PLANNING COMMISSIONERS

JEFFREY BARNES
Chair

PATRICIA KORZEC
Vice-Chair

RAY L. BAKER
Commissioner

JEFFREY SIMS
Commissioner

BRIAN LOWELL
Commissioner

VACANT
Commissioner

VACANT
Commissioner

PLANNING COMMISSION
Regular Meeting

Agenda

Thursday, January 25, 2018 at 7:00 PM
City Hall Council Chamber – 14177 Frederick Street

CALL TO ORDER

ROLL CALL

PLEDGE OF ALLEGIANCE

APPROVAL OF AGENDA

Approval of Agenda

CONSENT CALENDAR

All matters listed under Consent Calendar are considered to be routine and all will be enacted by one roll call vote. There will be no discussion of these items unless Members of the Planning Commission request specific items be removed from the Consent Calendar for separate action.

APPROVAL OF MINUTES

Planning Commission - Special Meeting - Dec 21, 2017 7:00 PM

PUBLIC COMMENTS PROCEDURE

Any person wishing to address the Commission on any matter, either under the Public Comments section of the Agenda or scheduled items or public hearings, must fill out a "Request to Speak" form available at the door. The completed form must be submitted to the Secretary prior to the Agenda item being called by the Chairperson. In speaking to the Commission, member of the public may be limited to three minutes per person, except for the applicant for entitlement. The Commission may establish an overall time limit for comments on a particular Agenda item. Members of the public must direct their questions to the Chairperson of the Commission and not to other members of the Commission, the applicant, the Staff, or the audience.

Upon request, this agenda will be made available in appropriate alternative formats to persons with disabilities, in compliance with the Americans with Disabilities Act of 1990. Any person with a disability who requires a modification or accommodation in order to participate in a meeting should direct such request to Guy Pegan, ADA Coordinator, at 951.413.3120 at least 72 hours before the meeting. The 72-hour notification will enable the City to make reasonable arrangements to ensure accessibility to this meeting.

NON-PUBLIC HEARING ITEMS

1. General Plan Annual Report to be submitted to the State Office of Planning and Research (Report of: Community Development)

STAFF RECOMMENDATION

Staff recommends that the Planning Commission **APPROVE** Resolution No. 2018-08 and thereby:

1. **CERTIFY** that the proposed General Plan Annual Report qualifies as an exemption in accordance with Section 15061 of the California Environmental Quality Act (CEQA) Guidelines; and

2. **RECOMMENDS** to the City Council that the January 1, 2017 to December 31, 2017 General Plan Annual Report is consistent with the requirements of Government Code Section 65400 with regard to reporting on status of the City General Plan and progress in its implementation, and is ready for submittal to the Office of Planning and Research and to the Department of Housing and Community Development by April 1, 2018.

PUBLIC HEARING ITEMS

2.

Case:	PEN16-0048 General Plan Amendment PEN16-0049 Change of Zone PEN16-0052 Parcel Map PEN16-0053 Master Plot Plan PEN16-0054-0055 Plot Plans (Medical Bld. 1&2) PEN16-0056-0057 Conditional Use Permits PEN17-0013 Phasing Plan
Applicant:	Richard Torng, Galaxy Management Inc.
Owner:	Galaxy Management Inc.
Representative:	Charles Yu
Location:	Southeast Corner of Brodiaea Avenue and Nason Street (486-290-036 & 486-280-037)
Case Planner:	Julia Descoteaux
Council District:	3
Proposal:	PROPOSED GENERAL PLAN AMENDMENT, CHANGE OF ZONE, PARCEL MAP, PLOT PLANS, CONDITIONAL USE PERMITS AND PHASING PLAN

FOR THE DEVELOPMENT OF A FIVE BUILDING MIXED-USE MEDICAL CENTER CAMPUS

STAFF RECOMMENDATION

Staff recommends the Planning Commission **APPROVE** the following Resolution Nos. 2018-01 2018-02, 2018-03, 2018-04, 2018-05 and 2018-06 and thereby recommend that the Moreno Valley City Council:

Resolution: 2018-01

1 **CERTIFY** the Mitigated Negative Declaration prepared for the Majestic Moreno Valley project, inclusive of all related applications, on file with the Community Development Department, incorporated herein by this reference, which Mitigated Negative Declaration has been completed in compliance with the California Environmental Quality Act, and the information and findings contained in the Mitigated Negative Declaration, attached hereto as Exhibit A, reflects the City's independent judgment and analysis; and

2. **ADOPT** the Mitigation Monitoring and Reporting Program prepared for the proposed Majestic Moreno Valley project, attached hereto as Exhibit B; and

Resolution: 2018-02

3. **APPROVE** PEN16-0048, General Plan Amendment as shown on the attachment included as Exhibit A; and

Resolution: 2018-03

4. **APPROVE** PEN16-0049 Change of Zone as shown on the attachment included as Exhibit A; and

Resolution: 2018-04

5. **APPROVE** Tentative Parcel Map 36227, PEN16-0052, subject to the attached conditions of approval attached as Exhibit A.

Resolution: 2018-05

6. **APPROVE** PEN16-0053, Master Plot Plan, PEN16-0054 – PEN16-0055 Plot Plans and PEN17-0013, Phasing Plan subject to the attached Conditions of Approval attached as Exhibits A, B, C and D; and

Resolution: 2018-06

7. **APPROVE** PEN16-0056 – PEN16-0057 Conditional Use Permits, subject to the attached conditions of approval attached as Exhibits A and B.

OTHER COMMISSION BUSINESS

STAFF COMMENTS

PLANNING COMMISSIONER COMMENTS

ADJOURNMENT
Planning Commission Regular Meeting, February 22, 2018 at 7:00 P.M., City of Moreno Valley, City Hall Council Chamber, 14177 Frederick Street, Moreno Valley, CA 92553.

CITY OF MORENO VALLEY PLANNING COMMISSION
SPECIAL MEETING
CITY HALL COUNCIL CHAMBER – 14177 FREDERICK STREET

Thursday, December 21, 2017 at 7:00 PM

CALL TO ORDER

CHAIR BARNES – Good evening ladies and gentlemen. I would like to call this Special Meeting of the Planning Commission to order. It is Thursday, December 21, 2017, and the time is 7:02 PM. First item on the Agenda is the roll call.

ROLL CALL

Commissioners Present:
Commissioner Lowell
Commissioner Baker
Commissioner Sims
Chair Barnes

Vice Chair Korzec – excused absent

Staff Present:
Rick Sandzimier, Planning Official
Paul Early, Assistant City Attorney
Ashley Aparicio, Recording Secretary/Administrative Assistant
Gabriel Diaz, Associate Planner
Michael Lloyd, Traffic Engineer

Speakers:
Rafael Brugueras
Kendrick Rivas
Roy Bleckert
David Marshall

PLEDGE OF ALLEGIANCE

Minutes Acceptance: Minutes of Dec 21, 2017 7:00 PM (APPROVAL OF MINUTES)

CHAIR BARNES – Next, could Commissioner Sims lead us in the Pledge of Allegiance?

APPROVAL OF THE AGENDA

Approval of Agenda

CHAIR BARNES – Thank you, Jeff.

COMMISSIONER SIMS – Thanks.

CHAIR BARNES – Next item, approval of the Agenda.

COMMISSIONER BARNES – I'll motion to approve.

CHAIR BARNES – Motion from Commissioner Lowell.

COMMISSIONER BAKER – I'll second.

CHAIR BARNES – A second from Commissioner Baker. All in favor say aye.

COMMISSIONER BAKER – Aye.

COMMISSIONER SIMS – Aye.

COMMISSIONER LOWELL – Aye.

CHAIR BARNES – Aye.

CHAIR BARNES – Opposed. The motion carries 4-0.

Opposed – 0

Motion carries 4 – 0

CONSENT CALENDAR

Minutes Acceptance: Minutes of Dec 21, 2017 7:00 PM (APPROVAL OF MINUTES)

All matters listed under Consent Calendar are considered to be routine and all will be enacted by one rollcall vote. There will be no discussion of these items unless Members of the Planning Commission request specific items be removed from the Consent Calendar for separate action.

APPROVAL OF MINUTES

Planning Commission - Regular Meeting – Oct 26, 2017 at 7:00 PM

Planning Commission - Regular Meeting – Nov 9, 2017 at 7:00 PM

CHAIR BARNES – Next is the Consent Calendar, and I see no items on the Consent Calendar.

PLANNING OFFICIAL RICK SANDZIMIER – The two sets of Minutes.

CHAIR BARNES – Just the Minutes. I need to indent that so I know it's a part of the…alright, approval of the Minutes, and they need to go separately, correct? Together? Okay.

PLANNING OFFICIAL RICK SANDZIMIER – You can do them together.

CHAIR BARNES – Okay, separate voting blocks. So the first Minutes to be approved are October 26, 2017.

COMMISSIONER SIMS – I'll make a motion to approve the Minutes of the Regular Meeting of the Planning Commission of October 26, 2017.

COMMISSIONER BAKER – I'll second that.

CHAIR BARNES – Motion from Commissioner Sims, second from Baker. All in favor….

COMMISSIONER BAKER – Aye.

COMMISSIONER SIMS – Aye.

COMMISSIONER LOWELL – Aye.

CHAIR BARNES – Aye.

CHAIR BARNES – Opposed. The motion carries 4-0.

Opposed – 0

Motion carries 4 – 0

CHAIR BARNES – Next we have the Meeting Minutes of November 9, 2017.

COMMISSIONER SIMS – I'm going to abstain.

CHAIR BARNES – Commissioner Sims was not here, so he must abstain.

COMMISSIONER LOWELL – I'll motion to approve as presented.

COMMISSIONER BAKER – I'll second it.

CHAIR BARNES – Motion approved from Commissioner Lowell, a second from Commissioner Baker.

COMMISSIONER LOWELL – Does Patricia need to be here to vote on it since she would make the full quorum for that four.

CHAIR BARNES – Do we have a quorum?

ASSISTANT CITY ATTORNEY PAUL EARLY – You still have a quorum having four people here.

CHAIR BARNES – Oh, I see, just three voters.

ASSISTANT CITY ATTORNEY PAUL EARLY – The three votes will still pass it, and there is no requirement that somebody abstain just because they weren't at the meeting. You can always familiarize yourself with the Minutes at a later date, but it is customary to do so, so there is no problem here.

CHAIR BARNES – Alright, thanks Paul. Alright, having a motion and a second, all in favor….

COMMISSIONER BAKER – Aye.

COMMISSIONER LOWELL – Aye.

CHAIR BARNES – Aye.

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CHAIR BARNES – Opposed. The motion carries 3-0.

Opposed – 0

Motion carries 3 – 0 – 1 with one abstention

PUBLIC COMMENTS PROCEDURE

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CHAIR BARNES – Alright, next item on the Agenda is the Public Comments portion of the meeting. Do we have any Speaker Slips?

ADMINISTRATIVE ASSISTANT ASHLEY APARICIO – Yes, we do. We have two, starting with Rafael Brugueras and Kendrick Rivas.

CHAIR BARNES – Alright, Mr. Brugueras.

SPEAKER RAFAEL BRUGUERAS – Good evening Chair, Commissioners, Staff, Residents, and our Guests. This month, the Staff put the Ordinance No. 926 on the website to be viewed by the City and the residents that live here, and they are the new rules that you are going to be applying in the future as applicants come to apply for the marijuana initiative in our city. There are 49 pages of all the new rules and something that you need to have in your hand in the future to understand when the staff comes to you for approval and the questions that you may need to ask to make sure that the applicant is going to

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follow the rules because that's important. I know they are going to do what they have to do because I've seen that already, but sometimes the applicants find a different way of reinterpreting a word. Oh, I didn't see it. Somebody didn't tell me. We don't want that problem to happen in 2018, and I wanted to thank you also for all the work that I see in my city for your guys and this counselor that is not here for your approvals, how we have the city now generated with excitement, and I hope the bill that got passed yesterday will bring even more entrepreneurs to our city and more development, so we can have jobs, revenue. Because with all that, we can do things to better our lives, and our city, and our surrounding neighbors, and I thank you for your votes and your concerns, and I wish you and each one of you a Merry Christmas because you've done wonders for us, this city. It all comes together at the end of the year, and this is our year. Thank you so much.

CHAIR BARNES – Thank you Mr. Brugueras. Next speaker…

ADMINISTRATIVE ASSISTANT ASHLEY APARICIO – Kendrick Rivas.

SPEAKER KENDRICK RIVAS – Good evening. I have one quick question. I can speak on whatever I want in this section, right? Okay. Good evening Chair, Chairmen, Staff, and our fellow American Citizens. I started to get into politics about in the sophomore grade when I first wrote a letter to the 44th President of the United States about physical education and how we should have more physical education all the way through the 12th grade and, since then, I got response back, but it was a stamp signature response, which means someone wrote the letter and just stamped his signature on it. Ever since, I have had a great love for politics and, in my senior year in high school, my youth government teacher had us, had us elect one for president, like a fake election. And every 12th grader in government classes were voting in the school and, in the end, I won the US Presidency, but I only like to say because I wasn't part of….the other candidate was probably not prepared to deliver a speech that day and, second, is that I am so glad that the World Logistics Center hasn't been built yet. I am very happy that every day in the morning on the eastern side of Moreno Valley there is nothing but land and forest you can see, and I thank God every day to make sure the World Logistics Center has not been built. Thank you.

CHAIR BARNES – Thank you Mr. Rivas. Any other speakers?

ADMINISTRATIVE ASSISTANT ASHLEY APARICIO – We do have one more. Roy, but I am unclear how to say his last name.

CHAIR BARNES – Alright. Bleckert.

ADMINISTRATIVE ASSISTANT ASHLEY APARICIO – Bleckert.

CHAIR BARNES – Lead addition, Mr. Bleckert.

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SPEAKER ROY BLECKERT – Last Tuesday at the City Council Meeting, they addressed consolidating some of the commissions, and they made a recommendation some of the other commissions and boards need to be looked at, and one thing I hope the Planning Commissioners and the Staff will look at in the future, because the Council indicated they would look at this, is this Planning Commission specifically. It's got seven members….or it is supposed to have seven members on. It's only had five for a very long time. It The council should either appoint two more people or cut the commission back to five members if that's what they want. So, with this, I mean if one member here did not show up, you would not have a quorum and you would not have a meeting. If they cut it down to five members, then you could at least have three and have a meeting. They expressed that they wanted to do things more efficiently in the future in the city and make things run, so I believe they should either do either action to make that…to facilitate that because we would not want a situation coming up where people had development projects up here, and they couldn't be heard because they didn't have a quorum. So, again, I would hope that the Planning Commissioners would relay that, Staff would relay that to Council, and hopefully we can facilitate either action, so when people bring projects up here they will be heard in a timely manner. Thank you.

CHAIR BARNES – Thank you Mr. Bleckert

ADMINISTRATIVE ASSISTANT ASHLEY APARICIO – We have no more speakers at this time.

CHAIR BARNES – No more speakers, alright.

NON-PUBLIC HEARING ITEMS

None

CHAIR BARNES – Moving onto Non-Public Hearing Items, we have none, so the Public Hearing section of the meeting.

PUBLIC HEARING ITEMS

1. Case: PEN16-0107 Plot Plan

   Applicant: Gary Wang & Associates

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Owner:	Yum Yum Donut Shop Inc.
Representative:	Grachel Cornelio of Gary Wang & Associates
Location:	Northwest corner of Alessandro Boulevard and Day Street
Case Planner:	Gabriel Diaz
Council District:	1
Proposal:	Plot Plan for a proposed 4236 square foot donut shop/convenience store

STAFF RECOMMENDATION

Staff recommends that the Planning Commission **APPROVE** Resolution No. 2017-43, and thereby:

1. **CERTIFY** that the proposed Plot Plan is exempt from the provisions of the California Environmental Quality Act (CEQA), as a Class 32 Categorical Exemption, CEQA Guidelines, Section 15332 (In-Fill Development); and

2. **APPROVE** Plot Plan PEN16-0107 based on the findings contained in the Planning Commission Resolution 2017-43, subject to the Conditions of Approval included as Exhibit A of the Resolution.

CHAIR BARNES – Case 1: PEN16-0107. It is a Plot Plan. The Applicant is Gary Wang and Associates. Do we have a Staff Report?

PLANNING OFFICIAL RICK SANDZIMIER – We do. I would like to introduce Associate Planner Gabriel Diaz who is going to give you the Staff Report.

ASSOCIATE PLANNER GABRIEL DIAZ – Thank you Chairman and Commissioners. There was a memo on your desk before the meeting, and there are some changes to the Conditions of Approval or basically just clarifying the Conditions of Approval for this case. We will start with that. Land Development was missing some headings, so that was added to the Conditions of Approval.

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Then, Building Condition No. 24 was added to clarify, and the clarification of a will-serve letter must be obtained and all applicable fees and charges shall be paid to Box Springs Mutual Company prior to permit issuance, and then that is Building Condition No. 24.

Alright, the proposal is a Plot Plan to allow the development of a Winchell's Donut Shop and Convenient Store, approximately 4,263 square feet on 0.6 of an acre parcel. The project is located on the northwest corner of Alessandro Boulevard and Day Street. The Applicant Representative is Grachel of Gary Wang and Associates. The project is located in Council District 1. The project property is basically rectangular in shape, presently vacant, although you do see a home on this older aerial, but currently it is vacant. There are a couple of mature trees adjacent to the western property line and some old stumps one the site that have been removed. The project property is zoned Community Commercial. Some other surrounding land uses include multifamily residential to the north, which is zone Community Commercial; a small grocery store, La Buena Market is located immediately to the west of the site and is zoned Community Commercial. To the south, across from Alessandro Boulevard, is a self-storage facility, which is zoned Community Commercial, and to the southeast, there is an industrial warehouse facility currently zoned Industrial. Immediately to the west, across Day Street, is vacant land owned by the city zoned for Multifamily Residential, up to 30 dwelling units per acre, Residential 30. The proposal for the 4,263 square foot Winchell's Donut Shop and Convenience Store is located on the southeast corner of the property, and you have parking to the rear and to the side of the property. The main access to the property will be from Alessandro Boulevard. There is an additional driveway located on Day Street. Both entrances and exits are right in and right out. Per the Municipal Code, the parking on the site has exceeded the requirement of 19 parking spaces that are required. The project is providing 20, which includes a carpool and fuel-efficient parking space. The architecture of the building is a contemporary modern style with elongated pitched roofs and prominent entrance feature from the parking lot. The tower element is what leads the customers to the main entrance of the building, and you see that on the top slide. The elevations…the exterior finishes include a blend of earth tones for the stone veneer treatments, some fiber cement, vintage wood, steel awnings, and standing seam roof for the tower elements. The proposed project will add architectural character to Alessandro Boulevard, and the proposed project will add architectural character to the Alessandro Corridor in the proximity westerly gateway to the city. Public notice was sent to all property owners'. The proposed project was posted on site and published in the Press Enterprise. No public comments have been reported. I have received no calls. Environmentally, the project has been reviewed in accordance with the latest addition of the Environmental Quality Act, CEQA Guidelines, and Staff determined that the project will not result in a potential significant impact. The project qualifies as a Class 32 Exemption, Section 15332 of the CEQA Guidelines, as an In-Fill Development project. Therefore, Staff recommends that the Planning

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Commission approve Resolution 2017-43 and thereby certify that the proposed Plot Plan is exempt by the provisions of CEQA and approve Plot Plan PEN16-0107, subject to the Conditions of Approval. This concludes staff presentation. If you have any questions, I'm open for questions.

CHAIR BARNES – Thank you Mr. Diaz.

ASSOCIATE PLANNER GABRIEL DIAZ – Thank you.

CHAIR BARNES – We do have a question from Commissioner Lowell.

COMMISSIONER LOWELL – On the Architectural Engineering Plans 105, it has a copy of the Conditions of Approval, and they don't match what was provided to us. Is that going to be updated or, if we approve it, is that going to be a problem?

ASSISTANT CITY ATTORNEY PAUL EARLY – Yeah, I wouldn't see that as a problem. It's just an administrative correction for it to be reflected on the final plan, so that we would make sure that happens anyway if there are changes that happen at this meeting.

COMMISSIONER LOWELL –Thank you.

CHAIR BARNES – Commissioner Sims.

COMMISSIONER SIMS – Well, on the summary here, it references a Winchell's Donut Shop and Convenience Store, so are these separate and distinct? It looks like it is one building and is the convenience component of this project a separate stand alone and, if so, what is being sold in the convenience component of this project?

ASSOCIATE PLANNER GABRIEL DIAZ – It is all under one roof, and I believe it's maybe a new branding by Winchell's to incorporate donuts and convenience store. I'm not too sure exactly…here's the floor layout. They do make donuts onsite, and I....it's kind of more like your typical gas station that you go in in the morning and pick up your daily needs or beverages. Kind of quick to get in and out, but it is being provided by Winchell's. The architect is here and could provide additional information on the items being sold inside potentially or specifics to that.

COMMISSIONER SIMS – So is this going to be a liquor store?

ASSOCIATE PLANNER GABRIEL DIAZ – No liquor store is being proposed at this time. If that were to happen, it would require a CUP application.

COMMISSIONER SIMS – Okay, the other question is you mentioned in your Staff Report that the exterior architectural layout or elevation of the building along

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Alessandro is going to add enhancement to the Alessandro Corridor. Is there…that was one of the things when I became a Planning Commissioner, I've always believed that the entry portals into the city, especially the westerly one, is a sight for sore eyes right now on, on, on Alessandro. Is there an overall planning document or a plan for the westerly portal along, along that similar to what happened on Sunnymead Boulevard from Day Street going up to Heacock? And the question is, I don't have a problem with the elevation, but is there a plan that Staff is working toward that there is some consistency in that, as new development happens, it looks cohesive?

PLANNING OFFICIAL RICK SANDZIMIER – The answer is yes but also some progress is being made. So the yes part of it is that we do have the Alessandro Corridor Study that was done a few years back that does address some of the aesthetics and some of the expected zoning and mixes of uses that will occur along Alessandro Boulevard. In addition, we have within our landscape standards, we have defined the types of street trees that we want along all of our designated arterials by name, and so we are following that. But to be developed in our Strategic Plan that was approved in August of 2016, we actually identified an initiative. It's a three-year work plan item to develop an arterial gateway and freeway streetscape concepts, and so we are currently working with doing an assessment with what all those gateways look like. In fact, I had an intern going out this week who was going out and shooting some photographs, and we're actually looking at the infrastructure. We're looking at the landscaping. We're looking at the maintenance standards. We're looking at the interface between Caltrans facilities, the off-ramps, and we are going to be working with our Public Works Department, and I met with our Public Works Director, I believe, it was on Monday this week to talk about this topic. So I know he and his staff are also looking at addressing that and, over the last year or two, you have seen some of the signage going up at Alessandro and Old 215, and you saw the new monument sign that went up on Alessandro here at Frederick. We're looking at trying to enhance the signage that lets people know where they are, that you're in Moreno Valley, and we want to be proud of that. So the landscaping and the signage features are all part of the progress that we're looking towards.

COMMISSIONER SIMS – I would, this is off topic, but just for….I do think that is something that the city should focus on. We're working hard, and one of the speakers mentioned about all the building and whatnot. I mean, we want to make….when you get to Moreno Valley, you want to know you're at Moreno Valley, not being afraid to come into Moreno Valley because when you're going through the gate it looks like, oh, what am I getting into, so we should really work on that.

CHAIR BARNES – Alright, thank you Jeff. Any other questions of Staff? Alright, would the Applicant like to come forward and maybe add to the dialogue?

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SPEAKER LINCOLN WATASE – Chair, Commissioners, Staff good evening. My name is Lincoln Watase. I'm the president for Yum Yum Donuts. Winchell's is a dba of Yum Yum. A question was raised about the project. I just wanted to share a little background or context. So it is a combination of a convenience store, fast food, and a donut-fresh bakery on site. So this is a new concept for us, and we're very excited about it. The idea is to achieve value for our customers and speed of service. So we're hoping that by providing attractive prices for our offerings and by having that combination all on one site of those three revenue streams that we would be able to have a high-volume operation that is very well received and appreciated by the local community. Are there any other specific questions about the nature of the project?

COMMISSIONER LOWELL – What are the hours of operation going to be?

SPEAKER LINCOLN WATASE – All of our donut shops are 24 hours. That's the world that we live in, so we will be 24 hours for our customers.

COMMISSIONER LOWELL – Do you have any security concerns being open at 2 o'clock in the morning?

SPEAKER LINCOLN WATASE – No. That is what we do, and that is who we are. So we have a lot of experience in that regard, and so we bring that experience to bear if and when there is a special situation or an issue.

COMMISSIONER LOWELL – Well, once it's open, I will be visiting there after the Planning Commission meetings to bring some donuts home for breakfast.

SPEAKER LINCOLN WATASE – And, also some good news, I brought a couple of dozen donuts as well, so I will make those available as well.

CHAIR BARNES – We'd have to pay for those, right Paul?

ASSISTANT CITY ATTORNEY PAUL EARLY – I think they follow under the gift gap.

CHAIR BARNES – Ah, excellent. Okay, alright, any other questions for the Applicant?

COMMISSIONER BAKER – I have one question here, and this may not have anything to do with this, but it looks like you may have…there's some booth seating in there?

SPEAKER LINCOLN WATASE – There's no seating. As it is a convenience store, that is really not compatible.

COMMISSIONER BAKER – So those are just racks for?

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SPEAKER LINCOLN WATASE – Correct.

COMMISSIONER BAKER – Got it, and no sit-down counter or anything, right?

SPEAKER LINCOLN WATASE – No.

COMMISSIONER BAKER – Okay, got it.

SPEAKER LINCOLN WATASE – Thank you.

COMMISSIONER BAKER – Thanks.

CHAIR BARNES – Commissioner Sims.

COMMISSIONER SIMS – I do have a, I don't know if this is best of Staff or of the Applicant's team but, in my prior life, I worked for the Water District and have some knowledge of the Box Springs Mutual Water Company fire flow situation, and I do have concerns about the actual ability whether or not Box Springs issuance of a will-serve letter….that's fine for domestic, but it has always been well known at the City, at Western Municipal Water District, who is the wholesaler over the Box Springs Mutual Water Company that buys wholesale water from Western Municipal Water District to supplement its water supply due to high nitrites for blending purposes. So, because of the infrastructure conditions in Box Springs, there have been issues of the ability for development within the entire Box Springs area, essentially from Old 215 up to Elsworth from Alessandro to Eucalyptus. This property is remote to Box Springs pumping their tanks and so forth, and so I do see Conditions of Approval in here. I just would be, this….it's not to say this is a no vote for it, but I would be, as a fire department for the city, be very, very strenuous on the application of the…..of the hydraulics done and have actual confirmation that the fire flow can, at this particular point, meet whatever the fire flow criteria is because it is known to be inadequate in that entire service area.

CHRIS COX, FIRE SAFETY SPECIALSIT - Yes, I personally witnessed the fire-flow test that was conducted for this site, and it was…it passed, and so we were sufficient with the fire flow and met the fire flow requirement.

COMMISSIONER SIMS – That's good. Then there must have been improvements in the last three years.

COMMISSIONER LOWELL – Well, we voted on an apartment complex over off Eucalyptus by the elementary school and part of the $400,000 that was paid to connection fees was to improve a chunk of pipe, and I think that might have been what we're connecting off of.

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COMMISSIONER SIMS – The apartments are over close in proximity, the tank, the pumps…

COMMISSIONER LOWELL – Right, but there was like 1,000 or 2,000 feet of 12-inch pipe that was put down Day Street, and I think that probably helped a little bit.

COMMISSIONER SIMS – That's excellent. Good, then I'll go back to sleep. As long as there is fire flow, that's good.

CHAIR BARNES – Before we get too far down the road, I think we have some public speakers, so I think we should move to the Public Hearing. Do we have any….do we have Speaker Slips?

ADMINISTRATIVE ASSISTANT ASHLEY APARICIO – Correct. I have two. I have Rafael Brugueras and Kendrick Rivas.

CHAIR BARNES – Well, I think I have to officially open the Public Hearing, which I've done. Mr. Brugueras come forward.

SPEAKER RAFAEL BRUGUERAS – Good evening, once again, Chair, Commissioners, Staff, Residents, and Guests. I went to that site yesterday, and I was able to park my truck in the back of the lot where I believe is going to be the exit, so that was only….I mean, it's a skinny thing. It's only one….only one car can fit at a time, that's for sure. I got out, couldn't get on the lot because it had a fence, so I want people to know that I was there, and then I walked all the way around. Then we have the grocery store heading towards the freeway. As I kept looking and reading the Staff Report, I came up with four issues that I needed to clear up, and Mr. Sims did one of them, and that was the liquor. The word convenience is a big word. They've got convenience stores, even at the gas station, they sell liquor and water and soda and potato chips. If this Winchell's is going to be anything like the one on Chicago and University where they have hot sandwiches and donuts? It's a beautiful thing, and it's a small place. This is going to be bigger, so this is really going to attract that corner real well? And I'm glad that they chose to come to Moreno Valley. Really, I would love to see the project get approved, but I have four concerns, and the liquor one was one of them. The second one was open 24 hours, because we're talking about Edgemont, okay? Alessandro, okay? We know the type of people that hang out there, and a lot of them don't live indoors. They hangout outside, so anything that's open 24 hours….I expect Yum Yum or Winchell's to be ready for that because we mentioned security here, okay. And I'm not saying there's going to be trouble, but you've got people hanging out looking to get out of the rain and out of the cold, and they'll buy a cup of coffee and they can sit there for two hours. I mean, you know, it's done, okay. My next one was the driveway, one way in, one way out. Now, I'm not sure because I didn't hear it and I didn't read it. There's a bus stop in front of this project. Okay? And the driveway that they

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are going to go in, the bust stop is in front of it. So I looked and I said to myself, congestion, because people are going to go in from Alessandro and come out through Day Street, but there is a bus stop right in front of it, and it's the entrance. I don't know if that's the entrance. I know you can't be behind…I know you cannot build behind it because you'd be now in front of the bus somehow, so there's a bus stop there, and you didn't see it and I didn't see it up there. My other one is, if they do decide and this gets approved, that they put up signs entrance only and exit only because these are small driveways that only fit one car at a time going in and going out. So we know that people are going to try to get out the Alessandro way just to jump on that freeway right away. You're going to have many of those. Okay, this is Moreno Valley. This is America. People think they can do whatever they want. So, if we put up signs, we could avoid accidents, especially on Alessandro, people going to the freeway going to work. It's a beautiful project, but those were my concerns when I was standing there and reading the Staff Report. I did see some things. Two things that clear up. The bus stop is one of them, and the signs are my other one. Thank you for listening.

CHAIR BARNES – Thank you Mr. Brugueras. Next speaker.

ADMINISTRATIVE ASSISTANT ASHLEY APARICIO – Kendrick Rivas.

SPEAKER KENDRICK RIVAS – Hello. I am, most of the time, in Moreno Valley bus stop and have been on Route 20, which serves Alessandro. I have stopped on that bus before, and I have been on that bus when they have picked up people at that segment of the bus stop and the bus stop and the bus, the one on Alessandro is a 40-foot long bus. I worry about not having enough room for the bus to come to a complete stop and trying to prevent from hitting a car because I've been on buses before when, out a nowhere, like a car goes in front of us and the bus has to like stop immediately, and it's like not a good feeling to be on the bus when that happens. And the second one is Alessandro. Where that store is going to be placed is a two-lane road. We all know that Alessandro should be like a three-lane road, and I'm worried about the space when we need to build a third lane on it. And I like the store, but it's like too big on a small lot. I wish it would be on a different lot, maybe on the east side, that's one of my main concerns. I like the store. I would like to go in there and shop someday but not at that location. It's like too small and too big at that location. Thank you.

CHAIR BARNES – Thank you. Any other speakers?

ADMINISTRATIVE ASSISTANT ASHLEY APARICIO – Not at this time.

CHAIR BARNES – Alright. Would the Applicant like to respond to any of the comments?

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SPEAKER GRACHEL DORNELIO – Good evening. My name is Grachel, and I'm a representative from Gary Wang and Associates. The site it actually being designed for the highway dedication, and the bus stop is being relocated to the adjacent lot, as per the City Guidelines, that we received from the comments of the Public Works and traffic engineers. So, currently, the bus stop is in front of our lot and that is a question between the City if it is going to be relocated because, per our plan, it is not going to be in front of our lot no more. It will be in the adjacent lot. We designed our driveway on the Alessandro Street that it will be a site for further development to be adjacent to the bus stop; however, at the corner, on the top right corner right there, we are still trying to be compliant for the site wall because we could not touch it because it is not part of our lot no more. It is the adjacent lot and that's it.

CHAIR BARNES – Alright, thank you.

SPEAKER GRACHEL DORNELIO – Any questions from the Commissioners?

CHAIR BARNES – I don't think….any questions? I think that covers it. Thank you very much. Any other Public Comments?

ADMINISTRATIVE ASSISTANT ASHLEY APARICIO – Not at this time, no.

CHAIR BARNES – Alright, well let's…we'll close the Public Hearing and deliberate. Any thoughts, observations?

COMMISSIONER LOWELL – The Alessandro Boulevard/Day Street intersection is a metered traffic-signaled intersection. Who is responsible for moving the street light to the ultimate location?

TRAFFIC ENGINEER MICHAEL LLOYD – Good evening, Michael Lloyd with Land Development. This project, as you heard, will be dedicating right-of-way along its frontage. The site was designed for the ultimate configuration. There are no proposed street improvements with this project, so at some point in time, there would be a capital project city project to finish out the improvements. The project would be required to pay DIF and TUMF, funding those improvements in the future.

COMMISSIONER LOWELL – Gotcha. The Grading Plans looked like they were designing for the ultimate right-of-way and the ultimate improvements, but they are not actually building it. It's a future development.

TRAFFIC ENGINEER MICHAEL LLOYD – That is correct. So the proposed right-of-way line that you see, they will be dedicating that right-of-way. They have designed that sign, so that it will work for future right-of-way. However, there are no proposed improvements along the frontage.

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COMMISSIONER LOWELL – And are they going to be widening the driveways to realign with the proposed driveways? The existing driveways don't line up.

TRAFFIC ENGINEER MICHAEL LLOYD – Correct. The driveways that you see are what will be constructed. I believe this is accurate. They are not proposed as one-way driveways. They should be 24 feet wide, which would accommodate two-way traffic.

COMMISSIONER LOWELL – Okay, thanks.

CHAIR BARNES – Thank you. Any other comments, observations? Alright, I think we'd be open to that.

COMMISSIONER SIMS – I'd like to make a recommendation that the Planning Commission approve Resolution No. 2017-43 and further certify that the proposed Plot Plan is exempt from the provisions of CEQA as a Class 32 Categorical Exemption being as an In-Fill Development, and secondly approve the Plot Plan PEN16-0107 based on the findings contained in the Planning Commission Resolution and with substitution of the Conditions on the dais this evening.

COMMISSIONER BAKER – I'll second that.

CHAIR BARNES – I have motion from Commissioner Sims and a second from Commissioner Baker. Yeah.

ADMINISTRATIVE ASSISTANT ASHLEY APARICIO – Unfortunately, we are having some technical difficulties tonight…

CHAIR BARNES – Oh, okay.

COMMISSIONER SIMS – We'll have to do it old school.

ADMINISTRATIVE ASSISTANT ASHLEY APARICIO – So voting is unavailable?

CHAIR BARNES – We're going to do it the old school way?

ADMINISTRATIVE ASSISTANT ASHLEY APARICIO – Yeah, thank you.

COMMISSIONER LOWELL – Roll call.

ADMINISTRATIVE ASSISTANT ASHLEY APARICIO – We're going to do a roll call vote?

CHAIR BARNES – Yes, we're going to do a roll call.

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COMMISSIONER SIMS – Yes.

COMMISSIONER LOWELL – Yes.

COMMISSIONER RAY BAKER – Yes.

CHAIR BARNES – Yes. The motion carries 4-0. Congratulations to the Applicant. Do we have a staff wrap-up?

Opposed – 0

Motion carries 4 – 0

PLANNING OFFICIAL RICK SANDZIMIER – We do. For the public and the Applicant, the decision taken here by the Planning Commission is an appealable action. If any interested party would like to file an appeal, they can do so within 15 days of this action. That appeal should be filed through the Community Development Director in a letter detailing the reasons for the appeal and that appeal would be taken forward to the City Council within 30 days for a public hearing.

CHAIR BARNES – Thank you Rick. Next up, Case 2, PEN16-0113, a Plot Plan. The Applicant is Alisam Moreno, LLC. Do we have a Staff Report?

2. Case:	PEN16-0113 Plot Plan
Applicant:	Alisam Moreno, LLC
Owner:	SH-60 at Heacock Street, LLC
Representative:	Bijan Shahmoradi
Location:	North side of Sunnymead Boulevard, west of Heacock Street, south of State Highway 60
Case Planner:	Gabriel Diaz

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Council District: 1

Proposal: Plot Plan for a new 5430 square foot automated car wash facility

STAFF RECOMMENDATION

A. Staff recommends that the Planning Commission **APPROVE** Resolution No. 2017-44, and thereby:

   1. **CERTIFY** that the Mitigated Negative Declaration prepared for Plot Plan PEN16-0113 on file with the Community Development Department, incorporated herein by this reference, has been completed in compliance with the California Environmental Quality Act, that the Planning Commission reviewed and considered the information contained in the Mitigated Negative Declaration, and the document reflects the City's independent judgment and analysis; attached hereto as Exhibit A; and

   2. **ADOPT** the Mitigation Monitoring and Reporting Program prepared for Plot Plan PEN16-0113, attached hereto as Exhibit B.

B. Staff recommends that the Planning Commission **APPROVE** Resolution No. 2017-45 and thereby:

   1. **APPROVE** Plot Plan PEN16-0113 based on the findings contained in this Resolution and subject to the Conditions of Approval included as Exhibit A.

PLANNING OFFICIAL RICK SANDZIMIER – We do. Gabriel Diaz will be providing this again.

ASSOCIATE PLANNER GABRIEL DIAZ – Thank you Chairman and Commissioners. We will start with the changes to the Conditions of Approval. For this one, there was only the amendment to Land Development Conditions, and there was only the heading. The actual conditions did not change. They are attached. Thank you.

The proposal is for a development of a 5,430 square foot fully automated car wash with vacuum stalls on a 1.68 acre site. The project is located on the north

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side of Sunnymead Boulevard west of Heacock Street and south of State Highway 60. It is on the 60/Heacock off-ramp. It is directly to the north. The representative is Bijan, the applicant's representative. The project is located in Council District 1. The property is rectangular in shape, presently vacant and flat. There are two signs on the property and, I believe, one mature plant in the middle of the property. The surrounding uses of the property includes a Chevron gas station to the east, along with Jack's Burgers, Jack's Famous Burger, and Jack in the Box immediately to the east fronting on Heacock. The Moreno Valley Plaza and related parking is to the south across Sunnymead Blvd and, to the west, you have automotive uses. All around the property, the Specific Plan is 204, Community Commercial, even across Sunnymead Boulevard. Here is the Zoning Map. The fully automated car wash includes an enclosed building for washing the vehicles. Before entering the car wash building, the people will pay at a service…for the service at an automatic station, which will take your money, and there is adequate stacking for vehicles. The tunnel is approximately 130 feet in length, and the height of the entrance is about 10 feet. The height of the entrance has been mitigated for the sound attenuation for the car wash. The automated car wash does reduce the number of staff at the facility and the reduction of need for staff parking onsite. The customers do have the option of continuing to dry off their vehicles and vacuum in the self-service vacuum area immediately exiting the car wash facility, and it is covered by metal awnings. The primary access to the development is from the driveway on Sunnymead Boulevard. The driveway will be right in and right out and is controlled by an existing raised median on Sunnymead Boulevard. The project does have a total of 39 parking spaces and, for our code requirement for car washes, the requirement is only 12. The architectural design of the building is contemporary style with some flat roofs, some faux windows on the east and west elevation, and two tower elements for the entrance and exit of the building. The exterior finishes include a series of earth tones for the paint, stone veneer, some metal fascia, striped canvas awnings, and a clay roof at the entrance tower and the exit tower. The proposed project is in-fill development. It is surrounded by current uses and will fill in the empty lot on Sunnymead Boulevard. Public notice was sent to all property owners. The proposed project was posted onsite and published in the public newspaper. I do have one call to report. I believe there was an adjacent car wash or a car wash owner in the area that called in and was concerned about the car wash, and I did let him know that the car wash was not a Conditional Use Application. It is a permitted use, and he did say he would come to the meeting. I'm not too sure if he is here today. Environmentally, an initial study was prepared. The initial study provided information in support of a Mitigated Negative Declaration with implementation of Mitigation Measures. With the Mitigation Measures in place, this will not have a significant effect on the environment. Studies prepared for this project included an Air Quality and Greenhouse Gas Analysis, a Biological Resource Assessment, a Phase 1 Cultural Resource Technical Report, and preliminary Drainage Study, a Geotechnical Investigation, a Noise Impact Analysis, and a Water Quality Management Plan. Mitigation Measures are recommended for the following

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project in the following areas: Biological resources and cultural historical resources, noise, and tribal resources. The measures for the cultural and tribal resources have been included to address input from the tribal agencies. The measures are intended to ensure potential resources that might be discovered are protected. Staff recommends that the Planning Commission approve Resolution 2017-44 and thereby certify that the Mitigated Negative Declaration prepared for Plot Plan PEN16-0113 on file with the Community Development Department has been completed in compliance with the California Environmental Quality Act, that the Planning Commission reviewed and considered the information contained in the Mitigated Negative Declaration, and the document reflects the City's independent judgment and analysis; (2) adopt the Mitigated Monitoring and Reporting Program; and (b) Staff recommends that Planning Commission approve Resolution No. 2017-45 and thereby approve Plot Plan PEN16-0113 based on the findings contained in the Resolution and subject to the Conditions of Approval. This concludes Staff presentation.

CHAIR BARNES – Thank you Mr. Diaz.

ASSOCIATE PLANNER GABRIEL DIAZ – Thank you.

CHAIR BARNES – Any questions from the Commissioners?

COMMISSIONER LOWELL – The Cultural Resource Board has to be involved in the cultural analysis. Has there been any determination whether it is a culturally significant site? It looks like it was developed already, and I don't think there's anything crazy there.

ASSOCIATE PLANNER GABRIEL DIAZ – That is correct. There is a cultural study submitted, and there were not any significant outcomes, but we have two tribal agencies, the Pechanga and Soboba who were involved, and those Mitigation Measures were applied to the project.

CHAIR BARNES – Any other questions. Alright, would the Applicant like to make a presentation?

SPEAKER BIJAN SHAHMORADI – Good evening, my name is Bijan I am one of the principals with the Water Drops Express Carwashes, and there are any questions or concerns I would be happy to answer.

CHAIR BARNES – There doesn't appear to be so, if that's the case, if there are no questions, let's open the Public Hearing. Do we have any public speakers?

ADMINISTRATIVE ASSISTANT ASHLEY APARICIO – We do. We have Rafael Brugueras, Kendrick Rivas, and David Marshall.

CHAIR BARNES – Thank you.

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SPEAKER RAFAEL BRUGUERAS – Good evening, once again, Chair, Commissioners, Staff, Residents, and Guests. Okay, I went to the site, and the only way I got on to the site, I had to park my vehicle at Jack in the Box, and I walked over, okay. Now, again, there is a bus stop in front of this project, again, and on the sidewalk I didn't see any driveway on Sunnymead Boulevard that will allow traffic to go onto the property to do business. So I am not sure if they are going to put a driveway. I don't know. Now, the only way onto that property, you gotta go between Jack in the Box, that dirt lot right there. That's the only way you can get onto that property from Heacock, okay? There is no other way. There is no… bus stop, sidewalk, that's it on, on, on Sunnymead Boulevard, Okay, so I don't know what they're going to do with that one. There is a bus stop there again, right, bus stop. Okay, I didn't hear anything about are they going to be open 24 hours because this is automatic, and I know that they are going to have fewer staff because it is automatic, so I don't know if this is going to be open 24 hours. I didn't see anything between 9:00 and 5:00, okay. I didn't see that either on the Staff Report. Okay, I am only going by what I can get out of the computer Staff Report. You may have more. They may have more. I'm only going by what I see and read. My second one is, it's a big place. Are they going to sell food, shampoo, automobile parts, little things inside? I didn't see any of that, like a convenient stand inside. I mean, I don't know what they are going to do on the site. I didn't see that either so, if this is a car wash, I don't know if they are going to have automatic machines where you put the money in, and it just drops out of the slot. Okay, once again, this is Sunnymead/Heacock, okay, next to the freeway, and each one of us that lives in the city sees the activities that go on on that corner. I'm only thinking about the residents' safety and their investment. I didn't hear anything about security. I didn't hear anything about that either so, again, I'm just saying that, for whatever reason, our city has become generous where people come and get things for free, and we have a lot of transients. You know what I'm saying, but we do have our fair share, especially on that corner. So I'd like to see that cleared up, the driveway, because I didn't see one, and if it is going to be 24 hours, and are they going to sell food or product because, if they have machines, people like to break into things. I don't know what they are going to do, but I do welcome them really. I am happy that they are going to fill up that lot. I mean, I do want them there, but I do want to make sure that safety comes first because there is a bus stop there, and that is a main street of our city, Sunnymead Boulevard and Heacock. It's a pretty, pretty busy street. Thank you so much.

CHAIR BARNES – Thank you Mr. Brugueras. Next speaker…

ADMINISTRATIVE ASSISTANT ASHLEY APARICIO – Kendrick Rivas.

CHAIR BARNES – Mr. Rivas.

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SPEAKER KENDRICK RIVAS – Good evening, since I moved…since I moved to Moreno Valley from China when I was four, I have relocated this year. I still live in Moreno Valley, but I relocated to the northeast side of the freeway and that off-ramp, almost like every weekend, we will get off that ramp, and I will see that empty land and like transient encampment. Like almost every six years it will be cleaned out, and also this bus stop there, and I do not feel like there is enough room to put a driveway in there. Plus, next month, Route 19, which serves that Sunnymead Boulevard, will be increased to 15 minutes every bus from 6 a.m. to 6 p.m., so there will be four buses per hour, and I am concerned about like my fellow bus commuters because I am mostly a bus commuter person in Moreno Valley. Thank you.

CHAIR BARNES – Thank you. Any other public speakers?

ADMINISTRATIVE ASSISTANT ASHLEY APARICIO – David Marshall.

CHAIR BARNES – Mr. Marshall.

SPEAKER DAVID MARSHALL – Good evening, David Marshall, resident 12449 Loraine Terrace since the 80s. There are six lots on Loraine Terrace. Four of them are owner occupied. There wasn't a single mention about a residence being in the neighborhood. The City has often overlooked us in their zoning or whatever. There is a stereo shop right down the street from me that puts in great stereos because I can hear them clear as day in my living room, but that wasn't a problem because they were zoned for it. So let's not overlook the zoning. Let's look at the residents that live there or just a mention of us anyway. We put up with a lot already just from the automotive repair place that's there. Parking has been an awful problem. That's been unresponsive from the City. Trash, abandoned cars, the 5 a.m. trash pickup because it's a business; we're just the residents. We don't count. We'd like to see something done about the noise because behind us there is a storage unit and the Caltrans noise wall. We are built into a concrete canyon there, and I can almost clearly hear orders from Jack in the Box. It is that bad. It echoes real bad in there, so I'd like to know what we're going to do about killing that noise a little bit. We've got the washers and driers that are going to be there, the vacuums, car stereos. You know, what else do you do when you dry your car? You crank up your stereo. Leaf blowers at 2 a.m. cleaning the parking lots open. That's got to happen, so we've got to take care of that. I've put up with that from the people across the street. Then, when it does come to the construction, when do they start? What time do you do that? What time does that stop? What do you about the dust and all the related stuff with that? Like you said, there were no days/hours. If it is automated, if it's 24, that's just not going to happen. They can't do that unless somebody finds their little decibel meter all of a sudden and can put down that 75 decibels at the property line. You guys don't seem to be able to find that. Concerns about the trash that is going to come from there, the smell of the recirculated water; I don't

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know if the oil separator in there, if that is going to be a problem. The security, like you mentioned, there are going to be lights there, bright lights. Am I going to have to put up with that looking out my front door now? Are there going to be gates? Are they going to be able to close it off? Oh, what else do we have here? The traffic. The only way you can come out of Jack in the Box there is to make the right-hand turn. The only way you are going to be able to come out of this is to make the right-hand turn with the bus that takes up one lane of Sunnymead Boulevard. It's already a giant cluster. You're going to make that a little bit worse. Flooding. We have a little thing we affectionately call Lake Loraine. When the storm drains get plugged up, it gets deep. Last year, it swallowed a car. It gets that deep there. I can imagine with all that being concrete, the runoff there into the street making….maybe I'll buy a boat. There are three gates now that go from the auto repair opening into that lot. Are they going to be opened? It that going to be accessible? Don't know about that. How many car washes do we need? There's five or six within half a mile of right there. I mean, what happens when they all go under. What do you do with a carwash? What do you make it into? Just a thought there and, what am I going to look out when I open my front door? I mean, am I going to see a carwash? Am I'm going to see another 12 foot monstrosity now in front of my front door? I bought this property. I don't rent it. I bought it, and I need to be respected as a homeowner in Moreno Valley for once.

CHAIR BARNES – Excuse me, thank you. Your time is up. Thank you. Alright, any other comments….pardon me, any other speakers?

ADMINISTRATIVE ASSISTANT ASHLEY APARICIO – Not at this time.

CHAIR BARNES – Alright, would the Applicant like to respond to any of those comments?

SPEAKER BIJAN SHAHMORADI – I was trying to maybe demonstrate a couple of minutes to make everybody understand how these car washes are working, and then I want to address some…..

PLANNING OFFICIAL RICK SANDZIMIER – Sir, if you could pull the microphone down.

SPEAKER BIJAN SHAHMORADI – I'm sorry. The most important thing is we're not 24 hours a day operation. We are opened up mostly based on daylight. Mostly in summertime between 8:00 to 6:00, maybe latest 7:00, if the sun is still available and during this time, winter time, we are open from 8:00 to 5:00, and that is the latest we stay open because it is dark and it is cold. You know, we don't have too many employees. I can explain this to…..

CHAIR BARNES – Hold on a second, we'll get you a microphone.

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SPEAKER BIJAN SHAHMORADI – Thank you, sir. These car washes are designed to provide services to the customers for maximum five to seven minutes. That's how we normally operate, and we already have about 14 of these type of carwashes operating, and we're planning on hopefully building one in here and hoping we could just expand this thing within the area here, if that is going to get supported by the neighbors. Total number of employees working in these car washes are about probably three to maximum four people, and there were questions about what type of security do we have. We have the most sophisticated camera systems and security systems. We have the gates for the entrance and exits, and we normally have someone who does a very silent cleaning and spending the night out there at out site. Yeah, spending night out there during the night, so he could do the cleaning and get the stuff prepared for the next shift, which is in the morning. When they come, everything is all ready to go. As far as the noise, the gentleman had a concern about the noise. The type of equipment that we have, I mean as we go on, I promise, you are never going to hear nothing from our carwash to I don't know how far away he lives from our property out there, but recently there was a drying system that came into the market, and we were the very first basically chain in the car wash, which we are using those type of drying systems, which all pretty much are noiseless. I mean, you don't probably hear anything from exit or entrance of the carwash entering into our facility out there, so I don't know what else, as far as the parking, we were required by the City to provide almost 12 to 15 parking but, including all the stalls we have for the vacuums, we have almost 25 to 26 parking spaces that we are providing and everything else we provided exceeded requirements to the landscaping to the area. And, honestly, I think this lot needs to be improved because the very first or second time I visited the site, I was a little bit concerned about homelessness and people out there, and it is really not a very good situation out there, so I think we're doing something really good, and we would appreciate us if you guys would support us to get on with this project. When I started coming here, I had kind of black hair when I applied for these applications, but it's almost two-and-a-half years or so, so we hopefully definitely can get some support from you guys. Thank you very much.

CHAIR BARNES – Yeah, question to the Applicant? Don't go away.

COMMISSIONER SIMS – I have a question, so on the, would be the west property line that runs north and south, I don't have the section here going through the property…is that a…what is that treatment there? Is that a wall or a block wall or is it….

SPEAKER BIJAN SHAHMORADI – This is Fred Scott, our architect.

SPEAKER FRED SCOTT – Fred Scott, architect, Visalia, California, 1009 North Demaree, Visalia, California. I'd like to address the entrance right here and your question also. I think the first gentleman that got up here was looking at how we

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access the site. There is a driveway approach right here, and that….so it is not across the other property line. Second thing, I think one of the other persons that came up addressed the vagrants in the area and things like that. We would like to cover the trash enclosure. We'd like to do that because that keeps vagrants from camping out in the trash enclosure, so I think that would help. The property line along here, we'll put a block wall up, take care it. So those, I think, are the three main items…Yes, Bijan....

SPEAKER BIJAN SHAHMORADI – What about the bus stop?

SPEAKER FRED SCOTT – Oh, the bus stop. We're leaving the bus stop exactly where it is. Not going to touch it, but we will do a nice driveway approach right here, split median with a median in the center and make it happen. We've done a number of car washes for Sam, Alisam Properties, and they all turned out very nice. I think it would be a great, great addition to the City of Moreno Valley. Any questions?

CHAIR BARNES – I have a couple questions.

SPEAKER FRED SCOTT – Yes sir.

CHAIR BARNES – So, when the patrons pay, are they paying a machine or are they paying a person?

SPEAKER FRED SCOTT – I'm sorry….

SPEAKER BIJAN SHAHMORADI – I can answer that question. Right by this…right in this area when you enter into the car wash before you get to the point of the tunnel, we have four what we call like HDK's, just like an ATM machine. However, you can pay that thing directly yourself, but we always have a person or two, girls out there, just screening the customers if they have any issue with just dispensing the money or credit card at least for the first six months or so, and we normally have at least one attendant out there to greet the customers. We do have electronic HDK's out there, which does all the transactions for credit cards or cash, and they get their receipts, so they approach to the back of the tunnel, and there is someone out there by the tunnel to provide, you know direction to the tunnel, and then they drive their own car through the….and then driving back to area that they can vacuum their own car and go. So we would have probably one or two employees here, one employee in front of the tunnel, and one person and maybe two persons at all times to provide cleaning, pick up trash, and make sure everything is all….just in case someone needs help or whatever in the back; elderly people, handicapped, we always provide a service for them just as well.

CHAIR BARNES – Okay, and then I had one other question. Is the driveway gated so that, when the facility is closed, people can't get into the parking lot or

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not? Yeah, my contractor is here. In all of our washes, we normally have at the entrance, we have the post with the chain. It is not an automatic gate or anything, but we lock it up at night, and then we open up in the morning, we open, so there's, there's a sign for the trespassing. Nobody is allowed to get in and out unless we open up the gates.

CHAIR BARNES – So, after hours, it's not a parking lot?

SPEAKER BIJAN SHAHMORADI – No sir, not at all.

CHAIR BARNES – Alright. Commissioner Sims.

COMMISSIONER SIMS – So on the…there were some questions about runoff on Loraine. I don't know what the issue is, if that is a CIP project or something in the future or it's a Caltrans issue that water is getting on Loraine. Suffice to say, is there water….how's the water runoff handled on this site?

SPEAKER FRED SCOTT – That's for me to answer. We're looking at porous concrete here, trying to retain the water onsite. Tidal….or let's see, the CBC 2010 Code, the California Green Code, requires retention onsite and then you pump it out after the storm, so you don't impact your storm drain system, so we're taking care of that onsite.

COMMISSIONER SIMS – Okay and the second question is, on the water usage for the carwash, what percent of the water is recycled?

SPEAKER BIJAN SHAHMORADI – I can answer that question. We are recycling up to about 94% of the water. Actually, up to about two years ago, we were at about almost 89% to 90%, but the new additional tank that we were actually advised to install, so it would be five clarifier tanks that would be installed and, by doing the fifth one, it's going to help us save another 4%, which is unbelievably, I think it's amazing development to have. Every car that you're washing is about almost six gallons, seven gallons or whatever that you could wash the whole thing.

COMMISSIONER SIMS – And then my last question is on the blowers for the vacuum or for the vacuums and whatnot, are the motors and the blowers…and sound attenuated…..

SPEAKER BIJAN SHAHMORADI – Honestly, there was a gentleman who had a concern. You know, that's the last thing we wanted to do was be disturbing our neighbors or providing any kind of inconvenience. No, we do have what they call a silencer in our new vacuum systems, which honestly I would love to invite, especially that gentleman, to come to one of our locations which we have in Northern California, actually in Central Valley and Ventura County, and for him to physically see exactly what we're doing out there, and he would have just a

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different idea. No, we do have silencer in all of our vacuum systems, which when we pick up the vacuum in order for the customers to vacuum their car, there's barely….you can't even hear anything going on.

SPEAKER FRED SCOTT –Also, sometimes, especially in a residential area, we have done sound attenuation walls out here, but this is not a residential neighborhood, so it is very minor by comparison, but in Fresno we did, on Shaw Avenue or Barstow, we did sound attenuation walls, and it solved the problem for us.

COMMISSIONER SIMS – Well, the one gentleman probably would disagree with you from….he lives very close to the property there….there's four or five residential homes there but, as far as that, as long as the sound is attenuated to whatever the appropriate Code requires….my last question would be, if my Commissioners would indulge me, is on the lighting. If you have hours where there is lighting. I assume there is going to be parking lighting and so forth throughout the facility. Are those going to be hooded and shielded so that there is not glare that comes off the top there?

SPEAKER FRED SCOTT – Yes, the 2010 CBC, California Building Code Green Code requires indirect lighting, so it doesn't create glare to adjacent properties. It's required by Code.

CHAIR BARNES – Thank you. Any other questions of the Applicant?

COMMISSIONER LOWELL – Yeah, I got a question. You said that the onsite WMP (Water Quality Management Plan) is probably going to be using porous concrete….

SPEAKER FRED SCOTT – Porous concrete…

COMMISSIONER LOWELL – And you're going to be pumping the water out after the fact? The WQMP doesn't show anything about porous concrete or pumping.

SPEAKER FRED SCOTT – No, I think we have concrete paving right here, all through here.

COMMISSIONER LOWELL – Concrete is different than porous concrete.

SPEAKER FRED SCOTT – Porous concrete.

COMMISSIONER LOWELL – City Staff, is that true, because I didn't see anything in here that says porous concrete?

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TRAFFIC ENGINEER MICHAEL LLOYD – A little more accurate depiction of what will be happening is…

COMMISSIONER LOWELL – Hold on. We have too many people talking. Michel Lloyd, please.

TRAFFIC ENGINEER MICHAEL LLOYD – A little more accurate description would be that the paved area will drain into the landscaped area.

SPEAKER FRED SCOTT – Our contractor says….I'm sorry.

CHAIR BARNES – Mr. Lloyd, go ahead.

TRAFFIC ENGINEER MICHAEL LLOYD – Thank you, Chair. The paved area will drain into the landscaped area. It will be picked up by an onsite storm drain and go into the basin. The basin would then drain into the triple barrel culvert that goes under Sunnymead.

COMMISSIONER LOWELL – So the bioretention and the WQMP is the accurate form of WQMP and BMP's?

TRAFFIC ENGINEER MICHAEL LLOYD – You are correct.

COMMISSIONER LOWELL – And the porous concrete, although would be great if they did, is not part of the plans?

TRAFFIC ENGINEER MICHAEL LLOYD – You are correct.

COMMISSIONER LOWELL – Okay.

SPEAKER FRED SCOTT – We've done both. Bioretention, you know, I'm not the civil engineer, but the civil engineer is designing it to meet the Code.

COMMISSIONER LOWELL – Well, my concern is you said porous concrete and, if you're proposing porous concrete……..

SPEAKER FRED SCOTT – Well, I was thinking….that was my thought.

COMMISSIONER LOWELL – Let me, let me finish….

SPEAKER FRED SCOTT – On what we were going to do, but I see it says concrete paving, and I know we do have bioretention.

COMMISSIONER LOWELL – My concern is that, if you are proposing porous concrete, that needs to be addressed tonight, so by your statement, we are not doing porous concrete? No porous pavement at all?

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SPEAKER FRED SCOTT – No, we are not.

SPEAKER BIJAN SHAHMORADI – No sir, not at all.

COMMISSIONER LOWELL – Okay, thank you.

CHAIR BARNES – Any other questions. None? Alright, with no questions, we will close the Public Hearing…..

PLANNING OFFICIAL RICK SANDZIMIER – Before, before you do that, I would like to respond to a couple of things, just in case we want to have a little more dialogue with the Applicant.

CHAIR BARNES – Alright, go ahead.

PLANNING OFFICIAL RICK SANDZIMIER – As we're listening to the Applicant's responses to some of your questions, some of the stuff is not consistent with that we're seeing on the plans or what we've actually considered with the plans. One was the security at the entrance. There is no indication on the plans at this point that there would be any sort of bollards or chain installed. That would want to be something that we would want to consider. We'd want our Traffic Staff to look at to make sure that they are placed appropriately so that there is no potential backing onto Sunnymead Boulevard itself and if they were placed far enough back that that wouldn't create some sort of a trap condition because they do have a raised median there. So the location of any bollards or chains would be something that we would want to look at but, if it is of keen interest to the Commission tonight, because you are talking about security, we'd want to make sure that we draft an appropriate condition that reflects that, so that we can work…we don't want to hold up the approval tonight. We could create a condition but just wanted to make sure that we do it so that it's checked before the grading and the building plans and those things are permitted. With regard to the wall condition, I think the architect mentioned that they could place a block wall for some sort of noise attenuation or for whatever purposes along the west edge of the property. There already is a block wall between the two properties that is shown on the plans that is existing and is expected to remain, so wanted to point that out there would be no need to put in a new wall. With regard to the….I think that covers it. I'm sorry. That was all that I wanted to cover.

COMMISSIONER LOWELL – Adding onto the block wall, they said there was a series of pedestrian access gates through that block wall. Are those going to be sealed off or locked or what's the issue, the desire on that?

ASSOCIATE PLANNER GABRIEL DIAZ – Currently, there is no proposal for that. Everything that is there will stay. That is a neighbor to neighbor issue. I

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believe they could, if they wanted in-fill, they could do that or create a block wall to cover up those gates or they could just lock those gates or keep them as is.

CHAIR BARNES – Could we go back to the gate issue real quick? Well is this something that we would have to….this is a general question…is this something that we would have to address tonight because it sounds like, if they are proposing it and it shows up on the plan, the plan check process and the current Code would determine that it's placed appropriately, and we wouldn't have to get into that specific detail it seems.

PLANNING OFFICIAL RICK SANDZIMIER – We could draft it without having to get into the finite details but as I took the pause and I remembered the other thing I wanted to say was, with regard to that security gate from the entrance, the one other thing we would want to check is with our fire department because, if it's locked and there is some sort of a need for an emergency response after hours, that our fire department would have proper access through that location, so we'd want to vet that with them, as well. The other thing, I don't know if our Staff presentation that you have on your dais this evening had a modified condition that it was similar to the previous project, so if you want to go into that. Did we mention that?

CHAIR BARNES – Yeah, you did.

PLANNING OFFICIAL RICK SANDZIMIER – My apology, okay.

SPEAKER BIJAN SHAHMORADI – Can I explain something? As far as the security gate and the chain, we normally place a little box on the side of these two posts that we have, and there is a code lock actually that goes on the side of this post and the first thing we do on all of our projects, we notify the fire department as well as the police department with the code, and we have a place out there on site, which they are aware of, just in case they have an emergency they are getting in and out. So we have never had any issue as far as security but, however, your gentleman wants us to proceed with the security of the case, we have absolutely no problem. We are more than happy to get it all taken care of one way or the other anyway.

CHAIR BARNES – Yeah, go ahead, Paul.

ASSISTANT CITY ATTORNEY PAUL EARLY – Yeah, I just wanted to make clear on this gate issue, it's only an issue tonight for this Commission if this Commission wants to require it. If you wanted to impose that condition that they have such a gate, we would need to address that tonight. Otherwise, if it goes forward as is, if a gate comes up in their plans, it will just be dealt with administratively as part of the planning and approval process.

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CHAIR BARNES – Yeah, that is kind of where my question was going, and it seems that that is appropriate to me but, I'm hearing a deliberation. I apologize.

COMMISSIONER SIMS – Well we're not deliberating yet, so…

COMMISSIONER LOWELL – Is the security something the City thinks that this project would need to add the bollards and chains across the entrance? I mean, it's pretty atypical.

CHAIR BARNES – Seems like they would've requested it before it got to us.

ASSOCIATE PLANNER GABRIEL DIAZ – Yes, this project was reviewed as an open project. The City did request wrought iron gates with pilasters on the east property to kind of add more security and prevent just people from walking from Heacock through the property onto Sunnymead, so that'll prevent that pedestrian access or, if you want to go do something inside this property, you'd have to do it from Sunnymead Boulevard or you'd have to hop the two fences to get into the property. There is no mention of any gates and chains as far as this property is concerned. That might be a fire issue. Fire does have to come into the property, go north, and then there is a T up top so they can turn around.

CHAIR BARNES – Go ahead.

COMMISSIONER SIMS – Well I just, I just, I've been that one that's on kind of these automated ones….there's one on Alessandro. I can't remember the street.

CHAIR BARNES – Correct.

COMMISSIONER SIMS – And then there is another one down by…I think there is another one down by Sunnymead Boulevard up just west of this one, this proposal, and they are open. There's no….in fact, there's one that, further up the street on Sunnymead, it's kind of like conjoined with an auto repair shop, so it's kind of a wide open ingress/egress, so I would think that security would, for all the reasons just talked about, getting the cars trapped coming in off the street or all those kind of concerns….

COMMISSIONER LOWELL – Is the security issue something the Applicant wants? Do you want to put a gated entrance, Sir?

SPEAKER BIJAN SHAHMORADI – To be very honest with you, no.

COMMISSIONER LOWELL – Okay. I don't think anybody up here is too eager to impose the condition.

CHAIR BARNES – Yeah, I don't think we're advocating it, just a curiosity.

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COMMISSIONER LOWELL – Okay.

CHAIR BARNES – Alright, any other questions? Alright, well then let's close the Public Hearing and deliberate. So observations, comments?

COMMISSIONER LOWELL – I think this project is going to do wonders for that little area. It is a homeless encampment that anything on that site could be better than iwhat is currently there. I completely understand Mr. Marshall's concerns about noise. Unfortunately, he lives in a place that is surrounded by commercial and freeway, and it is a busy area. No matter what goes in there, it is going to add noise to the situation. I am sympathetic to your concerns, Mr. Marshall. I don't know what we can do to help you out. With that said, I think this is a good addition to the area.

CHAIR BARNES – Anyone else?

COMMISSIONER BAKER – I like the project. I think it's, like Brian said, I think it's a good addition to that area there. You know, the noise issues, it looks like they've got that kind of under control as much as can be, but you're sitting in a commercial area there, and it is unfortunate, but I think it will be a good addition there to Sunnymead Boulevard.

CHAIR BARNES – Can I ask a question of Staff? There is a Mitigation Monitoring Program attached to this project?

ASSOCIATE PLANNER GABRIEL DIAZ – That is correct.

CHAIR BARNES – One of the issues is noise?

ASSOCIATE PLANNER GABRIEL DIAZ – That is correct. There was a Noise Study prepared and one of the reasons was, when they originally submitted, I reviewed the project and obviously I am aware that there is residential, so residential was a concern and, when I asked for further information on the noise of the machinery, it did exceed the Municipal Code requirements. So a Noise Study was conducted and mitigation occurred, which the entrances were 12 feet high, the entrance and exit, and that was reduced to 10 feet. There were two, at the exit and at the entrance. There is a 10, I believe, 10 x 30 foot sound attenuation wall that was….that is part of this project to reduce the sound and meet the noise requirements per our Code.

CHAIR BARNES – Okay, so there are architectural modifications that helped address that and with the plan in place, if there is a complaint, you have a mechanism to apply leverage. Okay, thank you. Any other comments? Well, I agree with what you guys have said. That property has been on eyesore sitting there on the on-ramp for the 30+ years I've been living out here, so I think it's a

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great project, and I'm happy to see that no longer dirt. So a motion? Commissioner Baker….

COMMISSIONER BAKER – I move that we approve Resolution 2017-44 and thereby (1) certify that the Mitigated Negative Declaration prepared to Plot Plan PEN16-013 on file with the Community Development Department incorporated herein by this reference has been completed in compliance with the California Environmental Quality Act, that the Planning Commission reviewed and considered the information contained in the Mitigated Negative Declaration, and the document reflects the City's independent judgment and analysis attached hereto in Exhibit A; and (2) adopt the Mitigated Monitoring and Reporting Program prepared for Plot Plan PEN16-0113 attached thereto to Exhibit B and also, on B, Staff recommends that the Planning Commission approve Resolution 2017-45 and thereby approve the Plot Plan PEN16-0113 based on the findings contained in this Resolution and subject to the Conditions of Approval included in Exhibit A….

CHAIR BARNES – And as modified by the revised Conditions….

COMMISSIONER BAKER – Yeah, and the modified Conditions…..

CHAIR BARNES – Prior to the meeting….

COMMISSIONER BAKER – Okay, let's see, that's….should I put a date on that or?

CHAIR BARNES – No. I think it's appropriate.

COMMISSIONER BAKER – Okay, include the modified Conditions applied to this particular…..

COMMISSIONER LOWELL – And, for clarity, the first Plot Plan for the Negative Declaration was PEN16-0113. One of the numbers was omitted.

COMMISSIONER BAKER – I missed one, okay.

CHAIR BARNES – Boy you're picky. Does that pass inspection, Paul?

ASSISTANT CITY ATTORNEY PAUL EARLY – As long as those Resolution Numbers are accurate. That's what matters to me the most.

CHAIR BARNES – Okay.

COMMISSIONER LOWELL – I'll second.

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CHAIR BARNES – A second from Commissioner Lowell. Could we have a roll call vote please?

COMMISSIONER SIMS – Yes.

COMMISSIONER LOWELL – Yes.

COMMISSIONER BAKER – Yes.

CHAIR BARNES – Yes. The motion carries 4-0. Congratulations to the Applicant. Welcome to Moreno Valley.

Opposed – 0

Motion carries 4 – 0

SPEAKER BIJAN SHAHMORADI – Thank you.

CHAIR BARNES – We look forward to rapid progress. My car is dirty. Staff wrap-up?

PLANNING OFFICIAL RICK SANDZIMIER – Yes, for the Applicant and the public's benefit, the Commission's action taken this evening is an appealable action. If any interested party would like to file an appeal, they can do so by filing that appeal within 15 days of this action. That appeal should be directed to the Director of Community Development and, if one is received, it will be agendized for City Council consideration within 30 days.

CHAIR BARNES – Thank you, Rick.

OTHER COMMISSION BUSINESS

CHAIR BARNES – Alright, Other Commission Business. There is none.

STAFF COMMENTS

CHAIR BARNES – Staff comments?

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PLANNING OFFICIAL RICK SANDZIMIER – I just want to wish you all a happy holiday and Merry Christmas, and we'll see you in the New Year.

CHAIR BARNES – Thank you, Rick.

PLANNING COMMISSIONER COMMENTS

CHAIR BARNES – Planning Commissioner Comments.

COMMISSIONER SIMS – I echo the same. Happy holidays.

COMMISSIONER LOWELL – Same here, Merry Christmas, happy holidays, Happy New Year.

CHAIR BARNES – Well, in addition to the happy holidays and Happy New Year wish and all that, I want to thank the Staff and my fellow Commissioners for their patience as I stumble through the process each meeting getting to the finish line. So thank you all for your help, and I've really enjoyed it, so…

COMMISSIONER SIMS – Thank you.

ADJOURNMENT

CHAIR BARNES – Thank you for doing it because you don't want to. Anyway, happy holidays everyone. The meeting is adjourned.

COMMISSIONER LOWELL – To what date?

CHAIR BARNES – To January 25, 2018 at 7:00 p.m. in these chambers.

COMMISSIONER LOWELL – The regular meeting of the Planning Commission.

NEXT MEETING

Next Meeting: Planning Commission Regular Meeting, January 25, 2018 at 7:00 PM, City of Moreno Valley, City Hall Council Chamber, 14177 Frederick Street, Moreno Valley, CA 92553.

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_____ _____

Richard J. Sandzimier Date
Planning Official
Approved

_____ _____

Jeffrey Barnes Date
Chair

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PLANNING COMMISSION

STAFF REPORT

Meeting Date: January 25, 2018

GENERAL PLAN ANNUAL REPORT TO BE SUBMITTED TO THE STATE OFFICE OF PLANNING AND RESEARCH

STAFF RECOMMENDATION

Staff recommends that the Planning Commission **APPROVE** Resolution No. 2018-08 and thereby:

1. **CERTIFY** that the proposed General Plan Annual Report qualifies as an exemption in accordance with Section 15061 of the California Environmental Quality Act (CEQA) Guidelines; and

2. **RECOMMENDS** to the City Council that the January 1, 2017 to December 31, 2017 General Plan Annual Report is consistent with the requirements of Government Code Section 65400 with regard to reporting on status of the City General Plan and progress in its implementation, and is ready for submittal to the Office of Planning and Research and to the Department of Housing and Community Development by April 1, 2018.

SUMMARY

The 2017 General Plan Annual Report discusses the major accomplishments and General Plan implementation projects that demonstrate City on-going compliance and consistency with the current Plan. The California Government Code Section 65400 requires that the legislative body of the City consider an annual progress report on the City's General Plan and to subsequently provide that annual progress report to the State Office of Planning and Research (OPR), and the Department of Housing and Community Development (HCD) by the first day of April each year. The annual report is expected to cover the status of the General Plan and the progress in its implementation, including the progress in meeting the City's established share of regional housing needs. The Planning Commission, serving as the Advisory body to the City Council on planning matters, is requested to review and make recommendations with respect to the annual report to the City Council prior to its submittal to OPR.

PROJECT DESCRIPTION

Background

California State Law requires each city to adopt a comprehensive, long-term general plan for its physical development and any land located outside its boundaries which bears a relationship to its planning activities. In essence, the City's general plan serves as the blueprint for future growth and development. As a blueprint for the future, the plan contains goals, objectives, policies and programs designed to provide decision makers with information and a basis for all land use related decisions.

The City of Moreno Valley incorporated on December 3, 1984. The City's first General Plan was adopted by City Council Resolution on September 8, 1988. The last comprehensive update of the General Plan was completed and approved by the city Council on July 11, 2006. The last update of the Housing Element of the General Plan was approved by the City Council on February 11, 2014.

The existing General Plan incorporates all required elements as follows, with date of the last update noted:

- Circulation Element (2006)
- Community Development Element (2006)
- Conservation Element (2006)
- Housing Element (2014)
- Parks, Recreation and Open Space Element (2006)
- Safety/Noise Element (2006)

The Housing Element is the only mandatory Element of the General Plan that must be updated on a set schedule, which is presently on an eight year cycle. The last update in February 2014 was performed in compliance with State Law. Following the adoption of that Housing Element, the State Department of Housing and Community Development (HCD) provided the City with certification of the document on May 19, 2014. With the certification from HCD, the next required update of the Housing Element will be in year 2021. Consistent with prudent planning practices and in light of an ever changing regional influences and market shifts, other Elements of the General Plan are expected to be updated from time to time to ensure that the policies and goals reflect the desired vision for the city, and do not become stale with respect to emerging industry trends and practices. Given the last comprehensive update of the City General Plan was performed in 2006, the City has taken steps, including budgetary approvals, as outlined in the Momentum Moval strategic plan to pursue a comprehensive General Plan update by August 2019, which update would be inclusive of three additional elements (Economic Development, Healthy Community, Environmental Justice) and compliance with applicable legislative mandates. The next critical path task in pursuit of a General Plan update is to complete a "visioning" process that will be used to establish/confirm City objectives for the update. The visioning process is planned to be initiated before the end of January.

Section 65400 of the California Government Code specifically requires the City comply with the following:

A) A General Plan Annual Report shall be provided by April 1 of each year to the legislative body (i.e. City Council), the Office of Planning and Research (OPR) and the Department of Housing and Community Development (HCD); and

B) A status of the General Plan and progress in its implementation shall be provided in the form of a General Plan Annual Report; and

C) Progress in meeting its share of the regional housing needs pursuant to Section 65584 of the Government Code shall be provided in the General Plan Annual Report.

Annual Report Contents

The attached 2017 General Plan Annual Report includes information on major projects, General Plan amendments and housing planning and development activities that have occurred from January 2017 through December 2017. The Annual Report specifically includes the following information:

- Acknowledgements
- Background, Analysis and Report Conclusions
- Major Accomplishments
- General Plan Implementation
- Housing Program Status Report (Appendix A)
- Evaluation of 2006 General Plan Goals, Objectives, Policies and Programs (Appendix B)

The General Plan Annual Report includes major projects and General Plan amendments approved by the Planning Commission and City Council in 2017. Ten (10) major projects and one (1) General Plan Amendment that involved a change in a portion of a residential project site from Residential 30 (R30) to Residential 5 (R5) to accommodate a Planned Unit Development (Legacy Park) were approved during this annual reporting period.

A Housing Program Status of the 2014-2021 Housing Element is included with this report. Between January 2017 and December 2017, the City has constructed both single-family and multiple-family residences. For single-family homes, 341 general dwelling units along with two (2) accessory dwelling units were constructed and count towards the City's required Regional Housing Needs Assessment numbers for the category of Above Moderate Income Level Housing (1 through 5 units). Eighty-four (84) multiple-family units were constructed, which count towards the City's required Regional Housing Needs Assessment numbers for the category of Moderate Income Level Housing (>=8 units). The City of Moreno Valley has partnered with the Riverside

Housing Development Corporation (RHDC) to rehabilitate 8 apartment units, completed in spring 2017. The units are Area Median Income (AMI) restricted (50% AMI), which is considered "Very Low Income" in the County of Riverside. Building and Safety staff verified the numbers by running reports on the building permits finalized in 2017.

As demonstrated in the attachments provided with this document, approved and completed projects and amendments to the General Plan are in conformance with the City's General Plan goals, objectives, policies and programs for each representative element. The City of Moreno Valley General Plan continues to serve as an effective guide for orderly growth and development, preservation and conservation of open space and natural resources. The City's Planning Commission and City Council have considered and followed the General Plan appropriately for long-range planning, capital improvement programs, community services, and associated fiscal and policy direction for Moreno Valley.

Conclusion

The General Plan Annual Progress Report is a State-mandated document which is expected to report on the implementation status of Moreno Valley's General Plan. The actions, plans, programs, and projects documented in the Annual Report represent the City's commitment to achieving the goals and objectives set forth in the seven (7) State mandated Elements.

The General Plan Annual Report is being provided to the Planning Commission for review and recommendations prior to consideration of this item by the City Council. Subsequent to Planning Commission action on the Annual Report it shall be forwarded, along with the recommendation(s) of the Planning Commission to the City Council in March for final review, consideration and action as consent calendar item. Following the assumed positive action by the City Council, the General Plan Annual Report will be send to the State OPR and HCD by the April 1, 2018 due date.

ENVIRONMENTAL

The General Plan Annual Report for the reporting period January 2017 to December 2017 has been bound to be exempt from the California Environmental Quality Act (CEQA) pursuant to Section 15061 of the CEQA Guidelines as there is no possibility that the activity/report itself would create potential for a significant impact upon the environment.

NOTIFICATION

Public noticing, other than the typical posting of the meeting agenda, is not required for the Planning Commission consideration of the General Plan Annual Progress Report.

Prepared by: Approved by:

Mark Gross
Senior Planner

Allen Brock
Assistant City Manager

ATTACHMENTS

1. PC Resolution 2018-08
2. General Plan Annual Report
3. Appendix A to Annual Report - 2017 Housing Forms
4. Appendix B to the Annual Report - Evaluation of 2006 General Plan Goals, Objectives Policies and Programs

RESOLUTION NO. 2018-08

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF MORENO VALLEY RECOMMENDING APPROVAL OF THE 2017 GENERAL PLAN ANNUAL REPORT TO THE CITY COUNCIL

WHEREAS, the State of California requires non-charter cities and counties to adopted a General Plan to provide guidance and direction for development activities; and,

WHEREAS, the City of Moreno Valley's current General Plan was adopted on July 11, 2006; and,

WHEREAS, California Government Code section 65400 mandates that cities submit an Annual Progress Report on the status of the General Plan and its implementation to their legislative bodies, the State Office of Planning and Research (OPR) and the Department of Housing and Community Development (HCD); and,

WHEREAS, the Annual Progress Report is required to include: a) The state of the Plan and the progress of its implementation; b) the progress in meeting its share of regional housing needs; and, c) the degree to which the General Plan complies with the Guidelines established by OPR; and,

WHEREAS, the City has prepared its Annual Progress Report due April 1, 2018 to include major accomplishments, General Plan implementation, an evaluation of current General Plan goals, objectives, policies and programs, and a regional housing report, in accordance with the Guidelines adopted by OPR; and

WHEREAS, the City of Moreno Valley's Housing Element is one of seven mandatory elements of a General Plan, and is required by the State of California to be updated every eight years; and as such was last updated in year 2014 and was reviewed and found in compliance by the State Department of Housing and Community Development, and the next mandatory update is not due until year 2021; and,

WHEREAS, the Annual Report includes vital General Plan and housing information applicable to the reporting period of January 1, 2017 to December 31, 2017; and

WHEREAS, on January 25, 2018, the City Planning Commission reviewed the compiled Annual Report and provided a recommendation to City Council; and

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred.

Attachment: PC Resolution 2018-08 [Revision 1] (2949 : General Plan Annual Report)

NOW, THEREFORE, BE IT RESOLVED, that it is hereby found, determined and resolved by the Planning Commission of the City of Moreno Valley as follows:

The City of Moreno Valley has completed the General Plan Annual Report as required by California Government Code section 65400 for the 2017 calendar year.

The Annual Report provided herein as an attachment to the staff report is found to be consistent with the suggested content in the State Guidelines and is hereby accepted.

BE IT FURTHER RESOLVED that the Planning Commission **HEREBY APPROVES** Resolution No. 2018-08 and:

1. **CERTIFIES** that the General Plan Annual Report qualifies as an exception in accordance with Section 15061 of the California Environmental Quality Act (CEQA) Guidelines, and

2. **RECOMMENDS** to the City Council that the January 1, 2017 to December 31, 2017 General Plan Annual Report is consistent with the requirements of Government Code Section 65400 with regard to reporting on status of the City General Plan and progress in its implementation, and is ready for submittal to the Office of Planning and Research and to the Department of Housing and Community Development by April 1, 2018.

APPROVED this 25h day of January, 2018

AYES:
NOES:
ABSTAIN:

_____
Jeffrey Barnes
Chair, Planning Commission

ATTEST:

Attachment: PC Resolution 2018-08 [Revision 1] (2949 : General Plan Annual Report)

_____
Richard J. Sandzimier, Planning Official

APPROVED AS TO FORM:

_____
City Attorney

Attachment: PC Resolution 2018-08 [Revision 1] (2949 : General Plan Annual Report)

CITY OF MORENO VALLEY
Community Development Department
Planning Division

GENERAL PLAN ANNUAL REPORT

JANUARY 1, 2017 – DECEMBER 31, 2017

ATTACHMENT 1

Attachment: General Plan Annual Report [Revision 1] (2949 : General Plan Annual Report)

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2. (APPENDIX B) GENERAL PLAN GOALS, OBJECTIVES, POLICIES AND PROGRAMS

Attachment: General Plan Annual Report [Revision 1] (2949 : General Plan Annual Report)

ACKNOWLEDGEMENTS

CITY COUNCIL (Elected)	**DISTRICT**	**TERM EXPIRES**
Dr. Yxstian A. Gutierrez, Mayor	CITYWIDE MAYOR	November 2018
Victoria Baca, Mayor Pro-Tem	1	November 2020
Jeffrey J. Giba	2	November 2018
David Marquez	3	November 2020
Ulises Cabrera	4	November 2018

PLANNING COMMISSION (Appointed)	**TERM EXPIRES**
Jeffrey Barnes, Chairperson	March 31, 2019
Patricia Korzec. Vice Chairperson	March 31, 2019
Brian Lowell	March 31, 2021
Ray L. Baker	March 31, 2021
Jeffrey D. Sims	March 31, 2019
Vacant	March 31, 2021
Vacant	March 31, 2021

CITY MANAGER
Thomas DeSantis

ASSISTANT CITY MANAGER
Allen D. Brock

COMMUNITY DEVELOPMENT DEPARTMENT
Richard Sandzimier, Acting Community Development Director

Planning Division
Vera Sanchez, Senior Administrative Assistant
Ashley Aparicio, Administrative Assistant
Chris Ormsby, AICP Senior Planner
Mark Gross, AICP Senior Planner
Jeffrey Bradshaw, Associate Planner
Julia Descoteaux, Associate Planner
Claudia Manrique, Associate Planner
Gabriel Diaz, Associate Planner
Leticia Esquivel, Senior Permit Technician
Summer Looy, Permit Technician
Grace Espino-Salcedo, Permit Technician
Joy Chen, WRCOG Intern
Natalie Qaquish, Administrative Intern

ANNUAL REPORT SUMMARY

Attachment: General Plan Annual Report [Revision 1] (2949 : General Plan Annual Report)

BACKGROUND

On December 3, 1984, the City of Moreno Valley was incorporated as a general law city led by a City Council-Manager form of government. Prior to incorporation, the City of Moreno Valley consisted of 42 square miles and a population of 49,702 people. As of December 2017, the City includes 51.56 square miles with a population of 209,826 people.

The City adopted its first General Plan in 1988. The General Plan was comprehensively amended and updated on July 11, 2006. The current General Plan recognizes the community's diverse population, distinct residential neighborhoods, neighborhood and regional commercial activities, industrial potential and recreational amenities.

This document constitutes an annual report to the Planning Commission and City Council as required by state law on the updates of programs and policies in the General Plan. The document includes major projects, General Plan amendments, a status report of goal objectives, policies and programs of the current General Plan, and a Housing Program Status Report. This Annual Report includes projects and information from January 1, 2017 through and up to December 31, 2017.

The following is a summary of the current adoption status of the different required elements of the General Plan:

- Circulation Element (2006)
- Community Development Element (2006)
- Conservation Element (2006)
- Housing Element (2014)
- Parks, Recreation and Open Space Element (2006)
- Safety and Noise Element (2006)

ANALYSIS

Government Code Section 65400

California Governments Code Section 65400 requires that prior to submittal to the Office of Planning & Research and Department of Housing and Community Development, the annual report be made to the legislative body of the submitting jurisdiction on the status of the General Plan and progress towards its implementation, including activity towards its share of regional housing needs. State law requires the following:

Attachment: General Plan Annual Report [Revision 1] (2949 : General Plan Annual Report)

A) A General Plan Annual Report shall be provided by April of each year to the City Council, the Office of Planning and Research (OPR) and the Department of Housing and Community Development (HCD); and

B) A status of the General Plan and progress in its implementation shall be provided in the General Plan Annual Report; and

C) Progress in meeting its share of the regional housing needs pursuant to Section 65584 of the Government Code shall be provided in the General Plan Annual Report.

Annual Review and Housing Program Summary Report

Pursuant to State Law, the Annual Report and Review of the City of Moreno Valley General Plan reports the progress in implementing the General Plan to the City Council. The City of Moreno Valley's Annual Report includes the following items:

1. A list of Major Accomplishments from January 2017 through December 2017

2. A list of General Plan Amendments from January 2017 through December 2017

3. Appendix A - Housing Program Status Report includes the City's progress made in meeting its share of regional housing needs pursuant to State Government Code Section 65584.

4. Appendix B – Moreno Valley General Plan Complete List of Goals and Policies, which provides a status report of the 2006 General Plan goals, policies, objectives and programs towards implementing the City's blueprint for land use development.

Moreno Valley General Plan – Goals, Objectives, Policies and Programs

Appendix B evaluates the 2006 General Plan goals and policies in a comprehensive document providing the goal/policy number, a description of each goal and policy, a discussion on implementation status and the party responsible for carrying out each item.

- A goal is defined as a broad vision of what the community wants to achieve or provide to residents, landowners and business owners. It is a statement of a desired condition based on community values. Goals are general in nature and usually timeless.

- A policy is a specific statement that guides decision-making. It indicates a commitment of the City to a particular course of action. A policy is based on and assists to implement the goal.

Attachment: General Plan Annual Report [Revision 1] (2949 : General Plan Annual Report)

The General Plan Annual Report also includes objectives leading up to the goal/policy as well as an update on existing programs.

General Plan Update

The State Office of Planning and Research (OPR) recommends that cities update their General Plan every ten (10) years. The City or Moreno Valley last completed an update to its General Plan on July 11, 2006, and is preparing for a comprehensive General Plan update by August 2019. The General Plan update is an extensive process that includes various public meetings involving City staff, commissions and extensive community outreach. The current update is subject to extensive public outreach and several public hearings before the Planning Commission and City Council. The cost and work involved with the update can be extensive.

Momentum MoVal, the City of Moreno Valley's Strategic Plan, represents the results of active engagement by Moreno Valley residents and the City Council in charting the community's course into the future. Adopted on August 16, 2016, the document provides a course of action for the City's next comprehensive General Plan update. This includes Objective 1.9 to "Ensure the City's General Plan articulates the vision of how Moreno Valley wants to evolve over time, and provides an orderly and predictable process through which this vision is developed and implemented, including new attention to economic development, sustainability, public health, and innovation".

Four (4) initiatives have been adopted with this effort to assist in preparing for and completing the comprehensive General Plan Update. This includes two (2) initiatives related to the completion of the General Plan Annual Report. Initiative 1.9.1 required the preparation of a General Plan Annual Report to the City Council before April 1, 2017 that explains how current land use decisions relate to adopted goals, policies and other implementation measures, and as appropriate, identifies necessary course adjustments consistent with the Strategic Plan. This effort was completed in March of 2017 and serves as the continued course of action to ensure the City actions are consistent with Government Code 65400. Initiative 1.9.2 called for the formation of a working group of key City staff to research and evaluate the General Plan adopted in 2006 as a prerequisite to initiating a comprehensive update of the General Plan. This working group remains intact and engaged and includes members of all departments/divisions. Meetings have been held periodically as warranted between October 2016 and December 2017 and will continue to occur through completion of the update expected in August 2019.

The final two Initiatives related to completion of the comprehensive General Plan update include Initiative 1.9.3 and 1.9.4. Initiative 1.9.3 calls for consideration of incremental

Attachment: General Plan Annual Report [Revision 1] (2949 : General Plan Annual Report)

funding set aside to perform the General Plan update. This Initiative was accomplished with approval of the City FY 2017-2019 Budget in May 2017. Initiative 1.9.4 outlines the goal for staff to "conduct the comprehensive update of the City's General Plan and supporting environmental document, including all mandatory elements (except the Housing Element, which was updated in 2014) and other desired optional Elements as authorized by the City Council" by August 2019. During the reporting period steps have been taken to meet this goal.

CONCLUSION

The City of Moreno Valley General Plan continues to serve as an effective guide for orderly growth and development, preservation and conservation of open space and natural resources. The document provides for the efficient expenditure of public funds. The City will continue to make progress in completing the comprehensive General Plan update by August 2019 and will provide updates on this effort in the next 2018 annual report.

As illustrated in the attachments provided with this document, completed public projects are in conformance with the City's General Plan goals, objectives, policies and programs for each representative element. The City of Moreno Valley's legislative bodies have used the 2006 General Plan as a primary source of long-range planning and policy direction. Future work activity that is consistent with these efforts will continue to guide future growth and preserve the quality of life within the community.

Attachment: General Plan Annual Report [Revision 1] (2949 : General Plan Annual Report)

MAJOR ACCOMPLISHMENTS

The City of Moreno Valley is committed to implementing the adopted General Plan, Development Code and Design Guidelines. The Development Code and Design Guidelines, combined with the adopted Landscape Guidelines, are major tools to implement the General Plan.

The purpose of this Annual Report is to highlight significant accomplishments and summarize ongoing General Plan projects that the City of Moreno Valley has been working on since January of 2017. A major function of this report is to acknowledge and evaluate the ongoing implementation of the General Plan. Major accomplishments include key projects that demonstrate how the City of Moreno Valley is carrying out the policy and vision of the General Plan. This report is prepared in accordance with Section 65040.5 of the California Government Code. Major accomplishments are provided from January 2017 to December 2017.

Major Accomplishments in 2017

Major development projects reviewed and approved in January 2017 through December 2017 are as follows:

- PEN16-0119 (Plot Plan) and PEN16-0120 (Tentative Tract Map 35429): A Plot Plan and Tentative Tract Map 35429 for 58 multiple-family condominium units. The project is located at the northwest corner of Alessandro Boulevard and Chara Street.

- PEN16-0123 (Plot Plan): A Plot Plan for a 220 unit multiple-family apartment complex. The project is located at the northeast corner of Lasselle Street and Cactus Avenue.

- PEN16-0131 (Master Plot Plan), PEN16-0132 (Plot Plan), PEN16-0133 (Plot Plan), and PEN16-0134 (Plot Plan: Master Plot Plan for a commercial shopping center development including a 24 hour gas station with convenience store and carwash, 3 fast food restaurants, office and warehouse building on 6.31 acres. The project is located at the northeast corner of Cactus Avenue and Commerce Center Drive.

- PEN16-0100 (Plot Plan) and PEN16-0101 (Variance): Plot Plan for the Brodiaea Business Center warehouse distribution center with a variance allowing for increased building area in the Business Park zoning district. The 99,978 SF building is located near the southwest corner of Brodiaea Avenue and Heacock Street.

Attachment: General Plan Annual Report [Revision 1] (2949 : General Plan Annual Report)

- PEN16-0042 (Change of Zone): Change of Zone for a 10 acre site along the south side of Mountain Ranch Road at Northshore Drive, making the zoning consistent with the project site's Residential 2 (R2) General Plan land use designation.

- PEN16-0157 (Conditional Use Permit): The Conditional Use Permit for the Fairfield Inn & Suites - a 106 room hotel to be located at north side of Eucalyptus Avenue and 500 feet east of Day Street in the Towngate Specific Plan.

- PEN16-0153 (Conditional Use Permit): The Conditional Use Permit for a 1-story 57,000 square foot, 90 room transitional care facility located on 7.12 acres at the southwest corner of Oliver St. and Filaree Ave.

- PEN16-0050 (Tentative Tract Map 37060): Tentative Tract Map 37060 subdivides 10 acres of vacant Residential Agriculture 2 (RA2) zoned property into 16 single-family lots. The project is located on the south side of Cottonwood Avenue at Lakeport Drive.

- PEN16-0107 (Plot Plan): Plot Plan for a new 4,263 square foot Winchell's donut shop and convenience store on a 0.6 acre site located at the northwest corner of Alessandro Boulevard and Day Street.

- PEN16-0113 (Plot Plan): Plot Plan with hearing for a fully automated carwash 5,430 square feet located on the north side of Sunnymead Boulevard, west of Heacock Street.

Attachment: General Plan Annual Report [Revision 1] (2949 : General Plan Annual Report)

GENERAL PLAN IMPLEMENTATION

The General Plan and Development Code provide the City of Moreno Valley the tools necessary to guide the development of the City into the next century. Implementation of the General Plan includes key projects that demonstrate how the City of Moreno Valley is carrying out the policy and vision of the Plan.

The Planning Commission held public hearings on amendments to the General Plan and the Development Code. The Planning Commission recommended approval of the amendments, and they were forwarded to the City Council for final approval. Projects representing General Plan Implementation are provided from January 2017 to December 2017.

General Plan Implementation in 2017

The following General Plan related projects reviewed and approved in January 2017 through December 2017 are as follows:

- PEN16-092 (General Plan Amendment), PEN16-0093 (Change of Zone), PEN16-0094 (Conditional Use Permit), and PEN16-0095 (Tentative Tract Map 36760): A General Plan Amendment from Residential 30 (R30) to Residential 5 (R5) and Zone Change from Residential 30 (R30) to Residential 5 (R5) for the 15.1 acre parcel as part of the development of TTM 36760 for the Legacy Park Planned Unit Development (PUD) with 221 Single-Family residential lots on 53 acres. The project is located at the southeast corner of Indian Street and Gentian Avenue.

Attachment: General Plan Annual Report [Revision 1] (2949 : General Plan Annual Report)

Appendix A

ANNUAL ELEMENT PROGRESS REPORT
Housing Element Implementation

(CCR Title 25 §6202)

Jurisdiction City of Moreno Valley

Reporting Period 01/01/2017 - 12/31/2017

Table A

Annual Building Activity Report Summary - New Construction
Very Low-, Low-, and Mixed-Income Multifamily Projects

Housing Development Information									Housing with Financial Assistance and/or Deed Restrictions		Housing without Financial Assistance or Deed Restrictions
1	2	3	4				5	5a	6	7	8
Project Identifier (may be APN No., project name or address)	Unit Category	Tenure R=Renter O=Owner	Affordability by Household Incomes				Total Units per Project	Est. # Infill Units*	Assistance Programs for Each Development	Deed Restricted Units	Note below the number of units determined to be affordable without financial or deed restrictions and attach an explanation how the jurisdiction determined the units were affordable. Refer to instructions.
			Very Low-Income	Low-Income	Moderate-Income	Above Moderate-Income			See Instructions	See Instructions	
(9) Total of **Moderate and Above Moderate** from Table A3 ► ►					0	343	0				
(10) Total by income Table A/A3 ► ►						343	0				
(11) Total **Extremely Low-Income** Units*											

* Note: These fields are voluntary

Attachment: Appendix A to Annual Report - 2017 Housing Forms [Revision 2] (2949 : General Plan Annual

ANNUAL ELEMENT PROGRESS REPORT
Housing Element Implementation
(CCR Title 25 §6202)

Jurisdiction City of Moreno Valley

Reporting Period 01/01/2017 - 12/31/2017

Table A2
Annual Building Activity Report Summary - Units Rehabilitated, Preserved and Acquired pursuant to GC Section 65583.1(c)(1)

Please note: Units may only be credited to the table below when a jurisdiction has included a program it its housing element to rehabilitate, preserve or acquire units to accommodate a portion of its RHNA whichmeet the specific criteria as outlined in GC Section 65583.1(c)(1)

Activity Type	Affordability by Household Incomes				(4) The Description should adequately document how each unit complies with subsection (c)(7) of Government Code Section 65583.1
	Extremely Low-Income*	Very Low-Income	Low-Income	TOTAL UNITS	
(1) Rehabilitation Activity		8	0	8	2/2/17: 22889 and 22899 Allies - 4 units each address (BFR16-0004 & 0006) - Affordable Covenant Expires 7/1/2070 and funded through HUD's HOME program.
(2) Preservation of Units At-Risk				0	
(3) Acquisition of Units				0	
(5) Total Units by Income	0	8	0	8	

* Note: This field is voluntary

Table A3
Annual building Activity Report Summary for Above Moderate-Income Units (not including those units reported on Table A)

	1. Single Family	2. 2 - 4 Units	3. 5+ Units	4. Second Unit	5. Mobile Homes	6. Total	7. Number of infill units*
No. of Units Permitted for **Moderate (>=8 units)**		**4**	**80**			84	
No. of Units Permitted for **Above Moderate (=1-5 units)**	341			2		343	

* Note: This field is voluntary

Attachment: Appendix A to Annual Report - 2017 Housing Forms [Revision 2] (2949 : General Plan Annual

ANNUAL ELEMENT PROGRESS REPORT
Housing Element Implementation
(CCR Title 25 §6202)

Jurisdiction City of Moreno Valley

Reporting Period 01/01/2017 - 12/31/2017

Table B

Regional Housing Needs Allocation Progress

Permitted Units Issued by Affordability

Enter Calendar Year starting with the first year of the RHNA allocation period. See Example.			2014	2015	2016	**2017**						Total Units to Date (all years)	Total Remaining RHNA by Income Level
Income Level		RHNA Allocation by Income Level	Year 1	Year 2	Year 3	**Year 4**	Year 5	Year 6	Year 7	Year 8	Year 9		
Very Low	Deed Restricted	1,500				**8**						8	1,492
	Non-deed restricted												
Low	Deed Restricted	993											993
	Non-deed restricted												
Moderate	Deed Restricted	1,112											1,028
	Non-deed restricted					**84**						84	
Above Moderate		2,564	93	103	119	**343**						658	1,906
Total RHNA by COG. Enter allocation number:		6,169	93	103	119	**435**						750	5,419
Total Units ► ► ►													
Remaining Need for RHNA Period ► ► ► ► ►													

Note: units serving extremly low-income households are included in the very low-income permitted units totals.

Attachment: Appendix A to Annual Report - 2017 Housing Forms [Revision 2] (2949 : General Plan Annual

ANNUAL ELEMENT PROGRESS REPORT
Housing Element Implementation
(CCR Title 25 §6202)

Jurisdiction City of Moreno Valley

Reporting Period 01/01/2017 - 12/31/2017

Table C

Program Implementation Status

Program Description (By Housing Element Program Names)	**Housing Programs Progress Report - Government Code Section 65583.** Describe progress of all programs including local efforts to remove governmental constraints to the maintenance, improvement, and development of housing as identified in the housing element.		
Name of Program	**Objective**	**Timeframe in H.E.**	**Status of Program Implementation**
Action 1.3 under Housing Goal #1: Availability of a wide range of housing by location, type of unit, and price to meet the existing and future needs of Moreno Valley residents.	Utilize available funding, HOME, CDBG, etc. allocations to provide the following incentives which may be applied to an affordable housing project: 1) Lease or purchase of City owned property at low rates; 2) Provision of off-site improvements.	2014-2021	Ongoing
Action 2.1 under Housing Goal #2: Promote and preserve suitable and affordable housing for persons with special needs, including lower income households, large families, single parent households, the disabled, senior citizens and shelter for the homeless.	Utilize resources such as HOME funds, California Housing Finance Agency single-family and multiple-family programs, HUD Section 208/811 loans, and HOPE II and III Homeownership programs to stimulate private developer and non-profit entity efforts in the development and financing of housing for lower and moderate-income households.	2014-2021	Ongoing

General Comments:

Related to Action 1.3 and Action 2.1 of Housing Element Programs/Policies/Actions - The City of Moreno Valley has partnered with the Riverside Housing Development Corporation (RHDC) to rehab the apartment units on Allies Place, which are AMI Resricted (50% AMI) until 7/1/2070, which is "Very Low Income" in the County of Riverside.
2017 - 341 Single Family Homes Residential 5 Zoning and including 4 custom homes, 2 Accessory Dwelling Units (2nd Units), 1 Duplex with 2 units converting from Commercial Use to Residential Units, 1 new Duplex with 2 units in Residenital 20 (R20) zoning and 80 MODERATE MULTIPLE-FAMILY UNITS (VIlla Camille Apts).

Attachment: Appendix A to Annual Report - 2017 Housing Forms [Revision 2] (2949 : General Plan Annual

APPENDIX B

Moreno Valley General Plan

Complete list of Goals and Policies

KEY	
Planning	Police
Land Development	Waste Coordinator
Special Districts	Transportation
Economic Development	Building
Parks / Community Services	Multiple Departments
Emergency Operations / Fire	

Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
The City Structure Land Use Element Goals and Policies			
9.2 Community Development Element Goals, Objectives, Policies and Programs			
9.2.1 Community Development Element Goals			
Goal 2.1	A pattern of land uses, which organizes future growth, minimizes conflicts between land uses, and which promotes the rational utilization of presently underdeveloped and undeveloped parcels.	Land use designations provided in the General Plan minimizes conflicts between land uses and allows for buffers between industrial, commercial and more sensitive residential land uses. In higher intensity Specific Plans such as the Industrial Area Plan (SP 208), buffers have been established between industrial land uses and existing more sensitive residential development. This is an ongoing goal of the City.	Planning

APPENDIX B

Moreno Valley General Plan

Complete list of Goals and Policies

Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
Goal 2.2	An organized, well-designed, high quality, and functional balance of urban and rural land uses that will meet the needs of a diverse population, and promote the optimum degree of health, safety, well-being, and beauty for all areas of the community, while maintaining a sound economic base.	The City of Moreno Valley strives to approve well-designed, high quality projects. There is a functional balance between urban and rural land uses that will meet the needs of the residents. For example, more rural land use designations are provided in the northern and eastern portions of the city, while urban land uses are provided in the western and southern portions. This practice allows for good sensible land use planning, while maintaining a sound economic base. This is an ongoing goal of the City.	Planning

APPENDIX B

Moreno Valley General Plan

Complete list of Goals and Policies

Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
Goal 2.3	Achieves an overall design statement that will establish a visually unique image throughout the City.	The City of Moreno Valley's General Plan provides for an overall design statement which establishes unique visual images throughout the City. The Municipal Code, which is consistent with the General Plan, establishes overall design guidelines and standards for residential, commercial and industrial development proposals, and reviews items such as, color, unity/diversity massing, and building proportion. This is an ongoing City goal.	Planning
Goal 2.4	A supply of housing in sufficient numbers suitable to meet the diverse needs of future residents and to support healthy economic development without creating an oversupply of any particular type of housing.	The downturn of the economy in 2007 limited new housing development in the City until recently. In the last year, new residential housing projects have been submitted and housing product has been very diverse. This includes such project types as smaller lot Planned Unit Developments for the senior or first time homeowner and multiple family housing such as apartments. This is an ongoing City goal.	Planning

APPENDIX B

Moreno Valley General Plan

Complete list of Goals and Policies

Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
Goal 2.5	Maintenance of systems for water supply and distribution; wastewater collection, treatment, and disposal; solid waste collection and disposal; and energy distribution which are capable of meeting the present and future needs of all residential, commercial, and industrial customers within the City of Moreno Valley.	A specific goal for the City is to maintain water supply, wastewater collection/treatment/disposal and solid waste collection capable of meeting the present and future needs of City residents. MVU prepares an annual Distribution System Plan, which forecasts the future electrical needs of MVU's service area. Capital improvement projects are then developed and prioritized to ensure that the system will meet the present and future needs of MVU customers. This is an ongoing goal.	Water Purveyors/Waste Coordinator /MVU

APPENDIX B

Moreno Valley General Plan

Complete list of Goals and Policies

Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
9.2.2 Community Development Element Objectives and Policies			
Objective 2.1	Balance the provision of urban and rural lands within Moreno Valley by providing adequate land for present and future urban and economic development needs, while retaining the significant natural features and the rural character and lifestyle of the northeastern portion of the community.	The City of Moreno Valley continues to provide a balance of urban and rural land. The majority of the City is urbanized, with a continued emphasis of retaining natural features as well as the urban lifestyle with larger lots and larger animal keeping opportunities north of State Route 60 in the northeaster portion of the community. This is an ongoing City objective.	Planning
Objective 2.2	Provide a wide range of residential opportunities and dwelling types to meet the demands of present and future residents of all socioeconomic groups.	The City has a very diverse residential mix, including a wide range of residential opportunities to meet the demand of all socioeconomic groups. As included in Moreno Valley's approved 2014 Housing Element, the City strives for affordable housing opportunities. The City allows opportunities for Planned Unit Developments (PUD's) that provide smaller lot housing for the senior and first time home buyer. Although the market has been slow for condominium development, apartment projects have recently picked up momentum . There are also continued opportunities for market rate single family home development, from tract maps that have been carried over from before the economic downturn. This is an ongoing City objective.	Planning

APPENDIX B

Moreno Valley General Plan

Complete list of Goals and Policies

Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
Policies:			
2.2.1	In determining allowable density for residential parcels an "adjusted net acreage" shall be used. Adjusted net acres shall mean the land area that would remain after dedication of ultimate rights-of-ways for arterial streets, freeways and park dedications.	All allowable density of residential projects in the City are determined by calculating an adjusted net average of buildable area after infrastructure dedication for streets, utilities, parks etc. This is a continuing City policy.	Planning
2.2.2	The primary purpose of areas designated **Hillside Residential** is to balance the preservation of hillside areas with the development of view-oriented residential uses. a. Within the Hillside Residential category, appropriate	Section 9.03.040 B "Residential Site Development Standards" of the Municipal Code establishes standards for hillside residential development consistent with the goals, objectives and policies of the General Plan. Hillside residential development	Planning

APPENDIX B

Moreno Valley General Plan

Complete list of Goals and Policies

Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
	residential uses include large lot residential uses. Lots smaller than one acre may only be permitted as clustered units to minimize grading, and other impacts on the environment, inclusive of the Multi-Species Habitat Conservation Plan. b. The maximum residential density within Hillside Residential areas shall be determined by the steepness of slopes within the project. The maximum allowable density shall not exceed one dwelling unit per acre on sloping hillside property and shall decrease with increasing slope gradient. c. Future development within Hillside Residential areas shall occur in such a manner as to maximize preservation of natural hillside contours, vegetation and other characteristics. Hillside area developments should minimize grading by following the natural contours as much as possible. d. Development within Hillside Residential areas shall	includes large lot residential uses, with the maximum allowable density not to exceed one dwelling unit per acre on sloping hillside property, including a decreasing density with an increasing slope gradient. Allowable development would preserve the preservation of natural hillsides. A slope analysis is the likely vehicle for development in hillside residential areas to determine the percentage of slope. **Goals, objectives and policies of hillside residential development will be further evaluated with the next comprehensive General Plan update.**	

APPENDIX B

Moreno Valley General Plan

Complete list of Goals and Policies

Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
	be evaluated to determine the precise boundaries of the area. If the Community Development Director determines that adequate slope information is not available, applicants requesting to develop within these areas shall complete a slope analysis for the proposed development site. Portions of the development that exceed an average slope of 10% shall adhere to the policies within the Hillside Residential category. Portions of the development where the slopes are less than 10% on average shall adhere		
2.2.3	The primary purpose of areas designated **Rural Residential** is to provide for and protect rural lifestyles, as well as to protect natural resources and hillsides in the rural portions of the City. a. The maximum residential density within Rural Residential and areas shall be determined by the steepness of slopes within the individual project area. The maximum allowable density shall be 0.4 dwelling units per acre (an average lot size of 2.5 acres) on flat terrain and shall decrease with increasing slope gradient. b. Within the Rural Residential category, appropriate residential uses include large lot residential uses. Lots smaller than 2.5 acres may only be permitted as clustered units to minimize grading and other impacts on the environment, inclusive of the Multi-Species Habitat Conservation Plan.	Section 9.03.040 A "Residential Site Development Standards" of the Municipal Code establishes standards for rural residential development consistent with the goals, objectives and policies of the General Plan. This includes large lot residential development allowing a maximum density of 0.4 dwelling units per acre on flat terrain, with a decrease in density as the slope gradient increases. This is an ongoing policy.	Planning

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2.2.4	The primary purpose of areas designated **Residential 1** is to provide for and protect rural lifestyles. The maximum allowable density for projects within the Residential 1 areas shall be 1.0 dwelling unit per acre.	Section 9.03.040 "Residential Site Development Standards" of the Municipal Code establishes requirements for Residential 1 development consistent with the goals, objectives and policies of the General Plan. Development shall not exceed 1 dwelling unit per acre. This is an ongoing policy.	Planning
2.2.5	The primary purpose of areas designated **Residential 2** is to provide for suburban lifestyles on residential lots larger than commonly available in suburban subdivisions and to provide a rural atmosphere. The maximum allowable density shall be 2.0 dwelling units per acre.	Section 9.03.040 "Residential Site Development Standards" of the Municipal Code establishes standards for Residential 2 development consistent with the goals, objectives and policies of the General Plan. Development shall not exceed 2 dwelling units per acre. This is an ongoing policy.	Planning
2.2.6	The primary purpose of areas designated **Residential 3** is to provide a transition between rural and urban density development areas, and to provide for a suburban lifestyle on residential lots larger than those commonly found in suburban subdivisions. The maximum allowable density shall be 3.0 dwelling units per acre.	Section 9.03.040 "Residential Site Development Standards" of the Municipal Code establishes standards for Residential 3 development consistent with the goals, objectives and policies of the General Plan. Development shall not exceed 3 dwelling units per acre. This is an ongoing policy.	Planning
2.2.7	The primary purpose of areas designated Residential 5 is to provide for single-family detached housing on standard sized suburban lots. The maximum allowable density shall be 5.0 dwelling units per acre.	Section 9.03.040 "Residential Site Development Standards" of the Municipal Code establishes standards for Residential 5 development consistent with the goals, objectives and policies of the General Plan. Development shall not exceed 5 dwelling unit per acre. This is an ongoing policy.	Planning

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2.2.8	The primary purpose of areas designated **Residential 10** is to provide for a variety of residential products and to encourage innovation in housing types. Developments within Residential 10 areas are typically expected to provide amenities not generally found in suburban subdivisions, such as common open space and recreational areas. The maximum allowable density shall be 10.0 dwelling units per acre.	Section 9.03.040 "Residential Site Development Standards" of the Municipal Code establishes standards for Residential 10 development consistent with the goals, objectives and policies of the General Plan. Development shall not exceed 10 dwelling units per acre. This is an ongoing policy.	Planning
2.2.9	The primary purpose of areas designated **Residential 15** is to provide a range of multi-family housing types for those not desiring dwellings on individual lots that include amenities such as common open space and recreational facilities. The maximum allowable density shall be 15.0 dwelling units per acre.	Section 9.03.040 "Residential Site Development Standards" of the Municipal Code establishes standards for multiple-family Residential 15 development consistent with the goals, objectives and policies of the General Plan. Development shall not exceed 15 dwelling unit per acre. This is an ongoing policy.	Planning
2.2.10	The primary purpose of areas designated **Residential 2**0 is to provide a range of high density multi-family housing types. Developments within Residential 20 areas shall also provide amenities, such as common open spaces and recreational facilities. The maximum density shall be 20 dwelling units per acre.	Section 9.03.040 "Residential Site Development Standards" of the Municipal Code establishes standards for high density residential 20 development consistent with the goals, objectives and policies of the General Plan. Development shall not exceed 20 dwelling units per acre. This is an ongoing policy.	Planning

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2.2.11	The primary purpose of areas designated **Residential 3**0 is to provide a range of high density multi-family housing types in an urban setting. Developments within Residential 30 areas shall also provide amenities, such as common open spaces and recreational facilities. The maximum density shall be 30 dwelling units per acre.	Section 9.03.040 "Residential Site Development Standards" of the Municipal Code establishes standards for high density Residential 30 development consistent with the goals, objectives and policies of the General Plan. Development shall not exceed 30 dwelling unit per acre. This is an ongoing policy.	Planning
2.2.12	Densities in excess of the maximum allowable density for residential projects may be permitted pursuant to California density bonus law.	The City encourages the use of density bonus for affordable housing and senior housing opportunities. Development Code Section 9.03.050 "Density Bonus Program for Affordable Housing" provides provisions for density bonus and greater on-site project densities. This is an ongoing policy.	Planning
2.2.13	Planned Unit Developments (PUD) shall be encouraged for residential construction in order to provide housing that is varied by type, design, form of ownership, and size. PUD's shall also provide opportunities to cluster units to protect significant environmental features and/or provide unique recreational facilities.	PUD's are encouraged to allow for more diverse designs, recreational opportunities and walkable residential communities. Section 9.03.060 "Planned Unit Developments of the Development Code provides for PUD's and clustering opportunities to avoid existing environmental constraints. This is an ongoing policy.	Planning
2.2.14	Discourage costly "leap-frog" development patterns by encouraging in-fill development wherever feasible, thereby reducing overall housing costs. Development within an area designated as SP 212-1 (Moreno Highlands) is not considered to be leapfrog development.	Developing on infill properties is always encouraged by the City. This is an ongoing policy.	Planning

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2.2.15	Encourage a diversity of housing types, including conventional, factory built, mobile home, and multiple family dwelling units.	The City encourages a diverse housing mix for all residentially zoned property. This is an ongoing policy.	Planning
2.2.16	Encourage the use of innovative and cost effective building materials, site design practices and energy and water conservation measures to conserve resources and reduce the cost of residential development.	The use of cost effective building materials, site design practices and energy/water conservation measures is encouraged through the Development and Building Codes. For example. The Landscape ordinance requires drought tolerant plant materials and waterwise irrigation practices . The Green Building Code requires conservations measures such as building material design and other energy requirements. This is an ongoing policy.	Planning
2.2.17	Affordable housing developments should be compatible in visual design with surrounding development.	All newly constructed affordable housing developments are compatible with both exterior design and surrounding development. This is an ongoing policy.	Planning
2.2.18	Discourage nonresidential uses on local residential streets that generate traffic, noise or other characteristics that would adversely affect nearby residents.	Current zoning practices discourages and in many cases does not allow for impactful non-residential development to occur. The Municipal Code (Section 9.02.020 "Permitted Uses"), restricts non residential uses in residential zones that are contained to local residential streets. This is an ongoing policy.	Planning

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
Objective 2.3	Promote a sense of community and pride within residential areas through increased neighborhood interaction and enhanced project design.	A sense of community and pride is instilled in newly approved projects through good design and walkable communities. Increased neighborhood interaction is also encourage through such things as neighborhood watch and Pop teams established for multiple family residential development. This is an ongoing policy.	Planning

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Policies:			
2.3.1	Within individual residential projects, a variety of floor plans and elevations should be offered.	Pursuant to Section 9.16.130 (Table 9.16.130B) of the Code, all residential projects shall provide a variety of floor plans and elevations. This is an ongoing policy.	Planning
2.3.2	Encourage building placement variations, roofline variations, architectural projections, and other embellishments to enhance the visual interest along residential streets.	Chapter 16 of the Municipal Code requires roofline variations, architectural projections and other embellishments such as four sided architecture. This is an ongoing policy.	Planning
2.3.3	Discourage the development of single-family residences with a bulk (building mass) that is out of scale with the size of the parcels on which they are located.	The City understands that building massing is a very important issue to consider in residential elevations and when developing single-family residential communities. The design guidelines contained in Section 9.16.010 of the Municipal Code discourages building massing that is out of context with the existing neighborhood. This is an ongoing policy.	Planning
2.3.4	Design large-scale small lot single family and multiple family residential projects to group dwellings around individual open space and/or recreational features.	Section 9.03.060 "Planned Unit Developments" of the Municipal Code encourages PUD's for greater innovation in housing development and conservation of natural resources and open space. Recreational facilities such as picnic areas, pocket parks, walking paths and gyms are commonplace among PUD developments. This is an ongoing policy.	Planning

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2.3.5	Ensure that all multiple family housing is well-designed, attractive and livable by: a. Ensuring all structures are architecturally compatible and include decorative architectural features and articulation in walls and roofs; b. Providing adequate parking, walkways, lighting, landscaping, amenities and open space areas; c. Providing private open space areas such as patios and balconies.	Pursuant to Chapter 16, Section 9.16.130 "Design Guidelines" of the Municipal Code, multiple-family residential projects shall be architecturally compatible with the existing neighborhood, provide parking, walkways and common open space areas such as picnic areas, pools, tot lots etc. This is an ongoing policy.	Planning
Objective 2.4	Provide commercial areas within the City that are conveniently located, efficient, attractive, and have safe and easy pedestrian and vehicular circulation in order to serve the retail and service commercial needs of Moreno Valley residents and businesses.	The City strives for commercial areas that provide functional vehicular circulation and safe pedestrian areas that are walkable internally between uses and externally to surrounding neighborhoods. This is an ongoing objective.	Planning
Policies:			
2.4.1	The primary purpose of areas designated **Commercial** is to provide property for business purposes, including, but not limited to, retail stores, restaurants, banks, hotels, professional offices, personal services and repair services. The zoning regulations shall identify the particular uses permitted on each parcel of land, which could include compatible noncommercial uses. Commercial development intensity should not exceed a Floor Area Ratio of 1.00 and the average floor area ratio should be significantly less.	Zoning regulations for commercial uses are consistent with established General Plan land use. For example, the City's zoning map establishes Commercial zoning designations and the Municipal Code Permitted Uses Table (Section 9.02.020-1) provides for permitted uses allowed for each commercial zoning category. This is an ongoing policy.	Planning

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
2.4.2	The commercial area located at the intersection of **Alessandro Boulevard and Redlands Boulevard** shall provide for commercial land uses that are compatible with the historical, small town nature of the original Moreno town site. The zoning regulations shall identify the particular uses permitted on each parcel of land, which could include compatible noncommercial uses.	The General Plan Land Use Map shows the site zoned as VC or Village Commercial, which is a unique zoning classification allowing for unique uses. Any development at this intersection has been and would need to be compatible with the historical, small town nature of the original site.	Planning

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2.4.3	The commercial area located on the **north side of State Route 60 at the intersection of Moreno Beach Drive** shall provide for the establishment of commercial land uses that serve the daily needs of the surrounding residential neighborhood and the traveling public. It is not intended to serve the needs of the region for goods, services, entertainment or recreation. The zoning regulations shall identify the particular uses and type of development permitted on each parcel, which could include office uses and compatible noncommercial uses.	Properties located north of State Route 60 at the intersection of Moreno Beach Drive are zoned CC or Community Commercial. The zoning established in the City's Land Use Map and Municipal Code identifies permitted uses allows for commercial/retail uses that both serve the needs of the surrounding residential neighborhood and the traveling public. The preferred alternative in the Highway 60 Corridor study suggested a town center concept which includes potential entertainment retail uses such as hotels and sit down restaurant. **This item shall be reviewed further during the next General Plan update.**	Planning
2.4.4	An overlay district limiting land uses to those that are supportive and compatible with medical uses shall be established around the **Riverside County Regional Medical Center and the Moreno Valley Community Hospital.** The zoning regulations shall identify the particular uses and type of development permitted on each parcel.	Municipal Code standards under Section 9.07-040 "Medical Use Overlay District (MUO)", provides the foundation to create and maintain diverse and supportive medical uses in the vicinity of the Riverside County Regional Medical Center (Riverside University Health Systems) and the Moreno Valley Community Hospital. This is an ongoing policy.	Planning

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2.4.5	The primary purpose of locations designated **Mixed-Use** on the Moreno Valley General Plan Land Use map is to provide for the establishment of commercial and office uses and/or residential developments of up to 20 dwelling units per acre. The zoning regulations shall identify the particular uses and type of development permitted on each parcel. Overall development intensity should not exceed a floor area ratio of 1.00.	The Mixed Use land use zone established in the General Plan provides for both commercial/office and higher density residential development opportunities. The permitted uses table (Municipal Code(Section 9.02.020-1) identifies types of uses and Residential Site Development Standards (Municipal Code Section 9.03.040-6) establishes floor area ratios. **The revised Mixed Use Overlay has established standards for denser residential development and allows density to rise from a maximum of 20 dwelling units per acre to a maximum of 40 dwelling units per acre. This item shall be further reviewed and adjusted accordingly with the next General Plan update.**	Planning

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
2.4.6	The primary purpose of areas designated **Residential/Office** on the Moreno Valley General Plan Land Use map is to provide areas for the establishment of office-based working environments or residential developments of up to 15 dwelling units per acre. The zoning regulations shall identify the particular uses and type of residential development permitted on each parcel of land. Overall development intensity should not exceed a Floor Area Ratio of 1.00.	As established in Chapter 9,02, Section 9.02.020 of the Municipal Code, areas zoned Residential/Office provide office based working environments and allow for higher density multiple-family residential development. Zoning regulations identify particular uses, types of residential development and floor area ratio requirements. This is an ongoing policy.	Planning
2.4.7	The primary purpose of areas designated **Office** is to provide for office uses, including, administrative, professional, legal, medical and financial offices. The zoning regulations shall identify the particular uses permitted on each parcel of land, which could include limited non-office uses that support and are compatible with office uses. Development intensity should not exceed a Floor Area Ratio of 2.00 and the average intensity should be significantly less.	The Municipal Code (Sections 9.02.020 and 9.04.010) establishes permitted uses and defines areas designated for office type uses. Current zoning regulations identifies development intensity. This is an ongoing policy.	Planning
2.4.8	Orient commercial development toward pedestrian use. Buildings should be designed and sited so as to present a human-scale environment, including convenient and comfortable pedestrian access, seating areas, courtyards, landscaping and convenient pedestrian access to the public sidewalk.	Section 9.04.010 encourages concentration of commercial use for the convenience of the public and to secure a mutually beneficial relationship between commercial uses and the and public. Section 9.16.150 "Commercial Design Guidelines requires pedestrian pathways in parking areas and further incorporates pedestrian ways and plazas to provide visual interest and functionality. This is an ongoing policy.	Planning

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
2.4.9	Require reciprocal parking and access agreements between individual parcels where practical.	Section 9.16.150 "Commercial Design Guidelines requires interspace access be provided between commercial centers reducing the number of drive approaches from the street and to encourage commercial/retail crossover. This is an ongoing policy.	Planning
2.4.10	Design internal roadways so that direct access is available to all structures visible from a particular parking area entrance in order to eliminate unnecessary vehicle travel, and to improve emergency response.	Internal roadways provide direct access to all structures visible from a parking area entrance. This would also be the norm for Specific Plans under Chapter 9.13. This is an ongoing policy.	Planning
2.4.11	The commercial area located in the vicinity of the intersection of Gilman Springs Road and Jack Rabbit Trail shall provide those commercial support activities necessary and/or incidental to adjacent recreational uses and emphasize tourist-oriented activities and retail services. Recreation-oriented residential land use types may be appropriate to the extent that they are incidental to and complement the recreational character of the area. At such time as the area is annexed to the City, the zoning regulations shall identify the particular uses permitted on each parcel of land.	The General Plan Land Use Map provides a commercial land use designation for this area located in the City's Sphere of Influence. Based on the policy, land uses should be limited away from general commercial use, with an emphasis on more recreation or tourist oriented land uses. **This item shall be further reviewed and evaluated in the next comprehensive General Plan update.**	Planning

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
Objective 2.5	Promote a mix of industrial uses which provide a sound and diversified economic base and ample employment opportunities for the citizens of Moreno Valley with the establishment of industrial activities that have good access to the regional transportation system, accommodate the personal needs of workers and business visitors; and which meets the service needs of local businesses.	The Municipal Code provides for a mixture of industrial uses that provide a diverse economic base and opportunities for employment with access to regional transportation systems. For example, the recently approved World Logistics Center, situated in the southern and eastern portion of the City, takes advantage of easy access to the State Route 60 freeway.	Planning
Policies:			
2.5.1	The primary purpose of areas designated **Business Park/Industrial** is to provide for manufacturing, research and development, warehousing and distribution, as well as office and support commercial activities. The zoning regulations shall identify the particular uses permitted on each parcel of land. Development intensity should not exceed a Floor Area Ratio of 1.00 and the average floor area ratio should be significantly less.	The Business park/Industrial land use category provides for a wide variety of industrial uses from warehousing, manufacturing and office/support uses. The Municipal Code Permitted Uses Table (Section 9.02.020-1) establishes permitted uses allowed for this land use category. This is an ongoing policy.	Planning

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2.5.2	Locate manufacturing and industrial uses to avoid adverse impacts on surrounding land uses.	Industrial design guidelines provided in the Municipal Code Chapter 9.16 requires truck traffic to be channeled directly to truck routes and prohibits access to neighborhood streets. Manufacturing/industrial uses shall be screened and buffered from surrounding land uses. This is an ongoing policy.	Planning
2.5.3	Screen manufacturing and industrial uses where necessary to reduce glare, noise, dust, vibrations and unsightly views.	Municipal Code Sections 9.16.160 "Business Park/industrial" and 9.05.050 'Good Neighbor Guidelines for Warehouse Distribution Facilities" require screening for manufacturing and industrial uses in view of rights of way. This is an ongoing policy.	Planning

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
2.5.4	Design industrial developments to discourage access through residential areas.	Industrial development is designed to discourage access through residential zones. Industrial design guidelines provided in the Municipal Code Chapter 9.16 requires truck traffic to be channeled directly to truck routes and prohibits access to neighborhood streets. In addition, Section 9.05.050 "Good Neighbor Guidelines for Warehouse Distribution Facilities" eliminates diesel trucks from unnecessarily traversing through residential neighborhoods based on establish truck routes, parking restrictions and proper signage An example includes the World Logistics Center project, a 41 million square foot industrial logistics hub in the southeastern portion of the City which has prevented access to Redlands Boulevard and the adjacent residential neighborhoods to the west by redesigning streets and preventing through access. This is an ongoing policy.	Planning

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
Objective 2.6	Maintain an adequate inventory of lands for the conduct of public, quasi-public, and institutional activities, including protection of areas needed for future public, quasi-public, and institutional facilities.	This is an on-going policy. Seniors and other users are encouraged to use para transit services provided by the Riverside Transit Agency. This is consistent with Chapter 9.11.080 of the Municipal Code.	Land Dev./Administrative Services/Police/Fire/Planning
Policies:			
2.6.1	The primary purpose of areas designated Public/Quasi-Public is to provide property for civic, cultural and public utility uses, including, but not limited to schools, libraries, fire stations, museums, and government offices. The zoning regulations shall identify the particular uses permitted on each parcel of land. Development intensity should not exceed a Floor Area Ratio of 1.00 and the average Floor Area Ratio should be significantly less.	The Municipal Code (Sections 9.02.020 and 9.04.010) establishes permitted uses and defines areas designated for "Public" uses. The description in this policy is consistent with zoning requirements in the above sections. This is an ongoing policy	Land Dev./Administrative Services/Police/Fire/Planning
Objective 2.7	Encourage open space preservation through appropriate land use policies that recognize the valuable natural resources and areas required for protection of public safety that exist in the City.	Municipal Code Chapter 9.06, Section 9.06.010 establishes standards for open space districts. The intent is to require specific regulations to preserve certain life styles, significant geological or other unique features, and protect the public health safety and welfare. Municipal Code Section 9.02.020 establishes permitted uses for properties located in the district. This is an ongoing objective.	Planning

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Policies:			
2.7.1	The primary purpose of areas designated **Open Space**, is to provide areas that are substantially unimproved, including, but not limited to areas for outdoor recreation, the preservation of natural resources, the grazing of livestock and the production of crops. Development intensity should not exceed a Floor Area Ratio of 0.10 and the average Floor Area Ratio should be significantly less.	The purpose of Open Space Districts is to provide primarily unimproved areas, while preserving natural and environmentally sensitive areas. Municipal Code Chapter 9.06, Section 9.06.010 establishes standards for open space districts. Municipal Code Section 9.02.020 establishes permitted uses for properties located in the district. This is an ongoing policy.	Planning
2.7.2	The primary purpose of areas designated **Floodplain** is to designate floodplain areas where permanent structures for human occupancy are prohibited to protect of the public health and safety. Development intensity should not exceed a Floor Area Ratio of 0.05.	Accomplished through site design consistent with Municipal Code Chapter 8.12.	Land Development/Planning
Objective 2.8	The major purpose of specific plans is to encourage and promote the development of larger-scaled mixed-use developments for the purpose of providing adequate flexibility and innovation in residential building types, land use mixes, site design, and development concepts.	Some of the objectives of a specific plan are s to encourage and promote the development of larger scaled mixed use developments for purposes of providing flexibility and innovation in residential building types, land use mixes, site design and development concepts for areas at or exceeding 15 acres. Municipal Code Chapter 9.13, Sections 9.13.010 through 9.13.050 provide purpose and intent, applicability and specific plan requirements. This is an ongoing objective.	Planning

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Policies:			
2.8.1	In order to provide superior design solutions, reduce adverse environmental impacts, preserve scenic values, and enhance the provision of open space and other amenities, transfers of residential densities permitted under the General Plan may be accomplished in accordance with the following: a. The transfer of residential densities may be accomplished only pursuant to approval of a planned unit development or hillside development. b. Up to one hundred percent (100%) of the density indicated on the General Plan Land Use map may be transferred within a single hillside development or planned unit development project. Densities may not be transferred from one project to another. c. The proposed transfer of densities shall be accomplished such that the project results in a superior use of land, increased sensitivity to the environment, and/or enhanced project amenities without an increased burden on public facilities and services.	Municipal Code chapter 9.03, Section 9.03.050 provides standards for density bonus and affordable housing opportunities. In addition, Chapter 9.03.060 "Planned Unit Developments", provide transfer of densities to preserve scenic areas, rock outcroppings and conservation of cultural or biological resources. Project amenities are enhanced by providing walkable communities that provide ample open space areas such as trails and parks. This is an ongoing policy.	Planning

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2.8.2	To the extent that development policies, land use standards, design guidelines, and other provisions of the adopted specific plans are, by their content, intended to address issues contained in the objectives, policies, and implementation programs of the Moreno Valley General Plan, and are inconsistent with the provisions of the General Plan, then the provisions of those specific plans shall be controlling; otherwise, all other provisions of the Moreno Valley General Plan shall remain in effect.	Specific Plans have been developed to be consistent with and to address issues contained in the Moreno Valley General Plan. All items not addressed in specific plans are directed to provisions in the Municipal Code (which is consistent with General Plan provisions). This is an ongoing policy.	Planning
Objective 2.9	Maintain City boundaries that are logical in terms of City service capabilities, economic development needs, social and economic interdependencies, citizen desires, and City costs and revenues.	Logical City boundaries have been maintained throughout the years with areas designated as spheres of influence for future expansion opportunities of the City. This is an ongoing objective.	Planning
Policies:			
2.9.1	Support and encourage the annexation of unincorporated areas within the General Plan study area for which: a. Long-term benefits will be derived by the City; b. Adequate infrastructure and services have been or can be economically provided in accordance with current City standards; c. The proposed annexation will generate sufficient revenues to adequately pay for the provision of City services within a reasonable period of time.	Logical City areas of future annexation of unincorporated areas (northern and eastern portions) have been encouraged to produce long term benefits only if the necessary infrastructure is in place or is attainable, and if the annexation can generate sufficient revenues to pay for City services. These areas have been designated as spheres of influence. This is an ongoing policy.	Planning

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Objective 2.10	Ensure that all development within the City of Moreno Valley is of high quality, yields a pleasant living and working environment for existing and future residents, and attracts business as the result of consistent exemplary design.	It is an objective of the City of Moreno Valley to make sure that development is of the highest quality, provides a pleasant living and working environment for residents and from an economic development standpoint, attracts business based on high quality design. This is an ongoing objective.	Planning
Policies:			
2.10.1	Encourage a design theme for each new development that is compatible with surrounding existing and planned developments.	Chapter 16, Section 9.16.130 "Design Guidelines" of the Municipal Code establishes design for different types of development. Consistent with this Chapter, design themes are encouraged for new development. The theme shall be compatible with surrounding development. This is an ongoing policy.	Planning
2.10.2	Screen trash storage and loading areas, ground and roof mounted mechanical equipment and outdoor storage areas from public view as appropriate.	Chapter 16, Section 9.16.130 "Design Guidelines" of the Municipal Code establishes design for screening of trash/ storage areas, loading areas, roof mounted mechanical equipment and outdoor storage areas from public view. This is an ongoing policy.	Planning

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
2.10.3	Require exterior elevations of buildings to have architectural treatments that enhance their appearance. a. A design theme, with compatible materials and styles should be evident within a development project; b. Secondary accent materials, colors and lighting should be used to highlight building features; c. Variations in roofline and setbacks (projections and recesses) should be used to break up the building mass. d. Industrial buildings shall include architectural treatments on visible facades that are aesthetically pleasing.	Chapter 16, Section 9.16.130 "Design Guidelines" of the Municipal Code establishes design for exterior building facades and architectural treatments for all development types to include such items as overall design materials, accent materials, rooflines and architectural treatments for industrial buildings. This is an ongoing policy.	Planning
2.10.4	Landscaping and open spaces should be provided as an integral part of project design to enhance building design, public views, and interior spaces; provide buffers and transitions as needed; and facilitate energy and resource conservation.	Chapter 16, Section 9.16.130 "Design Guidelines" of the Municipal Code requires landscape buffers and open spaces to enhance public design, public views and interior spaces. Landscape in buffers and opens space also facilitates energy conservation. This is an ongoing policy.	Planning
2.10.5	Development projects adjacent to freeways shall provide landscaped buffer strips along the ultimate freeway right-of-way.	Chapter 16, Section 9.16.130 "Design Guidelines" of the Municipal Code requires freeway adjacent developments to provide landscape buffers along freeway rights of ways. This is an ongoing policy.	Planning

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2.10.6	Buildings should be designed with a plan for adequate signage. Signs should be highly compatible with the building and site design relative to size, color, material, and placement.	Chapter 9.12"Sign Regulations" of the Municipal Code establishes requirements for sign placement and design. For visibility and economic viability of the business, adequate signage is required for building and site design. This is an ongoing policy.	Planning
2.10.7	On-site lighting should not cause nuisance levels of light or glare on adjacent properties.	Chapter 9.08 "General Development Standards" Section 9.08.100 "Lighting" of the Municipal Code provides standards for lighting and limitations for light and glare. Recent modifications to the Code have provided for dark sky provisions with further limitations of light spillage onto adjacent properties. This is an ongoing policy.	Planning
2.10.8	Lighting should improve the visual identification of structures. Within commercial areas, lighting should also help create a festive atmosphere by outlining buildings and encouraging nighttime use of areas by pedestrians.	Chapter 9.08, Section 9.08.100 "Lighting" of the Municipal Code provides lighting standards for visual identification. Lighting accents to the building through up lighting opportunities outline buildings and encourage use by pedestrians at night. This is an ongoing policy.	Planning
2.10.9	Fences and walls should incorporate landscape elements and changes in materials or texture to deter graffiti and add visual interest.	Both Chapters 9.08 Section 9.08.070 "Fences and Walls" and Chapter 9.16 "Design Guidelines" both require landscape elements, material changes and texture to deter graffiti to fences and walls This is an ongoing policy.	Planning

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2.10.10	Minimize the use and visibility of reverse frontage walls along streets and freeways by such treatments as landscaping, berming, and "side-on" cul-de-sacs.	Due to the cost of establishing "Special Districts" to maintain reverse frontage landscape and irrigation, reverse frontage development has been discouraged. Therefore, the use of reverse frontage walls is minimal. Any necessary reverse frontage wall shall be decorative in nature and would include landscape and possible berming to break up the elevations. This is an ongoing policy.	Planning
2.10.11	Screen and buffer nonresidential projects from adjacent residential property and other sensitive land uses when necessary to mitigate noise, glare and other adverse effects on adjacent uses.	Chapter 9.16 "Design Guidelines", Sections 9.16.150 and 9.16.160 and Chapter 9.08, Section 9.08.150 of the Municipal Code provides general screening and buffer requirements for non-residential properties to other sensitive properties. This would include such items as trash areas, loading areas, ground-mounted equipment, roof mounted equipment etc. This is an ongoing policy.	Planning
2.10.12	Screen parking areas from streets to the extent consistent with surveillance needs (e.g. mounding, landscaping, low profile walls, and/or grade separations).	Both Landscape Guidelines (Parking Lots) approved by resolution in 2009 and Chapter 9.16 "Design Guidelines" for residential, commercial, industrial and office land uses include guidelines for screening of materials and equipment from streetscapes. This is an ongoing policy.	Planning

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2.10.13	Provide landscaping in automobile parking areas to reduce solar heat and glare.	Landscape Guidelines (Parking Lots) approved by resolution in 2009 specifically requires landscaping in automobile parking areas. This is an ongoing policy.	Planning
2.10.14	Preserve or relocate existing mature trees and vegetation where practical. Mature trees shall be replaced when they cannot be preserved or relocated.	Landscape Guidelines approved by resolution in 2009 specifically requires preservation of landscape and specifically trees. Mature trees not able to be preserved shall be replaced at a 3 to 1 ratio. This is an ongoing policy.	Planning
2.10.15	Emphasize the "gateway status" of lands in the vicinity of the intersection of I-215 and State Route 60, at the intersection of Alessandro Boulevard and I-215, at the intersection of Perris Boulevard and State Route 60, and at State Route 60 and Gilman Springs Road. In the vicinity of those areas designated as having "gateway status", the City shall encourage community identification signing.	Although gateway status has been emphasized with a recent upgrade of community identification status, the City has not designated any specific areas along the I-215 or State Route 60 gateway status **As there are no specific policies or Code requirements on this subject, it is recommended that the item be further reviewed during the comprehensive update of the General Plan.**	Planning

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Objective 2.11	Maintain a water system that is capable of meeting the daily and peak demands of Moreno Valley residents and businesses, including the provision of adequate fire flows.	This item is accomplished through will serve letters, environmental documentation, and fire flow letters.	Land Development/Planning/Fire
Policies:			
2.11.1	Permit new development only where and when adequate water services can be provided.	This item is accomplished through will serve letters and environmental documentation.	Land Development/Planning
Objective 2.12	Maintain a wastewater collection, treatment, and disposal system that is capable of meeting the daily and peak demands of Moreno Valley residents and businesses.	Wastewater collection and treatment is provided by Eastern Municipal Water District (EMWD) Western Municipal Water District (WMWD), and Edgemont Community Services District (ECSD)	Land Development
Policies:			
2.12.1	Prior to the approval of any new development application ensure that adequate septic or sewer service capacity exists or will be available in a timely manner.	Requirement for sewer unless septic allowed by Riverside County Department of Environmental Health. This is consistent with Municipal Code Chapter 9.14.	Land Development
Objective 2.13	Coordinate development activity with the provision of public infrastructure and services to eliminate possible gaps in service provision.	Accomplished through design/construction consistent with Municipal Code Chapter 9.14.	Land Development
Policies:			
2.13.1	Limit the amount of development to that which can be adequately served by public services and facilities, based upon current information concerning the capability of public services and facilities.	Adequate public services are reviewed for each development proposal through California Environmental Quality Act guidelines.	Land Development/ Planning
2.13.2	Unless otherwise approved by the City, public water, sewer, drainage and other backbone facilities needed for a project phase shall be constructed prior to or concurrent with initial development within that phase.	Accomplished through design/construction consistent with Municipal Code Chapter 9.14.	Land Development

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2.13.3	It shall be the ultimate responsibility of the sponsor of a development project to assure that all necessary infrastructure improvements (including system wide improvements) needed to support project development are available at the time that they are needed.	Accomplished through design/construction consistent with Municipal Code Chapters 9.8 and 9.14.	Land Development
2.13.4	Encourage installation of advanced technology infrastructure, including, but not limited to, infrastructure for high speed internet access and solar energy.	Land Development is not providing guidance on high speed internet access or involved with solar energy. Any involvement would be through the plan check process completed for utilities.	Land Development
Objective 2.14	Establish and implement comprehensive solutions to the financing of public facilities that adequately distribute costs based on the level of benefit received and the timing of development.	This item is accomplished through implementation of DIF and TUMF programs consistent with Municipal Code Title 3.	Finance / Facilities / Land Development/SD/Capital Projects

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Policies:			
2.14.1	Conduct periodic review of public facilities impact mitigation fees in accordance with state statutes to ensure that the charges are consistent with the costs of improvements. Utilize the service and mitigation standards contained in the Moreno Valley General Plan as the basis for determining improvement costs.	DIF program is periodically updated and the program is implemented consistent with Municipal Code Title 3.	Finance / Facilities / Land Development/Capital Projects
2.14.2	Promote the establishment of benefit assessment districts, Mello-Roos Community Facilities Districts, tax increment financing, and other financing mechanisms in combination with programmed capital improvements to eliminate existing public service and facility gaps, and to provide necessary facilities in advance of the impacts created by development.	CFD No. 2014-01 (Maintenance Services) was established on March 25, 2014. The District was formed to provide an alternative financing tool for the development community. It provides a mechanism to fund the operation and maintenance of street lighting services and maintenance of public landscaping. With next comprehensive General Plan update, it is recommend to change, "Promote the establishment of benefit assessment district, Mello-Roos Community Facilities Districts, tax increment financing, and other financing mechanisms in combination. . ." with "Promote the establishment of various special financing districts based on qualifications of project in combination. . ."	Special Districts

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2.14.3	Review development projects for their impacts on public services and facilities including, but not necessarily limited to, roadways, water, sewer, fire, police, parks, and libraries and require public services or facilities to be provided at the standards outlined in the Moreno Valley General Plan and the standards of applicable service agencies.	Water and sewer impacts/service is determined during entitlement and will serve letters from purveyor.	Public Works / Public Safety/Facilities/Parks
Objective 2.15	Ensure that all Moreno Valley residents have access to high-quality educational facilities, regardless of their socioeconomic status or location within the City.	This objective is being met with continual cooperation and dialog with the Moreno Valley Unified School District and the Van Verde Unified School District.	Administrative Services/Planning

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
Policies:			
2.15.1	Encourage an ongoing open liaison with all school districts regarding proposed school design and siting to maximize access and minimize impacts to adjacent uses.	This will ensure that City Standards are conveyed, joint-use facilities are considered, safe routes to school are established, opportunity for parks are incorporated on adjacent property, and amenities are designed to minimize impacts to adjacent uses.	Parks/Planning
Objective 2.16	Maintain local library facilities and reserves in accordance with the following minimum standards: 0.5 square feet of library space and 1.2 volumes per capita.	Libraries fall under Admin Services. While the space and volume goals are well within national standards (and even below) they are well beyond what we can hope to achieve with the funds that we have to dedicate to library services. the .5 sq. ft. standard would required over 100,000 sq. ft. of space for library services. We are currently at 14,000 sq. ft. of space, .06 sq. ft. of space per resident, and even with adding a satellite of 4,000 sq. ft. we would be at 18.000 sq. ft. total or .08 sq. ft. per resident. Additionally, our current collections is just over 82,000 volumes, the 1.2 standard would require 246,000 volumes.	Administrative Services/Parks
Policies:			
2.16.1	Encourage inter-library loan agreements with the County library system and those of surrounding cities to provide the widest possible variety of materials to library patrons.	Inter-library loan agreements are encouraged with the County library system to provide the widest range and variety of materials possible to residents.	Administrative Services/Parks

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
2.16.2	Provide for the expansion of library facilities as needed to keep pace with the growing population of Moreno Valley.	Due to budgetary issues, the expansion of library facilities has not kept up with the pace of the growing population of Moreno Valley. **This item can be revisited with the comprehensive update of the General Plan.**	Administrative Service/Parks

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
Objective 2.17	Provide cultural facilities, including history (natural, cultural and children's) and art museums and performing arts facilities.	The City collaborates with a number of cultural facilities including the Vanguard Galley (Moreno Valley Cultural Arts Foundation) to provide residents with art expos; clothing, toy, and food drives; charity art auctions; poetry readings; live music and theater events. The Conference & Recreation Center is home to the Moreno Valley Master Chorale and the Moreno Valley Community Band. Both offer performances quarterly at no cost to the community. The March Field Park Community Center is home to day camp and pre-school programs year round and is soon to be re-painted. The City's Arts commission is planning a Community Mural that will utilize volunteers to design and paint a mural on the exterior of the building depicting youth and recreation activities. On-going	Parks/Administrative Services
Policies:			
2.17.1	Promote the development and construction of a civic/cultural center and museums.	Moreno Valley has constructed the Conference and Recreation Center, Cottonwood Banquet Room, and Towngate Community Center for use as civic/cultural centers. A museum is planned at March Field Park in the future. Events at these facilities are ongoing	Parks / Administrative Services

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
Objective 2.18	Promote social services programs that meet the special needs for childcare, the elderly, and the disabled.	The City offers child care, elderly, and disabled programs to the community through Community Service District funding and grants. Many of these programs are held at City buildings and schools. On-going	Parks / Administrative Services

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
Policies:			
2.18.1	Ensure that a full range of human service programs are available to meet the lifetime development needs of residents of all ages, including the special needs of seniors, families, children, disabled persons, and youth groups.	The City provides a range of activities to service residents of all ages. **Youth:** Sports – Flag Football, Pee-Wee and Jr Soccer and Baseball, Multi-Sport Clinics, Skateboarding, Golf and Foot golf, hiking Adult: Sports – Softball, Kickball, Arena Soccer, Soccer, Basketball, Skateboarding, Golf and Foot Golf, hiking, volleyball Life Enrichment Classes and Activities – acting, modeling, photography, writing, drawing, painting, dance, cheer, hula, martial arts, dog obedience, piano, guitar, CPR, Job Readiness Workshops, second languages, and aerobics **Special Needs:** Sunshine Social Club (physically challenged adults, professional development seminars, special transit (MoVan) **Seniors**: special transit (MoVan) , driving courses, free lunch, arts and crafts courses, fitness, bunco, billiards, guitar, special events, nutrition. All are ongoing programs.	Parks/Administrative Services
2.18.2	Encourage day care through zoning regulations by permitting such facilities in all compatible zoning classifications.	The City's Parks and Community Services Department locates their facilities within it's own facilities, which are properly zoned for such use.	Parks/Administrative Services / Community Development

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
2.18.3	Work closely with local schools, private companies, churches, non-profit agencies, government social service agencies, and community groups to facilitate the provision of community services.	The City works with various groups to jointly provide a multitude of services to the community. Examples of these groups include: Moreno Valley and Val Verde Unified School Districts, Salvation Army, Family Services Association, Master Chorale, Cultural Arts Foundation, Riverside University Health Systems, UC Riverside, Cal Baptist College, Friends of the Senior Center. Ongoing	Parks/Administrative Services
2.18.4	Encourage the development of senior citizens independent living and congregate care facilities in locations with convenient access to social, commercial, and medical services.	Development of senior citizen independent living and congregate care facilities are encouraged in locations convenient to social, commercial and medical services.	Administrative Services / *Community Development*
2.18.5	Promote volunteer involvement in all public programs and within the community as a whole.	The City promotes volunteer involvement through several departments and programs within the City.	Parks/Administrative Services

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
9.2 Community Development Element Goals, Objectives Policies and Programs			
9.2.3 Community Development Element Programs			
2-1	Develop a community signing scheme for street corridors, public buildings and selected entrances to the community and its sub-communities.	This is completed in concert with the bi-annual City Capital Improvement Plan effort. It is implemented in conformance with existing policies and procedures for signing throughout the City, and when needed, new policies may be developed. Wayfinding signs have been installed at selected locations. Future Wayfinding signs will be installed as need arises. "Welcome to Moreno Valley" signs have been installed at selected entrance points to the City, with remaining signs to be installed as priorities and funds allow.	Planning/Public Works/Capital Projects
2-2	Review and revise the Municipal Code to implement the goals, objectives and policies stated in the General Plan.	Periodically, the Municipal Code is revised and updated to reflect General Plan goals, objectives and policies. A General Plan annual report to review current General Plan standards is also completed and submitted to the Office of Planning and Research (OPR) each year. This is a policy that is reviewed annually with periodic updates throughout the year. This is an ongoing policy.	Planning
2-3	Conduct a detailed capital improvement program using the revised population projections and proposed land use characteristics of the General Plan.	A detailed capital improvement program is conducted annually by the Capital Projects Division of Public Works. This is an ongoing policy.	Public Works/Planning/Capital Projects

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
2-4	Periodically study the feasibility of extending the sphere of influence north of the city limits and annexing unincorporated areas along the city boundary.	Designated spheres of influence have been established east and north of the city limits. The City periodically studies the extension of the existing spheres of influence to the north, with the latest attempt at expansion studied with the City Council in 2016. This is an ongoing policy.	Planning
2-5	Disseminate local childcare resource information and provide referral service to residents and businesses.	Childcare resource information is provided to residents and businesses in the City. Ongoing	Planning/Administrative Services
2-6	Encourage demand-response public transportation facilities, such as the mini-bus or dial-a-ride systems in order facilitate the transportation needs of the elderly and the disabled.	This is an on-going policy. Seniors and other users are encouraged to use para transit services provided by the Riverside Transit Agency. This is consistent with Chapter 9.11.080 of the Municipal Code.	Transportation/Planning
2-7	Provide City information identifying available social services and facilities in a broad range of formats.	**Housing:** Following the dissolution of RDA, there are no currently active programs due to limited or no funding available. Any projects funded with HOME or Housing Authority funding is provided on the City's website.	Housing/Administrative Services/Planning
2-8	Evaluate existing social programs under the City's purview, and determine if they adequately address the needs of the aged, the disabled, low-income families and persons in crisis situations.	**Housing:** Following the dissolution of RDA, there are no currently active programs due to limited or no funding available. Any projects funded with HOME or Housing Authority funding is provided at City's website.	Housing/Administrative Services/Planning

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2-9	Work with other jurisdictions to seek changes in state law to allow reasonable controls on the location of community care facilities, foster homes and sober living facilities.	The City strives to work with surrounding jurisdictions and jurisdictions in California regarding state law and controls on location of community care facilities, foster homes and sober living.	Planning/Administrative Services
The City Structure Economic Development Goals and Policies			
9.3 9.3 Economic Development Element Goals, Objectives, Policies and Programs			
9.3.1 Economic Development Element Goals			
	To be inserted after development of Economic Development Strategy.	**This item will be completed with the next comprehensive update to the General Plan.**	Economic Development
9.3.2 Economic Development Element Policies			
	To be inserted after development of Economic Development Strategy.	**This item will be completed with the next comprehensive update to the General Plan.**	Economic Development
9.3.3 Economic Development Element Programs			
	To be inserted after development of Economic Development Strategy.	**This item will be completed with the next comprehensive update to the General Plan.**	Economic Development
The City Structure Parks, Recreation and Open Space Element Goals and Policies			
9.4 Parks, Recreation and Open Space Element Goals, Objectives, Policies and Programs			
9.4.1 Parks, Recreation and Open Space Element Goals			
Goal 4.1	To enhance Moreno Valley as a desirable place in which to live, work, shop, and do business.	The City provides numerous amenities for residents including parks, sports facilities, cultural/community centers, restaurants, stores, entertainment, and medical facilities, to promote the desirability of the City. Ongoing.	Parks / Community Services / *Economic Development*

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
Goal 4.2	To retain an open space system that will conserve natural resources, preserve scenic beauty, promote a healthful atmosphere, provide space for outdoor recreation, and protect the public safety.	The City promotes the preservation of it's natural resources and scenic beauty of open space, creating a healthy atmosphere for outdoor recreation and public safety, per MVMC Title 7. On-going.	Parks / Community Services / *Planning*
9.4.2 Parks, Recreation and Open Space Element Objectives and Policies			
Objective 4.1	Retain agricultural open space as long as agricultural activities can be economically conducted, and are desired by agricultural interests, and provide for an orderly transition of agricultural lands to other urban and rural uses.	The City encourages agricultural open space land as long as the activities can be economically conducted and it is an objective to provide for orderly transition of agricultural uses to other urban/rural lands. Permitted uses Table 9.02.020 in the Municipal Code allows for agricultural and crop production in all land use zones Ongoing.	Planning
Policies:			
4.1.1	Encourage grazing and crop production as a compatible part of a rural residential atmosphere.	Permitted uses Table 9.02.020 allows for agricultural and crop production in all land use zones. Ongoing.	Planning
Objective 4.2	Provide safe, affordable and accessible recreation facilities and programs to meet the current and future needs of Moreno Valley's various age and interest groups and promote the provision of private recreational facilities.	The City provides numerous safe, affordable, and accessible recreation facilities to meet the various needs or multiple age and interest groups. There are currently 4 community centers and 28 public parks that have recreation amenities. Ongoing.	Parks / Community Services
Policies:			

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4.2.1	Neighborhood parks shall serve as the day-to-day recreational areas of the City, Neighborhood parks should be within a reasonable walking distance of the population served. Community parks may also serve day-to-day recreation needs. That portion of the community and/or regional facilities that provide similar amenities to those found in neighborhood parks shall also be considered as meeting this objective.	Neighborhood parks are designed and constructed to be located within a reasonable distance of the population they are intended to serve. Community parks are designed and constructed to include similar amenities as neighborhood parks to meet the objective of a neighborhood park. On-going.	Parks / Community Services
4.2.2	Community parks shall provide opportunities for participation in sports and related athletic activities, water-oriented recreation and other special interest activities (e.g. golf, tennis, equestrian, etc.).	Community parks provide opportunities for a variety of athletic activities. Examples of these include: Cottonwood Golf Center, Moreno Valley Equestrian Center, March Field Skate Park, tennis courts at three sites, basketball courts at several sites, and splash pads in two parks. Ongoing.	Parks / Community Services

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4.2.3	Employ a multifaceted approach in the financing and acquisition, development and maintenance of parkland, including the financing of parklands through development fees, state and federal grant-in-aid programs, gifts and donations, and other sources.	Moreno Valley utilizes development impact fees, Quimby in lieu fees, Community Facilities and Services Districts, and various grants, to finance acquisition, development, and maintenance of parks and parkland. "Zone A was formed at City incorporation to provide a funding mechanism for parks and community services. Every parcel in the City contributes to Zone A. CFD No. 1 (Park Maintenance) was established on July 8, 2003. The District was formed to provide financing tool for the residential development community. It provides a mechanism to fund the operation and maintenance of parks constructed after district formation. All new residential development is conditioned to contribute to the District. Willdan Financial has been engaged to evaluate possible amendment to CFD No. 1 or creation of a new CFD to provide for a tax rate layer for non-residential development "	Parks / Community Services

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4.2.4	Encourage special events (tournaments, festivals, celebrations) that reflect the uniqueness of Moreno Valley and contribute to community identity, cohesiveness and stability.	Moreno Valley encourages and hosts several special events. Some are unique to the City, in order to bring together it's residents. Examples are: 4th of July Independence Parade and Family Fun Fest, Youth Fest, Springtastic Festival and Egg Hunt, Recreation Expo, Concerts/Movies in the Parks, Snow Day and Holiday Tree Lighting. Ongoing	Parks / Community Services
4.2.5	Work in conjunction with private and public school districts and other public agencies to facilitate the public use of school grounds and facilities for recreational activities. The City shall also encourage the development of park sites adjacent to school facilities to maximize recreational opportunities in Moreno Valley	The City has joint-use agreements with the school districts for use of recreation facilities. The City encourages new developments to construct parks next to schools to maximize recreational opportunities in the City. Ongoing.	Parks / Community Services
4.2.6	The City shall use cost effectiveness, demand and need for service and potential return on investment as criteria for the development and operation of future recreational facilities and programs.	The City Council sets activities/program fees. Typically, senior programs are no-cost and youth and adult fees are cost recovery. Sponsorships are utilized to off-set costs. Ongoing.	Parks / Community Services
4.2.7	The City level of service standard is 3 acres of developed parkland for every 1,000 new residents. Exceptions from this ratio may be made in exchange for extraordinary amenities of comparable economic value. Land not suitable for active recreation purposes may not be counted toward fulfilling parkland dedication requirements.	The City's standard for developed parkland is 3 acres per 1,000 new residents. In some areas, this ratio has been reduced due to the City receiving added amenities that are equal to or exceed the value of property. The City does not take on new property not suitable for active recreation purposes as fulfillment for parkland dedication requirements. MVMC Chapter 3.4. (Ongoing).	Parks / Community Services

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4.2.8	Encourage the development of recreational facilities within private developments, with appropriate mechanisms to ensure that such facilities are properly maintained and that they remain available to residents in perpetuity.	The Planning Division encourages development of recreational facilities within private developments, with facility maintenance provided through required Covenants, Conditions and Restrictions (CC&R's) and through a Homeowners Association.	Planning
4.2.9	In conjunction with the school districts, civic organizations, and other private, civic-minded entities, encourage and participate in the provision of organized recreational activities for Moreno Valley residents of all ages.	The City has many programs that incorporate organized recreation activities for schools, civic organizations, and private civic-minded entities. These are designed to encourage participation in organized recreational activities for resident of all ages.	Parks / Community Services
4.2.10	Involve individuals and citizen groups reflecting a cross section of Moreno Valley citizens (including youth and adults) in the planning, design and maintenance of parks, recreation facilities and recreation programs.	The City has established a Park and Trail adoption system for individuals and groups to assist with the maintenance of parks and trails. City has several boards and commissions that assist with the planning and design of recreation facilities, parks, and trails. Ongoing	Parks / Community Services
4.2.11	Emphasize joint planning and cooperation with all public agencies as the preferred approach to meeting the parks and program needs of Moreno Valley citizens.	Moreno Valley jointly plans and cooperates with the local fire department, police department, and water district, in its approach to meet the needs of citizens. On-going	Parks / Community Services

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4.2.12	Include multi-functional spaces and facilities in parks to facilitate cultural events.	Moreno Valley utilizes parks and the Conference and Recreation Center to facilitate cultural events such as: movies and concerts in the park; Artoberfest (art displays and performances); and various heritage related events.	Parks / Community Services
4.2.13	Provide recreation programs and access to facilities at reasonable costs.	The City provides many recreation programs and access to facility access at a reasonable cost. A few examples are: the Cottonwood Golf Center, Conference and Recreation Center gym, and Tee-ball. Ongoing	Parks / Community Services
4.2.14	Establish linear parks in agreement with public and private utilities, including the State of California along the California Aqueduct, for the use and maintenance of utility corridors and rights-of-way for recreational purposes.	The City currently has agreements with the State Department of Water Resources for use of land over the California Aqueduct pipeline and Edison for the Sunnymead Ranch Linear Park. Ongoing	Parks / Community Services

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4.2.15	Work closely with Riverside County Parks Department in its open space program to ensure that trail systems within Moreno Valley effectively link open space components.	The City requires developers that are located on Riverside County boundaries to coordinate their trail plans with the County Parks. (On-going) "Zone A was formed at City incorporation to provide a funding mechanism for parks and community services. Every parcel in the City contributes to Zone A. CFD No. 1 (Park Maintenance) was established on July 8, 2003. The District was formed to provide financing tool for the residential development community. It provides a mechanism to fund the operation and maintenance of parks constructed after district formation. All new residential development is conditioned to contribute to the District.	Parks / Community Services
4.2.16	Acquire land jointly with the local school districts for future school/park sites.	The City makes every effort to coordinate placing parks next to schools. An example of an undeveloped park next to a school is adjacent to March Middle School. Through a joint-use agreement the City had two lighted ball fields constructed on the school and will have a developer dedicated and construct a park adjacent to the school. On-going	Parks / Community Services
4.2.17	Require new development to contribute to the park needs of the City.	New development is required to provide fully functioning parks or a in-lieu fee for future construction of parks.	Parks / Community Services

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4.2.18	Provide lighted sports fields to increase availability and utilization of courts and playing field facilities.	Where funding allows, the City has added or revamped lighting of sport facilities. Added/revamped facilities include Lassalle Sports Park and Morrison Park. Ongoing	Parks / Community Services
Objective 4.3	Develop a hierarchical system of trails which contribute to environmental quality and energy conservation by providing alternatives to motorized vehicular travel and opportunities for recreational equestrian riding, bicycle riding, and hiking, and that connects with major regional trail systems.	The City has a master plan of multi-use trails and non-motorized bike trails throughout the City. They are designed to connect to trails and adjacent agencies. The trail plan is reviewed with each development annexing the City, each development building in the City, and on a yearly basis. Ongoing	Parks / Community Services

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
Policies:			
4.3.1	The City's network of multiuse trails, including regional trails, community trails, and local feeder trails, shall (1) be integrated with recreational, residential and commercial areas, schools and equestrian centers; (2) provide access to community resources and facilities, and (3) connect urban populations with passage to hillsides, ridgelines, and other scenic areas.	Per the Master Plan of Trails and the General Plan, trails are incorporated into parks, residential, commercial, and industrial developments. In many instances, trails provide access to facilities and other community resources. Trails are designed to connect to scenic areas. Ongoing	Parks / Community Services
4.3.2	The City shall establish an agreement with public and private utilities for the use and maintenance of utility corridors and rights-of-way for trail purposes.	The City has several agreements with both public and private utilities for the design, construction, and maintenance of trails. Examples of these include the California Department of Water Resources, The Gas Company, and Southern California Edison. Ongoing	Parks / Community Services
4.3.3	All new development approvals shall be contingent on trail right-of-way dedication and improvement in accordance with the Master Plan of Trails (Figure 4-5).	In adherence to the Master Plan of Trails, the City may require fee or easement dedication for trails. New developments that annex to the City may be required to provide similar amenities. On-going	Parks / Community Services
4.3.4	In conjunction with all development review, the City shall consider multiuse trail access and traditional travel routes through the property.	Per the Master Plan of Trails and the General Plan, trails are incorporated into many developments adjacent to traditional travel routes (streets and sidewalks). On-going	Parks / Community Services
4.3.5	In conjunction with the review and approval of nonresidential developments, the City should consider the use of multiuse trail amenities such as hitching posts, benches, rest areas, and drinking facilities.	In adherence to the Master Plan of Trails, the City may require trails and related amenities within nonresidential development.	Parks / Community Services

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4.3.6	Wherever possible, development of residential areas conditioned for animal keeping on lots of ½ acre or larger, shall include a decomposed granite trail on one side of the street and traditional concrete sidewalk on the other.	Where applicable, feeder trails are conditioned for residential developments that allow animal keeping. The standard is to have a trail on one side of the street and a traditional sidewalk on the other. On-going	Parks / Community Services
4.3.7	Trail design and construction should take into consideration the safety and convenience of all trail users as the primary concern.	User safety and convenience are the upmost concern in the planning and construction of multi-use trails. On-going	Parks / Community Services
4.3.8	The City should facilitate the development of a multiuse regional trail system.	The City has been working with the County of Riverside and Lake Perris State Park to coordinate trail systems. On-going	Parks / Community Services
4.3.9	Unless otherwise specified due to fire department requirements, access or as established by a specific plan, city trails along roadways shall be ten (10) feet wide and shall be constructed with decomposed granite or equal material and shall provide appropriate fencing or other devices where needed to delineate trails from vehicular rights-of-way.	Multi-use trails where located adjacent or near roadways are designed to have a minimum flat surface of ten (10) foot in width, with a 2% cross-slope. Trails are delineated from vehicular traffic by means of fencing and or shrubbery. Trail surfaces are stabilized granite with a minimum thickness of four (4) inches.	Parks / Community Services
4.3.10	Where firefighting access is required, trails shall be 20' wide to meet the needs of the Fire Department and its equipment. Fire Department requirements shall be met in all conditions where access is required.	Where fire access and a trail is required, the minimum width of the trail shall be 20', to accommodate fire equipment and staging. On-going	Parks / Community Services

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4.3.11	In unusual situations where legal or topographical barriers exist (e.g., excessive slope, the configuration of right-of-way, existing vegetation, etc.), the City shall have the discretion to amend the trail requirement as needed to accomplish the goals of this General Plan.	The City makes amendments to specific trail locations, based on various topographical barriers. This is done to create a trail system that can be utilized by the majority of citizens, without inconvenience to residents. On-going	Parks / Community Services
4.3.12	Local feeder trails shall connect residential lots in property zoned for horse keeping to the community trail system.	Where appropriate zoning exists, the City requires developers to install Feeder Trails that connect residential lots to the City's Trail System. On-going	Parks / Community Services
4.3.13	The City will encourage volunteer programs for the improvement of existing trails for the purpose of providing an integrated trail network that is safe, functional and readily accessible.	The City encourages volunteers for it's Adopt a Trail Program, to maintain safe, functional, and accessible trails. To date, individuals to civic organizations have become volunteers. This is an on-going program.	Parks / Community Services
4.3.14	Where feasible, use drainage courses, utility rights-of-way and other such opportunities to incorporate trail and open space elements in the design of major development projects.	The City evaluates developer projects to maximize the undeveloped space for use with trails, passive parks, and open space. Ongoing	Parks / Community Services
4.3.15	Utilize the Citizen's Advisory Board on Recreational Trails in making recommendations to City Council for the distribution of funds for the construction of new trails.	When funds are available, the Recreation Trails Board would be recommending body to City Council for distribution of funds to construct new trails. Ongoing	Parks / Community Services
9.4.3 Parks, Recreation and Open Space Element Programs			
Programs:			
4-1	Develop a parks and recreation facilities master plan to implement the Parks and Recreation Element.	In 2012 the City developed a Parks Master Plan, to outline the current recreational facilities, as well to identify the deficiencies. The master plan is a living document, to be updated periodically.	Parks / Community Services

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4-2	Develop policies and criteria for the establishment of trails and rest/picnic areas in natural open space areas.	The City has developed policies and criteria for the establishment of trails and rest stops in open space areas. Ongoing	Parks / Community Services
4-3	Set policies and criteria for the establishment of greenbelt standards and design guidelines to allow flexibility in design of greenbelt/parks/open spaces areas within new development as long as non-auto circulation corridors (for equestrians, bicycles, pedestrians, etc.) are provided and the overall dedication requirement for greenbelt and park facilities is met.	The City has set policies and criteria for the design and construction of greenbelts, parks, and open space. Several provide for the use of equestrians, bicycles, and pedestrians. These uses have become dedication requirements. Reviews of standards and design are under review every one to two years.	Parks / Community Services
4-4	Explore the feasibility of requiring new development to provide a percentage of the development in greenbelt area.	New developments are examined for possible greenbelts. Many of these developments are required to construct these greenbelts for the resident's use.	Parks / Community Services
4-5	Provide on-going opportunities for public involvement and input into the park planning process.	The public is involved in assessing the current and future needs of park amenities. Some of this is done through committees/boards/commissions and some it through community meetings. On-going	Parks / Community Services
4-6	Maintain advisory committees, such as the Parks and Recreation Advisory Committee, created by City Council in 1988, to serve in an advisory capacity on parks and recreation issues.	The City Parks and Community Services Departments maintains commissions/boards such as the Parks and Recreation Commission, Senior Advisory Board, Recreational Trails Board, various sports groups, and the Arts Commission.	Parks / Community Services

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4-7	Work with coalitions of sports organizations to define mutually compatible facility needs and mechanisms for the development, construction, operation and maintenance of these facilities.	The City consistently meets with various sports groups to discuss facilities and their needs. The City utilizes this information to design and construct new facilities as well as modify existing facilities. Ongoing.	Parks / Community Services
4-8	Investigate the feasibility of establishing a non-profit foundation to seek and receive donations from private sources for the support of Parks and Recreation programs and facilities.	The City's Library currently has a foundation for capital improvements. This foundation can be expanded upon to include various parks commissions/boards for specific programs. However, this must be approved by the IRS, so it does not jeopardize the City's tax exempt status. This program needs more investigation for additional uses. Ongoing.	Parks / Community Services
4-9	Acquire land and develop neighborhood and community parks in the "Recommended Future Parkland Acquisition Areas" shown in Figure 4-4.	**Figure 4-4 was not provided in the 2006 General Plan. This item will need to be removed or updated with the next comprehensive General Plan update.**	Parks / Community Services
4-10	Prepare a comprehensive plan of trails that clearly defines the routing of city trails and is part of the General Plan.	During the last General Plan update a comprehensive master plan of trails was adopted, which defines locations for city trails.	Parks / Community Services
4-11	Develop policies and criteria for the establishment of multiuse trails and rest/picnic areas in natural open space areas.	The City has developed policies and criteria for the establishment of trails and rest stops in open space areas. On-going. **This is a duplicate of Policy 4.2, and shall be removed during the next comprehensive General Plan Update.**	Parks / Community Services

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4-12	Periodically review the Master Plan of Trails to show existing and planned trails.	The Master Plan of Trails is periodically reviewed, adding newly constructed trails to the plan. Ongoing with yearly reviews.	Parks / Community Services
4-13	Enact ordinances requiring developers to incorporate trail corridors into their development plans in accordance with the Master Plan of Trails.	Ordinance 359 (1992) provides for recreational facilities for trails per the Master Plan of Trails.	Parks / Community Services
4-14	Develop standards for residential feeder trails to guide developers in locating and constructing trails and for the arrangement of on-going maintenance requirements of the trails.	The City has developed construction standards for residential feeder trails to guide developers in locating feeder trails, as well as requirement for the development to establish a funding mechanism to maintain these trails. On-going program	Parks / Community Services

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4-15	Establish a fee system for the equitable distribution of the cost of developing and maintaining trails citywide.	The City has established a Community Facilities District to pay for the cost of developing and maintaining trails. (On-going program.) Zone A was formed at City incorporation to provide a funding mechanism for parks and community services. Every parcel in the City contributes to Zone A. CFD No. 1 (Park Maintenance) was established on July 8, 2003. The District was formed to provide financing tool for the residential development community. It provides a mechanism to fund the operation and maintenance of parks constructed after district formation. All new residential development is conditioned to contribute to the District. Willdan Financial has been engaged to evaluate possible amendment to CFD No. 1 or creation of a new CFD to provide for a tax rate layer for non-residential development	Parks / Community Services
4-16	Investigate the feasibility of creating a special district(s) for the purpose of acquiring and managing open space and trails.	Currently, the City has a special district to manage trails. However, it has been the responsibility of developer associations to acquire and maintain open space.	Parks / Community Services
4-17	Seek out and apply for grants sponsored by state and federal agencies, such as the Recreational Trails Program administered by the Federal Highways Administration and the State Department of Parks and Recreation.	The City applies for several grants for trails, if the qualifications are met. On-going program	Parks / Community Services

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
The City Structure Circulation Element Goals, Objectives, Policies, and Programs			
9.5 Circulation Element Goals, Objectives, Policies, and Programs			
9.5.1 Circulation Element Goals			
Goal 5.1	Develop a safe, efficient, environmentally and financially sound, integrated vehicular circulation system consistent with the City General Plan Circulation Element Map, Figure 9-1, which provides access to development and supports mobility requirements of the system's users.	This is an on-going goal. It is accomplished through provisions of Titles 9 and 12 of the Municipal Code.	Transportation
Goal 5.2	Maintain safe and adequate pedestrian, bicycle, and public transportation systems to provide alternatives to single occupant vehicular travel and to support planned land uses.	This is an on-going goal. It is accomplished through provisions of Titles 9 and 12 of the Municipal Code.	Transportation
9.5.2 Circulation Element Objectives and Goals			
Objective 5.1	Create a safe, efficient and neighborhood- friendly street system.	This is an on-going objective. It is accomplished in accordance with Titles 9 and 12 of the Municipal Code.	Transportation
Policies:			
5.1.1	Plan access and circulation of each development project to accommodate vehicles (including emergency vehicles and trash trucks), pedestrians, and bicycles.	This is an on-going policy. It is implemented in accordance with Title 9 of the Municipal Code.	Transportation
5.1.2	Plan the circulation system to reduce conflicts between vehicular, pedestrian and bicycle traffic.	This is an on-going policy. It is implemented in accordance with Titles 9 and 12 of the Municipal Code.	Transportation
5.1.3	Require adequate off-street parking for all developments.	This is an on-going policy. It is implemented in accordance with Chapter 9.11 of the Municipal Code.	Transportation
5.1.4	Driveway placement shall be designed for safety and to enhance circulation wherever possible.	This is an on-going policy. It is implemented in accordance with Chapter 9.11.080 of the Municipal Code.	Transportation
5.1.5	Incorporate American Disability Act (ADA) and Title 24 requirements in roadway improvements as appropriate.	This is an on-going policy. It is implemented in accordance with Chapter 9 of the Municipal Code.	Transportation

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5.1.6	Design new developments to provide opportunity for access and circulation to future adjacent developments.	This is an on-going policy. It is implemented in accordance with Chapter 9.11.080 of the Municipal Code.	Transportation
Objective 5.2	Implement access management policies.	This is an on-going objective. It is implemented in accordance with Chapter 9.11.080 of the Municipal Code.	Transportation
Policies:			
5.2.1	Locate residential units with access from local streets. Minimize direct residential access from collectors. Prohibit direct single-family driveway access on arterials and higher classification roadways.	This is an on-going policy. It is implemented in accordance with Chapter 9.11.080 of the Municipal Code.	Transportation
5.2.2	Feed short local streets into collectors.	This is an on-going policy. It is implemented in accordance with Chapter 9.11.080 of the Municipal Code.	Transportation
5.2.3	Encourage the incorporation of traffic calming design into local and collector streets to promote safe vehicle speeds.	This is an on-going policy. It is implemented in accordance with Chapter 9.11.080 and Title 12 of the Municipal Code.	Transportation
5.2.4	Design new subdivisions to minimize the disruptive impact of motor vehicles on local streets. Long, broad and linear streets should be avoided. Residential streets should be no wider than 40 feet, and should have an uninterrupted length of less than one half mile. Curvilinear streets and cul-de-sacs are preferred. Streets within the subdivision should be designed to facilitate access to residences and to discourage through traffic.	This is an on-going policy. It is implemented in accordance with Chapter 9.11.080 of the Municipal Code.	Transportation

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Objective 5.3	Maintain Level of Service (LOS) "C" on roadway links, wherever possible, and LOS "D" in the vicinity of SR 60 and high employment centers. Figure 9-2 depicts the LOS standards that are applicable to all segments of the General Plan Circulation Element Map.	This is an on-going objective. It is implemented in accordance with Title 9 of the Municipal Code. **A complete review of the Circulation Element will be accomplished with the next General Plan update.**	Transportation
Policies:			
5.3.1	Obtain right-of-way and construct roadways in accordance with the designations shown on the General Plan Circulation Element Map and the City street improvement standards.	This is an on-going policy. It is implemented in accordance with Chapter 9.11.080 of the Municipal Code.	Transportation
5.3.2	Wherever feasible, promote the development of roadways in accordance with the City standard roadway cross-sections, as shown in Figure 9-3. Cross-sections range from two-lane undivided roadways to 8-lane divided facilities.	This is an on-going policy. It is implemented in accordance with Chapters 9.14.100 of the Municipal Code.	Transportation
5.3.3	Create new roadway classifications to accommodate future traffic demand, including; Divided Major Arterial - Reduced Cross-Section, and Divided Arterial - 6-lane. These cross-sections are shown on Figure 9-3.	This is an on-going policy. It is implemented in accordance with Chapter 9.14.100 of the Municipal Code.	Transportation
5.3.4	For planning purposes, utilize LOS standards shown on Table 5 -1 to determine recommended roadway widths.	This is an on-going policy. It is implemented in accordance with Title 9 of the Municipal Code. **A complete review of the Circulation Element will be accomplished with the next General Plan update.**	Transportation

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5.3.5	Ensure that new development pays a fair share of costs to provide local and regional transportation improvements and to mitigate cumulative traffic impacts. For this purpose, require new developments to participate in Transportation Uniform Mitigation Fee Program (TUMF), the Development Impact Fee Program (DIF) and any other applicable transportation fee programs and benefit assessment districts.	This is an on-going policy. It is implemented in accordance with Title 3 of the Municipal Code.	Transportation
5.3.6	Where new developments would increase traffic flows beyond the LOS C (or LOS D, where applicable), require appropriate and feasible mitigation measures as a condition of approval. Such measures may include extra right-of-way and improvements to accommodate left-turn and right-turn lanes at intersections, or other improvements.	This is an on-going policy. It is implemented in accordance with Chapter 9.11.080 of the Municipal Code.	Transportation
5.3.7	Provide consideration to projects that have overriding regional or local benefits that would be desirable even though the LOS standards cannot be met. These projects would be required to analyze traffic impacts and mitigate such impacts to the extent that it is deemed feasible.	This is an on-going policy. It is implemented in accordance with Chapter 9.11.080 of the Municipal Code.	Transportation
5.3.8	Pursue arterial improvements that link and/or cross the State route 60 (SR-60) Freeway, including an additional over-crossing at Graham Street.	This is an on-going policy. An additional over-crossing at Graham Street is shown as Initiative 4.6.4 of the City's Strategic Plan.	Transportation

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5.3.9	Address additional widenings at arterials providing access to SR-60 at Day Street, Frederick Street/Pigeon Pass road and Perris Boulevard.	This is an on-going policy. It is implemented in accordance with Chapter 9.11.080 of the Municipal Code. **A complete review of the Circulation Element will be accomplished with the next General Plan update.**	Transportation
Objective 5.4	Maximize efficiency of the regional circulation system through close coordination with state and regional agencies and implementation of regional transportation policies.	This is an on-going objective. The City works closely with all state and regional agencies to enhance the efficiency of the regional circulation system.	Transportation

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Policies:			
5.4.1	Coordinate with Caltrans and the Riverside County Transportation Commission (RCTC) to identify and protect ultimate rights-of-way, including those for freeways, regional arterial projects, transit, bikeways and interchange expansion.	This is an on-going policy. It is implemented in accordance with Chapter 9.11.080 of the Municipal Code. **A complete review of the Circulation Element will be accomplished with the next General Plan update.**	Transportation
5.4.2	Coordinate with Caltrans and RCTC regarding the integration of Intelligent Transportation Systems (ITS) consistent with the principles and recommendations of the Inland Empire Regional ITS Architecture Project.	This is an on-going policy. It is implemented in accordance with the City's ITS Master Plan.	Transportation
5.4.3	Work with property owners, in cooperation with RCTC, to reserve rights-of-way for potential Community and Environmental Transportation Acceptability Process (CETAP) corridors through site design, dedication, and land acquisition, as appropriate.	This is an on-going policy. It is implemented in accordance with Chapter 9.11.080 of the Municipal Code. **A complete review of the Circulation Element will be accomplished with the next General Plan update.**	Transportation
5.4.4	The City Council will commit to establishing ongoing relationships with all agencies that play a role in the development of the City's transportation system. Council members who are appointed to these agencies as City representatives shall seek out leadership roles to maximize their effectiveness on behalf of the City. Council will strive to maintain continuity in their appointments of representatives to promote effective representation.	This is an on-going policy. The Administrative Codes for various regional agencies define the requirements for elected officials to be represented on their Executive Boards.	Transportation

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5.4.5	Work with RCTC, WRCOG, and the TUMF Central Zone Committee to facilitate the expeditious construction of TUMF Network projects, especially projects that directly benefit Moreno Valley.	This is an on-going policy. The City has designated certain Public Works staff to represent Moreno Valley interests at various Technical Advisory meetings.	Transportation
5.4.6	Cooperatively participate with SCAG, RCTC, and WRCOG in the planning for a transportation system that anticipates regional needs for the safe and efficient movement of goods and people.	This is an on-going policy. It is implemented in accordance with Chapter 9.11.080 of the Municipal Code. A complete review of the Circulation Element will be accomplished with the next General Plan update.	Transportation
5.4.7	Utilizing a combination of regional, state and federal funds, development impact fees, and other locally generated funds, provide needed improvements along SR 60 and the associated interchanges, including interchange and grade separation improvements.	This is an on-going policy. It is implemented in accordance with Chapters 3.44 and 9.11.080 of the Municipal Code.	Transportation
5.4.8	Reserve rights-of-way to accomplish future improvements as specified in the Caltrans District 8 Route Concept Fact Sheet for SR-60. Specifically, SR-60 shall be built to six general purpose lanes and two High Occupancy Vehicle (HOV) lanes through Moreno Valley. Additional auxiliary lanes may be required between interchanges. The need for auxiliary lanes will be determined from future studies.	This is an on-going policy. It is implemented in accordance with Chapter 9.11.080 of the Municipal Code. **A complete review of the Circulation Element will be accomplished with the next General Plan update.**	Transportation
5.4.9	Lobby the State Legislature to keep triple trailer trucks off highways in developed areas of California.	This policy is out of date. Staff does not actively lobby against triple trailer trucks off highways.	Transportation
Objective 5.5	Maximize efficiency of the local circulation system by using appropriate policies and standards to design, locate and size roadways.	This is an on-going objective primarily accomplished through provisions in Chapter 9.11.080 of the Municipal Code.	Transportation
Policies:			

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5.5.1	Space Collectors between higher classification roadways within development areas at appropriate one-quarter mile intervals.	This is an on-going policy. It is implemented in accordance with Chapter 9.11.080 of the Municipal Code.	Transportation
5.5.2	Provide dedicated left-turn lanes at all major intersections on minor arterials and higher classification roadways.	This is an on-going policy. It is implemented in accordance with Chapter 9.11.080 of the Municipal Code.	Transportation
5.5.3	Prohibit points of access from conflicting with other existing or planned access points. Require points of access to roadways to be separated sufficiently to maintain capacity, efficiency, and safety of the traffic flow.	This is an on-going policy. It is implemented in accordance with Chapter 9.11.080 of the Municipal Code.	Transportation
5.5.4	Wherever possible, minimize the frequency of access points along streets by the consolidation of access points between adjacent properties on all circulation element streets, excluding collectors.	This is an on-going policy. It is implemented in accordance with Chapter 9.11.080 of the Municipal Code.	Transportation
5.5.5	Design streets and intersections in accordance with the Moreno Valley Municipal Code.	This is an on-going policy. It is implemented in accordance with Chapter 9.11.080 of the Municipal Code.	Transportation
5.5.6	Consider the overall safety, efficiency and capacity of street designs as more important than the location of on-street parking.	This is an on-going policy. It is implemented in accordance with Chapter 9.11.080 of the Municipal Code.	Transportation
5.5.7	For developments fronting both sides of a street, require that streets be constructed to full width. Where new developments front only one side of a street, require that streets be constructed to half width plus an additional 12-foot lane for opposing traffic, whenever possible. Additional width may be needed for medians or left and/or right turn lanes.	This is an on-going policy. It is implemented in accordance with Chapter 9.11.080 of the Municipal Code.	Transportation

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5.5.8	Whenever possible, require private and public land developments to provide on-site and off-site improvements necessary to mitigate any development-generated circulation impacts. A review of each proposed land development project shall be undertaken to identify project impacts to the circulation system. The City may require developers to provide traffic impact studies prepared by qualified professionals to identify the impacts of a development.	This is an on-going policy. It is implemented in accordance with Chapter 9.11.080 of the Municipal Code.	Transportation
5.5.9	Design curves and grades to permit safe movement of vehicular traffic per applicable Caltrans and Moreno Valley standards.	This is an on-going policy. It is implemented in accordance with Chapter 9.11.080 of the Municipal Code.	Transportation
5.5.10	Provide adequate sight distances for safe vehicular movement at all intersections and driveways.	This is an on-going policy. It is implemented in accordance with Chapter 9.11.080 of the Municipal Code.	Transportation
5.5.11	Implement National Pollutant Discharge Elimination System Best Management Practices relating to construction of roadways to control runoff contamination from affecting water resources.	The National Pollutant Discharge Elimination System Best Management Practices are required for projects relating to the construction of roadways, to control runoff contamination from impacting water resources (ongoing).	Transportation
Objective 5.6	Support development of a ground access system to March Inland Port in accordance with its development plan as a major cargo airport.	This is an on-going objective. The City works closely with the March Joint Powers Authority in implementing strategies / development in support of a major cargo airport.	Transportation
Policies:			
5.6.1	Ensure that City arterials that provide access to and from March Inland Port are properly designed to accommodate projected traffic volumes, including truck traffic.	This is an on-going policy. It is implemented in accordance with Chapter 9.11.080 of the Municipal Code.	Transportation

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5.6.2	Ensure that traffic routes to March Inland Port are planned to minimize impacts to City residential communities.	This is an on-going policy. It is implemented in accordance with Chapter 9.11.080 of the Municipal Code.	Transportation
Objective 5.7	Design roads to meet the needs of the residents of the community without detracting from the "rural" atmosphere in designated portions of Moreno Valley. (Designated "rural" areas include those encompassed by the Residential Agriculture 2, Residential 1, Rural Residential and Hillside Residential zoning districts. "Urban" areas encompass all other zoning districts.)	This is an on-going objective. It is implemented in accordance with Chapter 9.11.080 of the Municipal Code.	Transportation
Policies:			
5.7.1	Pursue development of modified sidewalk standards for local and collector roads within low density areas to reflect the rural character of those areas.	This is an on-going policy. It is implemented in accordance with Chapter 9.11.080 of the Municipal Code.	Transportation
5.7.2	Provide sidewalks on arterials in designated low density areas that provide access to schools and bus stops.	This is an on-going policy. It is implemented in accordance with Chapter 9.11.080 of the Municipal Code.	Transportation
Objective 5.8	Encourage development of an efficient public transportation system for the entire community.	This is an on-going objective. It is implemented in accordance with Chapter 9.11.080 of the Municipal Code.	Transportation
Policies:			
5.8.1	Support the development of high-speed transit linkages, or express routes, that would benefit the citizens and employers of Moreno Valley.	This is an on-going policy. The City works closely with Riverside Transit Agency (RTA) in the implementation of Bus Rapid Transit routes as developed in the RTA Comprehensive Operational Analysis (COA).	Transportation

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5.8.2	Support the efforts of the March Joint Powers Authority in its pursuit of a Transit Center.	This is an on-going policy. The City works closely with Riverside Transit Agency (RTA) in the implementation of recommended improvements developed in the RTA Comprehensive Operational Analysis (COA).	Transportation
5.8.3	Encourage public transportation opportunities that address the particular needs of transit dependent individuals in the City such as senior citizens, the disabled and low -income residents.	This is an on-going policy. The City works closely with Riverside Transit Agency (RTA) in the implementation of recommended improvements developed in the RTA Comprehensive Operational Analysis (COA).	Transportation
5.8.4	Ensure that all new developments make adequate provision for bus stops and turnout areas for both public transit and school bus service.	This is an on-going policy. It is implemented in accordance with Chapter 9.11.080 of the Municipal Code.	Transportation
5.8.5	Continue on-going coordination with transit authorities toward the expansion of transit facilities into newly developed areas.	This is an on-going policy. The City works closely with Riverside Transit Agency (RTA) in the implementation of recommended improvements developed in the RTA Comprehensive Operational Analysis (COA).	Transportation
Objective 5.9	Support and encourage development of safe, efficient and aesthetic pedestrian facilities.	This is an on-going objective. It is implemented in accordance with Chapter 9.11.080 of the Municipal Code.	Transportation
Policies:			

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5.9.1	Encourage walking as an alternative to single occupancy vehicle travel, and help ensure the safety of the pedestrian as follows: (a) All new developments shall provide sidewalks in conformance with the City's streets cross-section standards, and applicable policies for designated urban and rural areas. (b) The City shall actively pursue funding for the infill of sidewalks in developed areas. The highest priority shall be to provide sidewalks on designated school routes.	This is an on-going policy. It is implemented in accordance with Chapter 9.11.100 of the Municipal Code.	Transportation
5.9.2	Walkways shall be designed to minimize conflicts between vehicles and pedestrians.	This is an on-going policy. It is implemented in accordance with Chapter 9.11.100 of the Municipal Code.	Transportation
5.9.3	Where appropriate, provide amenities such as, but not limited to, enhanced paving, seating, and landscaping to enhance the pedestrian experience.	This is an on-going policy. New development is reviewed and conditioned to provide pedestrian friendly infrastructure in accordance with 9.11.100 of the Municipal Code.	Transportation
5.9.4	Require the provision of convenient and safe pedestrian access to buildings from the public sidewalk.	This is an on-going policy. It is implemented in accordance with Chapter 9.11.100 of the Municipal Code.	Transportation
Objective 5.10	Encourage bicycling as an alternative to single occupant vehicle travel for the purpose of reducing fuel consumption, traffic congestion, and air pollution. The Moreno Bikeway Plan is shown in Figure 9-4.	This is an on-going objective. Bicycle Infrastructure is developed in accordance with the adopted Bicycle Master Plan.	Transportation
Policies:			
5.10.1	Bikeways shall link residential neighborhood areas with parks, employment centers, civic and commercial areas, and schools.	This is an on-going policy. Bicycle Infrastructure is developed in accordance with the adopted Bicycle Master Plan.	Transportation

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5.10.2	Integrate bikeways, consistent with the Bikeway Plan, with the circulation system and maintain Class II and III bikeways as part of the City's street system.	This is an on-going policy. Bicycle Infrastructure is developed in accordance with the adopted Bicycle Master Plan.	Transportation
5.10.3	Support bicycle safety programs, and active enforcement of laws relating to the safe operation of bicycles on City streets.	This is an on-going policy. Bicycle Infrastructure is developed in accordance with the adopted Bicycle Master Plan.	Transportation
5.10.4	Link local bikeways with existing and planned regional bikeways.	This is an on-going policy. Bicycle Infrastructure is developed in accordance with the adopted Bicycle Master Plan.	Transportation
Objective 5.11	Eliminate obstructions that impede safe movement of vehicles, bicyclists, and pedestrians.	This is an on-going objective. Bicycle Infrastructure is developed in accordance with the adopted Bicycle Master Plan.	Transportation

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
Policies:			
5.11.1	Landscaping adjacent to City streets, sidewalks and bikeways shall be designed, installed and maintained so as not to physically or visually impede public use of these facilities. (a) The removal or relocation of mature trees, street trees and landscaping may be necessary to construct safe pedestrian, bicycle and street facilities. (b) New landscaping, especially street trees shall be planted in such a manner to avoid overhang into streets, obstruction of traffic control devices or sight distances, or creation of other safety hazards.	This is an on-going program. Transportation Engineering works closely with Special Districts to ensure existing and proposed landscaping does not interfere with traffic control devices or pose any problems for pedestrians and cyclists.	Transportation
5.11.2	Driveways shall be designed to avoid conflicts with pedestrian and bicycle travel.	This is an on-going policy. It is implemented in accordance with Chapter 9.11.080 of the Municipal Code.	Transportation
Objective 5.12	Promote efficient circulation planning for all school sites that will maximize pedestrian safety, and minimize traffic congestion and neighborhood impacts.	This is an on-going objective. It is implemented in accordance with Chapter 9.11.080 of the Municipal Code.	Transportation
Policies:			
5.12.1	Coordinate with school districts to identify suggested pedestrian routes within existing and new subdivisions for school children to walk to and from schools and/or bus stops.	This is an on-going policy. The city has a robust Safe Routes to School Program which provides for designated walking routes, and school age pedestrian education / encouragement outreach efforts.	Transportation
9.5.3 Circulation Element Programs			
Programs:			Transportation

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
5-1	Periodically review current traffic volumes, traffic collision data, and the pattern of urban development to coordinate, program, and as necessary revise the planning and prioritization of road improvements.	This is an on-going program. It is implemented in accordance with Title 12 of the Municipal Code.	Transportation
5-2	Periodically, reassess the goals, objectives and policies statements of the Circulation Element and propose amendments, as necessary.	This is an on-going program. **A comprehensive review of the Circulation Element will be performed with the next update of the General Plan.**	Transportation
5-3	Develop a comprehensive strategy to ensure full funding of the circulation system. The strategy will include the DIF, TUMF, and other funding sources that may be available to the City. In addition, the creation of benefit assessment districts, and road and bridge fee districts may be considered where appropriate.	This is an on-going policy. It is implemented in accordance with Title 3 of the Municipal Code.	Transportation
5-4	Develop a multi-year transportation infrastructure improvement program that, to the extent feasible, phases the construction of new projects in advance of new development.	This is a bi-annual City Capital Improvement Plan effort. It is implemented in accordance with the City's bi-annual budget process.	Transportation
5-5	The above referenced program will prioritize circulation improvement projects to be funded from DIF, TUMF and other sources. Prioritization to consider the following factors: (a) Traffic safety; (b) Congestion relief; (c) Access to new development; (d) Equitable benefit.	This is a bi-annual City Capital Improvement Plan effort. It is implemented in accordance with the City's bi-annual budget process.	Transportation

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
5-6	Conduct studies of specified arterial segments to determine if any additional improvements will be needed to maintain an acceptable LOS at General Plan build-out. Generally, these segments will be studied as new developments are proposed in their vicinity. Measures will be identified that are consistent with the Circulation Element designation of these roadway segments, such as additional turn lanes at intersections, signal optimization by coordination and enhanced phasing, and travel demand management measures. The study of specified arterial segments will be required to identify measures to maintain an acceptable LOS at General Plan build-out for at least one of the reasons discussed below: (a) Segments will need improvement, but their ultimate volumes slightly exceed design capabilities. (b) Segments will need improvements but require inter-jurisdictional coordination. (c) Segments would require significant encroachment on existing adjacent development if built-out to their Circulation Element designations.	This is an on-going program. It is implemented in accordance with Chapter 9.11.080 of the Municipal Code. The Circulation Element will undergo an extensive analysis with the next update of the General Plan.	Transportation
5-7	Establish traffic study guidelines to deal with development projects in a consistent manner. The traffic study guidelines shall include criteria for projects that propose changes it the approved General Plan land uses.	This is an on-going program. It is implemented in accordance with Chapter 9.11.080 of the Municipal Code. T**raffic study guidelines will be modified with the next update of the General Plan to ensure compliance with SB 743.**	Transportation

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
5-8	Develop access guidelines for arterials with commercial frontage to facilitate access to development and preservation of safe flow of traffic. A component of guidelines shall address shared access.	This is an on-going program. It is implemented in accordance with Chapter 9.11.080 of the Municipal Code.	Transportation
5-9	Collaborate with all adjacent jurisdictions to implement and integrate right-of-way requirements and improvement standards for General Plan roads that cross-jurisdictional boundary.	This is an on-going program. It is implemented in accordance with Chapter 9.11.080 of the Municipal Code.	Transportation
5-10	Support regional projects that improve access to Moreno Valley. Examples of specific ongoing projects that should be supported include: (a) CETAP Cajalco alignment and extension to State Route 241 in Orange County; (b) CETAP Moreno Valley to San Bernardino alternative alignments including Reche Canyon Road / Reche Vista Road alignment and the Pigeon Pass Road to Pepper Avenue alignment; (c) TUMF Backbone Network projects to widen Alessandro Boulevard and Van Buren Boulevard; (d) Measure A projects to widen SR-60 through the Badlands, widen Interstate 215 (I-215) from Riverside interchange to Interstate 10, and extension of San Jacinto commuter rail line; (e) Construction of commuter rail stations in Highgrove, and at the intersection of Alessandro at I-215; (f) Construction of HOV ramp connector from westbound SR-60 to south bound I-215; (g) Widen SR-60/I-215 from Moreno Valley interchange to Riverside interchange.	This is an on-going program. The City has designated certain Public Works staff to represent Moreno Valley interests at various Technical Advisory meetings.	Transportation

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
5-11	Work with RCTC, Caltrans, County of Riverside, adjacent jurisdictions and other affected agencies to plan and develop a multi-modal transportation system.	This is an on-going program. The City works closely with regional partners in the development of a circulation system that supports all modes of transportation.	Transportation
5-12	Coordinate with Caltrans to redesign and reconstruct the SR-60 interchanges with Day Street, Perris Boulevard, Nason Street, Moreno Beach Drive, Redlands Boulevard, Theodore Street and Gilman Springs Road.	This is completed in concert with the bi-annual City Capital Improvement Plan effort. It is implemented in accordance with the City's bi-annual budget process and Riverside County's bi-annual Federal Transportation Improvement Plan (FTIP) process. Nason Street interchange is complete	Transportation
5-13	Implement Transportation demand management (TDM) strategies that reduce congestion in the peak travel hours. Examples include carpooling, telecommuting, and flexible work hours.	This is an on-going program. It is implemented in accordance with Chapter 9.11.080 of the Municipal Code.	Transportation
5-14	Implement programs in support of the efforts of Riverside Transit Agency toward the expansion of the existing bus system within the City and the provision of future public transportation consistent with the Riverside County Transit Plan.	This is an on-going program. The City works closely with Riverside Transit Agency (RTA) in the implementation of recommended improvements developed in the RTA Comprehensive Operational Analysis (COA).	Transportation
5-15	Work with Riverside County Transportation Commission and Riverside Transit Agency to implement the Transit Oasis system.	This program is out of date. The City worked with RTA when they developed their Comprehensive Operational Analysis which is their long range planning document.	Transportation
5-16	Implement programs that mitigate on-street hazards for bicyclists.	This is an on-going program. Bicycle Infrastructure is developed in accordance with the adopted Bicycle Master Plan.	Transportation

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
5-17	Pursue regional, state and federal grant opportunities to fund design and construction of the City bikeway system.	This is an on-going program. Bicycle Infrastructure funding opportunities are identified in the adopted Bicycle Master Plan.	Transportation
5-18	Pursue grant funding that supports traffic safety at and in the vicinity of school facilities.	This is an on-going program. The City aggressively pursues all traffic safety related grant funding.	Transportation

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
5-19	Work with school districts and private schools to identify school site locations and designs that will minimize traffic impacts and promote traffic safety.	This is an on-going program. The city has a robust Safe Routes to School Program which provides for designated walking routes, and school age pedestrian education / encouragement outreach efforts.	Transportation
5-20	Work with school districts and private schools to identify suggested school routes and drop-off/pick-up plans for cars and buses.	This is an on-going program. The city has a robust Safe Routes to School Program which provides for designated walking routes, and school age pedestrian education / encouragement outreach efforts.	Transportation
5-21	Work with school districts and private schools to develop and promote traffic safety education programs.	This is an on-going program. The city has a robust Safe Routes to School Program which provides for designated walking routes, and school age pedestrian education / encouragement outreach efforts.	Transportation
The City Structure Safety Element Goals, Objectives, Policies, and Programs			
9.6 Safety Element Goals, Objectives, Policies, and Programs			
9.6.1 Safety Element Goals			
Goal 6.1	To achieve acceptable levels of protection from natural and man-made hazards to life, health, and property	1. The City of Moreno Valley has a robust, pro-active emergency management program that incorporates all elements of NIMS. 2. The City contracts with Cal-Fire for fire protection and emergency services. 3. the City's fire prevention and building safety divisions adopt and enforce the latest codes pertaining to structural, building construction and fire safety in the built environment.	Fire / Police / Building / Planning

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
Goal 6.2	To have emergency services which are adequate to meet minor emergency and major catastrophic situations.	1.The City contracts with Cal-Fire for fire protection and emergency services. The city has seven fire stations and access to a full complement of emergency services to respond to fires, medical emergencies, extrications, urban search and rescue, wild land fires, and swift water rescues. 2.Building and Safety Inspectors are trained through Cal OES and certified for the State of California in the Safety Assessment Program, for emergency assessment of all buildings and properties. 3. PD: The police department is almost fully staffed, and fully prepared to provide adequate services to meet emergency and catastrophic incident needs.	Fire / Police / Building
9.6.2 Safety Element Objectives and Goals			
Objective 6.1			
	Minimize the potential for loss of life and protect residents, workers, and visitors to the City from physical injury and property damage due to seismic ground shaking and secondary effects.	All residential and commercial buildings and structures are built to the current 2016 California Building Codes part 1 &2, volume 1&2 for all seismic events.	Fire / Police / Building / Planning
Policies:			

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
6.1.1	Reduce fault rupture and liquefaction hazards through the identification and recognition of potentially hazardous conditions and areas as they relate to the San Jacinto fault zone and the high and very high liquefaction hazard zones. During the review of future development projects, the City shall require geologic studies and mitigation for fault rupture hazards in accordance with the Alquist-Priolo Special Study Zones Act. Additionally, future geotechnical studies shall contain calculations for seismic settlement on all alluvial sites identified as having high or very high liquefaction potential. Should the calculations show a potential for liquefaction, appropriate mitigation shall be identified and implemented.	1. All residential and commercial buildings and structures are built to the current 2016 California Building Codes part 1 &2, volume 1&2 for all seismic events . **Fire:** This is really a Building and Land Development thing. Fire should be removed.	Fire / Police / Building / Planning
6.1.2	Require all new developments, existing critical and essential facilities and structures to comply with the most recent Uniform Building Code seismic design standards.	All residential and commercial buildings and structures are built to the current 2016 California Building Codes part 1 &2, volume 1&2 for all seismic events . **Fire:** The City's building safety division adopts and enforces the latest California Building Code pertaining to structural and seismic safety in the built environment. This is an ongoing goal. See MVMC 8.20.	Fire / Police / Building
Objective 6.2	Minimize the potential for loss of life and protect residents, workers, and visitors to the City from physical injury and property damage, and to minimize nuisances due to flooding.	Currently being done consistent with Municipal Code capture 8.12 as well as Federal Emergency Management Agency (FEMA) requirements.	Land Development

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Policies:			
6.2.1	Permit only that development in 100-year floodplain that represents an acceptable use of the land in relation to the hazards involved and the costs of providing flood control facilities. Locate critical facilities, such as hospitals, fire stations, police stations, public administration buildings, and schools outside of flood hazard areas.	This item is currently applied consistently with Municipal Code Chapter 8.12 as well as Federal Emergency Management Agency (FEMA) requirements.	Land Development
6.2.2	Storm drains and catch basins owned and operated by the City shall be inspected, cleaned and maintained pursuant to an approved clean out schedule.	M&O maintains storm drains compliant with NPDES requirements consistent with Muni Code Chapter 8.10.	Land Development/M&O
6.2.3	Maximize pervious areas in order to reduce increases in downstream runoff resulting from new development.	This is accomplished through the review/implementation of WQMPs and site design features consistent with Municipal Code Chapters 9.16, 9.17, et al.	Land Development /Planning
6.2.4	Design, construct and maintain street and storm drain flood control systems to accommodate 10 year and 100 year storm flows respectively.	Design of Street and storm drain flood control systems are accomplished through design review of improvement plans and studies consistent with Municipal Code Section 9.14.110. **Capital Projects:** This is completed in conjunction with Riverside County Flood Control and Water Conservation District's (RCFC&WCD) cooperation and funding. It is implemented in accordance with RCFC&WCD's annual Zone budget effort.	Land Development/M&O, Capital Projects

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6.2.5	The storm drain system shall conform to Riverside County Flood Control and Water Conservation District master drainage plans and the requirements of the Federal Emergency Management Agency.	This item is accomplished through design review of improvement plans and studies consistent with Muni Code Chapter 8.12. **Capital Projects:** This is completed in conjunction with Riverside County Flood Control and Water Conservation District's (RCFC&WCD) cooperation and funding. It is implemented in accordance with RCFC&WCD's annual Zone budget effort.	Land Development/Capital Projects
Objective 6.3	Provide noise compatible land use relationships by establishing noise standards utilized for design and siting purposes.	Chapter 9.10, Section 9.10.140 "Noise and Sound" of the Municipal Code provides standards for commercial and industrial uses. Additionally, Title 11, Chapter 11.80 "Noise Regulation" provides requirements for construction noise and times construction and grading can occur. This is an ongoing objective for all development.	Planning
Policies:			

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
6.3.1	The following uses shall require mitigation to reduce noise exposure where current or future exterior noise levels exceed 20 CNEL above the desired interior noise level: a. Single and multiple family residential buildings shall achieve an interior noise level of 45 CNEL or less. Such buildings shall include sound-insulating windows, walls, roofs and ventilation systems. Sound barriers shall also be installed (e.g. masonry walls or walls with berms) between single-family residences and major roadways. b. New libraries, hospitals and extended medical care facilities, places of worship and office uses shall be insulated to achieve interior noise levels of 50 CNEL or less. c. New schools shall be insulated to achieve interior noise levels of 45 CNEL or less.	Chapter 9.10, Section 9.10.140 "Noise and Sound" of the Municipal Code provides standards for commercial and industrial uses. Additionally, Title 11, Chapter 11.80 "Noise Regulation" provides regulations for construction noise and times construction and grading can occur. If CNEL levels are not met with the uses listed in this policy, mitigation measures for items such as installation shall be provided through the Noise Study and/or environmental document. This is an ongoing	Planning
6.3.2	Discourage residential uses where current or projected exterior noise due to aircraft over flights will exceed 65 CNEL.	Title 11, Chapter 11.80 "Noise Regulation" provides requirements for residential uses noise and Section 9.07.060 of the Municipal Code provides standards consistent with the Air Installation Compatibility Zone (ACUZ) Use Overlay District. Land use and building restrictions are provided when exceeding noise levels or if development/use is not in compliance with ACUZ standards. This is an ongoing policy.	Planning

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6.3.3	Where the future noise environment is likely to exceed 70 CNEL due to overflights from the joint-use airport at March, new buildings containing uses that are not addressed under Policy 6.3.1 shall require insulation to achieve interior noise levels recommended in the March Air Reserve Base Air Installation Compatible Use Zone Report.	Section 9.07.060, referring to the Air Installation Compatibility Zone (ACUZ) Use Overlay District, provides land use and building restrictions when exceeding noise levels or not in compliance with ACUZ standards. This is an ongoing policy.	Planning
6.3.4	Encourage residential development heavily impacted by aircraft over flight noise, to transition to uses that are more noise compatible.	Section 9.07.060 as well as ACUZ and/or standards required by the Airport Land Use Commission encourage non-compatible land uses to transition to more compatible uses.	Planning
6.3.5	Enforce the California Administrative Code, Title 24 noise insulation standards for new multi-family housing developments, motels and hotels.	Title 24 noise insulation standards for both new multi-family housing developments and hotels/motels are continually enforced through the California Administrative Code. This is an ongoing policy.	Planning
6.3.6	Building shall be limited in areas of sensitive receptors.	Section 9.07.060 as well as ACUZ and/or Airport Land Use Commission regulations restricts or limits building within areas of sensitive receptors.	Planning
Objective 6.4	Review noise issues during the planning process and require noise attenuation measures to minimize acoustic impacts to existing and future surrounding land uses.	Potential Noise issues to surrounding land uses are reviewed through the project design review stage at the Project Review Staff Committee and through the California Environmental Quality Act (CEQA) standards. Mitigation measures for noise shall be provided in environmental documents to limit noise impacts. This is an ongoing City objective.	Planning
Policies:			

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6.4.1	Site, landscape and architectural design features shall be encouraged to mitigate noise impacts for new developments, with a preference for noise barriers that avoid freeway sound barrier walls.	Specific design features are incorporated into projects during design review to minimize noise impacts. This could include site design features such as the placement of loading areas away from residential sensitive receptors, dense landscape and decorative walls. This is an ongoing policy.	Planning
Objective 6.5	Minimize noise impacts from significant noise generators such as, but not limited to, motor vehicles, trains, aircraft, commercial, industrial, construction, and other activities.	Chapter 9.10, Section 9.10.120 "Performance Standards" of the Municipal Code requires all mechanical and electrical equipment associated with such items as vehicles, land use or construction etc. to screen and minimize potential noise in a manner that it does not disturb adjacent uses and activities. (Ongoing)	Planning
Policies:			

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6.5.1	New commercial and industrial activities (including the placement of mechanical equipment) shall be evaluated and designed to mitigate noise impacts on adjacent uses	Chapter 9.16 "Design Guidelines", Sections 9.16.150 and 9.16.160 and Chapter 9.08, Section 9.08.150 of the Municipal Code provides general screening and buffer requirements for non-residential properties to other sensitive properties. This would include such items as trash areas, loading areas, ground-mounted equipment, roof mounted equipment etc. Chapter 9.10, Section 9.10.120 "performance Standards" of the Municipal Code requires all mechanical and electrical equipment associated with such items as vehicles, land use or construction etc. to screen and minimize potential noise in a manner that it does not disturb adjacent uses and activities. This is an ongoing policy.	Planning
6.5.2	Construction activities shall be operated in a manner that limits noise impacts on surrounding uses.	Chapter 9.10, Section 9.10.140 "Noise and Sound" of the Municipal Code provides standards for commercial and industrial uses. Additionally, Title 11, Chapter 11.80 "Noise Regulation" provides regulations for construction noise and times construction and grading can occur. This is an ongoing policy.	Planning

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Objective 6.6	Promote land use patterns that reduce daily automotive trips and reduce trip distance for work, shopping, school, and recreation.	The General Plan Land Use Map and the City's zoning map have provided land uses and patterns that reduce vehicle trips and distances for essential services. The City's Climate Action Plan also has provided strategies to reduce vehicle miles traveled. This is an ongoing objective.	Planning
Policies:			
6.6.1	Provide sites for new neighborhood commercial facilities within close proximity to the residential areas they serve.	The General Plan Land Use Map and the City's zoning map have provided land use designations and patterns that provide opportunities for residential areas to easily access neighborhood commercial areas (Ongoing)	Planning
6.6.2	Provide multi-family residential development sites in close proximity to neighborhood commercial centers in order to encourage pedestrian instead of vehicular travel.	Zoning Maps provided in the Municipal Code are consistent with the General Plan land use maps and have provided multiple-family zoning near or adjacent to where neighborhood commercial zoned property is located. This is an ongoing policy.	Planning
6.6.3	Locate neighborhood parks in close proximity to the appropriate concentration of residents in order to encourage pedestrian and bicycle travel to local recreation areas.	Moreno Valley strives to locate neighborhood parks in close proximity to the development the park will serve. Examples of these are: Victoriano Park/School, El Potrero Park/School, Morrison Park, Westbluff Park, and Ridgecrest Park. Pedestrian and bicycle travel to the parks are encourage, as well as shopping areas around parks. On-going	Parks

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Objective 6.7	Reduce mobile and stationary source air pollutant emissions.	Mobile and stationary source air pollution emissions are reviewed for most projects. For larger industrial projects, it is a primary objective to reduce air pollution sources. Air Quality is reviewed through the California Environmental Quality Act Guidelines and mitigation measures to reduce source are pollution emissions are a frequent occurrence. This is an ongoing City objective	Planning
Policies:			
6.7.1	Cooperate with regional efforts to establish and implement regional air quality strategies and tactics.	The City complies with standards within the California Air Resources Board (CARB) South Coast Air Quality Management District SCAQMD) requirements and rules (i.e. Rule 403) regarding emissions and air quality strategies. Checks and balances are reviewed thoroughly in the appropriate project environmental document. This is an ongoing policy.	Planning
6.7.2	Encourage the financing and construction of park-and-ride facilities.	This is an on-going policy. The City works closely with Caltrans and RCTC in the development of Park and Ride Facilities.	Transportation
6.7.3	Encourage express transit service from Moreno Valley to the greater metropolitan areas of Riverside, San Bernardino, Orange and Los Angeles Counties.	This is an on-going policy. The City works closely with Riverside Transit Agency (RTA) in the implementation of recommended improvements developed in the RTA Comprehensive Operational Analysis (COA).	Transportation

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6.7.4	Locate heavy industrial and extraction facilities away from residential areas and sensitive receptors.	Chapter 9.05 provides Good Neighbor standards for the location of heavy industrial uses away from residential uses. Examples of established buffer areas in large industrial projects are within the World Logistics Specific Plan and the Industrial Area Plan (SP 208), each separating industrial uses from residential uses.	Planning
6.7.5	Require grading activities to comply with South Coast Air Quality Management District's Rule 403 regarding the control of fugitive dust.	All grading activities comply with the South Coast Air Quality Management Districts Rule 403. Conditions of approval on projects confirm control of fugitive dust by such measures as continual watering of the site and restriction of grading during higher wind events. This is an ongoing policy.	Planning
6.7.6	Require building construction to comply with the energy conservation requirements of Title 24 of the California Administrative Code.	All residential and commercial buildings and structures are built to the current 2016 California Energy and Green Codes for all new and remodeled and tenant improvement project.	Building
Objective 6.8	As feasible given budget constraints, strive to maintain a police force with a ratio of one sworn officer for each 1,000 residents.	Fire should be removed from this item PD: The county continues to fill open positions and the new contract allows for two additional sworn officers.	Police / Fire
Policies:			

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
6.8.1	Explore the most effective and economical means of providing responsive and adequate law enforcement protection in the future.	Fire should be removed from this item PD: Senior leadership continues to work toward improving community policing programs, reducing crime, improving service and reducing costs.	Police / Fire
Objective 6.9	Reduce the risk and fear of crime through physical planning strategies that maximize surveillance opportunities and minimize opportunities for crime found in the present and future built environment, and by creating and maintaining a high level of community awareness and support of crime prevention.	Fire should be removed from this item PD: Senior leadership continues to work toward improving community policing programs, reducing crime, improving service delivery, and improving the perception of safety in the city. New patrol tactics, team deployments, social media platforms, and crime analysis strategies are being used to maximize our efforts.	Police / Fire
Policies:			
6.9.1	Promote the establishment of neighborhood and business watch programs to encourage community participation in the patrol of neighborhood areas, and increased awareness of any suspicious activity.	Fire should be removed from this item PD: Our Community Services Unit and Problem Oriented Policing Teams continues to work with neighborhood watch programs, businesses, and apartment managers to encourage community participation in the patrol of neighborhood areas, and increased awareness of any suspicious activity. A social media component is in the works to assist with these programs as well.	Police / Fire

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6.9.2	Require well-lighted entrances, walkways and parking lots, street lighting in all commercial, industrial areas and multiple-family residential areas to facilitate nighttime surveillance and discourage crime.	Fire should be removed from this item PD: Crime Prevention through Environmental Design (CPTED) Concepts are provided to businesses and homeowners via an inspection process handled by the Department's Community Services Unit.	Police / Fire
6.9.3	Incorporate "defensible space" concepts into the design of dwellings and nonresidential structures, including, but not limited to configuration of lots, buildings, fences, walls and other features that facilitate surveillance and reinforce a sense of territorial control.	Fire should be removed from this item PD: Crime Prevention through Environmental Design (CPTED) Concepts are provided to businesses and homeowners via an inspection process handled by the Department's Community Services Unit.	Police / Fire /Planning
Objective 6.10	Protect life and property from the potential short-term and long-term deleterious effects of the necessary transportation, use, storage treatment and disposal and hazardous materials and waste within the City of Moreno Valley.	The Fire Prevention Division strives to inspect business occupancies who store, handle, use hazardous materials on an annual basis. The latest California Fire Code regulations pertaining to hazardous materials processes are enforced.	Fire
Policies:			
6.10.1	Require all land use applications and approvals to be consistent with the siting criteria and other applicable provisions of the adopted Hazardous Waste Management Plan, which is also incorporated into and as part of the General Plan.	The Hazardous Waste Management Plan.	Waste Coordinator

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6.10.2	Manage the generation, collection, storage, processing, treatment, transport and disposal of hazardous waste in accordance with provisions of the City of Moreno Valley's adopted Hazardous Waste Management Plan, which is also incorporated into and as part of the General Plan.	The Hazardous Waste Management Plan. Host hazardous waste collection events; educate residents how to properly handle and dispose of hazardous waste; support Riverside County's efforts to provide residents and businesses with opportunities to dispose of hazardous waste properly. Work with Federal, State and County agencies to identify and regulate the use and disposal of toxic waste.	Waste Coordinator
Objective 6.11	Maintain an integrated emergency management program that is properly staffed, trained, and equipped for receiving emergency calls, providing initial response, providing for key support to major incidents.	1. The City of Moreno Valley has a robust, pro-active emergency management program that incorporates all elements of NIMS. 2. The City contracts with Cal-Fire for fire protection and emergency services.	Fire
Policies:			
6.11.1	Respond to any disaster situation in the City to provide necessary initial response and providing for key support to major incidents.	1. The City of Moreno Valley has a robust, pro-active emergency management program that incorporates all elements of NIMS. 2. The City contracts with Cal-Fire for fire protection and emergency services.	Emergency Operations / Fire
6.11.2	Provide emergency first aid treatment when necessary.	1. The City of Moreno Valley has a robust, pro-active emergency management program that incorporates all elements of NIMS. 2. The City contracts with Cal-Fire for fire protection and emergency services.	Emergency Operations / Fire

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
6.11.3	Support the maintenance of a trauma center within the City.	The City contracts with Cal-Fire for fire protection and emergency services.	Emergency Operations / Fire
6.11.4	Aggressively attack uncontrolled fires and hold losses to a minimum.	The City contracts with Cal-Fire for fire protection and emergency services.	Fire
6.11.5	Minimize uncontrolled fires through support of weed abatement programs.	The Fire Prevention Division has a pro-active hazard abatement program in which all vacant parcels are inspected on an annual basis to ensure proper maintenance is being conducted by property owners.	Fire
Objective 6.12			
	Coordinate with Federal, State and County agencies and neighboring communities in developing a regional system to respond to emergencies and major catastrophes.	1. The City of Moreno Valley has a robust, pro-active emergency management program that incorporates all elements of NIMS. 2. The City contracts with Cal-Fire for fire protection and emergency services.	Emergency Operations / Fire
Policies:			
6.12.1	Support mutual aid agreements and communication links with the County of Riverside and other local participating jurisdictions.	1. The City of Moreno Valley has a robust, pro-active emergency management program that incorporates all elements of NIMS. 2. The City contracts with Cal-Fire for fire protection and emergency services.	Emergency Operations / Fire

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
Objective 6.13	Maintain fire prevention, fire-related law enforcement, and public education and information programs to prevent fires.	The Fire Prevention division conducts inspections on multi-family dwellings, schools, hospitals, and business occupancies and provides education to residents and business owners regarding fire code violations and other potential safety problems.	Emergency Operations / Fire
Policies:			
6.13.1	Provide fire safety education to residents of appropriate age.	The Fire Prevention division conducts inspections on multi-family dwellings, schools, hospitals, and business occupancies and provides education to residents and business owners regarding fire code violations and other potential safety problems. The fire department participates in a number of public events throughout the year providing public education to our residents.	Fire
Objective 6.14	Maintain the capacity to respond rapidly to emergency situations.	1. The City of Moreno Valley has a robust, pro-active emergency management program that incorporates all elements of NIMS. 2. The City contracts with Cal-Fire for fire protection and emergency services.	Fire
Policies:			
6.14.1	Locate fire stations in accordance with the Fire Station Master Plan as shown in Figure 6-1. The exact location of each fire station may be modified based on availability of land and other factors.	Since the general plan was written, Station 58 was added off Moreno Beach and Auto Mall Dr. and Station 99 was added at Morrison and Cottonwood.	Fire

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
6.14.2	Relate the timing of fire station construction to the rise of service demand in surrounding areas.	1. Demand for service is continually monitored by Cal-Fire and recommendations are brought to the city.	Fire
Objective 6.15	Ensure that property in or adjacent to wildland areas is reasonably protected from wildland fire hazard, consistent with the maintenance of a viable natural ecology.	1. The Fire Prevention Division has a pro-active hazard abatement program in which all vacant parcels are inspected on an annual basis to ensure proper maintenance is being conducted by property owners. 2. During development, the Fire Prevention division ensures that all Wildland Urban Interface developments meet the construction requirements of the California Fire and Building Codes.	Fire
Policies:			
6.15.1	Encourage programs to minimize the fire hazard, including but not limited to the prevention of fuel build-up where wildland areas are adjacent to urban development.	1. The Fire Prevention Division has a pro-active hazard abatement program in which all vacant parcels are inspected on an annual basis to ensure proper maintenance is being conducted by property owners. 2. During development, the Fire Prevention division ensures that all Wildland Urban Interface developments meet the construction requirements of the California Fire and Building Codes.	Fire

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
6.15.2	Tailor fire prevention measures implemented in wildland areas to both the aesthetic and functional needs of the natural environment.	1. The Fire Prevention Division has a pro-active hazard abatement program in which all vacant parcels are inspected on an annual basis to ensure proper maintenance is being conducted by property owners. 2. During development, the Fire Prevention division ensures that all Wildland Urban Interface developments meet the construction requirements of the California Fire and Building Codes.	Fire
Objective 6.16	Ensure that uses within urbanized areas are planned and designed consistent with accepted safety.	1. The Fire Prevention Division has a pro-active hazard abatement program in which all vacant parcels are inspected on an annual basis to ensure proper maintenance is being conducted by property owners. 2. During development, the Fire Prevention division ensures that all Wildland Urban Interface developments meet the construction requirements of the California Fire and Building Codes.	Fire
Policies:			
6.16.1	Ensure that ordinances, resolutions and policies relating to urban development are consistent with the requirements of acceptable fire safety, including requirements for smoke detectors, emergency water supply and automatic fire sprinkler systems.	1. The Fire Prevention division enforces the latest state adopted California Fire Code to ensure appropriate fire protection systems are installed. 2. Annual inspections are conducted as resources permit to ensure fire protection systems are properly maintained.	Fire

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
6.16.2	Encourage the systematic mitigation of existing fire hazards related to land urban development or patterns of urban development as they are identified and as resources permit.	The Fire Prevention division conducts annual inspections as resources permit to ensure fire protection systems are properly maintained, egress and ingress are provided for, and that other hazards are mitigated as required.	Fire
6.16.3	Ensure that adequate emergency ingress and egress is provided for each development.	1. The Fire Prevention division reviews all new developments for sufficient ingress, egress, and water supply. 2. The Fire Prevention division conducts annual inspections as resources permit to ensure fire protection systems are properly maintained, egress and ingress are provided for, and that other hazards are mitigated as required.	Fire
6.16.4	Within the safety zones (e.g. Air Crash Hazard Zones and Clear Zones) shown in Figure 6-5, residential uses shall not be permitted, and business uses shall be restricted to low intensity uses as defined in the March Air Reserve Base Air Installation Compatible Use Zone Report, as amended from time to time.	Residential uses are generally not permitted and businesses shall be restricted to low intensity uses within air crash hazard and clear zones. This use is monitored and regulated by March Air Reserve Base Air Installation Compatible Use Zones and the Airport Land Use Commission (ALUC), This is an ongoing policy.	Planning
Objective 6.17	Provide non-emergency public services provided that such demands do not interfere with fire protection and other emergency services.	1. The City of Moreno Valley has a robust, pro-active emergency management program that incorporates all elements of NIMS.	Fire
9.6.3 Safety Element Programs			
Programs:			

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
6-1	Request that public utility companies inspect their facilities and distribution networks to determine the potential impact of earthquake damage.	**MVU** routinely inspects all facilities and performs any necessary repairs. Fire: 1. The City of Moreno Valley has a robust, pro-active emergency management program that works closely with local hospitals, utilities and other critical infrastructure.	Fire/MVU
6-2	Evaluate historic buildings relative to the need for mitigation of geologic hazards, while weighing their historical value against the potential hazard of their collapse.	All residential and commercial buildings and structures are built to the current 2016 California Building Codes for all renovations to historic buildings	Building
6-3	Reevaluate designated truck routes in terms of noise impact on existing land uses to determine if those established routes and the hours of their use should be adjusted to minimize exposure to truck noise.	This is an on-going program. It is accomplished through provisions of Title 12 of the Municipal Code. A comprehensive review of the designated truck routes will be performed with the General Plan update.	Transportation
6-4	Review existing ordinances to ensure that building and site design standards specifically address crime prevention utilizing defensible space criteria. Incorporate security standards into the Municipal Code.	No action has been taken in this area; however, the Department's Community Services Unit can begin working on this immediately.	Police/Planning

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
6-5	Seek state and federal grants to offset any required additions in law enforcement staffing and/or equipment.	Senior police leadership is constantly on the lookout out for grant opportunities. Similarly, the Riverside County Sheriff's Department assists in this effort by applying for grants on the police department's behalf. All grant awards are sent to the city for approval before acceptance. The police department is currently utilizing serval grants to fund equipment purchases and staff positions.	Police
6-6	Update the Fire Protection Master Plan as conditions warrant.	1. Demand for service is continually monitored by Cal-Fire and recommendations are brought to the city.	Fire
6-7	Establish regulations for development along the urban-wildland interface.	1. The Fire Prevention Division has a pro-active hazard abatement program in which all vacant parcels are inspected on an annual basis to ensure proper maintenance is being conducted by property owners. 2. During development, the Fire Prevention division ensures that all Wildland Urban Interface developments meet the construction requirements of the California Fire and Building Codes.	Fire
6-8	Establish criteria for the design, maintenance, modification and replacement of fire facilities.	1. Demand for service is continually monitored by Cal-Fire and recommendations are brought to the city.	Fire

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
6-9	Establish criteria for weed abatement programs.	1. The Fire Prevention Division has a pro-active hazard abatement program in which all vacant parcels are inspected on an annual basis to ensure proper maintenance is being conducted by property owners. 2. During development, the Fire Prevention division ensures that all Wildland Urban Interface developments meet the construction requirements of the California Fire and Building Codes.	Fire
The City Structure Conservation Element Goals, Objectives, Policies, and Programs			
9.7 Conservation Element Goals, Objectives, Policies, and Programs			
9.7.1 Conservation Element Goals			
Goal 7.1	To achieve the wise use of natural resources within the City of Moreno Valley, its sphere of influence and planning area.	The City continues to adhere to Goal 7.1, which includes conservation of natural resources within the city limits and is sphere of influence.	Planning
9.7.2 Conservation Element Objectives and Goals			
Objective 7.1	Minimize erosion problems resulting from development activities.	Accomplished through grading and erosion control plans consistent with Municipal Code Chapter 8.21.	Land Development
Policies:			
7.1.1	Require that grading plans include appropriate and feasible measures to minimize erosion, sedimentation, wind erosion and fugitive dust.	Grading plans are reviewed for these aspects consistent with Municipal Code Chapter 8.21.	Land Development
7.1.2	Circulation patterns within newly developing portions of Moreno Valley, particularly in hillside areas, should follow natural contours to minimize grading.	Circulation patterns are accomplished through review of site plans and tract maps consistent with Municipal Code Chapters 8.21 and 9.16	Land Development

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
Objective 7.2	Maintain surface water quality and the supply and quality of groundwater.	Surface water quality is achieved through the review and implementation of WQMPs consistent with Municipal Code Chapter 8.10.	Land Development
Policies:			
7.2.1	New development may use individual wells only where an adequate supply of good quality groundwater is available.	Well installation is governed by Riverside County Department of Environmental Health.	Land Development
7.2.2	The City shall comply with the provisions of its permit(s) issued by the Regional Water Quality Control Board for the protection of water quality pursuant to the National Pollutant Discharge Elimination System.	This is an on-going policy, consistent with Municipal Code Chapter 8.10.	Land Development
7.2.3	In concert with the water purveyor identify aquifer recharge areas and establish regulations to protect recharge areas and regulate new individual wells.	To date, this item is not required. Wells governed by Riverside County Department of Environmental Health. **This policy may need to be reviewed further with the next comprehensive General Plan update.**	Land Development
Objective 7.3	Minimize the consumption of water through a combination of water conservation and reuse.	To date, this item is not required. Wells are governed by Riverside County Department of Environmental Health. **This policy may need to be reviewed further with the next comprehensive General Plan update.**	Land Development/Planning/Special Districts
Policies:			

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
7.3.1	Require water conserving landscape and irrigation systems through development review. Minimize the use of lawn within private developments, and within parkway areas. The use of mulch and native and drought tolerant landscaping shall be encouraged.	The City's Water Conservation Landscape Ordinance as approved in 2009 requires water conservation landscape and irrigation systems in all development review. City uses Public Works Department Landscape Design Guidelines, Planning Division Landscape Standards and Municipal Code Chapter 17, Title 9 when reviewing and approving landscape plans for public landscape. In 2016, non-functional turf (irrigated with potable water) was removed in all publically maintained medians and parkway and replaced with drought tolerant landscaping and water efficient irrigation. This is an ongoing policy.	Planning
7.3.2	Encourage the use of reclaimed wastewater, stored rainwater, or other legally acceptable non-potable water supply for irrigation.	Land Development contributes to reuse through review/implementation of WQMPs consistent with Municipal Code Chapter 8.10.	Land Development/Planning
Objective 7.4	Maintain, protect, and preserve biologically significant habitats where practical, including the San Jacinto Wildlife Area, riparian areas, habitats of rare and endangered species, and other areas of natural significance.	The Planning Division, through the provisions of the Western Riverside County Multi-species Habitat Conservation Plan. assures that biologically significant habitats are protected and preserved during site design review at the Project Review Staff Committee. This is an ongoing objective.	Planning
Policies:			

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
7.4.1	Require all development, including roads, proposed adjacent to riparian and other biologically sensitive habitats to provide adequate buffers to mitigate impacts to such areas.	Development or public rights of way proposed adjacent to significant habitats are protected and preserved during site design review and review at the Project Review Staff Committee. This is an ongoing policy.	Planning
7.4.2	Limit the removal of natural vegetation in hillside areas when retaining natural habitat does not pose threats to public safety.	1. The Fire Prevention Division has a pro-active hazard abatement program in which all vacant parcels are inspected on an annual basis to ensure proper maintenance is being conducted by property owners.	Fire
7.4.3	Preserve natural drainage courses in their natural state and the natural hydrology, unless the protection of life and property necessitate improvement as concrete channels.	Accomplished through site design consistent with Municipal Code Chapters 8.12, 8.21, and 9.16.	Planning / Land Development
7.4.4	Incorporate significant rock formations into the design of hillside developments.	Natural rock formations are incorporated into design of hillside residential developments through Municipal Code standards included in Section 9.03.040 "Residential Site Development Standards" and Section 9.16.190 "Natural Open Space Standards". Section 9.03.060 "Planned Unit Developments" also incorporates the conservation of Cultural and Natural Resources. This is an ongoing policy.	Planning

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
7.4.5	The City shall fulfill its obligations set forth within any agreement(s) and permit(s) that the City may enter into for the purpose of implementing the Western Riverside County Multi-species Habitat Conservation Plan.	This goal is satisfied through the Western Riverside County Multi-Species Habitat Conservation Plan (MSHCP) approved on June 17, 2003, The MSHCP Plan was incorporated by the City of Moreno Valley and the City fulfills its obligations for implementing the Plan regarding agreements, permits, review of cell groups etc. This is an ongoing policy.	Planning
Objective 7.5	Encourage efficient use of energy resources.	The City's adopted Climate Action Strategy provides strategies for efficient use of energy resources citywide. MVU regularly forecasts demand for energy and procures enough energy to meet demand. A portion of the energy is from renewable resources, such as wind and solar. This is an ongoing objective.	Planning/MVU

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
Policies:			
7.5.1	Encourage building, site design, and landscaping techniques that provide passive heating and cooling to reduce energy demand.	Building, site design and landscaping techniques that provide passive heating and cooling as well as energy reduction are achieved by following the current 2016 California Energy and Green Code for reference. MVU has established Energy Efficiency Programs for residential and commercial customers that provide rebates and incentives for the installation of energy saving projects, including window film and cool roof applications.	Building/Planning /MVU
7.5.2	Encourage energy efficient modes of transportation and fixed facilities, including transit, bicycle, equestrian, and pedestrian transportation. Emphasize fuel efficiency in the acquisition and use of City-owned vehicles.	**MVU:** In March 2016, MVU completed the installation of electric vehicle charging stations that are available to the public. Installation of additional electric vehicle charging stations at City Hall will begin in February 2017. **Transportation:** This is an on-going policy. It is accomplished through implementation of the Bicycle Master Plan, continued development of the Safe Routes to School program, and support of the recommendations within RTA's Comprehensive Operational Analysis. Also Public Works uses fuel efficiency as a major factor in the acquisition of City vehicles.	Transportation/MVU

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
7.5.3	Locate areas planned for commercial, industrial and multiple family density residential development within areas of high transit potential and access.	The General Plan Land Use Map and the City's zoning map have provided land use designations and patterns that provide opportunities for commercial, industrial and multiple-family residential development to locate within areas of high transit potential and access. New plans such as the Nason Corridor and Alessandro Corridor have provided additional opportunities for development near transit corridors. This is an ongoing policy.	Planning
7.5.4	Encourage efficient energy usage in all city public buildings.	Efficient energy usage in all city public buildings is achieved by following the current 2016 California Energy and Green Code for reference. MVU works with Facilities to implement energy efficient measures in MVU-served city facilities. Examples include lighting retrofits at the Conference and Rec Center and the Animal Shelter. This is an ongoing policy.	Building/MVU
7.5.5	Encourage the use of solar power and other renewable energy systems.	The use of solar power and other renewable energy systems is achieved by following the current 2016 California Energy and Green Code and by goals included in the City's Climate Action Plan. MVU has a solar program for residential and commercial customers. To date, MVU customers have installed over 6 MW of solar.	Planning / Building

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
Objective 7.6	Identify and preserve Moreno Valley's unique historical and archaeological resources for future generations.	The City has identified historical and archeological resources for preservation purposes. This includes review of historic resources through project review under the California Environmental Quality Act (CEQA) and archeological resources through Native American Tribal entity review and general Archeological Studies through CEQA review. This is an ongoing objective of the City.	Planning / Building
Policies:			
7.6.1	Historical, cultural and archaeological resources shall be located and preserved, or mitigated consistent with their intrinsic value.	Through environmental review and required technical studies, project conditions of approval and coordination with Native American Tribes,, mitigation measures are provided to conserve cultural resources that are uncovered during excavation and construction act ivies This is an ongoing policy.	Planning
7.6.2	Implement appropriate mitigation measures to conserve cultural resources that are uncovered during excavation and construction activities.	Through environmental review and required technical studies, project conditions of approval and coordination with Native American Tribes, mitigation measures are provided to conserve cultural resources that are uncovered during excavation and construction activities This is an ongoing policy.	Planning
7.6.3	Minimize damage to the integrity of historic structures when they are altered.	Altered structures are reviewed internally with Building and Planning staff and on an individual basis with the Environmental and Historical Preservation Board. This is an ongoing policy.	Planning

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
7.6.4	Encourage restoration and adaptive reuse of historical buildings worthy of preservation.	Restoration and adaptive reuse to preserve historical buildings are reviewed internally with Building and Planning staff and on an individual basis with the Environmental and Historical Preservation Board. This is an ongoing policy.	Planning
7.6.5	Encourage documentation of historic buildings when such buildings must be demolished.	When historic buildings must be demolished, they are first reviewed by the Environmental and Historical Preservation Board. Any documentation would occur through the Building and Safety Division.	Planning
Objective 7.7	Where practical, preserve significant visual features significant views and vistas.	Review of development projects through Project Staff Review strive to preserve visual features, significant views and vistas. The item is further reviewed through Appendix G, "Aesthetics" and "Cultural Resources" of the California Environmental Quality Act (CEQA Guidelines. This is an ongoing objective.	Planning
Policies:			

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
7.7.1	Discourage development directly upon a prominent ridgeline.	Section 9.03.040 B "Residential Site Development Standards" of the Municipal Code establishes standards for hillside residential development consistent with the goals, objectives and policies of the General Plan. Allowable development would preserve natural hillsides and ridgelines. **Goals, objectives and policies of hillside residential development will be further evaluated with the next comprehensive General Plan update**.	Planning
7.7.2	Require new electrical and communication lines to be placed underground.	This item is accomplished through site design consistent with Municipal Code Section 9.14.130.	Land Development
7.7.3	Implement reasonable controls on the size, number and design of signs to minimize degradation of visual quality.	Sign regulations included in Chapter 9.12 "Sign Regulations" provides controls on size, number and design of signs. Sign programs for larger commercial and industrial sites also provide regulations that are consistent with the Municipal Code and General Plan policy.	Planning

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
7.7.4	Gilman Springs Road, Moreno Beach Drive, and State Route 60 shall be designated as local scenic roads.	Caltrans manages the Scenic Highway Program in accordance with State Scenic Highway Guidelines and Sections 260 through 263 of the Streets and Highways Code. A county highway component was added to the Program in Section 154 of the Streets and Highways Code. Key criteria include memorable landscape, minimal intrusions, local support, and length not less than 1 mile.	Transportation/Planning
7.7.5	Require development along scenic roadways to be visually attractive and to allow for scenic views of the surrounding mountains and Mystic Lake.	Development along scenic roadways and the allowance for scenic views of the surrounding mountains are achieved through environmental review and Appendix N "Aesthetics" of the California Environmental Quality Act Guidelines.	Building/Planning
7.7.6	Minimize the visibility of wireless communication facilities by the public. Encourage "stealth" designs and encourage new antennas to be located on existing poles, buildings and other structures.	Chapter 9.09, Section 9.09.040 "Communication facilities, antennas and satellite dishes includes standards to minimize the visibility of wireless communications and encourages stealth designs. Co-location of facilities are encouraged. This is an ongoing policy.	Planning

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
Objective 7.8	Maintain an adequate system of solid waste collection and disposal to meet existing and future needs.	Maintain an adequate system of solid waste collection and disposal to meet existing and future needs: Franchise agreement is in place, continued update/amendments as existing and future needs change and or emerge.	Waste Coordinator

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
Policies:			
7.8.1	Encourage recycling projects by individuals, non-profit organizations, or corporations and local businesses, as well as programs sponsored through government agencies.	Encourage recycling projects by individuals, non-profit organizations, or corporations and local businesses, as well as programs sponsored through government agencies. The City of Moreno Valley actively encourages recycling projects and promotes participation in Keep Moreno Valley Clean and Beautiful (KMVCB); and educates groups regarding recyclable materials guidelines and goals. The City is involved in extensive outreach and education activities with respect to the three R's: reduce, reuse, recycle.	Waste Coordinator
9.7.3 Conservation Element Programs			
Programs:			

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
7-1	Support regional solid waste disposal efforts by the County of Riverside.	**Capital Projects:** The City offers a number of waste reduction, recycling and community clean-up programs. There is a franchise agreement in place with a major solid waste/recycling (AB 939) hauler, for residential (curbside) and commercial (AB 341) materials, that has resulted in the attainment of significant diversion. The City in partnership with Riverside County hosts biannual hazardous and electronic waste collections and community outreach events. The City is implementing AB 1826, requiring businesses to recycle their organic waste. The City has implemented a used motor oil and filters recycling public education program, and promotes Riverside County's free Backyard Composting Workshops, where residents can learn to properly compost green waste.	Waste Coordinator/M&O/Capital Projects
7-2	Advocate for natural drainage channels to the Riverside County Flood Control District, in order to assure the maximum recovery of local water, and to protect riparian habitats and wildlife.	This item is accomplished through site design and coordination with Flood Control consistent with Municipal Code Chapter 8.12.	Land Development /Capital Projects
7-3	Maintain a close working relationship with EMWD to ensure that EMWD plans for and is aware of opportunities to use reclaimed water in the City.	A close working relationship is maintained with EMWD on all projects to review reclaimed water opportunities in the City	Land Development/Special Districts

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
7-4	Provide guidelines for preferred planting schemes and specific species to encourage aesthetically pleasing landscape statements that minimize water use.	Current Landscape Development Guidelines and Specifications in the Municipal Code provide preferred planting schemes and aesthetically pleasing landscape statements that minimize water use and require drought tolerant species. This is an ongoing policy.	Planning
7-5	Develop incentives where appropriate, for the maintenance and sensitive rehabilitation of historic structures and properties.	Although historic structures and properties are reviewed and conserved, specific incentives have not been developed for maintenance and sensitive rehabilitation of historic structures. **This item shall be further reviewed and evaluated in the next comprehensive General Plan update.**	Planning
7-6	In areas where archaeological or paleontological resources are known or reasonably expected to exist, based upon the citywide survey conducted by the UCR Archaeological Research Unit, incorporate the recommendations and determinations of that report to reduce potential impacts to levels of insignificance.	Archeological and paleontological resources are reviewed through face to face meetings with Native American Tribes and review of studies that determine where resources lie. One such vehicle to review resources is the studies and reports provided by the UCR Archaeological Research Unit. The City incorporates the recommendations and determinations of these reports into the review of proposed development projects to reduce any noted impacts to levels of insignificance. This is an ongoing policy.	Planning

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
9.8 Housing Element Goals, Objectives, Policies, and Programs			
9.8.1 Housing Element Goals			
Goal 8.1	Improve and maintain decent, sanitary and affordable housing.	**Housing:** Following the dissolution of RDA, there are no currently active programs due to limited or no funding available. The Housing Authority is continuing to monitor previously funded affordable units.	Housing/Planning
Goal 8.2	Improve and maintain decent, sanitary and affordable housing for very-low income households and seniors.	**Housing:** Following the dissolution of RDA, there are no currently active programs due to limited or no funding available. The Housing Authority is continuing to monitor previously funded affordable units.	Housing/Planning
Goal 8.3	Reduce substandard housing and health and safety violations.	**Housing:** Following the dissolution of RDA, there are no currently active programs due to limited or no funding available. The Housing Authority is continuing to monitor previously funded affordable units.	Housing/Planning
Goal 8.4	Assist in the revitalization of older neighborhoods.	**Housing:** Following the dissolution of RDA, there are no currently active programs due to limited or no funding available.	Housing/Planning
Goal 8.5	Improve and maintain decent and affordable rental housing.	**Housing:** Following the dissolution of RDA, there are no currently active programs due to limited or no funding available. The Housing Authority is continuing to monitor previously funded affordable units.	Housing/Planning
Goal 8.6	Assist very low, low and moderate-income first time buyers to purchase homes.	**Housing:** Following the dissolution of RDA, there are no currently active programs due to limited or no funding available.	Housing/Planning

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Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
Goal 8.7	Add to the number of affordable rental units for very low and low-income households.	**Housing:** Following the dissolution of RDA, there are no currently active programs due to limited or no funding available. The Housing Authority is continuing to seek new opportunities to develop new units.	Housing/Planning
Goal 8.8	Create affordable housing units for senior households.	**Housing:** Following the dissolution of RDA, there are no currently active programs due to limited or no funding available. The Housing Authority is continuing to seek new opportunities to develop new units.	Housing/Planning
9.8.2 Housing Element Objectives and Policies			
Objective 8.1	Rehabilitate a minimum of fifteen single- family homes under the Home Improvement Loan Program (HILP).	From the 2014-2021 Housing Element Update -The Home Improvement Loan Program is on hold pending identification of new funding source. The program was previously funded by Redevelopment Agency. **Housing:** The program has met its goal and is currently no longer active due to funding.	Housing/Planning
Objective 8.2	Rehabilitate a minimum of fifteen single-family homes under the Homeowner Assistance for Minor Rehabilitation loan program (HAMR).	From the 2014-2021 Housing Element Update - The Homeowners Assistance for Minor Rehabilitation (HAMR) program is on hold pending identification of new funding source. The program was previously funded by the Redevelopment Agency. **Housing:** The program has met its goal and is currently no longer active due to funding.	Housing/Planning
Policies:			

APPENDIX B

Moreno Valley General Plan

Complete list of Goals and Policies

Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
8.2.1	Rehabilitate single-family homes to correct substandard conditions, improve handicap accessibility, and improve the aesthetics of older neighborhoods, thereby contributing to their preservation and revitalization.	**Housing:** Following the dissolution of RDA, there are no currently active programs due to limited or no funding available. The Housing Authority is continuing to seek new opportunities to contribute to preservation of units.	Housing/Planning
Objective 8.3	Rehabilitate a minimum of ninety mobile homes, for very low-income homeowners, in mobile home parks citywide, under the Mobile Home Grant Program.	From the 2014-2021 Housing Element Update - Policy/Program # 8.4 - Program is due to continue as the City converted to a contract program with Habitat for Humanity starting in FY 2013-14. - Housing may have additional information. **Housing:** Following the dissolution of RDA, there are no currently active programs due to limited or no funding available. Through the City's CDBG funds, there continues to be multiple units addressed each year.	Housing/Planning
Policies:			
8.3.1	Correct substandard conditions in mobile home parks.	Following the dissolution of RDA, there are no currently active programs due to limited or no funding available. Through the City's CDBG funds, there continues to be multiple units addressed each year.	Housing/Planning

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Moreno Valley General Plan

Complete list of Goals and Policies

Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
Objective 8.4	Obtain code compliance from a minimum of twenty-five very low and moderate-income property owners, citywide, with emphasis on focus neighborhoods.	From the 2014-2021 Housing Element Update - Policy/Program # 8.3 - Program description - Administer a program to provide grant funds for neighborhood beautification in targeted neighborhoods. **Housing:** Following the dissolution of RDA, there are no currently active programs due to limited or no funding available. Code Compliance continues to seek compliance of the units.	Housing/Planning
Policies:			
8.4.1	Enforce correction by property owners of identified housing and code violations in rental properties occupied by very low to moderate-income households.	From the 2014-2021 Housing Element Update - Policy/Program # 8.3 - New program funds included in FY 2013-14 CDBG allocation will allow continuation of the program. **Housing:** Following the dissolution of RDA, there are no currently active programs due to limited or no funding available. Code Compliance continues to seek compliance of the units	Housing/Planning
Objective 8.5	Conduct five neighborhood clean-ups annually; provide related services to Community Development Block Grant (CDBG) areas in conjunction with other projects, and assist in clean-up of 360 housing units.	From the 2014-2021 Housing Element Update - Policy/Program # 8.6 -The program will continue with funds from future CDBG allocations.	Housing/Planning
Policies:			Housing/Plan

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Moreno Valley General Plan

Complete list of Goals and Policies

Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
8.5.1	Provide neighborhood improvement programs to CDBG target areas.	From the 2014-2021 Housing Element Update - Policy/Program # 8.5 - The program originally included both CDBG target areas and the Redevelopment Area. The program was revised after dissolution of the state's redevelopment agencies. Funding of the program in the CDBG target areas will continue in the 2014-2021 planning cycle. **Housing:** Following the dissolution of RDA, there are no currently active programs due to limited or no funding available.	Housing/Planning
Objective 8.6	Assist 300 households citywide.	Following the dissolution of RDA, there are no currently active programs due to limited or no funding available.	Housing/Planning
Policies:			
8.6.1	Provide fair housing and landlord/tenant education services to very low to moderate-income households.	Following the dissolution of RDA, there are no currently active programs due to limited or no funding available. Through the City's CDBG funding, the City continues to fund Fair Housing services.	Housing/Planning
Objective 8.7	Rehabilitate fifty multi-family units, citywide, through utilization of the Rental Rehabilitation Program.	**The program has met its goal and is currently no longer active due to funding.**	Housing/Planning
Policies:			
8.7.1	To eliminate substandard housing conditions for low-income renters, while enhancing the appearance of multi-family developments.	The City is currently working on establishing funding sources for this item. Ongoing.	Housing/Planning

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Moreno Valley General Plan

Complete list of Goals and Policies

Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
Objective 8.8	Assist households with down payment and closing costs.	From the 2014-2021 Housing Element Update - Policy/Program # 8.10 - Program description - Provide funds for Homebuyer Assistance Program (HAP) silent seconds. Work with approved lenders. **Housing: Following the dissolution of RDA, there are no currently active programs due to limited or no funding available.**	Housing/Planning
Policies:			
8.8.1	Provide assistance to facilitate homeownership for very low to moderate-income households.	From the 2014-2021 Housing Element Update - Policy/Program # 8.10 - Program will continue (need update from Housing) Housing: Following the dissolution of RDA, there are no currently active programs due to limited or no funding available.	Housing/Planning
Objective 8.9	Create a minimum of 126 affordable rental units, citywide.	**Following the dissolution of RDA, there are no currently active programs due to limited or no funding available.** The Housing Authority will continue to address new units as funding is available.	Housing/Planning

APPENDIX B

Moreno Valley General Plan

Complete list of Goals and Policies

Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
Policies:			
8.9.1	Facilitate the creation of affordable rental units.	From the 2014-2021 Housing Element Update - Policy/Program # 8.13 - Program 8.13 was deleted after dissolution of the state's redevelopment agencies. The City will continue to look for new funding source and other programs to promote the development of affordable units for larger families. Housing: Following the dissolution of RDA, there are no currently active programs due to limited or no funding available.	Housing/Planning
Objective 8.10	Create a minimum of seventy senior units.	Following the dissolution of RDA, there are no currently active programs due to limited or no funding available. The Housing Authority will continue to address new units as funding is available.	Housing/Planning
Policies:			
8.10.1	Create decent and affordable housing opportunities for low and very-low income seniors.	Following the dissolution of RDA, there are no currently active programs due to limited or no funding available. The Housing Authority will continue to address new units as funding is available.	Housing/Planning
9.8.3 Housing Element Programs			
Programs:			
8-1	Utilize the Home Improvement Loan Program (HILP) that provides a 3% loan for up to $15,000 deferred for 20 years. Available citywide for very low to lower income homeowners.	**The program has met its goal and is currently no longer active due to funding.**	Housing/Planning

APPENDIX B

Moreno Valley General Plan

Complete list of Goals and Policies

Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
8-2	Utilize the Homeowner Assistance for Minor Rehabilitation (HAMR) loan program that provides a 3% to 5% loan for up to $7,500 amortized over a 10-year term.	**The program has met its goal and is currently no longer active due to funding.**	Housing/Planning
8-3	Utilize the Mobile Home Grant Program that provides grants up to $10,000 for owner-occupants of mobile homes.	CDBG Funding is still being used for this purpose.	Housing/Planning
8-4	Provide enhanced code compliance services and referrals to City housing rehabilitation programs.	When Redevelopment was dissolved several years ago any referrals ceased at that point due to lack of funding availability	Housing/Planning
8-5	Utilize the City Neighborhood Clean-up Program to provide volunteers and equipment to neighborhoods for clean-up activities.	This program was administered by the Sustainability & intergovernmental Program Manager. The city has created an Annual Day of Volunteerism (5.1.2) that may replace this program.	Housing/Planning
8-6	Contract with a fair housing agency to mediate between landlords and tenants and educate them on their rights and responsibilities.	Fair housing receives CDBG funding for these activities on an annual basis.	Housing/Planning
8-7	Update the City's Analysis of Impediments to Fair Housing.	This item is no longer active due to funding loss. Funding sources are being looked at.	Housing/Planning
8-8	Provide rehabilitation loans through the City's Rental Rehabilitation Program that offers 5% loans with the first year deferred and amortized over a 19-year period.	The program has met its goal and is currently no longer active due to funding.	Housing/Planning
8-9	Through the Homebuyer Assistance Program, provide 30-year deferred silent second loans, with no interest, up to 20% or $200,000 of the purchase price of resale homes.	The program has met its goal and is currently no longer active due to funding.	Housing/Planning

APPENDIX B

Moreno Valley General Plan

Complete list of Goals and Policies

Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
8-10	Work with local CHDO to construct and/or rehabilitate houses for very low-income households.	The City receives an allocation of HOME funds for CHDOs. This funding may only be used for this purpose.	Housing/Planning
8-11	Purchase HUD homes for resale to first time homebuyers.	**Following the dissolution of RDA, there are no currently active programs due to limited or no funding available.** The Housing Authority will continue to address new units as funding is available.	Housing/Planning
8-12	Administer new construction home ownership program and youth job training.	**Following the dissolution of RDA, there are no currently active programs due to limited or no funding available.** The Housing Authority will continue to address new units as funding is available.	Housing/Planning
8-13	Work with housing developers by providing Agency assistance to write-down the costs of units via loans.	**Following the dissolution of RDA, there are no currently active programs due to limited or no funding available.** The Housing Authority will continue to address new units as funding is available.	Housing/Planning
8-14	Provide financial assistance for the development of affordable rental units for larger families.	**Following the dissolution of RDA, there are no currently active programs due to limited or no funding available.** The Housing Authority will continue to address new units as funding is available.	Housing/Planning
8-15	Revise General Plan.	The General Plan will need to be revised to add the R30 land use. This will be provided with the next comprehensive General Plan update.	Housing/Planning

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Moreno Valley General Plan

Complete list of Goals and Policies

Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
8-16	Continue to implement permit streamlining.	Permit streamlining is ongoing in support of affordable housing projects within the Housing Element.	Housing/Planning
8-17	Develop standards for mobile home parks and mobile home subdivisions.	If not governed or following under state regulations, Mobile home parks and subdivisions are addressed in the Municipal Code regarding use (Section 9.02.020-1 - Conditional Use Permit in residential zones) and standards (Section 9.08.110 "Manufactured Home Requirements").	Housing/Planning
8-18	Review parking standards for multi-family 3 and 4 bedroom units, including covered parking requirements to determine if reductions are appropriate.	The Municipal Code addresses density bonus, affordable housing and senior housing projects through reductions/modifications to standards.	Housing/Planning
8-19	Review second unit regulations to determine if expansion is merited to additional districts.	This item is ongoing to meet new state regulations and will remain in compliance with State law requirements.	Housing/Planning
8-20	Continue to pay the development fees for projects, on a case-by-case basis, that have received State or Federal funds, such as Section 202 and Tax Credits.	All uses, including Section 202 projects , continue to pay development impact fees on a case by case basis (ongoing).	Housing/Planning
8-21	Utilize Redevelopment Agency funds, where appropriate and necessary, to facilitate infrastructure for affordable projects.	**Following the dissolution of RDA, there are no currently active programs due to limited or no funding available.**	Housing/Planning
8-22	Propose general plan changes for rezoning areas in the city to housing uses or mixed uses that include housing.	The Municipal Code was updated in 2014 to include provisions for mixed use projects	Housing/Planning

APPENDIX B

Moreno Valley General Plan

Complete list of Goals and Policies

Goal/Policy	Description	Discussion on Implementation Status	Responsible Party
8-23	Facilitate the construction of a sixty-nine unit multi-family senior complex.	We are currently pursuing a senior development opportunity on Housing Authority property.	Housing/Planning

PLANNING COMMISSION

STAFF REPORT

Meeting Date: January 25, 2018

PROPOSED GENERAL PLAN AMENDMENT, CHANGE OF ZONE, PARCEL MAP, PLOT PLANS, CONDITIONAL USE PERMITS AND PHASING PLAN FOR THE DEVELOPMENT OF A FIVE BUILDING MIXED-USE MEDICAL CENTER CAMPUS

Case:	PEN16-0048 General Plan Amendment PEN16-0049 Change of Zone PEN16-0052 Parcel Map PEN16-0053 Master Plot Plan PEN16-0054-0055 Plot Plans (Medical Bld. 1&2) PEN16-0056-0057 Conditional Use Permits PEN17-0013 Phasing Plan
Applicant:	Richard Torng, Galaxy Management Inc.
Owner:	Galaxy Management Inc.
Representative:	Charles Yu
Location:	Southeast Corner of Brodiaea Avenue and Nason Street (486-290-036 & 486-280-037)
Case Planner:	Julia Descoteaux
Council District:	3

SUMMARY

The applicant, Galaxy Management Inc., is requesting approval of Majestic Moreno Valley, a mixed-use medical center campus located on the southeast corner of Nason Street and Brodiaea Avenue on approximately 18.5 acres of currently vacant land. The proposed project requires approval of a General Plan Amendment, Change of Zone, Master Plot Plan, two Plot Plans, two Conditional Use Permits, a Parcel Map and a Phasing Plan. The Master Plot Plan establishes the layout for the multi-building project

comprised of five buildings. There will be two separate medical office buildings, one building that accommodates two assisted living facilities, and one large L-shaped building that accommodates two skilled nursing facilities and one assisted living facility. The Master Plot Plan also shows all associated parking, drive aisles and courtyard areas.

PROJECT DESCRIPTION

The proposed project includes multiple entitlement applications that will enable the development of a five building mixed-use medical center campus on the presently vacant project site of approximately18.5 acre. The entitlement applications include a General Plan Amendment to change the land use designation of the project site from Residential 2 (R2) to Residential Office (R/O), and a Change of Zone request to change the zoning designation of the project site from Residential Agricultural 2 (RA2) to Office (O) and to add a Medical Use Overlay to the property. The Master Plot Plan application establishes the layout for the entire proposed campus comprised of two medical office buildings, and three other separate buildings that will house the three assisted living facilities, two skilled nursing facilities (365 beds), and courtyards. All associated parking areas and new access drives to the site are shown on the Master Plot Plan. Given the proximity of the project site to adjacent residential zoning (which is within 300'), the proposed Assisted Living and Skilled Nursing land uses require approval of separate Conditional Use Permits to operate at this location. Finally, an application for Parcel Map 36227 has been submitted to subdivide the project site into seven parcels.

The project will be developed with the proposed higher intensity Medical Office buildings, which will accommodate a variety of uses (e.g. medical offices, wellness center and urgent care), along the westerly Nason Street frontage. The lower intensity land uses (i.e. assisted living and skilled nursing facilities) will be located further into the site's eastern portions. The central portion of the site will accommodate the majority of the parking. Vehicular access and pedestrian accommodations will provide connectivity throughout.

Multiple courtyards, gardens and pedestrian walkways interconnect the project and are proposed to feature a drought tolerant landscape design. Bike racks are included throughout the project to accommodate and encourage use of alternative transportation.

Project

PEN16-0048 General Plan Amendment and PEN16-0049 Change of Zone

The project site is comprised of two existing vacant lots with two distinct Assessor's Parcel Numbers (486-290-036 & 486-280-037). The project area totals approximately 18.5 acres. The project area is currently designated Residential 2(R2) on the General Plan Land Use map, and is designated Residential Agricultural 2 (RA2) on the City Zoning Atlas.

Properties to the north of the project area have a General Plan land use designation and zoning designation of Residential 3 (R3), to the northeast both designations are Residential 5 (R5). The adjacent properties to the south and east have General Plan land use designations of Residential 2 and Zoning designations of RA2. Properties to the west have a General Plan designation of Commercial, and to the northwest Residential Office (RO). The property to the northwest has a Zoning designation of Office Commercial (OC). Property to the immediate west has a Zoning designation of Community Commercial. All properties to the west, northwest and southwest are designated with a Medical Use Overlay.

Both a General Plan Amendment and a Change of Zone are required for the type of project proposed, as the intended land uses are not permitted or conditionally permitted within large lot residential districts. The requested General Plan Amendment would result in a land use designation change from R2 to R/O and the Zoning designation would be changed from RA2 to Office (O) with a Medical Use Overlay, which all collectively would allow the proposed medical use project.

Staff has determined that the proposed change does reduce potential for larger lot single-family housing type in the City by approximately 36 residences, assuming the property were to be built out to the full current maximum residential density of two dwelling units per acre. The reduction of potential residential units is somewhat offset with the introduction of potential for assisted living and skilled nursing facilities because these types of facilities do offer a type of housing option that can benefit some segments of the population (e.g. seniors) within the City with alternate service oriented neighborhood scale living accommodations. In addition to maintaining some degree of residential service, the proposed land use changes also are consistent with City goals to increase economic development activity, job creation, and continued quality urban development.

Master Plot Plan

The proposed Master Plot Plan establishes the layout for the entire proposed campus comprised of two medical office buildings, located along the Nason Street frontage providing the main entry into the campus. The assisted living components and skilled nursing facilities have been included on the east portion of the site with access from Nason Street and Brodiaea Avenue. The south side of Brodiaea Avenue will be improved including sidewalk and landscaping.

The project has been designed in consideration of existing residential development and land uses to the east and south of the site by providing landscaped setback areas and an emergency only drive aisle along the east and southeast property lines. A decorative block wall will be required along the east and south property lines.

The overall project provides a pleasing landscaped entrance designed with drought tolerant plants, synthetic turf, decorative paved entrances, walking paths and trellises for access to all buildings and parking areas. Pervious paving is installed to assist with water quality while providing a decorative design to the parking lot.

Plot Plans (Medical Office Buildings 1 and 2)

Buildings 1 and 2 are two story buildings with approximately 53,000 square feet each. These two buildings will be located on the west portion of the site adjacent to the Nason Street frontage. The buildings are proposed with a modern design with circular and linear features, stucco wall and blue tinted glazed windows. The buildings are placed as bookends on each side of the main entrance to the complex. A decorative driveway leads to the rear parking and the Skilled Nursing and Assisted Living facilities.

Medical office building 1 will include medical office spaces with a cross bridge on the second floor connecting the two sides overlooking a courtyard in the middle of the first floor.

Medical office building 2 will be designed as a “Wellness” office building to include an indoor exercise pool and an urgent care facility.

PEN16-0056-0057 Conditional Use Permits (Skilled Nursing and Assisted Living, Buildings 3, 4 and 5)

Buildings 3, 4 and 5 are located on the eastern portion of the site with access from Nason Street and Brodiaea Avenue. The three buildings are designed with classical architecture with simple column details, large windows and gable roofs. Colors and materials will be compatible and consistent with the medical offices buildings while providing a residential appearance for the assisted living component. Building 5 will be designed and constructed in three sections.

Building 3, 4 and a portion of Building 5 (5c) are designed to accommodate assisted living with adjoining courtyards for residents. Buildings 3 and 4 are single story with a combined square footage of 34,600 accommodating approximately 57 beds. Building 5c is a two story 57,200 square foot building and will accommodate approximately 150 beds.

Building 5a and 5b is designed for skilled nursing facilities. Building 5a provides 29,314 square foot on the north wing and 5b provides 31,486 square foot on the south wing. Both facilities will include enclosed courtyard areas for the occupants.

Proposed Project Phasing (Three (3) phases)

The project will be developed in the following three phases per the proposed phasing plan.

Phase 1 would consist of three residential assisted living facilities located within buildings 3, 4 and 5C and all off-site improvements. On-site improvements will include the decorative paved entrance with the parking and trellis features in the center of the project, parking along the north east and street landscaping.

Phase 2 includes medical buildings 1 and 2 and the remaining internal parking lot.

Phase 3 would consist of building 5A and 5B with the connection to the 5C building.

Site

The existing site is approximately 18.5 acres (two parcels) of vacant land located on the southeast corner of Nason Street and Brodiaea Avenue. Brodiaea Avenue along the northern segment of the project site will be improved with this project.

Surrounding Area

The site is surrounded by vacant land, residential uses, and medical related uses on the west side of Nason Street. The property to the north is vacant, undeveloped land. The property to the south includes both vacant land and single family residential homes, with existing single family homes to the east. The property to the west includes the Riverside County Regional Medical Center, assisted living uses, medical facilities and a child care center.

The project is within the Nason Corridor Plan, a guiding vision document for transforming the area into a walkable, livable center for Moreno Valley with a range of jobs, housing and connected neighborhoods. This project is located in the overlap of Subarea 2 and Subarea 3. Subarea 2 provides for a traditional town center at Nason Street and Alessandro Boulevard intended to provide for community amenities, commercial uses and a transition of residential uses to the east and west. Subarea 3 provides for a health district to develop upon the existing medical uses in the area, providing a range of health care jobs and future supportive retail and dining amenities with a mixture of housing opportunities.

Access/Parking

The project will be accessed from Nason Street and Brodiaea Avenue with parking designed in the center of the site and adjacent to the buildings. Pervious pavement has been incorporated into the site design to assist in water quality for the site. Each use was separately parked and meets or exceeds the required parking. The site has 650 parking spaces with 595 required. All parking areas have been designed to meet or exceed the City's Municipal Code requirements.

ENVIRONMENTAL

The Initial Study completed for the project determined that the proposed project would have the potential for a significant effect on the environment in the areas of Air Quality, Biological, Cultural, Noise, Transportation and Tribal Resources, however, with the proposed project design, conditions of approval and the inclusion of twenty mitigation measures to be implemented with a Mitigation Monitoring and Reporting program, there will not be a significant effect on the environment and a Mitigated Negative Declaration (MND) will be prepared.

Tribal Consultation under AB52 and SB18 was completed. Mitigation Measures have been incorporated based on input from the tribes.

The public review period for the Mitigated Negative Declaration was November 12, 2017 through December 12, 2017.

NOTIFICATION

Public notices for the public hearing were sent to all property owners of record within 300 feet of the project on January 11th. The public hearing notice was also posted on the project site on January 12th and published in the local newspaper on January 14th. All noticing has been performed consistent with the City Municipal Code.

REVIEW AGENCY COMMENTS

Staff received the following responses to the Project Review Staff Committee transmittal; which was sent to all potentially affected reviewing agencies.

Agency	Response Date	Comments
Eastern Municipal Water District	October 21, 2016	Project submittal to EMWD required.
Riverside County Flood Control	October 25, 2016	Moreno Area Drainage fees apply.

STAFF RECOMMENDATION

Staff recommends the Planning Commission **APPROVE** the following Resolution Nos. 2018-01 2018-02, 2018-03, 2018-04, 2018-05 and 2018-06 and thereby recommend that the Moreno Valley City Council:

Resolution: 2018-01

1 **CERTIFY** the Mitigated Negative Declaration prepared for the Majestic Moreno Valley project, inclusive of all related applications, on file with the Community Development Department, incorporated herein by this reference, which Mitigated Negative Declaration has been completed in compliance with the California Environmental Quality Act, and the information and findings contained in the Mitigated Negative Declaration, attached hereto as Exhibit A, reflects the City's independent judgment and analysis; and

2. **ADOPT** the Mitigation Monitoring and Reporting Program prepared for the proposed Majestic Moreno Valley project, attached hereto as Exhibit B; and

Resolution: 2018-02

3. **APPROVE** PEN16-0048, General Plan Amendment as shown on the attachment included as Exhibit A; and

Resolution: 2018-03

4. **APPROVE** PEN16-0049 Change of Zone as shown on the attachment included as Exhibit A; and

Resolution: 2018-04

5. **APPROVE** Tentative Parcel Map 36227, PEN16-0052, subject to the attached conditions of approval attached as Exhibit A.

Resolution: 2018-05

6. **APPROVE** PEN16-0053, Master Plot Plan, PEN16-0054 – PEN16-0055 Plot Plans and PEN17-0013, Phasing Plan subject to the attached Conditions of Approval attached as Exhibits A, B, C and D; and

Resolution: 2018-06

7. **APPROVE** PEN16-0056 – PEN16-0057 Conditional Use Permits, subject to the attached conditions of approval attached as Exhibits A and B.

Prepared by:
Julia Descoteaux
Associate Planner

Approved by:
Allen Brock
Assistant City Manager

ATTACHMENTS

1. 2018-01 Reso MND
2. Exhibit A to 2018-01_MND
3. Exhibit B to 2018-01_MMRP
4. 2018-02 Reso GP
5. Exhibit A to 2018-02 GPA Map
6. 2018-03 Reso ZC
7. Exhibit A to 2018-03_Proposed Change
8. Exhibit B to 2018-03_Current-Proposed
9. Exhibit C to 2018-03_Medical Overlay
10. 2018-04 Reso Map
11. Exhibit A tp 2018-04_TPM

12. 2018-05 Reso PPs
13. Exhibit A to 2018-05_MPP
14. Exhibit B to 2018-05_PP1
15. Exhibit C to 2018-05_PP2
16. Exhibit D to 2018-05_Phase Plan
17. 2018-06 Reso CUPs
18. Exhibit A to 2018-06_CUP1
19. Exhibit B to 2018-06_CUP2
20. Phasing Plan
21. Site Plan
22. Preliminary Grading Plan
23. Landscape Plan
24. Architecture
25. Wall Exhibit
26. Tech Study BRA and MSHCP Consistency Analysis
27. Tech Study Noise Study
28. Tech Study Prelim Hydro Report
29. Tech Study_AQ GHG Assessment
30. Tech Study Traffic Report
31. TPM 36227

PLANNING COMMISSION RESOLUTION NO. 2018-01

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF MORENO VALLEY, CALIFORNIA, CERTIFYING THE MITIGATED NEGATIVE DECLARATION AND APPROVING THE MITIGATION MONITORING AND REPORTING PROGRAM FOR MAJESTIC MORENO VALLEY, A MEDICAL PLAZA COMPLEX (PEN16-0051)

WHEREAS, the applicant, Galaxy Management Inc., filed applications for the Majestic Moreno Valley Project ("Project"), which include an Expanded Environmental Review Mitigated Negative Declaration (PEN16-0051), General Plan Amendment (PEN16-0048), Change of Zone (PEN16-0049), three Plot Plans (PEN16-0053-PEN16-0055) two Conditional Use Permits (PEN16-0056-PEN16-0057), a Phasing Plan (PEN17-0013) and Tentative Parcel Map (PEN16-0052). The entitlements shall not be approved unless the Final Mitigated Negative Declaration (PEN16-0051) is certified and approved; and

WHEREAS, the applications for the Project have been evaluated in accordance with established City of Moreno Valley (City) procedures, and with consideration of the General Plan and other applicable regulations; and

WHEREAS, an Initial Study, supporting technical studies, and Mitigated Negative Declaration for the Project were prepared, consistent with the California Environmental Quality Act (CEQA); and

WHEREAS, a 30-day public review period of the Initial Study and Mitigated Negative Declaration commenced on November 12, 2017 and concluded on December 12, 2017. The public notice for the Mitigated Negative Declaration was mailed to interested parties, public agencies as well as published in the local newspaper on November 11, 2017; and

WHEREAS, the City, in conducting its own independent analysis of the Final Mitigated Negative Declaration, determined that a Mitigated Negative Declaration is an appropriate environmental determination for the Project as there is substantial evidence that demonstrates the Project with mitigation would not result in any significant environmental impacts; and

WHEREAS, a Mitigation Monitoring and Reporting Program (MMRP) has been prepared in accordance with CEQA Guidelines, and is designed to ensure compliance with the identified mitigation measures outlined in the Final Mitigated Negative Declaration through project implementation; and

WHEREAS, the City of Moreno Valley, Community Development Department, located at 14177 Frederick Street, Moreno Valley, California 92552 is the custodian of documents and other materials that constitute the record of proceedings upon which the decision to adopt the Mitigated Negative Declaration is based; and

Attachment: 2018-01 Reso MND [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

WHEREAS, the Planning Commission of the City of Moreno Valley considered the Project, including all environmental documentation, at a public hearing held on January 25, 2018; and

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred; and

WHEREAS, the Planning Commission considered the Initial Study prepared for the Project for the purpose of compliance with the California Environmental Quality Act (CEQA), and based on the Initial Study including all supporting technical evidence, it was determined that the project impacts are expected to be less than significant with mitigation, and approval of a Mitigated Negative Declaration is an appropriate environmental determination for the Project.

NOW, THEREFORE, THE PLANNING COMMISSION OF THE CITY OF MORENO VALLEY, CALIFORNIA, DOES HEREBY RESOLVE AS FOLLOWS:

A. This Planning Commission specifically finds that all of the facts set forth above in this Resolution are true and correct.

B. Based upon substantial evidence presented to this Planning Commission during the above-referenced meeting on January 25, 2018; and, including written and oral staff reports, and the record from the public hearing, this Planning Commission finds as follows:

1. Independent Judgment and Analysis –MSA Consulting, Inc. prepared the Mitigated Negative Declaration/Initial Study and coordinated the related technical studies prepared for the Majestic Moreno Valley project. The documents were properly circulated for public review in accordance with the California Environmental Quality Act Guideline. The Mitigated Negative Declaration/Initial Study has been completed along with the Mitigation Monitoring and Reporting Program (MMRP) to ensure compliance with all mitigation through project implementation. All environmental documents that comprise the Mitigated Negative Declaration, including all technical studies were independently reviewed by the City. On the basis of the whole record, there is no substantial evidence that the Project as designed, conditioned, and mitigated, will have a significant effect on the environment. The Mitigated Negative Declaration prepared and completed, in accordance with the CEQA Guidelines, reflects the independent judgment and analysis of the City.

Attachment: 2018-01 Reso MND [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

BE IT FURTHER RESOLVED that the Planning Commission **HEREBY APPROVES** Resolution No. 2018-01, and hereby recommends that the City Council:

1. **CERTIFY** the Mitigated Negative Declaration prepared for the Majestic Moreno Valley project, inclusive of all related applications, on file with the Community Development Department, incorporated herein by this reference, which Mitigated Negative Declaration has been completed in compliance with the California Environmental Quality Act, and the information and findings contained in the Mitigated Negative Declaration, attached hereto as Exhibit A, reflects the City's independent judgment and analysis; and

2. **ADOPT** the Mitigation Monitoring and Reporting Program prepared for Majestic Moreno Valley, attached hereto as Exhibit B.

APPROVED AND ADOPTED this 25th day of January, 2018.

AYES:
NOES:
ABSTAIN:

_____
Jeffrey Barnes
Chair, Planning Commission

ATTEST:

_____
Richard J. Sandzimier, Planning Official

APPROVED AS TO FORM:

_____
City Attorney

Exhibit A and Exhibit B

Attachment: 2018-01 Reso MND [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

CITY OF MORENO VALLEY

14177 Frederick Street
Moreno Valley, California 92553
Phone: (951) 413-3000

ENVIRONMENTAL INITIAL STUDY

1. Project Title: Majestic Moreno Valley Medical Center (PEN16-0047 through PEN16-0057, and PEN17-0013)

2. Lead Agency Name and Address: City of Moreno Valley, 14177 Fredrick Street, Moreno Valley, CA 92552

3. Contact Person and Phone Number: Sergio Gutierrez, Assistant Planner, or Chris Ormsby, Senior Planner, (951) 413-3206

4. Project Location: Southeast Corner of Brodiaea Ave and Nason Street

5. Project Sponsor's Name and Address: Galaxy Management Inc. c/o Charles Yu, 5067 Walnut Grove Ave, San Gabriel, CA 91776

6. General Plan Designation: Residential 2 (maximum 2 du/ac)

7. Zoning: RA2 (Residential, Agriculture -2 units per acre)

8. Description of the Project: Provided on pages 3 & 4 of this Initial Study.

9. Surrounding Land Uses and Setting: The property to the north is vacant undeveloped land. The property to the south is vacant agriculture land and single-family residential development. The property to the east is improved single family residences. The property to the west includes assisted living uses, medical facilities, office, child care center, and further to the west is the Riverside County Regional Medical Center.

10. Other public agencies whose approval is required (e.g. permits, financing approval, or participation agreement). None

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation

Attachment: Exhibit A to 2018-01_MND (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

begun? The City of Moreno Valley initiated Tribal Consultation from December 2016-Septempber 2017

NOTE: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21083.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3 (c) contains provisions specific to confidentiality.

Attachment: Exhibit A to 2018-01_MND (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

PROJECT DESCRIPTION

The property site is approximately 18.38 acres of undeveloped vacant land in the City of Moreno Valley. It is comprised of seven parcels that form a rectangular shaped property on the south east corner of Brodiaea Ave and Nason Street. The project proposes a medical plaza consisting of two medical office buildings, three assisted living facilities and two skilled nursing facilities.

The medical complex would be accommodated in five buildings (1 through 5C) within a unified site plan. The proposed development includes frontage street improvements with two proposed access points (driveways) along Nason Street to the west and three along Brodiaea Avenue to the north. Each proposed driveway would be enhanced with decorative pavers and landscaping. A gated entry for emergency access only is planned on Windmill Lane.

The medical office buildings are intended to be simple in design and form with linear elements and reminiscent of modern architecture. The assisted living and skilled nursing facilities are a nod to classical architecture with simple column details with large windows and gable roofs.

The proposed project includes landscaped open space in the form of courtyards, gardens and pedestrian walkways. The interior of all buildings, parking facilities, and walkways in addition to the exterior perimeter of the project site will be landscaped with California native drought tolerant plants such as willow acacia, Palo Verde, date palms, shrubs, and groundcover.

Project entitlements include a Tentative Parcel Map to subdivide the property into 7-parcels, a General Plan Amendment from Residential 2 (max 2 du/ac) to R/O Residential/Office and Change of Zone from Residential/Agriculture-2 (2-units per acre) to Office (O) with a Medical Use Overlay (MUO). Additional entitlements included are a Phasing Plan, Plot Plan and Conditional Use Permits.

The project proposes to develop the medical complex in three Phases with build-out of the first phase to be completed and open in year 2020. Buildout of Phase 2 is proposed in 2021 with Phase 3 to follow in 2022. The site design places facilities with a relatively higher intensity of use (medical office, wellness center, urgent care) along the Nason Street frontage, while proposed facilities requiring less intense operations (assisted living and skilled nursing) are situated with a greater separation from the primary frontage. The central portion of the medical plaza will primarily serve as a parking lot with accommodations for pedestrian and vehicular circulation.

Proposed Phase 1

Development of Phase 1 would consist of three residential Assisted Living facilities located within Buildings 3, 4 and 5C. Building 3 and 4 are proposed single-story structure with a height of 18.5 feet. Building 3 is approximately16,200 sf and Building 4 is 18,400 sf, together they provide a combined total of 57 beds. Building 5C is a proposed two-story structure with a height of 34 feet and 57,200 square feet of building area and will hold up to 150 beds. Phase 1 will also include the construction of on-site and off-site improvements in the form of adjacent road improvements, pedestrian connection, curb and gutter, detention basins, and utility connections.

Attachment: Exhibit A to 2018-01_MND (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

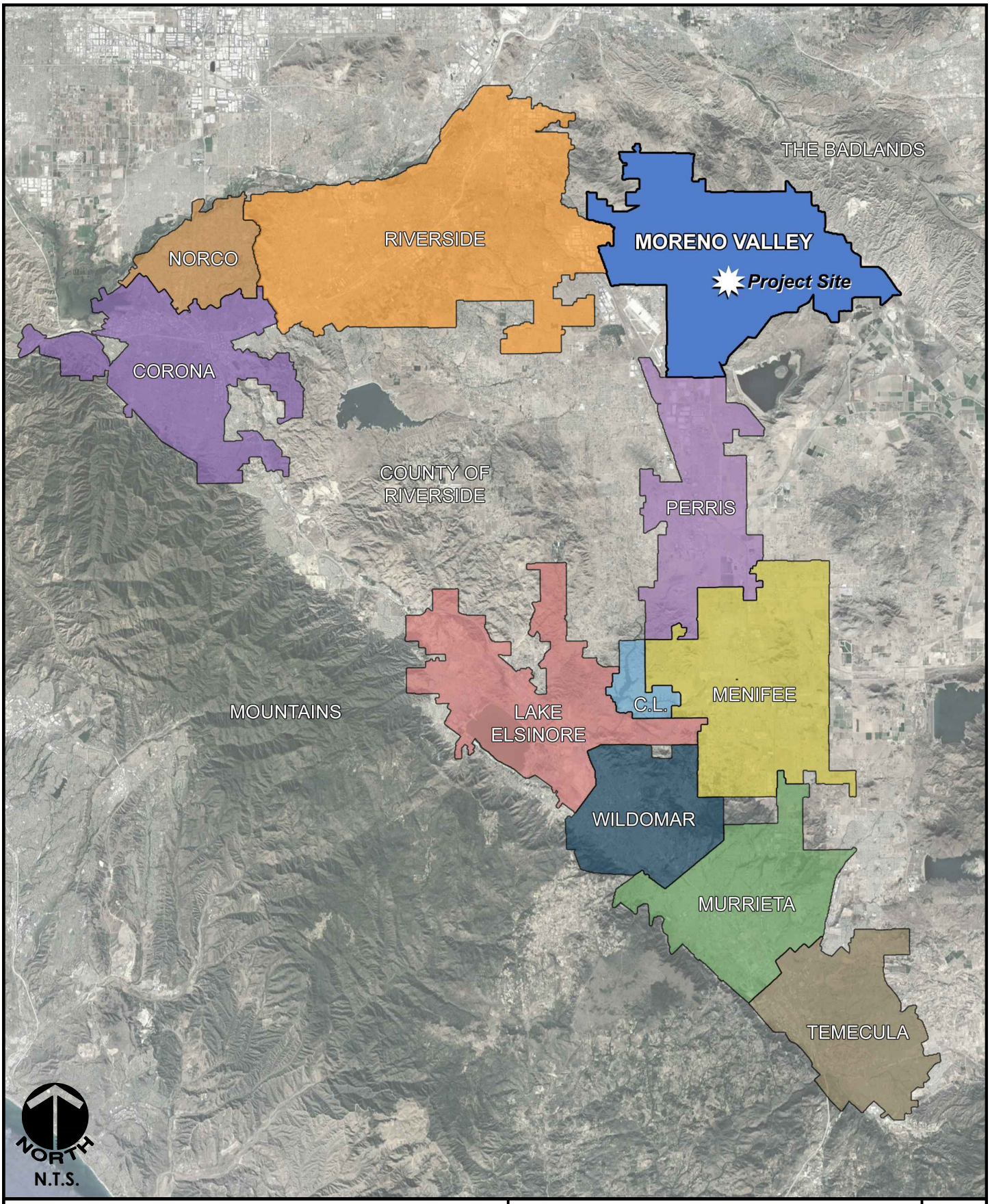
Proposed Phase 2

Development of Phase 2 would consist of the two medical buildings located in buildings 1 and 2, and the parking lot. Medical building 1 is a proposed two-story medical office structure with a height of 32 feet and a building area of 53,000 square feet, occupying the southwest corner of the plaza. Medical building 2 is a proposed two-story wellness center of 53,000 square feet with an attached one-story urgent care facility of 3,000 square feet, occupying the northwest corner of the plaza. The two-story wellness center has a height of 32 feet, while the single-story urgent care component has a height of 16 feet.

Proposed Phase 3

Implementation of Phase 3 would encompass Building 5A and 5B which is a connected structure that also connects to Building 5C that is part of the assisted living component. Buildings 5A and 5B are designated for skilled nursing services. The north and south wing of this single-story structure has a height of 21 feet and an overall building area of 60,800 square feet and approximately 158 beds.

Attachment: Exhibit A to 2018-01_MND (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)



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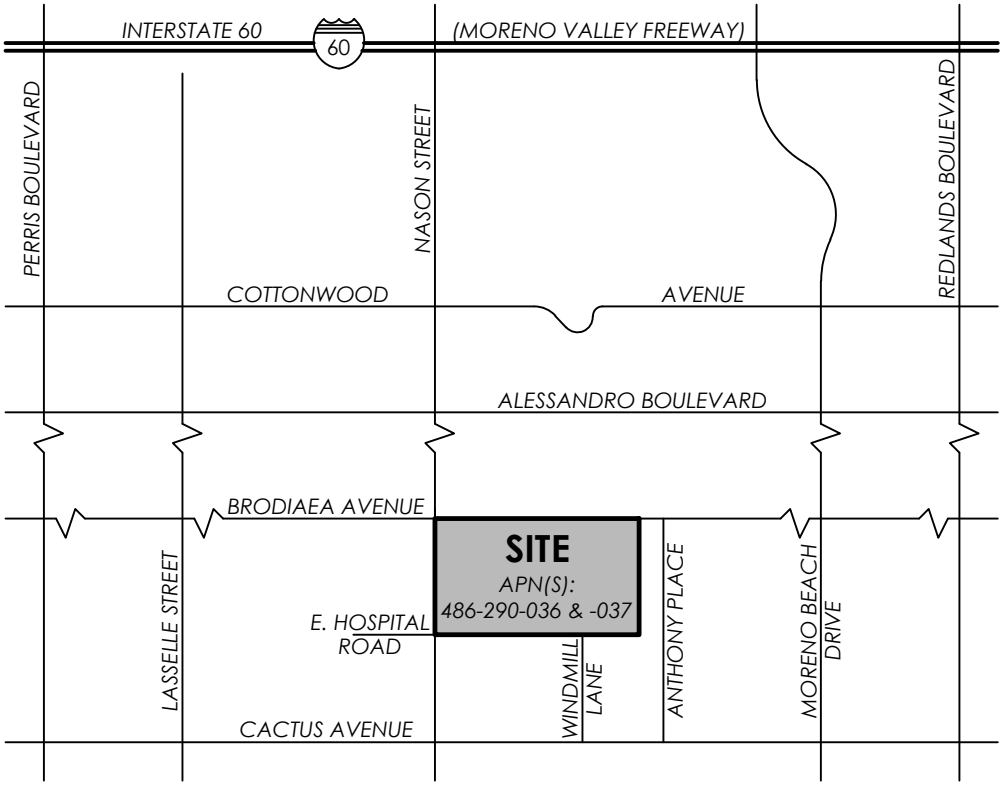
TELEPHONE (760) 320-9811 ■ FAX (760) 323-7893

Regional Location Map

GALAXY MANAGEMENT INC.
Initial Study

1

Attachment: Exhibit A to 2018-01_MND (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)



NORTH
N.T.S.

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Vicinity Map

GALAXY MANAGEMENT INC.

Initial Study

2

Attachment: Exhibit A to 2018-01_MND (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

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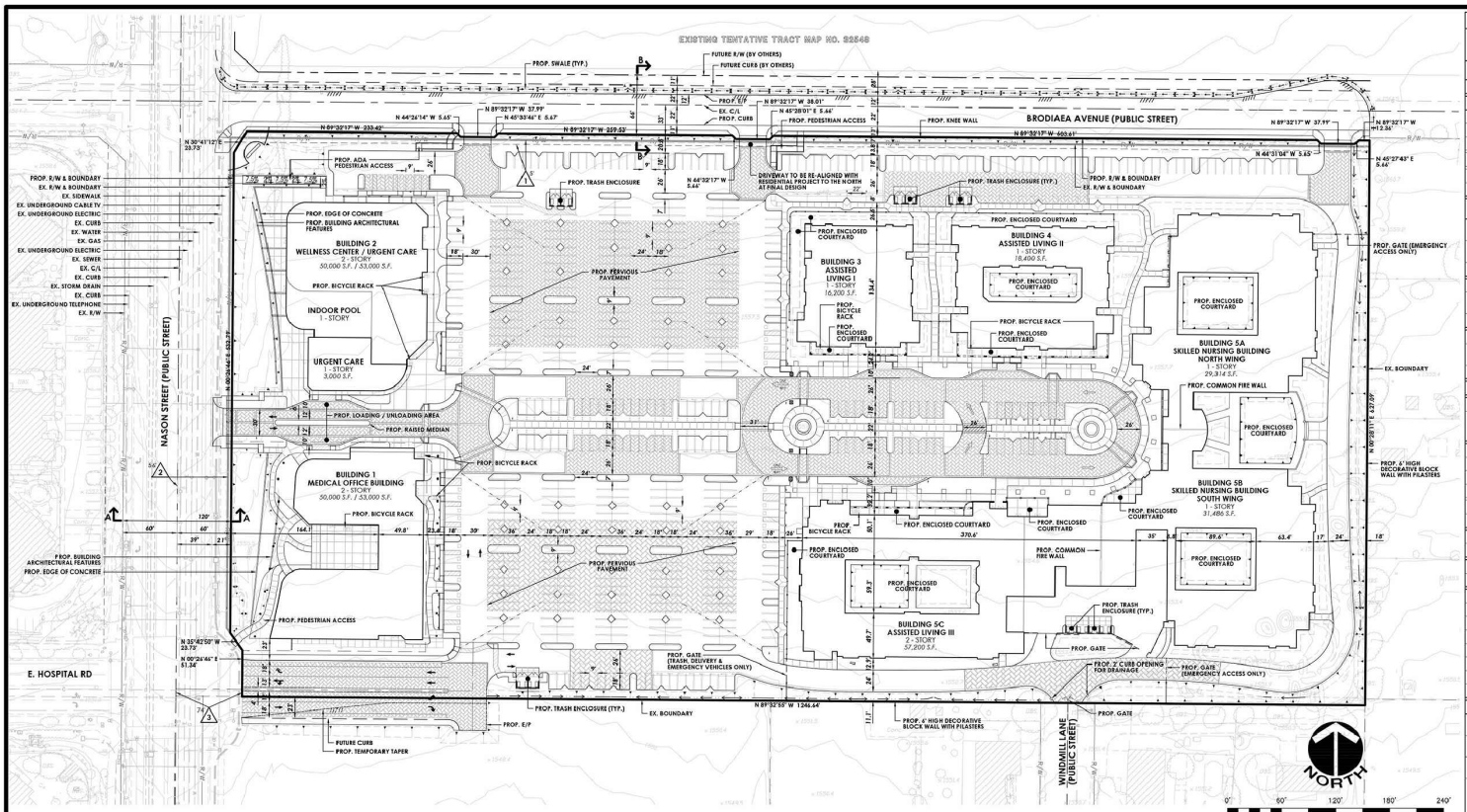
Aerial Photograph

GALAXY MANAGEMENT INC.

Initial Study

3

Attachment: Exhibit A to 2018-01_MND (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic



IN THE CITY OF MORENO VALLEY, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

TECHNICAL SITE PLAN

FOR TENTATIVE PARCEL MAP NO. 36227

EXHIBIT DATE: SEPTEMBER 30, 2016

REVISIONS

NO.	DATE	DESCRIPTION
1	12/6/2016	REVISIONS (DIMENSIONS & LABELING) PER CITY OF MORENO VALLEY PROJECT REVIEW STAFF MEETING NOVEMBER 16, 2016 CONDITIONS OF APPROVAL
2	03/30/17	ADDED A BLANKET EASEMENT NOTE TO THE DATA TABLE PER CITY COMMENTS
3	05/18/17	REVISIONS (LABELING) PER CITY OF MORENO VALLEY PROJECT REVIEW STAFF MEETING FEBRUARY 28, 2017 PRSC MEETING

DATA TABLE

APPLICANT / LAND OWNER:	GALAXY MANAGEMENT INC.		
ADDRESS:	5067 WALNUT GROVE AVENUE SAN GABRIEL, CALIFORNIA 91776		
CONTACT:	RICHARD TORNG	TELEPHONE:	(626) 818-4858
EXHIBIT PREPARER:	MSA CONSULTING, INC.		
ADDRESS:	34200 BOB HOPE DRIVE RANCHO MIRAGE, CALIFORNIA 92270		
CONTACT:	PAUL DEPALATIS, AICP	TELEPHONE:	(760) 320-9811
SOURCE OF TOPOGRAPHY:	INLAND AERIAL SURVEYS, INC.		
ADDRESS:	7117 ARLINGTON AVENUE, SUITE "A" RIVERSIDE, CALIFORNIA 92503		
DATE OF TOPOGRAPHY:	MAY 18, 2016	TELEPHONE:	(951) 687-4252
ASSESSOR'S PARCEL NUMBER:	486-290-036 & -037		

LEGAL DESCRIPTION:

LOT 3 AND A PORTION OF LOT 4 OF BLOCK 131 MAP NO. 1 BEAR VALLEY AND ALESSANDRO DEVELOPMENT CO. PER M.B. 11/10, SECTION 15 TOWNSHIP 3 SOUTH RANGE 3 WEST, SAN BERNARDINO BASE AND MERIDIAN.

LAND USE DESCRIPTION:	ACREAGE
EXISTING GROSS ACREAGE:	17.98 AC.
PUBLIC STREET DEDICATION (NASON STREET):	0.05 AC.
PUBLIC STREET DEDICATION SUB-TOTAL:	17.93 AC.
PUBLIC STREET VACATION (BRODIAEA AVENUE):	0.19 AC.
PROPOSED NET ACREAGE:	18.12 AC.

EXISTING ZONING:	RESIDENTIAL AGRICULTURE - 2 UNITS PER ACRE (RA2)
PROPOSED ZONING:	OFFICE (O) WITH MEDICAL USE OVERLAY (MUO)
EXISTING GENERAL PLAN LAND USE:	RESIDENTIAL AGRICULTURE: MAX. 2 DU/AC (RA2)
PROPOSED GENERAL PLAN LAND USE:	RESIDENTIAL/OFFICE (R/O)

PUBLIC UTILITY PURVEYORS:

ELECTRIC:	MORENO VALLEY ELECTRIC UTILITY	(877) 811-8700
GAS:	THE GAS COMPANY	(800) 427-2200
TELEPHONE:	VERIZON COMPANY	(800) 483-5000
WATER:	EASTERN MUNICIPAL WATER DISTRICT	(951) 928-6146
CABLE:	TIME WARNER CABLE	(866) 489-2249
SEWER:	EASTERN MUNICIPAL WATER DISTRICT	(951) 928-6146
USA:	UNDERGROUND SERVICE ALERT	(800) 227-2600

EXISTING EASEMENT NOTES:

1. 5' EASEMENT FOR WATER LINES PER BOOK 2164, PAGE 73, RECORDED OCTOBER 16, 1957, OF OFFICIAL RECORDS.
2. 56' RIGHT OF WAY PER DOCUMENT 2013-0407043 RECORDED AUGUST 20, 2013, OF OFFICIAL RECORDS.
3. 74' RIGHT OF WAY PER DOCUMENT 2013-0407043 RECORDED AUGUST 20, 2013, OF OFFICIAL RECORDS.

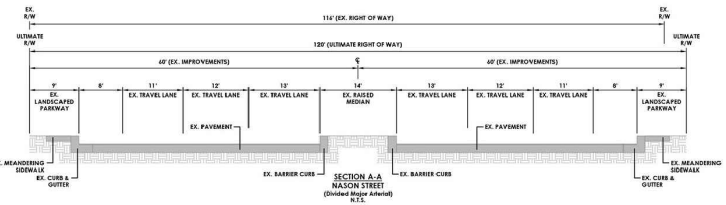
* WE HEREBY DEDICATE TO THE CITY OF MORENO VALLEY A PERPETUAL NON-EXCLUSIVE BLANKET EASEMENT OVER PARCEL 1 AND 2 OF LLA NO. 1002 FOR THE ELECTRICAL UTILITY PURPOSES. THE EASEMENT WILL INCLUDE RIGHTS OF INGRESS-EGREE FOR THE PURPOSE OF CONSTRUCTION, OPERATION, MAINTENANCE, FACILITY REPAIR AND METER READING.

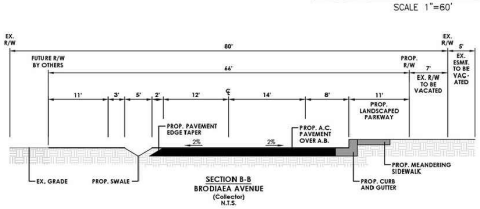
FEMA FLOOD ZONE DESIGNATION:

ZONE X - AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

AS SHOWN ON RIVERSIDE COUNTY, CALIFORNIA, FLOOD INSURANCE RATE MAPS, COMMUNITY PANEL MAP NUMBERS 06065C-0765G & 06065C-0770G EFFECTIVE DATE: AUGUST 28, 2008.

LIQUEFACTION: LOW MODERATE & MODERATE LIQUEFACTION ZONE





ABBREVIATIONS

(E)	EAST	N.T.S.	NOT TO SCALE
(N)	NORTH	O/H	OVERHEAD
(S)	SOUTH	OS/PP	OPEN SPACE / PARKS
(W)	WEST	PG.	PAGE
A.C.	ASPHALT CONCRETE	P/L	PROPERTY LINE
AC	ACREAGE	PROP.	PROPOSED
APN	ASSESSORS PARCEL NUMBER	P.U.E.	PUBLIC UTILITY EASEMENT
BNDRY	BOUNDARY	R	RADIUS
C/L	CENTERLINE	R-L	LOW DENSITY (RESIDENTIAL)
C&G	CURB AND GUTTER	R/W	RIGHT OF WAY
E/P	EDGE OF PAVEMENT	SF	SQUARE FEET
ESMT.	EASEMENT	STD.	STANDARD
EX.	EXISTING	TYP.	TYPICAL
MAX.	MAXIMUM	UG	UNDERGROUND
M.B.	MAP BOOK		
MIN.	MINIMUM		
NO.	NUMBER		

LEGEND

876.2	EXISTING SPOT ELEVATIONS
	EXISTING CONTOURS
3	EXISTING EASEMENT DELTA
C	EXISTING CABLE
DRN	EXISTING IRRIGATION DRAIN LINE
	EXISTING EASEMENT
	EXISTING ELECTRIC
G	EXISTING GAS
IRR	EXISTING IRRIGATION
	EXISTING LOT LINE
	EXISTING EDGE OF PAVEMENT
T	EXISTING TELEPHONE
O/H T	EXISTING OVERHEAD TELEPHONE
R/W	EXISTING RIGHT OF WAY
S	EXISTING SEWER
FM	EXISTING SEWER FORCE MAIN
W	EXISTING WATER
	PROPOSED BOUNDARY
	PROPOSED AND EXISTING CENTER LINE
	PROPOSED CURB
	PROPOSED EASEMENT
	PROPOSED LOT LINE
	PROPOSED RIGHT OF WAY

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Site Plan

GALAXY MANAGEMENT INC.

Initial Study

4

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below(■) would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

	Aesthetics		Greenhouse Gas Emissions		Population/Housing
	Agricultural Resources		Hazards & Hazardous Materials		Public Services
X	Air Quality		Hydrology/Water Quality		Recreation
X	Biological Resources		Land Use/Planning	X	Transportation/Traffic
X	Cultural Resources		Mineral Resources		Utilities/Service Systems
	Geology/Soils	X	Noise		Mandatory Findings of Significance
X	Tribal Cultural Resources				

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.	
I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.	X
I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.	
I find that the proposed project MAY have a "potential significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.	
I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.	

Signature 11/7/17 Date

Julia Descoteaux

Printed Name For

Attachment: Exhibit A to 2018-01_MND (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

EVALUATION OF ENVIRONMENTAL IMPACTS

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g. the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g. the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Potentially Significant Unless Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analysis," as described in (5) below, may be cross-referenced).

5) Earlier analysis may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063 (c) (3) (d). In this case, a brief discussion should identify the following:

   (a) Earlier Analysis Used. Identify and state where they are available for review.

   (b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   (c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

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6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g. general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

The analysis of each issue should identify: (a) the significance criteria or threshold used to evaluate each question; and (b) the mitigation measure identified, if any, to reduce the impact to less than significance.

Attachment: Exhibit A to 2018-01_MND (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
I. **AESTHETICS.** Would the project:				
a) Have a substantial adverse effect on a scenic vista?			X	

The City of Moreno Valley has varying distinguished views of surrounding topographic features and mountain ranges. The perception and uniqueness of scenic vistas and visual character can vary according to location and composition of the surrounding context. The subjective value of views is generally affected by the presence and intensity of neighboring man–made improvements, such as structures, overhead utilities, and landscape, often in relation to the aesthetic quality offered by a natural background, such as open space, mountain ranges, or a natural landmark feature. The proximity and massing of structures, vegetation and other visual barriers interacts with the visibility of surrounding environments to restrict or enhance local characteristic views. The assessment of scenic value also considers the compatibility of proposed projects in relation to areas, land uses or vantage points where the enjoyment of scenic vistas may exist, such as scenic roads or residential areas.

The Project property consists of undeveloped and generally flat land located east of Nason Street and south of the unimproved alignment of Brodiaea Avenue. The vacant site condition historically formed part of a larger agricultural setting that is no longer active on-site or in the general surroundings. Presently, a mixture of grasses covers a majority of the ground surface. The site exhibits signs of former plowing or disking, which appears to be the result of fire hazard abatement (weed abatement) activities. A cleared dirt road is present along the westerly and easterly boundaries, presumably to serve as a fire break in accordance with the City of Moreno Valley's fire hazard abatement standards. The southeast corner of the Property, an area of approximately one acre, exhibits various dirt mounds and scattered debris. Based on the review of historic aerial photos, there are no salient topographic features or other visual landmarks on-site. The vacant condition has been representative of the property since at least 1938. Accordingly, no historic buildings or structures have been known to formerly exist or are currently present on-site, including any discernable facilities representative of the former agricultural setting.

Presently, the northerly Project boundary is not physically delineated, but can be referenced by the unimproved east-west alignment of Brodiaea Avenue. An informal dirt road roughly follows this prolongation. Adjoining land along this property limit consists of vacant fields with vegetation and conditions similar to those observed on the Project property. The easterly Project boundary is delineated by a chain-link fencing and adjoined by the rear yards of single-family residential properties. The southerly boundary is partially delineated by chain-link fencing of existing residential properties on the south. The unpaved alignment of Windmill Lane has its north terminus against this Project limit. Land on the west includes Nason Street, followed by the Integrated Care Communities complex with a child development center, assisted living/memory care, and skilled nursing facilities within fenced limits.

The City of Moreno Valley is characterized by a relatively flat valley floor surrounded by rugged hills and mountains that are known to provide scenic vistas. In this context, the undeveloped Project property has distant and partially obstructed views of Moreno Peak and the Badlands to the north and northeast. Moreno Peak is a natural landform located south of State Route 60, approximately one mile northeast of the Project. The Badlands features are located farther from the site, approximately three miles to the northeast. To the southeast and south, the site also has partially obstructed views of Mount Russell.

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Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

In this existing context, the proposed Project would utilize the entire unimproved site for the development of a mixed-use medical facility with offices, a wellness center, an urgent care center, and accommodations for assisted living and skilled nursing. These services would be housed in five buildings within a unified site plan. The proposed development includes frontage street improvements with two proposed access points (driveways) along Nason Street to the west and three along Brodiaea Avenue to the north. Each proposed driveway would be enhanced with decorative pavers and landscaping to improve their aesthetic quality.

Building 1 is a proposed two-story medical office structure with a height of 32 feet and a building area of 53,000 square feet, occupying the southwest corner of the plaza. Building 2 is a proposed two-story wellness center of 53,000 square feet with an attached one-story urgent care facility of 3,000 square feet, occupying the northwest corner of the plaza. The two-story wellness center has a height of 32 feet, while the single-story urgent care component has a height of 16 feet. Building 3 is a proposed assisted living single-story structure with a height of 18.5 feet and 16,200 square feet of space occupying a north-central portion of the site. Building 4 is a proposed assisted living single-story structure with a height of 18.5 feet and 18,400 sq. ft. located east of Building 3. Proposed buildings 5A, 5B, and 5C are connected structures with a unified mass and appearance, occupying the easternmost portion of the medical campus.

Building 5A and 5B are designated for skilled nursing services. The north and south wing of this single-story structure has a height of 21 feet and an overall building area of 60,800 square feet. Building 5C is a proposed assisted living two-story structure with a height of 34 feet and 57,200 square feet of building area. As proposed, the site design places facilities with a relatively higher intensity of use (medical office, wellness center, urgent care) along the Nason Street frontage, while proposed facilities requiring less intense operations (assisted living and skilled nursing) are situated with a greater separation from the primary frontage. The central portion of the medical plaza will primarily serve as a parking lot with accommodations for pedestrian and vehicular circulation. The features and characteristics of the proposed buildings are intended to establish an attractive architectural presence while providing a desirable scale and environment for patients. The site design adheres to the building setback requirements.

The proposed architectural characteristics of the project would incorporate two complimentary building styles to help distinguish the types of facilities, while maintaining a unified appearance. The proposed medical office building, wellness center, and urgent care center facilities situated on the west side of the Project, along the Nason Street frontage, would employ a contemporary design with coordinated stucco finishes and a unified color scheme. The storefront windows would be treated with a tint glazing to reduce glare effects. The proposed skilled nursing and assisted living facilities, situated on the east side of the Project, would employ a more classic architectural style with color coordinated stucco and cultured stone finishes. The building windows would also be treated with a tint glazing and the proposed tower elements would include classic roof tiles. Moreover, the two proposed building styles would be visually unified by the entry monument, trash enclosure, stamped concrete and stone pavers throughout the site design. For security purposes, the Project will provide varied nighttime lighting to safely illuminate the parking areas, entrances, signs, walkways and other project features in accordance with

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the City's light and glare performance standards. These standards require that all outdoor lighting associated with nonresidential uses shall be fully shielded and directed away from surrounding residential uses and such lighting shall not exceed an intensity of 0.25 foot-candles measured from within 5 feet of any property line, and shall not blink, flash, oscillate or be unusually high intensity or brightness. Furthermore, the standards require that all lighting shall be designed to project downward and shall not create glare on adjacent properties. Relative to the scenic vistas, less than significant impacts are anticipated.

b) Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?			X	

The Project property consists of undeveloped land that previously formed part of an agricultural setting. A mixture of grasses and seasonal vegetation covers a majority of the flat ground surface and the Site has previously been subject to plowing or disking activities, likely as a form of fire hazard abatement. Based on historical aerial photographs, the vacant condition has been representative of the property since at least 1938. Accordingly, no historic buildings or structures have been known to formerly exist on-site and no physical improvements, structures, natural topographic features or other visual landmarks are currently found on-site. A Phase I Cultural Resources Assessment of the Project site, performed by MIG in June of 2016, found no evidence of recorded historic resources on-site, as defined in Section 15064.5 of the CEQA Guidelines that would be adversely affected by the proposed development.

The project is not located adjacent to or near any state or county, eligible or designated scenic highway. The purpose of the State Scenic Highway Program is to preserve and protect scenic State highway corridors from change that would diminish the aesthetic value of lands adjacent to highways. State highways can be officially designated as Scenic Highways or be determined to be eligible for designation. The status of a state scenic highway changes from eligible to "officially designated" when a local jurisdiction adopts a scenic corridor protection program and the California Department of Transportation (Caltrans) approves the designation as a Scenic Highway.

The Circulation Element of the City's General Plan designates certain roadways as local scenic roads based on their scenic value and characteristics. Specifically, these include Gilman Springs Road, Moreno Beach Drive, and State Route 60. Along these scenic roadways, development is required to be visually attractive and designed to allow for scenic views of the surrounding mountains and other local resources. The proposed Project is not located adjacent to one of the City's local scenic roads. In particular, the Project is located approximately 3.85 miles southwest of Gilman Springs Road, 0.75 miles west of Moreno Beach Drive, and 1.75 miles south of State Route 60. Based on separation, the project is not expected to impact the existing visual character along these locally recognized scenic roadways. As previously discussed, Project implementation would introduce a visually attractive frontage that would complement the existing streetscape. Less than significant impacts are expected in relation to scenic highways or corridors.

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c) Substantially degrade the existing visual character or quality of the site and its surroundings?			X	

As previously discussed, the proposed site plan involves a total of five one- and two-story buildings with heights ranging from 16 to 34 feet, served by parking lot facilities and drive aisles with perimeter landscaping enhancements. The proposed architectural style employs two complementary building design styles with coordinating construction materials and tones. In doing so, the proposed development will replace the existing unimproved site with a facility and corresponding frontage complementary to its surrounding context. The Project's final site design, architecture and landscape architecture will be subject to review and approval by the City of Moreno Valley to ensure that aesthetic considerations of the community are addressed in the proposed design. Less than significant impacts are expected.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	

The Project property and the adjoining land to the north lack structural or lighting improvements and therefore do not constitute an existing source of glare or light. In the local surroundings, existing sources of nighttime lighting can be attributed to public street light standards and illuminated traffic signals associated with Nason Street to the west. Existing day and nighttime traffic activity also contributes to the ambient setting. Existing medical office facilities located on the west side of Nason Street include post- and wall-mounted light fixtures oriented downward to cover the facility interior (sidewalks, driveways, and drive aisles) during the nighttime. The adjoining residential uses to the south and east of the Property include lighting generally consisting of low-intensity, wall-mounted, downward-oriented fixtures for the respective front, side and rear yards of homes.

The proposed Project would utilize the entire vacant property for the development of a mixed-use medical facility with offices, a wellness center, an urgent care center, and accommodations for assisted living and skilled nursing. The facilities would be housed in five one and two-story buildings. The site design includes frontage street improvements with two proposed access points (driveways) along Nason Street to the west and three along Brodiaea Avenue to the north. Each proposed driveway would be enhanced with the installation of decorative pavers and landscaping to improve their aesthetic quality. The project includes nighttime lighting to safely illuminate the site entrances, signage, parking, walkways and other project features in accordance with the City's light and glare performance standards. As previously described, the standards require lighting intensity to 0.25 foot candles from within five feet of any property line. Furthermore, the City standards prohibit light sources from blinking, flashing, oscillating or being unusually high intensity or brightness.

A project-specific lighting analysis has been prepared, identifying the point-by-point lighting levels (measured in foot-candles) for the entire Project in relation to the proposed locations, intensities and types of lighting fixtures. The photometric plan identifies two primary sources of lighting: 1) pole-mounted fixtures for the interior parking areas and driveways, and 2) indirect architectural post lights for pedestrian environments. Both types of fixtures have downward-projected illumination to provide coverage to their designated localized areas. As a form of context sensitivity, no light fixtures are proposed along a major portion of the southerly and easterly boundaries, which are adjacent to residential uses. Instead, adequate lighting is provided in the interior parking lots and walkways as necessary. The lighting analysis demonstrates that the proposed placement, orientation and intensity of

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exterior light fixtures will provide the necessary on-site coverage, while preventing light spillage onto adjoining properties by ensuring that the illumination is sufficiently diminished at the project edges and adjacent properties. The photometric analysis demonstrates that lighting conditions along the Project edges will not surpass the threshold of 0.25 foot candles.

Pertaining to glare and reflectivity, the proposed residential structures are expected to have light-colored stucco finishes with no highly reflective properties or other surface conditions that would cause substantial daytime or nighttime glare. The proposed windows include a tint treatment to prevent full reflectivity from those fixtures. With the proposed landscape plan that includes a strategic placement of trees, shrubs, groundcover, and accent plantings, the potential visibility of nighttime light sources and building surfaces is expected to be partially screened. Less than significant impacts are expected.

II. **AGRICULTURE RESOURCES**: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project?

a) Convert Prime Farmland, Unique Farmland or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency to non-agricultural use?			X	

The Project proposes a Change of Zone (CZ) from Residential, Agriculture-2 (RA2) to Office with Medical Use Overlay zone (O/MUO) to allow for the development of a medical complex on approximately 18.38 acres. The Project site is vacant and located to the south of the unimproved alignment of Brodiaea Avenue and on the east side of Nason Street.

According to the 2014 California Farmland Mapping and Monitoring Program map, the property is designated as "Farmland of Local Importance", which consists of soils that would be classified as Prime and/or of Statewide Importance but lack available irrigation water. The designation of Farmland of Local Importance comprises the largest portion of farmland in the City consisting of approximately 10,781 acres according to the Moreno Valley General Plan EIR.

The subject site and surrounding land to the north, east, south, and west is not categorized as Prime Farmland, Unique Farmland, or Farmland of Statewide importance. Less than significant impacts are expected.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?			X	

The Project site is currently located in an existing zoning for Residential Agriculture-2 (RA2) of which the primary purpose is to provide for suburban life-styles on residential lots larger than are commonly available in suburban subdivisions, according to the Moreno Valley General Plan. The site condition is currently vacant and has historically formed a portion of a larger agricultural area that is no longer active on-site or in the Project vicinity. As discussed previously, the Project proposes a Change of Zone (CZ) from RA2 to Office with Medical Use Overlay (O/MUO) to allow for the development of a medical

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complex on approximately 18.38 acres.

According to the Williamson Act Program 2015/2016 Land Conservation Map, no portion of land within a one-mile radius is recognized as being under a Williamson Act Contract. The proposed Project will change the current RA2 zoning and thus remove approximately 18.38 acres of the City's 10,781 acres of Farmland of Local Importance. Less than significant impacts are expected.

c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?			X	

The Project proposes a CZ from RA2 to (O/MUO) to allow for the development of a medical complex. The RA2 zoning designation is primarily to provide for a suburban lifestyle on residential lots larger than are commonly available in suburban subdivisions, and to allow non-equestrian residential developments in a rural atmosphere.

The Project site is not currently being used for farmland although it has historically been used to cultivate crops. The conversion of this land to support the 18.38 acre medical complex will support the community and local economy by providing medical offices, assisted living facilities, and skilled nursing facilities. Moreover the Project location is appropriate given its close proximity to other medical and commercial uses, including the Riverside County Regional Medical Center (west of Nason Street), an Assisted Living Facility, an office building, and a day care center.

The Project will convert 18 acres of the City's 10,781 acres of Farmland of Local Importance established by the 2014 California Farmland Mapping and Monitoring Program map. Less than significant impacts are expected.

III. **AIR QUALITY:** Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?			X	

The project is located in the City of Moreno Valley within Riverside County. Riverside County and the broader Inland Empire are defined by a semi-arid, Mediterranean climate with mild winters and warm summers. Annual rainfall averages 9.86 inches with the rainy season generally occurring during the winter. The project site is at an elevation of approximately 1,560 feet above mean sea level (AMSL).

Per the *Galaxy Management Medical Village Air Quality & Climate Change Assessment* (February 2017), prepared by MIG, the proposed Project is located within the South Coast Air Basin (Basin). The Basin includes Orange County and the non-desert portions of Los Angeles, San Bernardino, and Riverside Counties. The Basin is bounded by the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east that trap ambient air and pollutants within the Los Angeles and Inland Empire valleys below. The Basin is managed by the South Coast Air Quality Management District (SCAQMD). Pursuant to the California Clean Air Act (CCAA), SCAQMD is responsible for bringing air quality within the Basin into conformity with federal and state air quality standards by reducing existing emission levels and ensuring that future emission levels meet applicable air quality standards.

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SCAQMD works with federal, state, and local agencies to reduce pollutant emissions from stationary, mobile, and indirect pollutant sources through the development of rules and regulations.

Both California and the federal government have established health-based ambient air quality standards (AAQS) for seven air pollutants (known as "criteria pollutants"). These pollutants include ozone (O3), carbon monoxide (CO), nitrogen dioxide (NO2), sulfur dioxide (SO2), inhalable particulate matter with a diameter of 10 microns or less (PM10), fine particulate matter with a diameter of 2.5 microns or less (PM2.5), and lead (Pb). The state has also established AAQS for the additional pollutants of visibility reducing particles, sulfates, hydrogen sulfide, and vinyl chloride. The AAQS are designed to protect the health and welfare of the populace within a reasonable margin of safety. Where the state and federal standards differ, state AAQS are more stringent than federal AAQS. Regional air pollution levels are measured at monitoring stations located throughout the Basin. Areas that are in nonattainment with respect to criteria pollutants are required to prepare plans and implement measures that will bring the region into attainment. The non-desert portion of the Basin is currently in nonattainment status for ozone, inhalable and fine particulate matter, nitrogen dioxide, and lead.

According to the *Galaxy Management Medical Village Air Quality & Climate Change Assessment*, regional pollution problems in the Basin are caused by emissions within the area and the specific meteorology that promotes pollutant concentrations. Emissions sources vary widely from smaller sources such as individual residential water heaters and short-term grading activities to extensive operational sources including long-term operation of electrical power plants and other intense industrial uses. Pollutants in the Basin are blown inward from coastal areas by sea breezes from the Pacific Ocean and are prevented from horizontally dispersing due to the surrounding mountains. This is further complicated by atmospheric temperature inversions that create inversion layers. The inversion layer in Southern California refers to the warm layer of air that lies over the cooler air from the Pacific Ocean. This is strongest in the summer and prevents ozone and other pollutants from dispersing upward. A ground-level surface inversion commonly occurs during winter nights and traps carbon monoxide emitted during the morning rush hour.

At the local level, the project site is located in the Perris Valley monitoring area known as Source Receptor Area (SRA 24). The air quality in SRA 24 is monitored at Station 4149. Based on the 2012-2014 air quality monitoring data, the Perris Valley area experiences ozone pollution and particulate matter pollution with at most 64 days exceeding State ozone standards in 2012 and at most 10 days exceeding State PM10 standards in 2011.

The project site is currently vacant and therefore does not emit criteria pollutants. The proposed Project includes the construction of a medical village consisting of five buildings, on-grade uncovered parking, and associated drive aisles and landscaping. The proposed development will include medical office, wellness center, urgent care, assisted living and skilled nursing facilities.

A significant impact could occur if the proposed project conflicts with or obstructs the implementation of the South Coast Air Basin 2016 Air Quality Management Plan. Conflicts and obstructions that hinder implementation of the AQMP can delay efforts to meet attainment deadlines for criteria pollutants and maintaining existing compliance with applicable air quality standards. Pursuant to the methodology

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provided in Chapter 12 of the 1993 SCAQMD CEQA Air Quality Handbook, consistency with the South Coast Air Basin 2016 Air Quality Management Plan (AQMP) is affirmed when a project (1) does not increase the frequency or severity of an air quality standards violation or cause a new violation and (2) is consistent with the growth assumptions in the AQMP. Consistency review is presented below:

The project would result in short-term construction and long-term pollutant emissions that are less than the CEQA significance emissions thresholds established by the SCAQMD, with mitigation incorporated; therefore, the project could not result in an increase in the frequency or severity of any air quality standards violation and will not cause a new air quality standard violation.

The CEQA Air Quality Handbook indicates that consistency with AQMP growth assumptions must be analyzed for new or amended General Plan elements, Specific Plans, and significant projects. Significant projects include airports, electrical generating facilities, petroleum and gas refineries, designation of oil drilling districts, water ports, solid waste disposal sites, and off-shore drilling facilities; therefore, the proposed project is not defined as significant. This project includes a General Plan Amendment and therefore requires consistency analysis with the AQMP.

Per the *Galaxy Management Medical Village Air Quality & Climate Change Assessment*, the SCAG Regional Transportation Plan /Sustainable Communities Strategy (RTP/SCS) estimates an employment base of 31,400 for Moreno Valley 2012 and projects an employment base of 83,200 by the year 2040, an increase of 51,800 jobs. The proposed project will result in the addition of approximately 440 employees. This increase in employment is within the growth assumptions estimated by SCAG and thus would be consistent with regional growth projections for employment. The proposed project includes a total of 207 assisted living beds and 158 Skilled Nursing Program beds for a total of 365 beds/residents. SCAG estimates total population for Moreno Valley at 197,600 residents in 2012 and projects a total population of 256,600 by the year 2040, an increase of 59,000 residents.

The increase in population anticipated from the proposed project, compared to the current undeveloped condition, is within regional population growth assumptions. Therefore, the proposed project is consistent with the AQMP. Based on the consistency analysis presented above, the proposed project will not conflict with the AQMP. Less than significant impacts are anticipated relative to conflict with or obstruction of implementation of the applicable air quality plan following the implementation of standard conditions.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation.		X		

MIG prepared the *Galaxy Management Medical Village Air Quality & Climate Change Assessment* (February 2017). The report was prepared for use by the Lead Agency to assess potential project-related air quality impacts in compliance with the State CEQA Statutes and Guidelines, particularly in respect to the air quality issues identified in Appendix G of the state CEQA Guidelines.

To determine if maximum daily criteria pollutant emissions from construction and operation of the proposed project are significant, the SCAQMD significance thresholds are used. These thresholds are identified in Table III-1 (SCAQMD Maximum Daily Emissions Thresholds).

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Table III-1
SCAQMD Maximum Daily Emissions Thresholds (Pounds/Day)

Pollutant	Construction	Operation
NOx	100	55
VOC/ROG	75	55
PM10	150	150
PM2.5	55	55
SOx	150	150
CO	550	550
Lead	3	3
Source: SCAQMD 2012		

Short-term criteria pollutant emissions will occur during grading, building construction, paving, and coating activities. Emissions will occur from use of equipment, worker, vendor, and hauling trips, and disturbance of on-site soils (fugitive dust). To determine if construction of the proposed project could result in a significant air quality impact, the California Emissions Estimator Model (CalEEMod) has been utilized. It is estimated that the project will take approximately 17 months to complete and a 2020 operational year has been assumed. It is estimated that approximately 25,317 cubic yards of soil will be exported. Particulate matter emissions account for daily watering required by SCAQMD Rule 403 (three times per day for a 61 percent reduction in fugitive dust). Based on the results of the model, maximum daily emissions from the construction of the project will result in excessive emissions of volatile organic chemicals (identified as reactive organic gases) associated with interior and exterior coating activities. Using the default assumptions of 50 grams per liter (g/l) VOC content for residential interior and exterior coatings and 100 d/l for non-residential interior and exterior coatings, daily VOC emissions will reach 176.43 lbs/day.

To compensate for excessive volatile organic compound (reactive organic gasses) emissions from coating activities, the model includes use of a maximum 25 grams per liter (g/l) volatile organic compound (VOC) content for interior and exterior coatings. Use of low-VOC coatings during construction activities will reduce VOC emissions to below the 75 lbs/day threshold established by SCAQMD). The requirement for use of low-VOC coatings has been incorporated as Mitigation Measure AQ-1. Short-term construction-related impacts will be less than significant with mitigation incorporated.

Table III-2
Maximum Unmitigated Daily Construction Emissions (Pounds/Day)

Year	ROG	NOx	CO	SO2	PM10	PM2.5
Summer	176.38	92.78	49.96	0.15	8.84	4.52
Winter	176.43	93.25	48.01	0.15	8.85	4.52
SCAQMD Threshold	75	100	550	150	150	55
Threshold Exceeded	Yes	No	No	No	No	No

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Table III-3
Maximum Mitigated Daily Construction Emissions (Pounds/Day)

Year	ROG	NOx	CO	SO2	PM10	PM2.5
Summer	73.24	92.78	49.96	0.15	8.84	4.52
Winter	73.30	93.25	48.01	0.15	8.85	4.52
SCAQMD Threshold	75	100	550	150	150	55
Threshold Exceeded	No	No	No	No	No	No

Long-term criteria air pollutant emissions will result from the operation of the proposed project. Long-term emissions are categorized as area source emissions, energy demand emissions, and operational emissions. Operational emissions will result from automobile and other vehicle sources associated with daily trips to and from the project site. The California Emissions Estimator Model (CalEEMod) was utilized to estimate mobile source emissions. Trip generation is based on the project traffic study prepared by Kunzman Associates. Area source emissions are the combination of many small emission sources that include use of outdoor landscape maintenance equipment, use of consumer products such as cleaning products, and periodic repainting of the project. Energy demand emissions result from use of electricity and natural gas. Area, energy, and mobile source emissions are included in Table III-4 (Unmitigated Daily Emissions). Based on the results of the model, net daily operational emissions associated with the proposed development will not exceed the thresholds established by SCAQMD.

Table III-4
Unmitigated Daily Emissions (Pounds/Day)

Year	ROG	NOx	CO	SO2	PM10	PM2.5
Summer						
Area Sources	20.99	7.26	135.35	0.33	14.91	14.91
Energy Demand	0.21	1.83	0.82	0.01	0.15	0.15
Mobile Sources	9.41	44.17	116.52	0.39	30.45	8.30
Summer Total	30.62	53.25	252.69	0.73	45.50	23.46
Winter						
Area Sources	20.99	7.26	135.35	0.33	14.91	14.91
Energy Demand	0.21	1.83	0.82	0.01	0.15	0.15
Mobile Sources	9.06	45.11	110.71	0.37	30.45	8.30
Winter Total	30.26	54.20	246.88	0.71	45.51	23.46
SCAQMD Threshold	55	55	550	150	150	55
Threshold Exceeded	No	No	No	No	No	No

Operationally, the proposed project does not emit toxic air contaminants and there are no emitters of toxic air contaminants in vicinity of the project. No long-term impacts related to toxic air contaminants (TAC) will occur.

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A carbon monoxide (CO) hotspot is an area of localized CO pollution that is caused by severe vehicle congestion on major roadways, typically near intersections. CO hotspots have the potential to violate State and Federal CO standards at intersections, even if the broader Basin is in attainment for Federal and State levels. The Sacramento Metropolitan Air Quality Management District (SMAQMD) developed a screening threshold in 2011 which states that any project involving an intersection experiencing 31,600 vehicles per hour or more will require detailed analysis. In addition, the Bay Area Air Quality Management District developed a screening threshold in 2010 which states that any project involving an intersection experiencing 44,000 vehicles per hour would require detailed analysis. The proposed project's operations would not involve an intersection experiencing this level of traffic; therefore, the proposed project passes the screening analysis and impacts are deemed less than significant. Based on the local analysis procedures, the proposed project would not result in a CO hotspot.

As part of SCAQMD's environmental justice program, attention has recently been focusing more on the localized effects of air quality. Although the region may be in attainment for a particular criteria pollutant, localized emissions from construction activities coupled with ambient pollutant levels can cause localized increases in criteria pollutant that exceed national and/or state air quality standards.

Construction-related criteria pollutant emissions and potentially significant localized impacts were evaluated pursuant to the SCAQMD Final Localized Significance Thresholds Methodology. This methodology provides screening tables for one through five-acre project scenarios, depending on the amount of site disturbance during a day using the Fact Sheet for equipment usage in CalEEMod. Daily oxides of nitrogen (NOX), carbon monoxide (CO), and particulate matter (PM10 and PM2.5) emissions will occur during construction of the project, grading of the project site, and paving of facility parking lot and drive aisles.

Table III-5 (Localized Significance Threshold Analysis) summarize on-site emissions as compared to the local thresholds established for Source Receptor Area (SRA) 24 (Perris Valley). Based on the use of two tractors, one grader, and one dozer during grading activities, a two-acre threshold will be used. A 25-meter (82-foot) receptor distance was used to reflect the proximity of residential uses to south and east of the project site. Particulate matter emissions account for daily watering required by SCAQMD Rule 403 (three times per day for a 61 percent reduction in fugitive dust). Emissions from construction activities will not exceed any localized threshold.

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Table III-5
Localized Significance Threshold Analysis

Construction Activity	CO	NOx	PM10	PM2.5
Grading	35.09	59.52	6.05	3.83
Building Construction 2018	17.58	23.39	1.50	1.41
Building Construction 2019	17.16	21.08	1.29	1.21
Paving	14.66	15.24	0.82	0.76
Architectural Coating	1.84	1.84	0.13	0.13
Maximum	35.09	59.52	6.05	3.83
Threshold	883	170	7.0	4.0
Potentially Significant?	No	No	No	No

With mitigation incorporated, less than significant impacts are anticipated.

Mitigation Measure:

AQ-1: The applicant shall ensure that approved architectural coatings utilized. Prior to the issuance of building permits, the City will verify that construction plans submitted by the project proponent reflect use of architectural coatings where the content of volatile organic compounds (VOC) does not exceed 25 grams per liter (g/l) for interior and exterior applications. This measure must be verified through standard building inspections in light of the performance standard that emissions of volatile organic compounds from application of interior or exterior coatings shall not exceed the daily emissions thresholds established by the South Coast Air Quality Management District. The applicant bears the cost of implementing this mitigation.

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			X	

As previously discussed, cumulative short-term, construction-related emissions from the project will not contribute considerably to any potential cumulative air quality impact because short-term project emissions will be less than significant and other concurrent construction projects in the region will be required to implement standard air quality regulations and mitigation pursuant to state CEQA requirements, just as this project has. The proposed project is consistent with the growth assumptions in the AQMP. Therefore, the proposed project will not contribute to any potential cumulative air quality impacts.

d) Expose sensitive receptors to substantial pollutant concentrations?			X	

Some people are especially sensitive to air pollution and are given special consideration when evaluating air quality impacts from projects. These groups of people include children, the elderly, individuals with pre-existing respiratory or cardiovascular illness, and athletes and others who engage in frequent exercise. Structures that house these persons or places where they gather to exercise are defined as

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"sensitive receptors"; they are also known to be locations where an individual can remain for 24 hours.

As previously discussed, the proposed development will be implemented in three phases of construction. In summary, Phase 1 consists of three residential assisted living facilities and the construction of street improvements, drive aisles, parking, ADA-compliant pedestrian connections, stormwater facilities, and utility connections. Phase 2 includes two medical buildings and additional parking lot facilities, while Phase 3 could complete the project with the remaining skilled nursing buildings and associated drive aisles. All phases of development will accommodate sensitive receptors (e.g. elderly patients).

During construction, the project is expected to produce temporary and localized emissions, which based on the Air Quality Assessments modeling results would not exceed the established thresholds of significance. As previously discussed, the project applicant is required to comply with Rule 403 by implementing fugitive dust control. Examples of dust control measures include constructing a temporary fence with wind screen to prevent propagation of emissions, utilizing properly maintained equipment, maintaining stabilized soil, and constructing track-out prevention devices at construction access points. The temporary construction activities associated with Phase 2 and 3 will be implemented with the necessary safety measures to ensure that staff and patients in the operating phases are not obstructed of their access.

The *Galaxy Management Medical Village Air Quality & Climate Change Assessment* (February, 2017) concludes that the project will not result in substantial emissions of volatile organic compounds (with mitigation incorporated), oxides of nitrogen, or particulate matter and will not exceed the regional growth assumptions used in the Air Quality Management Plan (AQMP). The project will not individually cause or cumulatively contribute to an air quality standard violation. Toxics emissions, carbon monoxide, and localized criteria pollutants will not substantially impact sensitive receptors in vicinity of the project. The project will not expose a substantial number of people to odors. Less than significant impacts are expected.

e) Create objectionable odors affecting a substantial number of people?			X	

Objectionable odors can be associated with toxic or non-toxic emissions. While offensive odors seldom cause physical harm, they can be unpleasant and lead to considerable annoyance and distress among the public. The SCAQMD has compiled a list of facilities and operations that tend to produce offensive odors. Examples of such facilities that commonly generate odors include wastewater treatment plants, sanitary landfills, composting/green waste facilities, recycling facilities, petroleum refineries, chemical manufacturing plants, painting/coating operations, rendering plants, food packaging facilities, agricultural activities, and feedlots. Certain facilities, land uses and populations are considered more likely to experience concern over odors. These include retirement homes, residences, schools, playgrounds, child-care centers, and athletic facilities among others.

The *Galaxy Management Medical Village Air Quality & Climate Change Assessment* (February, 2017) included an analysis of potential odor impacts. The assessment indicates that the surrounding land uses include residential and health care uses which are not considered uses that produce odors. The proposed project, in turn, does not produce odors that will affect a substantial number of people considering that

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the proposed project will not result in the manufacturing of any products or conduct other heavy industrial operations. SCAQMD Rule 402 acts to prevent occurrences of odor nuisances. Consistent with City requirements, all Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with solid waste regulations. Potential operational-source odor impacts are therefore considered less-than-significant. Established requirements addressing construction equipment operations, and construction material use, storage, and disposal requirements act to minimize odor impacts that may result from construction activities. Moreover, construction-source odor emissions would be temporary, short-term, and intermittent in nature and would not result in persistent impacts that would affect substantial numbers of people. Potential construction-source odor impacts are therefore considered less-than-significant.

IV. **BIOLOGICAL RESOURCES**. Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U. S. Fish and Wildlife Service?		X		

On May 19, 2016, MIG conducted a Project-specific Biological Resources Assessment and Consistency Analysis for the18.38 Project site. The biological survey and analyses were designed to ascertain the impacts of the proposed development on the potential biological resources of the Project site and immediate vicinity, as mandated by CEQA and required by the City of Moreno Valley. Survey methodology included review of available background information pertaining to the biological resources on and in the vicinity of the project. Available literature and resource mapping reviewed included the occurrence records for special-status species and sensitive natural communities.

Field surveys were conducted on May 19, 2016 to assess the existing condition of the site, including recording observed plant and wildlife species, characterizing and delineating the vegetation communities and associated wildlife habitats, and evaluating the potential for these habitats to support special-status species and sensitive communities. The Project site is relatively flat with elevations ranging between approximately 1,555-1,570 feet above mean sea-level. The majority of the site has been graded and used for agricultural uses, specifically, barley. Crop barley is the dominate plant species throughout the project site. No sensitive plan species were observed on the Project site. Additionally, no sensitive plant species have been documents in the vicinity of the Project site.

No wildlife species listed by the State and or Federal government as endangered or threatened were identified during the biological field survey conducted on May 19, 2016. However, nesting birds protected under the Migratory Bird Treaty Act and California Department of Fish and Wildlife (CDFW) are potentially present in the grasslands and shrubs in and around the Project area. Focused burrowing owl surveys were conducted on June 13, 14, and 15, 2016. While no owls were observed during the field surveys, the project site is considered suitable habitat for the burrowing owl.

Based upon the recommendation of the Project-specific biological assessment, all construction related activities should occur outside of the nesting season (prior to February 1 or after August 31) or a nesting survey shall be prepared by a qualified biologist should construction occur within the avian nesting

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survey. Moreover, a focused burrowing owl clearance survey shall be conducted not more than 30 days prior to site disturbance (grubbing, grading, and construction). These measures are specified in Mitigation Measure BIO-1, BIO-2 and BIO-3. Less than significant impacts are expected to species identified as a candidate, sensitive, or special status in local or regional plans, policies, or regulations, or by the CDFW or the U.S. Fish and Wildlife Service (USFWS) following the recommended mitigation listed below:

Mitigation Measures:

BIO-1: The applicant shall avoid impacts to nesting birds and violation of state and federal laws pertaining to birds, all construction related activities (including but not limited to mobilization and staging, clearing, grubbing, vegetation removal, fence installation, demolition, and grading) should occur outside the avian nesting season (generally prior to Feb 1 or after Aug 31). If construction and construction noise occurs within the avian nesting season (from Feb 1 to Aug 31 or according to local requirements), all suitable habitats located within the project's area of disturbance including staging and storage areas plus a 250-foot (passerines) and 1,000 foot (raptor nests) buffer around these areas shall be thoroughly surveyed, as feasible, for the presence of active nests by a qualified biologist no more than 5-days before commencement of any site disturbance activities and equipment mobilization. If project activities are delayed more than 5-days, an additional nesting bird survey shall be performed. Active nesting is present if a bird is sitting in a nest, a nest has eggs or chicks in it, or adults are observed carrying food to the nest. The results of these surveys shall be documented. If it is determined that birds are actively nesting within the survey area, Mitigation Measure BIO-2 shall apply. Conversely, if the survey area is found to be absent of nesting birds, Mitigation Measure BIO-2 shall not be required.

BIO-2: If pre-construction nesting bird surveys result in the location of active nests, the applicant shall ensure that no site disturbance and mobilization of heavy equipment (including but not limited to equipment staging, fence installation, clearing, grubbing, vegetation removal, demolition and grading), shall take place within 250 feet of non-raptor nests and 1,000 feet of raptor nests, or as determined by a qualified biologist in consultation with the CDFW, until the chicks have fledged. Monitoring shall be required to insure compliance with the MBTA and relevant CDFW requirements. Monitoring dates and findings shall be documented.

BIO-3: The applicant shall ensure a pre-construction survey for burrowing owls be completed no more than 30-days prior to the start of construction at the Project site to ensure no burrowing owls have moved onto the site.

b) Have a substantially adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U. S. Wildlife Service?			X	

The biological survey performed in the Project property did not find any on-site naturally occurring springs, permanent aquatic habitats, drainages or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or the USFWS. As previously mentioned, the entire site has been disturbed by agricultural uses. The field survey did not detect the presence of any sensitive natural vegetation communities or riparian habitat on the Project site. As a result of the absence

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of significant wash or riparian vegetation, absence of sensitive plant species, less than significant impacts are expected.				
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			X	
Per the Project specific Biological Assessment, the Project site does not contain federally protected wetlands, marshes or other drainage features. The report further states that no naturally occurring springs or permanent aquatic habitats in or near the Project site boundaries were identified. As a result, implementation of the Project would not result in the direct removal, filling, or other hydrological interruption to any of these resources. Less than significant impacts are expected.				
d) Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established native resident migratory wildlife corridors, or impede the use of native wildlife nursery sites?			X	
Land uses bordering the Project site include vacant land to the north and south, residential uses to the east and south and medical uses to the west. Therefore, the movement of wildlife species at the Project site is substantially limited due to the habitat fragmentation caused by development. As indicated in the Project specific biological report, the site does not serve as a continuous regional connection for wildlife species. In addition, the site is outside of any species movement corridors identified by local or regional plans. The property does not occur within or adjacent to a Multiple Species Habitat Conservation Plan (MSHCP) Core Area, linkage, Constrained Linkage, or non-Contiguous Habitat Block. Therefore, less than significant impacts are expected.				
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
The Project site is presently vacant and had been previously disturbed. Project implementation would not result in demolition or tree removal. The proposed Project includes landscaping improvements in a manner consistent with local development standards. The Project will comply with the Western Riverside County MSHCP and the applicable goals, policies, objectives related to biological resources in the City of Moreno Valley General Plan. The Project will not conflict with policies established for the protection of biological resources. Therefore, no impacts are expected.				
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan?		X		
The Project lies within the boundary of the Western Riverside County MSHCP Reche Canyon/Badlands Area Plan and is not located within an MSHCP criteria area or area plan. The MSHCP implements a habitat mitigation fee from all new development to support the acquisition of conservation lands. The fee would be applied per Chapter 3.48 of the Moreno Valley Municipal Code (Western Riverside				

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County Multiple Species Habitat Conservation Plan Fee Program as a standard condition). Based on these provisions, the applicable fees would be collected by the City and remitted to the Western Riverside County Regional Conservation. The Project will comply with the provisions of the Western MSHCP. Less than significant impacts would result from project implementation provided the following Mitigation Measures **BIO-1, BIO-2** and **BIO-3** are followed.

V. **CULTURAL RESOURCES**. Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?			X	

The project is located on approximately 18.38 acres of undeveloped land in the City of Moreno Valley. The project is currently zoned Residential, Agriculture – 2 units per acre (RA2) and is proposing a change of zone to Office with a Medical Use Overlay (O/MUO). The project specific Cultural Resource Study prepared by MIG (June 2016) found no evidence of any settlement or land activities on or near the project area. The research methods performed by MIG as part of this assessment include a comprehensive records search, Native American Scoping, historical background and pedestrian survey. Results from the California Historical Resource Information Center – Eastern Information Center (CHRIS-EIC) indicated that there were no previously recorded historical resources within the Study Area. However, there are eight (8) previously recorded archaeological resources located within a one-mile radius (5-prehistoric and 3-historic) of the project site. Historic site CA RIV-003249-H, is a red brick cistern; iron pipe, concrete pipe, and well cap located in an agricultural field. Site P-33-015934-H consists of a single family, two story residence built in American style of Gable Front-and Wing in 1885. The last recorded site P-33-019919-H consists of the remains of a historic irrigation pumping feature and a capped well, located in a former agricultural field. The MIG biological report states that none of these resources will be impacted by the proposed project and no other historical resources were identified during the pedestrian survey. Therefore, no further evaluation of historical resources is necessary and less than significant impacts are expected.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?		X		

Archaeological resources are described as cultural resources, such as structures or objects that provide evidence to past human activity. They are important for scientific, historic, and or religious reasons to cultures, communities, groups or individuals. As previously discussed, MIG conducted a project specific study on historical and archaeological resources. The assessment included a records search, Native American scoping, historical background research and pedestrian field survey. No known archaeological resources from the EIC records were recorded within the project area. However, there are eight (8) previously recorded archaeological resources located within a one-mile radius (5-prehistoric and 3-historic); none of which will be impacted by the proposed project. The Cultural report further states that the Moreno Valley General Plan indicates that the project site is located within a five-mile radius of the Moreno Hills Complex (northeast of the project), the Wolfskill Ranch North Complex (Southeast), and the Wolfskill Ranch West Complex (south of the project site). These archaeological complexes are comprised of a series of hills and drainages that stretch into Moreno Valley and are characterized as prehistoric habitation areas consisting of bedrock milling stations, cupule rocks, petroglyphs, and pictographs. Additionally, the City's General Plan has identified archaeological sites located at the Moreno School and the intersection of Lasselle Street and Brodiaea Avenue. These

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archaeological sites are located approximately one and one-half mile north and northeast of the project site and have been classified as rocky outcrops containing bedrock milling stations. No other sites, features, artifacts, or built-environment of prehistoric or historic age were encountered during the pedestrian survey.

Furthermore, the Native American Heritage Commission (NAHC) sacred land record search did not indicate the presence of Native American resources within the project area. The NAHC recommended that additional local Native American groups be contacted for further information. MIG sent eighteen letters to individuals and Native American organizations identified by the NAHC as being affiliated with the vicinity of the project area. As of June 2016, MIG received seven (7) responses from the following Tribes: Soboba Band of Luiseno Indians, Cabazon Band of Mission Indians, Santa Rosa Band of Mission Indians, Pala Band of Mission Indians, San Luis Rey Band of Mission Indians, Agua Caliente Band of Cahuilla Indians and the San Manual Band of Mission Indians. Of the seven responding Tribes, only the Soboba Band of Luiseno Indians indicates the project site falls within the bounds of their Traditional Use Area (TUA) and request Tribal monitoring during all ground disturbance activities. The six remaining responses either defer to other local Tribes or had no comment due to the project site being outside of their ancestral territory. The Agua Caliente Band of Cahuilla Indians requested a copy of the cultural report before providing comments. The City has provided the cultural report to all tribes that requested it.

The cultural report concludes that given the prehistoric occupation of the region and identification of multiple surface archaeological resources in the vicinity of the project site, it is possible that intact archaeological resources could exist at depth. Therefore, less than significant impacts are expected following implementation of recommended mitigation measures to reduce impacts to previously undiscovered archaeological resources.

Mitigation Measures:

CUL-1: Prior to the issuance of a grading permit, the Applicant shall retain a qualified professional archaeologist who meets U.S. Secretary of the Interior's Professional Qualifications and Standards. The Project archaeologist and Native American Tribal Representatives will conduct an Archaeological Sensitivity Training for construction personnel prior to commencement of excavation activities. The training session will include a handout and will focus on how to identify archaeological and Tribal Cultural resources that may be encountered during earthmoving activities and the procedures to be followed in such an event, including who to contact and the appropriate avoidance measures that need to be undertaken until the find(s) can be properly evaluated; the duties of archaeological and Native American monitors; and the general steps a qualified professional archaeologist would follow in conducting a salvage investigation if one is necessary. All new construction personnel that will conduct earthwork or grading activities must take the Archaeological Sensitivity Training prior to beginning work on the project and the professional archaeologist shall make themselves available to provide the training on an as-needed basis. A sign-in sheet shall be compiled to track attendance and shall be submitted to the City with the Phase IV Archaeological Monitoring Report.

CUL 2: Preconstruction Notification of Native American Tribal Representatives. Prior to the issuance of a grading permit, the Applicant shall provide evidence to the City of Moreno Valley that the Agua Band of Cahuilla Indians, Pechanga Band of Luiseño Indians and the Soboba Band of

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Luiseño Indians tribal representatives (hereafter referred to as "Native American Tribal Representatives") received a minimum of 30 days advance notice of all mass grading and trenching activities, and provide evidence of monitoring agreements between the Applicant and the Tribes. The Native American Tribal Representatives shall be notified a minimum of 48 hours in advance and allowed to attend the pre-grading meeting with the City and project construction contractors and/or monitor all project mass grading and trenching activities.

CUL 3: Prior to grading permit issuance, the City shall verify that the following note is included on the Grading Plan: "If any suspected archaeological resources are discovered during ground-disturbing activities and the archaeological monitor or Tribal representatives are not present, the construction supervisor is obligated to halt work in a 100-foot radius around the find and call the project archaeologist and the Tribal representatives to the site to assess the significance of the find."

CUL-4: Prior to the issuance of a grading permit, the Applicant shall retain a qualified archaeological monitor. The archaeological monitor will work under the direction and guidance of the qualified professional archaeologist and will meet the U.S. Secretary of the Interior's Professional Qualifications and Standards. The archeological monitor shall have the authority to temporarily redirect earthmoving activities in the event that suspected archaeological resources are unearthed during project construction. Archaeological monitoring is required at all depths and strata. The archaeological monitor shall be present during all construction excavations (e.g., grading, trenching, or clearing/grubbing) into non-fill younger Pleistocene alluvial sediments. Multiple earth-moving construction activities may require multiple archaeological monitors. The frequency of monitoring shall be based on the rate of excavation and grading activities, proximity to known archaeological resources, the materials being excavated (native versus artificial fill soils), and the depth of excavation, and if found, the abundance and type of archaeological resources encountered. Full-time monitoring can be reduced to part-time inspections if determined adequate by the qualified professional archaeologist.

CUL-5: The applicant shall ensure that all ground disturbing activities are ceased and treatment plans are implemented if archaeological resources are encountered. In the event that archaeological resources are unearthed during ground-disturbing activities, ground-disturbing activities shall be halted or diverted away from the vicinity of the find so that the find can be evaluated. A buffer area of at least 100 feet shall be established around the find where construction activities shall not be allowed to continue until a qualified archaeologist has examined the newly discovered artifact(s) and has evaluated the area of the find. Work shall be allowed to continue outside of the buffer area. All archaeological resources unearthed by project construction activities shall be evaluated by a qualified professional archaeologist, who meets the U.S. Secretary of the Interior's Professional Qualifications and Standards. Should the newly discovered artifacts be determined to be prehistoric, Native American Tribes/Individuals should be contacted and consulted and Native American construction monitoring should be initiated. The Applicant and City shall coordinate with the archaeologist to develop an appropriate treatment plan for the resources. The plan may include implementation of archaeological data recovery excavations to address treatment of the resource along with subsequent laboratory processing and analysis.

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In the event that a cultural resource is encountered during ground-disturbing activities, the landowner(s) shall relinquish ownership of all such resources, including sacred items, burial goods, and all archaeological artifacts and non-human remains. The artifacts shall be relinquished through one or more of the following methods and evidence of such shall be provided to the City of Moreno Valley Planning Department:

1. Accommodate the process for Preservation-In-Place/Onsite reburial of the discovered items with the consulting Native American tribes or bands, as detailed in the treatment plan prepared by the professional paleontologist. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not occur until all cataloguing and basic recordation have been completed;
2. A curation agreement with an appropriate qualified repository within Riverside County that meets federal standards per 36 CFR Part 79; therefore, the resources would be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility within Riverside County, to be accompanied by payment of the fees necessary for permanent curation; and/or
3. For purposes of conflict resolution, if more than one Native American tribe or band is involved with the project and cannot come to an agreement as to the disposition of cultural materials, they shall be curated at the Western Science Center by default.

CUL-6: Prior to building permit issuance, the Project archaeologist shall prepare a final Phase IV Monitoring Report as outlined in the CRMP, which shall be submitted to the City Planning Division, the appropriate Native American tribe(s), and the Eastern Information Center at the University of California, Riverside. The report shall include a description of resources unearthed, if any, evaluation of the resources with respect to the California Register and CEQA, and treatment of these resources. All cultural material, excluding sacred, ceremonial, grave goods and human remains, collected during the grading monitoring program and from any previous archaeological studies or excavations on the project site shall be curated in a Riverside County repository according to the current professional repository standards and may include the Pechanga Band's curatorial facility in Temecula, CA.

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		X		

Results of the paleontological resources records search through the National History Museum of Los Angeles County (NHMLAC) indicate that no known vertebrate fossil localities have been previously identified within the project area or within a one-mile radius. Moreover, no paleontological resources were identified by MIG during the pedestrian survey. However, the results of the literature review and the search at the NHMLAC indicate that the study area is situated upon younger and older Quaternary alluvial fan deposits, derived from the more elevated terrain to the north. These sedimentary deposits typically do not contain significant vertebrate fossils, at least in the uppermost layers, but they may be underlain by older quaternary deposits that do contain significant vertebrate fossils (McLeod 2016). The City of Moreno Valley's General Plan indicates the project site is located within a vicinity of low paleontological potential. Furthermore, the General Plan also states that commonly the subsurface areas exhibiting the Mt. Eden Formation described as being primarily reddish sandstone and dark green and

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brown clay with local reddish fanglomerate and conglomerate deposits have the potential to contain significant resources. This soil series is not found onsite and as a result, less than significant impacts with mitigation measures are provided to reduce potentially significant impacts to undiscovered paleontological resources or unique geological features that may be encountered during project construction.

Mitigation Measures:

CUL 7: Conduct Paleontological Sensitivity Training for Construction Personnel. Prior to the issuance of a grading permit, the Applicant shall retain a professional paleontologist, who meets the qualifications set forth by the Society of Vertebrate Paleontology. The paleontologist shall conduct a Paleontological Sensitivity Training for construction personnel prior to commencement of excavation activities. The training will include a handout and will focus on how to identify paleontological resources that may be encountered during earthmoving activities, and the procedures to be followed in such an event, including who to contact and the appropriate avoidance measures that need to be undertaken until the find(s) can be properly evaluated; the duties of paleontological monitors; notification and other procedures to follow upon discovery of resources; and the general steps a qualified professional paleontologist would follow in conducting a salvage investigation if one is necessary. All new construction personnel that will conduct earthwork or grading activities must take the Paleontological Sensitivity Training prior to beginning work on the project and the professional paleontologist shall make themselves available to provide the training on an as-needed basis.

CUL-8: The applicant shall ensure the monitoring of construction excavations for paleontological resources is required for all excavations in older Quaternary alluvial fan deposits or in sedimentary deposits derived from the Mt. Eden Formation. Prior to the issuance of a grading permit, the Applicant shall retain a qualified paleontological monitor, who will work under the guidance and direction of a professional paleontologist, and who meets the qualifications set forth by the Society of Vertebrate Paleontology. The paleontological monitor shall have the authority to temporarily redirect earthmoving activities in the event that suspected paleontological resources are unearthed during project construction. The paleontological monitor shall be present during all construction excavations including, but not limited to grading, trenching, boring, and clearing/grubbing). Multiple earth-moving construction activities may require multiple paleontological monitors. The frequency of monitoring shall be based on the rate of excavation and grading. Monitoring may be reduced if potentially fossiliferous units are not present in the subsurface, or if present, are determined upon exposure and examination by the professional paleontologist to have a low potential to contain or yield fossil resources.

CUL-9: The applicant shall ensure that in the event that paleontological resources and or unique geological features are unearthed during ground-disturbing activities, all ground disturbing activities shall be halted or diverted away from the vicinity of the find in order to evaluate the resource. A buffer area of at least 100 feet shall be established around the find where construction activities shall not be allowed to continue until appropriate paleontological treatment plan has been approved by the Applicant and the City. Work shall be allowed to continue outside of the buffer area. The Applicant and City shall coordinate with a professional

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paleontologist, who meets the qualifications set forth by the Society of Vertebrate Paleontology, to develop an appropriate treatment plan for the resources. Treatment may include implementation of paleontological salvage excavations to remove the resource along with subsequent laboratory processing and analysis or preservation in place. At the paleontologist's discretion and to reduce construction delay, the grading and excavation contractor shall assist in removing rock samples for initial processing. Recovered specimens shall be properly prepared to a point of identification and permanent preservation, including screen washing sediments to recover small invertebrates and vertebrates, if necessary. Identification and curation of specimens into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable storage is required for significant discoveries.

CUL-10: The applicant shall ensure prior to building permits, that a professional paleontologist prepares a report summarizing the results of the monitoring and salvaging efforts, the methodology used in these efforts, as well as a description of the fossils collected and their significance as well as any necessary maps and graphics to accurately record the original location of these resources. The report shall be submitted to the Applicant, the City, the San Bernardino County Natural History Museum, Natural History Museum of Los Angeles County, and representatives of other appropriate or concerned agencies to signify the satisfactory completion of the project and required mitigation measures.

d) Disturb any human remains, including those interred outside of formal cemeteries?		X		

The historical and archaeological reports prepared by MIG for this Project included intensive-level field observations of the entire site. The entire project area was closely inspected for evidence of human activities dating to prehistoric or historic periods. As discussed previously, no other sites, features, artifacts, or built-environment features of prehistoric or historic age were encountered within the project area during the field survey.

Pursuant to the California Health and Safety Code Section 7050.5, and the CEQA Guidelines Section 15064.5 in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site, or any nearby area reasonably suspected to overlay adjacent remains, until the County Coroner has examined the remains. If the coroner determines the remains to be Native American, or has reason to believe that they are those of Native American, the coroner shall contact by telephone within 24-hours of the Native American Heritage Commission. Pursuant to the mentioned California Health and Safety Code, proper actions shall take place in the event of a discovery or recognition of any human remains during Project construction activities. Less than significant impacts are expected following the recommended mitigation measures.

Mitigation Measures:

CUL-11: In the event that any human remains are unearthed during project construction, the City of Moreno Valley and the Applicant shall comply with State Health and Safety Code Section 7050.5 The City of Moreno Valley and the Applicant shall immediately notify the Riverside County Coroner's office and no further disturbance shall occur until the County Coroner has

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made the necessary findings as to origin and disposition. If remains are determined to be of Native American descendent, the coroner has 24-hours to notify the Native American Heritage Commission (NAHC). The NAHC shall identify the person(s) thought to be the Most Likely Descendent (MLD). After the MLD has inspected the remains and the site, they have 48 hours to recommend to the landowner the treatment or disposal, with appropriate dignity, the human remains and any associated funery objects. The MLD shall complete their inspection and make their recommendation within 48 hours of being granted access by the landowner to inspect the discovery. The recommendation may include the scientific removal and nondestructive analysis of human remains and cultural items associated with Native American burials. Upon the discovery of the Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred, as prescribed in this mitigation measure, with the MLD regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The landowner shall discuss and confer with the descendants all reasonable options regarding the descendants' preferences for treatment.

If the NAHC is unable to identify a MLD, or the MLD identified fails to make a recommendation, or the landowner rejects the recommendation of the MLD and the mediation provided for in Subdivision (k) of Section 5097.94, if invoked, fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall inter the human remains and items associated with Native American human remains with appropriate dignity on the facility property in a location not subject to further and future subsurface disturbance. A record of the reburial shall be filed with the NAHC and the CHRIS-EIC. Upon the reburial of the human remains, the MLD shall file a record of the reburial with the NAHC and the project archaeologist shall file a record of the reburial with the EIC.

VI. **GEOLOGY AND SOILS**. Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:				
(i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			X	

According to Figure 5.6-2 Seismic Hazards of the General Plan Environmental Impact Report (GP EIR) the subject property is located approximately 3.3 miles southwest of the San Jacinto Fault study zone. This is the study zone located nearest to the site, also reflected in the most recent Alquist-Priolo Earthquake Fault Zoning Map Sunnymead Quadrangle. Impacts associated with fault rupture are considered less than significant.

(ii) Strong seismic ground shaking?			X	

The GP EIR Soils and Geology discussion states that earthquake-generated ground shaking is the most critical and potentially damaging earthquake effect in the planning area. Three potential sources of strong seismic ground shaking in the planning area include the San Jacinto fault, the San Andreas Fault

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and the Elsinore Fault. The major source of potential earthquake damage to the City planning area is from activity along the San Jacinto fault. Damage to buildings and infrastructure could be expected as a result of ground shaking during a seismic event. As mentioned previously, the subject property is located approximately 3.3 miles southwest of the San Jacinto fault study area. According to the GP EIR, existing grading regulations require permit applications to include soils engineering reports and, where necessary, engineering geology reports. The recommendations contained in the reports must be included in the grading plans and specifications. The reports typically include recommendations concerning cuts, fills, compaction and foundation design to ensure stable development. Additionally, all buildings in the region are required to resist seismic groundshaking in accordance with the latest version of the Uniform Building Code (UBC). This requirement is a commonly cited industry standard in geotechnical investigations conducted in southern California. Following the implementation of these standard conditions, impacts would be less than significant.				
(iii) Seismic-related ground failure, including liquefaction?			X	
According to Figure 5.6-2 of the Geology and Soils discussion of the GP EIR, areas with potential liquefaction impacts are located approximately 2.25 miles west of the subject property. The GP EIR indicates that liquefaction is commonly found in poorly consolidated sediment and high groundwater levels and occurs most frequently in creek beds and floodplains. Although the City has seen no evidence of liquefaction events occurring in the community nor has any geotechnical report recently submitted to the City identified liquefaction hazards, the Riverside County General Plan has identified a range of liquefaction susceptibility in Moreno Valley from very low with deep groundwater in the northern and eastern portions of the community to very high with shallow groundwater generally west of Perris Boulevard. The subject property is located east of Perris Boulevard, an area considered to have a low susceptibility to liquefaction. Following implementation of the regulations discussed previously, less than significant impacts are anticipated.				
(iv) Landslides?			X	
The GP EIR indicates that the primary factors that determine an area's susceptibility to slope instability are the underlying geologic and soils characteristics. The abundant shales and siltstones underlying the Badlands are highly porous and do not hold together well when wet, which can lead to slope instability and landslides. Secondary factors contributing to slope instability and landslides include rainfall and earthquakes. A "slow moving" landslide reportedly exists along Gilman Springs Road in the eastern portion of the City's planning area. The subject property is primarily flat and located at least 3 miles west/southwest of both the Badlands and Gilman Springs Road. Less than significant impacts are anticipated.				
(b) Result in substantial soil erosion or the loss of topsoil?			X	
According to the GP EIR, the subject property is located in an area identified as having a soils classification of Hanford-Tujunga-Greenfield. This soil association is found within the central portion of the City's study area, generally extending northeast to southeast of March Air Reserve Base. It consists of well drained to somewhat excessively drained soils, developed in granitic alluvium. Soil stability is considered poor to fair with significant erosion potential.				

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Proposed project improvements, including structures, parking lots, and landscaping will work to stabilize the site soils during the life of the project. Prior to that final stabilization, the project will be required, as a standard condition, to prepare and implement a Storm Water Pollution Prevention Plan. This plan is a requirement under the National Pollutant Discharge Elimination System (NPDES) and is further discussed in the Hydrology and Water Quality section of this document. Following implementation of project design features and standard conditions, impacts related to soil erosion or loss of topsoil are anticipated to be less than significant.				
(c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
According to the Geology and Soils discussion of the GP EIR some of the City's soils have poor to fair stability and are considered to be potentially expansive. Soils prone to collapse are commonly associated with wind-laid sands and silts, and alluvial fan and mudflow sediments deposited during flash floods. The collapse potential of the soils identified above ranges from minimal to significant. The Monserate-Arlington-Exeter soil association has minimal collapse potential and the Cienega-Rock Land-Fallbrook association has marginal potential for collapse. Project soils are classified as Hanford-Tujunga-Greenfield and can be considered most similar to the Manserate-Arlington-Exeter soil association. Both soil associations are defined as well drained and developed in alluvium from predominantly granitic materials. Both associations are also found in the low lying central areas of the City. The low-lying areas in the southeast corner of the City's planning area have experienced tectonic subsidence, as well as subsidence as a result of groundwater withdrawal for agricultural use. The southeast corner of the City's planning area is within the San Jacinto Wildlife Area and/or within the designated floodplain, approximately 4 miles east/southeast of the subject property. Following implementation of standard conditions discussed previously, less than significant impacts are anticipated.				
(d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			X	
As mentioned previously, according to the Geology and Soils discussion of the GP EIR some of the City's soils have poor to fair stability and are considered to be potentially expansive. Soils prone to collapse are commonly associated with wind-laid sands and silts, and alluvial fan and mudflow sediments deposited during flash floods. The collapse potential of the soils identified above ranges from minimal to significant. The Monserate-Arlington-Exeter soil association has minimal collapse potential and the Cienega-Rock Land-Fallbrook association has marginal potential for collapse. Project soils are classified as Hanford-Tujunga-Greenfield and can be considered most similar to the Manserate-Arlington-Exeter. Both soil associations are well drained and developed in alluvium from predominantly granitic materials.				

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Following implementation of standard conditions discussed previously, less than significant impacts are anticipated.				
(e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				X
The project will be required to connect to the existing public sewer system located in Nason Street. No septic tanks or alternative waste water disposal systems will be utilized. No impacts are anticipated.				
VII. **GREENHOUSE GAS EMISSIONS.** Would this project?				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	

Greenhouse Gas (GHG) is a gaseous compound in the earth's atmosphere that is capable of absorbing infrared radiation, thereby trapping and holding heat in the atmosphere. Common greenhouse gases in the earth's atmosphere include: water vapor, carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), ozone, and to a lesser extent chlorofluorocarbons. Carbon dioxide is the main GHG thought to contribute to climate change.

In response to growing concern for long-term adverse impacts associated with global climate change, California's Global Warming Solutions Act of 2006 (AB 32) requires California Air Resource Board (CARB) to reduce statewide emissions of greenhouse gases to 1990 levels by 2020. In 2016, Governor Jerry Brown signed Senate Bill 32 (SB32) that requires California to reduce GHG emissions to 40 percent below 1990 levels by 2030. Additionally, the City of Moreno Valley Energy Efficiency and Climate Action Strategy, adopted in 2012, includes analysis of existing and future greenhouse gas emissions and policies to guide efforts to reduce emissions.

Per the 2017, Project-specific GHG Report prepared by MIG, the project will result in short-term GHG emissions from construction activities. GHG will be released by equipment used for grading, paving, building construction, and architectural coatings. GHG emissions will also result from worker and vendor trips to the site during construction. However, construction activities are short-term and will cease to emit GHGs upon completion, unlike operational emissions. Project activities will result in continuous GHG emissions from mobile, area, and operational sources. As summarized in Table VIII-1 below, the total GHG emissions are estimated at 7,561.98 MTCO2E under Business as Usual (BAU) conditions without consideration of the project design features or implementation of the City's Energy Efficiency Climate Action Strategy policies.

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Table VII-1
Greenhouse Gas Annual Emissions Summary

	Emissions (metric tons per year)			
	CO_2	CH_4	N_2O	Total CO_2E
Area	109.48	0.14	0.00	113.41
Energy	1,314.34	0.05	0.02	1,319.95
Mobile Sources	5,005.36	0.26	0.00	5,011.91
Waste	318.58	18.82	0.00	789.27
Water Usage	233.12	1.25	0.05	273.73
Total CO_2E (All Sources)	7,508.28			

A numerical threshold for determining the significance of greenhouse gas emissions in the South Coast Air Basin has not been officially adopted by the SCAQMD.

The City's Energy Efficiency and Climate Action Strategy identifies local policy R2-E1 and R2-E5 which recommended energy efficient designs for all new residential and commercial buildings to be ten percent beyond current Title 24 Standards. Design features and regulatory requirements will further reduce GHG emissions by 1,326.26 MTCO2E per year, which is a 17.5 percent reduction. The GHG Analysis states that with design features and regulatory requirements, the project will meet the minimum threshold of 15 percent reduction performance standard from BAU conditions as required by the City's Energy Efficiency and Climate Action Strategy. Therefore, impacts would be less than significant with implementation of the City's GHG reduction policy.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

California's Global Warming Solutions Act of 2006 (AB32) requires California to reduce its GHG emissions to 1990 levels by 2020. California Air Resource Board (CARB) has identified measures to achieve this goal as set forth in the CARB Scoping Plan. The SCAQMD adopted the interim GHG significance threshold for stationary/industrial sources on December 5, 2008 which applies to Projects where the SCAQMD is the lead agency. Additionally, the City of Moreno Valley has adopted an Energy Efficiency and Climate Action Strategy to help reduce greenhouse gas emissions or support reduction strategies resulting from development.

SB 32 adopted in 2016 requires the state to reduce statewide GHG emissions to 40% below 1990 levels by 2030, a reduction target that was first introduced in Executive Order B-30-15. The project will reduce its GHG emissions to the maximum extent feasible through energy conservation measures and implementation of the current California Green Building Standards Code in addition to adhering to the policies the City's Energy Efficiency Climate Action Strategy Plan that have been adopted or that are adopted prior to construction of the project. Therefore, the project will not interfere with the State's

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implementation of AB 32 or SB 32. Less than significant impacts are expected.				
VIII. **HAZARDS AND HAZARDOUS MATERIALS.** Would the project?				
a) Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?			X	

The Project site is approximately 18.38 acres of undeveloped land located east of Nason Street and south of the unimproved alignment of Brodiaea Avenue. The Project proposes to construct a medical complex that would include approximately 258,600 square feet of building space comprised of two medical offices, three assisted living facilities, and two skilled nursing facilities. The Project's services will include an urgent care facility and services associated with medical offices, assisted living facilities, and skilled nursing facilities.

Construction of the Project is proposed in three (3) phases and is expected to involve the temporary management and use of potentially hazardous substances and petroleum products. The nature and quantities of these products would be limited to what is necessary to carry out construction of the Project. Some of these materials would be transported to the site periodically by vehicle and would be stored in designated controlled areas on a short-term basis. When handled properly by trained individuals and consistent with the manufacturer's instructions and industry standards, the risk involved with handling these materials is considerably reduced.

The proposed medical complex is expected to generate some quantities of medical waste. The generation, handling, storage, treatment, and disposal of medical waste are regulated by the Medical Waste Management Program under the California Department of Public Health (CDPH). The Medical Waste Management Program (MWMP) provides oversight for the implementation of the Medical Waste Management Act (MWMA) to ensure the protection of the public and the environment from potentially infectious diseases.

The MWMP shall be completed and maintained by all facilities of the proposed project that generate medical waste. Each facility shall register with the enforcement agency and file their plan for segregation, handling, storing, packing, treatment and shipping of medical waste. Containment and storage of medical waste shall comply with current CDPH regulations. All medical waste shall be transported to an approved and registered medical waste transfer station and treatment facility.

The Code of Federal Regulations (CFR Title 40, Part 261) defines hazardous materials based on ignitability, reactivity, corrosivilfty, and/or toxicity properties. The State of California defines hazardous materials as substances that are toxic, ignitable or flammable, reactive and/or corrosive, which have the capacity of causing harm or a health hazard during normal exposure or an accidental release. As a result, the use and management of hazardous or potentially hazardous substances is regulated under existing federal, state and local laws. Hazardous wastes require special handling and disposal methods to reduce their potential to damage public health and the environment. Manufacturer's specifications also dictate the proper use, handling, and disposal methods for the specific substances.

To prevent a threat to the environment during construction, the management of potentially hazardous

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materials and other potential pollutant sources will be regulated through the implementation of control measures required in the Storm Water Pollution Prevention Plan (SWPPP) for the Project. The SWPPP requires a list of potential pollutant sources and the identification of construction areas where additional control measures are necessary to prevent pollutants from being discharged. Best management practices are necessary for *Material Delivery and Storage*; *Material Use*; and *Spill Prevention and Control*. These measures outline the required physical improvements and procedures to prevent impacts of pollutants and hazardous materials to workers and the environment during construction. For example all construction materials, including paints, solvents, and petroleum products, must be stored in controlled areas and according to the manufacturer's specifications. In addition, perimeter controls (fencing with wind screen), linear sediment barriers (gravel bags, fiber rolls, or silt fencing), and access restrictions (gates) would help prevent temporary impacts to the public and environment. Based on compliance with all State and other applicable regulations, less than significant impacts related to the routine transport, use or disposal of hazardous materials are expected.				
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
Construction of the project is expected to involve the temporary management and use of potentially hazardous substances and petroleum products. When handled properly by trained individuals and consistent with the manufacturer's instructions and industry standards, the risk involved with handling these materials is considerably reduced. The project is required to follow industry regulations related to the use and storage of any hazardous materials or related chemicals during construction and routine operations of an urgent care center, assisted living facilities, skilled nursing facilities, and medical offices. As noted previously, the project will generate small quantities of medical waste, which will be regulated by their MWMP. All medical waste shall be transported to an approved and registered medical waste transfer station and treatment facility. Therefore, accidental conditions involving the release of hazardous materials are unlikely. Based on compliance with all State and other applicable regulations, less than significant impacts are expected to result from the project implementation.				
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
The Project site is not located within one-quarter mile of an existing or proposed school. The nearest existing schools are Valley View High School and Vista del Lago High School. Valley View is approximately 1.06 miles north of the project site, and Vista del Lago is approximately 1.04 miles southwest of the project site. As previously discussed, the Project site would be developed as a medical complex consisting of two medical offices, three assisted living facilities, and two skilled nursing facilities. The nature of the Project would not involve the use or handling of hazardous substances in quantities or conditions that would result in the release of hazardous emissions, materials or waste. To further minimize any potential public exposure to accidental risks, proper construction and safety measures will be implemented and temporary impacts during construction will be further mitigated by				

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standard operational procedures and protocols as well as Best Management Practices (BMPs). Less than significant impacts are expected.				
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result would it create a significant hazard to the public or the environment?				X
Record searches on the Project property were performed within multiple database platforms compiled pursuant to Government Code 65962.5 and its subsections. The resources consulted included *GeoTracker, EnviroStor,* and the *EPA Enforcement and Compliance History Online* (ECHO). GeoTracker is a database maintained by the State of California Water Resources Control Board that provides online access to environmental data. It serves as the management system for tracking regulatory data on sites that can potentially impact groundwater, particularly those requiring groundwater cleanup and permitted facilities, such as operating underground storage tanks and land disposal sites. EnviroStor is a database maintained by the State of California Department of Toxic Substances Control (DTSC). The EnviroStor database identifies sites with known contamination or sites for which there may be reasons to investigate further. It includes the identification of formerly contaminated properties that have been released for reuse; properties where environmental deed restrictions have been recorded to prevent inappropriate land uses; and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites. Moreover, the ECHO database focuses on inspection, violation, and enforcement data for the Clean Air Act (CAA), Clean Water Act (CWA) and Resource Conservation and Recovery Act (RCRA) and also includes Safe Drinking Water Act (SDWA) and Toxics Release Inventory (TRI) data. In April 2017, a search was performed on all three database platforms. The search results did not identify any records or sites in connection with the subject property. The EnviroStor and GeoTracker database results did not identify any Land Disposal Sites, Military Sites, DTSC Hazardous Waste Permits, or DTSC Cleanup Sites on or within 1,000 foot radius of the subject property. No impacts are expected.				
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
The project is not located near an existing public use airport. However, the Project site is approximately 4.3 miles northeast of the March Air Reserve Base, which is under the jurisdiction of the Riverside County Airport Land Use Commission. According to the 2014 March Air Reserve/Inland Port Airport Land Use Compatibility Plan, the Project falls outside of the boundary of the compatibility map. Therefore, the project is not in conflict with any land use compatibility zone or land use restrictions. According to the City GP Safety Element, the Project site is not located within a zone subject to hazards related to air crashes. The nearest public airport facility to the Project is the Riverside Municipal Airport,				

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located approximately 14.7 miles to the west. No impacts are anticipated.				
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				X
The project is not located in the vicinity of a private airstrip and no impacts are anticipated.				
g) Impair implementation of, or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
The Goals and Objectives Element of the City's General Plan sets forth objectives, goals, and policies to ensure the effectiveness of all elements of the GP. Section 9.6 of this Element, Safety Element Goals, Objectives, Policies and Programs, addresses the need to achieve acceptable levels of protection from natural and man-made hazards to life, health, and property, and to have emergency services which are adequate to meet minor and major emergencies or catastrophic situations. The City of Moreno Valley contracts with Riverside County Fire Department/Cal Fire (RCFD) for a full range of fire protection services provided 24 hours a day 7 days a week. The RCFD is staffed with a combination of County and State of California Department of Forestry & Fire Protection employees. They operate 96 fire stations that serve 1,360,000 residents over 6,970 miles of Riverside County. The City of Moreno Valley is currently served by six (6) fire stations located within the City of Moreno Valley Sphere according to the City GP EIR. The Project proposes a gated entry for emergency access planned on Windmill Lane. The proposed site design would be subject to a standard review process by the Riverside County Fire Department to ensure that the site-specific emergency access, water pressure, and other pertinent criteria are met by the Project. With the implementation of the required conditions of approval for the project, less than significant impacts are expected.				
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?			X	
Large areas of Southern California are susceptible to Wildfires all year round due to the region's weather, topography and vegetation conditions. The climate of the area is characterized by warm and dry summers and mild winters. According to the Safety Element of the City GP, the potential for a large and damaging fire is present throughout much of the year, especially during months when the Santa Ana winds blow. The California Board of Forestry (CDF) ranks fire hazard of wildland areas of the State using four main criteria: fuels, weather, assets at risk, and level of service. Although the Project site and the areas to the north and south are undeveloped with scattered vegetation, these conditions have not been recognized to meet the criteria of high or very high fire hazard zones. Wildland fire protection in California is the responsibility of either the State, local government, or the federal government. Local responsibility areas include incorporated cities where fire protection is typically provided by City fire departments, fire protection districts, counties, and by CAL Fire under				

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contract to local government. As mentioned previously, the City of Moreno Valley contracts with Riverside County Fire Department/Cal Fire (RCFD) for a full range of fire protection services provided 24 hours a day 7 days a week. The responsibility for fire prevention and suppression outside of the City boundaries is under the State and federal agencies.

The Riverside County RCIP and the Cal Fire Maps for Western Riverside County indicate that Project and its surroundings are located outside of the Very High Fire Hazard Severity Zone (FHSZ) for Local Responsibility Area and outside of the Very High/High/Moderate FHSZ for State and Federal Responsibility Areas. The Project site is not located on or near any wildfire areas. As previously discussed, the Project will include the on-site fire protection facilities necessary to satisfy the local Fire Department requirements. Less than significant impacts related to wildland fire are expected.

IX. **HYDROLOGY AND WATER QUALITY**. Would the project:				
a) Violate any water quality standards or waste discharge requirements?			X	

The Clean Water Act (CWA) of 1972 establishes regulations pertaining to the discharge of pollutants to waters of the U.S. from point sources. Subsequent amendments to the CWA in 1987 established a framework for regulating non-point source stormwater discharges under the National Pollutant Discharge Elimination System (NPDES). The objective of the Federal Clean Water Act is to "restore and maintain the chemical, physical and biological integrity of the Nation's waters," to make waters of the United States "fishable and swimmable." The Clean Water Act requires that states adopt water quality standards, including standards for toxic substances. Presently in the State of California, the State Water Resources Control Board (SWRCB) and nine California Regional Water Quality Control Boards (RWQCBs or Regional Boards) administer the regulation, protection and administration of the State's water quality pursuant to the NPDES. The SWRCB sets statewide policy, and together with the RWQCBs, implements state and federal laws and regulations. Each of the nine Regional Boards adopts a Basin Plan, which recognizes and reflects regional differences in existing water quality, the beneficial uses of the region's ground and surface waters, and local water quality conditions and problems. The regulations encompass storm water discharges from construction sites, municipal separate storm sewer systems (MS4s), and major industrial facilities.

The proposed Project is located within the San Jacinto River sub-watershed of the Santa Ana Region, which is under the jurisdiction of the Santa Ana RWQCB (Region 8). The Santa Ana Region includes the upper and lower Santa Ana River watersheds, the San Jacinto River watershed, and several other small drainage areas. The Santa Ana Region covers parts of southwestern San Bernardino County, western Riverside County, and northwestern Orange County. The approved Basin Plan for the Santa Ana Region (Basin Plan) establishes water quality standards for the ground and surface waters of the Region 8. The term "water quality standards," as used in the federal Clean Water Act, includes both the beneficial uses of specific waterbodies and the levels of quality which must be met and maintained to protect those uses. The Basin Plan includes an implementation plan describing the actions by the Regional Board and others that are necessary to achieve and maintain the water quality standards. The Riverside County Flood Control District and Water Conservation District (RCFCWCD) is the Principal Permittee of the Santa Ana MS4 Permit and the City of Moreno Valley, among other municipalities, are

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designated as Co-Permittees of the program.

Presently, the project property and adjoining land to the north and south presently consist of undeveloped flat land with a gradual slope from north to south. A mixture of grasses covers a majority of the ground surface with evidence of prior shallow plowing or disking. There are no trees on-site and the existing grasses are not attributed to a natural drainage course or floodplain. A dirt road maintained along the easterly and westerly edges of the property appears to serve as a fire break pursuant to the City of Moreno Valley's fire hazard abatement standards.

Currently, undeveloped land situated east of Nason Street, south of Alessandro Boulevard, and north of the unimproved alignment of Brodiaea Avenue is tributary to the project. As a result, any runoff from that off-site land that is not infiltrated by the natural ground would have the propensity to sheet flow toward the project site. This condition occurs primarily because Brodiaea Avenue is not improved and therefore is not enabled to intercept the runoff.

In the local vicinity, runoff is principally accepted by Line I, which is an 84-inch storm drain pipe located on Nason Street, west of the project. This facility forms part of the larger Moreno Master Drainage Plan, a plan by the Riverside County Flood Control and Water Conservation District (RCFCWCD) which includes existing and proposed storm drain facilities designed to accept runoff from the existing and proposed land use assumptions established in the City's General Plan. Downstream of the project, Line I and the municipal storm drain system route runoff toward the San Jacinto River, which flows to Railroad Canyon Reservoir (Canyon Lake) and subsequently into Lake Elsinore. Overflow from Lake Elsinore discharges into Temescal Creek, which drains in northwestern direction into the Santa Ana River.

The proposed project will result in temporary and permanent disturbance in an area greater than one acre. Therefore, the developer must comply with the State's most recent Construction General Permit (CGP) (currently Order No. 2009-0009-DWQ as amended by 2010-0014-DWQ and 2012-0006-DWQ). Compliance with the CGP involves the development and implementation of a project-specific Stormwater Pollution Prevention Plan (SWPPP) designed to reduce potential adverse impacts to surface water quality during the period of construction. The required plan will identify the locations and types of construction activities requiring best management practices (BMPs) and other necessary compliance measures to prevent soil erosion and stormwater runoff pollution. The plan will also identify the limits of allowable construction-related disturbance to prevent off-site impacts and exceedances.

Based on the project location and setting, the SWPPP is expected to identify temporary sediment track-out prevention devices at each construction entrance/exit point to prevent sediment track-out, damage, and fugitive dust emissions. Linear sediment barriers would be installed along the construction area perimeter as necessary to prevent erosion or sedimentation impacts on surrounding properties. The undeveloped project site does not have on-site storm drain facilities, but any existing storm drain inlets near the project, particularly those found downstream, would be protected to prevent discharge of sediment or other pollutants into the municipal storm drain system. Moreover, construction activities would be subject to good site housekeeping requirements, proper waste management, proper material handling and storage.

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During construction, the project will be required to comply with Moreno Valley's grading permit requirements, which include the responsibility to minimize and control fugitive dust at all times, in a manner consistent with South Coast Air Quality Management District's (SCAQMD) Rule 403. Although fugitive dust control measures pertain to air quality, they also help prevent violation of water quality standards and waste discharge requirements through the practice of soil stabilization and the control of air deposition of site materials, including sediment, from construction operations. As a standard condition, off-site soil erosion and sediment track-out conditions are prohibited. The required implementation of SWPPP and fugitive dust control practices will prevent construction-related impacts to water quality at the site and its surroundings, therefore resulting in less than significant impacts. The Santa Ana Region MS4 Permit requires that a Project-Specific Water Quality Management Plan (WQMP) be prepared for all projects within the Region that meet the Priority Development Project categories and thresholds established therein. The proposed medical plaza falls under the category of New Development Project because it will result in10,000 square feet or more of impervious surfaces. As a result, the Project is designed with an on-site storm drain system and low impact development (LID) site design principles that, during the life of the project, will comply with the Santa Ana Regional Water Quality Control Board requirements for priority development projects. The strategy of post-construction improvements and practices will be documented in the required Project Specific WQMP. A preliminary-level Project-Specific WQMP, Hydrology Report, and Grading Plan have been prepared for the project. The documentation indicates that the project's post-construction condition will be divided into multiple stormwater drainage management areas. The post-construction condition includes a mixture of pervious and impervious ground surfaces. Impervious surfaces include buildings, paving and hardscape, while pervious surfaces include landscape and the proposed pervious pavement. The project site design would ensure that runoff volume resulting from the 85th percentile, 24-hour storm event (design capture volume) from impervious areas, is routed to a combination of self-retaining zones and BMPs where infiltration of that volume can occur. As shown in the preliminary plans, only stormwater volume that exceeds the design capture volume will be conveyed off-site into Line I on Nason Street. By intercepting and infiltrating the first-flush runoff, the project achieves the retention of potential pollutants normally found in the first flush resulting from storm events. The WQMP includes source control and operation and maintenance requirements to ensure that the storm drain improvements maintain their water quality treatment effectiveness. Less than significant impacts are anticipated.				
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			X	
The City of Moreno Valley General Plan and EIR indicate that the Eastern Municipal Water District (EMWD) supplies water to the Project Area and a majority of the City. EMWD's water supply comes from local groundwater, recycled water and imported water from the Metropolitan Water District. In particular, the Project is underlain by the Perris North Groundwater Basin, where groundwater depths				

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range from approximately 100 to 150 feet below ground surface. The 2015 EMWD Consumer Confidence Report indicates that the Property is located within the Mills Service Area of EMWD. The EMWD reports that the quality of drinking water for the year 2015 was consistently high. The water supplied by EMWD met or surpassed all health-related drinking water standards, such as those established by the U.S. Environmental Protection Agency and regulated by the California State Water Resources Control Board.

As a standard condition, the Project proponent will consult with EMWD and the City to thoroughly review the project's total water demand calculations. The project Proponent will prepare a final water demand analysis with a daily and annual quantification of indoor and outdoor water consumption for each project building and irrigated open space. The Project will be required to identify and provide the proper water conservation measures to address the standards and conditions imposed by the City or EMWD. These measures would include low-flow plumbing fixtures, drought-tolerant (native) outdoor landscaping, and water-efficient irrigation systems. Additional domestic water improvements necessary to serve this development will be identified by EMWD and may be included as conditions of approval by the City of Moreno Valley.

Although the proposed Project is expected to introduce impervious surfaces (hardscape, asphalt, roofs, etc) to a previously undeveloped (pervious) condition, the Project will also incorporate storm water drainage facilities that will promote on-site retention, including the use of pervious pavement with subsurface stone-filled infiltration. This method of stormwater management will therefore facilitate groundwater recharge through infiltration at each of the Project's drainage management areas. Infiltration opportunities are also provided in the form of pervious cover areas in the landscaping design. The combined implementation of water conservation measures and on-site runoff infiltration improvements are expected to result in less than significant impacts to local groundwater resources and recharge efforts.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?			X	

The undeveloped property and adjoining land to the north and south are generally flat, with a prevailing gentle slope from north to south. A mixture of grasses covers a majority of the ground surface and there are signs of prior shallow plowing or disking, some of which may be the result of fire hazard abatement activities. The westerly edge of the property exhibits signs of minor surface erosion caused by localized stormwater runoff from the undeveloped land. There are no considerable drainage courses, streams or rivers on the property or its immediate surroundings. Locally, stormwater runoff is accepted by Line I, an 84-inch storm drain pipe located on Nason Street, west of the project. This facility forms part of the Moreno Master Drainage Plan.

Utilization of the entire undeveloped property for project implementation is not expected to result in the alteration of drainage patterns of the site or area. The proposed site design incorporates LID principles with opportunities to intercept and retain runoff in every on-site drainage management area. Where necessary, the project would also be required to implement detention facilities to control the runoff rates routed off-site into Line I. This strategy prevents significant increases in runoff volumes and velocities that would typically be caused by the introduction of impervious surfaces. Perimeter improvements,

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including landscaped swales and inlets, would prevent the project from causing siltation on or off-site. Existing off-site sheet flow attributed to undeveloped land north of the project will be handled in the proposed street improvements for Brodiaea Avenue. As presently proposed, a system of swales will intercept the sheet flow, then route it to multiple storm drain inlets that tie into a proposed storm drain line, then into Line I. These improvements will minimize erosion or siltation conditions caused by the off-site tributary runoff north of Brodiaea Avenue. Less than significant impacts are expected.				
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or surface runoff in a manner which would result in flooding on- or off site?			X	
As previously discussed, the project site is absent of streams, rivers or other substantial drainage courses that would typically pose a flood risk. As explained in Section IX (g) of this report, the site is also located outside of any floodplain or high flood risk zone, as determined by FEMA. Based on a project-specific Preliminary Hydrology Report, the design intent of the site's proposed grading, retention facilities, surface conveyances, and underground pipes will be to adequately convey the peak storm flows from the site, into the receiving municipal storm drain system (Line I) in conditions that prevent on-site inundation. The existing off-site tributary sheet flow from the adjoining undeveloped land to the north will also be properly conveyed to proposed storm drain improvements on Brodiaea Avenue that would tie into the municipal system (Line I). Less than significant impacts are anticipated.				
e) Create or contribute runoff which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			X	
The project is located within the Moreno Master Drainage Plan (MDP), which is prepared and administered by RCFCWCD. The Moreno MDP involves a network of existing and proposed drainage facilities deemed necessary to handle drainage and relieve any flood problems within the watershed. The Moreno MDP was originally adopted in 1980, and was subsequently revised in 1991 due to changes in development. Since the 1991 revision, the City of Moreno Valley has updated its General Plan, prompting the District to further revise the Moreno MDP to address these changes. The current version of the Moreno MDP (April 2015) factors the existing and proposed land uses set forth in the current approved City of Moreno General Plan. The undeveloped project site's current General Plan land use designation is Residential Agriculture (RA2), which is intended for the development of large lot, single-family residential development at a maximum allowable density of two dwelling units per net acre in a rural and agricultural setting. The proposed project involves a General Plan Amendment from Residential 2 (max 2 du/ac) to Office with Medical Use Overlay. This form of development represents a more intense use of the 18.38 acres compared to what would be permitted under a low-density residential land use policy. As such, conversion of undeveloped land (pervious) to impervious surfaces (hardscape, asphalt, roofs, etc) would normally result in an on-site increase in the rate and amount of surface runoff for the local storm drain facilities to accept. To manage on-site runoff and prevent considerable increases in the release of runoff into the Moreno MDP, the project will incorporate a grading design with engineered storm drain facilities designed based on the findings of a required project-specific hydrology study. The project area would be divided into multiple				

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drainage management areas, where runoff from impervious areas would be routed to the appropriate BMPs. Only stormwater volume that exceeds the design capture volume would be conveyed off-site into the receiving Line I on Nason Street. Less than significant impacts are expected.				
f) Otherwise substantially degrade water quality?			X	
As previously mentioned, the proposed medical plaza's characteristics meet the threshold of a Priority Development Project under the Santa Ana Region MS4 Permit. Therefore, Project-Specific Water Quality Management Plan (WQMP) must be prepared prior to issuance of a grading permit and implemented during the life of the project. The WQMP will identify the strategy of low impact development (LID) site design facilities, storm drain improvements, source control measures, and operation and maintenance procedures necessary to maintain the water quality control. In particular, the design capture volume of the entire project will be conveyed to facilities that will promote infiltration and dissipation of potential runoff pollutants, therefore preventing them from being directly routed off-site and into the receiving storm drain system. Only runoff resulting from larger storm events will be allowed to overflow into storm drain Line I on Nason Street in a controlled condition. Less than significant impacts are expected.				
g) Place housing within a 100-year floodplain, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?			X	
The Federal Emergency Management Agency (FEMA) evaluates potential flood hazards for the City. The FEMA Flood Insurance Rate Maps (FIRMs) serve as the basis for identifying those potential hazards and determining the need for and availability of federal flood insurance. According to FIRM panel 06065C0765G, effective August 28, 2008, the entire project and its immediate surroundings are located in a Zone X, an area of minimal flooding. Therefore, the project is not located in an area subject to inundation by the base flood (100-year, 1-percent-annual-chance). As designed, the proposed development would not considerably alter the existing flood zone or drainage course characteristics identified in the FEMA maps. As a standard condition, the proposed improvement plans will be subject to agency review and approval to ensure that the proposed grading and drainage conditions are acceptable to the City standards. Less than significant impacts are anticipated.				
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?			X	
Based on FEMA FIRM panel 06065C0765G, the project site and its surroundings are located in Zone X, an area determined to be outside of the 0.2 percent annual chance flood plain. As such, the project is not located in an area subject to inundation by the base flood (100-year, 1-percent-annual-chance). Less than significant impacts are anticipated.				
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				X
As previously discussed, the project is located outside of an area subject to inundation by the base flood (100-year, 1-percent-annual-chance) and by the 500 year flood. The project is not located within close proximity or downstream of an existing or planned levee or dam. Moreover, based on the Safety Element of the Moreno Valley General Plan, the project is located outside of the potential inundation				

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area due to failure of Lake Perris Dam. No impacts are anticipated.				
j) Inundation by seiche, tsunami, or mudflow?				X
The proposed project is not located near any bodies of water or areas with the potential for inundation by seiche, tsunami, or mudflow. Therefore, no impacts are expected.				
X. **LAND USE AND PLANNING**. Would the project:				
a) Physically divide an established community?			X	
The project site sits on approximately 18.38 acres of undeveloped land located east of Nason Street and south of the unimproved alignment of Brodiaea Avenue, in the City of Moreno Valley. As previously discussed the Project site is currently zoned Residential, Agriculture-2 (RA2) and is proposing a Change of Zone to Office with Medical Use Overlay (O/MUO). The subject property is adjoined to the north by vacant undeveloped land. To the east and south of the subject property are single family residential lots. To the west of the Project site is Nason Street, and the Riverside County Regional Medical Center. As discussed, the Project will develop a medical complex consisting of two medical buildings, three assisted living facilities, and two skilled nursing facilities. The development will total approximately 258,600 square feet of building space. The proposed development will be implemented in three phases of construction. In summary, Phase 1 consists of three residential assisted living facilities and the construction of street improvements, drive aisles, parking, ADA-compliant pedestrian connections, stormwater facilities, and utility connections. Phase 2 includes two medical buildings and additional parking lot facilities, while Phase 3 could complete the project with the remaining skilled nursing buildings and associated drive aisles. The proposed zoning designation O/MUO zoning designation would be compatible with the existing surrounding land uses given its proximity to the Riverside County Regional Medical Center. There is no established community pattern in the project vicinity that would be divided by the proposed Project. Alternatively, the Project is complementary to the existing nearby medical facilities and will provide additional access to assisted living and skilled nursing facilities for the community of Moreno Valley. Less than significant impacts are anticipated relative to the division of an established community.				
b) Conflict with an applicable land use plan, policy or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?			X	
The Project involves a CZ from Residential, Agriculture-2 (RA2) to Office with Medical Use Overlay (O/MUO). The Project site sits on approximately 18.38 acres of vacant land east of Nason Street and south of the unimproved alignment of Brodiaea Avenue. Surrounding land uses includes single family residential to the east and the south. Vacant land exists to the north and south, and to the west is the Riverside County Regional Medical Center. The existing zoning designation of Residential, Agriculture-2 (RA2) as described in the City's Municipal Code is to provide for suburban life-styles on residential lots larger than are commonly available in the suburban subdivisions and to provide for and protect the rural and agricultural				

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atmosphere. Under this zoning, a total of approximately 36 dwelling units (a maximum density of 2 dwelling units per acre) could be developed. The proposed zoning designation of O/MUO intends to implement the general plan concept of creating a medical corridor by limiting land use to those that are supportive of and compatible with the City's two existing hospitals (Riverside County Regional Medical Center and the Moreno Valley Community Hospital). As discussed previously, the Project proposes two medical buildings, three assisted living facilities, and two skilled nursing facilities. The proposed assisted living and skilled nursing facilities would accommodate seniors living in the City of Moreno Valley. The assisted living facilities combined will have 207 beds. The Project's physical characteristics and internal operations will not conflict with the City's land use, zoning or other regulatory policies. Site design features will be reviewed by and approved by the City relative to compliance with the City's General Plan and Zoning. Less than significant impacts are expected.				
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?			X	
The subject property is not located within a Conservation Area as designated by the Western Riverside County Multi-Species Habitat Conservation Plan (MSHCP). As a standard condition, all new development will pay the most current mitigation fees for the implementation of the MSHCP and support the acquisition of conservation lands. There are no protected biological resources on the property as recognized by the MSHCP, or the project specific Biological Assessment. The project is expected to comply with all required plan provisions and pay the required mitigation fee to achieve consistency with the MSHCP, and less than significant impacts are expected.				
XI. **MINERAL RESOURCES.** Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?			X	
In accordance with the Surface Mining and Reclamation Act of 1975 (SMARA), mineral land classification maps and reports have been developed to assist in the protection and development of mineral resources. Local agencies, including the City of Moreno Valley, utilize the existing information on mineral classification for land use plan development and decision-making. In the Moreno Valley General Plan Mineral Resources Element, there are no mineral resources within the planning area of Moreno Valley. The nature of the project does not involve the extraction of mineral deposits. Construction of the proposed medical facilities would rely on existing local and regional aggregate resources from permitted facilities. Less than significant impacts are expected related to the loss of availability of known mineral resources.				
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?			X	
According to the City's General Plan, the Project site is not located within an area known for existing				

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mineral resource deposits. Less than significant impacts are expected.				
XII. **NOISE.** Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	X			

MIG prepared the *Galaxy Management Medical Village Noise Study* (March 2017) to model and analyze the construction-related and operational noise impacts for the proposed Project. The study analyzed the project's consistency with applicable federal, State, and local regulations and determined that the construction-related and operational noise levels are consistent with the applicable regulations. The noise fundamentals and analysis discussions provided in this section are based on the information provided in the study.

"Sound" is a vibratory disturbance created by a moving or vibrating source and is capable of being detected. "Noise" is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance and, in the extreme, hearing impairment. Sound has three properties: amplitude and amplitude variation of the acoustical wave (loudness), frequency (pitch), and duration of the noise. Despite the ability to measure sound, human perceptibility is subjective, and the physical response to sound complicates the analysis of its impact on people. People judge the relative magnitude of sound sensation in subjective terms such as "noisiness" or "loudness."

Sound pressure levels are described in logarithmic units of ratios of sound pressures to a reference pressure, squared. These units are called bels. To provide a finer description of sound, a bel is subdivided into 10 decibels, abbreviated dB. Since decibels are logarithmic units, sound pressure levels cannot be added or subtracted by ordinary arithmetic means. For example, if one automobile produces a sound pressure level of 70 dB when it passes an observer, two cars passing simultaneously would not produce 140 dB. In fact, they would combine to produce 73 dB. This same principle can be applied to other traffic quantities as well. In other words, doubling the traffic volume on a street or the speed of the traffic will increase the traffic noise level by three dB. Conversely, halving the traffic volume or speed will reduce the traffic noise level by three dB. A three dB change in sound is the beginning at which humans generally notice a barely perceptible change in sound and a five dB change is generally readily perceptible.

Sound pressure level alone is not a reliable indicator of loudness. The frequency or pitch of a sound also has a substantial effect on how humans will respond. While the intensity of the sound is a purely physical quantity, the loudness or human response depends on the characteristics of the human ear. Human hearing is limited not only to the range of audible frequencies but also in the way it perceives the sound pressure level in that range. In general, the healthy human ear is most sensitive to sounds between 1,000 Hertz (Hz) and 5,000 Hz, and perceives both higher and lower frequency sounds of the same magnitude with less intensity. Hertz is a unit of frequency that defines any periodic event. In the case of sound pressure, a Hertz defines one cycle of a sound wave per second. To approximate the frequency response of the human ear, a series of sound pressure level adjustments is usually applied to the sound

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measured by a sound level meter.

Noise consists of pitch, loudness, and duration; therefore, a variety of methods for measuring noise have been developed. According to the California General Plan Guidelines for Noise Elements, the following are common metrics for measuring noise:

Leq (Equivalent Energy Noise Level): The sound level corresponding to a steady-state sound level containing the same total energy as a time-varying signal over given sample periods. Leq is typically computed over 1-, 8-, and 24-hour sample periods.

CNEL (Community Noise Equivalent Level): The average equivalent A-weighted sound level during a 24-hour day, obtained after addition of five decibels to sound levels in the evening from 7:00 PM to 10:00 PM and after addition of ten decibels to sound levels in the night from 10:00 PM to 7:00 AM.
Ldn (Day-Night Average Level): The average equivalent A-weighted sound level during a 24-hour day, obtained after the addition of ten decibels to sound levels in the night after 10:00 PM and before 7:00 AM.

CNEL and Ldn are utilized for describing ambient noise levels because they account for all noise sources over an extended period of time and account for the heightened sensitivity of people to noise during the night. Leq is better utilized for describing specific and consistent sources because of the shorter reference period.

Federal and State agencies have established noise and land use compatibility guidelines that use averaging approaches to noise measurement. The State Department of Aeronautics and the California Commission on Housing and Community Development have adopted the community noise equivalent level (CNEL).

The State of California defines sensitive receptors as those land uses that require serenity or are otherwise adversely affected by noise events or conditions. Schools, libraries, churches, hospitals, and residential uses make up the majority of these areas. Sp ecific sensitive receptors within one-quarter mile of the project site include the Riverside County Regional Medical Center to the west and residential uses to the west, south, and east of the project site.

Pursuant to Section 11.80.030 of the Moreno Valley Municipal Code, no person shall operate or cause to be operated a public or private motor vehicle, or combination of vehicles towed by a motor vehicle, that creates a sound exceeding the sound level limits below during daytime hours (between the hours of 8:00 AM and 10:00 PM):

Residential: 60 dBA

Commercial: 65 dBA

Pursuant to Section 11.80.030(D)(7), construction work conducted between the hours of 8:00 PM and 7:00 AM is prohibited.

The *Galaxy Management Medical Village Noise Study* conducted short-term noise measurements at the

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Project site to identify the ambient noise in the project vicinity. An American National Standards Institute (ANSI Section SI4 1979, Type 1) Larson Davis model LxT sound level meter was used to monitor existing ambient noise levels in the project area. The noise meter was programmed in "slow" mode to record noise levels in A-weighted form. The microphone height was set at five feet. Two ten-minute daytime noise measurements were taken on Tuesday February 28, 2017.

Ambient noise levels are a composite of noise from all sources, near and far. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location. The ambient noise level is presented in Table XII-1 (Ambient Noise Levels). Vehicular traffic along Nason Street is the dominant noise source at Measurement Location #1.

Table XII-1
Ambient Noise Levels

Location	Time Period	Measurement Period	Description	Existing Ambient Noise Levels (dBA Leq)
1	9:18 AM – 9:28 AM	10 Minutes	Southwest corner of Nason Street and Brodiaea Avenue	68.3
2	9:33 AM – 9:43 AM	10 Minutes	Northern terminus of Windmill Lane	44.9

Construction noise levels were estimated for nearby receptors using the FHWA Roadway Construction Noise Model (RCNM). See Exhibit 4 (Receptors) for receptor locations. Temporary noise increases will be greatest at the residential use to the south of the project site. The model indicates that the use of construction equipment such as tractors, dozers, and concrete saws could expose the residential uses located approximately 61 feet to the south of the center of the project site to a combined noise level of 65.9 dBA Lmax. Table XII-2 (Construction Noise Impacts) below summarizes the maximum noise levels at each of the studied receivers. Pursuant to the Moreno Valley Municipal Code, a noise level of 60 dBA is allowable for residential uses. Construction activity could result in noise levels in excess of the allowable noise levels at all studied receptors. Therefore, Mitigation Measure NOI-1 has been incorporated to reduce the impact to neighboring uses during construction.

Table XII-2
Construction Noise Impacts

Receptor	Grading	Building Construction	Paving	Architectural Coating
1 – Residential (W)	60.9	60.9	60.9	53.6
2 – Residential (S)	65.9	65.9	65.9	58.6
3 – Residential (E)	60.4	60.4	60.4	53.1

Mitigation Measure N-1 requires implementation of engineered controls on construction equipment to reduce temporary noise impacts by a minimum of 5.9 dBA which is a feasible performance standard based on available technology. Engineered controls include retrofitting equipment with improved exhaust and intake muffling, disengaging equipment fans, and installation of sound panels around equipment engines. These types of controls can achieve noise level reductions of approximately 10 dBA. Implementation of Mitigation Measure N-1 will reduce temporary noise impacts by a minimum of 5.9

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dBA, resulting in maximum construction noise within allowable levels of 60 dBA for neighboring residential uses. In order to minimize the impact of construction noise on adjacent residential uses, Mitigation Measure N-2, requiring installation of temporary construction noise barriers where residential uses are adjacent to the project site. Further, Mitigation Measure N-3 requires that all construction activities comply with the City of Moreno Valley Noise Ordinance. Therefore, with implementation of Mitigation Measures N-1 through N-3, construction noise will feasibly be reduced to unsubstantial levels.

The City of Moreno Valley Municipal Code sets an allowable exterior noise level for residential uses at 60 dBA and 65 dBA for commercial uses. Ambient noise at the project site would generally be defined by traffic on Nason Street. Traffic noise from vehicular traffic generated was provided by the project traffic study prepared by Kunzman Associates.

A substantial increase in ambient noise is an increase that is barely perceptible (3 dBA). Operationally, the proposed project will result in periodic landscaping and other occasional noise generating activities such as bus loading and unloading. These activities are common in commercial uses and do not represent a substantial increase in periodic noise in consideration that the project site is located in a commercial, mixed use area.

The Buildout Year 2022 Without Project and With Project noise levels along area roadway segments at 50 feet from the roadway centerline were calculated using TNM Version 2.5. Buildout Year Without and Plus Projected traffic noise levels exceed allowable exterior noise levels at all residential and commercial receptors except for residential uses along Brodiaea Avenue west of Nason Street. The proposed project does not cause the exterior noise levels to exceed the allowable thresholds for receptors that are currently below the allowable noise levels. Therefore, no substantial impacts will result. In addition, increases in traffic due to the proposed project will not result in a perceptible noise increase at any of the studied roadway segments. No substantial impacts will occur.

Residential uses are located adjacent to the project site to the south and east. Proposed Building 5 will be located in close proximity to these residential uses. Operation of Building 5 will require the use of mechanical equipment such as a heating, ventilation, and air condition (HVAC) system.

In order to assess impacts related to operation of stationary noise sources (HVAC) associated with the proposed project, worst-case noise levels were modeled utilizing SoundPLAN software. SoundPLAN is a three-dimensional noise modeling software that accounts for the shielding and reflective effects associated with intervening topography and nearby buildings.

HVAC units will be placed on the rooftop of the buildings. Pursuant to Moreno Valley Municipal Code Section 9.16.120(A)(16), all roof-mounted equipment is required to be concealed from public view. Therefore, all HVAC equipment will be screened with architectural screening elements that will match the building. The building will have variations in height to provide visual interest. However, the roofline for Building 5 A & B will be at 13.5 feet and Building 5C will be at 27 feet in height. A two-foot high parapet, which is a wall along the edge of the roof, will enclose the rooftop area. Each HVAC unit will be surrounded and screened by a five-foot barrier.

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Based on SoundPLAN default maximum noise levels for the roof-mounted HVAC units and with consideration of building parapets and screening materials, noise levels could reach up to 22.7 dBA Ldn at the eastern property line and 22.4 dBA Ldn at the southern property line. Operation of roof-mounted HVAC units will not exceed allowable exterior noise level of 60 dBA for residential uses. Therefore, no substantial impacts will result. With mitigation incorporated, less than significant impacts are anticipated.

Mitigation Measure:

NOI-1: The applicant shall ensure that the following mitigation measures occur:

- Stationary construction noise sources such as generators or pumps must be located at least 100 feet from sensitive land uses, as feasible, or at maximum distance when necessary to complete work near sensitive land uses, to be verified by submittal of a construction staging plan. This mitigation measure must be implemented throughout construction and may be periodically monitored by the Planning Director, or designee during routine inspections.
- Construction staging areas must be located as far from noise sensitive land uses as feasible, to be verified by submittal of a construction staging plan. Implementation of this measure shall occur throughout construction through periodic monitoring by the Planning Director or designee during routing inspections.
- Throughout construction, the contractor shall ensure all construction equipment is equipped with included noise attenuating devices and are properly maintained. This mitigation measure shall be periodically monitored by the Planning Director, or designee during routine inspections.
- Idling equipment must be turned off when not in use. This mitigation measure may be periodically monitored by the Planning Director, or designee during routine inspections.
- Equipment must be maintained so that vehicles and their loads are secured from rattling and banging. This mitigation measure may be periodically monitored by the Planning Director, or designee during routine inspections.

NOI-2:

- Temporary construction noise control barriers shall be installed where residential uses are located adjacent to the project site (south and east). The type and location of the noise control barriers shall be shown on all grading and building plans and subject to approval by the Planning Director, or designee.

NOI-3:

- All construction activities shall comply with the City of Moreno Valley Noise Ordinance (Chapter 11.80 of the City of Moreno Valley Municipal Code). This requirement shall be noted on all grading and building plans and in bid documents issued to construction contractors.

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			X	

Vibration is the movement of mass over time. It is described in terms of frequency and amplitude and unlike sound; there is no standard way of measuring and reporting amplitude. Vibration can be described

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in units of velocity (inches per second) or discussed in decibel (dB) units in order to compress the range of numbers required to describe vibration. Vibration impacts to buildings are generally discussed in terms of peak particle velocity (PPV) that describes particle movement over time (in terms of physical displacement of mass). For purposes of this analysis, PPV will be used to describe all vibration for ease of reading and comparison. Vibration can impact people, structures, and sensitive equipment. The primary concern related to vibration and people is the potential to annoy those working and residing in the area. Vibration with high enough amplitudes can damage structures (such as crack plaster or destroy windows). Groundborne vibration can also disrupt the use of sensitive medical and scientific instruments such as electron microscopes. Common sources of vibration within communities include construction activities and railroads.

Groundborne vibration generated by construction projects is usually highest during pile driving, rock blasting, soil compacting, jack hammering, and demolition-related activities. Next to pile driving, grading activity has the greatest potential for vibration impacts if large bulldozers, large trucks, or other heavy equipment are used.

Construction activities that use vibratory rollers and bulldozers are repetitive sources of vibration; therefore, the continuous threshold is used. Residential uses are located to the west, south, and east of the project site. As a worst case scenario, the *historic and some older buildings* threshold is used. Vibration from use of heavy construction equipment for the proposed project would be below the thresholds to cause damage to nearby structures at the receptors.

Construction of the project does not require rock blasting, pile driving, or the use of a jack hammer, but will use a vibratory roller, and small bulldozer, and loaded trucks. All of the receptors will experience barely perceptible vibration from the use of a small bulldozer, vibratory roller, and loaded truck. Construction of the proposed project will not result in strongly perceptible vibration and will therefore not expose neighboring receptors to excessive vibration.

With regard to long-term operational impacts, activities associated with the project will not result in any excessive vibration-related impacts to adjacent or on-site properties.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			X	

The proposed project will not cause traffic noise levels to exceed allowable exterior noise levels. In addition, the proposed project will not result in a perceptible increase in noise levels at studied receptors. Operation of stationary equipment on the rooftops of the project will not exceed allowable exterior noise levels at adjacent residential uses. Therefore, no substantial impacts will occur. With regard to long-term operational impacts, activities associated with the project will not result in any excessive vibration-related impacts to adjacent or on-site properties.

d) A substantially temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			X	

Temporary noise increases will be greatest during the grading phase of construction. The model indicates that the use of construction equipment such as tractors, dozers, and concrete saws could expose the commercial use located approximately 450 feet to the south of the center of the project site to a combined noise level of 65.9 dBA L max. Construction activity could result in noise levels in excess of

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the allowable noise levels at all studied receptors. The Project will minimize noise by implementing Mitigation Measure NOI-1, which requires implementation of engineered controls on construction equipment to reduce temporary noise impacts by a minimum of 5.9 dBA which is a feasible performance standard based on available technology. Engineered controls include retrofitting equipment with improved exhaust and intake muffling, disengaging equipment fans, and installation of sound panels around equipment engines. These types of controls can achieve noise level reductions of approximately 10 dBA. Implementation of Mitigation Measure NOI-1 will reduce temporary noise impacts by a minimum of 5.9 dBA, resulting in maximum construction noise within allowable levels of 60 dBA for neighboring residential uses. Therefore, with implementation of Mitigation Measure NOI-1, construction noise will feasibly be reduced to unsubstantial levels. Operation of the proposed project will result in periodic landscaping and other occasional noise generating activities such as bus loading and unloading. These activities are common in commercial uses and do not represent a substantial increase in periodic noise in consideration that the project site is located in a commercial, mixed use area. Less than significant impacts are expected.				
e) For a project located within an airport land use plan, or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X
The project site is not located within two miles of a public or private use airport. A heliport is located at the Riverside County Regional Medical Center, particularly at the northwest corner of Cactus Avenue and Nason Street, across Nason Street from the project site. The heliport is for private use only and requires permission prior to use. Helipad operations coordinate with nearby March Air Reserve Base, Redlands Municipal Airport, San Bernardino International Airport, Flabob Airport, Riversides Municipal Airport, and Hemet-Ryan Airport to ensure that helipad operation does not conflict with aircraft operations and would be expected to be temporary and sporadic. Therefore, no substantial impacts will occur.				
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X
The project is not located within the vicinity of a private airstrip. No impacts are anticipated related to this issue.				
XIII. **POPULATION AND HOUSING.** Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			X	
The Project involves a CZ from Residential, Agriculture-2 (RA2) to Office with Medical Use Overlay (O/MUO). The Project site sits on approximately 18.38 acres of vacant land east of Nason Street and east of the unimproved alignment of Brodiaea Avenue. The current residential zoning designation allows				

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for a maximum density of 2 dwelling units an acre which would allow for 36 single family residential units on the subject property. Per the U.S. Census Bureau, the City has 3.87 persons per household (2010-2015 estimates). Using this number, a single family development of 36 units could generate approximately 139 new residents. In comparison, the proposed Project will develop a medical campus consisting of two medical office buildings, three assisted living facilities, and two skilled nursing facilities. The three assisted living facilities will house approximately 207 beds that will accommodate the senior community. The project proposes to serve the existing and future aging population in the City of Moreno Valley and surrounding areas.

The existing residential zoning designation could directly induce population growth through the potential development of homes. In comparison, the Project does not propose any development of homes other than the space for the assisted living buildings which will effectively be the residences of senior community members. The Project could result in minimal population growth by encouraging relocation for employment. The Project would not result in any major extensions of roads another infrastructure that would directly or indirectly attract population to the area. Less than significant impacts are expected.

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X

As previously discussed, the Project site is vacant and will not displace any housing. No impacts are anticipated.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?		Dg		X

The Project site is vacant and undeveloped and will not displace any people that would necessitate the construction of replacement housing. No impacts are expected.

XIV. **PUBLIC SERVICES**. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

a) Fire protection?			X	

The Moreno Valley Fire Department is the primary response agency for fires, and other emergency incidents for the City. The fire department also provides a full range of fire prevention services to include public education, code enforcement, inspections and fire investigations. The City of Moreno Valley contracts with Cal Fire/Riverside County Fire Department (RCFD). This contract with Cal Fire allows for a full range of fire protection services provided 24-hours a day, 7 days a week. The RCFD is staffed with a combination of County and State of California Department of Forestry & Fire Protection employees. They operate 97 fire stations that serve 1,360,000 residents over 7,206 miles of Riverside County.

The Moreno Valley Fire Department Strategic Plan 2012-2022 provides an overview of Fire Department staff and equipment. The City of Moreno Valley has 7 fire stations throughout the community and per

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the Strategic Plan house a total of six fire engines, two aerial ladder trucks, one brush engine, three reserve fire engines, one reserve fire truck, and two fire rescue squads. The two aerial ladder trucks are staffed with one Fire Captain, one Fire Apparatus Engineer, and one Firefighter II Paramedic. The aerial ladder trucks are staffed with one Fire Captain, one Fire Apparatus Engineer and two Firefighter II's. Staffing for all fire engines and trucks is continuous, 24-hours a day, 7-days a week. The City's fire department has a total of 77 sworn staff and 8 non-sworn staff. Each station is serviced by 3 fire professionals at all times. The closest fire station to the proposed project site is Station No. 99 located at 13400 Morrison Street and is approximately 1.9 miles away. Three additional stations are located within a 4 mile radius.

Per the Moreno Valley Fire Department Strategic Plan 2012-2022, the City participates in a cooperative, regionalized fire and rescue delivery system with the Riverside County Fire Department through the fire services contract between the City and the County. As part of this regionalized system, additional resources are available from the County and surrounding jurisdictions to Moreno Valley when there is an emergency that is utilizing a majority of the City's resources.

The project proposes a medical complex comprised of 6 buildings to be utilized as two medical buildings, three residential assisted living facilities and two skilled nursing facilities. It is expected that the proposed assisted living and skilled nursing facilities would accommodate seniors currently living in the City of Moreno Valley, while some may relocate to obtain care at these facilities. The project will be developed in 3 phases, with phase 1 consisting of the residential assisted living facilities that can accommodate up to 207 residents. Assisted Living I & II are single story buildings and approximately 16,200 sf. and 18,400 sf. and will provide for a combined total of 57 beds. Assisted Living III is a two-story facility with approximately 57,200 sf. and 150 beds. Phase 2 proposes the development of approximately two, two-story medical buildings with approximately 106,000 sf. of medical office space. Medical building 1 will provide professional medical office space for an array of medical uses and building 2 proposes a wellness center and Urgent Care. The final phase will develop the two, single story skilled nursing facilities with approximately 60,800 sf. and accomodate158 beds.

The development of a medical complex with assisted living and skilled nursing components is likely to increase the number of emergency service calls. However, based on the sites proximity to the City's existing fire stations, and comments from the City's Fire Prevention Bureau, the project site can adequately be served without the expansion of a new fire facility and the standard 5- minute response times can continue to be met. The project site is located less and a half-of mile from Riverside County Regional Medical Center and the City's Fire department is equipped with paramedic services.

Additionally, the project would be required to implement all applicable and current California Fire Code Standards. Moreover, the project will be reviewed by City and Fire officials to ensure adequate fire and emergency services as a result of project implementation. Less than significant impacts are anticipated.

b) Police protection?				

The City of Moreno Valley contracts with the Riverside County Sheriff's Department to provide 24-hour law enforcement services 7 days a week, 365 days a year. Services include, patrol, traffic enforcement, crime prevention, detective units and special enforcement. Per the department's website, the MVPD has adopted a "Zoning Policing" strategy. The intent of this strategy is to improve response times to calls for service and familiarize officers with their assigned community areas. The City has

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been divided into four zones and police officers are assigned to a specific zone. Each zone is comprised of a team that consists of a Zone Commander, Zone Supervisor, and Zone Coordinator. The proposed project site will be served by Zone 4 which encompasses southern Moreno Valley, south of Alessandro Blvd., west of Lasselle Street. The City's patrol division contains nine supervising Sergeants, 64 sworn Patrol Officers, three K-9 teams and 12 non-sworn officers.

As discussed above, the project will construct a medical office complex with a residential component for the proposed assisted living and skilled nursing facilities. The project will employ on-site nursing staff that would provide basic health emergency assistance that could limit requests for police or fire emergency services. However, a medical facility with a senior living component is expected to increase calls for emergency services beyond the current conditions. This increase in demand in not expected to hinder the City's ability to provide police services. The project would be reviewed by City and Police staff to ensure adequate response and services is maintained as a result of project implementation. All new construction is required to comply with the current Development Impact Fees in place at the time of construction. These fees allow the City to continue to finance public facilities which goes towards the various public services to include emergency services through the police and fire departments. Development of the proposed project will result in less than significant impacts to police services.

c) Schools?			X	

The project site lies within the Moreno Valley Unified School District. The nearest school site is Valley View High School, approximately 1.2 miles away from the project site. The project proposes to construct a medical complex with professional office space and residential assisted living and skilled nursing facilities. The residential facilities would be occupied by senior residents who would not cause a demand to school services or facilities. Employment generated by project implementation could be served by local employees. It is unlikely that a substantial number of employees would relocate from outside of the region. Therefore, any increase in population generated by employment would be limited and it is not expected to add a substantial increase in school age children. Additionally, development of the project site will be required to comply with MVUSD Development Impact Fees to assist in offsetting impacts to school facilities. Less than significant impacts are expected.

d) Parks?			X	

As previously discussed, the project proposes to construct a medical office complex with office space and senior living residential units comprised of assisted living and skilled nursing facilities. The proposed project would include on-site recreational activities as well as outdoor courtyards. The City of Moreno Valley offers an array of recreational and leisure activities. The City currently has 40 parks and/or joint use facilities, to include, tennis courts, multi-purpose fields and recreation centers. Residents of the assisted living facilities may choose to utilize neighborhood parks; Celebration Park is the closest neighborhood park and is approximately 1.4 miles away. The potential increase in the number of people utilizing park facilities would be nominal and would not result in adverse impacts to the City's existing regional and neighborhood parks. Therefore, less than significant impacts are anticipated.

e) Other public facilities?			X	

Project implementation is not expected to contribute to an increased need for any public services beyond those discussed in this section. As required by City ordinance, the project will be required to pay all

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applicable City Development Impact Fees. Therefore, the proposed project is anticipated to result in less than significant impacts.				
XV. RECREATION**.**				
a) Would the project increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			X	
The Project proposes to construct a medical campus consisting of two medical buildings, three assisted living facilities, and two skilled nursing facilities. The Project does not propose any residential use or other land use that may generate a population that would increase the use of existing parks or other recreational facilities. The proposed Project would include on-site recreational activities as well as courtyards. The City currently has 40 parks and/or joint use facilities (5531.66 maintained acres), and includes a 9-hole executive golf course, 23 multi-use sports fields, 11 tennis courts, nine basketball courts, 28 play apparatus, and three recreation centers. Patients of the assisted living facilities may choose to utilize neighborhood parks; Celebration Park is the closest neighborhood park and is approximately 1.4 miles away. The potential increase in the number of people utilizing park facilities would be limited and would not result in adverse impacts to the City's existing regional and neighborhood parks. Furthermore, the project would be required to pay Development Impact Fees including park facilities fees to offset impacts to City park, trails and recreation facilities. Therefore, less than significant impacts are anticipated.				
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			X	
The Project does include on-site recreational facilities as well as courtyards. The on-site recreational facilities will not have an adverse impact on the environment; alternatively it will provide patients and employees with convenient places for leisure and recreation. Less than significant impacts are expected.				
XVI. **TRANSPORTATION/TRAFFIC.** Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?		X		
A Traffic Impact Analysis was prepared for the project by Kunzman Associates, Inc. in October 2017. The report presents the traffic impact study methodology, analysis, recommendations and supporting data. The study indicates that the project will operate with acceptable Levels of Service (LOS) following implementation of the recommendations contained within the report. LOS is discussed further within this section. The project is located at the southeast corner of Nason Street and Brodiaea Avenue. It is proposed to				

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provide access to Nason Street, Brodiaea Avenue and Hospital Road. 114,480 square feet of medical office land use, 207 beds of assisted living land use, and 158 beds of nursing home land use are proposed a part of the project.

The study's objectives were to evaluate the following traffic conditions:

1) existing; 2) existing plus phases I, II, and III of the proposed project; 3) phase I opening year (2020) with and without project; 4) phases I and II opening year (2021) with and without project; 5) phases I, II, and III opening year (2022) with and without project; 6) year 2040 with and without project; and 7) determination of on-site and off-site improvements and system management actions needed to achieve City of Moreno Valley level of service requirements.

One of the principal findings of the Analysis is relative to the required Level of Service. This finding indicates that the City has established LOS requirements for all intersections. LOS C is the design objective for all movements and under no circumstance will it be less than LOS D during peak hour, volume-to-capacity of 0.90, for site and non-site traffic at buildout of the study area.

The assessment of intersections is known as the Intersection Delay Method based on the Highway Capacity Manual, Transportation Research Board Special Report 209. To calculate delay, the volume of traffic using the intersection is compared with the capacity of the intersection. Signalized intersections are considered deficient (Level of Service F) if the overall intersection critical volume to capacity equals or exceeds 1.0, even if the level of service defined by the delay value is below the defined Level of Service.

The Traffic Analysis states that existing volume to capacity ratios and LOS were calculated for the study area roadways. The general definition of capacity is the number of vehicles that can reasonably be expected to pass over a given section of roadway in a given period of time. The following table is included as an illustration of Capacity compared to LOS relative to roadway sections.

Roadway Type	Design Capacity (Level of Service C)	Maximum Capacity (Level of Service E)
Divided Major Arterial	45,000	56,250
Modified Divided Major Arterial	30,000	37,500
Arterial	30,000	37,500
Minor Arterial	20,000	25,000

According to the GP EIR the Circulation Element recognizes that an LOS of C is optimal. However it also allows peak hour LOS D in certain locations. These locations include areas of high employment concentration, north/south roads in the vicinity of SR-60 or other locations in already developed areas of the City with geometric constraints that prevent LOS C from being achieved.

Trip Generation rates were determined for daily traffic, morning peak hour inbound and outbound traffic, and evening peak hour inbound and outbound traffic for the existing and proposed land uses within the Traffic Analysis. Trip generation rates for existing and proposed land uses were obtained from the Institute of Transportation Engineers, Trip Generation Manual, 9th Edition, 2012.

The current General Plan designation for the approximately 18.38 site is R2. The R2 designation allows up to 2 residential dwelling units per acre. The project could potentially be developed with 36 residential

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dwelling units.

If developed with the current General Plan designation, the project would be expected to generate approximately 345 daily vehicle trips, 28 of which occur during the morning peak hour and 37 of which occur during the evening peak hour.

In comparison, the proposed project is projected to generate approximately 5136 daily vehicle trips, 338 of which occur during the morning peak hour and 504 of which occur during the evening peak hour.

The Traffic Analysis concluded that existing traffic conditions for roadway segements and study area intersections currently operate at acceptable LOS.

According to the Analysis, several impacts are expected to occur with or without the project.

- 2020 With or Without the Project: Unacceptable LOS without the improvement of the roadway segment at Alessandro Boulevard west of Nason Street.
- 2040 With or Without the Project: Unacceptable LOS during peak hours without the improvement of the intersections at Nason Street and Eucalyptus Avenue as well as Nason Street and Allesandro Boulevard.
- 2040 With or Without the Project: Unacceptable LOS without the improvement of the roadway segments of Nason Street south of Eucalyptus Avenue; Nason Street north of Cottonwood Avenue; Alessandro Boulevard west of Nason Street and Cactus Avenue east of Nason Street.

The only impact unique to the project which would not occur without the project is:

- 2040 With the Project: Unacceptable LOS without the improvement of the roadway segment of Nason Street between Cottonwood Avenue and Alessandro Boulevard.

The Traffic Study concludes with the following recommendations:

- Construct Nason Street from Brodiaea Avenue to Hospital Road its ultimate half-section width as a Divided Major Arterial (134 foot right-of-way) in conjunction with development, including landscaping and parkway improvements as necessary.
- Construct Brodiaea Avenue from Nason Street to the east project boundary at its ultimate half-section width in conjunction with development, including landscaping and parking improvements, as necessary.
- On-site traffic signing/striping should be implemented in conjunction with detailed construction plans for the project site.
- Sight distance at project accesses shall comply with standard California Department of Transportation and City of Moreno Valley sight distance standards. The final grading, landscaping, and street improvement plans shall demonstrate that sight distance standards are met. Such plans must be reviewed by the City and approved as consistent with this measure prior to issue of grading permits.
- Participate in the phased construction of off-site traffic signals through payment of traffic signal mitigation fees. The traffic signals within the study area at buildout should specifically include an interconnect of the traffic signals to function in a coordinated system.

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As is the case for any roadway design, the City of Moreno Valley should periodically review traffic operations in the vicinity of the project once the project is constructed to assure that the traffic operations are satisfactory.

Following implementation of the project design features, standard conditions of the City of Moreno Valley, along with the recommendations within the project specific Traffic Study and the following Mitigation Measure, impacts are anticipated to be less than significant.

Mitigation Measure:

TRA-1: The project applicant shall participate in the phased construction of off-site traffic signals through payment of traffic signal mitigation fees. The traffic signals within the study area at buildout should specifically include an interconnect of the traffic signals to function in a coordinated system. Traffic signal mitigation fees shall be paid prior to Opening Year (2020) with Project Phase 1 or alternate City approved deadline.

b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?			X	

The Congestion Management Program (CMP,) prepared by the Riverside County Transportation Commission (RCTC,) is intended to link land use, transportation and air quality with reasonable growth management methods, strategies and programs that effectively utilize new transportation funds to alleviate traffic congestion and related impacts. As the designated Congestion Management Agency (CMA), the RCTC prepares the CMP that designates a system of highways and roadways to include all State Highway facilities within Riverside County and a system of "principal arterials" to be included as the Congestion Management System (CMS.) Program updates include consultation with local agencies, the County of Riverside, transit agencies and sub-regional agencies like the Western Riverside Council of Governments.

It is the responsibility of local agencies, when reviewing and approving development proposals to consider the traffic impacts to the CMS. All development proposals and circulation projects to be included within the City of Moreno Valley are required to comply with the current policies and procedures set forth by the RCTC's CMP. The CMA provides a uniform database of traffic impacts for use in a countywide transportation computer model. The RCTC has recognized use of the Riverside Transportation Analysis Model (RIVTAM) to analyze traffic impacts associated with development proposals or land use plans. The methodology for measuring LOS must be that contained in the most recent version of the Highway Capacity Manual. Traffic standards must be set no lower than LOS E for any segment or intersection on the CMP system unless the current LOS is lower (i.e., LOS F).

WRCOG has developed a Transportation Uniform Mitigation Fee (TUMF) that complements the objectives of the CMP. The TUMF program is a regional traffic mitigation program. It is intended to address land use and transportation system consistency through an integrated system-wide program that is reviewed annually and based upon local agency general plans and associated ITE trip generation rates. The number of daily trips generated by each land use is derived from the most

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recent ITE *Trip Generation Manual*.

Under the TUMF, developers of residential, industrial and commercial property pay a development fee to fund transportation projects that will be required as a result of the growth the projects create. The payment of TUMF mitigation fees will be required as a Condition of Approval for any future development project.

Nason Street is part of the TUMF network in Moreno Valley. The project is required to implement the payment of TUMF fees, Development Impact Fee (DIF) Program and established LOS requirements. Project implementation is not anticipated to conflict with the regional congestion management program if the project description combined with standard conditions described in this discussion, including the payment of TUMF fees, are implemented prior to project construction. Less than significant impacts are anticipated.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?			X	

According to the General Plan EIR: Safety Risks Due to Changes in Air Traffic Patterns Implementation of the proposed General Plan is not expected to significantly increase the number of individuals using the airport facilities at March Air Reserve Base/March Inland Port, which is a joint civilian and military airport. Additionally, the proposed General Plan would not result in construction of incompatible development within the airport area of influence. The Project is not expected to result in a change in air traffic patterns, including either an increase in traffic levels or additional safety risks associated with new development in areas subject to airport operations. No significant impact associated with March Air Reserve Base or air traffic patterns has been identified.

The subject property is located approximately 4 miles northeast of March Air Reserve Base (ARB.) Impacts to air traffic patterns are not anticipated for the City or the proposed Project. Less than significant impacts are anticipated.

d) Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?			X	

The project site plan has been designed according to City of Moreno Valley standards. It provides an internal circulation system without sharp curves or dangerous intersections that is subject to review and approval by the City Traffic Engineer during standard City review processes. It is proposed to provide access to Nason Street, Brodiaea Avenue and Hospital Road. The intersection of Hospital Road and Nason Street is currently signalized and is proposed to provide full access to the Project. The intersection at Brodiaea Avenue and Nason Street is currently a cross street stop and is proposed to provide right turn in/out only access to the project and a cross street stop. The intersection at the Project Entry and Nason Street does not currently exist however it is proposed to be right turn in/out only with a cross street stop. The three points of Project access on Brodiaea Avenue are proposed to be full access, cross street stops.

These driveways have been designed to incorporate proper stacking, sight distance and intersection

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control (e.g. left turn pockets) features. Consequently, the project design will not substantially increase vehicular hazards and impacts would be considered less than significant.				
e) Result in inadequate emergency access?			X	
The GP EIR indicates that the City will continue to implement its adopted road standards, the State of California Department of Transportation Highway Design Manual, Municipal Code and Fire Code. As a result, new and improved roadways will be designed to avoid unsafe elements and to provide adequate emergency access. The project would be reviewed by the Moreno Valley Fire and Police Departments as a standard part of the City's review process. Access points will comply with emergency access requirements. Review and approval of the site design by these agencies would ensure that impacts related to emergency access would be less than significant.				
f) Conflict with adopted policies or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?			X	
The project is not expected to conflict with the adopted policies, plans or programs regarding public transit, bicycle or pedestrian facilities. The GP EIR indicates that RCTC is charged with coordinating the operation of all public transportation services in Riverside County with a goal towards promoting program efficiency and effectiveness between transit operators. Moreno Valley is primarily served by the Riverside Transportation Agency (RTA), which provides public bus service to most of western Riverside County, including Moreno Valley. The Project Traffic Study states that the study area is currently served by Riverside Transit Agency Routes 20, 35, 41, and 210 along Nason Street, Eucalyptus Avenue, Alessandro Boulevard, Cactus Avenue, and Iris Avenue. A Transfer Point is indicated at the Riverside University Medical Center which is directly adjacent to the Project, on the west side of Nason Street. The use of local transit services by future project employees and patients is expected to be a less than significant impact. The project proponent is expected to coordinate with this Transit Agency regarding public transit facilities. The GP EIR describes the Moreno Valley Bikeway Plan. It consists of Class I, Class II and Class III routes. Class I bikeways are dedicated trails, separated from vehicular traffic. Class II are designated, striped bikeways generally located along the right shoulder of the roadway. Class III routes are identified with roadside signs, and do not have marked travel lanes. These bikeways provide bicycling opportunities for both recreational and commuting purposes. The proposed project would improve pedestrian mobility by incorporating external and internal sidewalks and pedestrian walkways. The Traffic Analysis indicates that a Class 1 Multi-Use Path is located on Nason Street frontage. All plans will be reviewed and constructed in conformance with City safety standards. Improvements resulting from the project are expected to enhance, rather than obstruct or conflict with,				

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Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
the City's established goals on public, pedestrian and bicycle transportation or with any existing facilities. Impacts are expected to be less than significant.				
XIX. **TRIBAL CULTURAL RESOURCES**				
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or		X		
As previously discussed in the Cultural discussion of this document, MIG conducted a project and site specific study on historical and archaeological resources. The assessment included records searches, Native American scoping, historical background research, and field survey. The results of the field survey found no presence of artifacts or cultural resources (prehistoric or historic). However, there are eight (8) previously recorded archaeological resources (prehistoric and historic) located within a one-mile radius (5-prehistoric and 3-historic) of the Study Area. None of these resources will be impacted by the proposed project. No known historical resources from the EIC records were recorded within the Study Area However, there was a single historic built environment (family house) located within a one-mile radius of the Study Area and no historic resources were identified during the pedestrian survey. Therefore, no further evaluation of historical resources is necessary. Furthermore, the NAHC reported that the sacred land research yielded negative results for Native American Cultural Resources within the Project area, but recommended that local Native American Groups be contacted for further information. MIG sent eighteen written requests to local Tribal representatives for comments and further information. Of the eighteen organizations contacted, seven Tribal representatives have responded in writing. The Soboba Band of Luiseno Indian identified the area to be located in the Tribes Traditional Use Area and is considered culturally sensitive. As a result of AB 52 consultation, additional mitigation was recommended by Pechanga and Soboba Band of Luiseno Indians. These mitigation measures have been thoroughly incorporated into this IS/MND and are identified as TRI-1 of this Section and in Cultural Resource Section V of this document. Therefore, less than significant impacts are expected to Tribal Cultural Resources following the recommended mitigation measure TRI-1.				
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resource Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5025.1, the lead agency shall consider the significance of the resource to a California Native American tribe.		X		

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Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

As previously discussed in the Cultural discussion of this document and above, the Native American Heritage Commission (NAHC) sacred land record search did not indicate the presence of Native American resources within a half-mile radius of the project. The NAHC recommended that additional local Native Tribes be contacted for further information. MIG sent eighteen written requests to local Tribal representatives for comments and further information. Of the eighteen organizations contacted, seven Tribal representatives have responded in writing. The Soboba Band of Luiseno Indians, Cabazon Band of Mission Indians, Santa Rosa Band of Mission Indians, Pala Band of Mission Indians, San Luis Rey Band of Mission Indians, Agua Caliente Band of Cahuilla Mission Indians, and the San Manuel Band of Mission Indians.

The Soboba Band of Luiseno Indians concluded that although it is outside of their existing reservation, the project area does fall within the bounds of their Tribal Traditional Use Areas. The project location is in proximity to known sites, is a shared use area that was used in ongoing trade between the tribes, and is considered to be culturally sensitive by the people of Soboba. The Tribe requested: to initiate a consultation with the project proponents and lead agency; the transfer of information to the Soboba Band of Luiseno Indians regarding the progress of this project should be done as soon as new developments occur; to act as a consulting tribal entity for this project; and that tribal monitors be present during all ground disturbing proceedings including surveys and archaeological testing.

The Cabazon Band of Mission Indians, the Santa Rosa Band of Mission Indians, and the Pala Band of Mission Indians stated the Study Area was outside of their ancestral territory and had no comments regarding the proposed project. The San Luis Band of Mission Indians deterred their comments to the Pechanga Band of Mission Indians or to the Soboba Tribe. The Agua Caliente Band of Cahuilla Mission Indians requested a cultural technical report of the Study Area (the report was in-progress at the time of their request) to include CHIRIS- Record Search results before it would comment on the proposed project. Finally, the San Manuel Band of Mission Indians stated that they have no knowledge of tribal cultural resources located within the Study Area. However, they recommended that a Phase I Cultural Assessment of the Study Area be completed prior to earthmoving activities.

AB 52 Consultation was conducted by the City of Moreno Valley from December, 2016 through September, 2017. During the consultation period, the Soboba and Pechanga Band of Luiseno Indians have consulted with the City and requested Tribal Native American Monitoring and that additional mitigation be incorporated. All recommended mitigation has been incorporated within this IS/MND. Based on these findings, less than significant impacts with mitigation are anticipated.

Mitigation Measures:

TRI-1: If, during mass grading and trenching activities, the Archaeologist or Tribal Monitor suspect that an archaeological resource and/or TCR may have been unearthed, the monitor identifying the potential resources, in consultation with the other monitor(s) as appropriate, shall immediately halt and redirect grading operations in a 100-foot radius around the find to allow identification and evaluation of the suspected resource. The Native American monitor(s) or appropriate representative(s) and the archaeological monitor shall evaluate the suspected resource and make a determination of significance pursuant to California Public Resources Code Section 21083.2. The archaeological monitor and Tribal monitor(s) or appropriate representative(s), the Project

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Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Applicant, and the City Planning Division shall confer regarding mitigation of the discovered resource(s). All sacred sites, should they be encountered within the project area, shall be avoided and preserved as the preferred mitigation, if feasible. If preservation in place is not feasible, treatment and/or mitigation may include implementation of archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis.				
XVIII. **UTILITIES AND SERVICE SYSTEMS.** Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			X	
The project falls under the jurisdiction of the Eastern Municipal Water District (EMWD). The project will connect into the existing 18' sewer main located in Nason Street. The project proposes a medical complex with professional medical offices, and residential assisted living and skilled nursing components, which will result in an increase in wastewater flows. Per the Due Diligence meeting with EMWD (February 2, 2017), sewer services were deemed adequate to serve the project. The project will connect into the existing wastewater system to extend wastewater services throughout the project. The infrastructure and design components for the project will be consistent with EMWD requirements and their 2015 Urban Water Management Plan (UWMP). Therefore, the project is not expected to exceed wastewater treatment requirements pf the Regional Water Quality Control Board. The project will also undergo further review by EMWD and City engineering staff to ensure compliance with all applicable wastewater treatment requirements. Less than significant impacts are expected.				
b) Require or result in construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
EMWD provides domestic water and wastewater service to the project site and has a service area of approximately 555 square miles in western Riverside County. EMWD is both a retail and wholesale agency, serving a retail population of 546,146 people and a wholesale population of 215,075 people. EMWDs 2015 adopted UWMP has been developed to assist the agency in forecasting water demands and supplies. Additionally, EMWD currently treats approximately 43 million gallons per day of wastewater at its four active regional water reclamation facilities through 1,813 miles of sewer pipeline. The project site is currently vacant and undeveloped land that is not serviced by existing utilities. The project proposes to connect into existing water and sewer infrastructure located along Nason Street to extend service to the project site. The project will comply with the existing water management program in place. The development will be expected to implement water conservation measures to reduce impacts to public water supply. Furthermore, per EMWD, the project is a candidate for recycled water use which will further reduce impacts to potable water. The project will undergo further review by EMWD and City staff to ensure wastewater capacity and compliance with all wastewater treatment requirements. Additionally, the project will comply with all sewer and water installation and connection fees in place at the time of development. No new or expanded treatment facilities are expected as a result of project implementation. Less than significant impacts are expected.				

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Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
The proposed project will introduce permanent impervious surfaces to the undeveloped site in the form of structures, hardscape and paved streets. The Project will also incorporate storm water drainage facilities that will promote on-site retention, including the use of pervious pavement with subsurface stone-filled infiltration. This method of stormwater management will therefore facilitate groundwater recharge through infiltration at each of the Project's drainage management areas. To manage on-site runoff and prevent considerable increases in the release of runoff into the Moreno MDP, the project will incorporate a grading design with engineered storm drain facilities designed based on the findings of the project-specific hydrology study. The project area would be divided into multiple drainage management areas, where runoff from impervious areas would be routed to the appropriate BMPs. Only stormwater volume that exceeds the design capture volume would be conveyed off-site into the receiving Line I on Nason Street. A Project-Specific Water Quality Management Plan (WQMP) shall be prepared prior to issuance of a grading permit and implemented during the life of the project. The WQMP will identify the strategy of low impact development (LID) site design facilities, storm drain improvements, source control measures, and operation and maintenance procedures necessary to maintain the water quality control. No new or expanded storm drainage facilities are anticipated as a result of project implementation. Less than significant impacts are anticipated.				
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			X	
The majority of EMWDs water supplies are imported water purchased through the Metropolitan Water District of Southern California (MWD) and the Colorado River Aqueduct (CRA). EMWDs local supplies include groundwater, desalinated groundwater, and recycled water. Groundwater is pumped from the Hemet/San Jacinto and West San Jacinto areas of the San Jacinto Groundwater Basin. EMWDs adopted 2015 UWMP has been developed to assist the agency in reliably meeting current and future water demand in a cost effective manner. The project site is currently vacant and undeveloped land and not served by existing utilities. There is an existing 18' water main located in Nason Street along the project frontage. The project is proposing a medical complex comprised of medical office space and residential assisted living and skilled nursing facilities which would increase the demand to existing water supplies. The project is proposing to connect into the existing infrastructure in order to extend service. The infrastructure and design components for the connection of services will be consistent with EMWD and City requirements. The project would not necessitate the need for new of expand water facilities or entitlements and EMWD would be able to meet the increased demand for water services. Moreover, the proposed development will be expected to implement water conservation measures to reduce impacts to water. The project is also a candidate for recycled water use which will further reduce impacts to potable water. Less than significant impacts are expected.				

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Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Result in a determination by the wastewater treatment provider which serves or may serve the project determined that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			X	
As previously discussed, wastewater generated by the project will be adequately served by EMWD. EMWD currently treats approximately 43 million gallons per day of wastewater at its four active regional water reclamation facilities through 1,813 miles of sewer pipeline. Per the Due Diligence meeting with staff at EMWD, sewer services were deemed to be adequate to serve the project. Therefore, sufficient capacity is available impacts would be less than significant.				
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			X	
Solid waste disposal and recycling services for the City of Moreno Valley is provided by Waste Management. Waste Management of the Inland Empire is a local division of the world's leading waste disposal company Waste Management Inc. Waste Management serves over 220,000 residents and disposes over 17,000 tons of waste on a weekly basis in the Inland Empire. Solid waste and recycling collected in the City is transferred to the El Sobrante landfill located in Corona. This facility has the capacity to process up to 70,000 tons of waste per week. Per the CalRecycle Data Summary, this landfill has a remaining capacity to hold 145,530,000 tons of waste. The California Department of Public Health and the Medical Waste Management Program (MWMP) regulates the generation, handling, storage, treatment and disposal of medical waste, by implementing the Medical Waste Management Act (MWMA). The MWMP shall ensure the proper handling of medical waste by permitting and inspecting medical waste. All medical waste shall be transported to an approved and registered medical waste transfer station and treatment facility. The project will comply with all applicable solid waste statutes and regulations and medical waste programs and plans currently in place. Therefore, less than significant impacts are expected relative to solid waste capacity.				
g) Comply with federal, state, and local statues and regulations related to solid waste?				X
The City of Moreno Valley contracts with Waste Management to serve the City's solid waste and recycling needs. All solid waste activities are carried out in compliance with the State, Federal and local statutes regulating solid waste. The project is not anticipated to hinder or impede future compliance and will comply with all local and state statutes and regulations in place. No impacts are anticipated.				
XIX. **MANDATORY FINDINGS OF SIGNIFICANCE.**				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?			X	

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Issues and Supporting Information	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
As concluded in the Biological, Cultural Resources and Tribal Cultural Resources sections of this document, the proposed project would result in no impacts or less than significant impacts to these resources. The project is compatible with the surrounding land use and will not significantly degrade the overall quality of the region's environment, or substantially reduce the habitat of a wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate important examples of the major periods of California history or prehistory. Based upon the information and mitigation measures provided within this Initial Study and independent studies prepared for biological and cultural resources, approval and implementation of the project is not expected to substantially alter or degrade the quality of the environment, including biological, cultural, or historical resources. Less than significant impacts are expected.				
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			X	
The proposed project and its location are found to be consistent with the existing federal, state, and local policies. The project site is an ideal location for the proposed medical complex, given the close proximity to the existing Riverside County Regional Medical Center and other adjacent medical facilities. Approval and implementation of the proposed project will result in less than significant impacts related to cumulatively considerable impacts.				
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	
The proposed project will not result in impacts related to environmental effects that will cause substantial adverse effects on human beings. The project will be consistent with other surrounding medial uses and will be developed in accordance with all current building standards. The City's review process will ensure that all applicable guidelines and standards are followed and implemented. Based upon the findings provided in this document, and mitigation measures and standard conditions incorporated into the project, less than significant impacts are expected.				

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Sources

City of Moreno Valley, General Plan, July 2006

City of Moreno Valley Municipal Code

Riverside County General Plan (RCIP), adopted October 7, 2003

Eastern Municipal Water District Urban Water Management Plan, June 2016

California Department of Public Health – Medical Waste Management Plan

March Air Reserve/Inland Port Airport Land Use Compatibility Plan, November 2014

Special Studies

Biological Resource Assessment, prepared by MIG, October, 2016

Traffic Impact Analysis, prepared by Kunzman, March 2017 / Revised October 2017

Phase 1 Cultural Resource Assessment, prepared by MIG, June 2016

Air Quality & Climate Change Assessment, prepared by MIG, February 2017

Noise Study, prepared by MIG, March 2017

Preliminary Hydrology Report, prepared by MSA Consulting, September 2016

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Majestic Moreno Valley Medical Center
Mitigation Monitoring Program

Section Number	Mitigation Measures	Responsible for Monitoring	Timing	Impact after Mitigation
III. Air Quality	**AQ-1:** The applicant shall ensure that approved architectural coatings are utilized. Prior to the issuance of building permits, the City will verify that construction plans submitted by the project proponent reflect use of architectural coatings where the content of volatile organic compounds (VOC) does not exceed 25 grams per liter (g/l) for interior and exterior applications. This measure must be verified through standard building inspections in light of the performance standard that emissions of volatile organic compounds from application of interior or exterior coatings shall not exceed the daily emissions thresholds established by the South Coast Air Quality Management District. The applicant bears the cost of implementing this mitigation.	Developer Planning Department	Prior to building permits	Less than significant

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Section Number	Mitigation Measures	Responsible for Monitoring	Timing	Impact after Mitigation
IV. Biological Resources	**BIO-1:** The applicant shall avoid impacts to nesting birds and violation of state and federal laws pertaining to birds, all construction related activities (including but not limited to mobilization and staging, clearing, grubbing, vegetation removal, fence installation, demolition, and grading) should occur outside the avian nesting season (generally prior to Feb 1 or after Aug 31). If construction and construction noise occurs within the avian nesting season (from Feb 1 to Aug 31 or according to local requirements), all suitable habitats located within the project's area of disturbance including staging and storage areas plus a 250-foot (passerines) and 1,000 foot (raptor nests) buffer around these areas shall be thoroughly surveyed, as feasible, for the presence of active nests by a qualified biologist no more than 5-days before commencement of any site disturbance activities and equipment mobilization. If project activities are delayed more than 5-days, an additional nesting bird survey shall be performed. Active nesting is present if a bird is sitting in a nest, a nest has eggs or chicks in it, or adults are observed carrying food to the nest. The results of these surveys shall be documented. If it is determined that birds are actively nesting within the survey area, Mitigation Measure BIO-2 shall apply. Conversely, if the survey area is found to be absent of nesting birds, Mitigation Measure BIO-2 shall not be required.	Developer Planning Department Qualified Biologist	Prior to any ground disturbance	Less than significant

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Section Number	Mitigation Measures	Responsible for Monitoring	Timing	Impact after Mitigation
	BIO-2: If pre-construction nesting bird surveys result in the location of active nests, the applicant shall ensure that no site disturbance and mobilization of heavy equipment (including but not limited to equipment staging, fence installation, clearing, grubbing, vegetation removal, demolition and grading), shall take place within 250 feet of non-raptor nests and 1,000 feet of raptor nests, or as determined by a qualified biologist in consultation with the CDFW, until the chicks have fledged. Monitoring shall be required to insure compliance with the MBTA and relevant CDFW requirements. Monitoring dates and findings shall be documented.	Developer Planning Department Qualified Biologist	Prior to any ground disturbance	Less than significant
	BIO-3: The applicant shall ensure a pre-construction survey for burrowing owls be completed no more than 30-days prior to the start of construction at the Project site to ensure no burrowing owls have moved onto the site.	Developer Planning Department Qualified Biologist	Prior to any ground disturbance	Less than significant

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Section Number	Mitigation Measures	Responsible for Monitoring	Timing	Impact after Mitigation
V. Cultural Resources	**CUL-1:** Prior to the issuance of a grading permit, the Applicant shall retain a qualified professional archaeologist who meets U.S. Secretary of the Interior's Professional Qualifications and Standards. The Project archaeologist and Native American Tribal Representatives will conduct an Archaeological Sensitivity Training for construction personnel prior to commencement of excavation activities. The training session will include a handout and will focus on how to identify archaeological and Tribal Cultural resources that may be encountered during earthmoving activities and the procedures to be followed in such an event, including who to contact and the appropriate avoidance measures that need to be undertaken until the find(s) can be properly evaluated; the duties of archaeological and Native American monitors; and the general steps a qualified professional archaeologist would follow in conducting a salvage investigation if one is necessary. All new construction personnel that will conduct earthwork or grading activities must take the Archaeological Sensitivity Training prior to beginning work on the project and the professional archaeologist shall make themselves available to provide the training on an as-needed basis. A sign-in sheet shall be compiled to track attendance and shall be submitted to the City with the Phase IV Archaeological Monitoring Report.	Developer Planning Department Qualified Archaeologist Approved Native American Monitor(s)	Prior to grading and other ground disturbing activities	Less than significant

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Section Number	Mitigation Measures	Responsible for Monitoring	Timing	Impact after Mitigation
	CUL-2: Preconstruction Notification of Native American Tribal Representatives. Prior to the issuance of a grading permit, the Applicant shall provide evidence to the City of Moreno Valley that the Agua Band of Cahuilla Indians, Pechanga Band of Luiseño Indians and the Soboba Band of Luiseño Indians tribal representatives (hereafter referred to as "Native American Tribal Representatives") received a minimum of 30 days advance notice of all mass grading and trenching activities, and provide evidence of monitoring agreements between the Applicant and the Tribes. The Native American Tribal Representatives shall be notified a minimum of 48 hours in advance and allowed to attend the pre-grading meeting with the City and project construction contractors and/or monitor all project mass grading and trenching activities.	Developer Planning Department	Prior to grading permit	Less than significant
	CUL-3: Prior to grading permit issuance, the City shall verify that the following note is included on the Grading Plan: "If any suspected archaeological resources are discovered during ground-disturbing activities and the archaeological monitor or Tribal representatives are not present, the construction supervisor is obligated to halt work in a 100-foot radius around the find and call the project archaeologist and the Tribal representatives to the site to assess the significance of the find."	Developer Planning Department Qualified Paleontologist or Archaeologist	Prior to grading permit	Less than significant

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Section Number	Mitigation Measures	Responsible for Monitoring	Timing	Impact after Mitigation
	CUL-4: Prior to the issuance of a grading permit, the Applicant shall retain a qualified archaeological monitor. The archaeological monitor will work under the direction and guidance of the qualified professional archaeologist and will meet the U.S. Secretary of the Interior's Professional Qualifications and Standards. The archeological monitor shall have the authority to temporarily redirect earthmoving activities in the event that suspected archaeological resources are unearthed during project construction. Archaeological monitoring is required at all depths and strata. The archaeological monitor shall be present during all construction excavations (e.g., grading, trenching, or clearing/grubbing) into non-fill younger Pleistocene alluvial sediments. Multiple earth-moving construction activities may require multiple archaeological monitors. The frequency of monitoring shall be based on the rate of excavation and grading activities, proximity to known archaeological resources, the materials being excavated (native versus artificial fill soils), and the depth of excavation, and if found, the abundance and type of archaeological resources encountered. Full-time monitoring can be reduced to part-time inspections if determined adequate by the qualified professional archaeologist.	Developer Planning Department Qualified Archaeologist	Prior to grading and other ground disturbing activities	Less than significant
	CUL-5: The applicant shall ensure that all ground disturbing activities are ceased and treatment plans are implemented if archaeological resources are encountered. In the event that archaeological resources are unearthed during ground-disturbing activities, ground-disturbing activities shall be halted or diverted away from the	Developer Planning Department Qualified	During grading and other ground disturbing	Less than significant

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Section Number	Mitigation Measures	Responsible for Monitoring	Timing	Impact after Mitigation
	vicinity of the find so that the find can be evaluated. A buffer area of at least 100 feet shall be established around the find where construction activities shall not be allowed to continue until a qualified archaeologist has examined the newly discovered artifact(s) and has evaluated the area of the find. Work shall be allowed to continue outside of the buffer area. All archaeological resources unearthed by project construction activities shall be evaluated by a qualified professional archaeologist, who meets the U.S. Secretary of the Interior's Professional Qualifications and Standards. Should the newly discovered artifacts be determined to be prehistoric, Native American Tribes/Individuals should be contacted and consulted and Native American construction monitoring should be initiated. The Applicant and City shall coordinate with the archaeologist to develop an appropriate treatment plan for the resources. The plan may include implementation of archaeological data recovery excavations to address treatment of the resource along with subsequent laboratory processing and analysis. In the event that a cultural resource is encountered during ground-disturbing activities, the landowner(s) shall relinquish ownership of all such resources, including sacred items, burial goods, and all archaeological artifacts and non-human remains. The artifacts shall be relinquished through one or more of the following methods and evidence of such shall be provided to the City of Moreno Valley Planning Department: 1. Accommodate the process for Preservation-In-	Archaeologist	activities	

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Section Number	Mitigation Measures	Responsible for Monitoring	Timing	Impact after Mitigation
	Place/Onsite reburial of the discovered items with the consulting Native American tribes or bands, as detailed in the treatment plan prepared by the professional paleontologist. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not occur until all cataloguing and basic recordation have been completed; 2. A curation agreement with an appropriate qualified repository within Riverside County that meets federal standards per 36 CFR Part 79; therefore, the resources would be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility within Riverside County, to be accompanied by payment of the fees necessary for permanent curation; and/or 3. For purposes of conflict resolution, if more than one Native American tribe or band is involved with the project and cannot come to an agreement as to the disposition of cultural materials, they shall be curated at the Western Science Center by default.			

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Section Number	Mitigation Measures	Responsible for Monitoring	Timing	Impact after Mitigation
	CUL-6: Prior to building permit issuance, the Project archaeologist shall prepare a final Phase IV Monitoring Report as outlined in the CRMP, which shall be submitted to the City Planning Division, the appropriate Native American tribe(s), and the Eastern Information Center at the University of California, Riverside. The report shall include a description of resources unearthed, if any, evaluation of the resources with respect to the California Register and CEQA, and treatment of these resources. All cultural material, excluding sacred, ceremonial, grave goods and human remains, collected during the grading monitoring program and from any previous archaeological studies or excavations on the project site shall be curated in a Riverside County repository according to the current professional repository standards and may include the Pechanga Band's curatorial facility in Temecula, CA.	Developer Planning Department Qualified Archaeologist	Prior to building permits	Less than significant
	CUL-7: Conduct Paleontological Sensitivity Training for Construction Personnel. Prior to the issuance of a grading permit, the Applicant shall retain a professional paleontologist, who meets the qualifications set forth by the Society of Vertebrate Paleontology. The paleontologist shall conduct a Paleontological Sensitivity Training for construction personnel prior to commencement of excavation activities. The training will include a handout and will focus on how to identify paleontological resources that may be encountered during earthmoving activities, and the procedures to be followed in such an event, including who to contact and the appropriate avoidance measures that need to be undertaken until the find(s) can be properly evaluated;	Developer Planning Department Qualified Paleontologist	Prior to grading and other ground disturbing activities	Less than significant

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Section Number	Mitigation Measures	Responsible for Monitoring	Timing	Impact after Mitigation
	the duties of paleontological monitors; notification and other procedures to follow upon discovery of resources; and the general steps a qualified professional paleontologist would follow in conducting a salvage investigation if one is necessary. All new construction personnel that will conduct earthwork or grading activities must take the Paleontological Sensitivity Training prior to beginning work on the project and the professional paleontologist shall make themselves available to provide the training on an as-needed basis.			
	CUL-8: The applicant shall ensure the monitoring of construction excavations for paleontological resources is required for all excavations in older Quaternary alluvial fan deposits or in sedimentary deposits derived from the Mt. Eden Formation. Prior to the issuance of a grading permit, the Applicant shall retain a qualified paleontological monitor, who will work under the guidance and direction of a professional paleontologist, and who meets the qualifications set forth by the Society of Vertebrate Paleontology. The paleontological monitor shall have the authority to temporarily redirect earthmoving activities in the event that suspected paleontological resources are unearthed during project construction. The paleontological monitor shall be present during all construction excavations including, but not limited to grading, trenching, boring, and clearing/grubbing). Multiple earth-moving construction activities may require multiple paleontological monitors. The frequency of monitoring shall be based on the rate of excavation and grading. Monitoring may be reduced if potentially fossiliferous units are not present in the	Developer Planning Department Qualified Paleontologist	During grading and other ground disturbing activities	Less than significant

Attachment: Exhibit B to 2018-01_MMRP (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013

Section Number	Mitigation Measures	Responsible for Monitoring	Timing	Impact after Mitigation
	subsurface, or if present, are determined upon exposure and examination by the professional paleontologist to have a low potential to contain or yield fossil resources.			
	CUL-9: The applicant shall ensure that in the event that paleontological resources and or unique geological features are unearthed during ground-disturbing activities, all ground disturbing activities shall be halted or diverted away from the vicinity of the find in order to evaluate the resource. A buffer area of at least 100 feet shall be established around the find where construction activities shall not be allowed to continue until appropriate paleontological treatment plan has been approved by the Applicant and the City. Work shall be allowed to continue outside of the buffer area. The Applicant and City shall coordinate with a professional paleontologist, who meets the qualifications set forth by the Society of Vertebrate Paleontology, to develop an appropriate treatment plan for the resources. Treatment may include implementation of paleontological salvage excavations to remove the resource along with subsequent laboratory processing and analysis or preservation in place. At the paleontologist's discretion and to reduce construction delay, the grading and excavation contractor shall assist in removing rock samples for initial processing. Recovered specimens shall be properly prepared to a point of identification and permanent preservation, including screen washing sediments to recover small invertebrates and vertebrates, if necessary. Identification and curation of specimens into a professional, accredited public museum repository	Developer Planning Department Qualified Paleontologist	During grading and other ground disturbing activities	Less than significant

Attachment: Exhibit B to 2018-01_MMRP (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013

Section Number	Mitigation Measures	Responsible for Monitoring	Timing	Impact after Mitigation
	with a commitment to archival conservation and permanent retrievable storage is required for significant discoveries.			
	CUL-10: The applicant shall ensure prior to building permits, that a professional paleontologist prepares a report summarizing the results of the monitoring and salvaging efforts, the methodology used in these efforts, as well as a description of the fossils collected and their significance as well as any necessary maps and graphics to accurately record the original location of these resources. The report shall be submitted to the Applicant, the City, the San Bernardino County Natural History Museum, Natural History Museum of Los Angeles County, and representatives of other appropriate or concerned agencies to signify the satisfactory completion of the project and required mitigation measures.	Developer Planning Department Qualified Paleontologist	Prior to building permits	Less than significant
	CUL-11: In the event that any human remains are unearthed during project construction, the City of Moreno Valley and the Applicant shall comply with State Health and Safety Code Section 7050.5 The City of Moreno Valley and the Applicant shall immediately notify the Riverside County Coroner's office and no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition. If remains are determined to be of Native American descendent, the coroner has 24-hours to notify the Native American Heritage Commission (NAHC). The NAHC shall identify the person(s) thought to be the Most Likely Descendent (MLD). After the MLD has inspected the remains and the site, they have 48 hours to recommend to the landowner the treatment or disposal,	Developer Planning Department Qualified Archaeologist	During grading and other ground disturbing activities	Less than significant

Attachment: Exhibit B to 2018-01_MMRP (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013

Section Number	Mitigation Measures	Responsible for Monitoring	Timing	Impact after Mitigation
	with appropriate dignity, the human remains and any associated funery objects. The MLD shall complete their inspection and make their recommendation within 48 hours of being granted access by the landowner to inspect the discovery. The recommendation may include the scientific removal and nondestructive analysis of human remains and cultural items associated with Native American burials. Upon the discovery of the Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred, as prescribed in this mitigation measure, with the MLD regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The landowner shall discuss and confer with the descendants all reasonable options regarding the descendants' preferences for treatment. If the NAHC is unable to identify a MLD, or the MLD identified fails to make a recommendation, or the landowner rejects the recommendation of the MLD and the mediation provided for in Subdivision (k) of Section 5097.94, if invoked, fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall inter the human remains and items associated with Native American human remains with appropriate dignity on the facility property in a location not subject to further and future subsurface disturbance. A record of the reburial shall be filed with the NAHC and			

Attachment: Exhibit B to 2018-01_MMRP (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013

Section Number	Mitigation Measures	Responsible for Monitoring	Timing	Impact after Mitigation
	the CHRIS-EIC. Upon the reburial of the human remains, the MLD shall file a record of the reburial with the NAHC and the project archaeologist shall file a record of the reburial with the EIC.			
XVII. Noise	**NOI-1:** Project proponent shall provide the following (or equivalent) noise abatement measures as part of the building construction plans in order to meet the City of Moreno Valley exterior noise standards of 60dBA for residential and 65dBA for commercial: • Stationary construction noise sources such as generators or pumps must be located at least 100 feet from sensitive land uses, as feasible, or at maximum distance when necessary to complete work near sensitive land uses, to be verified by submittal of a construction staging plan. This mitigation measure must be implemented throughout construction and may be periodically monitored by the Planning Director, or designee during routine inspections. • Construction staging areas must be located as far from noise sensitive land uses as feasible, to be verified by submittal of a construction staging plan. Implementation of this measure shall occur throughout construction through periodic monitoring by the Planning Director or designee during routine inspections. • Throughout construction, the contractor shall ensure all construction equipment is equipped with included noise attenuating devices and are properly maintained. This mitigation measure	Developer	During construction	Less than Significant

Attachment: Exhibit B to 2018-01_MMRP (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013

Section Number	Mitigation Measures	Responsible for Monitoring	Timing	Impact after Mitigation
	shall be periodically monitored by the Planning Director or designee during routine inspections. • Idling equipment must be turned off when not in use. This mitigation measure may be periodically monitored by the Planning Director or designee during routine inspections. • Equipment must be maintained so that vehicles and their loads are secured from rattling and banging. This mitigation measure may be periodically monitored by the Planning Director or designee during routine inspections.			
	NOI-2: The developer shall ensure temporary construction noise control barriers shall be installed where residential uses are located adjacent to the project site (south and west). The type and location of the noise control barriers shall be shown on all grading and building plans and subject to approval by the Planning Director, or designee.	Developer	During construction	Less than Significant
	NOI-3: All construction activities shall comply with the City of Moreno Valley Noise Ordinance (Chapter 11.80 of the City of Moreno Valley Municipal Code). This requirement shall be noted on all grading and building plans and in bid documents issued to construction contractors.	Developer	During construction	Less than Significant

Attachment: Exhibit B to 2018-01_MMRP (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013

Section Number	Mitigation Measures	Responsible for Monitoring	Timing	Impact after Mitigation
XVI. Traffic	**TRA-1:** The project applicant shall participate in the phased construction of off-site traffic signals through payment of traffic signal mitigation fees. The traffic signals within the study area at buildout should specifically include an interconnect of the traffic signals to function in a coordinated system. Traffic signal mitigation fees shall be paid prior to Opening Year (2020) with Project Phase 1 or alternate City approved deadline.	Developer City Engineer	Prior to Year 2020	Less than Significant
XIX. Tribal Cultural Resources	**TRI-1:** If, during mass grading and trenching activities, the Archaeologist or Tribal Monitor suspect that an archaeological resource and/or TCR may have been unearthed, the monitor identifying the potential resources, in consultation with the other monitor(s) as appropriate, shall immediately halt and redirect grading operations in a 100-foot radius around the find to allow identification and evaluation of the suspected resource. The Native American monitor(s) or appropriate representative(s) and the archaeological monitor shall evaluate the suspected resource and make a determination of significance pursuant to California Public Resources Code Section 21083.2. The archaeological monitor and Tribal monitor(s) or appropriate representative(s), the Project Applicant, and the City Planning Division shall confer regarding mitigation of the discovered resource(s). All sacred sites, should they be encountered within the project area, shall be avoided and preserved as the preferred mitigation, if feasible. If preservation in place is not feasible, treatment and/or mitigation may include implementation of archaeological data recovery excavations to remove the	Developer Planning Department Qualified Archaeologist Approved Native American Monitor(s)	During grading and other ground disturbing activities	Less than significant

Attachment: Exhibit B to 2018-01_MMRP (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013

Section Number	Mitigation Measures	Responsible for Monitoring	Timing	Impact after Mitigation
	resource along with subsequent laboratory processing and analysis.			

Attachment: Exhibit B to 2018-01_MMRP (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013

PLANNING COMMISSION RESOLUTION NO. 2018-02

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF MORENO VALLEY RECOMMENDING THAT THE CITY COUNCIL APPROVE APPLICATION NO. PEN16-0048: AN AMENDMENT TO THE GENERAL PLAN LAND USE MAP, CHANGING THE LAND USE DESIGNATION FROM RESIDENTIAL 2 (R2) TO RESIDENTIAL/OFFICE (R/O), FOR AN APPROXIMATELY 18.48 ACRES PROJECT SITE LOCATED AT THE SOUTHEAST CORNER OF NASON STREET AND BRODIAEA AVENUE.

WHEREAS, the applicant, Galaxy Management Inc., filed Application No. PEN16-0048, requesting an amendment to the Moreno Valley General Plan, as described in the title of this Resolution and the attached Exhibit A; and

WHEREAS, the application has been evaluated in accordance with established City of Moreno Valley (City) procedures, and with consideration of the General Plan and other applicable regulations; and

WHEREAS, the City has prepared an Initial Study and Mitigated Negative Declaration consistent with the California Environmental Quality Act (CEQA) based on a thorough analysis of potential environmental impacts; and

WHEREAS, upon completion of a thorough development review process the project was appropriately agendized and noticed for a public hearing before the Planning Commission of the City of Moreno Valley (Planning Commission); and

WHEREAS, the public hearing notice for this project was published in the local newspaper on January 14, 2018. Public notice was sent to all property owners of record within 300 feet of the project site on January 11, 2018. The public hearing notice for this project was also posted on the project site on January 12, 2018;

WHEREAS, on January 25, 2018, the Planning Commission held a public hearing to consider the application; and

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred; and

WHEREAS, pursuant to Government Code Section 66020(d)(1), **NOTICE IS HEREBY GIVEN** that this project is subject to certain fees, dedications, reservations and other exactions as provided herein.

NOW, THEREFORE, BE IT RESOLVED, it is hereby found, determined and resolved by the Planning Commission as follows:

A. This Planning Commission hereby specifically finds that all of the facts set forth above in this Resolution are true and correct.

Attachment: 2018-02 Reso GP [Revision 2] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

B. Based upon substantial evidence presented to this Planning Commission during the above-referenced meeting on January 25, 2018, including written and oral staff reports, public testimony and the record from the public hearing, this Planning Commission hereby specifically finds as follows:

1. **Conformance with General Plan Policies –** The proposed general plan amendment and zone change are consistent with the General Plan, and its goals, objectives, policies and programs.

   FACT: The proposed project includes multiple entitlement applications that will enable the development of a five building mixed-use medical center campus on the presently vacant 18.48 acre project site. The entitlement applications include a General Plan Amendment, to change the land use designation of the project site from Residential Two (R2) to Residential Office (R/O), and a Change of Zone request to change the zoning designation of the project site from Residential Agricultural Two (RA2) to Office (O) with a Medical Use Overlay. The Master Plot Plan application demonstrates the layout for the entire proposed campus comprised of two medical office buildings, three assisted living facilities, two skilled nursing facilities (365 beds), associated parking areas, and new access drives to the site. Given the proximity of the project site to adjacent residential zoning, Conditional Use Permit applications are required for the Assisted Living and Skilled Nursing uses. A Phasing Plan and Parcel Map 36227 (to subdivide the project site into seven parcels) are included in the approval.

   The Goals and Objectives of the Community Development Element of the General Plan encourages the development of independent living and congregate care facilities for senior citizens in locations with convenient access to social, commercial, and medical services (Objective 2.18, Policy 2.18.4).

   The proposal is consistent with the proposed General Plan designation and will provide assisted living and skilled nursing facilities providing neighborhood scale living accommodations for the senior community. The location of the proposed project, directly across from the Riverside County Regional Medical Center meets the General Plan Policy 2.2.4 of a supportive and compatible medical service

   The project as designed and conditioned meets the stated General Plan policies for Residential Office development with the underlying zoning and the medical use overlay.

   The Goals and Objectives of the Community Development Element of the General Plan include providing supportive senior facilities and medical uses.

Attachment: 2018-02 Reso GP [Revision 2] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

2. **Health, Safety and Welfare –** The proposed general plan amendment will not be detrimental to the public health, safety or welfare.

FACT: Future development under the proposed General Plan Amendment will not result in unacceptable levels of protection from natural and man-made hazards to life, health, and property and is therefore consistent with General Goal 9.6.1. The project site is located within approximately 1.5 miles of Fire Station No. 99 and within close proximity to emergency services which is consistent with General Plan Goal 9.6.2 which requires emergency services that are adequate to meet minor emergency and major catastrophic situations.

The California Environmental Quality Act (CEQA) is a statewide environmental law contained in Public Resources Code §§21000-21177. CEQA applies to most public agency decisions to carry out, authorize, or approve actions that have the potential to affect the environment. CEQA requires that public agencies analyze and acknowledge the environmental consequences of their discretionary actions and consider alternatives and mitigation measures that could avoid or reduce significant adverse impacts to the environment when avoidance or reduction is feasible. The CEQA compliance process provides public agencies and the general public an opportunity to comment on a proposed project's environmental effects. The proposed project is not exempt from CEQA. It was determined that an Initial Study would be prepared to determine whether the proposed project may have a significant effect on the environment.

An Initial Study/Mitigated Negative Declaration were prepared which assessed the potential of the proposed General Plan Amendment and the related Change of Zone, Tentative Parcel Map, Master Plot Plan, Plot Plans, Conditional Use Permits and a Phasing Plan for the Majestic Moreno Valley project applications to impact the environment. The proposed project includes the development of the project site with mixed use medical center campus on approximately 18.48 acres.
The Initial Study provided the documentation of the factual basis for the finding in the Mitigated Negative Declaration that the proposed project will not have a significant effect on the environment with the implementation of mitigation measures. The City as the Lead Agency has prepared a Mitigated Negative Declaration (MND) pursuant to Sections 15070 et seq. of the State CEQA Guidelines.

The Mitigated Negative Declaration is an informational document that provides the City, other public agencies, and the public at-large with an objective assessment of the potential environmental impacts that could result from implementation of the proposed project. The preparation and review of the Initial Study/Mitigated Negative Declaration reflects the independent judgment of the City.

Attachment: 2018-02 Reso GP [Revision 2] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

The MND has been considered by the Planning Commission and prepared as there is no evidence that the proposed project will have a significant impact on public health or be materially injurious to surrounding properties of the environment as a whole.

BE IT FURTHER RESOLVED that the Planning Commission **HEREBY APPROVES** Resolution No. 2018-02, and hereby recommends that the City Council:

1. **APPROVE** General Plan Amendment Application No. PEN16-0048 based on the findings contained in this resolution.

APPROVED this 25th day of January, 2018.

AYES:
NOES:
ABSTAIN:

_____
Jeffrey Barnes
Chair, Planning Commission

ATTEST:

_____
Richard J. Sandzimier, Planning Official

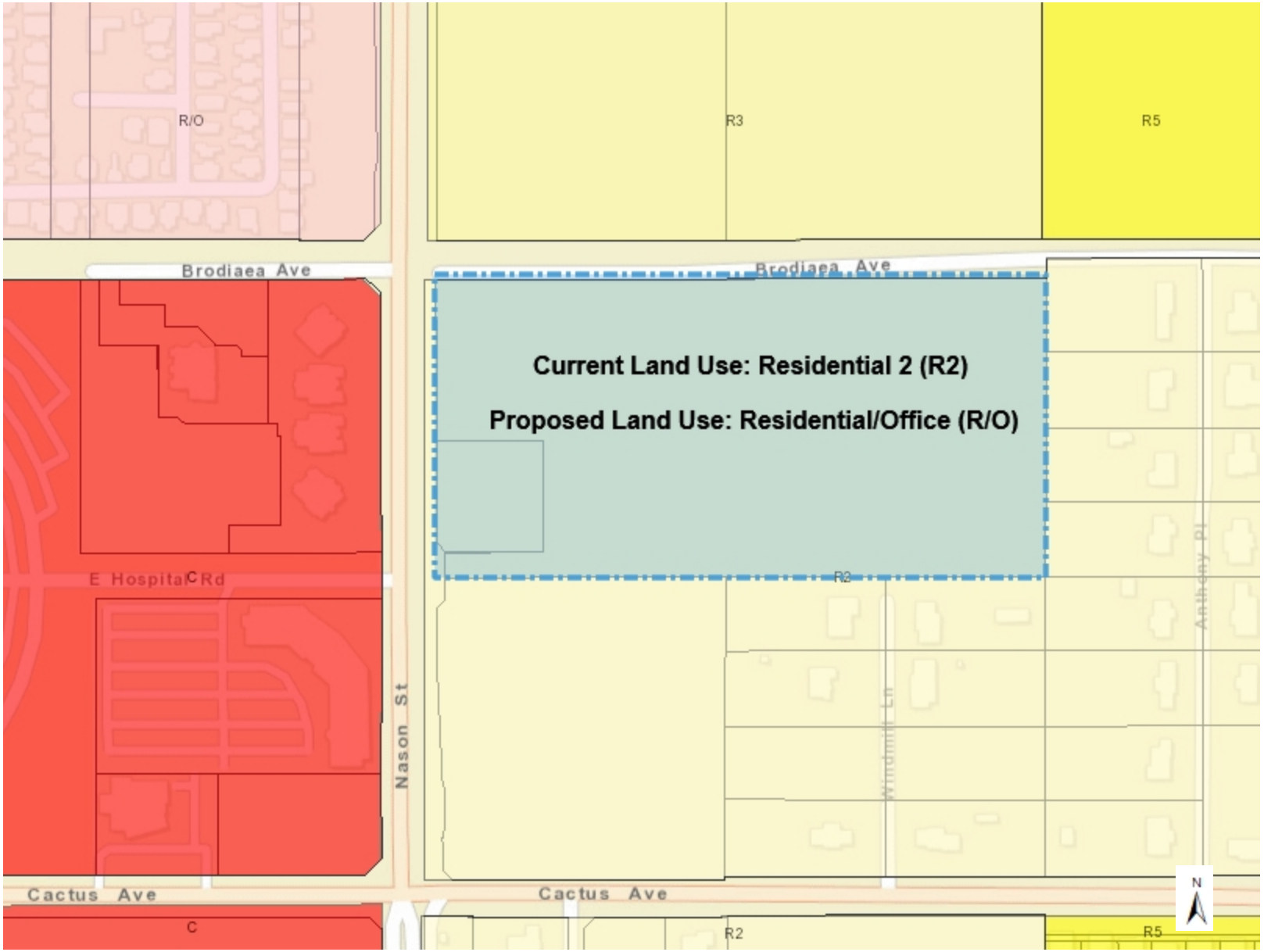
APPROVED AS TO FORM:

_____
City Attorney

ATTACHED: Exhibit A: General Plan Amendment Map

Attachment: 2018-02 Reso GP [Revision 2] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

PEN16-0048
General Plan Amendment



Legend

Land Use

- Residential: Max. 1 du/ac
- Mixed Use
- Residential: Max. 2 du/ac
- Rural Residential: Max 2.5 du/ac
- Residential: Max. 3 du/ac
- Residential: Max. 5 du/ac
- Residential: Max. 5 or 15 du/ac
- Residential: Max. 10 du/ac
- Residential: Max.15 du/ac
- Residential: Max. 20 du/ac
- Residential: Max. 30 du/ac
- Hillside Residential
- Planned Residential
- Residential/Office
- Office
- Commercial
- Business Park/Light Industrial
- Open Space
- Public Facilities
- Floodplain

Parcels

City Boundary

Notes

APNs: 486-290-036 & 037
Proposed General Plan Amendment from Residential 2 (R2) to Residential/Office (R/O).

631.0 0 315.48 631.0 Feet

WGS_1984_Web_Mercator_Auxiliary_Sphere

Print Date: 1/11/2018

DISCLAIMER: The information shown on this map was compiled from the City of Moreno Valley GIS and Riverside County GIS. The land base and facility information on this map is for display purposes only and should not be relied upon without independent verification as to its accuracy. Riverside County and City of Moreno Valley will not be held responsible for any claims, losses or damages resulting from the use of this map.

PLANNING COMMISSION RESOLUTION NO. 2018-03

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF MORENO VALLEY RECOMMENDING THAT THE CITY COUNCIL APPROVE APPLICATION NO. PEN16-0049 AN AMENDMENT TO THE OFFICIAL ZONING ATLAS, CHANGING THE ZONING CLASSIFICATION FROM RESIDENTIAL AGRICULTURE (RA2) TO OFFICE (O) WITH A MEDICAL USE OVERLAY FOR APPROXIMATELY 18.38 ACRES LOCATED AT THE SOUTHEAST CORNER OF NASON STREET AND BRODIAEA AVENUE

WHEREAS, the applicant, Galaxy Management Inc, filed Application No. PEN16-0049 (PA16-0062), requesting an amendment to Page 100 of the Official Zoning Atlas to the zoning classification for Assessor Parcel Numbers 486-290-036 and 486-290-037 as described in the title of this resolution and the attached Exhibit A: Proposed Changes to the Zoning Atlas, Exhibit B: Change of Zone Map and Exhibit C: Medical Use Overlay; and

WHEREAS, the application has been evaluated in accordance with established City of Moreno Valley (City) procedures, and with consideration of the General Plan and other applicable regulations; and

WHEREAS, the City has prepared an Initial Study and Mitigated Negative Declaration consistent with the California Environmental Quality Act (CEQA) based on a thorough analysis of potential environmental impacts; and

WHEREAS, upon completion of a thorough development review process the project was appropriately agendized and noticed for a public hearing before the Planning Commission of the City of Moreno Valley (Planning Commission); and

WHEREAS, the public hearing notice for this project was published in the local newspaper on January 14, 2017. Public notice was sent to all property owners of record within 300 feet of the project site on January 11, 2017. The public hearing notice for this project was also posted on the project site on January 12, 2017;

WHEREAS, on January 25, 2018, the Planning Commission held a public hearing to consider the application; and

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred; and

WHEREAS, pursuant to Government Code Section 66020(d)(1), **NOTICE IS HEREBY GIVEN** that this project is subject to certain fees, dedications, reservations and other exactions as provided herein.

NOW, THEREFORE, BE IT RESOLVED, it is hereby found, determined and resolved by the Planning Commission as follows:

Attachment: 2018-03 Reso ZC [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

A. This Planning Commission hereby specifically finds that all of the facts set forth above in this Resolution are true and correct.

B. Based upon substantial evidence presented to this Planning Commission during the above-referenced meeting on January 25, 2017, including written and oral staff reports, public testimony and the record from the public hearing, this Planning Commission hereby specifically finds as follows:

1. **Conformance with General Plan Policies –** The proposed amendment and is consistent with the General Plan, and its goals, objectives, policies and programs.

   FACT: With the approval of the General Plan Amendment to Residential/Office for the site, the proposed change in zoning designation to Office with a Medical Overlay would be consistent with the General Plan.

   The proposed project includes multiple entitlement applications that will enable the development of a seven building mixed-use medical center campus on the presently vacant 18.48 acre project site. The entitlement applications include a General Plan Amendment, to change the land use designation of the project site from Residential Two (R2) to Residential Office (R/O), a Change of Zone request to change the zoning designation of the project site from Residential Agricultural Two (RA2) to Office (O) with a Medical Use Overlay. The Master Plot Plan application demonstrates the layout for the entire proposed campus comprised of two medical office buildings, three assisted living facilities, two skilled nursing facilities (365 beds), associated parking areas, and new access drives to the site. Given the proximity of the project site to adjacent residential zoning, Conditional Use Permit applications are required for the Assisted Living and Skilled Nursing uses. An application for Parcel Map 36227 has been submitted to subdivide the project site into seven parcels.

   The Goals and Objectives of the Community Development Element of the General Plan encourages the development of independent living and congregate care facilities for senior citizens in locations with convenient access to social, commercial, and medical services (Objective 2.18, Policy 2.18.4). The proposal is consistent with the General Plan and will provide assisted living and skilled nursing facilities providing neighborhood scale living accommodations for the senior community. The location of the proposed project, directly across from the Riverside County Regional Medical Center meets the General Plan Policy 2.2.4 of supportive and compatible medical service.

Attachment: 2018-03 Reso ZC [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

2. **Conformance with the Zoning Regulations –** The proposed zoning is consistent with the purposes and intent of Title 9 of the City of Moreno Valley Municipal Code.

FACT: the Change of Zone from Residential Agriculture 2 (RA2) for approximately 18.48 acres to Office (O) with a medical use overlay would be consistent with the purposes and intent of Title 9 to allow for various types of housing and medical services. The proposed use, assisted living, skilled nursing living and medical offices provide services and accommodations for senior living.

The surrounding land uses near the site include single-family residential zoning to the north, east and south (Residential 3-north, Residential Agricultural 2, east and south). Some areas of the south and east are developed with large lot single family homes. To the west is the Riverside County Regional Medical Center with Memory Care and Assisted living facilities north of the Medical Center.

The proposed Residential/Office Use with the Medical Use Overlay is compatible with the established land use designations of the parcels in the area, allowing for various types of living close to medical facilities.

3. **Health, Safety and Welfare –** The proposal will not be detrimental to the public health, safety or welfare.

FACT: Future development under the proposed zoning designation of Office with a medical overlay will not result in unacceptable levels of protection from natural and man-made hazards to life, health, and property and is therefore consistent with General Goal 9.6.1. The project site is located within approximately 1.5 miles of Fire Station No. 99 and within close proximity to emergency services which is consistent with General Plan Goal 9.6.2 which requires emergency services that are adequate to meet minor emergency and major catastrophic situations.

The California Environmental Quality Act (CEQA) is a statewide environmental law contained in Public Resources Code §§21000-21177. CEQA applies to most public agency decisions to carry out, authorize, or approve actions that have the potential to affect the environment. CEQA requires that public agencies analyze and acknowledge the environmental consequences of their discretionary actions and consider alternatives and mitigation measures that could avoid or reduce significant adverse impacts to the environment when avoidance or reduction is feasible. The CEQA compliance process provides public agencies and the general public an opportunity to comment on a proposed project's environmental effects. The proposed project is not exempt from CEQA. It was determined that an Initial Study would be prepared to determine

Attachment: 2018-03 Reso ZC [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

whether the proposed project may have a significant effect on the environment.

An Initial Study/Mitigated Negative Declaration were prepared which assessed the potential of the proposed General Plan Amendment and the related Change of Zone, Tentative Parcel Map, Master Plot Plan, Plot Plans, Conditional Use Permits and a Phasing Plan for the Majestic Moreno Valley project applications to impact the environment. The proposed project includes the development of the project site with mixed use medical center campus on approximately 18.48 acres.
The Initial Study provided the documentation of the factual basis for the finding in the Mitigated Negative Declaration that the proposed project will not have a significant effect on the environment with the implementation of mitigation measures. The City as the Lead Agency has prepared a Mitigated Negative Declaration (MND) pursuant to Sections 15070 et seq. of the State CEQA Guidelines.

The Mitigated Negative Declaration is an informational document that provides the City, other public agencies, and the public at-large with an objective assessment of the potential environmental impacts that could result from implementation of the proposed project. The preparation and review of the Initial Study/Mitigated Negative Declaration reflects the independent judgment of the City.

The MND has been considered by the Planning Commission and prepared as there is no evidence that the proposed project will have a significant impact on public health or be materially injurious to surrounding properties of the environment as a whole.

BE IT FURTHER RESOLVED that the Planning Commission **HEREBY APPROVES** Resolution No. 2018-03, and hereby recommends that the City Council:

1. **APPROVE** Change of Zone Application No. PEN16-0049, based on the findings contained in this resolution.

APPROVED this 25th day of January, 2018.

AYES:
NOES:
ABSTAIN:

Attachment: 2018-03 Reso ZC [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

_____
Jeffrey Barnes
Chair, Planning Commission

ATTEST:

_____
Richard J. Sandzimier, Planning Official

APPROVED AS TO FORM:

_____
City Attorney

ATTACHED: Exhibit A: Proposed Changes to the Zoning Atlas, Exhibit B: Change of Zone Map and Exhibit C: Medical Use Overlay.

Attachment: 2018-03 Reso ZC [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Jul 16, 2015

The information shown on this map was compiled from the Riverside County GIS and the City of Moreno Valley GIS. The land base and facility information on this map is for display purposes only and should not be relied upon without independent verification as to its accuracy. Riverside County and City of Moreno Valley will not be held responsible for any claims, losses or damages resulting from the use of this map.

MORENO VALLEY
WHERE DREAMS SOAR

1 inch equals 400 feet

0 200 400 600 800 Feet

City of Moreno Valley Zoning Atlas

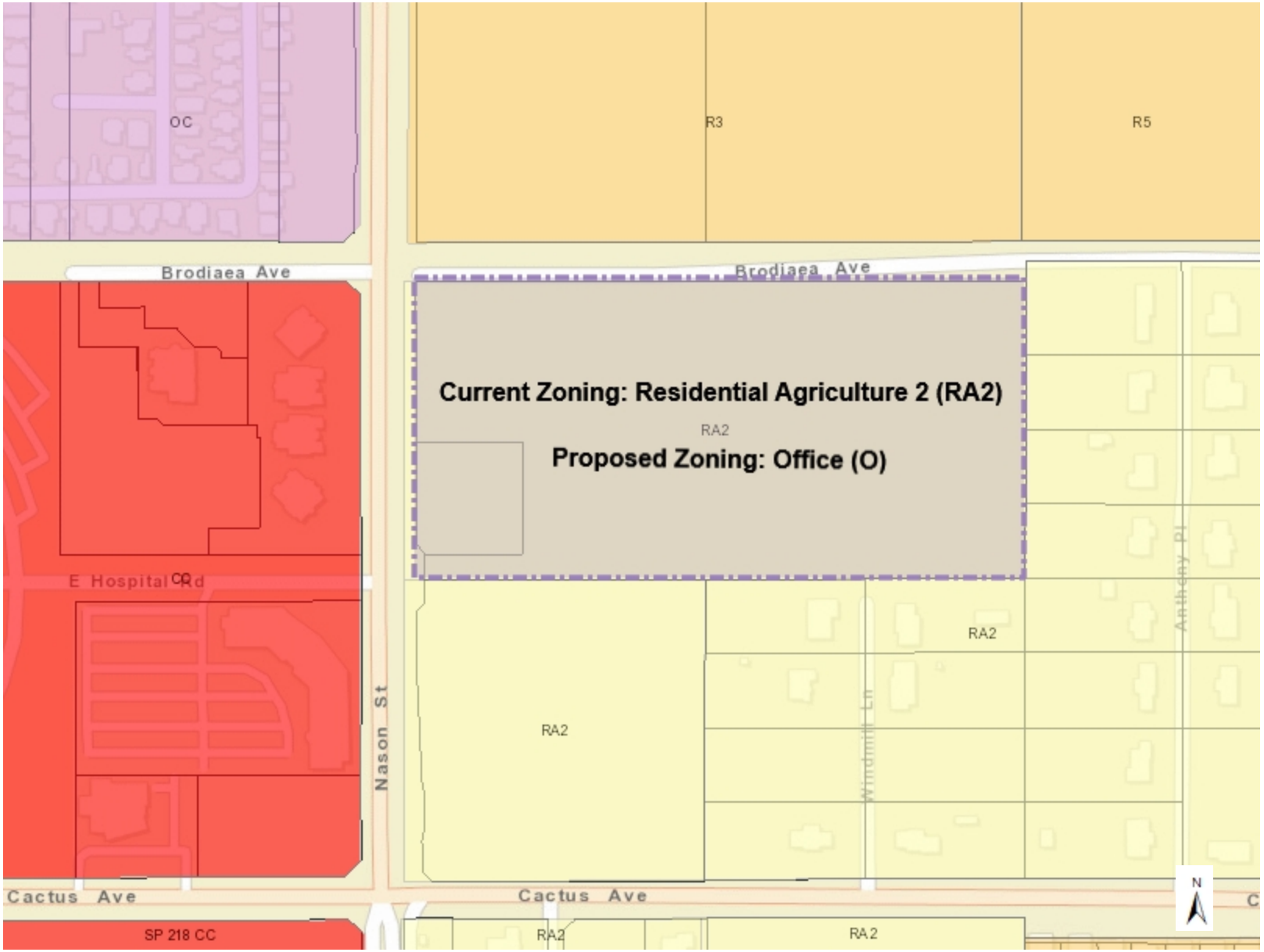
PROPOSED CHANGES

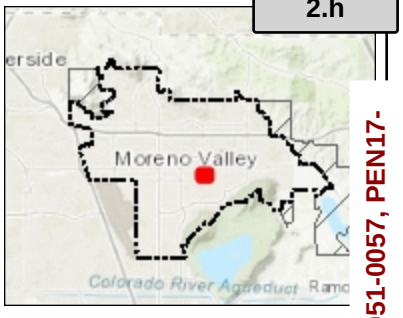
N W E S

EXHIBIT A TO 2018-03

Attachment: Exhibit A to 2018-03_Proposed Change [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-

PEN16-0049
Change of Zone





Legend

Zoning

- Commercial
- Industrial/Business Park
- Public Facilities
- Office
- Planned Development
- Large Lot Residential
- Residential Agriculture 2 DU/AC
- Residential 2 DU/AC
- Suburban Residential
- Multi-family
- Open Space/Park

Parcels

City Boundary

631.0 0 315.48 631.0 Feet

WGS_1984_Web_Mercator_Auxiliary_Sphere

Print Date: 1/11/2018

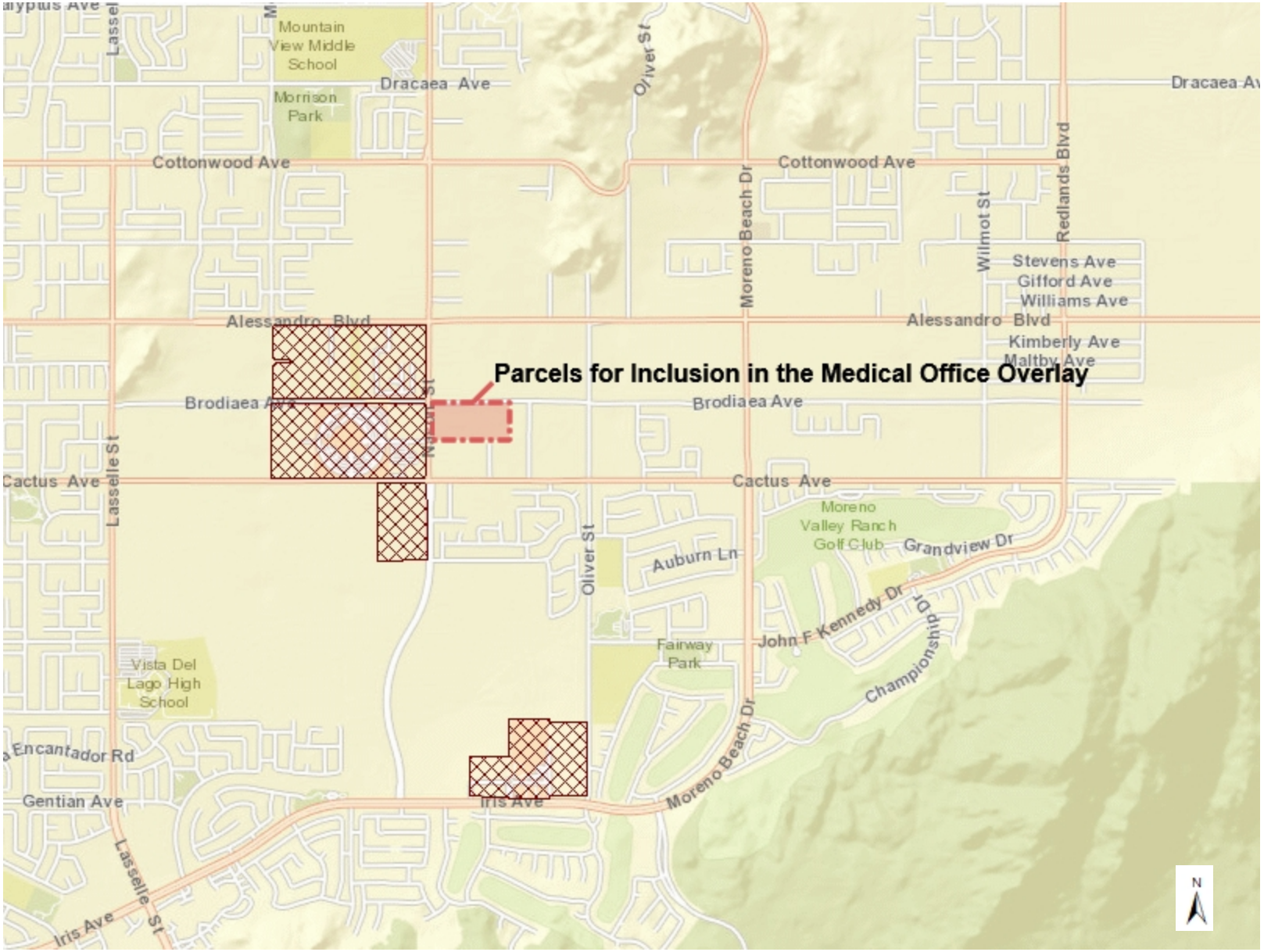
DISCLAIMER: The information shown on this map was compiled from the City of Moreno Valley GIS and Riverside County GIS. The land base and facility information on this map is for display purposes only and should not be relied upon without independent verification as to its accuracy. Riverside County and City of Moreno Valley will not be held responsible for any claims, losses or damages resulting from the use of this map.

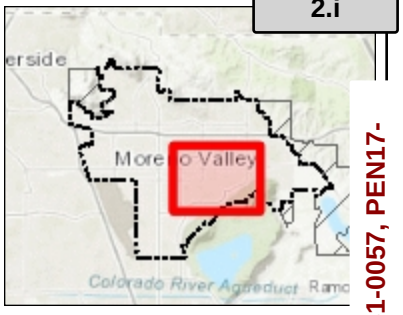
Notes

APNs: 486-290-036 & 037
Proposed Change of Zone from Residential Agriculture 2 (RA2) to Office (O) and inclusion in the Medical Use Overlay

EXHIBIT B TO 2018-03

Medical Office Overlay
(related to PEN16-0049 - Change of Zone)





Legend

- Medical Overlay

Notes

APNs: 486-290-036 & 037
Addition of Parcels into the Medical Office Overlay.

5,047.7 0 2,523.83 5,047.7 Feet

WGS_1984_Web_Mercator_Auxiliary_Sphere

Print Date: 1/11/2018

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Attachment: Exhibit C to 2018-03_Medical Overlay (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-

EXHIBIT C TO 2018-03

PLANNING COMMISSION RESOLUTION NO. 2018-05

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF MORENO VALLEY RECOMMENDING THAT THE CITY COUNCIL APPROVE PEN16-0052, TENTATIVE PARCEL MAP 36227 TO COMBINE TWO (2) PARCELS INTO ONE (1) PARCEL FOR A TOTAL OF 18.48 ACRES LOCATED ON THE SOUTH EAST CORNER OF NASON STREET AND BRODIAEA AVENUE, ASSESSORS PARCEL NUMBERS 486-290-036 AND 486-280-037.

WHEREAS, the applicant, Galaxy Management Inc., has filed an application for the approval of PEN16-0052 Tentative Parcel Map 36227 as described in the title of this Resolution; and

WHEREAS, the application has been evaluated in accordance with established City of Moreno Valley procedures, and with consideration of General Plan and other applicable regulations; and

WHEREAS, the City has prepared an Initial Study and Mitigated Negative Declaration consistent with the California Environmental Quality Act (CEQA) based on a thorough analysis of potential environmental impacts; and

WHEREAS, upon completion of a thorough development review process the project was appropriately agendized and noticed for a public hearing before the Planning Commission of the City of Moreno Valley (Planning Commission); and

WHEREAS, the public hearing notice for this project was published in the local newspaper on January 14, 2018. Public notice was sent to all property owners of record within 300 feet of the project site on January 11, 2018. The public hearing notice for this project was also posted on the project site on January 12, 2018; and

WHEREAS, on January 25, 2018, the Planning Commission held a public hearing to consider the application; and

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred; and

WHEREAS, pursuant to Government Code Section 66020(d)(1), **NOTICE IS HEREBY GIVEN** that this project is subject to certain fees, dedications, reservations and other exactions as provided herein.

NOW, THEREFORE, BE IT RESOLVED, by the Planning Commission of the City of Moreno Valley as follows:

Attachment: 2018-04 Reso Map [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

A. This Planning Commission hereby finds that all of the facts set forth above in this Resolution are true and correct.

B. Based upon substantial evidence presented to this Planning Commission during the meeting on January 25, 2018, including written and oral staff reports: and the record from the public hearing, this Planning Commission hereby specifically finds as follows:

1. That the proposed land division is consistent with applicable general and specific plans.

FACTS: The General Plan encourages a mix of uses to provide a diversified economic base and ample residential, medical and employment opportunities. With the approval of the General Plan Amendment, the project as designed and conditioned will achieve the objectives of the City of Moreno Valley's General Plan Residential/Office land use designation. The proposed medical complex is consistent with the General Plan and does not conflict with the goals, objectives, policies, and programs established within the Plan.

2. That the design or improvement of the proposed land division is consistent with the applicable general and specific plans.

FACTS: The proposed parcel map is consistent with the Residential/Office designation of the General Plan which provides for medical offices, assisted living and skilled nursing facilities. The parcel map would create one parcel consistent with the development standards of the Residential/Office (R/O) zone of the City's Municipal Code. The site is currently two parcels. The parcel map proposes one 18.48 acre parcel.

The Tentative Parcel Map 36227 as designed and conditioned with the certification of the Mitigated Negative Declaration, adoption of the Mitigation Monitoring and Reporting Program, General Plan Amendment and Change of Zone, will comply with all applicable Municipal Code standards.

3. That the site of the proposed land division is physically suitable for the type of development and density.

FACTS: The tentative parcel map is located on the east side of Nason Street at Brodiaea Avenue. The proposed parcel map combines two (2) parcels into one (1) 18.48 acre parcel.

Attachment: 2018-04 Reso Map [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

The surrounding land uses near the site include single-family residential zoning to the north, east and south (Residential 3-north, Residential Agricultural 2, east and south). Some areas of the south and east are developed with large lot single family homes. To the west is the Riverside County Regional Medical Center with Memory Care and Assisted living facilities north of the Medical Center.

4. That the design of the proposed land division or the proposed improvements, are not likely to cause substantial environmental damage or substantially and unavoidably injure fish or wildlife or their habitat.

FACTS: The parcel map would not likely have the potential for a significant impact on the environment if considered as a separate application. Since it is a related application to the medical complex, it has been fully evaluated in the Mitigated Negative Declaration for the project and will not cause substantial environmental damage or substantially and unavoidably injure fish or wildlife or their habitat.

5. That the design of the proposed land division or the type of improvements are unlikely to cause serious public health problems.

FACTS: The tentative parcel map as designed and conditioned is compatible (with the approval of the General Plan Amendment and Change of Zone will be compatible with existing and proposed land uses in the vicinity.

6. That the design of the proposed land division or type of improvements will not conflict with easements acquired by the public at large for access through or use of property within the proposed subdivision.

FACTS: The easements have been addressed on the Tentative Tract Map. All parcels will include independent utilities and private easements are not proposed for the project.

7. That the design of the map will not conflict with the requirements under the Williamson Act.

FACTS: The site is not under a Williamson Act contract entered into pursuant to the California Land Conservation Act. Therefore, proposed map is not subject to the Williamson Act.

Attachment: 2018-04 Reso Map [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

8. That the proposed land division and the associated design and improvements are consistent with the applicable ordinances of the city.

FACTS: The proposed Residential/Office Use with the Medical Use Overlay is compatible with the established land use designations of the parcels in the area, allowing for various types of living close to medical facilities.

C. FEES, DEDICATIONS, RESERVATIONS, AND OTHER EXACTIONS

1. FEES

Impact, mitigation and other fees are due and payable under currently applicable ordinances and resolutions. These fees may include but are not limited to: Development Impact Fee, Transportation Uniform Mitigation Fee (TUMF), Multi-species Habitat Conservation Plan (MSHCP) Mitigation Fee, Stephens Kangaroo Rat Habitat Conservation fee, Underground Utilities in lieu Fee, Area Drainage Plan Fee, Bridge and Thoroughfare Mitigation Fee (Future) and Traffic Signal Mitigation Fee. The final amount of fees payable is dependent upon information provided by the applicant and will be determined at the time the fees become due and payable.

Unless otherwise provided for by this resolution, all impact fees shall be calculated and collected at the time and in the manner provided in Chapter 3.32 of the City of Moreno Valley Municipal Code or as so provided in the applicable ordinances and resolutions. The City expressly reserves the right to amend the fees and the fee calculations consistent with applicable law.

2. DEDICATIONS, RESERVATIONS, AND OTHER EXACTIONS

The adopted Conditions of Approval for PEN16-0052 incorporated herein by reference, may include dedications, reservations, and exactions pursuant to Government Code Section 66020 (d) (1).

3. CITY RIGHT TO MODIFY/ADJUST; PROTEST LIMITATIONS

The City expressly reserves the right to establish, modify or adjust any fee, dedication, reservation or other exaction to the extent permitted and as authorized by law.

Pursuant to Government Code Section 66020(d) (1), NOTICE IS FURTHER GIVEN that the 90 day period to protest the imposition of any

Attachment: 2018-04 Reso Map [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

impact fee, dedication, reservation, or other exaction described in this resolution begins on the effective date of this resolution and any such protest must be in a manner that complies with Section 66020(a) and failure to timely follow this procedure will bar any subsequent legal action to attack, review, set aside, void or annul imposition.

The right to protest the fees, dedications, reservations, or other exactions does not apply to planning, zoning, grading, or other similar application processing fees or service fees in connection with this project and it does not apply to any fees, dedication, reservations, or other exactions of which a notice has been given similar to this, nor does it revive challenges to any fees for which the Statute of Limitations has previously expired.

BE IT FURTHER RESOLVED that the Planning Commission **HEREBY APPROVES** Resolution No. 2018-04, and hereby recommends that the City Council:

1. **APPROVE** Tentative Parcel Map 36227, PEN16-0052, subject to the attached conditions of approval attached as Exhibit A.

APPROVED this 25th day of January, 2018.

AYES:
NOES:
ABSTAIN:

_____
Jeffrey Barnes
Chair, Planning Commission

ATTEST:

_____
Richard J. Sandzimier, Planning Official
Secretary to the Planning Commission

APPROVED AS TO FORM:

_____
City Attorney

Attachment: 2018-04 Reso Map [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

CITY OF MORENO VALLEY
CONDITIONS OF APPROVAL
Tentative Parcel Map (PEN16-0052)

EFFECTIVE DATE:
EXPIRATION DATE:

COMMUNITY DEVELOPMENT DEPARTMENT

Planning Division

1. This approval shall comply with all applicable requirements of the City of Moreno Valley Municipal Code.

2. The site shall be developed in accordance with the approved plans on file in the Community Development Department - Planning Division, the Municipal Code regulations, General Plan, and the conditions contained herein. Prior to any use of the project site or business activity being commenced thereon, all Conditions of Approval shall be completed to the satisfaction of the Planning Official. (MC 9.14.020)

3. Separate approvals are required for the development of the site, including Master Plot Plan PEN16-0053, Plot Plans PEN16-0054-0055, Conditional Use Permits PEN16-0056-0057 and a Phasing Plan PEN17-0013.

4. This tentative map shall expire three years after the approval date of this tentative map unless extended as provided by the City of Moreno Valley Municipal Code; otherwise it shall become null and void and of no effect whatsoever in the event the applicant or any successor in interest fails to properly file a final map before the date of expiration. (MC 9.02.230, 9.14.050, 080)

5. The site shall be developed in accordance with the approved tentative map on file in the Community Development Department -Planning Division, the Municipal Code regulations, General Plan, and the conditions contained herein. (MC 9.14.020)

6. All site plans, grading plans, landscape and irrigation plans, building plans, fence/wall plans, lighting plans and street improvement plans shall be coordinated for consistency with this approval.

Special Conditions

7. Prior to building final, the developer/owner or developer's/owner' s successor-in-interest shall pay all applicable impact fees, including but not limited to

Attachment: Exhibit A tp 2018-04_TPM [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Transportation Uniform Mitigation fees (TUMF), and the City's adopted Development Impact Fees. (Ord)

8. Prior to the approval of building permits for individual parcels, provide proof of reciprocal parking and access easements where required.
Prior to recordation of the final subdivision map, the developer shall submit for review and approval the following documents to the Planning Division which shall demonstrate that the project will be developed and maintained in accordance with the intent and purpose of the approval:
   a. The document to convey title
   b. Deed restrictions, easements, or Covenants, Conditions and Restrictions to be recorded.
The approved documents shall be recorded at the same time that the subdivision map is recorded. The documents shall contain provisions for general maintenance of the site, joint access to proposed parcels, open space use restrictions, conservation easements, guest parking, water quality basins, lighting, landscaping, and common area if applicable. The approved documents shall also contain a provision, which provides that they may not be terminated and /or substantially amended without the consent of the City and the developer's successor-in-interest. (MC 9.14.090)

In addition, the following deed restrictions and disclosures shall be included within the document and grant deed of the properties:
   c. The developer shall promote the use of native plants and trees and drought tolerant species to the extent feasible.
   d. All lots designated for open space and or detention basins, shall be included as an easement to and maintained by a private maintenance entity. Language to this effect shall be included and reviewed within the required Covenant Conditions and Restrictions (CC&Rs) prior to the approval of the map.
   e. Maintenance of any and all common facilities.

<u>Prior to Grading Permit</u>

9. Prior to issuance of any grading permits, mitigation measures contained in the Mitigation Monitoring Program approved with this project shall be implemented as provided therein. A mitigation monitoring fee, as provided by City ordinance, shall be paid by the applicant within 30 days of project approval. No City permit or approval shall be issued until such fee is paid. (CEQA)

10. Prior to issuance of grading permits, the developer shall pay the applicable Stephens' Kangaroo Rat (SKR) Habitat Conservation Plan mitigation fee. (Ord)

11. Within thirty (30) days prior to any grading or other land disturbance, a pre-construction survey for Burrowing Owls shall be conducted pursuant to the

established guidelines of Multiple Species Habitat Conservation Plan. The

Attachment: Exhibit A tp 2018-04_TPM [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

construction survey shall be submitted to the Planning Division prior to any disturbance of the site and/or grading permit issuance.

12. The following Mitigation Measures apply to the project:

AQ-1: The applicant shall ensure that approved architectural coatings are utilized. Prior to the issuance of building permits, the City will verify that construction plans submitted by the project proponent reflect use of architectural coatings where the content of volatile organic compounds (VOC) does not exceed 25 grams per liter (g/l) for interior and exterior applications. This measure must be verified through standard building inspections in light of the performance standard that emissions of volatile organic compounds from application of interior or exterior coatings shall not exceed the daily emissions thresholds established by the South Coast Air Quality Management District. The applicant bears the cost of implementing this mitigation.

BIO-1: The applicant shall avoid impacts to nesting birds and violation of state and federal laws pertaining to birds, all construction related activities (including but not limited to mobilization and staging, clearing, grubbing, vegetation removal, fence installation, demolition, and grading) should occur outside the avian nesting season (generally prior to Feb 1 or after Aug 31). If construction and construction noise occurs within the avian nesting season (from Feb 1 to Aug 31 or according to local requirements), all suitable habitats located within the project's area of disturbance including staging and storage areas plus a 250-foot (passerines) and 1,000 foot (raptor nests) buffer around these areas shall be thoroughly surveyed, as feasible, for the presence of active nests by a qualified biologist no more than 5-days before commencement of any site disturbance activities and equipment mobilization. If project activities are delayed more than 5-days, an additional nesting bird survey shall be performed. Active nesting is present if a bird is sitting in a nest, a nest has eggs or chicks in it, or adults are observed carrying food to the nest. The results of these surveys shall be documented. If it is determined that birds are actively nesting within the survey area, Mitigation Measure BIO-2 shall apply. Conversely, if the survey area is found to be absent of nesting birds, Mitigation Measure BIO-2 shall not be required.

BIO-2: If pre-construction nesting bird surveys result in the location of active nests, the applicant shall ensure that no site disturbance and mobilization of heavy equipment (including but not limited to equipment staging, fence installation, clearing, grubbing, vegetation removal, demolition and grading), shall take place within 250 feet of non-raptor nests and 1,000 feet of raptor nests, or as determined by a qualified biologist in consultation with the CDFW, until the chicks have fledged. Monitoring shall be required to insure compliance with the MBTA and relevant CDFW requirements. Monitoring dates and findings shall be documented.

BIO-3: The applicant shall ensure a pre-construction survey for burrowing owls be completed no more than 30-days prior to the start of construction at the Project site to ensure no burrowing owls have moved onto the site.

CUL-1: Prior to the issuance of a grading permit, the Applicant shall retain a qualified professional archaeologist who meets U.S. Secretary of the Interior's Professional Qualifications and Standards. The Project archaeologist and Native American Tribal Representatives will conduct an Archaeological Sensitivity Training for construction personnel prior to commencement of excavation activities. The training session will include a handout and will focus on how to identify archaeological and Tribal Cultural resources that may be encountered during earthmoving activities and the procedures to be followed in such an event, including who to contact and the appropriate avoidance measures that need to be undertaken until the find(s) can be properly evaluated; the duties of archaeological and Native American monitors; and the general steps a qualified professional archaeologist would follow in conducting a salvage investigation if one is necessary. All new construction personnel that will conduct earthwork or grading acti

Attachment: Exhibit A tp 2018-04_TPM [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

must take the Archaeological Sensitivity Training prior to beginning work on the project and the professional archaeologist shall make themselves available to provide the training on an as-needed basis. A sign-in sheet shall be compiled to track attendance and shall be submitted to the City with the Phase IV Archaeological Monitoring Report.

CUL-2: Preconstruction Notification of Native American Tribal Representatives. Prior to the issuance of a grading permit, the Applicant shall provide evidence to the City of Moreno Valley that the Agua Band of Cahuilla Indians, Pechanga Band of Luiseño Indians and the Soboba Band of Luiseño Indians tribal representatives (hereafter referred to as "Native American Tribal Representatives") received a minimum of 30 days advance notice of all mass grading and trenching activities, and provide evidence of monitoring agreements between the Applicant and the Tribes. The Native American Tribal Representatives shall be notified a minimum of 48 hours in advance and allowed to attend the pre-grading meeting with the City and project construction contractors and/or monitor all project mass grading and trenching activities.

CUL-3: Prior to grading permit issuance, the City shall verify that the following note is included on the Grading Plan: "If any suspected archaeological resources are discovered during ground-disturbing activities and the archaeological monitor or Tribal representatives are not present, the construction supervisor is obligated to halt work in a 100-foot radius around the find and call the project archaeologist and the Tribal representatives to the site to assess the significance of the find."

CUL-4: Prior to the issuance of a grading permit, the Applicant shall retain a qualified archaeological monitor. The archaeological monitor will work under the direction and guidance of the qualified professional archaeologist and will meet the U.S. Secretary of the Interior's Professional Qualifications and Standards. The archeological monitor shall have the authority to temporarily redirect earthmoving activities in the event that suspected archaeological resources are unearthed during project construction. Archaeological monitoring is required at all depths and strata. The archaeological monitor shall be present during all construction excavations (e.g., grading, trenching, or clearing/grubbing) into non-fill younger Pleistocene alluvial sediments. Multiple earth-moving construction activities may require multiple archaeological monitors. The frequency of monitoring shall be based on the rate of excavation and grading activities, proximity to known archaeological resources, the materials being excavated (native versus artificial fill soils), and the depth of excavation, and if found, the abundance and type of archaeological resources encountered. Full-time monitoring can be reduced to part-time inspections if determined adequate by the qualified professional archaeologist.

CUL-5: The applicant shall ensure that all ground disturbing activities are ceased and treatment plans are implemented if archaeological resources are encountered. In the event that archaeological resources are unearthed during ground-disturbing activities, ground-disturbing activities shall be halted or diverted away from the vicinity of the find so that the find

can be evaluated. A buffer area of at least 100 feet shall be established around the find where
construction activities shall not be allowed to continue until a qualified archaeologist has examined the newly discovered artifact(s) and has evaluated the area of the find. Work shall be allowed to continue outside of the buffer area. All archaeological resources unearthed by project construction activities shall be evaluated by a qualified professional archaeologist, who meets the U.S. Secretary of the Interior's Professional Qualifications and Standards. Should the newly discovered artifacts be determined to be prehistoric, Native American Tribes/Individuals should be contacted and consulted and Native American construction monitoring should be initiated. The Applicant and City shall coordinate with the archaeologist to develop an appropriate treatment plan for the resources. The plan may include implementation of archaeological data recovery

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excavations to address treatment of the resource along with subsequent laboratory processing and analysis.
In the event that a cultural resource is encountered during ground-disturbing activities, the landowner(s) shall relinquish ownership of all such resources, including sacred items, burial goods, and all archaeological artifacts and non-human remains. The artifacts shall be relinquished through one or more of the following methods and evidence of such shall be provided to the City of Moreno Valley Planning Department:
Accommodate the process for Preservation-In-Place/Onsite with the consulting Native American tribes or bands, as detailed in the treatment plan prepared by the professional paleontologist. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not.
A curation agreement with an appropriate qualified repository within Riverside County that meets federal standards per 36 CFR Part 79; therefore, the resources would be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility within Riverside County, to be accompanied by payment of the fees necessary for permanent curation; and/or
For purposes of conflict resolution, if more than one Native American tribe or band is involved with the project and cannot come to an agreement as to the disposition of cultural materials, they shall be curated at the Western Science Center by default.

CUL-6: Prior to building permit issuance, the Project archaeologist shall prepare a final Phase IV Monitoring Report as outlined in the CRMP, which shall be submitted to the City Planning Division, the appropriate Native American tribe(s), and the Eastern Information Center at the University of California, Riverside. The report shall include a description of resources unearthed, if any, evaluation of the resources with respect to the California Register and CEQA, and treatment of these resources. All cultural material, excluding sacred, ceremonial, grave goods and human remains, collected during the grading monitoring program and from any previous archaeological studies or excavations on the project site shall be curated in a Riverside County repository according to the current professional repository standards and may include the Pechanga Band's curatorial facility in Temecula, CA.

CUL-7: Conduct Paleontological Sensitivity Training for Construction Personnel. Prior to the issuance of a grading permit, the Applicant shall retain a professional paleontologist, who meets the qualifications set forth by the Society of Vertebrate Paleontology. The paleontologist shall conduct a Paleontological Sensitivity Training for construction personnel prior to commencement of excavation activities. The training will include a handout and will focus on how to identify paleontological resources that may be encountered during earthmoving activities, and the procedures to be followed in such an event, including who to contact and the appropriate avoidance measures that need to be undertaken until the find(s) can be properly evaluated; the duties of paleontological monitors; notification and other procedures to follow upon discovery of resources; and the general steps a qualified professional paleontologist would follow in conducting a salvage investigation if one is necessary. All new construction personnel that will conduct earthwork or grading activities must take the Paleontological Sensitivity Training prior to beginning work on the project and the professional paleontologist shall make themselves available to provide the training on an as-needed basis.

CUL-8: The applicant shall ensure the monitoring of construction excavations for paleontological resources is required for all excavations in older Quaternary alluvial fan deposits or in sedimentary deposits derived from the Mt. Eden Formation. Prior to the issuance of a grading permit, the Applicant shall retain a qualified paleontological monitor, who will work under the guidance and direction of a professional paleontologist, and who meets the qualifications set forth by the Society of Vertebrate Paleontology. The paleontological monitor shall have the authority to temporarily redirect earthmoving activities in the event that suspected paleontological resources are unearthed during

Attachment: Exhibit A tp 2018-04_TPM [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

project construction. The paleontological monitor shall be present during all construction excavations including, but not limited to grading, trenching, boring, and clearing/grubbing). Multiple earth-moving construction activities may require multiple paleontological monitors. The frequency of monitoring shall be based on the rate of excavation and grading. Monitoring may be reduced if potentially fossiliferous units are not present in the subsurface, or if present, are determined upon exposure and examination by the professional paleontologist to have a low potential to contain or yield fossil resources.

CUL-9: The applicant shall ensure that in the event that paleontological resources and or unique geological features are unearthed during ground-disturbing activities, all ground disturbing activities shall be halted or diverted away from the vicinity of the find in order to evaluate the resource. A buffer area of at least 100 feet shall be established around the find where construction activities shall not be allowed to continue until appropriate paleontological treatment plan has been approved by the Applicant and the City. Work shall be allowed to continue outside of the buffer area. The Applicant and City shall coordinate with a professional paleontologist, who meets the qualifications set forth by the Society of Vertebrate Paleontology, to develop an appropriate treatment plan for the resources. Treatment may include implementation of paleontological salvage excavations to remove the resource along with subsequent laboratory processing and analysis or preservation in place. At the paleontologist's discretion and to reduce construction delay, the grading and excavation contractor shall assist in removing rock samples for initial processing. Recovered specimens shall be properly prepared to a point of identification and permanent preservation, including screen washing sediments to recover small invertebrates and vertebrates, if necessary. Identification and curation of specimens into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable storage is required for significant discoveries.

CUL-10: The applicant shall ensure prior to building permits, that a professional paleontologist prepares a report summarizing the results of the monitoring and salvaging efforts, the methodology used in these efforts, as well as a description of the fossils collected and their significance as well as any necessary maps and graphics to accurately record the original location of these resources. The report shall be submitted to the Applicant, the City, the San Bernardino County Natural History Museum, Natural History Museum of Los Angeles County, and representatives of other appropriate or concerned agencies to signify the satisfactory completion of the project and required mitigation measures.

CUL-11: In the event that any human remains are unearthed during project construction, the City of Moreno Valley and the Applicant shall comply with State Health and Safety Code Section 7050.5 The City of Moreno Valley and the Applicant shall immediately notify the Riverside County Coroner's office and no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition. If remains are determined to be of Native American descendent, the coroner has 24-hours to notify the Native American Heritage Commission (NAHC). The NAHC shall identify the person(s) thought to be the Most Likely Descendent (MLD). After the MLD has inspected the remains and the site, they have 48 hours to recommend to the landowner the treatment or disposal, with appropriate dignity, the human remains and any associated funerary objects. The MLD shall complete their inspection and make their recommendation within 48 hours of being granted access by the landowner to inspect the discovery. The recommendation may include the scientific removal and nondestructive analysis of human remains and cultural items associated with Native American burials. Upon the discovery of the Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred, as prescribed in this mitigation measure, with the MLD regarding their recommendations, if applicable, taking into account the

Attachment: Exhibit A tp 2018-04_TPM [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

possibility of multiple human remains. The landowner shall discuss and confer with the descendants all reasonable options regarding the descendants' preferences for treatment.

If the NAHC is unable to identify a MLD, or the MLD identified fails to make a recommendation, or the landowner rejects the recommendation of the MLD and the mediation provided for in Subdivision (k) of Section 5097.94, if invoked, fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall inter the human remains and items associated with Native American human remains with appropriate dignity on the facility property in a location not subject to further and future subsurface disturbance. A record of the reburial shall be filed with the NAHC and the CHRIS-EIC. Upon the reburial of the human remains, the MLD shall file a record of the reburial with the NAHC and the project archaeologist shall file a record of the reburial with the EIC.

NOI-1: Project proponent shall provide the following (or equivalent) noise abatement measures as part of the building construction plans in order to meet the City of Moreno Valley exterior noise standards of 60dBA for residential and 65dBA for commercial:
• Stationary construction noise sources such as generators or pumps must be located at least 100 feet from sensitive land uses, as feasible, or at maximum distance when necessary to complete work near sensitive land uses, to be verified by submittal of a construction staging plan. This mitigation measure must be implemented throughout construction and may be periodically monitored by the Planning Director, or designee during routine inspections.
• Construction staging areas must be located as far from noise sensitive land uses as feasible, to be verified by submittal of a construction staging plan. Implementation of this measure shall occur throughout construction through periodic monitoring by the Planning Director or designee during routine inspections.
• Throughout construction, the contractor shall ensure all construction equipment is equipped with included noise attenuating devices and are properly maintained. This mitigation measure shall be periodically monitored by the Planning Director or designee during routine inspections.
• Idling equipment must be turned off when not in use. This mitigation measure may be periodically monitored by the Planning Director or designee during routine inspections.
• Equipment must be maintained so that vehicles and their loads are secured from rattling and banging. This mitigation measure may be periodically monitored by the Planning Director or designee during routine inspections.

NOI-2: The developer shall ensure temporary construction noise control barriers shall be installed where residential uses are located adjacent to the project site (south and west). The type and location of the noise control barriers shall be shown on all grading and building plans and subject to approval by the Planning Director, or designee.

NOI-3: All construction activities shall comply with the City of Moreno Valley Noise Ordinance (Chapter 11.80 of the City of Moreno Valley Municipal Code). This requirement shall be noted on all grading and building plans and in bid documents issued to construction contractors.

TRA-1: The project applicant shall participate in the phased construction of off-site traffic signals through payment of traffic signal mitigation fees. The traffic signals within the study area at buildout should specifically include an interconnect of the traffic signals to function in a coordinated system. Traffic signal mitigation fees shall be paid prior to Opening Year (2020) with Project Phase 1 or alternate City approved deadline.

TRA-1: If, during mass grading and trenching activities, the Archaeologist or Tribal Monitor suspect that an archaeological resource and/or TCR may have been unearthed, the monitor identifying the potential resources, in consultation with the other monitor(s) as appropriate, shall immediately halt and redirect grading operations in a 100-foot radius

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around the find to allow identification and evaluation of the suspected resource. The Native American monitor(s) or appropriate representative(s) and the archaeological monitor shall evaluate the suspected resource and make a determination of significance pursuant to California Public Resources Code Section 21083.2. The archaeological monitor and Tribal monitor(s) or appropriate representative(s), the Project Applicant, and the City Planning Division shall confer regarding mitigation of the discovered resource(s). All sacred sites, should they be encountered within the project area, shall be avoided and preserved as the preferred mitigation, if feasible. If preservation in place is not feasible, treatment and/or mitigation may include implementation of archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis.

ECONOMIC DEVELOPMENT DEPARTMENT (EDD)

13. New Moreno Valley businesses may work with the Economic Development Department to coordinate job recruitment fairs.

14. New Moreno Valley businesses may adopt a "First Source" approach to employee recruitment that gives notice of job openings to Moreno Valley residents for one week in advance of the public recruitment.

15. New Moreno Valley businesses are encouraged to hire local residents.

16. New Moreno Valley businesses are encouraged to provide a job fair flyer and/or web announcement to the City in advance of job recruitments, so that the City can assist in publicizing these events.

17. New Moreno Valley businesses may utilize the workforce recruitment services provided by the Moreno Valley Employment Resource Center ("ERC").

    The ERC offers no cost assistance to businesses recruiting and training potential employees. Complimentary services include:

    - Job Announcements
    - Applicant testing / pre-screening
    - Interviewing
    - Job Fair support
    - Training space

FINANCIAL & MANAGEMENT SERVICES DEPARTMENT

Moreno Valley Utility

18. This project requires the installation of electric distribution facilities . A non-exclusive easement shall be provided to Moreno Valley Utility and shall include the rights of ingress and egress for the purpose of operation, maintenance, facility repair, and meter reading.

19. Existing Moreno Valley Utility electrical infrastructure shall be preserved in place . The developer will be responsible, at developer's expense, for any and all costs

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associated with the relocation of any of Moreno Valley Utility's underground electrical distribution facilities, as determined by Moreno Valley Utility, which may be in conflict with any developer planned construction on the project site.

20. This project is subject to a Reimbursement Agreement. The Developer is responsible for a proportionate share of costs associated with electrical distribution infrastructure previously installed that directly benefits the project. Payment shall be required prior to issuance of building permits.

21. This project requires the installation of electric distribution facilities. The developer shall submit a detailed engineering plan showing design, location and schematics for the utility system to be approved by the City Engineer. In accordance with Government Code Section 66462, the Developer shall execute an agreement with the City providing for the installation, construction, improvement and dedication of the utility system following recordation of final map and /or concurrent with trenching operations and other improvements so long as said agreement incorporates the approved engineering plan and provides financial security to guarantee completion and dedication of the utility system.

    The Developer shall coordinate and receive approval from the City Engineer to install, construct, improve, and dedicate to the City all utility infrastructure including but not limited to, conduit, equipment, vaults, ducts, wires, switches, conductors, transformers, and "bring-up" facilities including electrical capacity to serve the identified development and other adjoining, abutting, or benefiting projects as determined by Moreno Valley Utility – collectively referred to as "utility system", to and through the development, along with any appurtenant real property easements, as determined by the City Engineer necessary for the distribution and /or delivery of any and all "utility services" to and within the project. For purposes of this condition, "utility services" shall mean electric, cable television, telecommunication (including video, voice, and data) and other similar services designated by the City Engineer. "Utility services" shall not include sewer, water, and natural gas services, which are addressed by other conditions of approval.

    The City, or the City's designee, shall utilize dedicated utility facilities to ensure safe, reliable, sustainable and cost effective delivery of utility services and maintain the integrity of streets and other public infrastructure. Developer's shall, at developer's sole expense, install or cause installation of such interconnection facilities as may be necessary to connect to the electrical distribution infrastructure within the project to the Moreno Valley Utility owned and controlled electric distribution system.

<u>PUBLIC WORKS DEPARTMENT</u>

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Land Development

22. A digital (pdf) copy of all approved improvement plans shall be submitted to the Land Development Division.

23. All applicable inspection fees shall be paid.

24. All work performed within public right-of-way requires an encroachment permit. Security (in the form of a cash deposit or other approved means) may be required as determined by the City Engineer. For non-subdivision projects, the City Engineer may require the execution of a Public Improvement Agreement (PIA) as a condition of the issuance of a construction or encroachment permit. All inspection fees shall be paid prior to issuance of construction permit. [MC 9.14.100(C.4)]

25. Aggregate slurry, as defined in Section 203-5 of Standard Specifications for Public Works Construction, may be required just prior to the end of the one-year warranty period of the public streets at the discretion of the City Engineer. If slurry is required, a slurry mix design shall be submitted for review and approved by the City Engineer. The latex additive shall be Ultra Pave 70 (for anionic) or Ultra Pave 65 K (for cationic) or an approved equal per the geotechnical report. The latex shall be added at the emulsion plant after weighing the asphalt and before the addition of mixing water. The latex shall be added at a rate of two to two-and-one-half (2 to 2½) parts to one-hundred (100) parts of emulsion by volume. Any existing striping shall be removed prior to slurry application and replaced per City standards.

26. The developer shall comply with all applicable City ordinances and resolutions including the City's Municipal Code (MC) and if subdividing land, the Government Code (GC) of the State of California, specifically Sections 66410 through 66499.58, said sections also referred to as the Subdivision Map Act (SMA). [MC 9.14.010]

27. The final approved conditions of approval (COAs) and any applicable Mitigation Measures issued by the Planning Division shall be photographically or electronically placed on mylar sheets and included in the Grading and Street Improvement plans.

28. The developer shall monitor, supervise and control all construction and construction supportive activities, so as to prevent these activities from causing a public nuisance, including but not limited to, insuring strict adherence to the following:
(a) Removal of dirt, debris, or other construction material deposited on any public street no later than the end of each working day.
(b) Observance of working hours as stipulated on permits issued by the Land Development Division.
(c) The construction site shall accommodate the parking of all motor vehicles used by persons working at or providing deliveries to the site.
(d) All dust control measures per South Coast Air Quality Management District

(SCAQMD) requirements during the grading operations.
Violation of any condition, restriction or prohibition set forth in these conditions shall subject the owner, applicant, developer or contractor (s) to remedy as noted in City Municipal Code 8.14.090. In addition, the City Engineer or Building Official may suspend all construction related activities for violation of any condition, restriction or prohibition set forth in these conditions until such time as it has been determined that all operations and activities are in conformance with these conditions.

29. Prior to any plan approval, a final detailed drainage study (prepared by a registered/licensed civil engineer) shall be submitted for review and approved by the City Engineer. The study shall include existing and proposed hydrologic conditions as well as hydraulic calculations for all drainage control devices and storm drain lines. [MC 9.14.110(A.1)]. A digital (pdf) copy of the approved drainage study shall be submitted to the Land Development Division.

30. If improvements associated with this project are not initiated within two (2) years of the date of approval of the Public Improvement Agreement (PIA), the City Engineer may require that the engineer's estimate for improvements associated with the project be modified to reflect current City construction costs in effect at the time of request for an extension of time for the PIA or issuance of a permit.

31. The developer shall protect downstream properties from damage caused by alteration of drainage patterns (i.e. concentration or diversion of flow, etc). Protection shall be provided by constructing adequate drainage facilities, including, but not limited to, modifying existing facilities or by securing a drainage easement. [MC 9.14.110]

32. The tentative map, master plot plan, plot plan, or conditional use permit shall correctly show all existing easements, traveled ways, and drainage courses. Any omission may require the map or plans associated with this application to be resubmitted for further consideration. [MC 9.14.040(A)]

<u>Prior to Grading Plan Approval</u>

33. Two (2) copies of the final project-specific Water Quality Management Plan (WQMP) shall be submitted for review and approved by the City Engineer, which:
    a. Addresses Site Design Best Management Practices (BMPs) such as minimizing impervious areas, maximizing permeability, minimizes directly connected impervious areas to the City's street and storm drain systems, and conserves natural areas;
    b. Incorporates Source Control BMPs and provides a detailed description of their implementation;
    c. Describes the long-term operation and maintenance requirements for BMPs requiring maintenance; and

    d. Describes the mechanism for funding the long-term operation and

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maintenance of the BMPs.

A copy of the final WQMP template can be obtained on the City's Website or by contacting the Land Development Division. A digital (pdf) copy of the approved final project-specific Water Quality Management Plan (WQMP) shall be submitted to the Land Development Division.

34. The developer shall ensure compliance with the City Grading ordinance, these Conditions of Approval and the following criteria:

    a. The project street and lot grading shall be designed in a manner that perpetuates the existing natural drainage patterns with respect to tributary drainage area and outlet points. Unless otherwise approved by the City Engineer, lot lines shall be located at the top of slopes.

    b. Any grading that creates cut or fill slopes adjacent to the street shall provide erosion control, sight distance control, and slope easements as approved by the City Engineer.

    c. All improvement plans are substantially complete and appropriate clearance letters are provided to the City.

    d. A soils/geotechnical report (addressing the soil's stability and geological conditions of the site) shall be submitted to the Land Development Division for review. A digital (pdf) copy of the soils/geotechnical report shall be submitted to the Land Development Division.

35. Grading plans (prepared by a registered/licensed civil engineer) shall be submitted for review and approved by the City Engineer per the current submittal requirements.

36. The developer shall select Low Impact Development (LID) Best Management Practices (BMPs) designed per the latest version of the Water Quality Management Plan (WQMP) - a guidance document for the Santa Ana region of Riverside County.

37. The developer shall pay all remaining plan check fees.

38. A Storm Water Pollution Prevention Plan (SWPPP) shall be prepared in conformance with the State's current Construction Activities Storm Water General Permit. A copy of the current SWPPP shall be kept at the project site and be available for review upon request.

39. For projects that will result in discharges of storm water associated with construction with a soil disturbance of one or more acres of land, the developer shall submit a Notice of Intent (NOI) and obtain a Waste Discharger's Identification number (WDID#) from the State Water Quality Control Board (SWQCB) which shall be noted on the grading plans.

40. Landscape & Irrigation plans (prepared by a registered/licensed civil engineer) for

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water quality BMPs shall be submitted for review and approved by the City Engineer per the current submittal requirements, if applicable.

Prior to Grading Permit

41. A receipt showing payment of the Area Drainage Plan (ADP) fee to Riverside County Flood Control and Water Conservation District shall be submitted. [MC 9.14.100(O)]

42. If the developer chooses to construct the project in phases, a Construction Phasing Plan for the construction of on-site public and private improvements shall be submitted for review and approved by the City Engineer.

43. Prior to the payment of the Development Impact Fee (DIF), the developer may enter into a DIF Improvement Credit Agreement to secure credit for the construction of applicable improvements. If the developer fails to complete this agreement prior to the timing specified above, no credits will be given. The developer shall pay current DIF fees adopted by the City Council. [Ord. 695 § 1.1 (part), 2005] [MC 3.38.030, 040, 050]

44. A digital (pdf) copy of all approved grading plans shall be submitted to the Land Development Division.

45. Security, in the form of a cash deposit (preferable), or letter of credit shall be submitted as a guarantee of the implementation and maintenance of erosion control measures. At least twenty-five (25) percent of the required security shall be in the form of a cash deposit with the City. [MC 8.21.160(H)]

46. Security, in the form of a cash deposit (preferable), or letter of credit shall be submitted as a guarantee of the completion of the grading operations for the project. [MC 8.21.070]

47. The developer shall pay all applicable inspection fees.

Prior to Improvement Plan Approval

48. The developer is required to bring any existing access ramps adjacent to and fronting the project to current ADA (Americans with Disabilities Act) requirements. However, when work is required in an intersection that involves or impacts existing access ramps, all access ramps in that intersection shall be retrofitted to comply with current ADA requirements, unless otherwise approved by the City Engineer.

49. The developer shall submit clearances from all applicable agencies, and pay all applicable plan check fees.

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50. The street improvement plans shall comply with current City policies, plans and applicable City standards (i.e. MVSI-160 series, etc.) throughout this project.

51. The design plan and profile shall be based upon a centerline, extending beyond the project boundaries a minimum distance of 300 feet at a grade and alignment approved by the City Engineer.

52. Drainage facilities (i.e. catch basins, etc.) with sump conditions shall be designed to convey the tributary 100-year storm flows. Secondary emergency escape shall also be provided.

53. The hydrology study shall be designed to accept and properly convey all off -site drainage flowing onto or through the site. All storm drain design and improvements shall be submitted for review and approved of the City Engineer. In the event that the City Engineer permits the use of streets for drainage purposes, the provisions of current City standards shall apply. Should the quantities exceed the street capacity or the use of streets be prohibited for drainage purposes, as in the case where one travel lane in each direction shall not be used for drainage conveyance for emergency vehicle access on streets classified as minor arterials and greater, the developer shall provide adequate facilities as approved by the City Engineer. [MC 9.14.110 A.2]

54. All public improvement plans (prepared by a licensed/registered civil engineer) shall be submitted for review and approved by the City Engineer per the current submittal requirements.

55. The plans shall indicate any restrictions on trench repair pavement cuts to reflect the City's moratorium on disturbing newly-constructed pavement less than three (3) years old and recently slurry sealed streets less than one (1) year old. Pavement cuts for trench repairs may be allowed for emergency repairs or as specifically approved by the City Engineer.

56. The developer shall pothole to determine the exact location and elevation of existing underground utilities and incorporate the results into the design of the plans. The developer shall coordinate with all affected utility companies and bear all costs of utility relocations.

<u>Prior to Building Permit</u>

57. An engineered-fill certification, rough grade certification and compaction report shall be submitted for review and approved by the City Engineer. A digital (pdf) copy of the approved compaction report shall be submitted to the Land Development Division. All pads shall meet pad elevations per approved grading plans as noted

by the setting of "blue-top" markers installed by a registered land surveyor or licensed civil engineer.

58. For Commercial/Industrial projects, the owner may have to secure coverage under the State's General Industrial Activities Storm Water Permit as issued by the State Water Resources Control Board.

59. For all subdivision projects, the map shall be recorded (excluding model homes). [MC 9.14.190]

60. All outstanding fees shall be paid.

61. All required as-built plans (prepared by a registered/licensed civil engineer) shall be submitted for review and approved by the City Engineer per the current submittal requirements.

62. The engineered final/precise grade certification shall be submitted for review and approved by the City Engineer.

63. For non-subdivision projects, in compliance with Proposition 218, the developer shall agree to approve the City of Moreno Valley NPDES Regulatory Rate Schedule that is in place at the time of certificate of occupancy issuance. Under the current permit for storm water activities required as part of the National Pollutant Discharge Elimination System (NPDES) as mandated by the Federal Clean Water Act, this project is subject to the following requirements:

    a. Select one of the following options to meet the financial responsibility to provide storm water utilities services for the required continuous operation, maintenance, monitoring system evaluations and enhancements, remediation and/or replacement, all in accordance with Resolution No. 2002-46.

        i. Participate in the mail ballot proceeding in compliance with Proposition 218, for the Common Interest, Commercial, Industrial and Quasi-Public Use NPDES Regulatory Rate Schedule and pay all associated costs with the ballot process; or

        ii. Establish an endowment to cover future City costs as specified in the Common Interest, Commercial, Industrial and Quasi-Public Use NPDES Regulatory Rate Schedule.

    b. Notify the Special Districts Division of the intent to request building permits 90 days prior to their issuance and the financial option selected. The financial option selected shall be in place prior to the issuance of certificate of occupancy. [California Government Code & Municipal Code]

64. The developer shall complete all public improvements in conformance with current City standards, except as noted in the Special Conditions, including but not limited to the following:

    a. Street improvements including, but not limited to: pavement, base, curb

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and/or gutter, cross gutters, spandrel, sidewalks, drive approaches, pedestrian ramps, street lights, signing, striping, under sidewalk drains, landscaping and irrigation, medians, redwood header boards, pavement tapers/transitions and traffic control devices as appropriate.

b. Storm drain facilities including, but not limited to: storm drain pipe, storm drain laterals, open channels, catch basins and local depressions.

c. City-owned utilities.

d. Sewer and water systems including, but not limited to: sanitary sewer, potable water and recycled water.

e. Under grounding of all existing and proposed utilities adjacent to and on-site. [MC 9.14.130]

f. Relocation of overhead electrical utility lines including, but not limited to: electrical, cable and telephone.

65. For commercial, industrial and multi-family projects, a "Stormwater Treatment Device and Control Measure Access and Maintenance Covenant" shall be recorded to provide public notice of the maintenance requirements to be implemented per the approved final project-specific WQMP. A boilerplate copy of the "Stormwater Treatment Device and Control Measure Access and Maintenance Covenant" can be obtained by contacting the Land Development Division.

66. The applicant shall ensure the following, pursuant to Section XII. I. of the 2010 NPDES Permit:

a. Field verification that structural Site Design, Source Control and Treatment Control BMPs are designed, constructed and functional in accordance with the approved Final Water Quality Management Plan (WQMP).

b. Certification of best management practices (BMPs) from a state licensed civil engineer. An original WQMP BMP Certification shall be submitted for review and approved by the City Engineer.

67. The Developer shall comply with the following water quality related items:

a. Notify the Land Development Division prior to construction and installation of all structural BMPs so that an inspection can be performed.

b. Demonstrate that all structural BMPs described in the approved final project-specific WQMP have been constructed and installed in conformance with the approved plans and specifications;

c. Demonstrate that Developer is prepared to implement all non-structural BMPs described in the approved final project-specific WQMP; and

d. Demonstrate that an adequate number of copies of the approved final project-specific WQMP are available for future owners/occupants.

e. Clean and repair the water quality BMP's, including re-grading to approved civil drawing if necessary.

f. Provide City with updated Engineer's Line and Grade Certification.

g. Obtain approval and complete installation of the irrigation and landscaping.

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68. Prior to parcel map recordation or building permit issuance, either a reciprocal access easement shall be shown on the map or a separate recorded copy of a reciprocal access agreement between the project and the adjacent parcel to the south shall be provided to the City.

69. The Applicant has proposed to incorporate the use of an infiltration basin and self-retaining areas. Final design details of the treatment control BMPs shall be provided in the F-WQMP.

70. Prior to rough grading plan approval, the following shall be shown on the plans and dedications made via separate instrument and submitted to the City for review and approval: A 4-foot pedestrian right-of-way dedication behind all driveway approaches per City Standard MVSI-112C-0.

71. Prior to occupancy, the following improvements shall be completed:

    a. Nason Street, Modified Divided Major Arterial, City Standard MVSI-102A-0 (120-foot RW / 102-foot CC) shall construct to half-width plus 21' along the entire project's westerly frontage. Improvements shall consist of, but not be limited to pavement, base, street lights, driveway approaches, pedestrian ramps, curb & gutter, and sidewalk. In addition, replace or install any damaged, substandard or missing improvements.

    b. Brodiaea Avenue, Collector, City Standard MVSI-106BA-0 (66-foot RW / 44 -foot CC) shall be constructed to half-width plus 18' along the entire project's northerly frontage. Improvements shall consist of, but not be limited to, pavement, base, street lights, driveway approaches, pedestrian ramps, curb & gutter, sidewalk. In addition, replace or install any damaged, substandard or missing improvements.

72. Prior to approval of the parcel map, the map shall show the following:

    a. A seven-foot street right-of-way vacation on the south side of Brodiaea Avenue along project frontage.
    b. A four-foot street right-of-way dedication on the east side of Nason Street along the project frontage.

73. Prior to F-WQMP approval, post development BMPs for Brodiaea Avenue shall incorporated in accordance with MS4 Permit R8-2010-033.

74. Prior to precise grading plan approval, the grading plans shall clearly show that the parking lot conforms to City standards. The parking lot shall be 5% maximum, 1% minimum, 2% maximum at or near any disabled parking stall and travel way. Ramps, curb openings and travel paths shall all conform to current ADA standards

as outlined in Department of Justice's "ADA Standards for Accessible Design", Excerpt from 28 CFR Part 36. (www.usdoj.gov) and as approved by the City's Building and Safety Division.

Special Districts Division

75. The ongoing maintenance of any landscaping required to be installed behind the curb shall be the responsibility of the property owner.

76. Street Light Authorization forms for all street lights that are conditioned to be installed as part of this project must be submitted to the Special Districts Division for approval, prior to street light installation. The Street Light Authorization form can be obtained from the utility company providing electric service to the project, either Moreno Valley Utility or Southern California Edison. For questions, contact the Special Districts Division at 951.413.3480 or specialdistricts@moval.org.

77. The parcel(s) associated with this project have been incorporated into the Moreno Valley Community Services District Zone A (Parks & Community Services) and Zone C (Arterial Street Lighting). All assessable parcels therein shall be subject to annual parcel taxes for Zone A and Zone C for operations and capital improvements.

78. This project is conditioned to provide a funding source for the operation and maintenance of public improvements and/or services associated with new development in that territory. The Developer shall satisfy this condition with one of the options below.

a. Participate in a special election for maintenance/services and pay all associated costs of the election process and formation, if any. Financing may be structured through a Community Facilities District, Landscape and Lighting Maintenance District, or other financing structure as determined by the City; or

b. Establish an endowment fund to cover the future maintenance and /or service costs.

The Developer must notify the Special Districts Division at 951.413.3480 or at specialdistricts@moval.org of its selected financial option prior to City Council action authorizing recordation of the final map for the development. A minimum of 90 days is needed to complete the special election process. This allows adequate time to be in compliance with the provisions of Article 13C of the California Constitution for conducting a special election.

The financial option selected shall be in place prior to the issuance of the first building permit for the project.

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79. This project is conditioned to provide a funding source for the following special financing program(s):

a. Street Lighting Services for capital improvements, energy charges, and maintenance.

The Developer's responsibility is to provide a funding source for the capital improvements and the continued maintenance of the landscaped area. The Developer shall satisfy this condition with one of the options below.

i. Participate in a special election (mail ballot proceeding) and pay all associated costs of the special election and formation, if any. Financing may be structured through a Community Services District zone, Community Facilities District, Landscape and Lighting Maintenance District, or other financing structure as determined by the City; or

ii. Establish a Property Owner's Association (POA) or Home Owner's Association (HOA) which will be responsible for any and all operation and maintenance costs.

The Developer must notify the Special Districts Division at 951.413.3480 or at specialdistricts@moval.org of its selected financial option prior to City Council action authorizing recordation of the final map for the development. The option for participating in a special election requires approximately 90 days to complete the special election process. This allows adequate time to be in compliance with the provisions of Article 13C of the California Constitution for conducting a special election.

The financial option selected shall be in place prior to the issuance of the first building permit for this project and prior to acceptance of any improvements.

80. Commercial (R) If Land Development, a Division of the Public Works Department, requires this project to supply a funding source necessary to provide for, but not limited to, stormwater utilities services for the continuous operation, remediation and/or replacement, maintenance, monitoring, systems evaluation and enhancements of on-site facilities and performing annual inspections of the affected areas to ensure compliance with state mandated stormwater regulations, a funding source needs to be established. The Developer must notify the Special Districts Division at 951.413.3480 or specialdistricts@moval.org of its selected financial option for the National Pollution Discharge Elimination System (NPDES) program (see Land Development's related condition) 90 days prior to City Council action authorizing recordation of the final map for the development and participate in a special election process. This allows adequate time to be in compliance with the

provisions of Article 13D of the California Constitution. (California Health and Safety Code Sections 5473 through 5473.8 (Ord. 708 Section 3.1, 2006) & City of Moreno Valley Municipal Code Title 3, Section 3.50.050.)

81. This project has been identified to be included in the formation of a Community Facilities District for Public Safety services including but not limited to Police, Fire Protection, Paramedic Services, Park Rangers, and Animal Control services. The property owner(s) shall not protest the formation; however, they retain the right to object to the rate and method of maximum special tax. In compliance with Proposition 218, the property owner shall agree to approve the mail ballot proceeding (special election) for either formation of the CFD or annexation into an existing district that may already be established. The Developer must notify the Special Districts Division at 951.413.3480 or specialdistricts@moval.org of its intent to record the final map for the development 90 days prior to City Council action authorizing recordation of the map. This allows adequate time to be in compliance with the provisions of Article 13C of the California Constitution. (California Government Code Section 53313 et. seq.)

82. Prior to the issuance of the first building permit for this project, the Developer shall pay Advanced Energy fees for all applicable Residential and Arterial Street Lights required for this development. Payment shall be made to the City of Moreno Valley and collected by the Land Development Division. Fees are based upon the Advanced Energy fee rate in place at the time of payment, as set forth in the current Listing of City Fees, Charges, and Rates adopted by City Council. The Developer shall provide a copy of the receipt to the Special Districts Division (specialdistricts@moval.org). Any change in the project which may increase the number of street lights to be installed will require payment of additional Advanced Energy fees at the then current fee. Questions may be directed to the Special Districts Division at 951.413.3480 or specialdistricts@moval.org.

83. This project has been identified to potentially be included in the formation of a Map Act Area of Benefit Special District for the construction of major thoroughfares and/or freeway improvements. The property owner(s) shall participate in such District and pay any special tax, assessment, or fee levied upon the project property for such District. At the time of the public hearing to consider formation of the district, the property owner(s) will not protest the formation, but will retain the right to object any eventual assessment that is not equitable should the financial burden of the assessment not be reasonably proportionate to the benefit the affected property obtains from the improvements to be installed. The Developer must notify the Special Districts Division at 951.413.3480 or at specialdistricts@moval.org of its selected financial option when submitting an application for the first building permit to determine whether the development will be subjected to this condition. If subject to the condition, the special election requires a 90 day process in compliance with the provisions of Article 13C of the California Constitution. (Street & Highway Code,

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GP Objective 2.14.2, MC 9.14.100).

84. Any damage to existing landscape areas maintained by the City of Moreno Valley due to project construction shall be repaired/replaced by the Developer, or Developer's successors in interest, at no cost to the City of Moreno Valley.

Transportation Engineering Division

85. Nason Street is classified as a Divided Major Arterial at this location. Any improvements undertaken by this project shall be consistent with the City's standards for this facility.

86. Conditions of approval may be modified if the project or its phasing plan is altered from any approved plans.

87. All proposed on-site traffic signing and striping should be accordance with the latest California Manual on Uniform Traffic Control Devices (CAMUTCD).

88. Brodiaea Avenue is classified as a Collector (66' RW/44' CC) per City Standard Plan No. MVSI-106B-0. Any improvements undertaken by this project shall be consistent with the City's standards for this facility.

89. Access at the proposed street and driveways shall be as follows:

- West bound approach at Nason Street/Brodiaea Avenue intersection: Only right turns in/out are allowed. Access shall be controlled by the existing raised concrete median on Nason Street.
- Nason Street north driveway: Only right turns in/out are allowed. Access shall be controlled by the existing raised concrete median on Nason Street.
- Nason Street south driveway: The existing traffic signal at Nason Street/Hospital Road intersection shall be modified to support full access.
- Brodiaea Avenue driveways: Full access is allowed.

90. Project driveways shall conform to City of Moreno Valley Standard No. MVSI-112C-0 for Commercial Driveway Approaches.

91. Prior to issuance of a construction permit, construction traffic control plans prepared by a qualified, registered Civil or Traffic engineer may be required for plan approval or as required by the City Traffic Engineer.

92. Prior to final approval of any landscaping or monument sign plans, the project plans shall demonstrate that sight distance at the project driveways conforms to City Standard Plan No. MVSI-164A, B, C-0.

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93. Prior to the final approval of the street improvement plans, a signing and striping plan shall be prepared per City of Moreno Valley Standard Plans - Section 4 for all streets within the project area.

94. Project driveways shall conform to City of Moreno Valley Standard No. MVSI-112C-0 for Commercial Driveway Approaches.

95. Prior to the final approval of the street improvement plans, traffic signal modification plans will be required for the traffic signal located at Nason Street/Hospital Road intersection. Modifications may include but not limited to new signal poles, new pull boxes, new traffic detector loops or video/radar detection system, relocation of signal controller cabinet, etc. Specific modifications shall be determined during plan check review.

96. Prior to issuance of Certificate of Occupancy for any building in Phase 3 or prior to the project access at Nason Street/Hospital Road intersection being opened to vehicular traffic in any phase, the traffic signal at this intersection shall be modified and operational per the approved plans to the satisfaction of the City Engineer.

97. Prior to issuance of Certificate of Occupancy for any building in any of the project phases, all signing and striping on Nason Street and Brodiaea Avenue shall be installed per current City Standards and the approved plans.

98. Prior to acceptance of streets into the City-maintained road system, all approved signing and striping shall be installed per current City Standards and the approved plans.

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PLANNING COMMISSION RESOLUTION NO. 2018-05

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF MORENO VALLEY RECOMMENDING THAT THE CITY COUNCIL APPROVE PEN16-0053, MASTER PLOT PLAN, PEN16-0054 AND PEN16-0055, PLOT PLANS AND PEN17-0013 PHASING PLAN FOR THE CONSTRUCTION OF FIVE BUILDINGS TO ACCOMMODATE TWO MEDICAL BUILDINGS, THREE ASSISTED LIVING FACILITIES AND TWO SKILLED NURSING FACILITIES WITH ASSOCIATED PARKING ANDS STREET IMPROVEMENTS ON 18.48 ACRES LOCATED ON THE EAST SIDE OF NASON STREET SOUTH OF BRODIAEA AVENUE, ASSESSORS PARCEL NUMBERS 486-290-036 AND 486-290-037

WHEREAS, the applicant, Galaxy Management Inc., has filed an application for Majestic Moreno Valley, a Mixed Use Medical center campus as described in the title of this Resolution; and

WHEREAS, the application has been evaluated in accordance with established City of Moreno Valley procedures, and with consideration of General Plan and other applicable regulations; and

WHEREAS, the City has prepared an Initial Study and Mitigated Negative Declaration consistent with the California Environmental Quality Act (CEQA) based on a thorough analysis of potential environmental impacts; and

WHEREAS, upon completion of a thorough development review process the project was appropriately agendized and noticed for a public hearing before the Planning Commission of the City of Moreno Valley (Planning Commission); and

WHEREAS, the public hearing notice for this project was published in the local newspaper on January 14, 2018. Public notice was sent to all property owners of record within 300 feet of the project site on January 11, 2018. The public hearing notice for this project was also posted on the project site on January 12, 2018; and

WHEREAS, on January 25, 2018, the Planning Commission held a public hearing to consider the application; and

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred; and

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WHEREAS, pursuant to Government Code Section 66020(d)(1), **NOTICE IS HEREBY GIVEN** that this project is subject to certain fees, dedications, reservations and other exactions as provided herein.

NOW, THEREFORE, BE IT RESOLVED, by the Planning Commission of the City of Moreno Valley as follows:

A. This Planning Commission hereby finds that all of the facts set forth above in this Resolution are true and correct.

B. Based upon substantial evidence presented to this Planning Commission during the meeting on January 25, 2018, including written and oral staff reports: and the record from the public hearing, this Planning Commission hereby specifically finds as follows:

1. Conformance with General Plan Policies – The proposed use is consistent with the General Plan, and its goals, objectives, policies and programs.

FACTS: The proposed project includes multiple entitlement applications that will enable the development of a five building mixed-use medical center campus on the presently vacant 18.48 acre project site. The Master Plot Plan application demonstrates the layout for the entire proposed campus comprised of two medical office buildings, three assisted living facilities, two skilled nursing facilities (365 beds), associated parking areas, and new access drives to the site. The two Plot Plans include approval for Building 1 and Building 2 for medical offices, wellness center and urgent care facilities. (The remaining buildings will be approved with Conditional Use Permits).

The Phasing Plan as proposed provides the opportunity to develop the site facilities in phases allowing occupancy as development continues.

The complete entitlement applications include, a General Plan Amendment, to change the land use designation of the project site from Residential Two (R2) to Residential Office (R/O), a Change of Zone request to change the zoning designation of the project site from Residential Agricultural Two (RA2) to Office (O) with a Medical Use Overlay. Given the proximity of the project site to adjacent residential zoning, Conditional Use Permit applications are required for the Assisted Living and Skilled Nursing uses. A Phasing Plan for phased development and a Parcel Map 36227 to subdivide the project site into seven parcels is included in the proposal.

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The Goals and Objectives of the Community Development Element of the General Plan encourages the development of independent living and congregate care facilities for seniors in locations with convenient access to social, commercial, and medical services (Objective 2.18, Policy 2.18.4). The proposal is consistent with the General Plan and will provide assisted living and skilled nursing facilities providing neighborhood scale living accommodations for the senior community. The location of the proposed project, directly across from the Riverside County Regional Medical Center meets the General Plan Policy 2.2.4 of a supportive and compatible medical service.

The project as designed and conditioned meets the stated General Plan policies for Residential Office development with the underlying Office zoning and the medical use overlay.

The Goals and Objectives of the Community Development Element of the General Plan include providing supportive senior facilities and medical uses.

2. **Conformance with Zoning Regulations –** The proposed use complies with all applicable zoning and other regulations.

FACTS: With the approval of the Change of Zone, the project site is zoned Office with the medical use overlay which provides for the proposed medical uses. The use at this location will be compatible with and complementary to surrounding land uses that include the Riverside County Regional Medical Center directly to the west and the Kaiser Permanente Medical Center and Kaiser Permanente Medical Office buildings located approximately one and one-half miles south east of the site.

The project is designed in accordance with the provisions of Chapter 9.04 Commercial Districts, Chapter 9.07.040 Medical Use Overlay District and Chapter 9.16.150 Design Guidelines of the City's Municipal Code. The project as designed and conditioned would comply with all applicable zoning and other regulations.

3. **Health, Safety and Welfare –** The proposed use will not be detrimental to public health, safety or welfare or materially injurious to properties or improvements in the vicinity.

FACTS: The proposed Master Plot Plan, Plot Plans and Phasing Plan as designed and conditioned will provide acceptable levels of protection from natural and man-made hazards to life, health, and property consistent with General Goal 9.6.1. The project site is located approximately 1.5 miles from Fire Station No. 99 and within close proximity to emergency services which is consistent with General Plan Goal 9.6.2 requiring emergency

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services that are adequate to meet minor emergency and major catastrophic situations.

The California Environmental Quality Act (CEQA) is a statewide environmental law contained in Public Resources Code §§21000-21177. CEQA applies to most public agency decisions to carry out, authorize, or approve actions that have the potential to affect the environment. CEQA requires that public agencies analyze and acknowledge the environmental consequences of their discretionary actions and consider alternatives and mitigation measures that could avoid or reduce significant adverse impacts to the environment when avoidance or reduction is feasible. The CEQA compliance process provides public agencies and the general public an opportunity to comment on a proposed project's environmental effects. It was determined that an Initial Study would be prepared to determine whether the proposed project may have a significant effect on the environment.

An Initial Study/Mitigated Negative Declaration were prepared which assessed the potential of the proposed General Plan Amendment and the related Change of Zone, Tentative Parcel Map, Master Plot Plan, Plot Plans, Conditional Use Permits and a Phasing Plan for the Majestic Moreno Valley project applications to impact the environment. The proposed project includes the development of the project site with mixed use medical center campus on approximately 18.48 acres.

The Initial Study provided the documentation of the factual basis for the finding in the Mitigated Negative Declaration that the proposed project will not have a significant effect on the environment with the implementation of mitigation measures. The City as the Lead Agency has prepared a Mitigated Negative Declaration (MND) pursuant to Sections 15070 et seq. of the State CEQA Guidelines.

The Mitigated Negative Declaration is an informational document that provides the City, other public agencies, and the public at-large with an objective assessment of the potential environmental impacts that could result from implementation of the proposed project. The preparation and review of the Initial Study/Mitigated Negative Declaration reflects the independent judgment of the City.

The MND has been considered by the Planning Commission and prepared as there is no evidence that the proposed project will have a significant impact on public health or be materially injurious to surrounding properties of the environment as a whole.

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4. **Location, Design and Operation –** The location, design and operation of the proposed project will be compatible with existing and planned land uses in the vicinity.

FACTS: With the approval of the General Plan Amendment and Change of Zone, the Plot Plan applications would be permitted the project is designed consistent with the Municipal Code requirements. As designed and conditioned, the project will be compatible with the existing and planned land uses in the vicinity. The site is located on vacant property in the Residential/Office zone and the Medical Use Overlay District on Nason Street at Brodiaea Avenue just east of the Riverside County Regional Medical Center. The area to the west of the site is also located in the Medical Use Overlay District, and is zoned Office Commercial and Community Commercial. The project is bounded to the north and south by vacant residential zoned with existing large lot single family residents to the south and east. The project has been designed to be compatible with single family residences to the south by placing buildings as far as possible from property lines, and providing landscape buffers consistent with the Municipal Code.

As designed and conditioned, the project is compatible with existing and proposed land uses in the vicinity.

C. FEES, DEDICATIONS, RESERVATIONS, AND OTHER EXACTIONS

1. FEES

Impact, mitigation and other fees are due and payable under currently applicable ordinances and resolutions. These fees may include but are not limited to: Development Impact Fee, Transportation Uniform Mitigation Fee (TUMF), Multi-species Habitat Conservation Plan (MSHCP) Mitigation Fee, Stephens Kangaroo Rat Habitat Conservation fee, Underground Utilities in lieu Fee, Area Drainage Plan Fee, Bridge and Thoroughfare Mitigation Fee (Future) and Traffic Signal Mitigation Fee. The final amount of fees payable is dependent upon information provided by the applicant and will be determined at the time the fees become due and payable.

Unless otherwise provided for by this resolution, all impact fees shall be calculated and collected at the time and in the manner provided in Chapter 3.32 of the City of Moreno Valley Municipal Code or as so provided in the applicable ordinances and resolutions. The City expressly reserves the right to amend the fees and the fee calculations consistent with applicable law.

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2. DEDICATIONS, RESERVATIONS, AND OTHER EXACTIONS

The adopted Conditions of Approval for PEN16-0053, PEN16-0054, PEN16-0055, and PEN17-0013 incorporated herein by reference, may include dedications, reservations, and exactions pursuant to Government Code Section 66020 (d) (1).

3. CITY RIGHT TO MODIFY/ADJUST; PROTEST LIMITATIONS

The City expressly reserves the right to establish, modify or adjust any fee, dedication, reservation or other exaction to the extent permitted and as authorized by law.

Pursuant to Government Code Section 66020(d) (1), NOTICE IS FURTHER GIVEN that the 90 day period to protest the imposition of any impact fee, dedication, reservation, or other exaction described in this resolution begins on the effective date of this resolution and any such protest must be in a manner that complies with Section 66020(a) and failure to timely follow this procedure will bar any subsequent legal action to attack, review, set aside, void or annul imposition.

The right to protest the fees, dedications, reservations, or other exactions does not apply to planning, zoning, grading, or other similar application processing fees or service fees in connection with this project and it does not apply to any fees, dedication, reservations, or other exactions of which a notice has been given similar to this, nor does it revive challenges to any fees for which the Statute of Limitations has previously expired.

BE IT FURTHER RESOLVED that the Planning Commission **HEREBY APPROVES** Resolution No. 2018-05, and **RECOMMENDS** that the City Council:

1. **APPROVE** PEN16-0053, Master Plot Plan, PEN16-0054 and PEN16-0055 Plot Plans, and PEN17-0013, Phasing Plan, subject to the attached conditions of approval attached as Exhibits A, B, C and D.

APPROVED this 25th day of January, 2018.

AYES:
NOES:
ABSTAIN:

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_____
Jeffrey Barnes
Chair, Planning Commission

ATTEST:

_____
Richard J. Sandzimier, Planning Official

APPROVED AS TO FORM:

_____
City Attorney

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CITY OF MORENO VALLEY
CONDITIONS OF APPROVAL
Plot Plan (PEN16-0053)

EFFECTIVE DATE:
EXPIRATION DATE:

COMMUNITY DEVELOPMENT DEPARTMENT

Planning Division

1. ANY expansion to this use or exterior alterations will require the submittal of a separate application(s) and shall be reviewed and approved under separate permit(s). (MC 9.02.080)

2. The developer, or the developer's successor-in-interest, shall be responsible for maintaining any undeveloped portion of the site in a manner that provides for the control of weeds, erosion and dust. (MC 9.02.030)

3. This approval shall expire three years after the approval date of this project unless used or extended as provided for by the City of Moreno Valley Municipal Code. (MC 9.02.230)

4. All landscaped areas shall be maintained in a healthy and thriving condition, free from weeds, trash and debris. (MC 9.02.030)

5. The site shall be developed in accordance with the approved plans on file in the Community Development Department - Planning Division, the Municipal Code regulations, General Plan, and the conditions contained herein. Prior to any use of the project site or business activity being commenced thereon, all Conditions of Approval shall be completed to the satisfaction of the Planning Official. (MC 9.14.020)

6. Any signs indicated on the submitted plans are not included with this approval. Any signs, whether permanent (e.g. wall, monument) or temporary (e.g. banner, flag), require separate application and approval by the Planning Division. No signs are permitted in the public right of way. (MC 9.12)

7. All site plans, grading plans, landscape and irrigation plans, fence/wall plans, lighting plans and street improvement plans shall be coordinated for consistency with this approval.

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Special Conditions

8. Master Plot Plan PEN16-0053 has been approved for the development of a seven parcel, five building medical complex on 18.48 acres. The uses include a medical office building, wellness and urgent care office building, assisted living and skilled nursing facilities. The master plot plan has been approved with shared access and shared parking and will be developed per the approved plans and Plot Plans PEN16-0054 and PEN16-0055, Conditional Use Permits PEN16-0056 and PEN16-0057, Tentative Parcel Map 36227, PEN16-0052 and Phasing Plan PEN17-0013.

9. The following Mitigation Measures shall apply to the project:

AQ-1: The applicant shall ensure that approved architectural coatings are utilized. Prior to the issuance of building permits, the City will verify that construction plans submitted by the project proponent reflect use of architectural coatings where the content of volatile organic compounds (VOC) does not exceed 25 grams per liter (g/l) for interior and exterior applications. This measure must be verified through standard building inspections in light of the performance standard that emissions of volatile organic compounds from application of interior or exterior coatings shall not exceed the daily emissions thresholds established by the South Coast Air Quality Management District. The applicant bears the cost of implementing this mitigation.

BIO-1: The applicant shall avoid impacts to nesting birds and violation of state and federal laws pertaining to birds, all construction related activities (including but not limited to mobilization and staging, clearing, grubbing, vegetation removal, fence installation, demolition, and grading) should occur outside the avian nesting season (generally prior to Feb 1 or after Aug 31). If construction and construction noise occurs within the avian nesting season (from Feb 1 to Aug 31 or according to local requirements), all suitable habitats located within the project's area of disturbance including staging and storage areas plus a 250-foot (passerines) and 1,000 foot (raptor nests) buffer around these areas shall be thoroughly surveyed, as feasible, for the presence of active nests by a qualified biologist no more than 5-days before commencement of any site disturbance activities and equipment mobilization. If project activities are delayed more than 5-days, an additional nesting bird survey shall be performed. Active nesting is present if a bird is sitting in a nest, a nest has eggs or chicks in it, or adults are observed carrying food to the nest. The results of these surveys shall be documented. If it is determined that birds are actively nesting within the survey area, Mitigation Measure BIO-2 shall apply. Conversely, if the survey area is found to be absent of nesting birds, Mitigation Measure BIO-2 shall not be required.

BIO-2: If pre-construction nesting bird surveys result in the location of active nests, the applicant shall ensure that no site disturbance and mobilization of heavy equipment (including but not limited to equipment staging, fence installation, clearing, grubbing, vegetation removal, demolition and grading), shall take place within 250 feet of non-raptor nests and 1,000 feet of raptor nests, or as determined by a qualified biologist in consultation with the CDFW, until the chicks have fledged. Monitoring shall be required to insure compliance with the MBTA and relevant CDFW requirements. Monitoring dates and findings shall be documented.

BIO-3: The applicant shall ensure a pre-construction survey for burrowing owls be completed no more than 30-days prior to the start of construction at the Project site to ensure no burrowing owls have moved onto the site.

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CUL-1: Prior to the issuance of a grading permit, the Applicant shall retain a qualified professional archaeologist who meets U.S. Secretary of the Interior's Professional Qualifications and Standards. The Project archaeologist and Native American Tribal Representatives will conduct an Archaeological Sensitivity Training for construction personnel prior to commencement of excavation activities. The training session will include a handout and will focus on how to identify archaeological and Tribal Cultural resources that may be encountered during earthmoving activities and the procedures to be followed in such an event, including who to contact and the appropriate avoidance measures that need to be undertaken until the find(s) can be properly evaluated; the duties of archaeological and Native American monitors; and the general steps a qualified professional archaeologist would follow in conducting a salvage investigation if one is necessary. All new construction personnel that will conduct earthwork or grading activities must take the Archaeological Sensitivity Training prior to beginning work on the project and the professional archaeologist shall make themselves available to provide the training on an as-needed basis. A sign-in sheet shall be compiled to track attendance and shall be submitted to the City with the Phase IV Archaeological Monitoring Report.

CUL-2: Preconstruction Notification of Native American Tribal Representatives. Prior to the issuance of a grading permit, the Applicant shall provide evidence to the City of Moreno Valley that the Agua Band of Cahuilla Indians, Pechanga Band of Luiseño Indians and the Soboba Band of Luiseño Indians tribal representatives (hereafter referred to as "Native American Tribal Representatives") received a minimum of 30 days advance notice of all mass grading and trenching activities, and provide evidence of monitoring agreements between the Applicant and the Tribes. The Native American Tribal Representatives shall be notified a minimum of 48 hours in advance and allowed to attend the pre-grading meeting with the City and project construction contractors and/or monitor all project mass grading and trenching activities.

CUL-3: Prior to grading permit issuance, the City shall verify that the following note is included on the Grading Plan: "If any suspected archaeological resources are discovered during ground-disturbing activities and the archaeological monitor or Tribal representatives are not present, the construction supervisor is obligated to halt work in a 100-foot radius around the find and call the project archaeologist and the Tribal representatives to the site to assess the significance of the find."

CUL-4: Prior to the issuance of a grading permit, the Applicant shall retain a qualified archaeological monitor. The archaeological monitor will work under the direction and guidance of the qualified professional archaeologist and will meet the U.S. Secretary of the Interior's Professional Qualifications and Standards. The archeological monitor shall have the authority to temporarily redirect earthmoving activities in the event that suspected archaeological resources are unearthed during project construction. Archaeological monitoring is required at all depths and strata. The archaeological monitor shall be present during all construction excavations (e.g., grading, trenching, or clearing/grubbing) into non-fill younger Pleistocene alluvial sediments. Multiple earth-moving construction activities may require multiple archaeological monitors. The frequency of monitoring shall be based on the rate of excavation and grading activities, proximity to known archaeological resources, the materials being excavated (native versus artificial fill soils), and the depth of excavation, and if found, the abundance and type of archaeological resources encountered. Full-time monitoring can be reduced to part-time inspections if determined adequate by the qualified professional archaeologist.

CUL-5: The applicant shall ensure that all ground disturbing activities are ceased and treatment plans are implemented if archaeological resources are encountered. In the event that archaeological resources are unearthed during ground-disturbing activities, ground-disturbing activities shall be halted or diverted away from the vicinity of the find so that the find

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can be evaluated. A buffer area of at least 100 feet shall be established around the find where construction activities shall not be allowed to continue until a qualified archaeologist has examined the newly discovered artifact(s) and has evaluated the area of the find. Work shall be allowed to continue outside of the buffer area. All archaeological resources unearthed by project construction activities shall be evaluated by a qualified professional archaeologist, who meets the U.S. Secretary of the Interior's Professional Qualifications and Standards. Should the newly discovered artifacts be determined to be prehistoric, Native American Tribes/Individuals should be contacted and consulted and Native American construction monitoring should be initiated. The Applicant and City shall coordinate with the archaeologist to develop an appropriate treatment plan for the resources. The plan may include implementation of archaeological data recovery excavations to address treatment of the resource along with subsequent laboratory processing and analysis.
In the event that a cultural resource is encountered during ground-disturbing activities, the landowner(s) shall relinquish ownership of all such resources, including sacred items, burial goods, and all archaeological artifacts and non-human remains. The artifacts shall be relinquished through one or more of the following methods and evidence of such shall be provided to the City of Moreno Valley Planning Department:

1. Accommodate the process for Preservation-In-Place/Onsite with the consulting Native American tribes or bands, as detailed in the treatment plan prepared by the professional paleontologist. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not.
2. A curation agreement with an appropriate qualified repository within Riverside County that meets federal standards per 36 CFR Part 79; therefore, the resources would be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility within Riverside County, to be accompanied by payment of the fees necessary for permanent curation; and/or
3. For purposes of conflict resolution, if more than one Native American tribe or band is involved with the project and cannot come to an agreement as to the disposition of cultural materials, they shall be curated at the Western Science Center by default.

CUL-6: Prior to building permit issuance, the Project archaeologist shall prepare a final Phase IV Monitoring Report as outlined in the CRMP, which shall be submitted to the City Planning Division, the appropriate Native American tribe(s), and the Eastern Information Center at the University of California, Riverside. The report shall include a description of resources unearthed, if any, evaluation of the resources with respect to the California Register and CEQA, and treatment of these resources. All cultural material, excluding sacred, ceremonial, grave goods and human remains, collected during the grading monitoring program and from any previous archaeological studies or excavations on the project site shall be curated in a Riverside County repository according to the current professional repository standards and may include the Pechanga Band's curatorial facility in Temecula, CA.

CUL-7: Conduct Paleontological Sensitivity Training for Construction Personnel. Prior to the issuance of a grading permit, the Applicant shall retain a professional paleontologist, who meets the qualifications set forth by the Society of Vertebrate Paleontology. The paleontologist shall conduct a Paleontological Sensitivity Training for construction personnel prior to commencement of excavation activities. The training will include a handout and will focus on how to identify paleontological resources that may be encountered during earthmoving activities, and the procedures to be followed in such an event, including who to contact and the appropriate avoidance measures that need to be undertaken until the find(s) can be properly evaluated; the duties of paleontological monitors; notification and other procedures to follow upon discovery of resources; and the general steps a qualified professional paleontologist would follow in conducting a salvage investigation if one is necessary. All new construction personnel that will conduct earthwork or grading activities must take the Paleontological Sensitivity Training prior to beginning work on the project and the professional paleontologist shall make themselves available to provide the training on an

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as-needed basis.

CUL-8: The applicant shall ensure the monitoring of construction excavations for paleontological resources is required for all excavations in older Quaternary alluvial fan deposits or in sedimentary deposits derived from the Mt. Eden Formation. Prior to the issuance of a grading permit, the Applicant shall retain a qualified paleontological monitor, who will work under the guidance and direction of a professional paleontologist, and who meets the qualifications set forth by the Society of Vertebrate Paleontology. The paleontological monitor shall have the authority to temporarily redirect earthmoving activities in the event that suspected paleontological resources are unearthed during project construction. The paleontological monitor shall be present during all construction excavations including, but not limited to grading, trenching, boring, and clearing/grubbing). Multiple earth-moving construction activities may require multiple paleontological monitors. The frequency of monitoring shall be based on the rate of excavation and grading. Monitoring may be reduced if potentially fossiliferous units are not present in the subsurface, or if present, are determined upon exposure and examination by the professional paleontologist to have a low potential to contain or yield fossil resources.

CUL-9: The applicant shall ensure that in the event that paleontological resources and or unique geological features are unearthed during ground-disturbing activities, all ground disturbing activities shall be halted or diverted away from the vicinity of the find in order to evaluate the resource. A buffer area of at least 100 feet shall be established around the find where construction activities shall not be allowed to continue until appropriate paleontological treatment plan has been approved by the Applicant and the City. Work shall be allowed to continue outside of the buffer area. The Applicant and City shall coordinate with a professional paleontologist, who meets the qualifications set forth by the Society of Vertebrate Paleontology, to develop an appropriate treatment plan for the resources. Treatment may include implementation of paleontological salvage excavations to remove the resource along with subsequent laboratory processing and analysis or preservation in place. At the paleontologist's discretion and to reduce construction delay, the grading and excavation contractor shall assist in removing rock samples for initial processing. Recovered specimens shall be properly prepared to a point of identification and permanent preservation, including screen washing sediments to recover small invertebrates and vertebrates, if necessary. Identification and curation of specimens into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable storage is required for significant discoveries.

CUL-10: The applicant shall ensure prior to building permits, that a professional paleontologist prepares a report summarizing the results of the monitoring and salvaging efforts, the methodology used in these efforts, as well as a description of the fossils collected and their significance as well as any necessary maps and graphics to accurately record the original location of these resources. The report shall be submitted to the Applicant, the City, the San Bernardino County Natural History Museum, Natural History Museum of Los Angeles County, and representatives of other appropriate or concerned agencies to signify the satisfactory completion of the project and required mitigation measures.

CUL-11: In the event that any human remains are unearthed during project construction, the City of Moreno Valley and the Applicant shall comply with State Health and Safety Code Section 7050.5 The City of Moreno Valley and the Applicant shall immediately notify the Riverside County Coroner's office and no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition. If remains are determined to be of Native American descendent, the coroner has 24-hours to notify the Native American Heritage Commission (NAHC). The NAHC shall identify the person(s) thought to be the Most Likely Descendent (MLD). After the MLD has inspected the remains and the site, they have 48 hours to recommend to the landowner the treatment or disposal, with appropriate dignity, the human remains and any associated funerary objects. The MLD shall complete their inspection and make their recommendation within 48 hours of being

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granted access by the landowner to inspect the discovery. The recommendation may include the scientific removal and nondestructive analysis of human remains and cultural items associated with Native American burials. Upon the discovery of the Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred, as prescribed in this mitigation measure, with the MLD regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The landowner shall discuss and confer with the descendants all reasonable options regarding the descendants' preferences for treatment.

If the NAHC is unable to identify a MLD, or the MLD identified fails to make a recommendation, or the landowner rejects the recommendation of the MLD and the mediation provided for in Subdivision (k) of Section 5097.94, if invoked, fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall inter the human remains and items associated with Native American human remains with appropriate dignity on the facility property in a location not subject to further and future subsurface disturbance. A record of the reburial shall be filed with the NAHC and the CHRIS-EIC. Upon the reburial of the human remains, the MLD shall file a record of the reburial with the NAHC and the project archaeologist shall file a record of the reburial with the EIC.

NOI-1: Project proponent shall provide the following (or equivalent) noise abatement measures as part of the building construction plans in order to meet the City of Moreno Valley exterior noise standards of 60dBA for residential and 65dBA for commercial:
• Stationary construction noise sources such as generators or pumps must be located at least 100 feet from sensitive land uses, as feasible, or at maximum distance when necessary to complete work near sensitive land uses, to be verified by submittal of a construction staging plan. This mitigation measure must be implemented throughout construction and may be periodically monitored by the Planning Director, or designee during routine inspections.
• Construction staging areas must be located as far from noise sensitive land uses as feasible, to be verified by submittal of a construction staging plan. Implementation of this measure shall occur throughout construction through periodic monitoring by the Planning Director or designee during routine inspections.
• Throughout construction, the contractor shall ensure all construction equipment is equipped with included noise attenuating devices and are properly maintained. This mitigation measure shall be periodically monitored by the Planning Director or designee during routine inspections.
• Idling equipment must be turned off when not in use. This mitigation measure may be periodically monitored by the Planning Director or designee during routine inspections.
• Equipment must be maintained so that vehicles and their loads are secured from rattling and banging. This mitigation measure may be periodically monitored by the Planning Director or designee during routine inspections.

NOI-2: The developer shall ensure temporary construction noise control barriers shall be installed where residential uses are located adjacent to the project site (south and west). The type and location of the noise control barriers shall be shown on all grading and building plans and subject to approval by the Planning Director, or designee.

NOI-3: All construction activities shall comply with the City of Moreno Valley Noise Ordinance (Chapter 11.80 of the City of Moreno Valley Municipal Code). This requirement shall be noted on all grading and building plans and in bid documents issued to construction contractors.

TRA-1: The project applicant shall participate in the phased construction of off-site traffic signals through payment of traffic signal mitigation fees. The traffic signals within the study area at buildout should specifically include an interconnect of the traffic signals to function in a coordinated system. Traffic signal mitigation fees shall be paid prior to Opening Year (2020) with Project Phase 1 or alternate City approved deadline.

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TRA-1: If, during mass grading and trenching activities, the Archaeologist or Tribal Monitor suspect that an archaeological resource and/or TCR may have been unearthed, the monitor identifying the potential resources, in consultation with the other monitor(s) as appropriate, shall immediately halt and redirect grading operations in a 100-foot radius around the find to allow identification and evaluation of the suspected resource. The Native American monitor(s) or appropriate representative(s) and the archaeological monitor shall evaluate the suspected resource and make a determination of significance pursuant to California Public Resources Code Section 21083.2. The archaeological monitor and Tribal monitor(s) or appropriate representative(s), the Project Applicant, and the City Planning Division shall confer regarding mitigation of the discovered resource(s). All sacred sites, should they be encountered within the project area, shall be avoided and preserved as the preferred mitigation, if feasible. If preservation in place is not feasible, treatment and/or mitigation may include implementation of archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis.

Prior to Grading Permit

10. Prior to the issuance of grading permits, decorative (e.g. colored/scored concrete or as approve by the Planning Official) pedestrian pathways across circulation aisles/paths shall be provided throughout the development to connect dwellings with open spaces and/or recreational uses or commercial/industrial buildings with open space and/or parking. and/or the public right-of-way. The pathways shall be shown on the precise grading plan. (GP Objective 46.8, DG)

11. Prior to issuance of any grading permits, mitigation measures contained in the Mitigation Monitoring Program approved with this project shall be implemented as provided therein. A mitigation monitoring fee, as provided by City ordinance, shall be paid by the applicant within 30 days of project approval. No City permit or approval shall be issued until such fee is paid. (CEQA)

12. Prior to issuance of grading permits, the developer shall pay the applicable Stephens' Kangaroo Rat (SKR) Habitat Conservation Plan mitigation fee. (Ord)

13. Within thirty (30) days prior to any grading or other land disturbance, a pre-construction survey for Burrowing Owls shall be conducted pursuant to the established guidelines of Multiple Species Habitat Conservation Plan. The pre-construction survey shall be submitted to the Planning Division prior to any disturbance of the site and/or grading permit issuance.

14. Prior to approval of any grading permits, plans for any security gate system shall be submitted to and approved by to the Planning Division.

15. Prior to issuance of grading permits, the developer shall submit wall/fence plans to the Planning Division for review and approval as follows:

    A. A maximum 6 foot high solid decorative block perimeter wall with pilasters and a cap shall be required adjacent to all residential zoned areas.

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B. 3-foot high decorative wall, solid hedge or berm shall be placed in any setback areas between a public right of way and a parking lot for screening.

C. Any proposed retaining walls shall also be decorative in nature, while the combination of retaining and other walls on top shall not exceed the height requirement.

D. Walls and fences for visual screening are required when there are adjacent residential uses or residentially zone property. The height, placement and design will be based on a site specific review of the project. All walls are subject to the approval of the Planning Official. (DC 9.08.070)

16. Prior to the issuance of grading permits, a temporary project identification sign shall be erected on the site in a secure and visible manner. The sign shall be conspicuously posted at the site and remain in place until occupancy of the project. The sign shall include the following:

    a. The name (if applicable) and address of the development.
    b. The developer's name, address, and a 24-hour emergency telephone number.

17. Prior to issuance of grading permits, the location of the trash enclosure shall be included on the plans.

<u>Prior to Building permits</u>

18. Prior to the issuance of building permits, covered trash enclosure (s) shall be included in the building plans or the Building submittal of the Fence and Wall plans. The trash enclosure(s), including the roof materials, shall be compatible with the architecture, color and materials of the building(s) design. Trash enclosure areas shall include landscaping on three sides. (GP Objective 43.6, DG)

19. Prior to issuance of any building permits, final landscaping and irrigation plans shall be submitted for review and approved by the Planning Division. After the third plan check review for landscape plans, an additional plan check fee shall apply. The plans shall be prepared in accordance with the City's Landscape Requirements and shall include:

    A. A three (3) foot high decorative wall, solid hedge or berm shall be placed in any setback areas between a public right of way and a parking lot for screening.

    B. Finger and end planters with required step outs and curbing shall be provided every 12 parking stalls as well as at the terminus of each aisle.

    C. Diamond planters shall be provided every 3 parking stalls.

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D. Drought tolerant landscape shall be used. Sod shall be limited to gathering areas. (or No sod shall be installed)

E. Street trees shall be provided every 40 feet on center in the right of way.

F. On-site trees shall be planted at an equivalent of one (1) tree per thirty (30) linear feet of the perimeter of a parking lot and per thirty linear feet of a building dimension for the portions of the building visible from a parking lot or right of way. Trees may be massed for pleasing aesthetic effects.

G. Enhanced landscaping shall be provided at all driveway entries and street corner locations The review of all utility boxes, transformers etc. shall be coordinated to provide adequate screening from public view.

H. Landscaping on three sides of any trash enclosure.

I. All site perimeter and parking lot landscape and irrigation shall be installed prior to the release of certificate of any occupancy permits for the site or pad in question (master plot plan).

20. Prior to issuance of building permits, the Planning Division shall review and approve the location and method of enclosure or screening of transformer cabinets, commercial gas meters and back flow preventers as shown on the final working drawings. Location and screening shall comply with the following criteria : transformer cabinets and commercial gas meters shall not be located within required setbacks and shall be screened from public view either by architectural treatment or landscaping; multiple electrical meters shall be fully enclosed and incorporated into the overall architectural design of the building (s); back-flow preventers shall be screened by landscaping. (GP Objective 43.30)

21. Prior to issuance of a building permit, the developer /property owner or developer's successor-in-interest shall pay all applicable impact fees due at permit issuance, including but not limited to Multi-species Habitat Conservation Plan (MSHCP) mitigation fees. (Ord)

22. Prior to building final, the developer/owner or developer's/owner' s successor-in-interest shall pay all applicable impact fees, including but not limited to Transportation Uniform Mitigation fees (TUMF), and the City's adopted Development Impact Fees. (Ord)

23. Prior to or at building plan check submittal, the elevation plans shall include decorative lighting sconces on all sides of the buildings of the complex facing a parking lot, courtyard or plaza, or public right of way or open space to provide up-lighting and shadowing on the structures. Include drawings of the sconce

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details for each building within the elevation plans, approved by the Planning Division prior to building permit issuance.

24. Prior to or at building plan check submittal, two copies of a detailed, on-site, computer generated, point-by-point comparison lighting plan, including exterior building, parking lot, and landscaping lighting, shall be submitted to the Planning Division for review and approval prior to the issuance of a building permit. The lighting plan shall be generated on the plot plan and shall be integrated with the final landscape plan. The plan shall indicate the manufacturer's specifications for light fixtures used, shall include style, illumination, location, height and method of shielding per the City's Municipal Code requirements. After the third plan check review for lighting plans, an additional plan check fee will apply. (MC 9.08.100, 9.16.280)

25. Prior to issuance of building permits, screening details shall be addressed on the building plans for roof top equipment submitted for Planning Division review and approval through the building plan check process. All equipment shall be completely screened so as not to be visible from public view, and the screening shall be an integral part of the building.

Prior to Building Final or Occupancy

26. Prior to building final, all required landscaping and irrigation shall be installed per plan, certified by the Landscape Architect and inspected by the Planning Division. (MC 9.03.040, MC 9.17).

27. Prior to building final, Planning approved/stamped landscape plans shall be provided to the Community Development Department – Planning Division on a CD disk.

28. Prior to building final, all required and proposed fences and walls shall be constructed according to the approved plans on file in the Planning Division. (MC 9.080.070).

Building Division

29. The proposed non-residential project shall comply with the latest Federal Law, Americans with Disabilities Act, and State Law, California Code of Regulations, Title 24, Chapter 11B for accessibility standards for the disabled including access to the site, exits, bathrooms, work spaces, etc.

30. Prior to submittal, all new development, including residential second units, are required to obtain a valid property address prior to permit application. Addresses

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can be obtained by contacting the Building Safety Division at 951.413.3350.

31. Contact the Building Safety Division for permit application submittal requirements.

32. All new buildings 10,000 square feet and over, shall include building commissioning in the design and construction processes of the building project to verify that the building systems and components meet the owner 's or owner representative's project requirements (OPR). All requirements in The 2016 California Green Building Standards Code, sections 5.410.2 - 5.410.2.6 must be met.

33. Any construction within the city shall only be completed between the hour of seven a.m. to seven p.m. Monday through Friday, excluding holidays and from eight a.m. to four p.m. on Saturday, unless written approval is obtained from the city building official or city engineer (Municipal Code Section 8.14.040.E).

34. Building plans submitted shall be signed and sealed by a California licensed design professional as required by the State Business and Professions Code.

35. The proposed development is subject to the payment of applicable processing fees as required by the City's current Fee Ordinance at the time a building permit application is submitted or prior to the issuance of permits as determined by the City.

36. The proposed project will be subject to approval by the Eastern Municipal Water District and all applicable fees and charges shall be paid prior to permit issuance. Contact the water district at 951.928.3777 for specific details.

37. All new structures shall be designed in conformance to the latest design standards adopted by the State of California in the California Building Standards Code (California Code of Regulations, Title 24) including requirements for allowable area, occupancy separations, fire suppression systems, accessibility, etc. The current edition of the applicable code standards is the 2016 Triennial Edition.

38. The proposed non-residential project shall comply with 2016 California Green Building Standards Code, Section 5.106.5.3, mandatory requirements for Electric Vehicle Charging Station (EVCS).

39. The proposed project's occupancy shall be classified by the Building Official and must comply with exiting, occupancy separation(s) and minimum plumbing fixture requirements of the 2016 California Plumbing Code Table 4-1.

40. Prior to permit issuance, every applicant shall submit a properly completed Waste Management Plan (WMP), as a portion of the building or demolition permit process. (MC 8.80.030)

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ECONOMIC DEVELOPMENT DEPARTMENT (EDD)

41. New Moreno Valley businesses may work with the Economic Development Department to coordinate job recruitment fairs.

42. New Moreno Valley businesses may adopt a "First Source" approach to employee recruitment that gives notice of job openings to Moreno Valley residents for one week in advance of the public recruitment.

43. New Moreno Valley businesses are encouraged to hire local residents.

44. New Moreno Valley businesses are encouraged to provide a job fair flyer and/or web announcement to the City in advance of job recruitments, so that the City can assist in publicizing these events.

45. New Moreno Valley businesses may utilize the workforce recruitment services provided by the Moreno Valley Employment Resource Center ("ERC").

    The ERC offers no cost assistance to businesses recruiting and training potential employees. Complimentary services include:
    • Job Announcements
    • Applicant testing / pre-screening
    • Interviewing
    • Job Fair support
    • Training space

FIRE DEPARTMENT

Fire Prevention Bureau

46. Prior to issuance of Certificate of Occupancy or Building Final, all commercial buildings shall display street numbers in a prominent location on the street side and rear access locations. The numerals shall be a minimum of twelve inches in height. (CFC 505.1, MVMC 8.36.060[I])

47. Prior to issuance of Certificate of Occupancy, approval shall be required from the County of Riverside Community Health Agency (Department of Environmental Health) and Moreno Valley Fire Prevention Bureau to maintain, store, use, handle materials, or conduct processes which produce conditions hazardous to life or property, and to install equipment used in connection with such activities. (CFC 105)

48. Prior to issuance of Certificate of Occupancy or Building Final, the applicant/developer shall install a fire alarm system monitored by an approved Underwriters Laboratory listed central station based on a requirement for monitoring the sprinkler system, occupancy or use. Fire alarm panel shall be accessible from exterior of building in an approved location. Plans shall be submitted to the Fire Prevention Bureau for approval prior to installation. (CFC Chapter 9 and MVMC 8.36.100)

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49. Prior to issuance of Building Permits, the applicant/developer shall participate in the Fire Impact Mitigation Program. (Fee Resolution as adopted by City Council)

50. All Fire Department access roads or driveways shall not exceed 12 percent grade. (CFC 503.2.7 and MVMC 8.36.060[G])

51. The Fire Department emergency vehicular access road shall be (all weather surface) capable of sustaining an imposed load of 80,000 lbs. GVW, based on street standards approved by the Public Works Director and the Fire Prevention Bureau. The approved fire access road shall be in place during the time of construction. Temporary fire access roads shall be approved by the Fire Prevention Bureau. (CFC 501.4, and MV City Standard Engineering Plan 108d)

52. The angle of approach and departure for any means of Fire Department access shall not exceed 1 ft drop in 20 ft (0.3 m drop in 6 m), and the design limitations of the fire apparatus of the Fire Department shall be subject to approval by the AHJ. (CFC 503 and MVMC 8.36.060)

53. Prior to construction, all locations where structures are to be built shall have an approved Fire Department access based on street standards approved by the Public Works Director and the Fire Prevention Bureau. (CFC 501.4)

54. Prior to issuance of Building Permits, the applicant/developer shall provide the Fire Prevention Bureau with an approved site plan for Fire Lanes and signage. (CFC 501.3)

55. Prior to issuance of Certificate of Occupancy or Building Final, “Blue Reflective Markers” shall be installed to identify fire hydrant locations in accordance with City specifications. (CFC 509.1 and MVLT 440A-0 through MVLT 440C-0)

56. Existing fire hydrants on public streets are allowed to be considered available. Existing fire hydrants on adjacent properties shall not be considered available unless fire apparatus access roads extend between properties and easements are established to prevent obstruction of such roads. (CFC 507, 501.3) a - After the local water company signs the plans, the originals shall be presented to the Fire Prevention Bureau for signatures. The required water system, including fire hydrants, shall be installed, made serviceable, and be accepted by the Moreno Valley Fire Department prior to beginning construction. They shall be maintained accessible.

57. Final fire and life safety conditions will be addressed when the Fire Prevention Bureau reviews building plans. These conditions will be based on occupancy, use, California Building Code (CBC), California Fire Code (CFC), and related codes, which are in effect at the time of building plan submittal.

58. The Fire Code Official is authorized to enforce the fire safety during construction requirements of Chapter 33. (CFC Chapter 33 & CBC Chapter 33)

59. Fire lanes and fire apparatus access roads shall have an unobstructed width of not less than twenty–four (24) feet for building below 35 feet in height and thirty (30

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for buildings over 35 feet in height. as approved by the Fire Prevention Bureau and an unobstructed vertical clearance of not less the thirteen (13) feet six (6) inches. (CFC 503.2.1 and MVMC 8.36.060[E])

60. Prior to issuance of the building permit for development, independent paved access to the nearest paved road, maintained by the City shall be designed and constructed by the developer within the public right of way in accordance with City Standards. (MVMC 8.36.060, CFC 501.4)

61. Prior to issuance of a Certificate of Occupancy or Building Final, a "Knox Box Rapid Entry System" shall be provided. The Knox-Box shall be installed in an accessible location approved by the Fire Code Official. All exterior security emergency access gates shall be electronically operated and be provided with Knox key switches for access by emergency personnel. (CFC 506.1)

62. The minimum number of fire hydrants required, as well as the location and spacing of fire hydrants, shall comply with the C.F.C., MVMC, and NFPA 24. Fire hydrants shall be located no closer than 40 feet to a building. A fire hydrant shall be located within 50 feet of the fire department connection for buildings protected with a fire sprinkler system. The size and number of outlets required for the approved fire hydrants are (6" x 4" x 2 ½" x 2 ½") (CFC 507.5.1, 507.5.7, Appendix C, NFPA 24-7.2.3, MVMC 912.2.1)

63. Fire Department access driveways over 150 feet in length shall have a turn-around as determined by the Fire Prevention Bureau capable of accommodating fire apparatus. (CFC 503 and MVMC 8.36.060, CFC 501.4)

64. During phased construction, dead end roadways and streets which have not been completed shall have a turn-around capable of accommodating fire apparatus. (CFC 503.1 and 503.2.5)

65. If construction is phased, each phase shall provide an approved emergency vehicular access way for fire protection prior to any building construction. (CFC 501.4)

66. Plans for private water mains supplying fire sprinkler systems and /or private fire hydrants shall be submitted to the Fire Prevention Bureau for approval. (CFC 105 and CFC 3312.1)

67. The Fire Prevention Bureau is required to set a minimum fire flow for the remodel or construction of all commercial buildings per CFC Appendix B and Table B 105.1. The applicant/developer shall provide documentation to show there exists a water system capable of delivering said waterflow for 2 hour(s) duration at 20-PSI residual operating pressure. The required fire flow may be adjusted during the approval process to reflect changes in design, construction type, or automatic fire protection measures as approved by the Fire Prevention Bureau. Specific requirements for the project will be determined at time of submittal. (CFC 507.3, Appendix B)

68. Prior to construction, all traffic calming designs/devices must be approved by the Fire Marshal and City Engineer.

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69. Prior to building construction, dead end roadways and streets which have not been completed shall have a turnaround capable of accommodating fire apparatus. (CFC 503.2.5)

70. Prior to issuance of Building Permits, the applicant/developer shall furnish one copy of the water system plans to the Fire Prevention Bureau for review. Plans shall: a. Be signed by a registered civil engineer or a certified fire protection engineer; b . Contain a Fire Prevention Bureau approval signature block; and c. Conform to hydrant type, location, spacing of new and existing hydrants and minimum fire flow required as determined by the Fire Prevention Bureau. The required water system, including fire hydrants, shall be installed, made serviceable, and be accepted by the Moreno Valley Fire Department prior to beginning construction. They shall be maintained accessible.

FINANCIAL & MANAGEMENT SERVICES DEPARTMENT

Moreno Valley Utility

71. This project requires the installation of electric distribution facilities . A non-exclusive easement shall be provided to Moreno Valley Utility and shall include the rights of ingress and egress for the purpose of operation, maintenance, facility repair, and meter reading.

72. This project requires the installation of electric distribution facilities. The developer shall submit a detailed engineering plan showing design, location and schematics for the utility system to be approved by the City Engineer. In accordance with Government Code Section 66462, the Developer shall execute an agreement with the City providing for the installation, construction, improvement and dedication of the utility system following recordation of final map and/or concurrent with trenching operations and other improvements so long as said agreement incorporates the approved engineering plan and provides financial security to guarantee completion and dedication of the utility system.

The Developer shall coordinate and receive approval from the City Engineer to install, construct, improve, and dedicate to the City all utility infrastructure including but not limited to, conduit, equipment, vaults, ducts, wires, switches, conductors, transformers, and “bring-up” facilities including electrical capacity to serve the identified development and other adjoining, abutting, or benefiting projects as determined by Moreno Valley Utility – collectively referred to as “utility system”, to and through the development, along with any appurtenant real property easements, as determined by the City Engineer necessary for the distribution and/or delivery of any and all “utility services” to and within the project. For purposes of this condition, “utility services” shall mean electric, cable television, telecommunication (including video, voice, and data) and other similar services designated by the City Engineer . “Utility services” shall not include sewer, water, and natural gas services, which are addressed by other conditions of approval.

The City, or the City’s designee, shall utilize dedicated utility facilities to e

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safe, reliable, sustainable and cost effective delivery of utility services and maintain the integrity of streets and other public infrastructure. Deve

73. Existing Moreno Valley Utility electrical infrastructure shall be preserved in place. The developer will be responsible, at developer's expense, for any and all costs associated with the relocation of any of Moreno Valley Utility's underground electrical distribution facilities, as determined by Moreno Valley Utility, which may be in conflict with any developer planned construction on the project site.

74. This project is subject to a Reimbursement Agreement. The Developer is responsible for a proportionate share of costs associated with electrical distribution infrastructure previously installed that directly benefits the project. Payment shall be required prior to issuance of building permits.

PUBLIC WORKS DEPARTMENT

Land Development

75. A digital (pdf) copy of all approved improvement plans shall be submitted to the Land Development Division.

76. All applicable inspection fees shall be paid.

77. All work performed within public right-of-way requires an encroachment permit. Security (in the form of a cash deposit or other approved means) may be required as determined by the City Engineer. For non-subdivision projects, the City Engineer may require the execution of a Public Improvement Agreement (PIA) as a condition of the issuance of a construction or encroachment permit. All inspection fees shall be paid prior to issuance of construction permit. [MC 9.14.100(C.4)]

78. Aggregate slurry, as defined in Section 203-5 of Standard Specifications for Public Works Construction, may be required just prior to the end of the one-year warranty period of the public streets at the discretion of the City Engineer. If slurry is required, a slurry mix design shall be submitted for review and approved by the City Engineer. The latex additive shall be Ultra Pave 70 (for anionic) or Ultra Pave 65 K (for cationic) or an approved equal per the geotechnical report. The latex shall be added at the emulsion plant after weighing the asphalt and before the addition of mixing water. The latex shall be added at a rate of two to two-and-one-half (2 to 2½) parts to one-hundred (100) parts of emulsion by volume. Any existing striping shall be removed prior to slurry application and replaced per City standards.

79. The developer shall comply with all applicable City ordinances and resolutions including the City's Municipal Code (MC) and if subdividing land, the Government Code (GC) of the State of California, specifically Sections 66410 through 66499.58, said sections also referred to as the Subdivision Map Act (SMA). [MC 9.14.010]

80. The final approved conditions of approval (COAs) and any applicable Mitigation Measures issued by the Planning Division shall be photographically or electronically placed on mylar sheets and included in the Grading and Street Improvement plans.

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81. The developer shall monitor, supervise and control all construction and construction supportive activities, so as to prevent these activities from causing a public nuisance, including but not limited to, insuring strict adherence to the following:
(a) Removal of dirt, debris, or other construction material deposited on any public street no later than the end of each working day.
(b) Observance of working hours as stipulated on permits issued by the Land Development Division.
(c) The construction site shall accommodate the parking of all motor vehicles used by persons working at or providing deliveries to the site.
(d) All dust control measures per South Coast Air Quality Management District (SCAQMD) requirements during the grading operations.
Violation of any condition, restriction or prohibition set forth in these conditions shall subject the owner, applicant, developer or contractor (s) to remedy as noted in City Municipal Code 8.14.090. In addition, the City Engineer or Building Official may suspend all construction related activities for violation of any condition, restriction or prohibition set forth in these conditions until such time as it has been determined that all operations and activities are in conformance with these conditions.

82. Prior to any plan approval, a final detailed drainage study (prepared by a registered/licensed civil engineer) shall be submitted for review and approved by the City Engineer. The study shall include existing and proposed hydrologic conditions as well as hydraulic calculations for all drainage control devices and storm drain lines. [MC 9.14.110(A.1)]. A digital (pdf) copy of the approved drainage study shall be submitted to the Land Development Division.

83. If improvements associated with this project are not initiated within two (2) years of the date of approval of the Public Improvement Agreement (PIA), the City Engineer may require that the engineer's estimate for improvements associated with the project be modified to reflect current City construction costs in effect at the time of request for an extension of time for the PIA or issuance of a permit.

84. The developer shall protect downstream properties from damage caused by alteration of drainage patterns (i.e. concentration or diversion of flow, etc). Protection shall be provided by constructing adequate drainage facilities, including, but not limited to, modifying existing facilities or by securing a drainage easement. [MC 9.14.110]

85. The tentative map, master plot plan, plot plan, or conditional use permit shall correctly show all existing easements, traveled ways, and drainage courses. Any omission may require the map or plans associated with this application to be resubmitted for further consideration. [MC 9.14.040(A)]

<u>Prior to Grading Plan Approval</u>

86. Two (2) copies of the final project-specific Water Quality Management Plan (WQMP) shall be submitted for review and approved by the City Engineer, which:
a. Addresses Site Design Best Management Practices (BMPs) such as minimizing impervious areas, maximizing permeability, minimizes directly connected impervious areas to the City's street and storm drain systems,

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conserves natural areas;

b. Incorporates Source Control BMPs and provides a detailed description of their implementation;

c. Describes the long-term operation and maintenance requirements for BMPs requiring maintenance; and

d. Describes the mechanism for funding the long-term operation and maintenance of the BMPs.

A copy of the final WQMP template can be obtained on the City 's Website or by contacting the Land Development Division. A digital (pdf) copy of the approved final project-specific Water Quality Management Plan (WQMP) shall be submitted to the Land Development Division.

87. The developer shall ensure compliance with the City Grading ordinance, these Conditions of Approval and the following criteria:

a. The project street and lot grading shall be designed in a manner that perpetuates the existing natural drainage patterns with respect to tributary drainage area and outlet points. Unless otherwise approved by the City Engineer, lot lines shall be located at the top of slopes.

b. Any grading that creates cut or fill slopes adjacent to the street shall provide erosion control, sight distance control, and slope easements as approved by the City Engineer.

c. All improvement plans are substantially complete and appropriate clearance letters are provided to the City.

d. A soils/geotechnical report (addressing the soil's stability and geological conditions of the site) shall be submitted to the Land Development Division for review. A digital (pdf) copy of the soils/geotechnical report shall be submitted to the Land Development Division.

88. Grading plans (prepared by a registered/licensed civil engineer) shall be submitted for review and approved by the City Engineer per the current submittal requirements.

89. The developer shall select Low Impact Development (LID) Best Management Practices (BMPs) designed per the latest version of the Water Quality Management Plan (WQMP) - a guidance document for the Santa Ana region of Riverside County.

90. The developer shall pay all remaining plan check fees.

91. A Storm Water Pollution Prevention Plan (SWPPP) shall be prepared in conformance with the State's current Construction Activities Storm Water General Permit. A copy of the current SWPPP shall be kept at the project site and be available for review upon request.

92. For projects that will result in discharges of storm water associated with construction with a soil disturbance of one or more acres of land, the developer shall submit a Notice of Intent (NOI) and obtain a Waste Discharger's Identification number (WDID#) from the State Water Quality Control Board (SWQCB) which shall be noted on the grading plans.

93. Landscape & Irrigation plans (prepared by a registered/licensed civil engineer

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water quality BMPs shall be submitted for review and approved by the City Engineer per the current submittal requirements, if applicable.

Prior to Grading Permit

94. A receipt showing payment of the Area Drainage Plan (ADP) fee to Riverside County Flood Control and Water Conservation District shall be submitted. [MC 9.14.100(O)]

95. If the developer chooses to construct the project in phases, a Construction Phasing Plan for the construction of on-site public and private improvements shall be submitted for review and approved by the City Engineer.

96. Prior to the payment of the Development Impact Fee (DIF), the developer may enter into a DIF Improvement Credit Agreement to secure credit for the construction of applicable improvements. If the developer fails to complete this agreement prior to the timing specified above, no credits will be given. The developer shall pay current DIF fees adopted by the City Council. [Ord. 695 § 1.1 (part), 2005] [MC 3.38.030, 040, 050]

97. A digital (pdf) copy of all approved grading plans shall be submitted to the Land Development Division.

98. Security, in the form of a cash deposit (preferable), or letter of credit shall be submitted as a guarantee of the implementation and maintenance of erosion control measures. At least twenty-five (25) percent of the required security shall be in the form of a cash deposit with the City. [MC 8.21.160(H)]

99. Security, in the form of a cash deposit (preferable), or letter of credit shall be submitted as a guarantee of the completion of the grading operations for the project. [MC 8.21.070]

100. The developer shall pay all applicable inspection fees.

Prior to Improvement Plan Approval

101. The developer is required to bring any existing access ramps adjacent to and fronting the project to current ADA (Americans with Disabilities Act) requirements. However, when work is required in an intersection that involves or impacts existing access ramps, all access ramps in that intersection shall be retrofitted to comply with current ADA requirements, unless otherwise approved by the City Engineer.

102. The developer shall submit clearances from all applicable agencies, and pay all applicable plan check fees.

103. The street improvement plans shall comply with current City policies, plans and applicable City standards (i.e. MVSI-160 series, etc.) throughout this project.

104. The design plan and profile shall be based upon a centerline, extending beyond

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project boundaries a minimum distance of 300 feet at a grade and alignment approved by the City Engineer.

105. Drainage facilities (i.e. catch basins, etc.) with sump conditions shall be designed to convey the tributary 100-year storm flows. Secondary emergency escape shall also be provided.

106. The hydrology study shall be designed to accept and properly convey all off -site drainage flowing onto or through the site. All storm drain design and improvements shall be submitted for review and approved of the City Engineer. In the event that the City Engineer permits the use of streets for drainage purposes, the provisions of current City standards shall apply. Should the quantities exceed the street capacity or the use of streets be prohibited for drainage purposes, as in the case where one travel lane in each direction shall not be used for drainage conveyance for emergency vehicle access on streets classified as minor arterials and greater, the developer shall provide adequate facilities as approved by the City Engineer. [MC 9.14.110 A.2]

107. All public improvement plans (prepared by a licensed/registered civil engineer) shall be submitted for review and approved by the City Engineer per the current submittal requirements.

108. The plans shall indicate any restrictions on trench repair pavement cuts to reflect the City's moratorium on disturbing newly-constructed pavement less than three (3) years old and recently slurry sealed streets less than one (1) year old. Pavement cuts for trench repairs may be allowed for emergency repairs or as specifically approved by the City Engineer.

109. The developer shall pothole to determine the exact location and elevation of existing underground utilities and incorporate the results into the design of the plans. The developer shall coordinate with all affected utility companies and bear all costs of utility relocations.

<u>Prior to Building Permit</u>

110. An engineered-fill certification, rough grade certification and compaction report shall be submitted for review and approved by the City Engineer. A digital (pdf) copy of the approved compaction report shall be submitted to the Land Development Division. All pads shall meet pad elevations per approved grading plans as noted by the setting of "blue-top" markers installed by a registered land surveyor or licensed civil engineer.

111. For Commercial/Industrial projects, the owner may have to secure coverage under the State's General Industrial Activities Storm Water Permit as issued by the State Water Resources Control Board.

112. For all subdivision projects, the map shall be recorded (excluding model homes). [MC 9.14.190]

113. All outstanding fees shall be paid.

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114. All required as-built plans (prepared by a registered/licensed civil engineer) shall be submitted for review and approved by the City Engineer per the current submittal requirements.

115. The engineered final/precise grade certification shall be submitted for review and approved by the City Engineer.

116. For non-subdivision projects, in compliance with Proposition 218, the developer shall agree to approve the City of Moreno Valley NPDES Regulatory Rate Schedule that is in place at the time of certificate of occupancy issuance. Under the current permit for storm water activities required as part of the National Pollutant Discharge Elimination System (NPDES) as mandated by the Federal Clean Water Act, this project is subject to the following requirements:

a. Select one of the following options to meet the financial responsibility to provide storm water utilities services for the required continuous operation, maintenance, monitoring system evaluations and enhancements, remediation and/or replacement, all in accordance with Resolution No. 2002-46.

i. Participate in the mail ballot proceeding in compliance with Proposition 218, for the Common Interest, Commercial, Industrial and Quasi-Public Use NPDES Regulatory Rate Schedule and pay all associated costs with the ballot process; or

ii. Establish an endowment to cover future City costs as specified in the Common Interest, Commercial, Industrial and Quasi-Public Use NPDES Regulatory Rate Schedule.

b. Notify the Special Districts Division of the intent to request building permits 90 days prior to their issuance and the financial option selected. The financial option selected shall be in place prior to the issuance of certificate of occupancy. [California Government Code & Municipal Code]

117. The developer shall complete all public improvements in conformance with current City standards, except as noted in the Special Conditions, including but not limited to the following:

a. Street improvements including, but not limited to: pavement, base, curb and/or gutter, cross gutters, spandrel, sidewalks, drive approaches, pedestrian ramps, street lights, signing, striping, under sidewalk drains, landscaping and irrigation, medians, redwood header boards, pavement tapers/transitions and traffic control devices as appropriate.

b. Storm drain facilities including, but not limited to: storm drain pipe, storm drain laterals, open channels, catch basins and local depressions.

c. City-owned utilities.

d. Sewer and water systems including, but not limited to: sanitary sewer, potable water and recycled water.

e. Under grounding of all existing and proposed utilities adjacent to and on-site. [MC 9.14.130]

f. Relocation of overhead electrical utility lines including, but not limited to: electrical, cable and telephone.

118. For commercial, industrial and multi-family projects, a "Stormwater Treatment

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Device and Control Measure Access and Maintenance Covenant" shall be recorded to provide public notice of the maintenance requirements to be implemented per the approved final project-specific WQMP. A boilerplate copy of the "Stormwater Treatment Device and Control Measure Access and Maintenance Covenant" can be obtained by contacting the Land Development Division.

119. The applicant shall ensure the following, pursuant to Section XII. I. of the 2010 NPDES Permit:

a. Field verification that structural Site Design, Source Control and Treatment Control BMPs are designed, constructed and functional in accordance with the approved Final Water Quality Management Plan (WQMP).

b. Certification of best management practices (BMPs) from a state licensed civil engineer. An original WQMP BMP Certification shall be submitted for review and approved by the City Engineer.

120. The Developer shall comply with the following water quality related items:

a. Notify the Land Development Division prior to construction and installation of all structural BMPs so that an inspection can be performed.

b. Demonstrate that all structural BMPs described in the approved final project-specific WQMP have been constructed and installed in conformance with the approved plans and specifications;

c. Demonstrate that Developer is prepared to implement all non -structural BMPs described in the approved final project-specific WQMP; and

d. Demonstrate that an adequate number of copies of the approved final project-specific WQMP are available for future owners/occupants.

e. Clean and repair the water quality BMP's, including re-grading to approved civil drawing if necessary.

f. Provide City with updated Engineer's Line and Grade Certification.

g. Obtain approval and complete installation of the irrigation and landscaping.

121. Prior to parcel map recordation or building permit issuance, either a reciprocal access easement shall be shown on the map or a separate recorded copy of a reciprocal access agreement between the project and the adjacent parcel to the south shall be provided to the City.

122. Prior to F-WQMP approval, post development BMPs for Brodiaea Avenue shall incorporated in accordance with MS4 Permit R8-2010-033.

123. The Applicant has proposed to incorporate the use of an infiltration basin and self-retaining areas. Final design details of the treatment control BMPs shall be provided in the F-WQMP.

124. Prior to rough grading plan approval, the following shall be shown on the plans and dedications made via separate instrument and submitted to the City for review and approval: A 4-foot pedestrian right-of-way dedication behind all driveway approaches per City Standard MVSI-112C-0.

125. Prior to occupancy, the following improvements shall be completed:

a. Nason Street, Modified Divided Major Arterial, City Standard MVSI-102A-0

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foot RW / 102-foot CC) shall construct to half-width plus 21' along the entire project's westerly frontage. Improvements shall consist of, but not be limited to pavement, base, street lights, driveway approaches, pedestrian ramps, curb & gutter, and sidewalk. In addition, replace or install any damaged, substandard or missing improvements.

b. Brodiaea Avenue, Collector, City Standard MVSI-106BA-0 (66-foot RW / 44 -foot CC) shall be constructed to half-width plus 18' along the entire project's northerly frontage. Improvements shall consist of, but not be limited to, pavement, base, street lights, driveway approaches, pedestrian ramps, curb & gutter, sidewalk. In addition, replace or install any damaged, substandard or missing improvements.

126. Prior to precise grading plan approval, the grading plans shall clearly show that the parking lot conforms to City standards. The parking lot shall be 5% maximum, 1% minimum, 2% maximum at or near any disabled parking stall and travel way. Ramps, curb openings and travel paths shall all conform to current ADA standards as outlined in Department of Justice's "ADA Standards for Accessible Design", Excerpt from 28 CFR Part 36. (www.usdoj.gov) and as approved by the City's Building and Safety Division

127. Prior to approval of the parcel map, the map shall show the following:

a. A seven-foot street right-of-way vacation on the south side of Brodiaea Avenue along project frontage.
b. A four-foot street right-of-way dedication on the east side of Nason Street along the project frontage

Special Districts Division

128. The ongoing maintenance of any landscaping required to be installed behind the curb shall be the responsibility of the property owner.

129. Street Light Authorization forms for all street lights that are conditioned to be installed as part of this project must be submitted to the Special Districts Division for approval, prior to street light installation. The Street Light Authorization form can be obtained from the utility company providing electric service to the project, either Moreno Valley Utility or Southern California Edison. For questions, contact the Special Districts Division at 951.413.3480 or specialdistricts@moval.org.

130. The parcel(s) associated with this project have been incorporated into the Moreno Valley Community Services District Zone A (Parks & Community Services) and Zone C (Arterial Street Lighting). All assessable parcels therein shall be subject to annual parcel taxes for Zone A and Zone C for operations and capital improvements.

131. Prior to the issuance of the first building permit for this project, the Developer shall pay Advanced Energy fees for all applicable Residential and Arterial Street Lights required for this development. Payment shall be made to the City of Moreno Valley and collected by the Land Development Division. Fees are based upon the

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Advanced Energy fee rate in place at the time of payment, as set forth in the current Listing of City Fees, Charges, and Rates adopted by City Council. The Developer shall provide a copy of the receipt to the Special Districts Division (specialdistricts@moval.org). Any change in the project which may increase the number of street lights to be installed will require payment of additional Advanced Energy fees at the then current fee. Questions may be directed to the Special Districts Division at 951.413.3480 or specialdistricts@moval.org.

132. This project has been identified to potentially be included in the formation of a Map Act Area of Benefit Special District for the construction of major thoroughfares and/or freeway improvements. The property owner(s) shall participate in such District and pay any special tax, assessment, or fee levied upon the project property for such District. At the time of the public hearing to consider formation of the district, the property owner(s) will not protest the formation, but will retain the right to object any eventual assessment that is not equitable should the financial burden of the assessment not be reasonably proportionate to the benefit the affected property obtains from the improvements to be installed. The Developer must notify the Special Districts Division at 951.413.3480 or at specialdistricts@moval.org of its selected financial option when submitting an application for the first building permit to determine whether the development will be subjected to this condition. If subject to the condition, the special election requires a 90 day process in compliance with

the provisions of Article 13C of the California Constitution. (Street & Highway Code, GP Objective 2.14.2, MC 9.14.100).

133. This project is conditioned for a proposed district to provide a funding source for the operation and maintenance of public improvements and/or services associated with new development in that territory. The Developer shall satisfy this condition with one of the options outlined below.

a. Participate in a special election for maintenance/services and pay all associated costs of the election process and formation, if any. Financing may be structured through a Community Facilities District, Landscape and Lighting Maintenance District, or other financing structure as determined by the City; or

b. Establish an endowment fund to cover the future maintenance and/or service costs.

The Developer must notify the Special Districts Division at 951.413.3480 or at specialdistricts@moval.org when submitting the application for building permit issuance. If the first building permit is pulled prior to formation of the district, this condition will not apply. If the district has been or is in the process of being formed the Developer must inform the Special Districts Division of its selected financing option (a. or b. above). The option for participating in a special election requires 90 days to complete the special election process. This allows adequate time to be in compliance with the provisions of Article 13C of the California Constitution.

The financial option selected shall be in place prior to the issuance of the first certificate of occupancy for the project.

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134. This project is conditioned to provide a funding source for the following special financing program(s):

a. Street Lighting Services for capital improvements, energy charges, and maintenance.

The Developer's responsibility is to provide a funding source for the capital improvements and the continued maintenance. The Developer shall satisfy this condition with one of the options below.

i. Participate in a special election (mail ballot proceeding) and pay all associated costs of the special election and formation, if any. Financing may be structured through a Community Services District zone, Community Facilities District, Landscape and Lighting Maintenance District, or other financing structure as determined by the City; or

ii. Establish a Property Owner's Association (POA) or Home Owner's Association (HOA) which will be responsible for any and all operation and maintenance costs

The Developer must notify the Special Districts Division at 951.413.3480 or at specialdistricts@moval.org of its selected financial option when submitting the application for building permit issuance. The option for participating in a special election requires approximately 90 days to complete the special election process. This allows adequate time to be in compliance with the provisions of Article 13C of the California Constitution.

The financial option selected shall be in place prior to the issuance of the first certificate of occupancy for the project and prior to acceptance of any improvements.

135. Commercial (BP) If Land Development, a Division of the Public Works Department, requires this project to supply a funding source necessary to provide for, but not limited to, stormwater utilities services for the continuous operation, remediation and/or replacement, monitoring, systems evaluations and enhancement of on -site facilities and performing annual inspections of the affected areas to ensure compliance with state mandated stormwater regulations, a funding source needs to be established. The Developer must notify the Special Districts Division at 951.413.3480 or at specialdistricts@moval.org of its selected financial option for the National Pollution Discharge Elimination System (NPDES) program when submitting the application for the first building permit issuance (see Land Development's related condition). Participating in a special election the process requires a 90 day period prior to the City's issuance of a building permit. This allows adequate time to be in compliance with the provisions of Article 13D of the California Constitution. (California Health and Safety Code Sections 5473 through 5473.8 (Ord. 708 Section 3.1, 2006) & City of Moreno Valley Municipal Code Title 3, Section 3.50.050.)

136. This project has been identified to be included in the formation of a Community Facilities District (Mello-Roos) for Public Safety services, including but not limited to Police, Fire Protection, Paramedic Services, Park Rangers, and Animal Co

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services. The property owner(s) shall not protest the formation; however, they retain the right to object to the rate and method of maximum special tax. In compliance with Proposition 218, the property owner shall agree to approve the mail ballot proceeding (special election) for either formation of the CFD or annexation into an existing district. The Developer must notify the Special Districts Division at 951.413.3480 or at specialdistricts@moval.org when submitting the application for building permit issuance to determine the requirement for participation. If the first building permit is pulled prior to formation of the district, this condition will not apply . If the condition applies, the special election will require a minimum of 90 days prior to issuance of the first building permit. This allows adequate time to be in compliance with the provisions of Article 13C of the California Constitution. (California Government Code Section 53313 et. seq.)

137. Any damage to existing landscape areas maintained by the City of Moreno Valley due to project construction shall be repaired/replaced by the Developer, or Developer's successors in interest, at no cost to the City of Moreno Valley.

Transportation Engineering Division

138. Conditions of approval may be modified if the project or its phasing plan is altered from any approved plans..

139. Nason Street is classified as a Divided Major Arterial at this location. Any improvements undertaken by this project shall be consistent with the City's standards for this facility.

140. Brodiaea Avenue is classified as a Collector (66' RW/44' CC) per City Standard Plan No. MVSI-106B-0. Any improvements undertaken by this project shall be consistent with the City's standards for this facility.

141. Project driveways shall conform to City of Moreno Valley Standard No. MVSI-112C-0 for Commercial Driveway Approaches.

142. Access at the proposed street and driveways shall be as follows:

- West bound approach at Nason Street/Brodiaea Avenue intersection: Only right turns in/out are allowed. Access shall be controlled by the existing raised concrete median on Nason Street.
- Nason Street north driveway: Only right turns in/out are allowed. Access shall be controlled by the existing raised concrete median on Nason Street.
- Nason Street south driveway: The existing traffic signal at Nason Street/Hospital Road intersection shall be modified to support full access.
- Brodiaea Avenue driveways: Full access is allowed.

143. All proposed on-site traffic signing and striping should be accordance with the latest California Manual on Uniform Traffic Control Devices (CAMUTCD).

144. Prior to the final approval of the street improvement plans, traffic signal modification plans will be required for the traffic signal located at Nason Street/Hospital Road

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intersection. Modifications may include but not limited to new signal poles, new pull boxes, new traffic detector loops or video/radar detection system, relocation of signal controller cabinet, etc. Specific modifications shall be determined during plan check review.

145. Prior to issuance of a construction permit, construction traffic control plans prepared by a qualified, registered Civil or Traffic engineer may be required for plan approval or as required by the City Traffic Engineer.

146. Prior to final approval of any landscaping or monument sign plans, the project plans shall demonstrate that sight distance at the project driveways conforms to City Standard Plan No. MVSI-164A, B, C-0.

147. Prior to the final approval of the street improvement plans, a signing and striping plan shall be prepared per City of Moreno Valley Standard Plans - Section 4 for all streets within the project area.

148. Prior to issuance of Certificate of Occupancy for any building in Phase 3 or prior to the project access at Nason Street/Hospital Road intersection being opened to vehicular traffic in any phase, the traffic signal at this intersection shall be modified and operational per the approved plans to the satisfaction of the City Engineer.

149. Prior to issuance of Certificate of Occupancy for any building in any of the project phases, all signing and striping on Nason Street and Brodiaea Avenue shall be installed per current City Standards and the approved plans.

150. Prior to acceptance of streets into the City-maintained road system, all approved signing and striping shall be installed per current City Standards and the approved plans.

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CITY OF MORENO VALLEY
CONDITIONS OF APPROVAL
Plot Plan (PEN16-0054)

EFFECTIVE DATE:
EXPIRATION DATE:

COMMUNITY DEVELOPMENT DEPARTMENT

Planning Division

1. ANY expansion to this use or exterior alterations will require the submittal of a separate application(s) and shall be reviewed and approved under separate permit(s). (MC 9.02.080)

2. The developer, or the developer's successor-in-interest, shall be responsible for maintaining any undeveloped portion of the site in a manner that provides for the control of weeds, erosion and dust. (MC 9.02.030)

3. This approval shall expire three years after the approval date of this project unless used or extended as provided for by the City of Moreno Valley Municipal Code. (MC 9.02.230)

4. All landscaped areas shall be maintained in a healthy and thriving condition, free from weeds, trash and debris. (MC 9.02.030)

5. The site shall be developed in accordance with the approved plans on file in the Community Development Department - Planning Division, the Municipal Code regulations, General Plan, and the conditions contained herein. Prior to any use of the project site or business activity being commenced thereon, all Conditions of Approval shall be completed to the satisfaction of the Planning Official. (MC 9.14.020)

6. Any signs indicated on the submitted plans are not included with this approval. Any signs, whether permanent (e.g. wall, monument) or temporary (e.g. banner, flag), require separate application and approval by the Planning Division. No signs are permitted in the public right of way. (MC 9.12)

7. All site plans, grading plans, landscape and irrigation plans, fence/wall plans, lighting plans and street improvement plans shall be coordinated for consistency with this approval.

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Special Conditions

8. The site has been approved for Medical Building One, approximately 53,000 square feet to be located within the westerly portion of the medical complex facility. Medical Office Building One will be developed per the Phasing Plan PEN17-0013, per the approved plans. A change or modification will require separate review and approval.

9. The following Mitigation Measures apply to this project:

AQ-1: The applicant shall ensure that approved architectural coatings are utilized. Prior to the issuance of building permits, the City will verify that construction plans submitted by the project proponent reflect use of architectural coatings where the content of volatile organic compounds (VOC) does not exceed 25 grams per liter (g/l) for interior and exterior applications. This measure must be verified through standard building inspections in light of the performance standard that emissions of volatile organic compounds from application of interior or exterior coatings shall not exceed the daily emissions thresholds established by the South Coast Air Quality Management District. The applicant bears the cost of implementing this mitigation.

BIO-1: The applicant shall avoid impacts to nesting birds and violation of state and federal laws pertaining to birds, all construction related activities (including but not limited to mobilization and staging, clearing, grubbing, vegetation removal, fence installation, demolition, and grading) should occur outside the avian nesting season (generally prior to Feb 1 or after Aug 31). If construction and construction noise occurs within the avian nesting season (from Feb 1 to Aug 31 or according to local requirements), all suitable habitats located within the project's area of disturbance including staging and storage areas plus a 250-foot (passerines) and 1,000 foot (raptor nests) buffer around these areas shall be thoroughly surveyed, as feasible, for the presence of active nests by a qualified biologist no more than 5-days before commencement of any site disturbance activities and equipment mobilization. If project activities are delayed more than 5-days, an additional nesting bird survey shall be performed. Active nesting is present if a bird is sitting in a nest, a nest has eggs or chicks in it, or adults are observed carrying food to the nest. The results of these surveys shall be documented. If it is determined that birds are actively nesting within the survey area, Mitigation Measure BIO-2 shall apply. Conversely, if the survey area is found to be absent of nesting birds, Mitigation Measure BIO-2 shall not be required.

BIO-2: If pre-construction nesting bird surveys result in the location of active nests, the applicant shall ensure that no site disturbance and mobilization of heavy equipment (including but not limited to equipment staging, fence installation, clearing, grubbing, vegetation removal, demolition and grading), shall take place within 250 feet of non-raptor nests and 1,000 feet of raptor nests, or as determined by a qualified biologist in consultation with the CDFW, until the chicks have fledged. Monitoring shall be required to insure compliance with the MBTA and relevant CDFW requirements. Monitoring dates and findings shall be documented.

BIO-3: The applicant shall ensure a pre-construction survey for burrowing owls be completed no more than 30-days prior to the start of construction at the Project site to ensure no burrowing owls have moved onto the site.

CUL-1: Prior to the issuance of a grading permit, the Applicant shall retain a qualified professional archaeologist who meets U.S. Secretary of the Interior's Professional Qualifications and Standards. The Project archaeologist and Native American Tribal Representatives will conduct an Archaeological Sensitivity Training for construction per

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prior to commencement of excavation activities. The training session will include a handout and will focus on how to identify archaeological and Tribal Cultural resources that may be encountered during earthmoving activities and the procedures to be followed in such an event, including who to contact and the appropriate avoidance measures that need to be undertaken until the find(s) can be properly evaluated; the duties of archaeological and Native American monitors; and the general steps a qualified professional archaeologist would follow in conducting a salvage investigation if one is necessary. All new construction personnel that will conduct earthwork or grading activities must take the Archaeological Sensitivity Training prior to beginning work on the project and the professional archaeologist shall make themselves available to provide the training on an as-needed basis. A sign-in sheet shall be compiled to track attendance and shall be submitted to the City with the Phase IV Archaeological Monitoring Report.

CUL-2: Preconstruction Notification of Native American Tribal Representatives. Prior to the issuance of a grading permit, the Applicant shall provide evidence to the City of Moreno Valley that the Agua Band of Cahuilla Indians, Pechanga Band of Luiseño Indians and the Soboba Band of Luiseño Indians tribal representatives (hereafter referred to as "Native American Tribal Representatives") received a minimum of 30 days advance notice of all mass grading and trenching activities, and provide evidence of monitoring agreements between the Applicant and the Tribes. The Native American Tribal Representatives shall be notified a minimum of 48 hours in advance and allowed to attend the pre-grading meeting with the City and project construction contractors and/or monitor all project mass grading and trenching activities.

CUL-3: Prior to grading permit issuance, the City shall verify that the following note is included on the Grading Plan: "If any suspected archaeological resources are discovered during ground-disturbing activities and the archaeological monitor or Tribal representatives are not present, the construction supervisor is obligated to halt work in a 100-foot radius around the find and call the project archaeologist and the Tribal representatives to the site to assess the significance of the find."

CUL-4: Prior to the issuance of a grading permit, the Applicant shall retain a qualified archaeological monitor. The archaeological monitor will work under the direction and guidance of the qualified professional archaeologist and will meet the U.S. Secretary of the Interior's Professional Qualifications and Standards. The archeological monitor shall have the authority to temporarily redirect earthmoving activities in the event that suspected archaeological resources are unearthed during project construction. Archaeological monitoring is required at all depths and strata. The archaeological monitor shall be present during all construction excavations (e.g., grading, trenching, or clearing/grubbing) into non-fill younger Pleistocene alluvial sediments. Multiple earth-moving construction activities may require multiple archaeological monitors. The frequency of monitoring shall be based on the rate of excavation and grading activities, proximity to known archaeological resources, the materials being excavated (native versus artificial fill soils), and the depth of excavation, and if found, the abundance and type of archaeological resources encountered. Full-time monitoring can be reduced to part-time inspections if determined adequate by the qualified professional archaeologist.

CUL-5: The applicant shall ensure that all ground disturbing activities are ceased and treatment plans are implemented if archaeological resources are encountered. In the event that archaeological resources are unearthed during ground-disturbing activities, ground-disturbing activities shall be halted or diverted away from the vicinity of the find so that the find

can be evaluated. A buffer area of at least 100 feet shall be established around the find where construction activities shall not be allowed to continue until a qualified archaeologist has examined the newly discovered artifact(s) and has evaluated the area of the find. Work shall be allowed to continue outside of the buffer area. All archaeological resources unearthed by project construction activities shall be evaluated by a qualified professional archaeologist who

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meets the U.S. Secretary of the Interior's Professional Qualifications and Standards. Should the newly discovered artifacts be determined to be prehistoric, Native American Tribes/Individuals should be contacted and consulted and Native American construction monitoring should be initiated. The Applicant and City shall coordinate with the archaeologist to develop an appropriate treatment plan for the resources. The plan may include implementation of archaeological data recovery excavations to address treatment of the resource along with subsequent laboratory processing and analysis.

In the event that a cultural resource is encountered during ground-disturbing activities, the landowner(s) shall relinquish ownership of all such resources, including sacred items, burial goods, and all archaeological artifacts and non-human remains. The artifacts shall be relinquished through one or more of the following methods and evidence of such shall be provided to the City of Moreno Valley Planning Department:

1. Accommodate the process for Preservation-In-Place/Onsite with the consulting Native American tribes or bands, as detailed in the treatment plan prepared by the professional paleontologist. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not.
2. A curation agreement with an appropriate qualified repository within Riverside County that meets federal standards per 36 CFR Part 79; therefore, the resources would be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility within Riverside County, to be accompanied by payment of the fees necessary for permanent curation; and/or
3. For purposes of conflict resolution, if more than one Native American tribe or band is involved with the project and cannot come to an agreement as to the disposition of cultural materials, they shall be curated at the Western Science Center by default.

CUL-6: Prior to building permit issuance, the Project archaeologist shall prepare a final Phase IV Monitoring Report as outlined in the CRMP, which shall be submitted to the City Planning Division, the appropriate Native American tribe(s), and the Eastern Information Center at the University of California, Riverside. The report shall include a description of resources unearthed, if any, evaluation of the resources with respect to the California Register and CEQA, and treatment of these resources. All cultural material, excluding sacred, ceremonial, grave goods and human remains, collected during the grading monitoring program and from any previous archaeological studies or excavations on the project site shall be curated in a Riverside County repository according to the current professional repository standards and may include the Pechanga Band's curatorial facility in Temecula, CA.

CUL-7: Conduct Paleontological Sensitivity Training for Construction Personnel. Prior to the issuance of a grading permit, the Applicant shall retain a professional paleontologist, who meets the qualifications set forth by the Society of Vertebrate Paleontology. The paleontologist shall conduct a Paleontological Sensitivity Training for construction personnel prior to commencement of excavation activities. The training will include a handout and will focus on how to identify paleontological resources that may be encountered during earthmoving activities, and the procedures to be followed in such an event, including who to contact and the appropriate avoidance measures that need to be undertaken until the find(s) can be properly evaluated; the duties of paleontological monitors; notification and other procedures to follow upon discovery of resources; and the general steps a qualified professional paleontologist would follow in conducting a salvage investigation if one is necessary. All new construction personnel that will conduct earthwork or grading activities must take the Paleontological Sensitivity Training prior to beginning work on the project and the professional paleontologist shall make themselves available to provide the training on an as-needed basis.

CUL-8: The applicant shall ensure the monitoring of construction excavations for paleontological resources is required for all excavations in older Quaternary alluvial fan deposits or in sedimentary deposits derived from the Mt. Eden Formation. Prior to the issuance of a grading permit, the Applicant shall retain a qualified paleontological monitor

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who will work under the guidance and direction of a professional paleontologist, and who meets the qualifications set forth by the Society of Vertebrate Paleontology. The paleontological monitor shall have the authority to temporarily redirect earthmoving activities in the event that suspected paleontological resources are unearthed during project construction. The paleontological monitor shall be present during all construction excavations including, but not limited to grading, trenching, boring, and clearing/grubbing). Multiple earth-moving construction activities may require multiple paleontological monitors. The frequency of monitoring shall be based on the rate of excavation and grading. Monitoring may be reduced if potentially fossiliferous units are not present in the subsurface, or if present, are determined upon exposure and examination by the professional paleontologist to have a low potential to contain or yield fossil resources.

CUL-9: The applicant shall ensure that in the event that paleontological resources and or unique geological features are unearthed during ground-disturbing activities, all ground disturbing activities shall be halted or diverted away from the vicinity of the find in order to evaluate the resource. A buffer area of at least 100 feet shall be established around the find where construction activities shall not be allowed to continue until appropriate paleontological treatment plan has been approved by the Applicant and the City. Work shall be allowed to continue outside of the buffer area. The Applicant and City shall coordinate with a professional paleontologist, who meets the qualifications set forth by the Society of Vertebrate Paleontology, to develop an appropriate treatment plan for the resources. Treatment may include implementation of paleontological salvage excavations to remove the resource along with subsequent laboratory processing and analysis or preservation in place. At the paleontologist's discretion and to reduce construction delay, the grading and excavation contractor shall assist in removing rock samples for initial processing. Recovered specimens shall be properly prepared to a point of identification and permanent preservation, including screen washing sediments to recover small invertebrates and vertebrates, if necessary. Identification and curation of specimens into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable storage is required for significant discoveries.

CUL-10: The applicant shall ensure prior to building permits, that a professional paleontologist prepares a report summarizing the results of the monitoring and salvaging efforts, the methodology used in these efforts, as well as a description of the fossils collected and their significance as well as any necessary maps and graphics to accurately record the original location of these resources. The report shall be submitted to the Applicant, the City, the San Bernardino County Natural History Museum, Natural History Museum of Los Angeles County, and representatives of other appropriate or concerned agencies to signify the satisfactory completion of the project and required mitigation measures.

CUL-11: In the event that any human remains are unearthed during project construction, the City of Moreno Valley and the Applicant shall comply with State Health and Safety Code Section 7050.5 The City of Moreno Valley and the Applicant shall immediately notify the Riverside County Coroner's office and no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition. If remains are determined to be of Native American descendent, the coroner has 24-hours to notify the Native American Heritage Commission (NAHC). The NAHC shall identify the person(s) thought to be the Most Likely Descendent (MLD). After the MLD has inspected the remains and the site, they have 48 hours to recommend to the landowner the treatment or disposal, with appropriate dignity, the human remains and any associated funerary objects. The MLD shall complete their inspection and make their recommendation within 48 hours of being granted access by the landowner to inspect the discovery. The recommendation may include the scientific removal and nondestructive analysis of human remains and cultural items associated with Native American burials. Upon the discovery of the Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner

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has discussed and conferred, as prescribed in this mitigation measure, with the MLD regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The landowner shall discuss and confer with the descendants all reasonable options regarding the descendants' preferences for treatment.

If the NAHC is unable to identify a MLD, or the MLD identified fails to make a recommendation, or the landowner rejects the recommendation of the MLD and the mediation provided for in Subdivision (k) of Section 5097.94, if invoked, fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall inter the human remains and items associated with Native American human remains with appropriate dignity on the facility property in a location not subject to further and future subsurface disturbance. A record of the reburial shall be filed with the NAHC and the CHRIS-EIC. Upon the reburial of the human remains, the MLD shall file a record of the reburial with the NAHC and the project archaeologist shall file a record of the reburial with the EIC.

NOI-1: Project proponent shall provide the following (or equivalent) noise abatement measures as part of the building construction plans in order to meet the City of Moreno Valley exterior noise standards of 60dBA for residential and 65dBA for commercial:
• Stationary construction noise sources such as generators or pumps must be located at least 100 feet from sensitive land uses, as feasible, or at maximum distance when necessary to complete work near sensitive land uses, to be verified by submittal of a construction staging plan. This mitigation measure must be implemented throughout construction and may be periodically monitored by the Planning Director, or designee during routine inspections.
• Construction staging areas must be located as far from noise sensitive land uses as feasible, to be verified by submittal of a construction staging plan. Implementation of this measure shall occur throughout construction through periodic monitoring by the Planning Director or designee during routine inspections.
• Throughout construction, the contractor shall ensure all construction equipment is equipped with included noise attenuating devices and are properly maintained. This mitigation measure shall be periodically monitored by the Planning Director or designee during routine inspections.
• Idling equipment must be turned off when not in use. This mitigation measure may be periodically monitored by the Planning Director or designee during routine inspections.
• Equipment must be maintained so that vehicles and their loads are secured from rattling and banging. This mitigation measure may be periodically monitored by the Planning Director or designee during routine inspections.

NOI-2: The developer shall ensure temporary construction noise control barriers shall be installed where residential uses are located adjacent to the project site (south and west). The type and location of the noise control barriers shall be shown on all grading and building plans and subject to approval by the Planning Director, or designee.

NOI-3: All construction activities shall comply with the City of Moreno Valley Noise Ordinance (Chapter 11.80 of the City of Moreno Valley Municipal Code). This requirement shall be noted on all grading and building plans and in bid documents issued to construction contractors.

TRA-1: The project applicant shall participate in the phased construction of off-site traffic signals through payment of traffic signal mitigation fees. The traffic signals within the study area at buildout should specifically include an interconnect of the traffic signals to function in a coordinated system. Traffic signal mitigation fees shall be paid prior to Opening Year (2020) with Project Phase 1 or alternate City approved deadline.

TRA-1: If, during mass grading and trenching activities, the Archaeologist or Tribal Monitor suspect that an archaeological resource and/or TCR may have been unearthed, the monitor identifying the potential resources, in consultation with the other monitor(s) as appropriate, shall immediately halt and redirect grading operations in a 100-foot radius around the find to allow identification and evaluation of the suspected resource. The Native American monitor(s)

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or appropriate representative(s) and the archaeological monitor shall evaluate the suspected resource and make a determination of significance pursuant to California Public Resources Code Section 21083.2. The archaeological monitor and Tribal monitor(s) or appropriate representative(s), the Project Applicant, and the City Planning Division shall confer regarding mitigation of the discovered resource(s). All sacred sites, should they be encountered within the project area, shall be avoided and preserved as the preferred mitigation, if feasible. If preservation in place is not feasible, treatment and/or mitigation may include implementation of archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis.

Prior to Building Permit

10. Prior to the issuance of building permits, covered trash enclosure (s) shall be included in the building plans or the Building submittal of the Fence and Wall plans. The trash enclosure(s), including the roof materials, shall be compatible with the architecture, color and materials of the building(s) design. Trash enclosure areas shall include landscaping on three sides. (GP Objective 43.6, DG)

11. Prior to issuance of any building permits, final landscaping and irrigation plans shall be submitted for review and approved by the Planning Division. After the third plan check review for landscape plans, an additional plan check fee shall apply. The plans shall be prepared in accordance with the City's Landscape Requirements and shall include:

A. A three (3) foot high decorative wall, solid hedge or berm shall be placed in any setback areas between a public right of way and a parking lot for screening.

B. Finger and end planters with required step outs and curbing shall be provided every 12 parking stalls as well as at the terminus of each aisle.

C. Diamond planters shall be provided every 3 parking stalls.

D. Drought tolerant landscape shall be used. Sod shall be limited to gathering areas. (or No sod shall be installed)

E. Street trees shall be provided every 40 feet on center in the right of way.

F. On-site trees shall be planted at an equivalent of one (1) tree per thirty (30) linear feet of the perimeter of a parking lot and per thirty linear feet of a building dimension for the portions of the building visible from a parking lot or right of way. Trees may be massed for pleasing aesthetic effects.

G. Enhanced landscaping shall be provided at all driveway entries and street corner locations The review of all utility boxes, transformers etc. shall be coordinated to provide adequate screening from public view.

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H. Landscaping on three sides of any trash enclosure.

I. All site perimeter and parking lot landscape and irrigation shall be installed prior to the release of certificate of any occupancy permits for the site or pad in question.

12. Prior to issuance of building permits, the Planning Division shall review and approve the location and method of enclosure or screening of transformer cabinets, commercial gas meters and back flow preventers as shown on the final working drawings. Location and screening shall comply with the following criteria : transformer cabinets and commercial gas meters shall not be located within required setbacks and shall be screened from public view either by architectural treatment or landscaping; multiple electrical meters shall be fully enclosed and incorporated into the overall architectural design of the building (s); back-flow preventers shall be screened by landscaping. (GP Objective 43.30)

13. Prior to issuance of a building permit, the developer /property owner or developer's successor-in-interest shall pay all applicable impact fees due at permit issuance, including but not limited to Multi-species Habitat Conservation Plan (MSHCP) mitigation fees. (Ord)

14. Prior to building final, the developer/owner or developer's/owner' s successor-in-interest shall pay all applicable impact fees, including but not limited to Transportation Uniform Mitigation fees (TUMF), and the City's adopted Development Impact Fees. (Ord)

15. Prior to or at building plan check submittal, the elevation plans shall include decorative lighting sconces on all sides of the buildings of the complex facing a parking lot, courtyard or plaza, or public right of way or open space to provide up-lighting and shadowing on the structures. Include drawings of the sconce details for each building within the elevation plans, approved by the Planning Division prior to building permit issuance.

16. Prior to or at building plan check submittal, two copies of a detailed, on -site, computer generated, point-by-point comparison lighting plan, including exterior building, parking lot, and landscaping lighting, shall be submitted to the Planning Division for review and approval prior to the issuance of a building permit. The lighting plan shall be generated on the plot plan and shall be integrated with the final landscape plan. The plan shall indicate the manufacturer's specifications for light fixtures used, shall include style, illumination, location, height and method of shielding per the City's Municipal Code requirements. After the third plan check review for lighting plans, an additional plan check fee will apply. (MC 9.08.100, 9.16.280)

17. Prior to issuance of building permits, screening details shall be addressed on the

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building plans for roof top equipment submitted for Planning Division review and approval through the building plan check process. All equipment shall be completely screened so as not to be visible from public view, and the screening shall be an integral part of the building.

Prior to Grading permits

18. Prior to issuance of any grading permits, mitigation measures contained in the Mitigation Monitoring Program approved with this project shall be implemented as provided therein. A mitigation monitoring fee, as provided by City ordinance, shall be paid by the applicant within 30 days of project approval. No City permit or approval shall be issued until such fee is paid. (CEQA)

19. Prior to issuance of grading permits, the developer shall pay the applicable Stephens' Kangaroo Rat (SKR) Habitat Conservation Plan mitigation fee. (Ord)

20. Within thirty (30) days prior to any grading or other land disturbance, a pre-construction survey for Burrowing Owls shall be conducted pursuant to the established guidelines of Multiple Species Habitat Conservation Plan. The pre-construction survey shall be submitted to the Planning Division prior to any disturbance of the site and/or grading permit issuance.

21. Prior to issuance of grading permits, the developer shall submit wall/fence plans to the Planning Division for review and approval as follows:

    A. A maximum 6 foot high solid decorative block perimeter wall with pilasters and a cap shall be required adjacent to all residential zoned areas.

    B. 3-foot high decorative wall, solid hedge or berm shall be placed in any setback areas between a public right of way and a parking lot for screening.

    C. Any proposed retaining walls shall also be decorative in nature, while the combination of retaining and other walls on top shall not exceed the height requirement.

    D. Proposed screening walls for truck loading areas and required loading docks shall also include decorative block walls with pilasters with a height up to fourteen (14) feet to fully screen trucks (industrial and some situations with commercial uses).

    E. Walls and fences for visual screening are required when there are adjacent residential uses or residentially zone property. The height, placement and design will be based on a site specific review of the project. All walls are subject to the approval of the Planning Official. (DC 9.08.070) [select those that apply]

22. Prior to the issuance of grading permits, a temporary project identification sign shall be erected on the site in a secure and visible manner. The sign shall be conspicuously

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posted at the site and remain in place until occupancy of the project. The sign shall include the following:

a. The name (if applicable) and address of the development.
b. The developer's name, address, and a 24-hour emergency telephone number.

23. Prior to issuance of grading permits, the location of the trash enclosure shall be included on the plans.

Building Division

24. The proposed non-residential project shall comply with the latest Federal Law, Americans with Disabilities Act, and State Law, California Code of Regulations, Title 24, Chapter 11B for accessibility standards for the disabled including access to the site, exits, bathrooms, work spaces, etc.

25. Prior to submittal, all new development, including residential second units, are required to obtain a valid property address prior to permit application. Addresses can be obtained by contacting the Building Safety Division at 951.413.3350.

26. Contact the Building Safety Division for permit application submittal requirements.

27. All new buildings 10,000 square feet and over, shall include building commissioning in the design and construction processes of the building project to verify that the building systems and components meet the owner 's or owner representative's project requirements (OPR). All requirements in The 2016 California Green Building Standards Code, sections 5.410.2 - 5.410.2.6 must be met.

28. Any construction within the city shall only be completed between the hour of seven a.m. to seven p.m. Monday through Friday, excluding holidays and from eight a.m. to four p.m. on Saturday, unless written approval is obtained from the city building official or city engineer (Municipal Code Section 8.14.040.E).

29. Building plans submitted shall be signed and sealed by a California licensed design professional as required by the State Business and Professions Code.

30. The proposed development is subject to the payment of applicable processing fees as required by the City's current Fee Ordinance at the time a building permit application is submitted or prior to the issuance of permits as determined by the City.

31. The proposed project will be subject to approval by the Eastern Municipal Water

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District and all applicable fees and charges shall be paid prior to permit issuance. Contact the water district at 951.928.3777 for specific details.

32. All new structures shall be designed in conformance to the latest design standards adopted by the State of California in the California Building Standards Code (California Code of Regulations, Title 24) including requirements for allowable area, occupancy separations, fire suppression systems, accessibility, etc. The current edition of the applicable code standards is the 2016 Triennial Edition.

33. The proposed non-residential project shall comply with 2016 California Green Building Standards Code, Section 5.106.5.3, mandatory requirements for Electric Vehicle Charging Station (EVCS).

34. The proposed project's occupancy shall be classified by the Building Official and must comply with exiting, occupancy separation(s) and minimum plumbing fixture requirements of the 2016 California Plumbing Code Table 4-1.

35. Prior to permit issuance, every applicant shall submit a properly completed Waste Management Plan (WMP), as a portion of the building or demolition permit process. (MC 8.80.030)

ECONOMIC DEVELOPMENT DEPARTMENT (EDD)

36. New Moreno Valley businesses may work with the Economic Development Department to coordinate job recruitment fairs.

37. New Moreno Valley businesses may adopt a "First Source" approach to employee recruitment that gives notice of job openings to Moreno Valley residents for one week in advance of the public recruitment.

38. New Moreno Valley businesses are encouraged to hire local residents.

39. New Moreno Valley businesses are encouraged to provide a job fair flyer and/or web announcement to the City in advance of job recruitments, so that the City can assist in publicizing these events.

40. New Moreno Valley businesses may utilize the workforce recruitment services provided by the Moreno Valley Employment Resource Center ("ERC").

    The ERC offers no cost assistance to businesses recruiting and training potential employees. Complimentary services include:

    • Job Announcements
    • Applicant testing / pre-screening
    • Interviewing

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- Job Fair support
- Training space

FINANCIAL & MANAGEMENT SERVICES DEPARTMENT

Moreno Valley Utility

41. This project requires the installation of electric distribution facilities . A non-exclusive easement shall be provided to Moreno Valley Utility and shall include the rights of ingress and egress for the purpose of operation, maintenance, facility repair, and meter reading.

42. This project requires the installation of electric distribution facilities. The developer shall submit a detailed engineering plan showing design, location and schematics for the utility system to be approved by the City Engineer. In accordance with Government Code Section 66462, the Developer shall execute an agreement with the City providing for the installation, construction, improvement and dedication of the utility system following recordation of final map and /or concurrent with trenching operations and other improvements so long as said agreement incorporates the approved engineering plan and provides financial security to guarantee completion and dedication of the utility system.

    The Developer shall coordinate and receive approval from the City Engineer to install, construct, improve, and dedicate to the City all utility infrastructure including but not limited to, conduit, equipment, vaults, ducts, wires, switches, conductors, transformers, and “bring-up” facilities including electrical capacity to serve the identified development and other adjoining, abutting, or benefiting projects as determined by Moreno Valley Utility – collectively referred to as “utility system”, to and through the development, along with any appurtenant real property easements, as determined by the City Engineer necessary for the distribution and /or delivery of any and all “utility services” to and within the project. For purposes of this condition, “utility services” shall mean electric, cable television, telecommunication (including video, voice, and data) and other similar services designated by the City Engineer . “Utility services” shall not include sewer, water, and natural gas services, which are addressed by other conditions of approval.

    The City, or the City’s designee, shall utilize dedicated utility facilities to ensure safe, reliable, sustainable and cost effective delivery of utility services and maintain the integrity of streets and other public infrastructure. Deve

43. Existing Moreno Valley Utility electrical infrastructure shall be preserved in place . The developer will be responsible, at developer’s expense, for any and all costs associated with the relocation of any of Moreno Valley Utility’s underground

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electrical distribution facilities, as determined by Moreno Valley Utility, which may be in conflict with any developer planned construction on the project site.

44. This project is subject to a Reimbursement Agreement. The Developer is responsible for a proportionate share of costs associated with electrical distribution infrastructure previously installed that directly benefits the project. Payment shall be required prior to issuance of building permits.

PUBLIC WORKS DEPARTMENT

Land Development

45. A digital (pdf) copy of all approved improvement plans shall be submitted to the Land Development Division.

46. All applicable inspection fees shall be paid.

47. All work performed within public right-of-way requires an encroachment permit. Security (in the form of a cash deposit or other approved means) may be required as determined by the City Engineer. For non-subdivision projects, the City Engineer may require the execution of a Public Improvement Agreement (PIA) as a condition of the issuance of a construction or encroachment permit. All inspection fees shall be paid prior to issuance of construction permit. [MC 9.14.100(C.4)]

48. Aggregate slurry, as defined in Section 203-5 of Standard Specifications for Public Works Construction, may be required just prior to the end of the one-year warranty period of the public streets at the discretion of the City Engineer. If slurry is required, a slurry mix design shall be submitted for review and approved by the City Engineer. The latex additive shall be Ultra Pave 70 (for anionic) or Ultra Pave 65 K (for cationic) or an approved equal per the geotechnical report. The latex shall be added at the emulsion plant after weighing the asphalt and before the addition of mixing water. The latex shall be added at a rate of two to two-and-one-half (2 to 2½) parts to one-hundred (100) parts of emulsion by volume. Any existing striping shall be removed prior to slurry application and replaced per City standards.

49. The developer shall comply with all applicable City ordinances and resolutions including the City's Municipal Code (MC) and if subdividing land, the Government Code (GC) of the State of California, specifically Sections 66410 through 66499.58, said sections also referred to as the Subdivision Map Act (SMA). [MC 9.14.010]

50. The final approved conditions of approval (COAs) and any applicable Mitigation Measures issued by the Planning Division shall be photographically or electronically placed on mylar sheets and included in the Grading and Street Improvement plans.

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51. The developer shall monitor, supervise and control all construction and construction supportive activities, so as to prevent these activities from causing a public nuisance, including but not limited to, insuring strict adherence to the following:
(a) Removal of dirt, debris, or other construction material deposited on any public street no later than the end of each working day.
(b) Observance of working hours as stipulated on permits issued by the Land Development Division.
(c) The construction site shall accommodate the parking of all motor vehicles used by persons working at or providing deliveries to the site.
(d) All dust control measures per South Coast Air Quality Management District (SCAQMD) requirements during the grading operations.
Violation of any condition, restriction or prohibition set forth in these conditions shall subject the owner, applicant, developer or contractor (s) to remedy as noted in City Municipal Code 8.14.090. In addition, the City Engineer or Building Official may suspend all construction related activities for violation of any condition, restriction or prohibition set forth in these conditions until such time as it has been determined that all operations and activities are in conformance with these conditions.

52. Prior to any plan approval, a final detailed drainage study (prepared by a registered/licensed civil engineer) shall be submitted for review and approved by the City Engineer. The study shall include existing and proposed hydrologic conditions as well as hydraulic calculations for all drainage control devices and storm drain lines. [MC 9.14.110(A.1)]. A digital (pdf) copy of the approved drainage study shall be submitted to the Land Development Division.

53. If improvements associated with this project are not initiated within two (2) years of the date of approval of the Public Improvement Agreement (PIA), the City Engineer may require that the engineer's estimate for improvements associated with the project be modified to reflect current City construction costs in effect at the time of request for an extension of time for the PIA or issuance of a permit.

54. The developer shall protect downstream properties from damage caused by alteration of drainage patterns (i.e. concentration or diversion of flow, etc). Protection shall be provided by constructing adequate drainage facilities, including, but not limited to, modifying existing facilities or by securing a drainage easement. [MC 9.14.110]

55. The tentative map, master plot plan, plot plan, or conditional use permit shall correctly show all existing easements, traveled ways, and drainage courses. Any omission may require the map or plans associated with this application to be resubmitted for further consideration. [MC 9.14.040(A)]

<u>Prior to Grading Plan Approval</u>

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56. Two (2) copies of the final project-specific Water Quality Management Plan (WQMP) shall be submitted for review and approved by the City Engineer, which:
    a. Addresses Site Design Best Management Practices (BMPs) such as minimizing impervious areas, maximizing permeability, minimizes directly connected impervious areas to the City's street and storm drain systems, and conserves natural areas;
    b. Incorporates Source Control BMPs and provides a detailed description of their implementation;
    c. Describes the long-term operation and maintenance requirements for BMPs requiring maintenance; and
    d. Describes the mechanism for funding the long-term operation and maintenance of the BMPs.
    A copy of the final WQMP template can be obtained on the City 's Website or by contacting the Land Development Division. A digital (pdf) copy of the approved final project-specific Water Quality Management Plan (WQMP) shall be submitted to the Land Development Division.

57. The developer shall ensure compliance with the City Grading ordinance, these Conditions of Approval and the following criteria:
    a. The project street and lot grading shall be designed in a manner that perpetuates the existing natural drainage patterns with respect to tributary drainage area and outlet points. Unless otherwise approved by the City Engineer, lot lines shall be located at the top of slopes.
    b. Any grading that creates cut or fill slopes adjacent to the street shall provide erosion control, sight distance control, and slope easements as approved by the City Engineer.
    c. All improvement plans are substantially complete and appropriate clearance letters are provided to the City.
    d. A soils/geotechnical report (addressing the soil's stability and geological conditions of the site) shall be submitted to the Land Development Division for review. A digital (pdf) copy of the soils/geotechnical report shall be submitted to the Land Development Division.

58. Grading plans (prepared by a registered/licensed civil engineer) shall be submitted for review and approved by the City Engineer per the current submittal requirements.

59. The developer shall select Low Impact Development (LID) Best Management Practices (BMPs) designed per the latest version of the Water Quality Management Plan (WQMP) - a guidance document for the Santa Ana region of Riverside County.

60. The developer shall pay all remaining plan check fees.

61. A Storm Water Pollution Prevention Plan (SWPPP) shall be prepared in

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conformance with the State's current Construction Activities Storm Water General Permit. A copy of the current SWPPP shall be kept at the project site and be available for review upon request.

62. For projects that will result in discharges of storm water associated with construction with a soil disturbance of one or more acres of land, the developer shall submit a Notice of Intent (NOI) and obtain a Waste Discharger's Identification number (WDID#) from the State Water Quality Control Board (SWQCB) which shall be noted on the grading plans.

63. Landscape & Irrigation plans (prepared by a registered/licensed civil engineer) for water quality BMPs shall be submitted for review and approved by the City Engineer per the current submittal requirements, if applicable.

Prior to Grading Permit

64. A receipt showing payment of the Area Drainage Plan (ADP) fee to Riverside County Flood Control and Water Conservation District shall be submitted. [MC 9.14.100(O)]

65. If the developer chooses to construct the project in phases, a Construction Phasing Plan for the construction of on-site public and private improvements shall be submitted for review and approved by the City Engineer.

66. Prior to the payment of the Development Impact Fee (DIF), the developer may enter into a DIF Improvement Credit Agreement to secure credit for the construction of applicable improvements. If the developer fails to complete this agreement prior to the timing specified above, no credits will be given. The developer shall pay current DIF fees adopted by the City Council. [Ord. 695 § 1.1 (part), 2005] [MC 3.38.030, 040, 050]

67. A digital (pdf) copy of all approved grading plans shall be submitted to the Land Development Division.

68. Security, in the form of a cash deposit (preferable), or letter of credit shall be submitted as a guarantee of the implementation and maintenance of erosion control measures. At least twenty-five (25) percent of the required security shall be in the form of a cash deposit with the City. [MC 8.21.160(H)]

69. Security, in the form of a cash deposit (preferable), or letter of credit shall be submitted as a guarantee of the completion of the grading operations for the project. [MC 8.21.070]

70. The developer shall pay all applicable inspection fees.

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Prior to Improvement Plan Approval

71. The developer is required to bring any existing access ramps adjacent to and fronting the project to current ADA (Americans with Disabilities Act) requirements. However, when work is required in an intersection that involves or impacts existing access ramps, all access ramps in that intersection shall be retrofitted to comply with current ADA requirements, unless otherwise approved by the City Engineer.

72. The developer shall submit clearances from all applicable agencies, and pay all applicable plan check fees.

73. The street improvement plans shall comply with current City policies, plans and applicable City standards (i.e. MVSI-160 series, etc.) throughout this project.

74. The design plan and profile shall be based upon a centerline, extending beyond the project boundaries a minimum distance of 300 feet at a grade and alignment approved by the City Engineer.

75. Drainage facilities (i.e. catch basins, etc.) with sump conditions shall be designed to convey the tributary 100-year storm flows. Secondary emergency escape shall also be provided.

76. The hydrology study shall be designed to accept and properly convey all off -site drainage flowing onto or through the site. All storm drain design and improvements shall be submitted for review and approved of the City Engineer. In the event that the City Engineer permits the use of streets for drainage purposes, the provisions of current City standards shall apply. Should the quantities exceed the street capacity or the use of streets be prohibited for drainage purposes, as in the case where one travel lane in each direction shall not be used for drainage conveyance for emergency vehicle access on streets classified as minor arterials and greater, the developer shall provide adequate facilities as approved by the City Engineer. [MC 9.14.110 A.2]

77. All public improvement plans (prepared by a licensed/registered civil engineer) shall be submitted for review and approved by the City Engineer per the current submittal requirements.

78. The plans shall indicate any restrictions on trench repair pavement cuts to reflect the City's moratorium on disturbing newly-constructed pavement less than three (3) years old and recently slurry sealed streets less than one (1) year old. Pavement cuts for trench repairs may be allowed for emergency repairs or as specifically approved by the City Engineer.

79. The developer shall pothole to determine the exact location and elevation of existing underground utilities and incorporate the results into the design of the plans. The developer shall coordinate with all affected utility companies and bear all costs of utility relocations.

Prior to Building Permit

80. An engineered-fill certification, rough grade certification and compaction report shall be submitted for review and approved by the City Engineer. A digital (pdf) copy of the approved compaction report shall be submitted to the Land Development Division. All pads shall meet pad elevations per approved grading plans as noted by the setting of "blue-top" markers installed by a registered land surveyor or licensed civil engineer.

81. For Commercial/Industrial projects, the owner may have to secure coverage under the State's General Industrial Activities Storm Water Permit as issued by the State Water Resources Control Board.

82. For all subdivision projects, the map shall be recorded (excluding model homes). [MC 9.14.190]

83. All outstanding fees shall be paid.

84. All required as-built plans (prepared by a registered/licensed civil engineer) shall be submitted for review and approved by the City Engineer per the current submittal requirements.

85. The engineered final/precise grade certification shall be submitted for review and approved by the City Engineer.

86. For non-subdivision projects, in compliance with Proposition 218, the developer shall agree to approve the City of Moreno Valley NPDES Regulatory Rate Schedule that is in place at the time of certificate of occupancy issuance. Under the current permit for storm water activities required as part of the National Pollutant Discharge Elimination System (NPDES) as mandated by the Federal Clean Water Act, this project is subject to the following requirements:

a. Select one of the following options to meet the financial responsibility to provide storm water utilities services for the required continuous operation, maintenance, monitoring system evaluations and enhancements, remediation and/or replacement, all in accordance with Resolution No. 2002-46.

i. Participate in the mail ballot proceeding in compliance with Proposition 218, for the Common Interest, Commercial, Industrial and Quasi-Public Use NPDES Regulatory Rate Schedule and pay all associated costs with the ballot process; or

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ii. Establish an endowment to cover future City costs as specified in the Common Interest, Commercial, Industrial and Quasi-Public Use NPDES Regulatory Rate Schedule.

b. Notify the Special Districts Division of the intent to request building permits 90 days prior to their issuance and the financial option selected. The financial option selected shall be in place prior to the issuance of certificate of occupancy. [California Government Code & Municipal Code]

87. The developer shall complete all public improvements in conformance with current City standards, except as noted in the Special Conditions, including but not limited to the following:

a. Street improvements including, but not limited to: pavement, base, curb and/or gutter, cross gutters, spandrel, sidewalks, drive approaches, pedestrian ramps, street lights, signing, striping, under sidewalk drains, landscaping and irrigation, medians, redwood header boards, pavement tapers/transitions and traffic control devices as appropriate.

b. Storm drain facilities including, but not limited to: storm drain pipe, storm drain laterals, open channels, catch basins and local depressions.

c. City-owned utilities.

d. Sewer and water systems including, but not limited to: sanitary sewer, potable water and recycled water.

e. Under grounding of all existing and proposed utilities adjacent to and on-site. [MC 9.14.130]

f. Relocation of overhead electrical utility lines including, but not limited to: electrical, cable and telephone.

88. For commercial, industrial and multi-family projects, a "Stormwater Treatment Device and Control Measure Access and Maintenance Covenant" shall be recorded to provide public notice of the maintenance requirements to be implemented per the approved final project-specific WQMP. A boilerplate copy of the "Stormwater Treatment Device and Control Measure Access and Maintenance Covenant" can be obtained by contacting the Land Development Division.

89. The applicant shall ensure the following, pursuant to Section XII. I. of the 2010 NPDES Permit:

a. Field verification that structural Site Design, Source Control and Treatment Control BMPs are designed, constructed and functional in accordance with the approved Final Water Quality Management Plan (WQMP).

b. Certification of best management practices (BMPs) from a state licensed civil engineer. An original WQMP BMP Certification shall be submitted for review and approved by the City Engineer.

90. The Developer shall comply with the following water quality related items:

a. Notify the Land Development Division prior to construction and installation of

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all structural BMPs so that an inspection can be performed.

b. Demonstrate that all structural BMPs described in the approved final project-specific WQMP have been constructed and installed in conformance with the approved plans and specifications;

c. Demonstrate that Developer is prepared to implement all non -structural BMPs described in the approved final project-specific WQMP; and

d. Demonstrate that an adequate number of copies of the approved final project-specific WQMP are available for future owners/occupants.

e. Clean and repair the water quality BMP's, including re-grading to approved civil drawing if necessary.

f. Provide City with updated Engineer's Line and Grade Certification.

g. Obtain approval and complete installation of the irrigation and landscaping.

91. Prior to parcel map recordation or building permit issuance, either a reciprocal access easement shall be shown on the map or a separate recorded copy of a reciprocal access agreement between the project and the adjacent parcel to the south shall be provided to the City.

92. Prior to F-WQMP approval, post development BMPs for Brodiaea Avenue shall incorporated in accordance with MS4 Permit R8-2010-033.

93. The Applicant has proposed to incorporate the use of an infiltration basin and self-retaining areas. Final design details of the treatment control BMPs shall be provided in the F-WQMP.

94. Prior to rough grading plan approval, the following shall be shown on the plans and dedications made via separate instrument and submitted to the City for review and approval: A 4-foot pedestrian right-of-way dedication behind all driveway approaches per City Standard MVSI-112C-0.

95. Prior to occupancy, the following improvements shall be completed:

a. Nason Street, Modified Divided Major Arterial, City Standard MVSI-102A-0 (120-foot RW / 102-foot CC) shall construct to half-width plus 21' along the entire project's westerly frontage. Improvements shall consist of, but not be limited to pavement, base, street lights, driveway approaches, pedestrian ramps, curb & gutter, and sidewalk. In addition, replace or install any damaged, substandard or missing improvements.

b. Brodiaea Avenue, Collector, City Standard MVSI-106BA-0 (66-foot RW / 44 -foot CC) shall be constructed to half-width plus 18' along the entire project's northerly frontage. Improvements shall consist of, but not be limited to, pavement, base, street lights, driveway approaches, pedestrian ramps, curb & gutter, sidewalk. In addition, replace or install any damaged, substandard or missing

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improvements.

96. Prior to precise grading plan approval, the grading plans shall clearly show that the parking lot conforms to City standards. The parking lot shall be 5% maximum, 1% minimum, 2% maximum at or near any disabled parking stall and travel way. Ramps, curb openings and travel paths shall all conform to current ADA standards as outlined in Department of Justice's "ADA Standards for Accessible Design", Excerpt from 28 CFR Part 36. (www.usdoj.gov) and as approved by the City's Building and Safety Division.

97. Prior to approval of the parcel map, the map shall show the following:

a. A seven-foot street right-of-way vacation on the south side of Brodiaea Avenue along project frontage.

b. A four-foot street right-of-way dedication on the east side of Nason Street along the project frontage.

Special Districts Division

98. The parcel(s) associated with this project have been incorporated into the Moreno Valley Community Services District Zone A (Parks & Community Services) and Zone C (Arterial Street Lighting). All assessable parcels therein shall be subject to annual parcel taxes for Zone A and Zone C for operations and capital improvements.

99. The ongoing maintenance of any landscaping required to be installed behind the curb shall be the responsibility of the property owner.

100. Street Light Authorization forms for all street lights that are conditioned to be installed as part of this project must be submitted to the Special Districts Division for approval, prior to street light installation. The Street Light Authorization form can be obtained from the utility company providing electric service to the project, either Moreno Valley Utility or Southern California Edison. For questions, contact the Special Districts Division at 951.413.3480 or specialdistricts@moval.org.

101. This project has been identified to potentially be included in the formation of a Map Act Area of Benefit Special District for the construction of major thoroughfares and/or freeway improvements. The property owner(s) shall participate in such District and pay any special tax, assessment, or fee levied upon the project property for such District. At the time of the public hearing to consider formation of the district, the property owner(s) will not protest the formation, but will retain the right to object any eventual assessment that is not equitable should the financial burden of the assessment not be reasonably proportionate to the benefit the affected property obtains from the improvements to be installed. The Developer must notify the

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Special Districts Division at 951.413.3480 or at specialdistricts@moval.org of its selected financial option when submitting an application for the first building permit to determine whether the development will be subjected to this condition. If subject to the condition, the special election requires a 90 day process in compliance with the provisions of Article 13C of the California Constitution. (Street & Highway Code, GP Objective 2.14.2, MC 9.14.100).

102. Prior to the issuance of the first building permit for this project, the Developer shall pay Advanced Energy fees for all applicable Residential and Arterial Street Lights required for this development. Payment shall be made to the City of Moreno Valley and collected by the Land Development Division. Fees are based upon the Advanced Energy fee rate in place at the time of payment, as set forth in the current Listing of City Fees, Charges, and Rates adopted by City Council. The Developer shall provide a copy of the receipt to the Special Districts Division (specialdistricts@moval.org). Any change in the project which may increase the number of street lights to be installed will require payment of additional Advanced Energy fees at the then current fee. Questions may be directed to the Special Districts Division at 951.413.3480 or specialdistricts@moval.org.

103. This project is conditioned for a proposed district to provide a funding source for the operation and maintenance of public improvements and/or services associated with new development in that territory. The Developer shall satisfy this condition with one of the options outlined below.

a. Participate in a special election for maintenance/services and pay all associated costs of the election process and formation, if any. Financing may be structured through a Community Facilities District, Landscape and Lighting Maintenance District, or other financing structure as determined by the City; or

b. Establish an endowment fund to cover the future maintenance and/or service costs.

The Developer must notify the Special Districts Division at 951.413.3480 or at specialdistricts@moval.org when submitting the application for building permit issuance. If the first building permit is pulled prior to formation of the district, this condition will not apply. If the district has been or is in the process of being formed the Developer must inform the Special Districts Division of its selected financing option (a. or b. above). The option for participating in a special election requires 90 days to complete the special election process. This allows adequate time to be in compliance with the provisions of Article 13C of the California Constitution.

The financial option selected shall be in place prior to the issuance of the first certificate of occupancy for the project.

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104. This project is conditioned to provide a funding source for the following special financing program(s):

a. Street Lighting Services for capital improvements, energy charges, and maintenance.

The Developer's responsibility is to provide a funding source for the capital improvements and the continued maintenance. The Developer shall satisfy this condition with one of the options below.

i. Participate in a special election (mail ballot proceeding) and pay all associated costs of the special election and formation, if any. Financing may be structured through a Community Services District zone, Community Facilities District, Landscape and Lighting Maintenance District, or other financing structure as determined by the City; or

ii. Establish a Property Owner's Association (POA) or Home Owner's Association (HOA) which will be responsible for any and all operation and maintenance costs

The Developer must notify the Special Districts Division at 951.413.3480 or at specialdistricts@moval.org of its selected financial option when submitting the application for building permit issuance. The option for participating in a special election requires approximately 90 days to complete the special election process. This allows adequate time to be in compliance with the provisions of Article 13C of the California Constitution.

The financial option selected shall be in place prior to the issuance of the first certificate of occupancy for the project and prior to acceptance of any improvements.

105. Commercial (BP) If Land Development, a Division of the Public Works Department, requires this project to supply a funding source necessary to provide for, but not limited to, stormwater utilities services for the continuous operation, remediation and/or replacement, monitoring, systems evaluations and enhancement of on -site facilities and performing annual inspections of the affected areas to ensure compliance with state mandated stormwater regulations, a funding source needs to be established. The Developer must notify the Special Districts Division at 951.413.3480 or at specialdistricts@moval.org of its selected financial option for the National Pollution Discharge Elimination System (NPDES) program when submitting the application for the first building permit issuance (see Land Development's related condition). Participating in a special election the process requires a 90 day period prior to the City's issuance of a building permit. This allows adequate time to be in compliance with the provisions of Article 13D of the California Constitution. (California Health and Safety Code Sections 5473 through

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5473.8 (Ord. 708 Section 3.1, 2006) & City of Moreno Valley Municipal Code Title 3, Section 3.50.050.)

106. This project has been identified to be included in the formation of a Community Facilities District (Mello-Roos) for Public Safety services, including but not limited to Police, Fire Protection, Paramedic Services, Park Rangers, and Animal Control services. The property owner(s) shall not protest the formation; however, they retain the right to object to the rate and method of maximum special tax. In compliance with Proposition 218, the property owner shall agree to approve the mail ballot proceeding (special election) for either formation of the CFD or annexation into an existing district. The Developer must notify the Special Districts Division at 951.413.3480 or at specialdistricts@moval.org when submitting the application for building permit issuance to determine the requirement for participation. If the first building permit is pulled prior to formation of the district, this condition will not apply. If the condition applies, the special election will require a minimum of 90 days prior to issuance of the first building permit. This allows adequate time to be in compliance with the provisions of Article 13C of the California Constitution. (California Government Code Section 53313 et. seq.)

107. Any damage to existing landscape areas maintained by the City of Moreno Valley due to project construction shall be repaired/replaced by the Developer, or Developer's successors in interest, at no cost to the City of Moreno Valley.

Transportation Engineering Division

108. Conditions of approval may be modified if the project or its phasing plan is altered from any approved plans.

109. Prior to the final approval of the street improvement plans, traffic signal modification plans will be required for the traffic signal located at Nason Street/Hospital Road intersection. Modifications may include but not limited to new signal poles, new pull boxes, new traffic detector loops or video/radar detection system, relocation of signal controller cabinet, etc. Specific modifications shall be determined during plan check review.

110. Nason Street is classified as a Divided Major Arterial at this location. Any improvements undertaken by this project shall be consistent with the City's standards for this facility.

111. Brodiaea Avenue is classified as a Collector (66' RW/44' CC) per City Standard Plan No. MVSI-106B-0. Any improvements undertaken by this project shall be consistent with the City's standards for this facility.

112. Project driveways shall conform to City of Moreno Valley Standard No.

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MVSI-112C-0 for Commercial Driveway Approaches.

113. Access at the proposed street and driveways shall be as follows:

- West bound approach at Nason Street/Brodiaea Avenue intersection: Only right turns in/out are allowed. Access shall be controlled by the existing raised concrete median on Nason Street.
- Nason Street north driveway: Only right turns in/out are allowed. Access shall be controlled by the existing raised concrete median on Nason Street.
- Nason Street south driveway: The existing traffic signal at Nason Street/Hospital Road intersection shall be modified to support full access.
- Brodiaea Avenue driveways: Full access is allowed.

114. All proposed on-site traffic signing and striping should be accordance with the latest California Manual on Uniform Traffic Control Devices (CAMUTCD).

115. Prior to final approval of the street improvement plans, the project plans shall demonstrate that sight distance at proposed streets and driveways conforms to City Standard Plan No. MVSI-164A-0 through MVSI-164C-0.

116. Prior to the final approval of the street improvement plans, a signing and striping plan shall be prepared per City of Moreno Valley Standard Plans - Section 4 for all streets within the project area.

117. Prior to issuance of a construction permit, construction traffic control plans prepared by a qualified, registered Civil or Traffic engineer may be required for plan approval or as required by the City Traffic Engineer.

118. Prior to issuance of Certificate of Occupancy for any building in Phase 3 or prior to the project access at Nason Street/Hospital Road intersection being opened to vehicular traffic in any phase, the traffic signal at this intersection shall be modified and operational per the approved plans to the satisfaction of the City Engineer.

119. Prior to issuance of Certificate of Occupancy for any building in any of the project phases, all signing and striping on Nason Street and Brodiaea Avenue shall be installed per current City Standards and the approved plans.

120. Prior to acceptance of streets into the City-maintained road system, all approved signing and striping shall be installed per current City Standards and the approved plans.

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CITY OF MORENO VALLEY
CONDITIONS OF APPROVAL
Plot Plan (PEN16-0055)

EFFECTIVE DATE:
EXPIRATION DATE:

COMMUNITY DEVELOPMENT DEPARTMENT

Planning Division

1. ANY expansion to this use or exterior alterations will require the submittal of a separate application(s) and shall be reviewed and approved under separate permit(s). (MC 9.02.080)

2. The developer, or the developer's successor-in-interest, shall be responsible for maintaining any undeveloped portion of the site in a manner that provides for the control of weeds, erosion and dust. (MC 9.02.030)

3. This approval shall expire three years after the approval date of this project unless used or extended as provided for by the City of Moreno Valley Municipal Code. (MC 9.02.230)

4. All landscaped areas shall be maintained in a healthy and thriving condition, free from weeds, trash and debris. (MC 9.02.030)

5. The site shall be developed in accordance with the approved plans on file in the Community Development Department - Planning Division, the Municipal Code regulations, General Plan, and the conditions contained herein. Prior to any use of the project site or business activity being commenced thereon, all Conditions of Approval shall be completed to the satisfaction of the Planning Official. (MC 9.14.020)

6. Any signs indicated on the submitted plans are not included with this approval. Any signs, whether permanent (e.g. wall, monument) or temporary (e.g. banner, flag), require separate application and approval by the Planning Division. No signs are permitted in the public right of way. (MC 9.12)

7. All site plans, grading plans, landscape and irrigation plans, fence/wall plans, lighting plans and street improvement plans shall be coordinated for consistency with this approval.

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Special Conditions

8. The site has been approved for Medical Office Building Two (2), approximately 53,000 square feet to be located on the northwest portion (new parcel 2 TPM 36227) of the site within the medical complex facility. Medical Office Building Two (2) will be developed per the Phasing Plan PEN17-0013, per the approved plans.

9. The following Mitigation Measures apply to this project:

AQ-1: The applicant shall ensure that approved architectural coatings are utilized. Prior to the issuance of building permits, the City will verify that construction plans submitted by the project proponent reflect use of architectural coatings where the content of volatile organic compounds (VOC) does not exceed 25 grams per liter (g/l) for interior and exterior applications. This measure must be verified through standard building inspections in light of the performance standard that emissions of volatile organic compounds from application of interior or exterior coatings shall not exceed the daily emissions thresholds established by the South Coast Air Quality Management District. The applicant bears the cost of implementing this mitigation.

BIO-1: The applicant shall avoid impacts to nesting birds and violation of state and federal laws pertaining to birds, all construction related activities (including but not limited to mobilization and staging, clearing, grubbing, vegetation removal, fence installation, demolition, and grading) should occur outside the avian nesting season (generally prior to Feb 1 or after Aug 31). If construction and construction noise occurs within the avian nesting season (from Feb 1 to Aug 31 or according to local requirements), all suitable habitats located within the project's area of disturbance including staging and storage areas plus a 250-foot (passerines) and 1,000 foot (raptor nests) buffer around these areas shall be thoroughly surveyed, as feasible, for the presence of active nests by a qualified biologist no more than 5-days before commencement of any site disturbance activities and equipment mobilization. If project activities are delayed more than 5-days, an additional nesting bird survey shall be performed. Active nesting is present if a bird is sitting in a nest, a nest has eggs or chicks in it, or adults are observed carrying food to the nest. The results of these surveys shall be documented. If it is determined that birds are actively nesting within the survey area, Mitigation Measure BIO-2 shall apply. Conversely, if the survey area is found to be absent of nesting birds, Mitigation Measure BIO-2 shall not be required.

BIO-2: If pre-construction nesting bird surveys result in the location of active nests, the applicant shall ensure that no site disturbance and mobilization of heavy equipment (including but not limited to equipment staging, fence installation, clearing, grubbing, vegetation removal, demolition and grading), shall take place within 250 feet of non-raptor nests and 1,000 feet of raptor nests, or as determined by a qualified biologist in consultation with the CDFW, until the chicks have fledged. Monitoring shall be required to insure compliance with the MBTA and relevant CDFW requirements. Monitoring dates and findings shall be documented.

BIO-3: The applicant shall ensure a pre-construction survey for burrowing owls be completed no more than 30-days prior to the start of construction at the Project site to ensure no burrowing owls have moved onto the site.

CUL-1: Prior to the issuance of a grading permit, the Applicant shall retain a q

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professional archaeologist who meets U.S. Secretary of the Interior's Professional Qualifications and Standards. The Project archaeologist and Native American Tribal Representatives will conduct an Archaeological Sensitivity Training for construction personnel prior to commencement of excavation activities. The training session will include a handout and will focus on how to identify archaeological and Tribal Cultural resources that may be encountered during earthmoving activities and the procedures to be followed in such an event, including who to contact and the appropriate avoidance measures that need to be undertaken until the find(s) can be properly evaluated; the duties of archaeological and Native American monitors; and the general steps a qualified professional archaeologist would follow in conducting a salvage investigation if one is necessary. All new construction personnel that will conduct earthwork or grading activities must take the Archaeological Sensitivity Training prior to beginning work on the project and the professional archaeologist shall make themselves available to provide the training on an as-needed basis. A sign-in sheet shall be compiled to track attendance and shall be submitted to the City with the Phase IV Archaeological Monitoring Report.

CUL-2: Preconstruction Notification of Native American Tribal Representatives. Prior to the issuance of a grading permit, the Applicant shall provide evidence to the City of Moreno Valley that the Agua Band of Cahuilla Indians, Pechanga Band of Luiseño Indians and the Soboba Band of Luiseño Indians tribal representatives (hereafter referred to as "Native American Tribal Representatives") received a minimum of 30 days advance notice of all mass grading and trenching activities, and provide evidence of monitoring agreements between the Applicant and the Tribes. The Native American Tribal Representatives shall be notified a minimum of 48 hours in advance and allowed to attend the pre-grading meeting with the City and project construction contractors and/or monitor all project mass grading and trenching activities.

CUL-3: Prior to grading permit issuance, the City shall verify that the following note is included on the Grading Plan: "If any suspected archaeological resources are discovered during ground-disturbing activities and the archaeological monitor or Tribal representatives are not present, the construction supervisor is obligated to halt work in a 100-foot radius around the find and call the project archaeologist and the Tribal representatives to the site to assess the significance of the find."

CUL-4: Prior to the issuance of a grading permit, the Applicant shall retain a qualified archaeological monitor. The archaeological monitor will work under the direction and guidance of the qualified professional archaeologist and will meet the U.S. Secretary of the Interior's Professional Qualifications and Standards. The archeological monitor shall have the authority to temporarily redirect earthmoving activities in the event that suspected archaeological resources are unearthed during project construction. Archaeological monitoring is required at all depths and strata. The archaeological monitor shall be present during all construction excavations (e.g., grading, trenching, or clearing/grubbing) into non-fill younger Pleistocene alluvial sediments. Multiple earth-moving construction activities may require multiple archaeological monitors. The frequency of monitoring shall be based on the rate of excavation and grading activities, proximity to known archaeological resources, the materials being excavated (native versus artificial fill soils), and the depth of excavation, and if found, the abundance and type of archaeological resources encountered. Full-time monitoring can be reduced to part-time inspections if determined adequate by the qualified professional archaeologist.

CUL-5: The applicant shall ensure that all ground disturbing activities are ceased and treatment plans are implemented if archaeological resources are encountered. In the event that archaeological resources are unearthed during ground-disturbing activities, ground-disturbing activities shall be halted or diverted away from the vicinity of the find so that the find

can be evaluated. A buffer area of at least 100 feet shall be established around the find where construction activities shall not be allowed to continue until a qualified archaeologist has

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examined the newly discovered artifact(s) and has evaluated the area of the find. Work shall be allowed to continue outside of the buffer area. All archaeological resources unearthed by project construction activities shall be evaluated by a qualified professional archaeologist, who meets the U.S. Secretary of the Interior's Professional Qualifications and Standards. Should the newly discovered artifacts be determined to be prehistoric, Native American Tribes/Individuals should be contacted and consulted and Native American construction monitoring should be initiated. The Applicant and City shall coordinate with the archaeologist to develop an appropriate treatment plan for the resources. The plan may include implementation of archaeological data recovery excavations to address treatment of the resource along with subsequent laboratory processing and analysis.

In the event that a cultural resource is encountered during ground-disturbing activities, the landowner(s) shall relinquish ownership of all such resources, including sacred items, burial goods, and all archaeological artifacts and non-human remains. The artifacts shall be relinquished through one or more of the following methods and evidence of such shall be provided to the City of Moreno Valley Planning Department:

1. Accommodate the process for Preservation-In-Place/Onsite with the consulting Native American tribes or bands, as detailed in the treatment plan prepared by the professional paleontologist. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not.
2. A curation agreement with an appropriate qualified repository within Riverside County that meets federal standards per 36 CFR Part 79; therefore, the resources would be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility within Riverside County, to be accompanied by payment of the fees necessary for permanent curation; and/or
3. For purposes of conflict resolution, if more than one Native American tribe or band is involved with the project and cannot come to an agreement as to the disposition of cultural materials, they shall be curated at the Western Science Center by default.

CUL-6: Prior to building permit issuance, the Project archaeologist shall prepare a final Phase IV Monitoring Report as outlined in the CRMP, which shall be submitted to the City Planning Division, the appropriate Native American tribe(s), and the Eastern Information Center at the University of California, Riverside. The report shall include a description of resources unearthed, if any, evaluation of the resources with respect to the California Register and CEQA, and treatment of these resources. All cultural material, excluding sacred, ceremonial, grave goods and human remains, collected during the grading monitoring program and from any previous archaeological studies or excavations on the project site shall be curated in a Riverside County repository according to the current professional repository standards and may include the Pechanga Band's curatorial facility in Temecula, CA.

CUL-7: Conduct Paleontological Sensitivity Training for Construction Personnel. Prior to the issuance of a grading permit, the Applicant shall retain a professional paleontologist, who meets the qualifications set forth by the Society of Vertebrate Paleontology. The paleontologist shall conduct a Paleontological Sensitivity Training for construction personnel prior to commencement of excavation activities. The training will include a handout and will focus on how to identify paleontological resources that may be encountered during earthmoving activities, and the procedures to be followed in such an event, including who to contact and the appropriate avoidance measures that need to be undertaken until the find(s) can be properly evaluated; the duties of paleontological monitors; notification and other procedures to follow upon discovery of resources; and the general steps a qualified professional paleontologist would follow in conducting a salvage investigation if one is necessary. All new construction personnel that will conduct earthwork or grading activities must take the Paleontological Sensitivity Training prior to beginning work on the project and the professional paleontologist shall make themselves available to provide the training on an as-needed basis.

CUL-8: The applicant shall ensure the monitoring of construction excavations for

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paleontological resources is required for all excavations in older Quaternary alluvial fan deposits or in sedimentary deposits derived from the Mt. Eden Formation. Prior to the issuance of a grading permit, the Applicant shall retain a qualified paleontological monitor, who will work under the guidance and direction of a professional paleontologist, and who meets the qualifications set forth by the Society of Vertebrate Paleontology. The paleontological monitor shall have the authority to temporarily redirect earthmoving activities in the event that suspected paleontological resources are unearthed during project construction. The paleontological monitor shall be present during all construction excavations including, but not limited to grading, trenching, boring, and clearing/grubbing). Multiple earth-moving construction activities may require multiple paleontological monitors. The frequency of monitoring shall be based on the rate of excavation and grading. Monitoring may be reduced if potentially fossiliferous units are not present in the subsurface, or if present, are determined upon exposure and examination by the professional paleontologist to have a low potential to contain or yield fossil resources.

CUL-9: The applicant shall ensure that in the event that paleontological resources and or unique geological features are unearthed during ground-disturbing activities, all ground disturbing activities shall be halted or diverted away from the vicinity of the find in order to evaluate the resource. A buffer area of at least 100 feet shall be established around the find where construction activities shall not be allowed to continue until appropriate paleontological treatment plan has been approved by the Applicant and the City. Work shall be allowed to continue outside of the buffer area. The Applicant and City shall coordinate with a professional paleontologist, who meets the qualifications set forth by the Society of Vertebrate Paleontology, to develop an appropriate treatment plan for the resources. Treatment may include implementation of paleontological salvage excavations to remove the resource along with subsequent laboratory processing and analysis or preservation in place. At the paleontologist's discretion and to reduce construction delay, the grading and excavation contractor shall assist in removing rock samples for initial processing. Recovered specimens shall be properly prepared to a point of identification and permanent preservation, including screen washing sediments to recover small invertebrates and vertebrates, if necessary. Identification and curation of specimens into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable storage is required for significant discoveries.

CUL-10: The applicant shall ensure prior to building permits, that a professional paleontologist prepares a report summarizing the results of the monitoring and salvaging efforts, the methodology used in these efforts, as well as a description of the fossils collected and their significance as well as any necessary maps and graphics to accurately record the original location of these resources. The report shall be submitted to the Applicant, the City, the San Bernardino County Natural History Museum, Natural History Museum of Los Angeles County, and representatives of other appropriate or concerned agencies to signify the satisfactory completion of the project and required mitigation measures.

CUL-11: In the event that any human remains are unearthed during project construction, the City of Moreno Valley and the Applicant shall comply with State Health and Safety Code Section 7050.5 The City of Moreno Valley and the Applicant shall immediately notify the Riverside County Coroner's office and no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition. If remains are determined to be of Native American descendent, the coroner has 24-hours to notify the Native American Heritage Commission (NAHC). The NAHC shall identify the person(s) thought to be the Most Likely Descendent (MLD). After the MLD has inspected the remains and the site, they have 48 hours to recommend to the landowner the treatment or disposal, with appropriate dignity, the human remains and any associated funerary objects. The MLD shall complete their inspection and make their recommendation within 48 hours of being granted access by the landowner to inspect the discovery. The recommendation may include the scientific removal and nondestructive analysis of human remains and cultural items associated with Native American burials. Upon the discovery of the Native American remains

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the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred, as prescribed in this mitigation measure, with the MLD regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The landowner shall discuss and confer with the descendants all reasonable options regarding the descendants' preferences for treatment.

If the NAHC is unable to identify a MLD, or the MLD identified fails to make a recommendation, or the landowner rejects the recommendation of the MLD and the mediation provided for in Subdivision (k) of Section 5097.94, if invoked, fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall inter the human remains and items associated with Native American human remains with appropriate dignity on the facility property in a location not subject to further and future subsurface disturbance. A record of the reburial shall be filed with the NAHC and the CHRIS-EIC. Upon the reburial of the human remains, the MLD shall file a record of the reburial with the NAHC and the project archaeologist shall file a record of the reburial with the EIC.

NOI-1: Project proponent shall provide the following (or equivalent) noise abatement measures as part of the building construction plans in order to meet the City of Moreno Valley exterior noise standards of 60dBA for residential and 65dBA for commercial:
• Stationary construction noise sources such as generators or pumps must be located at least 100 feet from sensitive land uses, as feasible, or at maximum distance when necessary to complete work near sensitive land uses, to be verified by submittal of a construction staging plan. This mitigation measure must be implemented throughout construction and may be periodically monitored by the Planning Director, or designee during routine inspections.
• Construction staging areas must be located as far from noise sensitive land uses as feasible, to be verified by submittal of a construction staging plan. Implementation of this measure shall occur throughout construction through periodic monitoring by the Planning Director or designee during routine inspections.
• Throughout construction, the contractor shall ensure all construction equipment is equipped with included noise attenuating devices and are properly maintained. This mitigation measure shall be periodically monitored by the Planning Director or designee during routine inspections.
• Idling equipment must be turned off when not in use. This mitigation measure may be periodically monitored by the Planning Director or designee during routine inspections.
• Equipment must be maintained so that vehicles and their loads are secured from rattling and banging. This mitigation measure may be periodically monitored by the Planning Director or designee during routine inspections.

NOI-2: The developer shall ensure temporary construction noise control barriers shall be installed where residential uses are located adjacent to the project site (south and west). The type and location of the noise control barriers shall be shown on all grading and building plans and subject to approval by the Planning Director, or designee.

NOI-3: All construction activities shall comply with the City of Moreno Valley Noise Ordinance (Chapter 11.80 of the City of Moreno Valley Municipal Code). This requirement shall be noted on all grading and building plans and in bid documents issued to construction contractors.

TRA-1: The project applicant shall participate in the phased construction of off-site traffic signals through payment of traffic signal mitigation fees. The traffic signals within the study area at buildout should specifically include an interconnect of the traffic signals to function in a coordinated system. Traffic signal mitigation fees shall be paid prior to Opening Year (2020) with Project Phase 1 or alternate City approved deadline.

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TRA-1: If, during mass grading and trenching activities, the Archaeologist or Tribal Monitor suspect that an archaeological resource and/or TCR may have been unearthed, the monitor identifying the potential resources, in consultation with the other monitor(s) as appropriate, shall immediately halt and redirect grading operations in a 100-foot radius around the find to allow identification and evaluation of the suspected resource. The Native American monitor(s) or appropriate representative(s) and the archaeological monitor shall evaluate the suspected resource and make a determination of significance pursuant to California Public Resources Code Section 21083.2. The archaeological monitor and Tribal monitor(s) or appropriate representative(s), the Project Applicant, and the City Planning Division shall confer regarding mitigation of the discovered resource(s). All sacred sites, should they be encountered within the project area, shall be avoided and preserved as the preferred mitigation, if feasible. If preservation in place is not feasible, treatment and/or mitigation may include implementation of archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis.

Prior to Grading Permit

10. Prior to issuance of grading permits, the developer shall submit wall/fence plans to the Planning Division for review and approval as follows:

A. A maximum 6 foot high solid decorative block perimeter wall with pilasters and a cap shall be required adjacent to all residential zoned areas.

B. 3-foot high decorative wall, solid hedge or berm shall be placed in any setback areas between a public right of way and a parking lot for screening.

C. Any proposed retaining walls shall also be decorative in nature, while the combination of retaining and other walls on top shall not exceed the height requirement.

D. Proposed screening walls for truck loading areas and required loading docks shall also include decorative block walls with pilasters with a height up to fourteen (14) feet to fully screen trucks (industrial and some situations with commercial uses).

E. Walls and fences for visual screening are required when there are adjacent residential uses or residentially zone property. The height, placement and design will be based on a site specific review of the project. All walls are subject to the approval of the Planning Official. (DC 9.08.070)

11. Prior to the issuance of grading permits, a temporary project identification sign shall be erected on the site in a secure and visible manner. The sign shall be conspicuously posted at the site and remain in place until occupancy of the project. The sign shall include the following:

a. The name (if applicable) and address of the development.
b. The developer's name, address, and a 24-hour emergency telephone number.

12. Prior to issuance of grading permits, the location of the trash enclosure shall be included on the plans.

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13. Prior to issuance of any grading permits, mitigation measures contained in the Mitigation Monitoring Program approved with this project shall be implemented as provided therein. A mitigation monitoring fee, as provided by City ordinance, shall be paid by the applicant within 30 days of project approval. No City permit or approval shall be issued until such fee is paid. (CEQA)

14. Prior to issuance of grading permits, the developer shall pay the applicable Stephens' Kangaroo Rat (SKR) Habitat Conservation Plan mitigation fee. (Ord)

15. Within thirty (30) days prior to any grading or other land disturbance, a pre-construction survey for Burrowing Owls shall be conducted pursuant to the established guidelines of Multiple Species Habitat Conservation Plan. The pre-construction survey shall be submitted to the Planning Division prior to any disturbance of the site and/or grading permit issuance.

16. Prior to approval of any grading permits, plans for any security gate system shall be submitted to and approved by to the Planning Division.

17. Prior to the issuance of grading permits, the site plan and grading plans shall show decorative hardscape (e.g. colored concrete, stamped concrete, pavers or as approved by the Planning Official) consistent and compatible with the design, color and materials of the proposed development for all driveway ingress /egress locations of the project.

<u>Prior to Building Permit</u>

18. Prior to the issuance of building permits, covered trash enclosure (s) shall be included in the building plans or the Building submittal of the Fence and Wall plans. The trash enclosure(s), including the roof materials, shall be compatible with the architecture, color and materials of the building(s) design. Trash enclosure areas shall include landscaping on three sides. (GP Objective 43.6, DG)

19. Prior to issuance of any building permits, final landscaping and irrigation plans shall be submitted for review and approved by the Planning Division. After the third plan check review for landscape plans, an additional plan check fee shall apply. The plans shall be prepared in accordance with the City's Landscape Requirements and shall include:

    A. A three (3) foot high decorative wall, solid hedge or berm shall be placed in any setback areas between a public right of way and a parking lot for screening.

    B. Finger and end planters with required step outs and curbing shall be provided every 12 parking stalls as well as at the terminus of each aisle.

    C. Diamond planters shall be provided every 3 parking stalls.

    D. Drought tolerant landscape shall be used. Sod shall be limited to gathering areas. (or No sod shall be installed)

    E. Street trees shall be provided every 40 feet on center in the right of way.

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F. On-site trees shall be planted at an equivalent of one (1) tree per thirty (30) linear feet of the perimeter of a parking lot and per thirty linear feet of a building dimension for the portions of the building visible from a parking lot or right of way. Trees may be massed for pleasing aesthetic effects.

G. Enhanced landscaping shall be provided at all driveway entries and street corner locations The review of all utility boxes, transformers etc. shall be coordinated to provide adequate screening from public view.

H. Landscaping on three sides of any trash enclosure.

I. All site perimeter and parking lot landscape and irrigation shall be installed prior to the release of certificate of any occupancy permits for the site or pad in question.

20. Prior to issuance of building permits, the Planning Division shall review and approve the location and method of enclosure or screening of transformer cabinets, commercial gas meters and back flow preventers as shown on the final working drawings. Location and screening shall comply with the following criteria : transformer cabinets and commercial gas meters shall not be located within required setbacks and shall be screened from public view either by architectural treatment or landscaping; multiple electrical meters shall be fully enclosed and incorporated into the overall architectural design of the building (s); back-flow preventers shall be screened by landscaping. (GP Objective 43.30)

21. Prior to issuance of a building permit, the developer /property owner or developer's successor-in-interest shall pay all applicable impact fees due at permit issuance, including but not limited to Multi-species Habitat Conservation Plan (MSHCP) mitigation fees. (Ord)

22. Prior to building final, the developer/owner or developer's/owner' s successor-in-interest shall pay all applicable impact fees, including but not limited to Transportation Uniform Mitigation fees (TUMF), and the City's adopted Development Impact Fees. (Ord)

23. Prior to or at building plan check submittal, the elevation plans shall include decorative lighting sconces on all sides of the buildings of the complex facing a parking lot, courtyard or plaza, or public right of way or open space to provide up-lighting and shadowing on the structures. Include drawings of the sconce details for each building within the elevation plans, approved by the Planning Division prior to building permit issuance.

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24. Prior to or at building plan check submittal, two copies of a detailed, on-site, computer generated, point-by-point comparison lighting plan, including exterior building, parking lot, and landscaping lighting, shall be submitted to the Planning Division for review and approval prior to the issuance of a building permit. The lighting plan shall be generated on the plot plan and shall be integrated with the final landscape plan. The plan shall indicate the manufacturer's specifications for light fixtures used, shall include style, illumination, location, height and method of shielding per the City's Municipal Code requirements. After the third plan check review for lighting plans, an additional plan check fee will apply. (MC 9.08.100, 9.16.280)

25. Prior to issuance of building permits, screening details shall be addressed on the building plans for roof top equipment submitted for Planning Division review and approval through the building plan check process. All equipment shall be completely screened so as not to be visible from public view, and the screening shall be an integral part of the building.

Prior to Building Final or Occupancy

26. Prior to building final, all required landscaping and irrigation shall be installed per plan, certified by the Landscape Architect and inspected by the Planning Division. (MC 9.03.040, MC 9.17).

27. Prior to building final, Planning approved/stamped landscape plans shall be provided to the Community Development Department – Planning Division on a CD disk.

28. Prior to building final, all required and proposed fences and walls shall be constructed according to the approved plans on file in the Planning Division. (MC 9.080.070).

Building Division

29. The proposed non-residential project shall comply with the latest Federal Law, Americans with Disabilities Act, and State Law, California Code of Regulations, Title 24, Chapter 11B for accessibility standards for the disabled including access to the site, exits, bathrooms, work spaces, etc.

30. Prior to submittal, all new development, including residential second units, are required to obtain a valid property address prior to permit application. Addresses can be obtained by contacting the Building Safety Division at 951.413.3350.

31. Contact the Building Safety Division for permit application submittal requirements.

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32. All new buildings 10,000 square feet and over, shall include building commissioning in the design and construction processes of the building project to verify that the building systems and components meet the owner 's or owner representative's project requirements (OPR). All requirements in The 2016 California Green Building Standards Code, sections 5.410.2 - 5.410.2.6 must be met.

33. Any construction within the city shall only be completed between the hour of seven a.m. to seven p.m. Monday through Friday, excluding holidays and from eight a.m. to four p.m. on Saturday, unless written approval is obtained from the city building official or city engineer (Municipal Code Section 8.14.040.E).

34. Building plans submitted shall be signed and sealed by a California licensed design professional as required by the State Business and Professions Code.

35. The proposed development is subject to the payment of applicable processing fees as required by the City's current Fee Ordinance at the time a building permit application is submitted or prior to the issuance of permits as determined by the City.

36. The proposed project will be subject to approval by the Eastern Municipal Water District and all applicable fees and charges shall be paid prior to permit issuance. Contact the water district at 951.928.3777 for specific details.

37. All new structures shall be designed in conformance to the latest design standards adopted by the State of California in the California Building Standards Code (California Code of Regulations, Title 24) including requirements for allowable area, occupancy separations, fire suppression systems, accessibility, etc. The current edition of the applicable code standards is the 2016 Triennial Edition.

38. The proposed non-residential project shall comply with 2016 California Green Building Standards Code, Section 5.106.5.3, mandatory requirements for Electric Vehicle Charging Station (EVCS).

39. The proposed project's occupancy shall be classified by the Building Official and must comply with exiting, occupancy separation(s) and minimum plumbing fixture requirements of the 2016 California Plumbing Code Table 4-1.

40. Prior to permit issuance, every applicant shall submit a properly completed Waste Management Plan (WMP), as a portion of the building or demolition permit process. (MC 8.80.030)

ECONOMIC DEVELOPMENT DEPARTMENT (EDD)

41. New Moreno Valley businesses may work with the Economic Development

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Department to coordinate job recruitment fairs.

42. New Moreno Valley businesses may adopt a "First Source" approach to employee recruitment that gives notice of job openings to Moreno Valley residents for one week in advance of the public recruitment.

43. New Moreno Valley businesses are encouraged to hire local residents.

44. New Moreno Valley businesses are encouraged to provide a job fair flyer and/or web announcement to the City in advance of job recruitments, so that the City can assist in publicizing these events.

45. New Moreno Valley businesses may utilize the workforce recruitment services provided by the Moreno Valley Employment Resource Center ("ERC").

    The ERC offers no cost assistance to businesses recruiting and training potential employees. Complimentary services include:

    • Job Announcements
    • Applicant testing / pre-screening
    • Interviewing
    • Job Fair support
    • Training space

FINANCIAL & MANAGEMENT SERVICES DEPARTMENT

Moreno Valley Utility

46. This project requires the installation of electric distribution facilities . A non-exclusive easement shall be provided to Moreno Valley Utility and shall include the rights of ingress and egress for the purpose of operation, maintenance, facility repair, and meter reading.

47. This project requires the installation of electric distribution facilities. The developer shall submit a detailed engineering plan showing design, location and schematics for the utility system to be approved by the City Engineer. In accordance with Government Code Section 66462, the Developer shall execute an agreement with the City providing for the installation, construction, improvement and dedication of the utility system following recordation of final map and /or concurrent with trenching operations and other improvements so long as said agreement incorporates the approved engineering plan and provides financial security to guarantee completion and dedication of the utility system.

    The Developer shall coordinate and receive approval from the City Engineer to

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install, construct, improve, and dedicate to the City all utility infrastructure including but not limited to, conduit, equipment, vaults, ducts, wires, switches, conductors, transformers, and "bring-up" facilities including electrical capacity to serve the identified development and other adjoining, abutting, or benefiting projects as determined by Moreno Valley Utility – collectively referred to as "utility system", to and through the development, along with any appurtenant real property easements, as determined by the City Engineer necessary for the distribution and/or delivery of any and all "utility services" to and within the project. For purposes of this condition, "utility services" shall mean electric, cable television, telecommunication (including video, voice, and data) and other similar services designated by the City Engineer. "Utility services" shall not include sewer, water, and natural gas services, which are addressed by other conditions of approval.

The City, or the City's designee, shall utilize dedicated utility facilities to ensure safe, reliable, sustainable and cost effective delivery of utility services and maintain the integrity of streets and other public infrastructure. Deve

48. Existing Moreno Valley Utility electrical infrastructure shall be preserved in place. The developer will be responsible, at developer's expense, for any and all costs associated with the relocation of any of Moreno Valley Utility's underground electrical distribution facilities, as determined by Moreno Valley Utility, which may be in conflict with any developer planned construction on the project site.

49. This project is subject to a Reimbursement Agreement. The Developer is responsible for a proportionate share of costs associated with electrical distribution infrastructure previously installed that directly benefits the project. Payment shall be required prior to issuance of building permits.

PUBLIC WORKS DEPARTMENT

Land Development

50. A digital (pdf) copy of all approved improvement plans shall be submitted to the Land Development Division.

51. All applicable inspection fees shall be paid.

52. All work performed within public right-of-way requires an encroachment permit. Security (in the form of a cash deposit or other approved means) may be required as determined by the City Engineer. For non-subdivision projects, the City Engineer may require the execution of a Public Improvement Agreement (PIA) as a condition of the issuance of a construction or encroachment permit. All inspection fees shall be paid prior to issuance of construction permit. [MC 9.14.100(C.4)]

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53. Aggregate slurry, as defined in Section 203-5 of Standard Specifications for Public Works Construction, may be required just prior to the end of the one-year warranty period of the public streets at the discretion of the City Engineer. If slurry is required, a slurry mix design shall be submitted for review and approved by the City Engineer. The latex additive shall be Ultra Pave 70 (for anionic) or Ultra Pave 65 K (for cationic) or an approved equal per the geotechnical report. The latex shall be added at the emulsion plant after weighing the asphalt and before the addition of mixing water. The latex shall be added at a rate of two to two-and-one-half (2 to 2½) parts to one-hundred (100) parts of emulsion by volume. Any existing striping shall be removed prior to slurry application and replaced per City standards.

54. The developer shall comply with all applicable City ordinances and resolutions including the City's Municipal Code (MC) and if subdividing land, the Government Code (GC) of the State of California, specifically Sections 66410 through 66499.58, said sections also referred to as the Subdivision Map Act (SMA). [MC 9.14.010]

55. The final approved conditions of approval (COAs) and any applicable Mitigation Measures issued by the Planning Division shall be photographically or electronically placed on mylar sheets and included in the Grading and Street Improvement plans.

56. The developer shall monitor, supervise and control all construction and construction supportive activities, so as to prevent these activities from causing a public nuisance, including but not limited to, insuring strict adherence to the following:
(a) Removal of dirt, debris, or other construction material deposited on any public street no later than the end of each working day.
(b) Observance of working hours as stipulated on permits issued by the Land Development Division.
(c) The construction site shall accommodate the parking of all motor vehicles used by persons working at or providing deliveries to the site.
(d) All dust control measures per South Coast Air Quality Management District (SCAQMD) requirements during the grading operations.
Violation of any condition, restriction or prohibition set forth in these conditions shall subject the owner, applicant, developer or contractor (s) to remedy as noted in City Municipal Code 8.14.090. In addition, the City Engineer or Building Official may suspend all construction related activities for violation of any condition, restriction or prohibition set forth in these conditions until such time as it has been determined that all operations and activities are in conformance with these conditions.

57. Prior to any plan approval, a final detailed drainage study (prepared by a registered/licensed civil engineer) shall be submitted for review and approved by the City Engineer. The study shall include existing and proposed hydrologic conditions as well as hydraulic calculations for all drainage control devices and storm drain lines. [MC 9.14.110(A.1)]. A digital (pdf) copy of the approved drainage study shall be submitted to the Land Development Division.

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58. If improvements associated with this project are not initiated within two (2) years of the date of approval of the Public Improvement Agreement (PIA), the City Engineer may require that the engineer's estimate for improvements associated with the project be modified to reflect current City construction costs in effect at the time of request for an extension of time for the PIA or issuance of a permit.

59. The developer shall protect downstream properties from damage caused by alteration of drainage patterns (i.e. concentration or diversion of flow, etc). Protection shall be provided by constructing adequate drainage facilities, including, but not limited to, modifying existing facilities or by securing a drainage easement. [MC 9.14.110]

60. The tentative map, master plot plan, plot plan, or conditional use permit shall correctly show all existing easements, traveled ways, and drainage courses. Any omission may require the map or plans associated with this application to be resubmitted for further consideration. [MC 9.14.040(A)]

<u>Prior to Grading Plan Approval</u>

61. Two (2) copies of the final project-specific Water Quality Management Plan (WQMP) shall be submitted for review and approved by the City Engineer, which:
    a. Addresses Site Design Best Management Practices (BMPs) such as minimizing impervious areas, maximizing permeability, minimizes directly connected impervious areas to the City's street and storm drain systems, and conserves natural areas;
    b. Incorporates Source Control BMPs and provides a detailed description of their implementation;
    c. Describes the long-term operation and maintenance requirements for BMPs requiring maintenance; and
    d. Describes the mechanism for funding the long-term operation and maintenance of the BMPs.
    A copy of the final WQMP template can be obtained on the City's Website or by contacting the Land Development Division. A digital (pdf) copy of the approved final project-specific Water Quality Management Plan (WQMP) shall be submitted to the Land Development Division.

62. The developer shall ensure compliance with the City Grading ordinance, these Conditions of Approval and the following criteria:
    a. The project street and lot grading shall be designed in a manner that perpetuates the existing natural drainage patterns with respect to tributary drainage area and outlet points. Unless otherwise approved by the City Engineer, lot lines shall be located at the top of slopes.
    b. Any grading that creates cut or fill slopes adjacent to the street shall provide

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erosion control, sight distance control, and slope easements as approved by the City Engineer.

c. All improvement plans are substantially complete and appropriate clearance letters are provided to the City.

d. A soils/geotechnical report (addressing the soil's stability and geological conditions of the site) shall be submitted to the Land Development Division for review. A digital (pdf) copy of the soils/geotechnical report shall be submitted to the Land Development Division.

63. Grading plans (prepared by a registered/licensed civil engineer) shall be submitted for review and approved by the City Engineer per the current submittal requirements.

64. The developer shall select Low Impact Development (LID) Best Management Practices (BMPs) designed per the latest version of the Water Quality Management Plan (WQMP) - a guidance document for the Santa Ana region of Riverside County.

65. The developer shall pay all remaining plan check fees.

66. A Storm Water Pollution Prevention Plan (SWPPP) shall be prepared in conformance with the State's current Construction Activities Storm Water General Permit. A copy of the current SWPPP shall be kept at the project site and be available for review upon request.

67. For projects that will result in discharges of storm water associated with construction with a soil disturbance of one or more acres of land, the developer shall submit a Notice of Intent (NOI) and obtain a Waste Discharger's Identification number (WDID#) from the State Water Quality Control Board (SWQCB) which shall be noted on the grading plans.

68. Landscape & Irrigation plans (prepared by a registered/licensed civil engineer) for water quality BMPs shall be submitted for review and approved by the City Engineer per the current submittal requirements, if applicable.

<u>Prior to Grading Permit</u>

69. A receipt showing payment of the Area Drainage Plan (ADP) fee to Riverside County Flood Control and Water Conservation District shall be submitted. [MC 9.14.100(O)]

70. If the developer chooses to construct the project in phases, a Construction Phasing Plan for the construction of on-site public and private improvements shall be submitted for review and approved by the City Engineer.

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71. Prior to the payment of the Development Impact Fee (DIF), the developer may enter into a DIF Improvement Credit Agreement to secure credit for the construction of applicable improvements. If the developer fails to complete this agreement prior to the timing specified above, no credits will be given. The developer shall pay current DIF fees adopted by the City Council. [Ord. 695 § 1.1 (part), 2005] [MC 3.38.030, 040, 050]

72. A digital (pdf) copy of all approved grading plans shall be submitted to the Land Development Division.

73. Security, in the form of a cash deposit (preferable), or letter of credit shall be submitted as a guarantee of the implementation and maintenance of erosion control measures. At least twenty-five (25) percent of the required security shall be in the form of a cash deposit with the City. [MC 8.21.160(H)]

74. Security, in the form of a cash deposit (preferable), or letter of credit shall be submitted as a guarantee of the completion of the grading operations for the project. [MC 8.21.070]

75. The developer shall pay all applicable inspection fees.

<u>Prior to Improvement Plan Approval</u>

76. The developer is required to bring any existing access ramps adjacent to and fronting the project to current ADA (Americans with Disabilities Act) requirements. However, when work is required in an intersection that involves or impacts existing access ramps, all access ramps in that intersection shall be retrofitted to comply with current ADA requirements, unless otherwise approved by the City Engineer.

77. The developer shall submit clearances from all applicable agencies, and pay all applicable plan check fees.

78. The street improvement plans shall comply with current City policies, plans and applicable City standards (i.e. MVSI-160 series, etc.) throughout this project.

79. The design plan and profile shall be based upon a centerline, extending beyond the project boundaries a minimum distance of 300 feet at a grade and alignment approved by the City Engineer.

80. Drainage facilities (i.e. catch basins, etc.) with sump conditions shall be designed to convey the tributary 100-year storm flows. Secondary emergency escape shall also be provided.

81. The hydrology study shall be designed to accept and properly convey all off-site

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drainage flowing onto or through the site. All storm drain design and improvements shall be submitted for review and approved of the City Engineer. In the event that the City Engineer permits the use of streets for drainage purposes, the provisions of current City standards shall apply. Should the quantities exceed the street capacity or the use of streets be prohibited for drainage purposes, as in the case where one travel lane in each direction shall not be used for drainage conveyance for emergency vehicle access on streets classified as minor arterials and greater, the developer shall provide adequate facilities as approved by the City Engineer. [MC 9.14.110 A.2]

82. All public improvement plans (prepared by a licensed/registered civil engineer) shall be submitted for review and approved by the City Engineer per the current submittal requirements.

83. The plans shall indicate any restrictions on trench repair pavement cuts to reflect the City's moratorium on disturbing newly-constructed pavement less than three (3) years old and recently slurry sealed streets less than one (1) year old. Pavement cuts for trench repairs may be allowed for emergency repairs or as specifically approved by the City Engineer.

84. The developer shall pothole to determine the exact location and elevation of existing underground utilities and incorporate the results into the design of the plans. The developer shall coordinate with all affected utility companies and bear all costs of utility relocations.

<u>Prior to Building Permit</u>

85. An engineered-fill certification, rough grade certification and compaction report shall be submitted for review and approved by the City Engineer. A digital (pdf) copy of the approved compaction report shall be submitted to the Land Development Division. All pads shall meet pad elevations per approved grading plans as noted by the setting of "blue-top" markers installed by a registered land surveyor or licensed civil engineer.

86. For Commercial/Industrial projects, the owner may have to secure coverage under the State's General Industrial Activities Storm Water Permit as issued by the State Water Resources Control Board.

87. For all subdivision projects, the map shall be recorded (excluding model homes). [MC 9.14.190]

88. All outstanding fees shall be paid.

89. All required as-built plans (prepared by a registered/licensed civil engineer) shall be

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submitted for review and approved by the City Engineer per the current submittal requirements.

90. The engineered final/precise grade certification shall be submitted for review and approved by the City Engineer.

91. For non-subdivision projects, in compliance with Proposition 218, the developer shall agree to approve the City of Moreno Valley NPDES Regulatory Rate Schedule that is in place at the time of certificate of occupancy issuance. Under the current permit for storm water activities required as part of the National Pollutant Discharge Elimination System (NPDES) as mandated by the Federal Clean Water Act, this project is subject to the following requirements:

a. Select one of the following options to meet the financial responsibility to provide storm water utilities services for the required continuous operation, maintenance, monitoring system evaluations and enhancements, remediation and/or replacement, all in accordance with Resolution No. 2002-46.

i. Participate in the mail ballot proceeding in compliance with Proposition 218, for the Common Interest, Commercial, Industrial and Quasi-Public Use NPDES Regulatory Rate Schedule and pay all associated costs with the ballot process; or

ii. Establish an endowment to cover future City costs as specified in the Common Interest, Commercial, Industrial and Quasi-Public Use NPDES Regulatory Rate Schedule.

b. Notify the Special Districts Division of the intent to request building permits 90 days prior to their issuance and the financial option selected. The financial option selected shall be in place prior to the issuance of certificate of occupancy. [California Government Code & Municipal Code]

92. The developer shall complete all public improvements in conformance with current City standards, except as noted in the Special Conditions, including but not limited to the following:

a. Street improvements including, but not limited to: pavement, base, curb and/or gutter, cross gutters, spandrel, sidewalks, drive approaches, pedestrian ramps, street lights, signing, striping, under sidewalk drains, landscaping and irrigation, medians, redwood header boards, pavement tapers/transitions and traffic control devices as appropriate.

b. Storm drain facilities including, but not limited to: storm drain pipe, storm drain laterals, open channels, catch basins and local depressions.

c. City-owned utilities.

d. Sewer and water systems including, but not limited to: sanitary sewer, potable water and recycled water.

e. Under grounding of all existing and proposed utilities adjacent to and on-site. [MC 9.14.130]

f. Relocation of overhead electrical utility lines including, but not limited to:

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electrical, cable and telephone.

93. For commercial, industrial and multi-family projects, a "Stormwater Treatment Device and Control Measure Access and Maintenance Covenant" shall be recorded to provide public notice of the maintenance requirements to be implemented per the approved final project-specific WQMP. A boilerplate copy of the "Stormwater Treatment Device and Control Measure Access and Maintenance Covenant" can be obtained by contacting the Land Development Division.

94. The applicant shall ensure the following, pursuant to Section XII. I. of the 2010 NPDES Permit:
    a. Field verification that structural Site Design, Source Control and Treatment Control BMPs are designed, constructed and functional in accordance with the approved Final Water Quality Management Plan (WQMP).
    b. Certification of best management practices (BMPs) from a state licensed civil engineer. An original WQMP BMP Certification shall be submitted for review and approved by the City Engineer.

95. The Developer shall comply with the following water quality related items:
    a. Notify the Land Development Division prior to construction and installation of all structural BMPs so that an inspection can be performed.
    b. Demonstrate that all structural BMPs described in the approved final project-specific WQMP have been constructed and installed in conformance with the approved plans and specifications;
    c. Demonstrate that Developer is prepared to implement all non -structural BMPs described in the approved final project-specific WQMP; and
    d. Demonstrate that an adequate number of copies of the approved final project-specific WQMP are available for future owners/occupants.
    e. Clean and repair the water quality BMP's, including re-grading to approved civil drawing if necessary.
    f. Provide City with updated Engineer's Line and Grade Certification.
    g. Obtain approval and complete installation of the irrigation and landscaping.

96. Prior to parcel map recordation or building permit issuance, either a reciprocal access easement shall be shown on the map or a separate recorded copy of a reciprocal access agreement between the project and the adjacent parcel to the south shall be provided to the City.

97. Prior to F-WQMP approval, post development BMPs for Brodiaea Avenue shall incorporated in accordance with MS4 Permit R8-2010-033.

98. The Applicant has proposed to incorporate the use of an infiltration basin and self-retaining areas. Final design details of the treatment control BMPs shall be provided in the F-WQMP

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99. Special ConditionPrior to rough grading plan approval, the following shall be shown on the plans and dedications made via separate instrument and submitted to the City for review and approval: A 4-foot pedestrian right-of-way dedication behind all driveway approaches per City Standard MVSI-112C-0.

100. Prior to rough grading plan approval, the following shall be shown on the plans and dedications made via separate instrument and submitted to the City for review and approval: A 4-foot pedestrian right-of-way dedication behind all driveway approaches per City Standard MVSI-112C-0.

101. Prior to occupancy, the following improvements shall be completed:

a. Nason Street, Modified Divided Major Arterial, City Standard MVSI-102A-0 (120-foot RW / 102-foot CC) shall construct to half-width plus 21' along the entire project's westerly frontage. Improvements shall consist of, but not be limited to pavement, base, street lights, driveway approaches, pedestrian ramps, curb & gutter, and sidewalk. In addition, replace or install any damaged, substandard or missing improvements.

b. Brodiaea Avenue, Collector, City Standard MVSI-106BA-0 (66-foot RW / 44 -foot CC) shall be constructed to half-width plus 18' along the entire project's northerly frontage. Improvements shall consist of, but not be limited to, pavement, base, street lights, driveway approaches, pedestrian ramps, curb & gutter, sidewalk. In addition, replace or install any damaged, substandard or missing improvements.

102. Prior to precise grading plan approval, the grading plans shall clearly show that the parking lot conforms to City standards. The parking lot shall be 5% maximum, 1% minimum, 2% maximum at or near any disabled parking stall and travel way. Ramps, curb openings and travel paths shall all conform to current ADA standards as outlined in Department of Justice's "ADA Standards for Accessible Design", Excerpt from 28 CFR Part 36. (www.usdoj.gov) and as approved by the City's Building and Safety Division.

103. Prior to approval of the parcel map, the map shall show the following:

a. A seven-foot street right-of-way vacation on the south side of Brodiaea Avenue along project frontage.
b. A four-foot street right-of-way dedication on the east side of Nason Street along the project frontage

<u>Special Districts Division</u>

104. The ongoing maintenance of any landscaping required to be installed behind the

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curb shall be the responsibility of the property owner.

105. Street Light Authorization forms for all street lights that are conditioned to be installed as part of this project must be submitted to the Special Districts Division for approval, prior to street light installation. The Street Light Authorization form can be obtained from the utility company providing electric service to the project, either Moreno Valley Utility or Southern California Edison. For questions, contact the Special Districts Division at 951.413.3480 or specialdistricts@moval.org.

106. The parcel(s) associated with this project have been incorporated into the Moreno Valley Community Services District Zone A (Parks & Community Services) and Zone C (Arterial Street Lighting). All assessable parcels therein shall be subject to annual parcel taxes for Zone A and Zone C for operations and capital improvements.

107. Prior to the issuance of the first building permit for this project, the Developer shall pay Advanced Energy fees for all applicable Residential and Arterial Street Lights required for this development. Payment shall be made to the City of Moreno Valley and collected by the Land Development Division. Fees are based upon the Advanced Energy fee rate in place at the time of payment, as set forth in the current Listing of City Fees, Charges, and Rates adopted by City Council. The Developer shall provide a copy of the receipt to the Special Districts Division (specialdistricts@moval.org). Any change in the project which may increase the number of street lights to be installed will require payment of additional Advanced Energy fees at the then current fee. Questions may be directed to the Special Districts Division at 951.413.3480 or specialdistricts@moval.org.

108. This project has been identified to potentially be included in the formation of a Map Act Area of Benefit Special District for the construction of major thoroughfares and/or freeway improvements. The property owner(s) shall participate in such District and pay any special tax, assessment, or fee levied upon the project property for such District. At the time of the public hearing to consider formation of the district, the property owner(s) will not protest the formation, but will retain the right to object any eventual assessment that is not equitable should the financial burden of the assessment not be reasonably proportionate to the benefit the affected property obtains from the improvements to be installed. The Developer must notify the Special Districts Division at 951.413.3480 or at specialdistricts@moval.org of its selected financial option when submitting an application for the first building permit to determine whether the development will be subjected to this condition. If subject to the condition, the special election requires a 90 day process in compliance with the provisions of Article 13C of the California Constitution. (Street & Highway Code, GP Objective 2.14.2, MC 9.14.100).

109. This project is conditioned for a proposed district to provide a funding source for the

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operation and maintenance of public improvements and/or services associated with new development in that territory. The Developer shall satisfy this condition with one of the options outlined below.

a. Participate in a special election for maintenance/services and pay all associated costs of the election process and formation, if any. Financing may be structured through a Community Facilities District, Landscape and Lighting Maintenance District, or other financing structure as determined by the City; or

b. Establish an endowment fund to cover the future maintenance and/or service costs.

The Developer must notify the Special Districts Division at 951.413.3480 or at specialdistricts@moval.org when submitting the application for building permit issuance. If the first building permit is pulled prior to formation of the district, this condition will not apply. If the district has been or is in the process of being formed the Developer must inform the Special Districts Division of its selected financing option (a. or b. above). The option for participating in a special election requires 90 days to complete the special election process. This allows adequate time to be in compliance with the provisions of Article 13C of the California Constitution.

The financial option selected shall be in place prior to the issuance of the first certificate of occupancy for the project.

110. This project is conditioned to provide a funding source for the following special financing program(s):

a. Street Lighting Services for capital improvements, energy charges, and maintenance.

The Developer's responsibility is to provide a funding source for the capital improvements and the continued maintenance. The Developer shall satisfy this condition with one of the options below.

i. Participate in a special election (mail ballot proceeding) and pay all associated costs of the special election and formation, if any. Financing may be structured through a Community Services District zone, Community Facilities District, Landscape and Lighting Maintenance District, or other financing structure as determined by the City; or

ii. Establish a Property Owner's Association (POA) or Home Owner's Association (HOA) which will be responsible for any and all operation and maintenance costs

The Developer must notify the Special Districts Division at 951.413.3480 or at

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specialdistricts@moval.org of its selected financial option when submitting the application for building permit issuance. The option for participating in a special election requires approximately 90 days to complete the special election process. This allows adequate time to be in compliance with the provisions of Article 13C of the California Constitution.

The financial option selected shall be in place prior to the issuance of the first certificate of occupancy for the project and prior to acceptance of any improvements.

111. Commercial (BP) If Land Development, a Division of the Public Works Department, requires this project to supply a funding source necessary to provide for, but not limited to, stormwater utilities services for the continuous operation, remediation and/or replacement, monitoring, systems evaluations and enhancement of on-site facilities and performing annual inspections of the affected areas to ensure compliance with state mandated stormwater regulations, a funding source needs to be established. The Developer must notify the Special Districts Division at 951.413.3480 or at specialdistricts@moval.org of its selected financial option for the National Pollution Discharge Elimination System (NPDES) program when submitting the application for the first building permit issuance (see Land Development's related condition). Participating in a special election the process requires a 90 day period prior to the City's issuance of a building permit. This allows adequate time to be in compliance with the provisions of Article 13D of the California Constitution. (California Health and Safety Code Sections 5473 through 5473.8 (Ord. 708 Section 3.1, 2006) & City of Moreno Valley Municipal Code Title 3, Section 3.50.050.)

112. This project has been identified to be included in the formation of a Community Facilities District (Mello-Roos) for Public Safety services, including but not limited to Police, Fire Protection, Paramedic Services, Park Rangers, and Animal Control services. The property owner(s) shall not protest the formation; however, they retain the right to object to the rate and method of maximum special tax. In compliance with Proposition 218, the property owner shall agree to approve the mail ballot proceeding (special election) for either formation of the CFD or annexation into an existing district. The Developer must notify the Special Districts Division at 951.413.3480 or at specialdistricts@moval.org when submitting the application for building permit issuance to determine the requirement for participation. If the first building permit is pulled prior to formation of the district, this condition will not apply. If the condition applies, the special election will require a minimum of 90 days prior to issuance of the first building permit. This allows adequate time to be in compliance with the provisions of Article 13C of the California Constitution. (California Government Code Section 53313 et. seq.)

113. Any damage to existing landscape areas maintained by the City of Moreno Valley

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due to project construction shall be repaired/replaced by the Developer, or Developer's successors in interest, at no cost to the City of Moreno Valley.

Transportation Engineering Division

114. Conditions of approval may be modified if the project or its phasing plan is altered from any approved plans.

115. Nason Street is classified as a Divided Major Arterial at this location. Any improvements undertaken by this project shall be consistent with the City's standards for this facility.

116. Brodiaea Avenue is classified as a Collector (66' RW/44' CC) per City Standard Plan No. MVSI-106B-0. Any improvements undertaken by this project shall be consistent with the City's standards for this facility.

117. Project driveways shall conform to City of Moreno Valley Standard No. MVSI-112C-0 for Commercial Driveway Approaches.

118. Access at the proposed street and driveways shall be as follows:

- West bound approach at Nason Street/Brodiaea Avenue intersection: Only right turns in/out are allowed. Access shall be controlled by the existing raised concrete median on Nason Street.
- Nason Street north driveway: Only right turns in/out are allowed. Access shall be controlled by the existing raised concrete median on Nason Street.
- Nason Street south driveway: The existing traffic signal at Nason Street/Hospital Road intersection shall be modified to support full access.
- Brodiaea Avenue driveways: Full access is allowed.

119. Prior to the final approval of the street improvement plans, traffic signal modification plans will be required for the traffic signal located at Nason Street/Hospital Road intersection. Modifications may include but not limited to new signal poles, new pull boxes, new traffic detector loops or video/radar detection system, relocation of signal controller cabinet, etc. Specific modifications shall be determined during plan check review.

120. All proposed on-site traffic signing and striping should be accordance with the latest California Manual on Uniform Traffic Control Devices (CAMUTCD).

121. Prior to issuance of a construction permit, construction traffic control plans prepared by a qualified, registered Civil or Traffic engineer may be required for plan approval or as required by the City Traffic Engineer.

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122. Prior to final approval of the street improvement plans, the project plans shall demonstrate that sight distance at proposed streets and driveways conforms to City Standard Plan No. MVSI-164A-0 through MVSI-164C-0.

123. Prior to the final approval of the street improvement plans, a signing and striping plan shall be prepared per City of Moreno Valley Standard Plans - Section 4 for Nason Street and Brodiaea Avenue.

124. Prior to issuance of Certificate of Occupancy for any building in Phase 3 or prior to the project access at Nason Street/Hospital Road intersection being opened to vehicular traffic in any phase, the traffic signal at this intersection shall be modified and operational per the approved plans to the satisfaction of the City Engineer.

125. Prior to issuance of Certificate of Occupancy for any building in any of the project phases, all signing and striping on Nason Street and Brodiaea Avenue shall be installed per current City Standards and the approved plans.

126. Prior to acceptance of streets into the City-maintained road system, all approved signing and striping shall be installed per current City Standards and the approved plans.

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CITY OF MORENO VALLEY
CONDITIONS OF APPROVAL
Phasing Map (PEN17-0013)

EFFECTIVE DATE:
EXPIRATION DATE:

COMMUNITY DEVELOPMENT DEPARTMENT

Planning Division

1. The developer, or the developer's successor-in-interest, shall be responsible for maintaining any undeveloped portion of the site in a manner that provides for the control of weeds, erosion and dust. (MC 9.02.030)

2. All landscaped areas shall be maintained in a healthy and thriving condition, free from weeds, trash and debris. (MC 9.02.030)

3. The site shall be developed in accordance with the approved plans on file in the Community Development Department - Planning Division, the Municipal Code regulations, General Plan, and the conditions contained herein. Prior to any use of the project site or business activity being commenced thereon, all Conditions of Approval shall be completed to the satisfaction of the Planning Official. (MC 9.14.020)

Special Conditions

4. Phasing Plan PEN17-0013 is approved for Medical Office, Assisted Living and Skilled Nursing care facility per the approved plans.

   The project will be developed in the following three phases:

   Phase One
   Phase One consists of three residential Assisted Living facilities located within Buildings 3 and 4 and 5C. Buildings 3 and 4 provide approximately 57 beds with 150 beds in Building 5C. Phase One construction of on-site and off-site improvements will include associated parking, pedestrian connection, landscaping, water quality basins, utility connections and the adjacent street improvements on Nason Street and Brodiaea Avenue.

   Phase Two
   Phase Two includes the two medical office Buildings 1 and 2. Building 1 is for medical offices and Building 2 will includes a wellness center and urgent care facility

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and associated parking and landscaping.

Phase Three
Phase Three includes Building 5A and 5B for Assisted Living, approximately 158 beds.

All phases will be constructed per the approved plans. A change or modification shall require separate approval.

5. Occupancy shall be released in sequential order, unless amended under separate application. All related/required parking and access shall be completed with each phase.

6. Construction areas shall be enclosed with temporary fencing. The fencing shall be a minimum of six (6) feet high with locking, gated access and shall remain throughout phased construction, until occupancy of each phase.

7. The following Mitigation Measures apply to this project:

AQ-1: The applicant shall ensure that approved architectural coatings are utilized. Prior to the issuance of building permits, the City will verify that construction plans submitted by the project proponent reflect use of architectural coatings where the content of volatile organic compounds (VOC) does not exceed 25 grams per liter (g/l) for interior and exterior applications. This measure must be verified through standard building inspections in light of the performance standard that emissions of volatile organic compounds from application of interior or exterior coatings shall not exceed the daily emissions thresholds established by the South Coast Air Quality Management District. The applicant bears the cost of implementing this mitigation.

BIO-1: The applicant shall avoid impacts to nesting birds and violation of state and federal laws pertaining to birds, all construction related activities (including but not limited to mobilization and staging, clearing, grubbing, vegetation removal, fence installation, demolition, and grading) should occur outside the avian nesting season (generally prior to Feb 1 or after Aug 31). If construction and construction noise occurs within the avian nesting season (from Feb 1 to Aug 31 or according to local requirements), all suitable habitats located within the project's area of disturbance including staging and storage areas plus a 250-foot (passerines) and 1,000 foot (raptor nests) buffer around these areas shall be thoroughly surveyed, as feasible, for the presence of active nests by a qualified biologist no more than 5-days before commencement of any site disturbance activities and equipment mobilization. If project activities are delayed more than 5-days, an additional nesting bird survey shall be performed. Active nesting is present if a bird is sitting in a nest, a nest has eggs or chicks in it, or adults are observed carrying food to the nest. The results of these surveys shall be documented. If it is determined that birds are actively nesting within the survey area, Mitigation Measure BIO-2 shall apply. Conversely, if the survey area is found to be absent of nesting birds, Mitigation Measure BIO-2 shall not be required.

BIO-2: If pre-construction nesting bird surveys result in the location of active nests, the applicant shall ensure that no site disturbance and mobilization of heavy equipment (including but not limited to equipment staging, fence installation, clearing, grubbing, vegetation removal, demolition and grading), shall take place within 250 feet of non-raptor nests and 1,000 feet of raptor nests, or as determined by a qualified biologist in consultation with the CDFW, until the chicks have fledged. Monitoring shall be required to insure compliance with the MBTA and

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relevant CDFW requirements. Monitoring dates and findings shall be documented.

BIO-3: The applicant shall ensure a pre-construction survey for burrowing owls be completed no more than 30-days prior to the start of construction at the Project site to ensure no burrowing owls have moved onto the site.

CUL-1: Prior to the issuance of a grading permit, the Applicant shall retain a qualified professional archaeologist who meets U.S. Secretary of the Interior's Professional Qualifications and Standards. The Project archaeologist and Native American Tribal Representatives will conduct an Archaeological Sensitivity Training for construction personnel prior to commencement of excavation activities. The training session will include a handout and will focus on how to identify archaeological and Tribal Cultural resources that may be encountered during earthmoving activities and the procedures to be followed in such an event, including who to contact and the appropriate avoidance measures that need to be undertaken until the find(s) can be properly evaluated; the duties of archaeological and Native American monitors; and the general steps a qualified professional archaeologist would follow in conducting a salvage investigation if one is necessary. All new construction personnel that will conduct earthwork or grading activities must take the Archaeological Sensitivity Training prior to beginning work on the project and the professional archaeologist shall make themselves available to provide the training on an as-needed basis. A sign-in sheet shall be compiled to track attendance and shall be submitted to the City with the Phase IV Archaeological Monitoring Report.

CUL-2: Preconstruction Notification of Native American Tribal Representatives. Prior to the issuance of a grading permit, the Applicant shall provide evidence to the City of Moreno Valley that the Agua Band of Cahuilla Indians, Pechanga Band of Luiseño Indians and the Soboba Band of Luiseño Indians tribal representatives (hereafter referred to as "Native American Tribal Representatives") received a minimum of 30 days advance notice of all mass grading and trenching activities, and provide evidence of monitoring agreements between the Applicant and the Tribes. The Native American Tribal Representatives shall be notified a minimum of 48 hours in advance and allowed to attend the pre-grading meeting with the City and project construction contractors and/or monitor all project mass grading and trenching activities.

CUL-3: Prior to grading permit issuance, the City shall verify that the following note is included on the Grading Plan: "If any suspected archaeological resources are discovered during ground-disturbing activities and the archaeological monitor or Tribal representatives are not present, the construction supervisor is obligated to halt work in a 100-foot radius around the find and call the project archaeologist and the Tribal representatives to the site to assess the significance of the find."

CUL-4: Prior to the issuance of a grading permit, the Applicant shall retain a qualified archaeological monitor. The archaeological monitor will work under the direction and guidance of the qualified professional archaeologist and will meet the U.S. Secretary of the Interior's Professional Qualifications and Standards. The archeological monitor shall have the authority to temporarily redirect earthmoving activities in the event that suspected archaeological resources are unearthed during project construction. Archaeological monitoring is required at all depths and strata. The archaeological monitor shall be present during all construction excavations (e.g., grading, trenching, or clearing/grubbing) into non-fill younger Pleistocene alluvial sediments. Multiple earth-moving construction activities may require multiple archaeological monitors. The frequency of monitoring shall be based on the rate of excavation and grading activities, proximity to known archaeological resources, the materials being excavated (native versus artificial fill soils), and the depth of excavation, and if found, the abundance and type of archaeological resources encountered. Full-time monitoring can be reduced to part-time inspections if determined adequate by the qualified professional archaeologist.

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CUL-5: The applicant shall ensure that all ground disturbing activities are ceased and treatment plans are implemented if archaeological resources are encountered. In the event that archaeological resources are unearthed during ground-disturbing activities, ground-disturbing activities shall be halted or diverted away from the vicinity of the find so that the find

can be evaluated. A buffer area of at least 100 feet shall be established around the find where construction activities shall not be allowed to continue until a qualified archaeologist has examined the newly discovered artifact(s) and has evaluated the area of the find. Work shall be allowed to continue outside of the buffer area. All archaeological resources unearthed by project construction activities shall be evaluated by a qualified professional archaeologist, who meets the U.S. Secretary of the Interior's Professional Qualifications and Standards. Should the newly discovered artifacts be determined to be prehistoric, Native American Tribes/Individuals should be contacted and consulted and Native American construction monitoring should be initiated. The Applicant and City shall coordinate with the archaeologist to develop an appropriate treatment plan for the resources. The plan may include implementation of archaeological data recovery excavations to address treatment of the resource along with subsequent laboratory processing and analysis.
In the event that a cultural resource is encountered during ground-disturbing activities, the landowner(s) shall relinquish ownership of all such resources, including sacred items, burial goods, and all archaeological artifacts and non-human remains. The artifacts shall be relinquished through one or more of the following methods and evidence of such shall be provided to the City of Moreno Valley Planning Department:
Accommodate the process for Preservation-In-Place/Onsite with the consulting Native American tribes or bands, as detailed in the treatment plan prepared by the professional paleontologist. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not.
A curation agreement with an appropriate qualified repository within Riverside County that meets federal standards per 36 CFR Part 79; therefore, the resources would be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility within Riverside County, to be accompanied by payment of the fees necessary for permanent curation; and/or
For purposes of conflict resolution, if more than one Native American tribe or band is involved with the project and cannot come to an agreement as to the disposition of cultural materials, they shall be curated at the Western Science Center by default.

CUL-6: Prior to building permit issuance, the Project archaeologist shall prepare a final Phase IV Monitoring Report as outlined in the CRMP, which shall be submitted to the City Planning Division, the appropriate Native American tribe(s), and the Eastern Information Center at the University of California, Riverside. The report shall include a description of resources unearthed, if any, evaluation of the resources with respect to the California Register and CEQA, and treatment of these resources. All cultural material, excluding sacred, ceremonial, grave goods and human remains, collected during the grading monitoring program and from any previous archaeological studies or excavations on the project site shall be curated in a Riverside County repository according to the current professional repository standards and may include the Pechanga Band's curatorial facility in Temecula, CA.

CUL-7: Conduct Paleontological Sensitivity Training for Construction Personnel. Prior to the issuance of a grading permit, the Applicant shall retain a professional paleontologist, who meets the qualifications set forth by the Society of Vertebrate Paleontology. The paleontologist shall conduct a Paleontological Sensitivity Training for construction personnel prior to commencement of excavation activities. The training will include a handout and will focus on how to identify paleontological resources that may be encountered during earthmoving activities, and the procedures to be followed in such an event, including who to contact and the appropriate avoidance measures that need to be undertaken until the find(s) can be properly evaluated; the duties of paleontological monitors; notification and other procedures to follow upon discovery of resources; and the general steps a qualified

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professional paleontologist would follow in conducting a salvage investigation if one is necessary. All new construction personnel that will conduct earthwork or grading activities must take the Paleontological Sensitivity Training prior to beginning work on the project and the professional paleontologist shall make themselves available to provide the training on an as-needed basis.

CUL-8: The applicant shall ensure the monitoring of construction excavations for paleontological resources is required for all excavations in older Quaternary alluvial fan deposits or in sedimentary deposits derived from the Mt. Eden Formation. Prior to the issuance of a grading permit, the Applicant shall retain a qualified paleontological monitor, who will work under the guidance and direction of a professional paleontologist, and who meets the qualifications set forth by the Society of Vertebrate Paleontology. The paleontological monitor shall have the authority to temporarily redirect earthmoving activities in the event that suspected paleontological resources are unearthed during project construction. The paleontological monitor shall be present during all construction excavations including, but not limited to grading, trenching, boring, and clearing/grubbing). Multiple earth-moving construction activities may require multiple paleontological monitors. The frequency of monitoring shall be based on the rate of excavation and grading. Monitoring may be reduced if potentially fossiliferous units are not present in the subsurface, or if present, are determined upon exposure and examination by the professional paleontologist to have a low potential to contain or yield fossil resources.

CUL-9: The applicant shall ensure that in the event that paleontological resources and or unique geological features are unearthed during ground-disturbing activities, all ground disturbing activities shall be halted or diverted away from the vicinity of the find in order to evaluate the resource. A buffer area of at least 100 feet shall be established around the find where construction activities shall not be allowed to continue until appropriate paleontological treatment plan has been approved by the Applicant and the City. Work shall be allowed to continue outside of the buffer area. The Applicant and City shall coordinate with a professional paleontologist, who meets the qualifications set forth by the Society of Vertebrate Paleontology, to develop an appropriate treatment plan for the resources. Treatment may include implementation of paleontological salvage excavations to remove the resource along with subsequent laboratory processing and analysis or preservation in place. At the paleontologist's discretion and to reduce construction delay, the grading and excavation contractor shall assist in removing rock samples for initial processing. Recovered specimens shall be properly prepared to a point of identification and permanent preservation, including screen washing sediments to recover small invertebrates and vertebrates, if necessary. Identification and curation of specimens into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable storage is required for significant discoveries.

CUL-10: The applicant shall ensure prior to building permits, that a professional paleontologist prepares a report summarizing the results of the monitoring and salvaging efforts, the methodology used in these efforts, as well as a description of the fossils collected and their significance as well as any necessary maps and graphics to accurately record the original location of these resources. The report shall be submitted to the Applicant, the City, the San Bernardino County Natural History Museum, Natural History Museum of Los Angeles County, and representatives of other appropriate or concerned agencies to signify the satisfactory completion of the project and required mitigation measures.

CUL-11: In the event that any human remains are unearthed during project construction, the City of Moreno Valley and the Applicant shall comply with State Health and Safety Code Section 7050.5 The City of Moreno Valley and the Applicant shall immediately notify the Riverside County Coroner's office and no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition. If remains are determined to be of Native American descendent, the coroner has 24-hours to notify the Native American Heritage Commission (NAHC). The NAHC shall identify the person(s)

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thought to be the Most Likely Descendent (MLD). After the MLD has inspected the remains and the site, they have 48 hours to recommend to the landowner the treatment or disposal, with appropriate dignity, the human remains and any associated funerary objects. The MLD shall complete their inspection and make their recommendation within 48 hours of being granted access by the landowner to inspect the discovery. The recommendation may include the scientific removal and nondestructive analysis of human remains and cultural items associated with Native American burials. Upon the discovery of the Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred, as prescribed in this mitigation measure, with the MLD regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The landowner shall discuss and confer with the descendants all reasonable options regarding the descendants' preferences for treatment.

If the NAHC is unable to identify a MLD, or the MLD identified fails to make a recommendation, or the landowner rejects the recommendation of the MLD and the mediation provided for in Subdivision (k) of Section 5097.94, if invoked, fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall inter the human remains and items associated with Native American human remains with appropriate dignity on the facility property in a location not subject to further and future subsurface disturbance. A record of the reburial shall be filed with the NAHC and the CHRIS-EIC. Upon the reburial of the human remains, the MLD shall file a record of the reburial with the NAHC and the project archaeologist shall file a record of the reburial with the EIC.

NOI-1: Project proponent shall provide the following (or equivalent) noise abatement measures as part of the building construction plans in order to meet the City of Moreno Valley exterior noise standards of 60dBA for residential and 65dBA for commercial:
• Stationary construction noise sources such as generators or pumps must be located at least 100 feet from sensitive land uses, as feasible, or at maximum distance when necessary to complete work near sensitive land uses, to be verified by submittal of a construction staging plan. This mitigation measure must be implemented throughout construction and may be periodically monitored by the Planning Director, or designee during routine inspections.
• Construction staging areas must be located as far from noise sensitive land uses as feasible, to be verified by submittal of a construction staging plan. Implementation of this measure shall occur throughout construction through periodic monitoring by the Planning Director or designee during routine inspections.
• Throughout construction, the contractor shall ensure all construction equipment is equipped with included noise attenuating devices and are properly maintained. This mitigation measure shall be periodically monitored by the Planning Director or designee during routine inspections.
• Idling equipment must be turned off when not in use. This mitigation measure may be periodically monitored by the Planning Director or designee during routine inspections.
• Equipment must be maintained so that vehicles and their loads are secured from rattling and banging. This mitigation measure may be periodically monitored by the Planning Director or designee during routine inspections.

NOI-2: The developer shall ensure temporary construction noise control barriers shall be installed where residential uses are located adjacent to the project site (south and west). The type and location of the noise control barriers shall be shown on all grading and building plans and subject to approval by the Planning Director, or designee.

NOI-3: All construction activities shall comply with the City of Moreno Valley Noise Ordinance (Chapter 11.80 of the City of Moreno Valley Municipal Code). This requirement shall be noted on all grading and building plans and in bid documents issued to construction contractors.

TRA-1: The project applicant shall participate in the phased construction of off-site traffic

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signals through payment of traffic signal mitigation fees. The traffic signals within the study area at buildout should specifically include an interconnect of the traffic signals to function in a coordinated system. Traffic signal mitigation fees shall be paid prior to Opening Year (2020) with Project Phase 1 or alternate City approved deadline.

TRA-1: If, during mass grading and trenching activities, the Archaeologist or Tribal Monitor suspect that an archaeological resource and/or TCR may have been unearthed, the monitor identifying the potential resources, in consultation with the other monitor(s) as appropriate, shall immediately halt and redirect grading operations in a 100-foot radius around the find to allow identification and evaluation of the suspected resource. The Native American monitor(s) or appropriate representative(s) and the archaeological monitor shall evaluate the suspected resource and make a determination of significance pursuant to California Public Resources Code Section 21083.2. The archaeological monitor and Tribal monitor(s) or appropriate representative(s), the Project Applicant, and the City Planning Division shall confer regarding mitigation of the discovered resource(s). All sacred sites, should they be encountered within the project area, shall be avoided and preserved as the preferred mitigation, if feasible. If preservation in place is not feasible, treatment and/or mitigation may include implementation of archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis.

Building Division

8. The proposed non-residential project shall comply with the latest Federal Law, Americans with Disabilities Act, and State Law, California Code of Regulations, Title 24, Chapter 11B for accessibility standards for the disabled including access to the site, exits, bathrooms, work spaces, etc... Accessibility from the public right of way to accessible buildings shall be in place and maintained through each phase of construction.

FIRE DEPARTMENT

Fire Prevention Bureau

9. Prior to issuance of Certificate of Occupancy or Building Final, all commercial buildings shall display street numbers in a prominent location on the street side and rear access locations. The numerals shall be a minimum of twelve inches in height. (CFC 505.1, MVMC 8.36.060[I])

10. Prior to issuance of Certificate of Occupancy, approval shall be required from the County of Riverside Community Health Agency (Department of Environmental Health) and Moreno Valley Fire Prevention Bureau to maintain, store, use, handle materials, or conduct processes which produce conditions hazardous to life or property, and to install equipment used in connection with such activities. (CFC 105)

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11. Prior to issuance of Certificate of Occupancy or Building Final, the applicant/developer shall install a fire alarm system monitored by an approved Underwriters Laboratory listed central station based on a requirement for monitoring the sprinkler system, occupancy or use. Fire alarm panel shall be accessible from exterior of building in an approved location. Plans shall be submitted to the Fire Prevention Bureau for approval prior to installation. (CFC Chapter 9 and MVMC 8.36.100)

12. Prior to issuance of Building Permits, the applicant/developer shall participate in the Fire Impact Mitigation Program. (Fee Resolution as adopted by City Council)

13. All Fire Department access roads or driveways shall not exceed 12 percent grade. (CFC 503.2.7 and MVMC 8.36.060[G])

14. The Fire Department emergency vehicular access road shall be (all weather surface) capable of sustaining an imposed load of 80,000 lbs. GVW, based on street standards approved by the Public Works Director and the Fire Prevention Bureau. The approved fire access road shall be in place during the time of construction. Temporary fire access roads shall be approved by the Fire Prevention Bureau. (CFC 501.4, and MV City Standard Engineering Plan 108d)

15. Prior to construction, all locations where structures are to be built shall have an approved Fire Department access based on street standards approved by the Public Works Director and the Fire Prevention Bureau. (CFC 501.4)

16. Prior to issuance of Building Permits, the applicant/developer shall provide the Fire Prevention Bureau with an approved site plan for Fire Lanes and signage. (CFC 501.3)

17. Prior to issuance of Certificate of Occupancy or Building Final, “Blue Reflective Markers” shall be installed to identify fire hydrant locations in accordance with City specifications. (CFC 509.1 and MVLT 440A-0 through MVLT 440C-0)

18. Existing fire hydrants on public streets are allowed to be considered available . Existing fire hydrants on adjacent properties shall not be considered available unless fire apparatus access roads extend between properties and easements are established to prevent obstruction of such roads. (CFC 507, 501.3) a - After the local water company signs the plans, the originals shall be presented to the Fire Prevention Bureau for signatures. The required water system, including fire hydrants, shall be installed, made serviceable, and be accepted by the Moreno Valley Fire Department prior to beginning construction. They shall be maintained accessible.

19. Final fire and life safety conditions will be addressed when the Fire Prevention Bureau reviews building plans. These conditions will be based on occupancy, use, California Building Code (CBC), California Fire Code (CFC), and related codes, which are in effect at the time of building plan submittal.

20. The Fire Code Official is authorized to enforce the fire safety during construction requirements of Chapter 33. (CFC Chapter 33 & CBC Chapter 33)

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21. Fire lanes and fire apparatus access roads shall have an unobstructed width of not less than twenty–four (24) feet as approved by the Fire Prevention Bureau and an unobstructed vertical clearance of not less the thirteen (13) feet six (6) inches. (CFC 503.2.1 and MVMC 8.36.060[E])

22. Prior to issuance of the building permit for development, independent paved access to the nearest paved road, maintained by the City shall be designed and constructed by the developer within the public right of way in accordance with City Standards. (MVMC 8.36.060, CFC 501.4)

23. Prior to issuance of a Certificate of Occupancy or Building Final, a "Knox Box Rapid Entry System" shall be provided. The Knox-Box shall be installed in an accessible location approved by the Fire Code Official. All exterior security emergency access gates shall be electronically operated and be provided with Knox key switches for access by emergency personnel. (CFC 506.1)

24. The minimum number of fire hydrants required, as well as the location and spacing of fire hydrants, shall comply with the C.F.C., MVMC, and NFPA 24. Fire hydrants shall be located no closer than 40 feet to a building. A fire hydrant shall be located within 50 feet of the fire department connection for buildings protected with a fire sprinkler system. The size and number of outlets required for the approved fire hydrants are (6" x 4" x 2 ½" x 2 ½") (CFC 507.5.1, 507.5.7, Appendix C, NFPA 24-7.2.3, MVMC 912.2.1)

25. Fire Department access driveways over 150 feet in length shall have a turn-around as determined by the Fire Prevention Bureau capable of accommodating fire apparatus. (CFC 503 and MVMC 8.36.060, CFC 501.4)

26. During phased construction, dead end roadways and streets which have not been completed shall have a turn-around capable of accommodating fire apparatus. (CFC 503.1 and 503.2.5)

27. If construction is phased, each phase shall provide an approved emergency vehicular access way for fire protection prior to any building construction. (CFC 501.4)

28. Plans for private water mains supplying fire sprinkler systems and /or private fire hydrants shall be submitted to the Fire Prevention Bureau for approval. (CFC 105 and CFC 3312.1)

29. The Fire Prevention Bureau is required to set a minimum fire flow for the remodel or construction of all commercial buildings per CFC Appendix B and Table B105.1. The applicant/developer shall provide documentation to show there exists a water system capable of delivering said waterflow for 2 hour(s) duration at 20-PSI residual operating pressure. The required fire flow may be adjusted during the approval process to reflect changes in design, construction type, or automatic fire protection measures as approved by the Fire Prevention Bureau. Specific requirements for the project will be determined at time of submittal. (CFC 507.3, Appendix B)

30. Prior to construction, all traffic calming designs/devices must be approved by th

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Marshal and City Engineer.

31. Prior to building construction, dead end roadways and streets which have not been completed shall have a turnaround capable of accommodating fire apparatus. (CFC 503.2.5)

32. Prior to issuance of Building Permits, the applicant/developer shall furnish one copy of the water system plans to the Fire Prevention Bureau for review. Plans shall: a. Be signed by a registered civil engineer or a certified fire protection engineer; b. Contain a Fire Prevention Bureau approval signature block; and c. Conform to hydrant type, location, spacing of new and existing hydrants and minimum fire flow required as determined by the Fire Prevention Bureau. The required water system, including fire hydrants, shall be installed, made serviceable, and be accepted by the Moreno Valley Fire Department prior to beginning construction. They shall be maintained accessible.

FINANCIAL & MANAGEMENT SERVICES DEPARTMENT

Moreno Valley Utility

33. This project requires the installation of electric distribution facilities . A non-exclusive easement shall be provided to Moreno Valley Utility and shall include the rights of ingress and egress for the purpose of operation, maintenance, facility repair, and meter reading.

34. This project requires the installation of electric distribution facilities. The developer shall submit a detailed engineering plan showing design, location and schematics for the utility system to be approved by the City Engineer. In accordance with Government Code Section 66462, the Developer shall execute an agreement with the City providing for the installation, construction, improvement and dedication of the utility system following recordation of final map and/or concurrent with trenching operations and other improvements so long as said agreement incorporates the

    approved engineering plan and provides financial security to guarantee completion and dedication of the utility system.

    The Developer shall coordinate and receive approval from the City Engineer to install, construct, improve, and dedicate to the City all utility infrastructure including but not limited to, conduit, equipment, vaults, ducts, wires, switches, conductors, transformers, and “bring-up” facilities including electrical capacity to serve the identified development and other adjoining, abutting, or benefiting projects as determined by Moreno Valley Utility – collectively referred to as “utility system”, to and through the development, along with any appurtenant real property easements, as determined by the City Engineer necessary for the distribution and/or delivery of any and all “utility services” to and within the project. For purposes of this condition, “utility services” shall mean electric, cable television, telecommunication (including video, voice, and data) and other similar services designated by the City Engineer. “Utility services” shall not include sewer, water, and natural gas services, which are addressed by other conditions of approval.

    The City, or the City’s designee, shall utilize dedicated utility facilities to ensure safe

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reliable, sustainable and cost effective delivery of utility services and maintain the integrity of streets and other public infrastructure. Developer shall, at developer's sole expense, install or cause the installation of such interconnection facilities as may be necessary to connect the electrical distribution infrastructure within the project to the Moreno Valley Utility owned and controlled electric distribution system.

35. Existing Moreno Valley Utility electrical infrastructure shall be preserved in place. The developer will be responsible, at developer's expense, for any and all costs associated with the relocation of any of Moreno Valley Utility's underground electrical distribution facilities, as determined by Moreno Valley Utility, which may be in conflict with any developer planned construction on the project site.

36. This project is subject to a Reimbursement Agreement. The Developer is responsible for a proportionate share of costs associated with electrical distribution infrastructure previously installed that directly benefits the project. Payment shall be required prior to issuance of building permits.

PUBLIC WORKS DEPARTMENT

Prior to Building Permit

37. Prior to Occupancy of phase 1 buildings, the Water Quality BMPs shall be properly sized and operational to fully treat the stormwater runoff for all phases, or as approved by the City Engineer.

38. Street improvements on Nason Street and Broadiaea Avenue shall be completed as part of phase 1.

39. Prior to Occupancy of phase 3 buildings, the driveway at the southwest corner of the project shall be constructed and fully operational.

Special Districts Division

40. The ongoing maintenance of any landscaping required to be installed behind the curb shall be the responsibility of the property owner.

41. Any damage to existing landscape areas maintained by the City of Moreno Valley due to project construction shall be repaired/replaced by the Developer, or Developer's successors in interest, at no cost to the City of Moreno Valley.

42. The parcel(s) associated with this project have been incorporated into the Moreno Valley Community Services District Zone A (Parks & Community Services) and Zone C (Arterial Street Lighting). All assessable parcels therein shall be subject to annual parcel taxes for Zone A and Zone C for operations and capital improvements.

43. For Street Lights Installed in Each Phase: Street Light Authorization forms for all street lights that are conditioned to be installed as part of this project must be submitted to the Special Districts Division for approval, prior to street light installation. The Street

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Light Authorization form can be obtained from the utility company providing electric service to the project, either Moreno Valley Utility or Southern California Edison. For questions, contact the Special Districts Division at 951.413.3480 or specialdistricts@moval.org.

44. For Street Lights Installed in Each Phase: Prior to the issuance of the first building permit for this project, the Developer shall pay Advanced Energy fees for all applicable Residential and Arterial Street Lights required for this development. Payment shall be made to the City of Moreno Valley and collected by the Land Development Division. Fees are based upon the Advanced Energy fee rate in place at the time of payment, as set forth in the current Listing of City Fees, Charges, and Rates adopted by City Council. The Developer shall provide a copy of the receipt to the Special Districts Division (specialdistricts@moval.org). Any change in the project which may increase the number of street lights to be installed will require payment of additional Advanced Energy fees at the then current fee. Questions may be directed to the Special Districts Division at 951.413.3480 or specialdistricts@moval.org.

45. Prior to the Permit Issuance of Each Phase: This project has been identified to potentially be included in the formation of a Map Act Area of Benefit Special District for the construction of major thoroughfares and/or freeway improvements. The property owner(s) shall participate in such District and pay any special tax, assessment, or fee levied upon the project property for such District. At the time of the public hearing to consider formation of the district, the property owner(s) will not protest the formation, but will retain the right to object any eventual assessment that is not equitable should the financial burden of the assessment not be reasonably proportionate to the benefit the affected property obtains from the improvements to be installed. The Developer must notify the Special Districts Division at 951.413.3480 or at specialdistricts@moval.org of its selected financial option when submitting an application for the first building permit to determine whether the development will be subjected to this condition. If subject to the condition, the special election requires a 90 day process in compliance with the provisions of Article 13C of the California Constitution. (Street & Highway Code, GP Objective 2.14.2, MC 9.14.100).

46. Prior to the Permit Issuance of Each Phase: This project is conditioned for a proposed district to provide a funding source for the operation and maintenance of public improvements and/or services associated with new development in that territory. The Developer shall satisfy this condition with one of the options outlined below.

a. Participate in a special election for maintenance/services and pay all associated costs of the election process and formation, if any. Financing may be structured through a Community Facilities District, Landscape and Lighting Maintenance District, or other financing structure as determined by the City; or

b. Establish an endowment fund to cover the future maintenance and/or service costs.

The Developer must notify the Special Districts Division at 951.413.3480 or at specialdistricts@moval.org when submitting the application for building permit issuance. If the first building permit is pulled prior to formation of the district, this condition will not

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apply. If the district has been or is in the process of being formed the Developer must inform the Special Districts Division of its selected financing option (a. or b. above). The option for participating in a special election requires 90 days to complete the special election process. This allows adequate time to be in compliance with the provisions of Article 13C of the California Constitution.

The financial option selected shall be in place prior to the issuance of the first certificate of occupancy for the project.

47. Prior to the 1st COA for the project: This project is conditioned to provide a funding source for the following special financing program(s):

a. Street Lighting Services for capital improvements, energy charges, and maintenance.

The Developer's responsibility is to provide a funding source for the capital improvements and the continued maintenance. The Developer shall satisfy this condition with one of the options below.

i. Participate in a special election (mail ballot proceeding) and pay all associated costs of the special election and formation, if any. Financing may be structured through a Community Services District zone, Community Facilities District, Landscape and Lighting Maintenance District, or other financing structure as determined by the City; or

ii. Establish a Property Owner's Association (POA) or Home Owner's Association (HOA) which will be responsible for any and all operation and maintenance costs

The Developer must notify the Special Districts Division at 951.413.3480 or at specialdistricts@moval.org of its selected financial option when submitting the application for building permit issuance. The option for participating in a special election requires approximately 90 days to complete the special election process. This allows adequate time to be in compliance with the provisions of Article 13C of the California Constitution.

The financial option selected shall be in place prior to the issuance of the first certificate of occupancy for the project and prior to acceptance of any improvements.

48. Consistent with timing of Land Development's COA: Commercial (BP) If Land Development, a Division of the Public Works Department, requires this project to supply a funding source necessary to provide for, but not limited to, stormwater utilities services for the continuous operation, remediation and/or replacement, monitoring, systems evaluations and enhancement of on-site facilities and performing annual inspections of the affected areas to ensure compliance with state mandated stormwater regulations, a funding source needs to be established. The Developer must notify the Special Districts Division at 951.413.3480 or at specialdistricts@moval.org of its selected financial option for the National Pollution Discharge Elimination System (NPDES) program when submitting the application for the first building permit issuance (see Land Development's r

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condition). Participating in a special election the process requires a 90 day period prior to the City's issuance of a building permit. This allows adequate time to be in compliance with the provisions of Article 13D of the California Constitution. (California Health and Safety Code Sections 5473 through 5473.8 (Ord. 708 Section 3.1, 2006) & City of Moreno Valley Municipal Code Title 3, Section 3.50.050.)

49. Prior to the Permit Issuance of Each Phase: This project has been identified to be included in the formation of a Community Facilities District (Mello-Roos) for Public Safety services, including but not limited to Police, Fire Protection, Paramedic Services, Park Rangers, and Animal Control services. The property owner(s) shall not protest the formation; however, they retain the right to object to the rate and method of maximum special tax. In compliance with Proposition 218, the property owner shall agree to approve the mail ballot proceeding (special election) for either formation of the CFD or annexation into an existing district. The Developer must notify the Special Districts Division at 951 . 413 . 3480 or at specialdistricts@moval.org when submitting the application for building permit issuance to determine the requirement for participation. If the first building permit is pulled prior to formation of the district, this condition will not apply. If the condition applies, the special election will require a minimum of 90 days prior to issuance of the first building permit. This allows adequate time to be in compliance with the provisions of Article 13C of the California Constitution. (California Government Code Section 53313 et. seq.)

<u>Transportation Engineering Division</u>

50. Conditions of approval may be modified if the project or its phasing plan is altered from any approved plans.

51. Nason Street is classified as a Divided Major Arterial at this location. Any improvements undertaken by this project shall be consistent with the City's standards for this facility.

52. Brodiaea Avenue is classified as a Collector (66' RW/44' CC) per City Standard Plan No. MVSI-106B-0. Any improvements undertaken by this project shall be consistent with the City's standards for this facility.

53. Project driveways shall conform to City of Moreno Valley Standard No. MVSI-112C-0 for Commercial Driveway Approaches.

54. Access at the proposed street and driveways shall be as follows:

- Westbound approach at Nason Street/Brodiaea Avenue intersection: Only right turns in/out are allowed. Access shall be controlled by the existing raised concrete median on Nason Street.
- Nason Street north driveway: Only right turns in/out are allowed. Access shall be controlled by the existing raised concrete median on Nason Street.
- Nason Street south driveway: The existing traffic signal at Nason Street/Hospital Road intersection shall be modified to support full access.
- Brodiaea Avenue driveways: Full access is allowed.

Attachment: Exhibit D to 2018-05_Phase Plan (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

55. Prior to the final approval of the street improvement plans, traffic signal modification plans will be required for the traffic signal located at Nason Street/Hospital Road intersection. Modifications may include but not limited to new signal poles, new pull boxes, new traffic detector loops or video/radar detection system, relocation of signal controller cabinet, etc. Specific modifications shall be determined during plan check review.

56. All proposed on-site traffic signing and striping should be accordance with the latest California Manual on Uniform Traffic Control Devices (CAMUTCD).

57. Prior to issuance of a construction permit, construction traffic control plans prepared by a qualified, registered Civil or Traffic engineer may be required for plan approval or as required by the City Traffic Engineer.

58. Prior to final approval of the street improvement plans, the project plans shall demonstrate that sight distance at proposed streets and driveways conforms to City Standard Plan No. MVSI-164A-0 through MVSI-164C-0.

59. Prior to the final approval of the street improvement plans, a signing and striping plan shall be prepared per City of Moreno Valley Standard Plans - Section 4 for Nason Street and Brodiaea Avenue.

60. Prior to acceptance of streets into the City-maintained road system, all approved signing and striping shall be installed per current City Standards and the approved plans.

61. Prior to issuance of Certificate of Occupancy for any building in Phase 3 or prior to the project access at Nason Street/Hospital Road intersection being opened to vehicular traffic in any phase, the traffic signal at this intersection shall be modified and operational per the approved plans to the satisfaction of the City Engineer.

62. Prior to issuance of Certificate of Occupancy for any building in any of the project phases, all signing and striping on Nason Street and Brodiaea Avenue shall be installed per current City Standards and the approved plans.

Attachment: Exhibit D to 2018-05_Phase Plan (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

PLANNING COMMISSION RESOLUTION NO. 2018-06

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF MORENO VALLEY APPROVING CONDITIONAL USE PERMIT APPLICATIONS PEN16-0056 AND PEN16-0057 FOR DEVELOPMENT OF A MAJESTIC MORENO VALLEY, A MEDICAL PLAZA COMPLEX INCLUDING APPROXIMATELY 152,680 SQUARE FEET OF ASSISTED AND SKILLED NURSING FACILITIES WITHIN THE APPROXIMATELY 258,000 SQUARE FOOT MEDICAL COMPLEX ON 18.48 ACRES, ASSESSORS PARCEL NUMBERS 486-290-036 AND 486-280-037.

WHEREAS, the applicant, Galaxy Management Inc., has filed an application for the approval of Conditional Use Permit PEN16-0056 AND PEN16-0057 for development of a medical complex as described in the title above; and

WHEREAS, the application has been evaluated in accordance with established City of Moreno Valley (City) procedures, and with consideration of the General Plan and other applicable regulations; and

WHEREAS, the City has reviewed this project and determined that it is consistent with the site's General Plan designation of Office, all applicable General Plan policies and the Office zoning district subject to approval of a conditional use permit;

WHEREAS, the City has prepared an Initial Study and Mitigated Negative Declaration for the project consistent with the California Environmental Quality Act (CEQA) and based on a thorough analysis of potential environmental impacts. The Mitigated Negative Declaration represents the City's independent judgment and analysis; and

WHEREAS, upon completion of a thorough development review process the project was appropriately agendized and noticed for a public hearing before the Planning Commission of the City of Moreno Valley (Planning Commission); and

WHEREAS, the public hearing notice for this project was published in the local newspaper on January 14, 2018. Public notice was sent to all property owners of record within 300 feet of the project site on January 11, 2018. The public hearing notice for this project was also posted on the project site on January 12, 2018; and

WHEREAS, on January 25, 2018, the Planning Commission held a public hearing to consider the application; and

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred; and

Attachment: 2018-06 Reso CUPs [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

WHEREAS, pursuant to Government Code Section 66020(d)(1), **NOTICE IS HEREBY GIVEN** that this project is subject to certain fees, dedications, reservations and other exactions as provided herein.

NOW, THEREFORE, BE IT RESOLVED, it is hereby found, determined and resolved by the Planning Commission as follows:

A. This Planning Commission hereby specifically finds that all of the facts set forth above in this Resolution are true and correct.

B. Based upon substantial evidence presented to this Planning Commission during the above-referenced meeting on January 25, 2018, including written and oral staff reports, public testimony and the record from the public hearing, this Planning Commission hereby specifically finds as follows:

1. Conformance with General Plan Policies – The proposed use is consistent with the General Plan, and its goals, objectives, policies and programs.

FACT: With the approval of the General Plan Amendment and Zone change, the General Plan Land Use designation for the project site is Office. General Plan Policy 2.4.7 states that the primary purpose of areas designated Office is to provide for office uses, including, administrative, professional, legal, medical and financial offices.

The project site is located within the Medical Use Overlay District. General Plan Policy 2.4.4 states that this overlay district limits land uses to those that are supportive and compatible with medical uses to be established around the Riverside County Regional Medical Center and the Moreno Valley Community Hospital. The proposed medical care facility would be consistent with this policy.

The proposed medical facility will provide approximately 207 assisted livings beds and approximately 158 skilled nursing beds combined with medical care and services on a 18.48 acre site in close proximity to Kaiser Permanente Medical Center and just west of the Riverside County Regional Medical Center.

The project as designed and conditioned will achieve the objectives of the City of Moreno Valley's General Plan. The proposed project is consistent with the General Plan and does not conflict with the goals, objectives, policies, and programs established within the Plan.

2. Conformance with Zoning Regulations – The proposed use complies with all applicable zoning and other regulations.

FACT: With the approval of the Change of Zone, the project site is zoned Office which requires approval of a Conditional Use Permit for an assisted

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living or skilled nursing use. The Conditional Use Permits propose approximately 152,600 square feet of assisted and skilled nursing facilities. The use at this location will be compatible with and complementary to surrounding land uses that include the Riverside County Regional Medical Center directly to the west and the Kaiser Permanente Medical Center and Kaiser Permanente Medical Office buildings located approximately one and one-half miles south east of the site.

The project is designed in accordance with the provisions of Chapter 9.04 Commercial Districts, Chapter 9.07.040 Medical Use Overlay District and Chapter 9.16.150 Design Guidelines of the City's Municipal Code. The project as designed and conditioned would comply with all applicable zoning and other regulations.

3. **Health, Safety and Welfare –** The proposed use will not be detrimental to the public health, safety or welfare or materially injurious to properties or improvements in the vicinity.

FACT: The proposed Conditional Use Permit as designed and conditioned will provide acceptable levels of protection from natural and man-made hazards to life, health, and property consistent with General Goal 9.6.1. The project site is located approximately 1.5 miles from Fire Station No. 99 and within close proximity to emergency services which is consistent with General Plan Goal 9.6.2 which requires emergency services that are adequate to meet minor emergency and major catastrophic situations.

The California Environmental Quality Act (CEQA) is a statewide environmental law contained in Public Resources Code §§21000-21177. CEQA applies to most public agency decisions to carry out, authorize, or approve actions that have the potential to affect the environment. CEQA requires that public agencies analyze and acknowledge the environmental consequences of their discretionary actions and consider alternatives and mitigation measures that could avoid or reduce significant adverse impacts to the environment when avoidance or reduction is feasible. The CEQA compliance process provides public agencies and the general public an opportunity to comment on a proposed project's environmental effects. The proposed project is not exempt from CEQA. It was determined that an Initial Study would be prepared to determine whether the proposed project may have a significant effect on the environment.

An Initial Study/Mitigated Negative Declaration were prepared which assessed the potential of the proposed General Plan Amendment and the related Change of Zone, Tentative Parcel Map, Master Plot Plan, Plot Plans, Conditional Use Permits and a Phasing Plan for the Majestic Moreno Valley project applications to impact the environment. The proposed project includes the development of the project site with mixed use medical center campus on approximately 18.48 acres. The project

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site is located in the City of Moreno Valley, County of Riverside and State of California.

The Initial Study provided the documentation of the factual basis for the finding in the Mitigated Negative Declaration that the proposed project will not have a significant effect on the environment with the implementation of mitigation measures. The City as the Lead Agency has prepared a Mitigated Negative Declaration (MND) pursuant to Sections 15070 et seq. of the State CEQA Guidelines.

The Mitigated Negative Declaration is an informational document that provides the City, other public agencies, and the public at-large with an objective assessment of the potential environmental impacts that could result from implementation of the proposed project. The preparation and review of the Initial Study/Mitigated Negative Declaration reflects the independent judgment of the City.

The MND has been considered by the Planning Commission and prepared as there is no evidence that the proposed project will have a significant impact on public health or be materially injurious to surrounding properties of the environment as a whole.

4. **Location, Design and Operation –** The location, design and operation of the proposed project will be compatible with existing and planned land uses in the vicinity.

FACT: With the approval of the General Plan Amendment and Change of Zone, the project will be compatible with the existing and planned land uses in the vicinity. The site is located on vacant property in the Residential/Office zone and the Medical Use Overlay District on Nason Street at Brodiaea Avenue just east of the Riverside County Regional Medical Center. The area to the west of the site is also located in the Medical Use Overlay District, and is zoned Office Commercial and Community Commercial. The project is bounded to the north and south by vacant residential zoned with existing large lot single family residents to the south and east.

As designed and conditioned, the project is compatible with existing and proposed land uses in the vicinity.

FEES, DEDICATIONS, RESERVATIONS, AND OTHER EXACTIONS

1. FEES

Impact, mitigation and other fees are due and payable under currently applicable ordinances and resolutions. These fees may include but are not limited to: Development Impact Fee, Transportation Uniform Mitigation Fee (TUMF), Multi-species

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Habitat Conservation Plan (MSHCP) Mitigation Fee, Stephens Kangaroo Habitat Conservation fee, Underground Utilities in lieu Fee, Area Drainage Plan fee, Bridge and Thoroughfare Mitigation fee (Future) and Traffic Signal Mitigation fee. The final amount of fees payable is dependent upon information provided by the applicant and will be determined at the time the fees become due and payable.

Unless otherwise provided for by this Resolution, all impact fees shall be calculated and collected at the time and in the manner provided in Chapter 3.32 of the City of Moreno Valley Municipal Code or as so provided in the applicable ordinances and resolutions. The City expressly reserves the right to amend the fees and the fee calculations consistent with applicable law.

2. DEDICATIONS, RESERVATIONS, AND OTHER EXACTIONS

The adopted Conditions of Approval for PEN16-0056 and PEN16-0057, incorporated herein by reference, may include dedications, reservations, and exactions pursuant to Government Code Section 66020 (d) (1).

3. CITY RIGHT TO MODIFY/ADJUST; PROTEST LIMITATIONS

The City expressly reserves the right to establish, modify or adjust any fee, dedication, reservation or other exaction to the extent permitted and as authorized by law.

Pursuant to Government Code Section 66020(d)(1), NOTICE IS FURTHER GIVEN that the 90 day period to protest the imposition of any impact fee, dedication, reservation, or other exaction described in this Resolution begins on the effective date of this Resolution and any such protest must be in a manner that complies with Section 66020(a) and failure to timely follow this procedure will bar any subsequent legal action to attack, review, set aside, void or annul imposition.

The right to protest the fees, dedications, reservations, or other exactions does not apply to planning, zoning, grading, or other similar application processing fees or service fees in connection with this project and it does not apply to any fees, dedication, reservations, or other exactions of which a notice has been given similar to this, nor does it revive challenges to any fees for which the applicable statute of limitations has previously expired.

BE IT FURTHER RESOLVED that the Planning Commission **HEREBY APPROVES** Resolution No. 2018-06, and thereby:

Attachment: 2018-06 Reso CUPs [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

1. **APPROVES** Conditional Use Permits PEN16-0056-PEN16-0057 based on the findings contained in this resolution, and subject to the conditions of approval included as Exhibit A and Exhibit B.

APPROVED this 25th day of January, 2018.

AYES:
NOES:
ABSTAIN:

_____
Jeffrey Barnes
Chair, Planning Commission

ATTEST:

_____
Richard J. Sandzimier, Planning Official
Secretary to the Planning Commission

APPROVED AS TO FORM:

_____
City Attorney

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CITY OF MORENO VALLEY
CONDITIONS OF APPROVAL
Conditional Use Permit (PEN16-0056)

EFFECTIVE DATE:
EXPIRATION DATE:

COMMUNITY DEVELOPMENT DEPARTMENT

Planning Division

1. ANY expansion to this use or exterior alterations will require the submittal of a separate application(s) and shall be reviewed and approved under separate permit(s). (MC 9.02.080)

2. The developer, or the developer's successor-in-interest, shall be responsible for maintaining any undeveloped portion of the site in a manner that provides for the control of weeds, erosion and dust. (MC 9.02.030)

3. This approval shall expire three years after the approval date of this project unless used or extended as provided for by the City of Moreno Valley Municipal Code. (MC 9.02.230)

4. In the event the use hereby permitted ceases operation for a period of one (1) year or more, or as defined in the current Municipal Code, this permit may be revoked in accordance with provisions of the Municipal Code.

5. All landscaped areas shall be maintained in a healthy and thriving condition, free from weeds, trash and debris. (MC 9.02.030)

6. The site shall be developed in accordance with the approved plans on file in the Community Development Department - Planning Division, the Municipal Code regulations, General Plan, and the conditions contained herein. Prior to any use of the project site or business activity being commenced thereon, all Conditions of Approval shall be completed to the satisfaction of the Planning Official. (MC 9.14.020)

7. Any signs indicated on the submitted plans are not included with this approval. Any signs, whether permanent (e.g. wall, monument) or temporary (e.g. banner, flag), require separate application and approval by the Planning Division. No signs are permitted in the public right of way. (MC 9.12)

8. All site plans, grading plans, landscape and irrigation plans, fence/wall plans, lighting plans and street improvement plans shall be coordinated for consistency

Attachment: Exhibit A to 2018-06_CUP1 (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

with this approval.

Special Conditions

9. Conditional Use Permit PEN16-0056 is approved forBuilding Three (3), approximately 16,200 square feet and Building Four (4), approximately 18,400 square feet for Assisted Living services located on new Tentative Parcel (36227) Three (3) in the medical complex per the approved plans.A change or modification shall require separate approval. For a Conditional Use Permit, violation may result in revocation of the Conditional use Permit.

10. The following Mitigation Measures apply to this project:

AQ-1: The applicant shall ensure that approved architectural coatings are utilized. Prior to the issuance of building permits, the City will verify that construction plans submitted by the project proponent reflect use of architectural coatings where the content of volatile organic compounds (VOC) does not exceed 25 grams per liter (g/l) for interior and exterior applications. This measure must be verified through standard building inspections in light of the performance standard that emissions of volatile organic compounds from application of interior or exterior coatings shall not exceed the daily emissions thresholds established by the South Coast Air Quality Management District. The applicant bears the cost of implementing this mitigation.

BIO-1: The applicant shall avoid impacts to nesting birds and violation of state and federal laws pertaining to birds, all construction related activities (including but not limited to mobilization and staging, clearing, grubbing, vegetation removal, fence installation, demolition, and grading) should occur outside the avian nesting season (generally prior to Feb 1 or after Aug 31). If construction and construction noise occurs within the avian nesting season (from Feb 1 to Aug 31 or according to local requirements), all suitable habitats located within the project's area of disturbance including staging and storage areas plus a 250-foot (passerines) and 1,000 foot (raptor nests) buffer around these areas shall be thoroughly surveyed, as feasible, for the presence of active nests by a qualified biologist no more than 5-days before commencement of any site disturbance activities and equipment mobilization. If project activities are delayed more than 5-days, an additional nesting bird survey shall be performed. Active nesting is present if a bird is sitting in a nest, a nest has eggs or chicks in it, or adults are observed carrying food to the nest. The results of these surveys shall be documented. If it is determined that birds are actively nesting within the survey area, Mitigation Measure BIO-2 shall apply. Conversely, if the survey area is found to be absent of nesting birds, Mitigation Measure BIO-2 shall not be required.

BIO-2: If pre-construction nesting bird surveys result in the location of active nests, the applicant shall ensure that no site disturbance and mobilization of heavy equipment (including but not limited to equipment staging, fence installation, clearing, grubbing, vegetation removal, demolition and grading), shall take place within 250 feet of non-raptor nests and 1,000 feet of raptor nests, or as determined by a qualified biologist in consultation with the CDFW, until the chicks have fledged. Monitoring shall be required to insure compliance with the MBTA and relevant CDFW requirements. Monitoring dates and findings shall be documented.

BIO-3: The applicant shall ensure a pre-construction survey for burrowing owls be completed no more than 30-days prior to the start of construction at the Project site to ensure no burrowing owls have moved onto the site.

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CUL-1: Prior to the issuance of a grading permit, the Applicant shall retain a qualified professional archaeologist who meets U.S. Secretary of the Interior's Professional Qualifications and Standards. The Project archaeologist and Native American Tribal Representatives will conduct an Archaeological Sensitivity Training for construction personnel prior to commencement of excavation activities. The training session will include a handout and will focus on how to identify archaeological and Tribal Cultural resources that may be encountered during earthmoving activities and the procedures to be followed in such an event, including who to contact and the appropriate avoidance measures that need to be undertaken until the find(s) can be properly evaluated; the duties of archaeological and Native American monitors; and the general steps a qualified professional archaeologist would follow in conducting a salvage investigation if one is necessary. All new construction personnel that will conduct earthwork or grading activities must take the Archaeological Sensitivity Training prior to beginning work on the project and the professional archaeologist shall make themselves available to provide the training on an as-needed basis. A sign-in sheet shall be compiled to track attendance and shall be submitted to the City with the Phase IV Archaeological Monitoring Report.

CUL-2: Preconstruction Notification of Native American Tribal Representatives. Prior to the issuance of a grading permit, the Applicant shall provide evidence to the City of Moreno Valley that the Agua Band of Cahuilla Indians, Pechanga Band of Luiseño Indians and the Soboba Band of Luiseño Indians tribal representatives (hereafter referred to as "Native American Tribal Representatives") received a minimum of 30 days advance notice of all mass grading and trenching activities, and provide evidence of monitoring agreements between the Applicant and the Tribes. The Native American Tribal Representatives shall be notified a minimum of 48 hours in advance and allowed to attend the pre-grading meeting with the City and project construction contractors and/or monitor all project mass grading and trenching activities.

CUL-3: Prior to grading permit issuance, the City shall verify that the following note is included on the Grading Plan: "If any suspected archaeological resources are discovered during ground-disturbing activities and the archaeological monitor or Tribal representatives are not present, the construction supervisor is obligated to halt work in a 100-foot radius around the find and call the project archaeologist and the Tribal representatives to the site to assess the significance of the find."

CUL-4: Prior to the issuance of a grading permit, the Applicant shall retain a qualified archaeological monitor. The archaeological monitor will work under the direction and guidance of the qualified professional archaeologist and will meet the U.S. Secretary of the Interior's Professional Qualifications and Standards. The archeological monitor shall have the authority to temporarily redirect earthmoving activities in the event that suspected archaeological resources are unearthed during project construction. Archaeological monitoring is required at all depths and strata. The archaeological monitor shall be present during all construction excavations (e.g., grading, trenching, or clearing/grubbing) into non-fill younger Pleistocene alluvial sediments. Multiple earth-moving construction activities may require multiple archaeological monitors. The frequency of monitoring shall be based on the rate of excavation and grading activities, proximity to known archaeological resources, the materials being excavated (native versus artificial fill soils), and the depth of excavation, and if found, the abundance and type of archaeological resources encountered. Full-time monitoring can be reduced to part-time inspections if determined adequate by the qualified professional archaeologist.

CUL-5: The applicant shall ensure that all ground disturbing activities are ceased and treatment plans are implemented if archaeological resources are encountered. In the event that archaeological resources are unearthed during ground-disturbing activities, ground-disturbing activities shall be halted or diverted away from the vicinity of the find so that the find

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can be evaluated. A buffer area of at least 100 feet shall be established around the find where construction activities shall not be allowed to continue until a qualified archaeologist has examined the newly discovered artifact(s) and has evaluated the area of the find. Work shall be allowed to continue outside of the buffer area. All archaeological resources unearthed by project construction activities shall be evaluated by a qualified professional archaeologist, who meets the U.S. Secretary of the Interior's Professional Qualifications and Standards. Should the newly discovered artifacts be determined to be prehistoric, Native American Tribes/Individuals should be contacted and consulted and Native American construction monitoring should be initiated. The Applicant and City shall coordinate with the archaeologist to develop an appropriate treatment plan for the resources. The plan may include implementation of archaeological data recovery excavations to address treatment of the resource along with subsequent laboratory processing and analysis.
In the event that a cultural resource is encountered during ground-disturbing activities, the landowner(s) shall relinquish ownership of all such resources, including sacred items, burial goods, and all archaeological artifacts and non-human remains. The artifacts shall be relinquished through one or more of the following methods and evidence of such shall be provided to the City of Moreno Valley Planning Department:

1. Accommodate the process for Preservation-In-Place/Onsite with the consulting Native American tribes or bands, as detailed in the treatment plan prepared by the professional paleontologist. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not.
2. A curation agreement with an appropriate qualified repository within Riverside County that meets federal standards per 36 CFR Part 79; therefore, the resources would be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility within Riverside County, to be accompanied by payment of the fees necessary for permanent curation; and/or
3. For purposes of conflict resolution, if more than one Native American tribe or band is involved with the project and cannot come to an agreement as to the disposition of cultural materials, they shall be curated at the Western Science Center by default.

CUL-6: Prior to building permit issuance, the Project archaeologist shall prepare a final Phase IV Monitoring Report as outlined in the CRMP, which shall be submitted to the City Planning Division, the appropriate Native American tribe(s), and the Eastern Information Center at the University of California, Riverside. The report shall include a description of resources unearthed, if any, evaluation of the resources with respect to the California Register and CEQA, and treatment of these resources. All cultural material, excluding sacred, ceremonial, grave goods and human remains, collected during the grading monitoring program and from any previous archaeological studies or excavations on the project site shall be curated in a Riverside County repository according to the current professional repository standards and may include the Pechanga Band's curatorial facility in Temecula, CA.

CUL-7: Conduct Paleontological Sensitivity Training for Construction Personnel. Prior to the issuance of a grading permit, the Applicant shall retain a professional paleontologist, who meets the qualifications set forth by the Society of Vertebrate Paleontology. The paleontologist shall conduct a Paleontological Sensitivity Training for construction personnel prior to commencement of excavation activities. The training will include a handout and will focus on how to identify paleontological resources that may be encountered during earthmoving activities, and the procedures to be followed in such an event, including who to contact and the appropriate avoidance measures that need to be undertaken until the find(s) can be properly evaluated; the duties of paleontological monitors; notification and other procedures to follow upon discovery of resources; and the general steps a qualified professional paleontologist would follow in conducting a salvage investigation if one is necessary. All new construction personnel that will conduct earthwork or grading activities must take the Paleontological Sensitivity Training prior to beginning work on the project and the professional paleontologist shall make themselves available to provide the training on an

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as-needed basis.

CUL-8: The applicant shall ensure the monitoring of construction excavations for paleontological resources is required for all excavations in older Quaternary alluvial fan deposits or in sedimentary deposits derived from the Mt. Eden Formation. Prior to the issuance of a grading permit, the Applicant shall retain a qualified paleontological monitor, who will work under the guidance and direction of a professional paleontologist, and who meets the qualifications set forth by the Society of Vertebrate Paleontology. The paleontological monitor shall have the authority to temporarily redirect earthmoving activities in the event that suspected paleontological resources are unearthed during project construction. The paleontological monitor shall be present during all construction excavations including, but not limited to grading, trenching, boring, and clearing/grubbing). Multiple earth-moving construction activities may require multiple paleontological monitors. The frequency of monitoring shall be based on the rate of excavation and grading. Monitoring may be reduced if potentially fossiliferous units are not present in the subsurface, or if present, are determined upon exposure and examination by the professional paleontologist to have a low potential to contain or yield fossil resources.

CUL-9: The applicant shall ensure that in the event that paleontological resources and or unique geological features are unearthed during ground-disturbing activities, all ground disturbing activities shall be halted or diverted away from the vicinity of the find in order to evaluate the resource. A buffer area of at least 100 feet shall be established around the find where construction activities shall not be allowed to continue until appropriate paleontological treatment plan has been approved by the Applicant and the City. Work shall be allowed to continue outside of the buffer area. The Applicant and City shall coordinate with a professional paleontologist, who meets the qualifications set forth by the Society of Vertebrate Paleontology, to develop an appropriate treatment plan for the resources. Treatment may include implementation of paleontological salvage excavations to remove the resource along with subsequent laboratory processing and analysis or preservation in place. At the paleontologist's discretion and to reduce construction delay, the grading and excavation contractor shall assist in removing rock samples for initial processing. Recovered specimens shall be properly prepared to a point of identification and permanent preservation, including screen washing sediments to recover small invertebrates and vertebrates, if necessary. Identification and curation of specimens into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable storage is required for significant discoveries.

CUL-10: The applicant shall ensure prior to building permits, that a professional paleontologist prepares a report summarizing the results of the monitoring and salvaging efforts, the methodology used in these efforts, as well as a description of the fossils collected and their significance as well as any necessary maps and graphics to accurately record the original location of these resources. The report shall be submitted to the Applicant, the City, the San Bernardino County Natural History Museum, Natural History Museum of Los Angeles County, and representatives of other appropriate or concerned agencies to signify the satisfactory completion of the project and required mitigation measures.

CUL-11: In the event that any human remains are unearthed during project construction, the City of Moreno Valley and the Applicant shall comply with State Health and Safety Code Section 7050.5 The City of Moreno Valley and the Applicant shall immediately notify the Riverside County Coroner's office and no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition. If remains are determined to be of Native American descendent, the coroner has 24-hours to notify the Native American Heritage Commission (NAHC). The NAHC shall identify the person(s) thought to be the Most Likely Descendent (MLD). After the MLD has inspected the remains and the site, they have 48 hours to recommend to the landowner the treatment or disposal, with appropriate dignity, the human remains and any associated funerary objects. The MLD shall complete their inspection and make their recommendation within 48 hours of being

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granted access by the landowner to inspect the discovery. The recommendation may include the scientific removal and nondestructive analysis of human remains and cultural items associated with Native American burials. Upon the discovery of the Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred, as prescribed in this mitigation measure, with the MLD regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The landowner shall discuss and confer with the descendants all reasonable options regarding the descendants' preferences for treatment.

If the NAHC is unable to identify a MLD, or the MLD identified fails to make a recommendation, or the landowner rejects the recommendation of the MLD and the mediation provided for in Subdivision (k) of Section 5097.94, if invoked, fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall inter the human remains and items associated with Native American human remains with appropriate dignity on the facility property in a location not subject to further and future subsurface disturbance. A record of the reburial shall be filed with the NAHC and the CHRIS-EIC. Upon the reburial of the human remains, the MLD shall file a record of the reburial with the NAHC and the project archaeologist shall file a record of the reburial with the EIC.

NOI-1: Project proponent shall provide the following (or equivalent) noise abatement measures as part of the building construction plans in order to meet the City of Moreno Valley exterior noise standards of 60dBA for residential and 65dBA for commercial:
• Stationary construction noise sources such as generators or pumps must be located at least 100 feet from sensitive land uses, as feasible, or at maximum distance when necessary to complete work near sensitive land uses, to be verified by submittal of a construction staging plan. This mitigation measure must be implemented throughout construction and may be periodically monitored by the Planning Director, or designee during routine inspections.
• Construction staging areas must be located as far from noise sensitive land uses as feasible, to be verified by submittal of a construction staging plan. Implementation of this measure shall occur throughout construction through periodic monitoring by the Planning Director or designee during routine inspections.
• Throughout construction, the contractor shall ensure all construction equipment is equipped with included noise attenuating devices and are properly maintained. This mitigation measure shall be periodically monitored by the Planning Director or designee during routine inspections.
• Idling equipment must be turned off when not in use. This mitigation measure may be periodically monitored by the Planning Director or designee during routine inspections.
• Equipment must be maintained so that vehicles and their loads are secured from rattling and banging. This mitigation measure may be periodically monitored by the Planning Director or designee during routine inspections.

NOI-2: The developer shall ensure temporary construction noise control barriers shall be installed where residential uses are located adjacent to the project site (south and west). The type and location of the noise control barriers shall be shown on all grading and building plans and subject to approval by the Planning Director, or designee.

NOI-3: All construction activities shall comply with the City of Moreno Valley Noise Ordinance (Chapter 11.80 of the City of Moreno Valley Municipal Code). This requirement shall be noted on all grading and building plans and in bid documents issued to construction contractors.

TRA-1: The project applicant shall participate in the phased construction of off-site traffic signals through payment of traffic signal mitigation fees. The traffic signals within the study area at buildout should specifically include an interconnect of the traffic signals to function in a coordinated system. Traffic signal mitigation fees shall be paid prior to Opening Year (2020) with Project Phase 1 or alternate City approved deadline.

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TRA-1: If, during mass grading and trenching activities, the Archaeologist or Tribal Monitor suspect that an archaeological resource and/or TCR may have been unearthed, the monitor identifying the potential resources, in consultation with the other monitor(s) as appropriate, shall immediately halt and redirect grading operations in a 100-foot radius around the find to allow identification and evaluation of the suspected resource. The Native American monitor(s) or appropriate representative(s) and the archaeological monitor shall evaluate the suspected resource and make a determination of significance pursuant to California Public Resources Code Section 21083.2. The archaeological monitor and Tribal monitor(s) or appropriate representative(s), the Project Applicant, and the City Planning Division shall confer regarding mitigation of the discovered resource(s). All sacred sites, should they be encountered within the project area, shall be avoided and preserved as the preferred mitigation, if feasible. If preservation in place is not feasible, treatment and/or mitigation may include implementation of archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis.

Prior to Grading Permit

11. Prior to the issuance of grading permits, decorative (e.g. colored/scored concrete or as approve by the Planning Official) pedestrian pathways across circulation aisles/paths shall be provided throughout the development to connect dwellings with open spaces and/or recreational uses or commercial/industrial buildings with open space and/or parking. and/or the public right-of-way. The pathways shall be shown on the precise grading plan. (GP Objective 46.8, DG)

12. Prior to issuance of any grading permits, mitigation measures contained in the Mitigation Monitoring Program approved with this project shall be implemented as provided therein. A mitigation monitoring fee, as provided by City ordinance, shall be paid by the applicant within 30 days of project approval. No City permit or approval shall be issued until such fee is paid. (CEQA)

13. Prior to issuance of grading permits, the developer shall pay the applicable Stephens' Kangaroo Rat (SKR) Habitat Conservation Plan mitigation fee. (Ord)

14. Within thirty (30) days prior to any grading or other land disturbance, a pre-construction survey for Burrowing Owls shall be conducted pursuant to the established guidelines of Multiple Species Habitat Conservation Plan. The pre-construction survey shall be submitted to the Planning Division prior to any disturbance of the site and/or grading permit issuance.

15. Prior to issuance of grading permits, the developer shall submit wall/fence plans to the Planning Division for review and approval as follows:

    A. A maximum 6 foot high solid decorative block perimeter wall with pilasters and a cap shall be required adjacent to all residential zoned areas.

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B. 3-foot high decorative wall, solid hedge or berm shall be placed in any setback areas between a public right of way and a parking lot for screening.

C. Any proposed retaining walls shall also be decorative in nature, while the combination of retaining and other walls on top shall not exceed the height requirement.

D. Proposed screening walls for truck loading areas and required loading docks shall also include decorative block walls with pilasters with a height up to fourteen (14) feet to fully screen trucks (industrial and some situations with commercial uses).

E. Walls and fences for visual screening are required when there are adjacent residential uses or residentially zone property. The height, placement and design will be based on a site specific review of the project. All walls are subject to the approval of the Planning Official. (DC 9.08.070)

16. Prior to the issuance of grading permits, a temporary project identification sign shall be erected on the site in a secure and visible manner. The sign shall be conspicuously posted at the site and remain in place until occupancy of the project. The sign shall include the following:

    a. The name (if applicable) and address of the development.
    b. The developer's name, address, and a 24-hour emergency telephone number.

17. Prior to issuance of grading permits, the location of the trash enclosure shall be included on the plans.

<u>Prior to Building Permit</u>

18. Prior to the issuance of building permits, covered trash enclosure (s) shall be included in the building plans or the Building submittal of the Fence and Wall plans. The trash enclosure(s), including the roof materials, shall be compatible with the architecture, color and materials of the building(s) design. Trash enclosure areas shall include landscaping on three sides. (GP Objective 43.6, DG)

19. Prior to issuance of any building permits, final landscaping and irrigation plans shall be submitted for review and approved by the Planning Division. After the third plan check review for landscape plans, an additional plan check fee shall apply. The plans shall be prepared in accordance with the City's Landscape Requirements and shall include:

    A. A three (3) foot high decorative wall, solid hedge or berm shall be placed in any setback areas between a public right of way and a parking lot for screening.

    B. Finger and end planters with required step outs and curbing shall be provided

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every 12 parking stalls as well as at the terminus of each aisle.

C. Diamond planters shall be provided every 3 parking stalls.

D. Drought tolerant landscape shall be used. Sod shall be limited to gathering areas. (or No sod shall be installed)

E. Street trees shall be provided every 40 feet on center in the right of way.

F. On-site trees shall be planted at an equivalent of one (1) tree per thirty (30) linear feet of the perimeter of a parking lot and per thirty linear feet of a building dimension for the portions of the building visible from a parking lot or right of way. Trees may be massed for pleasing aesthetic effects.

G. Enhanced landscaping shall be provided at all driveway entries and street corner locations The review of all utility boxes, transformers etc. shall be coordinated to provide adequate screening from public view.

H. Landscaping on three sides of any trash enclosure.

I. All site perimeter and parking lot landscape and irrigation shall be installed prior to the release of certificate of any occupancy permits for the site or pad in question.

20. Prior to issuance of building permits, the Planning Division shall review and approve the location and method of enclosure or screening of transformer cabinets, commercial gas meters and back flow preventers as shown on the final working drawings. Location and screening shall comply with the following criteria : transformer cabinets and commercial gas meters shall not be located within required setbacks and shall be screened from public view either by architectural treatment or landscaping; multiple electrical meters shall be fully enclosed and incorporated into the overall architectural design of the building (s); back-flow preventers shall be screened by landscaping. (GP Objective 43.30)

21. Prior to issuance of a building permit, the developer /property owner or developer's successor-in-interest shall pay all applicable impact fees due at permit issuance, including but not limited to Multi-species Habitat Conservation Plan (MSHCP) mitigation fees. (Ord)

22. Prior to building final, the developer/owner or developer's/owner' s successor-in-interest shall pay all applicable impact fees, including but not limited to Transportation Uniform Mitigation fees (TUMF), and the City's adopted Development Impact Fees. (Ord)

23. Prior to or at building plan check submittal, the elevation plans shall include

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decorative lighting sconces on all sides of the buildings of the complex facing a parking lot, courtyard or plaza, or public right of way or open space to provide up-lighting and shadowing on the structures. Include drawings of the sconce details for each building within the elevation plans, approved by the Planning Division prior to building permit issuance.

24. Prior to or at building plan check submittal, two copies of a detailed, on-site, computer generated, point-by-point comparison lighting plan, including exterior building, parking lot, and landscaping lighting, shall be submitted to the Planning Division for review and approval prior to the issuance of a building permit. The lighting plan shall be generated on the plot plan and shall be integrated with the final landscape plan. The plan shall indicate the manufacturer's specifications for light fixtures used, shall include style, illumination, location, height and method of shielding per the City's Municipal Code requirements. After the third plan check review for lighting plans, an additional plan check fee will apply. (MC 9.08.100, 9.16.280)

25. Prior to issuance of building permits, screening details shall be addressed on the building plans for roof top equipment submitted for Planning Division review and approval through the building plan check process. All equipment shall be completely screened so as not to be visible from public view, and the screening shall be an integral part of the building.

Prior to Building Final or Occupancy

26. Prior to building final, all required landscaping and irrigation shall be installed per plan, certified by the Landscape Architect and inspected by the Planning Division. (MC 9.03.040, MC 9.17).

27. Prior to building final, Planning approved/stamped landscape plans shall be provided to the Community Development Department – Planning Division on a CD disk.

28. Prior to building final, all required and proposed fences and walls shall be constructed according to the approved plans on file in the Planning Division. (MC 9.080.070).

Building Division

29. The proposed non-residential project shall comply with the latest Federal Law, Americans with Disabilities Act, and State Law, California Code of Regulations, Title 24, Chapter 11B for accessibility standards for the disabled including access to the site, exits, bathrooms, work spaces, etc.

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30. Prior to submittal, all new development, including residential second units, are required to obtain a valid property address prior to permit application. Addresses can be obtained by contacting the Building Safety Division at 951.413.3350.

31. Contact the Building Safety Division for permit application submittal requirements.

32. All new buildings 10,000 square feet and over, shall include building commissioning in the design and construction processes of the building project to verify that the building systems and components meet the owner 's or owner representative's project requirements (OPR). All requirements in The 2016 California Green Building Standards Code, sections 5.410.2 - 5.410.2.6 must be met.

33. Any construction within the city shall only be completed between the hour of seven a.m. to seven p.m. Monday through Friday, excluding holidays and from eight a.m. to four p.m. on Saturday, unless written approval is obtained from the city building official or city engineer (Municipal Code Section 8.14.040.E).

34. Building plans submitted shall be signed and sealed by a California licensed design professional as required by the State Business and Professions Code.

35. The proposed development is subject to the payment of applicable processing fees as required by the City's current Fee Ordinance at the time a building permit application is submitted or prior to the issuance of permits as determined by the City.

36. The proposed project will be subject to approval by the Eastern Municipal Water District and all applicable fees and charges shall be paid prior to permit issuance . Contact the water district at 951.928.3777 for specific details.

37. All new structures shall be designed in conformance to the latest design standards adopted by the State of California in the California Building Standards Code (California Code of Regulations, Title 24) including requirements for allowable area, occupancy separations, fire suppression systems, accessibility, etc. The current edition of the applicable code standards is the 2016 Triennial Edition.

38. The proposed non-residential project shall comply with 2016 California Green Building Standards Code, Section 5.106.5.3, mandatory requirements for Electric Vehicle Charging Station (EVCS).

39. The proposed project's occupancy shall be classified by the Building Official and must comply with exiting, occupancy separation(s) and minimum plumbing fixture requirements of the 2016 California Plumbing Code Table 4-1.

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40. Prior to permit issuance, every applicant shall submit a properly completed Waste Management Plan (WMP), as a portion of the building or demolition permit process. (MC 8.80.030)

FINANCIAL & MANAGEMENT SERVICES DEPARTMENT

Moreno Valley Utility

41. This project requires the installation of electric distribution facilities. A non-exclusive easement shall be provided to Moreno Valley Utility and shall include the rights of ingress and egress for the purpose of operation, maintenance, facility repair, and meter reading.

42. This project requires the installation of electric distribution facilities. The developer shall submit a detailed engineering plan showing design, location and schematics for the utility system to be approved by the City Engineer. In accordance with Government Code Section 66462, the Developer shall execute an agreement with the City providing for the installation, construction, improvement and dedication of the utility system following recordation of final map and /or concurrent with trenching operations and other improvements so long as said agreement incorporates the approved engineering plan and provides financial security to guarantee completion and dedication of the utility system.

    The Developer shall coordinate and receive approval from the City Engineer to install, construct, improve, and dedicate to the City all utility infrastructure including but not limited to, conduit, equipment, vaults, ducts, wires, switches, conductors, transformers, and "bring-up" facilities including electrical capacity to serve the identified development and other adjoining, abutting, or benefiting projects as determined by Moreno Valley Utility – collectively referred to as "utility system", to and through the development, along with any appurtenant real property easements, as determined by the City Engineer necessary for the distribution and /or delivery of any and all "utility services" to and within the project. For purposes of this condition, "utility services" shall mean electric, cable television, telecommunication (including video, voice, and data) and other similar services designated by the City Engineer. "Utility services" shall not include sewer, water, and natural gas services, which are addressed by other conditions of approval.

    The City, or the City's designee, shall utilize dedicated utility facilities to ensure safe, reliable, sustainable and cost effective delivery of utility services and maintain the integrity of streets and other public infrastructure. Deve

43. Existing Moreno Valley Utility electrical infrastructure shall be preserved in place. The developer will be responsible, at developer's expense, for any and all costs

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associated with the relocation of any of Moreno Valley Utility's underground electrical distribution facilities, as determined by Moreno Valley Utility, which may be in conflict with any developer planned construction on the project site.

44. This project is subject to a Reimbursement Agreement. The Developer is responsible for a proportionate share of costs associated with electrical distribution infrastructure previously installed that directly benefits the project. Payment shall be required prior to issuance of building permits.

PUBLIC WORKS DEPARTMENT

Land Development

45. A digital (pdf) copy of all approved improvement plans shall be submitted to the Land Development Division.

46. All applicable inspection fees shall be paid.

47. All work performed within public right-of-way requires an encroachment permit. Security (in the form of a cash deposit or other approved means) may be required as determined by the City Engineer. For non-subdivision projects, the City Engineer may require the execution of a Public Improvement Agreement (PIA) as a condition of the issuance of a construction or encroachment permit. All inspection fees shall be paid prior to issuance of construction permit. [MC 9.14.100(C.4)]

48. Aggregate slurry, as defined in Section 203-5 of Standard Specifications for Public Works Construction, may be required just prior to the end of the one-year warranty period of the public streets at the discretion of the City Engineer. If slurry is required, a slurry mix design shall be submitted for review and approved by the City Engineer. The latex additive shall be Ultra Pave 70 (for anionic) or Ultra Pave 65 K (for cationic) or an approved equal per the geotechnical report. The latex shall be added at the emulsion plant after weighing the asphalt and before the addition of mixing water. The latex shall be added at a rate of two to two-and-one-half (2 to 2½) parts to one-hundred (100) parts of emulsion by volume. Any existing striping shall be removed prior to slurry application and replaced per City standards.

49. The developer shall comply with all applicable City ordinances and resolutions including the City's Municipal Code (MC) and if subdividing land, the Government Code (GC) of the State of California, specifically Sections 66410 through 66499.58, said sections also referred to as the Subdivision Map Act (SMA). [MC 9.14.010]

50. The final approved conditions of approval (COAs) and any applicable Mitigation Measures issued by the Planning Division shall be photographically or electronically placed on mylar sheets and included in the Grading and Street Improvement plans.

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51. The developer shall monitor, supervise and control all construction and construction supportive activities, so as to prevent these activities from causing a public nuisance, including but not limited to, insuring strict adherence to the following:
(a) Removal of dirt, debris, or other construction material deposited on any public street no later than the end of each working day.
(b) Observance of working hours as stipulated on permits issued by the Land Development Division.
(c) The construction site shall accommodate the parking of all motor vehicles used by persons working at or providing deliveries to the site.
(d) All dust control measures per South Coast Air Quality Management District (SCAQMD) requirements during the grading operations.
Violation of any condition, restriction or prohibition set forth in these conditions shall subject the owner, applicant, developer or contractor (s) to remedy as noted in City Municipal Code 8.14.090. In addition, the City Engineer or Building Official may suspend all construction related activities for violation of any condition, restriction or prohibition set forth in these conditions until such time as it has been determined that all operations and activities are in conformance with these conditions.

52. Prior to any plan approval, a final detailed drainage study (prepared by a registered/licensed civil engineer) shall be submitted for review and approved by the City Engineer. The study shall include existing and proposed hydrologic conditions as well as hydraulic calculations for all drainage control devices and storm drain lines. [MC 9.14.110(A.1)]. A digital (pdf) copy of the approved drainage study shall be submitted to the Land Development Division.

53. If improvements associated with this project are not initiated within two (2) years of the date of approval of the Public Improvement Agreement (PIA), the City Engineer may require that the engineer's estimate for improvements associated with the project be modified to reflect current City construction costs in effect at the time of request for an extension of time for the PIA or issuance of a permit.

54. The developer shall protect downstream properties from damage caused by alteration of drainage patterns (i.e. concentration or diversion of flow, etc). Protection shall be provided by constructing adequate drainage facilities, including, but not limited to, modifying existing facilities or by securing a drainage easement. [MC 9.14.110]

55. The tentative map, master plot plan, plot plan, or conditional use permit shall correctly show all existing easements, traveled ways, and drainage courses. Any omission may require the map or plans associated with this application to be resubmitted for further consideration. [MC 9.14.040(A)]

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Prior to Grading Plan Approval

56. Two (2) copies of the final project-specific Water Quality Management Plan (WQMP) shall be submitted for review and approved by the City Engineer, which:

    a. Addresses Site Design Best Management Practices (BMPs) such as minimizing impervious areas, maximizing permeability, minimizes directly connected impervious areas to the City's street and storm drain systems, and conserves natural areas;

    b. Incorporates Source Control BMPs and provides a detailed description of their implementation;

    c. Describes the long-term operation and maintenance requirements for BMPs requiring maintenance; and

    d. Describes the mechanism for funding the long-term operation and maintenance of the BMPs.

    A copy of the final WQMP template can be obtained on the City 's Website or by contacting the Land Development Division. A digital (pdf) copy of the approved final project-specific Water Quality Management Plan (WQMP) shall be submitted to the Land Development Division.

57. The developer shall ensure compliance with the City Grading ordinance, these Conditions of Approval and the following criteria:

    a. The project street and lot grading shall be designed in a manner that perpetuates the existing natural drainage patterns with respect to tributary drainage area and outlet points. Unless otherwise approved by the City Engineer, lot lines shall be located at the top of slopes.

    b. Any grading that creates cut or fill slopes adjacent to the street shall provide erosion control, sight distance control, and slope easements as approved by the City Engineer.

    c. All improvement plans are substantially complete and appropriate clearance letters are provided to the City.

    d. A soils/geotechnical report (addressing the soil's stability and geological conditions of the site) shall be submitted to the Land Development Division for review. A digital (pdf) copy of the soils/geotechnical report shall be submitted to the Land Development Division.

58. Grading plans (prepared by a registered/licensed civil engineer) shall be submitted for review and approved by the City Engineer per the current submittal requirements.

59. The developer shall select Low Impact Development (LID) Best Management Practices (BMPs) designed per the latest version of the Water Quality Management Plan (WQMP) - a guidance document for the Santa Ana region of Riverside County.

60. The developer shall pay all remaining plan check fees.

61. A Storm Water Pollution Prevention Plan (SWPPP) shall be prepared in conformance with the State's current Construction Activities Storm Water General Permit. A copy of the current SWPPP shall be kept at the project site and be available for review upon request.

62. For projects that will result in discharges of storm water associated with construction with a soil disturbance of one or more acres of land, the developer shall submit a Notice of Intent (NOI) and obtain a Waste Discharger's Identification number (WDID#) from the State Water Quality Control Board (SWQCB) which shall be noted on the grading plans.

63. Landscape & Irrigation plans (prepared by a registered/licensed civil engineer) for water quality BMPs shall be submitted for review and approved by the City Engineer per the current submittal requirements, if applicable.

Prior to Grading Permit

64. A receipt showing payment of the Area Drainage Plan (ADP) fee to Riverside County Flood Control and Water Conservation District shall be submitted. [MC 9.14.100(O)]

65. If the developer chooses to construct the project in phases, a Construction Phasing Plan for the construction of on-site public and private improvements shall be submitted for review and approved by the City Engineer.

66. Prior to the payment of the Development Impact Fee (DIF), the developer may enter into a DIF Improvement Credit Agreement to secure credit for the construction of applicable improvements. If the developer fails to complete this agreement prior to the timing specified above, no credits will be given. The developer shall pay current DIF fees adopted by the City Council. [Ord. 695 § 1.1 (part), 2005] [MC 3.38.030, 040, 050]

67. A digital (pdf) copy of all approved grading plans shall be submitted to the Land Development Division.

68. Security, in the form of a cash deposit (preferable), or letter of credit shall be submitted as a guarantee of the implementation and maintenance of erosion control measures. At least twenty-five (25) percent of the required security shall be in the form of a cash deposit with the City. [MC 8.21.160(H)]

69. Security, in the form of a cash deposit (preferable), or letter of credit shall be submitted as a guarantee of the completion of the grading operations for the project. [MC 8.21.070]

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70. The developer shall pay all applicable inspection fees.

Prior to Improvement Plan Approval

71. The developer is required to bring any existing access ramps adjacent to and fronting the project to current ADA (Americans with Disabilities Act) requirements. However, when work is required in an intersection that involves or impacts existing access ramps, all access ramps in that intersection shall be retrofitted to comply with current ADA requirements, unless otherwise approved by the City Engineer.

72. The developer shall submit clearances from all applicable agencies, and pay all applicable plan check fees.

73. The street improvement plans shall comply with current City policies, plans and applicable City standards (i.e. MVSI-160 series, etc.) throughout this project.

74. The design plan and profile shall be based upon a centerline, extending beyond the project boundaries a minimum distance of 300 feet at a grade and alignment approved by the City Engineer.

75. Drainage facilities (i.e. catch basins, etc.) with sump conditions shall be designed to convey the tributary 100-year storm flows. Secondary emergency escape shall also be provided.

76. The hydrology study shall be designed to accept and properly convey all off -site drainage flowing onto or through the site. All storm drain design and improvements shall be submitted for review and approved of the City Engineer. In the event that the City Engineer permits the use of streets for drainage purposes, the provisions of current City standards shall apply. Should the quantities exceed the street capacity or the use of streets be prohibited for drainage purposes, as in the case where one travel lane in each direction shall not be used for drainage conveyance for emergency vehicle access on streets classified as minor arterials and greater, the developer shall provide adequate facilities as approved by the City Engineer. [MC 9.14.110 A.2]

77. All public improvement plans (prepared by a licensed/registered civil engineer) shall be submitted for review and approved by the City Engineer per the current submittal requirements.

78. The plans shall indicate any restrictions on trench repair pavement cuts to reflect the City's moratorium on disturbing newly-constructed pavement less than three (3) years old and recently slurry sealed streets less than one (1) year old. Pavement cuts for trench repairs may be allowed for emergency repairs or as specifically

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approved by the City Engineer.

79. The developer shall pothole to determine the exact location and elevation of existing underground utilities and incorporate the results into the design of the plans. The developer shall coordinate with all affected utility companies and bear all costs of utility relocations.

Prior to Building Permit

80. An engineered-fill certification, rough grade certification and compaction report shall be submitted for review and approved by the City Engineer. A digital (pdf) copy of the approved compaction report shall be submitted to the Land Development Division. All pads shall meet pad elevations per approved grading plans as noted by the setting of "blue-top" markers installed by a registered land surveyor or licensed civil engineer.

81. For Commercial/Industrial projects, the owner may have to secure coverage under the State's General Industrial Activities Storm Water Permit as issued by the State Water Resources Control Board.

82. For all subdivision projects, the map shall be recorded (excluding model homes). [MC 9.14.190]

83. All outstanding fees shall be paid.

84. All required as-built plans (prepared by a registered/licensed civil engineer) shall be submitted for review and approved by the City Engineer per the current submittal requirements.

85. The engineered final/precise grade certification shall be submitted for review and approved by the City Engineer.

86. For non-subdivision projects, in compliance with Proposition 218, the developer shall agree to approve the City of Moreno Valley NPDES Regulatory Rate Schedule that is in place at the time of certificate of occupancy issuance. Under the current permit for storm water activities required as part of the National Pollutant Discharge Elimination System (NPDES) as mandated by the Federal Clean Water Act, this project is subject to the following requirements:

a. Select one of the following options to meet the financial responsibility to provide storm water utilities services for the required continuous operation, maintenance, monitoring system evaluations and enhancements, remediation and/or replacement, all in accordance with Resolution No. 2002-46.

i. Participate in the mail ballot proceeding in compliance with Proposition 218, for the Common Interest, Commercial, Industrial and Quasi-Public Use

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NPDES Regulatory Rate Schedule and pay all associated costs with the ballot process; or

ii. Establish an endowment to cover future City costs as specified in the Common Interest, Commercial, Industrial and Quasi-Public Use NPDES Regulatory Rate Schedule.

b. Notify the Special Districts Division of the intent to request building permits 90 days prior to their issuance and the financial option selected. The financial option selected shall be in place prior to the issuance of certificate of occupancy. [California Government Code & Municipal Code]

87. The developer shall complete all public improvements in conformance with current City standards, except as noted in the Special Conditions, including but not limited to the following:

a. Street improvements including, but not limited to: pavement, base, curb and/or gutter, cross gutters, spandrel, sidewalks, drive approaches, pedestrian ramps, street lights, signing, striping, under sidewalk drains, landscaping and irrigation, medians, redwood header boards, pavement tapers/transitions and traffic control devices as appropriate.

b. Storm drain facilities including, but not limited to: storm drain pipe, storm drain laterals, open channels, catch basins and local depressions.

c. City-owned utilities.

d. Sewer and water systems including, but not limited to: sanitary sewer, potable water and recycled water.

e. Under grounding of all existing and proposed utilities adjacent to and on-site. [MC 9.14.130]

f. Relocation of overhead electrical utility lines including, but not limited to: electrical, cable and telephone.

88. For commercial, industrial and multi-family projects, a "Stormwater Treatment Device and Control Measure Access and Maintenance Covenant" shall be recorded to provide public notice of the maintenance requirements to be implemented per the approved final project-specific WQMP. A boilerplate copy of the "Stormwater Treatment Device and Control Measure Access and Maintenance Covenant" can be obtained by contacting the Land Development Division.

89. The applicant shall ensure the following, pursuant to Section XII. I. of the 2010 NPDES Permit:

a. Field verification that structural Site Design, Source Control and Treatment Control BMPs are designed, constructed and functional in accordance with the approved Final Water Quality Management Plan (WQMP).

b. Certification of best management practices (BMPs) from a state licensed civil engineer. An original WQMP BMP Certification shall be submitted for review and approved by the City Engineer.

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90. The Developer shall comply with the following water quality related items:

a. Notify the Land Development Division prior to construction and installation of all structural BMPs so that an inspection can be performed.

b. Demonstrate that all structural BMPs described in the approved final project-specific WQMP have been constructed and installed in conformance with the approved plans and specifications;

c. Demonstrate that Developer is prepared to implement all non -structural BMPs described in the approved final project-specific WQMP; and

d. Demonstrate that an adequate number of copies of the approved final project-specific WQMP are available for future owners/occupants.

e. Clean and repair the water quality BMP's, including re-grading to approved civil drawing if necessary.

f. Provide City with updated Engineer's Line and Grade Certification.

g. Obtain approval and complete installation of the irrigation and landscaping.

91. Prior to parcel map recordation or building permit issuance, either a reciprocal access easement shall be shown on the map or a separate recorded copy of a reciprocal access agreement between the project and the adjacent parcel to the south shall be provided to the City.

92. Prior to F-WQMP approval, post development BMPs for Brodiaea Avenue shall incorporated in accordance with MS4 Permit R8-2010-033.

93. The Applicant has proposed to incorporate the use of an infiltration basin and self-retaining areas. Final design details of the treatment control BMPs shall be provided in the F-WQMP.

94. Prior to rough grading plan approval, the following shall be shown on the plans and dedications made via separate instrument and submitted to the City for review and approval: A 4-foot pedestrian right-of-way dedication behind all driveway approaches per City Standard MVSI-112C-0.

95. Prior to occupancy, the following improvements shall be completed:

a. Nason Street, Modified Divided Major Arterial, City Standard MVSI-102A-0 (120-foot RW / 102-foot CC) shall construct to half-width plus 21' along the entire project's westerly frontage. Improvements shall consist of, but not be limited to pavement, base, street lights, driveway approaches, pedestrian ramps, curb & gutter, and sidewalk. In addition, replace or install any damaged, substandard or missing improvements.

b. Brodiaea Avenue, Collector, City Standard MVSI-106BA-0 (66-foot RW / 44 -foot CC) shall be constructed to half-width plus 18' along the entire project's northerly frontage. Improvements shall consist of, but not be limited to, pavement,

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base, street lights, driveway approaches, pedestrian ramps, curb & gutter, sidewalk. In addition, replace or install any damaged, substandard or missing improvements.

96. Prior to precise grading plan approval, the grading plans shall clearly show that the parking lot conforms to City standards. The parking lot shall be 5% maximum, 1% minimum, 2% maximum at or near any disabled parking stall and travel way. Ramps, curb openings and travel paths shall all conform to current ADA standards as outlined in Department of Justice's "ADA Standards for Accessible Design", Excerpt from 28 CFR Part 36. (www.usdoj.gov) and as approved by the City's Building and Safety Division.

97. Prior to approval of the parcel map, the map shall show the following:

a. A seven-foot street right-of-way vacation on the south side of Brodiaea Avenue along project frontage.
b. A four-foot street right-of-way dedication on the east side of Nason Street along the project frontage.

Special Districts Division

98. The ongoing maintenance of any landscaping required to be installed behind the curb shall be the responsibility of the property owner.

99. Street Light Authorization forms for all street lights that are conditioned to be installed as part of this project must be submitted to the Special Districts Division for approval, prior to street light installation. The Street Light Authorization form can be obtained from the utility company providing electric service to the project, either Moreno Valley Utility or Southern California Edison. For questions, contact the Special Districts Division at 951.413.3480 or specialdistricts@moval.org.

100. The parcel(s) associated with this project have been incorporated into the Moreno Valley Community Services District Zone A (Parks & Community Services) and Zone C (Arterial Street Lighting). All assessable parcels therein shall be subject to annual parcel taxes for Zone A and Zone C for operations and capital improvements.

101. Prior to the issuance of the first building permit for this project, the Developer shall pay Advanced Energy fees for all applicable Residential and Arterial Street Lights required for this development. Payment shall be made to the City of Moreno Valley and collected by the Land Development Division. Fees are based upon the Advanced Energy fee rate in place at the time of payment, as set forth in the current Listing of City Fees, Charges, and Rates adopted by City Council. The Developer shall provide a copy of the receipt to the Special Districts Division

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(specialdistricts@moval.org). Any change in the project which may increase the number of street lights to be installed will require payment of additional Advanced Energy fees at the then current fee. Questions may be directed to the Special Districts Division at 951.413.3480 or specialdistricts@moval.org.

102. This project has been identified to potentially be included in the formation of a Map Act Area of Benefit Special District for the construction of major thoroughfares and/or freeway improvements. The property owner(s) shall participate in such District and pay any special tax, assessment, or fee levied upon the project property for such District. At the time of the public hearing to consider formation of the district, the property owner(s) will not protest the formation, but will retain the right to object any eventual assessment that is not equitable should the financial burden of the assessment not be reasonably proportionate to the benefit the affected property obtains from the improvements to be installed. The Developer must notify the Special Districts Division at 951.413.3480 or at specialdistricts@moval.org of its selected financial option when submitting an application for the first building permit to determine whether the development will be subjected to this condition. If subject to the condition, the special election requires a 90 day process in compliance with the provisions of Article 13C of the California Constitution. (Street & Highway Code, GP Objective 2.14.2, MC 9.14.100).

103. This project is conditioned for a proposed district to provide a funding source for the operation and maintenance of public improvements and/or services associated with new development in that territory. The Developer shall satisfy this condition with one of the options outlined below.

a. Participate in a special election for maintenance/services and pay all associated costs of the election process and formation, if any. Financing may be structured through a Community Facilities District, Landscape and Lighting Maintenance District, or other financing structure as determined by the City; or

b. Establish an endowment fund to cover the future maintenance and/or service costs.

The Developer must notify the Special Districts Division at 951.413.3480 or at specialdistricts@moval.org when submitting the application for building permit issuance. If the first building permit is pulled prior to formation of the district, this condition will not apply. If the district has been or is in the process of being formed the Developer must inform the Special Districts Division of its selected financing option (a. or b. above). The option for participating in a special election requires 90 days to complete the special election process. This allows adequate time to be in compliance with the provisions of Article 13C of the California Constitution.

The financial option selected shall be in place prior to the issuance of the first

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certificate of occupancy for the project.

104. This project is conditioned to provide a funding source for the following special financing program(s):

a. Street Lighting Services for capital improvements, energy charges, and maintenance.

The Developer's responsibility is to provide a funding source for the capital improvements and the continued maintenance. The Developer shall satisfy this condition with one of the options below.

i. Participate in a special election (mail ballot proceeding) and pay all associated costs of the special election and formation, if any. Financing may be structured through a Community Services District zone, Community Facilities District, Landscape and Lighting Maintenance District, or other financing structure as determined by the City; or

ii. Establish a Property Owner's Association (POA) or Home Owner's Association (HOA) which will be responsible for any and all operation and maintenance costs

The Developer must notify the Special Districts Division at 951.413.3480 or at specialdistricts@moval.org of its selected financial option when submitting the application for building permit issuance. The option for participating in a special election requires approximately 90 days to complete the special election process. This allows adequate time to be in compliance with the provisions of Article 13C of the California Constitution.

The financial option selected shall be in place prior to the issuance of the first certificate of occupancy for the project and prior to acceptance of any improvements.

105. Commercial (BP) If Land Development, a Division of the Public Works Department, requires this project to supply a funding source necessary to provide for, but not limited to, stormwater utilities services for the continuous operation, remediation and/or replacement, monitoring, systems evaluations and enhancement of on -site facilities and performing annual inspections of the affected areas to ensure compliance with state mandated stormwater regulations, a funding source needs to be established. The Developer must notify the Special Districts Division at 951.413.3480 or at specialdistricts@moval.org of its selected financial option for the National Pollution Discharge Elimination System (NPDES) program when submitting the application for the first building permit issuance (see Land Development's related condition). Participating in a special election the process requires a 90 day period prior to the City's issuance of a building permit. This

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allows adequate time to be in compliance with the provisions of Article 13D of the California Constitution. (California Health and Safety Code Sections 5473 through 5473.8 (Ord. 708 Section 3.1, 2006) & City of Moreno Valley Municipal Code Title 3, Section 3.50.050.)

106. This project has been identified to be included in the formation of a Community Facilities District (Mello-Roos) for Public Safety services, including but not limited to Police, Fire Protection, Paramedic Services, Park Rangers, and Animal Control services. The property owner(s) shall not protest the formation; however, they retain the right to object to the rate and method of maximum special tax. In compliance with Proposition 218, the property owner shall agree to approve the mail ballot proceeding (special election) for either formation of the CFD or annexation into an existing district. The Developer must notify the Special Districts Division at 951.413.3480 or at specialdistricts@moval.org when submitting the application for building permit issuance to determine the requirement for participation. If the first building permit is pulled prior to formation of the district, this condition will not apply. If the condition applies, the special election will require a minimum of 90 days prior to issuance of the first building permit. This allows adequate time to be in compliance with the provisions of Article 13C of the California Constitution. (California Government Code Section 53313 et. seq.)

107. Any damage to existing landscape areas maintained by the City of Moreno Valley due to project construction shall be repaired/replaced by the Developer, or Developer's successors in interest, at no cost to the City of Moreno Valley.

<u>Transportation Engineering Division</u>

108. Conditions of approval may be modified if the project or its phasing plan is altered from any approved plans.

109. Nason Street is classified as a Divided Major Arterial at this location. Any improvements undertaken by this project shall be consistent with the City's standards for this facility.

110. Brodiaea Avenue is classified as a Collector (66' RW/44' CC) per City Standard Plan No. MVSI-106B-0. Any improvements undertaken by this project shall be consistent with the City's standards for this facility.

111. Access at the proposed street and driveways shall be as follows:

- West bound approach at Nason Street/Brodiaea Avenue intersection: Only right turns in/out are allowed. Access shall be controlled by the existing raised concrete median on Nason Street.
- Nason Street north driveway: Only right turns in/out are allowed. Access shall be

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controlled by the existing raised concrete median on Nason Street.

- Nason Street south driveway: The existing traffic signal at Nason Street/Hospital Road intersection shall be modified to support full access.
- Brodiaea Avenue driveways: Full access is allowed.

112. Project driveways shall conform to City of Moreno Valley Standard No. MVSI-112C-0 for Commercial Driveway Approaches.

113. Prior to the final approval of the street improvement plans, traffic signal modification plans will be required for the traffic signal located at Nason Street/Hospital Road intersection. Modifications may include but not limited to new signal poles, new pull boxes, new traffic detector loops or video/radar detection system, relocation of signal controller cabinet, etc. Specific modifications shall be determined during plan check review.

114. All proposed on-site traffic signing and striping should be accordance with the latest California Manual on Uniform Traffic Control Devices (CAMUTCD).

115. Prior to issuance of a construction permit, construction traffic control plans prepared by a qualified, registered Civil or Traffic engineer may be required for plan approval or as required by the City Traffic Engineer.

116. Prior to final approval of the street improvement plans, the project plans shall demonstrate that sight distance at proposed streets and driveways conforms to City Standard Plan No. MVSI-164A-0 through MVSI-164C-0.

117. Prior to the final approval of the street improvement plans, a signing and striping plan shall be prepared per City of Moreno Valley Standard Plans - Section 4 for Nason Street and Brodiaea Avenue.

118. Prior to issuance of Certificate of Occupancy for any building in Phase 3 or prior to the project access at Nason Street/Hospital Road intersection being opened to vehicular traffic in any phase, the traffic signal at this intersection shall be modified and operational per the approved plans to the satisfaction of the City Engineer.

119. Prior to issuance of Certificate of Occupancy for any building in any of the project phases, all signing and striping on Nason Street and Brodiaea Avenue shall be installed per current City Standards and the approved plans.

120. Prior to acceptance of streets into the City-maintained road system, all approved signing and striping shall be installed per current City Standards and the approved plans.

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CITY OF MORENO VALLEY
CONDITIONS OF APPROVAL
Conditional Use Permit (PEN16-0057)

EFFECTIVE DATE:
EXPIRATION DATE:

COMMUNITY DEVELOPMENT DEPARTMENT

Planning Division

1. ANY expansion to this use or exterior alterations will require the submittal of a separate application(s) and shall be reviewed and approved under separate permit(s). (MC 9.02.080)

2. The developer, or the developer's successor-in-interest, shall be responsible for maintaining any undeveloped portion of the site in a manner that provides for the control of weeds, erosion and dust. (MC 9.02.030)

3. This approval shall expire three years after the approval date of this project unless used or extended as provided for by the City of Moreno Valley Municipal Code. (MC 9.02.230)

4. In the event the use hereby permitted ceases operation for a period of one (1) year or more, or as defined in the current Municipal Code, this permit may be revoked in accordance with provisions of the Municipal Code. (applicable to CUP's)

5. All landscaped areas shall be maintained in a healthy and thriving condition, free from weeds, trash and debris. (MC 9.02.030)

6. The site shall be developed in accordance with the approved plans on file in the Community Development Department - Planning Division, the Municipal Code regulations, General Plan, and the conditions contained herein. Prior to any use of the project site or business activity being commenced thereon, all Conditions of Approval shall be completed to the satisfaction of the Planning Official. (MC 9.14.020)

7. Any signs indicated on the submitted plans are not included with this approval. Any signs, whether permanent (e.g. wall, monument) or temporary (e.g. banner, flag), require separate application and approval by the Planning Division. No signs are permitted in the public right of way. (MC 9.12)

8. All site plans, grading plans, landscape and irrigation plans, fence/wall plans, lighting plans and street improvement plans shall be coordinated for consistency

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with this approval.

Special Conditions

9. Conditional Use Permit PEN16-0057 is approved for Building Five, approximately 258,600 square feet to include 60,800 for Skilled Nursing and 91,800 square feet for Assisted Living facilities and enclosed courtyards, located in the medical complex. Building Five (5) will be located on Tentative Parcel's 4, 5, and 6 of the new Tentative Parcel Map 36227. A change or modification shall require separate approval. For a Conditional Use Permit, violation may result in revocation of the Conditional Use Permit.

10. The following Mitigation Measures apply to this project:

AQ-1: The applicant shall ensure that approved architectural coatings are utilized. Prior to the issuance of building permits, the City will verify that construction plans submitted by the project proponent reflect use of architectural coatings where the content of volatile organic compounds (VOC) does not exceed 25 grams per liter (g/l) for interior and exterior applications. This measure must be verified through standard building inspections in light of the performance standard that emissions of volatile organic compounds from application of interior or exterior coatings shall not exceed the daily emissions thresholds established by the South Coast Air Quality Management District. The applicant bears the cost of implementing this mitigation.

BIO-1: The applicant shall avoid impacts to nesting birds and violation of state and federal laws pertaining to birds, all construction related activities (including but not limited to mobilization and staging, clearing, grubbing, vegetation removal, fence installation, demolition, and grading) should occur outside the avian nesting season (generally prior to Feb 1 or after Aug 31). If construction and construction noise occurs within the avian nesting season (from Feb 1 to Aug 31 or according to local requirements), all suitable habitats located within the project's area of disturbance including staging and storage areas plus a 250-foot (passerines) and 1,000 foot (raptor nests) buffer around these areas shall be thoroughly surveyed, as feasible, for the presence of active nests by a qualified biologist no more than 5-days before commencement of any site disturbance activities and equipment mobilization. If project activities are delayed more than 5-days, an additional nesting bird survey shall be performed. Active nesting is present if a bird is sitting in a nest, a nest has eggs or chicks in it, or adults are observed carrying food to the nest. The results of these surveys shall be documented. If it is determined that birds are actively nesting within the survey area, Mitigation Measure BIO-2 shall apply. Conversely, if the survey area is found to be absent of nesting birds, Mitigation Measure BIO-2 shall not be required.

BIO-2: If pre-construction nesting bird surveys result in the location of active nests, the applicant shall ensure that no site disturbance and mobilization of heavy equipment (including but not limited to equipment staging, fence installation, clearing, grubbing, vegetation removal, demolition and grading), shall take place within 250 feet of non-raptor nests and 1,000 feet of raptor nests, or as determined by a qualified biologist in consultation with the CDFW, until the chicks have fledged. Monitoring shall be required to insure compliance with the MBTA and relevant CDFW requirements. Monitoring dates and findings shall be documented.

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BIO-3: The applicant shall ensure a pre-construction survey for burrowing owls be completed no more than 30-days prior to the start of construction at the Project site to ensure no burrowing owls have moved onto the site.

CUL-1: Prior to the issuance of a grading permit, the Applicant shall retain a qualified professional archaeologist who meets U.S. Secretary of the Interior's Professional Qualifications and Standards. The Project archaeologist and Native American Tribal Representatives will conduct an Archaeological Sensitivity Training for construction personnel prior to commencement of excavation activities. The training session will include a handout and will focus on how to identify archaeological and Tribal Cultural resources that may be encountered during earthmoving activities and the procedures to be followed in such an event, including who to contact and the appropriate avoidance measures that need to be undertaken until the find(s) can be properly evaluated; the duties of archaeological and Native American monitors; and the general steps a qualified professional archaeologist would follow in conducting a salvage investigation if one is necessary. All new construction personnel that will conduct earthwork or grading activities must take the Archaeological Sensitivity Training prior to beginning work on the project and the professional archaeologist shall make themselves available to provide the training on an as-needed basis. A sign-in sheet shall be compiled to track attendance and shall be submitted to the City with the Phase IV Archaeological Monitoring Report.

CUL-2: Preconstruction Notification of Native American Tribal Representatives. Prior to the issuance of a grading permit, the Applicant shall provide evidence to the City of Moreno Valley that the Agua Band of Cahuilla Indians, Pechanga Band of Luiseño Indians and the Soboba Band of Luiseño Indians tribal representatives (hereafter referred to as "Native American Tribal Representatives") received a minimum of 30 days advance notice of all mass grading and trenching activities, and provide evidence of monitoring agreements between the Applicant and the Tribes. The Native American Tribal Representatives shall be notified a minimum of 48 hours in advance and allowed to attend the pre-grading meeting with the City and project construction contractors and/or monitor all project mass grading and trenching activities.

CUL-3: Prior to grading permit issuance, the City shall verify that the following note is included on the Grading Plan: "If any suspected archaeological resources are discovered during ground-disturbing activities and the archaeological monitor or Tribal representatives are not present, the construction supervisor is obligated to halt work in a 100-foot radius around the find and call the project archaeologist and the Tribal representatives to the site to assess the significance of the find."

CUL-4: Prior to the issuance of a grading permit, the Applicant shall retain a qualified archaeological monitor. The archaeological monitor will work under the direction and guidance of the qualified professional archaeologist and will meet the U.S. Secretary of the Interior's Professional Qualifications and Standards. The archeological monitor shall have the authority to temporarily redirect earthmoving activities in the event that suspected archaeological resources are unearthed during project construction. Archaeological monitoring is required at all depths and strata. The archaeological monitor shall be present during all construction excavations (e.g., grading, trenching, or clearing/grubbing) into non-fill younger Pleistocene alluvial sediments. Multiple earth-moving construction activities may require multiple archaeological monitors. The frequency of monitoring shall be based on the rate of excavation and grading activities, proximity to known archaeological resources, the materials being excavated (native versus artificial fill soils), and the depth of excavation, and if found, the abundance and type of archaeological resources encountered. Full-time monitoring can be reduced to part-time inspections if determined adequate by the qualified professional archaeologist.

CUL-5: The applicant shall ensure that all ground disturbing activities are ceased and

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treatment plans are implemented if archaeological resources are encountered. In the event that archaeological resources are unearthed during ground-disturbing activities, ground-disturbing activities shall be halted or diverted away from the vicinity of the find so that the find

can be evaluated. A buffer area of at least 100 feet shall be established around the find where construction activities shall not be allowed to continue until a qualified archaeologist has examined the newly discovered artifact(s) and has evaluated the area of the find. Work shall be allowed to continue outside of the buffer area. All archaeological resources unearthed by project construction activities shall be evaluated by a qualified professional archaeologist, who meets the U.S. Secretary of the Interior's Professional Qualifications and Standards. Should the newly discovered artifacts be determined to be prehistoric, Native American Tribes/Individuals should be contacted and consulted and Native American construction monitoring should be initiated. The Applicant and City shall coordinate with the archaeologist to develop an appropriate treatment plan for the resources. The plan may include implementation of archaeological data recovery excavations to address treatment of the resource along with subsequent laboratory processing and analysis.
In the event that a cultural resource is encountered during ground-disturbing activities, the landowner(s) shall relinquish ownership of all such resources, including sacred items, burial goods, and all archaeological artifacts and non-human remains. The artifacts shall be relinquished through one or more of the following methods and evidence of such shall be provided to the City of Moreno Valley Planning Department:

1. Accommodate the process for Preservation-In-Place/Onsite with the consulting Native American tribes or bands, as detailed in the treatment plan prepared by the professional paleontologist. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not.
2. A curation agreement with an appropriate qualified repository within Riverside County that meets federal standards per 36 CFR Part 79; therefore, the resources would be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility within Riverside County, to be accompanied by payment of the fees necessary for permanent curation; and/or
3. For purposes of conflict resolution, if more than one Native American tribe or band is involved with the project and cannot come to an agreement as to the disposition of cultural materials, they shall be curated at the Western Science Center by default.

CUL-6: Prior to building permit issuance, the Project archaeologist shall prepare a final Phase IV Monitoring Report as outlined in the CRMP, which shall be submitted to the City Planning Division, the appropriate Native American tribe(s), and the Eastern Information Center at the University of California, Riverside. The report shall include a description of resources unearthed, if any, evaluation of the resources with respect to the California Register and CEQA, and treatment of these resources. All cultural material, excluding sacred, ceremonial, grave goods and human remains, collected during the grading monitoring program and from any previous archaeological studies or excavations on the project site shall be curated in a Riverside County repository according to the current professional repository standards and may include the Pechanga Band's curatorial facility in Temecula, CA.

CUL-7: Conduct Paleontological Sensitivity Training for Construction Personnel. Prior to the issuance of a grading permit, the Applicant shall retain a professional paleontologist, who meets the qualifications set forth by the Society of Vertebrate Paleontology. The paleontologist shall conduct a Paleontological Sensitivity Training for construction personnel prior to commencement of excavation activities. The training will include a handout and will focus on how to identify paleontological resources that may be encountered during earthmoving activities, and the procedures to be followed in such an event, including who to contact and the appropriate avoidance measures that need to be undertaken until the find(s) can be properly evaluated; the duties of paleontological monitors; notification and other procedures to follow upon discovery of resources; and the general steps a qualified professional paleontologist would follow in conducting a salvage investigation if one is

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necessary. All new construction personnel that will conduct earthwork or grading activities must take the Paleontological Sensitivity Training prior to beginning work on the project and the professional paleontologist shall make themselves available to provide the training on an as-needed basis.

CUL-8: The applicant shall ensure the monitoring of construction excavations for paleontological resources is required for all excavations in older Quaternary alluvial fan deposits or in sedimentary deposits derived from the Mt. Eden Formation. Prior to the issuance of a grading permit, the Applicant shall retain a qualified paleontological monitor, who will work under the guidance and direction of a professional paleontologist, and who meets the qualifications set forth by the Society of Vertebrate Paleontology. The paleontological monitor shall have the authority to temporarily redirect earthmoving activities in the event that suspected paleontological resources are unearthed during project construction. The paleontological monitor shall be present during all construction excavations including, but not limited to grading, trenching, boring, and clearing/grubbing). Multiple earth-moving construction activities may require multiple paleontological monitors. The frequency of monitoring shall be based on the rate of excavation and grading. Monitoring may be reduced if potentially fossiliferous units are not present in the subsurface, or if present, are determined upon exposure and examination by the professional paleontologist to have a low potential to contain or yield fossil resources.

CUL-9: The applicant shall ensure that in the event that paleontological resources and or unique geological features are unearthed during ground-disturbing activities, all ground disturbing activities shall be halted or diverted away from the vicinity of the find in order to evaluate the resource. A buffer area of at least 100 feet shall be established around the find where construction activities shall not be allowed to continue until appropriate paleontological treatment plan has been approved by the Applicant and the City. Work shall be allowed to continue outside of the buffer area. The Applicant and City shall coordinate with a professional paleontologist, who meets the qualifications set forth by the Society of Vertebrate Paleontology, to develop an appropriate treatment plan for the resources. Treatment may include implementation of paleontological salvage excavations to remove the resource along with subsequent laboratory processing and analysis or preservation in place. At the paleontologist's discretion and to reduce construction delay, the grading and excavation contractor shall assist in removing rock samples for initial processing. Recovered specimens shall be properly prepared to a point of identification and permanent preservation, including screen washing sediments to recover small invertebrates and vertebrates, if necessary. Identification and curation of specimens into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable storage is required for significant discoveries.

CUL-10: The applicant shall ensure prior to building permits, that a professional paleontologist prepares a report summarizing the results of the monitoring and salvaging efforts, the methodology used in these efforts, as well as a description of the fossils collected and their significance as well as any necessary maps and graphics to accurately record the original location of these resources. The report shall be submitted to the Applicant, the City, the San Bernardino County Natural History Museum, Natural History Museum of Los Angeles County, and representatives of other appropriate or concerned agencies to signify the satisfactory completion of the project and required mitigation measures.

CUL-11: In the event that any human remains are unearthed during project construction, the City of Moreno Valley and the Applicant shall comply with State Health and Safety Code Section 7050.5 The City of Moreno Valley and the Applicant shall immediately notify the Riverside County Coroner's office and no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition. If remains are determined to be of Native American descendent, the coroner has 24-hours to notify the Native American Heritage Commission (NAHC). The NAHC shall identify the person(s) thought to be the Most Likely Descendent (MLD). After the MLD has inspected the remains

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and the site, they have 48 hours to recommend to the landowner the treatment or disposal, with appropriate dignity, the human remains and any associated funerary objects. The MLD shall complete their inspection and make their recommendation within 48 hours of being granted access by the landowner to inspect the discovery. The recommendation may include the scientific removal and nondestructive analysis of human remains and cultural items associated with Native American burials. Upon the discovery of the Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred, as prescribed in this mitigation measure, with the MLD regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The landowner shall discuss and confer with the descendants all reasonable options regarding the descendants' preferences for treatment.

If the NAHC is unable to identify a MLD, or the MLD identified fails to make a recommendation, or the landowner rejects the recommendation of the MLD and the mediation provided for in Subdivision (k) of Section 5097.94, if invoked, fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall inter the human remains and items associated with Native American human remains with appropriate dignity on the facility property in a location not subject to further and future subsurface disturbance. A record of the reburial shall be filed with the NAHC and the CHRIS-EIC. Upon the reburial of the human remains, the MLD shall file a record of the reburial with the NAHC and the project archaeologist shall file a record of the reburial with the EIC.

NOI-1: Project proponent shall provide the following (or equivalent) noise abatement measures as part of the building construction plans in order to meet the City of Moreno Valley exterior noise standards of 60dBA for residential and 65dBA for commercial:
• Stationary construction noise sources such as generators or pumps must be located at least 100 feet from sensitive land uses, as feasible, or at maximum distance when necessary to complete work near sensitive land uses, to be verified by submittal of a construction staging plan. This mitigation measure must be implemented throughout construction and may be periodically monitored by the Planning Director, or designee during routine inspections.
• Construction staging areas must be located as far from noise sensitive land uses as feasible, to be verified by submittal of a construction staging plan. Implementation of this measure shall occur throughout construction through periodic monitoring by the Planning Director or designee during routine inspections.
• Throughout construction, the contractor shall ensure all construction equipment is equipped with included noise attenuating devices and are properly maintained. This mitigation measure shall be periodically monitored by the Planning Director or designee during routine inspections.
• Idling equipment must be turned off when not in use. This mitigation measure may be periodically monitored by the Planning Director or designee during routine inspections.
• Equipment must be maintained so that vehicles and their loads are secured from rattling and banging. This mitigation measure may be periodically monitored by the Planning Director or designee during routine inspections.

NOI-2: The developer shall ensure temporary construction noise control barriers shall be installed where residential uses are located adjacent to the project site (south and west). The type and location of the noise control barriers shall be shown on all grading and building plans and subject to approval by the Planning Director, or designee.

NOI-3: All construction activities shall comply with the City of Moreno Valley Noise Ordinance (Chapter 11.80 of the City of Moreno Valley Municipal Code). This requirement shall be noted on all grading and building plans and in bid documents issued to construction contractors.

TRA-1: The project applicant shall participate in the phased construction of off-site traffic signals through payment of traffic signal mitigation fees. The traffic signals within the study

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area at buildout should specifically include an interconnect of the traffic signals to function in a coordinated system. Traffic signal mitigation fees shall be paid prior to Opening Year (2020) with Project Phase 1 or alternate City approved deadline.

TRA-1: If, during mass grading and trenching activities, the Archaeologist or Tribal Monitor suspect that an archaeological resource and/or TCR may have been unearthed, the monitor identifying the potential resources, in consultation with the other monitor(s) as appropriate, shall immediately halt and redirect grading operations in a 100-foot radius around the find to allow identification and evaluation of the suspected resource. The Native American monitor(s) or appropriate representative(s) and the archaeological monitor shall evaluate the suspected resource and make a determination of significance pursuant to California Public Resources Code Section 21083.2. The archaeological monitor and Tribal monitor(s) or appropriate representative(s), the Project Applicant, and the City Planning Division shall confer regarding mitigation of the discovered resource(s). All sacred sites, should they be encountered within the project area, shall be avoided and preserved as the preferred mitigation, if feasible. If preservation in place is not feasible, treatment and/or mitigation may include implementation of archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis.

Prior to Grading Permit

11. Prior to issuance of any grading permits, mitigation measures contained in the Mitigation Monitoring Program approved with this project shall be implemented as provided therein. A mitigation monitoring fee, as provided by City ordinance, shall be paid by the applicant within 30 days of project approval. No City permit or approval shall be issued until such fee is paid. (CEQA)

12. Prior to issuance of grading permits, the developer shall pay the applicable Stephens' Kangaroo Rat (SKR) Habitat Conservation Plan mitigation fee. (Ord)

13. Within thirty (30) days prior to any grading or other land disturbance, a pre-construction survey for Burrowing Owls shall be conducted pursuant to the established guidelines of Multiple Species Habitat Conservation Plan. The pre-construction survey shall be submitted to the Planning Division prior to any disturbance of the site and/or grading permit issuance.

14. Prior to issuance of grading permits, the developer shall submit wall/fence plans to the Planning Division for review and approval as follows:

    A. A maximum 6 foot high solid decorative block perimeter wall with pilasters and a cap shall be required adjacent to all residential zoned areas.

    B. 3-foot high decorative wall, solid hedge or berm shall be placed in any setback areas between a public right of way and a parking lot for screening.

    C. Any proposed retaining walls shall also be decorative in nature, while the combination of retaining and other walls on top shall not exceed the height requirement.

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D. Proposed screening walls for truck loading areas and required loading docks shall also include decorative block walls with pilasters with a height up to fourteen (14) feet to fully screen trucks (industrial and some situations with commercial uses).

E. Walls and fences for visual screening are required when there are adjacent residential uses or residentially zone property. The height, placement and design will be based on a site specific review of the project. All walls are subject to the approval of the Planning Official. (DC 9.08.070)

15. Prior to the issuance of grading permits, a temporary project identification sign shall be erected on the site in a secure and visible manner. The sign shall be conspicuously posted at the site and remain in place until occupancy of the project. The sign shall include the following:

a. The name (if applicable) and address of the development.
b. The developer's name, address, and a 24-hour emergency telephone number.

16. Prior to issuance of grading permits, the location of the trash enclosure shall be included on the plans.

<u>Prior to Building Permit</u>

17. Prior to the issuance of building permits, covered trash enclosure (s) shall be included in the building plans or the Building submittal of the Fence and Wall plans. The trash enclosure(s), including the roof materials, shall be compatible with the architecture, color and materials of the building(s) design. Trash enclosure areas shall include landscaping on three sides. (GP Objective 43.6, DG)

18. Prior to issuance of any building permits, final landscaping and irrigation plans shall be submitted for review and approved by the Planning Division. After the third plan check review for landscape plans, an additional plan check fee shall apply. The plans shall be prepared in accordance with the City's Landscape Requirements and shall include:

A. A three (3) foot high decorative wall, solid hedge or berm shall be placed in any setback areas between a public right of way and a parking lot for screening.

B. Finger and end planters with required step outs and curbing shall be provided every 12 parking stalls as well as at the terminus of each aisle.

C. Diamond planters shall be provided every 3 parking stalls.

D. Drought tolerant landscape shall be used. Sod shall be limited to gathering areas. (or No sod shall be installed)

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E. Street trees shall be provided every 40 feet on center in the right of way.

F. On-site trees shall be planted at an equivalent of one (1) tree per thirty (30) linear feet of the perimeter of a parking lot and per thirty linear feet of a building dimension for the portions of the building visible from a parking lot or right of way. Trees may be massed for pleasing aesthetic effects.

G. Enhanced landscaping shall be provided at all driveway entries and street corner locations The review of all utility boxes, transformers etc. shall be coordinated to provide adequate screening from public view.

H. Landscaping on three sides of any trash enclosure.

I. All site perimeter and parking lot landscape and irrigation shall be installed prior to the release of certificate of any occupancy permits for the site or pad in question.

19. Prior to issuance of building permits, the Planning Division shall review and approve the location and method of enclosure or screening of transformer cabinets, commercial gas meters and back flow preventers as shown on the final working drawings. Location and screening shall comply with the following criteria : transformer cabinets and commercial gas meters shall not be located within required setbacks and shall be screened from public view either by architectural treatment or landscaping; multiple electrical meters shall be fully enclosed and incorporated into the overall architectural design of the building (s); back-flow preventers shall be screened by landscaping. (GP Objective 43.30)

20. Prior to issuance of a building permit, the developer /property owner or developer's successor-in-interest shall pay all applicable impact fees due at permit issuance, including but not limited to Multi-species Habitat Conservation Plan (MSHCP) mitigation fees. (Ord)

21. Prior to building final, the developer/owner or developer's/owner' s successor-in-interest shall pay all applicable impact fees, including but not limited to Transportation Uniform Mitigation fees (TUMF), and the City's adopted Development Impact Fees. (Ord)

22. Prior to or at building plan check submittal, the elevation plans shall include decorative lighting sconces on all sides of the buildings of the complex facing a parking lot, courtyard or plaza, or public right of way or open space to provide up-lighting and shadowing on the structures. Include drawings of the sconce details for each building within the elevation plans, approved by the Planning Division prior to building permit issuance.

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23. Prior to or at building plan check submittal, two copies of a detailed, on-site, computer generated, point-by-point comparison lighting plan, including exterior building, parking lot, and landscaping lighting, shall be submitted to the Planning Division for review and approval prior to the issuance of a building permit. The lighting plan shall be generated on the plot plan and shall be integrated with the final landscape plan. The plan shall indicate the manufacturer's specifications for light fixtures used, shall include style, illumination, location, height and method of shielding per the City's Municipal Code requirements. After the third plan check review for lighting plans, an additional plan check fee will apply. (MC 9.08.100, 9.16.280)

24. Prior to issuance of building permits, screening details shall be addressed on the building plans for roof top equipment submitted for Planning Division review and approval through the building plan check process. All equipment shall be completely screened so as not to be visible from public view, and the screening shall be an integral part of the building.

Building Division

25. The proposed non-residential project shall comply with the latest Federal Law, Americans with Disabilities Act, and State Law, California Code of Regulations, Title 24, Chapter 11B for accessibility standards for the disabled including access to the site, exits, bathrooms, work spaces, etc.

26. Prior to submittal, all new development, including residential second units, are required to obtain a valid property address prior to permit application. Addresses can be obtained by contacting the Building Safety Division at 951.413.3350.

27. Contact the Building Safety Division for permit application submittal requirements.

28. All new buildings 10,000 square feet and over, shall include building commissioning in the design and construction processes of the building project to verify that the building systems and components meet the owner 's or owner representative's project requirements (OPR). All requirements in The 2016 California Green Building Standards Code, sections 5.410.2 - 5.410.2.6 must be met.

29. Any construction within the city shall only be completed between the hour of seven a.m. to seven p.m. Monday through Friday, excluding holidays and from eight a.m. to four p.m. on Saturday, unless written approval is obtained from the city building official or city engineer (Municipal Code Section 8.14.040.E).

30. Building plans submitted shall be signed and sealed by a California licensed design professional as required by the State Business and Professions Code.

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31. The proposed development is subject to the payment of applicable processing fees as required by the City's current Fee Ordinance at the time a building permit application is submitted or prior to the issuance of permits as determined by the City.

32. The proposed project will be subject to approval by the Eastern Municipal Water District and all applicable fees and charges shall be paid prior to permit issuance. Contact the water district at 951.928.3777 for specific details.

33. All new structures shall be designed in conformance to the latest design standards adopted by the State of California in the California Building Standards Code (California Code of Regulations, Title 24) including requirements for allowable area, occupancy separations, fire suppression systems, accessibility, etc. The current edition of the applicable code standards is the 2016 Triennial Edition.

34. The proposed non-residential project shall comply with 2016 California Green Building Standards Code, Section 5.106.5.3, mandatory requirements for Electric Vehicle Charging Station (EVCS).

35. The proposed project's occupancy shall be classified by the Building Official and must comply with exiting, occupancy separation(s) and minimum plumbing fixture requirements of the 2016 California Plumbing Code Table 4-1.

36. Prior to permit issuance, every applicant shall submit a properly completed Waste Management Plan (WMP), as a portion of the building or demolition permit process. (MC 8.80.030)

ECONOMIC DEVELOPMENT DEPARTMENT (EDD)

37. New Moreno Valley businesses may work with the Economic Development Department to coordinate job recruitment fairs.

38. New Moreno Valley businesses may adopt a "First Source" approach to employee recruitment that gives notice of job openings to Moreno Valley residents for one week in advance of the public recruitment.

39. New Moreno Valley businesses are encouraged to hire local residents.

40. New Moreno Valley businesses are encouraged to provide a job fair flyer and/or web announcement to the City in advance of job recruitments, so that the City can assist in publicizing these events.

41. New Moreno Valley businesses may utilize the workforce recruitment services provided by the Moreno Valley Employment Resource Center ("ERC").

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The ERC offers no cost assistance to businesses recruiting and training potential employees. Complimentary services include:

- Job Announcements
- Applicant testing / pre-screening
- Interviewing
- Job Fair support
- Training space

FINANCIAL & MANAGEMENT SERVICES DEPARTMENT

Moreno Valley Utility

42. This project requires the installation of electric distribution facilities . A non-exclusive easement shall be provided to Moreno Valley Utility and shall include the rights of ingress and egress for the purpose of operation, maintenance, facility repair, and meter reading.

43. This project requires the installation of electric distribution facilities. The developer shall submit a detailed engineering plan showing design, location and schematics for the utility system to be approved by the City Engineer. In accordance with Government Code Section 66462, the Developer shall execute an agreement with the City providing for the installation, construction, improvement and dedication of the utility system following recordation of final map and /or concurrent with trenching operations and other improvements so long as said agreement incorporates the approved engineering plan and provides financial security to guarantee completion and dedication of the utility system.

    The Developer shall coordinate and receive approval from the City Engineer to install, construct, improve, and dedicate to the City all utility infrastructure including but not limited to, conduit, equipment, vaults, ducts, wires, switches, conductors, transformers, and “bring-up” facilities including electrical capacity to serve the identified development and other adjoining, abutting, or benefiting projects as determined by Moreno Valley Utility – collectively referred to as “utility system”, to and through the development, along with any appurtenant real property easements, as determined by the City Engineer necessary for the distribution and /or delivery of any and all “utility services” to and within the project. For purposes of this condition, “utility services” shall mean electric, cable television, telecommunication (including video, voice, and data) and other similar services designated by the City Engineer . “Utility services” shall not include sewer, water, and natural gas services, which are addressed by other conditions of approval.

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The City, or the City's designee, shall utilize dedicated utility facilities to ensure safe, reliable, sustainable and cost effective delivery of utility services and maintain the integrity of streets and other public infrastructure. Deve

44. Existing Moreno Valley Utility electrical infrastructure shall be preserved in place. The developer will be responsible, at developer's expense, for any and all costs associated with the relocation of any of Moreno Valley Utility's underground electrical distribution facilities, as determined by Moreno Valley Utility, which may be in conflict with any developer planned construction on the project site.

45. This project is subject to a Reimbursement Agreement. The Developer is responsible for a proportionate share of costs associated with electrical distribution infrastructure previously installed that directly benefits the project. Payment shall be required prior to issuance of building permits.

PUBLIC WORKS DEPARTMENT

Land Development

46. Aggregate slurry, as defined in Section 203-5 of Standard Specifications for Public Works Construction, may be required just prior to the end of the one-year warranty period of the public streets at the discretion of the City Engineer. If slurry is required, a slurry mix design shall be submitted for review and approved by the City Engineer. The latex additive shall be Ultra Pave 70 (for anionic) or Ultra Pave 65 K (for cationic) or an approved equal per the geotechnical report. The latex shall be added at the emulsion plant after weighing the asphalt and before the addition of mixing water. The latex shall be added at a rate of two to two-and-one-half (2 to 2½) parts to one-hundred (100) parts of emulsion by volume. Any existing striping shall be removed prior to slurry application and replaced per City standards.

47. The developer shall comply with all applicable City ordinances and resolutions including the City's Municipal Code (MC) and if subdividing land, the Government Code (GC) of the State of California, specifically Sections 66410 through 66499.58, said sections also referred to as the Subdivision Map Act (SMA). [MC 9.14.010]

48. The final approved conditions of approval (COAs) and any applicable Mitigation Measures issued by the Planning Division shall be photographically or electronically placed on mylar sheets and included in the Grading and Street Improvement plans.

49. The developer shall monitor, supervise and control all construction and construction supportive activities, so as to prevent these activities from causing a public nuisance, including but not limited to, insuring strict adherence to the following:
(a) Removal of dirt, debris, or other construction material deposited on any public street no later than the end of each working day.

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(b) Observance of working hours as stipulated on permits issued by the Land Development Division.
(c) The construction site shall accommodate the parking of all motor vehicles used by persons working at or providing deliveries to the site.
(d) All dust control measures per South Coast Air Quality Management District (SCAQMD) requirements during the grading operations.
Violation of any condition, restriction or prohibition set forth in these conditions shall subject the owner, applicant, developer or contractor (s) to remedy as noted in City Municipal Code 8.14.090. In addition, the City Engineer or Building Official may suspend all construction related activities for violation of any condition, restriction or prohibition set forth in these conditions until such time as it has been determined that all operations and activities are in conformance with these conditions.

50. Prior to any plan approval, a final detailed drainage study (prepared by a registered/licensed civil engineer) shall be submitted for review and approved by the City Engineer. The study shall include existing and proposed hydrologic conditions as well as hydraulic calculations for all drainage control devices and storm drain lines. [MC 9.14.110(A.1)]. A digital (pdf) copy of the approved drainage study shall be submitted to the Land Development Division.

51. If improvements associated with this project are not initiated within two (2) years of the date of approval of the Public Improvement Agreement (PIA), the City Engineer may require that the engineer's estimate for improvements associated with the project be modified to reflect current City construction costs in effect at the time of request for an extension of time for the PIA or issuance of a permit.

52. The developer shall protect downstream properties from damage caused by alteration of drainage patterns (i.e. concentration or diversion of flow, etc). Protection shall be provided by constructing adequate drainage facilities, including, but not limited to, modifying existing facilities or by securing a drainage easement. [MC 9.14.110]

53. The tentative map, master plot plan, plot plan, or conditional use permit shall correctly show all existing easements, traveled ways, and drainage courses. Any omission may require the map or plans associated with this application to be resubmitted for further consideration. [MC 9.14.040(A)]

<u>Prior to Grading Plan Approval</u>

54. Two (2) copies of the final project-specific Water Quality Management Plan (WQMP) shall be submitted for review and approved by the City Engineer, which:
    a. Addresses Site Design Best Management Practices (BMPs) such as minimizing impervious areas, maximizing permeability, minimizes directly connected impervious areas to the City's street and storm drain systems, and

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conserves natural areas;

b. Incorporates Source Control BMPs and provides a detailed description of their implementation;

c. Describes the long-term operation and maintenance requirements for BMPs requiring maintenance; and

d. Describes the mechanism for funding the long-term operation and maintenance of the BMPs.

A copy of the final WQMP template can be obtained on the City 's Website or by contacting the Land Development Division. A digital (pdf) copy of the approved final project-specific Water Quality Management Plan (WQMP) shall be submitted to the Land Development Division.

55. The developer shall ensure compliance with the City Grading ordinance, these Conditions of Approval and the following criteria:

a. The project street and lot grading shall be designed in a manner that perpetuates the existing natural drainage patterns with respect to tributary drainage area and outlet points. Unless otherwise approved by the City Engineer, lot lines shall be located at the top of slopes.

b. Any grading that creates cut or fill slopes adjacent to the street shall provide erosion control, sight distance control, and slope easements as approved by the City Engineer.

c. All improvement plans are substantially complete and appropriate clearance letters are provided to the City.

d. A soils/geotechnical report (addressing the soil's stability and geological conditions of the site) shall be submitted to the Land Development Division for review. A digital (pdf) copy of the soils/geotechnical report shall be submitted to the Land Development Division.

56. Grading plans (prepared by a registered/licensed civil engineer) shall be submitted for review and approved by the City Engineer per the current submittal requirements.

57. The developer shall select Low Impact Development (LID) Best Management Practices (BMPs) designed per the latest version of the Water Quality Management Plan (WQMP) - a guidance document for the Santa Ana region of Riverside County.

58. The developer shall pay all remaining plan check fees.

59. A Storm Water Pollution Prevention Plan (SWPPP) shall be prepared in conformance with the State's current Construction Activities Storm Water General Permit. A copy of the current SWPPP shall be kept at the project site and be available for review upon request.

60. For projects that will result in discharges of storm water associated with construction with a soil disturbance of one or more acres of land, the developer shall submit a

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Notice of Intent (NOI) and obtain a Waste Discharger's Identification number (WDID#) from the State Water Quality Control Board (SWQCB) which shall be noted on the grading plans.

61. Landscape & Irrigation plans (prepared by a registered/licensed civil engineer) for water quality BMPs shall be submitted for review and approved by the City Engineer per the current submittal requirements, if applicable.

Prior to Grading Permit

62. A receipt showing payment of the Area Drainage Plan (ADP) fee to Riverside County Flood Control and Water Conservation District shall be submitted. [MC 9.14.100(O)]

63. If the developer chooses to construct the project in phases, a Construction Phasing Plan for the construction of on-site public and private improvements shall be submitted for review and approved by the City Engineer.

64. Prior to the payment of the Development Impact Fee (DIF), the developer may enter into a DIF Improvement Credit Agreement to secure credit for the construction of applicable improvements. If the developer fails to complete this agreement prior to the timing specified above, no credits will be given. The developer shall pay current DIF fees adopted by the City Council. [Ord. 695 § 1.1 (part), 2005] [MC 3.38.030, 040, 050]

65. A digital (pdf) copy of all approved grading plans shall be submitted to the Land Development Division.

66. Security, in the form of a cash deposit (preferable), or letter of credit shall be submitted as a guarantee of the implementation and maintenance of erosion control measures. At least twenty-five (25) percent of the required security shall be in the form of a cash deposit with the City. [MC 8.21.160(H)]

67. Security, in the form of a cash deposit (preferable), or letter of credit shall be submitted as a guarantee of the completion of the grading operations for the project. [MC 8.21.070]

68. The developer shall pay all applicable inspection fees.

Prior to Improvement Plan Approval

69. The developer is required to bring any existing access ramps adjacent to and fronting the project to current ADA (Americans with Disabilities Act) requirements. However, when work is required in an intersection that involves or impacts existing

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access ramps, all access ramps in that intersection shall be retrofitted to comply with current ADA requirements, unless otherwise approved by the City Engineer.

70. The developer shall submit clearances from all applicable agencies, and pay all applicable plan check fees.

71. The street improvement plans shall comply with current City policies, plans and applicable City standards (i.e. MVSI-160 series, etc.) throughout this project.

72. The design plan and profile shall be based upon a centerline, extending beyond the project boundaries a minimum distance of 300 feet at a grade and alignment approved by the City Engineer.

73. Drainage facilities (i.e. catch basins, etc.) with sump conditions shall be designed to convey the tributary 100-year storm flows. Secondary emergency escape shall also be provided.

74. The hydrology study shall be designed to accept and properly convey all off -site drainage flowing onto or through the site. All storm drain design and improvements shall be submitted for review and approved of the City Engineer. In the event that the City Engineer permits the use of streets for drainage purposes, the provisions of current City standards shall apply. Should the quantities exceed the street capacity or the use of streets be prohibited for drainage purposes, as in the case where one travel lane in each direction shall not be used for drainage conveyance for emergency vehicle access on streets classified as minor arterials and greater, the developer shall provide adequate facilities as approved by the City Engineer. [MC 9.14.110 A.2]

75. All public improvement plans (prepared by a licensed/registered civil engineer) shall be submitted for review and approved by the City Engineer per the current submittal requirements.

76. The plans shall indicate any restrictions on trench repair pavement cuts to reflect the City's moratorium on disturbing newly-constructed pavement less than three (3) years old and recently slurry sealed streets less than one (1) year old. Pavement cuts for trench repairs may be allowed for emergency repairs or as specifically approved by the City Engineer.

77. The developer shall pothole to determine the exact location and elevation of existing underground utilities and incorporate the results into the design of the plans. The developer shall coordinate with all affected utility companies and bear all costs of utility relocations.

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Prior to Building Permit

78. An engineered-fill certification, rough grade certification and compaction report shall be submitted for review and approved by the City Engineer. A digital (pdf) copy of the approved compaction report shall be submitted to the Land Development Division. All pads shall meet pad elevations per approved grading plans as noted by the setting of "blue-top" markers installed by a registered land surveyor or licensed civil engineer.

79. For Commercial/Industrial projects, the owner may have to secure coverage under the State's General Industrial Activities Storm Water Permit as issued by the State Water Resources Control Board.

80. For all subdivision projects, the map shall be recorded (excluding model homes). [MC 9.14.190]

81. All outstanding fees shall be paid.

82. All required as-built plans (prepared by a registered/licensed civil engineer) shall be submitted for review and approved by the City Engineer per the current submittal requirements.

83. The engineered final/precise grade certification shall be submitted for review and approved by the City Engineer.

84. For non-subdivision projects, in compliance with Proposition 218, the developer shall agree to approve the City of Moreno Valley NPDES Regulatory Rate Schedule that is in place at the time of certificate of occupancy issuance. Under the current permit for storm water activities required as part of the National Pollutant Discharge Elimination System (NPDES) as mandated by the Federal Clean Water Act, this project is subject to the following requirements:

    a. Select one of the following options to meet the financial responsibility to provide storm water utilities services for the required continuous operation, maintenance, monitoring system evaluations and enhancements, remediation and/or replacement, all in accordance with Resolution No. 2002-46.

        i. Participate in the mail ballot proceeding in compliance with Proposition 218, for the Common Interest, Commercial, Industrial and Quasi-Public Use NPDES Regulatory Rate Schedule and pay all associated costs with the ballot process; or

        ii. Establish an endowment to cover future City costs as specified in the Common Interest, Commercial, Industrial and Quasi-Public Use NPDES Regulatory Rate Schedule.

    b. Notify the Special Districts Division of the intent to request building permits 90 days prior to their issuance and the financial option selected. The financial option

selected shall be in place prior to the issuance of certificate of occupancy. [California Government Code & Municipal Code]

85. The developer shall complete all public improvements in conformance with current City standards, except as noted in the Special Conditions, including but not limited to the following:

a. Street improvements including, but not limited to: pavement, base, curb and/or gutter, cross gutters, spandrel, sidewalks, drive approaches, pedestrian ramps, street lights, signing, striping, under sidewalk drains, landscaping and irrigation, medians, redwood header boards, pavement tapers/transitions and traffic control devices as appropriate.

b. Storm drain facilities including, but not limited to: storm drain pipe, storm drain laterals, open channels, catch basins and local depressions.

c. City-owned utilities.

d. Sewer and water systems including, but not limited to: sanitary sewer, potable water and recycled water.

e. Under grounding of all existing and proposed utilities adjacent to and on-site. [MC 9.14.130]

f. Relocation of overhead electrical utility lines including, but not limited to: electrical, cable and telephone.

86. For commercial, industrial and multi-family projects, a "Stormwater Treatment Device and Control Measure Access and Maintenance Covenant" shall be recorded to provide public notice of the maintenance requirements to be implemented per the approved final project-specific WQMP. A boilerplate copy of the "Stormwater Treatment Device and Control Measure Access and Maintenance Covenant" can be obtained by contacting the Land Development Division.

87. The applicant shall ensure the following, pursuant to Section XII. I. of the 2010 NPDES Permit:

a. Field verification that structural Site Design, Source Control and Treatment Control BMPs are designed, constructed and functional in accordance with the approved Final Water Quality Management Plan (WQMP).

b. Certification of best management practices (BMPs) from a state licensed civil engineer. An original WQMP BMP Certification shall be submitted for review and approved by the City Engineer.

88. The Developer shall comply with the following water quality related items:

a. Notify the Land Development Division prior to construction and installation of all structural BMPs so that an inspection can be performed.

b. Demonstrate that all structural BMPs described in the approved final project-specific WQMP have been constructed and installed in conformance with the approved plans and specifications;

c. Demonstrate that Developer is prepared to implement all non-structural BMPs

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described in the approved final project-specific WQMP; and

d. Demonstrate that an adequate number of copies of the approved final project-specific WQMP are available for future owners/occupants.

e. Clean and repair the water quality BMP's, including re-grading to approved civil drawing if necessary.

f. Provide City with updated Engineer's Line and Grade Certification.

g. Obtain approval and complete installation of the irrigation and landscaping.

89. Prior to parcel map recordation or building permit issuance, either a reciprocal access easement shall be shown on the map or a separate recorded copy of a reciprocal access agreement between the project and the adjacent parcel to the south shall be provided to the City.

90. Prior to F-WQMP approval, post development BMPs for Brodiaea Avenue shall incorporated in accordance with MS4 Permit R8-2010-033.

91. The Applicant has proposed to incorporate the use of an infiltration basin and self-retaining areas. Final design details of the treatment control BMPs shall be provided in the F-WQMP.

92. Prior to rough grading plan approval, the following shall be shown on the plans and dedications made via separate instrument and submitted to the City for review and approval: A 4-foot pedestrian right-of-way dedication behind all driveway approaches per City Standard MVSI-112C-0.

93. Prior to occupancy, the following improvements shall be completed:

a. Nason Street, Modified Divided Major Arterial, City Standard MVSI-102A-0 (120-foot RW / 102-foot CC) shall construct to half-width plus 21' along the entire project's westerly frontage. Improvements shall consist of, but not be limited to pavement, base, street lights, driveway approaches, pedestrian ramps, curb & gutter, and sidewalk. In addition, replace or install any damaged, substandard or missing improvements.

b. Brodiaea Avenue, Collector, City Standard MVSI-106BA-0 (66-foot RW / 44 -foot CC) shall be constructed to half-width plus 18' along the entire project's northerly frontage. Improvements shall consist of, but not be limited to, pavement, base, street lights, driveway approaches, pedestrian ramps, curb & gutter, sidewalk. In addition, replace or install any damaged, substandard or missing improvements.

94. Prior to precise grading plan approval, the grading plans shall clearly show that the parking lot conforms to City standards. The parking lot shall be 5% maximum, 1% minimum, 2% maximum at or near any disabled parking stall and travel way. Ramps, curb openings and travel paths shall all conform to current ADA standards

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as outlined in Department of Justice's "ADA Standards for Accessible Design", Excerpt from 28 CFR Part 36. (www.usdoj.gov) and as approved by the City's Building and Safety Division.

95. Prior to approval of the parcel map, the map shall show the following:

a. A seven-foot street right-of-way vacation on the south side of Brodiaea Avenue along project frontage.

b. A four-foot street right-of-way dedication on the east side of Nason Street along the project frontage.

Special Districts Division

96. The ongoing maintenance of any landscaping required to be installed behind the curb shall be the responsibility of the property owner.

97. Street Light Authorization forms for all street lights that are conditioned to be installed as part of this project must be submitted to the Special Districts Division for approval, prior to street light installation. The Street Light Authorization form can be obtained from the utility company providing electric service to the project, either Moreno Valley Utility or Southern California Edison. For questions, contact the Special Districts Division at 951.413.3480 or specialdistricts@moval.org.

98. The parcel(s) associated with this project have been incorporated into the Moreno Valley Community Services District Zone A (Parks & Community Services) and Zone C (Arterial Street Lighting). All assessable parcels therein shall be subject to annual parcel taxes for Zone A and Zone C for operations and capital improvements.

99. Prior to the issuance of the first building permit for this project, the Developer shall pay Advanced Energy fees for all applicable Residential and Arterial Street Lights required for this development. Payment shall be made to the City of Moreno Valley and collected by the Land Development Division. Fees are based upon the Advanced Energy fee rate in place at the time of payment, as set forth in the current Listing of City Fees, Charges, and Rates adopted by City Council. The Developer shall provide a copy of the receipt to the Special Districts Division (specialdistricts@moval.org). Any change in the project which may increase the number of street lights to be installed will require payment of additional Advanced Energy fees at the then current fee. Questions may be directed to the Special Districts Division at 951.413.3480 or specialdistricts@moval.org.

100. This project has been identified to potentially be included in the formation of a Map Act Area of Benefit Special District for the construction of major thoroughfares and/or freeway improvements. The property owner(s) shall participate in such

Attachment: Exhibit B to 2018-06_CUP2 (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

District and pay any special tax, assessment, or fee levied upon the project property for such District. At the time of the public hearing to consider formation of the district, the property owner(s) will not protest the formation, but will retain the right to object any eventual assessment that is not equitable should the financial burden of the assessment not be reasonably proportionate to the benefit the affected property obtains from the improvements to be installed. The Developer must notify the Special Districts Division at 951.413.3480 or at specialdistricts@moval.org of its selected financial option when submitting an application for the first building permit to determine whether the development will be subjected to this condition. If subject to the condition, the special election requires a 90 day process in compliance with the provisions of Article 13C of the California Constitution. (Street & Highway Code, GP Objective 2.14.2, MC 9.14.100).

101. This project is conditioned for a proposed district to provide a funding source for the operation and maintenance of public improvements and/or services associated with new development in that territory. The Developer shall satisfy this condition with one of the options outlined below.

a. Participate in a special election for maintenance/services and pay all associated costs of the election process and formation, if any. Financing may be structured through a Community Facilities District, Landscape and Lighting Maintenance District, or other financing structure as determined by the City; or

b. Establish an endowment fund to cover the future maintenance and/or service costs.

The Developer must notify the Special Districts Division at 951.413.3480 or at specialdistricts@moval.org when submitting the application for building permit issuance. If the first building permit is pulled prior to formation of the district, this condition will not apply. If the district has been or is in the process of being formed the Developer must inform the Special Districts Division of its selected financing option (a. or b. above). The option for participating in a special election requires 90 days to complete the special election process. This allows adequate time to be in compliance with the provisions of Article 13C of the California Constitution.

The financial option selected shall be in place prior to the issuance of the first certificate of occupancy for the project.

102. This project is conditioned to provide a funding source for the following special financing program(s):

a. Street Lighting Services for capital improvements, energy charges, and maintenance.

Attachment: Exhibit B to 2018-06_CUP2 (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

The Developer's responsibility is to provide a funding source for the capital improvements and the continued maintenance. The Developer shall satisfy this condition with one of the options below.

i. Participate in a special election (mail ballot proceeding) and pay all associated costs of the special election and formation, if any. Financing may be structured through a Community Services District zone, Community Facilities District, Landscape and Lighting Maintenance District, or other financing structure as determined by the City; or

ii. Establish a Property Owner's Association (POA) or Home Owner's Association (HOA) which will be responsible for any and all operation and maintenance costs

The Developer must notify the Special Districts Division at 951.413.3480 or at specialdistricts@moval.org of its selected financial option when submitting the application for building permit issuance. The option for participating in a special election requires approximately 90 days to complete the special election process. This allows adequate time to be in compliance with the provisions of Article 13C of the California Constitution.

The financial option selected shall be in place prior to the issuance of the first certificate of occupancy for the project and prior to acceptance of any improvements.

103. Commercial (BP) If Land Development, a Division of the Public Works Department, requires this project to supply a funding source necessary to provide for, but not limited to, stormwater utilities services for the continuous operation, remediation and/or replacement, monitoring, systems evaluations and enhancement of on -site facilities and performing annual inspections of the affected areas to ensure compliance with state mandated stormwater regulations, a funding source needs to be established. The Developer must notify the Special Districts Division at 951.413.3480 or at specialdistricts@moval.org of its selected financial option for the National Pollution Discharge Elimination System (NPDES) program when submitting the application for the first building permit issuance (see Land Development's related condition). Participating in a special election the process requires a 90 day period prior to the City's issuance of a building permit. This allows adequate time to be in compliance with the provisions of Article 13D of the California Constitution. (California Health and Safety Code Sections 5473 through 5473.8 (Ord. 708 Section 3.1, 2006) & City of Moreno Valley Municipal Code Title 3, Section 3.50.050.)

104. This project has been identified to be included in the formation of a Community Facilities District (Mello-Roos) for Public Safety services, including but not limited to Police, Fire Protection, Paramedic Services, Park Rangers, and Animal Control

Attachment: Exhibit B to 2018-06_CUP2 (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

services. The property owner(s) shall not protest the formation; however, they retain the right to object to the rate and method of maximum special tax. In compliance with Proposition 218, the property owner shall agree to approve the mail ballot proceeding (special election) for either formation of the CFD or annexation into an existing district. The Developer must notify the Special Districts Division at 951.413.3480 or at specialdistricts@moval.org when submitting the application for building permit issuance to determine the requirement for participation. If the first building permit is pulled prior to formation of the district, this condition will not apply. If the condition applies, the special election will require a minimum of 90 days prior to issuance of the first building permit. This allows adequate time to be in compliance with the provisions of Article 13C of the California Constitution. (California Government Code Section 53313 et. seq.)

105. Any damage to existing landscape areas maintained by the City of Moreno Valley due to project construction shall be repaired/replaced by the Developer, or Developer's successors in interest, at no cost to the City of Moreno Valley.

Transportation Engineering Division

106. Conditions of approval may be modified if the project or its phasing plan is altered from any approved plans.

107. Nason Street is classified as a Divided Major Arterial at this location. Any improvements undertaken by this project shall be consistent with the City's standards for this facility.

108. Brodiaea Avenue is classified as a Collector (66' RW/44' CC) per City Standard Plan No. MVSI-106B-0. Any improvements undertaken by this project shall be consistent with the City's standards for this facility.

109. Project driveways shall conform to City of Moreno Valley Standard No. MVSI-112C-0 for Commercial Driveway Approaches.

110. Access at the proposed street and driveways shall be as follows:

- Westbound approach at Nason Street/Brodiaea Avenue intersection: Only right turns in/out are allowed. Access shall be controlled by the existing raised concrete median on Nason Street.
- Nason Street north driveway: Only right turns in/out are allowed. Access shall be controlled by the existing raised concrete median on Nason Street.
- Nason Street south driveway: The existing traffic signal at Nason Street/Hospital Road intersection shall be modified to support full access.
- Brodiaea Avenue driveways: Full access is allowed.

Attachment: Exhibit B to 2018-06_CUP2 (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

111. Prior to the final approval of the street improvement plans, traffic signal modification plans will be required for the traffic signal located at Nason Street/Hospital Road intersection. Modifications may include but not limited to new signal poles, new pull boxes, new traffic detector loops or video/radar detection system, relocation of signal controller cabinet, etc. Specific modifications shall be determined during plan check review.

112. All proposed on-site traffic signing and striping should be accordance with the latest California Manual on Uniform Traffic Control Devices (CAMUTCD).

113. Prior to issuance of a construction permit, construction traffic control plans prepared by a qualified, registered Civil or Traffic engineer may be required for plan approval or as required by the City Traffic Engineer.

114. Prior to final approval of the street improvement plans, the project plans shall demonstrate that sight distance at proposed streets and driveways conforms to City Standard Plan No. MVSI-164A-0 through MVSI-164C-0.

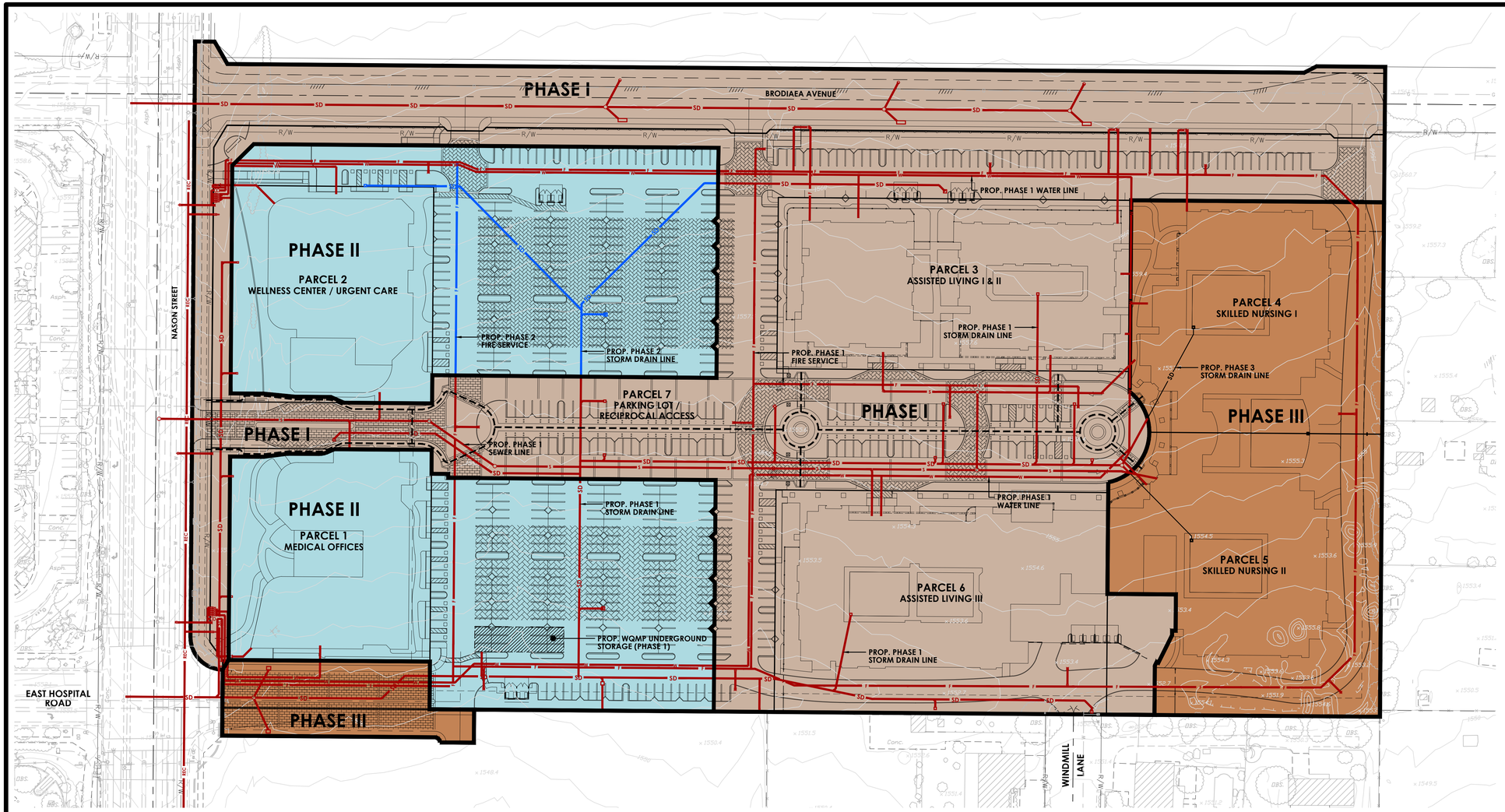
115. Prior to the final approval of the street improvement plans, a signing and striping plan shall be prepared per City of Moreno Valley Standard Plans - Section 4 for Nason Street and Brodiaea Avenue.

116. Prior to acceptance of streets into the City-maintained road system, all approved signing and striping shall be installed per current City Standards and the approved plans.

117. Prior to issuance of Certificate of Occupancy for any building in Phase 3 or prior to the project access at Nason Street/Hospital Road intersection being opened to vehicular traffic in any phase, the traffic signal at this intersection shall be modified and operational per the approved plans to the satisfaction of the City Engineer.

118. Prior to issuance of Certificate of Occupancy for any building in any of the project phases, all signing and striping on Nason Street and Brodiaea Avenue shall be installed per current City Standards and the approved plans.

Attachment: Exhibit B to 2018-06_CUP2 (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)



IN THE CITY OF MORENO VALLEY, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

PHASING PLAN

FOR TENTATIVE PARCEL MAP NO. 36227

EXHIBIT DATE: JULY 25, 2017

DATA TABLE

APPLICANT / LAND OWNER:	GALAXY MANAGEMENT INC.		
ADDRESS:	5067 WALNUT GROVE AVENUE SAN GABRIEL, CALIFORNIA 91776		
CONTACT:	RICHARD TORNG	TELEPHONE:	(626) 818-4858
EXHIBIT PREPARER:	MSA CONSULTING, INC.		
ADDRESS:	34200 BOB HOPE DRIVE RANCHO MIRAGE, CALIFORNIA 92270		
CONTACT:	PAUL DEPALATIS, AICP	TELEPHONE:	(760) 320-9811
SOURCE OF TOPOGRAPHY:	INLAND AERIAL SURVEYS, INC.		
ADDRESS:	7117 ARLINGTON AVENUE, SUITE "A" RIVERSIDE, CALIFORNIA 92503		
DATE OF TOPOGRAPHY:	MAY 18, 2016	TELEPHONE:	(951) 687-4252
ASSESSOR'S PARCEL NUMBER:	486-290-036 & -037		
LEGAL DESCRIPTION:	LOT 3 AND A PORTION OF LOT 4 OF BLOCK 131 MAP NO. 1 BEAR VALLEY AND ALESSANDRO DEVELOPMENT CO. PER M.B. 11/10, SECTION 15 TOWNSHIP 3 SOUTH RANGE 3 WEST, SAN BERNARDINO BASE AND MERIDIAN.		
EXISTING ZONING:	RESIDENTIAL AGRICULTURE - 2 UNITS PER ACRE (RA2)		
PROPOSED ZONING:	OFFICE (O) WITH MEDICAL USE OVERLAY (MUO)		
EXISTING GENERAL PLAN LAND USE:	RESIDENTIAL AGRICULTURE: MAX. 2 DU/AC (RA2)		
PROPOSED GENERAL PLAN LAND USE:	RESIDENTIAL/OFFICE (R/O)		

LEGEND:

PHASE I: ASSISTED LIVING I, II & III

ON-SITE	8.51 AC.
OFF-SITE	2.27 AC.
TOTAL	10.78 AC.

PHASE II: MEDICAL OFFICES & WELLNESS CENTER / URGENT CARE

ON-SITE	5.97 AC.

PHASE III: SKILLED NURSING I & II

ON-SITE	3.64 AC.
OFF-SITE	0.19 AC.
TOTAL	3.83 AC.

TOTAL ON-SITE	18.12 AC.
TOTAL OFF-SITE	2.46 AC.

ABBREVIATIONS

(E)	EAST	NO.	NUMBER
(N)	NORTH	N.T.S.	NOT TO SCALE
(S)	SOUTH	O/H	OVERHEAD
(W)	WEST	OS/PP	OPEN SPACE / PARKS
A.C.	ASPHALT CONCRETE	PG.	PAGE
AC	ACREAGE	P/L	PROPERTY LINE
APN	ASSESSORS PARCEL NUMBER	PROP.	PROPOSED
BNDRY	BOUNDARY	P.U.E.	PUBLIC UTILITY EASEMENT
C/L	CENTERLINE	R	RADIUS
C&G	CURB AND GUTTER	R-L	LOW DENSITY (RESIDENTIAL)
E/P	EDGE OF PAVEMENT	R/W	RIGHT OF WAY
ESMT.	EASEMENT	SF	SQUARE FEET
EX.	EXISTING	STD.	STANDARD
MAX.	MAXIMUM	TYP.	TYPICAL
M.B.	MAP BOOK	UG	UNDERGROUND
MIN.	MINIMUM		

LEGEND

- EXISTING LOT LINE
- EXISTING EDGE OF PAVEMENT
- R/W — EXISTING RIGHT OF WAY
- PROPOSED BOUNDARY
- PROPOSED TENTATIVE PARCEL MAP LOTS
- PROPOSED AND EXISTING CENTER LINE
- PROPOSED CURB
- PROPOSED EASEMENT
- PROPOSED RIGHT OF WAY
- PROPOSED PHASE LINE

LEGEND

PHASE 1 UTILITIES

- F — PROPOSED FIRE SERVICE
- S — PROPOSED SEWER
- SD — PROPOSED STORM DRAIN
- W — PROPOSED WATER
- REC — PROPOSED RECLAIMED WATER

PHASE 2 UTILITIES

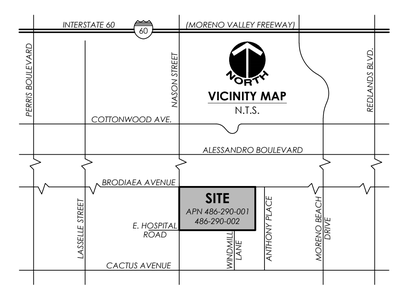
- F — PROPOSED FIRE SERVICE
- SD — PROPOSED STORM DRAIN

PHASE 3 UTILITIES

- SD — PROPOSED STORM DRAIN
- PROPOSED ADA ROUTE

NOTE:

EACH PHASE WILL INCLUDE COMPLETE IMPROVEMENTS & LANDSCAPING.



NORTH

0' 60' 120' 180' 240'

SCALE 1"=60'

MSA CONSULTING, INC.
PLANNING ■ CIVIL ENGINEERING ■ LAND SURVEYING
34200 BOB HOPE DRIVE ■ RANCHO MIRAGE ■ CA 92270
TELEPHONE (760) 320-9811 ■ FAX (760) 323-7893

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Attachment: Phasing Plan (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

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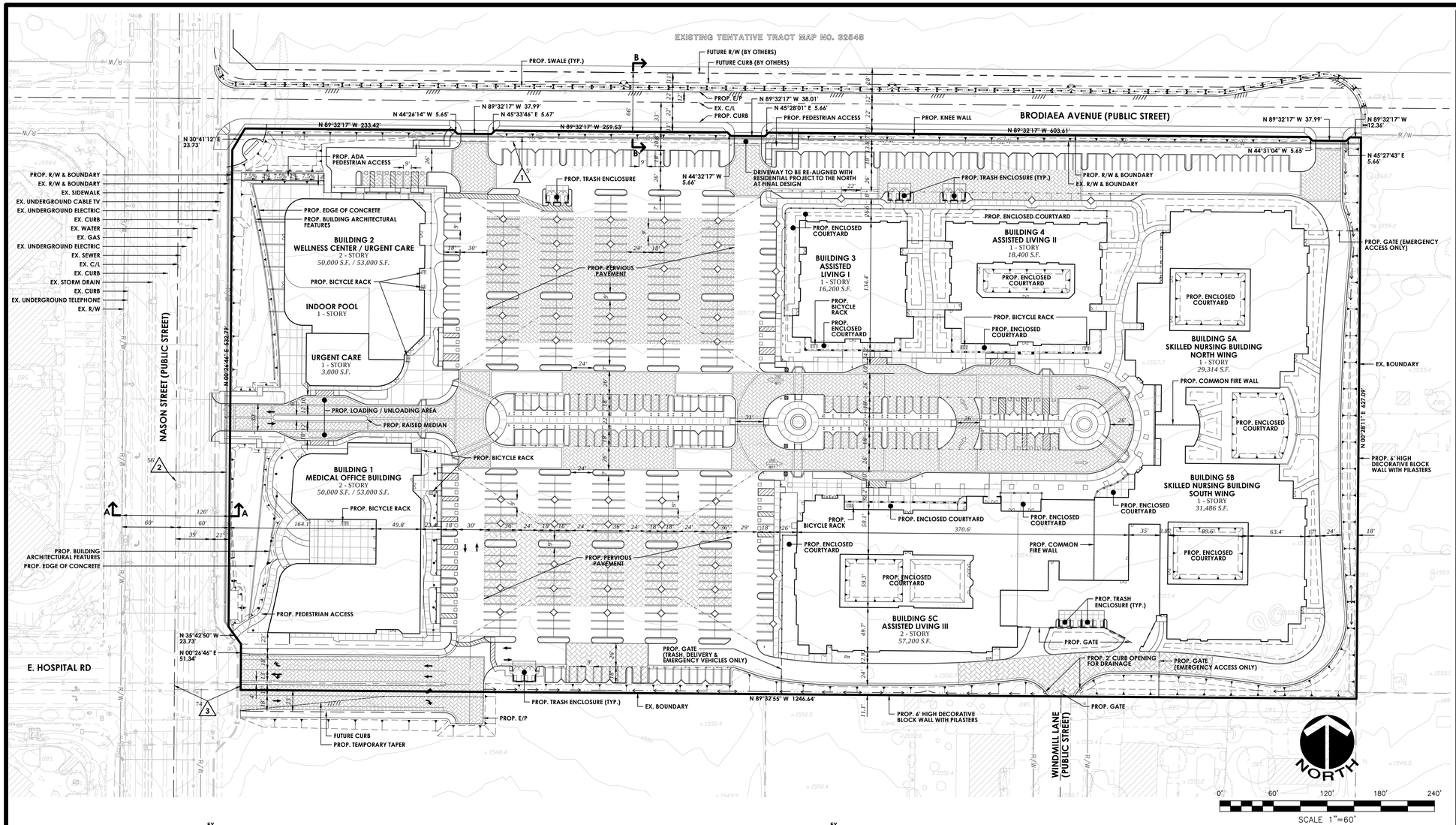

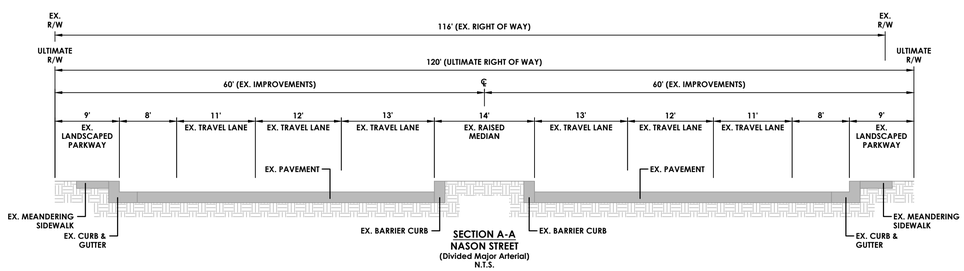

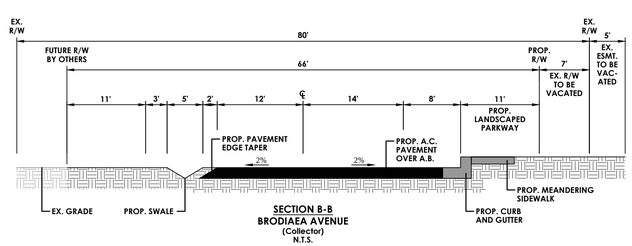

ABBREVIATIONS

(E)	EAST	N.T.S.	NOT TO SCALE
(N)	NORTH	O/H	OVERHEAD
(S)	SOUTH	OS/PP	OPEN SPACE / PARKS
(W)	WEST	PG.	PAGE
A.C.	ASPHALT CONCRETE	P/L	PROPERTY LINE
AC	ACREAGE	PROP.	PROPOSED
APN	ASSESSORS PARCEL NUMBER	P.U.E.	PUBLIC UTILITY EASEMENT
BNDRY	BOUNDARY	R	RADIUS
C/L	CENTERLINE	R-L	LOW DENSITY (RESIDENTIAL)
C&G	CURB AND GUTTER	R/W	RIGHT OF WAY
E/P	EDGE OF PAVEMENT	SF	SQUARE FEET
ESMT.	EASEMENT	STD.	STANDARD
EX.	EXISTING	TYP.	TYPICAL
MAX.	MAXIMUM	UG	UNDERGROUND
M.B.	MAP BOOK		
MIN.	MINIMUM		
NO.	NUMBER		

LEGEND

679.3	EXISTING SPOT ELEVATIONS
	EXISTING CONTOURS
X	EXISTING EASEMENT DELTA
C	EXISTING CABLE
DRN	EXISTING IRRIGATION DRAIN LINE
	EXISTING EASEMENT
E	EXISTING ELECTRIC
G	EXISTING GAS
IRR	EXISTING IRRIGATION
	EXISTING LOT LINE
	EXISTING EDGE OF PAVEMENT
T	EXISTING TELEPHONE
O/H T	EXISTING OVERHEAD TELEPHONE
R/W	EXISTING RIGHT OF WAY
S	EXISTING SEWER
FM	EXISTING SEWER FORCE MAIN
W	EXISTING WATER
	PROPOSED BOUNDARY
	PROPOSED AND EXISTING CENTER LINE
	PROPOSED CURB
	PROPOSED EASEMENT
	PROPOSED LOT LINE
	PROPOSED RIGHT OF WAY

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IN THE CITY OF MORENO VALLEY, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

TECHNICAL SITE PLAN

FOR TENTATIVE PARCEL MAP NO. 36227

EXHIBIT DATE: SEPTEMBER 30, 2016

REVISIONS

NO.	DATE	DESCRIPTION
1	12/6/2016	REVISIONS (DIMENSIONS & LABELING) PER CITY OF MORENO VALLEY PROJECT
		REVIEW STAFF MEETING NOVEMBER 16, 2016 CONDITIONS OF APPROVAL
2	03/30/17	ADDED A BLANKET EASEMENT NOTE TO THE DATA TABLE PER CITY COMMENTS
3	05/18/17	REVISIONS (LABELING) PER CITY OF MORENO VALLEY PROJECT REVIEW STAFF
		MEETING FEBRUARY 28, 2017 PRSC MEETING

DATA TABLE

APPLICANT / LAND OWNER:	GALAXY MANAGEMENT INC.		
ADDRESS:	5067 WALNUT GROVE AVENUE SAN GABRIEL, CALIFORNIA 91776		
CONTACT:	RICHARD TORNG	TELEPHONE:	(626) 818-4858
EXHIBIT PREPARER:	MSA CONSULTING, INC.		
ADDRESS:	34200 BOB HOPE DRIVE RANCHO MIRAGE, CALIFORNIA 92270		
CONTACT:	PAUL DEPALATIS, AICP	TELEPHONE:	(760) 320-9811
SOURCE OF TOPOGRAPHY:	INLAND AERIAL SURVEYS, INC.		
ADDRESS:	7117 ARLINGTON AVENUE, SUITE "A" RIVERSIDE, CALIFORNIA 92503		
DATE OF TOPOGRAPHY:	MAY 18, 2016	TELEPHONE:	(951) 687-4252
ASSESSOR'S PARCEL NUMBER:	486-290-036 & -037		

LEGAL DESCRIPTION:

LOT 3 AND A PORTION OF LOT 4 OF BLOCK 131 MAP NO. 1 BEAR VALLEY AND ALESSANDRO DEVELOPMENT CO. PER M.B. 11/10, SECTION 15 TOWNSHIP 3 SOUTH RANGE 3 WEST, SAN BERNARDINO BASE AND MERIDIAN.

LAND USE DESCRIPTION:	ACREAGE
EXISTING GROSS ACREAGE:	17.98 AC.
PUBLIC STREET DEDICATION (NASON STREET):	0.05 AC.
PUBLIC STREET DEDICATION SUB-TOTAL:	17.93 AC.
PUBLIC STREET VACATION (BRODIAEA AVENUE):	0.19 AC.
PROPOSED NET ACREAGE:	18.12 AC.

EXISTING ZONING:	RESIDENTIAL AGRICULTURE - 2 UNITS PER ACRE (RA2)
PROPOSED ZONING:	OFFICE (O) WITH MEDICAL USE OVERLAY (MUO)
EXISTING GENERAL PLAN LAND USE:	RESIDENTIAL AGRICULTURE: MAX. 2 DU/AC (RA2)
PROPOSED GENERAL PLAN LAND USE:	RESIDENTIAL/ OFFICE (R/O)

PUBLIC UTILITY PURVEYORS:

ELECTRIC:	MORENO VALLEY ELECTRIC UTILITY	(877) 811-8700
GAS:	THE GAS COMPANY	(800) 427-2200
TELEPHONE:	VERIZON COMPANY	(800) 483-5000
WATER:	EASTERN MUNICIPAL WATER DISTRICT	(951) 928-6146
CABLE:	TIME WARNER CABLE	(866) 489-2249
SEWER:	EASTERN MUNICIPAL WATER DISTRICT	(951) 928-6146
USA:	UNDERGROUND SERVICE ALERT	(800) 227-2600

EXISTING EASEMENT NOTES:

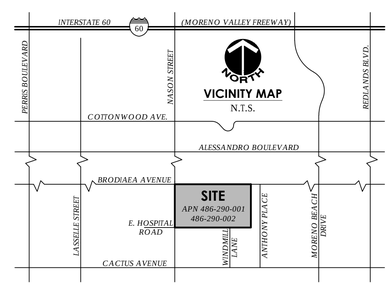
1	5' EASEMENT FOR WATER LINES PER BOOK 2164, PAGE 73, RECORDED OCTOBER 16, 1957, OF OFFICIAL RECORDS.
2	56' RIGHT OF WAY PER DOCUMENT 2013-0407043 RECORDED AUGUST 20, 2013, OF OFFICIAL RECORDS.
3	74' RIGHT OF WAY PER DOCUMENT 2013-0407043 RECORDED AUGUST 20, 2013, OF OFFICIAL RECORDS.
-	WE HEREBY DEDICATE TO THE CITY OF MORENO VALLEY A PERPETUAL NON-EXCLUSIVE BLANKET EASEMENT OVER PARCEL 1 AND 2 OF LLA NO. 1002 FOR THE ELECTRICAL UTILITY PURPOSES. THE EASEMENT WILL INCLUDE RIGHTS OF INGRESS-EGREE FOR THE PURPOSE OF CONSTRUCTION, OPERATION, MAINTENANCE, FACILITY REPAIR AND METER READING.

FEMA FLOOD ZONE DESIGNATION:

ZONE X - AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

AS SHOWN ON RIVERSIDE COUNTY, CALIFORNIA, FLOOD INSURANCE RATE MAPS, COMMUNITY PANEL MAP NUMBERS 06065C-0765G & 06065C-0770G EFFECTIVE DATE: AUGUST 28, 2008.

LIQUEFACTION:	LOW MODERATE & MODERATE LIQUEFACTION ZONE



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Attachment: Site Plan (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

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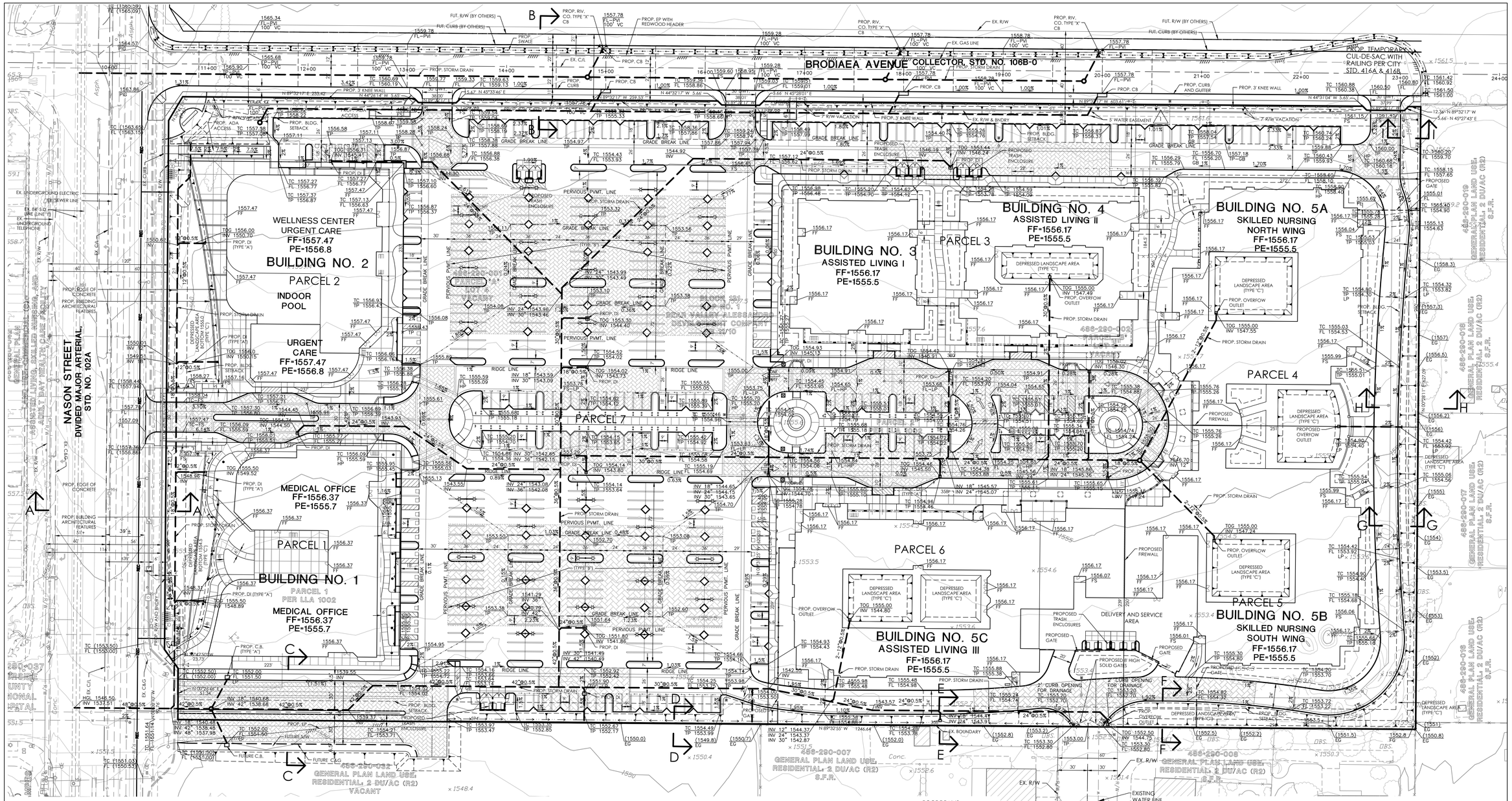
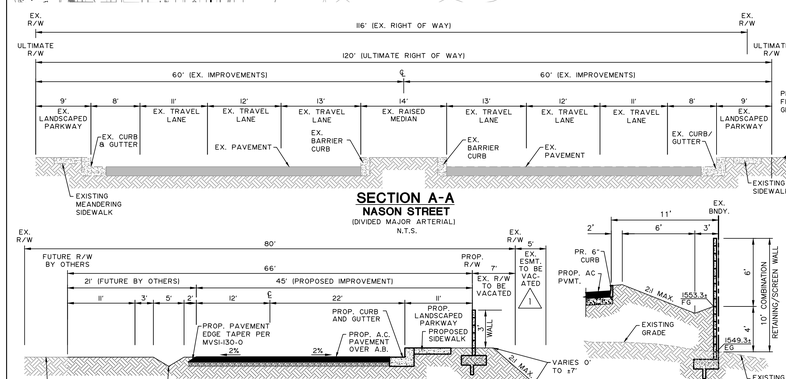
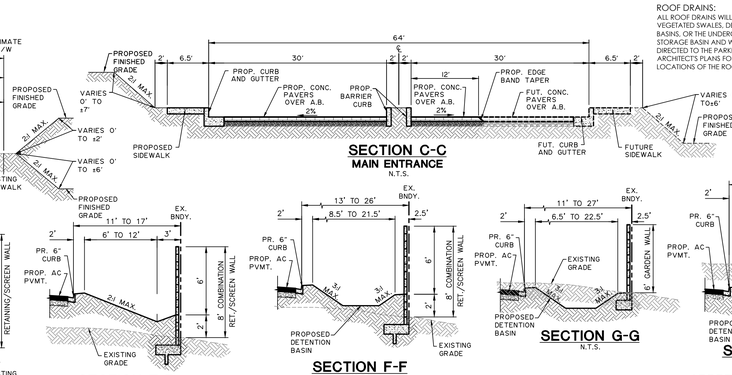


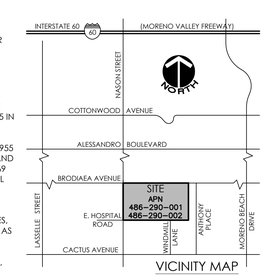




ROOF DRAINS:
ALL ROOF DRAINS WILL DRAIN TO VEGETATED SWALES, DETENTION BASINS, OR THE UNDERGROUND STORAGE BASIN AND WILL NOT BE DIRECTED TO THE PARKING LOT. SEE ARCHITECT'S PLANS FOR THE LOCATIONS OF THE ROOF DRAINS.

EASEMENTS

1. EASEMENT GRANTED TO WILLIAM R. MEADOR AND BERTHA MEADOR FOR WATERLINE PURPOSES / LANDSCAPE INSTALLATION. BOOK 2164, PAGE 73, RECORDED 10/16/1957, O.R.
2. EASEMENT FOR CONDUITS AND INCIDENTAL PURPOSES IN FAVOR OF EASTERN MUNICIPAL WATER DISTRICT PER DEED RECORDED MARCH 4, 1955 IN BOOK 1702, PAGE 559 OF OFFICIAL RECORDS, MEMORANDUM OF AGREEMENT RECORDED MARCH 4 1955 IN BOOK 1702, PAGE 467 AND 552, AND DEED RECORDED NOVEMBER 12, 1969 AS INSTRUMENT NO. 115832, OFFICIAL RECORD. EASEMENT IS UNPLOTTABLE AND BLANKET IN NATURE.
3. AN EASEMENT FOR PIPELINES, DITCHES, FLUMES, AND INCIDENTAL PURPOSES AS SHOWN ON THE BEAR VALLEY AND ALESSANDRO DEVELOPMENT COMPANY MAP ON FILE IN BOOK 11, PAGE 10 OF MAPS. EASEMENT IS UNPLOTTABLE.



VICINITY MAP
N.T.S.

OWNER/DEVELOPER

GALAXY MANAGEMENT INCORPORATED
5067 WALNUT GROVE AVENUE
SAN GABRIEL, CALIFORNIA 91776
TELEPHONE: (760)818-4858
CONTACT: RICHARD TORNG

STORM WATER MANAGEMENT CONTROL

LABEL ON PLAN	CONTROL DESCRIPTION
TYPE "A"	PROP. DRAIN INLET WITH SUBSURFACE STONE- FILLED INFILTRATION BASIN
TYPE "B"	PROP. PERMEABLE PAVEMENT WITH SUBSURFACE STONE-FILLED INFILTRATION
TYPE "C"	PROP. DEPRESSED LANDSCAPED AREA

LEGEND

679.3 EXISTING SPOT ELEVATIONS
EXISTING CONTOURS
EXISTING EASEMENT DELTA
EXISTING CABLE
DRN EXISTING IRRIGATION DRAIN LINE
EXISTING EASEMENT
E EXISTING ELECTRIC
G EXISTING GAS
IRR EXISTING IRRIGATION
EXISTING LOT LINE
T EXISTING TELEPHONE
O/H T EXISTING OVERHEAD TELEPHONE
R/W EXISTING RIGHT OF WAY
S EXISTING SEWER
FM EXISTING SEWER FORCE MAIN
W EXISTING WATER
EXISTING BOUNDARY
PROPOSED BOUNDARY
PROPOSED AND EXISTING CENTER LINE
PROPOSED EASEMENT
PROPOSED PARCEL LINE
PROPOSED RIGHT OF WAY
PROPOSED CURB & GUTTER
PROPOSED RIBBON GUTTER
PROPOSED VALLEY LINE
PR. PERVIOUS PVMT. LINE
PROPOSED BUILDING OUTLINE
PROPOSED CURB
PROPOSED GRADEBREAK/RIDGE LINE
PROPOSED EARTHEN SWALE
PROPOSED STORM DRAIN PIPE
S PROPOSED SEWER
W PROPOSED WATER

EARTHWORK ESTIMATE

(FOR PERMIT PURPOSES ONLY)

RAW CUT ..... 47,450 CY
RAW FILL ..... 22,133 CY

NOTE TO CONTRACTOR: QUANTITY ESTIMATE

MSA CONSULTING, INC. MAKES NO REPRESENTATION CONCERNING THE ESTIMATED QUANTITIES ON THESE PLANS, EXCEPT THAT ALL SUCH FIGURES, INCLUDING ALL EARTHWORK QUANTITIES, ARE PRELIMINARY ESTIMATES AND FOR PERMIT PURPOSES ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PREPARE HIS OWN QUANTITY ESTIMATE FOR CONSTRUCTION OR COST PURPOSES. MSA CONSULTING, INC. SHALL NOT BE RESPONSIBLE FOR ANY DEVIATIONS BETWEEN ESTIMATED QUANTITIES AND ACTUAL QUANTITIES AT THE TIME OF CONSTRUCTION.

ABBREVIATIONS

(E)	EAST	EG	EXISTING GRADE	MH	MANHOLE	PVMT	PAVEMENT
(N)	NORTH	EP	EDGE OF PAVEMENT	MIN.	MINIMUM	RIV.	RIVERSIDE
(S)	SOUTH	ESMT.	EASEMENT	NO.	NUMBER	R/W	RIGHT OF WAY
(W)	WEST	EX.	EXISTING	N.T.S.	NOT TO SCALE	S.D.	STORM DRAIN
AC	ASPHALT CONCRETE	FF	FINISHED FLOOR	OH	OVERHEAD	S/W	SIDEWALK
BNDY	BOUNDARY	FG	FINISHED GRADE	PA	PLANTER AREA	STA.	STATION
BSL	BUILDING SETBACK	FL	FLOWLINE	P/L	PROPERTY LINE	SWR.	SEWER
C/L	CENTERLINE	FS	FINISHED SURFACE	PE	PAD ELEVATION	TC	TOP OF CURB
C&G	CURB AND GUTTER	GB	GRADE BREAK	PIG	POINT OF INTERSECTION, GUTTER FL	TOG	TOP OF GRATE
CB	CATCH BASIN	HC	HANDICAP	PP	POWER POLE	TP	TOP OF PAVEMENT
CO.	COUNTY	HP	HIGH POINT	PROP.	PROPOSED	TYP.	TYPICAL
DI	DRAIN INLET	INV	INVERT	PT.	POINT	VC	VERTICAL CURVE
DWY	DRIVEWAY	LP	LOW POINT	PUE	PUBLIC UTILITY EASEMENT	VERT	VERTICAL
ELEV	ELEVATION	MAX.	MAXIMUM	PVI	POINT OF VERTICAL INTERSECTION	WTR.	WATER

PRELIMINARY GRADING PLAN

REVISED: 07-25-2017

Majestic Moreno Medical Plaza and Village

Nason Street & Brodiaea Avenue
Moreno Valley, California 92555

Galaxy Management Incorporated

5067 Walnut Grove Avenue
San Gabriel, CA 91776
Tel: 760-818-4858
Contact: Richard Torng

Consultant
THK Design
Architecture

260 East Garvey Avenue
Monterey Park, CA. 91755
Telephone: (323) 697-2120
Contact: Terence Kwok

CELEBRATING FORTY YEARS
MSA CONSULTING, INC.
PLANNING ■ CIVIL ENGINEERING ■ LAND SURVEYING
34200 BOB HOPE DRIVE ■ RANCHO MIRAGE ■ CA 92270
TELEPHONE (760) 320-9811 ■ FAX (760) 323-7893

Stamps

REGISTERED PROFESSIONAL ENGINEER
JUAN A. DE LA TORRE
C43880
Exp. 6-30-19
CIVIL
STATE OF CALIFORNIA

OSHPD APPROVAL
Office of Statewide Health Planning and Development (OSHPD), 400 R Street
Sacramento, California 95811
APPL. #

Date

Sheet Title
Preliminary Grading Plan

Address

Revision	Date

DATE: 03-02-17
SCALE: 1"=40'-0"
DRAWN: JSA
PROJECT NO.: XXX_XXX
SHEET: C-1
CASE NO. PA09-0033

Attachment: Preliminary Grading Plan [2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

I:\1968\ACAD\Grading\Preliminary\1968 Preliminary Grading Plan.dwg, 12/5/2017 4:14:52 PM, dgatlieri, MSA Consulting, Inc.

PLANT MATERIAL LEGEND

TREES

SYM.	NAME	SIZE	COMMENTS
	Acacia salicina Willow Acacia	24" Box	Standard
	Ulmus parvifolia Chinese Elm	24" Box	Standard
	Cercidium 'Desert Museum' Palo Verde	24" Box	Low Branching
	Lagerstroemia indica 'Pink' Crape Myrtle	24" Box	Standard
	Pinus canariensis Canary Island Pine	24" Box	Standard
	Cinnamomum camphora Camphor tree	24" Box	Standard

PALMS

SYM.	NAME	SIZE	COMMENTS
	Phoenix dactylifera Date Palm	20' BTH	
	Chamaerops humilis Mediterranean Fan Palm	24" Box	Multi Trunk

LARGE SHRUBS

SYM.	NAME	SIZE
	Cassia nemophylla Desert Cassia	5 gal.
	Nerium Oleander 'Petite Pink' Dwarf Oleander	5 gal.
	Tecoma stans angustata Yellow Bells	5 gal.
	Caesalpinia pulcherrima Red Bird of Paradise	5 gal.
	Eremophila maculata Valentine Bush	5 gal.

MEDIUM SHRUBS

SYM.	NAME	SIZE
	Leucophyllum laevigatum Chihuahuan Sage	5 gal.
	Russelia equisetiformis Coral Fountain	5 gal.
	Ruellia peninsularis Purple Ruellia	5 gal.
	Salvia greggii 'Sierra Linda' Sierra Linda Sage	5 gal.
	Salvia Leucantha Mexican Bush Sage	5 gal.

GROUND COVERS

SYM.	NAME	SIZE
	Carissa grandiflora 'Green Carpet' Green Carpet Natal Plum	5 gal.
	Dalea capitata Sierra Gold Gold Dalea	5 gal.
	Lantana montevidensis 'Trailing Purple' Purple Trailing Lantana	5 gal.
	Lantana montevidensis 'New Gold' Gold Mound Lantana	5 gal.
	Rosmarinus o. 'Huntington Carpet' Huntington Carpet Rosemary	5 gal.
	Euphorbia rigida Gopher Plant	5 gal.

ACCENTS

SYM.	NAME	SIZE
	Bougainvillea 'Oh La La' Oh La La Bougainvillea	5 gal.
	Bougainvillea 'Barbara Karst' Barbara Karst Bougainvillea	5 gal.
	Caesalpinia pulcherrima Red Bird of Paradise	5 gal.
	Dasylirion wheeleri Desert Spoon	5 gal.
	Hesperaloe parviflora Red Yucca	5 gal.
	Hesperaloe funifera Giant Hesperaloe	5 gal.
	Agave palmeri Palmer's Agave	5 gal.
	Cycas revoluta Sago Palm	15 gal.

AGAVES AND YUCCAS

SYM.	NAME	SIZE
	Agave americana Century Plant	15 gal.
	Agave american var. marginata Variegated Century Plant	15 gal.
	Agave Colorata Mescal Cenizo	5 gal.
	Agave desmettiana Agave	5 gal.
	Yucca recurvifolia Pendulous Yucca	5 gal.

INERT MATERIALS

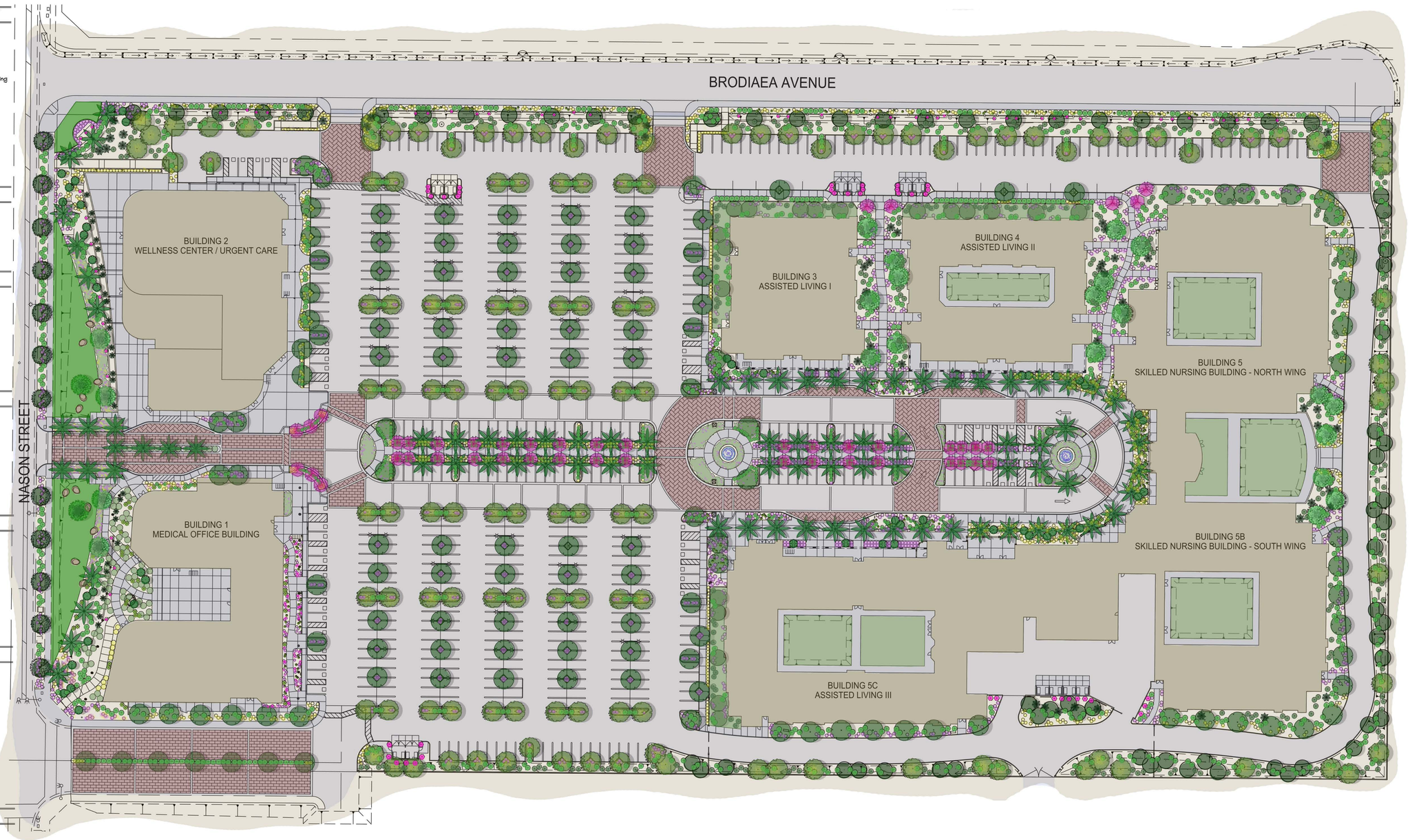
SYM.	DESCRIPTION
	BOULDERS TO BE 'CRESTA'.
	ALL PLANTER AREAS TO RECEIVE 'DESERT GOLD' DECOMPOSED GRANITE (DG) 3/8" MINUS WITH 11% FINES MAXIMUM. DG TO BE COMPACTED TO A 2" DEPTH AFTER BEING THOROUGHLY WETTED AND EITHER ROLLED OR TAMPED.

LAWN

SYM.	NAME
	Synthetic Turf

IRRIGATION SYSTEM:

THE IRRIGATION SYSTEM SHALL BE FULLY AUTOMATIC AND CONTROLLED BY A EVAPOTRANSPIRATION (ET) BASED CONTROLLER WITH A RAIN SENSING OVERRIDE DEVICE. ALL SHRUBS WILL IRRIGATED WITH WATER EFFICIENT DRIP EMITTERS AND ALL TURF HEADS WILL HAVE AUTOMATIC CHECK VALVES TO PREVENT WATER RUN-OFF.



Riverside County Ordinance 859 Landscape Water Use Calculations
Moreno Valley Medical Plaza

1 Maximum Annual Water Allowance (MAWA)

INPUT the total square footage of landscape = 189,835 S.F.
INPUT the Hist. ETo for the area = 55.1

MAWA = **606,898** cu ft / yr

2 Estimated Annual Water Use (EAWU)

Hydrozone # 1 **INPUT** Plant Factor = 0.7
INPUT square footage of hydrozone = 35,880
INPUT hydrozone irrigation efficiency = 0.75 sprays
EAWU = 152,558 cu ft / yr

Hydrozone # 2 0 0.5
INPUT square footage of hydrozone = 61,593
INPUT hydrozone irrigation efficiency = 0.9 drip
EAWU = 156,271 cu ft / yr

Hydrozone # 3 **INPUT** Plant Factor = 0.2
INPUT square footage of hydrozone = 92,385
INPUT hydrozone irrigation efficiency = 0.9 drip
EAWU = 93,763 cu ft / yr

SubTotal EAWU = 402,892 cu ft / yr
Input Irrigation System Operation Factor 0.85
Total EAWU = **473,991**
MAWA - EAWU = **132,907** cu ft / yr
(this number must be positive)

PERCENTAGE OF WATER SAVED RELATIVE TO MAX. ALLOWED = 22%

HSA DESIGN GROUP

MORENO VALLEY MEDICAL PLAZA

NASON STREET & BRODIAEA AVENUE
MORENO VALLEY, CALIFORNIA

CONCEPTUAL LANDSCAPE PLAN

0 40 80 160
GRAPHIC SCALE
1"=40'-0"

JULY 18, 2017

Attachment: Landscape Plan (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Majestic Moreno Valley Medical Village

Table of Contents

Aerial Views of Site
Street and Neighborhood Views of Site
Proposed Building Plans, Elevations, and Perspectives
Material Boards
Landscape Selections
Project Participants

Attachment: Architecture [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Majestic Moreno Valley Medical Village Proposal

Attachment: Architecture [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Majestic Moreno Valley Medical Village: Aerial View from Northeast Corner of Site

Proposed Moreno Valley Medical Village at Nason Street

Attachment: Architecture [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Assisted Living I, Assisted Living II, Skilled Nursing, and Assisted Living III Buildings: Aerial looking West

Proposed Moreno Valley Medical Village at Brodiaea Street

Attachment: Architecture [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Majestic Moreno Valley Medical Village

Street and Neighborhood Views of Site

Nason Street Views
Brodiaea Street Views
East Side Neighborhood View

Attachment: Architecture [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Vehicular Entrance From Nason Street

View From Northwest Corner of Nason and Brodiaea Streets

View From East Hospital Road,
Looking Northeast

Nason Street Views

Proposed Moreno Valley Medical Village at Nason and Brodiaea Streets

Attachment: Architecture [Revision 1] (2847 : PEN16-0048, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

At East End

Adjacent to Parking Lot

At West End

Nason Street Views

Proposed Moreno Valley Medical Village at Nason and Brodiaea Streets

Attachment: Architecture [Revision 1] (2847 : PEN16-0048, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Majestic Moreno Valley Medical Village

Proposed Facilities

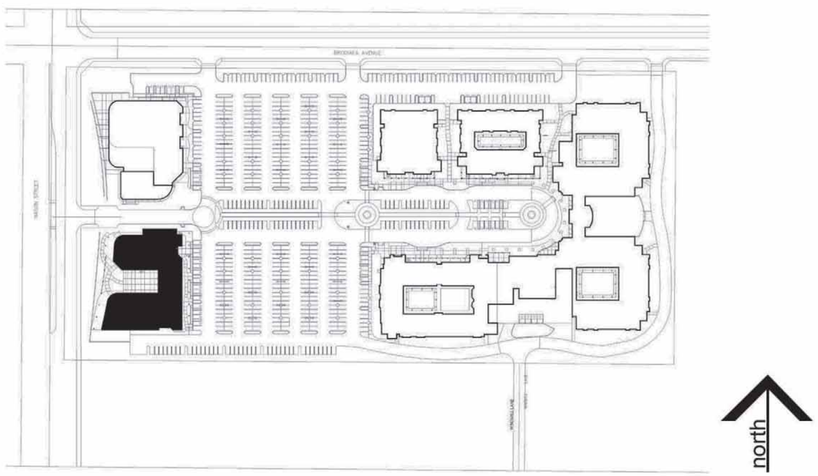
Building 1: Medical Office Building: Floor Plan, Elevations, and Perspectives
Building 2: Wellness Center / Urgent Care Building: Floor Plan, Elevations, and Perspectives
Building 3: Assisted Living I Building: Floor Plan, Elevations, and Perspectives
Building 4: Assisted Living II Building: Floor Plan, Elevations, and Perspectives
Building 5A and 5B: Skilled Nursing Building: Floor Plan, Elevations, and Perspectives
Building 5C: Assisted Living III Building: Floor Plan, Elevations, and Perspectives

Attachment: Architecture [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

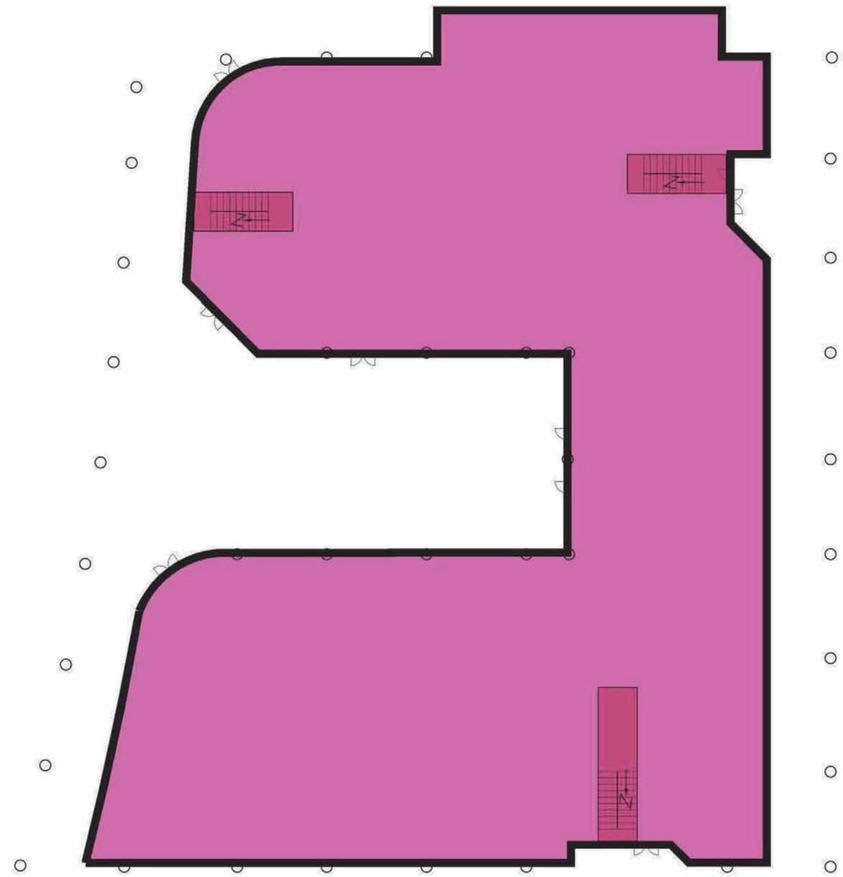
Building 1: Medical Office Building

Address: Nason Street Address to be Assigned
Occupancy Group: B
Proposed Use: Medical Offices
Construction Type: II or III
Building Area: 53,000 s.f.
Height: 32 feet / Two-Story
Parking Spaces Required: 53,000/225=235.56
Parking Spaces Provided: 280

Attachment: Architecture [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)



Key Plan

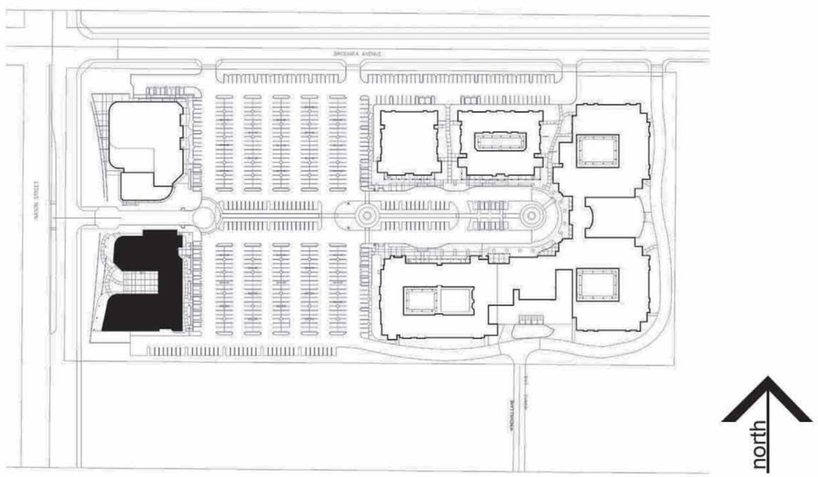


Frist Plan

Medical Office Building: Floor Plans

Proposed Moreno Valley Medical Village at Nason and Brodiaea Streets

Attachment: Architecture [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)



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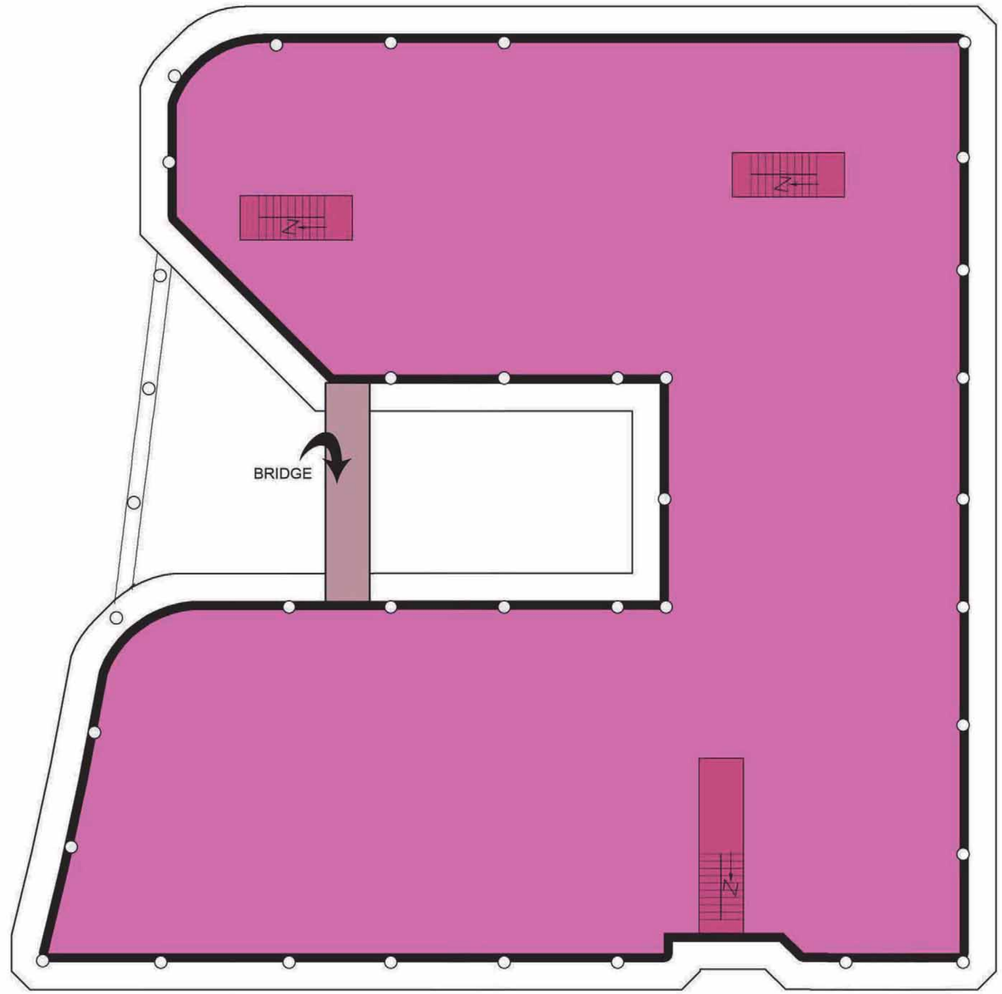


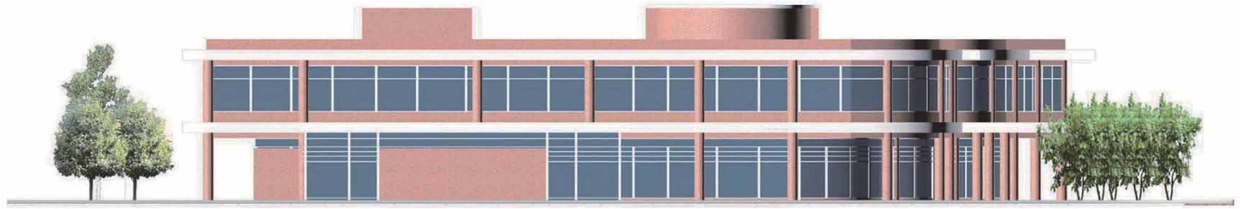
Second Plan

Medical Office Building: Second Plans

Proposed Moreno Valley Medical Village at Nason and Brodiaea Streets

Attachment: Architecture [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

South Elevation



East Elevation

West Elevation

North Elevation

Medical Office Building: Exterior Elevations

Proposed Moreno Valley Medical Village at Nason and Brodiaea Streets

Attachment: Architecture [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Medical Office Building: Street View from Northwest Corner

Proposed Moreno Valley Medical Village at Nason and Brodiaea Streets

Attachment: Architecture [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Northeast Corner

Southeast Corner

Nason Street Southwest and Northwest Corners

Medical Office Building: Four Views

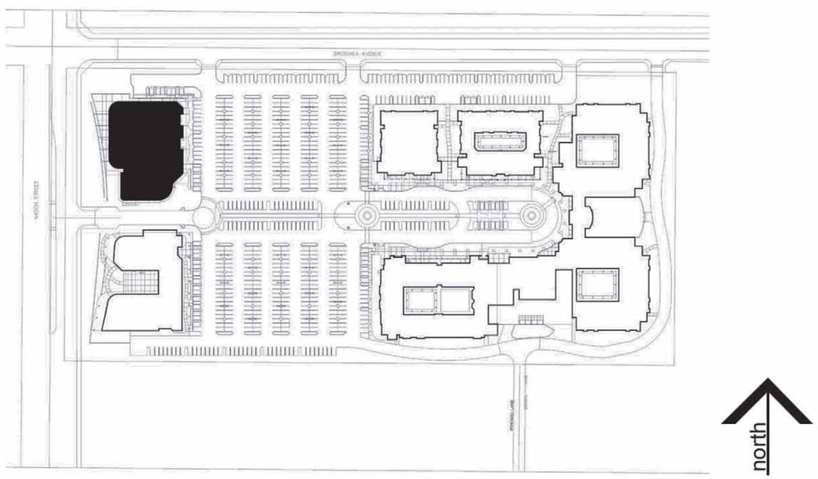
Proposed Moreno Valley Medical Village at Nason and Brodiaea Streets

Attachment: Architecture [Revision 1] (2847 : PEN16-0048, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

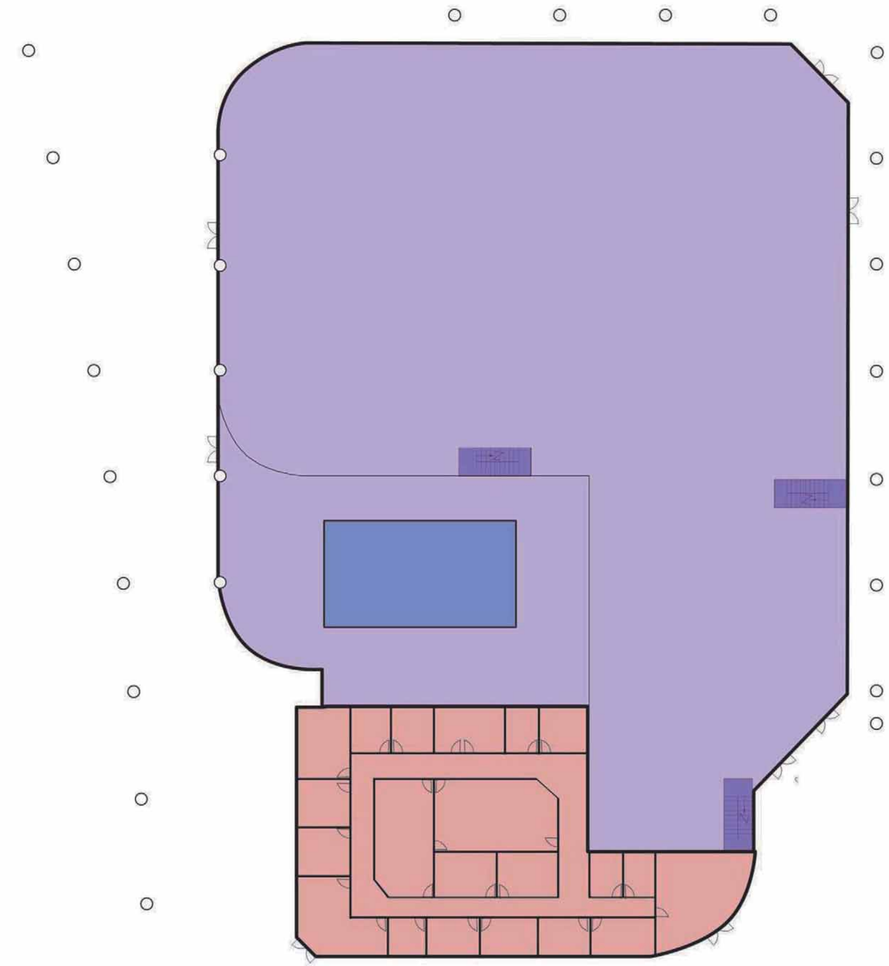
Wellness Center / Urgent Care

Address: Nason Street to be Assigned
Occupancy Group: B
Proposed Use: Wellness Center with Indoor Exercise Pool / Urgent Care
Building Area: 53,000 sf
Height: 32 feet / Two-Story at Wellness Center
16 feet / One Story at Urgent Care
Parking Spaces Required: 53,000/225=235.56
Parking Spaces Provided: 245

Attachment: Architecture [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)



Key Plan

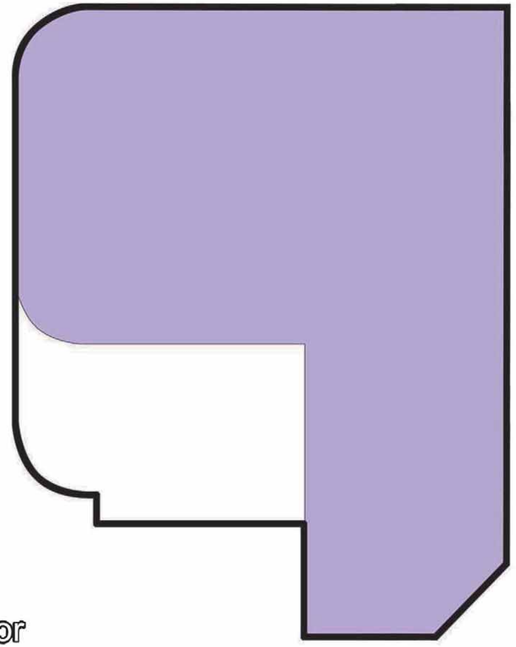


First Floor

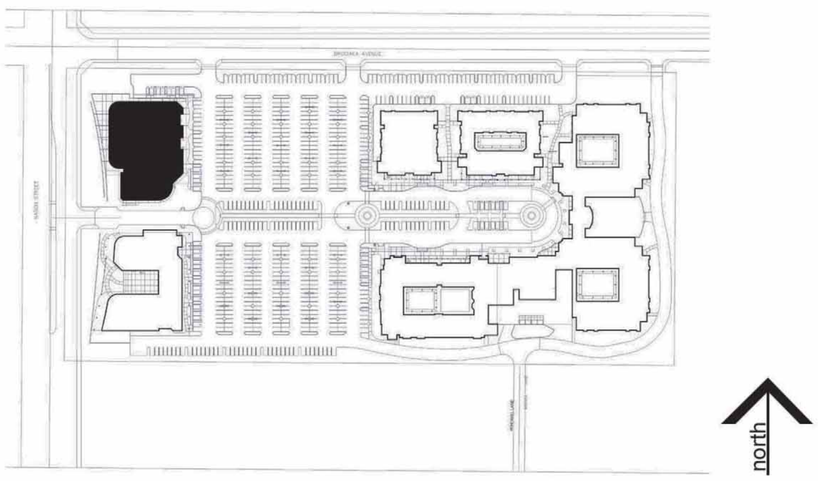
Wellness Center / Urgent Care: Floor Plans

Proposed Moreno Valley Medical Village at Nason and Brodiaea Streets

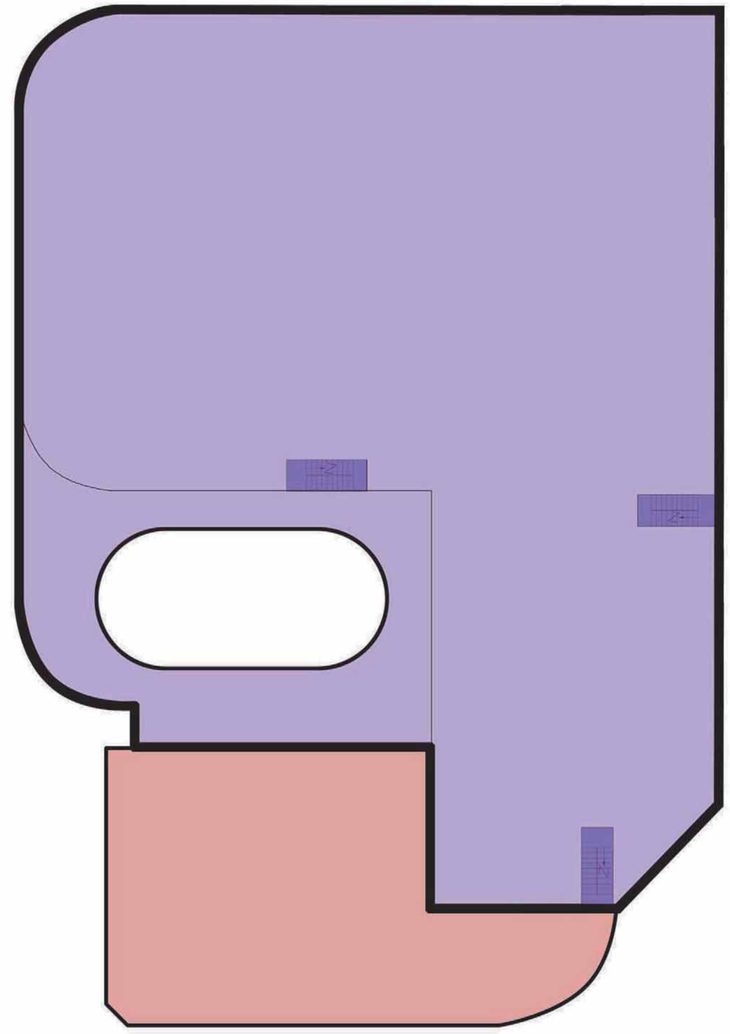
Attachment: Architecture [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)



Second Floor



Key Plan

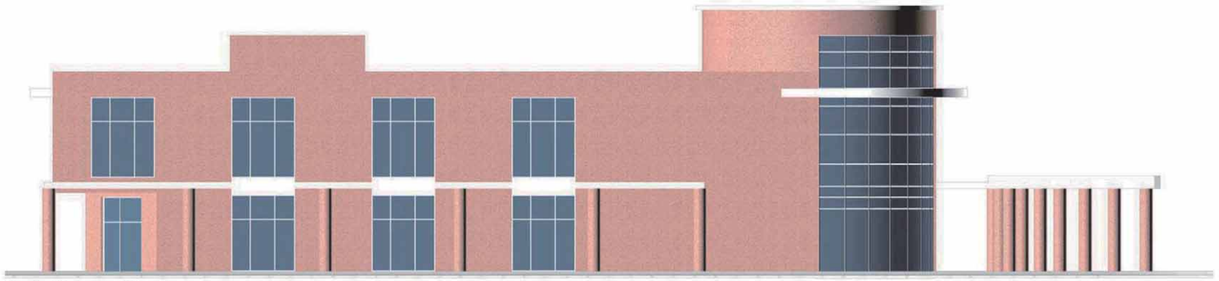


Mezzanine

Wellness Center / Urgent Care: Floor Plans

Proposed Moreno Valley Medical Village at Nason and Brodiaea Streets

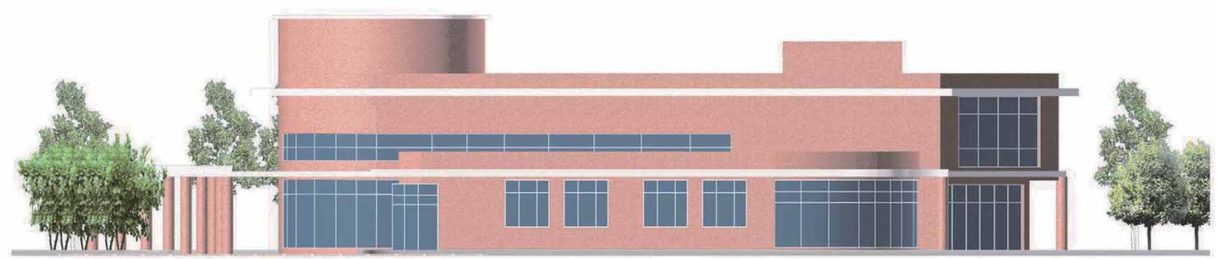
Attachment: Architecture [Revision 1] (2847 : PEN16-0048-0049, PEN16-0053-0057, PEN17-0013 Majestic Moreno Valley)



North Elevation

West Elevation

East Elevation



South Elevation

Wellness Center / Urgent Care: Exterior Elevations

Proposed Moreno Valley Medical Village at Nason and Brodiaea Streets

Attachment: Architecture [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Wellness Center: View from Corner of Nason and Brodiaea Streets

Proposed Moreno Valley Medical Village at Nason and Brodiaea Streets

Attachment: Architecture [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Wellness Center: Three Views

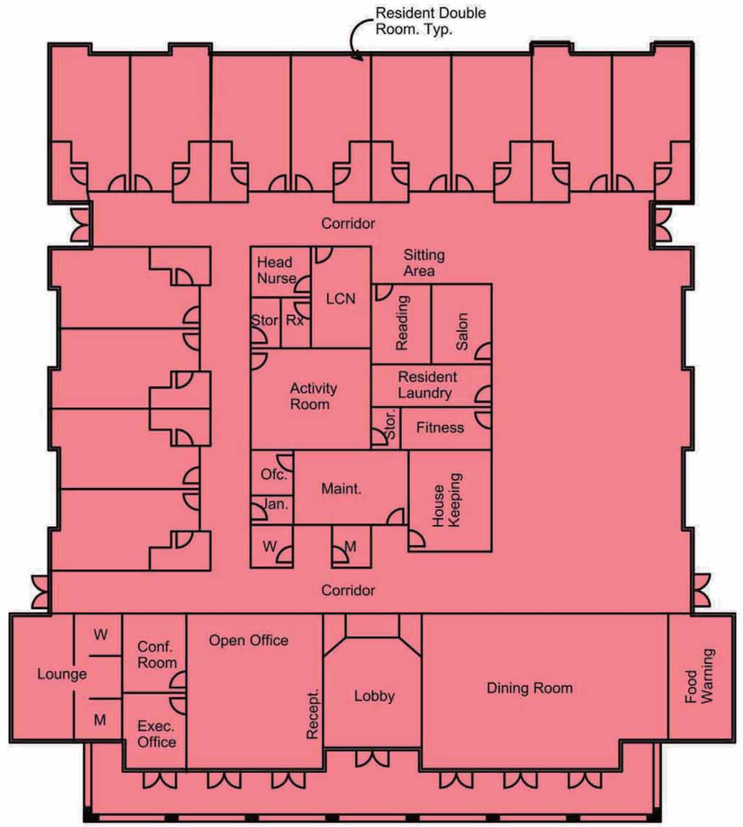
Proposed Moreno Valley Medical Village at Nason and Brodiaea Streets

Attachment: Architecture [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

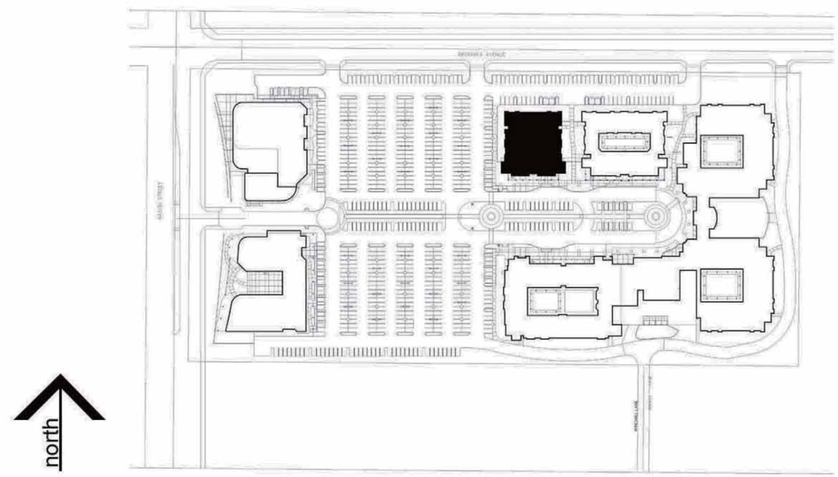
Assisted Living I Building

Address: Nason Street Address to be Assigned
Occupancy Group: I-2
Proposed Use: / 32-Bed
Construction Type: V-A
Building Area: 16,200 s.f.
Height: 18.5 feet / One-Story
Parking Spaces Required: 32/3=10.67
Parking Spaces Provided: 13

Attachment: Architecture [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)



Floor Plan



Key Plan

Assisted Living I Floor Plan

Proposed Moreno Valley Medical Village at Nason and Brodiaea Streets

Attachment: Architecture [Revision 1] (2847 : PEN16-0048-0049, PEN16-0053-0057, PEN17-0013 Majestic Moreno Valley)

North Elevation

West Elevation

East Elevation

South Elevation

Assisted Living I: Exterior Elevations

Proposed Moreno Valley Medical Village at Nason and Brodiaea Streets

Attachment: Architecture [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Assisted Living I: Southeast Corner

Proposed Moreno Valley Medical Village at Nason and Brodiaea Streets

Attachment: Architecture [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Assisted Living I: Three Views

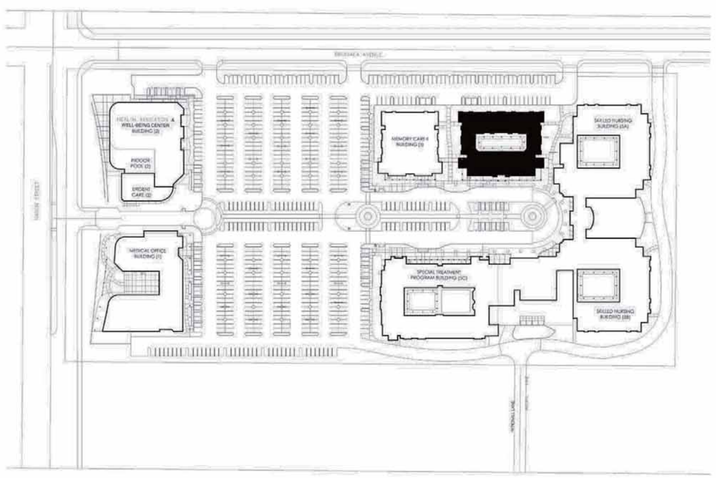
Proposed Moreno Valley Medical Village at Nason and Brodiaea Streets

Attachment: Architecture [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Assisted Living II Building

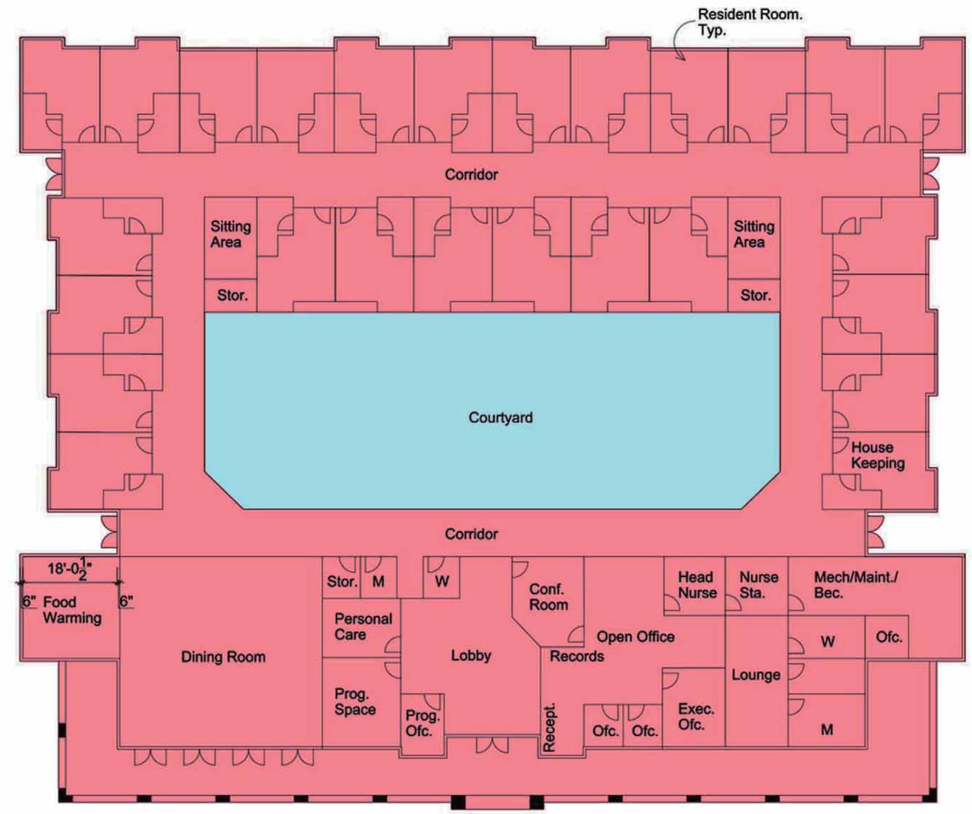
Address: Nason Street Address to be Assigned
Occupancy Group: I-2
Proposed Use: / 25-Bed
Construction Type: V-A
Building Area: 18,400 s.f.
Height: 18.5 feet / One-Story
Parking Spaces Required: 25/3=8.33
Parking Spaces Provided: 9

Attachment: Architecture [Revision 1] (2847 : PEN16-0048-0049, PEN16-0053-0057, PEN17-0013 Majestic Moreno Valley)



Key Plan

north



Floor Plan

Assisted Living II: Floor Plan

Proposed Moreno Valley Medical Village at Nason and Brodiaea Streets

Attachment: Architecture [Revision 1] (2847 : PEN16-0048-0049, PEN16-0053-0057, PEN17-0013 Majestic Moreno Valley)

North Elevation

West Elevation

East Elevation

South Elevation

Assisted Living II: Exterior Elevations

Proposed Moreno Valley Medical Village at Nason and Brodiaea Streets

Attachment: Architecture [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Assisted Living II: Southeast Corner View

Proposed Moreno Valley Medical Village at Nason and Brodiaea Streets

Attachment: Architecture [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Assisted Living II: Three Views

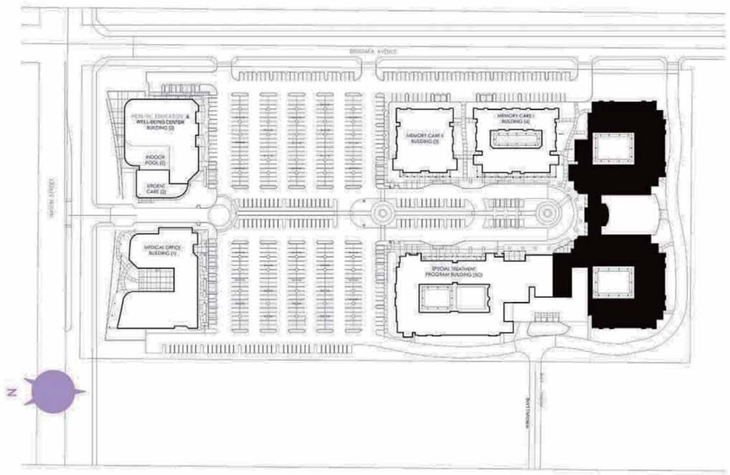
Proposed Moreno Valley Medical Village at Nason and Brodiaea Streets

Attachment: Architecture [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Skilled Nursing Building

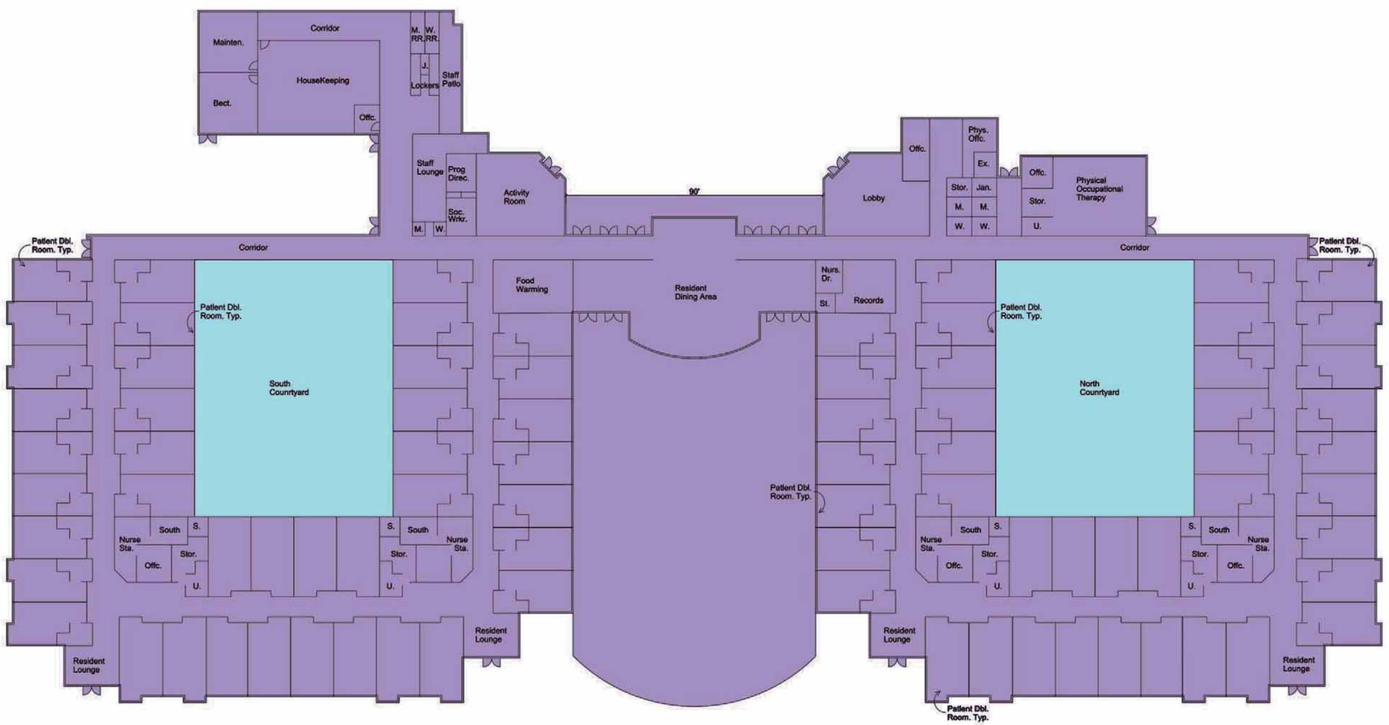
Address: Nason Street Address to be Assigned
Occupancy Group: I-2
Proposed Use: / 158-Bed
Construction Type: V-A
Building Area: 60,800 s.f.
Height: 21 feet / One-Story
Parking Spaces Required: 158/3=52.67
Parking Spaces Provided: 53

Attachment: Architecture [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)



Key Plan

north



Floor Plan

Skilled Nursing Building: Floor Plan

Proposed Moreno Valley Medical Village at Nason and Brodiaea Streets

Attachment: Architecture [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

North Elevation

South Elevation

West Elevation

East Elevation

Skilled Nursing Building: Exterior Elevations

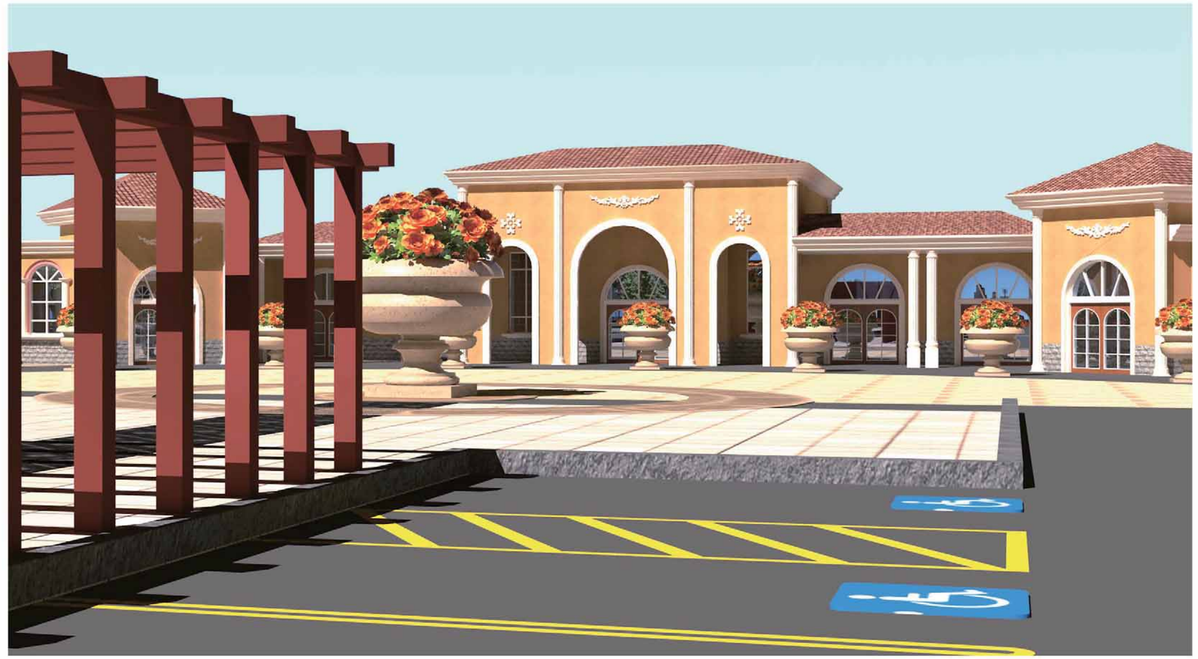
Proposed Moreno Valley Medical Village at Nason and Brodiaea Streets

Attachment: Architecture [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Skilled Nursing Building: West Elevation

Proposed Moreno Valley Medical Village at Nason and Brodiaea Streets

Attachment: Architecture [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)



Skilled Nursing Building: Three Views

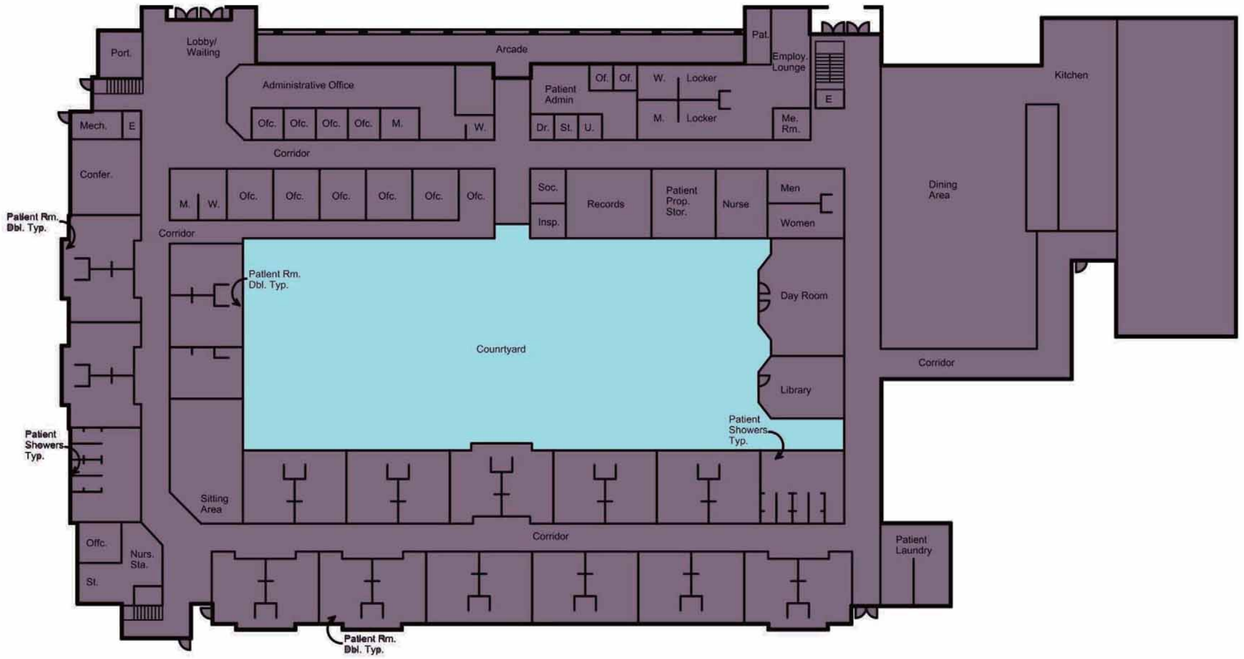
Proposed Moreno Valley Medical Village at Nason and Brodiaea Streets

Attachment: Architecture [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

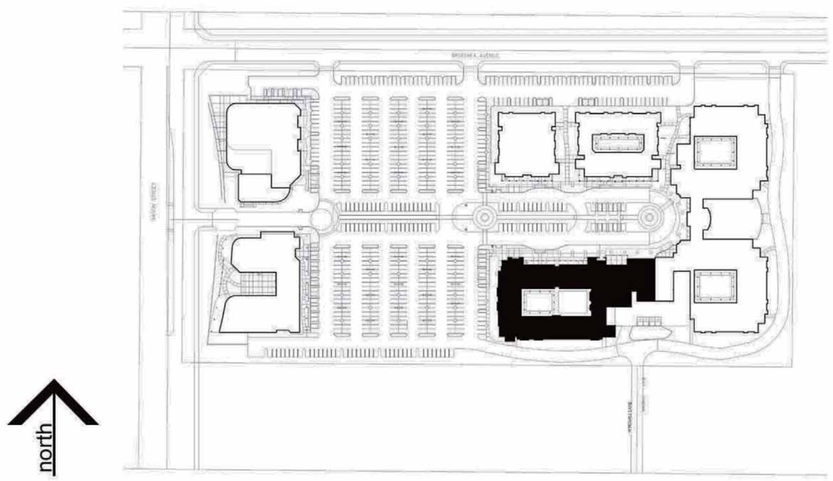
Assisted Living III Building

Address: Nason Street Address to be Assigned
Occupancy Group: I-2
Proposed Use: / 150-Bed
Construction Type: V-A
Building Area: 57,200 s.f.
Height: 34 feet / Two-Story
Parking Spaces Required: 150/3=50
Parking Spaces Provided: 50

Attachment: Architecture [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)



Floor Plan

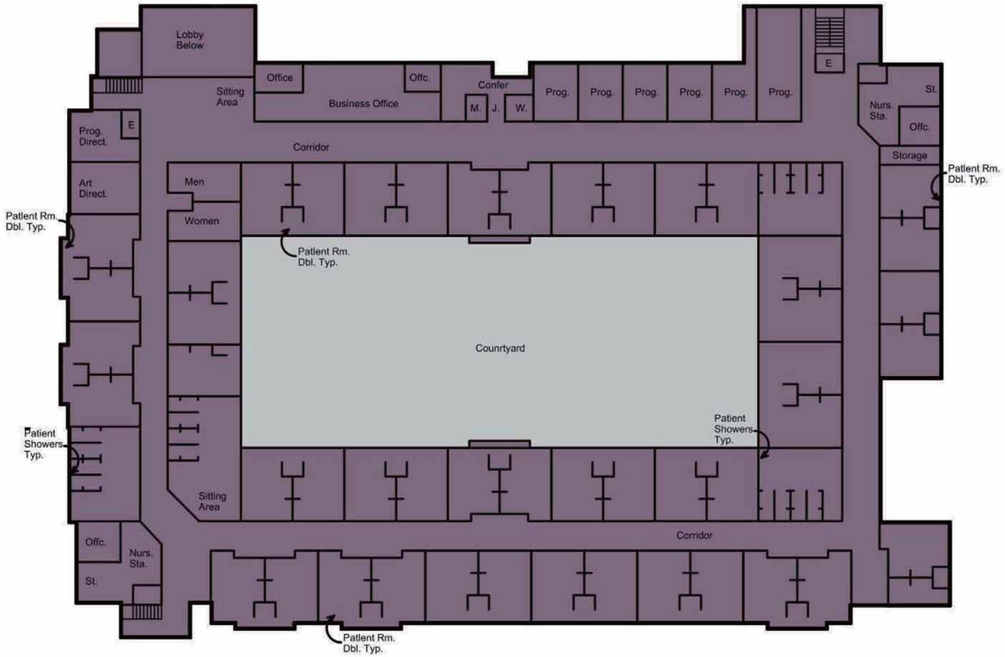


Key Plan

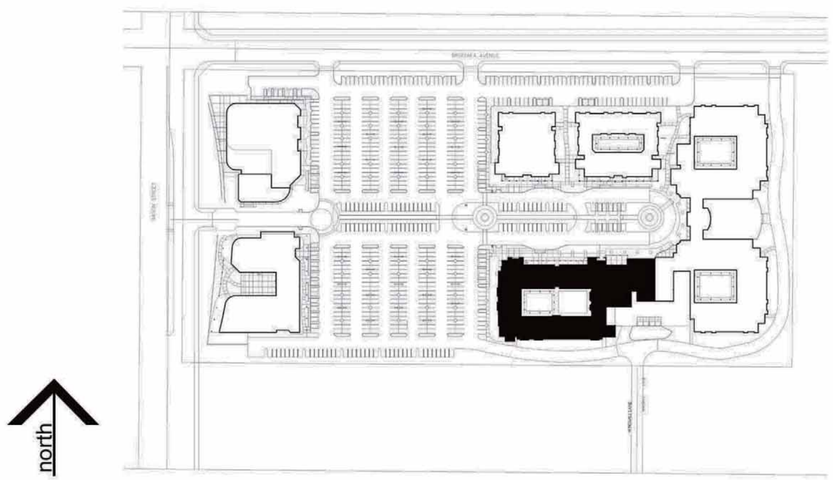
Assisted Living III Building: First Floor Plan

Proposed Moreno Valley Medical Village at Nason and Brodiaea Streets

Attachment: Architecture [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)



Second Plan

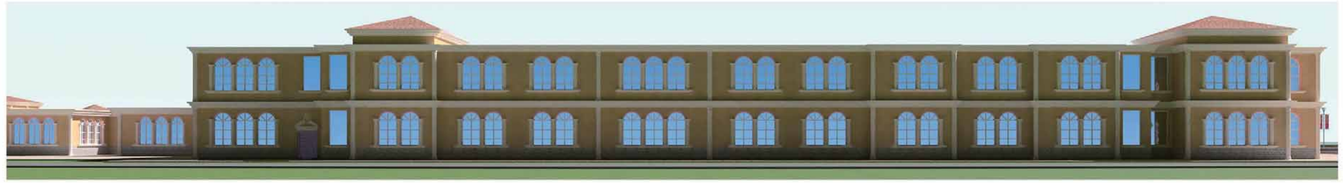


Key Plan

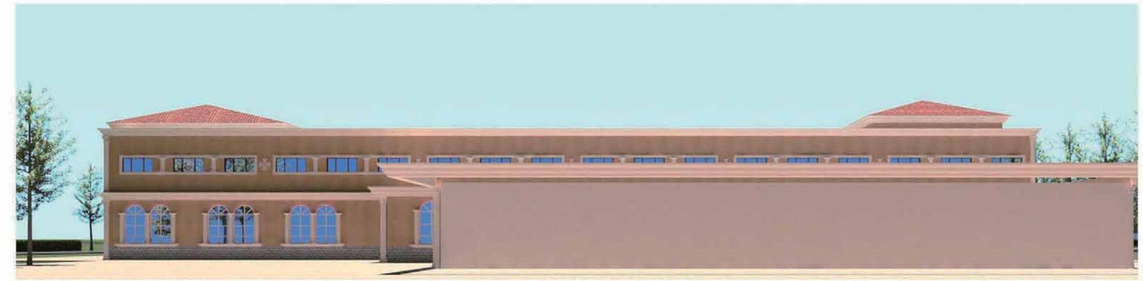
Assisted Living III Building: Second Floor Plan

Proposed Moreno Valley Medical Village at Nason and Brodiaea Streets

Attachment: Architecture [Revision 1] (2847 : PEN16-0048-0049, PEN16-0053-0057, PEN17-0013 Majestic Moreno Valley)



North Elevation



West Elevation

East Elevation

South Elevation

Assisted Living III Building: Exterior Elevations

Proposed Moreno Valley Medical Village at Nason and Brodiaea Streets

Attachment: Architecture [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Assisted Living III Building: North Elevation

Proposed Moreno Valley Medical Village at Nason and Brodiaea Streets

Attachment: Architecture [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Assisted Living III Building: Three Views

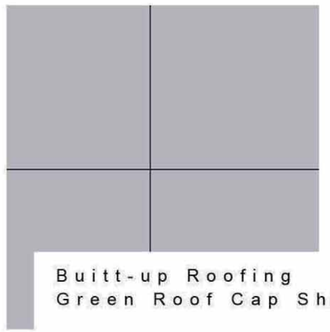
Proposed Moreno Valley Medical Village at Nason and Brodiaea Streets

Attachment: Architecture [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Majestic Moreno Valley Medical Village

Material and Finishes
Exterior Finishes
Site Materials

Attachment: Architecture [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

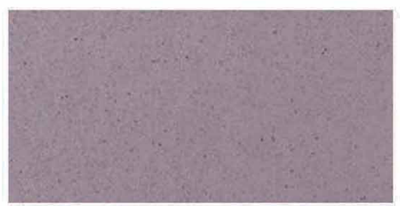


Buitt-up Roofing
Green Roof Cap Sheet R-1

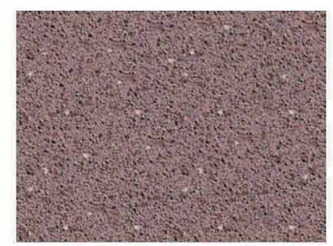
Storetront System Clear Anodized Aluminum wdw -1

Storetront / Window GlazingSolarBlue Tint WDW-2

Wall Stucco Finish Smooth Coa W-1



Colonnade Stucco Finish
Smooth Coat W-2



Concrete Walk F-1

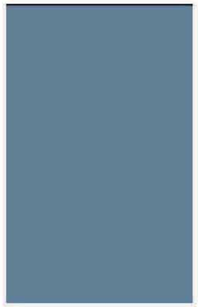
Medical Office Building

Wellness Center/Urgent Care Center

Moreno Valley Medical Vilage, Moreno Valley, California

Attachment: Architecture [Revision 1] (2847 : PEN16-0048-0049, PEN16-0053-0057, PEN17-0013 Majestic Moreno Valley)

Clay Roof Tile Classic Style
With Custom Roof Blend R-1



Paint Window Shutter P-1

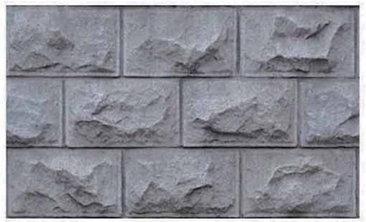
Paint Door/ Door Frame P-1

Black Vinyl Window WDW-1

SolarBronze Tint Glazing WDW -2

Wall Stucco Finish
Spanish Texture W-1

Cuttured Stone
Quoins &Sills W-2



Cultured Stone Wainscot Ancient
Villa Ledgestone Toscana W-3

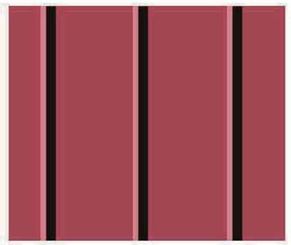
Skilled Nuring Facilities

Assisted Living Buildings

Moreno Valley Medical Vilage, Moreno Valley, California

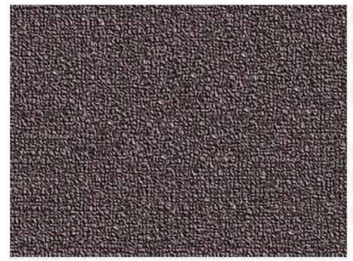
Attachment: Architecture [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Paint Entry Monument



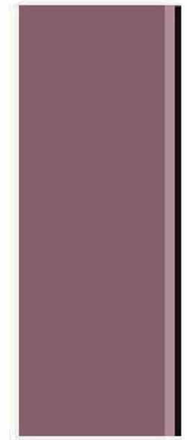
Trash Enclosure

Metal Deck Roof

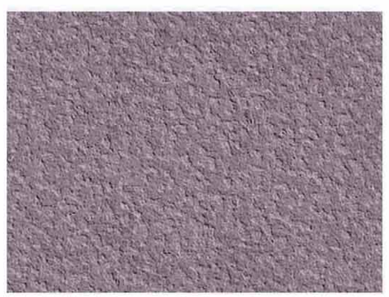


Trash Enclosure
Wall Stucco Finsh
Smooth Coat

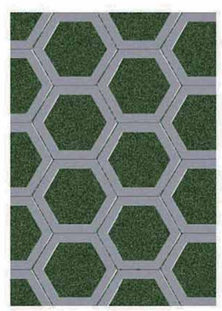
Trash Enclosure
Wall Stucco Finsh
Spanish Texture

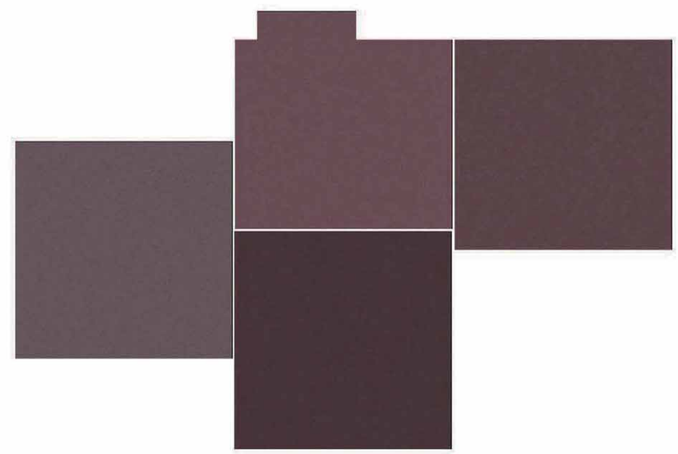


Paint Metal Trellis



Stamped Concrete





Turtstone Pavers Tuscany Blend

Site Materials

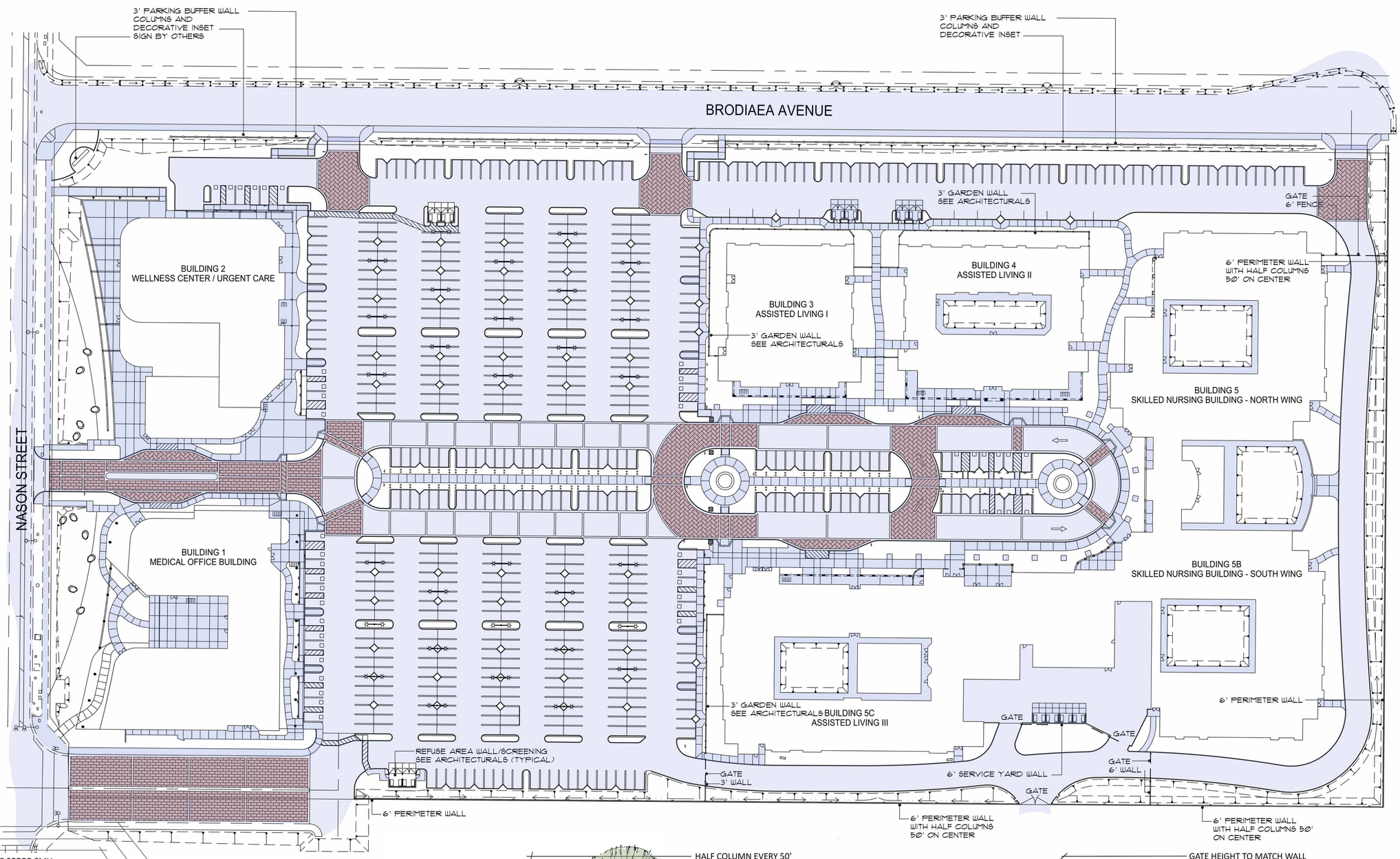
Moreno Valley Medical Vilage, Moreno Valley, California

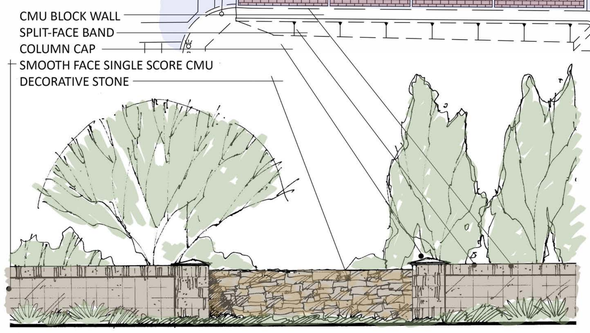
Optiflex Properties & Development LLC.

Attachment: Architecture [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

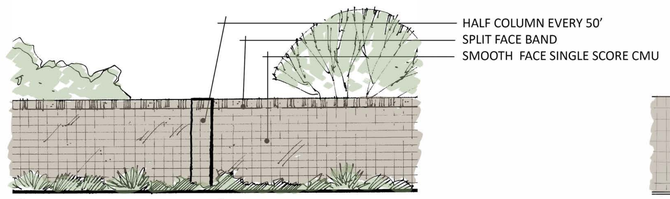
Majestic Moreno Medical Plaza and Village

Attachment: Architecture [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

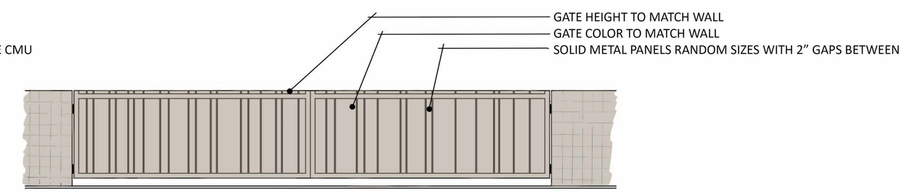




3' PARKING BUFFER WALL AND LOW GARDEN WALL WITH COLUMNS AND DECORATIVE PANEL
*ALL BLOCK TO BE INTEGRAL COLOR



6' PERIMETER WALL *ALL BLOCK TO BE INTEGRAL COLOR



GATE / ELEVATION

MORENO VALLEY MEDICAL PLAZA

NASON STREET & BRODIAEA AVENUE
MORENO VALLEY, CALIFORNIA

WALL LAYOUT PLAN

HSA DESIGN GROUP

0 40 80 160
GRAPHIC SCALE
1"=40'-0"

JULY 18, 2016

Attachment: Wall Exhibit (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Biological Resources Assessment & Western Riverside County MSHCP Consistency Analysis

18.0 Acres – Southeast Corner of Nason Street & Brodiaea Avenue
Moreno Valley, Riverside County, California

Prepared for:
Galaxy Management, Inc.
5067 Walnut Grove Avenue
San Gabriel, California 91776

Prepared by:
MIG
1500 Iowa Avenue, Suite 110
Riverside, California 92507

June 2017

Attachment: Tech Study BRA and MSHCP Consistency Analysis [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic

This document is formatted for double-sided printing

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Attachment: Tech Study BRA and MSHCP Consistency Analysis [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic

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Attachment E-3. Biological Report Summary Sheet
Attachment E-4. Level of Significance Checklist
Attachment E-5. Soils Map
Attachment E-6. Biological Resources Map
Attachment E-7. Current Project Site Photographs

Appendices

Appendix A Special-Status Animal Species with Potential to Occur on the Project Site
Appendix B Special-Status Plant Species with Potential to Occur on the Project Site
Appendix C List of Observed Species

Attachment: Tech Study BRA and MSHCP Consistency Analysis [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic

List of Abbreviated Terms

BMP	Best Management Practice
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
FESA	Federal Endangered Species Act
HCP	Habitat Conservation Plan
MBTA	Migratory Bird Treaty Act
MSL	Mean Sea Level
MSHCP	Multiple Species Habitat Conservation Plan
NCCP	Natural Community Conservation Planning
NOAA Fisheries	National Oceanic and Atmospheric Administrations' National Marine Fisheries Service
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act
NRCS	Natural Resource Conservation Service
RCIP	Riverside County Integrated Project
RWQCB	Regional Water Quality Control Board
SWPPP	Stormwater Pollution Prevention Plan
SF	Square Foot
USACE	United States Army Corps of Engineers
U.S.C.	United States Code
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

Attachment: Tech Study BRA and MSHCP Consistency Analysis [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic

Attachment: Tech Study BRA and MSHCP Consistency Analysis [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic

1.0 INTRODUCTION

The purpose of this Biological Resource Assessment and Multiple Species Habitat Conservation Plan (MSHCP) Consistency Analysis is to verify the type, location, and extent of potential sensitive biological resources located on the 18.0-acre site located at the southeast corner of Nason Street and Brodiaea Avenue (APNs 486-290-036 and -037) in the City of Moreno Valley, Riverside County, California (Project Site). MIG conducted a field survey of the Project Site on May 19, 2016. This report provides a thorough description of the biological setting of the Project Site and surrounding area, as well as a description of the vegetation communities, wildlife, potential movement/migration corridors, special-status species, sensitive natural communities, and potential for jurisdictional waters and wetlands. An assessment of the project impacts and recommended mitigation measures to avoid, minimize, or compensate for potential adverse impacts to sensitive habitats and species is also included in the report. The evaluation of potential project impacts follows the checklist items from Appendix G of the California Environmental Quality Act (CEQA) guidelines and has been prepared in a format suitable to support CEQA review and to submit with any future regulatory application packages that might be required.

This report also presents the findings of a Western Riverside County MSHCP Biological Assessment and Consistency Analysis for the 18.0-acre Project Site. The purpose of this study is to document the existing biological resources, identify vegetation types, and assess the potential biological and regulatory constraints associated with the proposed development as outlined by the MSHCP. An MSHCP burrowing owl (*Athene cunicularia*) habitat assessment was also conducted for this report (MSHCP 2006).

1.1 Project Location

The 18.0-acre Project Site is located north of Cactus Avenue, south of Brodiaea Avenue, east of Nason Street, and west of Anthony Place in the City of Moreno Valley, Riverside County, California, on APNs 486-290-036 and -037 (Attachment E-1, Vicinity Map; Attachment E-2, Project Site Map). The Project Site occurs within the U.S. Geological Survey (USGS) 7.5-Minute series Sunnymead Quadrangle, Township 3 South, Range 3 West, Section 15.

The Project Site is relatively flat, with elevations ranging between approximately 1,555 and1,570 feet above mean sea level. The most prominent surface water feature in the vicinity of the Project Site is Lake Perris, located approximately 3.5 miles south of the Project Site.

Land uses bordering the Project Site include vacant land to the north and south, residential uses to the east, and medical uses to the west. The 60 Freeway (Moreno Valley Freeway) is located approximately 1.8 miles north of the Project Site.

1.2 Project Description

The proposed project includes the construction and operation of the 309,441 square-foot (SF) Moreno Valley Medical Village. The proposed Moreno Valley Medical Village will consist of six buildings plus an attached Urgent Care Center in one of the six buildings. Buildings share on-grade parking of 210,000 SF. that can accommodate 696 cars. The Medical Village will consist of the following:

- Medical Office Building (91,292 SF)
- Health Education & Wellbeing Center (50,000 SF) with attached Urgent Care Facility (5,000 SF)
- Skilled Nursing Facility (64,534 SF)

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- Skilled Nursing Facility with Special Treatment Program (64,215 SF)
- Memory Care Unit (18,200 SF)
- Geriatric Psych Unit (16,200 SF)

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2.0 REGULATORY SETTING

The following discussion identifies federal, state, and local environmental regulations that serve to protect sensitive biological resources relevant to the proposed Project Site and CEQA review process.

2.1 Federal

2.1.1 Federal Endangered Species Act

The Federal Endangered Species Act (FESA) of 1973, as amended, provides the regulatory framework for the protection of plant and animal species (and their associated critical habitats), which are formally listed, proposed for listing, or candidates for listing as endangered or threatened under the FESA. The FESA has the following four major components: (1) provisions for listing species, (2) requirements for consultation with the United States Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries), (3) prohibitions against "taking" (meaning harassing, harming, hunting, shooting, wounding, killing, trapping, capturing, or collecting, or attempting to engage in any such conduct) of listed species, and (4) provisions for permits that allow incidental "take". The FESA also discusses recovery plans and the designation of critical habitat for listed species. Section 7 requires Federal agencies, in consultation with, and with the assistance of the USFWS or NOAA Fisheries, as appropriate, to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of threatened or endangered species or result in the destruction or adverse modification of critical habitat for these species. Both the USFWS and NOAA Fisheries share the responsibility for administration of the FESA.

2.1.2 The Migratory Bird Treaty Act

The Federal Migratory Bird Treaty Act (MBTA) (16 U.S. Code (U.S.C.) 703 et seq.), Title 50 Code of Federal Regulations (CFR) Part 10, prohibits taking, killing, possessing, transporting, and importing of migratory birds, parts of migratory birds, and their eggs and nests, except when specifically authorized by the Department of the Interior. As used in the act, the term "take" is defined as meaning, "to pursue, hunt, capture, collect, kill or attempt to pursue, hunt, shoot, capture, collect or kill, unless the context otherwise requires." With a few exceptions, most birds are considered migratory under the MBTA. Disturbances that causes nest abandonment and/or loss of reproductive effort or loss of habitat upon which these birds depend would be in violation of the MBTA.

2.1.3 Clean Water Act Sections 404 and 401

The U.S. Army Corps of Engineers (USACE) and the U.S. Environmental Protection Agency regulate the discharge of dredged or fill material into waters of the U.S., including wetlands, under Section 404 of the Clean Water Act (CWA) (33 U.S.C. 1344). Waters of the U.S. are defined in Title 33 CFR Part 328.3(a) and include a range of wet environments such as lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds. The lateral limits of jurisdiction in those waters may be divided into three categories – territorial seas, tidal waters, and non-tidal waters – and is determined depending on which type of waters is present (Title 33 CFR Part 328.4(a), (b), (c)). Activities in waters of the U.S. regulated under Section 404 include fill for development, water resource projects (e.g., dams and levees), infrastructure developments (e.g., highways, rail lines, and airports) and mining projects. Section 404 of the CWA requires a federal permit before dredged or fill material may be discharged into waters of the U.S., unless the activity is exempt from Section 404 regulation (e.g., certain farming and forestry activities).

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Section 401 of the CWA (33 U.S.C. 1341) requires an applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the U.S. to obtain a water quality certification from the state in which the discharge originates. The discharge is required to comply with the applicable water quality standards. A certification obtained for the construction of any facility must also pertain to the subsequent operation of the facility. The responsibility for the protection of water quality in California rests with the State Water Resources Control Board and its nine Regional Water Quality Control Boards (RWQCBs).

2.2 State

2.2.1 California Endangered Species Act

The State of California enacted similar laws to the FESA, the California Native Plant Protection Act (NPPA) in 1977, and the California Endangered Species Act (CESA) in 1984. The CESA expanded upon the original NPPA and enhanced legal protection for plants, but the NPPA remains part of the California Fish and Game Code. To align with the FESA, CESA created the categories of "threatened" and "endangered" species. It converted all "rare" animals into the CESA as threatened species, but did not do so for rare plants. Thus, these laws provide the legal framework for protection of California-listed rare, threatened, and endangered plant and animal species. The California Department of Fish and Wildlife (CDFW) implements NPPA and CESA, and its Wildlife and Habitat Data Analysis Branch maintains the California Natural Diversity Database (CNDDB), a computerized inventory of information on the general location and status of California's rarest plants, animals, and natural communities. During the CEQA review process, the CDFW is given the opportunity to comment on the potential of the proposed Project to affect listed plants and animals.

2.2.2 Native Plant Protection Act

The NPPA of 1977 (California Fish and Game Code, §§ 1900 through 1913) directed the CDFW to carry out the Legislature's intent to "preserve, protect and enhance rare and endangered plants in this State." The NPPA is administered by the CDFW, which has the authority to designate native plants as endangered or rare and to protect them from "take."

2.2.3 California Environmental Quality Act

CEQA was enacted in 1970 to provide for full disclosure of environmental impacts to the public before issuance of a permit by state and local public agencies. CEQA (Public Resources Code Sections 21000 et. seq.) requires public agencies to review activities which may affect the quality of the environment so that consideration is given to preventing damage to the environment. When a lead agency issues a permit for development that could affect the environment, it must disclose the potential environmental effects of the project. This is done with an Initial Study and Negative Declaration (or Mitigated Negative Declaration) or with an Environmental Impact Report. Certain classes of projects are exempt from detailed analysis under CEQA. CEQA Guidelines Section 15380 defines endangered, threatened, and rare species for purposes of CEQA and clarifies that CEQA review extends to other species that are not formally listed under the state or federal Endangered Species Acts but that meet specified criteria.

2.2.4 Fully Protected Species and Species of Special Concern

The classification of "fully protected" was the CDFW's initial effort to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish, amphibian and reptiles, birds, and mammals. Most of the species on these lists have subsequently been listed under CESA and/or FESA. The Fish and Game Code sections (fish at §5515, amphibian and reptiles at §5050, birds at

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§3511, and mammals at §4700) dealing with "fully protected" species states that these species "…may not be taken or possessed at any time and no provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected species," (CDFW Fish and Game Commission 1998) although take may be authorized for necessary scientific research. This language makes the "fully protected" designation the strongest and most restrictive regarding the "take" of these species. In 2003, the code sections dealing with fully protected species were amended to allow the CDFW to authorize take resulting from recovery activities for state-listed species.

Species of special concern are broadly defined as animals not listed under the FESA or CESA, but which are nonetheless of concern to the CDFW because they are declining at a rate that could result in listing or historically occurred in low numbers and known threats to their persistence currently exist. This designation is intended to result in special consideration for these animals by the CDFW, land managers, consulting biologist, and others, and is intended to focus attention on the species to help avert the need for costly listing under FESA and CESA and cumbersome recovery efforts that might ultimately be required. This designation also is intended to stimulate collection of additional information on the biology, distribution, and status of poorly known at-risk species, and focus research and management attention on them. Although these species generally have no special legal status, they are given special consideration under the CEQA during project review.

2.2.5 California Fish and Wildlife Code Sections 3503 and 3513

According to Section 3503 of the California Fish and Wildlife Code, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Section 3503.5 specifically protects birds in the orders Falconiformes and Strigiformes (birds-of-prey). Section 3513 essentially overlaps with the MBTA, prohibiting the take or possession of any migratory non-game bird. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "take" by the CDFW.

2.2.6 Other Sensitive Plants – California Native Plant Society

The California Native Plant Society (CNPS), a non-profit plant conservation organization, publishes and maintains an Inventory of Rare and Endangered Vascular Plants of California in both hard copy and electronic version (http://www.cnps.org/cnps/rareplants/inventory/).

The Inventory assigns plants to the following categories:

- 1A Presumed extinct in California;
- 1B Rare, threatened, or endangered in California and elsewhere;
- 2 Rare, threatened, or endangered in California, but more common elsewhere;
- 3 Plants for which more information is needed – A review list; and
- 4 Plants of limited distribution – A watch list.

Additional endangerment codes are assigned to each taxon as follows:

- 1 Seriously endangered in California (over 80% of occurrences threatened/high degree of immediacy of threat).
- 2 Fairly endangered in California (20-80% occurrences threatened).
- 3 Not very endangered in California (<20% of occurrences threatened or no current threats known).

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Plants on Lists 1A, 1B, and 2 of the CNPS Inventory consist of plants that may qualify for listing, and the CDFW, as well as other state agencies (e.g., California Department of Forestry and Fire Protection). As part of the CEQA process, such species should be fully considered, as they meet the definition of threatened or endangered under the NPPA and Sections 2062 and 2067 of the California Fish and Game Code. California Rare Plant Rank 3 and 4 species are considered to be plants about which more information is needed or are uncommon enough that their status should be regularly monitored. Such plants may be eligible or may become eligible for state listing, and CNPS and CDFW recommend that these species be evaluated for consideration during the preparation of CEQA documents (CNPS 2001, 2015).

2.2.7 California Fish and Game Code Section 1600-1603

Streams, lakes, and riparian vegetation, as habitat for fish and other wildlife species, are subject to jurisdiction by the CDFW under Sections 1600-1616 of the California Fish and Game Code. Any activity that will do one or more of the following: (1) substantially obstruct or divert the natural flow of a river, stream, or lake; (2) substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or (3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake generally require a 1602 Lake and Streambed Alteration Agreement. The term "stream", which includes creeks and rivers, is defined in the California Code of Regulations (CCR) as follows: "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life". This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation (14 CCR 1.72). In addition, the term stream can include ephemeral streams, dry washes, watercourses with subsurface flows, canals, aqueducts, irrigation ditches, and other means of water conveyance if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife (CDFW 1994). Riparian is defined as "on, or pertaining to, the banks of a stream"; therefore, riparian vegetation is defined as, "vegetation which occurs in and/or adjacent to a stream and is dependent on, and occurs because of, the stream itself" (CDFW 1994). Removal of riparian vegetation also requires a Section 1602 Lake and Streambed Alteration Agreement from the CDFW.

2.2.8 Porter-Cologne Water Quality Control Act

Waters of the State are defined by the Porter-Cologne Water Quality Control Act as "any surface water or groundwater, including saline waters, within the boundaries of the state." The State Water Resources Control Board protects all waters in its regulatory scope, but has special responsibility for isolated wetlands and headwaters. These water bodies have high resource value, are vulnerable to filling, and may not be regulated by other programs, such as Section 404 of the CWA. Waters of the State are regulated by the RWQCBs under the State Water Quality Certification Program, which regulates discharges of dredged and fill material under Section 401 of the CWA and the Porter-Cologne Water Quality Control Act. Projects that require a USACE permit, or fall under other federal jurisdiction, and have the potential to impact Waters of the State are required to comply with the terms of the Water Quality Certification Program. If a proposed project does not require a federal license or permit, but does involve activities that may result in a discharge of harmful substances to Waters of the State, the RWQCBs have the option to regulate such activities under its state authority in the form of Waste Discharge Requirements or Certification of Waste Discharge Requirements.

2.2.9 National Pollutant Discharge Elimination System (NPDES)

The NPDES program requires permitting for activities that discharge pollutants into waters of the United States. This includes discharges from municipal, industrial, and construction sources. These are considered point-sources from a regulatory standpoint. Generally, these permits are issued and monitored under the

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oversight of the State Water Resources Control Board and administered by each RWQCB. Construction activities that disturb one acre or more (whether a single project or part of a larger development) are required to obtain coverage under the state's General Permit for Dischargers of Storm Water Associated with Construction Activity. All dischargers are required to obtain coverage under the Construction General Permit. The activities covered under the Construction General Permit include clearing, grading, and other disturbances. The permit requires preparation of a Storm Water Pollution Prevention Plan (SWPPP) and implementation of Best Management Practices (BMPs) with a monitoring program. The project will require coverage under the Construction General Permit.

2.2.10 Sensitive Vegetation Communities

Sensitive vegetation communities are natural communities and habitats that are either unique in constituent components, of relatively limited distribution in the region, or of particularly high wildlife value. These communities may or may not necessarily contain special-status species. Sensitive natural communities are usually identified in local or regional plans, policies or regulations, or by the CDFW (i.e., CNDDB) or the USFWS. The CNDDB identifies a number of natural communities as rare, which are given the highest inventory priority (Holland 1986; CDFW 2016). Impacts to sensitive natural communities and habitats must be considered and evaluated under the CEQA (CCR: Title 14, Div. 6, Chap. 3, Appendix G).

2.3 Local

2.3.1 Western Riverside County Multi-Species Habitat Conservation Plan

In June of 2003, the Riverside County Board of Supervisors adopted a comprehensive MSHCP to provide a regional conservation solution to species and habitat issues that have historically threatened to stall infrastructure and land use development. The MSHCP is a multi-jurisdictional effort that encompasses approximately 1.26 million acres (1,966 square miles) and includes all unincorporated Riverside County land west of the crest of the San Jacinto Mountains to the Orange County line, as well as the jurisdictional areas of fourteen cities, including the City of Moreno Valley (Western Riverside County MSHCP, 2004).

As part of the MSHCP, the City of Moreno Valley and its sphere of Influence comprise the Reche Canyon / Badlands Area Plan. The Reche Canyon / Badlands Area Plan contains four Area Plan Subunits: (1) Box Springs East to the northwest of the City of Moreno Valley and within the Box Springs Mountains; (2) Reche Canyon also within the northwestern portion of the City; (3) Badlands – North in the northeast portion of the City, and (4) San Jacinto Wildlife Area / Mystic Lake, located southeast of the City.

2.3.2 City of Moreno Valley General Plan

According to the City of Moreno Valley General Plan Chapter 9 (Goals and Objectives) contains the following applicable goals, policies, and objectives related to biological resources.

Objective 7.4 Maintain, protect, and preserve biologically significant habitats where practical, including the San Jacinto Wildlife Area, riparian areas, habitats of rare and endangered species, and other areas of natural significance.

Policy 7.4.1 Require all development, including roads, proposed adjacent to riparian and other biologically sensitive habitats to provide adequate buffers to mitigate impacts to such areas.

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Policy 7.4.3 Preserve natural drainage courses in their natural state and the natural hydrology, unless the protection of life and property necessitate improvement as concrete channels.

Policy 7.4.5 The City shall fulfill its obligations set forth within any agreement(s) and permit(s) that the City may enter into for the purpose of implementing the Western Riverside County Multispecies Habitat Conservation Plan.

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3.0 METHODS

This analysis of potential biological resources located on the Project Site includes a review of available background information in and around the vicinity of the Project Site and completion of a field survey.

3.1 Literature Review

Prior to conducting field surveys, MIG biologists reviewed available background information pertaining to the biological resources on and in the vicinity of the project. Available literature and resource mapping reviewed included the occurrence records for special-status species and sensitive natural communities and numerous other information sources listed below:

- CDFW California Natural Communities Database (CNDDB) record search of the Sunnymead and surrounding USGS 7.5-Minute Quadrangles (CDFW CNDDB 2016)
- CNPS Online Inventory (CNPS 2016)
- Soil Survey Staff, Natural Resource Conservation Service (NRCS), United States Department of Agricultural (USDA) (Soil Survey Staff 2016)
- State & Federally Listed Endangered, & Threatened Animals of California (CDFW 2016a)
- State and Federally Listed Endangered, Threatened, and Rare Plants of California (CDFW 2016b)
- USFWS National Wetlands Inventory (USFWS 2016a)
- USFWS, Carlsbad Office, Threatened and Endangered Species (USFWS 2016b)
- Jepson Manual: Vascular Plants of California, Second Edition (Baldwin et al. 2012)
- Riverside County Integrated Project (RCIP) Conservation Report Summary Generator (MSHCP RCIP 2016)
- Western Riverside County MHSCP Burrowing Owl Survey Instructions (MSHCP 2006)

3.2 Field Surveys

A biological reconnaissance-level field survey was conducted by MIG Senior Biologist Jonathan Campbell and MIG Associate Ecologist Savannah Richards on May 19, 2016. The biological field survey was conducted to assess the existing conditions of the Project Site, including recording observed plant and wildlife species, characterizing and delineating the vegetation communities and associated wildlife habitats, and evaluating the potential for these habitats to support special-status species and sensitive communities.

3.2.1 Plant Communities

During the field survey, MIG biologists traversed the entire Project Site by foot and evaluated the suitability of onsite vegetation communities to support special-status species documented in the vicinity of the Project Site. Plant communities were preliminarily mapped with the aid of an aerial photograph using the MSHCP uncollapsed vegetation community classification system and Holland (1986)/CDFW (2003) vegetation community classification systems when appropriate. When a vegetation community could not be accurately characterized using this information, an updated community classification code was developed to more accurately represent onsite habitat types.

3.2.2 Sensitive Plant Species

Sensitive plant species include those 1) listed, proposed for listing, or candidates for listing as threatened or endangered by the USFWS under the FESA; 2) listed or proposed for listing as rare, threatened, or endangered by the CDFW under the CESA; 3) occurring on List 1A, List 1B, List 2, List 3, or List 4 of the

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CNPS Inventory; 4) and occurring within an MSHCP narrow endemic and/or criteria area species Survey Area.

3.2.3 Sensitive Wildlife Species

Sensitive wildlife species include those 1) listed, proposed for listing or candidates for listing as threatened or endangered by the USFWS or NOAA Fisheries under FESA; 2) listed or proposed for listing as rare, threatened, endangered, fully protected, or species of special concern by the CDFW under CESA; and 3) birds protected by the USFWS under the MTBA and/or by the CDFW under Fish and Game Code Sections 3503 and 3513.

3.2.4 MSHCP Riparian/Riverine Resources, Vernal Pools, and Jurisdictional Resources

This report provides a general review of topographic features and habitats observed onsite that could be subject to USACE jurisdiction pursuant to Section 404 of the CWA, RWQCB jurisdiction pursuant to Section 401 of the CWA, and CDFW jurisdiction pursuant to Division 2, Chapter 6, Section 1600 of the Fish and Game Code.

Habitats were also assessed to determine if MSHCP riparian/riverine resources and/or vernal pools, pursuant to section 6.1.2 of the MSHCP (2004), were present onsite. Riparian/riverine resources are those lands that contain habitat dominated by trees, shrubs, persistent emergent vegetation, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year. Vernal pools are seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season (MSHCP 2004). In addition, stock ponds, ephemeral pools, and other areas of potential fairy shrimp habitat were noted, if applicable.

3.2.5 Wildlife Corridors and Urban/Wildland Interface

Providing functional habitat connectivity between natural areas is essential to sustaining healthy wildlife populations and allowing for the continued dispersal of native plant and animal species. The regional movement and migration of wildlife species has been substantially altered due to habitat fragmentation over the past century. This fragmentation is most commonly caused by development of open areas, which can result in large patches of land becoming inaccessible and forming a virtual barrier between undeveloped areas. Additional roads associated with development, although narrow, may result in barriers to smaller or less mobile wildlife species. Habitat fragmentation results in isolated islands of habitat, which affects wildlife behavior, foraging activity, reproductive patterns, immigration and emigration or dispersal capabilities, and survivability. Wildlife corridors can consist of a sequence of stepping-stones across the landscape (i.e., discontinuous areas of habitat such as isolated wetlands), continuous lineal strips of vegetation and habitat (e.g., riparian strips and ridge lines), or they may be parts of larger habitat areas selected for its known or likely importance to local wildlife.

3.2.6 Burrowing Owl

The Project Site occurs within a predetermined Survey Area in the MSHCP for the burrowing owl. Based on the presence of suitable burrowing owl habitat in the form of California ground squirrel (*Otospermophilius beecheyi*) burrows documented on the Project Site during the reconnaissance-level field survey, focused surveys were required.

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Per the Western Riverside County MSHCP Burrowing Owl Survey Instructions (March 2006), focused burrowing owl surveys (Step II, Part A) were conducted by a qualified biologist on June 13, 14, and 15, 2016.

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4.0 EXISTING CONDITIONS

The following provides a description of the soils, vegetation communities, wildlife, and wildlife movement corridors present on the Project Site.

4.1 Physical Characteristics

The 18.0-acre Project Site is relatively flat, with elevations ranging between approximately 1,555-1,570 feet above mean sea level (see Attachment E-1, Vicinity Map). The Project Site includes APNs 486-290-036 and -037 which are graded and have been used for the production of the agricultural crop barley (*Hordeum vulgare*). No trees or structures are located on the Project Site. The most prominent surface water feature in the vicinity of the Project Site is Lake Perris, located approximately 3.5 miles south of the Project Site.

Land uses bordering the Project Site include vacant land to the north and south, residential uses to the east, and medical uses to the west. The 60 Freeway (Moreno Valley Freeway) is located approximately 1.8 miles north of the Project Site.

4.2 Soils

The Web Soil Survey reports the following soils within the boundary of the Project Site (given with the acreage of each soil type within the Project Site area) as shown on Attachment E-5, Soils Map (USDA, NRCS 2016):

- Greenfield sandy Loam (GyA): 6.4 ac
- Greenfield sandy loam, eroded (GyC2): 0.3 ac
- Hanford coarse sandy loam (HcC): 0.8 ac
- Hanford fine sandy loam (HgA): 9.3 ac
- Ramona sandy loam (RaA): 1.3 ac

4.3 Plant Communities

Natural community names and hierarchical structure follows the CDFW "List of California Terrestrial Natural Communities" or Holland (1986) classification systems, which have been refined and augmented where appropriate to better characterize the habitat types observed onsite when not addressed by the MSHCP classification system.

4.3.1 Agricultural (16.73 acres)

The majority of the Project Site (16.73 acres) has been graded and used for the production of the agricultural crop barley (Attachment E-6, Biological Resources Map and Attachment E-7, Current Project Site Photographs). Crop barley is the dominant plant species throughout the Project Site. Other plant species observed within this community include Russian thistle (*Salsola tragus*), wild radish (*Raphanus sativus*), lamb's quarters (*Chenopodium album*), cheeseweed (*Malva parviflora*), London rocket (*Sisymbrium irio*), wild oat (*Avena fatua*), bindweed (*Convolvulus arvensis*), red-stemmed filaree (*Erodium cicutarium*), and common sow-thistle (*Sonchus oleraceus*).

4.3.2 Disturbed (1.27 acres)

A small portion of the southeastern portion of the Project Site (1.27 acres) consists of a disturbed plant community that contains several different plant species than the agricultural plant community (Attachment E-6, Biological Resources Map and Attachment E-7, Current Project Site Photographs). Additional plant species

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observed within this community include stink-net (*Oncosiphon piluliferum*), common fiddleneck (*Amsinckia menziesii* var. *intermedia*), horseweed (*Conyza canadensis*), puncture vine (*Tribulus terrestris*), tumbling pigweed (*Amaranthus albus*), prickly sow-thistle (*Sonchus asper*), prickly lettuce (*Lactuca serriola*), and short-podded mustard (*Hirschfeldia incana*).

The following plant species occur in both the agricultural and disturbed plant communities: barley, Russian thistle, wild radish, lamb's quarters, cheeseweed, London rocket, wild oat, bindweed, red-stemmed filaree, and common sow-thistle.

4.4 Wildlife

Wildlife species encountered onsite include mourning dove (*Zenaida macroura*), house finch (*Carpodacus mexicanus*), western meadowlark (*Sturnella neglecta*), American crow (*Corvus brachyrhynchos*), blue grosbeak (*Passerina caerulea*), northern rough-winged swallow (*Stelgidopteryx serripennis*), cliff swallow (*Petrochelidon pyrrhonota*), and red-tailed hawk (*Buteo jamaicensis*). California ground squirrel burrows were observed in and around the southeast portions of the Project Site (Attachment E-7, Current Project Site Photographs). California ground squirrels are currently inhabiting the on-site burrows.

4.5 Wildlife Corridors and Urban/Wildlands Interface

Land uses bordering the Project Site include vacant land to the north and south, residential uses to the east, and medical uses to the west. Therefore, the movement of wildlife species at the Project Site is substantially limited due to the habitat fragmentation caused by development and the Project Site does not serve as a continuous regional connection for wildlife species. In addition, the Project Site is outside of any species movement corridors identified by local or regional plans. The Project Site does not occur within or adjacent to an MSHCP Core, Linkage, Constrained Linkage, or Non-Contiguous Habitat Block.

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5.0 SENSITIVE BIOLOGICAL RESOURCES

As required by Riverside County Environmental Programs Department, a record of all sensitive biological resources observed onsite (Attachment E-3, Biological Report Summary Sheet) and a CEQA significance checklist for biological resources (Attachment E-4, Level of Significance Checklist) are provided.

5.1 Sensitive Plant Communities

No sensitive plant communities were observed on the Project Site.

5.2 Sensitive Plant Species

No sensitive plant species were observed on the Project Site. In addition, no sensitive plant species have been documented in the vicinity of the Project Site or have the potential to occur on the Project Site due to the absence of essential habitat requirements for the species, the absence of known occurrences within 5 miles of the Project Site, and/or the Project Site is outside the species known range of distribution. The MSHCP has determined that any other sensitive species potentially occurring onsite have been adequately covered (MSHCP Table 2-2 Species Considered for Conservation Under the MSHCP Since 1999, 2004).

5.3 Sensitive Wildlife Species

Based on the presence of suitable habitat and fossorial burrows, burrowing owls may be present in or around the Project Site. No other special-status wildlife species were observed on the Project Site or have the potential to occur onsite due to the absence of suitable habitat. The MSHCP has determined that any other sensitive species potentially occurring onsite have been adequately covered (MSHCP Table 2-2 Species Considered for Conservation Under the MSHCP Since 1999, 2004).

5.4 MSHCP Riparian/Riverine Resources, Vernal Pools, and Jurisdictional Resources

Although a formal jurisdictional delineation was not undertaken as a part of this effort, onsite habitats were assessed to determine if any wetlands and/or “waters” were present onsite. Resources subject to the jurisdiction of the USACE, RWQCB, and/or CDFW were not observed on the Project Site.

No MSHCP riparian/riverine or vernal pool resources were observed on the Project Site.

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6.0 MSHCP CONSISTENCY

The purpose of this analysis is to document existing biological resources, identify general vegetation types, and assess the potential biological and regulatory constraints and potential impacts associated with the proposed development within the Project Site as outlined by the Western Riverside County MSHCP. The following sections summarize the Project Site's relationship to MSHCP compliance guidelines.

6.1 Criteria Areas

The Project Site is located within the Western Riverside County MSHCP Reche Canyon/Badlands Area Plan. The Project Site is not located within an MSHCP criteria area or area plan subunit.

6.2 Narrow Endemic Plant Species Survey Area

The Project Site does not occur within a predetermined Survey Area for narrow endemic plant species. No surveys are required.

6.3 Criteria Area Species Survey Area

The Project Site does not occur within a predetermined Survey Area for criteria area plant species. No surveys are required.

6.4 Amphibian Species Survey Area

The Project Site does not occur within a predetermined Survey Area for amphibian species. No surveys are required.

6.5 Mammal Species Survey Area

The Project Site does not occur within a predetermined Survey Area for mammal species. No surveys are required.

6.6 Burrowing Owl Survey Area

The Project Site occurs within a predetermined Survey Area in the Western Riverside County MSHCP for the burrowing owl. Based on the presence of suitable burrowing owl habitat documented during the habitat assessment within and adjacent to the Project Site, focused surveys are required. Per the Western Riverside County MSHCP Burrowing Owl Survey Instructions (March 2006), focused burrowing owl surveys (Step II, Part A) should be conducted by a qualified biologist during the breeding season (March 1 – August 31) in order to describe if, when, and how the Project Site is used by burrowing owls. In the event owls are observed onsite, County of Riverside Environmental Programs Department will be contacted to discuss potential mitigation measures, such as passive or active relocation.

Focused burrowing owl surveys were conducted by a qualified biologist on June 13, 14, and 15, 2016.

6.7 MSHCP Riparian/Riverine Resources and Vernal Pools

No MSHCP riparian/riverine resources or vernal pools pursuant to Section 6.1.2 of the MSHCP were identified on the Project Site.

6.8 Urban/Wildlands Interface

The Project Site does not occur within or adjacent to an MSHCP Core, Linkage, Constrained Linkage, or Non-Contiguous Habitat Block. Therefore, an Urban/Wildland Interface analysis pursuant to Section 6.1.4 of the MSHCP is not required.

Attachment: Tech Study BRA and MSHCP Consistency Analysis [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic

7.0 ENVIRONMENTAL IMPACTS

This section describes potential impacts to sensitive biological resources—including special-status plants and animals, and aquatic resources—that may occur in the Project Site. Each impact discussion includes Mitigation Measures that would be implemented during the project to avoid and/or reduce the potential for and/or level of impacts to each resource. With the implementation of the Mitigation Measures, all impacts to biological resources are anticipated to be reduced to less than significant pursuant to CEQA.

7.1 Thresholds of Significance

In accordance with Appendix G of the CEQA Guidelines, a project could have a significant environmental impact on biological resources if it would:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS
c) Have a substantial adverse effect on federally protected wetlands, as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrologic interruption, or other means
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance
f) Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plant (NCCP), or other approved local, regional, or state HCP

7.2 Discussion of Thresholds of Significance

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by the CDFW or USFWS;

No special-status plant species are anticipated to occur on the Project Site; therefore, no impact will occur. No wildlife species listed by the State and/or Federal government as endangered or threatened were identified during the biological field survey conducted on May 19, 2016.

<u>MBTA</u>
Nesting birds protected under the MBTA and California Fish and Game Code are potentially present in the grasslands and shrubs in and around the project area. If construction activities occur during the avian breeding season (generally February 1 to August 31), injury to individuals or nest abandonment could occur. In addition, noise and increased construction activity could temporarily disturb nesting or foraging activities, potentially resulting in the abandonment of nest sites. However, with the implementation of Mitigation Measure BIO-1 and BIO-2, the impacts from the project would be less than significant. These Mitigation Measures include conducting pre-construction nesting bird surveys during the breeding season.

Burrowing Owl

As discussed previously in Section 6.6, the Project Site occurs within a predetermined Survey Area for the burrowing owl. Based on the presence of suitable burrowing owl habitat in the form of California ground squirrel burrows documented on the Project Site during the habitat assessment, focused surveys were required.

Per the Western Riverside County MSHCP Burrowing Owl Survey Instructions (March 2006), focused burrowing owl surveys (Step II, Part A) were conducted by a qualified biologist on June 13, 14, and 15, 2016.

No burrowing owls or burrowing owl sign were observed during the focused surveys. California ground squirrels are currently inhabiting the on-site burrows. Per the MSHCP Burrowing Owl Survey Instructions, if the site is determined not to be occupied, no further surveys are required; however, pre-construction surveys will be required to be conducted within 30 days of ground disturbance. Thus, Mitigation Measure BIO-3 is included to reduce impacts to burrowing owls to less than significant levels.

Mitigation Measures

BIO-1 To avoid impacts to nesting birds and violation of state and federal laws pertaining to birds, all construction-related activities (including but not limited to mobilization and staging, clearing, grubbing, vegetation removal, fence installation, demolition, and grading) should occur outside the avian nesting season (generally prior to February 1 or after August 31). If construction and construction noise occurs within the avian nesting season (from February 1 to August 31 or according to local requirements), all suitable habitats located within the project's area of disturbance including staging and storage areas plus a 250-foot (passerines) and 1,000-foot (raptor nests) buffer around these areas shall be thoroughly surveyed, as feasible, for the presence of active nests by a qualified biologist no more than five days before commencement of any site disturbance activities and equipment mobilization. If project activities are delayed by more than five days, an additional nesting bird survey shall be performed. Active nesting is present if a bird is sitting in a nest, a nest has eggs or chicks in it, or adults are observed carrying food to the nest. The results of the surveys shall be documented. If it is determined that birds are actively nesting within the survey area, Mitigation Measure BIO-2 shall apply. Conversely, if the survey area is found to be absent of nesting birds, Mitigation Measure BIO-2 shall not be required.

BIO-2 If pre-construction nesting bird surveys result in the location of active nests, no site disturbance and mobilization of heavy equipment (including but not limited to equipment staging, fence installation, clearing, grubbing, vegetation removal, fence installation, demolition, and grading), shall take place within 250 feet of non-raptor nests and 1,000 feet of raptor nests, or as determined by a qualified biologist in consultation with the California Department of Fish and Wildlife, until the chicks have fledged. Monitoring shall be required to insure compliance with the MBTA and relevant California Fish and Game Code requirements. Monitoring dates and findings shall be documented.

BIO-3 A pre-construction survey for burrowing owls should be completed no more than 30 days prior to the start of construction at the Project Site to ensure no burrowing owls have moved onto the site.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the CDFW or USFWS;

Attachment: Tech Study BRA and MSHCP Consistency Analysis [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic

The April 26, 2016 biological field survey revealed that agricultural and disturbed habitats exist on the 18.0-acre Project Site. No sensitive natural vegetation communities or riparian habitat are present on the Project Site. As such, no impact to riparian habitat or other sensitive natural vegetation communities will occur.

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

No USACE, CDFW, or RWQCB jurisdictional resources were observed on the Project Site. No impacts will occur.

d) Interfere substantially with the movement of any native resident or migratory fish and wildlife species or with established native resident or migratory wildlife corridors, or impede the use of a native wildlife nursery site;

The Project Site is primarily urban and is not located within an established wildlife movement corridor. Additionally, the project is not in a known wildlife nursery site. Thus, wildlife species, migratory corridors and native wildlife nursery sites will not be impacted due to project implementation.

e) Conflict with any local polices or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or

The City of Moreno Valley General Plan Chapter 9 (Goals and Objectives) contains the following applicable goals, policies, and objectives related to biological resources.

Objective 7.4 Maintain, protect, and preserve biologically significant habitats where practical, including the San Jacinto Wildlife Area, riparian areas, habitats of rare and endangered species, and other areas of natural significance.

Policy 7.4.1 Require all development, including roads, proposed adjacent to riparian and other biologically sensitive habitats to provide adequate buffers to mitigate impacts to such areas.

Policy 7.4.3 Preserve natural drainage courses in their natural state and the natural hydrology, unless the protection of life and property necessitate improvement as concrete channels.

Policy 7.4.5 The City shall fulfill its obligations set forth within any agreement(s) and permit(s) that the City may enter into for the purpose of implementing the Western Riverside County Multispecies Habitat Conservation Plan.

The proposed project will not conflict with policies established for the protection of biological resources. No impacts will occur.

f) Conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan.

The Project Site is located within the Western Riverside County MSHCP Reche Canyon/Badlands Area Plan. The Project Site is not located within an MSHCP criteria area or area plan subunit. The Project Site does not

Attachment: Tech Study BRA and MSHCP Consistency Analysis [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic

occur within a predetermined Survey Area for narrow endemic plant species, criteria area plant species, amphibian species, or mammal species. No surveys are required for these species.

As discussed previously in Section 6.6, the Project Site occurs within a predetermined Survey Area for the burrowing owl. Based on the presence of suitable burrowing owl habitat documented during the habitat assessment within and adjacent to the Project Site, focused surveys were required. Per the Western Riverside County MSHCP Burrowing Owl Survey Instructions (March 2006), focused burrowing owl surveys (Step II, Part A) were conducted by a qualified biologist on June 13, 14, and 15. No burrowing owls or burrowing owl sign were observed during the focused surveys. Per the MSHCP Burrowing Owl Survey Instructions, if the site is determined not to be occupied, no further surveys are required; however, pre-construction surveys are required to be conducted within 30 days of ground disturbance. Thus, Mitigation Measure BIO-3 is included to reduce impacts to burrowing owls to less than significant levels.

No MSHCP riparian/riverine resources or vernal pools pursuant to Section 6.1.2 of the MSHCP were identified on the Project Site. The Project Site does not occur within or adjacent to an MSHCP Core, Linkage, Constrained Linkage, or Non-Contiguous Habitat Block. Therefore, an Urban/Wildland Interface analysis pursuant to Section 6.1.4 of the MSHCP is not required. No impact will occur.

Attachment: Tech Study BRA and MSHCP Consistency Analysis [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic

8.0 REFERENCES

Bruce B, D. Goldman, D Keil, R. Patterson, T. Rosatti, T. Wilken. 2012. The Jepson Manual – Vascular Plants of California. University of California Press.

California Department of Fish and Wildlife (CDFW), Non-Game Heritage Division, Sacramento, CA. 2003. The Vegetation Classification and Mapping Program – List of California Terrestrial Natural Communities Recognized by The California Natural Diversity Database.

CDFW. 2014. Natural Communities Background Info. Available online at www.dfg.ca.gov/biogeodata/vegcamp/natural_comm_background.asp. Accessed [May 2016].

CDFW, California Natural Diversity Data Base (CNDDB). December 2015. Sensitive Element Record Search for the Steele Peak and Surrounding USGS Quadrangles. California Department of Fish and Wildlife. Sacramento, California. Accessed [May 2016].

CDFW. May 2016a. State & Federally Listed Endangered, & Threatened Animals of California. Natural Heritage Division, Natural Diversity Data Base.

CDFW. May 2016b. State and Federally Listed Endangered, Threatened, and Rare Plants of California. Natural Heritage Division, Natural Diversity Data Base.

California Native Plant Society (CNPS). 2016. Online Inventory of Rare and Endangered Plants (8th edition). California Native Plant Society, Sacramento. Available online at http://cnps.org/inventory. Accessed [May 2016].

Holland, R. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. Nongame-Heritage Program. California Department of Fish and Wildlife.

Multiple Species Habitat Conservation Plan (MSHCP). 2004. Riverside County Integrated Project Available at: http://wrc-rca.org/Permit_Docs/mshcp_vol1.html. Accessed [May 2016].

MSHCP. March 2006. Burrowing Owl Survey Instructions. Available online at: http://rctlma.org/Portals/1/EPD/consultant/burrowing_owl_survey_ instructions.pdf. Accessed [May 2016].

MSHCP, Riverside County Integrated Project. 2016. RCIP Conservation Summary Report Generator. Available online at: http://onlineservices.rctlma.org/ content/rcip_report_generator.aspx. Accessed [May 2016].

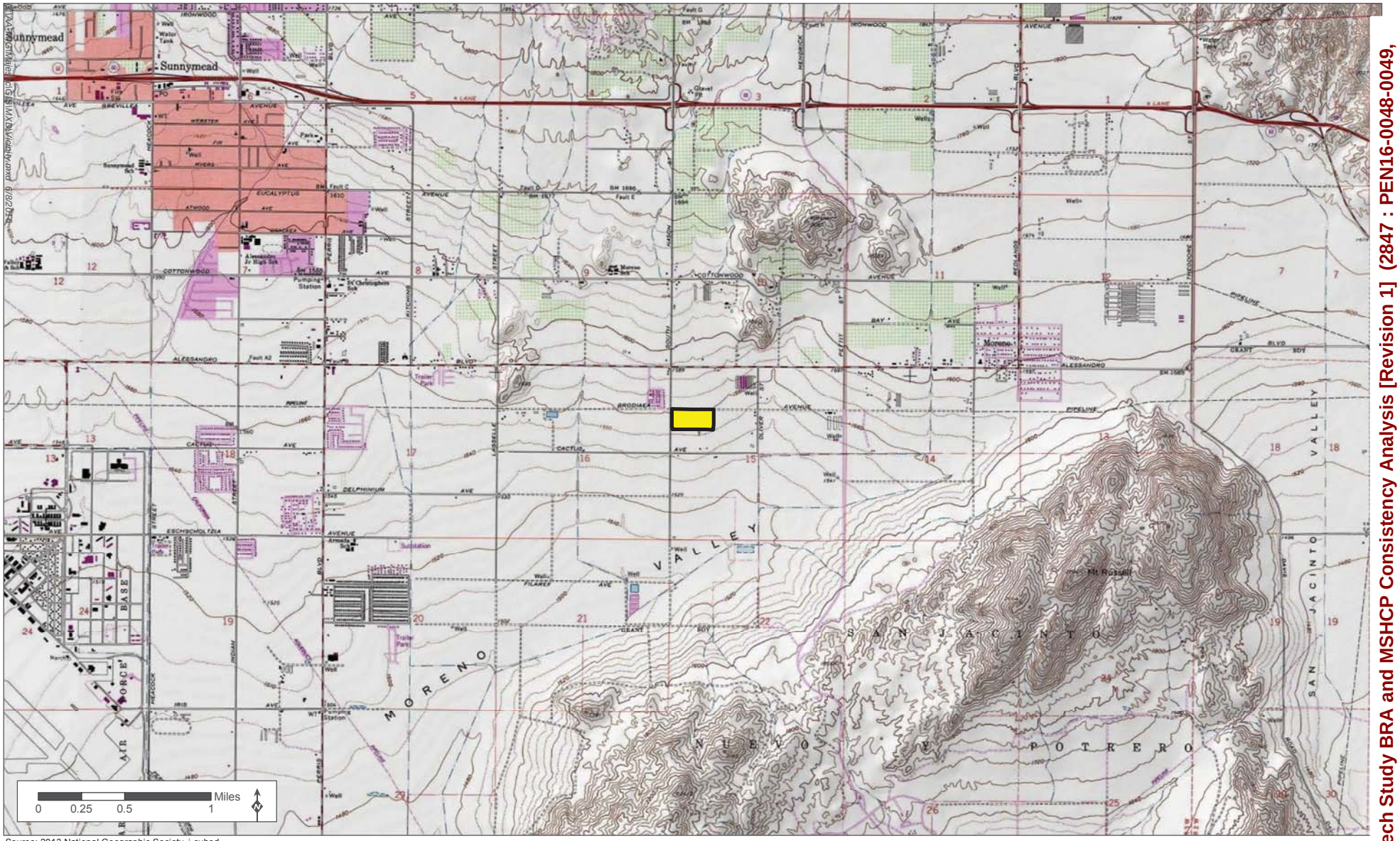
United States Army Corps of Engineers, Environmental Protection Agency. 2015. Clean Water Rule: Definition of Waters of the United States. Federal Register 80 (124): 37054-37127.

United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS), Soil Survey Staff. 2016. Web Soil Survey. Available online at http://websoilsurvey.nrcs.usda.gov/. Accessed [May 2016].

United States Fish & Wildlife Service (USFWS). 2016a. National Wetlands Inventory. Wetlands Mapper. Available online at: http://www.fws.gov/wetlands/data/mapper.HTML. Accessed [May 2016].

USFWS. 2016b. Threatened and Endangered Species. Pacific Southwest Region. Carlsbad Office. Available online at h http://www.fws.gov/carlsbad/ TEspecies.html. Accessed [May 2016].

Attachment: Tech Study BRA and MSHCP Consistency Analysis [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic



Source: 2013 National Geographic Society, i-cubed

Legend

Project Boundary

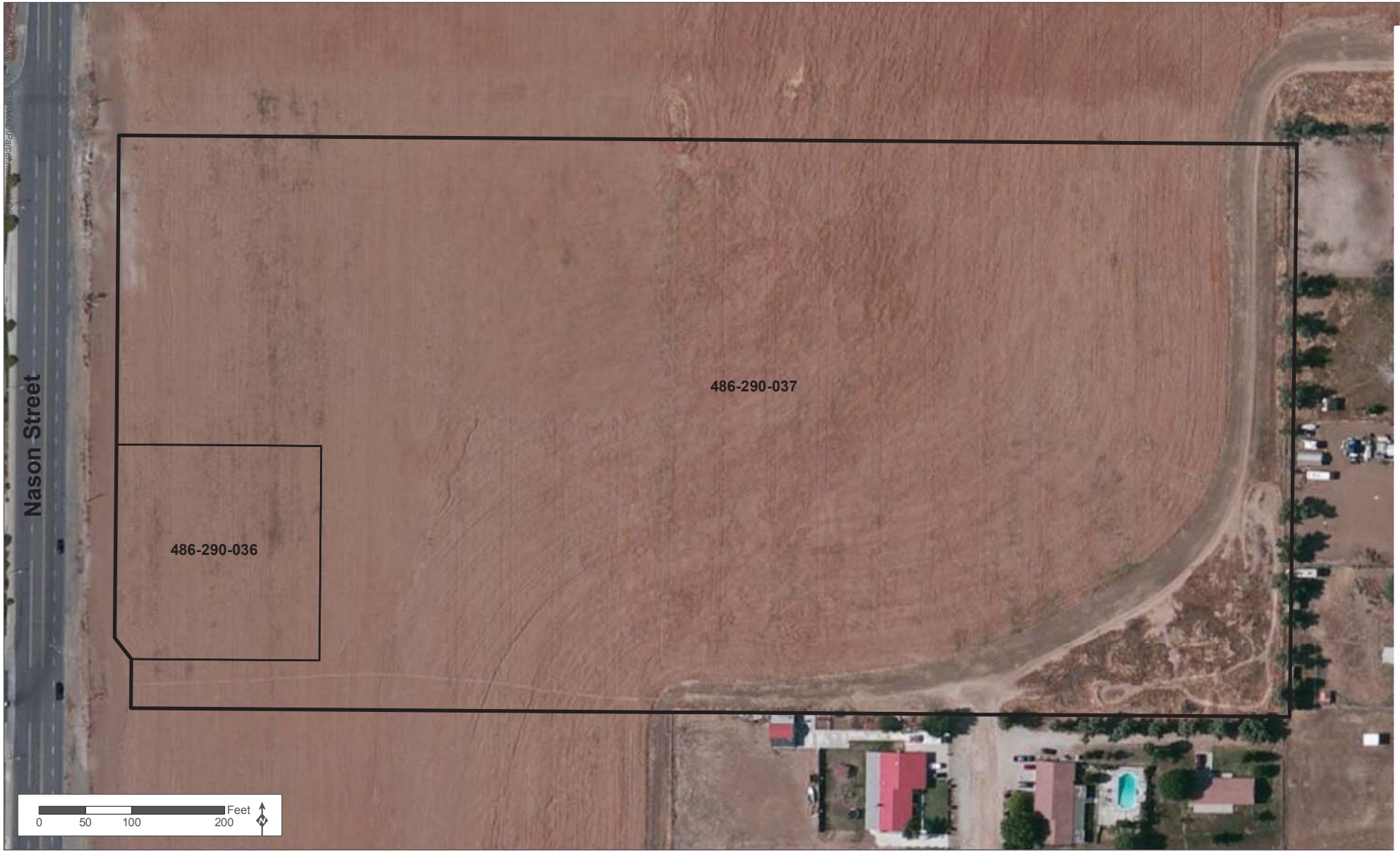
MIG

Attachment E-1 Vicinity Map

SE Corner of Nason Street & Brodiaea Avenue

Moreno Valley, Ri

Attachment: Tech Study BRA and MSHCP Consistency Analysis [Revision 1] (2847 : PEN16-0048-0049,



Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Legend

- Project Boundary
- APNs

BIOLOGICAL REPORT SUMMARY SHEET

Applicant Name: _____

Assessor's Parcel Number (APN): 486-290-036, 486-290-037

Site Location: Section: 15 **Township:** 3S **Range:** 3W

Site Address: East of Nason Street, north of Windmill Lane

Related Case Number(s): _____ **PDB Number:** _____

CHECK SPECIES SURVEYED FOR	SPECIES or ENVIRONMENTAL ISSUE OF CONCERN	(Circle Yes, No or N/A regarding species findings on the referenced site)		
X-HA	Arroyo Toad	Yes	No	N/A
X-HA	Blueline Stream(s)	Yes	No	N/A
	Coachella Valley Fringed-Toed Lizard	Yes	No	N/A
X-HA	Coastal California Gnatcatcher	Yes	No	N/A
X-HA	Riversidean Sage Scrub	Yes	No	N/A
	Delhi Sands Flower-Loving Fly	Yes	No	N/A
	Desert Pupfish	Yes	No	N/A
	Desert Slender Salamander	Yes	No	N/A
	Desert Tortoise	Yes	No	N/A
	Flat-Tailed Horned Lizard	Yes	No	N/A
X-HA	Least Bell's Vireo	Yes	No	N/A
X-HA	Oak Woodlands	Yes	No	N/A
X-HA	Quino Checkerspot Butterfly	Yes	No	N/A
X-HA	Riverside/Vernal Pool Fairy Shrimp	Yes	No	N/A
	Santa Ana River Woolystar	Yes	No	N/A
	San Bernardino Kangaroo Rat	Yes	No	N/A
	Slender Horned Spineflower	Yes	No	N/A
	Stephens' Kangaroo Rat	Yes	No	N/A
X-HA	Seasonal Depression	Yes	No	N/A
X-HA	Wetlands	Yes	No	N/A

HA - Habitat Assessment Determination

CHECK SPECIES SURVEYED FOR	SPECIES or ENVIRONMENTAL ISSUE OF CONCERN	(Circle Yes, No or N/A regarding species findings on the referenced site)		
X-HA	Burrowing Owl	Yes	No	N/A
X-HA	Southwestern Willow Flycatcher	Yes	No	N/A
X-HA	Western Yellow-billed Cuckoo	Yes	No	N/A
	Other	Yes	No	N/A
	Other	Yes	No	N/A
	Other	Yes	No	N/A
	Other	Yes	No	N/A
	Other	Yes	No	N/A
	Other	Yes	No	N/A
	Other	Yes	No	N/A
	Other	Yes	No	N/A
	Other	Yes	No	N/A

HA - Habitat Assessment Determination

Species of concern shall be any unique, rare, endangered, or threatened species. It shall include species used to delineate wetlands and riparian corridors. It shall also include any hosts, perching, or food plants used by any animals listed as rare, endangered, threatened or candidate species by either State, or Federal regulations, or for Riverside County as listed by the California Department of Fish and Game Natural Diversity Data Base (NDDB).

I declare under penalty of perjury that the information provided on this summary sheet is in accordance with the information provided in the biological report.

Jonathan E. Campbell MIG October 13, 2016

Signature and Company Name Report Date

10(a) Permit Number (if applicable) Permit Expiration Date

County Use Only

Received by:_____**Date:**_____

PD-B#_____

Attachment: Tech Study BRA and MSHCP Consistency Analysis [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic

LEVEL OF SIGNIFICANCE CHECKLIST
For Biological Resources

Attachment E-4

Case Number: _____ **Lot/APN No.** 486-290-036 486-290-037 **EA Number**_____

Wildlife & Vegetation

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U. S. Wildlife Service?
Less Than Significant with Mitigation Incorporated

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U. S. Fish and Wildlife Service?
No Impact

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
No Impact

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident migratory wildlife corridors, or impede the use of native wildlife nursery sites?
No Impact

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
No Impact

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state conservation plan?
No Impact

Source: CGP Fig. VI.36-VI.40

Findings of Fact:

The 18.0 acre Project Site is located within the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Reche Canyon/Badlands Area Plan. The Project Site is not located within a Criteria Area Cell or Area Plan Subunit. The Project Site does not occur within a predetermined Survey Area for criteria area plant, narrow endemic plant, amphibian, or mammal species. The Project Site occurs within a predetermined Survey Area for the burrowing owl and focused surveys are required. In addition, a 30-day preconstruction survey will be conducted immediately prior to the initiation of construction to ensure protection for this species and compliance with the conservation goals as outlined in the MSHCP. No features subject to the jurisdiction of the Regional Water Quality Control Board (RWQCB), California Department of Fish and Wildlife (CDFW), or US Army Corps of Engineers (USACE) were documented onsite. No MSHCP riparian/riverine or vernal pool resources were documented onsite. The Project Site does not occur within or adjacent to an MSHCP Core, Linkage, Constrained Linkage, or Non-Contiguous Habitat Block.

Proposed Mitigation:

To be Determined

Monitoring Recommended:

To be Determined

Prepared By: Jonathan E. Campbell Date: October 13, 2016

Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Legend

Soils

- Greenfield sandy loam (GyA) 6.4 ac
- Greenfield sandy loam, eroded (GyC2) 0.3 ac
- Hanford coarse sandy loam (HcC): 0.8 ac
- Hanford fine sandy loam (HgA): 9.3 ac
- Ramona sandy loam (RaA): 1.3 ac

Attachment E-5 Soils Map

Majestik More

Attachment: Tech Study BRA and MSHCP Consistency Analysis [Revision 1] (2847 : PEN16-0048-0049,

Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Legend

Project Boundary

Vegetation Communities

Agricultural (AG): 16.73 ac

Disturbed (DIS): 1.27 ac

Attachment E-6 Biological Resources Map

Majestik More

Attachment: Tech Study BRA and MSHCP Consistency Analysis [Revision 1] (2847 : PEN16-0048-0049,

Photograph 1: APN 486-290-037 view looking north at the agricultural plant community (16.73 acres)

Photograph 2: APN 486-290-037 view looking south at the disturbed plant community (1.27 acres)

Appendix A: Special-Status Animal Species with Potential to Occur on the Project Site.

Species	Status		Habitat Requirements	Potential for Occurrence
	Federal	State		
INVERTEBRATES				
Crotch bumble bee *Bombus crotchii*	--	--	Found along coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include *Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum.*	**Not Expected.** There are recent known records of occurrence in the vicinity of the Project Site (within 5 miles). However, there is no suitable habitat present on the Project Site and there is no suitable food plant or habitat located on the Project Site. Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.
Busck's gallmoth *Carolella busckana*	--	--	No habitat information available.	**Not Expected.** There is no suitable habitat located on the Project Site. There are no recent known records of occurrence in the vicinity of the Project Site (within 5 miles). Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.
Desert cuckoo wasp *Ceratochrysis longimala*	--	--	No habitat information available.	**Not Expected.** There is no suitable habitat located on the Project Site. There are no recent known records of occurrence in the vicinity of the Project Site (within 5 miles). Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.
Quino checkerspot butterfly *Euphydryas editha quino*	FE	--	Found within sunny openings within chaparral and coastal sage shrublands in parts of Riverside and San Diego counties. Occurs in hills and mesas near the coast and requires high densities of food plants including *Plantago erecta, P. insularis,* and *Orthocarpus purpurescens*.	**Not Expected.** There is no suitable habitat located on the Project Site. There are no recent known records of occurrence in the vicinity of the Project Site (within 5 miles). Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.
Delhi Sands flower-loving fly *Rhaphiomidas terminatus abdominalis*	FE	--	Found only in areas of the Delhi Sands formation in southwestern San Bernardino and northwestern Riverside counties. Requires fine, sandy soils, often with wholly or partly consolidated dunes and sparse vegetation.	**Not Expected.** There is no suitable habitat located on the Project Site. The Delhi soil series is not present on the Project Site. There are no recent known records of occurrence in the vicinity of the Project Site (within 5 miles). Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.

Attachment: Tech Study BRA and MSHCP Consistency Analysis [Revision 1] (2847 : PEN16-0048-0049,

Appendix A: Special-Status Animal Species with Potential to Occur on the Project Site.

Species	Status		Habitat Requirements	Potential for Occurrence
	Federal	State		
CRUSTACEANS				
Riverside fairy shrimp *Streptocephalus woottoni*	FE	--	Endemic to western Riverside, Orange, and San Diego counties in areas of tectonic swales/earth slump basins in grassland and coastal sage scrub. Inhabit seasonally astatic pools filled by winter/spring rains. Hatch in warm water later in the season.	**Not Expected.** There are recent known records of occurrence in the vicinity of the Project Site (within 5 miles). However, no water bodies are present on the Project Site; therefore, there is no suitable habitat present on the Project Site. The species is not expected to be found on the Project Site.
FISHES				
Santa Ana sucker *Catostomus santaanae*	FT	--	Endemic to Los Angeles Basin south coastal streams. Habitat generalists, but prefer sand-rubble-boulder bottoms, cool, clear water, and algae.	**Not Expected.** No water bodies are present on the Project Site; therefore, there is no suitable habitat present on the Project Site. The species is not expected to be found on the Project Site.
Arroyo chub *Gila orcuttii*	--	CSC	Native to streams from Malibu Creek to San Luis Rey River basin. Introduced into streams in Santa Clara, Ventura, Santa Ynez, Mohave and San Diego river basins. Inhabits slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation and associated invertebrates.	**Not Expected.** No water bodies are present on the Project Site. The species is not expected to be found on the Project Site.
Santa Ana speckled dace *Rhinichthys osculus ssp. 3*	--	CSC	Inhabits headwaters of the Santa Ana and San Gabriel rivers. May be extirpated from the Los Angeles River system. Requires permanent flowing streams with summer water temps of 17-20 Celsius. Usually inhabits shallow cobble and gravel riffles.	**Not Expected.** No water bodies are present on the Project Site; therefore, there is no suitable habitat present on the Project Site. The species is not expected to be found on the Project Site.
AMPHIBIANS				
Southern mountain yellow-legged frog *Rana muscosa*	FE	SE, CSC	Species always encountered within a few feet of water. Tadpoles may require 2 to 4 years to complete their aquatic development.	**Not Expected.** There is no suitable habitat including water bodies located on the Project Site. There are no recent known records of occurrence in the vicinity of the Project Site (within 5 miles). Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.

Attachment: Tech Study BRA and MSHCP Consistency Analysis [Revision 1] (2847 : PEN16-0048-0049,

Appendix A: Special-Status Animal Species with Potential to Occur on the Project Site.

Species	Status		Habitat Requirements	Potential for Occurrence
	Federal	State		
Western spadefoot *Spea hammondii*	--	CSC	Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	**Not Expected.** There are recent known records of occurrence in the vicinity of the Project Site (within 5 miles). However, there is no suitable habitat present on the Project Site. Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.
REPTILES				
Silvery legless lizard *Anniella pulchra pulchra*	--	CSC	Sandy or loose loamy soils under sparse vegetation. Soil moisture is essential. They prefer soils with a high moisture content.	**Not Expected.** There is no suitable habitat located on the Project Site. There are no recent known records of occurrence in the vicinity of the Project Site (within 5 miles). Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.
Orangethroat whiptail *Aspidoscelis hyperythra*	--	CSC	Inhabits low-elevation coastal scrub, chaparral, and valley-foothill hardwood habitats. Prefers washes and other sandy areas with patches of brush and rocks. Perennial plants necessary for its major food (i.e, termites).	**Not Expected.** There are recent known records of occurrence in the vicinity of the Project Site (within 5 miles). However, there is no suitable habitat present on the Project Site. Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.
Coastal whiptail *Aspidoscelis tigris stejnegeri*	--	--	Found in deserts and semiarid areas with sparse vegetation and open areas. Also found in woodland and riparian areas. Ground may be firm soil, sandy, or rocky.	**Not Expected.** There are recent known records of occurrence in the vicinity of the Project Site (within 5 miles). However, there is no suitable habitat present on the Project Site. Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.
Rosy boa Charina trivirgata	--	--	Inhabits chaparral, Mojavean desert scrub, and Sonoran desert scrub. Prefers moderate to dense vegetation and rocky cover. Prefers habitats with a mix of brushy cover and rocky soil such as coastal canyons and hillsides, desert canyons, washes and mountains.	**Not Expected.** There is no suitable habitat located on the Project Site. There are no recent known records of occurrence in the vicinity of the Project Site (within 5 miles). Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.
Red-diamond rattlesnake *Crotalus ruber*	--	CSC	Inhabits chaparral, Mojavean desert scrub, and Sonoran desert scrub from coastal San Diego County to the eastern slopes of the mountains. Occurs in rocky areas and dense vegetation. Needs rodent burrows, cracks in rocks, or surface cover objects.	**Not Expected.** There are recent known records of occurrence in the vicinity of the Project Site (within 5 miles). However, there is no suitable habitat present on the Project Site. Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.

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Appendix A: Special-Status Animal Species with Potential to Occur on the Project Site.

Species	Status		Habitat Requirements	Potential for Occurrence
	Federal	State		
San Bernardino ringneck snake *Diadophis punctatus modestus*	--	--	Most common in open, relatively rocky areas. Found in somewhat moist microhabitats near intermittent streams. Avoids moving through open or barren areas by restricting movements to areas of surface litter or herbaceous vegetation.	**Not Expected.** There is no suitable habitat located on the Project Site. There are no recent known records of occurrence in the vicinity of the Project Site (within 5 miles). Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.
Western pond turtle *Emys marmorata*	--	CSC	Inhabits ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. Requires basking sites and sandy banks or open grassy fields up to 0.5 kilometers from the water's edge for egg-laying.	**Not Expected.** There is no suitable habitat including water bodies located on the Project Site. There are no recent known records of occurrence in the vicinity of the Project Site (within 5 miles). Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.
California mountain kingsnake (San Bernardino population) *Lampropeltis zonata (parvirubra)*	--	CSC	Inhabits bigcone spruce and chaparral at lower elevations. Inhabits black oak, incense cedar, Jeffrey pine, and ponderosa pine at higher elevations. Found in well-lit canyons with rocky outcrops or rocky talus.	**Not Expected.** There is no suitable habitat located on the Project Site. There are no recent known records of occurrence in the vicinity of the Project Site (within 5 miles). Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.
Coast horned lizard *Phrynosoma blainvillii*	--	CSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Requires open areas for sunning, bushes for cover, patches of loose soil for refuge, and abundant supply of insects.	**Not Expected.** There are recent known records of occurrence in the vicinity of the Project Site (within 5 miles). However, there is no suitable habitat present on the Project Site. Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.
two-striped garter snake *Thamnophis hammondii*	--	CSC	Found along coastal California from vicinity of Salinas to northwest Baja California. Inhabits areas from the sea to about 7,000 feet in elevation. Highly aquatic, found in or near permanent fresh water. Often found along streams with rocky beds and riparian growth.	**Not Expected.** There is no suitable habitat including water bodies located on the Project Site. There are no recent known records of occurrence in the vicinity of the Project Site (within 5 miles). Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.

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Appendix A: Special-Status Animal Species with Potential to Occur on the Project Site.

Species	Status		Habitat Requirements	Potential for Occurrence
	Federal	State		
BIRDS				
Cooper's hawk *Accipiter cooperii*	--	--	Found in woodland, chiefly of open, interrupted or marginal type. Nests mainly in riparian growths of deciduous trees located in canyon bottoms in river flood-plains and in live oaks.	**Not Expected.** There are recent known records of occurrence in the vicinity of the Project Site (within 5 miles). However, there is no suitable habitat present on the Project Site. Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.
Tricolored blackbird *Agelaius tricolor*	--	CSC	Inhabits freshwater marsh, marsh and swamp, swamp, and wetland habitats. Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few kilometers of the colony.	**Not Expected.** There are recent known records of occurrence in the vicinity of the Project Site (within 5 miles). However, there is no suitable habitat present on the Project Site. Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.
Southern California rufous-crowned sparrow *Aimophila ruficeps canescens*	--	--	Resident in Southern California coastal sage scrub and sparse mixed chaparral. Frequents relatively steep, often rocky hillsides with grass and forb patches.	**Not Expected.** There are recent known records of occurrence in the vicinity of the Project Site (within 5 miles). However, there is no suitable habitat present on the Project Site. Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.
Golden eagle *Aquila chrysaetos*	--	--	Inhabits rolling foothills, mountain areas, sage-juniper flats, and desert. Nesting habitat includes cliff-walled canyons and large trees in open areas.	**Not Expected.** There is no suitable habitat located on the Project Site. There are no recent known records of occurrence in the vicinity of the Project Site (within 5 miles). Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.
Bell's sage sparrow *Artemisiospiza belli belli*	--	--	Nests in chaparral dominated by fairly dense stands of chamise. Found in coastal sage scrub in south of range.	**Not Expected.** There are recent known records of occurrence in the vicinity of the Project Site (within 5 miles). However, there is no suitable habitat present on the Project Site. Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.

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Appendix A: Special-Status Animal Species with Potential to Occur on the Project Site.

Species	Status		Habitat Requirements	Potential for Occurrence
	Federal	State		
Long-eared owl *Asio otus*	--	CSC	Inhabits riparian bottomlands grown to tall willows and cottonwoods as well as belts of live oak paralleling stream courses. Requires adjacent open land productive of mice and the presence of old nests of crows, hawks, or magpies for breeding.	**Not Expected.** There is no suitable habitat located on the Project Site. There are no recent known records of occurrence in the vicinity of the Project Site (within 5 miles). Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.
Burrowing owl *Athene cunicularia*	--	CSC	Inhabits open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel (*Otospermophilius beecheyi*).	**Moderate Potential.** Suitable habitat is present on the Project Site. Multiple California Ground squirrel (*Otospermophilus beecheyi*) burrows are present on the Project Site. However, California Ground squirrels are currently inhabiting the on-site burrows and no burrowing owls or burrowing owl sign was observed during focused surveys. Because suitable habits exists,, this species has a moderate probability of being found on the Project Site.
Ferruginous hawk Buteo regalis	--	--	Found in open grasslands, sagebrush flats, desert scrub, low foothills and fringes of pinyon and juniper habitats. Eats mostly lagomorphs, ground squirrels, and mice. Population trends may follow lagomorph population cycles.	**Not Expected.** There are recent known records of occurrence in the vicinity of the Project Site (within 5 miles). However, there is no suitable habitat present on the Project Site. Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.
Swainson's hawk *Buteo swainsoni*	--	ST	Occurs in Great Basin grassland, riparian forest, riparian woodland, valley and foothill grassland habitats. Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	**Not Expected.** There is no suitable habitat located on the Project Site. There are no recent known records of occurrence in the vicinity of the Project Site (within 5 miles). Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.
Coastal cactus wren *Campylorhynchus brunneicapillus sandiegensis*	--	CSC	Inhabits southern California coastal sage scrub communities. Wrens require tall opuntia cactus for nesting and roosting.	**Not Expected.** There is no suitable habitat located on the Project Site. There are no recent known records of occurrence in the vicinity of the Project Site (within 5 miles). Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.

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Appendix A: Special-Status Animal Species with Potential to Occur on the Project Site.

Species	Status		Habitat Requirements	Potential for Occurrence
	Federal	State		
Western yellow-billed cuckoo *Coccyzus americanus occidentalis*	FT	SE	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow (*Salix* sp.) often mixed with cottonwoods (*Populus* sp.), with lower story of blackberry (*Rubus sp.*), nettles (*Urtica sp.*), or wild grape (*Vitis girdiana*).	**Not Expected.** There are recent known records of occurrence in the vicinity of the Project Site (within 5 miles). However, there is no suitable habitat present on the Project Site. Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.
White-tailed kite *Elanus leucurus*	--	--	Inhabits rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodlands. Requires open grasslands, meadows or marshes for foraging in proximity to isolated, dense-topped trees for nesting and perching.	**Not Expected.** There is no suitable habitat located on the Project Site. There are no recent known records of occurrence in the vicinity of the Project Site (within 5 miles). Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.
Southwestern Willow Flycatcher *Empidonax traillii extimus*	FE	SE	Inhabits riparian and wetland thickets, generally of willow, tamarisk, or both, sometimes boxelder or Russian olive.	**Not Expected.** There is no suitable habitat located on the Project Site. There are no recent known records of occurrence in the vicinity of the Project Site (within 5 miles). Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.
California horned lark *Eremophila alpestris actia*	--	--	Coastal regions, chiefly from Sonoma Co. to San Diego Co. Also main part of San Joaquin Valley & east to foothills. Short-grass prairie, "bald" hills, mountain meadows, open coastal plains, fallow grain fields, alkali flats.	**Not Expected.** There is no suitable habitat located on the Project Site. There are no recent known records of occurrence in the vicinity of the Project Site (within 5 miles). Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.
Bald eagle *Haliaeetus leucocephalus*	DL	SE	Ocean shore, lake margins, & rivers for both nesting & wintering. Most nests within 1 mi of water. Nests in large, old-growth, or dominant live tree w/open branches, especially ponderosa pine. Roosts communally in winter.	**Not Expected.** There is no suitable habitat located on the Project Site. There are no recent known records of occurrence in the vicinity of the Project Site (within 5 miles). Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.
Yellow-breasted chat *Icteria virens*	--	CSC	Summer resident; inhabits riparian thickets of willow and other brushy tangles near watercourses. Nests in low, dense riparian, consisting of willow, blackberry, wild grape.	**Not Expected.** There are recent known records of occurrence in the vicinity of the Project Site (within 5 miles). However, there is no suitable habitat present on the Project Site. Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.

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Appendix A: Special-Status Animal Species with Potential to Occur on the Project Site.

Species	Status		Habitat Requirements	Potential for Occurrence
	Federal	State		
Loggerhead shrike *Lanius ludovicianus*	--	CSC	Inhabits broken woodlands, savannah, pinyon-juniper, Joshua tree, and riparian woodlands, desert oases, scrub and washes. Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	**Not Expected.** There are recent known records of occurrence in the vicinity of the Project Site (within 5 miles). However, there is no suitable habitat present on the Project Site. Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.
White-faced ibis *Plegadis chihi*	--	--	Inhabits shallow, fresh-water mashes. Requires dense thickets for nesting interspersed with areas of shallow water for foraging.	**Not Expected.** There are recent known records of occurrence in the vicinity of the Project Site (within 5 miles). However, there is no suitable habitat present on the Project Site. Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.
Coastal California gnatcatcher *Polioptila californica californica*	FT	CSC	Obligate, permanent resident of coastal sage scrub below 2,500 feet in Southern California. Inhabits low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied.	**Not Expected.** There are recent known records of occurrence in the vicinity of the Project Site (within 5 miles). However, there is no suitable habitat present on the Project Site. Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.
Yellow warbler *Setophaga petechia*	--	CSC	Occurs in riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevada. Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders.	**Not Expected.** There is no suitable habitat located on the Project Site. There are no recent known records of occurrence in the vicinity of the Project Site (within 5 miles). Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.
Lawrence's goldfinch *Spinus lawrencei*	--	--	Nests in open oak or other arid woodland and chaparral, near water. Nearby herbaceous habitats used for feeding. Closely associated with oaks.	**Not Expected.** There are recent known records of occurrence in the vicinity of the Project Site (within 5 miles). However, there is no suitable habitat present on the Project Site. Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.

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Appendix A: Special-Status Animal Species with Potential to Occur on the Project Site.

Species	Status		Habitat Requirements	Potential for Occurrence
	Federal	State		
Least Bell's vireo *Vireo bellii pusillus*	FE	SE	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms below 2,000 feet. Nests placed along margins of bushes or on twigs projecting into pathways (usually *salix*, *baccharis*, *Prosopis*).	**Not Expected.** There are recent known records of occurrence in the vicinity of the Project Site (within 5 miles). However, there is no suitable habitat present on the Project Site. Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.
MAMMALS				
Pallid bat *Antrozous pallidus*	--	CSC	Occurs in deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	**Not Expected.** There is no suitable habitat located on the Project Site. There are no recent known records of occurrence in the vicinity of the Project Site (within 5 miles). Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.
Northwestern San Diego pocket mouse *Chaetodipus fallax fallax*	--	CSC	Inhabits chaparral, coastal scrub. Coastal scrub, chaparral, grasslands, and sagebrush habitats in western San Diego County. Found in sandy, herbaceous areas, usually in association with rocks or coarse gravel.	**Not Expected.** There are recent known records of occurrence in the vicinity of the Project Site (within 5 miles). However, there is no suitable habitat present on the Project Site. Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.
San Bernardino Merriam's kangaroo rat *Dipodomys merriami parvus*	FE	CSC	Inhabits alluvial scrub vegetation on sandy loam substrates characteristic of alluvial fans and flood plains.	**Not Expected.** There are recent known records of occurrence in the vicinity of the Project Site (within 5 miles). However, there is no suitable habitat present on the Project Site. Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.
Stephens' kangaroo rat *Dipodomys stephensi*	FE	ST	Inhabits primarily annual and perennial grasslands, but also occurs in coastal scrub and sagebrush with sparse canopy cover. Prefers buckwheat (*Eriogonum sp.*), chamise (*Adenostoma fasciculatum*), brome grass (*Bromus sp.*) and filaree (*Erodium sp.*). Will burrow into firm soil.	**Not Expected.** There is no suitable habitat located on the Project Site. There are no recent known records of occurrence in the vicinity of the Project Site (within 5 miles). Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.

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Appendix A: Special-Status Animal Species with Potential to Occur on the Project Site.

Species	Status		Habitat Requirements	Potential for Occurrence
	Federal	State		
Western mastiff bat *Eumops perotis californicus*	--	CSC	Inhabits many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, valley and foothill grasslands, and chaparral. Roosts in crevices in cliff faces, high buildings, trees and tunnels.	**Not Expected.** There are recent known records of occurrence in the vicinity of the Project Site (within 5 miles). However, there is no suitable habitat present on the Project Site. Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.
Western yellow bat *Lasiurus xanthinus*	--	CSC	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in trees, particularly palms. Forages over water and among trees.	**Not Expected.** There are recent known records of occurrence in the vicinity of the Project Site (within 5 miles). However, there is no suitable habitat present on the Project Site. Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.
Lesser long-nosed bat *Leptonycteris yerbabuenae*	FE	--	Found in arid regions such as desert grasslands and shrub land. Suitable day roosts (caves and mines) and suitable concentrations of food plants (columnar cacti and agaves) are critical resources. Caves and mines are used as day roosts and caves, mines, rock crevices, trees, shrubs, and abandoned buildings are used as night roosts for digesting meals. Nectar, pollen, and fruit eating bat; primarily feeding on agaves, saguaro, and organ pipe cactus.	**Not Expected.** There is no suitable habitat located on the Project Site. There are no recent known records of occurrence in the vicinity of the Project Site (within 5 miles). Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.
San Diego black-tailed jackrabbit *Lepus californicus bennettii*	--	CSC	Found in intermediate canopy stages of shrub habitats and open shrub/herbaceous and tree/herbaceous edges. Inhabits coastal sage scrub habitats in Southern California.	**Not Expected.** There are recent known records of occurrence in the vicinity of the Project Site (within 5 miles). However, there is no suitable habitat present on the Project Site. Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.
San Diego desert woodrat *Neotoma lepida intermedia*	--	CSC	Inhabits coastal scrub of Southern California from San Diego County to San Luis Obispo County. Moderate to dense canopies preferred. They are particularly abundant in rock outcrops and rocky cliffs and slopes.	**Not Expected.** There is no suitable habitat located on the Project Site. There are no recent known records of occurrence in the vicinity of the Project Site (within 5 miles). Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.

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Appendix A: Special-Status Animal Species with Potential to Occur on the Project Site.

Species	Status		Habitat Requirements	Potential for Occurrence
	Federal	State		
Pocketed free-tailed bat *Nyctinomops femorosaccus*	--	CSC	Inhabits a variety of arid areas in Southern California, including pine-juniper woodlands, desert scrub, palm oasis, desert wash, and desert riparian. Prefers rocky areas with high cliffs.	**Not Expected.** There are recent known records of occurrence in the vicinity of the Project Site (within 5 miles). However, there is no suitable habitat present on the Project Site. Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.
Southern grasshopper mouse *Onychomys torridus ramona*	--	CSC	Inhabits desert areas, especially scrub habitats with friable soils for digging. Prefers low to moderate shrub cover.	**Not Expected.** There is no suitable habitat located on the Project Site. There are no recent known records of occurrence in the vicinity of the Project Site (within 5 miles). Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.
Los Angeles pocket mouse *Perognathus longimembris brevinasus*	--	CSC	Inhabits lower elevation grasslands and coastal sage communities in and around the Los Angeles Basin. Found in open ground with fine sandy soils. May not dig extensive burrows, hiding under weeds and dead leaves instead.	**Not Expected.** There are recent known records of occurrence in the vicinity of the Project Site (within 5 miles). However, there is no suitable habitat present on the Project Site. Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.
American badger *Taxidea taxus*	--	CSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	**Not Expected.** There are recent known records of occurrence in the vicinity of the Project Site (within 5 miles). However, there is no suitable habitat present on the Project Site. Not observed during May 2016 field survey. The species is not expected to be found on the Project Site.

KEY:
(nesting and/or wintering) = For most taxa, the CNDDB is interested in information that indicates the presence of a resident population. For some species (primarily birds), the CNDDB only tracks certain parts of the species range or life history (e.g., nesting locations).

STATUS:

Federal
FE: Federally-listed Endangered
FT: Federally-listed Threatened
FD: Federally-delisted

State
SE: State-listed Endangered
ST: State-listed Threatened
CSC: State Species of Special Concern

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Appendix A: Special-Status Animal Species with Potential to Occur on the Project Site.

SOURCES:

1 California Natural Diversity Database (CNDDB), BIOS 5 Data Viewer, and NatureServe.org Explorer were used to identify preferred habitat for each species

2 CNDDB records are from CNDDB 2015

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Appendix B: Special Status Plant Species With Potential to Occur on the Project Site.

Species	Status			Habitat Requirements	Elevation Range; Life Form; Blooming Period	Potential Occurrence in the Project Area[1]
	Federal	State	CNPS			
DICOTS						
Chaparral sand-verbena *Abronia villosa var. aurita*	--	--	1B.1	Occurs in chaparral, coastal scrub, desert dunes, and sandy areas.	9-1,650 m; Annual herb; Blooms January to September	**Not Expected.** There is no suitable habitat present on the Project Site. There are no recent known records of occurrence in the vicinity of the project (within 5 miles). Not observed during May 2016 field survey; however, focused surveys were not conducted. The species is not expected to be found on the Project Site.
San Diego ambrosia *Ambrosia pumila*	FE	--	1B.1	Occurs in chaparral, coastal scrub, valley and foothill grassland. Found in sandy loam or clay soil in valleys; persists where disturbance has been superficial. Sometimes on margins or near vernal pools.	20-415 m; Perennial herb; Blooms April to October	**Not Expected.** There is no suitable habitat present on the Project Site. There are no recent known records of occurrence in the vicinity of the project (within 5 miles). Not observed during May 2016 field survey; however, focused surveys were not conducted. The Project Site is above the known elevation range for the species (475 m). The species is not expected to be found on the Project Site.
Marsh sandwort *Arenaria paludicola*	FE	SE	1B.1	Occurs in freshwater marsh, marsh, swamp, and wetland. Found growing up through dense mats of *Typha, Juncus,* and *Scirpus* in freshwater marsh habitat.	10-170 m; Perennial herb; Blooms from May to August	**Not Expected.** There is no marsh or wetland habitat present on the Project Site. There are no recent known records of occurrence in the vicinity of the project (within 5 miles). Not observed during May 2016 field survey; however, focused surveys were not conducted. The Project Site is above the known elevation range for the species (475 m). The species is not expected to be found on the Project Site.

[1] The potential for occurrence is based on occurrences recorded in the CNDDB, knowledge of species requirements, and site inspections during 2016 field surveys

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Appendix B: Special Status Plant Species With Potential to Occur on the Project Site.

Species	Status			Habitat Requirements	Elevation Range; Life Form; Blooming Period	Potential Occurrence in the Project Area[1]
	Federal	State	CNPS			
Horn's milk-vetch *Astragalus hornii var. hornii*	--	--	1B.1	Found in meadows, seeps, playas, lake margins, and alkaline sites.	90-890 m; Annual herb; Blooms May to October	**Not Expected.** There is no suitable habitat present on the Project Site. There are no recent known records of occurrence in the vicinity of the project (within 5 miles). Not observed during May 2016 field survey; however, focused surveys were not conducted. The species is not expected to be found on the Project Site.
Jaeger's milk-vetch *Astragalus pachypus var. jaegeri*	--	--	1B.1	Occurs in coastal scrub, chaparral, valley and foothill grassland, cismontane woodlands. Found on dry ridges and valleys and open sandy slopes; often in grassland and oak-chaparral.	460-1,060 m; Shrub; Blooms December to June	**Not Expected.** There is no suitable habitat present on the Project Site. There are no recent known records of occurrence in the vicinity of the project (within 5 miles). Not observed during May 2016 field survey; however, focused surveys were not conducted. The species is not expected to be found on the Project Site.
San Jacinto Valley crownscale *Atriplex coronata var. notatior*	FE	--	1B.1	Occurs in playas, valley and foothill grassland, vernal pools, and alkaline areas in the San Jacinto River Valley.	370-480 m; Annual herb; Blooms April to August	**Not Expected.** There are recent known records of occurrence in the vicinity of the project (within 5 miles). Not observed during May 2016 field survey; however, focused surveys were not conducted. The species is not expected to be found on the Project Site.
Parish's brittlescale *Atriplex parishii*	--	--	1B.1	Occurs in vernal pools, chenopod scrub, playas. Usually on drying alkali flats with fine soils.	30-500 m; Annual herb; Blooms June to October	**Not Expected.** There are recent known records of occurrence in the vicinity of the project (within 5 miles). Not observed during May 2016 field survey; however, focused surveys were not conducted. The species is not expected to be found on the Project Site.

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Appendix B: Special Status Plant Species With Potential to Occur on the Project Site.

Species	Status			Habitat Requirements	Elevation Range; Life Form; Blooming Period	Potential Occurrence in the Project Area[1]
	Federal	State	CNPS			
Davidson's saltscale *Atriplex serenana var. davidsonii*	--	--	1B.2	Coastal bluff scrub, coastal scrub. Alkaline soil.	0-470 m; Annual herb; Blooms April to October	**Not Expected.** There are recent known records of occurrence in the vicinity of the project (within 5 miles). Not observed during May 2016 field survey; however, focused surveys were not conducted. The species is not expected to be found on the Project Site.
Nevin's barberry *Berberis nevinii*	FE	SE	1B.1	Occurs in chaparral, cismontane woodland, coastal scrub, riparian scrub and on steep, north-facing slopes or in low grade sandy washes.	290-1,575 m; Shrub; Blooms March to June	**Not Expected.** There is no suitable habitat present on the Project Site. There are no recent known records of occurrence in the vicinity of the project (within 5 miles). Not observed during May 2016 field survey; however, focused surveys were not conducted. The species is not expected to be found on the Project Site.
Round-leaved filaree *California macrophylla*	--	--	1B.2	Cismontane woodland, valley and foothill grassland. Clay soils.	15-1,200 m; Annual herb; Blooms March to May	**Not Expected.** There are recent known records of occurrence in the vicinity of the project (within 5 miles). Not observed during May 2016 field survey; however, focused surveys were not conducted. The species is not expected to be found on the Project Site.
Payson's jewelflower Caulanthus simulans	--	--	4.2	Chaparral, coastal scrub. Frequently in burned areas, or in disturbed sites such as streambeds; also on rocky, steep slopes. Sandy, granitic soils.	190-2,190 m; Annual herb; Blooms March to May	**Not Expected.** There is no suitable habitat present on the Project Site. There are no recent known records of occurrence in the vicinity of the project (within 5 miles). Not observed during May 2016 field survey; however, focused surveys were not conducted. The species is not expected to be found on the Project Site.

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Species	Status			Habitat Requirements	Elevation Range; Life Form; Blooming Period	Potential Occurrence in the Project Area[1]
	Federal	State	CNPS			
Smooth tarplant *Centromadia pungens* ssp. *laevis*	--	--	1B.1	Found in valley and foothill grassland, chenopod scrub, meadows, playas, riparian woodland. Occurs in alkali meadows, alkali scrub, and also in disturbed places.	0-640 m; Annual herb; Blooms April to September	**Not Expected.** There are recent known records of occurrence in the vicinity of the project (within 5 miles). Not observed during May 2016 field survey; however, focused surveys were not conducted. The species is not expected to be found on the Project Site.
Salt marsh bird's-beak *Chloropyron maritimum* ssp. *maritimum*	FE	SE	1B.2	Occurs in coastal salt marsh, coastal dunes. Limited to the higher zones of the salt marsh habitat.	0-30 m; Annual herb; Blooms May to October	**Not Expected.** There is no suitable habitat present on the Project Site. There are no recent known records of occurrence in the vicinity of the project (within 5 miles). Not observed during May 2016 field survey; however, focused surveys were not conducted. The Project Site is above the known elevation range for the species (475 m). The species is not expected to be found on the Project Site.
Parry's spineflower *Chorizanthe parryi* var. *parryi*	--	--	1B.1	Occurs in coastal scrub, chaparral, cismontane woodland, valley, and foothill grassland. Found in dry slopes and flats; sometimes at interface of two vegetation types, such as chaparral and oak woodland; dry, sandy soils.	225-1,220 m; Annual herb; Blooms April to June	**Not Expected.** There are recent known records of occurrence in the vicinity of the project (within 5 miles). There is no suitable habitat present on the Project Site. Not observed during May 2016 field survey; however, focused surveys were not conducted. The species is not expected to be found on the Project Site.

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Species	Status			Habitat Requirements	Elevation Range; Life Form; Blooming Period	Potential Occurrence in the Project Area[1]
	Federal	State	CNPS			
Long-spined spineflower *Chorizanthe polygonoides var. longispina*	--	--	1B.2	Occurs in chaparral, coastal scrub, meadows and seeps, valley and foothill grassland, and vernal pools. Found in gabbroic clay.	110-1,610m; Annual herb; Blooms April to July	**Not Expected.** There is no suitable habitat present on the Project Site. There are no recent known records of occurrence in the vicinity of the project (within 5 miles). Not observed during May 2016 field survey; however, focused surveys were not conducted. The species is not expected to be found on the Project Site.
White-bracted spineflower *Chorizanthe xanti var. leucotheca*	--	--	1B.2	Occurs in Mojavean desert scrub, pinyon-juniper woodland, coastal scrub (alluvial fans). Found in sandy or gravelly places.	390-1,630 m; Annual herb; Blooms April to June	**Not Expected.** There is no suitable habitat present on the Project Site. There are no recent known records of occurrence in the vicinity of the project (within 5 miles). Not observed during May 2016 field survey; however, focused surveys were not conducted. The species is not expected to be found on the Project Site.
Peruvian dodder *Cuscuta obtusiflora var. glandulosa*			2B.2	Marshes and swamps (freshwater).	15-280 m; Annual herb/vine; Blooms July to October	**Not Expected.** There is no suitable habitat present on the Project Site. There are no recent known records of occurrence in the vicinity of the project (within 5 miles). Not observed during May 2016 field survey; however, focused surveys were not conducted. The Project Site is above the known elevation range for the species (475 m). The species is not expected to be found on the Project Site.

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Species	Status			Habitat Requirements	Elevation Range; Life Form; Blooming Period	Potential Occurrence in the Project Area[1]
	Federal	State	CNPS			
Slender-horned spineflower *Dodecahema leptoceras*	FE	SE	1B.1	Occurs in chaparral, cismontane woodland, coastal scrub (alluvial fan sage scrub). Found in flood deposited terraces and washes; associates include *Encelia, Dalea*, and *Lepidospartum*. Sandy soils.	200-760 m; Annual herb; Blooms April to June	**Not Expected.** There is no suitable habitat present on the Project Site. There are no recent known records of occurrence in the vicinity of the project (within 5 miles). Not observed during May 2016 field survey; however, focused surveys were not conducted. The species is not expected to be found on the Project Site.
Santa Ana River woollystar *Eriastrum densifolium* ssp. *sanctorum*	FE	SE	1B.1	Occurs in coastal scrub and chaparral. Found in sandy soils on river floodplains or terraced fluvial deposits.	90-610 m; Perennial herb; Blooms May to September	**Not Expected.** There is no suitable habitat present on the Project Site. There are no recent known records of occurrence in the vicinity of the project (within 5 miles). Not observed during May 2016 field survey; however, focused surveys were not conducted. The species is not expected to be found on the Project Site.
Alvin Meadow bedstraw *Galium californicum ssp. primum*	--	--	1B.2	Found in chaparral and lower montane coniferous forest. Grows in shade of trees and shrubs at the lower edge of the pine belt in the pine forest-chaparral ecotone. Prefers granitic, sandy soils.	1,420-1,740 m; Perennial herb; Blooms May to July	**Not Expected.** There is no suitable habitat present on the Project Site. There are no recent known records of occurrence in the vicinity of the project (within 5 miles). Not observed during May 2016 field survey; however, focused surveys were not conducted. The Project Site is below the known elevation range for the species (475 m). The species is not expected to be found on the Project Site.

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Species	Status			Habitat Requirements	Elevation Range; Life Form; Blooming Period	Potential Occurrence in the Project Area[1]
	Federal	State	CNPS			
Palmer's grapplinghook *Harpagonella palmeri*	--	--	4.2	Found in chaparral, coastal scrub, valley and foothill grassland. Occurs in clay soils and open grassy areas within shrubland.	13-1,210 m; Annual herb; Blooms March to May	**Not Expected.** There is no suitable habitat present on the Project Site. There are no recent known records of occurrence in the vicinity of the project (within 5 miles). Not observed during May 2016 field survey; however, focused surveys were not conducted. The species is not expected to be found on the Project Site.
Los Angeles sunflower *Helianthus nuttallii ssp. parishii*	--	--	1A	Found in marshes and swamps (coastal salt and freshwater).	40-910 m; Perennial herb (rhizomatous); Blooms August to October	**Not Expected.** There is no suitable habitat present on the Project Site. There are no recent known records of occurrence in the vicinity of the project (within 5 miles). Not observed during May 2016 field survey; however, focused surveys were not conducted. The species is not expected to be found on the Project Site.
Mesa horkelia *Horkelia cuneata* var. *puberula*	--	--	1B.1	Occurs in chaparral, cismontane woodland, coastal scrub. Found on sandy or gravelly sites.	70-810 m; Perennial herb; Blooms February to July	**Not Expected.** There is no suitable habitat present on the Project Site. There are no recent known records of occurrence in the vicinity of the project (within 5 miles). Not observed during May 2016 field survey; however, focused surveys were not conducted. The species is not expected to be found on the Project Site.

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Species	Status			Habitat Requirements	Elevation Range; Life Form; Blooming Period	Potential Occurrence in the Project Area[1]
	Federal	State	CNPS			
Coulter's goldfields *Lasthenia glabrata* ssp. *coulteri*	--	--	1B.1	Occurs in coastal salt marshes, playas, vernal pools. Usually found on alkaline soils in playas, sinks, and grasslands.	1-1,200 m; Annual herb; Blooms February to June	**Not Expected.** There are recent known records of occurrence in the vicinity of the project (within 5 miles). There is no suitable habitat present on the Project Site. Not observed during May 2016 field survey; however, focused surveys were not conducted. The species is not expected to be found on the Project Site.
Robinson's pepper-grass *Lepidium virginicum* var. *robinsonii*	--	--	4.3	Occurs in chaparral, coastal scrub. Found on dry soils and shrubland.	1-885 m; Annual herb; Blooms January to July	**Not Expected.** There are recent known records of occurrence in the vicinity of the project (within 5 miles). There is no suitable habitat present on the Project Site. Not observed during May 2016 field survey; however, focused surveys were not conducted. The species is not expected to be found on the Project Site.
Parish's desert-thorn *Lycium parishii*	--	--	2B.3	Occurs in coastal scrub and Sonoran desert scrub communities.	160-1,030 m; Shrub; Blooms March to April	**Not Expected.** There is no suitable habitat present on the Project Site. There are no recent known records of occurrence in the vicinity of the project (within 5 miles). Not observed during May 2016 field survey; however, focused surveys were not conducted. The species is not expected to be found on the Project Site.

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Species	Status			Habitat Requirements	Elevation Range; Life Form; Blooming Period	Potential Occurrence in the Project Area[1]
	Federal	State	CNPS			
Parish's bush-mallow *Malacothamnus parishii*	--	--	1A	Found in chaparral, coastal sage scrub, and washes.	0-2,440; Shrub; Blooms April to July	**Not Expected.** There is no suitable habitat present on the Project Site. There are no recent known records of occurrence in the vicinity of the project (within 5 miles). Not observed during May 2016 field survey; however, focused surveys were not conducted. The species is not expected to be found on the Project Site.
Hall's monardella *Monardella macrantha* ssp. *hallii*	--	--	1B.3	Occurs in broadleaved upland forest, chaparral, lower montane coniferous forest, cismontane woodland, valley, and foothill grassland. Found on dry slopes and ridges in openings within the above communities.	730-2,195 m; Perennial herb; Blooms June to October	**Not Expected.** There is no suitable habitat present on the Project Site. There are no recent known records of occurrence in the vicinity of the project (within 5 miles). Not observed during May 2016 field survey; however, focused surveys were not conducted. The Project Site is below the known elevation range for the species (475 m). The species is not expected to be found on the Project Site.
Pringle's monardella *Monardella pringlei*	--	--	1A	Occurs in Coastal scrub communities and on sandy hills.	280-350 m; Annual herb; Blooms May to June	**Not Expected.** There is no suitable habitat present on the Project Site. There are no recent known records of occurrence in the vicinity of the project (within 5 miles). Not observed during May 2016 field survey; however, focused surveys were not conducted. The Project Site is above the known elevation range for the species (475 m). The species is not expected to be found on the Project Site.

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Species	Status			Habitat Requirements	Elevation Range; Life Form; Blooming Period	Potential Occurrence in the Project Area[1]
	Federal	State	CNPS			
Little mousetail *Myosurus minimus ssp. apus*	--	--	3.1	Found in vernal pools, valley and foothill grassland. This subspecies has taxonomic problems; distinguishing between this and *M. sessilis* is difficult. Occurs in alkaline soils.	30-770 m; Annual herb; Blooms March to June	**Not Expected.** There is no suitable habitat present on the Project Site. There are no recent known records of occurrence in the vicinity of the project (within 5 miles). Not observed during May 2016 field survey; however, focused surveys were not conducted. The species is not expected to be found on the Project Site.
Mud nama *Nama stenocarpa*	--	--	2B.2	Found in marshes and swamps. Occurs in lake shores, river banks, and intermittently wet areas.	Annual herb; No elevation or blooming period information available	**Not Expected.** There is no suitable habitat present on the Project Site. There are no recent known records of occurrence in the vicinity of the project (within 5 miles). Not observed during May 2016 field survey; however, focused surveys were not conducted. The species is not expected to be found on the Project Site.
Gambel's water cress *Nasturtium gambelii*	FE	ST	1B.1	Found in marshes and swamps. Occurs in freshwater and brackish marshes at the margins of lakes and along streams, in or just above the water level.	5-780 m; Perennial herb; Blooms April to October	**Not Expected.** There is no suitable habitat present on the Project Site. There are no recent known records of occurrence in the vicinity of the project (within 5 miles). Not observed during May 2016 field survey; however, focused surveys were not conducted. The species is not expected to be found on the Project Site.

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	Federal	State	CNPS			
Spreading navarretia *Navarretia fossalis*	FT	--	1B.1	Found in vernal pools, chenopod scrub, marshes, swamps, and playas. Occurs in San Diego hardpan and San Diego claypan vernal pools; in swales and vernal pools, often surrounded by other habitat types.	90-1,070 m; Annual herb; Blooms April to June	**Not Expected.** There are recent known records of occurrence in the vicinity of the project (within 5 miles). There is no suitable habitat present on the Project Site. Not observed during May 2016 field survey; however, focused surveys were not conducted. The species is not expected to be found on the Project Site.
Parish's gooseberry *Ribes divaricatum var. parishii*	--	--	1A	Found in riparian woodlands. Occurs in *Salix* swales in riparian habitats.	290-310 m; Shrub; Blooms February to April	**Not Expected.** There is no suitable habitat present on the Project Site. There are no recent known records of occurrence in the vicinity of the project (within 5 miles). Not observed during May 2016 field survey; however, focused surveys were not conducted. The Project Site is above the known elevation range for the species (475 m). The species is not expected to be found on the Project Site.
Parish's checkerbloom *Sidalcea hickmanii ssp. parishii*	--	Rare	1B.2	Found in chaparral, cismontane woodland, and lower montane coniferous forest. Occurs in disturbed burned or cleared areas on dry, rocky slopes, in fuel breaks and fire roads along the mountain summits.	1,510 to 2,010 m; Perennial herb; Blooms June to August	**Not Expected.** There is no suitable habitat present on the Project Site. There are no recent known records of occurrence in the vicinity of the project (within 5 miles). Not observed during May 2016 field survey; however, focused surveys were not conducted. The Project Site is below the known elevation range for the species (475 m). The species is not expected to be found on the Project Site.

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	Federal	State	CNPS			
Salt Spring checkerbloom *Sidalcea neomexicana*	--	--	2B.2	Occurs on playas, chaparral, coastal scrub, lower montane coniferous forest, and Mojavean desert scrub. Found in alkali springs and marshes.	0-1,390; Perennial herb; Blooms March to June	**Not Expected.** There is no suitable habitat present on the Project Site. There are no recent known records of occurrence in the vicinity of the project (within 5 miles). Not observed during May 2016 field survey; however, focused surveys were not conducted. The species is not expected to be found on the Project Site.
Southern jewelflower *Streptanthus campestris*	--	--	1B.3	Found in chaparral, lower montane coniferous forest, and pinyon-juniper woodland. Occurs in open, rocky areas.	820-2,750 m; Perennial herb; Blooms May to July	**Not Expected.** There is no suitable habitat present on the Project Site. There are no recent known records of occurrence in the vicinity of the project (within 5 miles). Not observed during May 2016 field survey; however, focused surveys were not conducted. The Project Site is below the known elevation range for the species (475 m). The species is not expected to be found on the Project Site.
San Bernardino aster *Symphyotrichum defoliatum*	--	--	1B.2	Occurs in meadows and seeps, marshes and swamps, coastal scrub, cismontane woodland, lower montane coniferous forest, and grassland. Found in vernally mesic grassland or near ditches, streams and springs; disturbed areas.	2-2,040 m; Perennial herb; Blooms July to November	**Not Expected.** There is no suitable habitat present on the Project Site. There are no recent known records of occurrence in the vicinity of the project (within 5 miles). Not observed during May 2016 field survey; however, focused surveys were not conducted. The species is not expected to be found on the Project Site.

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	Federal	State	CNPS			
Wright's trichocoronis *Trichocoronis wrightii var. wrightii*	--	--	2B.1	Found in marshes and swamps, riparian forest, meadows, seeps, and vernal pools. Occurs in mud flats of vernal lakes, drying river beds, and alkali meadows.	10-460 m; Annual herb; Blooms May to September	**Not Expected.** There are recent known records of occurrence in the vicinity of the project (within 5 miles). There is no suitable habitat present on the Project Site. Not observed during May 2016 field survey; however, focused surveys were not conducted. The Project Site is below the known elevation range for the species (475 m). The species is not expected to be found on the Project Site.
MONOCOTS						
Munz's onion *Allium munzii*	FE	ST	1B.1	Found in chaparral, coastal scrub, cismontane woodland, pinyon-juniper woodland, valley and foothill grassland. Occurs in heavy clay soils; grows in grasslands and openings within shrublands or woodlands.	350-1,070 m; Perennial herb; Blooms March to May	**Not Expected.** There is no suitable habitat present on the Project Site. There are no recent known records of occurrence in the vicinity of the project (within 5 miles). Not observed during May 2016 field survey; however, focused surveys were not conducted. The species is not expected to be found on the Project Site.
Thread-leaved brodiaea *Brodiaea filifolia*	FT	FE	1B.1	Found in chaparral (openings), cismontane woodland, coastal scrub, playas, valley and foothill grassland, vernal pools. Usually associated with annual grassland and vernal pools; often surrounded by shrubland habitats. Occurs in openings on clay soils.	40-1,130 m; Perennial herb (bulb); Blooms March to June	**Not Expected.** There is no suitable habitat present on the Project Site. There are no recent known records of occurrence in the vicinity of the project (within 5 miles). Not observed during May 2016 field survey; however, focused surveys were not conducted. The species is not expected to be found on the Project Site.

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	Federal	State	CNPS			
Plummer's mariposa-lily *Calochortus plummerae*	--	--	4.2	Occurs in coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, and lower montane coniferous forest. Found on rocky and sandy sites, usually of granitic or alluvial material. Can be very common after fire.	140-1,920 m; Perennial herb (bulb); Blooms May to July	**Not Expected.** There are recent known records of occurrence in the vicinity of the project (within 5 miles). There is no suitable habitat present on the Project Site. Not observed during May 2016 field survey; however, focused surveys were not conducted. The species is not expected to be found on the Project Site.
Bristly sedge *Carex comosa*	--	--	2B.1	Marshes and swamps, coastal prairie, valley and foothill grassland. Lake margins, wet places; site below sea level is on a Delta island.	270-1,030 m; Perennial grasslike herb (rhizomatous); Blooms May to September	**Not Expected.** There is no suitable habitat present on the Project Site. There are no recent known records of occurrence in the vicinity of the project (within 5 miles). Not observed during May 2016 field survey; however, focused surveys were not conducted. The species is not expected to be found on the Project Site.
California satintail *Imperata brevifolia*	--	--	2B.1	Found in coastal scrub, chaparral, riparian scrub, Mojavean scrub, meadows, seeps (alkali), and riparian scrub.	190-1,190; Perennial grass; Blooms September to May	**Not Expected.** There is no suitable habitat present on the Project Site. There are no recent known records of occurrence in the vicinity of the project (within 5 miles). Not observed during May 2016 field survey; however, focused surveys were not conducted. The species is not expected to be found on the Project Site.

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Prairie wedge grass *Sphenopholis obtusata*	--	--	2B.2	Occurs in cismontane woodland, meadows, and seeps. Found in open moist sites, along rivers and springs, alkaline desert seeps.	240 to 2,870 m; Perennial grass; Blooms August to July	**Not Expected.** There is no suitable habitat present on the Project Site. There are no recent known records of occurrence in the vicinity of the project (within 5 miles). Not observed during May 2016 field survey; however, focused surveys were not conducted. The species is not expected to be found on the Project Site.
Bryophytes						
California screw moss *Tortula californica*	--	--	1B.2	Found in chenopod scrub, valley, and foothill grassland. Moss growing on sandy soil.	Moss; No elevation or blooming period information available	**Not Expected.** There is no suitable habitat present on the Project Site. There are no recent known records of occurrence in the vicinity of the project (within 5 miles). Not observed during May 2016 field survey; however, focused surveys were not conducted. The species is not expected to be found on the Project Site.
Lichens						
Woven-spored lichen *Texosporium sancti-jacobi*	--	--	3	Found in chaparral habitats. Occurs in open sites; in California with *Adenostoma fasciculatum*, *Eriogonum*, and *Selaginella*. Found at Pinnacles, on small mammal pellets.	Lichen; No elevation or blooming period information available	**Not Expected.** There is no suitable habitat present on the Project Site. There are no recent known records of occurrence in the vicinity of the project (within 5 miles). Not observed during May 2016 field survey; however, focused surveys were not conducted. The species is not expected to be found on the Project Site.
Plant Communities						
Canyon Live Oak Ravine Forest						This plant community is not present on the Project Site.
Riversidian Alluvial Fan Sage Scrub						This plant community is not present on the Project Site.
Southern Coast Live Oak Riparian Forest						This plant community is not present on the Project Site.

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	Federal	State	CNPS			
Southern Cottonwood Willow Riparian Forest						This plant community is not present on the Project Site.
Southern Riparian Forest						This plant community is not present on the Project Site.
Southern Riparian Scrub						This plant community is not present on the Project Site.
Southern Sycamore Alder Riparian Woodland						This plant community is not present on the Project Site.
Southern Willow Scrub						This plant community is not present on the Project Site.

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STATUS KEY:
Federal
FE: Federally-listed Endangered
FT: Federally-listed Threatened

State
CE: California-listed Endangered
CT: California-listed Threatened

California Native Plant Society (CNPS)**:**
1B: Plants listed as rare, threatened, or endangered in California and elsewhere
2B: Plants rare, threatened, or endangered in California, but more common elsewhere
3: Plants about which we need more information

CNPS added a decimal threat rank to the List rank to parallel that used by the CNDDB. This extension replaces the E (Endangerment) value from the R-E-D Code. CNPS ranks therefore read like this: 1B.1, 1B.2, etc. Threat code extensions and their meanings are as follows:
.1 – Seriously endangered in California (over 80% of occurrences threatened / high degree of immediacy of threat)
.2 – Fairly endangered in California (20-80% occurrences threatened)
.3 – Not very endangered in California (<20% of occurrences threatened or no current threats known)

OURCES:
1 Calflora and the California Native Plant Society Rare and Endangered Plant Inventory was used to identify preferred habitat for each species
2 CNDDB records are from CNDDB 2015

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Appendix C. List of Observed Species (5-19-16)

Plants
barley (*Hordeum vulgare*)
bindweed (*Convolvulus arvensis*)
cheeseweed (Malva parviflora)
common fiddleneck (*Amsinckia menziesii* var. *intermedia*)
common sow-thistle (*Sonchus oleraceus*)
horseweed (*Conyza canadensis*)
lamb's quarters (*Chenopodium album*)
London rocket (*Sisymbrium irio*)
prickly lettuce (*Lactuca serriola*)
prickly sow-thistle (*Sonchus asper*)
puncture vine (*Tribulus terrestris*)
red-stemmed filaree (*Erodium cicutarium*)
Russian thistle (*Salsola tragus*)
short-podded mustard (*Hirschfeldia incana*)
stink-net (*Oncosiphon piluliferum*)
tumbling pigweed (*Amaranthus albus*)
wild oat (*Avena fatua*)
wild radish (*Raphanus sativus*)

Animals
American crow (*Corvus brachyrhynchos*)
blue grosbeak (*Passerina caerulea*)
California ground squirrel (*Otospermophilius beecheyi*)
cliff swallow (*Petrochelidon pyrrhonota*)
house finch (*Carpodacus mexicanus*)
mourning dove (*Zenaida macroura*)
northern rough-winged swallow (*Stelgidopteryx serripennis*)
red-tailed hawk (*Buteo jamaicensis*)
western meadowlark (*Sturnella neglecta*)

Attachment: Tech Study BRA and MSHCP Consistency Analysis [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic

Galaxy Management Medical Village

Noise Study

June 2017 (13517)

Prepared for:

Galaxy Management, Inc.
5067 Walnut Grove Avenue
San Gabriel, California 91776

Prepared by:

MIG
1500 Iowa Avenue, Suite 110
Riverside, California 92507

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

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Galaxy Management Medical Village

Noise Study

June 2017

City of Moreno Valley, California

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

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1 EXECUTIVE SUMMARY

Construction-related and operational noise impacts were modeled and analyzed for the proposed project located at the southeast corner of Nason Street and Brodiaea Avenue in the city of Moreno Valley, California. This noise impact analysis contains documentation of existing noise levels as well as analysis of the impacts generated by project traffic and analysis of construction noise and vibration impacts. This report analyzes the project's consistency with applicable federal, State, and local regulations. The results of this report find construction-related and operational noise levels are consistent with applicable regulations.

1.1 Project Description

The proposed project is located on approximately 18.14 acres and is currently vacant. The project includes the construction of a medical village consisting of five buildings, on-grade un-covered parking, and associated drive aisles and landscaping. The proposed development will include a 53,000-square foot medical office building, 50,000-square foot wellness center with a 3,000-square foot urgent care attached, 91,800 square feet of assisted living space with a total of 207 beds, and a 70,000-square foot Skilled Nursing Program (SNP) building with a total of 158 beds. Approximately 333,568 square feet of the site area will consist of driveway pavement area, an emergency fire access lane, and parking to accommodate 696 parking spaces. The project will also include approximately 264,675 square feet of landscape and hardscape area. Approximately 25,317 cubic yards of soil will be exported.

1.2 Construction-Related Noise

Temporary noise increases will be greatest during the grading phase of construction. The model indicates that the use of construction equipment such as tractors, dozers, and concrete saws could expose the commercial use located approximately 450 feet to the south of the center of the project site to a combined noise level of 65.9 dBA $L_{max.}$. Construction activity could result in noise levels in excess of the allowable noise levels at all studied receptors. With implementation of Mitigation Measure N-1, described herein, no substantial impacts will occur.

1.3 Operational Noise

The proposed project will not cause traffic noise levels to exceed allowable exterior noise levels. In addition, the proposed project will not result in a perceptible increase in noise levels at studied receptors. Operation of stationary equipment on the rooftops of the project will not exceed allowable exterior noise levels at adjacent residential uses. Operation of the proposed project will include noise sources similar to those occurring under existing conditions. Therefore, no substantial impacts will occur.

1.4 Vibration

Based on the threshold criteria established by the Federal Transit Administration (FTA) and the California Department of Transportation (Caltrans), vibration from use of heavy construction equipment to construct the proposed project would be below the thresholds to cause damage to nearby structures and result in *barely perceptible* vibration at residential uses to the west, south, and east of the project site. Therefore, no impacts related to excessive vibration will occur.

1.5 Airport Noise

The project site is not located within two miles of a public or private use airport. One private-use helipad is located across the Nason Street from the project site. Helipad operations coordinate with nearby airports to ensure conflicts in flight will not occur. Therefore, no substantial impacts will occur.

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1.6 Mitigation Measures

The following mitigation measures are required to ensure that project-related short and long-term noise levels are consistent with applicable federal, State, and local regulations.

N-1 The following measures are required to ensure that project-related short-term construction noise levels are reduced to less-than-significant levels.

a) Stationary construction noise sources such as generators or pumps must be located at least 100 feet from sensitive land uses, as feasible, or at maximum distance when necessary to complete work near sensitive land uses, to be verified by submittal of a construction staging plan. Implementation of this measure shall occur throughout construction through periodic monitoring by the Planning Director, or designee during routine inspections.

b) Construction staging areas must be located as far from noise sensitive land uses as feasible, to be verified by submittal of a construction staging plan. Implementation of this measure shall occur throughout construction through periodic monitoring by the Planning Director, or designee during routine inspections.

c) Throughout construction, the contractor shall ensure all construction equipment is equipped with included noise attenuating devices and are properly maintained. This mitigation measure shall be periodically monitored by the Planning Director, or designee during routine inspections.

d) Idling equipment must be turned off when not in use. This mitigation measure may be periodically monitored by the Planning Director, or designee during routine inspections.

e) Equipment must be maintained so that vehicles and their loads are secured from rattling and banging. This mitigation measure may be periodically monitored by the Planning Director, or designee during routine inspections.

N-2 Temporary construction noise control barriers shall be installed where residential uses are located adjacent to the project site (south and west). The type and location of the noise control barriers shall be shown on all grading and building plans and subject to approval by the Planning Director, or designee.

N-3 All construction activities shall comply with the City of Moreno Valley Noise Ordinance (Chapter 11.80 of the City of Moreno Valley Municipal Code). This requirement shall be noted on all grading and building plans and in bid documents issued to construction contractors.

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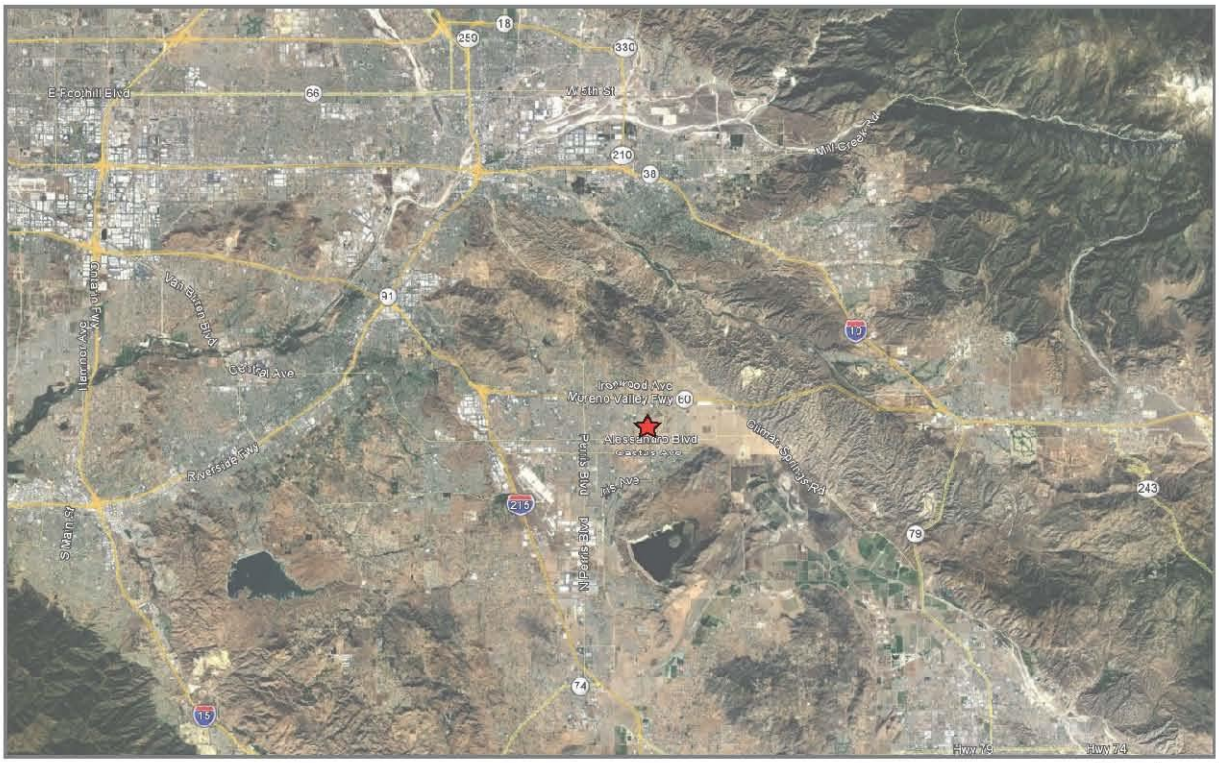

Regional

Vicinity

Not to Scale

Exhibit 1 Regional Context and Vicinity Ma

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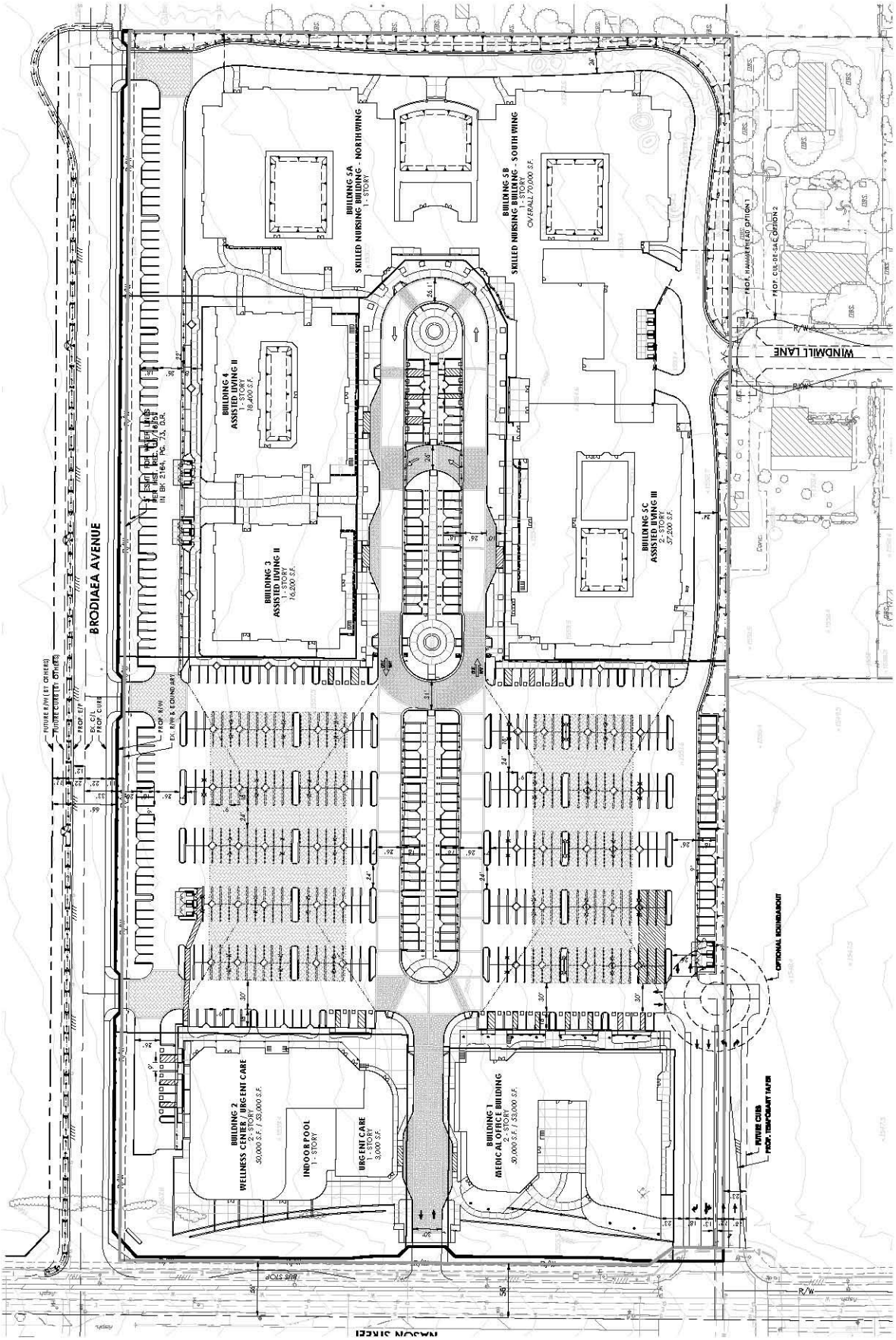

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Exhibit 2 Site Pla...

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2 INTRODUCTION

This report includes modeling and analysis of construction- and operation-related noise generated from the proposed project on surrounding land uses. Vibration effects and airport noise are also discussed herein. The project includes construction of a medical village consisting of five buildings with associated parking, drive aisles, and landscaping in Moreno Valley, California. The proposed development will include a medical office building, wellness center, urgent care, assisted living facilities, and a Skilled Nursing Program (SNP) building.

This report has been prepared utilizing project-specific characteristics where available. In those instances where project-specific data is not available, the analysis has been supplemented by model defaults or other standardized sources of comparable data. In any case where non-project defaults or other data have been used, a "worst-case" scenario was developed to ensure a conservative estimate of noise impacts.

This report has been prepared for use by the Lead Agency to assess potential project-related noise impacts to the environment in compliance with federal, State, or local guidelines, particularly with respect to the noise issues identified in Appendix G of the State CEQA Guidelines. This report does not make determinations of significance pursuant to CEQA because such determinations are required to be made solely in the purview of the Lead Agency.

This report has been prepared by Christopher Brown (Director of Environmental Services) and Olivia Chan (Associate Analyst) of MIG, Inc. under contract with Galaxy Management, Inc.

Christopher Brown
Director of Environmental Services

Olivia Chan
Associate Analyst

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3 FUNDAMENTALS OF NOISE

3.1 Defining Noise

"Sound" is a vibratory disturbance created by a moving or vibrating source and is capable of being detected. "Noise" is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance and, in the extreme, hearing impairment.

THE PRODUCTION OF SOUND

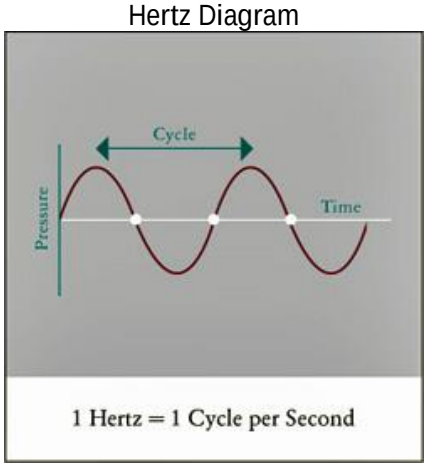
Sound has three properties: amplitude and amplitude variation of the acoustical wave (loudness), frequency (pitch), and duration of the noise. Despite the ability to measure sound, human perceptibility is subjective, and the physical response to sound complicates the analysis of its impact on people. People judge the relative magnitude of sound sensation in subjective terms such as "noisiness" or "loudness."

MEASURING SOUND

Sound pressure levels are described in logarithmic units of ratios of sound pressures to a reference pressure, squared. These units are called bels. To provide a finer description of sound, a bel is subdivided into 10 decibels, abbreviated dB. Since decibels are logarithmic units, sound pressure levels cannot be added or subtracted by ordinary arithmetic means. For example, if one automobile produces a sound pressure level of 70 dB when it passes an observer, two cars passing simultaneously would not produce 140 dB. In fact, they would combine to produce 73 dB. This same principle can be applied to other traffic quantities as well. In other words, doubling the traffic volume on a street or the speed of the traffic will increase the traffic noise level by three dB. Conversely, halving the traffic volume or speed will reduce the traffic noise level by three dB. A three dB change in sound is the beginning at which humans generally notice a *barely perceptible* change in sound and a five dB change is generally *readily perceptible.*[1]

Sound pressure level alone is not a reliable indicator of loudness. The frequency or pitch of a sound also has a substantial effect on how humans will respond. While the intensity of the sound is a purely physical quantity, the loudness or human response depends on the characteristics of the human ear. Human hearing is limited not only to the range of audible frequencies but also in the way it perceives the sound pressure level in that range. In general, the healthy human ear is most sensitive to sounds between 1,000 Hertz (Hz) and 5,000 Hz, and perceives both higher and lower frequency sounds of the same magnitude with less intensity. Hertz is a unit of frequency that defines any periodic event. In the case of sound pressure, a Hertz defines one cycle of a sound wave per second (see Figure 1, Hertz Diagram). To approximate the frequency response of the human ear, a series of sound pressure level adjustments is usually applied to the sound measured by a sound level meter.

Figure 1
Hertz Diagram



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STANDARDS FOR NOISE EQUIVALENT

Noise consists of pitch, loudness, and duration; therefore, a variety of methods for measuring noise have been developed. According to the California General Plan Guidelines for Noise Elements, the following are common metrics for measuring noise:[2]

L_{eq} (Equivalent Energy Noise Level): The sound level corresponding to a steady-state sound level containing the same total energy as a time-varying signal over given sample periods. L_{eq} is typically computed over 1-, 8-, and 24-hour sample periods.

CNEL (Community Noise Equivalent Level): The average equivalent A-weighted sound level during a 24-hour day, obtained after addition of five decibels to sound levels in the evening from 7:00 PM to 10:00 PM and after addition of ten decibels to sound levels in the night from 10:00 PM to 7:00 AM.

L_{dn} (Day-Night Average Level): The average equivalent A-weighted sound level during a 24-hour day, obtained after the addition of ten decibels to sound levels in the night after 10:00 PM and before 7:00 AM.

CNEL and L_{dn} are utilized for describing ambient noise levels because they account for all noise sources over an extended period of time and account for the heightened sensitivity of people to noise during the night. L_{eq} is better utilized for describing specific and consistent sources because of the shorter reference period.

Federal and State agencies have established noise and land use compatibility guidelines that use averaging approaches to noise measurement. The State Department of Aeronautics and the California Commission on Housing and Community Development have adopted the community noise equivalent level (CNEL).

3.2 Vibration and Groundborne Noise

Vibration is the movement of mass over time. It is described in terms of frequency and amplitude and unlike sound; there is no standard way of measuring and reporting amplitude. Vibration can be described in units of velocity (inches per second) or discussed in decibel (dB) units in order to compress the range of numbers required to describe vibration. Vibration impacts to buildings are generally discussed in terms of peak particle velocity (PPV) that describes particle movement over time (in terms of physical displacement of mass). For purposes of this analysis, PPV will be used to describe all vibration for ease of reading and comparison. Vibration can impact people, structures, and sensitive equipment.[3] The primary concern related to vibration and people is the potential to annoy those working and residing in the area. Vibration with high enough amplitudes can damage structures (such as crack plaster or destroy windows). Groundborne vibration can also disrupt the use of sensitive medical and scientific instruments such as electron microscopes. Common sources of vibration within communities include construction activities and railroads.

Groundborne vibration generated by construction projects is usually highest during pile driving, rock blasting, soil compacting, jack hammering, and demolition-related activities. Next to pile driving, grading activity has the greatest potential for vibration impacts if large bulldozers, large trucks, or other heavy equipment are used.

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4 EXISTING NOISE ENVIRONMENT

4.1 Sensitive Receptors

The State of California defines sensitive receptors as those land uses that require serenity or are otherwise adversely affected by noise events or conditions. Schools, libraries, churches, hospitals, and residential uses make up the majority of these areas. Specific sensitive receptors within one-quarter mile of the project site include the Riverside County Regional Medical Center to the west and residential uses to the west, south, and east of the project site.

4.2 Existing Noise Levels

Short-term noise measurements at the project site were conducted to identify the ambient noise in the project vicinity. An American National Standards Institute (ANSI Section SI4 1979, Type 1) Larson Davis model LxT sound level meter was used to monitor existing ambient noise levels in the project area. The noise meter was programmed in “slow” mode to record noise levels in A-weighted form. The microphone height was set at five feet. Two ten-minute daytime noise measurement was taken between 12:9 on Tuesday February 28, 2017.

Ambient noise levels are a composite of noise from all sources, near and far. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location. The measurement locations are shown in Exhibit 3 (Noise Measurement Location). The ambient noise level is presented in Table 1 (Ambient Noise Levels) and measurement output data is included as Appendix A. Vehicular traffic along Nason Street is the dominant noise source at Measurement Location #1.

Table 1
Ambient Noise Levels

Location	Time Period	Measurement Period	Description	Existing Ambient Noise Levels (dBA Leq)
1	9:18 AM – 9:28 AM	10 minutes	Southwest corner of Nason Street and Brodiaea Avenue	68.3
2	9:33 AM – 9:43 AM	10 minutes	Northern terminus of Windmill Lane	44.9

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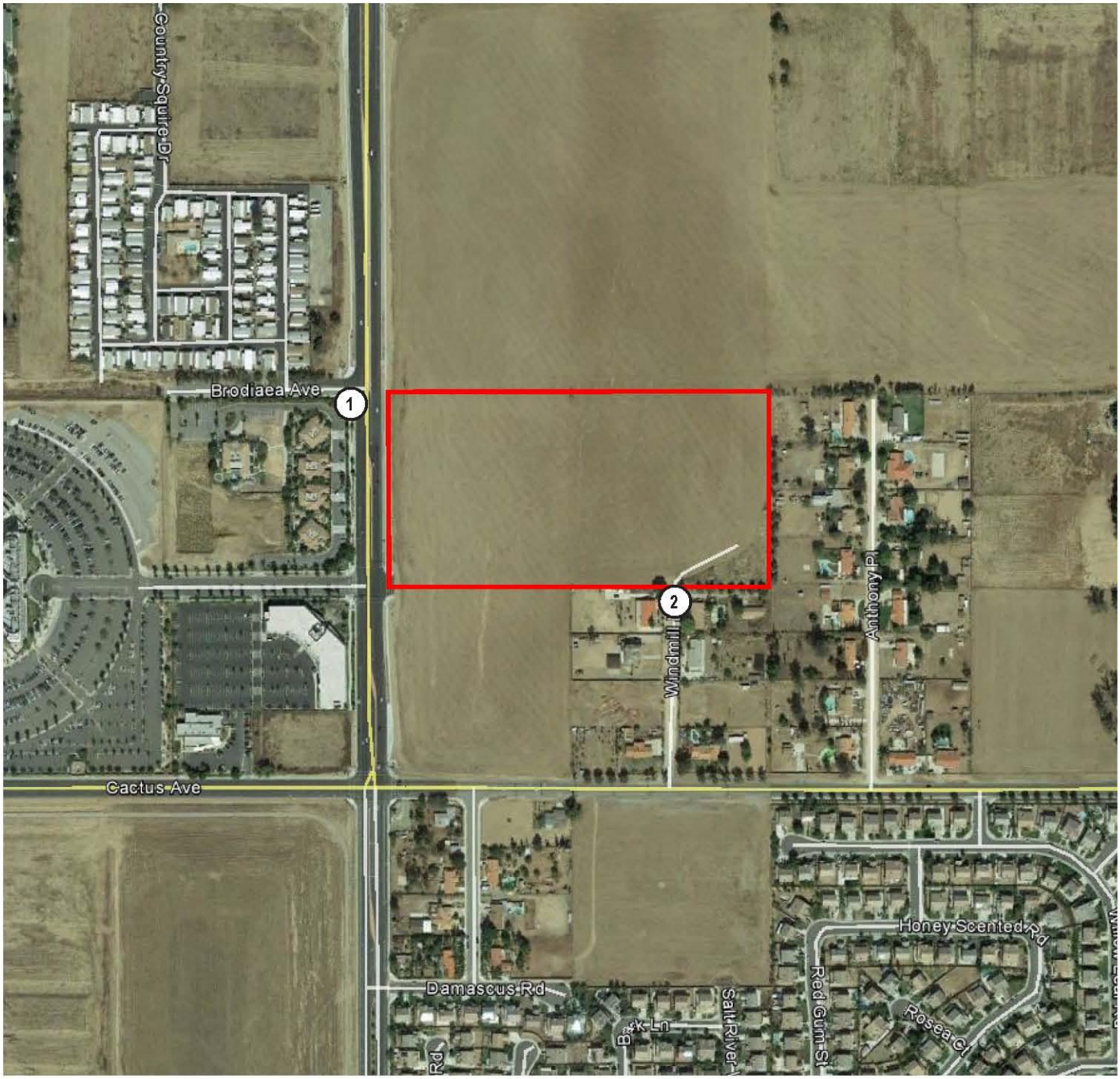

Project Site

Measurement Location

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Exhibit 3 Noise Measurement Locatio

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5 REGULATORY FRAMEWORK

5.1 Federal Regulations

FEDERAL NOISE CONTROL ACT OF 1972

The U.S. Environmental Protection Agency (EPA) Office of Noise Abatement and Control was originally established to coordinate federal noise control activities. After its inception, EPA's Office of Noise Abatement and Control issued the Federal Noise Control Act of 1972, establishing programs and guidelines to identify and address the effects of noise on public health, welfare, and the environment. In response, the EPA published information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety (Levels of Environmental Noise). The Levels of Environmental Noise recommended that the L_{dn} should not exceed 55 dBA outdoors or 45 dBA indoors to prevent significant activity interference and annoyance in noise-sensitive areas.

In addition, the Levels of Environmental Noise identified five dBA as an "adequate margin of safety" for a noise level increase relative to a baseline noise exposure level of 55 dBA L_{dn} (i.e., there would not be a noticeable increase in adverse community reaction with an increase of five dBA or less from this baseline level). The EPA did not promote these findings as universal standards or regulatory goals with mandatory applicability to all communities, but rather as advisory exposure levels below which there would be no risk to a community from any health or welfare effect of noise.

In 1981, EPA administrators determined that subjective issues such as noise would be better addressed at more localized levels of government. Consequently, in 1982 responsibilities for regulating noise control policies were transferred to State and local governments. However, noise control guidelines and regulations contained in EPA rulings in prior years remain in place by designated federal agencies, allowing more individualized control for specific issues by designated federal, State, and local government agencies.

FEDERAL TRANSIT ADMINISTRATION

The Federal Transit Administration (FTA) has developed methodology and significance criteria to evaluate incremental noise impacts from surface transportation modes (i.e., on road motor vehicles and trains) as presented in Transit Noise Impact and Vibration Assessment (FTA Guidelines). These incremental noise impact criteria are based on EPA findings and subsequent studies of annoyance in communities affected by transportation noise. The FTA extended the EPA's five dBA incremental impact criterion to higher ambient levels. As baseline ambient levels increase, smaller and smaller increments are allowed to limit expected increases in community annoyance. For example, in residential areas with a baseline ambient noise level of 50 dBA CNEL, a less-than-five dBA increase in noise levels would produce a minimal increase in community annoyance levels, while at 70 dBA CNEL, only one dBA increase could be accommodated before a significant annoyance increase would occur.

VIBRATION STANDARDS

The FTA provides guidelines for maximum-acceptable vibration criteria for different types of land uses. Groundborne vibration and noise levels associated with various types of construction equipment and activities are summarized in Table 2 (Reference Vibration Source Amplitudes for Construction Equipment). Table 3 (Groundborne Vibration and Noise Impact Criteria) shows the Federal Transit Administration's maximum acceptable vibration standard for human annoyance in residences where people normally sleep is 80 VdB (less than 70 vibration events per day).

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Table 2
Reference Vibration Source Amplitudes for Construction Equipment

Equipment	Reference PPV at 25 ft (in/sec) at 25 Feet	Approximate Vibration Level (VL) at 25 Feet
Pile driver (impact)	1.518 (upper range)	112
	0.644 (typical)	104
Pile driver (sonic)	0.734 (upper range)	105
	0.170 (typical)	93
Clam shovel drop (slurry wall)	0.202	94
Hydromill	0.008 in soil	66
Slurry wall	0.017 in rock	75
Vibratory roller	0.210	94
Hoe Ram	0.089	87
Large bulldozer	0.089	87
Caisson drill	0.089	87
Loaded trucks	0.076	86
Jackhammer	0.035	79
Small bulldozer	0.003	58

Notes: PPV is the peak particle velocity. Pile driver amplitude varies greatly based on equipment type and size.
Source: Federal Transit Administration. Transit Noise and Vibration Impact Assessment. 2006.

Table 3
Groundborne Vibration and Noise Impact Criteria

Land Use Category	Groundborne Vibration Impact Levels (VdB)		Groundborne Noise Impact Levels (dBA)	
	Frequent Events[1]	Infrequent Events[2]	Frequent Events[1]	Infrequent Events[2]
Category 1: Buildings where low ambient vibration is essential for interior vibrations	65 VdB[3]	65 VdB[3]	N/A	N/A
Category 2: Residences and buildings where people normally sleep	72 VdB	80 VdB	35 dBA	43 dBA
Category 3: Institutional land uses with primarily daytime use	75 VdB	83 VdB	40 dBA	48 dBA

1 Frequent Events – more than 70 vibration events per day
2 Infrequent Events – fewer than 70 vibration events per day
3 This criterion limit is based on levels that are acceptable for more moderately sensitive equipment such as optical microscopes.
Source: United States Department of Transportation, Federal Transit Administration, Transit Noise and Vibration Assessment, 1995

The FTA and Caltrans have compiled the data from numerous studies related to vibration and have developed standards for human perception and building damage. The FTA's maximum acceptable vibration standard for human annoyance is 78 VdB at nearby vibration-sensitive land uses.[4] The Caltrans maximum vibration level standard is 0.2 in/sec PPV for the prevention of structural damage to typical residential buildings.[5]

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5.2 State Regulations

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

CEQA requires lead agencies to consider noise impacts. Under CEQA, lead agencies are directed to assess conformance to locally established noise standards or other agencies' noise standards; measure and identify the potentially significant exposure of people to or generation of excessive noise levels; measure and identify potentially significant permanent or temporary increase in ambient noise levels; and measure and identify potentially significant impacts associated with air traffic.

CALIFORNIA NOISE CONTROL ACT OF 1973

Sections 46000-46080 of the California Health and Safety Code, known as the California Noise Control Act of 1973, find that excessive noise is a serious hazard to public health and welfare and that exposure to certain levels of noise can result in physiological, psychological, and economic damage. It also finds that there is a continuous and increasing bombardment of noise in the urban, suburban, and rural areas. The California Noise Control Act declares that the State of California has a responsibility to protect the health and welfare of its citizens by the control, prevention, and abatement of noise. It is the policy of the State to provide an environment for all Californians free from noise that jeopardizes their health or welfare.

CALIFORNIA NOISE INSULATION STANDARDS (CCR TITLE 24)

In 1974, the California Commission on Housing and Community Development adopted noise insulation standards for multi-family residential buildings (Title 24, Part 2, California Code of Regulations). Title 24 establishes standards for interior room noise (attributable to outside noise sources). The regulations also specify that acoustical studies must be prepared whenever a residential building or structure is proposed to be located near an existing or adopted freeway route, expressway, parkway, major street, thoroughfare, rail line, rapid transit line, or industrial noise source, and where such noise source or sources create an exterior CNEL (or L_{dn}) of 60 dBA or greater. Such acoustical analysis must demonstrate that the residence has been designed to limit intruding noise to an interior CNEL (or L_{dn}) of 45 dBA or below [California's Title 24 Noise Standards, Chap. 2-35].

STATE OF CALIFORNIA GENERAL PLAN GUIDELINES 2003

Though not adopted by law, the State of California General Plan Guidelines 2003, published by the California Governor's Office of Planning and Research (OPR) (OPR Guidelines), provides guidance for the compatibility of projects within areas of specific noise exposure. The OPR Guidelines identify the suitability of various types of development relative to a range of outdoor noise levels and provide each local community some flexibility in setting local noise standards that allow for the variability in community preferences. Findings presented in the Levels of Environmental Noise Document (EPA 1974) influenced the recommendations of the OPR Guidelines, most importantly in the choice of noise exposure metrics (i.e., L_{dn} or CNEL) and in the upper limits for the normally acceptable outdoor exposure of noise-sensitive uses.

The OPR Guidelines include a Noise and Land Use Compatibility Matrix which identifies acceptable and unacceptable community noise exposure limits for various land use categories. Where the "normally acceptable" range is used, it is defined as the highest noise level that should be considered for the construction of the buildings which do not incorporate any special acoustical treatment or noise mitigation. The "conditionally acceptable" or "normally acceptable" ranges include conditions calling for detailed acoustical study or construction mitigation to reduce interior exposure levels prior to the construction or operation of the building under the listed exposure levels.

CALIFORNIA DEPARTMENT OF TRANSPORTATION

According to the Caltrans vibration manual, large bulldozers, vibratory rollers (used to compact earth), and loaded trucks utilized during grading activities can produce vibration, and depending on the level of vibration, could cause annoyance at uses within the project vicinity or damage structures. Caltrans has developed a screening tool to determine of vibration from construction equipment is substantial enough to impact surrounding uses.

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

The Caltrans vibration manual establishes thresholds for vibration impacts on buildings and humans. These thresholds are summarized in Tables 4 (Vibration Damage Potential Threshold Criteria) and 5 (Vibration Annoyance Potential Threshold Criteria).

Table 4
Vibration Damage Potential Threshold Criteria

Structural Integrity	Maximum PPV (in/sec)	
	Transient	Continuous
Historic and some older buildings	0.50	0.25
Older residential structures	0.50	0.30
New residential structures	1.00	0.50
Modern industrial and commercial structures	2.00	0.50
Source: Caltrans 2013		

Table 5
Vibration Annoyance Potential Threshold Criteria

Human Response	PPV Threshold (in/sec)	
	Transient	Continuous
Barely perceptible	0.035	0.012
Distinctly perceptible	0.24	0.035
Strongly perceptible	0.90	0.10
Severely perceptible	2.00	0.40
Source: Caltrans 2013		

5.3 Local Regulations

CITY OF MORENO VALLEY MUNICIPAL CODE

Noise Standards

Pursuant to Section 11.80.030 of the Moreno Valley Municipal Code, no person shall operate or cause to be operated a public or private motor vehicle, or combination of vehicles towed by a motor vehicle, that creates a sound exceeding the sound level limits below during daytime hours (between the hours of 8:00 AM and 10:00 PM):

- Residential – 60 dBA
- Commercial – 65 dBA

Construction Noise Levels

Pursuant to Section 11.80.030(D)(7), construction work conducted between the hours of 8:00 PM and 7:00 AM is prohibited.

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

The thresholds identified in Appendix G of the State CEQA Guidelines, as implemented by the City of Moreno Valley, have been utilized to assess the significance of the potential environmental effects of the project.

6.1 Thresholds of Significance

In accordance with Appendix G of the State CEQA Guidelines, the proposed project could result in potentially significant impacts related to noise if it results in:

A. Exposure of persons or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.
B. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.
C. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.
D. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.
E. For a project located within an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, exposure of people residing or working in the project area to excessive noise levels.
F. For a project within a vicinity of a private airstrip, expose people residing or working in the project area to excessive noise levels.

To assess construction impacts, a worst-case construction scenario was modeled using the Federal Highway Administration's Roadway Construction Noise Model (RCNM). Modeling parameters and output are provided in Appendix B. RCNM utilizes standard noise emission levels for different types of equipment and includes utilization percentage, impact, and shielding parameters.

To assess Buildout Year and Year 2022 traffic noise levels, vehicle trips associated with surrounding roadways were modeled utilizing the Federal Highway Administration (FHWA) Traffic noise Model (TNM) Version 2.5. Traffic noise levels identified represent conservative potential noise exposure. In reality, noise levels may vary from those represented as the calculations do not assume natural or artificial shielding nor do they assume reflection from existing or proposed structures or topography. Intervening structures or other noise-attenuating obstacles between a roadway and a receptor may reduce roadway noise levels at the receptor.

To assess impacts associated with on-site stationary noise sources, SoundPLAN software was utilized. SoundPLAN is a three-dimensional noise modeling software that accounts for the shielding and reflective effects associated with intervening topography and nearby buildings.

6.2 Consistency with Applicable Standards

CONSTRUCTION NOISE LEVELS

Construction noise levels were estimated for nearby receptors using the FHWA Roadway Construction Noise Model (RCNM). See Exhibit 4 (Receptors) for receptor locations. Temporary noise increases will be greatest at the residential use to the south of the project site. The model indicates that the use of construction equipment such as tractors, dozers, and concrete saws could expose the residential uses located approximately 61 feet to the south of the center of the project site to a combined noise level of 65.9 dBA L_{max}. Table 6 (Construction Noise Impacts) below summarizes the maximum noise levels at each of the studied receivers. Pursuant to the Moreno Valley Municipal Code, a noise level of 60 dBA is allowable for residential uses. Construction activity could result in noise levels in excess of the allowable noise levels at all studied receptors. Therefore, Mitigation Measures N-1 through N-3 have been incorporated to reduce the impact to neighboring uses during construction.

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Table 6
Construction Noise Impacts

Receptor	Grading	Building Construction	Paving	Architectural Coating
1 – Residential (W)	60.9	60.9	60.9	53.6
2 – Residential (S)	65.9	65.9	65.9	58.6
3 – Residential (E)	60.4	60.4	60.4	53.1

Mitigation Measure N-1 requires implementation of engineered controls on construction equipment to reduce temporary noise impacts by a minimum of 5.9 dBA which is a feasible performance standard based on available technology. Engineered controls include retrofitting equipment with improved exhaust and intake muffling, disengaging equipment fans, and installation of sound panels around equipment engines. These types of controls can achieve noise level reductions of approximately 10 dBA.[6] [7] Implementation of Mitigation Measure N-1 will reduce temporary noise impacts by a minimum of 5.9 dBA, resulting in maximum construction noise within allowable levels of 60 dBA for neighboring residential uses. In order to minimize the impact of construction noise on adjacent residential uses, Mitigation Measure N-2, requiring installation of temporary construction noise barriers where residential uses are adjacent to the project site. Further, Mitigation Measure N-3 requires that all construction activities comply with the City of Moreno Valley Noise Ordinance. Therefore, with implementation of Mitigation Measures N-1 through N-3, construction noise will feasibly be reduced to unsubstantial levels.

TRAFFIC NOISE LEVELS

The City of Moreno Valley Municipal Code sets an allowable exterior noise level for residential uses at 60 dBA and 65 dBA for commercial uses. Ambient noise at the project site would generally be defined by traffic on Nason Street. Traffic noise from vehicular traffic generated was provided by the project traffic study prepared by Kunzman Associates.

A substantial increase in ambient noise is an increase that is *barely perceptible* (3 dBA). Operationally, the proposed project will result in periodic landscaping and other occasional noise generating activities such as bus loading and unloading. These activities are common in commercial uses and do not represent a substantial increase in periodic noise in consideration that the project site is located in a commercial, mixed use area.

The Buildout Year 2022 Without Project and With Project noise levels along area roadway segments at 50 feet from the roadway centerline were calculated using TNM Version 2.5 (see Appendix C for output data). Buildout Year 2022 Without and With Project traffic noise levels at 50 feet from the roadway centerline area summarized in Table 7 (Buildout Year 2022 Roadway Noise Levels).

Buildout Year Without and Plus Projected traffic noise levels exceed allowable exterior noise levels at all residential and commercial receptors except for residential uses along Brodiaea Avenue west of Nason Street. The proposed project does not cause the exterior noise levels to exceed the allowable thresholds for receptors that are currently below the allowable noise levels. Therefore, no substantial impacts will result. In addition, increases in traffic due to the proposed project will not result in a perceptible noise increase at any of the studied roadway segments. No substantial impacts will occur.

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Table 7
Buildout Year 2022 Roadway Noise Levels

Roadway	Segment	Affected Land Use	2022 Noise Level at 50 Feet from Centerline (CNEL)		Difference	Significant?
			Without Project	Plus Project		
Nason St	North of SR-60 WB Ramps	R	68.9	69.1	0.2	No
	Between SR-60 WB & EB Ramps	R	73.5	73.8	0.3	No
	Between SR-60 EB Ramps & Fir Ave	C/R	73.6	74.1	0.5	No
	Between Fir Ave & Eucalyptus Ave	R	74.1	74.5	0.4	No
	South of Eucalyptus Ave	R/S	74.9	75.3	0.4	No
	North of Cottonwood Ave	R	74.5	75.0	0.5	No
	Between Cottonwood Ave & Alessandro Blvd	R	73.9	74.5	0.6	No
	Between Alessandro Blvd & Brodiaea Ave	R	73.6	74.4	0.8	No
	Between Brodiaea Ave & Hospital Rd	R/M	73.6	74.1	0.5	No
	Between Hospital Rd & Cactus Ave	M	72.8	73.1	0.3	No
	South of Cactus Ave	R	71.8	72.0	0.2	No
Fir Ave	West of Nason St	R	69.5	69.7	0.2	No
Eucalyptus Ave	West of Nason St	R	70.0	70.1	0.1	No
	East of Nason St	R	71.7	71.8	0.1	No
Cottonwood Ave	West of Nason St	R	67.7	68.0	0.3	No
Alessandro Blvd	West of Nason St	R	72.3	72.5	0.2	No
Brodiaea Ave	West of Nason St	R	55.5	55.5	0.0	No
Cactus Ave	West of Nason St	M	72.3	72.4	0.1	No
	East of Nason St	R	70.9	71.0	0.1	No

Affected Land Use: R – Residential; C – Commercial; M - Medical

On-Site Stationary Noise Sources

Residential uses are located adjacent to the project site to the south and east. The proposed Building 5, as shown on Exhibit 2 (Site Plan), will be located in close proximity to these residential uses. Operation of Building 5 will require the use of mechanical equipment such as a heating, ventilation, and air condition (HVAC) system.

In order to assess impacts related to operation of stationary noise sources (HVAC) associated with the proposed project, worst-case noise levels were modeled utilizing SoundPLAN software. SoundPLAN is a three-dimensional noise modeling software that accounts for the shielding and reflective effects associated with intervening topography and nearby buildings.

HVAC units will be placed on the rooftop of the buildings. Pursuant to Moreno Valley Municipal Code Section 9.16.120(A)(16), all roof-mounted equipment is required to be concealed from public view. Therefore, all HVAC equipment will be screened with architectural screening elements that will match the building. See Exhibit 5 (Building 5 Roof Plan) for locations of HVAC units and screening barriers. The building will have variations in height to provide visual interest. However, the roofline for Building 5 A & B will be at 13.5 feet and Building 5C will be at 27 feet in height. A two-foot high parapet, which is a wall along the edge of the roof, will enclose the rooftop area. Each HVAC unit will be surrounded and screened by a five-foot barrier.

Based on SoundPLAN default maximum noise levels for the roof-mounted HVAC units and with consideration of building parapets and screening materials, noise levels could reach up to 22.7 dBA Ldn at the eastern property line and 22.4 dBA

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Ldn at the southern property line. Operation of roof-mounted HVAC units will not exceed allowable exterior noise level of 60 dBA for residential uses. Therefore, no substantial impacts will result.

PERIODIC OPERATIONAL NOISE

Operationally, the proposed project would result in periodic outdoor noise associated with landscaping activities and people talking in the parking area and the outside of the buildings. Noise associated with landscaping and conversations are typical of commercial and residential developments and the project would therefore not create new sources of such noise. The proposed project would also result in periodic noise with pickup of solid waste and recycling. The proposed project would store solid waste in trash enclosures along the northern and southern portions of the project site. As with other commercial and residential land uses in the project vicinity, refuse vehicles are expected to visit the site on a weekly basis. This noise would be similar to noise generated within the project vicinity as regular trash pickup already occurs. Therefore, the project will not introduce any sources of noise that are not currently occurring. Additionally, the eastern and southern boundaries of the project site will be bound by a proposed six-foot high block wall, which will minimize operational noise impacts associated with landscaping, conversations, and trash pickup to adjacent residential uses. No substantial impacts will result.

6.3 Vibration Impacts

CONSTRUCTION VIBRATION

Construction activities that use vibratory rollers and bulldozers are repetitive sources of vibration; therefore, the *continuous* threshold is used. Residential uses are located to the west, south, and east of the project site. As a worst case scenario, the *historic and some older buildings* threshold is used. Based on the threshold criteria summarized in Tables 4 and 5, vibration from use of heavy construction equipment for the proposed project would be below the thresholds to cause damage to nearby structures at the receptors shown in Table 8 (Construction Vibration Impacts).

Construction of the project does not require rock blasting, pile driving, or the use of a jack hammer, but will use a vibratory roller, and small bulldozer, and loaded trucks. All of the receptors will experience *barely perceptible* vibration from the use of a small bulldozer, vibratory roller, and loaded truck. Construction of the proposed project will not result in strongly perceptible vibration and will therefore not expose neighboring receptors to excessive vibration.

With regard to long-term operational impacts, activities associated with the project will not result in any excessive vibration-related impacts to adjacent or on-site properties.

Table 8
Construction Vibration Impacts

Receptors	Equipment	PPVref	Distance (feet)	PPV
1 – Residential (W)	Vibratory Roller	0.21	800	0.0023
2 – Residential (S)	Vibratory Roller	0.21	450	0.0049
3 – Residential (E)	Vibratory Roller	0.21	850	0.0021
1 – Residential (W)	Small Bulldozer	0.003	800	0.0010
2 – Residential (S)	Small Bulldozer	0.003	450	0.0021
3 – Residential (E)	Small Bulldozer	0.003	850	0.0009
1 – Residential (W)	Loaded Truck	0.076	800	0.0008
2 – Residential (S)	Loaded Truck	0.076	450	0.0018
3 – Residential (E)	Loaded Truck	0.076	850	0.0008

6.4 Airport Noise

The project site is not located within two miles of a public or private use airport. A heliport is located at the Riverside County Regional Medical Center located at the northwest corner of Cactus Avenue and Nason Street, across Nason

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Street from the project site.[8] [9] The heliport is for private use only and require permission prior to use. Helipad operations coordinate with nearby March Air Reserve Base, Redlands Municipal Airport, San Bernardino International Airport, Flabob Airport, Riversides Municipal Airport, and Hemet-Ryan Airport to ensure that helipad operation does not conflict with aircraft operations. Therefore, no substantial impacts will occur.

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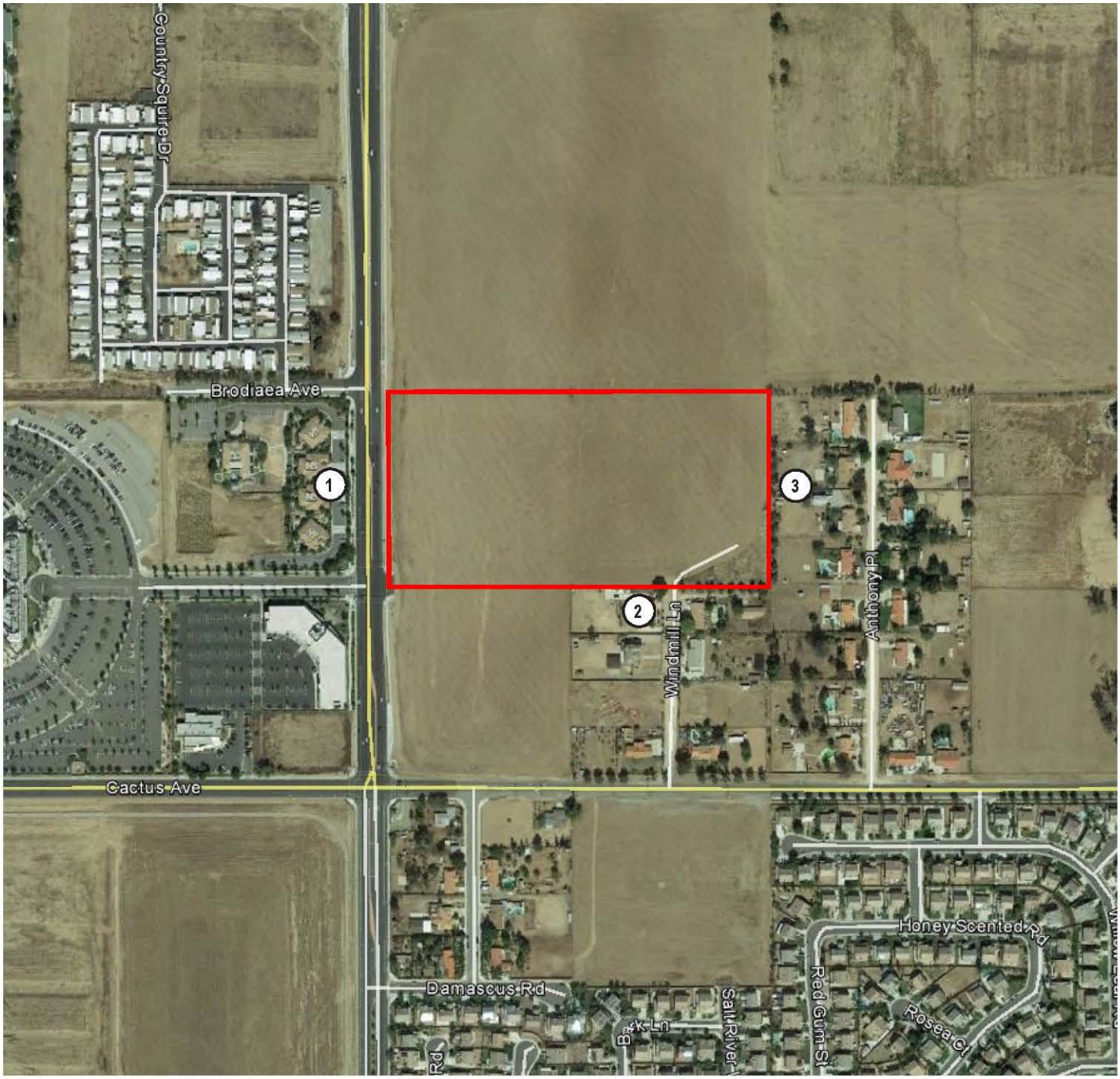

Project Site

Receptor

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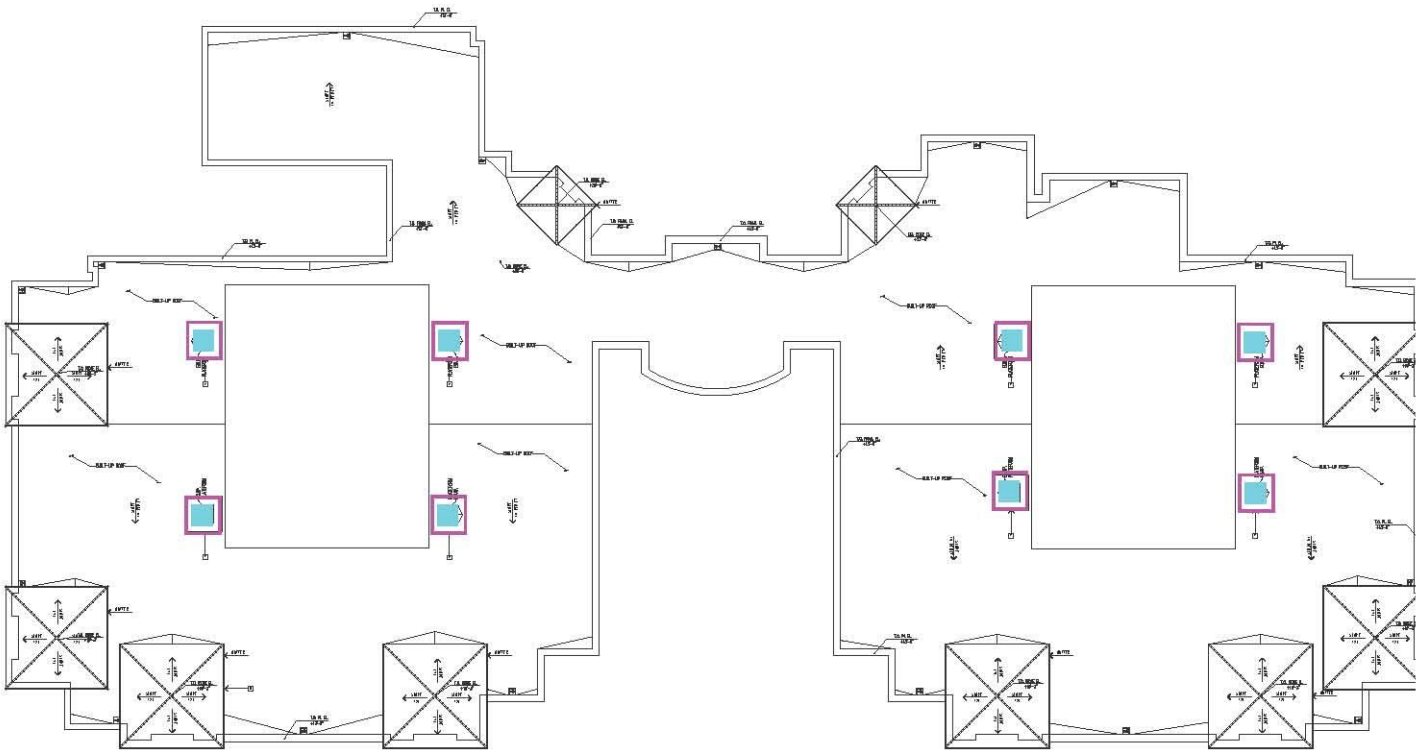
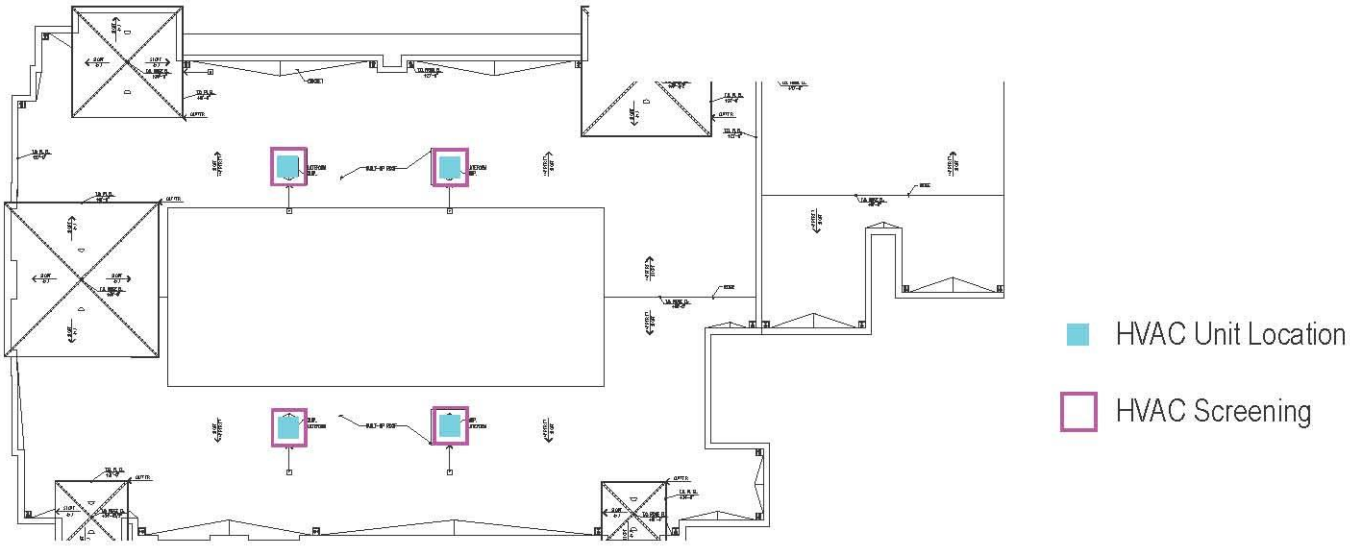
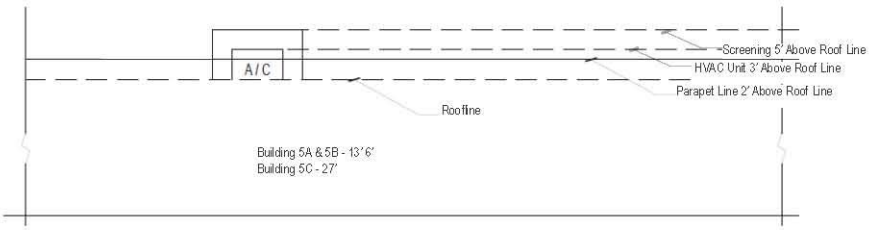


Building 5 A & B



Building 5 C



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7 MITIGATION MEASURES

The following mitigation measures are required to ensure that project-related noise levels will not exceed established thresholds.

N-1 The following measures are required to ensure that project-related short-term construction noise levels are reduced to less-than-significant levels.

a) Stationary construction noise sources such as generators or pumps must be located at least 100 feet from sensitive land uses, as feasible, or at maximum distance when necessary to complete work near sensitive land uses, to be verified by submittal of a construction staging plan. Implementation of this measure shall occur throughout construction through periodic monitoring by the Planning Director, or designee during routine inspections.

b) Construction staging areas must be located as far from noise sensitive land uses as feasible, to be verified by submittal of a construction staging plan. Implementation of this measure shall occur throughout construction through periodic monitoring by the Planning Director, or designee during routine inspections.

c) Throughout construction, the contractor shall ensure all construction equipment is equipped with included noise attenuating devices and are properly maintained. This mitigation measure shall be periodically monitored by the Planning Director, or designee during routine inspections.

d) Idling equipment must be turned off when not in use. This mitigation measure may be periodically monitored by the Planning Director, or designee during routine inspections.

e) Equipment must be maintained so that vehicles and their loads are secured from rattling and banging. This mitigation measure may be periodically monitored by the Planning Director, or designee during routine inspections.

N-2 Temporary construction noise control barriers shall be installed where residential uses are located adjacent to the project site (south and west). The type and location of the noise control barriers shall be shown on all grading and building plans and subject to approval by the Planning Director, or designee.

N-3 All construction activities shall comply with the City of Moreno Valley Noise Ordinance (Chapter 11.80 of the City of Moreno Valley Municipal Code). This requirement shall be noted on all grading and building plans and in bid documents issued to construction contractors.

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8 REFERENCES

[1] California Department of Transportation. Basics of Highway Noise: Technical Noise Supplement. November 2009.

[2] California Governor's Office of Planning and Research. General Plan Guidelines. 2003

[3] California Department of Transportation. Transportation- and Construction-Induced Vibration Guidance Manual. June 2004

[4] Federal Transit Administration. *Transit Noise and Vibration Impact Assessment.* 2006

[5] California Department of Transportation. *Transportation and Construction Vibration Guidance Manual. Division of Environmental Analysis. September 2013*

[6] United States Bureau of Mines. Mining Machinery Noise Control Guidelines. 1983

[7] United States Bureau of Mines. Noise Abatement Techniques for Construction Equipment. August 1979

[8] Federal Aviation Administration. Airport Data and Contact Information. http://www.faa.gov/airports/airport_safety/airportdata_5010/ [February 2017]

[9] AirNav, LLC. Airport Information. http://www.airnav.com [February 2017]

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

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General Information

Serial Number	03790
Model	SoundExpert™ LxT
Firmware Version	2.206
Filename	LxT_Data.113
User	MIG
Job Description	13517
Location	Moreno Valley

Measurement Description	
Start Time	Tuesday, 28 February 2017 09:18:57
Stop Time	Tuesday, 28 February 2017 09:28:57
Duration	00:10:00.0
Run Time	00:10:00.0
Pause	00:00:00.0
Pre Calibration	Wednesday, 21 December 2016 07:07:41
Post Calibration	None
Calibration Deviation	---

Note

Overall Data

LASeq		68.3	dB
LASmax	28 Feb 2017 09:23:11	79.3	dB
LApeak (max)	28 Feb 2017 09:18:59	104.5	dB
LASmin	28 Feb 2017 09:19:21	42.1	dB
LCSeq		75.4	dB
LASeq		68.3	dB
LCSeq - LASeq		7.1	dB
LAIeq		70.5	dB
LAeq		68.3	dB
LAIeq - LAeq		2.2	dB
Ldn		68.3	dB
LDay 07:00-22:00		68.3	dB
LNight 22:00-07:00		---	dB
Lden		68.3	dB
LDay 07:00-19:00		68.3	dB
LEvening 19:00-22:00		---	dB
LNight 22:00-07:00		---	dB
LASE		96.1	dB
# Overloads		1	
Overload Duration		2.0	s
# OBA Overloads		11	
OBA Overload Duration		45.1	s

Statistics

LAS1.00	77.9	dBA
LAS10.00	73.2	dBA
LAS25.00	68.5	dBA
LAS50.00	61.8	dBA
LAS66.60	58.8	dBA
LAS90.00	50.8	dBA

LAS > 70.0 dB (Exceedence Counts / Duration)	21 / 145.5	s
LAS > 100.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LApeak > 135.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LApeak > 137.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LApeak > 140.0 dB (Exceedence Counts / Duration)	0 / 0.0	s

Settings

RMS Weight	A Weighting
Peak Weight	A Weighting
Detector	Slow
Preamp	PRMLxT1L
Microphone Correction	Off
Integration Method	Exponential
OBA Range	Low
OBA Bandwidth	1/1 and 1/3
OBA Freq. Weighting	A Weighting
OBA Max Spectrum	At Lmax

Under Range Limit	25.0	dB
Under Range Peak	78.0	dB
Noise Floor	14.9	dB
Overload	121.8	dB

1/1 Spectra

Freq. (Hz):	8.0	16.0	31.5	63.0	125	250	500	1k	2k	4k	8k	16k
LASeq	6.3	7.9	25.6	41.1	52.2	56.0	59.2	65.0	62.7	52.2	41.1	26.0
LASmax	6.3	15.4	35.8	47.0	63.2	63.1	70.8	76.1	74.1	64.2	55.1	42.0
LASmin	6.3	4.3	14.4	25.6	32.5	32.2	33.5	35.3	31.0	24.0	13.0	5.2

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1/3 Spectra

Freq. (Hz):	6.3	8.0	10.0	12.5	16.0	20.0	25.0	31.5	40.0	50.0	63.0	80.0
LASeq	2.1	1.6	0.9	1.0	2.0	6.3	11.8	18.4	24.4	30.0	35.1	39.6
LASmax	2.1	1.6	0.8	2.1	9.4	14.5	21.0	31.9	34.4	38.6	44.4	43.8
LASmin	2.1	1.6	0.8	0.3	-0.6	-1.4	2.4	7.2	12.4	17.0	20.3	22.6

Freq. (Hz):	100	125	160	200	250	315	400	500	630	800	1k	1.25
LASeq	44.1	48.2	48.7	48.3	50.6	53.3	52.5	53.7	56.4	59.3	60.6	60.7
LASmax	62.4	54.2	53.4	56.3	56.4	60.8	62.3	68.3	66.9	69.7	71.6	72.4
LASmin	25.3	26.1	26.9	24.7	28.4	26.2	28.5	27.4	28.3	28.9	31.0	30.5

Freq. (Hz):	1.6k	2k	2.5k	3.15k	4k	5k	6.3k	8k	10k	12.5k	16k	20k
LASeq	60.0	57.8	54.2	50.2	46.4	42.4	39.2	35.3	30.4	24.7	18.3	9.9
LASmax	71.8	68.8	65.4	62.2	58.5	55.0	53.0	49.5	45.5	40.9	33.2	26.1
LASmin	28.4	25.3	22.1	20.9	17.4	12.9	9.8	7.9	4.9	2.7	0.1	-3.1

Calibration History

Preamp	Date	dB re. 1V/Pa
PRMLxT1L	21 Dec 2016 07:07:41	-28.0
PRMLxT1L	27 Jan 2016 10:21:19	-28.9
PRMLxT1L	26 Jan 2016 14:23:09	-28.9
PRMLxT1L	26 Jan 2016 14:20:57	-28.1
PRMLxT1L	17 Nov 2015 09:56:46	-28.9
PRMLxT1L	14 Jul 2015 08:29:53	-28.8
PRMLxT1L	30 Jan 2014 00:00:58	-28.0
PRMLxT1L	13 Sep 2014 10:03:02	-27.2
PRMLxT1L	13 Aug 2014 07:59:24	-28.6
PRMLxT1L	21 Jul 2014 14:19:41	-28.1
PRMLxT1L	08 May 2014 10:49:07	-28.1

General Information

Serial Number	03790
Model	SoundExpert™ LxT
Firmware Version	2.206
Filename	LxT_Data.114
User	MIG
Job Description	13517
Location	Moreno Valley

Measurement Description	
Start Time	Tuesday, 28 February 2017 09:33:33
Stop Time	Tuesday, 28 February 2017 09:43:33
Duration	00:10:00.0
Run Time	00:10:00.0
Pause	00:00:00.0
Pre Calibration	Wednesday, 21 December 2016 07:07:41
Post Calibration	None
Calibration Deviation	---

Note

Overall Data

LASeq		44.9	dB
LASmax	28 Feb 2017 09:33:33	64.9	dB
LApeak (max)	28 Feb 2017 09:36:00	76.5	dB
LASmin	28 Feb 2017 09:41:04	36.0	dB
LCSeq		63.2	dB
LASeq		44.9	dB
LCSeq - LASeq		18.3	dB
LAIeq		49.6	dB
LAeq		44.9	dB
LAIeq - LAeq		4.7	dB
Ldn		44.9	dB
LDay 07:00-22:00		44.9	dB
LNight 22:00-07:00		---	dB
Lden		44.9	dB
LDay 07:00-19:00		44.9	dB
LEvening 19:00-22:00		---	dB
LNight 22:00-07:00		---	dB
LASE		72.7	dB
# Overloads		0	
Overload Duration		0.0	s
# OBA Overloads		2	
OBA Overload Duration		5.9	s

Statistics

LAS1.00	55.7	dBA
LAS10.00	47.6	dBA
LAS25.00	44.3	dBA
LAS50.00	41.5	dBA
LAS66.60	40.0	dBA
LAS90.00	37.9	dBA

LAS > 70.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LAS > 100.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LApeak > 135.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LApeak > 137.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LApeak > 140.0 dB (Exceedence Counts / Duration)	0 / 0.0	s

Settings

RMS Weight	A Weighting
Peak Weight	A Weighting
Detector	Slow
Preamp	PRMLxT1L
Microphone Correction	Off
Integration Method	Exponential
OBA Range	Low
OBA Bandwidth	1/1 and 1/3
OBA Freq. Weighting	A Weighting
OBA Max Spectrum	At Lmax

Under Range Limit	25.0	dB
Under Range Peak	78.0	dB
Noise Floor	14.9	dB
Overload	121.8	dB

1/1 Spectra

Freq. (Hz):	8.0	16.0	31.5	63.0	125	250	500	1k	2k	4k	8k	16k
LASeq	6.5	9.3	20.6	31.8	40.6	36.7	33.5	37.1	36.6	31.3	20.1	7.0
LASmax	16.1	29.3	39.8	45.4	45.6	46.8	44.3	46.2	49.2	45.6	36.0	28.4
LASmin	6.3	4.3	14.8	25.7	28.7	26.1	24.1	28.7	25.4	20.4	0.0	1.4

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

1/3 Spectra

Freq. (Hz):	6.3	8.0	10.0	12.5	16.0	20.0	25.0	31.5	40.0	50.0	63.0	80.0
LASeq	2.1	1.6	1.4	1.0	6.0	5.9	10.6	15.4	18.5	23.5	27.0	29.1
LASmax	2.1	1.6	9.9	15.7	23.8	24.0	29.1	35.7	37.1	40.7	40.6	40.5
LASmin	2.1	1.6	0.8	0.3	-0.6	-1.4	2.3	7.7	12.3	16.8	19.6	22.1

Freq. (Hz):	100	125	160	200	250	315	400	500	630	800	1k	1.25
LASeq	32.8	36.8	36.9	31.1	32.1	32.4	28.7	28.2	29.3	31.6	32.2	33.3
LASmax	41.0	41.4	41.4	41.5	41.3	39.7	39.4	40.4	39.9	38.6	41.0	45.1
LASmin	22.7	24.5	22.8	20.9	20.9	17.4	17.0	18.5	20.5	19.4	6.3	9.4

Freq. (Hz):	1.6k	2k	2.5k	3.15k	4k	5k	6.3k	8k	10k	12.5k	16k	20k
LASeq	33.7	32.1	27.7	28.7	26.6	21.8	18.5	13.4	8.9	5.0	1.0	-2.9
LASmax	43.0	45.7	44.9	41.2	42.0	37.6	33.9	30.0	27.6	26.1	22.0	19.6
LASmin	11.4	19.4	17.2	17.3	14.3	11.3	7.7	5.8	2.7	-3.7	-3.4	-3.1

Calibration History

Preamp	Date	dB re. 1V/Pa
PRMLxT1L	21 Dec 2016 07:07:41	-28.0
PRMLxT1L	27 Jan 2016 10:21:19	-28.9
PRMLxT1L	26 Jan 2016 14:23:09	-28.9
PRMLxT1L	26 Jan 2016 14:20:57	-28.1
PRMLxT1L	17 Nov 2015 09:56:46	-28.9
PRMLxT1L	14 Jul 2015 08:29:53	-28.8
PRMLxT1L	30 Jan 2014 00:00:58	-28.0
PRMLxT1L	13 Sep 2014 10:03:02	-27.2
PRMLxT1L	13 Aug 2014 07:59:24	-28.6
PRMLxT1L	21 Jul 2014 14:19:41	-28.1
PRMLxT1L	08 May 2014 10:49:07	-28.1

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Appendix B Construction Noise Output Data

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

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Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/16/2016
Case Description: Site Preparation

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Residential (W)	Residential	60	60	60

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	800	0
Dozer	No	40		81.7	800	0
Dozer	No	40		81.7	800	0
Tractor	No	40	84		800	0
Tractor	No	40	84		800	0
Backhoe	No	40		77.6	800	0
Backhoe	No	40		77.6	800	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Dozer	57.6	53.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	57.6	53.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	57.6	53.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	59.9	55.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	59.9	55.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	53.5	49.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	53.5	49.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	59.9	62.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Residential (S)	Residential	60	60	60

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	450	0
Dozer	No	40		81.7	450	0
Dozer	No	40		81.7	450	0
Tractor	No	40	84		450	0
Tractor	No	40	84		450	0
Backhoe	No	40		77.6	450	0
Backhoe	No	40		77.6	450	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Dozer	62.6	58.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	62.6	58.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	62.6	58.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	64.9	60.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	64.9	60.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	58.5	54.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	58.5	54.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	64.9	67.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

---- Receptor #3 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Residential (E)	Residential	60	60	60

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	850	0
Dozer	No	40		81.7	850	0
Dozer	No	40		81.7	850	0
Tractor	No	40	84		850	0
Tractor	No	40	84		850	0
Backhoe	No	40		77.6	850	0
Backhoe	No	40		77.6	850	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Dozer	57.1	53.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	57.1	53.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	57.1	53.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	59.4	55.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	59.4	55.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	53	49	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	53	49	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	59.4	61.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/16/2016
Case Description: Grading

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Residential (W)	Residential	60	60	60

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	800	0
Excavator	No	40		80.7	800	0
Grader	No	40	85		800	0
Dozer	No	40		81.7	800	0
Scraper	No	40		83.6	800	0
Scraper	No	40		83.6	800	0
Backhoe	No	40		77.6	800	0
Tractor	No	40	84		800	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Excavator	56.6	52.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	56.6	52.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader	60.9	56.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	57.6	53.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Scraper	59.5	55.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Scraper	59.5	55.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	53.5	49.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	59.9	55.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	60.9	63.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Residential (S)	Residential	60	60	60

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	450	0
Excavator	No	40		80.7	450	0
Grader	No	40	85		450	0
Dozer	No	40		81.7	450	0
Scraper	No	40		83.6	450	0
Scraper	No	40		83.6	450	0
Backhoe	No	40		77.6	450	0
Tractor	No	40	84		450	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Excavator	61.6	57.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	61.6	57.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader	65.9	61.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	62.6	58.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Scraper	64.5	60.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Scraper	64.5	60.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	58.5	54.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	64.9	60.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	65.9	68.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

---- Receptor #3 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Residential (E)	Residential	60	60	60

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	850	0
Excavator	No	40		80.7	850	0
Grader	No	40	85		850	0
Dozer	No	40		81.7	850	0
Scraper	No	40		83.6	850	0
Scraper	No	40		83.6	850	0
Backhoe	No	40		77.6	850	0
Tractor	No	40	84		850	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Excavator	56.1	52.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	56.1	52.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader	60.4	56.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	57.1	53.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Scraper	59	55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Scraper	59	55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	53	49	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	59.4	55.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	60.4	63.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/16/2016
Case Description: Building Construction

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Residential (W)	Residential	60	60	60

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	800	0
All Other Equipment > 5 HP	No	50	85		800	0
All Other Equipment > 5 HP	No	50	85		800	0
All Other Equipment > 5 HP	No	50	85		800	0
Generator	No	50		80.6	800	0
Backhoe	No	40		77.6	800	0
Backhoe	No	40		77.6	800	0
Tractor	No	40	84		800	0
Welder / Torch	No	40		74	800	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Crane	56.5	48.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	60.9	57.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	60.9	57.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	60.9	57.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	56.5	53.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	53.5	49.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	53.5	49.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	59.9	55.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	49.9	45.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	60.9	64.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Residential (S)	Residential	60	60	60

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	450	0
All Other Equipment > 5 HP	No	50	85		450	0
All Other Equipment > 5 HP	No	50	85		450	0
All Other Equipment > 5 HP	No	50	85		450	0
Generator	No	50		80.6	450	0
Backhoe	No	40		77.6	450	0
Backhoe	No	40		77.6	450	0
Tractor	No	40	84		450	0
Welder / Torch	No	40		74	450	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Crane	61.5	53.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	65.9	62.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	65.9	62.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	65.9	62.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	61.5	58.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	58.5	54.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	58.5	54.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	64.9	60.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	54.9	50.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	65.9	69.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

---- Receptor #3 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Residential (E)	Residential	60	60	60

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	850	0
All Other Equipment > 5 HP	No	50	85		850	0
All Other Equipment > 5 HP	No	50	85		850	0
All Other Equipment > 5 HP	No	50	85		850	0
Generator	No	50		80.6	850	0
Backhoe	No	40		77.6	850	0
Backhoe	No	40		77.6	850	0
Tractor	No	40	84		850	0
Welder / Torch	No	40		74	850	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Crane	55.9	48	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	60.4	57.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	60.4	57.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	60.4	57.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	56	53	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	53	49	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	53	49	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	59.4	55.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	49.4	45.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	60.4	63.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/16/2016
Case Description: Paving

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Residential (W)	Residential	60	60	60

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Paver	No	50		77.2	800	0
Paver	No	50		77.2	800	0
All Other Equipment > 5 HP	No	50	85		800	0
All Other Equipment > 5 HP	No	50	85		800	0
Roller	No	20		80	800	0
Roller	No	20		80	800	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Paver	56.5	48.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	60.9	57.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	60.9	57.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	60.9	57.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	56.5	53.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	53.5	49.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	60.9	64.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Residential (S)	Residential	60	60	60

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Paver	No	50		77.2	450	0
Paver	No	50		77.2	450	0
All Other Equipment > 5 HP	No	50	85		450	0
All Other Equipment > 5 HP	No	50	85		450	0
Roller	No	20		80	450	0
Roller	No	20		80	450	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Paver	61.5	53.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	65.9	62.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	65.9	62.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	65.9	62.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	61.5	58.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	58.5	54.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	65.9	69.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

---- Receptor #3 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Residential (E)	Residential	60	60	60

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Paver	No	50		77.2	850	0
Paver	No	50		77.2	850	0
All Other Equipment > 5 HP	No	50	85		850	0
All Other Equipment > 5 HP	No	50	85		850	0
Roller	No	20		80	850	0
Roller	No	20		80	850	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Paver	52.6	49.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	52.6	49.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	60.4	57.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	60.4	57.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	55.4	48.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	55.4	48.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	60.4	61.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/16/2016
Case Description: Architectural Coating

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Residential (W)	Residential	60	60	60

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	800	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	53.6	49.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	53.6	49.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Residential (S)	Residential	60	60	60

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	450	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	58.6	54.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	58.6	54.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Residential (E)	Residential	60	60	60

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	850	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	53.1	49.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	53.1	49.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Galaxy Management
Construction Vibration Screening

Receptors	Distance (ft)
1 – Residential (W)	800
2 – Residential (S)	450
3 – Residential (E)	850

Equipment	PPVref	D	n	Eref	Eequip	PPV
Vibratory Roller	0.21	800	1.3			0.0023
Vibratory Roller	0.21	450	1.3			0.0049
Vibratory Roller	0.21	850	1.3			0.0021
Large Bulldozer	0.089	800	1.3			0.0010
Large Bulldozer	0.089	450	1.3			0.0021
Large Bulldozer	0.089	850	1.3			0.0009
Loaded Truck	0.076	800	1.3			0.0008
Loaded Truck	0.076	450	1.3			0.0018
Loaded Truck	0.076	850	1.3			0.0008

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Appendix C TNM Output Data

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

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RESULTS: SOUND LEVELS

Majestic Moreno

2022 Without Project

27 March 2017

MIG

TNM 2.5

Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: Majestic Moreno

RUN: Nason n/o SR 60 WB Ramps

BARRIER DESIGN: INPUT HEIGHTS

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS: 68 deg F, 50% RH

Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Lden	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
50 Feet from Centerline	1	1	0.0	68.9	0	68.9	0	Snd Lvl	68.9	0.0	0	0.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	1	0.0	0.0	0.0

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-

RESULTS: SOUND LEVELS

Majestic Moreno

2022 Without Project

27 March 2017

MIG

TNM 2.5

Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: Majestic Moreno

RUN: Nason btwn SR60 WB & EB Ramps

BARRIER DESIGN: INPUT HEIGHTS

ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Lden	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
50 Feet from Centerline	1	1	0.0	73.5	0	73.5	0	Snd Lvl	73.5	0.0	0	0.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	1	0.0	0.0	0.0

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-

RESULTS: SOUND LEVELS

Majestic Moreno

2022 Without Project

27 March 2017

MIG

TNM 2.5

Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: Majestic Moreno

RUN: Nason btwn SR60 EB Ramps & Fir Ave

BARRIER DESIGN: INPUT HEIGHTS

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS: 68 deg F, 50% RH

Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Lden	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
50 Feet from Centerline	1	1	0.0	73.6	0	73.6	0	Snd Lvl	73.6	0.0	0	0.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	1	0.0	0.0	0.0

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-

RESULTS: SOUND LEVELS

Majestic Moreno

2022 Without Project

27 March 2017

MIG

TNM 2.5

Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: Majestic Moreno

RUN: Nason btwn Fir Ave & Eucalyptus Ave

BARRIER DESIGN: INPUT HEIGHTS

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS: 68 deg F, 50% RH

Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Lden	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
50 Feet from Centerline	1	1	0.0	74.1	0	74.1	0	Snd Lvl	74.1	0.0	0	0.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	1	0.0	0.0	0.0

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-

RESULTS: SOUND LEVELS

Majestic Moreno

2022 Without Project

27 March 2017

MIG

TNM 2.5

Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: Majestic Moreno

RUN: Nason s/o Eucalyptus Ave

BARRIER DESIGN: INPUT HEIGHTS

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS: 68 deg F, 50% RH

Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Lden	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
50 Feet from Centerline	1	1	0.0	74.9	0	74.9	0	Snd Lvl	74.9	0.0	0	0.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	1	0.0	0.0	0.0

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-

RESULTS: SOUND LEVELS

Majestic Moreno

2022 Without Project

27 March 2017

MIG

TNM 2.5

Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: Majestic Moreno

RUN: Nason n/o Cottonwood Ave

BARRIER DESIGN: INPUT HEIGHTS

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS: 68 deg F, 50% RH

Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Lden	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
50 Feet from Centerline	1	1	0.0	74.5	0	74.5	0	Snd Lvl	74.5	0.0	0	0.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	1	0.0	0.0	0.0

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-

RESULTS: SOUND LEVELS

Majestic Moreno

2022 Without Project

27 March 2017

MIG

TNM 2.5

Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: Majestic Moreno

RUN: Nason btwn Cottonwood & Alessandro

BARRIER DESIGN: INPUT HEIGHTS

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS: 68 deg F, 50% RH

Receiver

Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated Lden	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
50 Feet from Centerline	1	1	0.0	73.9	0	73.9	0	Snd Lvl	73.9	0.0	0	0.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	1	0.0	0.0	0.0

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-

RESULTS: SOUND LEVELS

Majestic Moreno

2022 Without Project

27 March 2017

MIG

TNM 2.5

Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: Majestic Moreno

RUN: Nason btwn Alessandro & Brodiaea

BARRIER DESIGN: INPUT HEIGHTS

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS: 68 deg F, 50% RH

Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Lden	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
50 Feet from Centerline	1	1	0.0	73.6	0	73.6	0	Snd Lvl	73.6	0.0	0	0.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	1	0.0	0.0	0.0

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-

RESULTS: SOUND LEVELS

Majestic Moreno

2022 Without Project

27 March 2017

MIG

TNM 2.5

Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: Majestic Moreno

RUN: Nason btwn Brodiaea & Hospital

BARRIER DESIGN: INPUT HEIGHTS

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS: 68 deg F, 50% RH

Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Lden	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
50 Feet from Centerline	1	1	0.0	73.6	0	73.6	0	Snd Lvl	73.6	0.0	0	0.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	1	0.0	0.0	0.0

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-

RESULTS: SOUND LEVELS

Majestic Moreno

2022 Without Project

27 March 2017

MIG

TNM 2.5

Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: Majestic Moreno

RUN: Nason btwn Hospital & Cactus

BARRIER DESIGN: INPUT HEIGHTS

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS: 68 deg F, 50% RH

Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Lden	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
50 Feet from Centerline	1	1	0.0	72.8	0	72.8	0	Snd Lvl	72.8	0.0	0	0.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	1	0.0	0.0	0.0

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-

RESULTS: SOUND LEVELS

Majestic Moreno

2022 Without Project

27 March 2017

MIG

TNM 2.5

Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: Majestic Moreno

RUN: Nason s/o Cactus Ave

BARRIER DESIGN: INPUT HEIGHTS

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS: 68 deg F, 50% RH

Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Lden	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
50 Feet from Centerline	1	1	0.0	71.8	0	71.8	0	Snd Lvl	71.8	0.0	0	0.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	1	0.0	0.0	0.0

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-

RESULTS: SOUND LEVELS

Majestic Moreno

2022 Without Project

27 March 2017

MIG

TNM 2.5

Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: Majestic Moreno

RUN: Fir Ave w/o Nason St

BARRIER DESIGN: INPUT HEIGHTS

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS: 68 deg F, 50% RH

Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Lden	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
50 Feet from Centerline	1	1	0.0	69.5	0	69.5	0	Snd Lvl	69.5	0.0	0	0.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	1	0.0	0.0	0.0

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-

RESULTS: SOUND LEVELS

Majestic Moreno

2022 Without Project

27 March 2017

MIG

TNM 2.5

Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: Majestic Moreno

RUN: Eucalyptus w/o Nason

BARRIER DESIGN: INPUT HEIGHTS

ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Lden	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
50 Feet from Centerline	1	1	0.0	70.0	0	70.0	0	Snd Lvl	70.0	0.0	0	0.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	1	0.0	0.0	0.0

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-

RESULTS: SOUND LEVELS

Majestic Moreno

2022 Without Project

27 March 2017

MIG

TNM 2.5

Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: Majestic Moreno

RUN: Eucalyptus e/o Nason

BARRIER DESIGN: INPUT HEIGHTS

ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Lden	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
50 Feet from Centerline	1	1	0.0	71.7	0	71.7	0	Snd Lvl	71.7	0.0	0	0.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	1	0.0	0.0	0.0

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-

RESULTS: SOUND LEVELS

Majestic Moreno

2022 Without Project

27 March 2017

MIG

TNM 2.5

Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: Majestic Moreno

RUN: Cottonwood w/o Nason

BARRIER DESIGN: INPUT HEIGHTS

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS: 68 deg F, 50% RH

Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Lden	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
50 Feet from Centerline	1	1	0.0	67.7	0	67.7	0	Snd Lvl	67.7	0.0	0	0.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	1	0.0	0.0	0.0

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-

RESULTS: SOUND LEVELS

Majestic Moreno

2022 Without Project

27 March 2017

MIG

TNM 2.5

Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: Majestic Moreno

RUN: Alessandro w/o Nason

BARRIER DESIGN: INPUT HEIGHTS

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS: 68 deg F, 50% RH

Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Lden	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
50 Feet from Centerline	1	1	0.0	72.3	0	72.3	0	Snd Lvl	72.3	0.0	0	0.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	1	0.0	0.0	0.0

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-

RESULTS: SOUND LEVELS

Majestic Moreno

2022 Without Project

27 March 2017

MIG

TNM 2.5

Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: Majestic Moreno

RUN: Brodiaea w/o Nason

BARRIER DESIGN: INPUT HEIGHTS

ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Lden	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
50 Feet from Centerline	1	1	0.0	55.5	0	55.5	0	Snd Lvl	55.5	0.0	0	0.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	1	0.0	0.0	0.0

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-

RESULTS: SOUND LEVELS

Majestic Moreno

2022 Without Project

27 March 2017

MIG

TNM 2.5

Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: Majestic Moreno

RUN: Cactus w/o Nason

BARRIER DESIGN: INPUT HEIGHTS

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS: 68 deg F, 50% RH

Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Lden	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
50 Feet from Centerline	1	1	0.0	72.3	0	72.3	0	Snd Lvl	72.3	0.0	0	0.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	1	0.0	0.0	0.0

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-

RESULTS: SOUND LEVELS

Majestic Moreno

2022 Without Project

27 March 2017

MIG

TNM 2.5

Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: Majestic Moreno

RUN: Cactus e/o Nason

BARRIER DESIGN: INPUT HEIGHTS

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS: 68 deg F, 50% RH

Receiver												
Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated Lden	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
50 Feet from Centerline	1	1	0.0	70.9	0	70.9	0	Snd Lvl	70.9	0.0	0	0.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	1	0.0	0.0	0.0

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-

RESULTS: SOUND LEVELS

Majestic Moreno

2022 Plus Project

27 March 2017

MIG

TNM 2.5

Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: Majestic Moreno

RUN: Nason n/o SR 60 WB Ramps

BARRIER DESIGN: INPUT HEIGHTS

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS: 68 deg F, 50% RH

Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Lden	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
50 Feet from Centerline	1	1	0.0	69.1	0	69.1	0	Snd Lvl	69.1	0.0	0	0.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	1	0.0	0.0	0.0

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-

RESULTS: SOUND LEVELS

Majestic Moreno

2022 Plus Project

27 March 2017

MIG

TNM 2.5

Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: Majestic Moreno

RUN: Nason btwn SR60 WB & EB Ramps

BARRIER DESIGN: INPUT HEIGHTS

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS: 68 deg F, 50% RH

Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Lden	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
50 Feet from Centerline	1	1	0.0	73.8	0	73.8	0	Snd Lvl	73.8	0.0	0	0.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	1	0.0	0.0	0.0

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-

RESULTS: SOUND LEVELS

Majestic Moreno

2022 Plus Project

27 March 2017

MIG

TNM 2.5

Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: Majestic Moreno

RUN: Nason btwn SR60 EB Ramps & Fir Ave

BARRIER DESIGN: INPUT HEIGHTS

ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Lden	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
50 Feet from Centerline	1	1	0.0	74.1	0	74.1	0	Snd Lvl	74.1	0.0	0	0.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	1	0.0	0.0	0.0

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-

RESULTS: SOUND LEVELS

Majestic Moreno

2022 Plus Project

27 March 2017

MIG

TNM 2.5

Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: Majestic Moreno

RUN: Nason btwn Fir Ave & Eucalyptus Ave

BARRIER DESIGN: INPUT HEIGHTS

ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Lden	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
50 Feet from Centerline	1	1	0.0	74.5	0	74.5	0	Snd Lvl	74.5	0.0	0	0.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	1	0.0	0.0	0.0

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-

RESULTS: SOUND LEVELS

Majestic Moreno

2022 Plus Project

27 March 2017

MIG

TNM 2.5

Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: Majestic Moreno

RUN: Nason s/o Eucalyptus Ave

BARRIER DESIGN: INPUT HEIGHTS

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS: 68 deg F, 50% RH

Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Lden	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
50 Feet from Centerline	1	1	0.0	75.3	0	75.3	0	Snd Lvl	75.3	0.0	0	0.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	1	0.0	0.0	0.0

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-

RESULTS: SOUND LEVELS

Majestic Moreno

2022 Plus Project

27 March 2017

MIG

TNM 2.5

Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: Majestic Moreno

RUN: Nason n/o Cottonwood Ave

BARRIER DESIGN: INPUT HEIGHTS

ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Lden	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
50 Feet from Centerline	1	1	0.0	75.0	0	75.0	0	Snd Lvl	75.0	0.0	0	0.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	1	0.0	0.0	0.0

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-

RESULTS: SOUND LEVELS

Majestic Moreno

2022 Plus Project

27 March 2017

MIG

TNM 2.5

Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: Majestic Moreno

RUN: Nason btwn Cottonwood & Alessandro

BARRIER DESIGN: INPUT HEIGHTS

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS: 68 deg F, 50% RH

Receiver

Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated Lden	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
50 Feet from Centerline	1	1	0.0	74.5	0	74.5	0	Snd Lvl	74.5	0.0	0	0.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	1	0.0	0.0	0.0

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-

RESULTS: SOUND LEVELS

Majestic Moreno

2022 Plus Project

27 March 2017

MIG

TNM 2.5

Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: Majestic Moreno

RUN: Nason btwn Alessandro & Brodiaea

BARRIER DESIGN: INPUT HEIGHTS

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS: 68 deg F, 50% RH

Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Lden	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
50 Feet from Centerline	1	1	0.0	74.4	0	74.4	0	Snd Lvl	74.4	0.0	0	0.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	1	0.0	0.0	0.0

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-

RESULTS: SOUND LEVELS

Majestic Moreno

2022 Plus Project

27 March 2017

MIG

TNM 2.5

Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: Majestic Moreno

RUN: Nason btwn Brodiaea & Hospital

BARRIER DESIGN: INPUT HEIGHTS

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS: 68 deg F, 50% RH

Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Lden	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
50 Feet from Centerline	1	1	0.0	74.1	0	74.1	0	Snd Lvl	74.1	0.0	0	0.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	1	0.0	0.0	0.0

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-

RESULTS: SOUND LEVELS

Majestic Moreno

2022 Plus Project

27 March 2017

MIG

TNM 2.5

Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: Majestic Moreno

RUN: Nason btwn Hospital & Cactus

BARRIER DESIGN: INPUT HEIGHTS

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS: 68 deg F, 50% RH

Receiver

Name	No.	#DUs	Existing Lden	No Barrier Lden Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated Lden	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
50 Feet from Centerline	1	1	0.0	73.1	0	73.1	0	Snd Lvl	73.1	0.0	0	0.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	1	0.0	0.0	0.0

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-

RESULTS: SOUND LEVELS

Majestic Moreno

2022 Plus Project

27 March 2017

MIG

TNM 2.5

Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: Majestic Moreno

RUN: Nason s/o Cactus Ave

BARRIER DESIGN: INPUT HEIGHTS

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS: 68 deg F, 50% RH

Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Lden	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
50 Feet from Centerline	1	1	0.0	72.0	0	72.0	0	Snd Lvl	72.0	0.0	0	0.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	1	0.0	0.0	0.0

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-

RESULTS: SOUND LEVELS

Majestic Moreno

2022 Plus Project

MIG

27 March 2017

TNM 2.5

Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: Majestic Moreno

RUN: Fir Ave w/o Nason St

BARRIER DESIGN: INPUT HEIGHTS

ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Lden	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
50 Feet from Centerline	1	1	0.0	69.7	0	69.7	0	Snd Lvl	69.7	0.0	0	0.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	1	0.0	0.0	0.0

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-

RESULTS: SOUND LEVELS

Majestic Moreno

2022 Plus Project

27 March 2017

MIG

TNM 2.5

Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: Majestic Moreno

RUN: Eucalyptus w/o Nason

BARRIER DESIGN: INPUT HEIGHTS

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS: 68 deg F, 50% RH

Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Lden	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
50 Feet from Centerline	1	1	0.0	70.1	0	70.1	0	Snd Lvl	70.1	0.0	0	0.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	1	0.0	0.0	0.0

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-

RESULTS: SOUND LEVELS

Majestic Moreno

2022 Plus Project

27 March 2017

MIG

TNM 2.5

Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: Majestic Moreno

RUN: Eucalyptus e/o Nason

BARRIER DESIGN: INPUT HEIGHTS

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS: 68 deg F, 50% RH

Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Lden	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
50 Feet from Centerline	1	1	0.0	71.8	0	71.8	0	Snd Lvl	71.8	0.0	0	0.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	1	0.0	0.0	0.0

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-

RESULTS: SOUND LEVELS

Majestic Moreno

2022 Plus Project

MIG

27 March 2017

TNM 2.5

Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: Majestic Moreno

RUN: Cottonwood w/o Nason

BARRIER DESIGN: INPUT HEIGHTS

ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Lden	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
50 Feet from Centerline	1	1	0.0	68.0	0	68.0	0	Snd Lvl	68.0	0.0	0	0.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	1	0.0	0.0	0.0

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-

RESULTS: SOUND LEVELS

Majestic Moreno

2022 Plus Project

27 March 2017

MIG

TNM 2.5

Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: Majestic Moreno

RUN: Alessandro w/o Nason

BARRIER DESIGN: INPUT HEIGHTS

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS: 68 deg F, 50% RH

Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Lden	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
50 Feet from Centerline	1	1	0.0	72.5	0	72.5	0	Snd Lvl	72.5	0.0	0	0.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	1	0.0	0.0	0.0

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-

RESULTS: SOUND LEVELS

Majestic Moreno

2022 Plus Project

27 March 2017

MIG

TNM 2.5

Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: Majestic Moreno

RUN: Brodiaea w/o Nason

BARRIER DESIGN: INPUT HEIGHTS

ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Lden	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
50 Feet from Centerline	1	1	0.0	55.5	0	55.5	0	Snd Lvl	55.5	0.0	0	0.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	1	0.0	0.0	0.0

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-

RESULTS: SOUND LEVELS

Majestic Moreno

2022 Plus Project

27 March 2017

MIG

TNM 2.5

Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: Majestic Moreno

RUN: Cactus w/o Nason

BARRIER DESIGN: INPUT HEIGHTS

ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Lden	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
50 Feet from Centerline	1	1	0.0	72.4	0	72.4	0	Snd Lvl	72.4	0.0	0	0.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	1	0.0	0.0	0.0

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-

RESULTS: SOUND LEVELS

Majestic Moreno

2022 Plus Project

27 March 2017

MIG

TNM 2.5

Calculated with TNM 2.5

RESULTS: SOUND LEVELS

PROJECT/CONTRACT: Majestic Moreno

RUN: Cactus e/o Nason

BARRIER DESIGN: INPUT HEIGHTS

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS: 68 deg F, 50% RH

Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			Lden	Lden		Increase over existing		Type	Calculated	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Lden	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
50 Feet from Centerline	1	1	0.0	71.0	0	71.0	0	Snd Lvl	71.0	0.0	0	0.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	1	0.0	0.0	0.0

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

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Majestic Moreno
Run Info
Stationary Noise

Project description

Project title:	Majestic Moreno
Project No.:	13517
Engineer:	OChan
Customer:	
Description:	

Run description

Calculation:	Single Point Sound
Title:	Stationary Noise
Group:	
Run file:	RunFile.runx
Result number:	1
Local calculation (ThreadCount=4)	
Calculation start:	3/1/2017 9:43:30 AM
Calculation end:	3/1/2017 9:43:32 AM
Calculation time:	00:00:747 [m:s:ms]
No. of points:	4
No. of calculated points:	4
Kernel version:	7/22/2015 (32 bit)

Run parameters

Reflection order	3	
Maximal reflection distance to receiver		200 m
Maximal reflection distance to source		50 m
Search radius	5000 m	
Weighting:	dB(A)	
Tolerance:	0.100 dB	
Create ground effect areas from road surfaces:		Yes

Standards:

Industry:		ISO 9613-2: 1996
Air absorption:	ISO 9613	

Using alternative method according to chapter 7.3.2: No (except for sources without a spectrum)

Limitation of screening loss:

single/multiple 20.0 dB /25.0 dB

Calculation with side screening: Yes

Use Eqn (Abar=Dz-Max(Agr,0)) instead of Eqn (12) (Abar=Dz-Agr) for insertion loss

Evaluate extra path length in vertical plane defined by source and receiver

Majestic Moreno
Run Info
Stationary Noise

Environment:

Air pressure	1013.3 mbar
rel. Humidity	70.0 %
Temperature	10.0 °C

Meteo. Corr. C0(7-22h)[dB]=0.0; C0(22-7h)[dB]=0.0;

Ignore Cmet for Lmax-Industry-Calculation: No

Parameter for screening: C2=20.0

Dissection parameters:

Distance to diameter factor	8
Minimal Distance [m]	1 m
Max. Difference GND+Diffraction	1.0 dB
Max. No. of Iterations	4

Attenuation

Foliage:	ISO 9613-2
Built up area:	ISO 9613-2
Industrial site:	ISO 9613-2

Assessment: Day Night Level LDN

Reflection of "own" facade is suppressed

Geometry data

Situation1.sit 3/1/2017 9:42:58 AM

- contains:

Geo-File1.geo 3/1/2017 9:42:56 AM

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Majestic Moreno
Assessed receiver levels
Stationary Noise

Receiver	Usage	Fl	Dir	Ldn,lim dB(A)	Lr,lim dB(A)	Lr,lim dB(A)	Ldn dB(A)	Leq,d dB(A)	
Property Line (E)	AU	G					22.7	16.2	
Property Line (E)2	AU	G					22.0	15.6	
Property Line (S)	AU	G					22.4	15.9	
Property Line (S)2	AU	G					21.4	15.0	

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Majestic Moreno
Assessed contibution level - Stationary Noise

Source	Group	Source	Lane	Ldn dB(A)	Leq,d dB(A)	Leq,n dB(A)	A dB
Receiver Property Line Fl G	Ldn,lim dB(A)	Lr,lim dB(A)	Lr,lim dB(A)	Ldn 22. dB(A)	Leq,d 16.		
AC Unit	Default industrial noise	Point		2.1	-4.3	-4.3	0.0
AC Unit	Default industrial noise	Point		3.1	-3.3	-3.3	0.0
AC Unit	Default industrial noise	Point		2.1	-4.3	-4.3	0.0
AC Unit	Default industrial noise	Point		3.1	-3.3	-3.3	0.0
AC Unit	Default industrial noise	Point		17.5	11.1	11.1	0.0
AC Unit	Default industrial noise	Point		13.2	6.7	6.7	0.0
AC Unit	Default industrial noise	Point		12.9	6.5	6.5	0.0
AC Unit	Default industrial noise	Point		15.3	8.9	8.9	0.0
AC Unit	Default industrial noise	Point		9.9	3.5	3.5	0.0
AC Unit	Default industrial noise	Point		8.7	2.3	2.3	0.0
AC Unit	Default industrial noise	Point		12.1	5.7	5.7	0.0
AC Unit	Default industrial noise	Point		11.2	4.8	4.8	0.0
Receiver Property Line Fl G	Ldn,lim dB(A)	Lr,lim dB(A)	Lr,lim dB(A)	Ldn 22. dB(A)	Leq,d 15.		
AC Unit	Default industrial noise	Point		2.0	-4.4	-4.4	0.0
AC Unit	Default industrial noise	Point		2.3	-4.1	-4.1	0.0
AC Unit	Default industrial noise	Point		1.0	-5.4	-5.4	0.0
AC Unit	Default industrial noise	Point		2.8	-3.6	-3.6	0.0
AC Unit	Default industrial noise	Point		9.2	2.8	2.8	0.0
AC Unit	Default industrial noise	Point		10.3	3.8	3.8	0.0
AC Unit	Default industrial noise	Point		8.5	2.1	2.1	0.0
AC Unit	Default industrial noise	Point		12.2	5.8	5.8	0.0
AC Unit	Default industrial noise	Point		13.1	6.7	6.7	0.0
AC Unit	Default industrial noise	Point		16.2	9.8	9.8	0.0
AC Unit	Default industrial noise	Point		15.3	8.9	8.9	0.0
AC Unit	Default industrial noise	Point		11.8	5.3	5.3	0.0
Receiver Property Line Fl G	Ldn,lim dB(A)	Lr,lim dB(A)	Lr,lim dB(A)	Ldn 22. dB(A)	Leq,d 15.		
AC Unit	Default industrial noise	Point		18.4	12.0	12.0	0.0
AC Unit	Default industrial noise	Point		18.0	11.6	11.6	0.0
AC Unit	Default industrial noise	Point		10.4	4.0	4.0	0.0
AC Unit	Default industrial noise	Point		9.7	3.3	3.3	0.0
AC Unit	Default industrial noise	Point		9.7	3.3	3.3	0.0
AC Unit	Default industrial noise	Point		5.8	-0.6	-0.6	0.0
AC Unit	Default industrial noise	Point		2.3	-4.1	-4.1	0.0
AC Unit	Default industrial noise	Point		1.9	-4.5	-4.5	0.0
AC Unit	Default industrial noise	Point		-1.4	-7.8	-7.8	0.0
AC Unit	Default industrial noise	Point		-1.7	-8.1	-8.1	0.0
AC Unit	Default industrial noise	Point		0.0	-6.4	-6.4	0.0
AC Unit	Default industrial noise	Point		0.1	-6.3	-6.3	0.0
Receiver Property Line Fl G	Ldn,lim dB(A)	Lr,lim dB(A)	Lr,lim dB(A)	Ldn 21. dB(A)	Leq,d 15.		
AC Unit	Default industrial noise	Point		5.2	-1.2	-1.2	0.0
AC Unit	Default industrial noise	Point		7.3	0.9	0.9	0.0
AC Unit	Default industrial noise	Point		7.8	1.3	1.3	0.0
AC Unit	Default industrial noise	Point		8.3	1.9	1.9	0.0

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Majestic Moreno
Assessed contibution level - Stationary Noise

Source	Group	Source	Lane	Ldn dB(A)	Leq,d dB(A)	Leq,n dB(A)	A dB
AC Unit	Default industrial noise	Point		16.4	10.0	10.0	0.0
AC Unit	Default industrial noise	Point		14.8	8.4	8.4	0.0
AC Unit	Default industrial noise	Point		12.1	5.7	5.7	0.0
AC Unit	Default industrial noise	Point		11.6	5.2	5.2	0.0
AC Unit	Default industrial noise	Point		5.3	-1.1	-1.1	0.0
AC Unit	Default industrial noise	Point		3.2	-3.2	-3.2	0.0
AC Unit	Default industrial noise	Point		6.5	0.1	0.1	0.0
AC Unit	Default industrial noise	Point		6.1	-0.3	-0.3	0.0

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Majestic Moreno
Contribution spectra - Stationary Noise

Source	time slice	Sum dB(A)	63Hz dB(A)	125Hz dB(A)	250Hz dB(A)	500Hz dB(A)	1kHz dB(A)	2kHz dB(A)	4kHz dB(A)	8kHz dB(A)
Receiver Property Line (E) Fl G	Ldn,lim dB(A)	Lr,lim dB(A)	Lr,lim dB(A)	Ldn 22.7 dB(A)	Leq,d 16.2 dB(A)					
AC Unit	Ldn	9.9	-13.6	-1.9	6.2	2.7	0.9	2.1	-6.2	-21.3
AC Unit	Leq,d	3.5	-20.0	-8.4	-0.2	-3.7	-5.5	-4.4	-12.6	-27.7
AC Unit	Leq,n	3.5	-20.0	-8.4	-0.2	-3.7	-5.5	-4.4	-12.6	-27.7
AC Unit	Ldn	15.3	-5.6	5.6	10.8	7.8	6.5	7.5	2.0	-6.5
AC Unit	Leq,d	8.9	-12.1	-0.9	4.4	1.4	0.1	1.1	-4.4	-12.9
AC Unit	Leq,n	8.9	-12.1	-0.9	4.4	1.4	0.1	1.1	-4.4	-12.9
AC Unit	Ldn	12.9	-9.2	2.0	8.7	5.0	3.4	6.1	0.3	-10.3
AC Unit	Leq,d	6.5	-15.6	-4.4	2.3	-1.4	-3.0	-0.3	-6.1	-16.8
AC Unit	Leq,n	6.5	-15.6	-4.4	2.3	-1.4	-3.0	-0.3	-6.1	-16.8
AC Unit	Ldn	11.2	-10.4	1.6	7.2	3.3	2.6	3.5	-4.5	-18.0
AC Unit	Leq,d	4.8	-16.8	-4.8	0.8	-3.1	-3.8	-2.9	-10.9	-24.4
AC Unit	Leq,n	4.8	-16.8	-4.8	0.8	-3.1	-3.8	-2.9	-10.9	-24.4
AC Unit	Ldn	12.1	-9.7	2.3	7.8	3.8	4.3	4.6	-3.2	-16.5
AC Unit	Leq,d	5.7	-16.1	-4.1	1.3	-2.7	-2.1	-1.8	-9.7	-22.9
AC Unit	Leq,n	5.7	-16.1	-4.1	1.3	-2.7	-2.1	-1.8	-9.7	-22.9
AC Unit	Ldn	8.7	-12.8	-1.2	4.7	1.1	0.1	0.8	-7.1	-21.6
AC Unit	Leq,d	2.3	-19.2	-7.6	-1.7	-5.3	-6.4	-5.6	-13.5	-28.0
AC Unit	Leq,n	2.3	-19.2	-7.6	-1.7	-5.3	-6.4	-5.6	-13.5	-28.0
AC Unit	Ldn	2.1	-19.4	-7.6	-1.5	-5.1	-6.8	-7.7	-14.3	-31.9
AC Unit	Leq,d	-4.3	-25.9	-14.0	-7.9	-11.6	-13.3	-14.1	-20.7	-38.3
AC Unit	Leq,n	-4.3	-25.9	-14.0	-7.9	-11.6	-13.3	-14.1	-20.7	-38.3
AC Unit	Ldn	3.1	-18.4	-6.6	-0.5	-4.1	-5.8	-6.6	-13.0	-28.2
AC Unit	Leq,d	-3.3	-24.8	-13.0	-6.9	-10.5	-12.2	-13.0	-19.5	-34.6
AC Unit	Leq,n	-3.3	-24.8	-13.0	-6.9	-10.5	-12.2	-13.0	-19.5	-34.6
AC Unit	Ldn	2.1	-19.4	-7.5	-1.5	-5.1	-6.8	-7.7	-14.5	-32.2
AC Unit	Leq,d	-4.3	-25.8	-14.0	-7.9	-11.5	-13.2	-14.1	-20.9	-38.6
AC Unit	Leq,n	-4.3	-25.8	-14.0	-7.9	-11.5	-13.2	-14.1	-20.9	-38.6
AC Unit	Ldn	13.2	-9.0	2.1	8.5	4.9	5.5	6.0	0.5	-9.1
AC Unit	Leq,d	6.7	-15.5	-4.3	2.1	-1.5	-0.9	-0.4	-5.9	-15.5
AC Unit	Leq,n	6.7	-15.5	-4.3	2.1	-1.5	-0.9	-0.4	-5.9	-15.5
AC Unit	Ldn	17.5	-5.0	6.3	14.0	10.4	8.3	7.8	3.2	-4.2
AC Unit	Leq,d	11.1	-11.4	-0.1	7.6	4.0	1.9	1.4	-3.2	-10.6
AC Unit	Leq,n	11.1	-11.4	-0.1	7.6	4.0	1.9	1.4	-3.2	-10.6
AC Unit	Ldn	3.1	-18.4	-6.6	-0.5	-4.1	-5.8	-6.6	-12.9	-29.1
AC Unit	Leq,d	-3.3	-24.8	-13.0	-6.9	-10.5	-12.2	-13.0	-19.3	-35.5
AC Unit	Leq,n	-3.3	-24.8	-13.0	-6.9	-10.5	-12.2	-13.0	-19.3	-35.5
Receiver Property Line (E)2 Fl G	Ldn,lim dB(A)	Lr,lim dB(A)	Lr,lim dB(A)	Ldn 22.0 dB(A)	Leq,d 15.6 dB(A)					
AC Unit	Ldn	13.1	-9.1	2.0	7.7	6.3	5.8	5.7	0.3	-9.2
AC Unit	Leq,d	6.7	-15.5	-4.4	1.3	-0.1	-0.6	-0.7	-6.1	-15.6
AC Unit	Leq,n	6.7	-15.5	-4.4	1.3	-0.1	-0.6	-0.7	-6.1	-15.6
AC Unit	Ldn	12.2	-9.3	2.9	8.4	4.2	3.1	3.9	-3.7	-16.2
AC Unit	Leq,d	5.8	-15.7	-3.5	2.0	-2.2	-3.3	-2.5	-10.1	-22.6
AC Unit	Leq,n	5.8	-15.7	-3.5	2.0	-2.2	-3.3	-2.5	-10.1	-22.6
AC Unit	Ldn	8.5	-13.5	-2.0	4.0	0.4	0.2	1.4	-5.0	-17.8
AC Unit	Leq,d	2.1	-19.9	-8.4	-2.4	-6.0	-6.2	-5.0	-11.4	-24.2
AC Unit	Leq,n	2.1	-19.9	-8.4	-2.4	-6.0	-6.2	-5.0	-11.4	-24.2
AC Unit	Ldn	11.8	-9.2	2.0	7.7	4.0	2.3	3.8	-2.0	-10.9
AC Unit	Leq,d	5.3	-15.6	-4.4	1.3	-2.4	-4.1	-2.6	-8.5	-17.3
AC Unit	Leq,n	5.3	-15.6	-4.4	1.3	-2.4	-4.1	-2.6	-8.5	-17.3
AC Unit	Ldn	15.3	-5.7	5.5	10.9	7.0	6.1	8.2	2.4	-6.1
AC Unit	Leq,d	8.9	-12.1	-0.9	4.5	0.6	-0.3	1.8	-4.0	-12.5
AC Unit	Leq,n	8.9	-12.1	-0.9	4.5	0.6	-0.3	1.8	-4.0	-12.5

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Majestic Moreno
Contribution spectra - Stationary Noise

Source	time slice	Sum dB(A)	63Hz dB(A)	125Hz dB(A)	250Hz dB(A)	500Hz dB(A)	1kHz dB(A)	2kHz dB(A)	4kHz dB(A)	8kHz dB(A)
AC Unit	Ldn	16.2	-5.7	5.4	12.6	8.8	7.0	6.8	2.8	-5.0
AC Unit	Leq,d	9.8	-12.1	-1.0	6.2	2.3	0.6	0.4	-3.6	-11.4
AC Unit	Leq,n	9.8	-12.1	-1.0	6.2	2.3	0.6	0.4	-3.6	-11.4
AC Unit	Ldn	1.0	-20.8	-9.0	-3.0	-6.6	-7.1	-7.3	-14.8	-34.5
AC Unit	Leq,d	-5.4	-27.3	-15.4	-9.4	-13.0	-13.6	-13.7	-21.2	-40.9
AC Unit	Leq,n	-5.4	-27.3	-15.4	-9.4	-13.0	-13.6	-13.7	-21.2	-40.9
AC Unit	Ldn	2.3	-20.7	-8.8	-1.1	-4.8	-6.0	-7.4	-14.9	-34.9
AC Unit	Leq,d	-4.1	-27.1	-15.2	-7.5	-11.2	-12.4	-13.8	-21.3	-41.3
AC Unit	Leq,n	-4.1	-27.1	-15.2	-7.5	-11.2	-12.4	-13.8	-21.3	-41.3
AC Unit	Ldn	2.0	-21.5	-7.5	-1.5	-5.2	-6.5	-8.2	-15.7	-36.6
AC Unit	Leq,d	-4.4	-27.9	-13.9	-7.9	-11.6	-12.9	-14.6	-22.1	-43.0
AC Unit	Leq,n	-4.4	-27.9	-13.9	-7.9	-11.6	-12.9	-14.6	-22.1	-43.0
AC Unit	Ldn	10.3	-13.3	-1.6	6.4	3.3	1.5	2.3	-5.8	-21.0
AC Unit	Leq,d	3.8	-19.7	-8.0	-0.1	-3.1	-4.9	-4.1	-12.2	-27.4
AC Unit	Leq,n	3.8	-19.7	-8.0	-0.1	-3.1	-4.9	-4.1	-12.2	-27.4
AC Unit	Ldn	9.2	-12.3	-0.7	5.1	1.9	0.4	1.2	-5.7	-19.6
AC Unit	Leq,d	2.8	-18.8	-7.1	-1.3	-4.5	-6.0	-5.2	-12.2	-26.0
AC Unit	Leq,n	2.8	-18.8	-7.1	-1.3	-4.5	-6.0	-5.2	-12.2	-26.0
AC Unit	Ldn	2.8	-20.4	-8.6	-0.5	-4.2	-6.3	-6.6	-13.7	-32.4
AC Unit	Leq,d	-3.6	-26.8	-15.0	-7.0	-10.6	-12.7	-13.0	-20.1	-38.8
AC Unit	Leq,n	-3.6	-26.8	-15.0	-7.0	-10.6	-12.7	-13.0	-20.1	-38.8
Receiver Property Line (S) Fl G	Ldn,lim dB(A)	Lr,lim dB(A)	Lr,lim dB(A)	Ldn 22.4 dB(A)	Leq,d 15.9 dB(A)					
AC Unit	Ldn	-1.4	-22.4	-11.8	-5.8	-9.6	-9.5	-8.6	-15.5	-34.3
AC Unit	Leq,d	-7.8	-28.8	-18.2	-12.3	-16.0	-15.9	-15.0	-21.9	-40.7
AC Unit	Leq,n	-7.8	-28.8	-18.2	-12.3	-16.0	-15.9	-15.0	-21.9	-40.7
AC Unit	Ldn	1.9	-20.6	-9.4	-3.5	-7.2	-8.1	-2.9	-9.7	-26.0
AC Unit	Leq,d	-4.5	-27.0	-15.8	-9.9	-13.6	-14.5	-9.3	-16.2	-32.4
AC Unit	Leq,n	-4.5	-27.0	-15.8	-9.9	-13.6	-14.5	-9.3	-16.2	-32.4
AC Unit	Ldn	2.3	-19.6	-8.3	-2.5	-6.2	-7.0	-3.8	-9.0	-23.4
AC Unit	Leq,d	-4.1	-26.1	-14.8	-8.9	-12.6	-13.4	-10.2	-15.4	-29.8
AC Unit	Leq,n	-4.1	-26.1	-14.8	-8.9	-12.6	-13.4	-10.2	-15.4	-29.8
AC Unit	Ldn	0.1	-21.3	-10.4	-4.5	-8.2	-7.5	-7.3	-13.3	-30.8
AC Unit	Leq,d	-6.3	-27.7	-16.8	-10.9	-14.6	-13.9	-13.8	-19.7	-37.2
AC Unit	Leq,n	-6.3	-27.7	-16.8	-10.9	-14.6	-13.9	-13.8	-19.7	-37.2
AC Unit	Ldn	0.0	-21.5	-10.7	-4.8	-8.5	-7.1	-7.0	-13.4	-31.9
AC Unit	Leq,d	-6.4	-27.9	-17.1	-11.2	-14.9	-13.5	-13.4	-19.8	-38.3
AC Unit	Leq,n	-6.4	-27.9	-17.1	-11.2	-14.9	-13.5	-13.4	-19.8	-38.3
AC Unit	Ldn	-1.7	-22.6	-12.0	-6.1	-9.8	-9.9	-9.1	-15.9	-35.7
AC Unit	Leq,d	-8.1	-29.0	-18.4	-12.5	-16.2	-16.4	-15.5	-22.3	-42.1
AC Unit	Leq,n	-8.1	-29.0	-18.4	-12.5	-16.2	-16.4	-15.5	-22.3	-42.1
AC Unit	Ldn	10.4	-10.8	-0.1	5.3	2.6	1.8	3.2	-0.5	-9.2
AC Unit	Leq,d	4.0	-17.3	-6.6	-1.1	-3.8	-4.6	-3.2	-6.9	-15.6
AC Unit	Leq,n	4.0	-17.3	-6.6	-1.1	-3.8	-4.6	-3.2	-6.9	-15.6
AC Unit	Ldn	18.0	-2.7	9.0	14.0	10.5	7.5	8.8	5.7	-0.7
AC Unit	Leq,d	11.6	-9.1	2.6	7.6	4.1	1.1	2.4	-0.7	-7.2
AC Unit	Leq,n	11.6	-9.1	2.6	7.6	4.1	1.1	2.4	-0.7	-7.2
AC Unit	Ldn	18.4	-2.7	9.0	15.0	10.4	7.6	9.0	5.5	-1.0
AC Unit	Leq,d	12.0	-9.1	2.6	8.6	4.0	1.1	2.6	-0.9	-7.4
AC Unit	Leq,n	12.0	-9.1	2.6	8.6	4.0	1.1	2.6	-0.9	-7.4
AC Unit	Ldn	5.8	-15.8	-4.6	1.3	-2.3	-2.4	-1.5	-7.7	-21.1
AC Unit	Leq,d	-0.6	-22.3	-11.0	-5.1	-8.8	-8.8	-7.9	-14.1	-27.5
AC Unit	Leq,n	-0.6	-22.3	-11.0	-5.1	-8.8	-8.8	-7.9	-14.1	-27.5
AC Unit	Ldn	9.7	-13.1	-1.3	5.9	2.1	1.4	1.4	-6.1	-22.8

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Majestic Moreno
Contribution spectra - Stationary Noise

Source	time slice	Sum dB(A)	63Hz dB(A)	125Hz dB(A)	250Hz dB(A)	500Hz dB(A)	1kHz dB(A)	2kHz dB(A)	4kHz dB(A)	8kHz dB(A)
AC Unit	Leq,d	3.3	-19.5	-7.7	-0.5	-4.3	-5.0	-5.0	-12.5	-29.3
AC Unit	Leq,n	3.3	-19.5	-7.7	-0.5	-4.3	-5.0	-5.0	-12.5	-29.3
AC Unit	Ldn	9.7	-10.8	-0.1	5.4	1.6	-0.2	2.2	-1.6	-10.1
AC Unit	Leq,d	3.3	-17.2	-6.5	-1.1	-4.8	-6.6	-4.2	-8.0	-16.5
AC Unit	Leq,n	3.3	-17.2	-6.5	-1.1	-4.8	-6.6	-4.2	-8.0	-16.5
Receiver Property Line (S)2 Fl G	Ldn,lim	dB(A)	Lr,lim	dB(A)	Lr,lim	dB(A)	Ldn	21.4 dB(A)	Leq,d	15.0 dB(A)
AC Unit	Ldn	5.3	-17.9	-6.5	1.8	-1.8	-2.9	-4.0	-10.0	-25.5
AC Unit	Leq,d	-1.1	-24.3	-12.9	-4.6	-8.2	-9.3	-10.4	-16.5	-31.9
AC Unit	Leq,n	-1.1	-24.3	-12.9	-4.6	-8.2	-9.3	-10.4	-16.5	-31.9
AC Unit	Ldn	11.6	-10.0	1.3	7.1	4.7	3.7	2.6	-1.8	-10.9
AC Unit	Leq,d	5.2	-16.4	-5.1	0.7	-1.7	-2.7	-3.9	-8.2	-17.4
AC Unit	Leq,n	5.2	-16.4	-5.1	0.7	-1.7	-2.7	-3.9	-8.2	-17.4
AC Unit	Ldn	12.1	-10.2	1.1	7.0	5.4	5.2	3.8	-2.3	-12.9
AC Unit	Leq,d	5.7	-16.6	-5.3	0.6	-1.0	-1.3	-2.6	-8.7	-19.3
AC Unit	Leq,n	5.7	-16.6	-5.3	0.6	-1.0	-1.3	-2.6	-8.7	-19.3
AC Unit	Ldn	6.1	-16.4	-4.7	1.4	-1.6	-1.8	-1.5	-6.6	-21.5
AC Unit	Leq,d	-0.3	-22.8	-11.1	-5.0	-8.0	-8.2	-7.9	-13.0	-27.9
AC Unit	Leq,n	-0.3	-22.8	-11.1	-5.0	-8.0	-8.2	-7.9	-13.0	-27.9
AC Unit	Ldn	6.5	-16.5	-4.7	1.4	0.6	-0.7	-2.3	-8.9	-22.5
AC Unit	Leq,d	0.1	-22.9	-11.1	-5.0	-5.8	-7.1	-8.7	-15.3	-28.9
AC Unit	Leq,n	0.1	-22.9	-11.1	-5.0	-5.8	-7.1	-8.7	-15.3	-28.9
AC Unit	Ldn	3.2	-17.9	-6.5	-0.4	-4.0	-5.6	-6.5	-13.1	-29.5
AC Unit	Leq,d	-3.2	-24.3	-12.9	-6.8	-10.4	-12.0	-12.9	-19.5	-35.9
AC Unit	Leq,n	-3.2	-24.3	-12.9	-6.8	-10.4	-12.0	-12.9	-19.5	-35.9
AC Unit	Ldn	7.8	-15.2	-1.9	4.1	0.4	-0.9	-1.4	-9.8	-26.0
AC Unit	Leq,d	1.3	-21.7	-8.3	-2.4	-6.0	-7.4	-7.8	-16.2	-32.4
AC Unit	Leq,n	1.3	-21.7	-8.3	-2.4	-6.0	-7.4	-7.8	-16.2	-32.4
AC Unit	Ldn	7.3	-13.2	-1.8	3.9	0.1	-2.1	-3.2	-10.0	-22.4
AC Unit	Leq,d	0.9	-19.6	-8.2	-2.5	-6.3	-8.6	-9.6	-16.4	-28.8
AC Unit	Leq,n	0.9	-19.6	-8.2	-2.5	-6.3	-8.6	-9.6	-16.4	-28.8
AC Unit	Ldn	5.2	-15.5	-4.3	1.3	-2.4	-2.9	-4.1	-10.4	-24.6
AC Unit	Leq,d	-1.2	-21.9	-10.7	-5.1	-8.8	-9.3	-10.5	-16.8	-31.0
AC Unit	Leq,n	-1.2	-21.9	-10.7	-5.1	-8.8	-9.3	-10.5	-16.8	-31.0
AC Unit	Ldn	14.8	-5.9	5.5	10.7	6.6	6.2	6.4	0.9	-7.4
AC Unit	Leq,d	8.4	-12.3	-0.9	4.3	0.2	-0.2	0.0	-5.5	-13.8
AC Unit	Leq,n	8.4	-12.3	-0.9	4.3	0.2	-0.2	0.0	-5.5	-13.8
AC Unit	Ldn	16.4	-4.6	7.1	12.3	8.7	8.2	7.2	1.9	-5.9
AC Unit	Leq,d	10.0	-11.0	0.6	5.9	2.3	1.8	0.8	-4.6	-12.3
AC Unit	Leq,n	10.0	-11.0	0.6	5.9	2.3	1.8	0.8	-4.6	-12.3
AC Unit	Ldn	8.3	-13.9	-2.4	4.6	0.9	-0.5	-0.1	-7.0	-23.0
AC Unit	Leq,d	1.9	-20.3	-8.8	-1.8	-5.5	-7.0	-6.5	-13.4	-29.5
AC Unit	Leq,n	1.9	-20.3	-8.8	-1.8	-5.5	-7.0	-6.5	-13.4	-29.5

Attachment: Tech Study Noise Study [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Majestic Moreno
Octave spectra of the sources in dB(A) - Stationary Noise

Name	Source type	l or A	Li	R'w	L'w	Lw	KI	KT	LwMax	D-Omega-	Day histogram	Emission spectrum	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
		m,m²	dB(A)	dB	dB(A)	dB(A)	dB	dB	dB(A)	dB(A)			dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
AC Unit	Point				70.3	70.3	0.0	0.0		0	100%/24h	Axial-flow fan	37.8	55.4	64.4	63.8	62.0	63.2	60.5	56.9
AC Unit	Point				70.3	70.3	0.0	0.0		0	100%/24h	Axial-flow fan	37.8	55.4	64.4	63.8	62.0	63.2	60.5	56.9
AC Unit	Point				70.3	70.3	0.0	0.0		0	100%/24h	Axial-flow fan	37.8	55.4	64.4	63.8	62.0	63.2	60.5	56.9
AC Unit	Point				70.3	70.3	0.0	0.0		0	100%/24h	Axial-flow fan	37.8	55.4	64.4	63.8	62.0	63.2	60.5	56.9
AC Unit	Point				70.3	70.3	0.0	0.0		0	100%/24h	Axial-flow fan	37.8	55.4	64.4	63.8	62.0	63.2	60.5	56.9
AC Unit	Point				70.3	70.3	0.0	0.0		0	100%/24h	Axial-flow fan	37.8	55.4	64.4	63.8	62.0	63.2	60.5	56.9
AC Unit	Point				70.3	70.3	0.0	0.0		0	100%/24h	Axial-flow fan	37.8	55.4	64.4	63.8	62.0	63.2	60.5	56.9
AC Unit	Point				70.3	70.3	0.0	0.0		0	100%/24h	Axial-flow fan	37.8	55.4	64.4	63.8	62.0	63.2	60.5	56.9
AC Unit	Point				70.3	70.3	0.0	0.0		0	100%/24h	Axial-flow fan	37.8	55.4	64.4	63.8	62.0	63.2	60.5	56.9
AC Unit	Point				70.3	70.3	0.0	0.0		0	100%/24h	Axial-flow fan	37.8	55.4	64.4	63.8	62.0	63.2	60.5	56.9
AC Unit	Point				70.3	70.3	0.0	0.0		0	100%/24h	Axial-flow fan	37.8	55.4	64.4	63.8	62.0	63.2	60.5	56.9

PRELIMINARY HYDROLOGY REPORT

Located on the SE Corner of Brodiaea Avenue and Nason Street
Within a portion of the N.W. 1/4 of Section 15,
Township 3 South, Range 3 West. S.B.M.
City of Moreno Valley, California

MAJESTIC MORENO MEDICAL PLAZA AND VILLAGE
Tentative Parcel Map 36227
City Case Number PA09-0033

September 12, 2016

Prepared for:

Galaxy Management Incorporated

MSA Job Number: 1968

MSA CONSULTING, INC.
PLANNING ■ CIVIL ENGINEERING ■ LAND SURVEYING
34200 BOB HOPE DRIVE ■ RANCHO MIRAGE ■ CA 92270
TELEPHONE (760) 320-9811 ■ FAX (760) 323-7893

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

PRELIMINARY HYDROLOGY REPORT

Located on the SE Corner of Brodiaea Avenue and Nason Street
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MAJESTIC MORENO MEDICAL PLAZA AND VILLAGE
Tentative Parcel Map 36227
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REGISTERED PROFESSIONAL ENGINEER
JULIAN A. DE LA TORRE
C43880
CIVIL
STATE OF CALIFORNIA

September 12, 2016

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Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

PROJECT DESCRIPTION

The proposed project is a mixed-use facility that accommodates medical offices, a wellness center, an urgent care center, assisted living, and a skilled nursing facility with a special treatment program. The proposed development will occupy approximately 18 acres at the southeast corner of Brodiaea Avenue and Nason Street in the City of Moreno Valley, Riverside County, California. The project property is comprised of two parcels assigned Assessor's Parcel Numbers 486-290-001 and 002. The location of the subject property can also be described as lying within a portion of Section 15, Township 3 South, Range 3 West, San Bernardino Base and Meridian. The project has been assigned Tentative Parcel Number 36227 (City Case Number PA09-0033). Currently the project site is undeveloped, comprised of relatively flat land which was formerly used for agricultural purposes. A vicinity map is included in Appendix A.

EXISTING CONDITIONS

Flood Rate Map

The project area is covered by FIRM Panel Number 06065C0765G, revised August 28, 2008, which indicates the project area lies within Zone X, indicating *"areas determined to be outside the 0.2% annual chance floodplain"* (see attached FEMA map – Appendix B).

National Cooperative Soil Survey

The existing soil is categorized as hydrologic soil group B, as shown on the attached National Cooperative Soil Survey exhibits in Appendix C.

Existing Storm Flows:

Currently tributary areas to the north of the subject property as well as the subject property itself are vacant and for the purposes of this report are assumed to have a land classification of "Undeveloped – Fair". The land slopes from north to south and storm flows can be generally categorized as "sheet flow" (see existing conditions hydrology exhibit). It was assumed areas north of Alessandro Boulevard are not tributary to the project. At the current time, Brodiaea Avenue has not been constructed and provides no barrier to storm flows.

PROPOSED FLOOD CONTROL REQUIREMENTS

Drainage requirements fall under the jurisdiction of the City of Moreno Valley. The project design is to intercept and convey the storm flows through a series of proposed bio swales, detention basins, catch basins, drop inlets and sub-surface storm drain systems to the existing 84" storm drain pipe (Line "I" of the Moreno Valley ADP) located in Nason Street.

Brodiaea Avenue will be constructed in accordance with City of Moreno Valley Standards for a Collector Street (Std. No. 107). Per the conditions of approval, only a 12-foot lane north of the centerline will be constructed at the current time, with a bio-swale and Type IX inlets being utilized to capture and convey storm flows from the tributary areas north of Brodiaea Avenue. The southerly ½ of the street will be constructed to its ultimate configuration and will have curb-inlet type catch basins to capture storm flows. A proposed sub-surface storm drain system will convey these flows

to the existing 84" storm drain located in Nason Street. Refer to the Proposed Conditions (Off-Site) Hydrology Exhibit.

On-site storm flows are proposed to be conveyed via the parking area and earthen channels (bio-swales) to storm drain inlets and/or detention basins and ultimately to the existing 84" storm drain line in Nason Street.

HYDROLOGY ANALYSIS DESIGN CRITERIA

Storm flows for the 100-year event were obtained utilizing the Rational Method, as described in the RCFC&WCD *Hydrology Manual*. Peak flow storm rates were analyzed using the RCFCD Rational Method for the 10 and 100 year storm events. The hydrologic data used for the calculations are as follows:

Hydrologic Soil Group:

Soil Group B – Are those soils having moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Antecedent Moisture Condition:

AMC II – Moderate runoff potential, an intermediate condition. Per RCFC & WCD Hydrology Manual (Dated: April, 1978): *"For the purposes of design hydrology using District methods, AMC II should normally be assumed for both the 10 year and 100 year frequency storm"*.

Land Use Classifications and Runoff Index Numbers:

Runoff Index Numbers were obtained from RCFCD Plate D-5.5 and are summarized below:

Existing Conditions – Undeveloped (Fair)	69
Proposed Conditions – Commercial Landscaping	56

Precipitation Intensities:

Precipitation intensities were obtained from the RCFCD Manual for the Sunnymead/Moreno Valley Area (Plate D-4.1 Sheet 6):

10 Year 10 Minute Intensity:	2.01 inches/hour
10 Year 60 Minute Intensity:	0.82 inches/hour
100 Year 10 Minute Intensity:	2.94 inches/hour
100 Year 60 Minute Intensity:	1.20 inches/hour
Slope of Intensity Duration Curve:	0.50

See Appendix D for the respective RCFCD Plates.

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

SUMMARY of RCFCD RATIONAL METHOD PEAK FLOWS

The rational method computer runs for the existing conditions and proposed conditions (off-site) are included in Appendix E and are summarized below.

Existing Conditions:

Existing storm flows from the 100 year and 10 year events begin at the southerly right-of-way of Alessandro Boulevard to the southerly property line as a "sheet flow" condition. Results from the analyses are shown below:

Storm Event	Peak Flow (cfs)	T_c (min)	Intensity (in/hr)	Area (acres)
100-Year	69.84	23.17	1.93	51.28
10-Year	42.47	23.81	1.30	51.28

Proposed Conditions (Off-Site):

The drainage area was sub-divided into 3 (three) distinct areas corresponding to proposed inlet and catch basin locations (refer to the Proposed Conditions – Off-Site Hydrology Exhibit).

100 Year Storm Event

Designation	**Q_{100} (cfs)**	**T_c (min)**	**Intensity (in/hr)**	**Area (acres)**
A1	11.81	21.65	2.00	8.54
A2	11.34	23.76	1.91	8.68
Sub-Area Addition	23.15			17.22
A3	1.52	7.84	3.32	0.52
Confluence (Inlet 1)	***24.02***	***23.76***	***1.91***	***17.74***
A4 (Catch Basin 1)	***1.23***	***6.75***	***3.58***	***0.39***
Total Flow: DA-A	**24.67**	**23.76**	**1.91**	**18.13**
B1	3.40	18.20	2.18	2.21
B2	4.95	20.86	2.04	3.50
Sub-Area Addition	8.35			5.71
B3	0.76	6.06	3.78	0.23
Confluence (Inlet 2)	***8.77***	***20.86***	***2.04***	***5.94***
B4 (Catch Basin 2)	***0.63***	***6.06***	***3.78***	***0.19***
Total Flow: DA-B	**9.11**	**20.86**	**2.04**	**6.13**
C1	10.62	21.28	2.02	7.60
C2	1.17	7.42	3.41	0.39
Confluence (Inlet 3)	***11.32***	***21.28***	***2.02***	***7.99***
C3 (Catch Basin 3)	***0.96***	***7.42***	***3.41***	***0.32***
Total Flow: DA-C	**11.88**	**21.28**	**2.02**	**8.31**

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

10 Year Storm Event

Designation	Q_{100} (cfs)	T_c (min)	Intensity (in/hr)	Area (acres)
A1	7.29	21.65	1.36	8.54
A2	6.92	24.05	1.30	8.68
Sub-Area Addition	14.21			17.22
A3	1.03	7.84	2.27	0.52
Confluence (Inlet 1)	***14.80***	***24.05***	***1.30***	***17.74***
A4 (Catch Basin 1)	***0.83***	***6.75***	***2.44***	***0.39***
Total Flow: DA-A	**15.24**	**24.05**	**1.30**	**18.13**
B1	2.11	18.20	1.49	2.21
B2	3.03	21.17	1.38	3.50
Sub-Area Addition	5.41			5.71
B3	0.52	6.06	2.58	0.23
Confluence (Inlet 2)	***5.42***	***21.17***	***1.38***	***5.94***
B4 (Catch Basin 2)	***0.43***	***6.06***	***2.58***	***0.19***
Total Flow: DA-B	**5.65**	**21.17**	**1.38**	**6.13**
C1	6.56	21.28	1.38	7.60
C2	0.79	7.42	2.33	0.39
Confluence (Inlet 3)	***7.03***	***21.28***	***1.38***	***7.99***
C3 (Catch Basin 3)	***0.65***	***7.42***	***2.33***	***0.32***
Total Flow: DA-C	**7.42**	**21.28**	**1.38**	**8.31**

Proposed Conditions (On-Site):

The subject property was subdivided into 25 smaller subareas. On-Site peak storm flows were calculated manually utilizing the RCFCD Rational Method equation:

Q=CIA(1.008)

Due to the small drainage flow path lengths, a minimum time of concentration (T_c) of 5 minutes was assumed for all areas (this will also provide for a more conservative estimate of the storm flow tributary to each area). The remaining factors are shown below:

Intensity (100 Year)	4.16 in/hr	Plate D-4.1(6)
Intensity (10 Year)	2.84 in/hr	Plate D-4.1(6)
Runoff Index (RI)	56	Plate D-5.5
Runoff Coefficient (C)	Varies	Plate D-5.7(7)

1.008 Conversion Factor from inch-acre/hour to cubic feet/second

Refer to the Proposed Conditions (On-Site) Hydrology Exhibit for locations of the drainage subareas and the Preliminary Grading Exhibit for proposed grades.

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

A summary of the calculated peak flows is shown below:

Drainage Subarea	Area (acres)	Q_{100} (cfs)	Q_{10} (cfs)	Storm Flows Directed To:
A	0.95	3.31	2.20	Storm Drain System
B	0.35	1.29	0.88	Storm Drain System
C	0.50	1.78	1.22	Storm Drain System
D	2.06	7.60	5.19	Storm Drain System
E	0.33	1.16	0.78	Storm Drain System
F	0.45	1.59	1.07	Detention Area
G	1.06	3.84	2.58	Storm Drain System
H	0.36	1.28	0.87	Detention Area
I	0.43	1.48	0.96	Detention Area
J	0.89	3.10	2.04	Detention Area
K	0.42	1.46	0.99	Detention Area
L	0.37	1.32	0.89	Detention Area
M	1.30	4.63	3.13	Storm Drain System
N	0.26	0.94	0.63	Detention Area
O	1.32	4.59	3.10	Storm Drain System
P	0.78	2.85	1.92	Storm Drain System
Q	0.65	2.37	1.62	Storm Drain System
R	0.34	1.23	0.83	Storm Drain System
S	0.22	0.80	0.55	Storm Drain System
T	0.30	1.11	0.76	Storm Drain System
U	0.77	2.87	1.94	Storm Drain System
V	2.97	10.96	7.48	Storm Drain System
W	0.18	0.64	0.43	Storm Drain System
X	0.89	3.06	2.04	Storm Drain System
Y	0.20	0.75	0.52	Storm Drain System
Totals	18.35	65.26	44.08	

The proposed storm drain system will outlet into the existing 84” storm drain located in Nason Street and identified as Line I of the Moreno Valley ADP. Hydraulic calculations for the sizing of the proposed drainage inlets and storm drain pipe will be analyzed and submitted for City approval during the final design process.

Proposed Courtyard Detention/Retention (Drainage Areas ‘F’, ‘H’, ‘K’, ‘L’ and ‘N’):
Storm flows generated from these areas are proposed to be detained and/or retained utilizing shallow (1-foot maximum depth) basins. Drain inlets will be located to provide emergency overflow from the basin to the storm drain system should the basin capacity be exceeded during the storm event.

Drainage Areas ‘I’ and ‘J’:
Storm flows generated from these areas are proposed to be detained and/or retained utilizing shallow (1-foot maximum depth) basins. Emergency overflow swales will convey excess storm flows to a drain inlet located within drainage area ‘G’.

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

EXCERPTS FROM THE PROJECT SPECIFIC WATER QUALITY MANAGEMENT PLAN

The following are excerpts from the Project Specific Preliminary Water Quality Management Plan for the Majestic Moreno Medical Plaza and Village.

The project site's former use included agricultural operations, which did not include natural vegetation or a natural drainage pattern. The entire project property will be modified by development activities. Project proponents shall implement site design concepts that achieve each of the following:

1. Minimize Urban Runoff: The Majestic Moreno Medical Plaza and Village development will minimize urban runoff by incorporating 4.3 acres of landscaped areas distributed throughout the site. These areas surround project buildings and buffer other impervious surfaces. The landscaped areas represent approximately 24 percent of the project site. The landscape design of this project also incorporates native and drought tolerant vegetation to minimize irrigation runoff. Select landscaped areas will be depressed to serve the purpose of retention basins and help capture first flush storm flows.
2. Minimize Impervious Footprint: The site design will minimize the project's impervious footprint by incorporating landscaped and pervious pavement areas. As previously described, the project will accommodate approximately 4.3 acres of pervious surfaces in the form of landscaped areas. Additionally, the project design will incorporate two rectangular pervious pavement areas in the site's primary parking lots. The pervious pavement is anticipated to cover a surface area of approximately 66,850 square feet (1.53 acres). The project's landscaped areas/detention basins and pervious pavement areas are sized to capture and treat first flush storm flows while minimizing the site's impervious footprint.
3. Conserve Natural Areas: The project property formerly served for agriculture uses. The site is surrounded by agricultural, residential and medical office uses, none of which contain undisturbed natural areas or drainage patterns. The project site does not contain natural areas that could be conserved as part of the project design. Therefore the project will involve installation of a new sub-surface storm drain system to tie into existing storm drain on Nason Street. Preservation of existing vegetation or drainage is not feasible for the proposed project.
4. Minimize Directly Connected Impervious Areas (DCIAs) The proposed project minimizes directly connected impervious areas through its landscape and pervious pavement design, which buffers and surrounds many of the site's impervious surfaces. For example, roof runoff is directed to the landscaped areas or detention basins. Parking lot surfaces, which are generally continuous, are combined with two pervious pavement areas where first flush storm flows will infiltrate.

The project's site design Best Management Practices (BMPs), described below, are sized to capture and treat first flush storm flows in accordance with design values found in the Santa Ana Watershed Water Quality Management Plan, Exhibit C. Additional flows beyond this volume are captured in drainage inlets and conveyed off-site to the 84-inch storm drain line on Nason Street.

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Summary of Exhibit C -Volume requirements per Santa Ana Watershed Water Quality Management Plan

DRAINAGE SUB-AREA	"DESIGN CAPTURE" VOLUME REQUIREMENTS (cubic feet)	NOTES
A	928	Design Capture Volume Self Contained
B	635	Design Capture Volume Self Contained
C	1245	Design Capture Volume to Underground Storage
D	3659	Design Capture Volume Tributary to Pervious Pavement
E	397	Design Capture Volume to Underground Storage
F	531	Design Capture Volume Self Contained
G	1486	Design Capture Volume to Underground Storage
H	450	Design Capture Volume Self Contained
I	362	Design Capture Volume Self Contained
J	822	Design Capture Volume Self Contained
K	436	Design Capture Volume Self Contained
L	471	Design Capture Volume Self Contained
M	1336	Design Capture Volume to Underground Storage
N	358	Design Capture Volume Self Contained
O	1416	Design Capture Volume to Underground Storage
P	1160	Design Capture Volume to Underground Storage
Q	1046	Design Capture Volume to Underground Storage
R	459	Design Capture Volume to Underground Storage
S	334	Design Capture Volume to Underground Storage
T	502	Design Capture Volume to Underground Storage

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U	1396	Design Capture Volume to Underground Storage
V	5070	Design Capture Volume Tributary to Pervious Pavement
W	225	Design Capture Volume to Underground Storage
X	777	Design Capture Volume Self Contained
y	185	Design Capture Volume Self Contained
TOTAL	25,686	

Summary of Design Volume by BMP Option:

BMP Treatment Description	Volume Required (cf)
Pervious Pavement*	8,729
Sub-Area Self Contained Storage	5,955
Underground Storage	11,002
Total	25,686

*Based on Santa Ana Watershed Water Quality Management Plan a design volume of 8,729 cubic feet will require approximately 51,348 square feet of pervious pavement area (8,729 cf/0.17 ft).

The proposed project will include modified drainage inlets, vegetated swales, detention basins and porous pavement as treatment control BMPs. Drainage inlets will be designed with subsurface stone-filled infiltration basins. The vegetated swales will be incorporated into landscaped areas. Retention basins will be located in depressed landscaped areas, which include the central courtyards to four project buildings. These retention basins will be underlain by gravel to maximize containment and infiltration. Additionally, porous pavement areas will be located in centralized locations of two of the project's parking lots. The modified drainage inlets, retention areas, vegetated swales and pervious pavement surfaces are sized to capture and treat first flush storm flows. Overflow quantities will enter the on-site storm drain pipeline and be directed off-site to the existing public storm drain pipeline on Nason Street.

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

BEST MANAGEMENT PRACTICES FOR TREATMENT CONTROLS	
BMP LABEL	CONTROL DESCRIPTION
BMP "A"	Proposed drainage inlet with subsurface stone-filled infiltration basin.
BMP "B"	Proposed permeable pavement with subsurface stone-filled infiltration basin.
BMP "C"	Proposed landscaped area with infiltration (detention/retention) basins and graded earthen swales (bio-swales).
BMP "D"	Proposed Underground Storage

The primary non-structural source control BMP for the proposed project will involve an education program. Education for employees, residents and maintenance staff will be conducted by providing a series printed materials developed by multiple agencies. Examples of these materials include brochures and flyers offering general education on the subject and tips on water conservation, pollution prevention and cleanliness. A series of guidelines will be formulated and widely distributed for promoting beneficial habits and restricting harmful activities, such as littering. Landscaping maintenance staff will also educated regarding these practices.

The project's structural source control BMPs are part of the design intent and will include storm drain signage, an efficient landscape irrigation system design, protection of existing slopes and channels, and the properly design of trash storage areas.

Storm drain signage will be placed to prohibit discharge and waste dumping into project storm water inlets or channels. The signage may include a written expression that explicitly prohibits the discharge or dumping. An efficient irrigation system design will minimize runoff excess irrigation water into the storm water conveyance system. With adequate maintenance, the efficient irrigation system is also recognized for helping slow runoff. The project will also incorporate the properly design of the proposed maintenance yards and trash enclosures to prevent spills, leakage and contamination of runoff or soils.

RESULTS AND CONCLUSIONS

As the above summaries and narratives confirm, the proposed project meets the hydrologic conditions as set forth by the City of Moreno Valley. During the final design process, hydraulic calculations for the drainage swales and storm drain systems will be processed through the City's Engineering Department for approval.

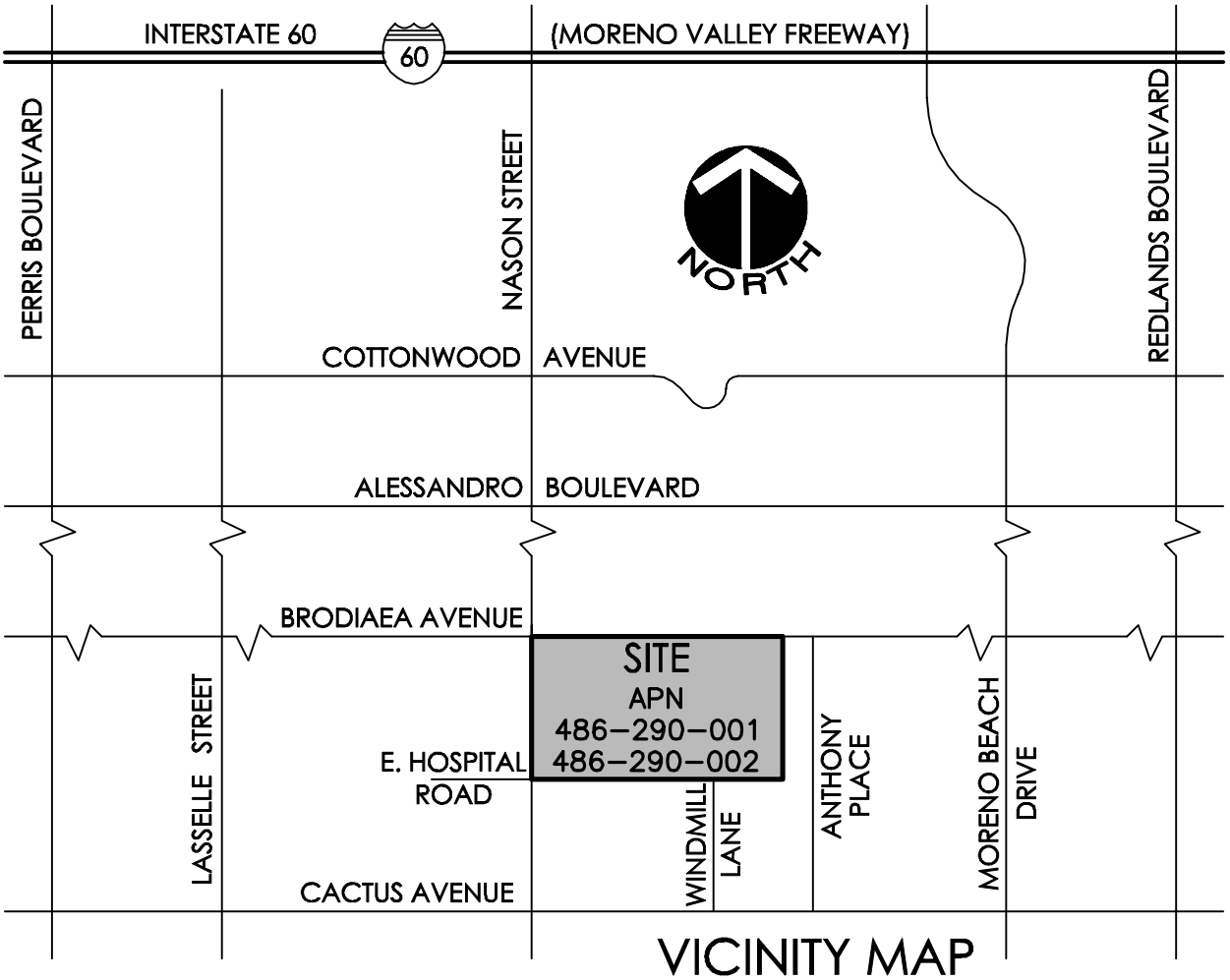
Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Appendix A
Vicinity Map

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

MAJESTIC MORENO MEDICAL PLAZA AND VILLAGE

TPM 36227
CITY CASE NUMBER PA09-0033



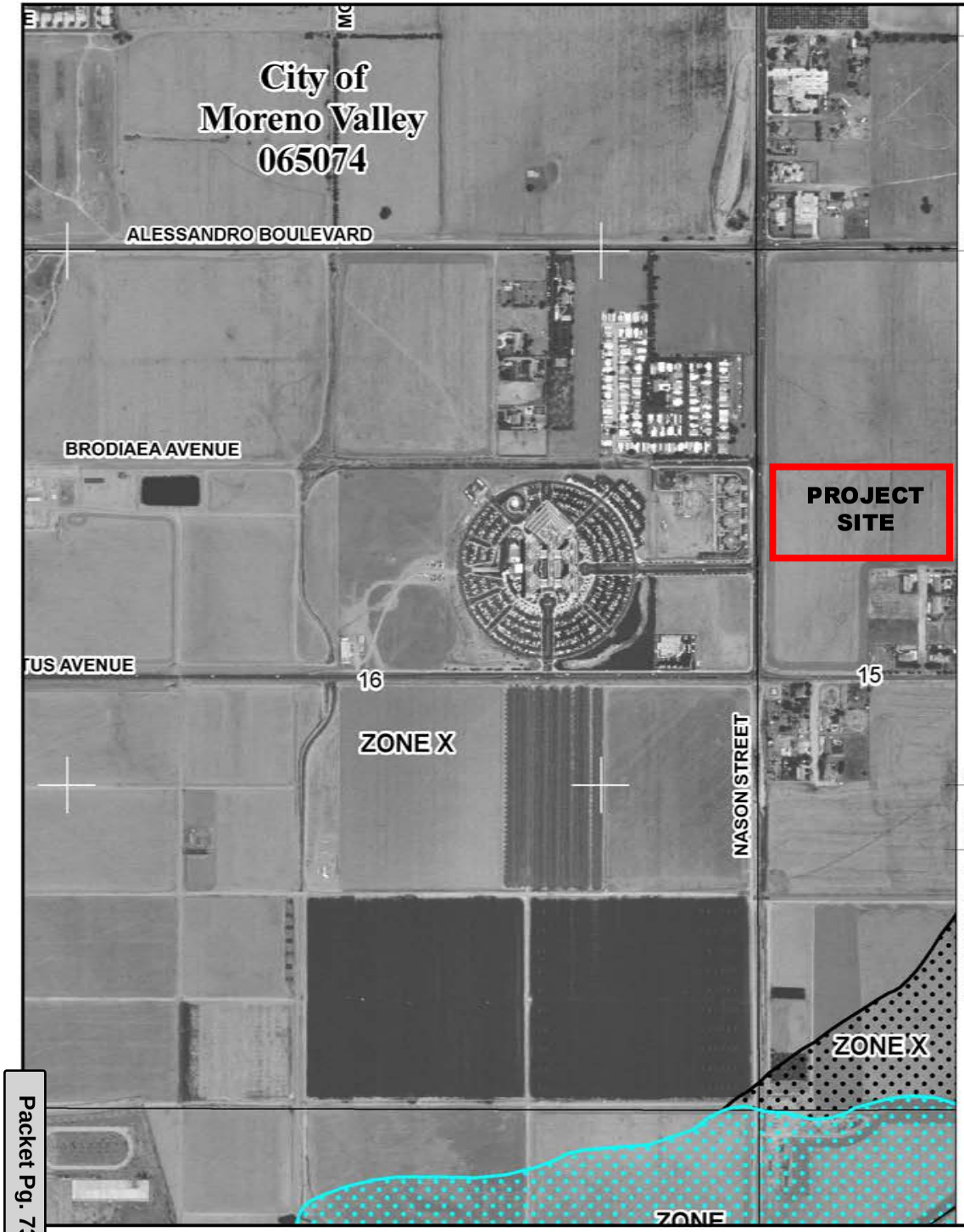
VICINITY MAP
N.T.S.

LOCATED WITHIN A PORTION OF THE N.W. ¼ OF SECTION 15, TOWNSHIP 3 SOUTH, RANGE 3 EAST, SAN BERNARDINO BASE & MERIDIAN

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Appendix B
NFIP Flood Insurance Rate Map

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)



MAP SCALE 1" = 1000'

500 0 1000 2000 FEET

METER

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0765G

FIRM

FLOOD INSURANCE RATE MAP

RIVERSIDE COUNTY, CALIFORNIA
AND INCORPORATED AREAS

PANEL 765 OF 3805
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
MORENO VALLEY, CITY OF	065074	0765	G
RIVERSIDE COUNTY	060245	0765	G

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
06065C0765G

EFFECTIVE DATE
AUGUST 28, 2008

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

DEFINITIONS OF FEMA FLOOD ZONE DESIGNATIONS

Moderate to Low Risk Areas

In communities that participate in the NFIP, flood insurance is available to all property owners and renters in these zones:

ZONE	DESCRIPTION
X (Shaded)	Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood. Insurance purchase is not required in these zones.
X	Areas determined to be outside the 0.2% annual chance floodplain.

High Risk Areas

In communities that participate in the NFIP, mandatory flood insurance purchase requirements apply to all of these zones:

ZONE	DESCRIPTION
A	Areas with a 1% annual chance of flooding and a 26% chance of flooding over the life of a 30-year mortgage. Because detailed analyses are not performed for such areas; no depths or base flood elevations are shown within these zones.
AE	Areas with a 1% annual chance of flooding and a 26% chance of flooding over the life of a 30-year mortgage. In most instances, base flood elevations derived from detailed analyses are shown at selected intervals within these zones.
AH	Areas with a 1% annual chance of shallow flooding, usually in the form of a pond, with an average depth ranging from 1 to 3 feet. These areas have a 26% chance of flooding over the life of a 30-year mortgage. Base flood elevations derived from detailed analyses are shown at selected intervals within these zones.
AO	River or stream flood hazard areas, and areas with a 1% or greater chance of shallow flooding each year, usually in the form of sheet flow, with an average depth ranging from 1 to 3 feet. These areas have a 26% chance of flooding over the life of a 30-year mortgage. Average flood depths derived from detailed analyses are shown within these zones. For areas of alluvial fan flooding, velocities are also determined.
AR	Areas with a temporarily increased flood risk due to the building or restoration of a flood control system (such as a levee or a dam). Mandatory flood insurance purchase requirements will apply, but rates will not exceed the rates for unnumbered A zones if the structure is built or restored in compliance with Zone AR floodplain management regulations.
A99	Areas with a 1% annual chance of flooding that will be protected by a Federal flood control system where construction has reached specified legal requirements. No depths or base flood elevations are shown within these zones.

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High Risk – Coastal Areas

In communities that participate in the NFIP, mandatory flood insurance purchase requirements apply to all of these zones:

ZONE	DESCRIPTION
V	Coastal areas with a 1% or greater chance of flooding and an additional hazard associated with storm waves. These areas have a 26% chance of flooding over the life of a 30-year mortgage. No base flood elevations are shown within these zones.
VE	Coastal areas with a 1% or greater chance of flooding and an additional hazard associated with storm waves. These areas have a 26% chance of flooding over the life of a 30-year mortgage. Base flood elevations derived from detailed analyses are shown at selected intervals within these zones.

Undetermined Risk Areas

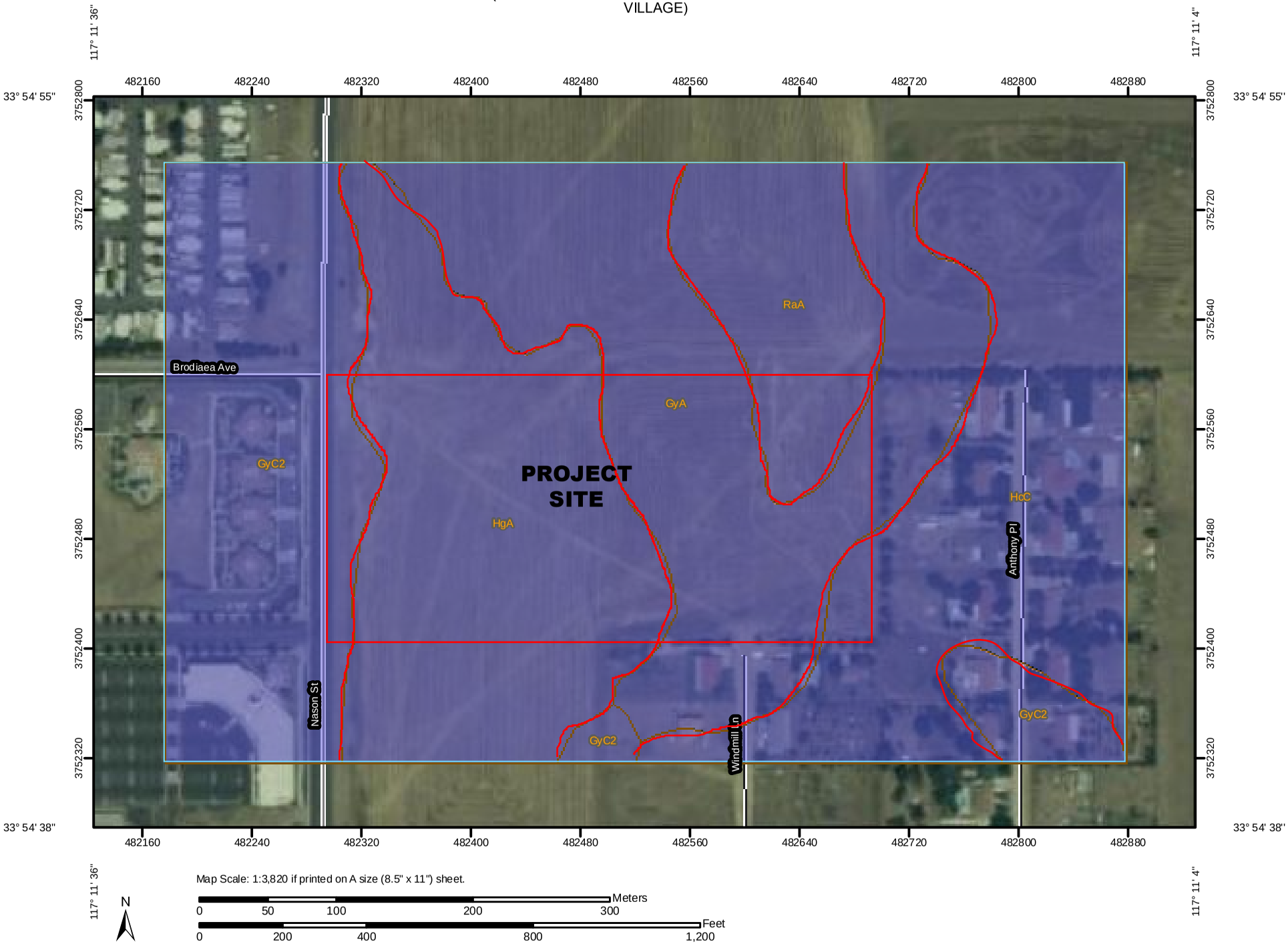
ZONE	DESCRIPTION
D	Areas with possible but undetermined flood hazards. No flood hazard analysis has been conducted. Flood insurance rates are commensurate with the uncertainty of the flood risk.

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Appendix C
USDA NCSS Hydrologic Soils Map

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Hydrologic Soil Group—Western Riverside Area, California
(1968 MAJESTIC MORENO MEDICAL PLAZA AND VILLAGE)



MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Units

Soil Ratings

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Political Features

- Cities

Water Features

- Oceans
- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

MAP INFORMATION

Map Scale: 1:3,820 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:15,840.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: UTM Zone 11N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Western Riverside Area, California
Survey Area Data: Version 5, Jan 3, 2008

Date(s) aerial images were photographed: 6/7/2005

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Hydrologic Soil Group— Summary by Map Unit — Western Riverside Area, California				
Map unit symbol	**Map unit name**	**Rating**	**Acres in AOI**	**Percent of AOI**
GyA	Greenfield sandy loam, 0 to 2 percent slopes	B	18.5	24.3%
GyC2	Greenfield sandy loam, 2 to 8 percent slopes, eroded	B	17.3	22.8%
HcC	Hanford coarse sandy loam, 2 to 8 percent slopes	B	17.1	22.6%
HgA	Hanford fine sandy loam, 0 to 2 percent slopes	B	16.8	22.2%
RaA	Ramona sandy loam, 0 to 2 percent slopes	B	6.2	8.1%
Totals for Area of Interest			**75.9**	**100.0%**

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: *None Specified*

Tie-break Rule: Lower

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Appendix D
RCFCD Reference Plates

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

RAINFALL INTENSITY—INCHES PER HOUR

SUNNYMEAD - MORENO			WOODCREST		
DURATION MINUTES	FREQUENCY 10 YEAR	FREQUENCY 100 YEAR	DURATION MINUTES	FREQUENCY 10 YEAR	FREQUENCY 100 YEAR
5	2.84	4.16	5	3.37	5.30
6	2.59	3.79	6	3.05	4.79
7	2.40	3.51	7	2.80	4.40
8	2.25	3.29	8	2.60	4.09
9	2.12	3.10	9	2.44	3.83
10	2.01	2.94	10	2.30	3.62
11	1.92	2.80	11	2.19	3.43
12	1.83	2.68	12	2.08	3.27
13	1.76	2.58	13	1.99	3.13
14	1.70	2.48	14	1.91	3.01
15	1.64	2.40	15	1.84	2.89
16	1.59	2.32	16	1.78	2.79
17	1.54	2.25	17	1.72	2.70
18	1.50	2.19	18	1.67	2.62
19	1.46	2.13	19	1.62	2.54
20	1.42	2.08	20	1.57	2.47
22	1.35	1.98	22	1.49	2.34
24	1.30	1.90	24	1.42	2.23
26	1.25	1.82	26	1.36	2.14
28	1.20	1.76	28	1.31	2.05
30	1.16	1.70	30	1.26	1.98
32	1.12	1.64	32	1.22	1.91
34	1.09	1.59	34	1.18	1.85
36	1.06	1.55	36	1.14	1.79
38	1.03	1.51	38	1.11	1.74
40	1.00	1.47	40	1.07	1.69
45	.95	1.39	45	1.01	1.58
50	.90	1.31	50	.95	1.49
55	.86	1.25	55	.90	1.42
60	.82	1.20	60	.86	1.35
65	.79	1.15	65	.82	1.29
70	.76	1.11	70	.79	1.24
75	.73	1.07	75	.76	1.19
80	.71	1.04	80	.73	1.15
85	.69	1.01	85	.71	1.11
SLOPE = .500			SLOPE = .550		

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HYDROLOGY MANUAL

STANDARD INTENSITY-DURATION CURVES DATA

PLATE D-4.1 (6 of 6)

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

RUNOFF INDEX NUMBERS OF HYDROLOGIC SOIL-COVER COMPLEXES FOR PERVIOUS AREAS-AMC II

Cover Type (3)	Quality of Cover (2)	Soil Group A	B	C	D
NATURAL COVERS -					
Barren (Rockland, eroded and graded land)		78	86	91	93
Chaparrel, Broadleaf (Manzonita, ceanothus and scrub oak)	Poor	53	70	80	85
	Fair	40	63	75	81
	Good	31	57	71	78
Chaparrel, Narrowleaf (Chamise and redshank)	Poor	71	82	88	91
	Fair	55	72	81	86
Grass, Annual or Perennial	Poor	67	78	86	89
	Fair	50	69	79	84
	Good	38	61	74	80
Meadows or Cienegas (Areas with seasonally high water table, principal vegetation is sod forming grass)	Poor	63	77	85	88
	Fair	51	70	80	84
	Good	30	58	72	78
Open Brush (Soft wood shrubs - buckwheat, sage, etc.)	Poor	62	76	84	88
	Fair	46	66	77	83
	Good	41	63	75	81
Woodland (Coniferous or broadleaf trees predominate. Canopy density is at least 50 percent)	Poor	45	66	77	83
	Fair	36	60	73	79
	Good	28	55	70	77
Woodland, Grass (Coniferous or broadleaf trees with canopy density from 20 to 50 percent)	Poor	57	73	82	86
	Fair	44	65	77	82
	Good	33	58	72	79
URBAN COVERS -					
Residential or Commercial Landscaping (Lawn, shrubs, etc.)	Good	32	56	69	75
Turf (Irrigated and mowed grass)	Poor	58	74	83	87
	Fair	44	65	77	82
	Good	33	58	72	79
AGRICULTURAL COVERS -					
Fallow (Land plowed but not tilled or seeded)		76	85	90	92

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RUNOFF INDEX NUMBERS FOR PERVIOUS AREA

PLATE D-5.5 (1 of 2)

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

RUNOFF INDEX NUMBERS OF HYDROLOGIC SOIL-COVER COMPLEXES FOR PERVIOUS AREAS-AMC II

Cover Type (3)	Quality of Cover (2)	Soil Group A	B	C	D
AGRICULTURAL COVERS (cont.) -					
Legumes, Close Seeded (Alfalfa, sweetclover, timothy, etc.)	Poor	66	77	85	89
	Good	58	72	81	85
Orchards, Deciduous (Apples, apricots, pears, walnuts, etc.)		See Note 4			
Orchards, Evergreen (Citrus, avocados, etc.)	Poor	57	73	82	86
	Fair	44	65	77	82
	Good	33	58	72	79
Pasture, Dryland (Annual grasses)	Poor	67	78	86	89
	Fair	50	69	79	84
	Good	38	61	74	80
Pasture, Irrigated (Legumes and perennial grass)	Poor	58	74	83	87
	Fair	44	65	77	82
	Good	33	58	72	79
Row Crops (Field crops - tomatoes, sugar beets, etc.)	Poor	72	81	88	91
	Good	67	78	85	89
Small Grain (Wheat, oats, barley, etc.)	Poor	65	76	84	88
	Good	63	75	83	87
Vineyard		See Note 4			

Notes:

1. All runoff index (RI) numbers are for Antecedent Moisture Condition (AMC) II.

2. Quality of cover definitions:
   Poor-Heavily grazed or regularly burned areas. Less than 50 percent of the ground surface is protected by plant cover or brush and tree canopy.
   Fair-Moderate cover with 50 percent to 75 percent of the ground surface protected.
   Good-Heavy or dense cover with more than 75 percent of the ground surface protected.

3. See Plate C-2 for a detailed description of cover types.

4. Use runoff index numbers based on ground cover type. See discussion under "Cover Type Descriptions" on Plate C-2.

5. Reference Bibliography item 17.

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RUNOFF INDEX NUMBERS FOR PERVIOUS AREA

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

ACTUAL IMPERVIOUS COVER

Land Use (1)	Range-Percent	Recommended Value For Average Conditions-Percent(2)
Natural or Agriculture	0 - 10	0
Single Family Residential: (3)		
40,000 S. F. (1 Acre) Lots	10 - 25	20
20,000 S. F. (½ Acre) Lots	30 - 45	40
7,200 - 10,000 S. F. Lots	45 - 55	50
Multiple Family Residential:		
Condominiums	45 - 70	65
Apartments	65 - 90	80
Mobile Home Park	60 - 85	75
Commercial, Downtown Business or Industrial	80 -100	90

Notes:

1. Land use should be based on ultimate development of the watershed. Long range master plans for the County and incorporated cities should be reviewed to insure reasonable land use assumptions.

2. Recommended values are based on average conditions which may not apply to a particular study area. The percentage impervious may vary greatly even on comparable sized lots due to differences in dwelling size, improvements, etc. Landscape practices should also be considered as it is common in some areas to use ornamental gravels underlain by impervious plastic materials in place of lawns and shrubs. A field investigation of a study area should always be made, and a review of aerial photos, where available may assist in estimating the percentage of impervious cover in developed areas.

3. For typical horse ranch subdivisions increase impervious area 5 percent over the values recommended in the table above.

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IMPERVIOUS COVER FOR DEVELOPED AREAS

PLATE D-5.6

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

RUNOFF COEFFICIENT CURVE DATA

The data in the following tables may be used to develop runoff coefficient (C) curves for any combination of runoff index (RI) number and antecedent mositure condition (AMC). For an RI number with an AMC of II (from Plate D-5.5) enter the tables on the following pages and plot the "C" curve data directly on Plate D-5.8. "C" curve data is given for even RI numbers only, but values may easily be interpolated for odd RI numbers.

For an AMC of I or III enter the tabulation on this page with the RI for AMC II, and read the appropriate RI for AMC I or III. Use this revised RI to enter the tables on the following pages to determine "C". For example if RI = 40 for AMC II, then RI = 22 for AMC I and RI = 60 for AMC III.

AMC ADJUSTMENT RELATIONSHIPS

RI FOR AMC II	RI FOR OTHER AMC CONDITIONS: AMC I	AMC III	RI FOR AMC II	RI FOR OTHER AMC CONDITIONS: AMC I	AMC III
10	--	22	55	35	74
11	--	24	56	36	75
12	--	25	57	37	75
13	--	27	58	38	76
14	--	28	59	39	77
15	--	30	60	40	78
16	--	31	61	41	78
17	--	33	62	42	79
18	--	34	63	43	80
19	--	36	64	44	81
20	--	37	65	45	82
21	10	38	66	46	82
22	10	39	67	47	83
23	11	41	68	48	84
24	11	42	69	50	84
25	12	43	70	51	85
26	12	44	71	52	86
27	13	46	72	53	86
28	14	47	73	54	87
29	14	49	74	55	88
30	15	50	75	57	88
31	16	51	76	58	89
32	16	52	77	59	89
33	17	53	78	60	90
34	18	54	79	62	91
35	18	55	80	63	91
36	19	56	81	64	92
37	20	57	82	66	92
38	21	58	83	67	93
39	21	59	84	68	93
40	22	60	85	70	94
41	23	61	86	72	94
42	24	62	87	73	95
43	25	63	88	75	95
44	25	64	89	76	96
45	26	65	90	78	96
46	27	66	91	80	97
47	28	67	92	81	97
48	29	68	93	83	98
49	30	69	94	85	98
50	31	70	95	87	98
51	31	70	96	89	99
52	32	71	97	91	99
53	33	72	98	94	99
54	34	73	99	97	--

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RUNOFF COEFFICIENT CURVE DATA

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

RUNOFF COEFFICIENTS FOR RI INDEX NO. = 52

IMPERVIOUS PERCENT	INTENSITY - INCHES/HOUR										
	.0	.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	5.0	6.0
0.	.00	.26	.40	.49	.56	.60	.64	.67	.69	.72	.75
5.	.04	.29	.43	.51	.57	.62	.65	.68	.70	.73	.75
10.	.09	.32	.45	.53	.59	.63	.66	.69	.71	.74	.76
15.	.13	.36	.48	.56	.61	.65	.68	.70	.72	.75	.77
20.	.18	.39	.50	.58	.63	.66	.69	.71	.73	.76	.78
25.	.22	.42	.53	.60	.64	.68	.70	.72	.74	.77	.79
30.	.27	.45	.55	.62	.66	.69	.72	.74	.75	.78	.79
35.	.31	.48	.58	.64	.68	.71	.73	.75	.76	.78	.80
40.	.36	.52	.60	.66	.69	.72	.74	.76	.77	.79	.81
45.	.40	.55	.63	.68	.71	.74	.76	.77	.78	.80	.82
50.	.45	.58	.65	.70	.73	.75	.77	.78	.79	.81	.82
55.	.49	.61	.68	.72	.75	.77	.78	.79	.80	.82	.83
60.	.54	.64	.70	.74	.76	.78	.80	.81	.82	.83	.84
65.	.58	.68	.73	.76	.78	.80	.81	.82	.83	.84	.85
70.	.63	.71	.75	.78	.80	.81	.82	.83	.84	.85	.85
75.	.67	.74	.78	.80	.81	.83	.83	.84	.85	.86	.86
80.	.72	.77	.80	.82	.83	.84	.85	.85	.86	.86	.87
85.	.76	.80	.83	.84	.85	.86	.86	.86	.87	.87	.88
90.	.81	.84	.85	.86	.87	.87	.87	.88	.88	.88	.88
95.	.86	.87	.88	.88	.88	.89	.89	.89	.89	.89	.89
100.	.90	.90	.90	.90	.90	.90	.90	.90	.90	.90	.90

RUNOFF COEFFICIENTS FOR RI INDEX NO. = 54

IMPERVIOUS PERCENT	INTENSITY - INCHES/HOUR										
	.0	.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	5.0	6.0
0.	.00	.28	.42	.51	.57	.62	.65	.68	.70	.73	.76
5.	.04	.31	.45	.53	.59	.63	.67	.69	.71	.74	.76
10.	.09	.34	.47	.55	.61	.65	.68	.70	.72	.75	.77
15.	.13	.37	.49	.57	.62	.66	.69	.71	.73	.76	.78
20.	.18	.40	.52	.59	.64	.68	.70	.72	.74	.77	.79
25.	.22	.43	.54	.61	.66	.69	.71	.73	.75	.78	.79
30.	.27	.46	.56	.63	.67	.70	.73	.75	.76	.78	.80
35.	.31	.49	.59	.65	.69	.72	.74	.76	.77	.79	.81
40.	.36	.53	.61	.67	.70	.73	.75	.77	.78	.80	.81
45.	.40	.56	.64	.69	.72	.75	.76	.78	.79	.81	.82
50.	.45	.59	.66	.71	.74	.76	.78	.79	.80	.82	.83
55.	.49	.62	.68	.73	.75	.77	.79	.80	.81	.83	.84
60.	.54	.65	.71	.74	.77	.79	.80	.81	.82	.83	.84
65.	.58	.68	.73	.76	.79	.80	.81	.82	.83	.84	.85
70.	.63	.71	.76	.78	.80	.82	.83	.83	.84	.85	.86
75.	.67	.74	.78	.80	.82	.83	.84	.84	.85	.86	.86
80.	.72	.78	.80	.82	.83	.84	.85	.86	.86	.87	.87
85.	.76	.81	.83	.84	.85	.86	.86	.87	.87	.88	.88
90.	.81	.84	.85	.86	.87	.87	.88	.88	.88	.88	.89
95.	.86	.87	.88	.88	.88	.89	.89	.89	.89	.89	.89
100.	.90	.90	.90	.90	.90	.90	.90	.90	.90	.90	.90

RUNOFF COEFFICIENTS FOR RI INDEX NO. = 56

IMPERVIOUS PERCENT	INTENSITY - INCHES/HOUR										
	.0	.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	5.0	6.0
0.	.00	.29	.44	.53	.59	.63	.67	.69	.71	.74	.77
5.	.04	.32	.46	.55	.61	.65	.68	.70	.72	.75	.77
10.	.09	.35	.49	.57	.62	.66	.69	.71	.73	.76	.78
15.	.13	.38	.51	.59	.64	.67	.70	.72	.74	.77	.79
20.	.18	.41	.53	.60	.65	.69	.71	.73	.75	.78	.79
25.	.22	.44	.55	.62	.67	.70	.73	.74	.76	.78	.80
30.	.27	.47	.58	.64	.68	.71	.74	.75	.77	.79	.81
35.	.31	.50	.60	.66	.70	.73	.75	.77	.78	.80	.81
40.	.36	.53	.62	.68	.71	.74	.76	.78	.79	.81	.82
45.	.40	.56	.65	.70	.73	.75	.77	.79	.80	.81	.83
50.	.45	.60	.67	.71	.75	.77	.78	.80	.81	.82	.83
55.	.49	.63	.69	.73	.76	.78	.80	.81	.82	.83	.84
60.	.54	.66	.72	.75	.78	.79	.81	.82	.83	.84	.85
65.	.58	.69	.74	.77	.79	.81	.82	.83	.83	.85	.85
70.	.63	.72	.76	.79	.81	.82	.83	.84	.84	.85	.86
75.	.67	.75	.78	.81	.82	.83	.84	.85	.85	.86	.87
80.	.72	.78	.81	.83	.84	.85	.85	.86	.86	.87	.87
85.	.76	.81	.83	.84	.85	.86	.87	.87	.87	.88	.88
90.	.81	.84	.85	.86	.87	.87	.88	.88	.88	.88	.89
95.	.86	.87	.88	.88	.88	.89	.89	.89	.89	.89	.89
100.	.90	.90	.90	.90	.90	.90	.90	.90	.90	.90	.90

RUNOFF COEFFICIENTS FOR RI INDEX NO. = 58

IMPERVIOUS PERCENT	INTENSITY - INCHES/HOUR										
	.0	.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	5.0	6.0
0.	.00	.31	.46	.55	.61	.65	.68	.71	.73	.75	.78
5.	.04	.34	.48	.57	.62	.66	.69	.72	.73	.76	.78
10.	.09	.37	.50	.58	.64	.67	.70	.72	.74	.77	.79
15.	.13	.40	.52	.60	.65	.69	.71	.73	.75	.78	.79
20.	.18	.43	.55	.62	.67	.70	.72	.74	.76	.78	.80
25.	.22	.46	.57	.64	.68	.71	.74	.75	.77	.79	.81
30.	.27	.48	.59	.65	.69	.72	.75	.76	.78	.80	.81
35.	.31	.51	.61	.67	.71	.74	.76	.77	.79	.81	.82
40.	.36	.54	.63	.69	.72	.75	.77	.78	.79	.81	.83
45.	.40	.57	.66	.71	.74	.76	.78	.79	.80	.82	.83
50.	.45	.60	.68	.72	.75	.77	.79	.80	.81	.83	.84
55.	.49	.63	.70	.74	.77	.79	.80	.81	.82	.83	.84
60.	.54	.66	.72	.76	.78	.80	.81	.82	.83	.84	.85
65.	.58	.69	.75	.78	.80	.81	.82	.83	.84	.85	.86
70.	.63	.72	.77	.79	.81	.82	.83	.84	.85	.86	.86
75.	.67	.75	.79	.81	.83	.84	.85	.85	.86	.86	.87
80.	.72	.78	.81	.83	.84	.85	.86	.86	.86	.87	.88
85.	.76	.81	.83	.85	.86	.86	.87	.87	.87	.88	.88
90.	.81	.84	.86	.86	.87	.87	.88	.88	.88	.89	.89
95.	.86	.87	.88	.88	.89	.89	.89	.89	.89	.89	.89
100.	.90	.90	.90	.90	.90	.90	.90	.90	.90	.90	.90

RUNOFF COEFFICIENT
CURVE DATA

Appendix E

RCFCD Rational Method Analyses Computer Runs
Manual Peak Flow Calculations (Proposed On-Site)

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

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            Riverside County Rational Hydrology Program

CIVILCADD/CIVILDESIGN Engineering Software,(c) 1989 - 2005 Version 7.1
Rational Hydrology Study        Date: 02/12/10  File:1968exist100yr.out
------------------------------------------------------------------------
MAJESTIC MORENO MEDICAL PLAZA AND VILLAGE
EXISTING CONDITIONS
100 YEAR STORM EVENT
------------------------------------------------------------------------
 *********   Hydrology Study Control Information **********

 English (in-lb) Units used in input data file

------------------------------------------------------------------------
Program License Serial Number 6041
------------------------------------------------------------------------
Rational Method Hydrology Program based on
Riverside County Flood Control & Water Conservation District
1978 hydrology manual

Storm event (year) =  100.00 Antecedent Moisture Condition = 2

Standard intensity-duration curves data (Plate D-4.1)
For the [ Sunnymead-Moreno ] area used.
10 year storm 10 minute intensity =  2.010(In/Hr)
10 year storm 60 minute intensity =  0.820(In/Hr)
100 year storm 10 minute intensity =  2.940(In/Hr)
100 year storm 60 minute intensity =  1.200(In/Hr)

Storm event year = 100.0
Calculated rainfall intensity data:
1 hour intensity =  1.200(In/Hr)
Slope of intensity duration curve = 0.5000

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      100.000 to Point/Station      110.000
**** INITIAL AREA EVALUATION ****   EX-1
______________________________________________________________________
Initial area flow distance =   520.000(Ft.)
Top (of initial area) elevation =  1588.000(Ft.)
Bottom (of initial area) elevation =  1577.000(Ft.)
Difference in elevation =    11.000(Ft.)
Slope =    0.02115  s(percent)=       2.12
TC = k(0.710)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   18.732 min.
Rainfall intensity =      2.148(In/Hr) for a   100.0 year storm
UNDEVELOPED (fair cover) subarea
Runoff Coefficient = 0.704
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  69.00
Pervious area fraction =  1.000; Impervious fraction =  0.000
Initial subarea runoff =     14.872(CFS)
Total initial stream area =        9.840(Ac.)
Pervious area fraction = 1.000
```

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

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Process from Point/Station      110.000 to Point/Station      120.000
**** NATURAL CHANNEL TIME + SUBAREA FLOW ADDITION ****      EX-2
______________________________________________________________________
Top of natural channel elevation =   1577.000(Ft.)
End of natural channel elevation =   1550.000(Ft.)
Length of natural channel  =  1400.000(Ft.)
Estimated mean flow rate at midpoint of channel =     46.187(CFS)

Natural valley channel type used
L.A. County flood control district formula for channel velocity:
 Velocity(ft/s) = (7 + 8(q(English Units)^.352)(slope^0.5)
Velocity using mean channel flow =   5.25(Ft/s)

Correction to map slope used on extremely rugged channels with
drops and waterfalls (Plate D-6.2)
      Normal channel slope =  0.0193
Corrected/adjusted channel slope =  0.0193
Travel time =    4.44 min.     TC =   23.17  min.


 Adding area flow to channel
UNDEVELOPED (fair cover) subarea
Runoff Coefficient = 0.687
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  69.00
Pervious area fraction =  1.000; Impervious fraction =  0.000
Rainfall intensity =      1.931(In/Hr) for a   100.0 year storm
Subarea runoff =     54.964(CFS) for     41.440(Ac.)
Total runoff =     69.836(CFS)      Total area =      51.280(Ac.)
End of computations, total study area =           51.28 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.

Area averaged pervious area fraction(Ap) = 1.000
Area averaged RI index number =  69.0
```

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

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            Riverside County Rational Hydrology Program

CIVILCADD/CIVILDESIGN Engineering Software,(c) 1989 - 2005 Version 7.1
Rational Hydrology Study        Date: 02/12/10  File:1968exist10yr.out
------------------------------------------------------------------------
MAJESTIC MORENO MEDICAL PLAZA AND VILLAGE
EXISTING CONDITIONS
10 YEAR STORM EVENT
------------------------------------------------------------------------
 *********   Hydrology Study Control Information **********

 English (in-lb) Units used in input data file

------------------------------------------------------------------------
Program License Serial Number 6041
------------------------------------------------------------------------
Rational Method Hydrology Program based on
Riverside County Flood Control & Water Conservation District
1978 hydrology manual

Storm event (year) =   10.00 Antecedent Moisture Condition = 2

Standard intensity-duration curves data (Plate D-4.1)
For the [ Sunnymead-Moreno ] area used.
10 year storm 10 minute intensity =  2.010(In/Hr)
10 year storm 60 minute intensity =  0.820(In/Hr)
100 year storm 10 minute intensity =  2.940(In/Hr)
100 year storm 60 minute intensity =  1.200(In/Hr)

Storm event year =  10.0
Calculated rainfall intensity data:
1 hour intensity =  0.820(In/Hr)
Slope of intensity duration curve = 0.5000

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      100.000 to Point/Station      110.000
**** INITIAL AREA EVALUATION ****   EX-1
______________________________________________________________________
Initial area flow distance =   520.000(Ft.)
Top (of initial area) elevation =  1588.000(Ft.)
Bottom (of initial area) elevation =  1577.000(Ft.)
Difference in elevation =    11.000(Ft.)
Slope =    0.02115  s(percent)=       2.12
TC = k(0.710)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   18.732 min.
Rainfall intensity =      1.468(In/Hr) for a    10.0 year storm
UNDEVELOPED (fair cover) subarea
Runoff Coefficient = 0.639
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  69.00
Pervious area fraction =  1.000; Impervious fraction =  0.000
Initial subarea runoff =      9.229(CFS)
Total initial stream area =        9.840(Ac.)
Pervious area fraction = 1.000
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Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

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++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station      110.000 to Point/Station      120.000
**** NATURAL CHANNEL TIME + SUBAREA FLOW ADDITION ****      EX-2
______________________________________________________________________
Top of natural channel elevation =   1577.000(Ft.)
End of natural channel elevation =   1550.000(Ft.)
Length of natural channel  =  1400.000(Ft.)
Estimated mean flow rate at midpoint of channel =     28.664(CFS)

Natural valley channel type used
L.A. County flood control district formula for channel velocity:
 Velocity(ft/s) = (7 + 8(q(English Units)^.352)(slope^0.5)
Velocity using mean channel flow =   4.59(Ft/s)

Correction to map slope used on extremely rugged channels with
drops and waterfalls (Plate D-6.2)
      Normal channel slope =  0.0193
Corrected/adjusted channel slope =  0.0193
Travel time =    5.08 min.     TC =   23.81  min.


 Adding area flow to channel
UNDEVELOPED (fair cover) subarea
Runoff Coefficient = 0.616
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  69.00
Pervious area fraction =  1.000; Impervious fraction =  0.000
Rainfall intensity =      1.302(In/Hr) for a    10.0 year storm
Subarea runoff =     33.245(CFS) for     41.440(Ac.)
Total runoff =     42.474(CFS)      Total area =      51.280(Ac.)
End of computations, total study area =           51.28 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.

Area averaged pervious area fraction(Ap) = 1.000
Area averaged RI index number =  69.0
```

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

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            Riverside County Rational Hydrology Program

CIVILCADD/CIVILDESIGN Engineering Software,(c) 1989 - 2005 Version 7.1
Rational Hydrology Study        Date: 02/12/10  File:1968PROFF100YR.out
------------------------------------------------------------------------
MAJESTIC MORENO MEDICAL PLAZA AND VILLAGE
PROPOSED CONDITIONS - OFFSITE
100 YEAR STORM EVENT
------------------------------------------------------------------------
 *********   Hydrology Study Control Information **********

 English (in-lb) Units used in input data file
------------------------------------------------------------------------
Program License Serial Number 6041
------------------------------------------------------------------------
Rational Method Hydrology Program based on
Riverside County Flood Control & Water Conservation District
1978 hydrology manual

Storm event (year) =  100.00 Antecedent Moisture Condition = 2

Standard intensity-duration curves data (Plate D-4.1)
For the [ Sunnymead-Moreno ] area used.
10 year storm 10 minute intensity =  2.010(In/Hr)
10 year storm 60 minute intensity =  0.820(In/Hr)
100 year storm 10 minute intensity =  2.940(In/Hr)
100 year storm 60 minute intensity =  1.200(In/Hr)

Storm event year = 100.0
Calculated rainfall intensity data:
1 hour intensity =  1.200(In/Hr)
Slope of intensity duration curve = 0.5000

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station     1100.000 to Point/Station     1110.000
**** INITIAL AREA EVALUATION ****   DA-A1
______________________________________________________________________
Initial area flow distance =   700.000(Ft.)
Top (of initial area) elevation =  1588.000(Ft.)
Bottom (of initial area) elevation =  1575.000(Ft.)
Difference in elevation =    13.000(Ft.)
Slope =    0.01857  s(percent)=       1.86
TC = k(0.710)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   21.654 min.
Rainfall intensity =      1.998(In/Hr) for a   100.0 year storm
UNDEVELOPED (fair cover) subarea
Runoff Coefficient = 0.692
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  69.00
Pervious area fraction =  1.000; Impervious fraction =  0.000
Initial subarea runoff =     11.811(CFS)
Total initial stream area =        8.540(Ac.)
Pervious area fraction = 1.000
```

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++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station     1110.000 to Point/Station     1125.000
**** NATURAL CHANNEL TIME + SUBAREA FLOW ADDITION ****      DA-A2
______________________________________________________________________
Top of natural channel elevation =   1575.000(Ft.)
End of natural channel elevation =   1557.800(Ft.)
Length of natural channel  =   615.000(Ft.)
Estimated mean flow rate at midpoint of channel =     17.813(CFS)

Natural valley channel type used
L.A. County flood control district formula for channel velocity:
 Velocity(ft/s) = (7 + 8(q(English Units)^.352)(slope^0.5)
Velocity using mean channel flow =   4.86(Ft/s)

Correction to map slope used on extremely rugged channels with
drops and waterfalls (Plate D-6.2)
      Normal channel slope =  0.0280
Corrected/adjusted channel slope =  0.0280
Travel time =    2.11 min.     TC =   23.76  min.


 Adding area flow to channel
UNDEVELOPED (fair cover) subarea
Runoff Coefficient = 0.685
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  69.00
Pervious area fraction =  1.000; Impervious fraction =  0.000
Rainfall intensity =      1.907(In/Hr) for a   100.0 year storm
Subarea runoff =     11.335(CFS) for      8.680(Ac.)
Total runoff =     23.146(CFS)      Total area =      17.220(Ac.)

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station     1110.000 to Point/Station     1125.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________
Along Main Stream number: 1 in normal stream number 1
Stream flow area =     17.220(Ac.)
Runoff from this stream =     23.146(CFS)
Time of concentration =   23.76 min.
Rainfall intensity =     1.907(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station     1120.000 to Point/Station     1125.000
**** INITIAL AREA EVALUATION ****   DA-A3
______________________________________________________________________
Initial area flow distance =   450.000(Ft.)
Top (of initial area) elevation =  1565.300(Ft.)
Bottom (of initial area) elevation =  1557.800(Ft.)
Difference in elevation =     7.500(Ft.)
Slope =    0.01667  s(percent)=       1.67
TC = k(0.300)*[(length^3)/(elevation change)]^0.2
```

```
Initial area time of concentration =    7.835 min.
Rainfall intensity =      3.321(In/Hr) for a   100.0 year storm
COMMERCIAL subarea type
Runoff Coefficient = 0.878
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =      1.517(CFS)
Total initial stream area =        0.520(Ac.)
Pervious area fraction = 0.100

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station     1120.000 to Point/Station     1125.000
**** CONFLUENCE OF MINOR STREAMS ****     Flow to Inlet 1
______________________________________________________________________
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      0.520(Ac.)
Runoff from this stream =      1.517(CFS)
Time of concentration =    7.83 min.
Rainfall intensity =     3.321(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1       23.146     23.76                 1.907
2        1.517      7.83                 3.321
Largest stream flow has longer time of concentration
Qp =     23.146 + sum of
        Qb         Ia/Ib
         1.517 *    0.574 =      0.871
Qp =     24.017

Total of 2 streams to confluence:
Flow rates before confluence point:
      23.146       1.517
Area of streams before confluence:
       17.220        0.520
Results of confluence:
Total flow rate =     24.017(CFS)
Time of concentration =    23.764 min.
Effective stream area after confluence =     17.740(Ac.)

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station     1120.000 to Point/Station     1125.000
**** CONFLUENCE OF MAIN STREAMS ****
______________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area =     17.740(Ac.)
Runoff from this stream =     24.017(CFS)
Time of concentration =   23.76 min.
Rainfall intensity =     1.907(In/Hr)
```

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

```
Program is now starting with Main Stream No. 2

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station     1130.000 to Point/Station     1135.000
**** INITIAL AREA EVALUATION ****   DA-A4 Flow to Catch Basin 1
______________________________________________________________________
Initial area flow distance =   360.000(Ft.)
Top (of initial area) elevation =  1565.900(Ft.)
Bottom (of initial area) elevation =  1557.800(Ft.)
Difference in elevation =     8.100(Ft.)
Slope =    0.02250  s(percent)=       2.25
TC = k(0.300)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    6.748 min.
Rainfall intensity =      3.578(In/Hr) for a   100.0 year storm
COMMERCIAL subarea type
Runoff Coefficient = 0.880
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =      1.227(CFS)
Total initial stream area =        0.390(Ac.)
Pervious area fraction = 0.100

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station     1130.000 to Point/Station     1135.000
**** CONFLUENCE OF MAIN STREAMS ****      Total Flow Drainage Area 'A'
______________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 2
Stream flow area =      0.390(Ac.)
Runoff from this stream =      1.227(CFS)
Time of concentration =    6.75 min.
Rainfall intensity =     3.578(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)

1       24.017     23.76               1.907
2        1.227      6.75               3.578
Largest stream flow has longer time of concentration
Qp =     24.017 + sum of
        Qb         Ia/Ib
         1.227 *    0.533 =      0.654
Qp =     24.671

Total of 2 main streams to confluence:
Flow rates before confluence point:
      24.017       1.227
Area of streams before confluence:
       17.740        0.390
```

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

```
Results of confluence:
Total flow rate =     24.671(CFS)
Time of concentration =    23.764 min.
Effective stream area after confluence  =     18.130(Ac.)

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station     2100.000 to Point/Station     2110.000
**** INITIAL AREA EVALUATION ****   DA-B1
______________________________________________________________________
Initial area flow distance =   510.000(Ft.)
Top (of initial area) elevation =  1588.000(Ft.)
Bottom (of initial area) elevation =  1576.000(Ft.)
Difference in elevation =    12.000(Ft.)
Slope =    0.02353  s(percent)=       2.35
TC = k(0.710)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   18.196 min.
Rainfall intensity =      2.179(In/Hr) for a   100.0 year storm
UNDEVELOPED (fair cover) subarea
Runoff Coefficient = 0.706
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  69.00
Pervious area fraction =  1.000; Impervious fraction =  0.000
Initial subarea runoff =      3.400(CFS)
Total initial stream area =        2.210(Ac.)
Pervious area fraction = 1.000

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station     2110.000 to Point/Station     2125.000
**** NATURAL CHANNEL TIME + SUBAREA FLOW ADDITION ****      DA-B2
______________________________________________________________________
Top of natural channel elevation =   1576.000(Ft.)
End of natural channel elevation =   1557.800(Ft.)
Length of natural channel  =   610.000(Ft.)
Estimated mean flow rate at midpoint of channel =      6.092(CFS)

Natural valley channel type used
L.A. County flood control district formula for channel velocity:
 Velocity(ft/s) = (7 + 8(q(English Units)^.352)(slope^0.5)
Velocity using mean channel flow =   3.82(Ft/s)

Correction to map slope used on extremely rugged channels with
drops and waterfalls (Plate D-6.2)
      Normal channel slope =  0.0298
Corrected/adjusted channel slope =  0.0298
Travel time =    2.66 min.     TC =   20.86  min.


 Adding area flow to channel
UNDEVELOPED (fair cover) subarea
Runoff Coefficient = 0.695
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
```

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

```
RI index for soil(AMC 2)  =  69.00
Pervious area fraction =  1.000; Impervious fraction =  0.000
Rainfall intensity =      2.035(In/Hr) for a   100.0 year storm
Subarea runoff =      4.953(CFS) for      3.500(Ac.)
Total runoff =      8.353(CFS)      Total area =       5.710(Ac.)

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station     2110.000 to Point/Station     2125.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________
Along Main Stream number: 1 in normal stream number 1
Stream flow area =      5.710(Ac.)
Runoff from this stream =      8.353(CFS)
Time of concentration =   20.86 min.
Rainfall intensity =     2.035(In/Hr)

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station     2120.000 to Point/Station     2125.000
**** INITIAL AREA EVALUATION ****   DA-B3
______________________________________________________________________
Initial area flow distance =   150.000(Ft.)
Top (of initial area) elevation =  1558.800(Ft.)
Bottom (of initial area) elevation =  1557.800(Ft.)
Difference in elevation =     1.000(Ft.)
Slope =    0.00667  s(percent)=       0.67
TC = k(0.300)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    6.064 min.
Rainfall intensity =      3.775(In/Hr) for a   100.0 year storm
COMMERCIAL subarea type
Runoff Coefficient = 0.880
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =      0.764(CFS)
Total initial stream area =        0.230(Ac.)
Pervious area fraction = 0.100

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station     2120.000 to Point/Station     2125.000
**** CONFLUENCE OF MINOR STREAMS ****     Total Flow to Inlet 2
______________________________________________________________________
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      0.230(Ac.)
Runoff from this stream =      0.764(CFS)
Time of concentration =    6.06 min.
Rainfall intensity =     3.775(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1        8.353     20.86                 2.035
2        0.764      6.06                 3.775
```

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

```
Largest stream flow has longer time of concentration
Qp =      8.353 + sum of
        Qb         Ia/Ib
         0.764 *    0.539 =      0.412
Qp =      8.765

Total of 2 streams to confluence:
Flow rates before confluence point:
       8.353       0.764
Area of streams before confluence:
        5.710        0.230
Results of confluence:
Total flow rate =      8.765(CFS)
Time of concentration =    20.857 min.
Effective stream area after confluence =      5.940(Ac.)

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station     2120.000 to Point/Station     2125.000
**** CONFLUENCE OF MAIN STREAMS ****
______________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area =      5.940(Ac.)
Runoff from this stream =      8.765(CFS)
Time of concentration =   20.86 min.
Rainfall intensity =     2.035(In/Hr)
Program is now starting with Main Stream No. 2

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Process from Point/Station     2120.000 to Point/Station     2130.000
**** INITIAL AREA EVALUATION ****   DA-B4 Flow to Catch Basin 2
______________________________________________________________________
Initial area flow distance =   150.000(Ft.)
Top (of initial area) elevation =  1558.800(Ft.)
Bottom (of initial area) elevation =  1557.800(Ft.)
Difference in elevation =     1.000(Ft.)
Slope =    0.00667  s(percent)=       0.67
TC = k(0.300)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    6.064 min.
Rainfall intensity =      3.775(In/Hr) for a   100.0 year storm
COMMERCIAL subarea type
Runoff Coefficient = 0.880
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =      0.631(CFS)
Total initial stream area =        0.190(Ac.)
Pervious area fraction = 0.100

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station     2120.000 to Point/Station     2130.000
**** CONFLUENCE OF MAIN STREAMS ****      Total Flow Drainage Area 'B'
______________________________________________________________________
The following data inside Main Stream is listed:
```

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

```
In Main Stream number: 2
Stream flow area =      0.190(Ac.)
Runoff from this stream =      0.631(CFS)
Time of concentration =    6.06 min.
Rainfall intensity =     3.775(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1        8.765     20.86               2.035
2        0.631      6.06               3.775
Largest stream flow has longer time of concentration
Qp =      8.765 + sum of
        Qb         Ia/Ib
         0.631 *    0.539 =      0.340
Qp =      9.106

Total of 2 main streams to confluence:
Flow rates before confluence point:
       8.765       0.631
Area of streams before confluence:
        5.940        0.190


Results of confluence:
Total flow rate =      9.106(CFS)
Time of concentration =    20.857 min.
Effective stream area after confluence  =      6.130(Ac.)

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station     3100.000 to Point/Station     3115.000
**** INITIAL AREA EVALUATION ****   DA-C1
______________________________________________________________________
Initial area flow distance =   875.000(Ft.)
Top (of initial area) elevation =  1585.500(Ft.)
Bottom (of initial area) elevation =  1557.800(Ft.)
Difference in elevation =    27.700(Ft.)
Slope =    0.03166  s(percent)=       3.17
TC = k(0.710)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   21.280 min.
Rainfall intensity =      2.015(In/Hr) for a   100.0 year storm
UNDEVELOPED (fair cover) subarea
Runoff Coefficient = 0.694
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  69.00
Pervious area fraction =  1.000; Impervious fraction =  0.000
Initial subarea runoff =     10.624(CFS)
Total initial stream area =        7.600(Ac.)
Pervious area fraction = 1.000


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Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

```
Process from Point/Station     3100.000 to Point/Station     3115.000
**** CONFLUENCE OF MINOR STREAMS ****
____________________________________________________________________
Along Main Stream number: 1 in normal stream number 1
Stream flow area =      7.600(Ac.)
Runoff from this stream =     10.624(CFS)
Time of concentration =   21.28 min.
Rainfall intensity =     2.015(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station     3110.000 to Point/Station     3115.000
**** INITIAL AREA EVALUATION ****   DA-C2
____________________________________________________________________
Initial area flow distance =   325.000(Ft.)
Top (of initial area) elevation =  1561.500(Ft.)
Bottom (of initial area) elevation =  1557.800(Ft.)
Difference in elevation =     3.700(Ft.)
Slope =    0.01138  s(percent)=       1.14
TC = k(0.300)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    7.424 min.
Rainfall intensity =      3.412(In/Hr) for a   100.0 year storm
COMMERCIAL subarea type
Runoff Coefficient = 0.879
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =      1.169(CFS)
Total initial stream area =        0.390(Ac.)
Pervious area fraction = 0.100

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station     3110.000 to Point/Station     3115.000
**** CONFLUENCE OF MINOR STREAMS ****     Total Flow to Inlet 3
____________________________________________________________________
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      0.390(Ac.)
Runoff from this stream =      1.169(CFS)
Time of concentration =    7.42 min.
Rainfall intensity =     3.412(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1       10.624     21.28                 2.015
2        1.169      7.42                 3.412
Largest stream flow has longer time of concentration
Qp =     10.624 + sum of
        Qb         Ia/Ib
         1.169 *    0.591 =      0.691
Qp =     11.315
```

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

```
Total of 2 streams to confluence:
Flow rates before confluence point:
      10.624       1.169
Area of streams before confluence:
        7.600        0.390
Results of confluence:
Total flow rate =     11.315(CFS)
Time of concentration =    21.280 min.
Effective stream area after confluence =      7.990(Ac.)

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station     3110.000 to Point/Station     3115.000
**** CONFLUENCE OF MAIN STREAMS ****
______________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area =      7.990(Ac.)
Runoff from this stream =     11.315(CFS)
Time of concentration =   21.28 min.
Rainfall intensity =     2.015(In/Hr)
Program is now starting with Main Stream No. 2


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station     3110.000 to Point/Station     3120.000
**** INITIAL AREA EVALUATION ****   DA-C3 Total Flow to Catch Basin 3
______________________________________________________________________
Initial area flow distance =   325.000(Ft.)
Top (of initial area) elevation =  1561.500(Ft.)
Bottom (of initial area) elevation =  1557.800(Ft.)
Difference in elevation =     3.700(Ft.)
Slope =    0.01138  s(percent)=       1.14
TC = k(0.300)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    7.424 min.
Rainfall intensity =      3.412(In/Hr) for a   100.0 year storm
COMMERCIAL subarea type
Runoff Coefficient = 0.879
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =      0.959(CFS)
Total initial stream area =        0.320(Ac.)
Pervious area fraction = 0.100

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station     3110.000 to Point/Station     3120.000
**** CONFLUENCE OF MAIN STREAMS ****      Total Flow Drainage Area 'C'
______________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 2
Stream flow area =      0.320(Ac.)
Runoff from this stream =      0.959(CFS)
Time of concentration =    7.42 min.
Rainfall intensity =     3.412(In/Hr)
```

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Summary of stream data:

Stream No.	Flow rate (CFS)	TC (min)	Rainfall Intensity (In/Hr)
1	11.315	21.28	2.015
2	0.959	7.42	3.412

Largest stream flow has longer time of concentration
Qp = 11.315 + sum of
Qb Ia/Ib
0.959 * 0.591 = 0.567
Qp = 11.881

Total of 2 main streams to confluence:
Flow rates before confluence point:
11.315 0.959
Area of streams before confluence:
7.990 0.320

Results of confluence:
Total flow rate = 11.881(CFS)
Time of concentration = 21.280 min.
Effective stream area after confluence = 8.310(Ac.)
End of computations, total study area = 32.57 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.

Area averaged pervious area fraction(Ap) = 0.944
Area averaged RI index number = 68.2

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

```
            Riverside County Rational Hydrology Program

CIVILCADD/CIVILDESIGN Engineering Software,(c) 1989 - 2005 Version 7.1
Rational Hydrology Study        Date: 02/12/10  File:1968PROFF10YR.out
------------------------------------------------------------------------
MAJESTIC MORENO MEDICAL PLAZA AND VILLAGE
PROPOSED CONDITIONS - OFFSITE
10 YEAR STORM EVENT
------------------------------------------------------------------------
 *********   Hydrology Study Control Information **********

 English (in-lb) Units used in input data file

------------------------------------------------------------------------
Program License Serial Number 6041
------------------------------------------------------------------------
Rational Method Hydrology Program based on
Riverside County Flood Control & Water Conservation District
1978 hydrology manual

Storm event (year) =   10.00 Antecedent Moisture Condition = 2

Standard intensity-duration curves data (Plate D-4.1)
For the [ Sunnymead-Moreno ] area used.
10 year storm 10 minute intensity =  2.010(In/Hr)
10 year storm 60 minute intensity =  0.820(In/Hr)
100 year storm 10 minute intensity =  2.940(In/Hr)
100 year storm 60 minute intensity =  1.200(In/Hr)

Storm event year =  10.0
Calculated rainfall intensity data:
1 hour intensity =  0.820(In/Hr)
Slope of intensity duration curve = 0.5000

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station     1100.000 to Point/Station     1110.000
**** INITIAL AREA EVALUATION ****   DA-A1
______________________________________________________________________
Initial area flow distance =   700.000(Ft.)
Top (of initial area) elevation =  1588.000(Ft.)
Bottom (of initial area) elevation =  1575.000(Ft.)
Difference in elevation =    13.000(Ft.)
Slope =    0.01857  s(percent)=       1.86
TC = k(0.710)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   21.654 min.
Rainfall intensity =      1.365(In/Hr) for a    10.0 year storm
UNDEVELOPED (fair cover) subarea
Runoff Coefficient = 0.625
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  69.00
Pervious area fraction =  1.000; Impervious fraction =  0.000
Initial subarea runoff =      7.291(CFS)
Total initial stream area =        8.540(Ac.)
Pervious area fraction = 1.000
```

```
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station     1110.000 to Point/Station     1125.000
**** NATURAL CHANNEL TIME + SUBAREA FLOW ADDITION ****      DA-A2
______________________________________________________________________
Top of natural channel elevation =   1575.000(Ft.)
End of natural channel elevation =   1557.800(Ft.)
Length of natural channel  =   615.000(Ft.)
Estimated mean flow rate at midpoint of channel =     10.997(CFS)

Natural valley channel type used
L.A. County flood control district formula for channel velocity:
 Velocity(ft/s) = (7 + 8(q(English Units)^.352)(slope^0.5)
Velocity using mean channel flow =   4.28(Ft/s)

Correction to map slope used on extremely rugged channels with
drops and waterfalls (Plate D-6.2)
      Normal channel slope =  0.0280
Corrected/adjusted channel slope =  0.0280
Travel time =    2.39 min.     TC =   24.05  min.


 Adding area flow to channel
UNDEVELOPED (fair cover) subarea
Runoff Coefficient = 0.615
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  69.00
Pervious area fraction =  1.000; Impervious fraction =  0.000
Rainfall intensity =      1.295(In/Hr) for a    10.0 year storm
Subarea runoff =      6.919(CFS) for      8.680(Ac.)
Total runoff =     14.210(CFS)      Total area =      17.220(Ac.)

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station     1110.000 to Point/Station     1125.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________
Along Main Stream number: 1 in normal stream number 1
Stream flow area =     17.220(Ac.)
Runoff from this stream =     14.210(CFS)
Time of concentration =   24.05 min.
Rainfall intensity =     1.295(In/Hr)


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station     1120.000 to Point/Station     1125.000
**** INITIAL AREA EVALUATION ****   DA-A3
______________________________________________________________________
Initial area flow distance =   450.000(Ft.)
Top (of initial area) elevation =  1565.300(Ft.)
Bottom (of initial area) elevation =  1557.800(Ft.)
Difference in elevation =     7.500(Ft.)
Slope =    0.01667  s(percent)=       1.67
TC = k(0.300)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    7.835 min.
Rainfall intensity =      2.269(In/Hr) for a    10.0 year storm
```

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

```
COMMERCIAL subarea type
Runoff Coefficient = 0.872
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =      1.028(CFS)
Total initial stream area =        0.520(Ac.)
Pervious area fraction = 0.100

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station     1120.000 to Point/Station     1125.000
**** CONFLUENCE OF MINOR STREAMS ****     Total Flow to Inlet 1
______________________________________________________________________
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      0.520(Ac.)
Runoff from this stream =      1.028(CFS)
Time of concentration =    7.83 min.
Rainfall intensity =     2.269(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1       14.210     24.05                 1.295
2        1.028      7.83                 2.269
Largest stream flow has longer time of concentration
Qp =     14.210 + sum of
        Qb         Ia/Ib
         1.028 *    0.571 =      0.587
Qp =     14.797

Total of 2 streams to confluence:
Flow rates before confluence point:
      14.210       1.028
Area of streams before confluence:
       17.220        0.520
Results of confluence:
Total flow rate =     14.797(CFS)
Time of concentration =    24.047 min.
Effective stream area after confluence =     17.740(Ac.)

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station     1120.000 to Point/Station     1125.000
**** CONFLUENCE OF MAIN STREAMS ****
______________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area =     17.740(Ac.)
Runoff from this stream =     14.797(CFS)
Time of concentration =   24.05 min.
Rainfall intensity =     1.295(In/Hr)
Program is now starting with Main Stream No. 2
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
```

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

```
Process from Point/Station     1130.000 to Point/Station     1135.000
**** INITIAL AREA EVALUATION ****   DA-A4 Flow to Catch Basin 1
____________________________________________________________________
Initial area flow distance =   360.000(Ft.)
Top (of initial area) elevation =  1565.900(Ft.)
Bottom (of initial area) elevation =  1557.800(Ft.)
Difference in elevation =     8.100(Ft.)
Slope =    0.02250  s(percent)=       2.25
TC = k(0.300)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    6.748 min.
Rainfall intensity =      2.445(In/Hr) for a    10.0 year storm
COMMERCIAL subarea type
Runoff Coefficient = 0.873
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =      0.832(CFS)
Total initial stream area =        0.390(Ac.)
Pervious area fraction = 0.100

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station     1130.000 to Point/Station     1135.000
**** CONFLUENCE OF MAIN STREAMS ****      Total Flow Drainage Area 'A'
____________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 2
Stream flow area =      0.390(Ac.)
Runoff from this stream =      0.832(CFS)
Time of concentration =    6.75 min.
Rainfall intensity =     2.445(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1       14.797     24.05               1.295
2        0.832      6.75               2.445
Largest stream flow has longer time of concentration
Qp =     14.797 + sum of
        Qb         Ia/Ib
         0.832 *    0.530 =      0.441
Qp =     15.238

Total of 2 main streams to confluence:
Flow rates before confluence point:
      14.797       0.832
Area of streams before confluence:
       17.740        0.390


Results of confluence:
Total flow rate =     15.238(CFS)
Time of concentration =    24.047 min.
```

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

```
Effective stream area after confluence  =     18.130(Ac.)

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station     2100.000 to Point/Station     2110.000
**** INITIAL AREA EVALUATION ****   DA-B1
______________________________________________________________________
Initial area flow distance =   510.000(Ft.)
Top (of initial area) elevation =  1588.000(Ft.)
Bottom (of initial area) elevation =  1576.000(Ft.)
Difference in elevation =    12.000(Ft.)
Slope =    0.02353  s(percent)=       2.35
TC = k(0.710)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   18.196 min.
Rainfall intensity =      1.489(In/Hr) for a    10.0 year storm
UNDEVELOPED (fair cover) subarea
Runoff Coefficient = 0.642
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  69.00
Pervious area fraction =  1.000; Impervious fraction =  0.000
Initial subarea runoff =      2.112(CFS)
Total initial stream area =        2.210(Ac.)
Pervious area fraction = 1.000

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station     2110.000 to Point/Station     2125.000
**** NATURAL CHANNEL TIME + SUBAREA FLOW ADDITION ****      DA-B2
______________________________________________________________________
Top of natural channel elevation =   1576.000(Ft.)
End of natural channel elevation =   1557.800(Ft.)
Length of natural channel  =   610.000(Ft.)
Estimated mean flow rate at midpoint of channel =      3.784(CFS)

Natural valley channel type used
L.A. County flood control district formula for channel velocity:
 Velocity(ft/s) = (7 + 8(q(English Units)^.352)(slope^0.5)
Velocity using mean channel flow =   3.42(Ft/s)

Correction to map slope used on extremely rugged channels with
drops and waterfalls (Plate D-6.2)
      Normal channel slope =  0.0298
Corrected/adjusted channel slope =  0.0298
Travel time =    2.98 min.     TC =   21.17  min.


 Adding area flow to channel
UNDEVELOPED (fair cover) subarea
Runoff Coefficient = 0.628
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  69.00
Pervious area fraction =  1.000; Impervious fraction =  0.000
Rainfall intensity =      1.380(In/Hr) for a    10.0 year storm
```

```
Subarea runoff =      3.032(CFS) for      3.500(Ac.)
Total runoff =      5.145(CFS)      Total area =       5.710(Ac.)

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station     2110.000 to Point/Station     2125.000
**** CONFLUENCE OF MINOR STREAMS ****
______________________________________________________________________
Along Main Stream number: 1 in normal stream number 1
Stream flow area =      5.710(Ac.)
Runoff from this stream =      5.145(CFS)
Time of concentration =   21.17 min.
Rainfall intensity =     1.380(In/Hr)

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station     2120.000 to Point/Station     2125.000
**** INITIAL AREA EVALUATION ****   DA-B3
______________________________________________________________________
Initial area flow distance =   150.000(Ft.)
Top (of initial area) elevation =  1558.800(Ft.)
Bottom (of initial area) elevation =  1557.800(Ft.)
Difference in elevation =     1.000(Ft.)
Slope =    0.00667  s(percent)=       0.67
TC = k(0.300)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    6.064 min.
Rainfall intensity =      2.579(In/Hr) for a    10.0 year storm
COMMERCIAL subarea type
Runoff Coefficient = 0.874
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =      0.518(CFS)
Total initial stream area =        0.230(Ac.)
Pervious area fraction = 0.100

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station     2120.000 to Point/Station     2125.000
**** CONFLUENCE OF MINOR STREAMS ****     Total Flow to Inlet 2
______________________________________________________________________
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      0.230(Ac.)
Runoff from this stream =      0.518(CFS)
Time of concentration =    6.06 min.
Rainfall intensity =     2.579(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1        5.145     21.17                 1.380
2        0.518      6.06                 2.579
Largest stream flow has longer time of concentration
Qp =      5.145 + sum of
        Qb         Ia/Ib
```

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

```
         0.518 *    0.535 =      0.277
Qp =      5.422

Total of 2 streams to confluence:
Flow rates before confluence point:
       5.145       0.518
Area of streams before confluence:
        5.710        0.230
Results of confluence:
Total flow rate =      5.422(CFS)
Time of concentration =    21.171 min.
Effective stream area after confluence =      5.940(Ac.)

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station     2120.000 to Point/Station     2125.000
**** CONFLUENCE OF MAIN STREAMS ****
______________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area =      5.940(Ac.)
Runoff from this stream =      5.422(CFS)
Time of concentration =   21.17 min.
Rainfall intensity =     1.380(In/Hr)
Program is now starting with Main Stream No. 2


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station     2120.000 to Point/Station     2130.000
**** INITIAL AREA EVALUATION ****   DA-B4 Flow to Catch Basin 2
______________________________________________________________________
Initial area flow distance =   150.000(Ft.)
Top (of initial area) elevation =  1558.800(Ft.)
Bottom (of initial area) elevation =  1557.800(Ft.)
Difference in elevation =     1.000(Ft.)
Slope =    0.00667  s(percent)=       0.67
TC = k(0.300)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    6.064 min.
Rainfall intensity =      2.579(In/Hr) for a    10.0 year storm
COMMERCIAL subarea type
Runoff Coefficient = 0.874
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =      0.428(CFS)
Total initial stream area =        0.190(Ac.)
Pervious area fraction = 0.100

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station     2120.000 to Point/Station     2130.000
**** CONFLUENCE OF MAIN STREAMS ****      Total Flow Drainage Area 'B'
______________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 2
Stream flow area =      0.190(Ac.)
```

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

```
Runoff from this stream =      0.428(CFS)
Time of concentration =    6.06 min.
Rainfall intensity =     2.579(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1        5.422     21.17               1.380
2        0.428      6.06               2.579
Largest stream flow has longer time of concentration
Qp =      5.422 + sum of
        Qb         Ia/Ib
         0.428 *    0.535 =      0.229
Qp =      5.651

Total of 2 main streams to confluence:
Flow rates before confluence point:
       5.422       0.428
Area of streams before confluence:
        5.940        0.190


Results of confluence:
Total flow rate =      5.651(CFS)
Time of concentration =    21.171 min.
Effective stream area after confluence  =      6.130(Ac.)

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station     3100.000 to Point/Station     3115.000
**** INITIAL AREA EVALUATION ****   DA-C1
______________________________________________________________________
Initial area flow distance =   875.000(Ft.)
Top (of initial area) elevation =  1585.500(Ft.)
Bottom (of initial area) elevation =  1557.800(Ft.)
Difference in elevation =    27.700(Ft.)
Slope =    0.03166  s(percent)=       3.17
TC = k(0.710)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =   21.280 min.
Rainfall intensity =      1.377(In/Hr) for a    10.0 year storm
UNDEVELOPED (fair cover) subarea
Runoff Coefficient = 0.627
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  69.00
Pervious area fraction =  1.000; Impervious fraction =  0.000
Initial subarea runoff =      6.563(CFS)
Total initial stream area =        7.600(Ac.)
Pervious area fraction = 1.000


++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station     3100.000 to Point/Station     3115.000
**** CONFLUENCE OF MINOR STREAMS ****
```

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

```
____________________________________________________________________
Along Main Stream number: 1 in normal stream number 1
Stream flow area =      7.600(Ac.)
Runoff from this stream =      6.563(CFS)
Time of concentration =   21.28 min.
Rainfall intensity =     1.377(In/Hr)

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station     3110.000 to Point/Station     3115.000
**** INITIAL AREA EVALUATION ****   DA-C2
____________________________________________________________________
Initial area flow distance =   325.000(Ft.)
Top (of initial area) elevation =  1561.500(Ft.)
Bottom (of initial area) elevation =  1557.800(Ft.)
Difference in elevation =     3.700(Ft.)
Slope =    0.01138  s(percent)=       1.14
TC = k(0.300)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    7.424 min.
Rainfall intensity =      2.331(In/Hr) for a    10.0 year storm
COMMERCIAL subarea type
Runoff Coefficient = 0.872
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =      0.793(CFS)
Total initial stream area =        0.390(Ac.)
Pervious area fraction = 0.100

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station     3110.000 to Point/Station     3115.000
**** CONFLUENCE OF MINOR STREAMS ****     Flow to Inlet 3
____________________________________________________________________
Along Main Stream number: 1 in normal stream number 2
Stream flow area =      0.390(Ac.)
Runoff from this stream =      0.793(CFS)
Time of concentration =    7.42 min.
Rainfall intensity =     2.331(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)


1        6.563     21.28                 1.377
2        0.793      7.42                 2.331
Largest stream flow has longer time of concentration
Qp =      6.563 + sum of
        Qb         Ia/Ib
         0.793 *    0.591 =      0.468
Qp =      7.031

Total of 2 streams to confluence:
Flow rates before confluence point:
       6.563       0.793
```

```
Area of streams before confluence:
        7.600        0.390
Results of confluence:
Total flow rate =      7.031(CFS)
Time of concentration =    21.280 min.
Effective stream area after confluence =      7.990(Ac.)

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station     3110.000 to Point/Station     3115.000
**** CONFLUENCE OF MAIN STREAMS ****
______________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area =      7.990(Ac.)
Runoff from this stream =      7.031(CFS)
Time of concentration =   21.28 min.
Rainfall intensity =     1.377(In/Hr)
Program is now starting with Main Stream No. 2

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station     3110.000 to Point/Station     3120.000
**** INITIAL AREA EVALUATION ****   DA-C3 Flow to Catch Basin 3
______________________________________________________________________
Initial area flow distance =   325.000(Ft.)
Top (of initial area) elevation =  1561.500(Ft.)
Bottom (of initial area) elevation =  1557.800(Ft.)
Difference in elevation =     3.700(Ft.)
Slope =    0.01138  s(percent)=       1.14
TC = k(0.300)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration =    7.424 min.
Rainfall intensity =      2.331(In/Hr) for a    10.0 year storm
COMMERCIAL subarea type
Runoff Coefficient = 0.872
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 1.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
RI index for soil(AMC 2)  =  56.00
Pervious area fraction =  0.100; Impervious fraction =  0.900
Initial subarea runoff =      0.651(CFS)
Total initial stream area =        0.320(Ac.)
Pervious area fraction = 0.100

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
Process from Point/Station     3110.000 to Point/Station     3120.000
**** CONFLUENCE OF MAIN STREAMS ****      Total Flow Drainage Area 'C'
______________________________________________________________________
The following data inside Main Stream is listed:
In Main Stream number: 2
Stream flow area =      0.320(Ac.)
Runoff from this stream =      0.651(CFS)
Time of concentration =    7.42 min.
Rainfall intensity =     2.331(In/Hr)
Summary of stream data:

Stream   Flow rate      TC            Rainfall Intensity
 No.       (CFS)       (min)                 (In/Hr)
```

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

```
1        7.031     21.28                1.377
2        0.651      7.42                2.331
Largest stream flow has longer time of concentration
Qp =      7.031 + sum of
        Qb         Ia/Ib
         0.651 *    0.591 =      0.384
Qp =      7.415

Total of 2 main streams to confluence:
Flow rates before confluence point:
       7.031       0.651
Area of streams before confluence:
        7.990        0.320


Results of confluence:
Total flow rate =      7.415(CFS)
Time of concentration =    21.280 min.
Effective stream area after confluence  =      8.310(Ac.)
End of computations, total study area =          32.57 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.

Area averaged pervious area fraction(Ap) = 0.944
Area averaged RI index number =  68.2
```

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

MAJESTIC MORENO MEDICAL PLAZA AND VILLAGE

PROPOSED CONDITIONS (ON-SITE) LAND USE

MSA Job Number 1968

Drainage Subarea	Area			Percent Impervious
	Impervious (acres)	Pervious (acres)	Total (acres)	
A	0.56	0.39	0.95	59%
B	0.32	0.03	0.35	91%
C	0.37	0.13	0.50	74%
D	1.86	0.20	2.06	90%
E	0.23	0.10	0.33	70%
F	0.31	0.14	0.45	69%
G	0.83	0.23	1.06	78%
H	0.26	0.10	0.36	72%
I	0.22	0.21	0.43	51%
J	0.50	0.39	0.89	56%
K	0.26	0.16	0.42	62%
L	0.27	0.10	0.37	73%
M	0.94	0.36	1.30	72%
N	0.20	0.06	0.26	77%
O	0.84	0.48	1.32	64%
P	0.63	0.15	0.78	81%
Q	0.55	0.10	0.65	85%
R	0.26	0.08	0.34	76%
S	0.18	0.04	0.22	82%
T	0.26	0.04	0.30	87%
U	0.70	0.07	0.77	91%
V	2.61	0.36	2.97	88%
W	0.13	0.05	0.18	72%
X	0.47	0.42	0.89	53%
Y	0.20	0.00	0.20	100%
Totals	13.96	4.39	18.35	76%

Buildings	**4.32 ac**
Pavement/Hardscape	**9.64 ac**
Landscape	**4.39 ac**
Total Area	**18.35 ac**

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

MAJESTIC MORENO MEDICAL PLAZA AND VILLAGE

PROPOSED CONDITIONS (ON-SITE) RATIONAL METHOD

100 Year Storm Event

MSA Job Number 1968

Intensity (100 Yr) 4.16 in/hr Plate D-4.1(6)

Runoff Index 56 Plate D-5.5(1)

Drainage Subarea	Area (acres)	PERCENT IMPERVIOUS	C Plate D-5.7	Q_{100} (cfs)
A	0.95	59%	0.83	3.31
B	0.35	91%	0.88	1.29
C	0.50	74%	0.85	1.78
D	2.06	90%	0.88	7.60
E	0.33	70%	0.84	1.16
F	0.45	69%	0.84	1.59
G	1.06	78%	0.86	3.84
H	0.36	72%	0.85	1.28
I	0.43	51%	0.82	1.48
J	0.89	56%	0.83	3.10
K	0.42	62%	0.83	1.46
L	0.37	73%	0.85	1.32
M	1.30	72%	0.85	4.63
N	0.26	77%	0.86	0.94
O	1.32	64%	0.83	4.59
P	0.78	81%	0.87	2.85
Q	0.65	85%	0.87	2.37
R	0.34	76%	0.86	1.23
S	0.22	82%	0.87	0.80
T	0.30	87%	0.88	1.11
U	0.77	91%	0.89	2.87
V	2.97	88%	0.88	10.96
W	0.18	72%	0.85	0.64
X	0.89	53%	0.82	3.06
Y	0.20	100%	0.90	0.75
Totals	18.35			65.26

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

MAJESTIC MORENO MEDICAL PLAZA AND VILLAGE

PROPOSED CONDITIONS (ON-SITE) RATIONAL METHOD

10 Year Storm Event

MSA Job Number 1968

Intensity (10 Yr) 2.84 in/hr Plate D-4.1(6)

Runoff Index 56 Plate D-5.5(1)

Drainage Subarea	Area (acres)	IMPERVIOUS PERCENT	C Plate D-5.7	Q_{10} (cfs)
A	0.95	59%	0.81	2.20
B	0.35	91%	0.88	0.88
C	0.50	74%	0.85	1.22
D	2.06	90%	0.88	5.19
E	0.33	70%	0.83	0.78
F	0.45	69%	0.83	1.07
G	1.06	78%	0.85	2.58
H	0.36	72%	0.84	0.87
I	0.43	51%	0.78	0.96
J	0.89	56%	0.80	2.04
K	0.42	62%	0.82	0.99
L	0.37	73%	0.84	0.89
M	1.30	72%	0.84	3.13
N	0.26	77%	0.85	0.63
O	1.32	64%	0.82	3.10
P	0.78	81%	0.86	1.92
Q	0.65	85%	0.87	1.62
R	0.34	76%	0.85	0.83
S	0.22	82%	0.87	0.55
T	0.30	87%	0.88	0.76
U	0.77	91%	0.88	1.94
V	2.97	88%	0.88	7.48
W	0.18	72%	0.84	0.43
X	0.89	53%	0.80	2.04
Y	0.20	100%	0.90	0.52
Totals	18.35			44.08

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Appendix F

Santa Ana Watershed Water Quality Management Plan Exhibit C – Volume Based Calculations

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

MAJESTIC MORENO MEDICAL PLAZA AND VILLAGE
DESIGN STORAGE VOLUME SUMMARY
Required Volumes Obtained from Santa Ana Watershed worksheets

Drainage Sub-Areas Tributary to Underground Storage

Drainage Sub-Area	Area (acres)	Volume Required (cu-ft)
C	0.50	1,245
E	0.33	397
G	1.06	1,486
M	1.30	1,336
O	1.32	1,416
P	0.78	1,160
Q	0.65	1,046
R	0.34	459
S	0.22	334
T	0.30	502
U	0.77	1,396
W	0.18	225
TOTAL	**7.75**	**11,002**

Drainage Sub-Areas Tributary to Pervious Pavement

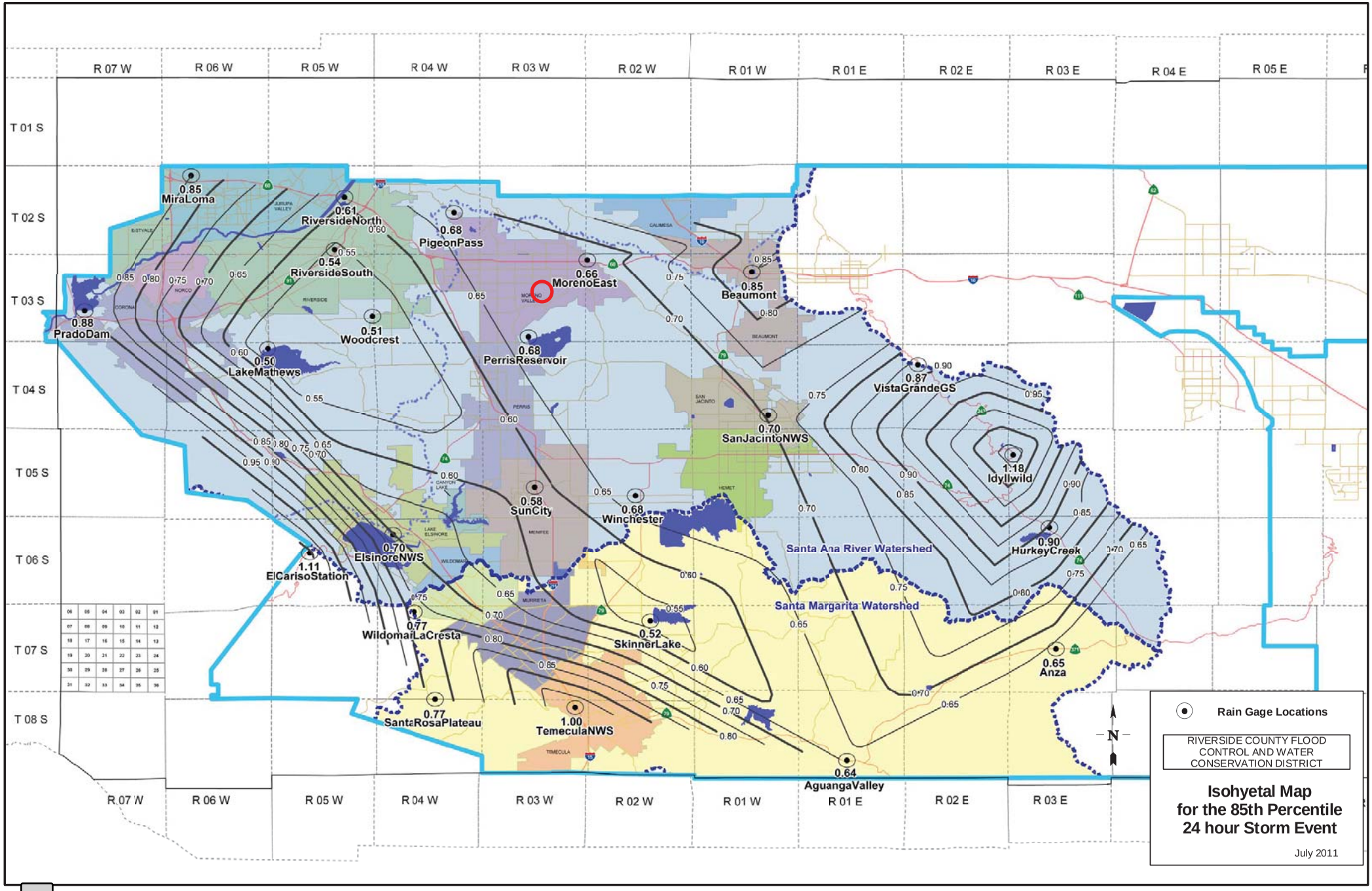
Drainage Sub-Area	Area (acres)	Volume Required (cu-ft)
D	2.06	3,659
V	2.97	5,070
TOTAL	**5.03**	**8,729**

Drainage Sub-Areas Tributary to Basins

Drainage Sub-Area		Volume Required (cu-ft)
A	0.95	928
B	0.35	635
F	0.45	531
H	0.36	450
I	0.43	362
J	0.89	822
K	0.42	436
L	0.37	471
N	0.26	358
X	0.89	777
y	0.20	185
TOTAL	**5.57**	**5,955**

Total	**18.35**	**25,686**

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)


R 07 W
R 06 W
R 05 W
R 04 W
R 03 W
R 02 W
R 01 W
R 01 E
R 02 E
R 03 E
R 04 E
R 05 E
T 01 S
T 02 S
T 03 S
T 04 S
T 05 S
T 06 S
T 07 S
T 08 S
0.85 MiraLoma
0.61 RiversideNorth
0.68 PigeonPass
0.54 RiversideSouth
0.66 MorenoEast
0.85 Beaumont
0.88 PradoDam
0.51 Woodcrest
0.50 LakeMathews
0.68 PerrisReservoir
0.87 VistaGrandeGS
0.70 SanJacintoNWS
1.18 Idyllwild
0.58 SunCity
0.68 Winchester
0.70 ElsinoreNWS
1.11 ElCarisoStation
0.90 HurkeyCreek
0.77 WildomarLaCresta
0.52 SkinnerLake
0.65 Anza
0.77 SantaRosaPlateau
1.00 TemeculaNWS
0.64 AguangaValley
Santa Ana River Watershed
Santa Margarita Watershed
N
Rain Gage Locations
RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
Isohyetal Map for the 85th Percentile 24 hour Storm Event
July 2011

Santa Ana Watershed - BMP Design Volume, V_{BMP}

(Rev. 10-2011)

Legend: Required Entries / Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name	MSA Consulting, Inc.	Date	9/15/2016
Designed by	JSA/JH	Case No	
Company Project Number/Name	1968 - Majestic Moreno Medical Plaza and Village		

BMP Identification

BMP NAME / ID: DA-A

Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

85th Percentile, 24-hour Rainfall Depth, from the Isohyetal Map in Handbook Appendix E

D_{85}= 0.67 inches

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Imperivous Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	*Design Storm Depth (in)*	*Design Capture Volume, V_{BMP} (cubic feet)*	*Proposed Volume on Plans (cubic feet)*
A	*41382*	*Mixed Surface Types*	*0.59*	*0.40*	*16609*			
	41382		*Total*		16609	0.67	*927.3*	*950*

Notes:

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Santa Ana Watershed - BMP Design Volume, V_{BMP}

(Rev. 10-2011)

Legend: Required Entries / Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name: MSA Consulting, Inc. | Date: 9/15/2016

Designed by: JSA/JH | Case No:

Company Project Number/Name: 1968 - Majestic Moreno Medical Plaza and Village

BMP Identification

BMP NAME / ID: DA-B

Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

85th Percentile, 24-hour Rainfall Depth, from the Isohyetal Map in Handbook Appendix E

D_{85}= 0.67 inches

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Imperivous Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	*Design Storm Depth (in)*	*Design Capture Volume, V_{BMP} (cubic feet)*	*Proposed Volume on Plans (cubic feet)*
B	*15246*	*Mixed Surface Types*	*0.91*	*0.74*	*11358.1*			
	15246	***Total***			**11358.1**	**0.67**	***634.2***	***650***

Notes:

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Santa Ana Watershed - BMP Design Volume, V_{BMP}

(Rev. 10-2011)

Legend: Required Entries / Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name	MSA Consulting, Inc.	Date	9/16/2016
Designed by	JSA/JH	Case No	
Company Project Number/Name	1968 - Majestic Moreno Medical Plaza and Village		

BMP Identification

BMP NAME / ID: DA-C

Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

85th Percentile, 24-hour Rainfall Depth, from the Isohyetal Map in Handbook Appendix E

D_{85}= 0.67 inches

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Imperivous Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	*Design Storm Depth (in)*	*Design Capture Volume, V_{BMP} (cubic feet)*	*Proposed Volume on Plans (cubic feet)*
C	*41780*	*Mixed Surface Types*	*0.74*	*0.53*	*22281.9*			
	41780		*Total*		*22281.9*	*0.67*	*1244.1*	*1,250*

Notes:

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Santa Ana Watershed - BMP Design Volume, V_{BMP}

(Rev. 10-2011)

Legend: Required Entries | Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name	MSA Consulting, Inc.	Date	9/16/2016
Designed by	JSA/JH	Case No	
Company Project Number/Name	1968 - Majestic Moreno Medical Plaza and Village		

BMP Identification

BMP NAME / ID DA-D

Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

85th Percentile, 24-hour Rainfall Depth, from the Isohyetal Map in Handbook Appendix E

D_{85}= 0.67 inches

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Imperivous Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	*Design Storm Depth (in)*	*Design Capture Volume, V_{BMP} (cubic feet)*	*Proposed Volume on Plans (cubic feet)*
D	*89733*	*Mixed Surface Types*	*0.9*	*0.73*	*65530.4*			
	89733	**Total**			**65530.4**	**0.67**	**3658.8**	**3,700**

Notes:

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Santa Ana Watershed - BMP Design Volume, V_{BMP}

(Rev. 10-2011)

Legend: Required Entries / Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name	MSA Consulting, Inc.	Date	9/16/2016
Designed by	JSA/JH	Case No	
Company Project Number/Name	1968 - Majestic Moreno Medical Plaza and Village		

BMP Identification

BMP NAME / ID: DA-E

Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

85th Percentile, 24-hour Rainfall Depth, from the Isohyetal Map in Handbook Appendix E

D_{85}= 0.67 inches

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Imperivous Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	*Design Storm Depth (in)*	*Design Capture Volume, V_{BMP} (cubic feet)*	*Proposed Volume on Plans (cubic feet)*
E	*14374*	*Mixed Surface Types*	*0.7*	*0.49*	*7099.2*			
	14374		***Total***		**7099.2**	**0.67**	***396.4***	***400***

Notes:

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Santa Ana Watershed - BMP Design Volume, V_{BMP}

(Rev. 10-2011)

Legend: Required Entries / Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name	MSA Consulting, Inc.	Date	9/16/2016
Designed by	JSA/JH	Case No	
Company Project Number/Name	1968 - Majestic Moreno Medical Plaza and Village		

BMP Identification

BMP NAME / ID: DA-F

Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

85th Percentile, 24-hour Rainfall Depth, from the Isohyetal Map in Handbook Appendix E

D_{85}= 0.67 inches

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Imperivous Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	*Design Storm Depth (in)*	*Design Capture Volume, V_{BMP} (cubic feet)*	*Proposed Volume on Plans (cubic feet)*
F	*19602*	*Mixed Surface Types*	*0.69*	*0.48*	*9498.4*			
	19602		***Total***		**9498.4**	**0.67**	***530.3***	***550***

Notes:

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Santa Ana Watershed - BMP Design Volume, V_{BMP}

(Rev. 10-2011)

Legend: Required Entries / Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name MSA Consulting, Inc. Date 9/16/2016
Designed by JSA/JH Case No
Company Project Number/Name 1968 - Majestic Moreno Medical Plaza and Village

BMP Identification

BMP NAME / ID DA-G

Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

85th Percentile, 24-hour Rainfall Depth,
from the Isohyetal Map in Handbook Appendix E

D_{85}= 0.67 inches

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Imperivous Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	*Design Storm Depth (in)*	*Design Capture Volume, V_{BMP} (cubic feet)*	*Proposed Volume on Plans (cubic feet)*
G	*46173*	*Mixed Surface Types*	*0.78*	*0.58*	*26611.1*			
	46173	***Total***			**26611.1**	**0.67**	**1485.8**	**1,500**

Notes:

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Santa Ana Watershed - BMP Design Volume, V_{BMP}

(Rev. 10-2011)

Legend: Required Entries / Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name: MSA Consulting, Inc. — Date: 9/16/2016

Designed by: JSA/JH — Case No:

Company Project Number/Name: 1968 - Majestic Moreno Medical Plaza and Village

BMP Identification

BMP NAME / ID: DA-H

Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

85th Percentile, 24-hour Rainfall Depth, from the Isohyetal Map in Handbook Appendix E

D_{85}= 0.67 inches

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Imperivous Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	*Design Storm Depth (in)*	*Design Capture Volume, V_{BMP} (cubic feet)*	*Proposed Volume on Plans (cubic feet)*
H	*15681*	*Mixed Surface Types*	*0.72*	*0.51*	*8047.1*			
	15681	**Total**			8047.1	0.67	449.3	460

Notes:

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Santa Ana Watershed - BMP Design Volume, V_{BMP}

(Rev. 10-2011)

Legend: Required Entries / Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name MSA Consulting, Inc. Date 9/16/2016

Designed by JSA/JH Case No

Company Project Number/Name 1968 - Majestic Moreno Medical Plaza and Village

BMP Identification

BMP NAME / ID DA-I

Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

85th Percentile, 24-hour Rainfall Depth, from the Isohyetal Map in Handbook Appendix E D_{85}= 0.67 inches

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Imperivous Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	*Design Storm Depth (in)*	*Design Capture Volume, V_{BMP} (cubic feet)*	*Proposed Volume on Plans (cubic feet)*
I	*18730*	*Mixed Surface Types*	*0.51*	*0.35*	*6474.5*			
	18730	**Total**			**6474.5**	**0.67**	**361.5**	**370**

Notes:

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Santa Ana Watershed - BMP Design Volume, V_{BMP}

(Rev. 10-2011)

Legend: Required Entries / Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name MSA Consulting, Inc. | Date 9/16/2016
Designed by JSA/JH | Case No
Company Project Number/Name 1968 - Majestic Moreno Medical Plaza and Village

BMP Identification

BMP NAME / ID DA-J

Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

85th Percentile, 24-hour Rainfall Depth, from the Isohyetal Map in Handbook Appendix E

D_{85}= 0.67 inches

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Imperivous Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	*Design Storm Depth (in)*	*Design Capture Volume, V_{BMP} (cubic feet)*	*Proposed Volume on Plans (cubic feet)*
J	*38768*	*Mixed Surface Types*	*0.56*	*0.38*	*14712.9*			
	38768	***Total***			**14712.9**	**0.67**	***821.5***	***830***

Notes:

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Santa Ana Watershed - BMP Design Volume, V_{BMP}

(Rev. 10-2011)

Legend: Required Entries | Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name MSA Consulting, Inc. Date 9/16/2016
Designed by JSA/JH Case No
Company Project Number/Name 1968 - Majestic Moreno Medical Plaza and Village

BMP Identification

BMP NAME / ID DA-K

Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

85th Percentile, 24-hour Rainfall Depth,
from the Isohyetal Map in Handbook Appendix E

D_{85}= 0.67 inches

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Imperivous Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	*Design Storm Depth (in)*	*Design Capture Volume, V_{BMP} (cubic feet)*	*Proposed Volume on Plans (cubic feet)*
K	*18295*	*Mixed Surface Types*	*0.62*	*0.42*	*7766.8*			
	18295	***Total***			**7766.8**	**0.67**	***433.6***	***440***

Notes:

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Santa Ana Watershed - BMP Design Volume, V_{BMP}

(Rev. 10-2011)

Legend: Required Entries / Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name: MSA Consulting, Inc. — Date: 9/16/2016

Designed by: JSA/JH — Case No:

Company Project Number/Name: 1968 - Moreno Valley Medical Center

BMP Identification

BMP NAME / ID: DA-L

Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

85th Percentile, 24-hour Rainfall Depth, from the Isohyetal Map in Handbook Appendix E — D_{85}= 0.67 inches

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Impervious Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	*Design Storm Depth (in)*	*Design Capture Volume, V_{BMP} (cubic feet)*	*Proposed Volume on Plans (cubic feet)*
L	*16117*	*Mixed Surface Types*	*0.73*	*0.52*	*8431.4*			
	16117	**Total**			**8431.4**	**0.67**	**470.8**	**480**

Notes:

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Santa Ana Watershed - BMP Design Volume, V_{BMP}

(Rev. 10-2011)

Legend: Required Entries / Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name	MSA Consulting, Inc.	Date	9/16/2016
Designed by	JSA/JH	Case No	
Company Project Number/Name	1968 - Majestic Moreno Medical Plaza and Village		

BMP Identification

BMP NAME / ID: DA-M

Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

85th Percentile, 24-hour Rainfall Depth, from the Isohyetal Map in Handbook Appendix E

D_{85}= 0.67 inches

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Imperivous Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	*Design Storm Depth (in)*	*Design Capture Volume, V_{BMP} (cubic feet)*	*Proposed Volume on Plans (cubic feet)*
M	*46628*	*Mixed Surface Types*	*0.72*	*0.51*	*23928.3*			
	46628		*Total*		*23928.3*	*0.67*	*1336*	*1,350*

Notes:

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Santa Ana Watershed - BMP Design Volume, V_{BMP}

(Rev. 10-2011)

Legend: Required Entries / Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name	MSA Consulting, Inc.	Date	9/16/2016
Designed by	JSA/JH	Case No	
Company Project Number/Name	1968 - Majestic Moreno Medical Plaza and Village		

BMP Identification

BMP NAME / ID: DA-N

Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

85th Percentile, 24-hour Rainfall Depth, from the Isohyetal Map in Handbook Appendix E

D_{85}= 0.67 inches

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Imperivous Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	*Design Storm Depth (in)*	*Design Capture Volume, V_{BMP} (cubic feet)*	*Proposed Volume on Plans (cubic feet)*
N	*11325*	*Mixed Surface Types*	*0.77*	*0.57*	*6401.2*			
	11325		***Total***		**6401.2**	**0.67**	***357.4***	***370***

Notes:

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Santa Ana Watershed - BMP Design Volume, V_{BMP}

(Rev. 10-2011)

Legend: Required Entries / Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name: MSA Consulting, Inc. | Date: 9/16/2016

Designed by: JSA/JH | Case No:

Company Project Number/Name: 1968 - Majestic Moreno Medical Plaza and Village

BMP Identification

BMP NAME / ID: DA-O

Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

85th Percentile, 24-hour Rainfall Depth, from the Isohyetal Map in Handbook Appendix E

D_{85}= 0.67 inches

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Imperivous Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	*Design Storm Depth (in)*	*Design Capture Volume, V_{BMP} (cubic feet)*	*Proposed Volume on Plans (cubic feet)*
O	*57499*	*Mixed Surface Types*	*0.64*	*0.44*	*25345.1*			
	57499	***Total***			**25345.1**	**0.67**	***1415.1***	***1,430***

Notes:

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Santa Ana Watershed - BMP Design Volume, V_{BMP}

(Rev. 10-2011)

Legend: Required Entries | Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name: MSA Consulting, Inc. | Date: 9/16/2016

Designed by: JSA/JH | Case No:

Company Project Number/Name: 1968 - Majestic Moreno Medical Plaza and Village

BMP Identification

BMP NAME / ID: DA-P

Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

85th Percentile, 24-hour Rainfall Depth, from the Isohyetal Map in Handbook Appendix E

D_{85}= 0.67 inches

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Imperivous Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	*Design Storm Depth (in)*	*Design Capture Volume,* V_{BMP} *(cubic feet)*	*Proposed Volume on Plans (cubic feet)*
P	*33976*	*Mixed Surface Types*	*0.81*	*0.61*	*20764.7*			
	33976	**Total**			**20764.7**	**0.67**	**1159.4**	**1,170**

Notes:

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Santa Ana Watershed - BMP Design Volume, V_{BMP}

(Rev. 10-2011)

Legend: Required Entries / Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name MSA Consulting, Inc. Date 9/16/2016
Designed by JSA/JH Case No
Company Project Number/Name 1968 - Majestic Moreno Medical Plaza and Village

BMP Identification

BMP NAME / ID DA-Q

Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

85th Percentile, 24-hour Rainfall Depth, from the Isohyetal Map in Handbook Appendix E

D_{85}= 0.67 inches

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Impervious Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	*Design Storm Depth (in)*	*Design Capture Volume, V_{BMP} (cubic feet)*	*Proposed Volume on Plans (cubic feet)*
Q	*28314*	*Mixed Surface Types*	*0.85*	*0.66*	*18723.2*			
	28314	***Total***			**18723.2**	**0.67**	***1045.4***	***1,060***

Notes:

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Santa Ana Watershed - BMP Design Volume, V_{BMP}

(Rev. 10-2011)

Legend: Required Entries / Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name: MSA Consulting, Inc. — Date: 9/16/2016

Designed by: JSA/JH — Case No:

Company Project Number/Name: 1968 - Moreno Valley Medical Center

BMP Identification

BMP NAME / ID: DA-R

Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

85th Percentile, 24-hour Rainfall Depth, from the Isohyetal Map in Handbook Appendix E — D_{85}= 0.67 inches

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Imperivous Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	*Design Storm Depth (in)*	*Design Capture Volume, V_{BMP} (cubic feet)*	*Proposed Volume on Plans (cubic feet)*
R	*14810*	*Mixed Surface Types*	*0.76*	*0.55*	*8210*			
	14810	***Total***			8210	0.67	*458.4*	*470*

Notes:

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Santa Ana Watershed - BMP Design Volume, V_{BMP}

(Rev. 10-2011)

Legend: Required Entries / Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name MSA Consulting, Inc.
Date 9/16/206
Designed by JSA/JH
Case No
Company Project Number/Name 1968 - Majestic Moreno Medical Plaza and Village

BMP Identification

BMP NAME / ID DA-S

Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

85th Percentile, 24-hour Rainfall Depth,
from the Isohyetal Map in Handbook Appendix E

D_{85}= 0.67 inches

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Imperivous Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	*Design Storm Depth (in)*	*Design Capture Volume, V_{BMP} (cubic feet)*	*Proposed Volume on Plans (cubic feet)*
S	*9583*	*Mixed Surface Types*	*0.82*	*0.62*	*5972.9*			
	9583	**Total**			**5972.9**	**0.67**	**333.5**	**340**

Notes:

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Santa Ana Watershed - BMP Design Volume, V_{BMP}

(Rev. 10-2011)

Legend: Required Entries / Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name MSA Consulting, Inc. Date 9/16/2016
Designed by JSA/JH Case No
Company Project Number/Name 1968 - Majestic Moreno Medical Plaza and Village

BMP Identification

BMP NAME / ID DA-T

Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

85th Percentile, 24-hour Rainfall Depth,
from the Isohyetal Map in Handbook Appendix E

D_{85}= 0.67 inches

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Imperivous Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	*Design Storm Depth (in)*	*Design Capture Volume, V_{BMP} (cubic feet)*	*Proposed Volume on Plans (cubic feet)*
T	*13068*	*Mixed Surface Types*	*0.87*	*0.69*	*8990.7*			
	13068	***Total***			**8990.7**	**0.67**	***502***	***510***

Notes:

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Santa Ana Watershed - BMP Design Volume, V_{BMP}

(Rev. 10-2011)

Legend: Required Entries / Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name	MSA Consulting, Inc.	Date	9/16/2016
Designed by	JSA/JH	Case No	
Company Project Number/Name	1968 - Majestic Moreno Medical Plaza and Village		

BMP Identification

BMP NAME / ID: DA-U

Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

85th Percentile, 24-hour Rainfall Depth, from the Isohyetal Map in Handbook Appendix E

D_{85}= 0.67 inches

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Imperivous Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	*Design Storm Depth (in)*	*Design Capture Volume, V_{BMP} (cubic feet)*	*Proposed Volume on Plans (cubic feet)*
U	*33541*	*Mixed Surface Types*	*0.91*	*0.74*	*24987.6*			
	33541		***Total***		**24987.6**	**0.67**	***1395.1***	***1,400***

Notes:

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Santa Ana Watershed - BMP Design Volume, V_{BMP}

(Rev. 10-2011)

Legend: Required Entries / Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name: MSA Consulting, Inc.
Date: 9/16/2016
Designed by: JSA/JH
Case No:
Company Project Number/Name: 1968 - Majestic Moreno Medical Plaza and Village

BMP Identification

BMP NAME / ID: DA-V

Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

85th Percentile, 24-hour Rainfall Depth, from the Isohyetal Map in Handbook Appendix E

D_{85}= 0.67 inches

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Imperivous Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	*Design Storm Depth (in)*	*Design Capture Volume, V_{BMP} (cubic feet)*	*Proposed Volume on Plans (cubic feet)*
V	*129373*	*Mixed Surface Types*	*0.88*	*0.70*	*90792.8*			
	129373	**Total**			90792.8	0.67	5069.3	5,100

Notes:

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Santa Ana Watershed - BMP Design Volume, V_{BMP}

(Rev. 10-2011)

Legend: Required Entries / Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name	MSA Consulting, Inc.	Date	9/16/2016
Designed by	JSA/JH	Case No	
Company Project Number/Name	1968 - Majestic Moreno Medical Plaza and Village		

BMP Identification

BMP NAME / ID: DA-W

Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

85th Percentile, 24-hour Rainfall Depth, from the Isohyetal Map in Handbook Appendix E

D_{85}= 0.67 inches

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Imperivous Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	*Design Storm Depth (in)*	*Design Capture Volume, V_{BMP} (cubic feet)*	*Proposed Volume on Plans (cubic feet)*
W	*7840*	*Mixed Surface Types*	*0.72*	*0.51*	*4023.3*			
	7840		*Total*		*4023.3*	*0.67*	*224.6*	*230*

Notes:

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Santa Ana Watershed - BMP Design Volume, V_{BMP}

(Rev. 10-2011)

Legend: Required Entries / Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name: MSA Consulting, Inc.
Date: 9/16/2016
Designed by: JSA/JH
Case No:
Company Project Number/Name: 1968 - Majestic Moreno Medical Plaza and Village

BMP Identification

BMP NAME / ID: DA-X

Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

85th Percentile, 24-hour Rainfall Depth,
from the Isohyetal Map in Handbook Appendix E

D_{85}= 0.67 inches

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Imperivous Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	*Design Storm Depth (in)*	*Design Capture Volume, V_{BMP} (cubic feet)*	*Proposed Volume on Plans (cubic feet)*
X	*38768*	*Mixed Surface Types*	*0.53*	*0.36*	*13912.1*			
	38768	***Total***			13912.1	0.67	*776.8*	*790*

Notes:

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Santa Ana Watershed - BMP Design Volume, V_{BMP}

(Rev. 10-2011)

Legend: Required Entries / Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name: MSA Consulting, Inc.
Date: 9/16/2016
Designed by: JSA/JH
Case No:
Company Project Number/Name: 1968 - Majestic Moreno Medical Plaza and Village

BMP Identification

BMP NAME / ID: DA-Y

Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

85th Percentile, 24-hour Rainfall Depth,
from the Isohyetal Map in Handbook Appendix E

D_{85}= 0.67 inches

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Impervious Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	*Design Storm Depth (in)*	*Design Capture Volume, V_{BMP} (cubic feet)*	*Proposed Volume on Plans (cubic feet)*
Y	*3712*	*Concrete or Asphalt*	*1*	*0.89*	*3311.1*			
	3712	**Total**			3311.1	0.67	184.9	190

Notes:

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

JOB NAME: **MAJESTIC MORENO MEDICAL PLAZA AND VILLAGE**
JOB #: 1968
DATE: September 17, 2016
BASIN CHARACTERISTICS

BASIN STORAGE VOLUMES BASED ON THE CONIC METHOD

WHERE: $$V = \frac{1}{3}(E_1 - E_2)\left(A_1 + A_2 + \sqrt{A_1 A_2}\right)$$

DRAINAGE AREA 'F'

CONTOUR ELEVATION	DEPTH INCR (ft)	DEPTH TOTAL (ft)	AREA INCR (sf)	AREA TOTAL (sf)	VOLUME INCR (cuft)	VOLUME TOTAL (cuft)	VOLUME TOTAL (acre-ft)
0	0	0		2,015	0	0	0.00
1	1	1	1,015	3,030	2,505	2,505	0.06

DRAINAGE AREA 'H'

CONTOUR ELEVATION	DEPTH INCR (ft)	DEPTH TOTAL (ft)	AREA INCR (sf)	AREA TOTAL (sf)	VOLUME INCR (cuft)	VOLUME TOTAL (cuft)	VOLUME TOTAL (acre-ft)
0	0	0		3,210	0	0	0.00
1	1	1	1,250	4,460	3,818	3,818	0.09

DRAINAGE AREA 'K'

CONTOUR ELEVATION	DEPTH INCR (ft)	DEPTH TOTAL (ft)	AREA INCR (sf)	AREA TOTAL (sf)	VOLUME INCR (cuft)	VOLUME TOTAL (cuft)	VOLUME TOTAL (acre-ft)
0	0	0		3,215	0	0	0.00
1	1	1	1,205	4,420	3,802	3,802	0.09

DRAINAGE AREA 'L'

CONTOUR ELEVATION	DEPTH INCR (ft)	DEPTH TOTAL (ft)	AREA INCR (sf)	AREA TOTAL (sf)	VOLUME INCR (cuft)	VOLUME TOTAL (cuft)	VOLUME TOTAL (acre-ft)
0	0	0		3,245	0	0	0.00
1	1	1	1,255	4,500	3,855	3,855	0.09

DRAINAGE AREA 'N'

CONTOUR ELEVATION	DEPTH INCR (ft)	DEPTH TOTAL (ft)	AREA INCR (sf)	AREA TOTAL (sf)	VOLUME INCR (cuft)	VOLUME TOTAL (cuft)	VOLUME TOTAL (acre-ft)
0	0	0		1,390	0	0	0.00
1	1	1	1,125	2,515	1,925	1,925	0.04

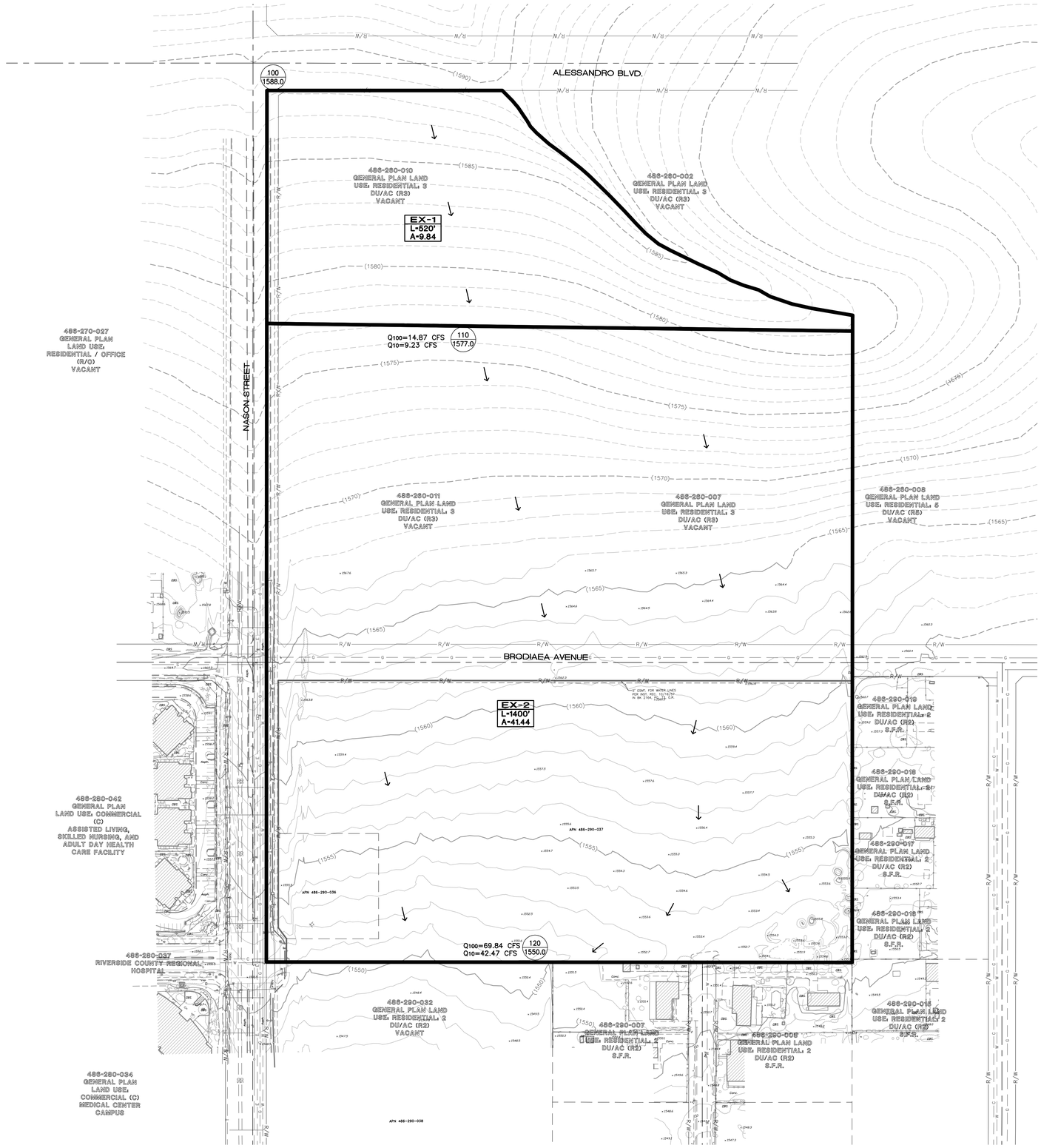
DRAINAGE AREA 'G','I' & 'J'

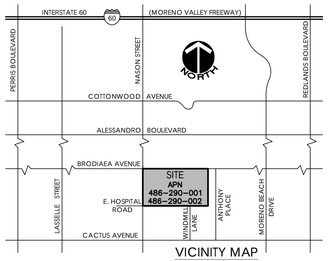
CONTOUR ELEVATION	DEPTH INCR (ft)	DEPTH TOTAL (ft)	AREA INCR (sf)	AREA TOTAL (sf)	VOLUME INCR (cuft)	VOLUME TOTAL (cuft)	VOLUME TOTAL (acre-ft)
0	0	0		2,838	0	0	0.00
1	1	1	10,585	13,423	7,478	7,478	0.17

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Appendix G
Hydrology Exhibits
Preliminary Grading Exhibit

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)





VICINITY MAP
N.T.S.

LEGEND

→	DRAINAGE FLOW
▬	TRIBUTARY AREA BOUNDARY
A / L-123 / A=4.5	DRAINAGE SUB-AREA ID FLOW TRAVEL LENGTH (FT) AREA (AC)
NODE / ELEV	NODE & ELEVATION

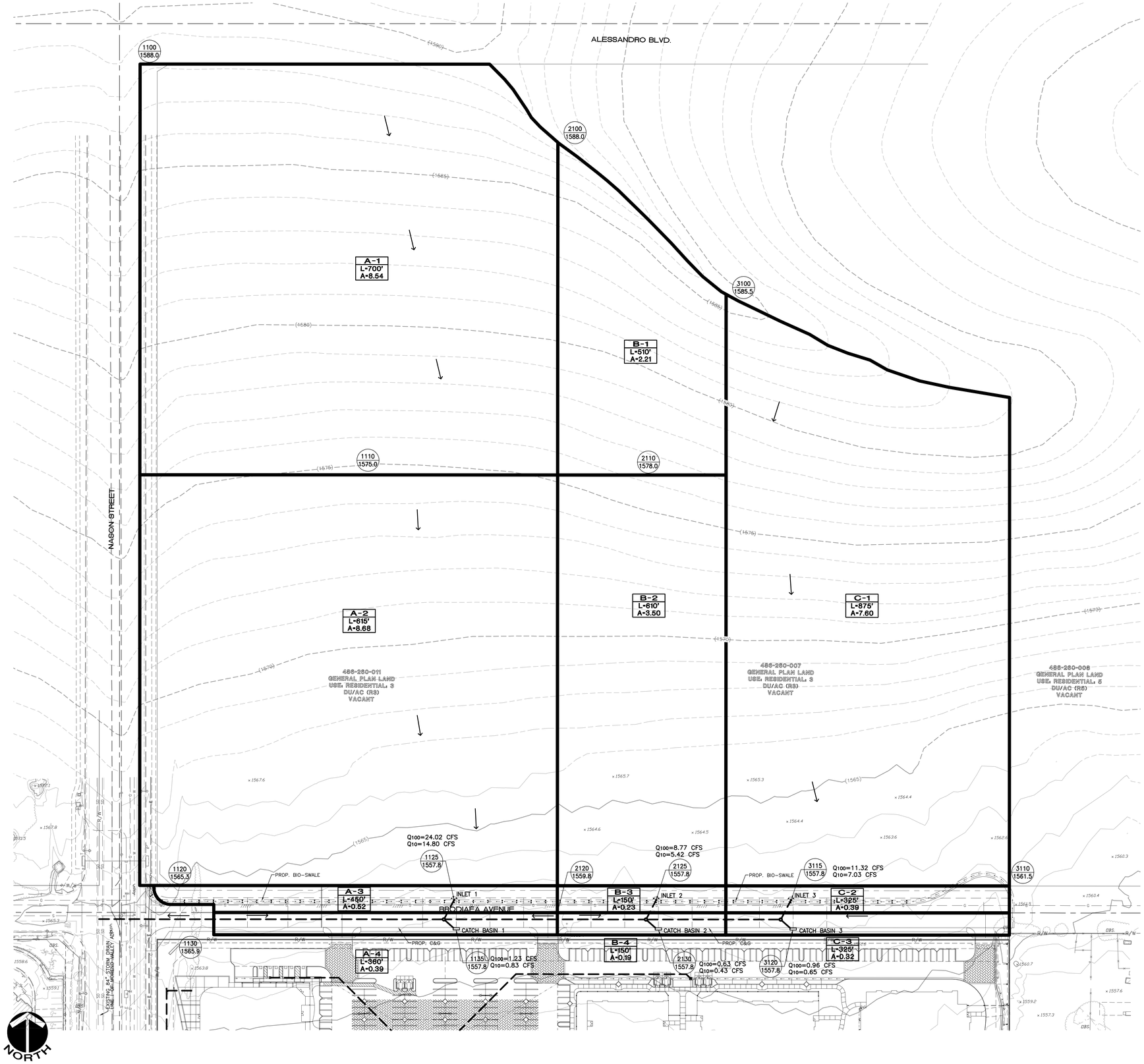
SEPTEMBER 2016

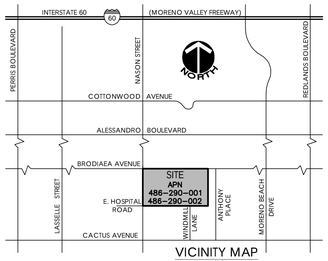
MSA CONSULTING, INC.
PLANNING ■ CIVIL ENGINEERING ■ LAND SURVEYING
34200 BOB HOPE DRIVE ■ RANCHO MIRAGE ■ CA 92270
TELEPHONE (760) 320-9811 ■ FAX (760) 323-7893

CITY OF MORENO VALLEY, CALIFORNIA
MAJESTIC MORENO MEDICAL PLAZA AND VILLAGE
CITY CASE NUMBER PA09-0033
EXISTING CONDITIONS HYDROLOGY EXHIBIT

R:\19681\ACAD\Hydrology\19681pa EXIST HYDRO EXHIBIT.DWG, 9/20/2016 2:41:42 PM, jalmaguslin, MSA Consulting, Inc.

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)





VICINITY MAP
N.T.S.

LEGEND

DRAINAGE FLOW	→
TRIBUTARY AREA BOUNDARY	
DRAINAGE SUB-AREA ID FLOW TRAVEL LENGTH (FT) AREA (AC)	A L=123 A=4.5
NODE & ELEVATION	NODE ELEV
EXISTING RIGHT-OF-WAY	R/W
EXISTING CENTERLINE	— — —

100 YEAR STORM EVENT SUMMARY

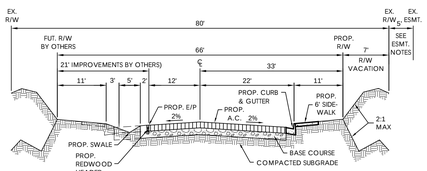
DRAINAGE AREA	Q100 (CFS)	Tc (MIN)	I (IN/HR)	AREA (ACRES)
DA-A1	11.81	21.65	2.00	8.54
DA-A2	11.34	23.76	1.91	8.68
SUB AREA ADDITION	23.15			17.22
DA-A3	1.52	7.84	3.32	0.52
CONFLUENCE: FLOW TO INLET 1	24.02	23.76	1.91	17.74
DA-A4 FLOW TO CB-1	1.23	6.75	3.58	0.39
TOTAL FLOW DRAINAGE AREA 'A'	24.67	23.76	2.18	18.13
DA-B1	3.40	18.20	1.91	2.21
DA-B2	4.95	20.86	2.04	3.50
SUB AREA ADDITION	8.35			5.71
DA-B3	0.76	6.06	3.78	0.23
CONFLUENCE: FLOW TO INLET 2	8.77	20.86	2.04	5.94
DA-B4: FLOW TO CB-2	0.63	6.06	3.78	0.19
TOTAL FLOW DRAINAGE AREA 'B'	9.11	20.86	2.04	6.13
DA-C1	10.62	21.28	2.02	7.60
DA-C2	1.17	7.42	3.41	0.39
CONFLUENCE: FLOW TO INLET 3	11.32	21.28	2.02	7.99
DA-C3: FLOW TO CB-3	0.96	7.42	3.41	0.32
TOTAL FLOW DRAINAGE AREA 'C'	11.88	21.28	2.02	8.31

TOTAL STUDY AREA = 32.57 ACRES
AREA AVERAGED PERVIOUS AREA FRACTION (Ap) = 0.94
AREA AVERAGED RI INDEX NUMBER = 68.2

10 YEAR STORM EVENT SUMMARY

DRAINAGE AREA	Q10 (CFS)	Tc (MIN)	I (IN/HR)	AREA (ACRES)
DA-A1	7.29	21.65	1.36	8.54
DA-A2	6.92	24.05	1.30	8.68
SUB AREA ADDITION	14.21			17.22
DA-A3	1.03	7.84	2.27	0.52
CONFLUENCE: FLOW TO INLET 1	14.80	24.05	1.03	17.74
DA-A4 FLOW TO CB-1	0.83	6.75	2.44	0.39
TOTAL FLOW DRAINAGE AREA 'A'	15.24	24.05	1.30	18.13
DA-B1	2.11	18.20	1.49	2.21
DA-B2	3.03	21.17	1.38	3.50
SUB AREA ADDITION	5.14			5.71
DA-B3	0.52	6.06	2.58	0.23
CONFLUENCE: FLOW TO INLET 2	5.42	21.17	1.38	5.94
DA-B4: FLOW TO CB-2	0.43	6.06	2.58	0.19
TOTAL FLOW DRAINAGE AREA 'B'	5.65	21.17	1.38	6.13
DA-C1	6.56	21.28	1.38	7.60
DA-C2	0.79	7.42	2.33	0.39
CONFLUENCE: FLOW TO INLET 3	7.03	21.28	1.38	7.99
DA-C3: FLOW TO CB-3	0.65	7.42	2.33	0.32
TOTAL FLOW DRAINAGE AREA 'C'	7.42	21.28	1.38	8.31

TOTAL STUDY AREA = 32.57 ACRES
AREA AVERAGED PERVIOUS AREA FRACTION (Ap) = 0.94
AREA AVERAGED RI INDEX NUMBER = 68.2



BRODIAEA AVENUE
COLLECTOR, STD. NO. 107
N.T.S.

SEPTEMBER 2016

MSA CONSULTING, INC.
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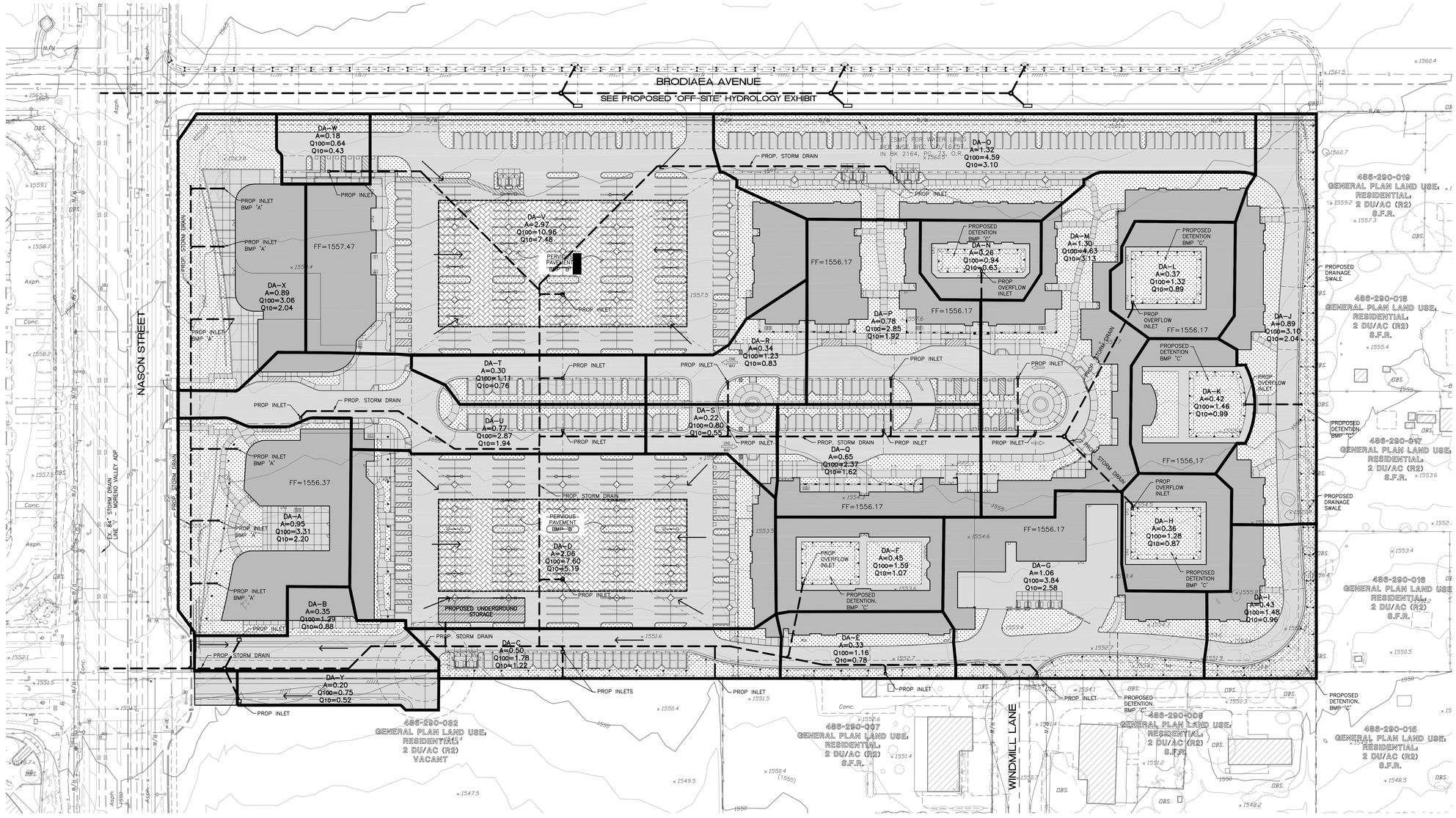
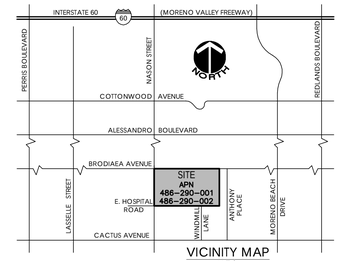
CITY OF MORENO VALLEY, CALIFORNIA
MAJESTIC MORENO MEDICAL PLAZA AND VILLAGE
CITY CASE NUMBER PA09-0033
PROPOSED CONDITIONS (OFF-SITE) HYDROLOGY EXHIBIT

R:\19961\ACAD\hydrology\13168.pla PROP RATIONAL OFF-SITE HYDRO EXHIBIT.DWG, 9/20/2016 3:03:56 PM, jaimaguzman, MSA Consulting, Inc.

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)





VICINITY MAP
N.T.S.

BEST MANAGEMENT PRACTICES FOR TREATMENT CONTROLS

BMP LABEL ON PLAN	CONTROL DESCRIPTION
BMP "A"	PROP. DRAIN INLET WITH SUBSURFACE STONE- FILLED INFILTRATION BASIN
BMP "B"	PROP. PERMEABLE PAVEMENT WITH SUBSURFACE STONE-FILLED INFILTRATION BASIN
BMP "C"	PROP. LANDSCAPED AREA WITH INFILTRATION BASINS AND TRENCHES
BMP "D"	PROP. UNDERGROUND STORAGE

PROPOSED LAND USE SUMMARY

DRAINAGE SUBAREA	IMPERVIOUS (ACRES)	AREA PERVIOUS (ACRES)	TOTAL (ACRES)	PERCENT IMPREVIOUS
A	0.56	0.39	0.95	59%
B	0.32	0.03	0.35	91%
C	0.37	0.13	0.50	74%
D	1.86	0.20	2.06	90%
E	0.23	0.10	0.33	70%
F	0.31	0.14	0.45	69%
G	0.83	0.23	1.06	78%
H	0.26	0.10	0.36	72%
I	0.22	0.21	0.43	51%
J	0.50	0.39	0.89	56%
K	0.26	0.16	0.42	62%
L	0.27	0.10	0.37	73%
M	0.94	0.36	1.30	72%
N	0.20	0.06	0.26	77%
O	0.84	0.48	1.32	64%
P	0.63	0.15	0.78	81%
Q	0.55	0.10	0.65	85%
R	0.26	0.08	0.34	76%
S	0.18	0.04	0.22	82%
T	0.26	0.04	0.30	87%
U	0.70	0.07	0.77	91%
V	2.61	0.36	2.97	88%
W	0.13	0.05	0.18	72%
X	0.47	0.42	0.89	53%
Y	0.20	0.00	0.20	100%
TOTALS	13.96	4.39	18.35	76%

PROPOSED PEAK FLOW SUMMARY (Q100)

DRAINAGE SUBAREA	AREA (ACRES)	PERCENT IMPREVIOUS	RUNOFF COEFFICIENT	Q100 (CFS)
A	0.95	59%	0.83	3.31
B	0.35	91%	0.88	1.29
C	0.50	74%	0.85	1.78
D	2.06	90%	0.88	7.60
E	0.33	70%	0.84	1.16
F	0.45	69%	0.84	1.59
G	1.06	78%	0.86	3.84
H	0.36	72%	0.85	1.28
I	0.43	51%	0.82	1.48
J	0.89	56%	0.83	3.10
K	0.42	62%	0.83	1.46
L	0.37	73%	0.85	1.32
M	1.30	72%	0.85	4.63
N	0.26	77%	0.86	0.94
O	1.32	64%	0.83	4.59
P	0.78	81%	0.87	2.85
Q	0.65	85%	0.87	2.37
R	0.34	76%	0.86	1.23
S	0.22	82%	0.87	0.80
T	0.30	87%	0.88	1.11
U	0.77	91%	0.89	2.87
V	2.97	88%	0.88	10.96
W	0.18	72%	0.85	0.64
X	0.89	53%	0.82	3.06
Y	0.20	100%	0.90	0.75
TOTALS	18.35			65.26

PROPOSED PEAK FLOW SUMMARY (Q 10)

DRAINAGE SUBAREA	AREA (ACRES)	PERCENT IMPREVIOUS	RUNOFF COEFFICIENT	Q10 (CFS)
A	0.95	59%	0.81	2.20
B	0.35	91%	0.88	0.88
C	0.50	74%	0.85	1.22
D	2.06	90%	0.88	5.19
E	0.33	70%	0.83	0.78
F	0.45	69%	0.83	1.07
G	1.06	78%	0.85	2.58
H	0.36	72%	0.84	0.87
I	0.43	51%	0.78	0.96
J	0.89	56%	0.80	2.04
K	0.42	62%	0.82	0.99
L	0.37	73%	0.84	0.89
M	1.30	72%	0.84	3.13
N	0.26	77%	0.85	0.63
O	1.32	64%	0.82	3.10
P	0.78	81%	0.86	1.92
Q	0.65	85%	0.87	1.62
R	0.34	76%	0.85	0.83
S	0.22	82%	0.87	0.55
T	0.30	87%	0.88	0.76
U	0.77	91%	0.88	1.94
V	2.97	88%	0.88	7.48
W	0.18	72%	0.84	0.43
X	0.89	53%	0.80	2.04
Y	0.20	100%	0.90	0.52
TOTALS	18.35			44.08

NOTE: THE ABOVE STORM PEAK FLOWS WERE OBTAINED UTILIZING THE RATIONAL METHOD EQUATION FOR PEAK FLOW AS PRESCRIBED BY RCFCD:

Q=CIA(1.008)

WHERE:

SUBAREA Tc	5 MINUTES	
100 YEAR INTENSITY	4.16 IN/HR	Plate D-4.1(6)
10 YEAR INTENSITY	2.84 IN/HR	Plate D-4.1(6)
RUNOFF COEFFICIENT AS SHOWN		Plate D-5.7(7)

WQMP DESIGN VOLUMES

DRAINAGE AREA	IMPERVIOUS AREA (S.F.)	PERVIOUS AREA (S.F.)	TOTAL AREA (S.F.)	IMPERVIOUS FRACTION	DESIGN CAPTURE VOLUME (C.F.)	PROPOSED VOLUME (C.F.)	NOTES
A	24,394	16,998	41,382	0.59	928	950	PR. VOL. IS SELF CONTAINED
B	13,940	1,306	15,246	0.91	635	650	PR. VOL. IS SELF CONTAINED
C	16,117	5,663	41,780	0.74	1,245	1,250	PR. VOL. TO UNDERGROUND STORAGE
D	81,021	8,712	89,733	0.90	3,659	3,700	PR. VOL. TRIBUTARY TO PERVIOUS PVM'T.
E	9,583	4,356	14,374	0.70	397	400	PR. VOL. TO UNDERGROUND STORAGE
F	13,504	6,098	19,602	0.69	531	550	PR. VOL. IS SELF CONTAINED
G	36,154	10,018	46,173	0.78	1,486	1,500	PR. VOL. TO UNDERGROUND STORAGE
H	10,890	4,356	15,681	0.72	450	460	PR. VOL. IS SELF CONTAINED
I	10,018	9,147	18,730	0.51	362	370	PR. VOL. IS SELF CONTAINED
J	21,780	16,988	38,768	0.56	822	830	PR. VOL. IS SELF CONTAINED
K	11,325	6,969	18,295	0.62	434	440	PR. VOL. IS SELF CONTAINED
L	11,761	4,356	16,117	0.73	471	480	PR. VOL. IS SELF CONTAINED
M	40,946	15,681	46,628	0.72	1,336	1,350	PR. VOL. TO UNDERGROUND STORAGE
N	8,712	2,613	11,325	0.77	358	370	PR. VOL. IS SELF CONTAINED
O	36,590	20,909	57,499	0.64	1,416	1,430	PR. VOL. TO UNDERGROUND STORAGE
P	27,442	6,534	33,976	0.81	1,160	1,170	PR. VOL. TO UNDERGROUND STORAGE
Q	23,958	4,356	28,314	0.85	1,046	1,060	PR. VOL. TO UNDERGROUND STORAGE
R	11,325	3,485	14,810	0.76	459	470	PR. VOL. TO UNDERGROUND STORAGE
S	7,840	1,743	9,583	0.82	334	340	PR. VOL. TO UNDERGROUND STORAGE
T	11,325	1,743	13,068	0.87	502	510	PR. VOL. TO UNDERGROUND STORAGE
U	30,492	3,049	33,541	0.91	1,396	1,400	PR. VOL. TO UNDERGROUND STORAGE
V	113,691	15,682	129,373	0.88	5,070	5,100	PR. VOL. TRIBUTARY TO PERVIOUS PVM'T.
W	5,662	2,178	7,840	0.72	225	230	PR. VOL. TO UNDERGROUND STORAGE
X	20,473	18,295	38,768	0.53	777	790	PR. VOL. IS SELF CONTAINED
Y	3,712	0.00	3,712	1.00	185	190	PR. VOL. IS SELF CONTAINED
TOTALS	608,098	191,228	799,326		25,684	25,990	

LAND USE LEGEND

BUILDINGS (IMPERVIOUS AREA)

STREETS/HARDSCAPE (IMPERVIOUS AREA)

LANDSCAPED AREA

PERVIOUS PAVEMENT

LEGEND

DRAINAGE FLOW

TRIBUTARY AREA BOUNDARY

EXISTING R/W

EXISTING/PROPOSED CENTERLINE

PROPOSED PERVIOUS PAVEMENT

PROPOSED STORM DRAIN

PROPOSED CATCH BASIN

PROPOSED DRAIN INLET

DRAINAGE AREAS: 'F', 'H', 'K', 'L' AND 'N' ARE PROPOSED COURTYARD DETENTION AREAS:

STORM FLOWS GENERATED FROM THESE AREAS ARE PROPOSED TO BE DETAINED AND/OR RETAINED UTILIZING SMALL (1-FOOT DEEP MAXIMUM) BASINS. DRAIN INLETS WILL BE LOCATED TO PROVIDE EMERGENCY OVERFLOW FROM THE BASIN TO THE STORM DRAIN SYSTEM SHOULD THE BASIN CAPACITY BE EXCEEDED DURING THE STORM EVENT.

DRAINAGE AREAS: 'I' AND 'J':

STORM FLOWS GENERATED FROM THESE AREAS ARE PROPOSED TO BE DETAINED AND/OR RETAINED UTILIZING SMALL (1-FOOT DEEP MAXIMUM) BASINS. EMERGENCY OVERFLOW SWALES WILL CONVEY EXCESS STORM FLOWS TO THE DRAIN INLET LOCATED WITHIN DRAINAGE AREA 'G'.

NORTH

0' 50' 100' 150' 200'

SCALE 1"=50'

SEPTEMBER 2016

MSA CONSULTING, INC.
PLANNING ■ CIVIL ENGINEERING ■ LAND SURVEYING
34200 BOB HOPE DRIVE ■ RANCHO MIRAGE ■ CA 92270
TELEPHONE (760) 320-9811 ■ FAX (760) 323-7893

CITY OF MORENO VALLEY, CALIFORNIA
MAJESTIC MORENO MEDICAL PLAZA AND VILLAGE
CITY CASE NUMBER PA09-0033
PROPOSED CONDITIONS (ON-SITE) HYDROLOGY EXHIBIT

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

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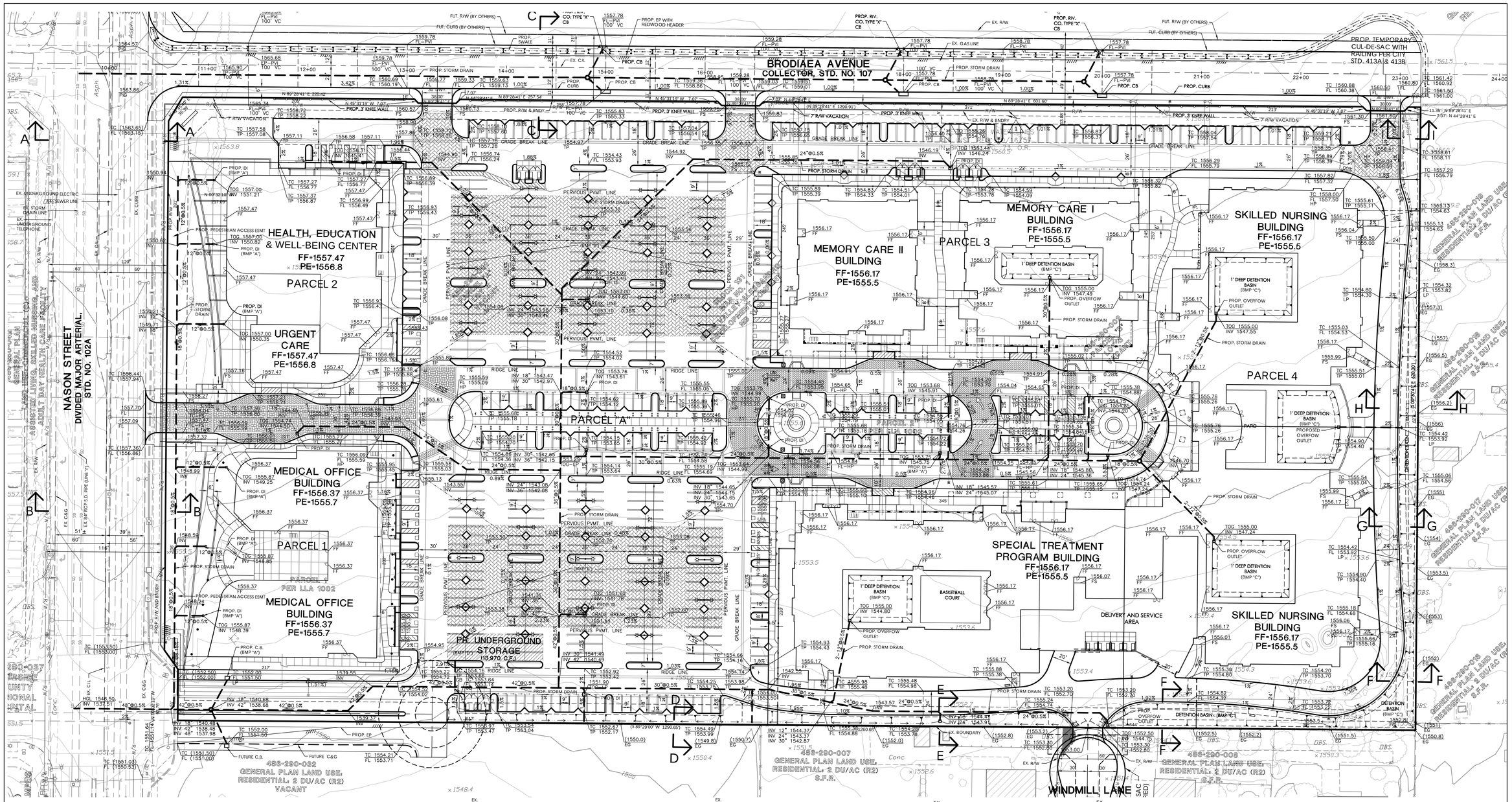
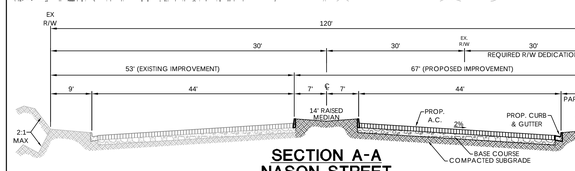
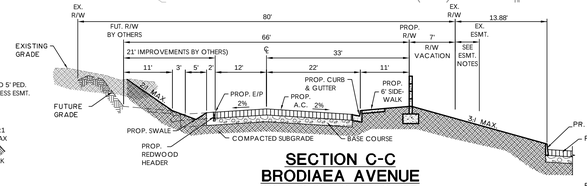
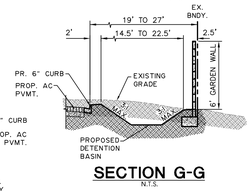
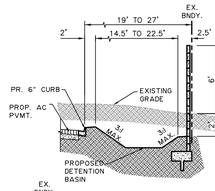
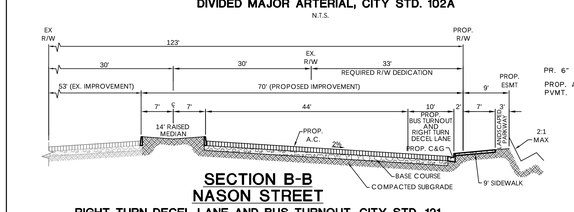


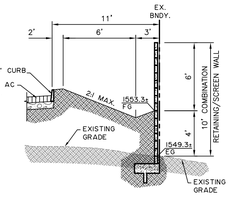


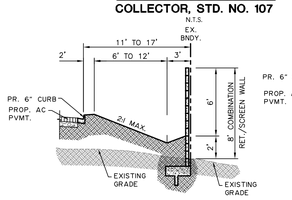


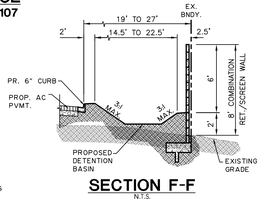


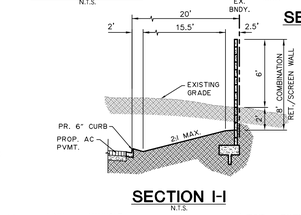












LEGEND

- 679.3 EXISTING SPOT ELEVATIONS
- EXISTING CONTOURS
- EXISTING EASEMENT DELTA
- EXISTING CABLE
- EXISTING IRRIGATION DRAIN LINE
- EXISTING EASEMENT
- EXISTING ELECTRIC
- EXISTING GAS
- EXISTING IRRIGATION
- EXISTING LOT LINE
- EXISTING TELEPHONE
- EXISTING OVERHEAD TELEPHONE
- EXISTING RIGHT OF WAY
- EXISTING SEWER
- EXISTING SEWER FORCE MAIN
- EXISTING WATER
- EXISTING BOUNDARY
- PROPOSED BOUNDARY
- PROPOSED AND EXISTING CENTER LINE
- PROPOSED EASEMENT
- PROPOSED PARCEL LINE
- PROPOSED RIGHT OF WAY
- PROPOSED CURB & GUTTER
- PROPOSED RIBBON GUTTER
- PROPOSED VALLEY LINE
- PR. PERVIOUS PVMT. LINE
- PROPOSED BUILDING OUTLINE
- PROPOSED CURB
- PROPOSED GRADEBREAK/RIDGE LINE
- PROPOSED EARTHEN SWALE
- PROPOSED STORM DRAIN PIPE
- PROPOSED SEWER
- PROPOSED WATER

ABBREVIATIONS

(E)	EAST	EG	EXISTING GRADE	MH	MANHOLE	PVMT	PAVEMENT
(N)	NORTH	EP	EDGE OF PAVEMENT	MIN.	MINIMUM	R/W	RIVERSIDE RIGHT OF WAY
(S)	SOUTH	ESMT.	EASEMENT	NO.	NUMBER	S.D.	STORM DRAIN
(W)	WEST	EX.	EXISTING	N.T.S.	NOT TO SCALE	S/W	SIDEWALK
AC	ASPHALT CONCRETE	FF	FINISHED FLOOR	OH	OVERHEAD	STA.	STATION
BNDY	BOUNDARY	FG	FINISHED GRADE	PA	PLANTER AREA	SWR.	SEWER
BSL	BUILDING SETBACK	FL	FLOWLINE	P/L	PROPERTY LINE	TC	TOP OF CURB
C/L	CENTERLINE	FS	FINISHED SURFACE	PE	PAD ELEVATION	TOG	TOP OF GRATE
C&G	CURB AND GUTTER	GB	GRADE BREAK	PIG	POINT OF INTERSECTION, GUTTER FL	TP	TOP OF PAVEMENT
CB	CATCH BASIN	HC	HANDICAP	PP	POWER POLE	TYP.	TYPICAL
CO.	COUNTY	HP	HIGH POINT	PROP.	PROPOSED	VC	VERTICAL CURVE
DI	DRAIN INLET	INV	INVERT	PT.	POINT	VERT	VERTICAL
DWY	DRIVEWAY	LP	LOW POINT	PUE	PUBLIC UTILITY EASEMENT	WTR.	WATER
ELEV	ELEVATION	MAX.	MAXIMUM	PVI	POINT OF VERTICAL INTERSECTION		

OWNER/DEVELOPER

GALAXY MANAGEMENT INCORPORATED
5067 WALNUT GROVE AVENUE
SAM GABRIEL, CALIFORNIA 91776
TELEPHONE: (760)818-4858
CONTACT: RICHARD TORNG

EASEMENTS

1. EASEMENT GRANTED TO WILLIAM R. MEADOR AND BERTHA MEADOR FOR WATERLINE PURPOSES / LANDSCAPE INSTALLATION. BOOK 2164, PAGE 73, RECORDED 10/16/1957, O.R.
2. EASEMENT FOR CONDUITS AND INCIDENTAL PURPOSES IN FAVOR OF EASTERN MUNICIPAL WATER DISTRICT PER DEED RECORDED MARCH 4, 1955 IN BOOK 1702, PAGE 559 OF OFFICIAL RECORDS, MEMORANDUM OF AGREEMENT RECORDED MARCH 4 1955 IN BOOK 1702, PAGE 467 AND 552, AND DEED RECORDED NOVEMBER 12, 1969 AS INSTRUMENT NO. 115832, OFFICIAL RECORD. EASEMENT IS UNPLOTTABLE AND BLANKET IN NATURE.
3. AN EASEMENT FOR PIPELINES, DITCHES, FLUMES, AND INCIDENTAL PURPOSES AS SHOWN ON THE BEAR VALLEY AND ALESSANDRO DEVELOPMENT COMPANY MAP ON FILE IN BOOK 11, PAGE 10 OF MAPS. EASEMENT IS UNPLOTTABLE.

ROOF DRAINS:

ALL ROOF DRAINS WILL DRAIN TO VEGETATED SWALES, DETENTION BASINS, OR THE UNDERGROUND STORAGE BASIN AND WILL NOT BE DIRECTED TO THE PARKING LOT. SEE ARCHITECT'S PLANS FOR THE LOCATIONS OF THE ROOF DRAINS.

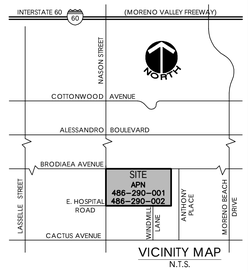
EARTHWORK ESTIMATE

(FOR PERMIT PURPOSES ONLY)

RAW CUT 47,450 CY
RAW FILL 22,133 CY

NOTE TO CONTRACTOR: QUANTITY ESTIMATE

MSA CONSULTING, INC. MAKES NO REPRESENTATION CONCERNING THE ESTIMATED QUANTITIES ON THESE PLANS, EXCEPT THAT ALL SUCH FIGURES, INCLUDING ALL EARTHWORK QUANTITIES, ARE PRELIMINARY ESTIMATES AND FOR PERMIT PURPOSES ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PREPARE HIS OWN QUANTITY ESTIMATE FOR CONSTRUCTION OR COST PURPOSES. MSA CONSULTING, INC. SHALL NOT BE RESPONSIBLE FOR ANY DEVIATIONS BETWEEN ESTIMATED QUANTITIES AND ACTUAL QUANTITIES AT THE TIME OF CONSTRUCTION.



VICINITY MAP
N.T.S.

BEST MANAGEMENT PRACTICES FOR TREATMENT CONTROLS

BMP LABEL ON PLAN	CONTROL DESCRIPTION
BMP "A"	PROP. DRAIN INLET WITH SUBSURFACE STONE- FILLED INFILTRATION BASIN
BMP "B"	PROP. PERMEABLE PAVEMENT WITH SUBSURFACE STONE-FILLED INFILTRATION BASIN
BMP "C"	PROP. LANDSCAPED AREA WITH INFILTRATION BASINS AND TRENCHES
BMP "D"	PROP. UNDERGROUND STORAGE

PRELIMINARY GRADING PLAN

Majestic Moreno Medical Plaza and Village

Nason Street & Brodiaea Avenue
Moreno Valley, California 92555

Galaxy Management Incorporated
5067 Walnut Grove Avenue
San Gabriel, CA 91776
Tel: 760-818-4858
Contact: Richard Torng

Consultant
THK Design
Architecture
260 East Garvey Avenue
Monterey Park, CA 91755
Telephone: (323) 697-2120
Contact: Terence Kwok

CELEBRATING FORTY YEARS
MSA CONSULTING, INC.
PLANNING • CIVIL ENGINEERING • LAND SURVEYING
34200 BOB HOPE DRIVE • RANCHO MIRAGE • CA 92270
TELEPHONE (760) 320-9811 • FAX (760) 323-7893

Stamps

REGISTERED PROFESSIONAL ENGINEER
JULIAN A. DE LA TORRE
C43880
Exp. 6-30-17
CIVIL
STATE OF CALIFORNIA

OSHPD APPROVAL
Office of Statewide Health Planning and Development (OSHPD), 400 R Street
Sacramento, California 95811
APPL. #

Date

Revision	Date

Sheet Title
Preliminary Grading Plan

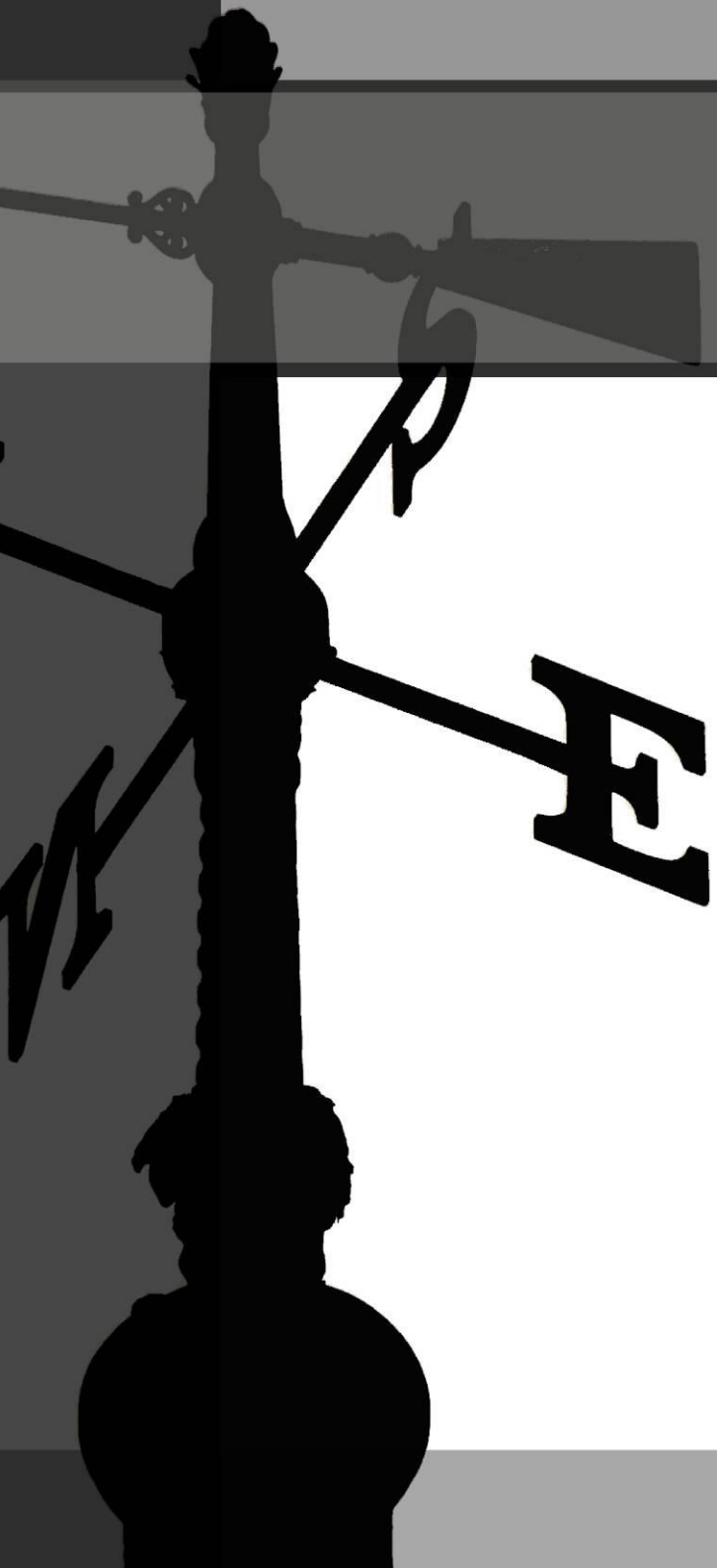
Address

DATE: 07-25-16
SCALE: 1"=40'-0"
DRAWN: JSA
PROJECT NO.: XXX_XXX
SHEET: C-1

CASE NO. PA09-0033

Attachment: Tech Study Prelim Hydro Report [Revision 1] (2847 : PEN16-0048, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

R:\19661\CAD\Grading\Preliminary\1998 Preliminary Grading Plan.dwg, 9/21/2016 9:21:25 AM, jsamaguain, MSA Consulting, Inc.



Galaxy Management Medical Village

Air Quality & Climate Change Assessment

June 2017 (13517)

Prepared for:

Galaxy Management, Inc.
5067 Walnut Grove Avenue
San Gabriel, California 91776

Prepared by:

MIG
1500 Iowa Avenue, Suite 110
Riverside, California 92507

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

This document is formatted for double-sided printing to conserve natural resources.

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Galaxy Management Medical Village

Air Quality & Climate Change Assessment

June 2017

Moreno Valley, California

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

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Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

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Appendix A CalEEMod Output

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

1 Executive Summary

Construction-related and operational emissions of criteria pollutants were modeled and analyzed for the proposed project located at the southeast corner of Nason Street and Brodiaea Avenue (APNs 486-290-036 and -037) in the city of Moreno Valley, Riverside County, California. This report also analyzes the project's consistency with the South Coast Air Quality Management District (SCAQMD) 2012 Air Quality Management Plan (AQMP) for the South Coast Air Basin. Cumulative impacts were analyzed using the methodology provided by the 1993 SCAQMD California Environmental Quality Act (CEQA) Air Quality Handbook. The results of this report find that the thresholds established by SCAQMD for volume and receptor-specific criteria pollutant emissions and toxic air contaminants will not be exceeded.

Additionally, this report models and analyzes construction- and operation-related emissions of greenhouse gases from the proposed project. This analysis utilizes guidance provided in the California Air Pollution Control Officers Association (CAPCOA) *CEQA and Climate Change* white paper and the *Quantifying Greenhouse Gas Mitigation Measures* handbook. Modeling of emissions utilizes the California Emissions Estimator Model (CalEEMod) v 2016.3.1. The results of this report find that the interim-threshold established by the South Coast Air Quality Management District for greenhouse gas emissions will not be exceeded.

1.1 Project Description

The proposed project is located on approximately 18.14 acres and is currently vacant. The project includes the construction of a medical village consisting of five buildings, on-grade un-covered parking, and associated drive aisles and landscaping. The proposed development will include a 53,000-square foot medical office building, 50,000-square foot wellness center with a 3,000-square foot urgent care attached, 91,800 square feet of assisted living space with a total of 207 beds, and a 70,000-square foot Skilled Nursing Program (SNP) building with a total of 158 beds. Approximately 333,568 square feet of the site area will consist of driveway pavement area, an emergency fire access lane, and parking to accommodate 696 parking spaces. The project will also include approximately 264,675 square feet of landscape and hardscape area. Approximately 25,317 cubic yards of soil will be exported.

1.2 Air Quality

The project will not result in substantial emissions of volatile organic compounds (with mitigation incorporated), oxides of nitrogen, or particulate matter and will not exceed the regional growth assumptions used in the Air Quality Management Plan (AQMP). The project will not individually cause or cumulatively contribute to an air quality standard violation. Toxics emissions, carbon monoxide, and localized criteria pollutants will not substantially impact sensitive receptors in vicinity of the project. The project will not expose a substantial number of people to odors.

1.3 Climate Change

With implementation of project design features, regulatory requirements, and greenhouse gas reduction policies identified in the City's Energy Efficiency and Climate Action Strategy, the project will result in a 17.5 percent reduction in greenhouse gas emissions compared to business as usual conditions. This reduction exceeds the 15 percent reduction required by the City's Energy Efficiency and Climate Action Strategy and will therefore result in less than significant impacts. The project will not conflict with greenhouse gas reduction strategies.

1.4 Mitigation Measures

The following mitigation measures are required to reduce, minimize, or avoid exceedance of established thresholds.

AQ-1 Before the City issues building permits, the Building Official and Community Development Director must verify that construction plans submitted by the project proponent reflect use of architectural coatings where the content of volatile organic compounds (VOC) does not exceed 25 grams per liter (g/l) for interior and exterior applications. This measure must be verified through standard building inspections in light of the performance standard that emissions of

volatile organic compounds from application of interior or exterior coatings shall not exceed the daily emissions thresholds established by the South Coast Air Quality Management District. The applicant bears the cost of implementing this mitigation.

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2 Introduction

This report models and analyzes construction- and operation-related emissions of criteria air pollutants, and greenhouse gas emissions from the proposed project. The project includes construction of a medical village consisting of five buildings with associated parking, drive aisles, and landscaping in Moreno Valley, California. The proposed development will include a medical office building, wellness center, urgent care, assisted living facilities, and a Skilled Nursing Program (SNP) building.

The air quality analysis provided herein utilizes guidance provided in the South Coast Air Quality Management District (SCAQMD) the 1993 California Environmental Quality Act (CEQA) Air Quality handbook as amended and supplemented (http://www.aqmd.gov/cega/hdbk.html). Modeling of emissions utilizes the following software and guidelines:

- California Emissions Estimator Model (CalEEMod) v 2016.3.1

The climate change analysis provided herein utilizes guidance provided in the California Air Pollution Control Officers Association (CAPCOA) *CEQA and Climate Change* white paper and the *Quantifying Greenhouse Gas Mitigation Measures* handbook. Modeling of greenhouse gas emissions utilizes the California Emissions Estimator Model (CalEEMod) v 2016.3.1.

This report has been prepared utilizing project-specific characteristics where available. In those instances where project-specific data is not available, the analysis has been supplemented by established model default values or other standardized sources of comparable data. In any case where non-project defaults or other data have been used, a "worst-case" scenario was developed to ensure a conservative estimate of emissions.

This report has been prepared for use by the Lead Agency to assess potential project-related air quality impacts in compliance with the state CEQA Statutes and Guidelines, particularly in respect to the air quality issues identified in Appendix G of the state CEQA Guidelines. This report suggests significance thresholds pursuant to published data for review and consideration by the Lead Agency that is responsible for making determinations of significance pursuant to CEQA.

This document has been reviewed in accordance with *Table 7-2, Checklist for an Air Quality Analysis Section* of the SCAQMD Air Quality Handbook for quality control purposes.

This report was prepared by Christopher Brown (Director of Environmental Services) and Olivia Chan (Associate Analyst) of the Planning and Environmental Management Services division of MIG, Inc. under contract with Galaxy Management, Inc.

Christopher Brown
Director of Environmental Services

Olivia Chan
Associate Analyst

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3 Environmental Setting

3.1 Climate

The project is located in the city of Moreno Valley, Riverside County, California. Riverside County and the broader Inland Empire are defined by a semi-arid, Mediterranean climate with mild winters and warm summers. Annual rainfall averages 9.86 inches with the rainy season occurring during the winter.[1] The coolest month of the year is December with an average monthly low of 41.3° Fahrenheit (F). The warmest month is August with an average monthly high of 94.4° F. The project site is at an elevation of approximately 1,560 feet above mean sea level (AMSL).

3.2 Regional Air Quality

The proposed project is located within the South Coast Air Basin (Basin).[2] The Basin includes Orange County and the non-desert portions of Los Angeles, San Bernardino, and Riverside Counties. The Basin is bounded by the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east that trap ambient air and pollutants within the Los Angeles and Inland Empire valleys below. The Basin is managed by the South Coast Air Quality Management District (SCAQMD). Pursuant to the California Clean Air Act (CCAA), SCAQMD is responsible for bringing air quality within the Basin into conformity with federal and state air quality standards by reducing existing emission levels and ensuring that future emission levels meet applicable air quality standards. SCAQMD works with federal, state, and local agencies to reduce pollutant emissions from stationary, mobile, and indirect pollutant sources through the development of rules and regulations.

Both California and the federal government have established health-based ambient air quality standards (AAQS) for seven air pollutants (known as "criteria pollutants"). These pollutants include ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), inhalable particulate matter with a diameter of 10 microns or less (PM_{10}), fine particulate matter with a diameter of 2.5 microns or less ($PM_{2.5}$), and lead (Pb). The state has also established AAQS for the additional pollutants of visibility reducing particles, sulfates, hydrogen sulfide, and vinyl chloride. The AAQS are designed to protect the health and welfare of the populace within a reasonable margin of safety. Where the state and federal standards differ, state AAQS are more stringent than federal AAQS. Federal and state standards are shown in Table 1 (Ambient Air Quality Standards). A brief description of each criteria pollutant is provided below.

Ozone. Ozone is a pungent, colorless, and highly reactive gas that forms from the atmospheric reaction of organic gases with nitrogen oxides in the presence of sunlight. Ozone is most commonly associated with smog. Ozone precursors such as reactive organic gases (ROG) and oxides of nitrogen (NO_X) are released from mobile and stationary sources. Ozone is a respiratory irritant and can cause cardiovascular diseases, eye irritation, and impaired cardiopulmonary function. Ozone also causes damage to building materials and plant leafs.

Carbon Monoxide. Carbon monoxide is primarily emitted from vehicles due to the incomplete combustion of fuels. Carbon monoxide has wide ranging impacts on human health because it combines with hemoglobin in the body and reduces the amount of oxygen transported in the bloodstream. Carbon monoxide can result in reduced tolerance for exercise, impairment of mental function, impairment of fetal development, headaches, nausea, and death at high levels of exposure.

Nitrogen Dioxide. Nitrogen dioxide and other oxides of nitrogen (NO_X) contribute to the formation of smog and results in the brownish haze associated with it. They are primarily emitted from motor vehicle exhaust but can be omitted from other high-temperature stationary sources. Nitrogen oxides can aggravate respiratory illnesses, reduce visibility, impair plant growth, and form acid rain.

Particulate Matter. Particulate matter is a complex mixture of small-suspended particles and liquid droplets in the air. Particulate matter between ten microns and 2.5 microns is known as PM_{10}, also known as coarse or inhalable particulate matter. PM_{10} is emitted from diverse sources including road dust, diesel soot, combustion products, abrasion of tires and brakes, construction operations, and windstorms. PM_{10} can also be formed secondarily in the atmosphere when NO_2 and SO_2

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react with ammonia. Particulate matter less than 2.5 microns in size are called $PM_{2.5}$ or fine particulate matter. $PM_{2.5}$ is primarily emitted from point sources such as power plants, industrial facilities, automobiles, wood-burning fireplaces, and construction sites. Particulate matter is deposited in the lungs and causes permanent lung damage, potentially resulting in lung disease and respiratory symptoms like asthma and bronchitis. Particulate matter has also been linked to cardiovascular problems such as arrhythmia and heart attacks. Particulate matter can also interfere with the body's ability to clear the respiratory tract and can act as a carrier of absorbed toxic substances. Particulate matter causes welfare issues because it scatters light and reduces visibility, causes environmental damage such as increasing the acidity of lakes and streams, and can stain and damage stone, such as that applied in statues and monuments.

Sulfur Dioxide. Sulfur dioxide and other oxides of sulfur (SO_X) are reactive gasses emitted from the burning of fossil fuels, primarily from power plants and other industrial facilities. [3] Other less impacting sources include metal extraction activities, locomotives, large ships, and off-road equipment. Human health impacts associated with SO_X emissions include bronchoconstriction and increased asthma symptoms.

Lead. Lead is primarily emitted from metal processing facilities (i.e. secondary lead smelters) and other sources such as manufacturers of batteries, paints, ink, ceramics, and ammunition. Historically, automobiles were the primary sources before lead was phased out of gasoline. The health effects of exposure to lead include gastrointestinal disturbances, anemia, kidney diseases, and potential neuromuscular and neurologic dysfunction. Lead is also classified as a probable human carcinogen.

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Table 1
Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[1]		National Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Ozone (O_3)	1 Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	-	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.07 ppm (137 µg/m^3)		0.07 ppm (137 µg/m^3)		
Respirable Particulate Matter (PM_{10}) [8]	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		-		
Fine Particulate Matter($PM_{2.5}$) [8]	24 Hour	-	-	35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	12 µg/m^3	15 µg/m^3	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/ m^3)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m^3)	-	Non-Dispersive Infrared Photometry (NDIR) -
	8 Hour	9.0 ppm (10mg/m^3)		9 ppm (10 mg/m^3)	-	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/ m^3)		-	-	
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	0.03 ppm (57 µg/m^3)	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m^3)	Same as Primary Standard	Gas Phase Chemiluminescence
	1 Hour	0.18 ppm (339 µg/m^3)		100 ppb (188 µg/m^3)	-	
Sulfur Dioxide (SO_2)	1 Hour	0.25 ppm (655 µg/m^3)	Ultraviolet Fluorescence	75 ppb (196 µg/m^3)	-	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method) -
	3 Hour	-		-	0.5 ppm (1,300 µg/m^3)	
	24 Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (for certain areas)[10]	-	
	Annual Arithmetic Mean	-		0.030 ppm (for certain areas)[10]	-	
Lead[11,12]	30 Day Average	1.5 µg/m^3	Atomic Absorption	-	-	High Volume Sampler and Atomic Absorption
	Calendar Quarter	-		1.5 µg/m^3 (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average[10]	-		0.15 µg/m^3		
Visibility Reducing Particles[13]	8 Hour	See footnote 13	Beta Attenuation and Transmittance through Filter Tape	No Federal Standards		
Sulfates	24 Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[11]	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

Source: ARB, October 2015

PPM, parts per million
µg/m3, micrograms per cubic meter

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), and particulate matter (PM_{10}, $PM_{2.5}$, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m^3 is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal

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to or less than the standard. Contact U.S. EPA for further clarification and current national policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the EPA.
8. On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 µg/m^3 to 12.0 µg/m^3. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 µg/m^3, as was the annual secondary standard of 15 µg/m^3. The existing 24-hour PM_{10} standards (primary and secondary) of 150 µg/m^3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
9. To attain the 1-hour national standard, the 3-year average of the 98th percentile of the daily maximum 1-hour daily maximum concentrations at each site must not exceed 100ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national standards to the California standards the units can be converted from ppb to ppm. In this case, the national standards of 100ppb is identical to 0.100ppm.
10. On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
11. The ARB has identified lead and vinyl chloride as "toxic air contaminants" with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
11. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 µg/m^3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
12. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

3.3 Non-Attainment Status

Air pollution levels are measured at monitoring stations located throughout the Basin. Areas that are in nonattainment with respect to criteria pollutants are required to prepare plans and implement measures that will bring the region into attainment. Table 2 (South Coast Air Basin (Non-Desert) Attainment Status) summarizes the attainment status in the non-desert portion of the Basin for the criteria pollutants.[4] The non-desert portion of the Basin is currently in nonattainment status for ozone, inhalable and fine particulate matter, nitrogen dioxide, and lead.

Pollution problems in the Basin are caused by emissions within the area and the specific meteorology that promotes pollutant concentrations. Emissions sources vary widely from smaller sources such as individual residential water heaters and short-term grading activities to extensive operational sources including long-term operation of electrical power plants and other intense industrial uses. Pollutants in the Basin are blown inward from coastal areas by sea breezes from the Pacific Ocean and are prevented from horizontally dispersing due to the surrounding mountains. This is further complicated by atmospheric temperature inversions that create inversion layers. The inversion layer in Southern California refers to the warm layer of air that lies over the cooler air from the Pacific Ocean. This is strongest in the summer and prevents ozone and other pollutants from dispersing upward. A ground-level surface inversion commonly occurs during winter nights and traps carbon monoxide emitted during the morning rush hour.

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Table 2
South Coast Air Basin (Non-Desert) Attainment Status

Pollutant	Federal	State
O_3 (1-hr)	--	Nonattainment
O_3 (8-hr)	Nonattainment	Nonattainment
PM_{10}	Attainment	Nonattainment
$PM_{2.5}$	Nonattainment	Nonattainment
CO	Attainment	Attainment
NO_2	Attainment	Nonattainment
SO_2	Attainment	Attainment
Pb	Nonattainment	Nonattainment
VRP	--	Unclassified
SO_4	--	Attainment
H_2S	--	Unclassified
Sources: ARB 2014		

3.4 Local Air Quality

Riverside County is located within the South Coast Air Basin (SCAB), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The project site is located in the Perris Valley monitoring area known as Source Receptor Area (SRA 24). The air quality in SRA 24 is monitored at Station 4149. Air monitoring results for SRA 24 over the last three years of available data are summarized in Table 4.2-3 (2012-2014 Local Air Quality).[5 6 7] Note that NO_2, SO_2, $PM_{2.5}$, TSP, and Pb are not measured at this station. Table 4.2-4 (2012-2014 Air Quality Standards Exceedance) summarizes the number of days for each monitoring year that air quality standards were exceeded. Based on the 2012-2014 air quality monitoring data, the Perris Valley area experiences ozone pollution and particulate matter pollution with at most 64 days exceeding State ozone standards in 2012 and at most 10 days exceeding State PM_{10} standards in 2011.

Table 3
2012-2014 Local Air Quality

Year	CO (PPM)		O_3 (PPM)		NO_2 (ppb)		SO_2 (ppb)	
	Max 1-hr	Max 8-hr	Max 1-hr	Max 8-hr	Max 1-hr	AAM	Max 1-hr	Max 24-hr
2014	--	--	0.117	0.094	--	--	--	--
2013	--	--	0.108	0.090	--	--	--	--
2012	--	--	0.111	0.093	--	--	--	--

Year	PM_{10} (µg/m³)		$PM_{2.5}$ (µg/m³)		TSP (µg/m³)		Pb (µg/m³)		SO_4 (µg/m³)
	Max 24-hr	AAM	Max 24-hr	AAM	Max 24-hr	AAM	Max Month	Max Qtr	Max 24-hr
2014	87	35.1	--	--	--	--	--	--	3.5
2013	70	33.6	--	--	--	--	--	--	3.4
2012	62	26.5	--	--	--	--	--	--	3.8

Source: SCAQMD 2012-2014

-- pollutant not monitored
ppm, parts per million
ppb, parts per billion
µg/m³, micrograms per cubic meter
AAM, annual arithmetic mean

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Table 4
2012-2014 Air Quality Standards Exceedance

Year	O_3 (PPM)			PM_{10} ($\mu g/m^3$)		$PM_{2.5}$ ($\mu g/m^3$)
	Fed* 8-hr	State 1-hr	State 8-hr	Fed 24-hr	State 24-hr	Fed^ 24-hr
2014	38	16	63	0	8	--
2013	34	17	60	0	10	--
2012	46	28	64	0	1	--

Source: SCAQMD 2012-2014

-- pollutant not monitored
* 0.075 ppm
^35 $\mu g/m^3$

3.5 Sensitive Receptors

Some populations are more susceptible to the effects of air pollution than the population at large; these populations are defined as sensitive receptors. Sensitive receptors include children, the elderly, the sick, and the athletic. Land uses associated with sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. Pollutants of particular concern when relating to sensitive receptors include carbon monoxide, toxic air contaminants, and odors. Specific sensitive receptors within one-quarter mile of the project site include the Riverside County Regional Medical Center to the west and residential uses to the west, south, and east of the project site.

3.6 Toxic Emission Sources

According to the EPA, there are no existing sources of industrial- or utility-related toxic emissions uses within one-quarter mile of the project site.[8] The nearest toxics emitter to the project site is San Diego & Electric-Moreno Valley located at 14601 Virginia & Alessandro in Moreno Valley, approximately four miles east of the project site. San Diego Gas & Electric – Moreno Valley is a pipeline transport of natural gas. The facility is in compliance with emissions requirements.[9]

3.7 Local Transportation

The proposed development will be located east of Nason Street between Brodiaea Avenue and Hospital Road in the City of Moreno Valley. Nason Street is a four-lane undivided north-south roadway. The project traffic study analyzed existing performance at 15 intersections in the project vicinity. All studied intersections currently operate at acceptable levels of service.[10]

3.8 Odors

According to the CEQA Air Quality Handbook, land uses associated with odor complaints include agricultural operations, wastewater treatment plants, landfills, and certain industrial operations (such as manufacturing uses that produce chemicals, paper, etc.). The proposed development is not a use generally associated with substantial odors. Furthermore, surrounding residential and medical center uses are not associated with substantial odors.

3.9 Existing Criteria Pollutant Emissions

The project site is currently vacant and therefore does not emit criteria pollutants.

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3.10 Climate Change

3.10.1 Defining Climate Change

Climate change is the distinct change in measures of climate for a long period of time. Climate change can result from natural processes and from human activities. Natural changes in the climate can be caused by indirect processes such as changes in the Earth's orbit around the Sun or direct changes within the climate system itself (i.e. changes in ocean circulation). Human activities affect the atmosphere through emissions of gases and changes to the planet's surface. Emissions affect the atmosphere directly by changing its chemical composition, while changes to the land surface indirectly affects the atmosphere by changing the way the Earth absorbs gases from the atmosphere. The term "climate change" is preferred over the term "global warming" because "climate change" conveys the fact that other changes can occur beyond just average increase in temperatures near the Earth's surface. Elements that indicate that climate change is occurring on Earth include:

- Rising of global surface temperatures by 1.3° Fahrenheit (F) over the last 100 years
- Changes in precipitation patterns
- Melting ice in the Arctic
- Melting glaciers throughout the world
- Rising ocean temperatures
- Acidification of oceans
- Range shifts in plant and animal species

Climate change is intimately tied to the Earth's greenhouse effect. The greenhouse effect is a natural occurrence that helps regulate the temperature of the planet. The majority of radiation from the Sun hits the Earth's surface and warms it. The surface in turn radiates heat back towards the atmosphere, known as infrared radiation. Gases and clouds in the atmosphere trap and prevent some of this heat from escaping back into space and re-radiate it in all directions. This process is essential to supporting life on Earth because it keeps the planet approximately 60° F warmer than without it. Emissions from human activities since the beginning of the industrial revolution (approximately 150 years) are adding to the natural greenhouse effect by increasing the gases in the atmosphere that trap heat, thereby contributing to an average increase in the Earth's temperature. Human activities that enhance the greenhouse effect are detailed below.

<u>Greenhouse Gases</u>

The greenhouse effect is caused by a variety of "greenhouse gases". Greenhouse gases (GHGs) occur naturally and from human activities. Greenhouse gases produced by human activities include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Since the year 1750, it is estimated that the concentrations of carbon dioxide, methane, and nitrous oxide in the atmosphere have increased over 39 percent, 158 percent, and 18 percent, respectively, primarily due to human activity.[11] The primary GHGs are discussed below.[12]

Carbon Dioxide. CO_2 is emitted and removed from the atmosphere naturally. Animal and plant respiration involves the release of carbon dioxide from animals and its absorption by plants in a continuous cycle. The ocean-atmosphere exchange results in the absorption and release of CO_2 at the sea surface. Carbon dioxide is also released from plants during wildfires. Volcanic eruptions release a small amount of CO_2 from the Earth's crust.

Human activities that affect carbon dioxide in the atmosphere include burning of fossil fuels, industrial processes, and product uses. Combustion of fossil fuels is the largest source of carbon dioxide emissions in the United States, accounting for approximately 85 percent of all equivalent emissions. Because of the fossil fuels used, the largest of these sources is electricity generation and transportation. When fossil fuels are burned, the carbon stored in them is released into the atmosphere entirely as CO_2. Emissions from onsite industrial activities also emit carbon dioxide such as cement, metal, and chemical production and use of petroleum produced in plastics, solvents, and lubricants.

Methane. Methane (CH_4) is emitted from human activities and natural sources. Natural sources of methane include wetlands, gas hydrates, permafrost, termites, oceans, freshwater bodies, soils, and wildfires. Human activities that cause methane releases include fossil fuel production, animal digestive processes from farms, manure management, and waste management. It is estimated that 50 percent of global methane emissions are human generated. Wetlands are the primary natural producers of methane in the world because the habitat is conducive to bacteria that produce methane during decomposition of organic material. Methane is produced from landfills as solid waste decomposes. Methane is a primary component of natural gas and is emitted during its production, processing, storage, transmission, distribution, and use. Decomposition of organic material in manure stocks or in liquid manure management systems also releases methane. Releases from animal digestive processes are the primary source of human-related methane.

Nitrous Oxide. Anthropogenic (human) sources of nitrous oxide include agricultural soil management, animal manure management, sewage treatment, combustion of fossil fuels, and production of certain acids. N_2O is produced naturally in soil and water, especially in wet, tropical forests. The primary human-related source of N_2O is agricultural soil management due to use of synthetic nitrogen fertilizers and other techniques to boost nitrogen in soils. Combustion of fossil fuels (mobile and stationary) is the second leading source of nitrous oxide, although parts of the world where catalytic converters are used (such as California) have significantly lower levels than those areas that do not.

High Global Warming Potential Gases. High global warming potential (GWP) gases (or fluorinated gases) are entirely manmade and are mainly used in industrial processes. HFCs, PFCs, and SF_6 are high GWP gases. These types of gases are used in aluminum production, semiconductor manufacturing, electric power transmission, magnesium production and processing, and in the production of hydrochlorofuorocarbon-22 (HCFC-22). High GWP gases are also used as substitutes for ozone-depleting gases like chlorofluorocarbons (CFCs) and halons. Use of high GWP gases as substitutes for ozone-depleting substances is the primary use of these gases in the United States.

Water Vapor. It should be noted that water vapor is also a significant GHG in the atmosphere; however, concentration of water vapor in the air is primarily dependent on air temperature and cannot be influenced by humans.

GHGs behave differently in the atmosphere and contribute to climate change in different ways. Some gases have more potential to reflect infrared heat back towards the earth while some persist in the atmosphere longer than others. To equalize the contribution of GHGs to climate change, the Intergovernmental Panel on Climate Change (IPCC) devised a weighted metric to compare all greenhouse gases to carbon dioxide.[13] The weighting depends on the lifetime of the gas in the atmosphere and its radiative efficiency. As an example, over a time horizon of 100-years, emissions of nitrous oxide will contribute to climate change 298 times more than the same amount of emissions of carbon dioxide while emissions of HFC-23 will contribute 14,800 times more than the same amount of carbon dioxide. These differences define a gas's GWP. Table 5 (Global Warming Potential of Greenhouse Gases) identifies the lifetime and GWP of select GHGs. The lifetime of the GHG represents how many years the GHG will persist in the atmosphere. The GWP of the GHG represents the GHG's relative potential to induce climate change as compared to carbon dioxide.

Carbon Sequestration

Carbon sequestration is the process by which plants absorb CO_2 from the atmosphere and store it in biomass like leaves and grasses. Agricultural lands, forests, and grasslands can all sequester carbon dioxide, or emit it. The key is to determine if the land use is emitting carbon dioxide faster than it is absorbing it. Young, fast-growing trees are particularly good at absorbing more than they release and are known as a *sink*. Agricultural resources often end up being sources of carbon release because of soil management practices. Deforestation contributes to carbon dioxide emissions by removing trees, or carbon sinks, that will otherwise absorb CO_2. Forests are a crucial part of sequestration in some parts of the world, but not much in the United States. Another form of sequestration is geologic sequestration. This is a manmade process that results in the collection and transport of CO_2 from industrial emitters (i.e. power plants) and injecting it into underground reservoirs.

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Table 5
Global Warming Potential (GWP) of Greenhouse Gases (GHG)

GHG	Lifetime (yrs)	GWP
Carbon Dioxide	50-200	1
Methane	12	25
Nitrous Oxide	114	298
HFC-23	270	14,800
HFC-134a	14	1,430
HFC-152a	1.4	124
PFC-14	50,000	7,390
PFC-116	10,000	12,200
Sulfur Hexafluoride	3,200	22,800
Source: IPCC 2007[14]		

3.10.2 Climate Change and California

Specific, anticipated impacts to California have been identified in the 2009 California Climate Adaptation Strategy prepared by the California Natural Resources Agency (CNRA) through extensive modeling efforts.[15] General climate changes in California indicate that:

- California is likely to get hotter and drier as climate change occurs with a reduction in winter snow, particularly in the Sierra Nevadas
- Some reduction in precipitation is likely by the middle of the century
- Sea-levels will rise up to an estimated 55 inches
- Extreme events such as heat waves, wildfires, droughts, and floods will increase
- Ecological shifts of habitat and animals are already occurring and will continue to occur

It should be noted that changes are based on the results of several models prepared under different climatic scenarios; therefore, discrepancies occur between the projections. The potential impacts of global climate change in California are detailed below.

<u>Public Health and Welfare</u>

Concerns related to public health and climate change includes higher rates of mortality and morbidity, change in prevalence and spread of disease vectors, decreases in food quality and security, reduced water availability, and increased exposure to pesticides. These concerns are all generally related to increase in ambient outdoor air temperature, particularly in summer.

Higher rates of mortality and morbidity could arise from more frequent heat waves at greater intensities. Health impacts associated with extreme heat events include heat stroke, heat exhaustion, and exacerbation of medical conditions such as cardiovascular and respiratory diseases, diabetes, nervous system disorders, emphysema, and epilepsy. Climate change will result in degradation of air quality promoting the formation of ground-level pollutants, particularly ozone. Degradation of air quality will increase the severity of health impacts from criteria and other air pollutants discussed in Section 4.3 (Air Quality). Temperature increases and increases in carbon dioxide are also expected to increase plant production of pollens, spores, and fungus. Pollens and spores could induce or aggravate allergic rhinitis, asthma, and obstructive pulmonary diseases.

Precipitation projections suggest that California will become drier over the next century due to reduced precipitation and increased evaporation from higher temperatures. These conditions could result in increased occurrences of drought. Surface water reductions will increase the need to pump groundwater, reducing supplies and increasing the potential for land subsidence.

Precipitation changes are also suspected to impact the Sierra snowpack (see “Water Management” herein). Earlier snow melts could coincide with the rainy season and could result in failure of the flood control devices in that region. Flooding can

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cause property damage and loss of life for those affected. Increased wildfires are also of concern as the state "dries" over time. Wildfires can also cause property damage, loss of life, and injuries to citizens and emergency response services.

Sea-level rises will also threaten human health and welfare. Flood risks will be increased in coastal areas due to strengthened storm surges and greater tidal damage that could result in injury and loss of property and life. Gradual rising of the sea will permanently inundate many coastal areas in the state.

Other concerns related to public health are changes in the range, incidence, and spread of infectious, water-borne, and food-borne diseases. Changes in humidity levels, distribution of surface water, and precipitation changes are all likely to shift or increase the preferred range of disease vectors (i.e. mosquitoes). This could expose more people and animals to potential for vector-borne disease.

Biodiversity and Habitat

Changes in temperature will change the livable ranges of plants and animals throughout the state and cause considerable stress on these species. Species will shift their range if appropriate habitat is available and accessible if they cannot adapt to their new climate. If they do not adapt or shift, they face local extirpation or extinction. As the climate changes, community compositions and interactions will be interrupted and changed. These have substantial implications on the ecosystems in the state. Extreme events will lead to tremendous stress and displacement on affected species. This could make it easier for invasive species to enter new areas, due to their ability to more easily adapt. Precipitation changes will alter stream flow patterns and affect fish populations during their life cycle. Sea level rises could impact fragile wetland and other coastal habitat.

Water Management

Although disagreement among scientists on long-term precipitation patterns in the state has occurred, it is generally accepted by scientists that rising temperatures will impact California's water supply due to changes in the Sierra Nevada snowpack. Currently, the state's water infrastructure is designed to both gather and convey water from melting snow and to serve as a flood control device. Snowpack melts gradually through spring warming into early summer, releasing an average of approximately 15 million acre-feet of water. The state's concern related to climate change is that due to rising temperatures, snowpack melt will begin earlier in the spring and will coincide with the rainy season. The combination of precipitation and snowmelt will overwhelm the current system, requiring tradeoffs between water storage and flood protection to be made. Reduction in reserves from the Sierra Nevada snowpack is troublesome for California and particularly for Southern California. Approximately 75-percent of California's available water supply originates in the northern third of the state while 80 percent of demand occurs in the southern two-thirds. There is also concern that rising temperatures will result in decreasing volumes from the Colorado River basin. Colorado River water is important to Southern California because it supplies water directly to Metropolitan Water District of Southern California. Water from the Colorado River is also used to recharge groundwater basins in the Coachella Valley.

Agriculture

California is the most agriculturally productive state in the US resulting in more than 37 billion dollars in revenue in 2008. California is the nation's leading producer of nearly 80 crops and livestock commodities, supplying more than half of the nation's fruit and vegetables and over 90 percent of the nation's production of almonds, apricots, raisin grapes, olives, pistachios, and walnuts. Production of crops is not limited to the Central Valley but also occurs in Southern California. Strawberries and grapes are grown in San Bernardino and Riverside Counties. Orange County and San Diego County contribute to strawberry production. Cherries are grown in Los Angeles and Riverside County. Anticipated impacts to agricultural resources are mixed when compared to the potentially increased temperatures, reduced chill hours, and changes in precipitation associated with climate change. For example, wheat, cotton, maize, sunflower, and rice are anticipated to show declining yields as temperatures rise. Conversely, grapes and almonds will benefit from warming temperatures. Anticipated increases in the number and severity in heat waves will have a negative impact on livestock where heat stress will make livestock more vulnerable to disease, infection and mortality. The projected drying trend and changes in precipitation are a threat to agricultural production in California. Reduced water reliability and changes in weather patterns will impact irrigated

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farmlands and reduce food security. Furthermore, a drying trend will increase wildfire risk. Overall, agriculture in California is anticipated to suffer due to climate change impacts.

Forestry

Increases in wildfires will substantially impact California's forest resources that are prime targets for wildfires. This can increase public safety risks, property damage, emergency response costs, watershed quality, and habitat fragmentation. Climate change is also predicted to affect the behavior or plant species including seed production, seedling establishment, growth, and vigor due to rising temperatures. Precipitation changes will affect forests due to longer dry periods, moisture deficits, and drought conditions that limit seedling and sapling growth. Prolonged drought also weakens trees, making them more susceptible to disease and pest invasion. Furthermore, as trees die due to disease and pest invasion (i.e. the Bark Beetle invasion of the San Bernardino Forest), wildfires can spread more rapidly.

Transportation and Energy Infrastructure

Higher temperatures will require increased cooling, raising energy production demand. Higher temperatures also decrease the efficiency of distributing electricity and could lead to more power outages during peak demand. Climate changes will impact the effectiveness of California's transportation infrastructure as extreme weather events damage, destroy, and impair roadways and railways throughout the state causing governmental costs to increase as well as impacts to human life as accidents increase. Other infrastructure costs and potential impacts to life will increase due to the need to upgrade levees and other flood control devices throughout the state. Infrastructure improvement costs related to climate change adaptation are estimated in the tens of billions of dollars.

3.10.3 Existing Greenhouse Gas Emissions

The project site is currently vacant and does not emit greenhouse gases.

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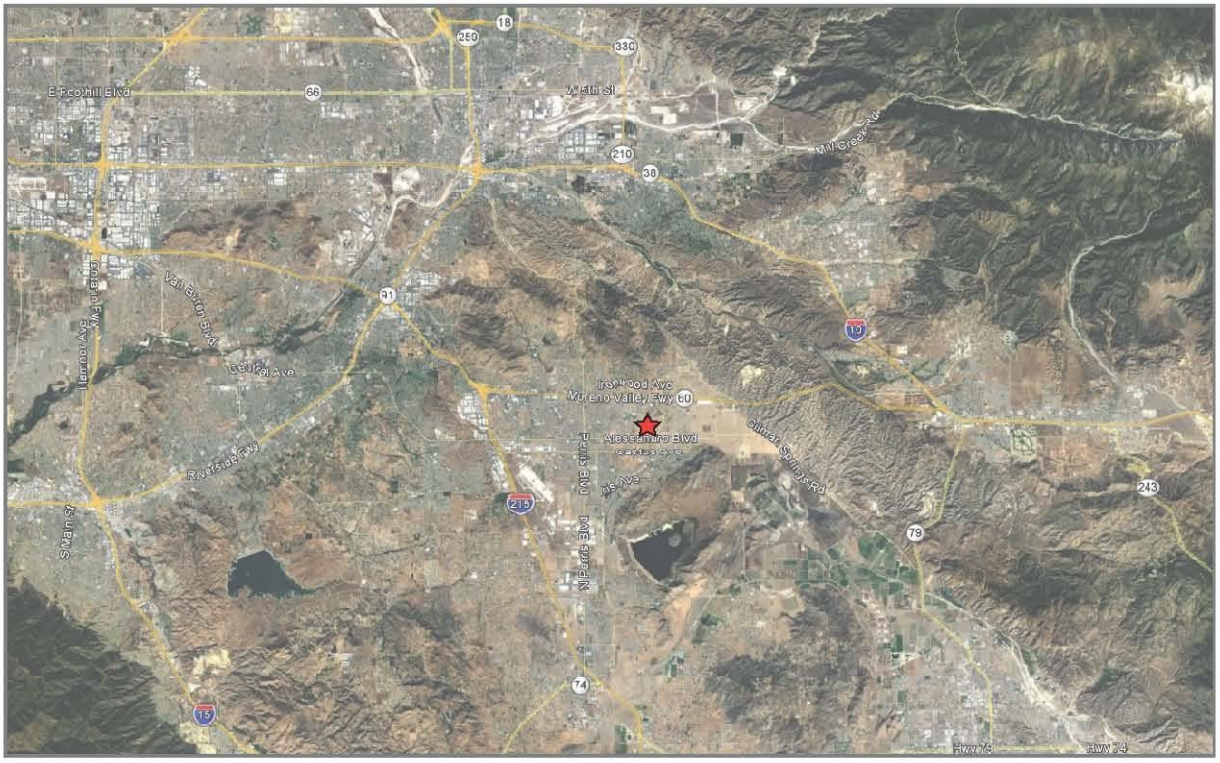

Regional

Vicinity

Not to Scale

Exhibit 1 Regional Context and Vicinity Map

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4 Regulatory Framework

The following summarizes federal, state, and local regulations related to air quality, pollution control, and greenhouse gas emissions.

4.1 Clean Air Act

The Federal Clean Air Act (CAA) defines the Environmental Protection Agency's (EPA) responsibilities for protecting and improving the United States air quality and ozone layer.[16] Key components of the CAA include reducing ambient concentrations of air pollutants that cause health and aesthetic problems, reducing emission of toxic air pollutants, and stopping production and use of chemicals that destroy the ozone.

Federal clean air laws require areas with unhealthy levels of ozone, inhalable particulate matter, carbon monoxide, nitrogen dioxide, and sulfur dioxide to develop State Implementation Plans (SIPs); comprehensive documents that identify how an area will attain NAAQS. Deadlines for attainment were established in the 1990 amendments to the CAA based on the severity of an area's air pollution problem. Failure to meet air quality deadlines can result in sanctions against the state or the EPA taking over enforcement of the CAA in the affected area. SIPs are a compilation of new and previously submitted plans, programs, district rules, and state and federal regulations. The SCAQMD implements the required provisions of an applicable SIP through its AQMPs and updates. Currently, SCAQMD implements the 8-hr Ozone SIP in the 2007 AQMP and the PM_{10} SIP in the 2003 AQMP. The $PM_{2.5}$ SIP is currently being revised by SCAQMD in response to partial disapproval by the EPA. The 2012 Lead SIP for the Los Angeles County portion of the SCAB was adopted by the SCAQMD Board on May 4, 2012 and approved by ARB on May 24, 2012 and forwarded to the EPA for approval as a revision to the California SIP.

4.2 California Clean Air Act

The California Clean Air Act (CCAA) of 1988 was enacted to develop plans and strategies for attaining California Ambient Air Quality Standards (CAAQS). The California Air Resources Board (ARB), which is part of the California Environmental Protection Agency (Cal-EPA), develops statewide air quality regulations, including industry-specific limits on criteria, toxic, and nuisance pollutants. The CCAA is more stringent than federal law in a number of ways, including revised standards for PM_{10} and ozone and state for visibility reducing particles, sulfates, hydrogen sulfide, and vinyl chloride.

4.3 Toxic Hotspots

State requirements specifically address air toxics issues through Assembly Bill (AB) 1807 (known as the Tanner Bill) that established the state air toxics program and the Air Toxics Hot Spots Information and Assessment Act (AB 2588). The air quality regulations developed from these bills have been modified recently to incorporate the federal regulations associated with the Federal Clean Air Act Amendments of 1990. The Air Toxics Hot Spots Information and Assessment Act (Hot Spots Act) was enacted in September 1987. Under this bill, stationary sources of emissions are required to report the types and quantities of certain substances that their facilities routinely release into the air.

The SCAQMD is required to prepare an annual report on the status and forecast of air toxic "hot spots" pursuant to Section 44363 of the California Health and Safety Code. SCAQMD monitors facilities that are not exempt from the fee and reporting requirements of AB2588.

Some facilities are covered under "umbrella" permits that address industry-wide categories. SCAQMD has issued general permits for the following seven activities:

- Retail gasoline dispensing
- Perchloroethylene dry cleaning
- Auto body shops
- Fiberglass molding
- Printing

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- Metal plating
- Wood striping and finishing

Emissions inventories and risk assessment guidelines have been prepared for the seven industry-wide categories. Approximately 1,400 auto body shops, 3,200 gasoline stations, and 1,400 perchloroethylene dry cleaners within the District are covered under these umbrella permits.

Depending on the severity of the facilities' TAC releases, SCAQMD requires either public notification of toxic hot spots or preparation of a risk reduction plan, as follows:

	Cancer Risk (per million)	Acute Risk	Chronic Risk
Action Risk Level	>= 25	>= 3.0	>= 3.0
Public Notification Level	>= 10	>= 1.0	>= 1.0
Exempt	<1	<0.1	<0.1

4.4 2016 Air Quality Management Plan

The purpose of an Air Quality Management Plan (AQMP) is to bring an air basin into compliance with federal and state air quality standards and is a multi-tiered document that builds on previously adopted AQMPs.[17] The 2003 AQMP was adopted in August 2003 and demonstrated O_3 and PM_{10} for the Basin. It also provides the maintenance plans for CO and NO_2, which the Basin has been in attainment for since 1997 and 1992, respectively. The 2007 AQMP for the Basin was approved by the SCAQMD Board of Directors in June 2007. The 2007 AQMP builds on the 2003 AQMP and is designed to address the federal 8-hour ozone and $PM_{2.5}$ air quality standards. The AQMP identifies short- and long-term control measures designed to reduce stationary, area, and mobile source emissions, organized into four primary components:

1. District Stationary and Mobile Source Control Measures
2. Air Resources Board (ARB) State Strategy
3. Supplement to ARB Control Strategy
4. SCAG Regional Transportation Strategy and Control Measures

The 2012 AQMP was adopted by the SCAQMD board on December 7, 2012. The 2012 AQMP incorporated the latest scientific and technological information and planning assumptions, including the 2012 Regional Transportation Plan/Sustainable Communities Strategy and updated emission inventory methodologies for various source categories. The 2012 AQMP includes the new and changing federal requirements, implementation of new technology measures, and the continued development of economically sound, flexible compliance approaches. The SCAQMD approved the 2016 AQMP on March 3, 2017. The 2016 AQMP addresses the federal 2008 8-hour ozone NAAQS, 2012 annual PM2.5 NAAQS and the 2006 24-hour PM 2.5 NAAQS. The 2016 AQMP includes a chapter reporting on the Riverside County portion of the Salton Sea Air Basin and future air quality requirements. An additional chapter provides the proposed air toxics control program that will reduce toxic risk and another examines the interplay between air quality and other planning efforts addressing climate change, energy, and transportation. The objectives of the 2016 AQMP include the following:[18]

- Eliminate reliance on future technologies (CAA Section 182(e)(5)) measures to the maximum extent feasible.
- Calculate and take credit for co-benefits from other planning efforts.
- Develop a strategy with fair-share emission reductions at the federal, state, and local levels.
- Invest in strategies and technologies meeting multiple objectives regarding air quality, climate change, air toxics exposure, energy, and transportation.
- Identify and secure significant funding for incentives to implement early deployment and commercialization of zero and near-zero technologies.
- Enhance the socioeconomic analysis and pursue the most efficient and cost-effective path to achieve multi-pollutant and multi-deadline targets.

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- Prioritize enforceable regulatory measures as well as non-regulatory, innovative and "win-win" approaches for emission reductions.

4.5 SCAQMD Rule Book

In order to control air pollution in the Basin, SCAQMD adopts rules that establish permissible air pollutant emissions and governs a variety of businesses, processes, operations, and products to implement the AQMP and the various federal and state air quality requirements. SCAQMD does not adopt rules for mobile sources; those are established by ARB or the United States Environmental Protection Agency (EPA). Rules that will be applicable during construction of the proposed project include Rule 403 (Fugitive Dust) and Rule 1113 (Architectural Coatings). Rule 403 prohibits emissions of fugitive dust from any grading activity, storage pile, or other disturbed surface area if it crosses the project property line or if emissions caused by vehicle movement cause substantial impairment of visibility (defined as exceeding 20 percent opacity in the air). Rule 403 requires the implementation of Best Available Control Measures (BACM) and includes additional provisions for projects disturbing more than five acres and those disturbing more than fifty acres. Rule 1113 establishes maximum concentrations of VOCs in paints and other applications and establishes the thresholds for low-VOC coatings.

4.6 Executive Order S-3-05

Executive Order S-3-05 was issued by California Governor Arnold Schwarzenegger and established targets for the reduction of greenhouse gas emission at the milestone years of 2010, 2020, and 2050. Statewide GHG emissions must be reduced to 1990 levels by year 2020 and by 80 percent beyond that by year 2050. The Order requires the Secretary of the California Environmental Protection Agency (CalEPA) to coordinate with other state departments to identify strategies and reduction programs to meet the identified targets. A Climate Action Team (CAT) was created and is headed by the Secretary of CalEPA who reports on the progress of the reduction strategies. The latest CAT *Biennial Report to the Governor and Legislature* was completed in April 2010.[19] CAT also works in 11 subgroups to support development and implementation of the Scoping Plan (see "California Global Warming Solutions Act" herein).

4.7 Executive Order B-30-15

Executive Order B-30-15 was issued by California Governor Edmund G. Brown Jr. on April 29, 2015 to establish a California greenhouse gas reduction target of 40 percent below 1990 levels by 2030. This is meant as an interim target to ensure the state meets its ultimate goal of 80 percent below 1990 levels by 2050.

4.8 California Global Warming Solutions Act

The California State Legislature adopted the California Global Warming Solutions Act in 2006 (AB32). AB32 establishes the caps on statewide greenhouse gas emissions proclaimed in Executive Order S-3-05 and establishes a regulatory timeline to meet the reduction targets. The timeline is as follows:

January 1, 2009	Adopt Scoping Plan
January 1, 2010	Early action measures take effect
January 1, 2011	Adopt GHG reduction measures
January 1, 2012	Reduction measures take effect
December 31, 2020	Deadline for 2020 reduction target

As part of AB32, CARB had to determine what 1990 GHG emissions levels were and projected a business-as-usual (BAU) estimate for 2020 to determine the amount of GHG emissions that will need to be reduced. BAU is a term used to define emissions levels without considering reductions from future or existing programs or technologies. 1990 emissions are

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estimated at 427 million metric tons of carbon dioxide equivalent (MMTCO2E) while 2020 emissions (after accounting for the economic downturn in 2008 and implementation of Pavley 1 vehicle emissions reductions and the State Renewable Portfolio Standard identified in Air Resources Board Scoping Plan below) are estimated at 507 MMTCO2E; therefore, California GHG emissions must be reduced 80 MMTCO2E (507 – 427 = 80) by 2020, a reduction of approximately 16 percent below BAU. Emissions are required to be reduced an additional 80 percent below 1990 levels by 2050.

The California Air Resources Board (ARB) is responsible for implementation of AB32. Nine discrete early action measures and 35 additional measures were adopted in October 2007 and are now enforceable. The discrete early actions include a low carbon fuel standard, landfill methane capture regulations, reductions in HFCs from mobile air conditioning systems, fluorinated gas emissions from semiconductor manufacturing, sulfur hexafluoride from some industrial processes, high GWP gases in consumer products, and emissions from diesel auxiliary engines on ships at California Ports, improved fuel efficiency in heavy-duty diesel vehicles, and new tire pressure regulations. The early action programs form part of California's comprehensive strategy for achieving the GHG reduction targets.

4.9 Sustainable Communities and Climate Protection Act

In January 2009, California Senate Bill (SB) 375 went into effect known as the Sustainable Communities and Climate Protection Act.[20] The objective of SB375 is to better integrate regional planning of transportation, land use, and housing to reduce sprawl and ultimately reduce greenhouse gas emissions and other air pollutants. SB375 tasks ARB to set greenhouse gas reduction targets for each of California's 18 regional Metropolitan Planning Organizations (MPOs). Each MPO is required to prepare a Sustainable Communities Strategy (SCS) as part of their Regional Transportation Plan (RTP). The SCS is a growth strategy in combination with transportation policies that will show how the MPO will meet its GHG reduction target. If the SCS cannot meet the reduction goal, an Alternative Planning Strategy (APS) may be adopted that meets the goal through alternative development, infrastructure, and transportation measures or policies.

In the Southern California Association of Governments (SCAG) region (in which the project is located), sub-regions can also elect to prepare their own SCS or APS. In August 2010, ARB released the proposed GHG reduction targets for the MPOs to be adopted in September 2010. The proposed reduction targets for the SCAG region were 8-percent by year 2020 and 13-percent by year 2035. The 8-percent year 2020 target was adopted in September 2010 and tentatively adopted the year 2035 until February 2011 to provide additional time for SCAG, ARB, and other stakeholders to account for additional resources (such as state transportation funds) needed to achieve the proposed targets. In February 2011, the SCAG President affirmed the year 2035 reduction target and SCAG Staff updated ARB on additional funding opportunities. The status of funding was requested to be revisited again in year 2014.

4.10 Air Resources Board Scoping Plan

The ARB Scoping Plan is the comprehensive plan to reach the GHG reduction targets stipulated in AB32. The key elements of the plan are to expand and strengthen energy efficiency programs, achieve a statewide renewable energy mix of 33 percent, develop a cap-and-trade program with other partners in the Western Climate Initiative (includes seven states in the United States and four territories in Canada), establish transportation-related targets, and establish fees.[21] The Scoping Plan measures are identified in Table 6 (Scoping Plan Measures). Note that the current early discrete actions are incorporated into these measures. ARB estimates that implementation of these measures will reduce GHG emissions in the state by 174 MMTCO2E by 2020; therefore, implementation of the Scoping Plan will meet the 2020 reduction target. In a report prepared on September 23, 2010, ARB indicates that 40 percent of the reduction measures identified in the Scoping Plan have been secured.[22] The cap-and-trade program began on January 1, 2012 after ARB completes a series of activities that deal with the registration process, compliance cycle, and tracking system; however, covered entities will not have an emissions obligation until 2013.[23] ARB is currently working on the low carbon fuel standard where public hearings and workshops are currently being conducted. In August 2011, the Scoping Plan was reapproved by the ARB Board with the program's environmental documentation.

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The ARB has prepared the First Update to the Scoping Plan (Update) with a draft made available for public review on February 10, 2014. The Update to the Scoping Plan builds upon the 2008 Scoping Plan with new strategies and recommendations. The Update identifies opportunities to leverage existing and new funds to further drive GHG emission reductions through strategic planning and targeted low carbon investments. The Update defines ARB's climate change priorities for the next five years and sets the groundwork to reach post-2020 goals set forth in Executive Orders S-3-05 and B-16-2012. The Update highlights California's progress toward meeting the 2020 GHG emission reduction goals defined in the 2008 Scoping Plan. It also evaluates how to align the State's long-term GHG reduction strategies with other State policy priorities for water, waste, natural resources, clean energy, transportation, and land use. A draft Environmental Analysis (EA) was released for a 45-day public review period on March 14, 2014. After considering public comments and Board direction, the final First Update, summary of comments received on the draft EA, and ARB's responses to those comments were released on May 15, 2014. The First Update to the Scoping Plan was approved by the Board on May 22, 2014.

4.11 Water Conservation in Landscaping Act

Section 65591 of the Government Code requires all local jurisdictions to adopt a water efficient landscape ordinance. The ordinance is to address water conservation through appropriate use and grouping of plants based on environmental conditions, water budgeting to maximize irrigation efficiency, storm water retention, and automatic irrigation systems. Failure to adopt a water efficiency ordinance requires a local jurisdiction to enforce the provisions of the state's model water efficiency ordinance. In 2009, the Department of Water Resources (DWR) updated the Model Water Efficient Landscape Ordinance pursuant to amendments to the 1991 Act. These amendments and the new model ordinance went into effect on January 1, 2010. The amended Act is applicable to any new commercial, multi-family, industrial, or tract home project containing 2,500 square feet (SF) or more of landscaping. Individual landscape projects of 5,000 SF or more on single-family properties will also be subject to the Act. All landscape plans are required to include calculations verifying conformance with the maximum applied water allowance and must be prepared and stamped by a licensed landscape architect.

4.12 California Green Building Standards

New California Green Building Standards Code (CALGREEN) went into effect on January 1, 2011.[24] The purpose of the new addition to the California Building Code (CBC) is to improve public health, safety, and general welfare by enhancing the design and construction of buildings using concepts to reduce negative impacts or produce positive impacts on the environment. The CALGREEN regulations cover planning and design, energy efficiency, water efficiency and conservation, material conservation and resources efficiency, and environmental quality. Many of the new regulations have the effect of reducing greenhouse gas emissions from the operation of new buildings. Table 7 (CALGREEN Requirements) summarizes the previous requirements of the CBC and the new requirements of CALGREEN that went into effect in January 2011. Minor technical revisions and additional requirements went into effect in July 2012. The Code was further updated in 2013, effective January 1, 2014 through 2016. The code has been updated with the 2016 Code effective as of January 1, 2017.

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Table 6
Scoping Plan Measures

Measure	Description
T-1	Pavely I and II – Light Duty Vehicle Greenhouse Gas Standards
T-2	Low Carbon Fuel Standard
T-3	Regional Transportation-Related Greenhouse Gas Targets
T-4	Vehicle Efficiency Measures
T-5	Ship Electrification at Ports
T-6	Good Movement Efficiency Measures
T-7	Heavy-Duty Vehicle Aerodynamic Efficiency
T-8	Medium and Heavy-Duty Vehicle Hybridization
T-9	High Speed Rail
E-1	Energy Efficiency (Electricity Demand Reduction)
E-2	Increase Combined Heat and Power Use
E-3	Renewable Portfolio Standard
E-4	Million Solar Roofs
CR-1	Energy Efficiency (Natural Gas Demand Reduction)
CR-2	Solar Water Heating
GB-1	Green Buildings
W-1	Water Use Efficiency
W-2	Water Recycling
W-3	Water System Energy Efficiency
W-4	Reuse Urban Runoff
W-5	Increase Renewable Energy Production
W-6	Public Good Charge (Water)
I-1	Energy Efficiency for Large Industrial Sources
I-2	Oil and Gas Extraction GHG Reductions
I-3	Oil and Gas Transmission Leak Reductions
I-4	Refinery Flare Recovery Process Improvements
I-5	Removal of Methane Exemption from Existing Refinery Regulations
RW-1	Landfill Methane Control
RW-2	Increase Landfill Methane Capture Efficiency
RW-3	Recycling and Zero Waste
F-1	Sustainable Forest Target
H-1	Motor Vehicle Air Conditioning
H-2	Non-Utilities and Non-Semiconductor SF_6 Limits
H-3	Semiconductor Manufacturing PFC Reductions
H-4	Consumer Products High GWP Limits
H-5	High GWP Mobile Source Reductions
H-6	High GWP Stationary Source Reductions
H-7	High GWP Mitigation Fees
A-1	Large Dairy Methane Capture
Source: ARB 2008	

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Table 7
CALGREEN Requirements

Item		Requirements	
		Previous	CALGREEN
4.1	Stormwater Management	Stormwater management required on projects > than one acre	All projects subject to stormwater management.
	Surface Drainage	Surface water must flow away from building	Drainage patterns must be analyzed
4.2	Energy Efficiency	California Energy Code	Minimum energy efficiency to be established by California Energy Commissions
4.3	Indoor Water Use	HCD maximum flush rates; CEC water use standards for appliances and fixtures	Indoor water use must decrease by at least 20 percent (prescriptive or performance based)
	Multiple Showerheads	Not covered	Multiple showerheads can not exceed combined flow of the code
	Irrigation Controllers	Not covered	Irrigation controllers must be weather or soil moisture based controllers
4.4	Joint Protection	Plumbing and Mechanical Codes	All openings must be sealed with materials that rodents cannot penetrate
	Construction Waste	Local Ordinances	Establishes minimum 50 percent recycling and waste management plan
	Operation	Plumbing Code for gray water systems	Educational materials and manuals must be provided to building occupants and owners to ensure proper equipment operation
4.5	Fireplaces	Local Ordinances	Gas fireplaces must be direct-vent sealed-combustion type; Wood stoves and pellet stoves must meet USEPA Phase II emissions limits
	Mechanical Equipment	Not covered	All ventilation equipment must be sealed from contamination during construction
	VOCs	Local Ordinances	Establishes statewide limits on VOC emissions from adhesives, paints, sealants, and other coatings
	Capillary Break	No prescriptive method of compliance	Establishes minimum requirements for vapor barriers in slab on grade foundations
	Moisture Content	Current mill moisture levels for wall and floor beams is 15-20 percent	Moisture content must be verified prior to enclosure of wall or floor beams
	Whole House Fans	Not covered	Requires insulted louvers and closing mechanism when fan is off
	Bath Exhaust Fans	Not covered	Requires Energy Star compliance and humidistat control
	HVAC Design	Minimal requirements for heat loss, heat gain, and duct systems	Entire system must be designed in respects to the local climate
7	Installer Qualifications	HVAC installers need not be trained	HVAC installers must be trained or certified
	Inspectors	Training only required for structural materials	All inspectors must be trained

Source: HCD 2010

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4.13 Moreno Valley Energy Efficiency and Climate Action Strategy

The City of Moreno Valley Energy Efficiency and Climate Action Strategy (Strategy) is a policy document that identifies energy and water consumption and greenhouse gas emission reduction strategies. The Climate Action portion of the Strategy includes analysis of existing and future greenhouse gas emissions within Moreno Valley and includes policies to guide efforts to reduce emissions to meet or exceed State requirements. The Strategy sets goals to reduce emissions produced in the city by 2020. Emissions reduction goals and policies incorporate environmental responsibility into its daily management of residential, commercial and industrial growth, education, energy and water use, air quality, transportation, waste reduction, economic development, and open space and natural habitats.

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5 Project Description

The proposed project is located on approximately 18.14 acres and is currently vacant. The project includes the construction of a medical village consisting of five buildings, on-grade un-covered parking, and associated drive aisles and landscaping. The proposed development will include a 53,000-square foot medical office building, 50,000-square foot wellness center with a 3,000-square foot urgent care attached, 91,800 square feet of assisted living space with a total of 207 beds, and a 70,000-square foot Skilled Nursing Program (SNP) building with a total of 158 beds. (see Exhibit 2, Site Plan) Approximately 333,568 square feet of the site area will consist of driveway pavement area, emergency fire access lane, and parking to accommodate 696 parking spaces. The project will also include approximately 264,675 square feet of landscape and hardscape area. Approximately 25,317 cubic yards of soil will be exported.

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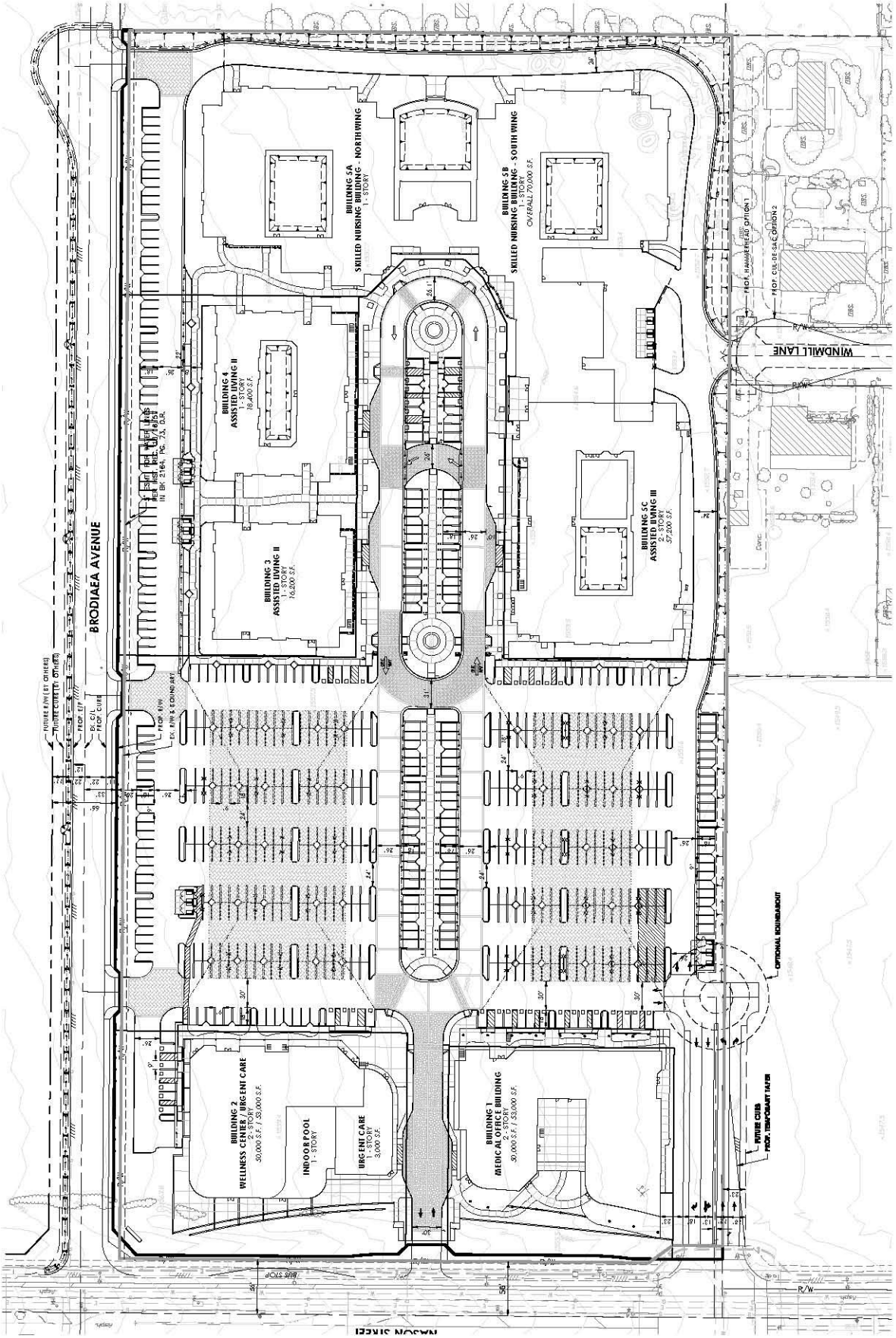

Exhibit 2 Site Pla

Galaxy Management Medical Village

City of Mo

http://www.migcom.com • 951-787-9222

MIG

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6 Air Quality Impact Analysis

The impact analysis contained herein was prepared utilizing guidance provided in the 1993 SCAQMD California Environmental Quality Act (CEQA) Air Quality Handbook. The thresholds identified in Appendix G of the state CEQA Guidelines, as implemented by the City of Moreno Valley, have been utilized to determine the significance of potential impacts.

6.1 Thresholds of Significance

In accordance with Appendix G of the state CEQA Guidelines and the local implementation procedures of the City of Moreno Valley, the project could result in potentially significant impacts related to air quality if it:

A. Conflicts with or obstructs implementation of the applicable air quality plan.
B. Violates any air quality standard or contributes substantially to an existing or projected air quality violation.
C. Results in a cumulatively considerable net increase of any criteria pollutant that the region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors).
D. Exposes sensitive receptors to substantial pollutant concentrations.
E. Create objectionable odors affecting a substantial number of people.

To determine if maximum daily criteria pollutant emissions from construction and operation of the proposed project are significant, the SCAQMD significance thresholds are used. These thresholds are identified in Table 8 (SCAQMD Maximum Daily Emissions Thresholds (lbs/days)).

Table 8
SCAQMD Maximum Daily Emissions Thresholds (lbs/days)

Pollutant	Construction	Operation
NO_X	100	55
VOC/ROG	75	55
PM^{10}	150	150
$PM^{2.5}$	55	55
SO_X	150	150
CO	550	550
Lead	3	3
Source: SCAQMD 2012		

6.2 AQMP Consistency

A significant impact could occur if the proposed project conflicts with or obstructs the implementation of the South Coast Air Basin 2016 Air Quality Management Plan. Conflicts and obstructions that hinder implementation of the AQMP can delay efforts to meet attainment deadlines for criteria pollutants and maintaining existing compliance with applicable air quality standards. Pursuant to the methodology provided in Chapter 12 of the 1993 SCAQMD CEQA Air Quality Handbook, consistency with the South Coast Air Basin 2016 Air Quality Management Plan (AQMP) is affirmed when a project (1) does not increase the frequency or severity of an air quality standards violation or cause a new violation and (2) is consistent with the growth assumptions in the AQMP.[25] Consistency review is presented below:

1. The project would result in short-term construction and long-term pollutant emissions that are less than the CEQA significance emissions thresholds established by the SCAQMD, with mitigation incorporated, as demonstrated in Section 6.3 et seq of this report; therefore, the project could not result in an increase in the frequency or severity of any air quality standards violation and will not cause a new air quality standard violation.

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2. The CEQA Air Quality Handbook indicates that consistency with AQMP growth assumptions must be analyzed for new or amended General Plan elements, Specific Plans, and *significant projects*. *Significant projects* include airports, electrical generating facilities, petroleum and gas refineries, designation of oil drilling districts, water ports, solid waste disposal sites, and off-shore drilling facilities; therefore, the proposed project is not defined as *significant*. This project includes a General Plan Amendment and therefore requires consistency analysis with the AQMP.

The SCAG Regional Transportation Plan /Sustainable Communities Strategy (RTP/SCS) estimated an employment base of 31,400 for Moreno Valley in 2012 and projected an employment base of 83,200 by the year 2040, an increase of 51,800 jobs. The proposed project will result in the addition of approximately 440 employees.[26] This increase in employment is within the growth assumptions estimated by SCAG and thus would be consistent with regional growth projections for employment. The proposed project includes a total of 207 assisted living beds and 158 Skilled Nursing Program beds for a total of 365 beds/residents. SCAG estimated a total population for Moreno Valley at 197,600 residents in 2012 and projected a total population of 256,600 by the year 2040, an increase of 59,000 residents. The increase in population anticipated from the proposed project is within regional population growth assumptions. Therefore, the proposed project is consistent with the AQMP.

Based on the consistency analysis presented above, the proposed project will not conflict with the AQMP.

6.3 Pollutant Emissions

6.3.1 Building Construction

Short-term criteria pollutant emissions will occur during grading, building construction, paving, and coating activities. Emissions will occur from use of equipment, worker, vendor, and hauling trips, and disturbance of on-site soils (fugitive dust). To determine if construction of the proposed project could result in a significant air quality impact, the California Emissions Estimator Model (CalEEMod) has been utilized. It is estimated that the project will take approximately 17 months to complete and a year 2020 operational year has been assumed. It is estimated that approximately 25,317 cubic yards of soil will be exported. Particulate matter emissions account for daily watering required by SCAQMD Rule 403 (three times per day for a 61 percent reduction in fugitive dust). Based on the results of the model, maximum daily emissions from the construction of the project will result in excessive emissions of volatile organic chemicals (identified as reactive organic gases) associated with interior and exterior coating activities. Using the default assumptions of 50 grams per liter (g/l) VOC content for residential interior and exterior coatings and 100 d/l for non-residential interior and exterior coatings, daily VOC emissions will reach 176.43 lbs/day.

To compensate for excessive volatile organic compound (reactive organic gasses) emissions from coating activities, the model includes use of a maximum 25 grams per liter (g/l) volatile organic compound (VOC) content for interior and exterior coatings. Use of low-VOC coatings during construction activities will reduce VOC emissions to below the 75 lbs/day threshold established by SCAQMD (see Table 10 Maximum Mitigated Daily Construction Emissions (lbs/day)). The requirement for use of low-VOC coatings has been incorporated as Mitigation Measure AQ-1. Short-term construction-related impacts will be less than significant with mitigation incorporated.

Table 9
Maximum Unmitigated Daily Construction Emissions (lbs/day)

Year	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Summer	176.38	92.78	49.96	0.15	8.84	4.52
Winter	176.43	93.25	48.01	0.15	8.85	4.52
Threshold	75	100	550	150	150	55
Potentially Significant?	Yes	No	No	No	No	No

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Table 10
Maximum Mitigated Daily Construction Emissions (lbs/day)

Year	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Summer	73.24	92.78	49.96	0.15	8.84	4.52
Winter	73.30	93.25	48.01	0.15	8.85	4.52
Threshold	75	100	550	150	150	55
Potentially Significant?	No	No	No	No	No	No

6.3.2 Operational and Area Sources

Long-term criteria air pollutant emissions will result from the operation of the proposed project. Long-term emissions are categorized as area source emissions, energy demand emissions, and operational emissions. Operational emissions will result from automobile and other vehicle sources associated with daily trips to and from the project site. The California Emissions Estimator Model (CalEEMod) was utilized to estimate mobile source emissions. Trip generation is based on the project traffic study prepared by Kunzman Associates.[27] Area source emissions are the combination of many small emission sources that include use of outdoor landscape maintenance equipment, use of consumer products such as cleaning products, and periodic repainting of the project. Energy demand emissions result from use of electricity and natural gas. Area, energy, and mobile source emissions are included in Table 11 (Unmitigated Daily Emissions (lbs/day)). Based on the results of the model, net daily operational emissions associated with the proposed development will not exceed the thresholds established by SCAQMD.

Table 11
Unmitigated Daily Emissions (lbs/day)

Source	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Summer						
Area Sources	20.99	7.26	135.35	0.33	14.91	14.91
Energy Demand	0.21	1.83	0.82	0.01	0.15	0.15
Mobile Sources	9.41	44.17	116.52	0.39	30.45	8.30
Summer Total	*30.62*	*53.25*	*252.69*	*0.73*	*45.50*	*23.46*
Winter						
Area Sources	20.99	7.26	135.35	0.33	14.91	14.91
Energy Demand	0.21	1.83	0.82	0.01	0.15	0.15
Mobile Sources	9.06	45.11	110.71	0.37	30.45	8.30
Winter Total	*30.26*	*54.20*	*246.88*	*0.71*	*45.51*	*23.46*
Threshold	55	55	550	150	150	55
Potentially Significant?	No	No	No	No	No	No

6.4 Localized Emissions

6.4.1 Toxic Air Contaminants

Operationally, the proposed project does not emit toxic air contaminants and there are no emitters of toxic air contaminants in vicinity of the project. No long-term impacts related to toxic air contaminants (TAC) will occur.

6.4.2 Carbon Monoxide Hotspots

A carbon monoxide (CO) hotspot is an area of localized CO pollution that is caused by severe vehicle congestion on major roadways, typically near intersections. CO hotspots have the potential to violate State and Federal CO standards at intersections, even if the broader Basin is in attainment for Federal and State levels. The California Department of Transportation Project-Level Carbon Monoxide Protocol (Protocol) screening procedures have been utilized to determine if the proposed project could potentially result in a CO hotspot. Based on the recommendations of the Protocol, a screening analysis

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should be performed for the proposed project to determine if a detailed analysis will be required. The California Department of Transportation notes that because of the age of the assumptions used in the screening procedures and the obsolete nature of the modeling tools utilized to develop the screening procedures in the Protocol, they are no longer accepted. More recent screening procedures based on more current methodologies have been developed. The Sacramento Metropolitan Air Quality Management District (SMAQMD) developed a screening threshold in 2011 which states that any project involving an intersection experiencing 31,600 vehicles per hour or more will require detailed analysis. In addition, the Bay Area Air Quality Management District developed a screening threshold in 2010 which states that any project involving an intersection experiencing 44,000 vehicles per hour would require detailed analysis. The proposed project's operations would not involve an intersection experiencing this level of traffic; therefore, the proposed project passes the screening analysis and impacts are deemed less than significant. Based on the local analysis procedures, the proposed project would not result in a CO hotspot.

6.4.3 Localized Significance Thresholds

As part of SCAQMD's environmental justice program, attention has recently been focusing more on the localized effects of air quality. Although the region may be in attainment for a particular criteria pollutant, localized emissions from construction activities coupled with ambient pollutant levels can cause localized increases in criteria pollutant that exceed national and/or state air quality standards.

Construction-related criteria pollutant emissions and potentially significant localized impacts were evaluated pursuant to the SCAQMD Final Localized Significance Thresholds Methodology. This methodology provides screening tables for one through five-acre project scenarios, depending on the amount of site disturbance during a day using the Fact Sheet for equipment usage in CalEEMod.[28] Daily oxides of nitrogen (NO_X), carbon monoxide (CO), and particulate matter (PM_{10} and $PM_{2.5}$) emissions will occur during construction of the project, grading of the project site, and paving of facility parking lot and drive aisles. Table 12 (Localized Significance Threshold Analysis) summarize on-site emissions as compared to the local thresholds established for Source Receptor Area (SRA) 24 (Perris Valley). Based on the use of two tractors, one grader, and one dozer during grading activities, a two-acre threshold will be used. A 25-meter receptor distance was used to reflect the proximity of residential uses to south and east of the project site. Particulate matter emissions account for daily watering required by SCAQMD Rule 403 (three times per day for a 61 percent reduction in fugitive dust). Emissions from construction activities will not exceed any localized threshold.

Table 12
Localized Significance Threshold Analysis

Construction Activity	CO	NO_X	PM_{10}	$PM_{2.5}$
Grading	35.09	59.52	6.05	3.83
Building Construction 2018	17.58	23.39	1.50	1.41
Building Construction 2019	17.16	21.08	1.29	1.21
Paving	14.66	15.24	0.82	0.76
Architectural Coating	1.84	1.84	0.13	0.13
Maximum	35.09	59.52	6.05	3.83
Threshold	883	170	7.0	4.0
Potentially Significant?	No	No	No	No

6.5 Odors

According to the CEQA Air Quality Handbook, land uses associated with odor complaints include agricultural operations, wastewater treatment plants, landfills, and certain industrial operations (such as manufacturing uses that produce chemicals, paper, etc.). Surrounding land uses include residential and health care uses which are not considered uses that produce odors. The proposed project, in turn, does not produce odors that will affect a substantial number of people considering that the proposed project will not result in the manufacturing of any products or conduct other heavy industrial operations.

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6.6 Cumulative Impacts

6.6.1 Cumulative Construction Impacts

Cumulative short-term, construction-related emissions from the project will not contribute considerably to any potential cumulative air quality impact because short-term project emissions will be less than significant and other concurrent construction projects in the region will be required to implement standard air quality regulations and mitigation pursuant to state CEQA requirements, just as this project has.

6.6.2 Cumulative Operational Impacts

The SCAQMD CEQA Air Quality Handbook identifies methodologies for analyzing long-term cumulative air quality impacts for criteria pollutants for which the Basin is nonattainment. These methodologies identify three performance standards that can be used to determine if long-term emissions will result in cumulative impacts. Essentially, these methodologies assess growth associated with a land use project and are evaluated for consistency with regional projections. These methodologies are outdated, and are no longer recommended by SCAQMD.

As discussed in Section 6.2 (AQMD Consistency) of this report, the proposed project is consistent with the growth assumptions in the AQMP. Therefore, the proposed project will not contribute to any potential cumulative air quality impacts.

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7 Climate Change Impact Analysis

7.1 Thresholds of Significance

The proposed project could result in potentially significant impacts related to greenhouse gas emissions and global climate change if it would:

A. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

B. Conflict with an applicable plan, policy, or regulation adopted for the purposes of reducing the emissions of greenhouse gases.

A numerical threshold for determining the significance of greenhouse gas emissions in the South Coast Air Basin (Basin) has not officially been adopted by the SCAQMD. The City of Moreno Valley adopted an Energy Efficiency and Climate Action Strategy in 2012. The focus of the City's Strategy is to implement energy efficiency and greenhouse gas reduction strategies in an effort to reduce greenhouse gas emissions to meet or exceed State requirements. The purpose and intent of these policies is to achieve compliance with AB 32 and reduce greenhouse gas emissions by 15 percent by the year 2020.

7.1.1 Short-Term Emissions

The project will result in short-term greenhouse gas emissions from construction activities. Greenhouse gas emissions will be released by equipment used for grading, paving, building construction, and architectural coating activities. GHG emissions will also result from worker and vendor trips to and from the project site. Table 13 (Construction Greenhouse Gas Emissions) summarizes the estimated yearly emissions from construction activities. Carbon dioxide emissions from construction equipment and worker/vendor trips were estimated utilizing the California Emissions Estimator Model (CalEEMod) version 2016.3.1. Construction activities are short-term and cease to emit greenhouse gases upon completion, unlike operational emissions that are continuous year after year until operation of the use ceases. Because of this difference, the City recommends that construction emissions be amortized over a 30-year operational lifetime. This normalizes construction emissions so that they can be grouped with operational emissions in order to generate a precise project GHG inventory. Amortized construction emissions are included in Table 13.

Table 13
Construction Greenhouse Gas Emissions

	GHG Emissions (MT/YR)			
	CO_2	CH_4	N_2O	TOTAL*
2018	1,603.72	0.16	0.00	1,607.67
2019	443.35	0.04	0.00	444.41
*AMORTIZED TOTAL^*				*53.59*

* MTCO2E
Note: Slight variations may occur due to rounding and variations in modeling software
^ Amortized over 30-years

7.1.2 Long-Term Emissions

Project activities will result in continuous greenhouse gas emissions from mobile, area, and operational sources. Mobile sources including vehicle trips to and from the project site will result primarily in emissions of CO_2 with minor emissions of methane and nitrous oxide. The most significant GHG emission from natural gas usage will be methane. Electricity usage by the project and indirect usage of electricity for water and wastewater conveyance will result primarily in emissions of carbon dioxide. Disposal of solid waste will result in emissions of methane from the decomposition of waste at landfills coupled with CO_2 emission from the handling and transport of solid waste. These sources combine to define the long-term greenhouse gas emissions inventory for the build-out of the proposed project.

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The methodology utilized for each emissions source in CalEEMod is based on the CAPCOA *Quantifying Greenhouse Gas Mitigation Measures* handbook.[29] A summary of the project's operational greenhouse gas are included in Table 14 (Operational Greenhouse Gas Emissions). The emissions inventories are presented as metric tons of carbon dioxide equivalent (MTCO2E) meaning that all emissions have been weighted based on their Global Warming Potential (GWP) (a metric ton is equal to 1.102 US short tons). Mobile sources are based on annual vehicle miles traveled (VMT) based on daily trip generation identified in project traffic study. Natural gas usage and electricity usage are based on default demand figures utilized in CalEEMod.

Table 14
Operational Greenhouse Gas Emissions

Source	GHG Emissions (MT/YR)			
	CO_2	CH_4	N_2O	TOTAL*
Area	109.48	0.14	0.00	113.41
Energy	1,314.34	0.05	0.02	1,319.95
Mobile	5,005.36	0.26	0.00	5,011.91
Solid Waste	318.58	18.82	0.00	789.27
Water/Wastewater	233.12	1.25	0.03	273.73
Subtotal	*6,980.88*	*20.53*	*0.05*	*7,508.28*

* MTCO2E/YR
Note: Slight variations may occur due to rounding

7.1.3 Greenhouse Gas Emissions Inventory

Table 15 (Greenhouse Gas Emissions Inventory) summarizes the yearly estimated greenhouse gas emissions from construction of the project and operational sources. The total yearly carbon dioxide equivalent emissions are estimated at 7,561.87 MTCO2E under business as usual (BAU) conditions without consideration of project design features or implementation of City's Energy Efficiency and Climate Action Strategy policies.

Table 15
Greenhouse Gas Emissions Inventory

Source	GHG Emissions (MT/YR)
	TOTAL*
Construction^	53.59
Operational	7,508.28
EMISSIONS	7,561.87

* MTCO2E/YR: metric tons of carbon dioxide equivalent per year
Note: Slight variations may occur due to rounding
^ Construction impacts amortized over 30-years

Design Features and Regulatory Requirements
The project includes project design features that will reduce greenhouse gas emissions. Furthermore, regulatory requirements associated with the City's Energy Efficiency and Climate Action Strategy policies and the state CalGREEN requirements will further reduce greenhouse gas emissions. Greenhouse gas emissions reductions are summarized below as modeled using CalEEMod per the California Air Pollution Control Officers Association (CAPCOA) *Quantifying Greenhouse Gas Mitigation Measures* handbook.

The City's Energy Efficiency and Climate Action Strategy identifies local policy R2-T3, which requires a Transportation Demand Management (TDM) program for new development to reduce vehicle miles traveled by encouraging ride-sharing and carpooling. The project will ensure trip reduction by encouraging ridesharing through preferential parking and the availability of secured bicycle storage. (CAPCOA Mitigation Measure TRT-3)

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The City's Energy Efficiency and Climate Action Strategy identifies local policy R2-E1 and R2-E5 which require energy efficient designs for all new residential and commercial buildings to be ten percent beyond current Title 24 standards. CalEEMod defaults assume compliance with 2008 California Building Energy Efficiency Standards. According to the Impact Analysis on California's 2013 *Building Energy Efficiency Standards* report prepared by California Energy Commission, compliance with 2013 standards reduced electricity use by 23.3 percent compared to 2008 standards.[30] 2016 Title 24 standards are effective as of January 1, 2017. According to the California Energy Commission, new residential developments built to 2016 standards are 28 percent more efficient than homes built to 2013 standards and nonresidential developments are five percent more efficient.[31] The model was adjusted to account for a 23.3 percent exceedance of 2008 Title 24 efficiency standards to meet 2013 standards coupled with an addition five percent exceedance of 2013 standards to meet 2016 standards for a total exceedance of 28.3 percent. In order to provide a conservative analysis, the additional ten percent efficiency required by the City's Energy Efficiency and Climate Action Strategy has not been discounted. (CAPCOA Mitigation Measure BE-1)

The City's Energy Efficiency and Climate Action Strategy identifies local policy R2-W1, which requires the reduction of water use of 20 percent per capita. Pursuant to CalGREEN requirements, indoor water demand must be reduced by a minimum of 20 percent. This requirement was applied to the project using default reduction factors for low-flow fixtures such as bathroom faucets, kitchen faucets, toilets, and showers provided in CalEEMod (CAPCOA Mitigation Measure WUW-1).

The City's Energy Efficiency and Climate Action Strategy identifies local policy R2-S1 which requires 75 percent of solid waste be diverted from landfills by the year 2020. A 75 percent solid waste diversion factor has been assumed. Recycling helps reduce GHG emissions by reducing solid waste transportation demand and decomposition of solid waste in landfills. (CAPCOA Mitigation Measure SW-1)

Design features and regulatory requirements will reduce greenhouse gas emissions by 1,326.26 MTCO2E per year from BAU conditions, a 17.5 percent reduction. With design features and regulatory requirements, the project will meet the minimum threshold of a 15 percent reduction performance standard from BAU conditions as required by the City's Energy Efficiency and Climate Action Strategy. Table 16 (Reduced Greenhouse Gas Emissions Inventory) summarizes the project greenhouse gas inventory with design features and regulatory requirements incorporated. Impacts will be less than significant with implementation of City greenhouse gas reduction policy.

Table 16
Reduced Greenhouse Gas Emissions Inventory

Source	GHG Emissions (MT/YR)*	
	BAU	Reduced
Construction^	53.59	53.59
Area	113.41	113.41
Energy	1,319.95	1,180.32
Mobile	5,011.91	4,459.39
Solid Waste	789.27	197.32
Water/Wastewater	273.73	231.58
Total	*7,561.87*	*6,235.61*
Reduction		*1,326.26*
Percent Reduction		*17.5%*

* MTCO2E/YR
Note: Slight variations may occur due to rounding

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7.2 Greenhouse Gas Emissions Reduction Planning

7.2.1 Moreno Valley Energy Efficiency and Climate Action Strategy

The City's Energy Efficiency and Climate Action Strategy (2012) guides the City toward attainable conservation goals that may also significantly reduce the impact of greenhouse gas emissions within the community. The Energy Efficiency and Climate Action Strategy includes goals and policies to support and encourage sustainable actions. As discussed above, the project will be consistent with and support implementation of five identified local policies. With implementation of those policies, the project will achieve a 17.87 percent reduction in greenhouse gas emissions over BAU conditions, meeting the required 15 percent reduction as discussed in the City's Energy Efficiency and Climate Action Strategy.

The City adopted the 2016 edition of the California Building Code, including the California Green Building Standards Code (pursuant to Moreno Valley Municipal Code Chapter 8.20). The project would be subject to the California Green Building Standards Code, which requires new buildings to reduce water consumption, employ building commissioning to increase building system efficiencies for large buildings, divert construction waste from landfills, and install low pollutant-emitting finish materials. The project does not include any feature (i.e. substantially alter energy demands) that would interfere with implementation of these state and City codes and plans. No impact will occur.

7.2.2 California Air Resources Board Scoping Plan

ARB's *Scoping Plan* identifies strategies to reduce California's greenhouse gas emissions in support of AB 32. Many of the strategies identified in the Scoping Plan are not applicable at the project level, such as long-term technological improvements to reduce emissions from vehicles. Some measures are applicable and supported by the project, such as energy efficiency. Finally, while some measures are not directly applicable, the project will not conflict with their implementation. Reduction measures are grouped into 18 action categories, as follows:

1. California Cap-and-Trade Program Linked to Western Climate Initiative Partner Jurisdictions. Implement a broad-based California cap-and-trade program to provide a firm limit on emissions. Link the California cap–and-trade program with other Western Climate Initiative Partner programs to create a regional market system to achieve greater environmental and economic benefits for California. Ensure California's program meets all applicable AB 32 requirements for market-based mechanisms.
2. California Light-Duty Vehicle Greenhouse Gas Standards. Implement adopted Pavley standards and planned second phase of the program. Align zero-emission vehicle, alternative and renewable fuel and vehicle technology programs with long-term climate change goals.
3. Energy Efficiency. Maximize energy efficiency building and appliance standards, and pursue additional efficiency efforts including new technologies, and new policy and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California (including both investor-owned and publicly owned utilities).
4. Renewables Portfolio Standards. Achieve 33 percent renewable energy mix statewide.
5. Low Carbon Fuel Standard. Develop and adopt the Low Carbon Fuel Standard.
6. Regional Transportation-Related Greenhouse Gas Targets. Develop regional greenhouse gas emissions reduction targets for passenger vehicles.
7. Vehicle Efficiency Measures. Implement light-duty vehicle efficiency measures.
8. Goods Movement. Implement adopted regulations for the use of shore power for ships at berth. Improve efficiency in goods movement activities.
9. Million Solar Roofs Program. Install 3,000 megawatts of solar-electric capacity under California's existing solar programs.
10. Medium- and Heavy-Duty Vehicles. Adopt medium- (MD) and heavy-duty (HD) vehicle efficiencies. Aerodynamic efficiency measures for HD trucks pulling trailers 53-feet or longer that include improvements in trailer aerodynamics and use of rolling resistance tires were adopted in 2008 and went into effect in 2010. Future, yet to be determined improvements, includes hybridization of MD and HD trucks.

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

11. Industrial Emissions. Require assessment of large industrial sources to determine whether individual sources within a facility can cost-effectively reduce greenhouse gas emissions and provide other pollution reduction co-benefits. Reduce greenhouse gas emissions from fugitive emissions from oil and gas extraction and gas transmission. Adopt and implement regulations to control fugitive methane emissions and reduce flaring at refineries.
12. High Speed Rail. Support implementation of a high speed rail system.
13. Green Building Strategy. Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings.
14. High Global Warming Potential Gases. Adopt measures to reduce high warming global potential gases.
15. Recycling and Waste. Reduce methane emissions at landfills. Increase waste diversion, composting and other beneficial uses of organic materials, and mandate commercial recycling. Move toward zero-waste.
16. Sustainable Forests. Preserve forest sequestration and encourage the use of forest biomass for sustainable energy generation. The 2020 target for carbon sequestration is 5 million MTCO2E/YR.
17. Water. Continue efficiency programs and use cleaner energy sources to move and treat water.
18. Agriculture. In the near-term, encourage investment in manure digesters and at the five-year Scoping Plan update determine if the program should be made mandatory by 2020.

Table 17 (Scoping Plan Consistency Summary) summarizes the project's consistency with the State Scoping Plan. As summarized, the project will not conflict with any of the provisions of the Scoping Plan and in fact supports four of the action categories through energy efficiency, water conservation, recycling, and landscaping.

Table 17
Scoping Plan Consistency Summary

Action	Supporting Measures	Consistency
Cap-and-Trade Program	--	Not Applicable. These programs involve capping emissions from electricity generation, industrial facilities, and broad scoped fuels. Caps do not affect commercial projects.
Light-Duty Vehicle Standards	T-1	Not Applicable. This is a statewide measure establishing vehicle emissions standards.
Energy Efficiency	E-1	Consistent. The project will include a variety of building, water, and solid waste efficiencies consistent with 2013 CALGREEN requirements.
	E-2	
	CR-1	
	CR-2	
Renewables Portfolio Standard	E-3	Not Applicable. Establishes the minimum statewide renewable energy mix.
Low Carbon Fuel Standard	T-2	Not Applicable. Establishes reduced carbon intensity of transportation fuels.
Regional Transportation-Related Greenhouse Gas Targets	T-3	Not Applicable. The project will not result in substantial emissions of greenhouse gas emissions; therefore, transportation related emissions reductions are not required.
Vehicle Efficiency Measures	T-4	Not Applicable. Identifies measures such as minimum tire-fuel efficiency, lower friction oil, and reduction in air conditioning use.
Goods Movement	T-5	Not applicable. Identifies measures to improve goods movement efficiencies such as advanced combustion strategies, friction reduction, waste heat recovery, and

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

	T-6	electrification of accessories.
Million Solar Roofs Program	E-4	Not Applicable. Sets goal for use of solar systems throughout the state.
Medium- & Heavy-Duty Vehicles	T-7	Not applicable. Medium-duty and heavy-duty trucks and trailers will not operate from the proposed project.
	T-8	
Industrial Emissions	I-1	Not Applicable. These measures are applicable to large industrial facilities (> 500,000 MTCOE2/YR) and other intensive uses such as refineries.
	I-2	
	I-3	
	I-4	
	I-5	
High Speed Rail	T-9	Not Applicable. Supports increased mobility choice.
Green Building Strategy	GB-1	Consistent. The project will include a variety of building, water, and solid waste efficiencies consistent with 2013 CALGREEN requirements.
High Global Warming Potential Gases	H-1	Not Applicable. The proposed project is not a substantial source of high GWP emissions and will comply with any future changes in air conditioning, fire protection suppressant, and other requirements.
	H-2	
	H-3	
	H-4	
	H-5	
	H-6	
	H-7	
Recycling and Waste	RW-1	Consistent. The project will be required to recycle a minimum of 50 percent from construction activities and operations per state requirements.
	RW-2	
	RW-3	
Sustainable Forests	F-1	Not Applicable. The project site is not forested and the project will not result in the loss of any forest land.
Water	W-1	Consistent. The project will include use of low-flow fixtures and efficient landscaping per state requirements.
	W-2	
	W-3	
	W-4	
	W-5	
	W-6	
Agriculture	A-1	Not Applicable. The project is not an agricultural use.

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

8 Mitigation Measures

AQ-1 Before the City issues building permits, the Building Official and Community Development Director must verify that construction plans submitted by the project proponent reflect use of architectural coatings where the content of volatile organic compounds (VOC) does not exceed 25 grams per liter (g/l) for interior and exterior applications. This measure must be verified through standard building inspections in light of the performance standard that emissions of volatile organic compounds from application of interior or exterior coatings shall not exceed the daily emissions thresholds established by the South Coast Air Quality Management District. The applicant bears the cost of implementing this mitigation.

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9 References

[1] Western Regional Climate Center. Period of Record Monthly Climate Summary: Riverside Citrus Exp St, California (047473). http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca7473 [June 2016]
[2] South Coast Air Quality Management District. CEQA Air Quality Handbook. 1993
[3] United States Environmental Protection Agency. Sulfur Dioxide. https://www.epa.gov/so2-pollution [February 2017]
[4] California Air Resources Board. Area Designations Maps – State and National. http://www.arb.ca.gov/desig/adm/adm.htm [February 2017]
[5] South Coast Air Quality Management District. Historical Data by Year. 2014
[6] South Coast Air Quality Management District. Historical Data by Year. 2013
[7] South Coast Air Quality Management District. Historical Data by Year. 2012
[8] United States Environmental Protection Agency. EnviroMapper for Envirofacts. http://www.epa.gov/emefdata/em4ef.home [September 2016]
[9] United States Environmental Protection Agency. Envirofacts. San Diego Gas & Electric – Moreno Valley. https://ofmpub.epa.gov/enviro/multisys2_v2.get_list?facility_uin=110002065782 [September 2016]
[10] Kunzman Associates, Inc Majestic Moreno Medical Campus Traffic Impact Analysis. March 22, 2017
[11] United States Environmental Protection Agency. *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2011.* April 12, 2013
[12] United States Environmental Protection Agency. Greenhouse Gas Emissions. https://www.epa.gov/ghgemissions [February 2017]
[13] Intergovernmental Panel on Climate Change. Changes in Atmospheric Constituents and in Radiative Forcing (Working Group I). Forth Assessment Report. 2007
[14] Ibid
[15] California Natural Resources Agency. 2009 California Climate Adaptation Strategy.
[16] United States Environmental Protection Agency. Clean Air Act. www.epa.gov/air/caa/ [August 2014]
[17] South Coast Air Quality Management District. Air Quality Management Plan. June 2007
[18] South Coast Air Quality Management District. Final 2016 Air Quality Management Plan. March 2017
[19] California Climate Action Team. Biennial Report. April 2010
[20] Southern California Association of Governments. Senate Bill 3.75 Fact Sheet. www.scag.ca.gov/sb375/factsheets.htm [October 7, 2010]
[21] California Air Resources Board. Climate Change Scoping Plan. December 2008
[22] California Air Resources Board. AB 32 Climate Change, Scoping Plan Progress Report. September 2010
[23] California Air Resources Board. Cap-and-Trade. http://www.arb.ca.gov/cc/capandtrade/capandtrade.htm [February 2017]
[24] California Building Standards Commission. California Code of Regulations Title 24. California Green Building Standards Code. 2010
[25] South Coast Air Quality Management District. CEQA Air Quality Handbook. 1993
[26] The Natelson Company, Inc. Employment Density Study. October 31, 2001
[27] Kunzman Associates, Inc Majestic Moreno Medical Campus Traffic Impact Analysis. March 22, 2017
[28] South Coast Air Quality Management District. Fact Sheet for Applying CalEEMod to Localized Significance Thresholds.
[29] California Air Pollution Control Officers Association. Quantifying Greenhouse Gas Emissions. August 2010
[30] California Energy Commission. Impact Analysis California's 2013 Building Energy Efficiency Standards. July 2013
[31] California Energy Commission. 2016 Building Energy Efficiency Standards Adoption Hearing Presentation. http://www.energy.ca.gov/title24/2016standards/rulemaking/documents/2015-06-10_hearing/2015-06-10_Adoption_Hearing_Presentation.pdf [February 2017]

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Appendix A CalEEMod Output

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

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Moreno Valley Medical Village

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Medical Office Building	114.48	1000sqft	1.34	114,480.00	0
Other Asphalt Surfaces	333.57	1000sqft	7.66	333,568.00	0
Other Non-Asphalt Surfaces	264.68	1000sqft	6.08	264,675.00	0
Congregate Care (Assisted Living)	365.00	Dwelling Unit	3.06	365,000.00	365

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	10			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 114,480 SF Medical Office Building
365 DU Assisted Living and Nursing Home Units/Beds

Construction Phase -

Grading - Export 25,317 CY

Architectural Coating - Maximum 25 g/L

Vehicle Trips -

Woodstoves - No wood-burning fireplaces

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

Construction Off-road Equipment Mitigation - Water site 3 tmes daily

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	25.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	25.00
tblArchitecturalCoating	EF_Parking	100.00	25.00
tblArchitecturalCoating	EF_Residential_Exterior	50.00	25.00
tblArchitecturalCoating	EF_Residential_Interior	50.00	25.00
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblFireplaces	NumberGas	310.25	328.50
tblFireplaces	NumberWood	18.25	0.00
tblGrading	MaterialExported	0.00	25,317.00
tblLandUse	BuildingSpaceSquareFeet	333,570.00	333,568.00
tblLandUse	BuildingSpaceSquareFeet	264,680.00	264,675.00
tblLandUse	LandUseSquareFeet	333,570.00	333,568.00
tblLandUse	LandUseSquareFeet	264,680.00	264,675.00
tblLandUse	LotAcreage	2.63	1.34
tblLandUse	LotAcreage	22.81	3.06
tblLandUse	Population	1,044.00	365.00
tblProjectCharacteristics	OperationalYear	2018	2020
tblWoodstoves	NumberCatalytic	18.25	0.00
tblWoodstoves	NumberNoncatalytic	18.25	36.50

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	6.2942	92.7807	49.9578	0.1485	10.8351	2.7639	13.5990	4.1752	2.5475	6.7227	0.0000	15,574.8293	15,574.8293	2.6043	0.0000	15,639.9364
2019	73.2429	40.8585	46.2607	0.1323	7.1571	1.4568	8.6139	1.9207	1.3707	3.2914	0.0000	13,377.7617	13,377.7617	1.1233	0.0000	13,405.8444
Maximum	**73.2429**	**92.7807**	**49.9578**	**0.1485**	**10.8351**	**2.7639**	**13.5990**	**4.1752**	**2.5475**	**6.7227**	**0.0000**	**15,574.8293**	**15,574.8293**	**2.6043**	**0.0000**	**15,639.9364**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	6.2942	92.7807	49.9578	0.1485	7.1571	2.7639	8.8449	1.9725	2.5475	4.5200	0.0000	15,574.8293	15,574.8293	2.6043	0.0000	15,639.9364
2019	73.2429	40.8585	46.2607	0.1323	7.1571	1.4568	8.6139	1.9207	1.3707	3.2914	0.0000	13,377.7617	13,377.7617	1.1233	0.0000	13,405.8444
Maximum	**73.2429**	**92.7807**	**49.9578**	**0.1485**	**7.1571**	**2.7639**	**8.8449**	**1.9725**	**2.5475**	**4.5200**	**0.0000**	**15,574.8293**	**15,574.8293**	**2.6043**	**0.0000**	**15,639.9364**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**20.44**	**0.00**	**21.40**	**36.13**	**0.00**	**22.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	20.9887	7.2588	135.3480	0.3283		14.9093	14.9093		14.9093	14.9093	2,154.0980	7,010.8482	9,164.9462	11.8620	0.1275	9,499.5005
Energy	0.2132	1.8285	0.8226	0.0116		0.1473	0.1473		0.1473	0.1473		2,326.0244	2,326.0244	0.0446	0.0426	2,339.8468
Mobile	9.4147	44.1656	116.5215	0.3862	30.0656	0.3806	30.4462	8.0441	0.3571	8.4012		39,239.2556	39,239.2556	1.9920		39,289.0558
Total	**30.6167**	**53.2529**	**252.6920**	**0.7261**	**30.0656**	**15.4372**	**45.5027**	**8.0441**	**15.4137**	**23.4577**	**2,154.0980**	**48,576.1282**	**50,730.2262**	**13.8985**	**0.1702**	**51,128.4030**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	20.9887	7.2588	135.3480	0.3283		14.9093	14.9093		14.9093	14.9093	2,154.0980	7,010.8482	9,164.9462	11.8620	0.1275	9,499.5005
Energy	0.2132	1.8285	0.8226	0.0116		0.1473	0.1473		0.1473	0.1473		2,326.0244	2,326.0244	0.0446	0.0426	2,339.8468
Mobile	9.4147	44.1656	116.5215	0.3862	30.0656	0.3806	30.4462	8.0441	0.3571	8.4012		39,239.2556	39,239.2556	1.9920		39,289.0558
Total	**30.6167**	**53.2529**	**252.6920**	**0.7261**	**30.0656**	**15.4372**	**45.5027**	**8.0441**	**15.4137**	**23.4577**	**2,154.0980**	**48,576.1282**	**50,730.2262**	**13.8985**	**0.1702**	**51,128.4030**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	1/1/2018	2/9/2018	5	30	
2	Building Construction	Building Construction	2/10/2018	4/5/2019	5	300	
3	Paving	Paving	4/6/2019	5/3/2019	5	20	
4	Architectural Coating	Architectural Coating	5/4/2019	5/31/2019	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 13.74

Residential Indoor: 739,125; Residential Outdoor: 246,375; Non-Residential Indoor: 171,720; Non-Residential Outdoor: 57,240; Striped

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

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Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	8	20.00	0.00	3,165.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	551.00	156.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	110.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Clean Paved Roads

3.2 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.7688	0.0000	8.7688	3.6110	0.0000	3.6110			0.0000			0.0000
Off-Road	5.0901	59.5218	35.0894	0.0620		2.6337	2.6337		2.4230	2.4230		6,244.4284	6,244.4284	1.9440		6,293.0278
Total	**5.0901**	**59.5218**	**35.0894**	**0.0620**	**8.7688**	**2.6337**	**11.4025**	**3.6110**	**2.4230**	**6.0340**		**6,244.4284**	**6,244.4284**	**1.9440**		**6,293.0278**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.9590	33.1819	6.4277	0.0840	1.8428	0.1284	1.9712	0.5050	0.1229	0.6278		9,086.6569	9,086.6569	0.6520		9,102.9564
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1069	0.0770	1.0006	2.4500e-003	0.2236	1.7900e-003	0.2254	0.0593	1.6500e-003	0.0609		243.7440	243.7440	8.3300e-003		243.9523
Total	**1.0659**	**33.2589**	**7.4283**	**0.0865**	**2.0663**	**0.1302**	**2.1965**	**0.5642**	**0.1245**	**0.6887**		**9,330.4009**	**9,330.4009**	**0.6603**		**9,346.9086**

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Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.4198	0.0000	3.4198	1.4083	0.0000	1.4083			0.0000			0.0000
Off-Road	5.0901	59.5218	35.0894	0.0620		2.6337	2.6337		2.4230	2.4230	0.0000	6,244.4284	6,244.4284	1.9440		6,293.0278
Total	**5.0901**	**59.5218**	**35.0894**	**0.0620**	**3.4198**	**2.6337**	**6.0536**	**1.4083**	**2.4230**	**3.8313**	**0.0000**	**6,244.4284**	**6,244.4284**	**1.9440**		**6,293.0278**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.9590	33.1819	6.4277	0.0840	1.8428	0.1284	1.9712	0.5050	0.1229	0.6278		9,086.6569	9,086.6569	0.6520		9,102.9564
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1069	0.0770	1.0006	2.4500e-003	0.2236	1.7900e-003	0.2254	0.0593	1.6500e-003	0.0609		243.7440	243.7440	8.3300e-003		243.9523
Total	**1.0659**	**33.2589**	**7.4283**	**0.0865**	**2.0663**	**0.1302**	**2.1965**	**0.5642**	**0.1245**	**0.6887**		**9,330.4009**	**9,330.4009**	**0.6603**		**9,346.9086**

3.3 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099		2,620.9351	2,620.9351	0.6421		2,636.9883
Total	**2.6795**	**23.3900**	**17.5804**	**0.0269**		**1.4999**	**1.4999**		**1.4099**	**1.4099**		**2,620.9351**	**2,620.9351**	**0.6421**		**2,636.9883**

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.6711	18.9529	4.8106	0.0405	0.9982	0.1385	1.1368	0.2874	0.1325	0.4199		4,321.3435	4,321.3435	0.2985		4,328.8053
Worker	2.9437	2.1222	27.5668	0.0675	6.1589	0.0494	6.2083	1.6334	0.0455	1.6789		6,715.1477	6,715.1477	0.2295		6,720.8854
Total	**3.6147**	**21.0751**	**32.3774**	**0.1080**	**7.1571**	**0.1879**	**7.3450**	**1.9207**	**0.1781**	**2.0988**		**11,036.4912**	**11,036.4912**	**0.5280**		**11,049.6907**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099	0.0000	2,620.9351	2,620.9351	0.6421		2,636.9883
Total	**2.6795**	**23.3900**	**17.5804**	**0.0269**		**1.4999**	**1.4999**		**1.4099**	**1.4099**	**0.0000**	**2,620.9351**	**2,620.9351**	**0.6421**		**2,636.9883**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.6711	18.9529	4.8106	0.0405	0.9982	0.1385	1.1368	0.2874	0.1325	0.4199		4,321.3435	4,321.3435	0.2985		4,328.8053
Worker	2.9437	2.1222	27.5668	0.0675	6.1589	0.0494	6.2083	1.6334	0.0455	1.6789		6,715.1477	6,715.1477	0.2295		6,720.8854
Total	**3.6147**	**21.0751**	**32.3774**	**0.1080**	**7.1571**	**0.1879**	**7.3450**	**1.9207**	**0.1781**	**2.0988**		**11,036.4912**	**11,036.4912**	**0.5280**		**11,049.6907**

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

3.3 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.3612**	**21.0788**	**17.1638**	**0.0269**		**1.2899**	**1.2899**		**1.2127**	**1.2127**		**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.6080	17.9075	4.4158	0.0401	0.9982	0.1187	1.1169	0.2874	0.1136	0.4009		4,282.3898	4,282.3898	0.2881		4,289.5931
Worker	2.6751	1.8722	24.6811	0.0653	6.1589	0.0482	6.2071	1.6334	0.0444	1.6778		6,503.7917	6,503.7917	0.2038		6,508.8878
Total	**3.2831**	**19.7797**	**29.0969**	**0.1054**	**7.1571**	**0.1669**	**7.3240**	**1.9207**	**0.1580**	**2.0787**		**10,786.1815**	**10,786.1815**	**0.4920**		**10,798.4809**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.3612**	**21.0788**	**17.1638**	**0.0269**		**1.2899**	**1.2899**		**1.2127**	**1.2127**	**0.0000**	**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.6080	17.9075	4.4158	0.0401	0.9982	0.1187	1.1169	0.2874	0.1136	0.4009		4,282.3898	4,282.3898	0.2881		4,289.5931
Worker	2.6751	1.8722	24.6811	0.0653	6.1589	0.0482	6.2071	1.6334	0.0444	1.6778		6,503.7917	6,503.7917	0.2038		6,508.8878
Total	**3.2831**	**19.7797**	**29.0969**	**0.1054**	**7.1571**	**0.1669**	**7.3240**	**1.9207**	**0.1580**	**2.0787**		**10,786.1815**	**10,786.1815**	**0.4920**		**10,798.4809**

3.4 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4544	15.2441	14.6648	0.0228		0.8246	0.8246		0.7586	0.7586		2,257.0025	2,257.0025	0.7141		2,274.8548
Paving	1.0035					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.4579**	**15.2441**	**14.6648**	**0.0228**		**0.8246**	**0.8246**		**0.7586**	**0.7586**		**2,257.0025**	**2,257.0025**	**0.7141**		**2,274.8548**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0728	0.0510	0.6719	1.7800e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		177.0542	177.0542	5.5500e-003		177.1930
Total	**0.0728**	**0.0510**	**0.6719**	**1.7800e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**177.0542**	**177.0542**	**5.5500e-003**		**177.1930**

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4544	15.2441	14.6648	0.0228		0.8246	0.8246		0.7586	0.7586	0.0000	2,257.0025	2,257.0025	0.7141		2,274.8548
Paving	1.0035					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.4579**	**15.2441**	**14.6648**	**0.0228**		**0.8246**	**0.8246**		**0.7586**	**0.7586**	**0.0000**	**2,257.0025**	**2,257.0025**	**0.7141**		**2,274.8548**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0728	0.0510	0.6719	1.7800e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		177.0542	177.0542	5.5500e-003		177.1930
Total	**0.0728**	**0.0510**	**0.6719**	**1.7800e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**177.0542**	**177.0542**	**5.5500e-003**		**177.1930**

3.5 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	72.4424					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		282.0423
Total	**72.7089**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**		**281.4481**	**281.4481**	**0.0238**		**282.0423**

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5341	0.3738	4.9273	0.0130	1.2295	9.6200e-003	1.2392	0.3261	8.8700e-003	0.3350		1,298.3976	1,298.3976	0.0407		1,299.4150
Total	**0.5341**	**0.3738**	**4.9273**	**0.0130**	**1.2295**	**9.6200e-003**	**1.2392**	**0.3261**	**8.8700e-003**	**0.3350**		**1,298.3976**	**1,298.3976**	**0.0407**		**1,299.4150**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	72.4424					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423
Total	**72.7089**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**	**0.0000**	**281.4481**	**281.4481**	**0.0238**		**282.0423**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5341	0.3738	4.9273	0.0130	1.2295	9.6200e-003	1.2392	0.3261	8.8700e-003	0.3350		1,298.3976	1,298.3976	0.0407		1,299.4150
Total	**0.5341**	**0.3738**	**4.9273**	**0.0130**	**1.2295**	**9.6200e-003**	**1.2392**	**0.3261**	**8.8700e-003**	**0.3350**		**1,298.3976**	**1,298.3976**	**0.0407**		**1,299.4150**

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.4147	44.1656	116.5215	0.3862	30.0656	0.3806	30.4462	8.0441	0.3571	8.4012		39,239.2556	39,239.2556	1.9920		39,289.0558
Unmitigated	9.4147	44.1656	116.5215	0.3862	30.0656	0.3806	30.4462	8.0441	0.3571	8.4012		39,239.2556	39,239.2556	1.9920		39,289.0558

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Congregate Care (Assisted Living)	1,000.10	803.00	890.60	3,267,822	3,267,822
Medical Office Building	4,136.16	1,025.74	177.44	8,109,142	8,109,142
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	5,136.26	1,828.74	1,068.04	11,376,964	11,376,964

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Congregate Care (Assisted Living)	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Medical Office Building	16.60	8.40	6.90	29.60	51.40	19.00	60	30	10
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Medical Office Building	0.550339	0.043800	0.200255	0.122233	0.016799	0.005871	0.020633	0.029727	0.002027	0.001932	0.004726	0.000704	0.000955
Other Asphalt Surfaces	0.550339	0.043800	0.200255	0.122233	0.016799	0.005871	0.020633	0.029727	0.002027	0.001932	0.004726	0.000704	0.000955
Other Non-Asphalt Surfaces	0.550339	0.043800	0.200255	0.122233	0.016799	0.005871	0.020633	0.029727	0.002027	0.001932	0.004726	0.000704	0.000955
Congregate Care (Assisted Living)	0.550339	0.043800	0.200255	0.122233	0.016799	0.005871	0.020633	0.029727	0.002027	0.001932	0.004726	0.000704	0.000955

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.2132	1.8285	0.8226	0.0116		0.1473	0.1473		0.1473	0.1473		2,326.0244	2,326.0244	0.0446	0.0426	2,339.8468
NaturalGas Unmitigated	0.2132	1.8285	0.8226	0.0116		0.1473	0.1473		0.1473	0.1473		2,326.0244	2,326.0244	0.0446	0.0426	2,339.8468

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Congregate Care (Assisted Living)	18676.6	0.2014	1.7212	0.7324	0.0110		0.1392	0.1392		0.1392	0.1392		2,197.2459	2,197.2459	0.0421	0.0403	2,210.3030
Medical Office Building	1094.62	0.0118	0.1073	0.0901	6.4000e-004		8.1600e-003	8.1600e-003		8.1600e-003	8.1600e-003		128.7785	128.7785	2.4700e-003	2.3600e-003	129.5437
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.2132**	**1.8285**	**0.8226**	**0.0116**		**0.1473**	**0.1473**		**0.1473**	**0.1473**		**2,326.0244**	**2,326.0244**	**0.0446**	**0.0426**	**2,339.8468**

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Congregate Care (Assisted Living)	18.6766	0.2014	1.7212	0.7324	0.0110		0.1392	0.1392		0.1392	0.1392		2,197.2459	2,197.2459	0.0421	0.0403	2,210.3030
Medical Office Building	1.09462	0.0118	0.1073	0.0901	6.4000e-004		8.1600e-003	8.1600e-003		8.1600e-003	8.1600e-003		128.7785	128.7785	2.4700e-003	2.3600e-003	129.5437
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.2132**	**1.8285**	**0.8226**	**0.0116**		**0.1473**	**0.1473**		**0.1473**	**0.1473**		**2,326.0244**	**2,326.0244**	**0.0446**	**0.0426**	**2,339.8468**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	20.9887	7.2588	135.3480	0.3283		14.9093	14.9093		14.9093	14.9093	2,154.0980	7,010.8482	9,164.9462	11.8620	0.1275	9,499.5005
Unmitigated	20.9887	7.2588	135.3480	0.3283		14.9093	14.9093		14.9093	14.9093	2,154.0980	7,010.8482	9,164.9462	11.8620	0.1275	9,499.5005

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.9621					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	9.7056					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	9.3942	6.9087	105.0617	0.3267		14.7429	14.7429		14.7429	14.7429	2,154.0980	6,956.4706	9,110.5686	11.8087	0.1275	9,443.7906
Landscaping	0.9269	0.3501	30.2863	1.6000e-003		0.1664	0.1664		0.1664	0.1664		54.3776	54.3776	0.0533		55.7098
Total	**20.9887**	**7.2588**	**135.3480**	**0.3283**		**14.9092**	**14.9092**		**14.9092**	**14.9092**	**2,154.0980**	**7,010.8482**	**9,164.9462**	**11.8620**	**0.1275**	**9,499.5005**

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.9621					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	9.7056					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	9.3942	6.9087	105.0617	0.3267		14.7429	14.7429		14.7429	14.7429	2,154.0980	6,956.4706	9,110.5686	11.8087	0.1275	9,443.7906
Landscaping	0.9269	0.3501	30.2863	1.6000e-003		0.1664	0.1664		0.1664	0.1664		54.3776	54.3776	0.0533		55.7098
Total	**20.9887**	**7.2588**	**135.3480**	**0.3283**		**14.9092**	**14.9092**		**14.9092**	**14.9092**	**2,154.0980**	**7,010.8482**	**9,164.9462**	**11.8620**	**0.1275**	**9,499.5005**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

Moreno Valley Medical Village

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Medical Office Building	114.48	1000sqft	1.34	114,480.00	0
Other Asphalt Surfaces	333.57	1000sqft	7.66	333,568.00	0
Other Non-Asphalt Surfaces	264.68	1000sqft	6.08	264,675.00	0
Congregate Care (Assisted Living)	365.00	Dwelling Unit	3.06	365,000.00	365

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	10			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 114,480 SF Medical Office Building
365 DU Assisted Living and Nursing Home Units/Beds
Construction Phase -

Grading - Export 25,317 CY

Architectural Coating - Maximum 25 g/L

Vehicle Trips -

Woodstoves - No wood-burning fireplaces

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

Construction Off-road Equipment Mitigation - Water site 3 tmes daily

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	25.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	25.00
tblArchitecturalCoating	EF_Parking	100.00	25.00
tblArchitecturalCoating	EF_Residential_Exterior	50.00	25.00
tblArchitecturalCoating	EF_Residential_Interior	50.00	25.00
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblFireplaces	NumberGas	310.25	328.50
tblFireplaces	NumberWood	18.25	0.00
tblGrading	MaterialExported	0.00	25,317.00
tblLandUse	BuildingSpaceSquareFeet	333,570.00	333,568.00
tblLandUse	BuildingSpaceSquareFeet	264,680.00	264,675.00
tblLandUse	LandUseSquareFeet	333,570.00	333,568.00
tblLandUse	LandUseSquareFeet	264,680.00	264,675.00
tblLandUse	LotAcreage	2.63	1.34
tblLandUse	LotAcreage	22.81	3.06
tblLandUse	Population	1,044.00	365.00
tblProjectCharacteristics	OperationalYear	2018	2020
tblWoodstoves	NumberCatalytic	18.25	0.00
tblWoodstoves	NumberNoncatalytic	18.25	36.50

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	6.6070	93.2531	48.0138	0.1469	10.8351	2.7664	13.6015	4.1752	2.5499	6.7251	0.0000	15,408.8588	15,408.8588	2.6306	0.0000	15,474.6241
2019	73.2954	41.0654	44.4784	0.1272	7.1571	1.4587	8.6158	1.9207	1.3725	3.2932	0.0000	12,859.4395	12,859.4395	1.1308	0.0000	12,887.7088
Maximum	**73.2954**	**93.2531**	**48.0138**	**0.1469**	**10.8351**	**2.7664**	**13.6015**	**4.1752**	**2.5499**	**6.7251**	**0.0000**	**15,408.8588**	**15,408.8588**	**2.6306**	**0.0000**	**15,474.6241**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	6.6070	93.2531	48.0138	0.1469	7.1571	2.7664	8.8471	1.9725	2.5499	4.5224	0.0000	15,408.8587	15,408.8587	2.6306	0.0000	15,474.6241
2019	73.2954	41.0654	44.4784	0.1272	7.1571	1.4587	8.6158	1.9207	1.3725	3.2932	0.0000	12,859.4395	12,859.4395	1.1308	0.0000	12,887.7088
Maximum	**73.2954**	**93.2531**	**48.0138**	**0.1469**	**7.1571**	**2.7664**	**8.8471**	**1.9725**	**2.5499**	**4.5224**	**0.0000**	**15,408.8587**	**15,408.8587**	**2.6306**	**0.0000**	**15,474.6241**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**20.44**	**0.00**	**21.40**	**36.13**	**0.00**	**21.99**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	20.9887	7.2588	135.3480	0.3283		14.9093	14.9093		14.9093	14.9093	2,154.0980	7,010.8482	9,164.9462	11.8620	0.1275	9,499.5005
Energy	0.2132	1.8285	0.8226	0.0116		0.1473	0.1473		0.1473	0.1473		2,326.0244	2,326.0244	0.0446	0.0426	2,339.8468
Mobile	9.0570	45.1124	110.7132	0.3660	30.0656	0.3829	30.4485	8.0441	0.3593	8.4034		37,208.2857	37,208.2857	1.9931		37,258.1121
Total	**30.2589**	**54.1997**	**246.8838**	**0.7059**	**30.0656**	**15.4395**	**45.5051**	**8.0441**	**15.4159**	**23.4600**	**2,154.0980**	**46,545.1582**	**48,699.2562**	**13.8996**	**0.1702**	**49,097.4593**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	20.9887	7.2588	135.3480	0.3283		14.9093	14.9093		14.9093	14.9093	2,154.0980	7,010.8482	9,164.9462	11.8620	0.1275	9,499.5005
Energy	0.2132	1.8285	0.8226	0.0116		0.1473	0.1473		0.1473	0.1473		2,326.0244	2,326.0244	0.0446	0.0426	2,339.8468
Mobile	9.0570	45.1124	110.7132	0.3660	30.0656	0.3829	30.4485	8.0441	0.3593	8.4034		37,208.2857	37,208.2857	1.9931		37,258.1121
Total	**30.2589**	**54.1997**	**246.8838**	**0.7059**	**30.0656**	**15.4395**	**45.5051**	**8.0441**	**15.4159**	**23.4600**	**2,154.0980**	**46,545.1582**	**48,699.2562**	**13.8996**	**0.1702**	**49,097.4593**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	1/1/2018	2/9/2018	5	30	
2	Building Construction	Building Construction	2/10/2018	4/5/2019	5	300	
3	Paving	Paving	4/6/2019	5/3/2019	5	20	
4	Architectural Coating	Architectural Coating	5/4/2019	5/31/2019	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 13.74

Residential Indoor: 739,125; Residential Outdoor: 246,375; Non-Residential Indoor: 171,720; Non-Residential Outdoor: 57,240; Striped

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	8	20.00	0.00	3,165.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	551.00	156.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	110.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Clean Paved Roads

3.2 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.7688	0.0000	8.7688	3.6110	0.0000	3.6110			0.0000			0.0000
Off-Road	5.0901	59.5218	35.0894	0.0620		2.6337	2.6337		2.4230	2.4230		6,244.4284	6,244.4284	1.9440		6,293.0278
Total	**5.0901**	**59.5218**	**35.0894**	**0.0620**	**8.7688**	**2.6337**	**11.4025**	**3.6110**	**2.4230**	**6.0340**		**6,244.4284**	**6,244.4284**	**1.9440**		**6,293.0278**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.9850	33.6467	6.9141	0.0826	1.8428	0.1309	1.9737	0.5050	0.1252	0.6302		8,935.7798	8,935.7798	0.6788		8,952.7500
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1172	0.0847	0.9118	2.3000e-003	0.2236	1.7900e-003	0.2254	0.0593	1.6500e-003	0.0609		228.6505	228.6505	7.8300e-003		228.8463
Total	**1.1021**	**33.7313**	**7.8260**	**0.0849**	**2.0663**	**0.1327**	**2.1990**	**0.5642**	**0.1269**	**0.6911**		**9,164.4303**	**9,164.4303**	**0.6866**		**9,181.5963**

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.4198	0.0000	3.4198	1.4083	0.0000	1.4083			0.0000			0.0000
Off-Road	5.0901	59.5218	35.0894	0.0620		2.6337	2.6337		2.4230	2.4230	0.0000	6,244.4284	6,244.4284	1.9440		6,293.0278
Total	**5.0901**	**59.5218**	**35.0894**	**0.0620**	**3.4198**	**2.6337**	**6.0536**	**1.4083**	**2.4230**	**3.8313**	**0.0000**	**6,244.4284**	**6,244.4284**	**1.9440**		**6,293.0278**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.9850	33.6467	6.9141	0.0826	1.8428	0.1309	1.9737	0.5050	0.1252	0.6302		8,935.7798	8,935.7798	0.6788		8,952.7500
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1172	0.0847	0.9118	2.3000e-003	0.2236	1.7900e-003	0.2254	0.0593	1.6500e-003	0.0609		228.6505	228.6505	7.8300e-003		228.8463
Total	**1.1021**	**33.7313**	**7.8260**	**0.0849**	**2.0663**	**0.1327**	**2.1990**	**0.5642**	**0.1269**	**0.6911**		**9,164.4303**	**9,164.4303**	**0.6866**		**9,181.5963**

3.3 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099		2,620.9351	2,620.9351	0.6421		2,636.9883
Total	**2.6795**	**23.3900**	**17.5804**	**0.0269**		**1.4999**	**1.4999**		**1.4099**	**1.4099**		**2,620.9351**	**2,620.9351**	**0.6421**		**2,636.9883**

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.6995	18.9931	5.3126	0.0394	0.9982	0.1407	1.1389	0.2874	0.1346	0.4220		4,206.4045	4,206.4045	0.3192		4,214.3845
Worker	3.2281	2.3321	25.1208	0.0633	6.1589	0.0494	6.2083	1.6334	0.0455	1.6789		6,299.3214	6,299.3214	0.2157		6,304.7147
Total	**3.9276**	**21.3252**	**30.4334**	**0.1027**	**7.1571**	**0.1901**	**7.3472**	**1.9207**	**0.1801**	**2.1008**		**10,505.7259**	**10,505.7259**	**0.5349**		**10,519.0992**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099	0.0000	2,620.9351	2,620.9351	0.6421		2,636.9883
Total	**2.6795**	**23.3900**	**17.5804**	**0.0269**		**1.4999**	**1.4999**		**1.4099**	**1.4099**	**0.0000**	**2,620.9351**	**2,620.9351**	**0.6421**		**2,636.9883**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.6995	18.9931	5.3126	0.0394	0.9982	0.1407	1.1389	0.2874	0.1346	0.4220		4,206.4045	4,206.4045	0.3192		4,214.3845
Worker	3.2281	2.3321	25.1208	0.0633	6.1589	0.0494	6.2083	1.6334	0.0455	1.6789		6,299.3214	6,299.3214	0.2157		6,304.7147
Total	**3.9276**	**21.3252**	**30.4334**	**0.1027**	**7.1571**	**0.1901**	**7.3472**	**1.9207**	**0.1801**	**2.1008**		**10,505.7259**	**10,505.7259**	**0.5349**		**10,519.0992**

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

3.3 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.3612**	**21.0788**	**17.1638**	**0.0269**		**1.2899**	**1.2899**		**1.2127**	**1.2127**		**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.6343	17.9296	4.8905	0.0390	0.9982	0.1206	1.1188	0.2874	0.1154	0.4027		4,167.3672	4,167.3672	0.3082		4,175.0715
Worker	2.9379	2.0571	22.4241	0.0613	6.1589	0.0482	6.2071	1.6334	0.0444	1.6778		6,100.4921	6,100.4921	0.1913		6,105.2738
Total	**3.5721**	**19.9866**	**27.3146**	**0.1003**	**7.1571**	**0.1688**	**7.3259**	**1.9207**	**0.1598**	**2.0805**		**10,267.8594**	**10,267.8594**	**0.4994**		**10,280.3453**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.3612**	**21.0788**	**17.1638**	**0.0269**		**1.2899**	**1.2899**		**1.2127**	**1.2127**	**0.0000**	**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.6343	17.9296	4.8905	0.0390	0.9982	0.1206	1.1188	0.2874	0.1154	0.4027		4,167.3672	4,167.3672	0.3082		4,175.0715
Worker	2.9379	2.0571	22.4241	0.0613	6.1589	0.0482	6.2071	1.6334	0.0444	1.6778		6,100.4921	6,100.4921	0.1913		6,105.2738
Total	**3.5721**	**19.9866**	**27.3146**	**0.1003**	**7.1571**	**0.1688**	**7.3259**	**1.9207**	**0.1598**	**2.0805**		**10,267.8594**	**10,267.8594**	**0.4994**		**10,280.3453**

3.4 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4544	15.2441	14.6648	0.0228		0.8246	0.8246		0.7586	0.7586		2,257.0025	2,257.0025	0.7141		2,274.8548
Paving	1.0035					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.4579**	**15.2441**	**14.6648**	**0.0228**		**0.8246**	**0.8246**		**0.7586**	**0.7586**		**2,257.0025**	**2,257.0025**	**0.7141**		**2,274.8548**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0800	0.0560	0.6105	1.6700e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		166.0751	166.0751	5.2100e-003		166.2053
Total	**0.0800**	**0.0560**	**0.6105**	**1.6700e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**166.0751**	**166.0751**	**5.2100e-003**		**166.2053**

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4544	15.2441	14.6648	0.0228		0.8246	0.8246		0.7586	0.7586	0.0000	2,257.0025	2,257.0025	0.7141		2,274.8548
Paving	1.0035					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.4579**	**15.2441**	**14.6648**	**0.0228**		**0.8246**	**0.8246**		**0.7586**	**0.7586**	**0.0000**	**2,257.0025**	**2,257.0025**	**0.7141**		**2,274.8548**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0800	0.0560	0.6105	1.6700e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		166.0751	166.0751	5.2100e-003		166.2053
Total	**0.0800**	**0.0560**	**0.6105**	**1.6700e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**166.0751**	**166.0751**	**5.2100e-003**		**166.2053**

3.5 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	72.4424					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		282.0423
Total	**72.7089**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**		**281.4481**	**281.4481**	**0.0238**		**282.0423**

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5865	0.4107	4.4767	0.0122	1.2295	9.6200e-003	1.2392	0.3261	8.8700e-003	0.3350		1,217.8841	1,217.8841	0.0382		1,218.8387
Total	**0.5865**	**0.4107**	**4.4767**	**0.0122**	**1.2295**	**9.6200e-003**	**1.2392**	**0.3261**	**8.8700e-003**	**0.3350**		**1,217.8841**	**1,217.8841**	**0.0382**		**1,218.8387**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	72.4424					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423
Total	**72.7089**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**	**0.0000**	**281.4481**	**281.4481**	**0.0238**		**282.0423**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5865	0.4107	4.4767	0.0122	1.2295	9.6200e-003	1.2392	0.3261	8.8700e-003	0.3350		1,217.8841	1,217.8841	0.0382		1,218.8387
Total	**0.5865**	**0.4107**	**4.4767**	**0.0122**	**1.2295**	**9.6200e-003**	**1.2392**	**0.3261**	**8.8700e-003**	**0.3350**		**1,217.8841**	**1,217.8841**	**0.0382**		**1,218.8387**

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.0570	45.1124	110.7132	0.3660	30.0656	0.3829	30.4485	8.0441	0.3593	8.4034		37,208.2857	37,208.2857	1.9931		37,258.1121
Unmitigated	9.0570	45.1124	110.7132	0.3660	30.0656	0.3829	30.4485	8.0441	0.3593	8.4034		37,208.2857	37,208.2857	1.9931		37,258.1121

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Congregate Care (Assisted Living)	1,000.10	803.00	890.60	3,267,822	3,267,822
Medical Office Building	4,136.16	1,025.74	177.44	8,109,142	8,109,142
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	5,136.26	1,828.74	1,068.04	11,376,964	11,376,964

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Congregate Care (Assisted	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Medical Office Building	16.60	8.40	6.90	29.60	51.40	19.00	60	30	10
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Medical Office Building	0.550339	0.043800	0.200255	0.122233	0.016799	0.005871	0.020633	0.029727	0.002027	0.001932	0.004726	0.000704	0.000955
Other Asphalt Surfaces	0.550339	0.043800	0.200255	0.122233	0.016799	0.005871	0.020633	0.029727	0.002027	0.001932	0.004726	0.000704	0.000955
Other Non-Asphalt Surfaces	0.550339	0.043800	0.200255	0.122233	0.016799	0.005871	0.020633	0.029727	0.002027	0.001932	0.004726	0.000704	0.000955
Congregate Care (Assisted Living)	0.550339	0.043800	0.200255	0.122233	0.016799	0.005871	0.020633	0.029727	0.002027	0.001932	0.004726	0.000704	0.000955

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.2132	1.8285	0.8226	0.0116		0.1473	0.1473		0.1473	0.1473		2,326.0244	2,326.0244	0.0446	0.0426	2,339.8468
NaturalGas Unmitigated	0.2132	1.8285	0.8226	0.0116		0.1473	0.1473		0.1473	0.1473		2,326.0244	2,326.0244	0.0446	0.0426	2,339.8468

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Congregate Care (Assisted Living)	18676.6	0.2014	1.7212	0.7324	0.0110		0.1392	0.1392		0.1392	0.1392		2,197.2459	2,197.2459	0.0421	0.0403	2,210.3030
Medical Office Building	1094.62	0.0118	0.1073	0.0901	6.4000e-004		8.1600e-003	8.1600e-003		8.1600e-003	8.1600e-003		128.7785	128.7785	2.4700e-003	2.3600e-003	129.5437
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.2132**	**1.8285**	**0.8226**	**0.0116**		**0.1473**	**0.1473**		**0.1473**	**0.1473**		**2,326.0244**	**2,326.0244**	**0.0446**	**0.0426**	**2,339.8468**

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Congregate Care (Assisted Living)	18.6766	0.2014	1.7212	0.7324	0.0110		0.1392	0.1392		0.1392	0.1392		2,197.2459	2,197.2459	0.0421	0.0403	2,210.3030
Medical Office Building	1.09462	0.0118	0.1073	0.0901	6.4000e-004		8.1600e-003	8.1600e-003		8.1600e-003	8.1600e-003		128.7785	128.7785	2.4700e-003	2.3600e-003	129.5437
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.2132**	**1.8285**	**0.8226**	**0.0116**		**0.1473**	**0.1473**		**0.1473**	**0.1473**		**2,326.0244**	**2,326.0244**	**0.0446**	**0.0426**	**2,339.8468**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	20.9887	7.2588	135.3480	0.3283		14.9093	14.9093		14.9093	14.9093	2,154.0980	7,010.8482	9,164.9462	11.8620	0.1275	9,499.5005
Unmitigated	20.9887	7.2588	135.3480	0.3283		14.9093	14.9093		14.9093	14.9093	2,154.0980	7,010.8482	9,164.9462	11.8620	0.1275	9,499.5005

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.9621					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	9.7056					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	9.3942	6.9087	105.0617	0.3267		14.7429	14.7429		14.7429	14.7429	2,154.0980	6,956.4706	9,110.5686	11.8087	0.1275	9,443.7906
Landscaping	0.9269	0.3501	30.2863	1.6000e-003		0.1664	0.1664		0.1664	0.1664		54.3776	54.3776	0.0533		55.7098
Total	**20.9887**	**7.2588**	**135.3480**	**0.3283**		**14.9092**	**14.9092**		**14.9092**	**14.9092**	**2,154.0980**	**7,010.8482**	**9,164.9462**	**11.8620**	**0.1275**	**9,499.5005**

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.9621					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	9.7056					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	9.3942	6.9087	105.0617	0.3267		14.7429	14.7429		14.7429	14.7429	2,154.0980	6,956.4706	9,110.5686	11.8087	0.1275	9,443.7906
Landscaping	0.9269	0.3501	30.2863	1.6000e-003		0.1664	0.1664		0.1664	0.1664		54.3776	54.3776	0.0533		55.7098
Total	**20.9887**	**7.2588**	**135.3480**	**0.3283**		**14.9092**	**14.9092**		**14.9092**	**14.9092**	**2,154.0980**	**7,010.8482**	**9,164.9462**	**11.8620**	**0.1275**	**9,499.5005**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

Moreno Valley Medical Village

South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Medical Office Building	114.48	1000sqft	1.34	114,480.00	0
Other Asphalt Surfaces	333.57	1000sqft	7.66	333,568.00	0
Other Non-Asphalt Surfaces	264.68	1000sqft	6.08	264,675.00	0
Congregate Care (Assisted Living)	365.00	Dwelling Unit	3.06	365,000.00	365

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	10			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 114,480 SF Medical Office Building
365 DU Assisted Living and Nursing Home Units/Beds

Construction Phase -

Grading - Export 25,317 CY

Architectural Coating -

Vehicle Trips -

Woodstoves - No wood-burning fireplaces

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

Construction Off-road Equipment Mitigation - Water site 3 tmes daily

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblFireplaces	NumberGas	310.25	328.50
tblFireplaces	NumberWood	18.25	0.00
tblGrading	MaterialExported	0.00	25,317.00
tblLandUse	BuildingSpaceSquareFeet	333,570.00	333,568.00
tblLandUse	BuildingSpaceSquareFeet	264,680.00	264,675.00
tblLandUse	LandUseSquareFeet	333,570.00	333,568.00
tblLandUse	LandUseSquareFeet	264,680.00	264,675.00
tblLandUse	LotAcreage	2.63	1.34
tblLandUse	LotAcreage	22.81	3.06
tblLandUse	Population	1,044.00	365.00
tblProjectCharacteristics	OperationalYear	2018	2020
tblWoodstoves	NumberCatalytic	18.25	0.00
tblWoodstoves	NumberNoncatalytic	18.25	36.50

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.8182	6.6227	6.2313	0.0174	0.9738	0.2365	1.2103	0.2807	0.2217	0.5024	0.0000	1,603.7185	1,603.7185	0.1581	0.0000	1,607.6707
2019	1.9834	1.6060	1.7639	4.8400e-003	0.2562	0.0599	0.3161	0.0688	0.0563	0.1251	0.0000	443.3546	443.3546	0.0422	0.0000	444.4104
Maximum	**1.9834**	**6.6227**	**6.2313**	**0.0174**	**0.9738**	**0.2365**	**1.2103**	**0.2807**	**0.2217**	**0.5024**	**0.0000**	**1,603.7185**	**1,603.7185**	**0.1581**	**0.0000**	**1,607.6707**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.8182	6.6227	6.2313	0.0174	0.8936	0.2365	1.1301	0.2477	0.2217	0.4694	0.0000	1,603.7180	1,603.7180	0.1581	0.0000	1,607.6703
2019	1.9834	1.6060	1.7639	4.8400e-003	0.2562	0.0599	0.3161	0.0688	0.0563	0.1251	0.0000	443.3544	443.3544	0.0422	0.0000	444.4103
Maximum	**1.9834**	**6.6227**	**6.2313**	**0.0174**	**0.8936**	**0.2365**	**1.1301**	**0.2477**	**0.2217**	**0.4694**	**0.0000**	**1,603.7180**	**1,603.7180**	**0.1581**	**0.0000**	**1,607.6703**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**6.52**	**0.00**	**5.26**	**9.45**	**0.00**	**5.26**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2018	3-31-2018	2.3371	2.3371
2	4-1-2018	6-30-2018	1.6497	1.6497
3	7-1-2018	9-30-2018	1.6678	1.6678
4	10-1-2018	12-31-2018	1.6863	1.6863
5	1-1-2019	3-31-2019	1.5107	1.5107
6	4-1-2019	6-30-2019	2.0471	2.0471
		Highest	2.3371	2.3371

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.1801	0.1301	5.0991	4.2800e-003		0.2051	0.2051		0.2051	0.2051	24.4271	85.0514	109.4784	0.1400	1.4500e-003	113.4082
Energy	0.0389	0.3337	0.1501	2.1200e-003		0.0269	0.0269		0.0269	0.0269	0.0000	1,314.3394	1,314.3394	0.0457	0.0150	1,319.9522
Mobile	1.2800	6.6942	16.3707	0.0543	4.3209	0.0557	4.3767	1.1578	0.0523	1.2101	0.0000	5,005.3574	5,005.3574	0.2623	0.0000	5,011.9148
Waste						0.0000	0.0000		0.0000	0.0000	318.5821	0.0000	318.5821	18.8277	0.0000	789.2738
Water						0.0000	0.0000		0.0000	0.0000	12.1020	221.0175	233.1195	1.2521	0.0312	273.7313
Total	**3.4990**	**7.1580**	**21.6199**	**0.0607**	**4.3209**	**0.2877**	**4.6086**	**1.1578**	**0.2843**	**1.4421**	**355.1112**	**6,625.7656**	**6,980.8768**	**20.5278**	**0.0477**	**7,508.2803**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.1801	0.1301	5.0991	4.2800e-003		0.2051	0.2051		0.2051	0.2051	24.4271	85.0514	109.4784	0.1400	1.4500e-003	113.4082
Energy	0.0389	0.3337	0.1501	2.1200e-003		0.0269	0.0269		0.0269	0.0269	0.0000	1,314.3394	1,314.3394	0.0457	0.0150	1,319.9522
Mobile	1.2800	6.6942	16.3707	0.0543	4.3209	0.0557	4.3767	1.1578	0.0523	1.2101	0.0000	5,005.3574	5,005.3574	0.2623	0.0000	5,011.9148
Waste						0.0000	0.0000		0.0000	0.0000	318.5821	0.0000	318.5821	18.8277	0.0000	789.2738
Water						0.0000	0.0000		0.0000	0.0000	12.1020	221.0175	233.1195	1.2521	0.0312	273.7313
Total	**3.4990**	**7.1580**	**21.6199**	**0.0607**	**4.3209**	**0.2877**	**4.6086**	**1.1578**	**0.2843**	**1.4421**	**355.1112**	**6,625.7656**	**6,980.8768**	**20.5278**	**0.0477**	**7,508.2803**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	1/1/2018	2/9/2018	5	30	
2	Building Construction	Building Construction	2/10/2018	4/5/2019	5	300	
3	Paving	Paving	4/6/2019	5/3/2019	5	20	
4	Architectural Coating	Architectural Coating	5/4/2019	5/31/2019	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 13.74

Residential Indoor: 739,125; Residential Outdoor: 246,375; Non-Residential Indoor: 171,720; Non-Residential Outdoor: 57,240; Striped

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	8	20.00	0.00	3,165.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	551.00	156.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	110.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Clean Paved Roads

3.2 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1315	0.0000	0.1315	0.0542	0.0000	0.0542	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0764	0.8928	0.5263	9.3000e-004		0.0395	0.0395		0.0364	0.0364	0.0000	84.9728	84.9728	0.0265	0.0000	85.6341
Total	**0.0764**	**0.8928**	**0.5263**	**9.3000e-004**	**0.1315**	**0.0395**	**0.1710**	**0.0542**	**0.0364**	**0.0905**	**0.0000**	**84.9728**	**84.9728**	**0.0265**	**0.0000**	**85.6341**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0146	0.5144	0.0996	1.2500e-003	0.0272	1.9400e-003	0.0291	7.4700e-003	1.8600e-003	9.3200e-003	0.0000	122.7868	122.7868	9.0300e-003	0.0000	123.0127
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5900e-003	1.3100e-003	0.0140	4.0000e-005	3.2900e-003	3.0000e-005	3.3200e-003	8.7000e-004	2.0000e-005	9.0000e-004	0.0000	3.1605	3.1605	1.1000e-004	0.0000	3.1632
Total	**0.0161**	**0.5157**	**0.1137**	**1.2900e-003**	**0.0305**	**1.9700e-003**	**0.0325**	**8.3400e-003**	**1.8800e-003**	**0.0102**	**0.0000**	**125.9473**	**125.9473**	**9.1400e-003**	**0.0000**	**126.1759**

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0513	0.0000	0.0513	0.0211	0.0000	0.0211	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0764	0.8928	0.5263	9.3000e-004		0.0395	0.0395		0.0364	0.0364	0.0000	84.9727	84.9727	0.0265	0.0000	85.6340
Total	**0.0764**	**0.8928**	**0.5263**	**9.3000e-004**	**0.0513**	**0.0395**	**0.0908**	**0.0211**	**0.0364**	**0.0575**	**0.0000**	**84.9727**	**84.9727**	**0.0265**	**0.0000**	**85.6340**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0146	0.5144	0.0996	1.2500e-003	0.0272	1.9400e-003	0.0291	7.4700e-003	1.8600e-003	9.3200e-003	0.0000	122.7868	122.7868	9.0300e-003	0.0000	123.0127
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5900e-003	1.3100e-003	0.0140	4.0000e-005	3.2900e-003	3.0000e-005	3.3200e-003	8.7000e-004	2.0000e-005	9.0000e-004	0.0000	3.1605	3.1605	1.1000e-004	0.0000	3.1632
Total	**0.0161**	**0.5157**	**0.1137**	**1.2900e-003**	**0.0305**	**1.9700e-003**	**0.0325**	**8.3400e-003**	**1.8800e-003**	**0.0102**	**0.0000**	**125.9473**	**125.9473**	**9.1400e-003**	**0.0000**	**126.1759**

3.3 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3095	2.7016	2.0305	3.1100e-003		0.1732	0.1732		0.1629	0.1629	0.0000	274.6212	274.6212	0.0673	0.0000	276.3032
Total	**0.3095**	**2.7016**	**2.0305**	**3.1100e-003**		**0.1732**	**0.1732**		**0.1629**	**0.1629**	**0.0000**	**274.6212**	**274.6212**	**0.0673**	**0.0000**	**276.3032**

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0789	2.2355	0.5853	4.6300e-003	0.1136	0.0161	0.1297	0.0328	0.0154	0.0482	0.0000	447.7316	447.7316	0.0323	0.0000	448.5380
Worker	0.3373	0.2770	2.9755	7.4300e-003	0.6982	5.7000e-003	0.7039	0.1854	5.2600e-003	0.1907	0.0000	670.4456	670.4456	0.0230	0.0000	671.0196
Total	**0.4162**	**2.5126**	**3.5608**	**0.0121**	**0.8118**	**0.0218**	**0.8336**	**0.2182**	**0.0207**	**0.2389**	**0.0000**	**1,118.1772**	**1,118.1772**	**0.0552**	**0.0000**	**1,119.5576**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3095	2.7015	2.0305	3.1100e-003		0.1732	0.1732		0.1629	0.1629	0.0000	274.6208	274.6208	0.0673	0.0000	276.3029
Total	**0.3095**	**2.7015**	**2.0305**	**3.1100e-003**		**0.1732**	**0.1732**		**0.1629**	**0.1629**	**0.0000**	**274.6208**	**274.6208**	**0.0673**	**0.0000**	**276.3029**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0789	2.2355	0.5853	4.6300e-003	0.1136	0.0161	0.1297	0.0328	0.0154	0.0482	0.0000	447.7316	447.7316	0.0323	0.0000	448.5380
Worker	0.3373	0.2770	2.9755	7.4300e-003	0.6982	5.7000e-003	0.7039	0.1854	5.2600e-003	0.1907	0.0000	670.4456	670.4456	0.0230	0.0000	671.0196
Total	**0.4162**	**2.5126**	**3.5608**	**0.0121**	**0.8118**	**0.0218**	**0.8336**	**0.2182**	**0.0207**	**0.2389**	**0.0000**	**1,118.1772**	**1,118.1772**	**0.0552**	**0.0000**	**1,119.5576**

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

3.3 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0815	0.7272	0.5922	9.3000e-004		0.0445	0.0445		0.0418	0.0418	0.0000	81.1110	81.1110	0.0198	0.0000	81.6049
Total	**0.0815**	**0.7272**	**0.5922**	**9.3000e-004**		**0.0445**	**0.0445**		**0.0418**	**0.0418**	**0.0000**	**81.1110**	**81.1110**	**0.0198**	**0.0000**	**81.6049**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0214	0.6302	0.1607	1.3700e-003	0.0339	4.1200e-003	0.0380	9.7900e-003	3.9400e-003	0.0137	0.0000	132.5178	132.5178	9.3000e-003	0.0000	132.7502
Worker	0.0915	0.0730	0.7938	2.1500e-003	0.2086	1.6600e-003	0.2102	0.0554	1.5300e-003	0.0569	0.0000	193.9443	193.9443	6.0800e-003	0.0000	194.0964
Total	**0.1129**	**0.7032**	**0.9545**	**3.5200e-003**	**0.2425**	**5.7800e-003**	**0.2483**	**0.0652**	**5.4700e-003**	**0.0707**	**0.0000**	**326.4621**	**326.4621**	**0.0154**	**0.0000**	**326.8466**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0815	0.7272	0.5922	9.3000e-004		0.0445	0.0445		0.0418	0.0418	0.0000	81.1109	81.1109	0.0198	0.0000	81.6048
Total	**0.0815**	**0.7272**	**0.5922**	**9.3000e-004**		**0.0445**	**0.0445**		**0.0418**	**0.0418**	**0.0000**	**81.1109**	**81.1109**	**0.0198**	**0.0000**	**81.6048**

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0214	0.6302	0.1607	1.3700e-003	0.0339	4.1200e-003	0.0380	9.7900e-003	3.9400e-003	0.0137	0.0000	132.5178	132.5178	9.3000e-003	0.0000	132.7502
Worker	0.0915	0.0730	0.7938	2.1500e-003	0.2086	1.6600e-003	0.2102	0.0554	1.5300e-003	0.0569	0.0000	193.9443	193.9443	6.0800e-003	0.0000	194.0964
Total	**0.1129**	**0.7032**	**0.9545**	**3.5200e-003**	**0.2425**	**5.7800e-003**	**0.2483**	**0.0652**	**5.4700e-003**	**0.0707**	**0.0000**	**326.4621**	**326.4621**	**0.0154**	**0.0000**	**326.8466**

3.4 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0145	0.1524	0.1467	2.3000e-004		8.2500e-003	8.2500e-003		7.5900e-003	7.5900e-003	0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371
Paving	0.0100					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0246**	**0.1524**	**0.1467**	**2.3000e-004**		**8.2500e-003**	**8.2500e-003**		**7.5900e-003**	**7.5900e-003**	**0.0000**	**20.4752**	**20.4752**	**6.4800e-003**	**0.0000**	**20.6371**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	5.8000e-004	6.2600e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5304	1.5304	5.0000e-005	0.0000	1.5316
Total	**7.2000e-004**	**5.8000e-004**	**6.2600e-003**	**2.0000e-005**	**1.6500e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.5304**	**1.5304**	**5.0000e-005**	**0.0000**	**1.5316**

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0145	0.1524	0.1467	2.3000e-004		8.2500e-003	8.2500e-003		7.5900e-003	7.5900e-003	0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371
Paving	0.0100					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0246**	**0.1524**	**0.1467**	**2.3000e-004**		**8.2500e-003**	**8.2500e-003**		**7.5900e-003**	**7.5900e-003**	**0.0000**	**20.4752**	**20.4752**	**6.4800e-003**	**0.0000**	**20.6371**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	5.8000e-004	6.2600e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5304	1.5304	5.0000e-005	0.0000	1.5316
Total	**7.2000e-004**	**5.8000e-004**	**6.2600e-003**	**2.0000e-005**	**1.6500e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.5304**	**1.5304**	**5.0000e-005**	**0.0000**	**1.5316**

3.5 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.7558					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6600e-003	0.0184	0.0184	3.0000e-005		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5587
Total	**1.7584**	**0.0184**	**0.0184**	**3.0000e-005**		**1.2900e-003**	**1.2900e-003**		**1.2900e-003**	**1.2900e-003**	**0.0000**	**2.5533**	**2.5533**	**2.2000e-004**	**0.0000**	**2.5587**

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.3000e-003	4.2200e-003	0.0459	1.2000e-004	0.0121	1.0000e-004	0.0122	3.2100e-003	9.0000e-005	3.2900e-003	0.0000	11.2227	11.2227	3.5000e-004	0.0000	11.2315
Total	**5.3000e-003**	**4.2200e-003**	**0.0459**	**1.2000e-004**	**0.0121**	**1.0000e-004**	**0.0122**	**3.2100e-003**	**9.0000e-005**	**3.2900e-003**	**0.0000**	**11.2227**	**11.2227**	**3.5000e-004**	**0.0000**	**11.2315**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.7558					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6600e-003	0.0184	0.0184	3.0000e-005		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5586
Total	**1.7584**	**0.0184**	**0.0184**	**3.0000e-005**		**1.2900e-003**	**1.2900e-003**		**1.2900e-003**	**1.2900e-003**	**0.0000**	**2.5533**	**2.5533**	**2.2000e-004**	**0.0000**	**2.5586**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.3000e-003	4.2200e-003	0.0459	1.2000e-004	0.0121	1.0000e-004	0.0122	3.2100e-003	9.0000e-005	3.2900e-003	0.0000	11.2227	11.2227	3.5000e-004	0.0000	11.2315
Total	**5.3000e-003**	**4.2200e-003**	**0.0459**	**1.2000e-004**	**0.0121**	**1.0000e-004**	**0.0122**	**3.2100e-003**	**9.0000e-005**	**3.2900e-003**	**0.0000**	**11.2227**	**11.2227**	**3.5000e-004**	**0.0000**	**11.2315**

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.2800	6.6942	16.3707	0.0543	4.3209	0.0557	4.3767	1.1578	0.0523	1.2101	0.0000	5,005.3574	5,005.3574	0.2623	0.0000	5,011.9148
Unmitigated	1.2800	6.6942	16.3707	0.0543	4.3209	0.0557	4.3767	1.1578	0.0523	1.2101	0.0000	5,005.3574	5,005.3574	0.2623	0.0000	5,011.9148

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Congregate Care (Assisted Living)	1,000.10	803.00	890.60	3,267,822	3,267,822
Medical Office Building	4,136.16	1,025.74	177.44	8,109,142	8,109,142
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	5,136.26	1,828.74	1,068.04	11,376,964	11,376,964

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Congregate Care (Assisted	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Medical Office Building	16.60	8.40	6.90	29.60	51.40	19.00	60	30	10
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Medical Office Building	0.550339	0.043800	0.200255	0.122233	0.016799	0.005871	0.020633	0.029727	0.002027	0.001932	0.004726	0.000704	0.000955
Other Asphalt Surfaces	0.550339	0.043800	0.200255	0.122233	0.016799	0.005871	0.020633	0.029727	0.002027	0.001932	0.004726	0.000704	0.000955
Other Non-Asphalt Surfaces	0.550339	0.043800	0.200255	0.122233	0.016799	0.005871	0.020633	0.029727	0.002027	0.001932	0.004726	0.000704	0.000955
Congregate Care (Assisted Living)	0.550339	0.043800	0.200255	0.122233	0.016799	0.005871	0.020633	0.029727	0.002027	0.001932	0.004726	0.000704	0.000955

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	929.2400	929.2400	0.0384	7.9400e-003	932.5643
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	929.2400	929.2400	0.0384	7.9400e-003	932.5643
NaturalGas Mitigated	0.0389	0.3337	0.1501	2.1200e-003		0.0269	0.0269		0.0269	0.0269	0.0000	385.0994	385.0994	7.3800e-003	7.0600e-003	387.3879
NaturalGas Unmitigated	0.0389	0.3337	0.1501	2.1200e-003		0.0269	0.0269		0.0269	0.0269	0.0000	385.0994	385.0994	7.3800e-003	7.0600e-003	387.3879

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Congregate Care (Assisted Living)	6.81696e+006	0.0368	0.3141	0.1337	2.0000e-003		0.0254	0.0254		0.0254	0.0254	0.0000	363.7787	363.7787	6.9700e-003	6.6700e-003	365.9405
Medical Office Building	399535	2.1500e-003	0.0196	0.0165	1.2000e-004		1.4900e-003	1.4900e-003		1.4900e-003	1.4900e-003	0.0000	21.3207	21.3207	4.1000e-004	3.9000e-004	21.4474
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0389**	**0.3337**	**0.1501**	**2.1200e-003**		**0.0269**	**0.0269**		**0.0269**	**0.0269**	**0.0000**	**385.0994**	**385.0994**	**7.3800e-003**	**7.0600e-003**	**387.3879**

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Congregate Care (Assisted Living)	6.81696e+006	0.0368	0.3141	0.1337	2.0000e-003		0.0254	0.0254		0.0254	0.0254	0.0000	363.7787	363.7787	6.9700e-003	6.6700e-003	365.9405
Medical Office Building	399535	2.1500e-003	0.0196	0.0165	1.2000e-004		1.4900e-003	1.4900e-003		1.4900e-003	1.4900e-003	0.0000	21.3207	21.3207	4.1000e-004	3.9000e-004	21.4474
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0389**	**0.3337**	**0.1501**	**2.1200e-003**		**0.0269**	**0.0269**		**0.0269**	**0.0269**	**0.0000**	**385.0994**	**385.0994**	**7.3800e-003**	**7.0600e-003**	**387.3879**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Congregate Care (Assisted Living)	1.79911e+006	573.2363	0.0237	4.9000e-003	575.2871
Medical Office Building	1.11732e+006	356.0036	0.0147	3.0400e-003	357.2772
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**929.2400**	**0.0384**	**7.9400e-003**	**932.5643**

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Congregate Care (Assisted Living)	1.79911e+006	573.2363	0.0237	4.9000e-003	575.2871
Medical Office Building	1.11732e+006	356.0036	0.0147	3.0400e-003	357.2772
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**929.2400**	**0.0384**	**7.9400e-003**	**932.5643**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	2.1801	0.1301	5.0991	4.2800e-003		0.2051	0.2051		0.2051	0.2051	24.4271	85.0514	109.4784	0.1400	1.4500e-003	113.4082
Unmitigated	2.1801	0.1301	5.0991	4.2800e-003		0.2051	0.2051		0.2051	0.2051	24.4271	85.0514	109.4784	0.1400	1.4500e-003	113.4082

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1756					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.7713					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.1174	0.0864	1.3133	4.0800e-003		0.1843	0.1843		0.1843	0.1843	24.4271	78.8851	103.3121	0.1339	1.4500e-003	107.0908
Landscaping	0.1159	0.0438	3.7858	2.0000e-004		0.0208	0.0208		0.0208	0.0208	0.0000	6.1663	6.1663	6.0400e-003	0.0000	6.3174
Total	**2.1801**	**0.1301**	**5.0991**	**4.2800e-003**		**0.2051**	**0.2051**		**0.2051**	**0.2051**	**24.4271**	**85.0514**	**109.4784**	**0.1400**	**1.4500e-003**	**113.4082**

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1756					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.7713					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.1174	0.0864	1.3133	4.0800e-003		0.1843	0.1843		0.1843	0.1843	24.4271	78.8851	103.3121	0.1339	1.4500e-003	107.0908
Landscaping	0.1159	0.0438	3.7858	2.0000e-004		0.0208	0.0208		0.0208	0.0208	0.0000	6.1663	6.1663	6.0400e-003	0.0000	6.3174
Total	**2.1801**	**0.1301**	**5.0991**	**4.2800e-003**		**0.2051**	**0.2051**		**0.2051**	**0.2051**	**24.4271**	**85.0514**	**109.4784**	**0.1400**	**1.4500e-003**	**113.4082**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	233.1195	1.2521	0.0312	273.7313
Unmitigated	233.1195	1.2521	0.0312	273.7313

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Congregate Care (Assisted Living)	23.7812 / 14.9925	159.2792	0.7812	0.0196	184.6475
Medical Office Building	14.365 / 2.73619	73.8403	0.4709	0.0116	89.0839
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**233.1195**	**1.2521**	**0.0312**	**273.7313**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Congregate Care (Assisted Living)	23.7812 / 14.9925	159.2792	0.7812	0.0196	184.6475
Medical Office Building	14.365 / 2.73619	73.8403	0.4709	0.0116	89.0839
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**233.1195**	**1.2521**	**0.0312**	**273.7313**

8.0 Waste Detail

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	318.5821	18.8277	0.0000	789.2738
Unmitigated	318.5821	18.8277	0.0000	789.2738

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Congregate Care (Assisted Living)	333.06	67.6082	3.9955	0.0000	167.4964
Medical Office Building	1236.38	250.9740	14.8321	0.0000	621.7774
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**318.5821**	**18.8277**	**0.0000**	**789.2738**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Congregate Care (Assisted Living)	333.06	67.6082	3.9955	0.0000	167.4964
Medical Office Building	1236.38	250.9740	14.8321	0.0000	621.7774
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**318.5821**	**18.8277**	**0.0000**	**789.2738**

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

Moreno Valley Medical Village

South Coast Air Basin, Annual 2020 Mitigated

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Medical Office Building	114.48	1000sqft	1.34	114,480.00	0
Other Asphalt Surfaces	333.57	1000sqft	7.66	333,568.00	0
Other Non-Asphalt Surfaces	264.68	1000sqft	6.08	264,675.00	0
Congregate Care (Assisted Living)	365.00	Dwelling Unit	3.06	365,000.00	365

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	10			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 114,480 SF Medical Office Building
365 DU Assisted Living and Nursing Home Units/Beds

Construction Phase -

Grading - Export 25,317 CY

Architectural Coating - Maximum 25 g/L

Vehicle Trips -

Vehicle Emission Factors -

Vehicle Emission Factors -

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

Vehicle Emission Factors -

Woodstoves - No wood-burning fireplaces

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	25.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	25.00
tblArchitecturalCoating	EF_Parking	100.00	25.00
tblArchitecturalCoating	EF_Residential_Exterior	50.00	25.00
tblArchitecturalCoating	EF_Residential_Interior	50.00	25.00
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblFireplaces	NumberGas	310.25	328.50
tblFireplaces	NumberWood	18.25	0.00
tblFleetMix	FleetMixLandUseSubType	Medical Office Building	Congregate Care (Assisted Living)
tblFleetMix	FleetMixLandUseSubType	Other Asphalt Surfaces	Medical Office Building
tblFleetMix	FleetMixLandUseSubType	Other Non-Asphalt Surfaces	Other Asphalt Surfaces
tblFleetMix	FleetMixLandUseSubType	Congregate Care (Assisted Living)	Other Non-Asphalt Surfaces
tblGrading	MaterialExported	0.00	25,317.00
tblLandUse	BuildingSpaceSquareFeet	333,570.00	333,568.00
tblLandUse	BuildingSpaceSquareFeet	264,680.00	264,675.00
tblLandUse	LandUseSquareFeet	333,570.00	333,568.00
tblLandUse	LandUseSquareFeet	264,680.00	264,675.00
tblLandUse	LotAcreage	2.63	1.34
tblLandUse	LotAcreage	22.81	3.06
tblLandUse	Population	1,044.00	365.00

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

tblProjectCharacteristics	OperationalYear	2018	2020
tblWoodstoves	NumberCatalytic	18.25	0.00
tblWoodstoves	NumberNoncatalytic	18.25	36.50

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.8070	6.5307	6.0850	0.0167	1.0229	0.2406	1.2634	0.3194	0.2253	0.5447	0.0000	1,536.0698	1,536.0698	0.1563	0.0000	1,539.9783
2019	0.9802	1.8133	1.9881	5.4900e-003	0.2913	0.0672	0.3586	0.0783	0.0632	0.1414	0.0000	502.4231	502.4231	0.0473	0.0000	503.6063
Maximum	**0.9802**	**6.5307**	**6.0850**	**0.0167**	**1.0229**	**0.2406**	**1.2634**	**0.3194**	**0.2253**	**0.5447**	**0.0000**	**1,536.0698**	**1,536.0698**	**0.1563**	**0.0000**	**1,539.9783**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.8070	6.5307	6.0850	0.0167	0.8884	0.2406	1.1290	0.2562	0.2253	0.4815	0.0000	1,536.0694	1,536.0694	0.1563	0.0000	1,539.9779
2019	0.9802	1.8133	1.9881	5.4900e-003	0.2913	0.0672	0.3586	0.0783	0.0632	0.1414	0.0000	502.4230	502.4230	0.0473	0.0000	503.6061
Maximum	**0.9802**	**6.5307**	**6.0850**	**0.0167**	**0.8884**	**0.2406**	**1.1290**	**0.2562**	**0.2253**	**0.4815**	**0.0000**	**1,536.0694**	**1,536.0694**	**0.1563**	**0.0000**	**1,539.9779**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**10.23**	**0.00**	**8.29**	**15.89**	**0.00**	**9.21**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**1-1-2018**	**3-31-2018**	2.2698	2.2698
2	**4-1-2018**	**6-30-2018**	1.6497	1.6497

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

3	**7-1-2018**	**9-30-2018**	1.6678	1.6678
4	**10-1-2018**	**12-31-2018**	1.6863	1.6863
5	**1-1-2019**	**3-31-2019**	1.5107	1.5107
6	**4-1-2019**	**6-30-2019**	1.2483	1.2483
		Highest	2.2698	2.2698

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.1801	0.1301	5.0991	4.2800e-003		0.2051	0.2051		0.2051	0.2051	24.4271	85.0514	109.4784	0.1400	1.4500e-003	113.4082
Energy	0.0389	0.3337	0.1501	2.1200e-003		0.0269	0.0269		0.0269	0.0269	0.0000	1,314.3394	1,314.3394	0.0457	0.0150	1,319.9522
Mobile	1.2800	6.6942	16.3707	0.0543	4.3209	0.0557	4.3767	1.1578	0.0523	1.2101	0.0000	5,005.3574	5,005.3574	0.2623	0.0000	5,011.9148
Waste						0.0000	0.0000		0.0000	0.0000	318.5821	0.0000	318.5821	18.8277	0.0000	789.2738
Water						0.0000	0.0000		0.0000	0.0000	12.1020	221.0175	233.1195	1.2521	0.0312	273.7313
Total	**3.4990**	**7.1580**	**21.6199**	**0.0607**	**4.3209**	**0.2877**	**4.6086**	**1.1578**	**0.2843**	**1.4421**	**355.1112**	**6,625.7656**	**6,980.8768**	**20.5278**	**0.0477**	**7,508.2803**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.1801	0.1301	5.0991	4.2800e-003		0.2051	0.2051		0.2051	0.2051	24.4271	85.0514	109.4784	0.1400	1.4500e-003	113.4082
Energy	0.0313	0.2680	0.1199	1.7100e-003		0.0216	0.0216		0.0216	0.0216	0.0000	1,175.3870	1,175.3870	0.0417	0.0131	1,180.3236
Mobile	1.2196	6.2316	14.8488	0.0483	3.8124	0.0497	3.8622	1.0216	0.0467	1.0682	0.0000	4,453.4420	4,453.4420	0.2379	0.0000	4,459.3896
Waste						0.0000	0.0000		0.0000	0.0000	79.6455	0.0000	79.6455	4.7069	0.0000	197.3184
Water						0.0000	0.0000		0.0000	0.0000	9.6816	189.3655	199.0471	1.0022	0.0251	231.5815
Total	**3.4310**	**6.6297**	**20.0677**	**0.0543**	**3.8124**	**0.2764**	**4.0889**	**1.0216**	**0.2733**	**1.2949**	**113.7542**	**5,903.2458**	**6,017.0000**	**6.1287**	**0.0396**	**6,182.0213**

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	1.95	7.38	7.18	10.55	11.77	3.92	11.28	11.77	3.84	10.21	67.97	10.90	13.81	70.14	16.92	17.66

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2018	1/12/2018	5	10	
2	Grading	Grading	1/13/2018	2/23/2018	5	30	
3	Building Construction	Building Construction	2/24/2018	4/19/2019	5	300	
4	Paving	Paving	4/20/2019	5/17/2019	5	20	
5	Architectural Coating	Architectural Coating	5/18/2019	6/14/2019	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 13.74

Residential Indoor: 739,125; Residential Outdoor: 246,375; Non-Residential Indoor: 171,720; Non-Residential Outdoor: 57,240; Striped

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	2,503.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	551.00	156.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	110.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0228	0.2410	0.1124	1.9000e-004		0.0129	0.0129		0.0119	0.0119	0.0000	17.3800	17.3800	5.4100e-003	0.0000	17.5152
Total	**0.0228**	**0.2410**	**0.1124**	**1.9000e-004**	**0.0903**	**0.0129**	**0.1032**	**0.0497**	**0.0119**	**0.0615**	**0.0000**	**17.3800**	**17.3800**	**5.4100e-003**	**0.0000**	**17.5152**

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.8000e-004	3.9000e-004	4.2100e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9481	0.9481	3.0000e-005	0.0000	0.9490
Total	**4.8000e-004**	**3.9000e-004**	**4.2100e-003**	**1.0000e-005**	**9.9000e-004**	**1.0000e-005**	**1.0000e-003**	**2.6000e-004**	**1.0000e-005**	**2.7000e-004**	**0.0000**	**0.9481**	**0.9481**	**3.0000e-005**	**0.0000**	**0.9490**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0352	0.0000	0.0352	0.0194	0.0000	0.0194	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0228	0.2410	0.1124	1.9000e-004		0.0129	0.0129		0.0119	0.0119	0.0000	17.3799	17.3799	5.4100e-003	0.0000	17.5152
Total	**0.0228**	**0.2410**	**0.1124**	**1.9000e-004**	**0.0352**	**0.0129**	**0.0481**	**0.0194**	**0.0119**	**0.0312**	**0.0000**	**17.3799**	**17.3799**	**5.4100e-003**	**0.0000**	**17.5152**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.8000e-004	3.9000e-004	4.2100e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9481	0.9481	3.0000e-005	0.0000	0.9490
Total	**4.8000e-004**	**3.9000e-004**	**4.2100e-003**	**1.0000e-005**	**9.9000e-004**	**1.0000e-005**	**1.0000e-003**	**2.6000e-004**	**1.0000e-005**	**2.7000e-004**	**0.0000**	**0.9481**	**0.9481**	**3.0000e-005**	**0.0000**	**0.9490**

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

3.3 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1301	0.0000	0.1301	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0764	0.8928	0.5263	9.3000e-004		0.0395	0.0395		0.0364	0.0364	0.0000	84.9728	84.9728	0.0265	0.0000	85.6341
Total	**0.0764**	**0.8928**	**0.5263**	**9.3000e-004**	**0.1301**	**0.0395**	**0.1696**	**0.0540**	**0.0364**	**0.0903**	**0.0000**	**84.9728**	**84.9728**	**0.0265**	**0.0000**	**85.6341**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0115	0.4068	0.0788	9.9000e-004	0.0215	1.5400e-003	0.0230	5.9000e-003	1.4700e-003	7.3700e-003	0.0000	97.1044	97.1044	7.1400e-003	0.0000	97.2830
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5900e-003	1.3100e-003	0.0140	4.0000e-005	3.2900e-003	3.0000e-005	3.3200e-003	8.7000e-004	2.0000e-005	9.0000e-004	0.0000	3.1605	3.1605	1.1000e-004	0.0000	3.1632
Total	**0.0131**	**0.4081**	**0.0928**	**1.0300e-003**	**0.0248**	**1.5700e-003**	**0.0264**	**6.7700e-003**	**1.4900e-003**	**8.2700e-003**	**0.0000**	**100.2649**	**100.2649**	**7.2500e-003**	**0.0000**	**100.4462**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0507	0.0000	0.0507	0.0210	0.0000	0.0210	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0764	0.8928	0.5263	9.3000e-004		0.0395	0.0395		0.0364	0.0364	0.0000	84.9727	84.9727	0.0265	0.0000	85.6340
Total	**0.0764**	**0.8928**	**0.5263**	**9.3000e-004**	**0.0507**	**0.0395**	**0.0903**	**0.0210**	**0.0364**	**0.0574**	**0.0000**	**84.9727**	**84.9727**	**0.0265**	**0.0000**	**85.6340**

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0115	0.4068	0.0788	9.9000e-004	0.0215	1.5400e-003	0.0230	5.9000e-003	1.4700e-003	7.3700e-003	0.0000	97.1044	97.1044	7.1400e-003	0.0000	97.2830
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5900e-003	1.3100e-003	0.0140	4.0000e-005	3.2900e-003	3.0000e-005	3.3200e-003	8.7000e-004	2.0000e-005	9.0000e-004	0.0000	3.1605	3.1605	1.1000e-004	0.0000	3.1632
Total	**0.0131**	**0.4081**	**0.0928**	**1.0300e-003**	**0.0248**	**1.5700e-003**	**0.0264**	**6.7700e-003**	**1.4900e-003**	**8.2700e-003**	**0.0000**	**100.2649**	**100.2649**	**7.2500e-003**	**0.0000**	**100.4462**

3.4 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2961	2.5846	1.9426	2.9700e-003		0.1657	0.1657		0.1558	0.1558	0.0000	262.7328	262.7328	0.0644	0.0000	264.3420
Total	**0.2961**	**2.5846**	**1.9426**	**2.9700e-003**		**0.1657**	**0.1657**		**0.1558**	**0.1558**	**0.0000**	**262.7328**	**262.7328**	**0.0644**	**0.0000**	**264.3420**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0755	2.1388	0.5600	4.4300e-003	0.1086	0.0154	0.1240	0.0313	0.0147	0.0461	0.0000	428.3493	428.3493	0.0309	0.0000	429.1208
Worker	0.3227	0.2650	2.8467	7.1000e-003	0.6680	5.4600e-003	0.6735	0.1774	5.0300e-003	0.1824	0.0000	641.4220	641.4220	0.0220	0.0000	641.9711
Total	**0.3982**	**2.4038**	**3.4066**	**0.0115**	**0.7766**	**0.0209**	**0.7975**	**0.2087**	**0.0198**	**0.2285**	**0.0000**	**1,069.7713**	**1,069.7713**	**0.0528**	**0.0000**	**1,071.0919**

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2961	2.5846	1.9426	2.9700e-003		0.1657	0.1657		0.1558	0.1558	0.0000	262.7325	262.7325	0.0644	0.0000	264.3417
Total	**0.2961**	**2.5846**	**1.9426**	**2.9700e-003**		**0.1657**	**0.1657**		**0.1558**	**0.1558**	**0.0000**	**262.7325**	**262.7325**	**0.0644**	**0.0000**	**264.3417**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0755	2.1388	0.5600	4.4300e-003	0.1086	0.0154	0.1240	0.0313	0.0147	0.0461	0.0000	428.3493	428.3493	0.0309	0.0000	429.1208
Worker	0.3227	0.2650	2.8467	7.1000e-003	0.6680	5.4600e-003	0.6735	0.1774	5.0300e-003	0.1824	0.0000	641.4220	641.4220	0.0220	0.0000	641.9711
Total	**0.3982**	**2.4038**	**3.4066**	**0.0115**	**0.7766**	**0.0209**	**0.7975**	**0.2087**	**0.0198**	**0.2285**	**0.0000**	**1,069.7713**	**1,069.7713**	**0.0528**	**0.0000**	**1,071.0919**

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0933	0.8326	0.6780	1.0600e-003		0.0510	0.0510		0.0479	0.0479	0.0000	92.8662	92.8662	0.0226	0.0000	93.4317
Total	**0.0933**	**0.8326**	**0.6780**	**1.0600e-003**		**0.0510**	**0.0510**		**0.0479**	**0.0479**	**0.0000**	**92.8662**	**92.8662**	**0.0226**	**0.0000**	**93.4317**

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0245	0.7215	0.1840	1.5700e-003	0.0388	4.7200e-003	0.0436	0.0112	4.5200e-003	0.0157	0.0000	151.7232	151.7232	0.0107	0.0000	151.9894
Worker	0.1048	0.0836	0.9089	2.4600e-003	0.2388	1.9000e-003	0.2407	0.0634	1.7500e-003	0.0652	0.0000	222.0522	222.0522	6.9600e-003	0.0000	222.2263
Total	**0.1293**	**0.8051**	**1.0929**	**4.0300e-003**	**0.2776**	**6.6200e-003**	**0.2842**	**0.0746**	**6.2700e-003**	**0.0809**	**0.0000**	**373.7754**	**373.7754**	**0.0176**	**0.0000**	**374.2156**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0933	0.8326	0.6780	1.0600e-003		0.0510	0.0510		0.0479	0.0479	0.0000	92.8661	92.8661	0.0226	0.0000	93.4316
Total	**0.0933**	**0.8326**	**0.6780**	**1.0600e-003**		**0.0510**	**0.0510**		**0.0479**	**0.0479**	**0.0000**	**92.8661**	**92.8661**	**0.0226**	**0.0000**	**93.4316**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0245	0.7215	0.1840	1.5700e-003	0.0388	4.7200e-003	0.0436	0.0112	4.5200e-003	0.0157	0.0000	151.7232	151.7232	0.0107	0.0000	151.9894
Worker	0.1048	0.0836	0.9089	2.4600e-003	0.2388	1.9000e-003	0.2407	0.0634	1.7500e-003	0.0652	0.0000	222.0522	222.0522	6.9600e-003	0.0000	222.2263
Total	**0.1293**	**0.8051**	**1.0929**	**4.0300e-003**	**0.2776**	**6.6200e-003**	**0.2842**	**0.0746**	**6.2700e-003**	**0.0809**	**0.0000**	**373.7754**	**373.7754**	**0.0176**	**0.0000**	**374.2156**

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

3.5 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0145	0.1524	0.1467	2.3000e-004		8.2500e-003	8.2500e-003		7.5900e-003	7.5900e-003	0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371
Paving	0.0100					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0246**	**0.1524**	**0.1467**	**2.3000e-004**		**8.2500e-003**	**8.2500e-003**		**7.5900e-003**	**7.5900e-003**	**0.0000**	**20.4752**	**20.4752**	**6.4800e-003**	**0.0000**	**20.6371**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	5.8000e-004	6.2600e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5304	1.5304	5.0000e-005	0.0000	1.5316
Total	**7.2000e-004**	**5.8000e-004**	**6.2600e-003**	**2.0000e-005**	**1.6500e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.5304**	**1.5304**	**5.0000e-005**	**0.0000**	**1.5316**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0145	0.1524	0.1467	2.3000e-004		8.2500e-003	8.2500e-003		7.5900e-003	7.5900e-003	0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371
Paving	0.0100					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0246**	**0.1524**	**0.1467**	**2.3000e-004**		**8.2500e-003**	**8.2500e-003**		**7.5900e-003**	**7.5900e-003**	**0.0000**	**20.4752**	**20.4752**	**6.4800e-003**	**0.0000**	**20.6371**

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	5.8000e-004	6.2600e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5304	1.5304	5.0000e-005	0.0000	1.5316
Total	**7.2000e-004**	**5.8000e-004**	**6.2600e-003**	**2.0000e-005**	**1.6500e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.5304**	**1.5304**	**5.0000e-005**	**0.0000**	**1.5316**

3.6 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.7244					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6600e-003	0.0184	0.0184	3.0000e-005		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5587
Total	**0.7271**	**0.0184**	**0.0184**	**3.0000e-005**		**1.2900e-003**	**1.2900e-003**		**1.2900e-003**	**1.2900e-003**	**0.0000**	**2.5533**	**2.5533**	**2.2000e-004**	**0.0000**	**2.5587**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.3000e-003	4.2200e-003	0.0459	1.2000e-004	0.0121	1.0000e-004	0.0122	3.2100e-003	9.0000e-005	3.2900e-003	0.0000	11.2227	11.2227	3.5000e-004	0.0000	11.2315
Total	**5.3000e-003**	**4.2200e-003**	**0.0459**	**1.2000e-004**	**0.0121**	**1.0000e-004**	**0.0122**	**3.2100e-003**	**9.0000e-005**	**3.2900e-003**	**0.0000**	**11.2227**	**11.2227**	**3.5000e-004**	**0.0000**	**11.2315**

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.7244					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6600e-003	0.0184	0.0184	3.0000e-005		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5586
Total	**0.7271**	**0.0184**	**0.0184**	**3.0000e-005**		**1.2900e-003**	**1.2900e-003**		**1.2900e-003**	**1.2900e-003**	**0.0000**	**2.5533**	**2.5533**	**2.2000e-004**	**0.0000**	**2.5586**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.3000e-003	4.2200e-003	0.0459	1.2000e-004	0.0121	1.0000e-004	0.0122	3.2100e-003	9.0000e-005	3.2900e-003	0.0000	11.2227	11.2227	3.5000e-004	0.0000	11.2315
Total	**5.3000e-003**	**4.2200e-003**	**0.0459**	**1.2000e-004**	**0.0121**	**1.0000e-004**	**0.0122**	**3.2100e-003**	**9.0000e-005**	**3.2900e-003**	**0.0000**	**11.2227**	**11.2227**	**3.5000e-004**	**0.0000**	**11.2315**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Provide Riade Sharing Program

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.2196	6.2316	14.8488	0.0483	3.8124	0.0497	3.8622	1.0216	0.0467	1.0682	0.0000	4,453.4420	4,453.4420	0.2379	0.0000	4,459.3896
Unmitigated	1.2800	6.6942	16.3707	0.0543	4.3209	0.0557	4.3767	1.1578	0.0523	1.2101	0.0000	5,005.3574	5,005.3574	0.2623	0.0000	5,011.9148

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4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Congregate Care (Assisted Living)	1,000.10	803.00	890.60	3,267,822	2,993,918
Medical Office Building	4,136.16	1,025.74	177.44	8,109,142	7,044,147
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	5,136.26	1,828.74	1,068.04	11,376,964	10,038,066

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Congregate Care (Assisted	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Medical Office Building	16.60	8.40	6.90	29.60	51.40	19.00	60	30	10
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Congregate Care (Assisted Living)	0.550339	0.043800	0.200255	0.122233	0.016799	0.005871	0.020633	0.029727	0.002027	0.001932	0.004726	0.000704	0.000955
Medical Office Building	0.550339	0.043800	0.200255	0.122233	0.016799	0.005871	0.020633	0.029727	0.002027	0.001932	0.004726	0.000704	0.000955
Other Asphalt Surfaces	0.550339	0.043800	0.200255	0.122233	0.016799	0.005871	0.020633	0.029727	0.002027	0.001932	0.004726	0.000704	0.000955
Other Non-Asphalt Surfaces	0.550339	0.043800	0.200255	0.122233	0.016799	0.005871	0.020633	0.029727	0.002027	0.001932	0.004726	0.000704	0.000955

5.0 Energy Detail

Historical Energy Use: N

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5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	866.0320	866.0320	0.0358	7.4000e-003	869.1303
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	929.2400	929.2400	0.0384	7.9400e-003	932.5643
NaturalGas Mitigated	0.0313	0.2680	0.1199	1.7100e-003		0.0216	0.0216		0.0216	0.0216	0.0000	309.3549	309.3549	5.9300e-003	5.6700e-003	311.1933
NaturalGas Unmitigated	0.0389	0.3337	0.1501	2.1200e-003		0.0269	0.0269		0.0269	0.0269	0.0000	385.0994	385.0994	7.3800e-003	7.0600e-003	387.3879

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Congregate Care (Assisted Living)	6.81696e+006	0.0368	0.3141	0.1337	2.0000e-003		0.0254	0.0254		0.0254	0.0254	0.0000	363.7787	363.7787	6.9700e-003	6.6700e-003	365.9405
Medical Office Building	399535	2.1500e-003	0.0196	0.0165	1.2000e-004		1.4900e-003	1.4900e-003		1.4900e-003	1.4900e-003	0.0000	21.3207	21.3207	4.1000e-004	3.9000e-004	21.4474
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0389**	**0.3337**	**0.1501**	**2.1200e-003**		**0.0269**	**0.0269**		**0.0269**	**0.0269**	**0.0000**	**385.0994**	**385.0994**	**7.3800e-003**	**7.0600e-003**	**387.3879**

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Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Congregate Care (Assisted Living)	5.51063e+006	0.0297	0.2539	0.1081	1.6200e-003		0.0205	0.0205		0.0205	0.0205	0.0000	294.0680	294.0680	5.6400e-003	5.3900e-003	295.8155
Medical Office Building	286467	1.5400e-003	0.0140	0.0118	8.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	15.2870	15.2870	2.9000e-004	2.8000e-004	15.3778
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0313**	**0.2680**	**0.1199**	**1.7000e-003**		**0.0216**	**0.0216**		**0.0216**	**0.0216**	**0.0000**	**309.3549**	**309.3549**	**5.9300e-003**	**5.6700e-003**	**311.1933**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Congregate Care (Assisted Living)	1.79911e+006	573.2363	0.0237	4.9000e-003	575.2871
Medical Office Building	1.11732e+006	356.0036	0.0147	3.0400e-003	357.2772
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**929.2400**	**0.0384**	**7.9400e-003**	**932.5643**

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Congregate Care (Assisted Living)	1.70506e+006	543.2673	0.0224	4.6400e-003	545.2109
Medical Office Building	1.013e+006	322.7647	0.0133	2.7600e-003	323.9194
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**866.0320**	**0.0358**	**7.4000e-003**	**869.1303**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	2.1801	0.1301	5.0991	4.2800e-003		0.2051	0.2051		0.2051	0.2051	24.4271	85.0514	109.4784	0.1400	1.4500e-003	113.4082
Unmitigated	2.1801	0.1301	5.0991	4.2800e-003		0.2051	0.2051		0.2051	0.2051	24.4271	85.0514	109.4784	0.1400	1.4500e-003	113.4082

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1756					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.7713					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.1174	0.0864	1.3133	4.0800e-003		0.1843	0.1843		0.1843	0.1843	24.4271	78.8851	103.3121	0.1339	1.4500e-003	107.0908
Landscaping	0.1159	0.0438	3.7858	2.0000e-004		0.0208	0.0208		0.0208	0.0208	0.0000	6.1663	6.1663	6.0400e-003	0.0000	6.3174
Total	**2.1801**	**0.1301**	**5.0991**	**4.2800e-003**		**0.2051**	**0.2051**		**0.2051**	**0.2051**	**24.4271**	**85.0514**	**109.4784**	**0.1400**	**1.4500e-003**	**113.4082**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1756					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.7713					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.1174	0.0864	1.3133	4.0800e-003		0.1843	0.1843		0.1843	0.1843	24.4271	78.8851	103.3121	0.1339	1.4500e-003	107.0908
Landscaping	0.1159	0.0438	3.7858	2.0000e-004		0.0208	0.0208		0.0208	0.0208	0.0000	6.1663	6.1663	6.0400e-003	0.0000	6.3174
Total	**2.1801**	**0.1301**	**5.0991**	**4.2800e-003**		**0.2051**	**0.2051**		**0.2051**	**0.2051**	**24.4271**	**85.0514**	**109.4784**	**0.1400**	**1.4500e-003**	**113.4082**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Attachment: Tech Study_AQ GHG Assessment [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057,

Install Low Flow Shower

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	199.0471	1.0022	0.0251	231.5815
Unmitigated	233.1195	1.2521	0.0312	273.7313

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Congregate Care (Assisted Living)	23.7812 / 14.9925	159.2792	0.7812	0.0196	184.6475
Medical Office Building	14.365 / 2.73619	73.8403	0.4709	0.0116	89.0839
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**233.1195**	**1.2521**	**0.0312**	**273.7313**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Congregate Care (Assisted Living)	19.025 / 14.9925	138.0377	0.6254	0.0158	158.3703
Medical Office Building	11.492 / 2.73619	61.0094	0.3768	9.3300e-003	73.2112
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**199.0471**	**1.0022**	**0.0251**	**231.5815**

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8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	79.6455	4.7069	0.0000	197.3184
Unmitigated	318.5821	18.8277	0.0000	789.2738

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Congregate Care (Assisted Living)	333.06	67.6082	3.9955	0.0000	167.4964
Medical Office Building	1236.38	250.9740	14.8321	0.0000	621.7774
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**318.5821**	**18.8277**	**0.0000**	**789.2738**

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Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Congregate Care (Assisted Living)	83.265	16.9020	0.9989	0.0000	41.8741
Medical Office Building	309.095	62.7435	3.7080	0.0000	155.4443
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**79.6455**	**4.7069**	**0.0000**	**197.3184**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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KUNZMAN ASSOCIATES, INC.

MAJESTIC MORENO MEDICAL CAMPUS

TRAFFIC IMPACT ANALYSIS

October 31, 2017

Attachment: Tech Study Traffic Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Traffic Engineering | Transportation Planning | Parking | Noise/Vibration | Expert Witness
Air Quality | Global Climate Change | Health Risk Assessment

MAJESTIC MORENO MEDICAL CAMPUS

TRAFFIC IMPACT ANALYSIS

October 31, 2017

Prepared by:

Carl Ballard, LEED GA ■ William Kunzman, P.E.

KUNZMAN ASSOCIATES, INC.
1111 Town & Country Road, Suite 34 ■ Orange, California 92868
5005 La Mart Drive, Suite 201 ■ Riverside, California 92507
(714) 973-8383 ■ www.traffic-engineer.com
JN 6462a

Attachment: Tech Study Traffic Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

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I. INTRODUCTION AND SUMMARY

A. Purpose of Report and Study Objectives

The purpose of this traffic impact analysis is to evaluate the development of the proposed Majestic Moreno Medical Campus project. This traffic report presents the traffic impact study methodology, analysis, findings, recommendations, and supporting data.

Study objectives include documentation of existing traffic conditions in the vicinity of the site; evaluation of traffic conditions for existing plus the phase I, II, and III of the proposed project; (3) evaluation of traffic conditions for the phase I year at opening (2020) of the proposed project; (4) evaluation of traffic conditions for the phases I and II year at opening (2021) of the proposed project; (5) evaluation of traffic conditions for the phases I, II, and III year at opening (2022) of the proposed project; (6) evaluation of traffic conditions for the Year 2040; and (7) determination of on-site and off-site improvements and system management actions needed to achieve City of Moreno Valley level of service requirements.

Although this is a technical report, every effort has been made to write the report clearly and concisely. To assist the reader with those terms unique to transportation engineering, a glossary of terms is provided within Appendix A.

B. Executive Summary

1. Site Location and Study Area

The project site is located east of Nason Street between Brodiaea Avenue and Hospital Road in the City of Moreno Valley.

Pursuant to the scoping discussions with City of Moreno Valley staff, the study area includes the following roadway segments and intersections (see Appendix B):

Roadway Segments:

Nason Street north of SR-60 Freeway WB Ramps
Nason Street between SR-60 Freeway WB Ramps and SR-60 EB Ramps
Nason Street between SR-60 EB Ramps and Fir Avenue
Nason Street between Fir Avenue and Eucalyptus Avenue
Nason Street south of Eucalyptus Avenue
Nason Street north of Cottonwood Avenue
Nason Street between Cottonwood Avenue and Alessandro Boulevard
Nason Street between Alessandro Boulevard and Brodiaea Avenue
Nason Street between Brodiaea Avenue and Hospital Road
Nason Street between Hospital Road and Cactus Avenue
Nason Street south of Cactus Avenue
Fir Avenue west of Nason Street
Eucalyptus Avenue west of Nason Street

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Eucalyptus Avenue east of Nason Street
Cottonwood Avenue west of Nason Street
Alessandro Boulevard west of Nason Street
Brodiaea Avenue west of Nason Street
Brodiaea Avenue east of Nason Street
Cactus Avenue west of Nason Street
Cactus Avenue east of Nason Street

Intersections:

Nason Street (NS) at:
- SR-60 Freeway WB Ramps (EW) - #1
- SR-60 Freeway EB Ramps (EW) - #2
- Fir Avenue (EW) - #3
- Eucalyptus Avenue (EW) - #4
- Dracaea Avenue (EW) - #5
- Cottonwood Avenue (EW) - #6
- Alessandro Boulevard (EW) - #7
- Brodiaea Avenue (EW) - #8
- Project Access (EW) - #9
- Hospital Road/Project Access (EW) - #10
- Cactus Avenue (EW) - #11
- Iris Avenue (EW) - #12

Project West Access (NS) at:
- Brodiaea Avenue (EW) - #13

Project Central Access (NS) at:
- Brodiaea Avenue (EW) - #14

Project East Access (NS) at:
- Brodiaea Avenue (EW) - #15

2. Development Description

The project site is proposed to be developed with 114,480 square feet of medical office land use, 207 beds of assisted living land use, and 158 beds of nursing home land use. The project site is proposed to provide access to Nason Street, Brodiaea Avenue, and Hospital Road.

The site is proposed to be developed in three phases. Phase I consists of 207 beds of assisted living land use and is proposed to open in Year 2020. Phase II consists of 114,480 square feet of medical office land use and is proposed to open in Year 2021. Phase III consists of 158 beds of nursing home land use and is proposed to open in Year 2022.

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The current General Plan zoning for the approximately 18.38 acre site is R2. The R2 zoning allows up to 2 residential dwelling units per acre. The project site could potentially be developed with 36 residential dwelling units.

3. Principal Findings

a. Required Level of Service: The City has established Level of Service requirements for all intersections within the City. Level of Service C will be the design objective for all movements and under no circumstance will be less than Level of Service D (during peak hour), volume-to-capacity of 0.90, for site and non-site traffic at the build-out of the study area.

b. For Existing traffic conditions, the study area intersections currently operate at acceptable Levels of Service during the peak hours.

For Existing traffic conditions, the study area roadway segments currently operate at acceptable Levels of Service.

c. The project is projected to generate a total of approximately 5,136 daily vehicle trips, 338 of which occur during the morning peak hour and 504 of which occur during the evening peak hour.

d. For Existing Plus Project Phase I, II, and III traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours.

For Existing Plus Project Phase I, II, and III traffic conditions, the study area roadway segments are projected to operate at acceptable Levels of Service.

e. For Opening Year (2020) Without Project traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours.

For Opening Year (2020) Without Project traffic conditions, the following study area roadway segment is projected to operate at an unacceptable Level of Service, without improvements:

Alessandro Boulevard west of Nason Street

For Opening Year (2020) Without Project traffic conditions, the study area roadway segments are projected to operate within acceptable Levels of Service, with improvements.

f. For Opening Year (2020) With Project Phase I traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours.

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For Opening Year (2020) With Project Phase I traffic conditions, the following study area roadway segment is projected to operate at an unacceptable Level of Service, without improvements:

Alessandro Boulevard west of Nason Street

For Opening Year (2020) With Project Phase I traffic conditions, the study area roadway segments are projected to operate within acceptable Levels of Service, with improvements.

g. For Opening Year (2021) Without Project traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours.

For Opening Year (2021) Without Project traffic conditions, the following study area roadway segment is projected to operate at an unacceptable Level of Service, without improvements:

Alessandro Boulevard west of Nason Street

For Opening Year (2021) Without Project traffic conditions, the study area roadway segments are projected to operate within acceptable Levels of Service, with improvements.

h. For Opening Year (2021) With Project Phases I and II traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours.

For Opening Year (2021) With Project Phases I and II traffic conditions, the following study area roadway segment is projected to operate at an unacceptable Level of Service, without improvements:

Alessandro Boulevard west of Nason Street

For Opening Year (2021) With Project Phases I and II traffic conditions, the study area roadway segments are projected to operate within acceptable Levels of Service, with improvements.

i. For Opening Year (2022) Without Project traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours.

For Opening Year (2022) Without Project traffic conditions, the following study area roadway segment is projected to operate at an unacceptable Level of Service, without improvements:

Alessandro Boulevard west of Nason Street

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For Opening Year (2022) Without Project traffic conditions, the study area roadway segments are projected to operate within acceptable Levels of Service, with improvements.

j. For Opening Year (2022) With Project Phases I, II and III traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours.

For Opening Year (2022) With Project Phases I, II and III traffic conditions, the following study area roadway segment is projected to operate at an unacceptable Level of Service, without improvements:

Alessandro Boulevard west of Nason Street

For Opening Year (2022) With Project Phases I, II and III traffic conditions, the study area roadway segments are projected to operate within acceptable Levels of Service, with improvements.

k. For Year 2040 Without Project traffic conditions, the following study area intersections are projected to operate at unacceptable Levels of Service during the peak hours, without improvements:

Nason Street (NS) at:
Eucalyptus Avenue (EW) - #4
Alessandro Boulevard (EW) - #7

For Year 2040 Without Project traffic conditions, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours, with improvements.

For Year 2040 Without Project traffic conditions, the following study area roadway segments are projected to operate at unacceptable Levels of Service, without improvements:

Nason Street south of Eucalyptus Avenue
Nason Street north of Cottonwood Avenue
Alessandro Boulevard west of Nason Street
Cactus Avenue east of Nason Street

For Year 2040 Without Project traffic conditions, the study area roadway segments are projected to operate within acceptable Levels of Service, with improvements.

l. For Year 2040 With Project Phases I, II and III traffic conditions, the following study area intersections are projected to operate at unacceptable Levels of Service during the peak hours, without improvements:

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Nason Street (NS) at:
Eucalyptus Avenue (EW) - #4
Alessandro Boulevard (EW) - #7

For Year 2040 With Project Phases I, II and III traffic conditions, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours, with improvements.

For Year 2040 With Project Phases I, II and III traffic conditions, the following study area roadway segments are projected to operate at unacceptable Levels of Service, without improvements:

Nason Street south of Eucalyptus Avenue
Nason Street north of Cottonwood Avenue
Nason Street between Cottonwood Avenue and Alessandro Boulevard
Alessandro Boulevard west of Nason Street
Cactus Avenue east of Nason Street

For Year 2040 With Project traffic conditions, the study area roadway segments are projected to operate within acceptable Levels of Service, with improvements.

m. The vehicle queuing analysis from the Synchro software (see Appendix G) shows that all future vehicle queuing demands are able to be contained in the vehicle queuing storage areas.

4. Recommendations

Site-specific circulation and access recommendations are depicted on Figure 54.

Construct Nason Street from Brodiaea Avenue to Hospital Road its ultimate half-section width as a Divided Major Arterial (120 foot right-of-way) in conjunction with development, including landscaping and parkway improvements, as necessary

Construct Brodiaea Avenue from Nason Street to the east project boundary at its ultimate half-section width in conjunction with development, including landscaping and parkway improvements, as necessary.

Existing signing and striping along Nason Street adjacent to the project site needs to be modified to accommodate the proposed project access.

The existing traffic signal at Nason Street (NS) at Hospital Road (EW) - #10 needs to be modified to accommodate the proposed project access.

On-site traffic signing/striping should be implemented in conjunction with detailed construction plans for the project site.

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Sight distance at project accesses shall comply with standard California Department of Transportation and City of Moreno Valley sight distance standards. The final grading, landscaping, and street improvement plans shall demonstrate that sight distance standards are met. Such plans must be reviewed by the City and approved as consistent with this measure prior to issue of grading permits.

Participate in the phased construction of off-site traffic signals through payment of traffic signal mitigation fees. The traffic signals within the study area at buildout should specifically include an interconnect of the traffic signals to function in a coordinated system.

As is the case for any roadway design, the City of Moreno Valley should periodically review traffic operations in the vicinity of the project once the project is constructed to assure that the traffic operations are satisfactory.

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II. PROPOSED DEVELOPMENT

A. Location

The project site is located east of Nason Street between Brodiaea Avenue and Hospital Road in the City of Moreno Valley. Figure 1 shows the project location map.

B. Land Use and Intensity

The project site is proposed to be developed with 114,480 square feet of medical office land use, 207 beds of assisted living land use, and 158 beds of nursing home land use. The project site is proposed to provide access to Nason Street, Brodiaea Avenue, and Hospital Road.

The site is proposed to be developed in three phases. Phase I consists of 207 beds of assisted living land use and is proposed to open in Year 2020. Phase II consists of 114,480 square feet of medical office land use and is proposed to open in Year 2021. Phase III consists of 158 beds of nursing home land use and is proposed to open in Year 2022.

C. Site Plan

Figure 2 illustrates the project site plan.

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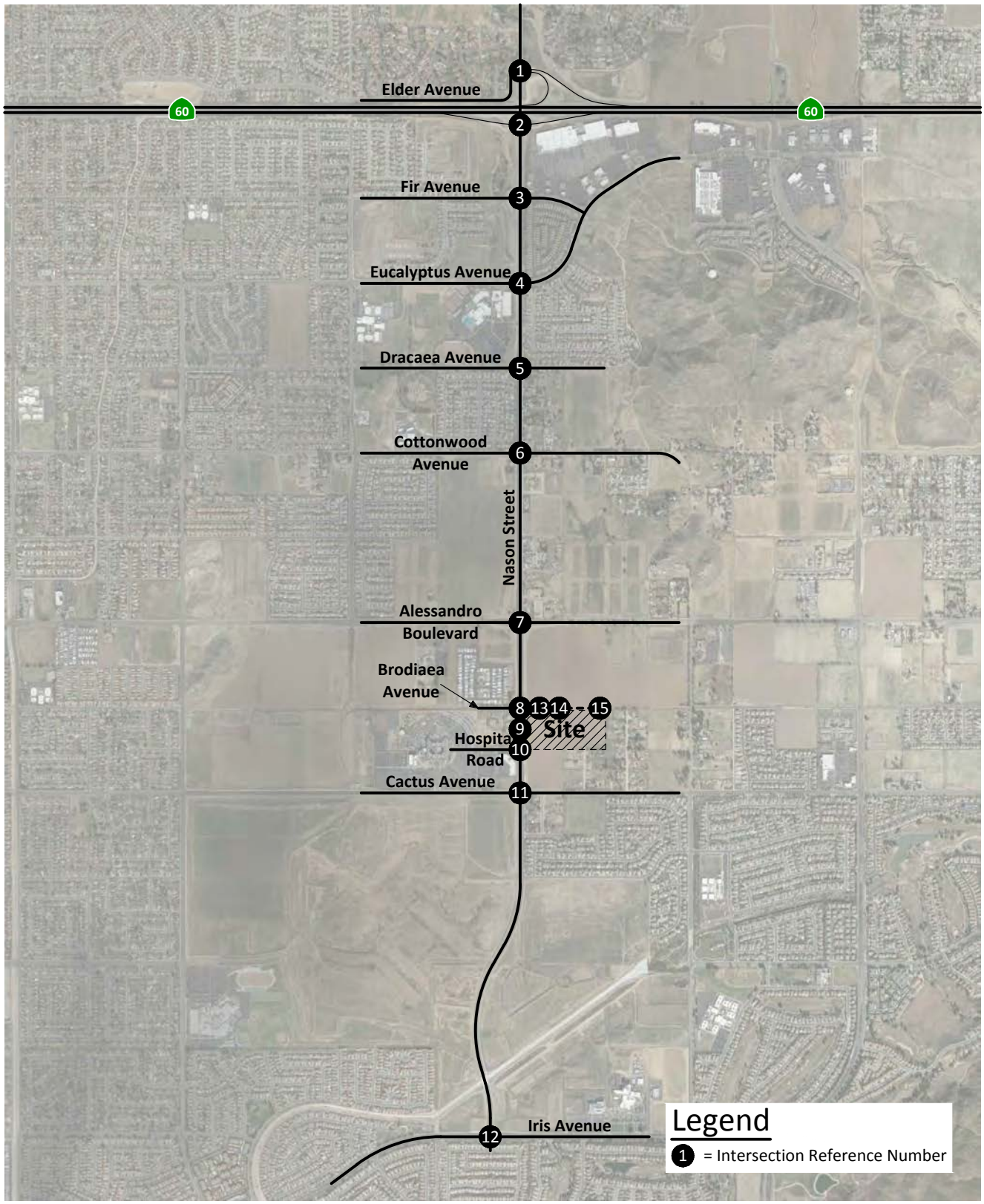
Figure 1
Project Location Map



KUNZMAN ASSOCIATES, INC.

OVER 40 YEARS OF EXCELLENT SERVICE

JN 6462a

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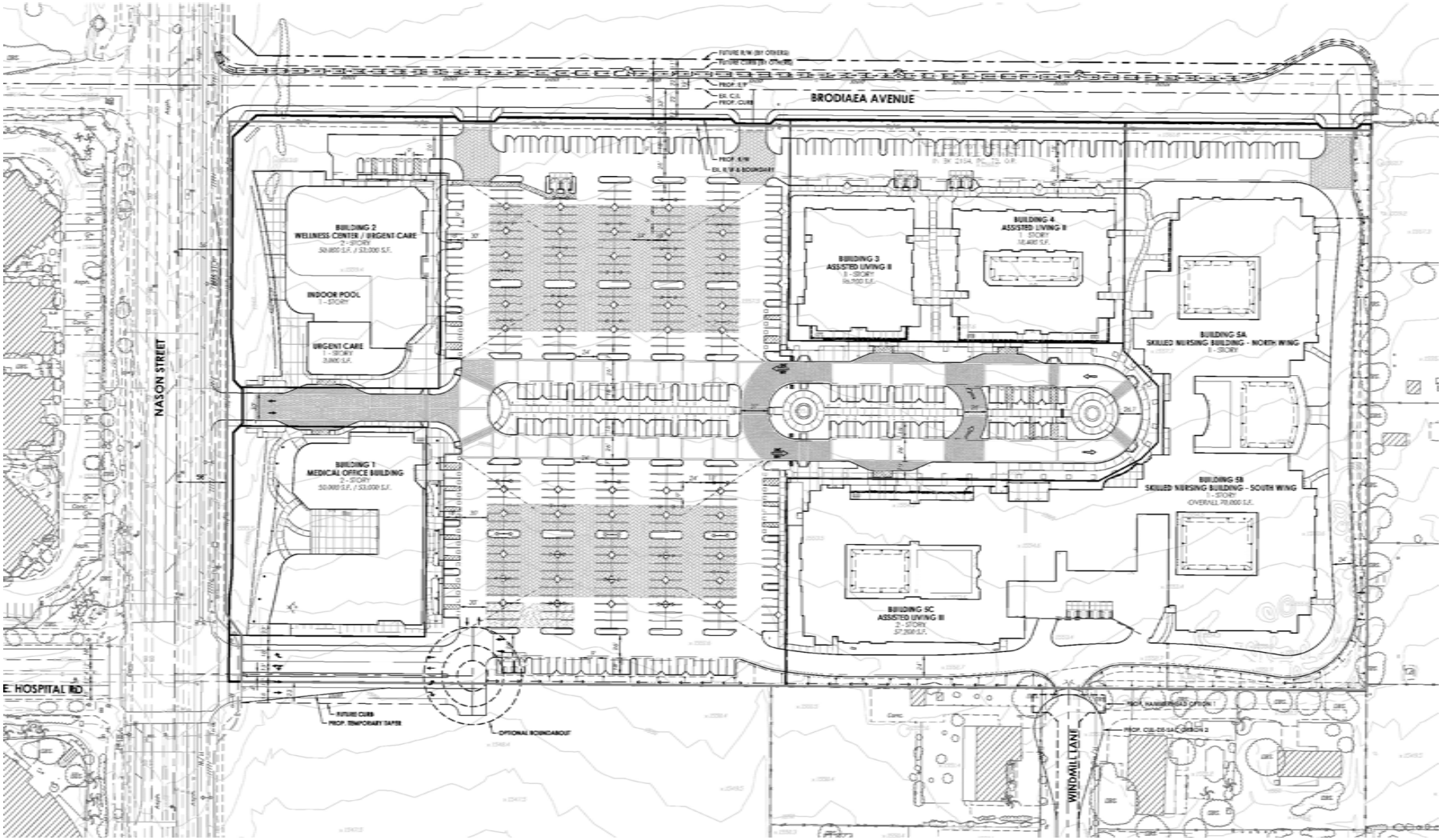
Figure 2
Site Plan



KUNZMAN ASSOCIATES, INC.

OVER 40 YEARS OF EXCELLENT SERVICE

JN 6462a

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III. EXISTING CONDITIONS

A. Study Area

1. Area of Significant Traffic Impact

Pursuant to the scoping discussions with City of Moreno Valley staff, the study area includes the following roadway segments and intersections (see Appendix B):

Roadway Segments:

Nason Street north of SR-60 Freeway WB Ramps
Nason Street between SR-60 Freeway WB Ramps and SR-60 EB Ramps
Nason Street between SR-60 EB Ramps and Fir Avenue
Nason Street between Fir Avenue and Eucalyptus Avenue
Nason Street south of Eucalyptus Avenue
Nason Street north of Cottonwood Avenue
Nason Street between Cottonwood Avenue and Alessandro Boulevard
Nason Street between Alessandro Boulevard and Brodiaea Avenue
Nason Street between Brodiaea Avenue and Hospital Road
Nason Street between Hospital Road and Cactus Avenue
Nason Street south of Cactus Avenue
Fir Avenue west of Nason Street
Eucalyptus Avenue west of Nason Street
Eucalyptus Avenue east of Nason Street
Cottonwood Avenue west of Nason Street
Alessandro Boulevard west of Nason Street
Brodiaea Avenue west of Nason Street
Brodiaea Avenue east of Nason Street
Cactus Avenue west of Nason Street
Cactus Avenue east of Nason Street

Intersections:

Nason Street (NS) at:
- SR-60 Freeway WB Ramps (EW) - #1
- SR-60 Freeway EB Ramps (EW) - #2
- Fir Avenue (EW) - #3
- Eucalyptus Avenue (EW) - #4
- Dracaea Avenue (EW) - #5
- Cottonwood Avenue (EW) - #6
- Alessandro Boulevard (EW) - #7
- Brodiaea Avenue (EW) - #8
- Project Access (EW) - #9
- Hospital Road/Project Access (EW) - #10
- Cactus Avenue (EW) - #11
- Iris Avenue (EW) - #12

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Project West Access (NS) at:
Brodiaea Avenue (EW) - #13

Project Central Access (NS) at:
Brodiaea Avenue (EW) - #14

Project East Access (NS) at:
Brodiaea Avenue (EW) - #15

B. Study Area Land Use

1. Existing Land Uses

The project site is currently undeveloped and does not generate significant vehicle trips. The properties adjacent to the project site are currently partially developed. The properties north and south of the project are undeveloped. The property east of the project is developed with residential dwelling units. The property west of the project is developed with the RUHS Medical Center and Integrated Care Communities.

C. Site Accessibility

1. Area Roadway System

Figure 3 identifies the existing roadway conditions for study area roadways. The number of through lanes for existing roadways and the existing intersection controls are identified.

2. Existing Traffic Volumes and Level of Service

Figure 4 depicts the Existing average daily traffic volumes. Existing average daily traffic volumes were obtained from manual 24-hour directional tube counts made for Kunzman Associates, Inc. in October 2016 (see Appendix C) and from the California Department of Transportation, Annual Average Daily Traffic, dated 2015.

Existing volume to capacity ratios and levels of service have been calculated for the study area roadways and are shown in Table 1. Roadway capacity is generally defined as the number of vehicles that can be reasonably expected to pass over a given section of road in a given time period, and is defined below:

Roadway Type	Design Capacity (Level of Service C)	Maximum Capacity (Level of Service E)
Divided Major Arterial	45,000	56,250
Modified Divided Major Arterial	30,000	37,500
Arterial	30,000	37,500
Minor Arterial	20,000	25,000

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For roadway segment volume to capacity ratios, the following Level of Service definitions have been used:

Level of Service A = Volume to Capacity Ratio 0.000 to 0.600
Level of Service B = Volume to Capacity Ratio 0.601 to 0.700
Level of Service C = Volume to Capacity Ratio 0.701 to 0.800
Level of Service D = Volume to Capacity Ratio 0.801 to 0.900
Level of Service E = Volume to Capacity Ratio 0.901 to 1.000
Level of Service F = Volume to Capacity Ratio 1.001 and up

For Existing traffic conditions, the study area roadway segments currently operate at acceptable Levels of Service (see Table 1).

The technique used to assess the capacity needs of an intersection is known as the Intersection Delay Method (see Appendix F) based on the Highway Capacity Manual – Transportation Research Board Special Report 209. To calculate delay, the volume of traffic using the intersection is compared with the capacity of the intersection. It should be noted that the signalized intersections are considered deficient (Level of Service F) if the overall intersection critical volume to capacity ratio equals or exceeds 1.0, even if the level of service defined by the delay value is below the defined Level of Service standard. The volume to capacity ratio is defined as the critical volumes divided by the intersection capacity. A volume to capacity ratio greater than 1.0 implies that the traffic volume demand is greater than the capacity of the intersection and as a result traffic may begin to queue during the analyzed peak hour.

The existing delay and Level of Service for intersections in the vicinity of the project are shown in Table 2. Existing delay is based upon manual morning and evening peak hour turning movement counts made for Kunzman Associates, Inc. in October 2016 (see Figures 5 and 6). Traffic count worksheets are provided in Appendix C.

For Existing traffic conditions, the study area intersections currently operate at acceptable Levels of Service during the peak hours (see Table 2). Existing delay worksheets are provided in Appendix F.

3. General Plan Circulation Element

Figure 7 exhibits the current City of Moreno Valley General Plan Circulation Element. Existing and future roadways are included in the Circulation Element of the General Plan and are graphically depicted on Figure 7. This figure shows the nature and extent of arterial highways that are needed to adequately serve the ultimate development depicted by the Land Use Element of the General Plan. The City of Moreno Valley General Plan roadway cross-sections are shown on Figure 8.

4. Transit Service

The study area is currently served by Riverside Transit Agency Routes 20, 35, 41, and 210 along Nason Street, Eucalyptus Avenue, Alessandro Boulevard, Cactus Avenue,

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and Iris Avenue. The existing bus routes provided within the study area are shown on Figure 9.

5. Bicycle Facilities

The City of Moreno Valley bike paths are illustrated on Figure 10. Class II bike lanes exist on both sides of Nason Street along the project frontage.

6. Pedestrian Facilities

Existing pedestrian facilities are illustrated on Figure 11.

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Table 1

Existing Roadway Segment Level of Service

Roadway	Segment	Number of Lanes[1]	Maximum Capacity at Level of Service E	Average Daily Traffic Volume	Volume to Capacity	Level of Service[2]
Nason Street	north of SR-60 Freeway WB Ramps	4D	37,500	6,000	0.160	A
	between SR-60 Freeway WB Ramps and SR-60 Freeway EB Ramps	4D	37,500	17,200	0.459	A
	between SR-60 Freeway EB Ramps and Fir Avenue	4D	37,500	17,600	0.469	A
	between Fir Avenue and Eucalyptus Avenue	4D	37,500	19,700	0.525	A
	south of Eucalyptus Avenue	4D	37,500	22,100	0.589	A
	north of Cottonwood Avenue	4D	37,500	20,000	0.533	A
	between Cottonwood Avenue and Alessandro Boulevard	4D	37,500	17,400	0.464	A
	between Alessandro Boulevard and Brodiaea Avenue	5D	46,850	16,400	0.350	A
	between Brodiaea Avenue and Hospital Road	4D	37,500	16,200	0.432	A
	between Hospital Road and Cactus Avenue	4D	37,500	13,200	0.352	A
	south of Cactus Avenue	4D	37,500	9,800	0.261	A
Fir Avenue	west of Nason Street	2U	12,500	6,900	0.552	A
Eucalyptus Avenue	west of Nason Street	4D	37,500	6,400	0.171	A
	east of Nason Street	4D	37,500	7,400	0.197	A
Cottonwood Avenue	west of Nason Street	2U	12,500	4,500	0.360	A
Alessandro Boulevard	west of Nason Street	2U	12,500	9,600	0.768	C
Brodiaea Avenue	west of Nason Street	2U	12,500	300	0.024	A
Cactus Avenue	west of Nason Street	4D	37,500	13,000	0.347	A
	east of Nason Street	2U	12,500	9,300	0.744	C

[1] #D = #-Lane Divided Roadway; #U = #-Lane Undivided Roadway.

[2] Level of Service, which is based on maximum capacity (Level of Service E).

Volume to Capacity Ratio
0.000 - 0.600
0.601 - 0.700
0.701 - 0.800
0.801 - 0.900
0.901 - 1.000
>1.000

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Table 2

Existing Intersection Delay and Level of Service

Intersection	Jurisdiction	Traffic Control[3]	Intersection Approach Lanes[1]												Peak Hour Delay-LOS[2]	
			Northbound			Southbound			Eastbound			Westbound				
			L	T	R	L	T	R	L	T	R	L	T	R	Morning	Evening
Nason Street (NS) at:																
SR-60 Freeway WB Ramps (EW) - #1	California Department of Transportation	TS	1	2	1>	1	1.5	0.5	1	1	1>	1	1	1>	14.3-B	14.3-B
SR-60 Freeway EB Ramps (EW) - #2	California Department of Transportation	TS	0	2	d	1	2	0	1	0.5	1.5	0	0	0	14.2-B	15.2-B
Fir Avenue (EW) - #3	City of Moreno Valley	TS	1	2	d	1	2	1	1	0.5	0.5	1	1	1>	19.0-B	19.9-B
Eucalyptus Avenue (EW) - #4	City of Moreno Valley	TS	1	2	1	1	2	d	1	2	d	1	2	d	20.6-C	14.3-B
Dracaea Avenue (EW) - #5	City of Moreno Valley	TS	1	2	d	1	2	d	1	0.5	0.5	1	0.5	0.5	16.5-B	9.8-A
Cottonwood Avenue (EW) - #6	City of Moreno Valley	TS	1	2	d	1	2	1	1	1	1	1	1.5	0.5	15.9-B	12.1-B
Alessandro Boulevard (EW) - #7	City of Moreno Valley	TS	1	2	1	1	3	1	2	2	1	2	1	1	20.2-C	17.9-B
Brodiaea Avenue (EW) - #8	City of Moreno Valley	CSS	1	2	0	0	2.5	0.5	0	0	1	0	0	0	12.2-B	10.6-B
Hospital Road/Project Access (EW) - #10	City of Moreno Valley	TS	1	2	0	1	2	1	1	0	1	0	0	0	9.6-A	13.3-B
Cactus Avenue (EW) - #11	City of Moreno Valley	TS	2	2	1	1	2	1	1	1	1	1	0.5	0.5	28.3-C	20.7-C
Iris Avenue (EW) - #12	City of Moreno Valley	TS	1	0.5	0.5	1	1	1>	2	3	d	1	3	1	20.9-C	19.7-B

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Right Turn Overlap; d = De Facto Right Turn

[2] Delay and level of service calculated using the following analysis software: Vistro version 4.00-00. Per the Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or a stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal; CSS = Cross Street Stop

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Figure 3
Existing Through Travel Lanes and Intersection Controls

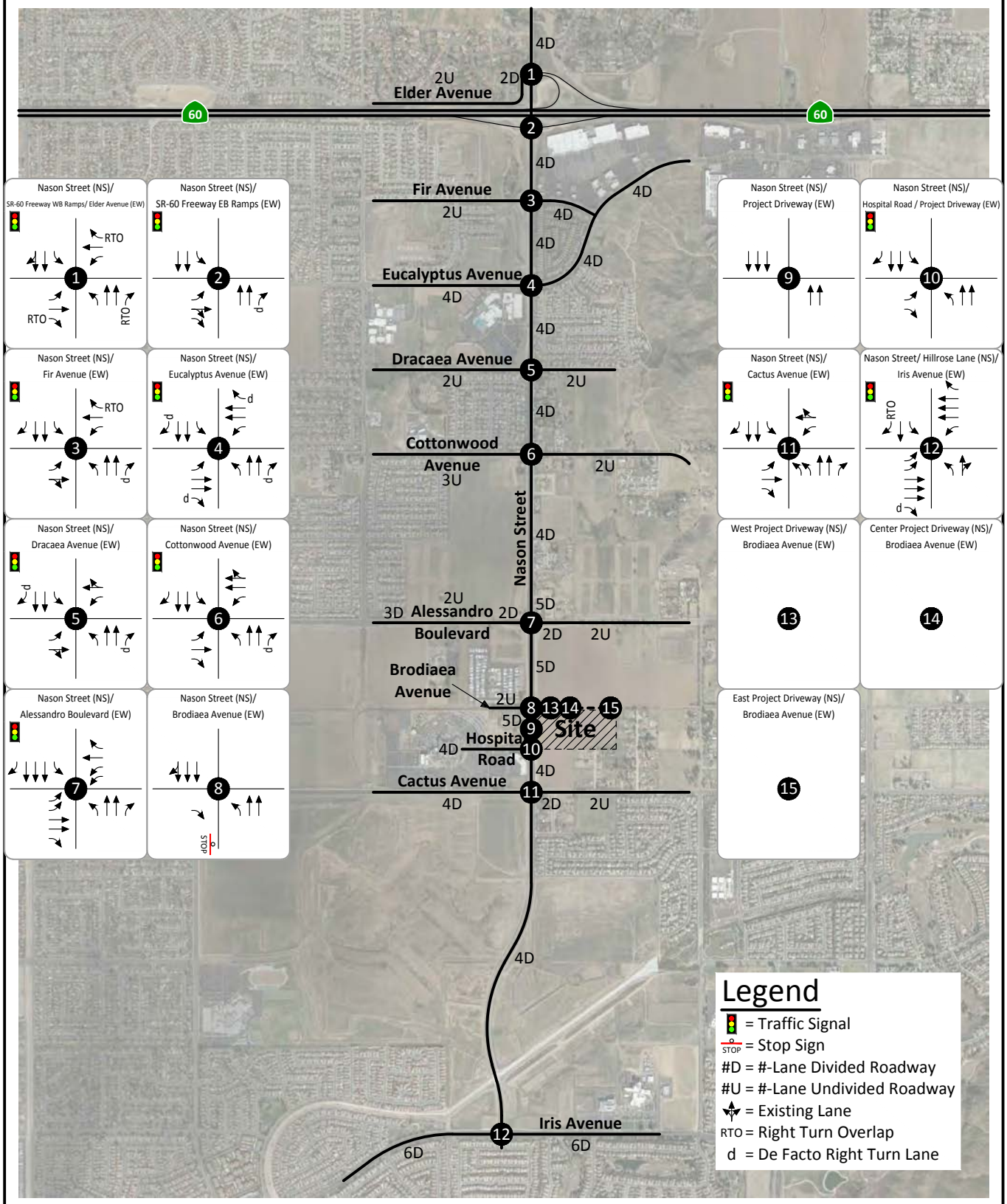

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Figure 4
Existing Average Daily Traffic Volumes

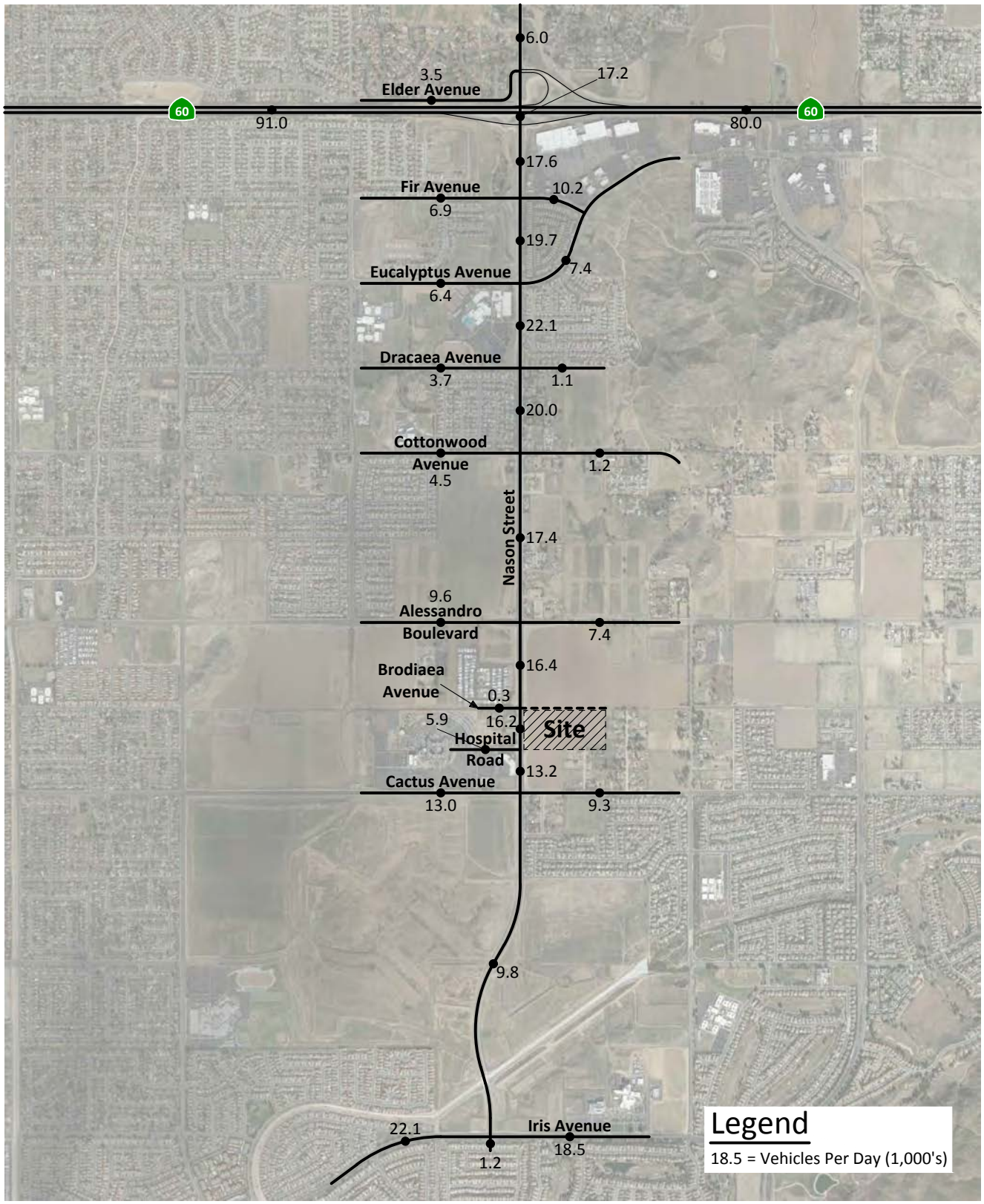

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Figure 5
Existing Morning Peak Hour Intersection Turning Movement Volumes

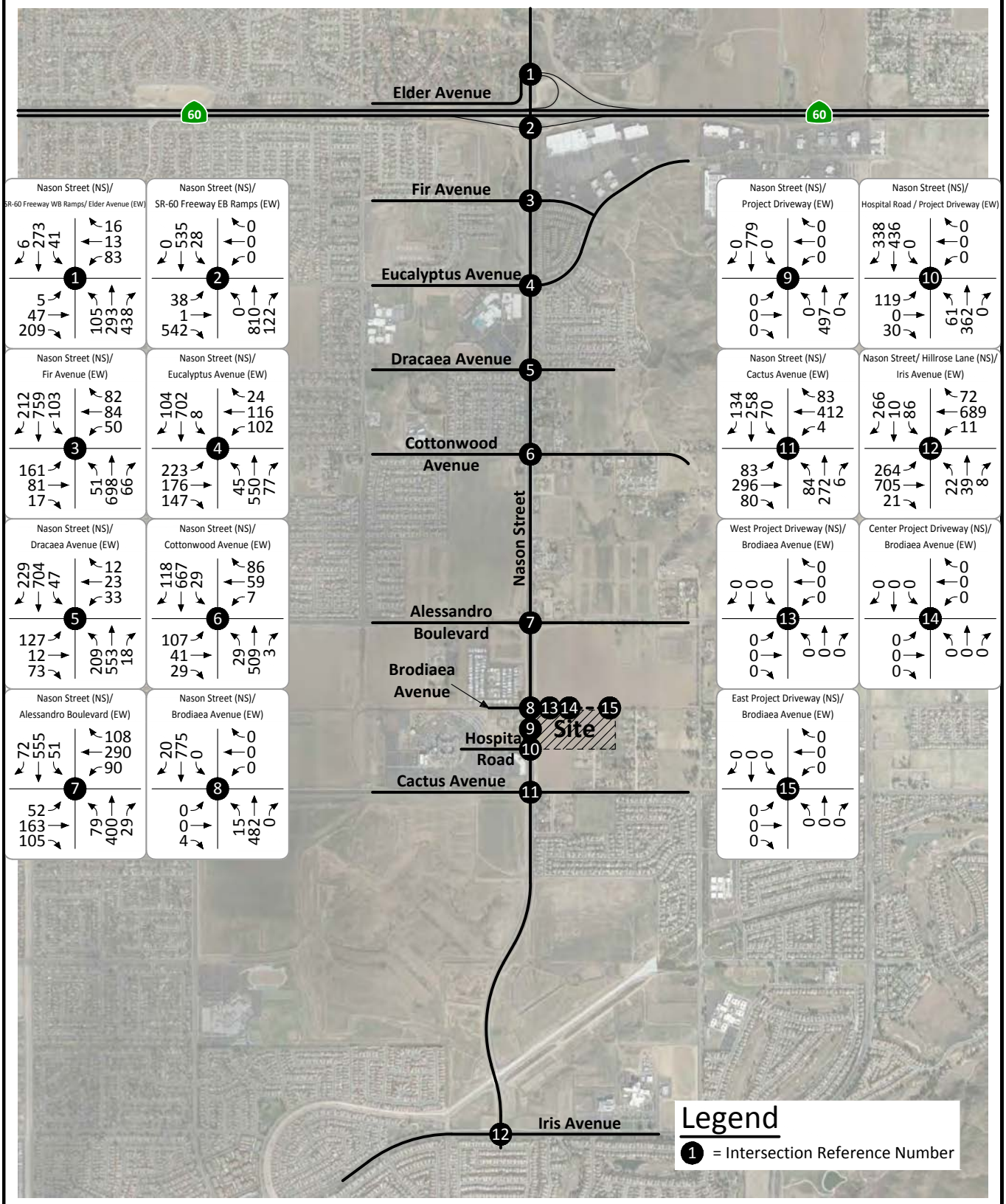

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Figure 6
Existing Evening Peak Hour Intersection Turning Movement Volumes

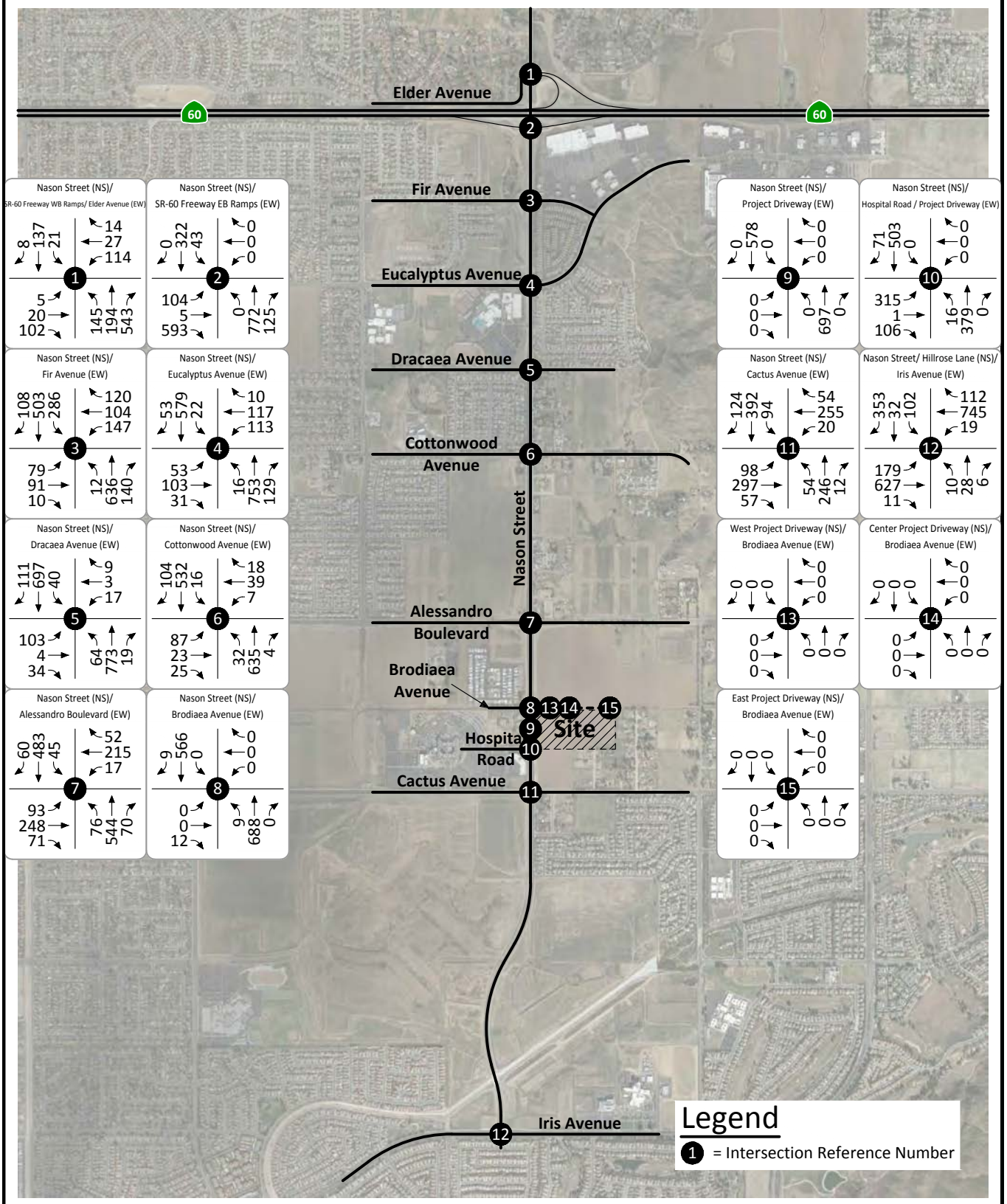

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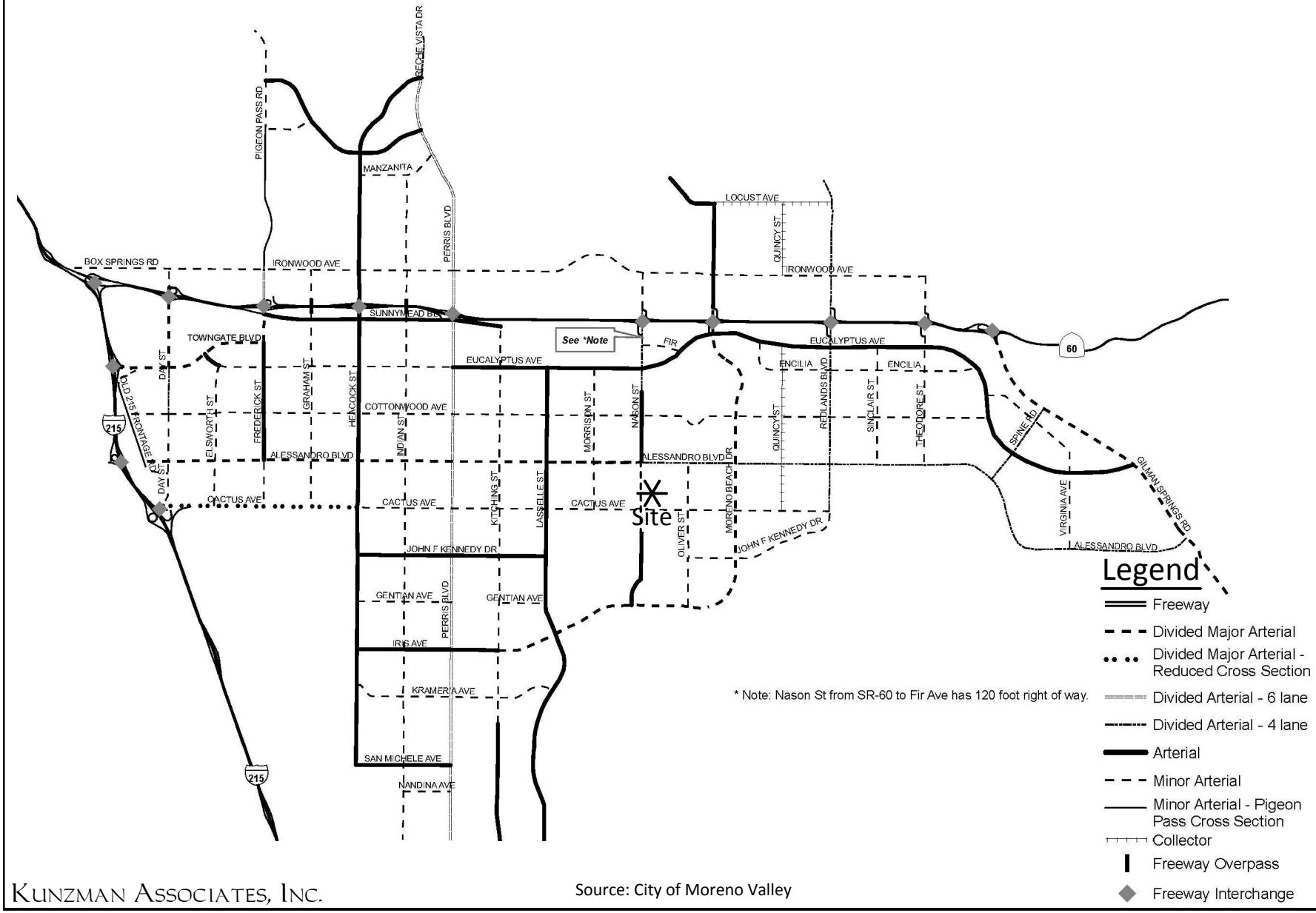
Figure 7
City of Moreno Valley General Plan Circulation Element



Source: City of Moreno Valley

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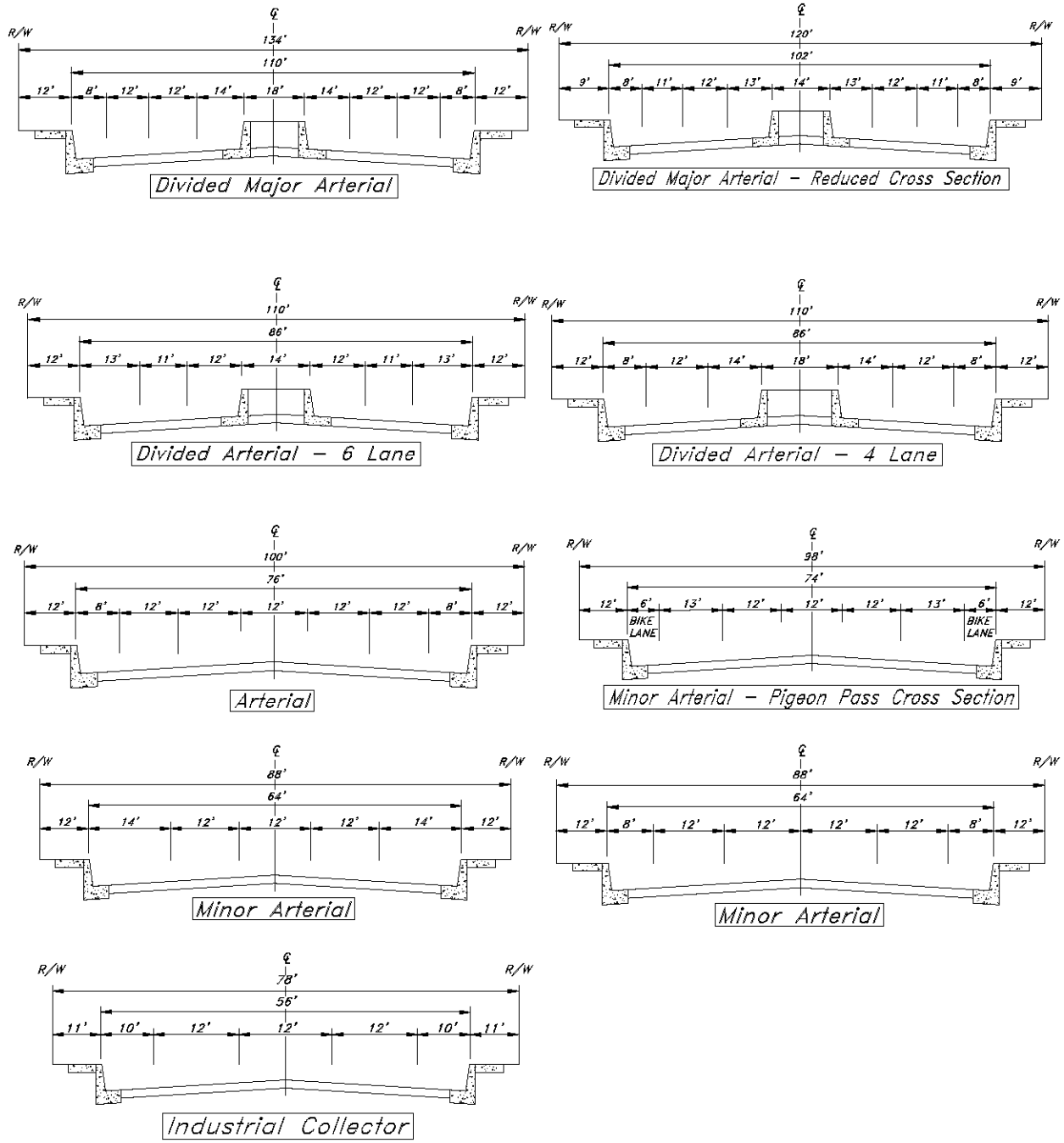
Figure 8
City of Moreno Valley General Plan Roadway Cross-Sections



Source: City of Moreno Valley

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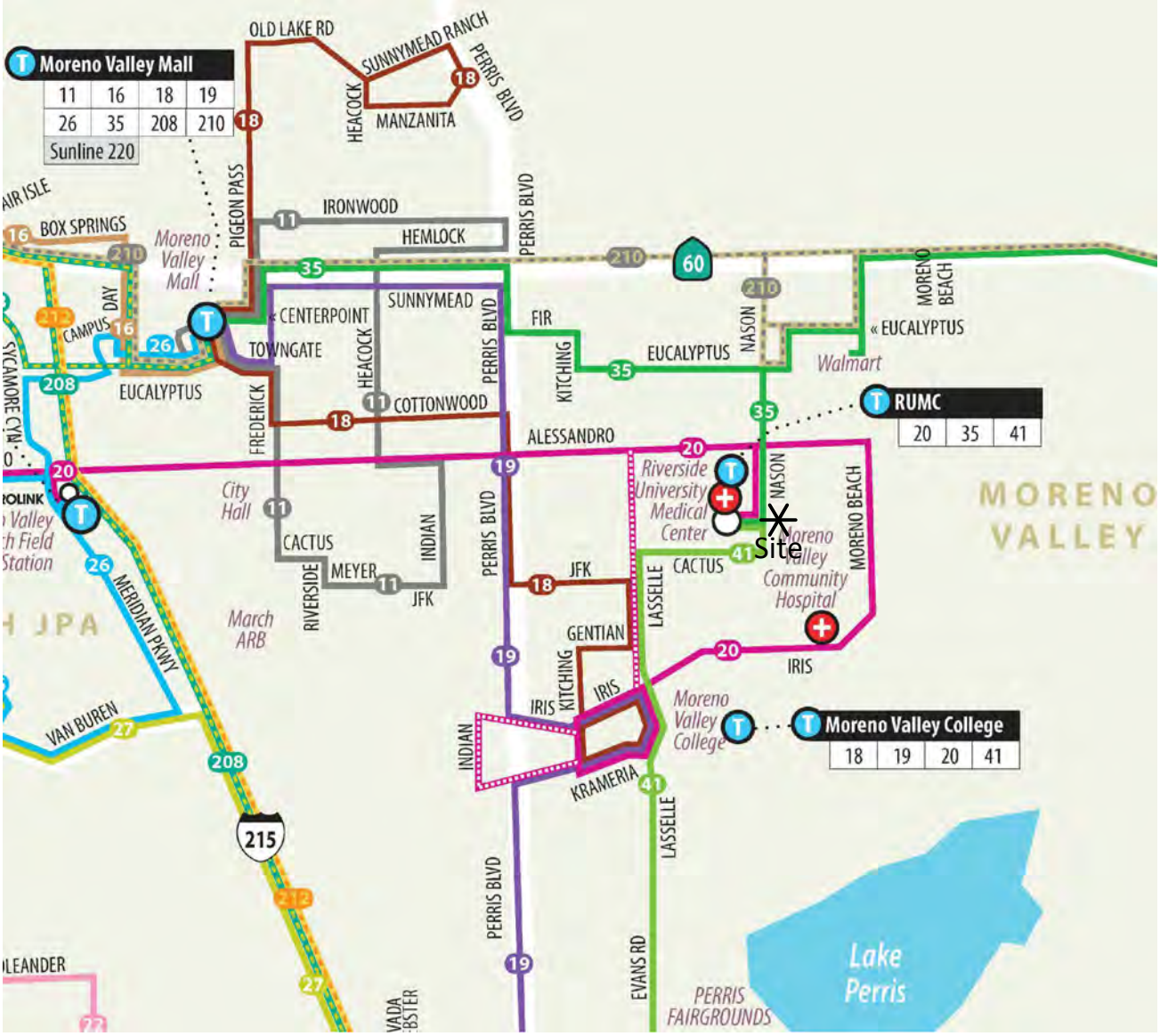
Figure 9
City of Moreno Valley Transit Routes



Legend

41 Route Number	Point of Interest	Interstate
Route Path	Medical Facility	State Highway
Commuter Routing	Transfer Point	Main Road
Alternate Routing	Metrolink Station	Water

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Source: City of Moreno Valley

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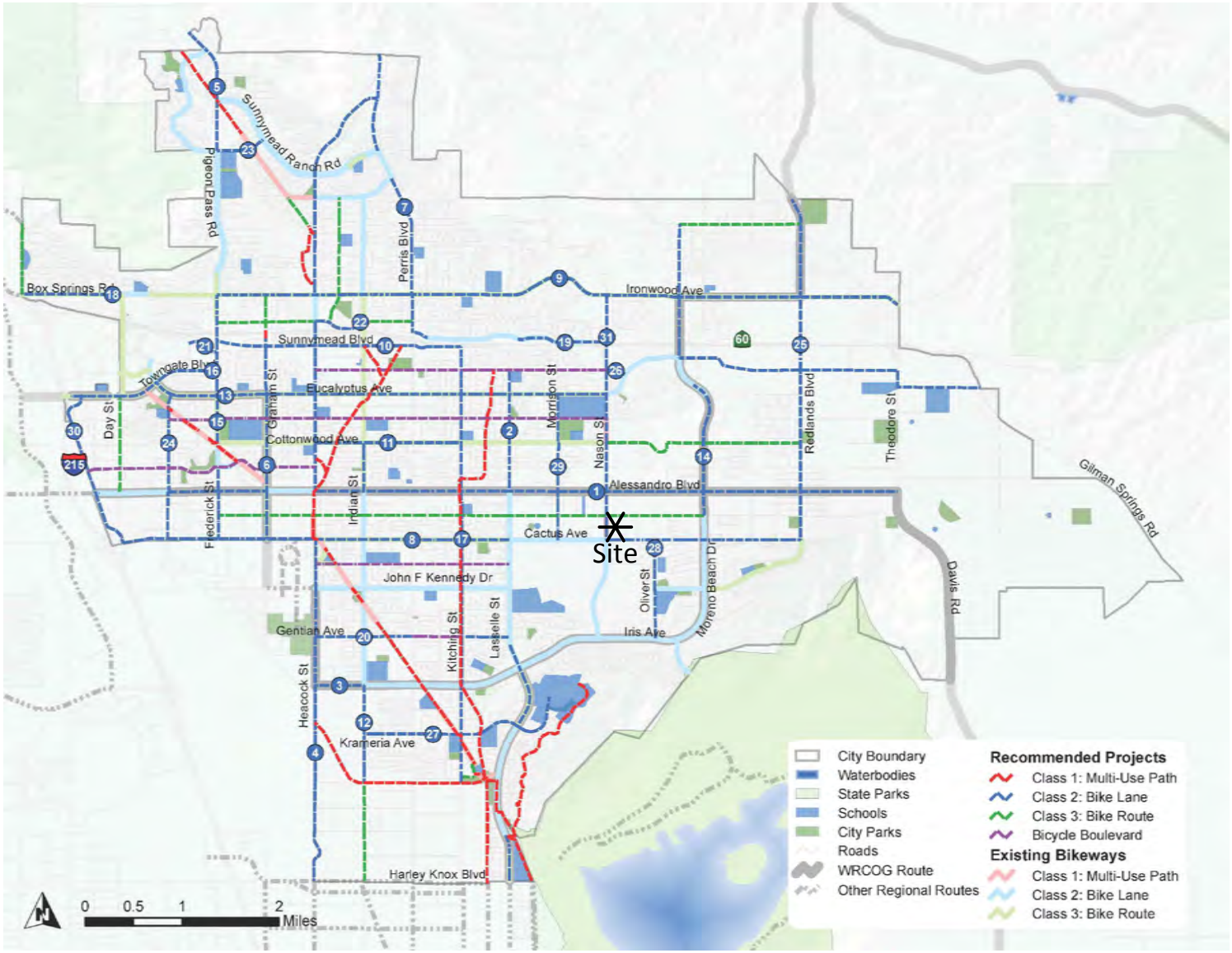
Figure 10
City of Moreno Valley Bikeways



Source: City of Moreno Valley

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Figure 11
Existing Pedestrian Facilities

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IV. PROJECT TRIPS

The project site is proposed to be developed with 114,480 square feet of medical office land use, 207 beds of assisted living land use, and 158 beds of nursing home land use. The project site is proposed to provide access to Nason Street, Brodiaea Avenue, and Hospital Road.

The site is proposed to be developed in three phases. Phase I consists of 207 beds of assisted living land use and is proposed to open in Year 2020. Phase II consists of 114,480 square feet of medical office land use and is proposed to open in Year 2021. Phase III consists of 158 beds of nursing home land use and is proposed to open in Year 2022.

A. Site Traffic

1. Trip Generation

The trips generated by the project are determined by multiplying an appropriate trip generation rate by the quantity of land use. Trip generation rates are predicated on the assumption that energy costs, the availability of roadway capacity, the availability of vehicles to drive, and life styles remain similar to what are known today. A major change in these variables may affect trip generation rates.

Trip generation rates were determined for daily traffic, morning peak hour inbound and outbound traffic, and evening peak hour inbound and outbound traffic for the proposed land uses. By multiplying the trip generation rates by the land use quantities, the traffic volumes are determined. Table 3 exhibits the trip generation rates, project peak hour volumes, and project daily traffic volumes. The trip generation rates are from the Institute of Transportation Engineers, Trip Generation Manual, 9th Edition, 2012.

The project is projected to generate a total of approximately 5,136 daily vehicle trips, 338 of which occur during the morning peak hour and 504 of which occur during the evening peak hour.

The current General Plan zoning for the approximately 18.38 acre site is R2. The R2 zoning allows up to 2 residential dwelling units per acre. The project site could potentially be developed with 36 residential dwelling units.

If developed with the current General Plan zoning, the project would be expected to generate approximately 343 daily vehicle trips, 27 of which occur during the morning peak hour and 36 of which occur during the evening peak hour.

2. Trip Distribution

Figures 12 to 17 contain the directional distributions of the project trips for the proposed land use by phase.

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To determine the trip distributions for the proposed project, peak hour and daily traffic counts of the existing directional distribution of traffic for existing areas in the vicinity of the site, and other additional information on future development and traffic impacts in the area were reviewed.

3. Trip Assignment

Based on the identified project trip generation and distributions, project average daily traffic volumes by phase have been calculated and shown on Figures 18 to 20, respectively. Morning and evening peak hour intersection turning movement volumes expected from the project phases are shown on Figures 21 to 26, respectively.

4. Modal Split

The trip reducing potential of public transit has not been considered in this report. Essentially the traffic projections are conservative in that public transit might be able to reduce the traffic volumes.

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Table 3

Project Trip Generation[1]

Proposed Development Trips									
			Peak Hour						
			Morning			Evening			
Land Use	Quantity	Units[2]	Inbound	Outbound	Total	Inbound	Outbound	Total	Daily
Trip Generation Rates									
Medical Office Building		TSF	1.89	0.50	2.39	1.00	2.57	3.57	36.13
Assisted Living		BD	0.12	0.06	0.18	0.14	0.15	0.29	2.74
Nursing Home		BD	0.12	0.05	0.17	0.07	0.15	0.22	2.74
Trips Generated (Phase I)									
Assisted Living	207	BD	25	12	37	29	31	60	567
Trips Generated (Phase II)									
Medical Office Building	114.480	TSF	216	58	274	114	295	409	4,136
Trips Generated (Phase III)									
Nursing Home	158	BD	19	8	27	11	24	35	433
Total			260	78	338	154	350	504	5,136

General Plan Land Use Trips									
			Peak Hour						
			Morning			Evening			
Land Use	Quantity	Units[2]	Inbound	Outbound	Total	Inbound	Outbound	Total	Daily
Trip Generation Rates									
Single-Family Detached Residential		DU	0.19	0.56	0.75	0.63	0.37	1.00	9.52
Trips Generated									
Single-Family Detached Residential	36	DU	7	20	27	23	13	36	343

[1] Source: Institute of Transportation Engineers, Trip Generation Manual, 9th Edition, 2012, Land Use Codes 210, 254, 620, and 720.

[2] TSF = Thousand Square Feet; BD = Number of Beds; DU = Dwelling Units

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Figure 12
Project Phase I Outbound Trip Distribution

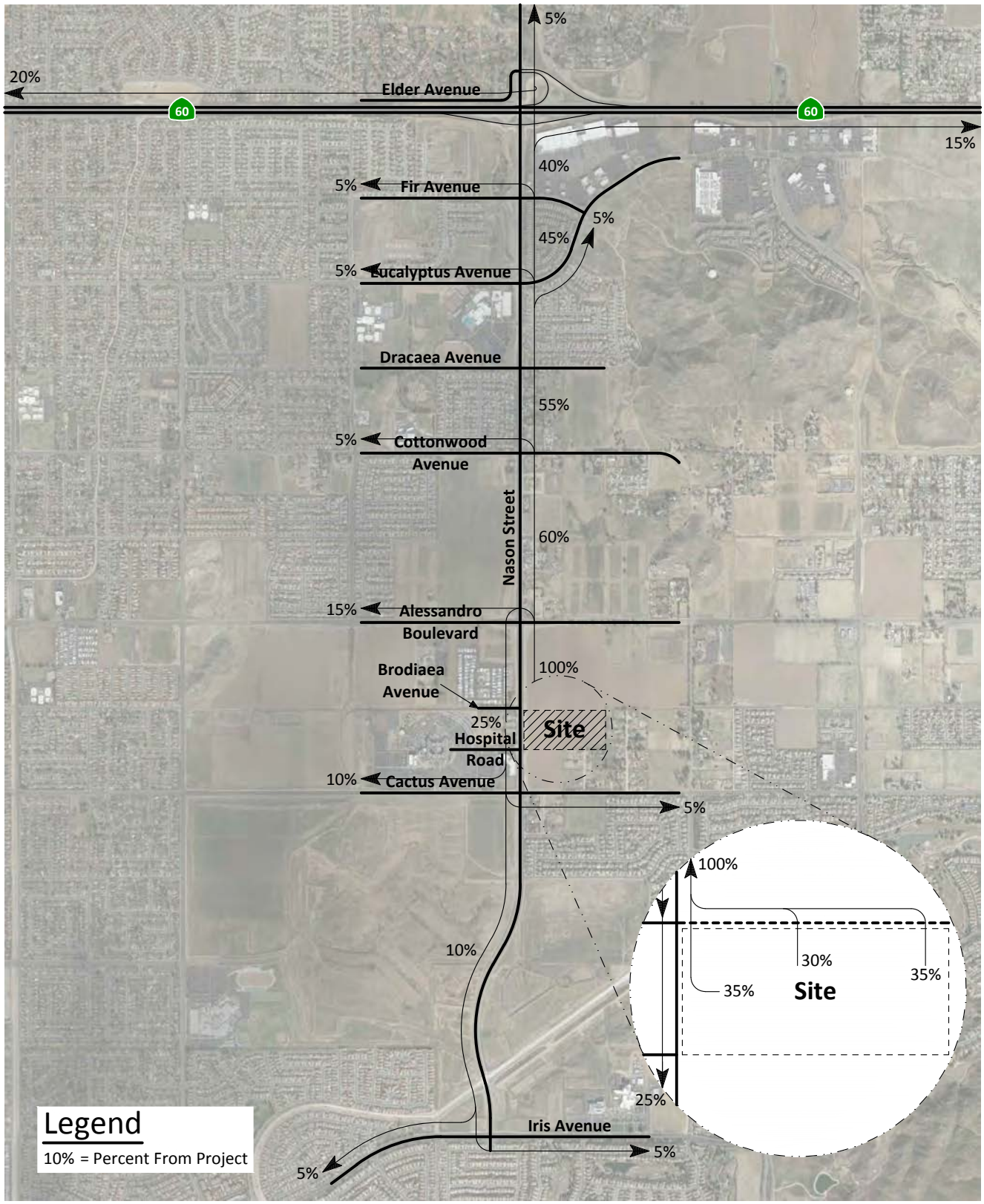

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Figure 13
Project Phase I Inbound Trip Distribution

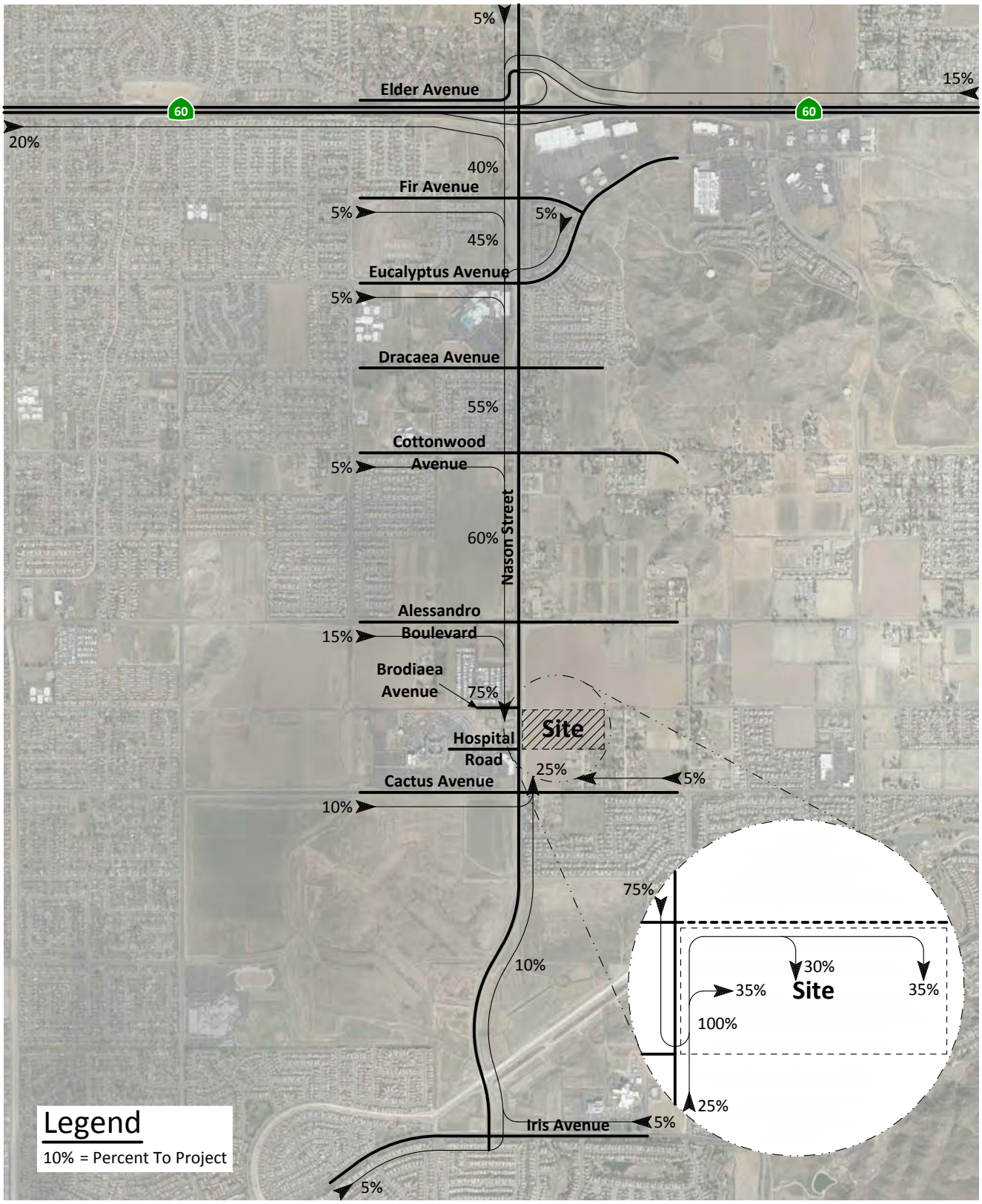

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Figure 14
Project Phase II Outbound Trip Distribution

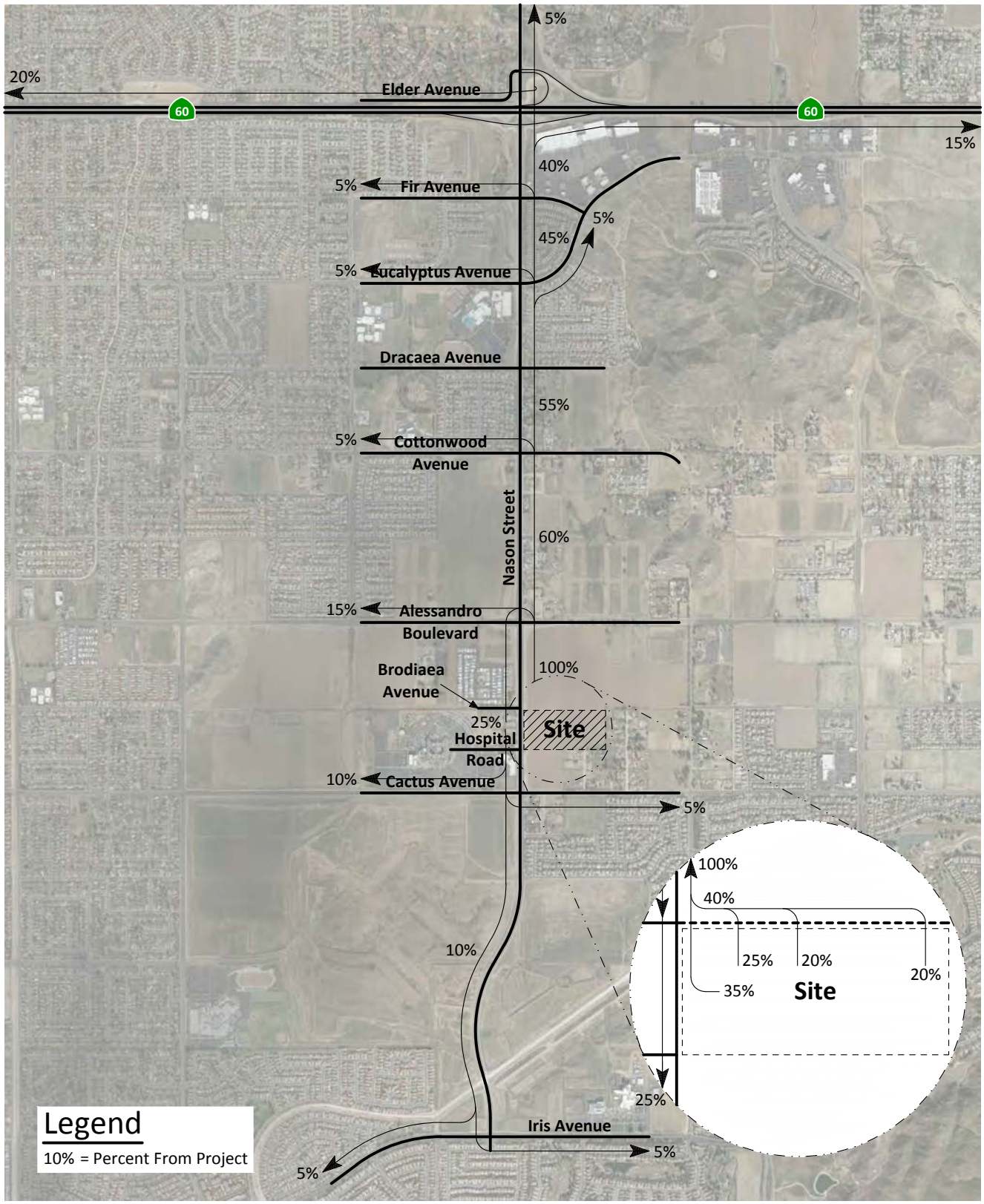

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Figure 15
Project Phase II Inbound Trip Distribution

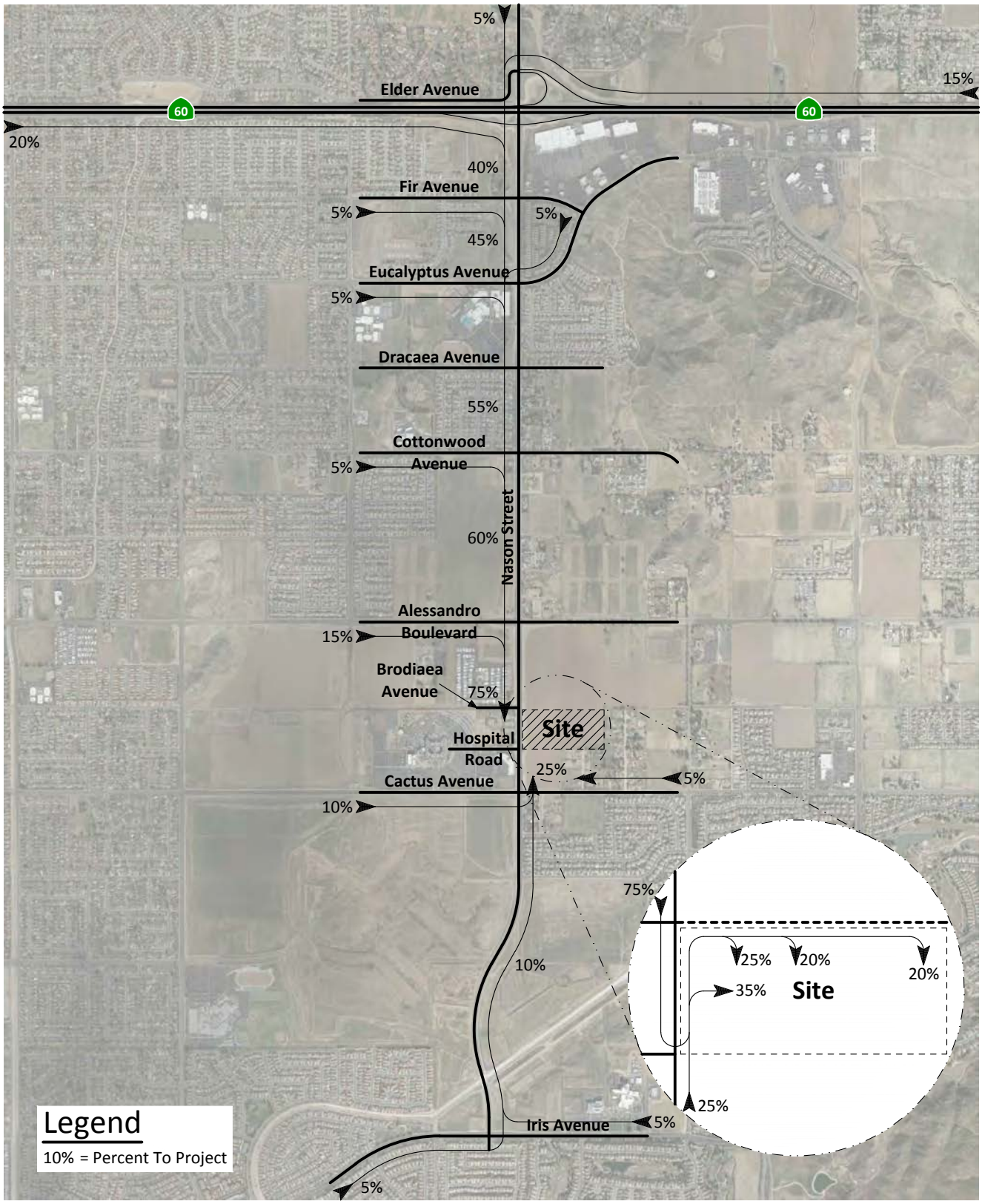

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Figure 16
Project Phase III Outbound Trip Distribution

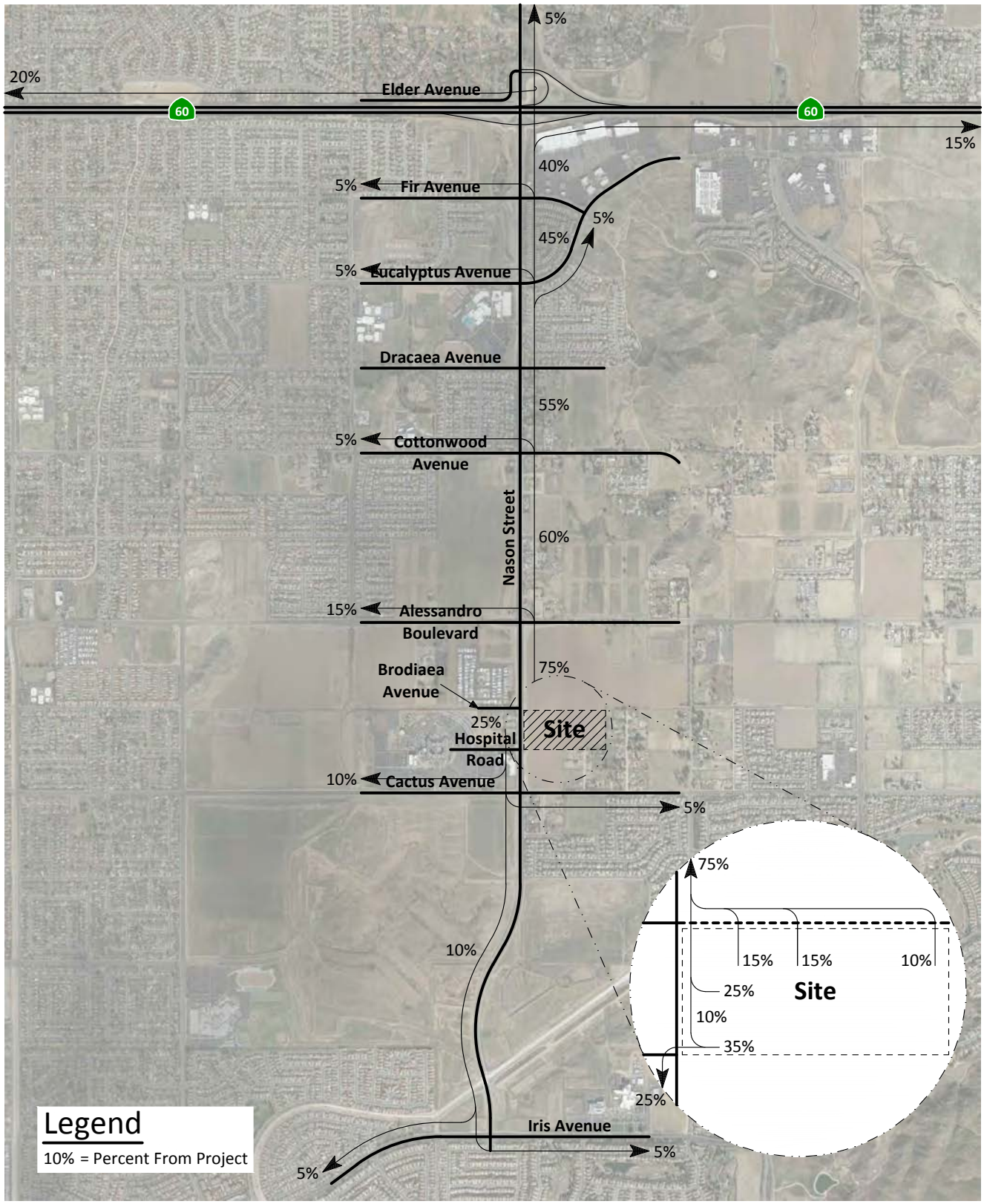

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Figure 17
Project Phase III Inbound Trip Distribution

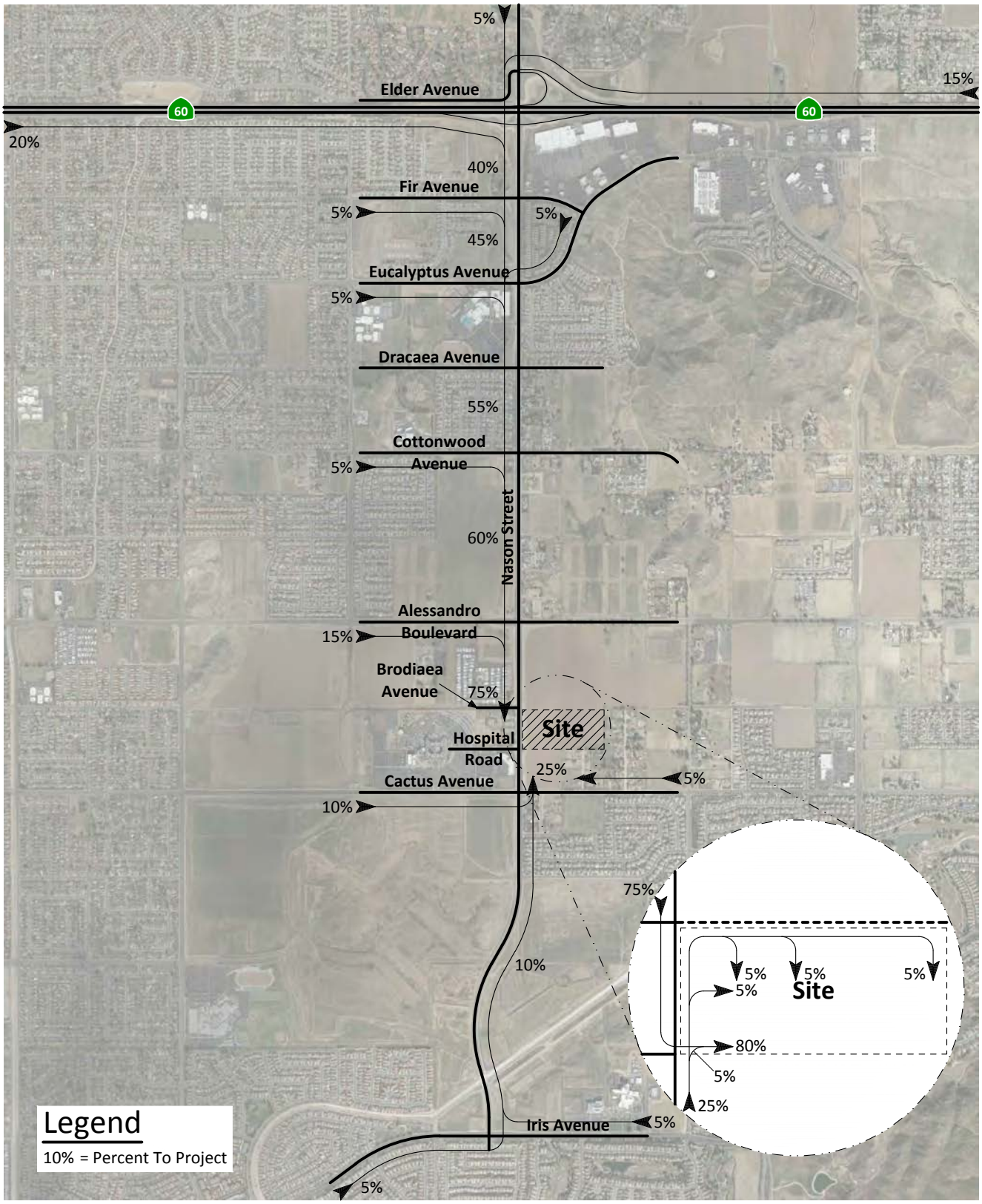

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Figure 18
Project Phase I Average Daily Traffic Volumes

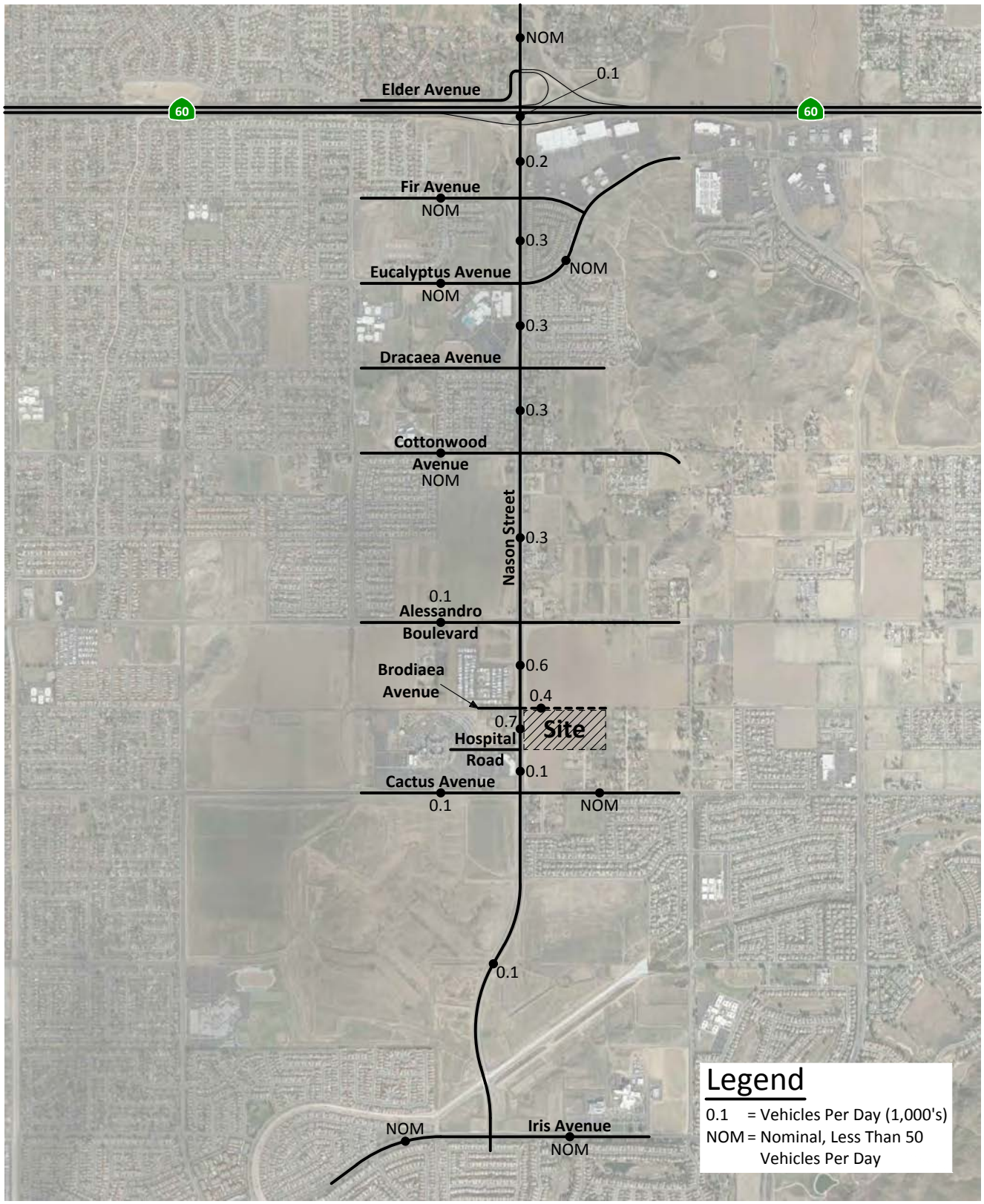

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Figure 19
Project Phase II Average Daily Traffic Volumes

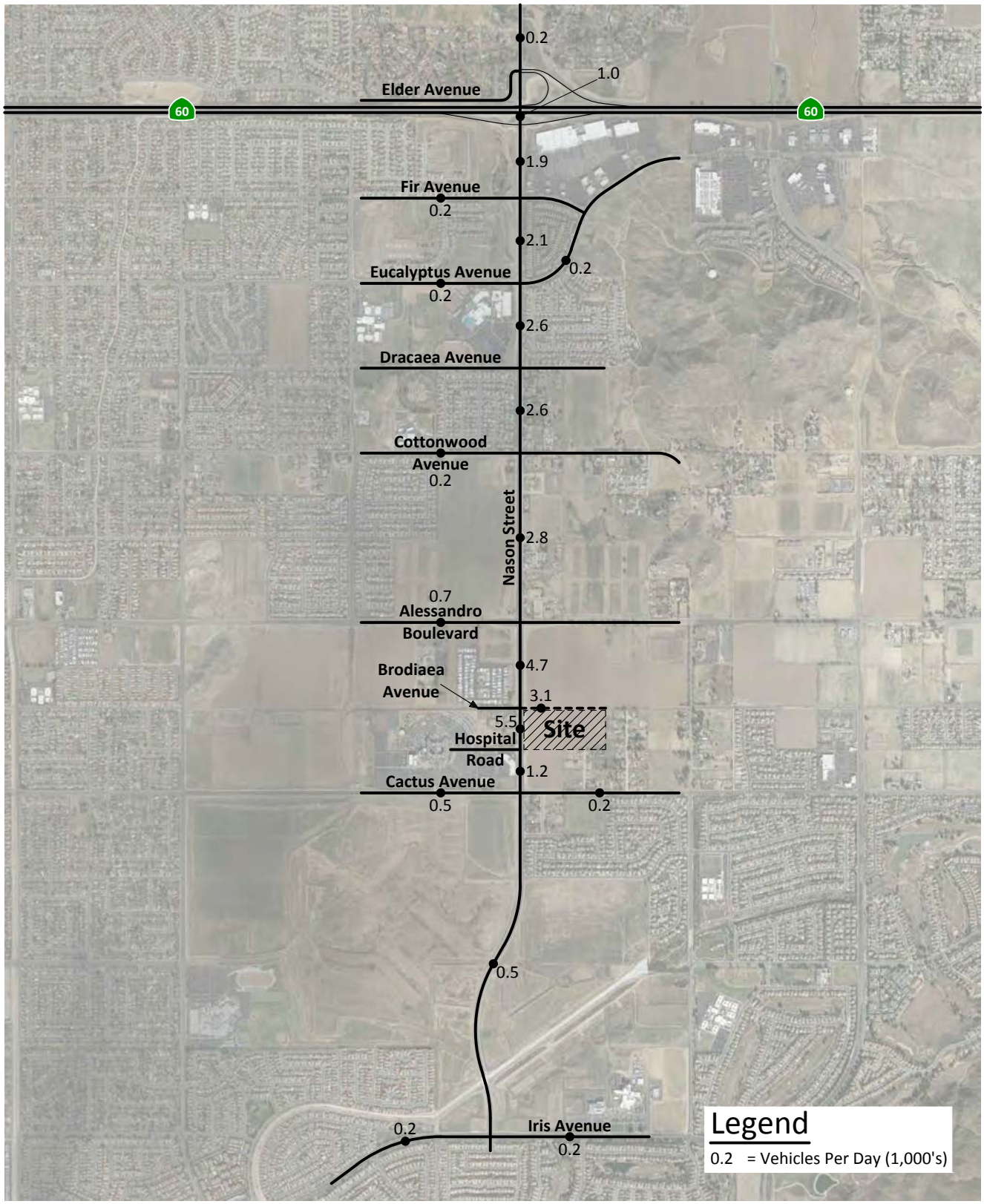

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Figure 20
Project Phase III Average Daily Traffic Volumes

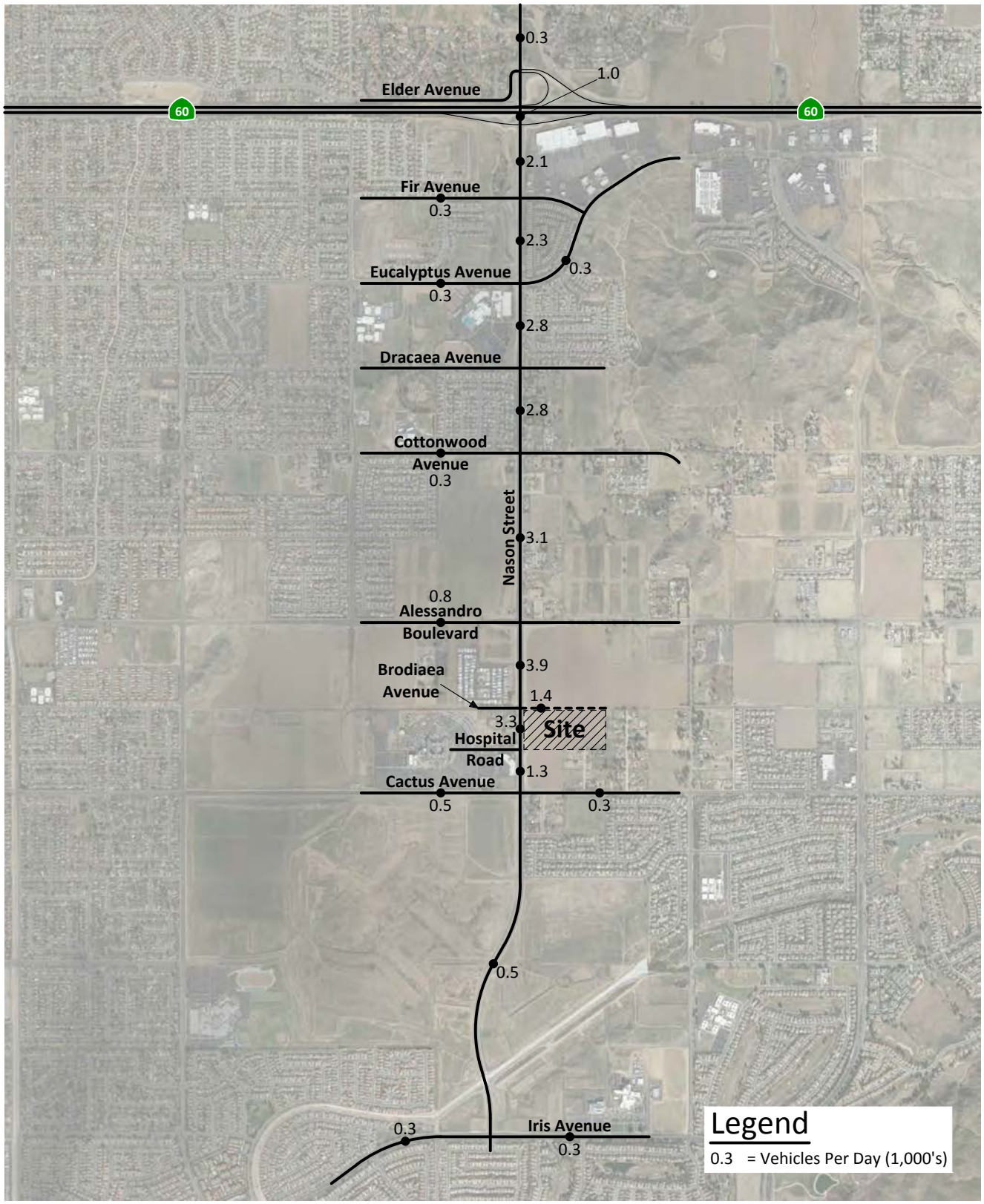

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Figure 21
Project Phase I
Morning Peak Hour Intersection Turning Movement Volumes

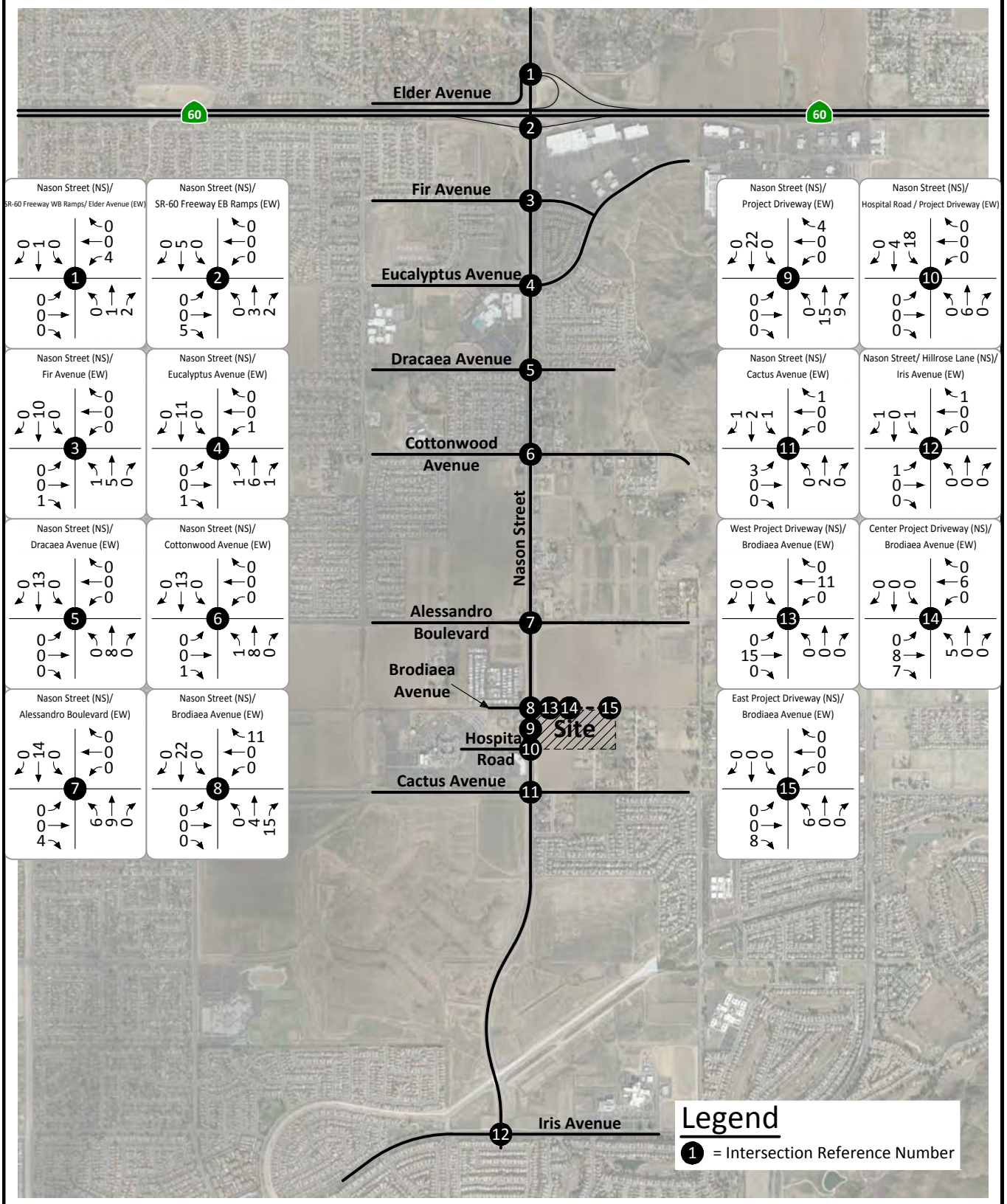

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Figure 22
Project Phase I
Evening Peak Hour Intersection Turning Movement Volumes

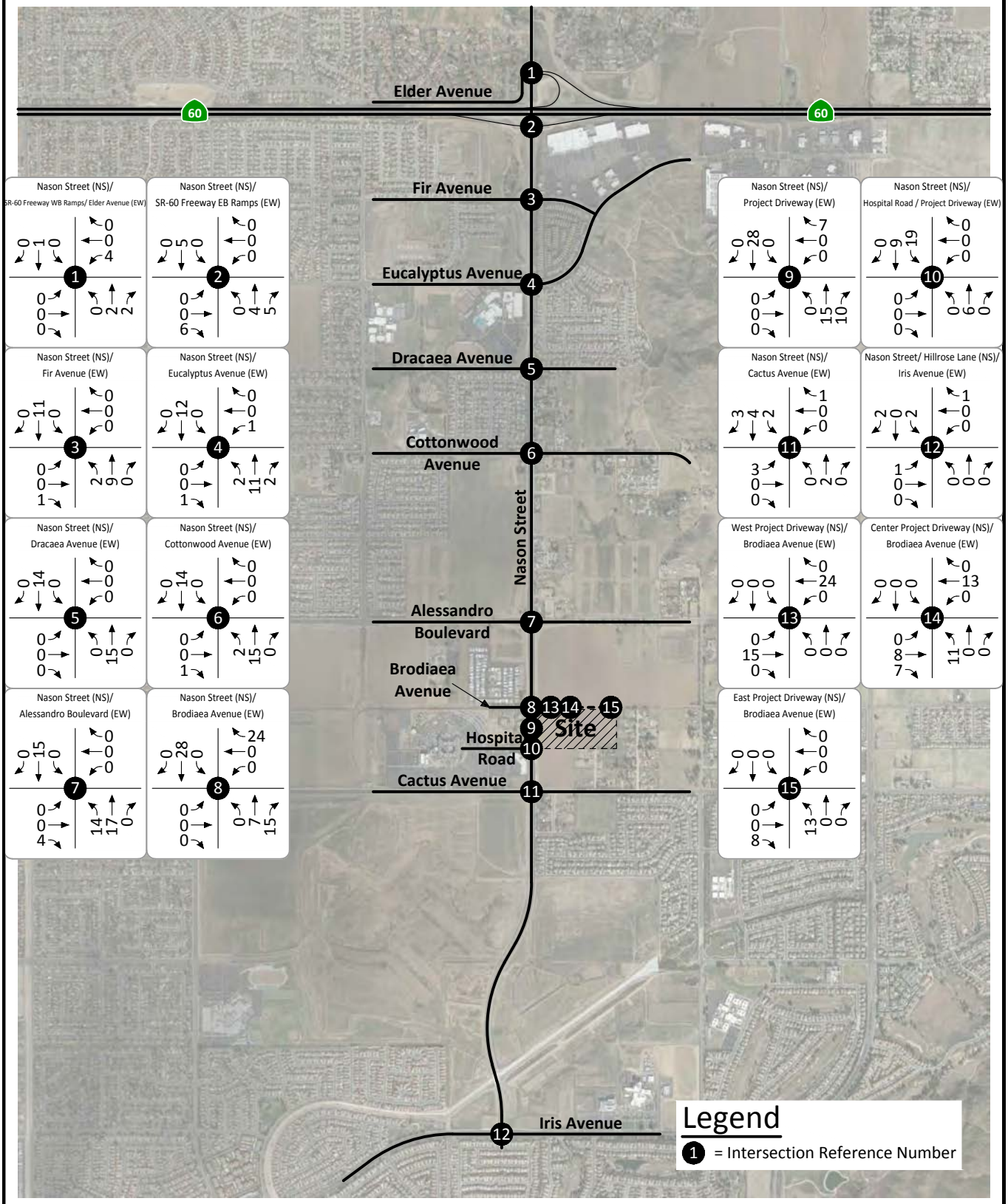

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Figure 23
Project Phase II
Morning Peak Hour Intersection Turning Movement Volumes

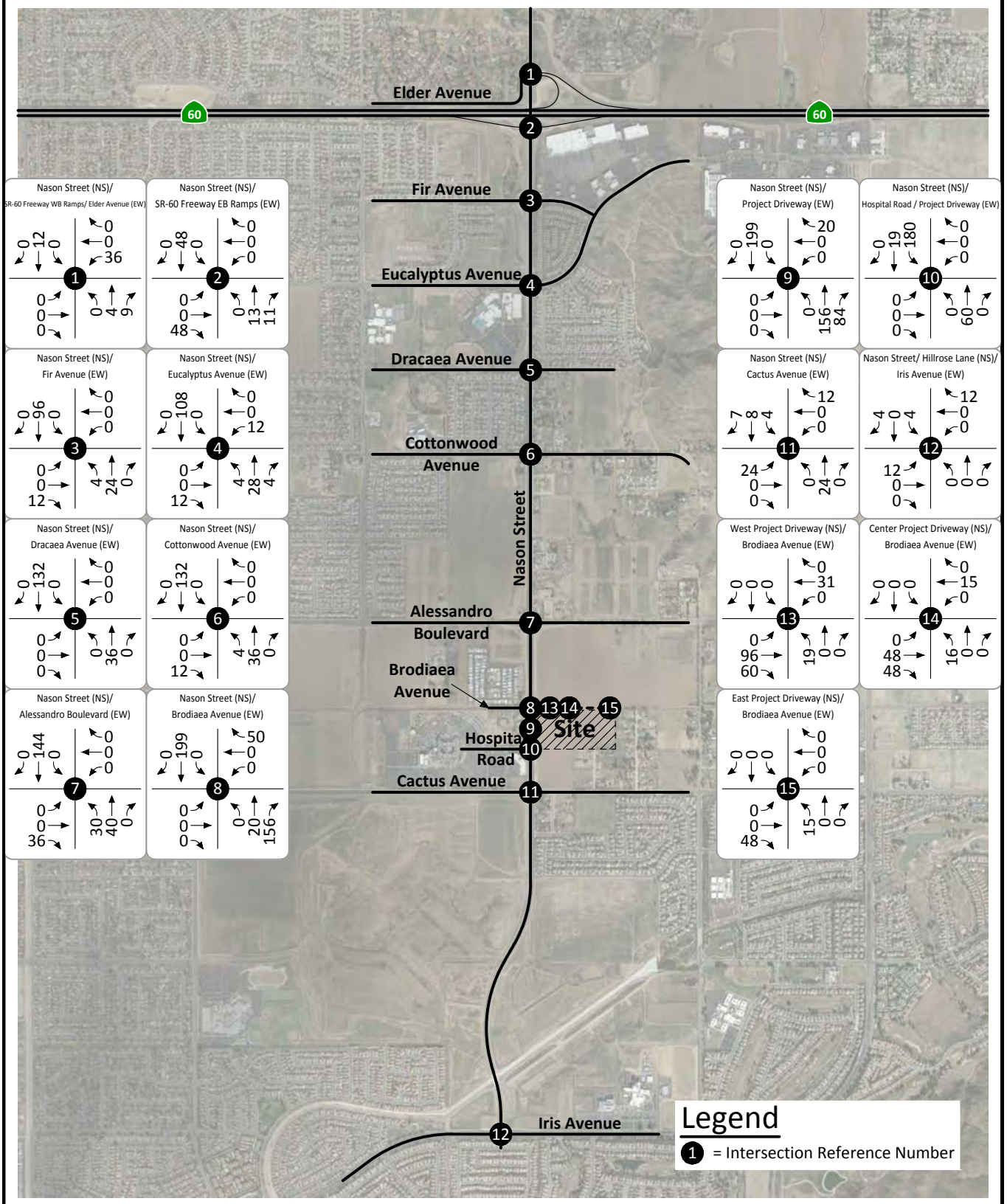

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Figure 24
Project Phase II
Evening Peak Hour Intersection Turning Movement Volumes

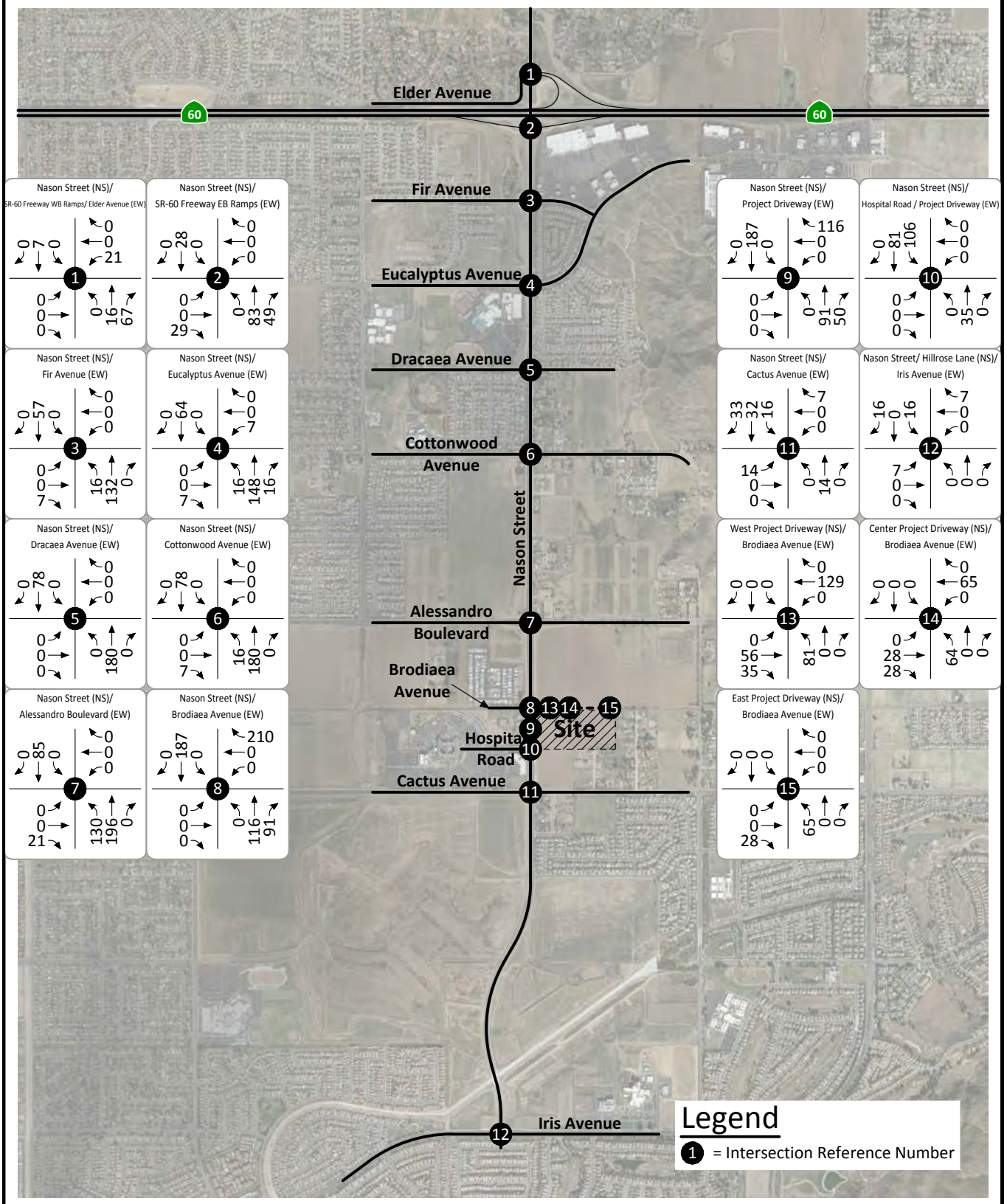

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Figure 25
Project Phase III
Morning Peak Hour Intersection Turning Movement Volumes

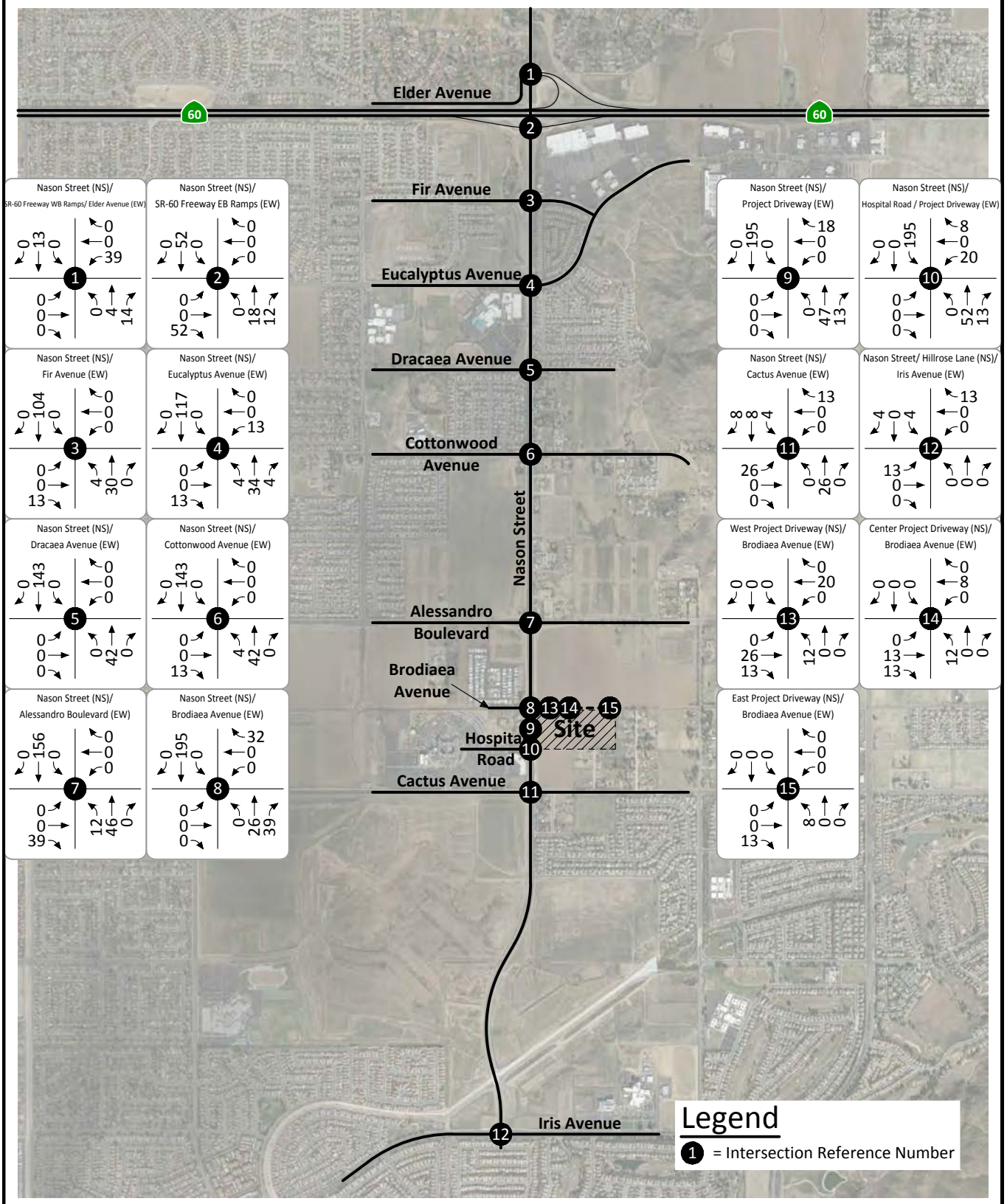

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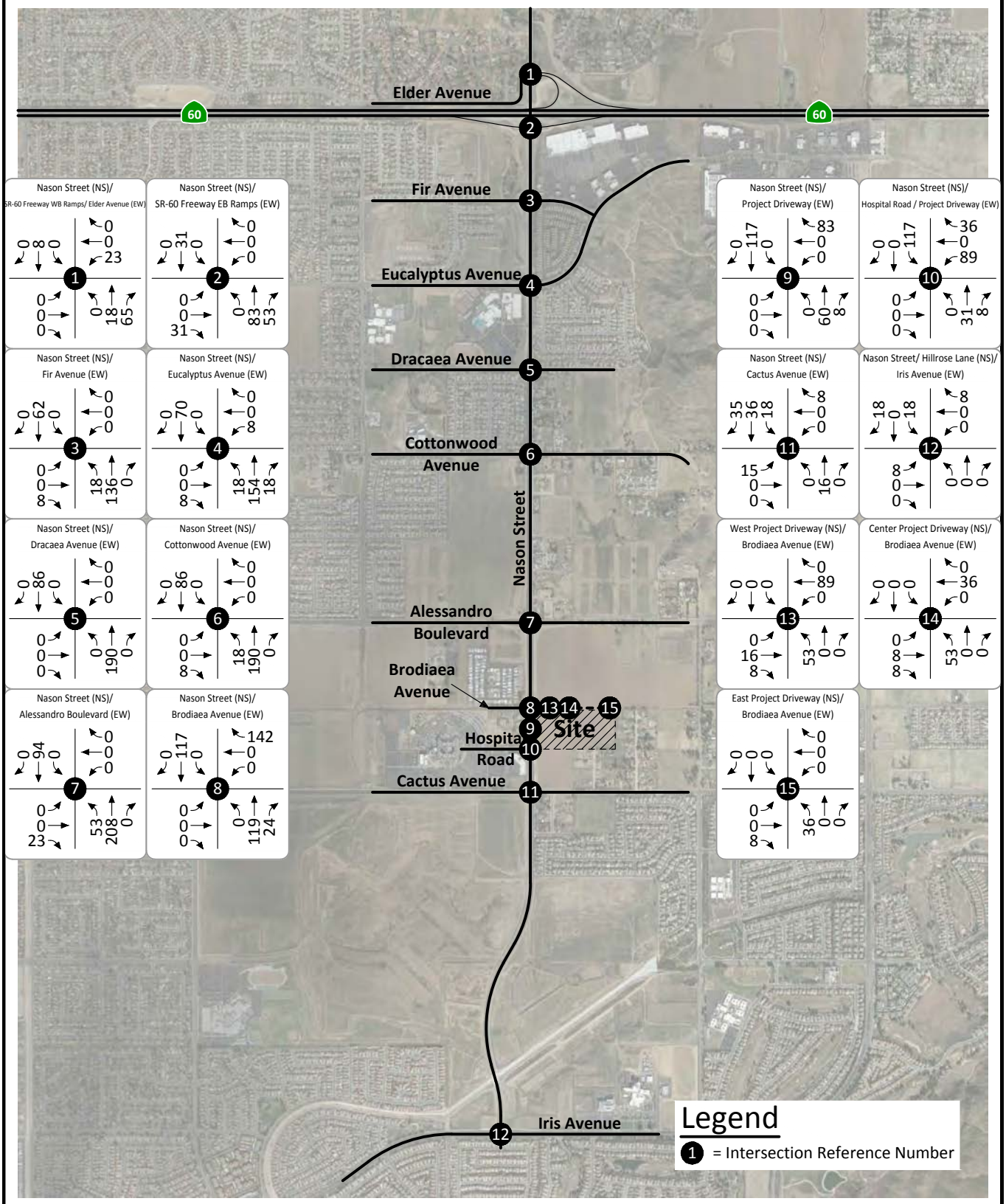
Figure 26
Project Phase III
Evening Peak Hour Intersection Turning Movement Volumes



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V. EXISTING PLUS PROJECT TRAFFIC CONDITIONS

To assess existing plus project traffic conditions, existing traffic is combined with project Phases I, II, and III traffic.

A. Roadway Segment Analysis

The roadway segment Levels of Service for Existing Plus Project Phases I, II, and III traffic conditions are shown in Table 4. For Existing Plus Project Phases I, II, and III traffic conditions, the study area roadway segments are projected to operate at acceptable Levels of Service.

Figure 27 shows the average daily traffic volumes that can be expected for Existing Plus Project Phases I, II, and III traffic conditions. For Existing Plus Project Phases I, II, and III traffic conditions, existing traffic is combined with trips generated by the project.

B. Intersection Delay and Level of Service Analysis

The technique used to assess the capacity needs of an intersection is known as the Intersection Delay Method (see Appendix F). Delay and Level of Service worksheets for each analysis scenario are provided in Appendix F. Morning and evening peak hour intersection turning movement volumes expected from the project are shown on Figures 28 and 29, respectively.

The Existing Plus Project Phases I, II, and III delay and Level of Service for the study area intersections are shown in Table 5.

For Existing Plus Project Phases I, II, and III traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours.

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Table 4

Existing Plus Project Roadway Segment Level of Service

Roadway	Segment	Number of Lanes[1]	Maximum Capacity at Level of Service E	Average Daily Traffic Volume	Volume to Capacity	Level of Service[2]
Nason Street	north of SR-60 Freeway WB Ramps	4D	37,500	6,300	0.168	A
	between SR-60 Freeway WB Ramps and SR-60 Freeway EB Ramps	4D	37,500	18,400	0.491	A
	between SR-60 Freeway EB Ramps and Fir Avenue	4D	37,500	19,700	0.525	A
	between Fir Avenue and Eucalyptus Avenue	4D	37,500	22,000	0.587	A
	south of Eucalyptus Avenue	4D	37,500	24,900	0.664	B
	north of Cottonwood Avenue	4D	37,500	22,800	0.608	B
	between Cottonwood Avenue and Alessandro Boulevard	4D	37,500	20,500	0.547	A
	between Alessandro Boulevard and Brodiaea Avenue	5D	46,850	20,300	0.433	A
	between Brodiaea Avenue and Hospital Road	4D	37,500	18,900	0.504	A
	between Hospital Road and Cactus Avenue	4D	37,500	14,500	0.387	A
	south of Cactus Avenue	4D	37,500	10,300	0.275	A
Fir Avenue	west of Nason Street	2U	12,500	7,200	0.576	A
Eucalyptus Avenue	west of Nason Street	4D	37,500	6,700	0.179	A
	east of Nason Street	4D	37,500	7,700	0.205	A
Cottonwood Avenue	west of Nason Street	2U	12,500	4,800	0.384	A
Alessandro Boulevard	west of Nason Street	2U	12,500	10,400	0.832	D
Brodiaea Avenue	west of Nason Street	2U	12,500	300	0.024	A
	east of Nason Street	2U	12,500	1,300	0.104	A
Cactus Avenue	west of Nason Street	4D	37,500	13,500	0.360	A
	east of Nason Street	2U	12,500	9,600	0.768	C

[1] #D = #-Lane Divided Roadway; #U = #-Lane Undivided Roadway.

[2] Level of Service, which is based on maximum capacity (Level of Service E).

Volume to Capacity Ratio
0.000 - 0.600
0.601 - 0.700
0.701 - 0.800
0.801 - 0.900
0.901 - 1.000
>1.000

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Table 5

Existing Plus Project Intersection Delay and Level of Service

Intersection	Jurisdiction	Traffic Control[3]	Intersection Approach Lanes[1]												Peak Hour Delay-LOS[2]	
			Northbound			Southbound			Eastbound			Westbound				
			L	T	R	L	T	R	L	T	R	L	T	R	Morning	Evening
Nason Street (NS) at:																
SR-60 Freeway WB Ramps (EW) - #1	California Department of Transportation	TS	1	2	1>	1	1.5	0.5	1	1	1>	1	1	1>	14.8-B	14.8-B
SR-60 Freeway EB Ramps (EW) - #2	California Department of Transportation	TS	0	2	d	1	2	0	1	0.5	1.5	0	0	0	14.2-B	15.3-B
Fir Avenue (EW) - #3	City of Moreno Valley	TS	1	2	d	1	2	1	1	0.5	0.5	1	1	1>	19.6-B	20.5-C
Eucalyptus Avenue (EW) - #4	City of Moreno Valley	TS	1	2	1	1	2	d	1	2	d	1	2	d	21.6-C	15.0-B
Dracaea Avenue (EW) - #5	City of Moreno Valley	TS	1	2	d	1	2	d	1	0.5	0.5	1	0.5	0.5	17.2-B	9.8-A
Cottonwood Avenue (EW) - #6	City of Moreno Valley	TS	1	2	d	1	2	1	1	1	1	1	1.5	0.5	16.6-B	12.7-B
Alessandro Boulevard (EW) - #7	City of Moreno Valley	TS	1	2	1	1	3	1	2	2	1	2	1	1	20.7-C	18.6-B
Brodiaea Avenue (EW) - #8	City of Moreno Valley	CSS	1	**1.5**	**0.5**	0	2.5	0.5	0	0	1	0	0	1	13.7-B	15.0-B
Project Access (EW) - #9	City of Moreno Valley	**CSS**	0	2	**1**	0	3	0	0	0	0	0	0	**1**	10.0-A	11.7-B
Hospital Road/Project Access (EW) - #10	City of Moreno Valley	TS	1	2	**1**	1	2	1	0.5	0.5	1	**0.5**	**0.5**	**1**	17.3-B	21.2-C
Cactus Avenue (EW) - #11	City of Moreno Valley	TS	2	2	1	1	2	1	1	1	1	1	0.5	0.5	30.3-C	21.0-C
Iris Avenue (EW) - #12	City of Moreno Valley	TS	1	0.5	0.5	1	1	1>	2	3	d	1	3	1	20.9-C	19.8-B
Project West Access (NS) at:																
Brodiaea Avenue (EW) - #13	City of Moreno Valley	**CSS**	**0.5**	0	**0.5**	0	0	0	0	**0.5**	**0.5**	**0.5**	**0.5**	0	8.7-A	9.2-A
Project Central Access (NS) at:																
Brodiaea Avenue (EW) - #14	City of Moreno Valley	**CSS**	**0.5**	0	**0.5**	0	0	0	0	**0.5**	**0.5**	**0.5**	**0.5**	0	8.6-A	8.7-A
Project East Access (NS) at:																
Brodiaea Avenue (EW) - #15	City of Moreno Valley	**CSS**	**0.5**	0	**0.5**	0	0	0	0	**0.5**	**0.5**	**0.5**	**0.5**	0	8.5-A	8.5-A

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Right Turn Overlap; d = De Facto Right Turn; **BOLD** = Improvement

[2] Delay and level of service calculated using the following analysis software: Vistro version 4.00-00. Per the Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal c
stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal; CSS = Cross Street Stop

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Figure 27
Existing Plus Project Average Daily Traffic Volumes

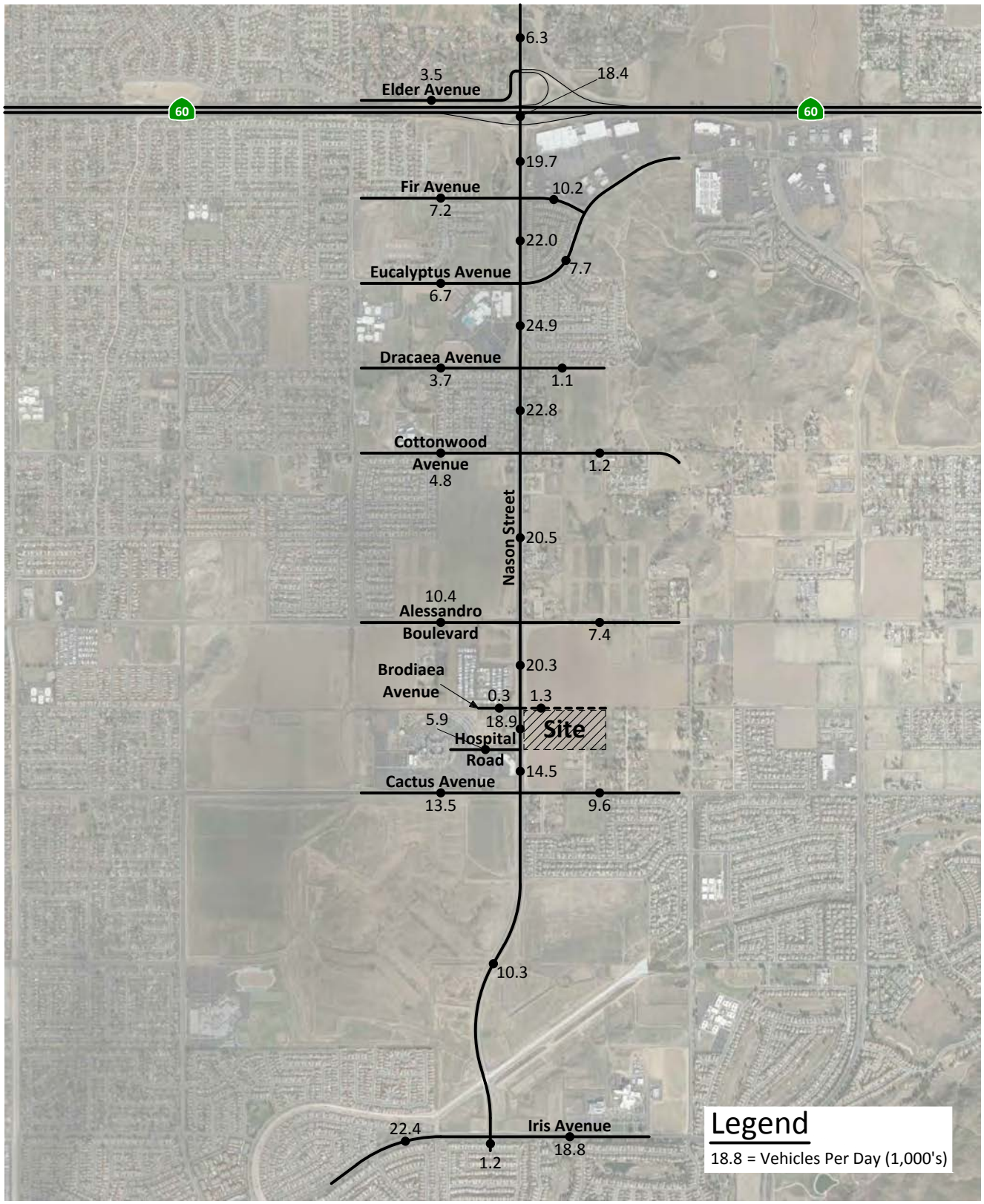

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Figure 28
Existing Plus Project
Morning Peak Hour Intersection Turning Movement Volumes

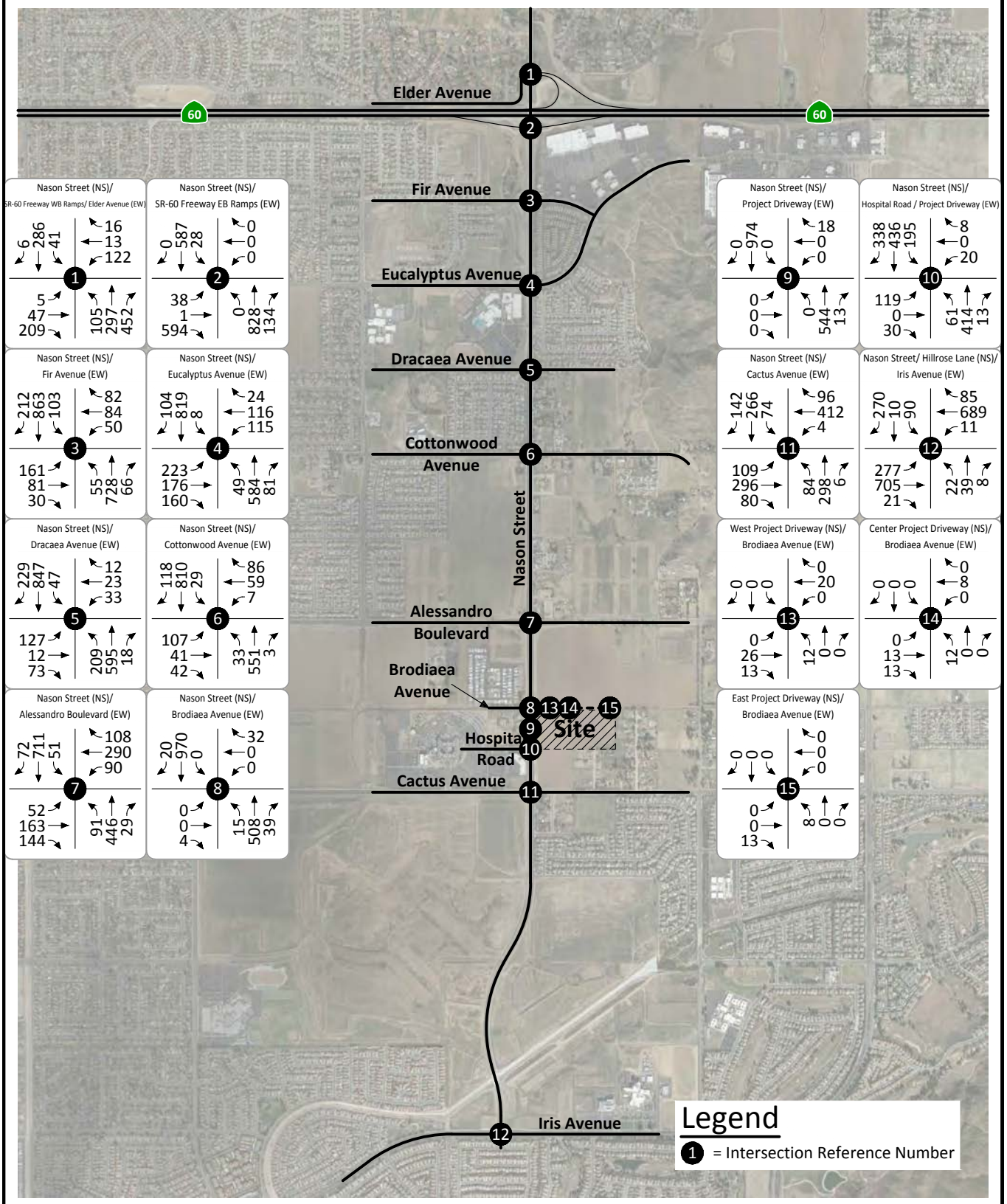

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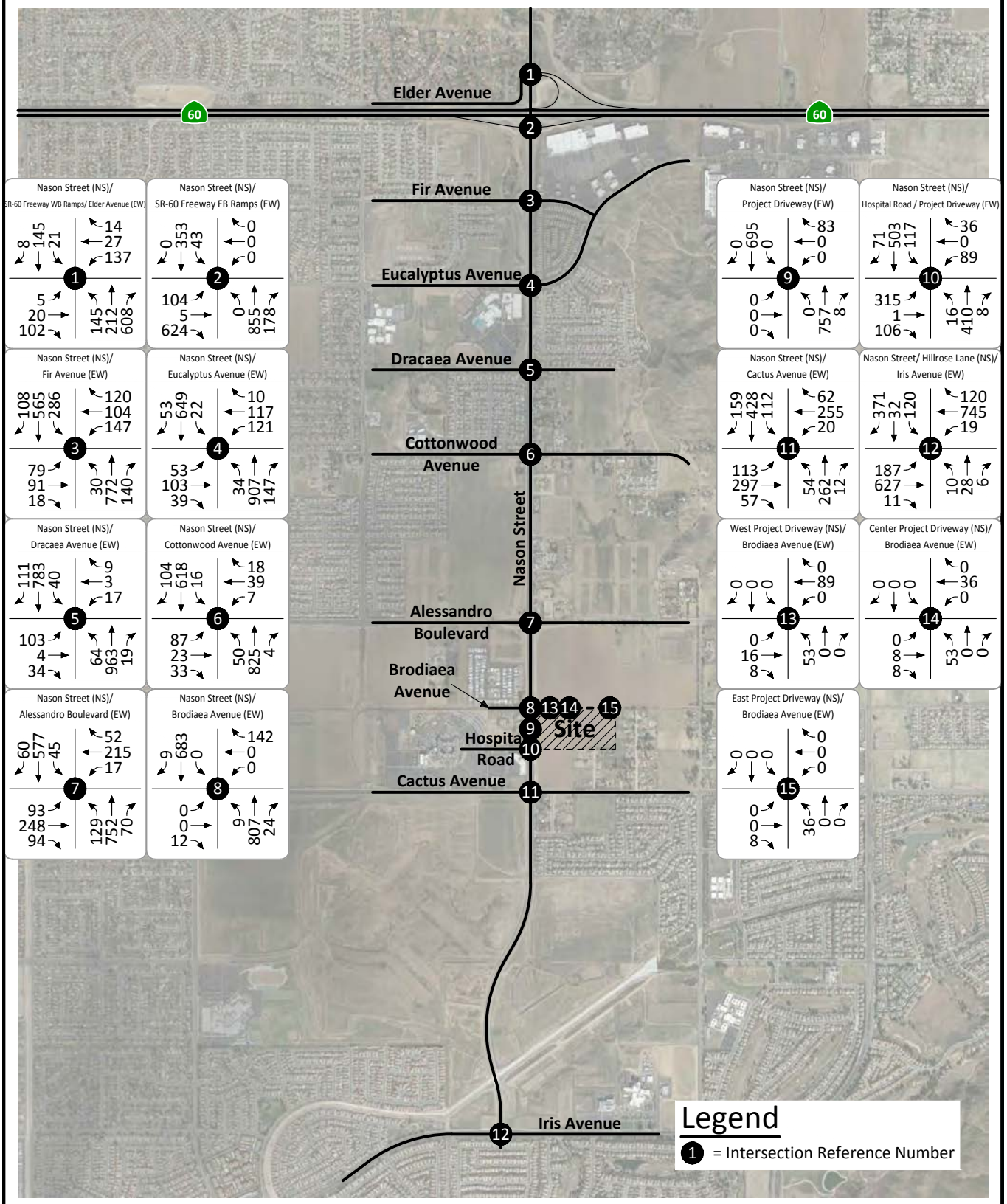
Figure 29
Existing Plus Project
Evening Peak Hour Intersection Turning Movement Volumes



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VI. OPENING YEAR (2020) TRAFFIC CONDITIONS

To assess future traffic conditions, the Moreno Valley Traffic Model data is used for Year 2040. The Opening Year for analysis purposes in this report is Year 2020 for Phase I.

A. Method of Projection

Based upon discussions with City of Moreno Valley, the Year 2040 traffic volume forecasts have been determined using the City of Moreno Valley Traffic Model data based on the Riverside County Traffic Analysis Model (RIVTAM) (see Appendix D).

The Opening Year (2020) traffic volumes have been interpolated from the Year 2040 traffic volumes based upon a portion of the future growth increment (see Appendix E).

B. Roadway Segment Analysis

1. Opening Year (2020) Without Project

The roadway segment Levels of Service for Opening Year (2020) Without Project conditions are shown in Table 6. For Opening Year (2020) Without Project traffic conditions, the following study area roadway segment is projected to operate at unacceptable Level of Service, without improvements:

Alessandro Boulevard west of Nason Street

For Opening Year (2020) Without Project traffic conditions, the study area roadway segments are projected to operate within acceptable Levels of Service, with improvements.

Figure 30 shows the average daily traffic volumes that can be expected for Opening Year (2020) Without Project traffic conditions.

2. Opening Year (2020) With Project Phase I

The roadway segment Levels of Service for Opening Year (2020) With Project Phase I conditions are shown in Table 7. For Opening Year (2020) With Project traffic conditions, the following study area roadway segment is projected to operate at an unacceptable Level of Service, without improvements:

Alessandro Boulevard west of Nason Street

For Opening Year (2020) With Project Phase I traffic conditions, the study area roadway segments are projected to operate within acceptable Levels of Service, with improvements.

Figure 31 shows the average daily traffic volumes that can be expected for Opening Year (2020) With Project Phase I traffic conditions. For Opening Year (2020) With

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Project Phase I traffic conditions, Opening Year (2020) traffic is combined with trips generated by the project.

C. Intersection Delay and Level of Service Analysis

The technique used to assess the capacity needs of an intersection is known as the Intersection Delay Method (see Appendix F). Delay and Level of Service worksheets for each analysis scenario are provided in Appendix F.

1. Opening Year (2020) Without Project

The Opening Year (2020) Without Project delay and Level of Service for the study area intersections are shown in Table 8. Morning and evening peak hour intersection turning movement volumes expected from the project are shown on Figures 32 and 33, respectively. For Opening Year (2020) Without Project traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours.

2. Opening Year (2020) With Project Phase I

The Opening Year (2020) With Project Phase I delay and Level of Service for the study area intersections are shown in Table 9. Morning and evening peak hour intersection turning movement volumes expected from the project are shown on Figures 34 and 35, respectively. For Opening Year (2020) With Project Phase I traffic conditions, the study area intersections are projected to operate at acceptable Levels of Service during the peak hours.

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Table 6

Opening Year (2020) Without Project Roadway Segment Level of Service

Roadway	Segment	Number of Lanes[1]	Maximum Capacity at Level of Service E	Average Daily Traffic Volume	Volume to Capacity	Level of Service[2]
Nason Street	north of SR-60 Freeway WB Ramps	4D	37,500	6,300	0.168	A
	between SR-60 Freeway WB Ramps and SR-60 Freeway EB Ramps	4D	37,500	18,300	0.488	A
	between SR-60 Freeway EB Ramps and Fir Avenue	4D	37,500	18,700	0.499	A
	between Fir Avenue and Eucalyptus Avenue	4D	37,500	20,900	0.557	A
	south of Eucalyptus Avenue	4D	37,500	24,400	0.651	B
	north of Cottonwood Avenue	4D	37,500	22,300	0.595	A
	between Cottonwood Avenue and Alessandro Boulevard	4D	37,500	19,400	0.517	A
	between Alessandro Boulevard and Brodiaea Avenue	5D	46,850	18,200	0.388	A
	between Brodiaea Avenue and Hospital Road	4D	37,500	18,000	0.480	A
	between Hospital Road and Cactus Avenue	4D	37,500	15,000	0.400	A
	south of Cactus Avenue	4D	37,500	11,600	0.309	A
Fir Avenue	west of Nason Street	2U	12,500	7,300	0.584	A
Eucalyptus Avenue	west of Nason Street	4D	37,500	7,600	0.203	A
	east of Nason Street	4D	37,500	10,500	0.280	A
Cottonwood Avenue	west of Nason Street	2U	12,500	4,800	0.384	A
Alessandro Boulevard	west of Nason Street					
	- Without Improvements	2U	12,500	12,400	0.992	E
	- With Improvements	**2D**	18,750	12,400	0.661	B
Brodiaea Avenue	west of Nason Street	2U	12,500	300	0.024	A
Cactus Avenue	west of Nason Street	4D	37,500	13,800	0.368	A
	east of Nason Street	2U	12,500	9,900	0.792	C

[1] #D = #-Lane Divided Roadway; #U = #-Lane Undivided Roadway; **BOLD** = Improvement.

[2] Level of Service, which is based on maximum capacity (Level of Service E).

Volume to Capacity Ratio
0.000 - 0.600
0.601 - 0.700
0.701 - 0.800
0.801 - 0.900
0.901 - 1.000
>1.000

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Table 7

Opening Year (2020) With Project Roadway Segment Level of Service

Roadway	Segment	Number of Lanes[1]	Maximum Capacity at Level of Service E	Average Daily Traffic Volume	Volume to Capacity	Level of Service[2]
Nason Street	north of SR-60 Freeway WB Ramps	4D	37,500	6,300	0.168	A
	between SR-60 Freeway WB Ramps and SR-60 Freeway EB Ramps	4D	37,500	18,400	0.491	A
	between SR-60 Freeway EB Ramps and Fir Avenue	4D	37,500	18,900	0.504	A
	between Fir Avenue and Eucalyptus Avenue	4D	37,500	21,200	0.565	A
	south of Eucalyptus Avenue	4D	37,500	24,700	0.659	B
	north of Cottonwood Avenue	4D	37,500	22,600	0.603	B
	between Cottonwood Avenue and Alessandro Boulevard	4D	37,500	19,700	0.525	A
	between Alessandro Boulevard and Brodiaea Avenue	5D	46,850	18,600	0.397	A
	between Brodiaea Avenue and Hospital Road	4D	37,500	18,300	0.488	A
	between Hospital Road and Cactus Avenue	4D	37,500	15,100	0.403	A
	south of Cactus Avenue	4D	37,500	11,700	0.312	A
Fir Avenue	west of Nason Street	2U	12,500	7,300	0.584	A
Eucalyptus Avenue	west of Nason Street	4D	37,500	7,600	0.203	A
	east of Nason Street	4D	37,500	10,500	0.280	A
Cottonwood Avenue	west of Nason Street	2U	12,500	4,800	0.384	A
Alessandro Boulevard	west of Nason Street					
	- Without Improvements	2U	12,500	12,500	1.000	E
	- With Improvements	**2D**	18,750	12,500	0.667	B
Brodiaea Avenue	west of Nason Street	2U	12,500	300	0.024	A
	east of Nason Street	2U	12,500	200	0.016	A
Cactus Avenue	west of Nason Street	4D	37,500	13,900	0.371	A
	east of Nason Street	2U	12,500	9,900	0.792	C

[1] #D = #-Lane Divided Roadway; #U = #-Lane Undivided Roadway; **BOLD** = Improvement.

[2] Level of Service, which is based on maximum capacity (Level of Service E).

Volume to Capacity Ratio
0.000 - 0.600
0.601 - 0.700
0.701 - 0.800
0.801 - 0.900
0.901 - 1.000
>1.000

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Table 8

Opening Year (2020) Without Project Intersection Delay and Level of Service

Intersection	Jurisdiction	Traffic Control[3]	Intersection Approach Lanes[1]												Peak Hour Delay-LOS[2]	
			Northbound			Southbound			Eastbound			Westbound				
			L	T	R	L	T	R	L	T	R	L	T	R	Morning	Evening
Nason Street (NS) at:																
SR-60 Freeway WB Ramps (EW) - #1	California Department of Transportation	TS	1	2	1>	1	1.5	0.5	1	1	1>	1	1	1>	14.4-B	15.1-B
SR-60 Freeway EB Ramps (EW) - #2	California Department of Transportation	TS	0	2	d	1	2	0	1	0.5	1.5	0	0	0	14.1-B	15.5-B
Fir Avenue (EW) - #3	City of Moreno Valley	TS	1	2	d	1	2	1	1	0.5	0.5	1	1	1>	19.8-B	20.9-C
Eucalyptus Avenue (EW) - #4	City of Moreno Valley	TS	1	2	1	1	2	d	1	2	d	1	2	d	22.7-C	16.4-B
Dracaea Avenue (EW) - #5	City of Moreno Valley	TS	1	2	d	1	2	d	1	0.5	0.5	1	0.5	0.5	18.8-B	12.2-B
Cottonwood Avenue (EW) - #6	City of Moreno Valley	TS	1	2	d	1	2	1	1	1	1	1	1.5	0.5	16.9-B	13.4-B
Alessandro Boulevard (EW) - #7	City of Moreno Valley	TS	1	2	1	1	3	1	2	2	1	2	1	1	22.7-C	19.9-B
Brodiaea Avenue (EW) - #8	City of Moreno Valley	CSS	1	2	0	0	2.5	0.5	0	0	1	0	0	0	12.7-B	11.2-B
Hospital Road/Project Access (EW) - #10	City of Moreno Valley	TS	1	2	0	1	2	1	1	0	1	0	0	0	9.8-A	13.4-B
Cactus Avenue (EW) - #11	City of Moreno Valley	TS	2	2	1	1	2	1	1	1	1	1	0.5	0.5	30.7-C	21.5-C
Iris Avenue (EW) - #12	City of Moreno Valley	TS	1	0.5	0.5	1	1	1>	2	3	d	1	3	1	20.9-C	19.9-B

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left; T = Through; R = Right; > = Right Turn Overlap; d = De Facto Right Turn

[2] Delay and level of service calculated using the following analysis software: Vistro version 4.00-00. Per the Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal; CSS = Cross Street Stop

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Table 9

Opening Year (2020) With Project Intersection Delay and Level of Service

Intersection	Jurisdiction	Traffic Control[3]	Intersection Approach Lanes[1]												Peak Hour Delay-LOS[2]	
			Northbound			Southbound			Eastbound			Westbound				
			L	T	R	L	T	R	L	T	R	L	T	R	Morning	Evening
Nason Street (NS) at:																
SR-60 Freeway WB Ramps (EW) - #1	California Department of Transportation	TS	1	2	1>	1	1.5	0.5	1	1	1>	1	1	1>	14.5-B	15.2-B
SR-60 Freeway EB Ramps (EW) - #2	California Department of Transportation	TS	0	2	d	1	2	0	1	0.5	1.5	0	0	0	14.1-B	15.6-B
Fir Avenue (EW) - #3	City of Moreno Valley	TS	1	2	d	1	2	1	1	0.5	0.5	1	1	1>	19.9-B	21.1-C
Eucalyptus Avenue (EW) - #4	City of Moreno Valley	TS	1	2	1	1	2	d	1	2	d	1	2	d	22.9-C	16.5-B
Dracaea Avenue (EW) - #5	City of Moreno Valley	TS	1	2	d	1	2	d	1	0.5	0.5	1	0.5	0.5	18.9-B	12.2-B
Cottonwood Avenue (EW) - #6	City of Moreno Valley	TS	1	2	d	1	2	1	1	1	1	1	1.5	0.5	17.0-B	13.5-B
Alessandro Boulevard (EW) - #7	City of Moreno Valley	TS	1	2	1	1	3	1	2	2	1	2	1	1	22.8-C	20.0-B
Brodiaea Avenue (EW) - #8	City of Moreno Valley	CSS	1	**1.5**	**0.5**	0	2.5	0.5	0	0	1	0	0	1	12.9-A	11.8-B
Project Access (EW) - #9	City of Moreno Valley	**CSS**	0	2	**1**	0	3	0	0	0	0	0	0	**1**	10.1-B	11.0-B
Hospital Road/Project Access (EW) - #10	City of Moreno Valley	TS	1	2	1	1	2	1	0.5	0.5	1	**0.5**	**0.5**	**1**	13.0-B	17.2-B
Cactus Avenue (EW) - #11	City of Moreno Valley	TS	2	2	1	1	2	1	1	1	1	1	0.5	0.5	31.0-C	21.6-C
Iris Avenue (EW) - #12	City of Moreno Valley	TS	1	0.5	0.5	1	1	1>	2	3	d	1	3	1	21.0-C	19.9-B
Project West Access (NS) at:																
Brodiaea Avenue (EW) - #13	City of Moreno Valley	**CSS**	**0.5**	0	**0.5**	0	0	0	0	**0.5**	**0.5**	**0.5**	**0.5**	0	8.6-A	8.6-A
Project Central Access (NS) at:																
Brodiaea Avenue (EW) - #14	City of Moreno Valley	**CSS**	**0.5**	0	**0.5**	0	0	0	0	**0.5**	**0.5**	**0.5**	**0.5**	0	8.6-A	8.6-A
Project East Access (NS) at:																
Brodiaea Avenue (EW) - #15	City of Moreno Valley	**CSS**	**0.5**	0	**0.5**	0	0	0	0	**0.5**	**0.5**	**0.5**	**0.5**	0	8.5-A	8.5-A

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left; T = Through; R = Right; > = Right Turn Overlap; d = De Facto Right Turn; **BOLD** = Improvement

[2] Delay and level of service calculated using the following analysis software: Vistro version 4.00-00. Per the Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal c
stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal; CSS = Cross Street Stop

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Figure 30
Opening Year (2020) Without Project Average Daily Traffic Volumes

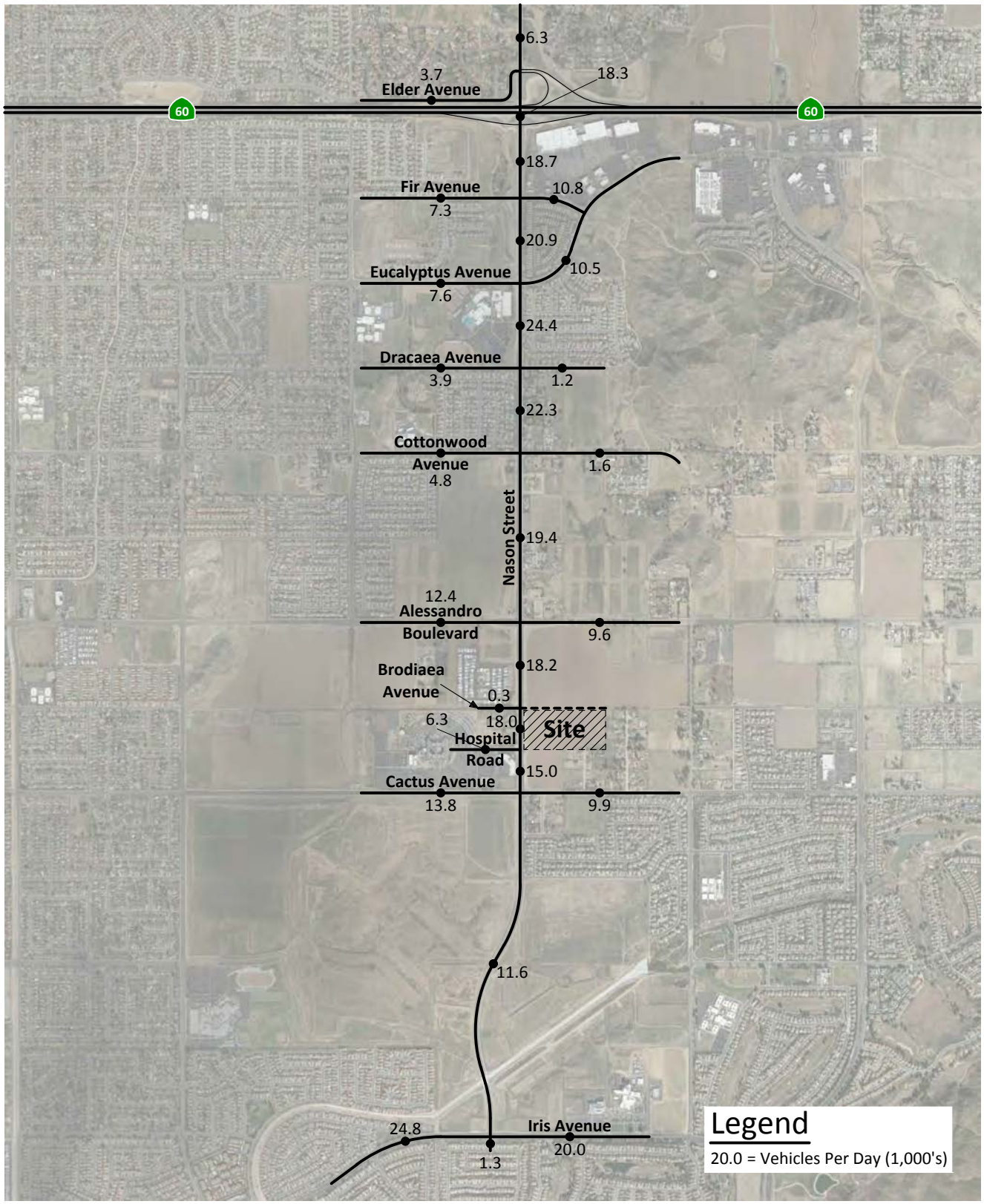

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Figure 31
Opening Year (2020) With Project Average Daily Traffic Volumes

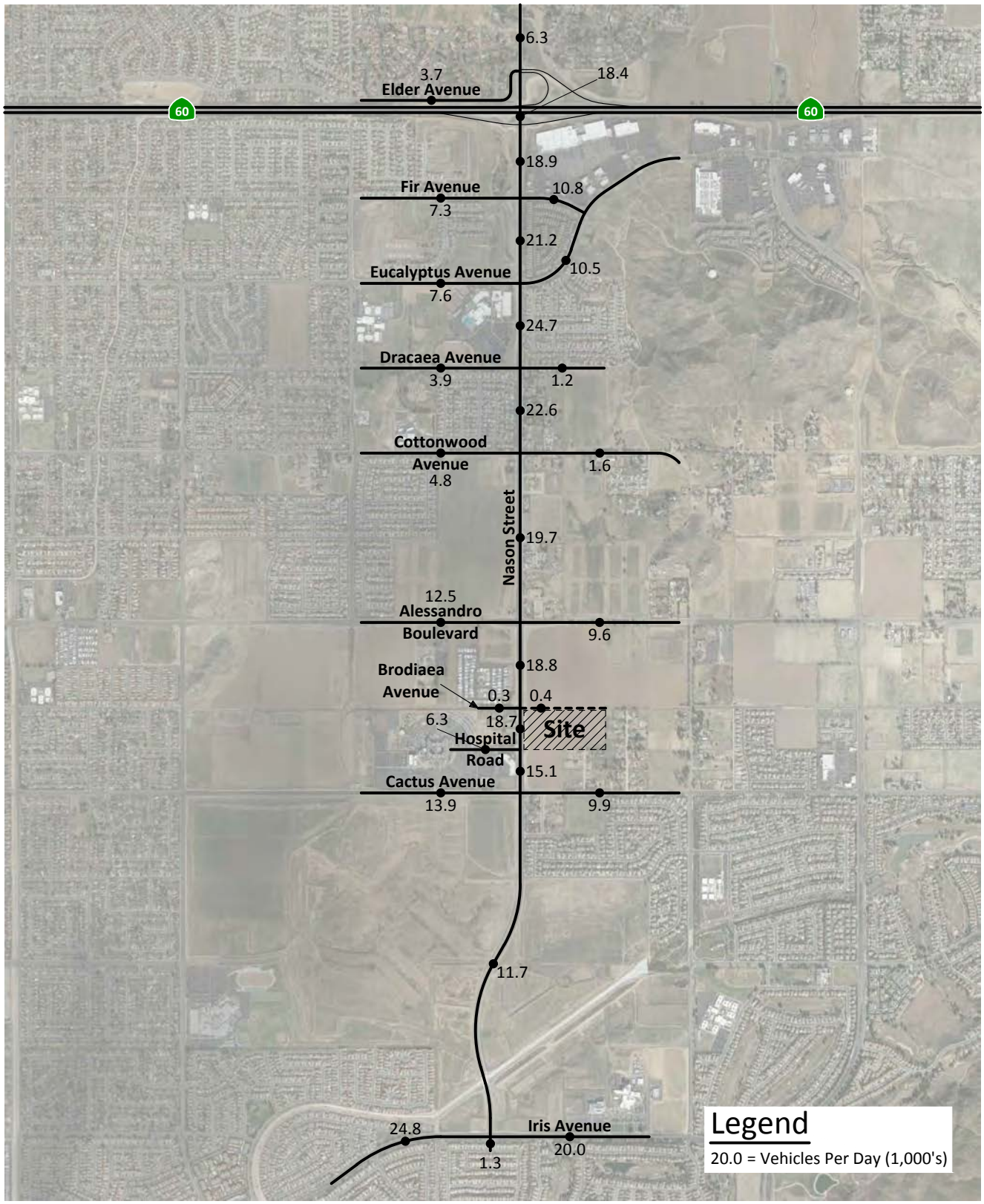

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Figure 32
Opening Year (2020) Without Project
Morning Peak Hour Intersection Turning Movement Volumes

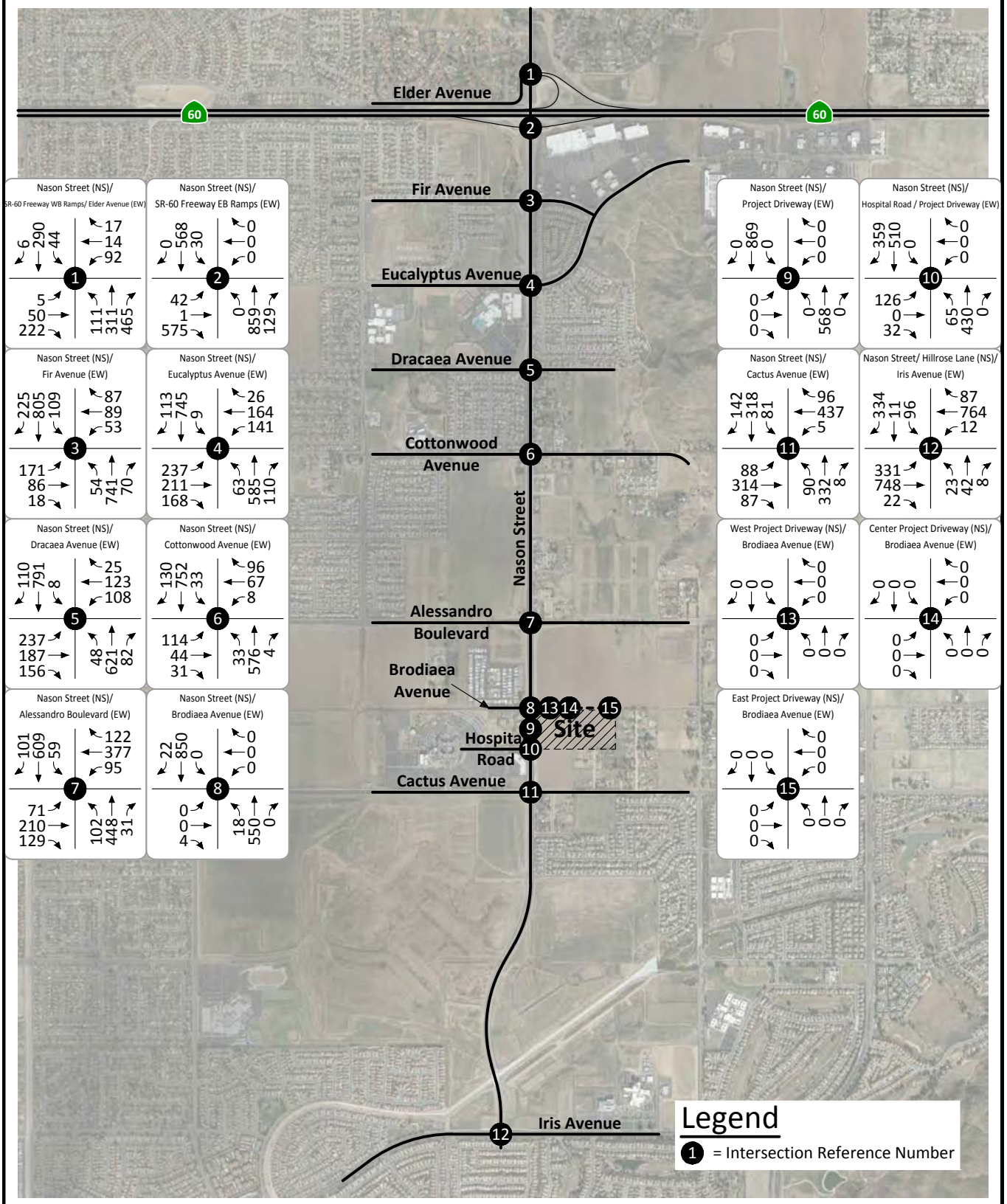

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Figure 33
Opening Year (2020) Without Project
Evening Peak Hour Intersection Turning Movement Volumes

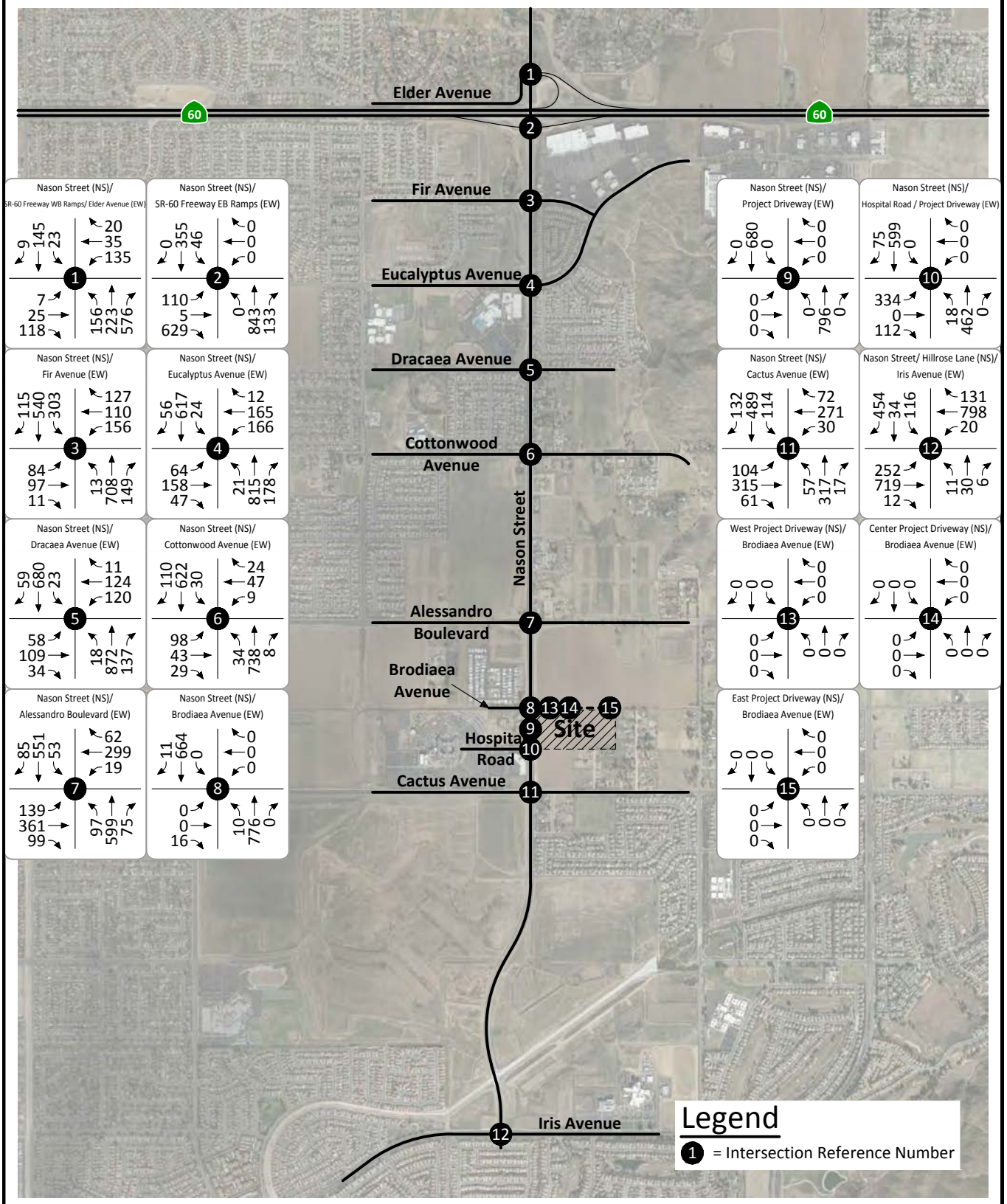

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Figure 34
Opening Year (2020) With Project
Morning Peak Hour Intersection Turning Movement Volumes

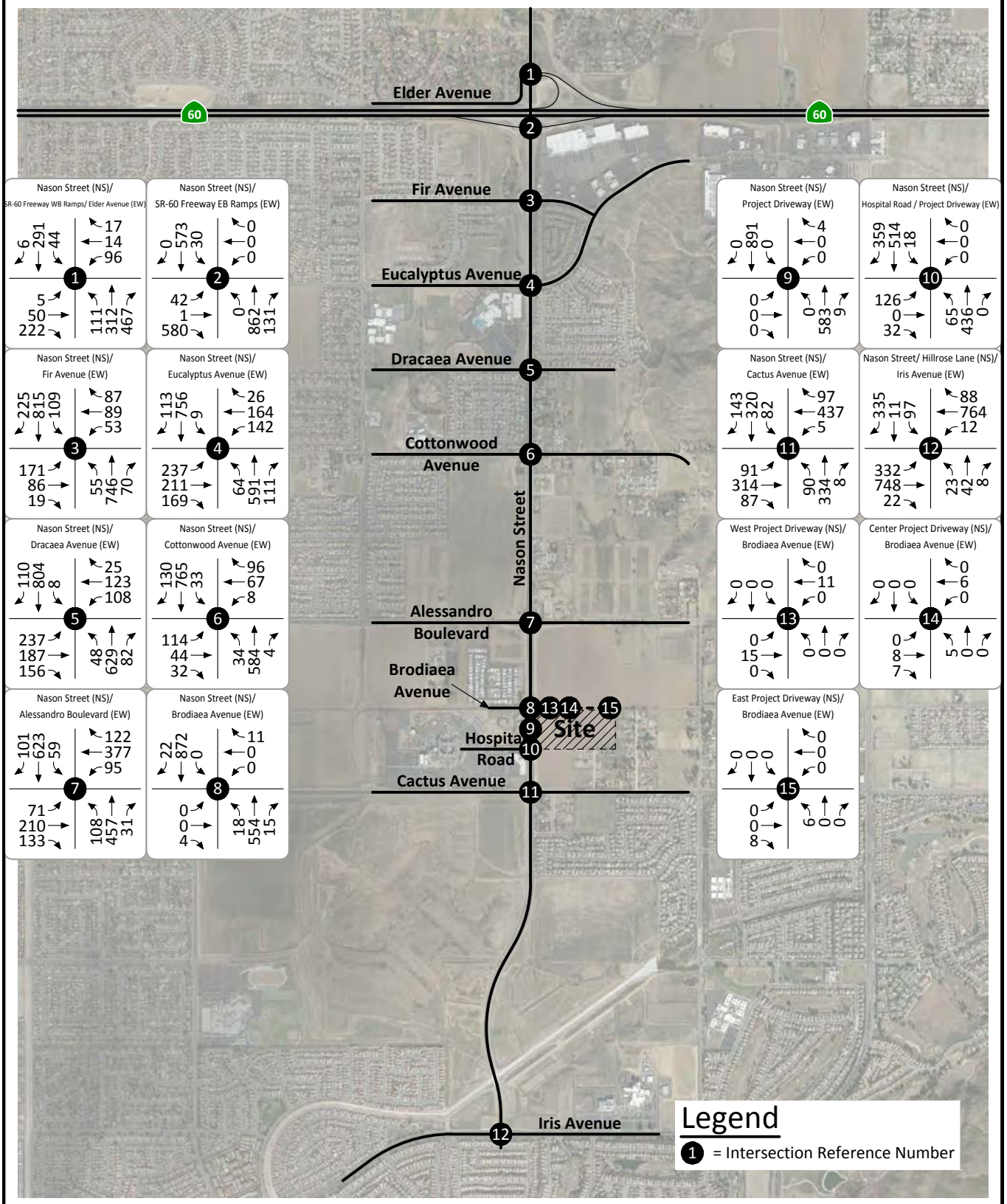

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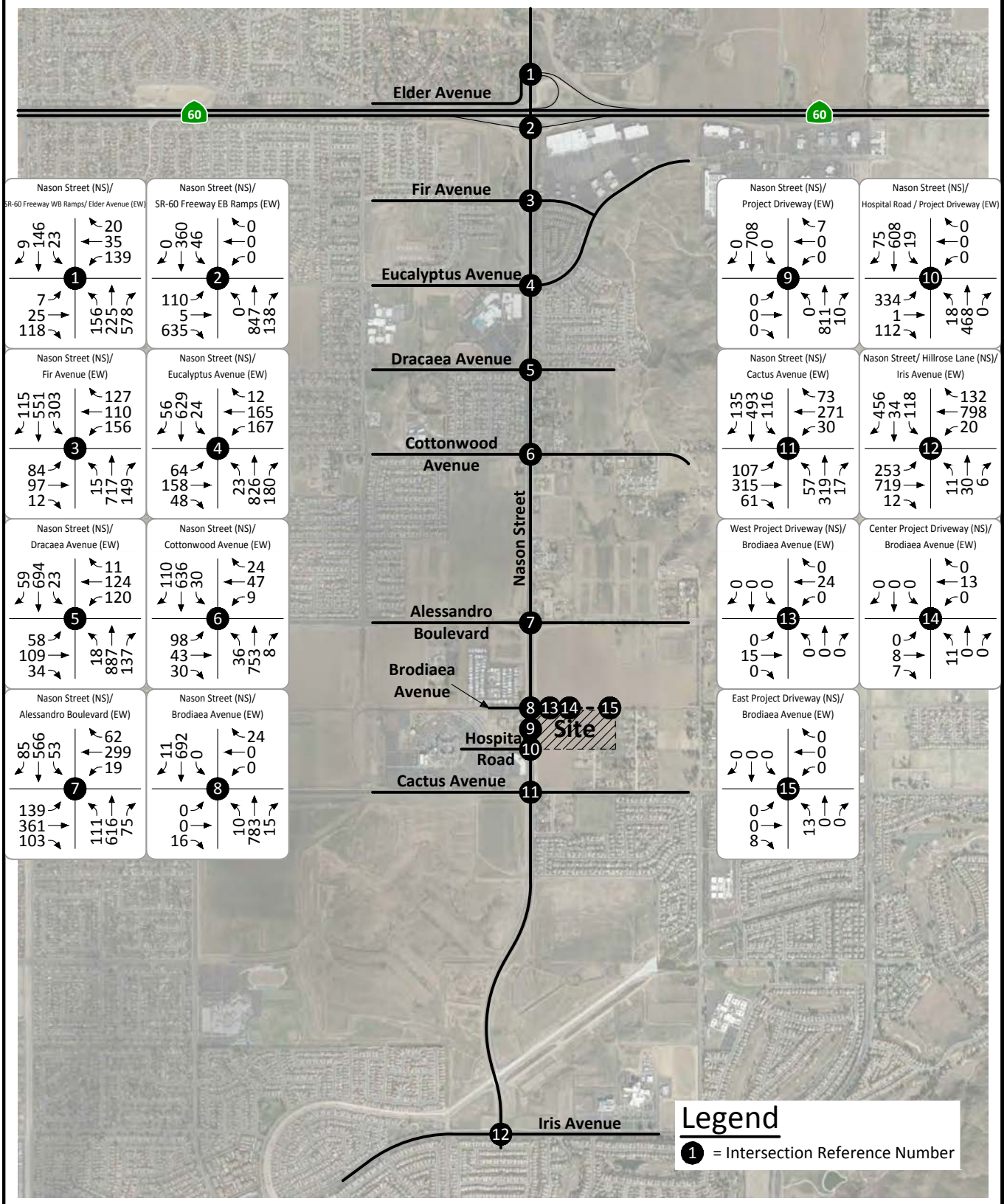
Figure 35
Opening Year (2020) With Project
Evening Peak Hour Intersection Turning Movement Volumes



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VII. OPENING YEAR (2021) TRAFFIC CONDITIONS

To assess future traffic conditions, the Moreno Valley Traffic Model data is used for Year 2040. The Opening Year for analysis purposes in this report is Year 2021 for Phases I and II.

A. Method of Projection

Based upon discussions with City of Moreno Valley, the Year 2040 traffic volume forecasts have been determined using the City of Moreno Valley Traffic Model data based on the Riverside County Traffic Analysis Model (RIVTAM) (see Appendix D).

The Opening Year (2021) traffic volumes have been interpolated from the Year 2040 traffic volumes based upon a portion of the future growth increment(see Appendix E).

B. Roadway Segment Analysis

1. Opening Year (2021) Without Project

The roadway segment Levels of Service for Opening Year (2021) Without Project conditions are shown in Table 10. For Opening Year (2021) Without Project traffic conditions, the following study area roadway segment is projected to operate at an unacceptable Level of Service, without improvements:

Alessandro Boulevard west of Nason Street

For Opening Year (2021) Without Project traffic conditions, the study area roadway segments are projected to operate within acceptable Levels of Service, with improvements.

Figure 36 shows the average daily traffic volumes that can be expected for Opening Year (2021) Without Project traffic conditions.

2. Opening Year (2021) With Project Phases I and II

The roadway segment Levels of Service for Opening Year (2021) With Project Phases I and II conditions are shown in Table 11. For Opening Year (2021) With Project Phases I and II traffic conditions, the following study area roadway segment is projected to operate at an unacceptable Level of Service, without improvements:

Alessandro Boulevard west of Nason Street

For Opening Year (2021) With Project Phases I and II traffic conditions, the study area roadway segments are projected to operate within acceptable Levels of Service, with improvements.

Figure 37 shows the average daily traffic volumes that can be expected for Opening Year (2021) With Project Phases I and II traffic conditions. For Opening Year (2021)

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With Project Phases I and II traffic conditions, Opening Year (2021) traffic is combined with trips generated by the project.

C. Intersection Delay and Level of Service Analysis

The technique used to assess the capacity needs of an intersection is known as the Intersection Delay Method (see Appendix F). Delay and Level of Service worksheets for each analysis scenario are provided in Appendix F.

1. Opening Year (2021) Without Project

The Opening Year (2021) Without Project delay and Level of Service for the study area intersections are shown in Table 12. Morning and evening peak hour intersection turning movement volumes expected from the project are shown on Figures 38 and 39, respectively. For Opening Year (2021) Without Project traffic conditions, the study area intersections are projected to operate at an acceptable Levels of Service during the peak hours.

2. Opening Year (2021) With Project Phases I and 11

The Opening Year (2021) With Project Phases I and II delay and Level of Service for the study area intersections are shown in Table 13. Morning and evening peak hour intersection turning movement volumes expected from the project are shown on Figures 40 and 41, respectively. For Opening Year (2021) With Project Phases I and II traffic conditions, the study area intersections are projected to operate at an acceptable Levels of Service during the peak hours.

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Table 10

Opening Year (2021) Without Project Roadway Segment Level of Service

Roadway	Segment	Number of Lanes[1]	Maximum Capacity at Level of Service E	Average Daily Traffic Volume	Volume to Capacity	Level of Service[2]
Nason Street	north of SR-60 Freeway WB Ramps	4D	37,500	6,500	0.173	A
	between SR-60 Freeway WB Ramps and SR-60 Freeway EB Ramps	4D	37,500	18,600	0.496	A
	between SR-60 Freeway EB Ramps and Fir Avenue	4D	37,500	19,100	0.509	A
	between Fir Avenue and Eucalyptus Avenue	4D	37,500	21,300	0.568	A
	south of Eucalyptus Avenue	4D	37,500	25,200	0.672	B
	north of Cottonwood Avenue	4D	37,500	23,000	0.613	B
	between Cottonwood Avenue and Alessandro Boulevard	4D	37,500	20,000	0.533	A
	between Alessandro Boulevard and Brodiaea Avenue	5D	46,850	18,800	0.401	A
	between Brodiaea Avenue and Hospital Road	4D	37,500	18,600	0.496	A
	between Hospital Road and Cactus Avenue	4D	37,500	15,500	0.413	A
	south of Cactus Avenue	4D	37,500	12,200	0.325	A
Fir Avenue	west of Nason Street	2U	12,500	7,400	0.592	A
Eucalyptus Avenue	west of Nason Street	4D	37,500	8,000	0.213	A
	east of Nason Street	4D	37,500	11,500	0.307	A
Cottonwood Avenue	west of Nason Street	2U	12,500	4,900	0.392	A
Alessandro Boulevard	west of Nason Street					
	- Without Improvements	2U	12,500	13,300	1.064	F
	- With Improvements	**2D**	18,750	13,300	0.709	C
Brodiaea Avenue	west of Nason Street	2U	12,500	300	0.024	A
Cactus Avenue	west of Nason Street	4D	37,500	14,000	0.373	A
	east of Nason Street	2U	12,500	10,200	0.816	D

[1] #D = #-Lane Divided Roadway; #U = #-Lane Undivided Roadway; **BOLD** = Improvement.

[2] Level of Service, which is based on maximum capacity (Level of Service E).

Volume to Capacity Ratio
0.000 - 0.600
0.601 - 0.700
0.701 - 0.800
0.801 - 0.900
0.901 - 1.000
>1.000

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Table 11

Opening Year (2021) With Project Roadway Segment Level of Service

Roadway	Segment	Number of Lanes[1]	Maximum Capacity at Level of Service E	Average Daily Traffic Volume	Volume to Capacity	Level of Service[2]
Nason Street	north of SR-60 Freeway WB Ramps	4D	37,500	6,700	0.179	A
	between SR-60 Freeway WB Ramps and SR-60 Freeway EB Ramps	4D	37,500	19,700	0.525	A
	between SR-60 Freeway EB Ramps and Fir Avenue	4D	37,500	21,000	0.560	A
	between Fir Avenue and Eucalyptus Avenue	4D	37,500	23,400	0.624	B
	south of Eucalyptus Avenue	4D	37,500	27,800	0.741	C
	north of Cottonwood Avenue	4D	37,500	25,600	0.683	B
	between Cottonwood Avenue and Alessandro Boulevard	4D	37,500	22,800	0.608	B
	between Alessandro Boulevard and Brodiaea Avenue	5D	46,850	22,300	0.476	A
	between Brodiaea Avenue and Hospital Road	4D	37,500	21,100	0.563	A
	between Hospital Road and Cactus Avenue	4D	37,500	16,700	0.445	A
	south of Cactus Avenue	4D	37,500	12,700	0.339	A
Fir Avenue	west of Nason Street	2U	12,500	7,600	0.608	B
Eucalyptus Avenue	west of Nason Street	4D	37,500	8,200	0.219	A
	east of Nason Street	4D	37,500	11,700	0.312	A
Cottonwood Avenue	west of Nason Street	2U	12,500	5,100	0.408	A
Alessandro Boulevard	west of Nason Street					
	- Without Improvements	2U	12,500	14,000	1.120	F
	- With Improvements	**2D**	18,750	14,000	0.747	C
Brodiaea Avenue	west of Nason Street	2U	12,500	300	0.024	A
	east of Nason Street	2U	12,500	1,000	0.080	A
Cactus Avenue	west of Nason Street	4D	37,500	14,500	0.387	A
	east of Nason Street	2U	12,500	10,400	0.832	D

[1] #D = #-Lane Divided Roadway; #U = #-Lane Undivided Roadway; **BOLD** = Improvement.

[2] Level of Service, which is based on maximum capacity (Level of Service E).

Volume to Capacity Ratio
0.000 - 0.600
0.601 - 0.700
0.701 - 0.800
0.801 - 0.900
0.901 - 1.000
>1.000

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Table 12

Opening Year (2021) Without Project Intersection Delay and Level of Service

Intersection	Jurisdiction	Traffic Control[3]	Intersection Approach Lanes[1]												Peak Hour Delay-LOS[2]	
			Northbound			Southbound			Eastbound			Westbound				
			L	T	R	L	T	R	L	T	R	L	T	R	Morning	Evening
Nason Street (NS) at:																
SR-60 Freeway WB Ramps (EW) - #1	California Department of Transportation	TS	1	2	1>	1	1.5	0.5	1	1	1>	1	1	1>	14.6-B	15.3-B
SR-60 Freeway EB Ramps (EW) - #2	California Department of Transportation	TS	0	2	d	1	2	0	1	0.5	1.5	0	0	0	14.2-B	15.7-B
Fir Avenue (EW) - #3	City of Moreno Valley	TS	1	2	d	1	2	1	1	0.5	0.5	1	1	1>	20.2-C	21.2-C
Eucalyptus Avenue (EW) - #4	City of Moreno Valley	TS	1	2	1	1	2	d	1	2	d	1	2	d	23.7-C	17.6-B
Dracaea Avenue (EW) - #5	City of Moreno Valley	TS	1	2	d	1	2	d	1	0.5	0.5	1	0.5	0.5	19.3-B	12.4-B
Cottonwood Avenue (EW) - #6	City of Moreno Valley	TS	1	2	d	1	2	1	1	1	1	1	1.5	0.5	17.4-B	14.0-B
Alessandro Boulevard (EW) - #7	City of Moreno Valley	TS	1	2	1	1	3	1	2	2	1	2	1	1	24.4-C	20.5-C
Brodiaea Avenue (EW) - #8	City of Moreno Valley	CSS	1	2	0	0	2.5	0.5	0	0	1	0	0	0	13.0-B	11.4-B
Hospital Road/Project Access (EW) - #10	City of Moreno Valley	TS	1	2	0	1	2	1	1	0	1	0	0	0	9.9-A	13.5-B
Cactus Avenue (EW) - #11	City of Moreno Valley	TS	2	2	1	1	2	1	1	1	1	1	0.5	0.5	31.8-C	21.7-C
Iris Avenue (EW) - #12	City of Moreno Valley	TS	1	0.5	0.5	1	1	1>	2	3	d	1	3	1	21.1-C	20.1-C

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left; T = Through; R = Right; > = Right Turn Overlap; d = De Facto Right Turn

[2] Delay and level of service calculated using the following analysis software: Vistro version 4.00-00. Per the Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal; CSS = Cross Street Stop

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Table 13

Opening Year (2021) With Project Intersection Delay and Level of Service

Intersection	Jurisdiction	Traffic Control[3]	Intersection Approach Lanes[1]												Peak Hour Delay-LOS[2]	
			Northbound			Southbound			Eastbound			Westbound				
			L	T	R	L	T	R	L	T	R	L	T	R	Morning	Evening
Nason Street (NS) at:																
SR-60 Freeway WB Ramps (EW) - #1	California Department of Transportation	TS	1	2	1>	1	1.5	0.5	1	1	1>	1	1	1>	15.3-B	15.8-B
SR-60 Freeway EB Ramps (EW) - #2	California Department of Transportation	TS	0	2	d	1	2	0	1	0.5	1.5	0	0	0	14.8-B	16.1-B
Fir Avenue (EW) - #3	City of Moreno Valley	TS	1	2	d	1	2	1	1	0.5	0.5	1	1	1>	20.8-C	22.1-C
Eucalyptus Avenue (EW) - #4	City of Moreno Valley	TS	1	2	1	1	2	d	1	2	d	1	2	d	26.0-C	18.3-B
Dracaea Avenue (EW) - #5	City of Moreno Valley	TS	1	2	d	1	2	d	1	0.5	0.5	1	0.5	0.5	22.0-C	12.8-B
Cottonwood Avenue (EW) - #6	City of Moreno Valley	TS	1	2	d	1	2	1	1	1	1	1	1.5	0.5	18.5-B	14.7-B
Alessandro Boulevard (EW) - #7	City of Moreno Valley	TS	1	2	1	1	3	1	2	2	1	2	1	1	25.6-C	22.2-C
Brodiaea Avenue (EW) - #8	City of Moreno Valley	CSS	1	**1.5**	**0.5**	0	2.5	0.5	0	0	1	0	0	1	14.5-B	15.9-C
Project Access (EW) - #9	City of Moreno Valley	**CSS**	0	2	**1**	0	3	0	0	0	0	0	0	**1**	10.3-B	12.5-B
Hospital Road/Project Access (EW) - #10	City of Moreno Valley	TS	1	2	1	1	2	1	0.5	0.5	1	**0.5**	**0.5**	**1**	17.3-B	22.3-C
Cactus Avenue (EW) - #11	City of Moreno Valley	TS	2	2	1	1	2	1	1	1	1	1	0.5	0.5	34.2-C	22.3-C
Iris Avenue (EW) - #12	City of Moreno Valley	TS	1	0.5	0.5	1	1	1>	2	3	d	1	3	1	22.0-C	20.3-C
Project West Access (NS) at:																
Brodiaea Avenue (EW) - #13	City of Moreno Valley	**CSS**	**0.5**	0	**0.5**	0	0	0	0	**0.5**	**0.5**	**0.5**	**0.5**	0	8.7-A	9.1-A
Project Central Access (NS) at:																
Brodiaea Avenue (EW) - #14	City of Moreno Valley	**CSS**	**0.5**	0	**0.5**	0	0	0	0	**0.5**	**0.5**	**0.5**	**0.5**	0	8.6-A	8.6-A
Project East Access (NS) at:																
Brodiaea Avenue (EW) - #15	City of Moreno Valley	**CSS**	**0.5**	0	**0.5**	0	0	0	0	**0.5**	**0.5**	**0.5**	**0.5**	0	8.5-A	8.5-A

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left; T = Through; R = Right; > = Right Turn Overlap; d = De Facto Right Turn; **BOLD** = Improvement

[2] Delay and level of service calculated using the following analysis software: Vistro version 4.00-00. Per the Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal c
stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal; CSS = Cross Street Stop

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Figure 36
Opening Year (2021) Without Project Average Daily Traffic Volumes

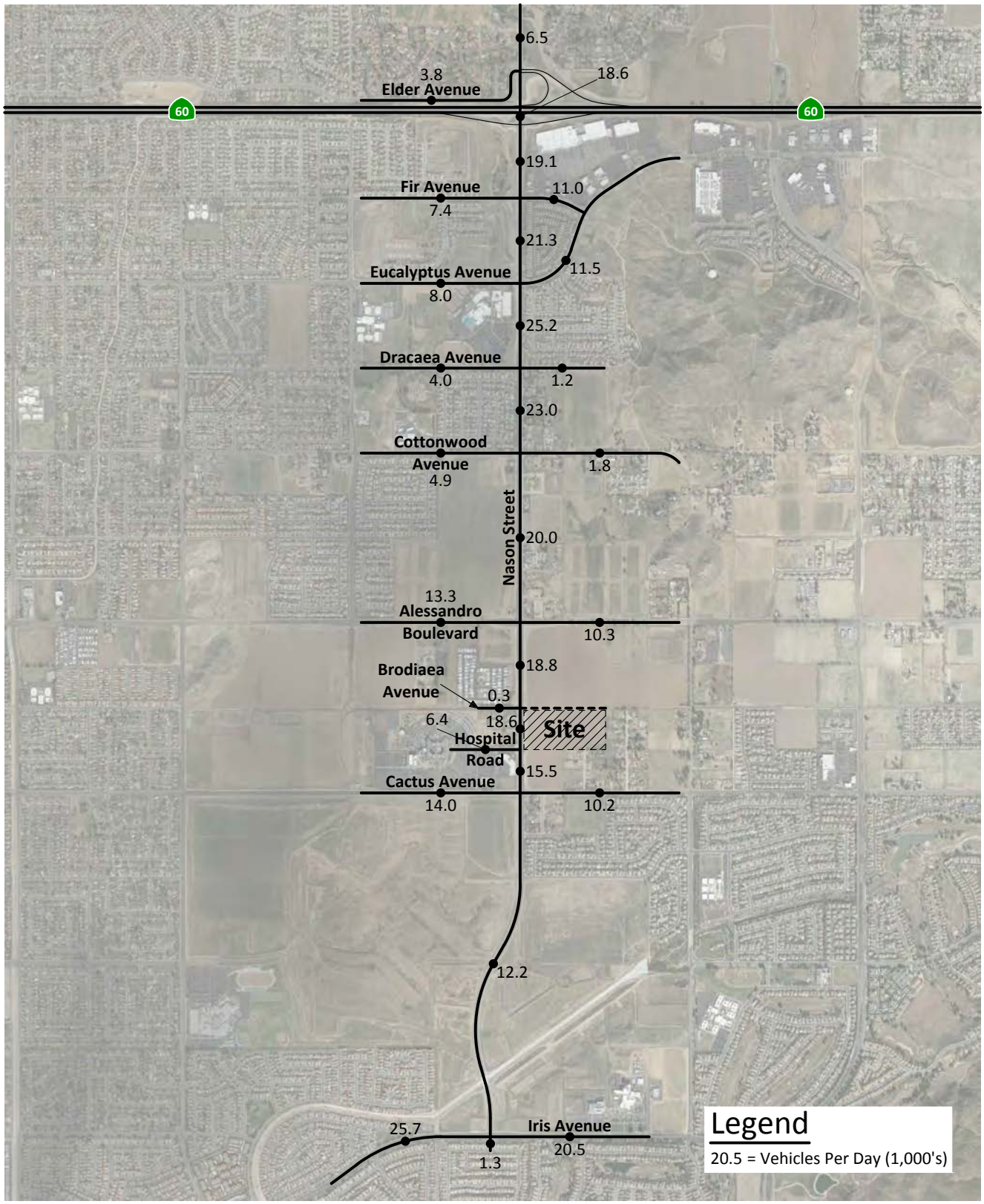

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Figure 37
Opening Year (2021) With Project Average Daily Traffic Volumes

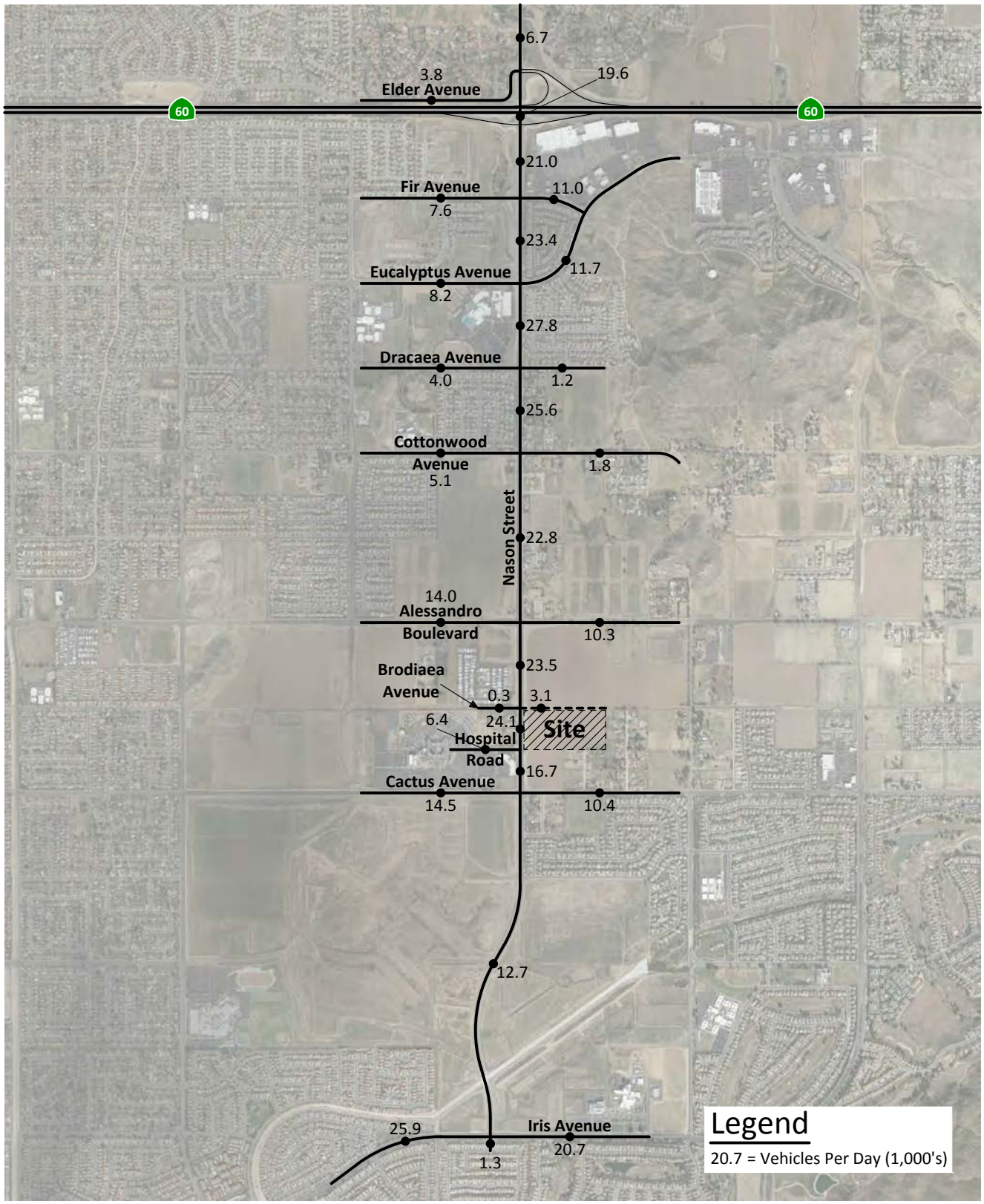

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Figure 38
Opening Year (2021) Without Project
Morning Peak Hour Intersection Turning Movement Volumes

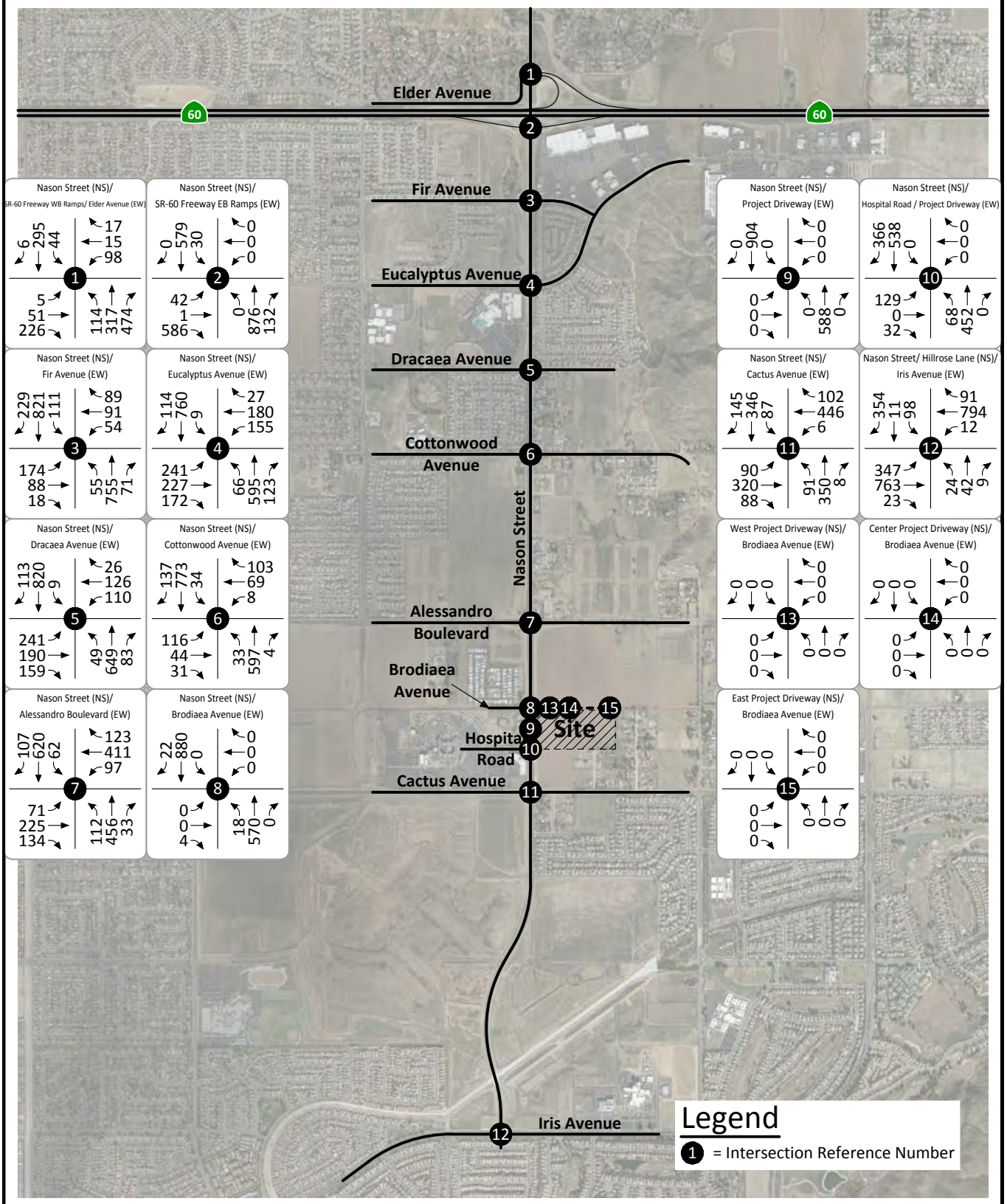

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Figure 39
Opening Year (2021) Without Project
Evening Peak Hour Intersection Turning Movement Volumes

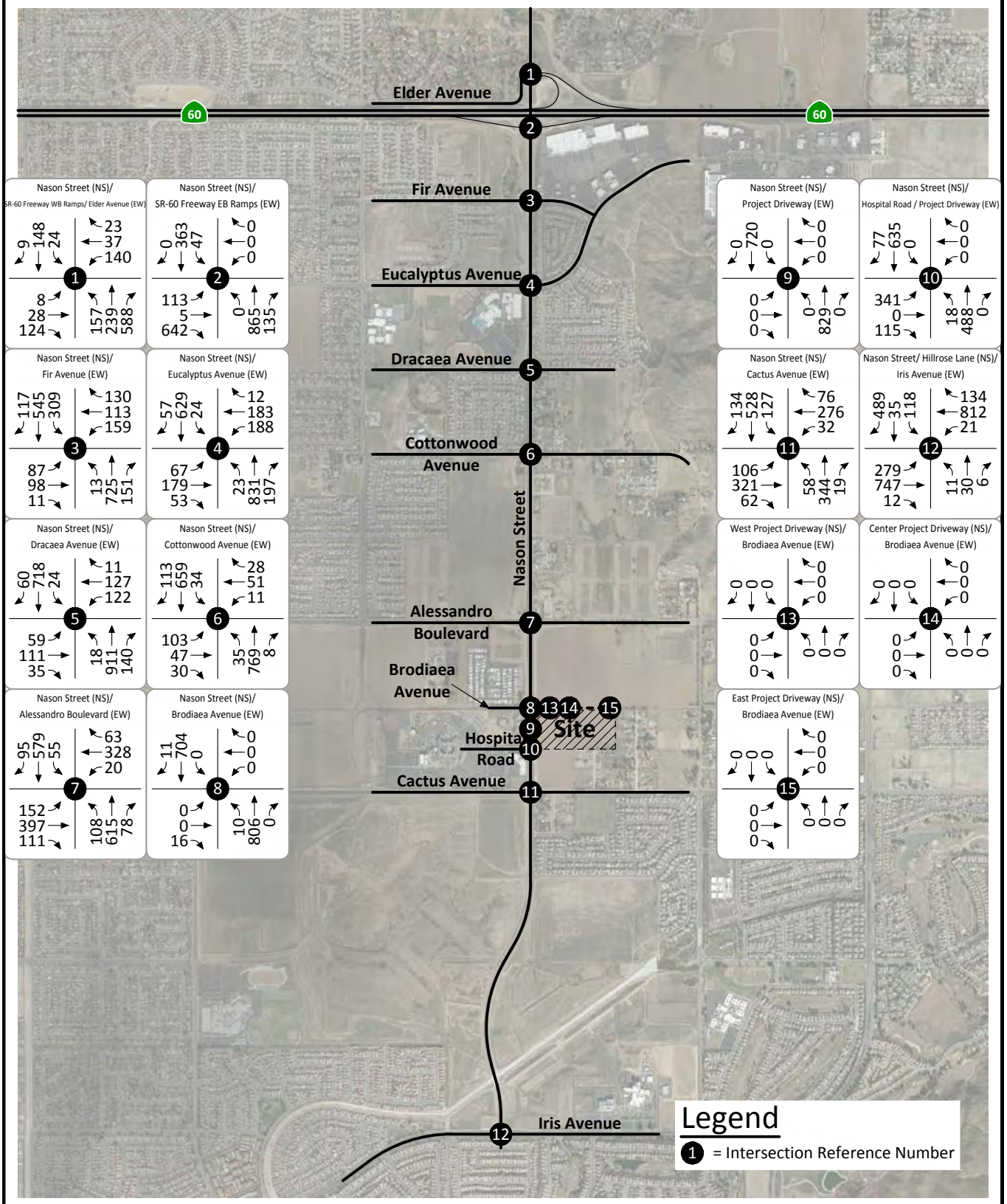

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Figure 40
Opening Year (2021) With Project
Morning Peak Hour Intersection Turning Movement Volumes

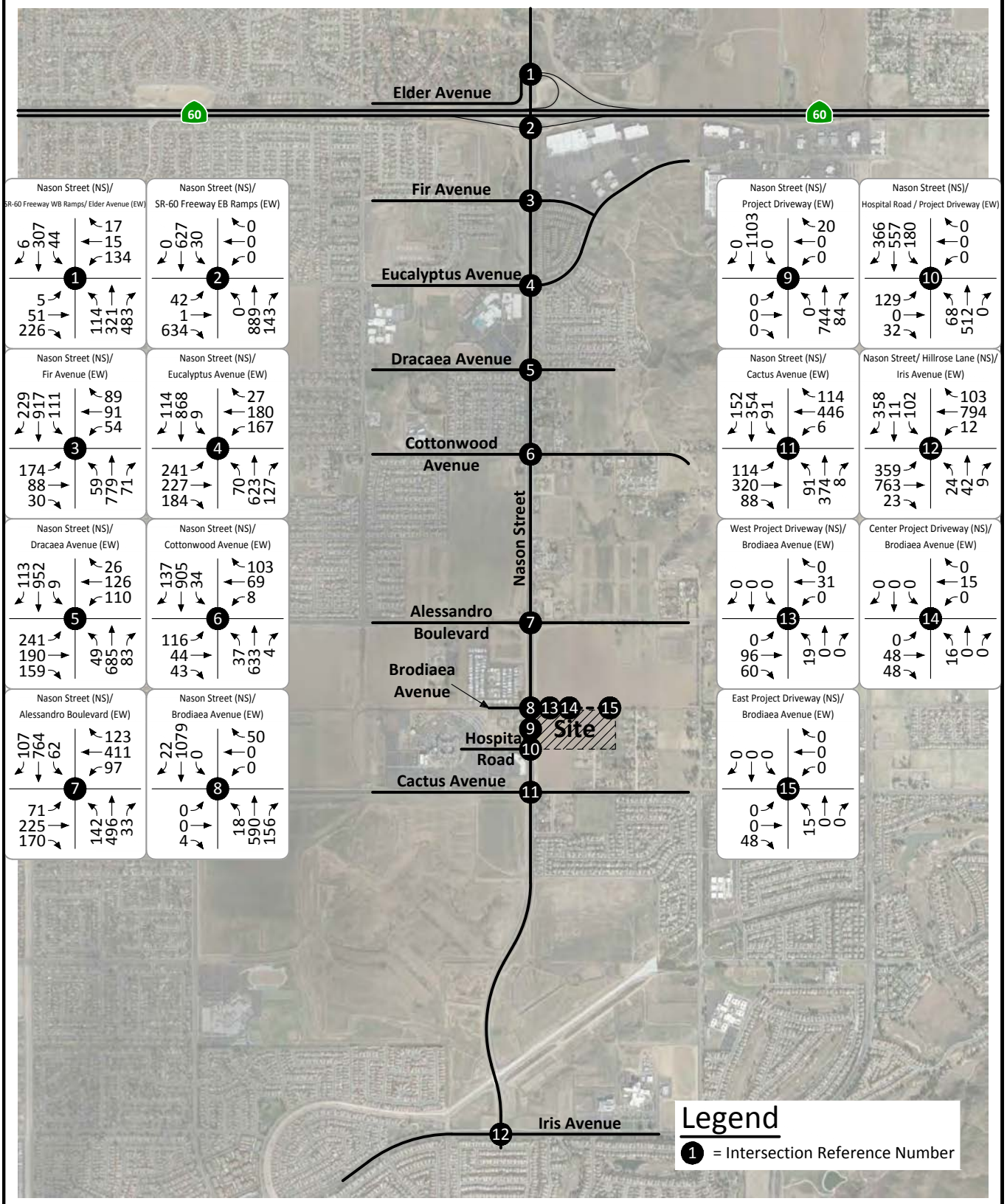

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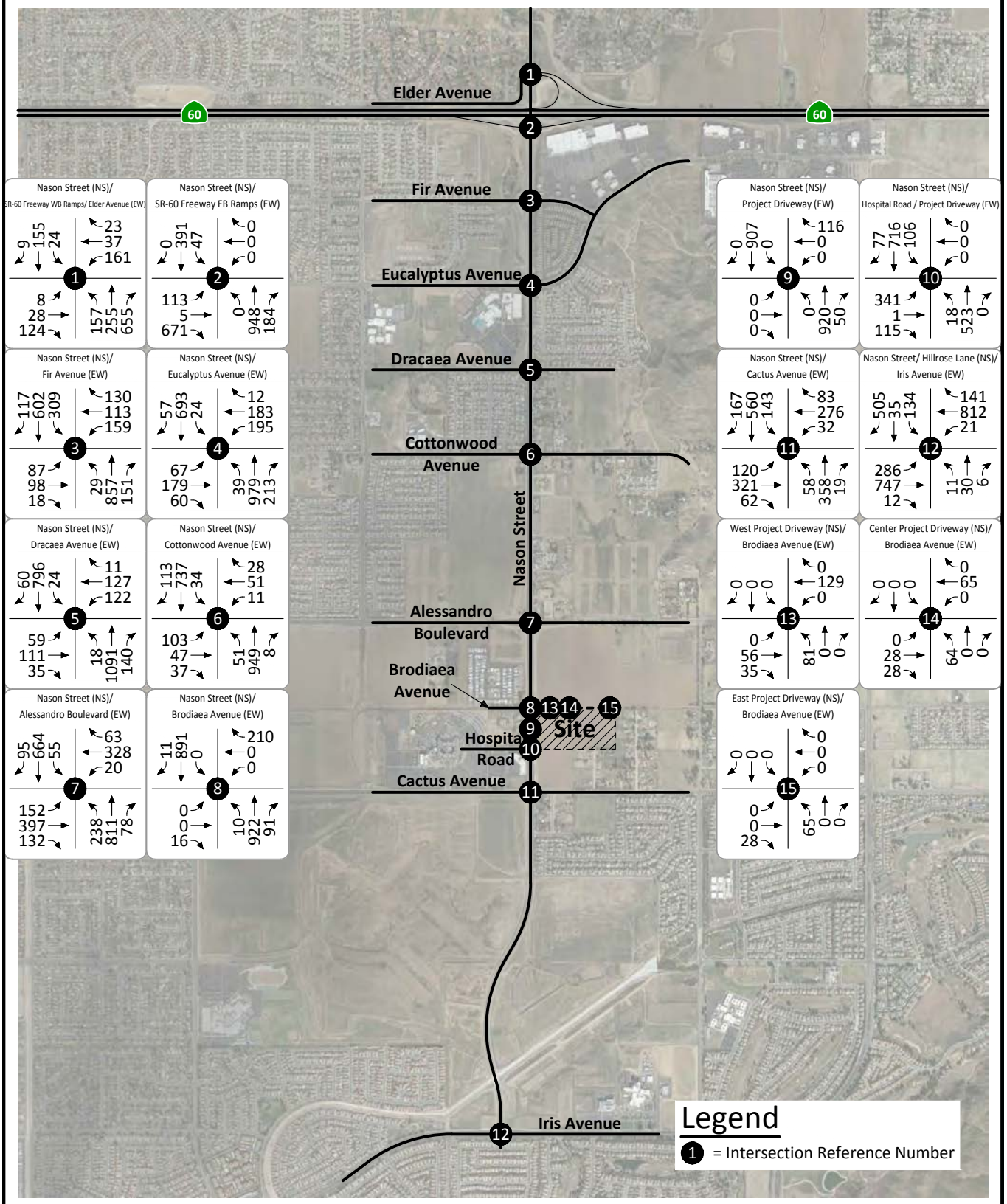
Figure 41
Opening Year (2021) With Project
Evening Peak Hour Intersection Turning Movement Volumes



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VIII. OPENING YEAR (2022) TRAFFIC CONDITIONS

To assess future traffic conditions, the Moreno Valley Traffic Model data is used for Year 2040. The Opening Year for analysis purposes in this report is Year 2022 for Phases I, II, and III.

A. Method of Projection

Based upon discussions with City of Moreno Valley, the Year 2040 traffic volume forecasts have been determined using the City of Moreno Valley Traffic Model data based on the Riverside County Traffic Analysis Model (RIVTAM) (see Appendix D).

The Opening Year (2022) traffic volumes have been interpolated from the Year 2040 traffic volumes based upon a portion of the future growth increment (see Appendix E).

B. Roadway Segment Analysis

1. Opening Year (2022) Without Project

The roadway segment Levels of Service for Opening Year (2022) Without Project conditions are shown in Table 14. For Opening Year Without Project traffic conditions, the following study area roadway segment is projected to operate at an unacceptable Level of Service, without improvements:

Alessandro Boulevard west of Nason Street

For Opening Year (2022) Without Project traffic conditions, the study area roadway segments are projected to operate within acceptable Levels of Service, with improvements.

Figure 42 shows the average daily traffic volumes that can be expected for Opening Year (2022) Without Project traffic conditions.

2. Opening Year (2022) With Project Phases 1, II, and III

The roadway segment Levels of Service for Opening Year (2022) With Project Phases I, II, and III conditions are shown in Table 15. For Opening Year (2022) With Project traffic conditions, the following study area roadway segment is projected to operate at an unacceptable Levels of Service, without improvements:

Alessandro Boulevard west of Nason Street

For Opening Year (2022) With Project Phase I traffic conditions, the study area roadway segments are projected to operate within acceptable Levels of Service, with improvements.

Figure 43 shows the average daily traffic volumes that can be expected for Opening Year (2022) With Project Phases I, II, and III traffic conditions. For Opening Year

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(2022) With Project Phases I, II, and III traffic conditions, Opening Year (2022) traffic is combined with trips generated by the project.

C. Intersection Delay and Level of Service Analysis

The technique used to assess the capacity needs of an intersection is known as the Intersection Delay Method (see Appendix F). Delay and Level of Service worksheets for each analysis scenario are provided in Appendix F.

1. Opening Year (2022) Without Project

The Opening Year (2022) Without Project delay and Level of Service for the study area intersections are shown in Table 16. Morning and evening peak hour intersection turning movement volumes expected from the project are shown on Figures 44 and 45, respectively. For Opening Year (2022) Without Project traffic conditions, the study area intersections are projected to operate at an acceptable Levels of Service during the peak hours.

2. Opening Year (2022) With Project Phase I

The Opening Year (2022) With Project Phases I, II, and III delay and Level of Service for the study area intersections are shown in Table 17. Morning and evening peak hour intersection turning movement volumes expected from the project are shown on Figures 46 and 47, respectively. For Opening Year (2020) With Project Phases I, II, and III traffic conditions, the study area intersections are projected to operate at an acceptable Levels of Service during the peak hours.

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Table 14

Opening Year (2022) Without Project Roadway Segment Level of Service

Roadway	Segment	Number of Lanes[1]	Maximum Capacity at Level of Service E	Average Daily Traffic Volume	Volume to Capacity	Level of Service[2]
Nason Street	north of SR-60 Freeway WB Ramps	4D	37,500	6,600	0.176	A
	between SR-60 Freeway WB Ramps and SR-60 Freeway EB Ramps	4D	37,500	19,100	0.509	A
	between SR-60 Freeway EB Ramps and Fir Avenue	4D	37,500	19,500	0.520	A
	between Fir Avenue and Eucalyptus Avenue	4D	37,500	21,800	0.581	A
	south of Eucalyptus Avenue	4D	37,500	25,900	0.691	B
	north of Cottonwood Avenue	4D	37,500	23,800	0.635	B
	between Cottonwood Avenue and Alessandro Boulevard	4D	37,500	20,700	0.552	A
	between Alessandro Boulevard and Brodiaea Avenue	5D	46,850	19,400	0.414	A
	between Brodiaea Avenue and Hospital Road	4D	37,500	19,200	0.512	A
	between Hospital Road and Cactus Avenue	4D	37,500	16,100	0.429	A
	south of Cactus Avenue	4D	37,500	12,800	0.341	A
Fir Avenue	west of Nason Street	2U	12,500	7,600	0.608	B
Eucalyptus Avenue	west of Nason Street	4D	37,500	8,400	0.224	A
	east of Nason Street	4D	37,500	12,600	0.336	A
Cottonwood Avenue	west of Nason Street	2U	12,500	5,000	0.400	A
Alessandro Boulevard	west of Nason Street					
	- Without Improvements	2U	12,500	14,300	1.144	F
	- With Improvements	**2D**	18,750	14,300	0.763	C
Brodiaea Avenue	west of Nason Street	2U	12,500	300	0.024	A
Cactus Avenue	west of Nason Street	4D	37,500	14,300	0.381	A
	east of Nason Street	2U	12,500	10,400	0.832	D

[1] #D = #-Lane Divided Roadway; #U = #-Lane Undivided Roadway; **BOLD** = Improvement.

[2] Level of Service, which is based on maximum capacity (Level of Service E).

Volume to Capacity Ratio
0.000 - 0.600
0.601 - 0.700
0.701 - 0.800
0.801 - 0.900
0.901 - 1.000
>1.000

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Table 15

Opening Year (2022) With Project Roadway Segment Level of Service

Roadway	Segment	Number of Lanes[1]	Maximum Capacity at Level of Service E	Average Daily Traffic Volume	Volume to Capacity	Level of Service[2]
Nason Street	north of SR-60 Freeway WB Ramps	4D	37,500	6,900	0.184	A
	between SR-60 Freeway WB Ramps and SR-60 Freeway EB Ramps	4D	37,500	20,300	0.541	A
	between SR-60 Freeway EB Ramps and Fir Avenue	4D	37,500	21,600	0.576	A
	between Fir Avenue and Eucalyptus Avenue	4D	37,500	24,100	0.643	B
	south of Eucalyptus Avenue	4D	37,500	28,700	0.765	C
	north of Cottonwood Avenue	4D	37,500	26,600	0.709	C
	between Cottonwood Avenue and Alessandro Boulevard	4D	37,500	23,800	0.635	B
	between Alessandro Boulevard and Brodiaea Avenue	5D	46,850	23,300	0.497	A
	between Brodiaea Avenue and Hospital Road	4D	37,500	21,900	0.584	A
	between Hospital Road and Cactus Avenue	4D	37,500	17,400	0.464	A
	south of Cactus Avenue	4D	37,500	13,300	0.355	A
Fir Avenue	west of Nason Street	2U	12,500	7,900	0.632	B
Eucalyptus Avenue	west of Nason Street	4D	37,500	8,700	0.232	A
	east of Nason Street	4D	37,500	12,900	0.344	A
Cottonwood Avenue	west of Nason Street	2U	12,500	5,300	0.424	A
Alessandro Boulevard	west of Nason Street					
	- Without Improvements	2U	12,500	15,100	1.208	F
	- With Improvements	**2D**	18,750	15,100	0.805	D
Brodiaea Avenue	west of Nason Street	2U	12,500	300	0.024	A
	east of Nason Street	2U	12,500	1,300	0.104	A
Cactus Avenue	west of Nason Street	4D	37,500	14,800	0.395	A
	east of Nason Street	2U	12,500	10,700	0.856	D

[1] #D = #-Lane Divided Roadway; #U = #-Lane Undivided Roadway; **BOLD** = Improvement.

[2] Level of Service, which is based on maximum capacity (Level of Service E).

Volume to Capacity Ratio
0.000 - 0.600
0.601 - 0.700
0.701 - 0.800
0.801 - 0.900
0.901 - 1.000
>1.000

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Table 16

Opening Year (2022) Without Project Intersection Delay and Level of Service

Intersection	Jurisdiction	Traffic Control[3]	Intersection Approach Lanes[1]												Peak Hour Delay-LOS[2]	
			Northbound			Southbound			Eastbound			Westbound				
			L	T	R	L	T	R	L	T	R	L	T	R	Morning	Evening
Nason Street (NS) at:																
SR-60 Freeway WB Ramps (EW) - #1	California Department of Transportation	TS	1	2	1>	1	1.5	0.5	1	1	1>	1	1	1>	14.7-B	20.6-C
SR-60 Freeway EB Ramps (EW) - #2	California Department of Transportation	TS	0	2	d	1	2	0	1	0.5	1.5	0	0	0	14.5-B	26.1-C
Fir Avenue (EW) - #3	City of Moreno Valley	TS	1	2	d	1	2	1	1	0.5	0.5	1	1	1>	20.6-C	21.5-C
Eucalyptus Avenue (EW) - #4	City of Moreno Valley	TS	1	2	1	1	2	d	1	2	d	1	2	d	24.7-C	18.2-B
Dracaea Avenue (EW) - #5	City of Moreno Valley	TS	1	2	d	1	2	d	1	0.5	0.5	1	0.5	0.5	20.8-C	12.5-B
Cottonwood Avenue (EW) - #6	City of Moreno Valley	TS	1	2	d	1	2	1	1	1	1	1	1.5	0.5	18.0-B	14.3-B
Alessandro Boulevard (EW) - #7	City of Moreno Valley	TS	1	2	1	1	3	1	2	2	1	2	1	1	25.6-C	21.1-C
Brodiaea Avenue (EW) - #8	City of Moreno Valley	CSS	1	2	0	0	2.5	0.5	0	0	1	0	0	0	13.1-B	11.6-B
Hospital Road/Project Access (EW) - #10	City of Moreno Valley	TS	1	2	0	1	2	1	1	0	1	0	0	0	9.9-A	13.7-B
Cactus Avenue (EW) - #11	City of Moreno Valley	TS	2	2	1	1	2	1	1	1	1	1	0.5	0.5	32.5-C	22.1-C
Iris Avenue (EW) - #12	City of Moreno Valley	TS	1	0.5	0.5	1	1	1>	2	3	d	1	3	1	22.2-C	20.3-C

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left; T = Through; R = Right; > = Right Turn Overlap; d = De Facto Right Turn

[2] Delay and level of service calculated using the following analysis software: Vistro version 4.00-00. Per the Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal; CSS = Cross Street Stop

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Table 17

Opening Year (2022) With Project Intersection Delay and Level of Service

Intersection	Jurisdiction	Traffic Control[3]	Intersection Approach Lanes[1]												Peak Hour Delay-LOS[2]	
			Northbound			Southbound			Eastbound			Westbound				
			L	T	R	L	T	R	L	T	R	L	T	R	Morning	Evening
Nason Street (NS) at:																
SR-60 Freeway WB Ramps (EW) - #1	California Department of Transportation	TS	1	2	1>	1	1.5	0.5	1	1	1>	1	1	1>	15.5-B	16.2-B
SR-60 Freeway EB Ramps (EW) - #2	California Department of Transportation	TS	0	2	d	1	2	0	1	0.5	1.5	0	0	0	15.2-B	16.3-B
Fir Avenue (EW) - #3	City of Moreno Valley	TS	1	2	d	1	2	1	1	0.5	0.5	1	1	1>	21.2-C	22.6-C
Eucalyptus Avenue (EW) - #4	City of Moreno Valley	TS	1	2	1	1	2	d	1	2	d	1	2	d	27.9-C	19.2-B
Dracaea Avenue (EW) - #5	City of Moreno Valley	TS	1	2	d	1	2	d	1	0.5	0.5	1	0.5	0.5	23.8-C	13.0-B
Cottonwood Avenue (EW) - #6	City of Moreno Valley	TS	1	2	d	1	2	1	1	1	1	1	1.5	0.5	19.3-B	15.1-B
Alessandro Boulevard (EW) - #7	City of Moreno Valley	TS	1	2	1	1	3	1	2	2	1	2	1	1	27.8-C	23.4-C
Brodiaea Avenue (EW) - #8	City of Moreno Valley	CSS	1	**1.5**	**0.5**	0	2.5	0.5	0	0	1	0	0	1	14.8-B	17.2-C
Project Access (EW) - #9	City of Moreno Valley	**CSS**	0	2	**1**	0	3	0	0	0	0	0	0	**1**	10.4-B	12.8-B
Hospital Road/Project Access (EW) - #10	City of Moreno Valley	TS	1	2	1	1	2	1	0.5	0.5	1	**0.5**	**0.5**	**1**	17.7-B	23.2-C
Cactus Avenue (EW) - #11	City of Moreno Valley	TS	2	2	1	1	2	1	1	1	1	1	0.5	0.5	35.6-D	22.7-C
Iris Avenue (EW) - #12	City of Moreno Valley	TS	1	0.5	0.5	1	1	1>	2	3	d	1	3	1	22.4-C	20.6-C
Project West Access (NS) at:																
Brodiaea Avenue (EW) - #13	City of Moreno Valley	**CSS**	**0.5**	0	**0.5**	0	0	0	0	**0.5**	**0.5**	**0.5**	**0.5**	0	8.7-A	9.2-A
Project Central Access (NS) at:																
Brodiaea Avenue (EW) - #14	City of Moreno Valley	**CSS**	**0.5**	0	**0.5**	0	0	0	0	**0.5**	**0.5**	**0.5**	**0.5**	0	8.6-A	8.7-A
Project East Access (NS) at:																
Brodiaea Avenue (EW) - #15	City of Moreno Valley	**CSS**	**0.5**	0	**0.5**	0	0	0	0	**0.5**	**0.5**	**0.5**	**0.5**	0	8.5-A	8.5-A

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left; T = Through; R = Right; > = Right Turn Overlap; d = De Facto Right Turn; **BOLD** = Improvement

[2] Delay and level of service calculated using the following analysis software: Vistro version 4.00-00. Per the Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal; CSS = Cross Street Stop

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Figure 42
Opening Year (2022) Without Project Average Daily Traffic Volumes

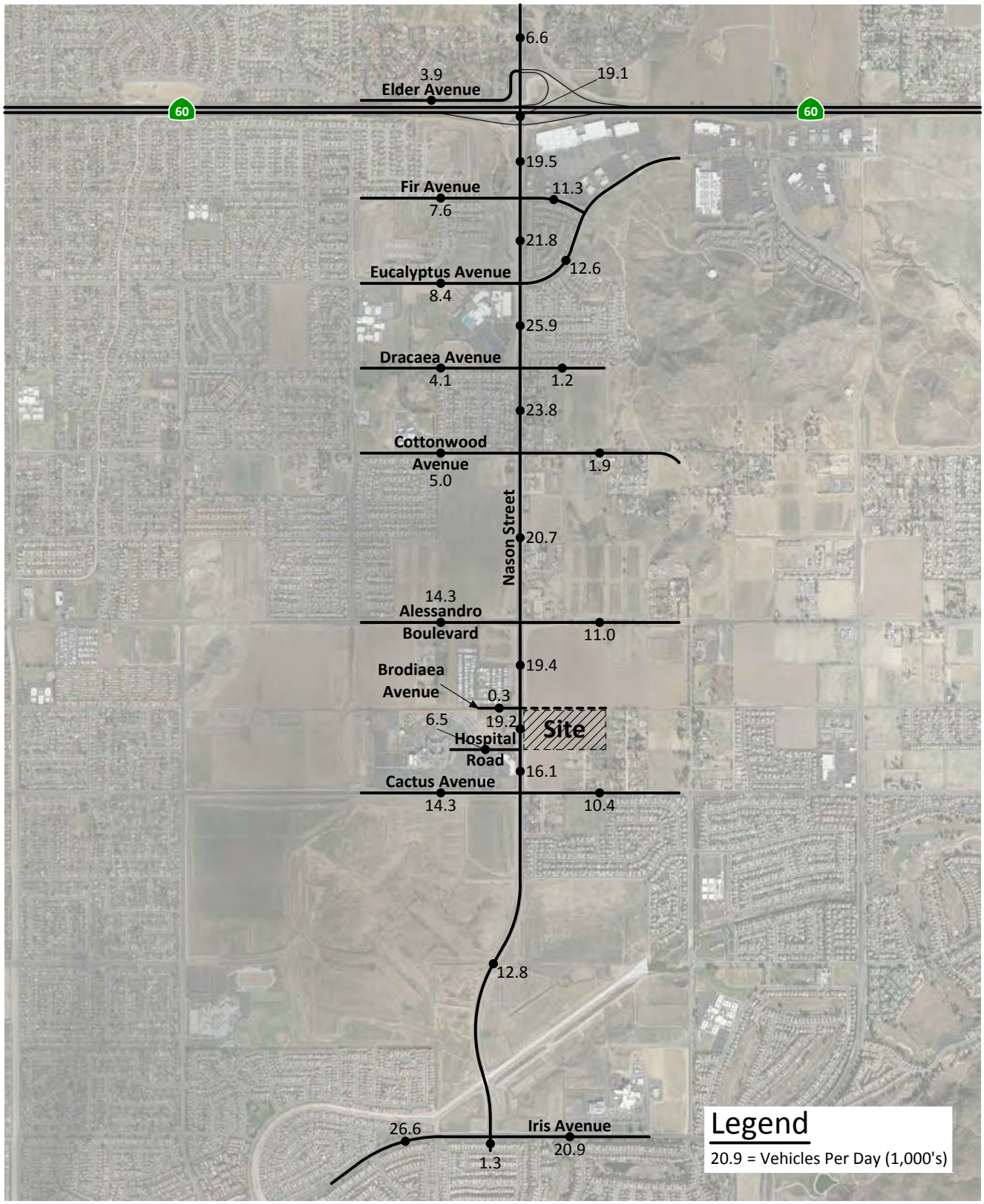

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Figure 43
Opening Year (2022) With Project Average Daily Traffic Volumes

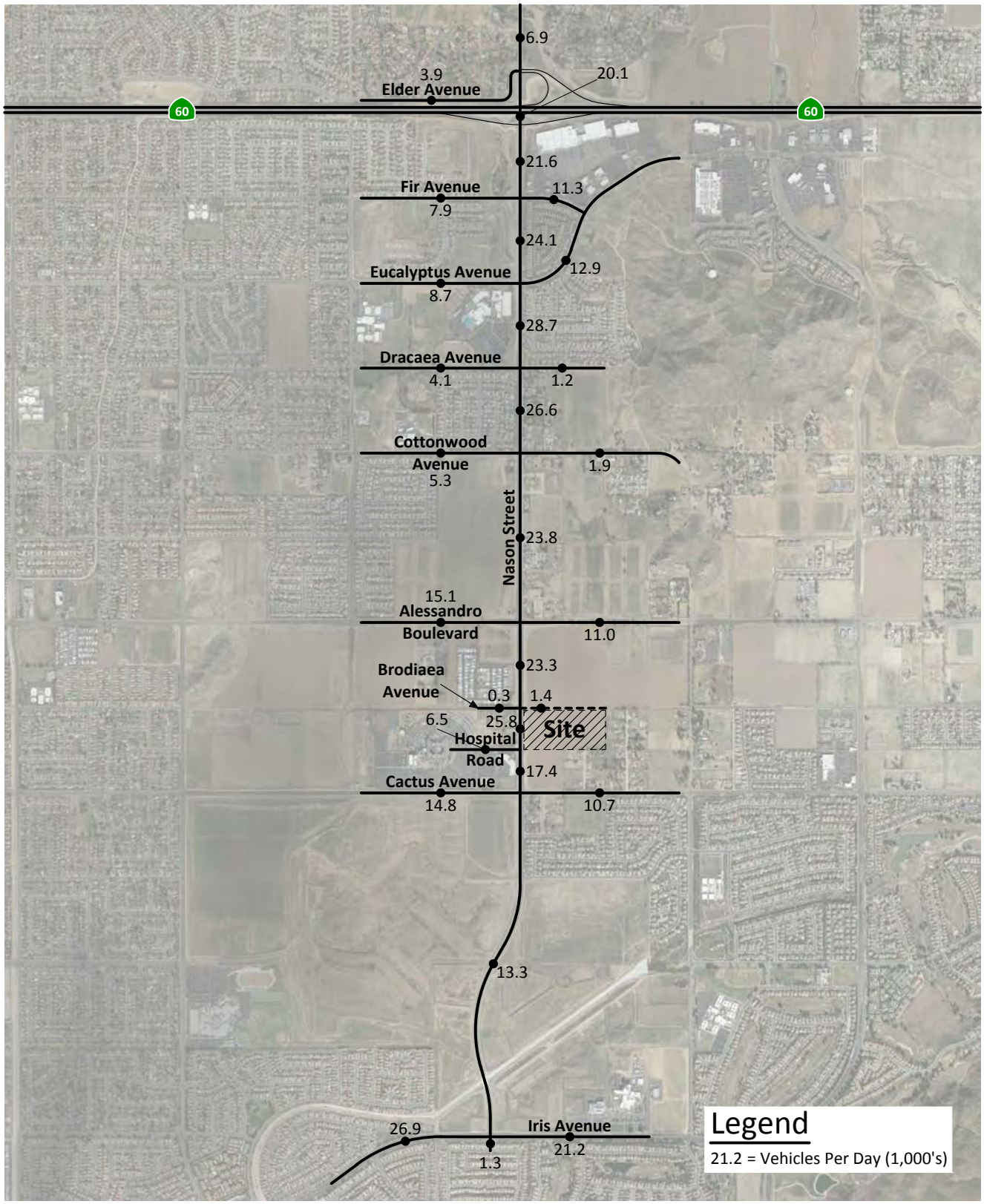

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Figure 44
Opening Year (2022) Without Project
Morning Peak Hour Intersection Turning Movement Volumes

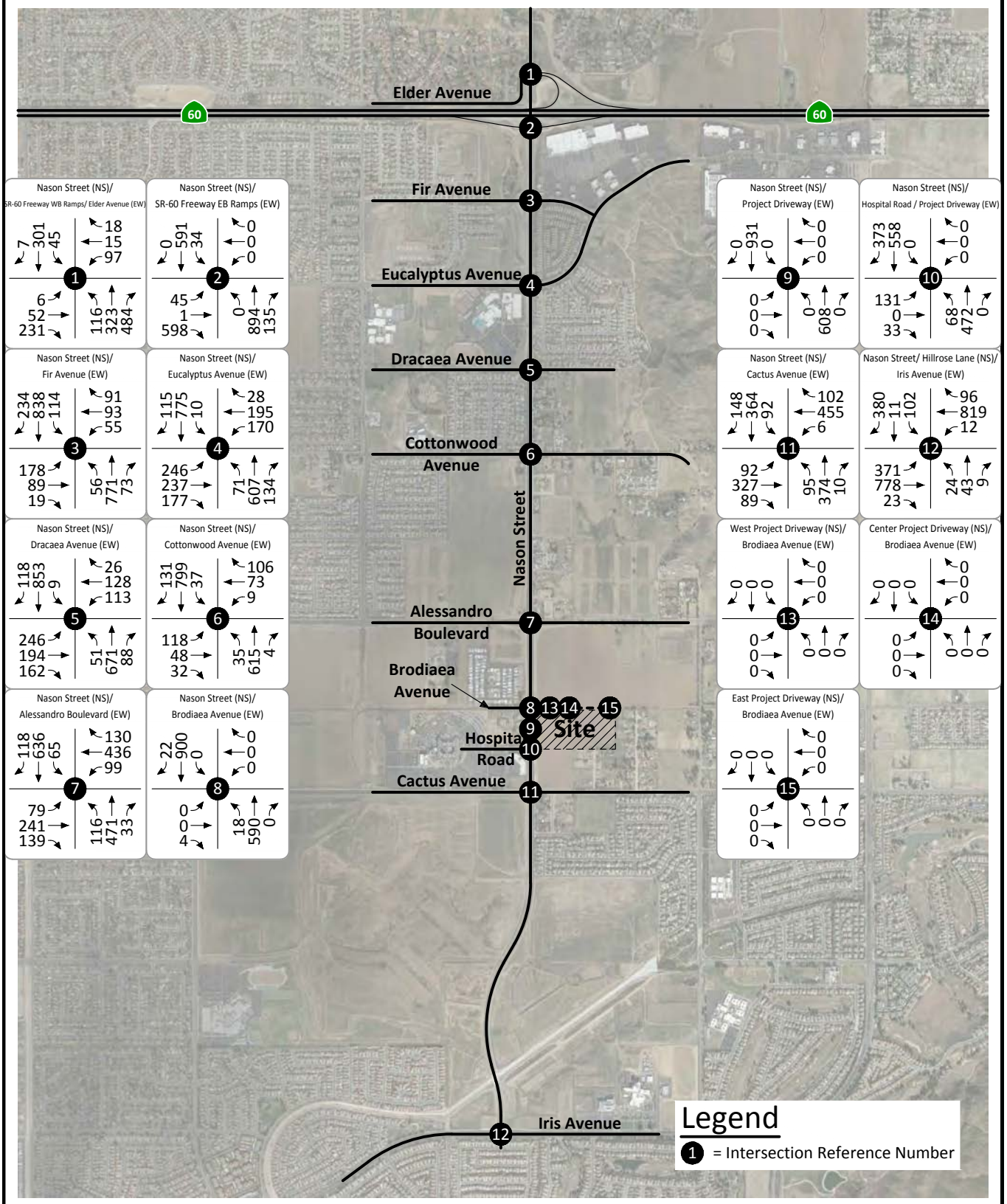

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Figure 45
Opening Year (2022) Without Project
Evening Peak Hour Intersection Turning Movement Volumes

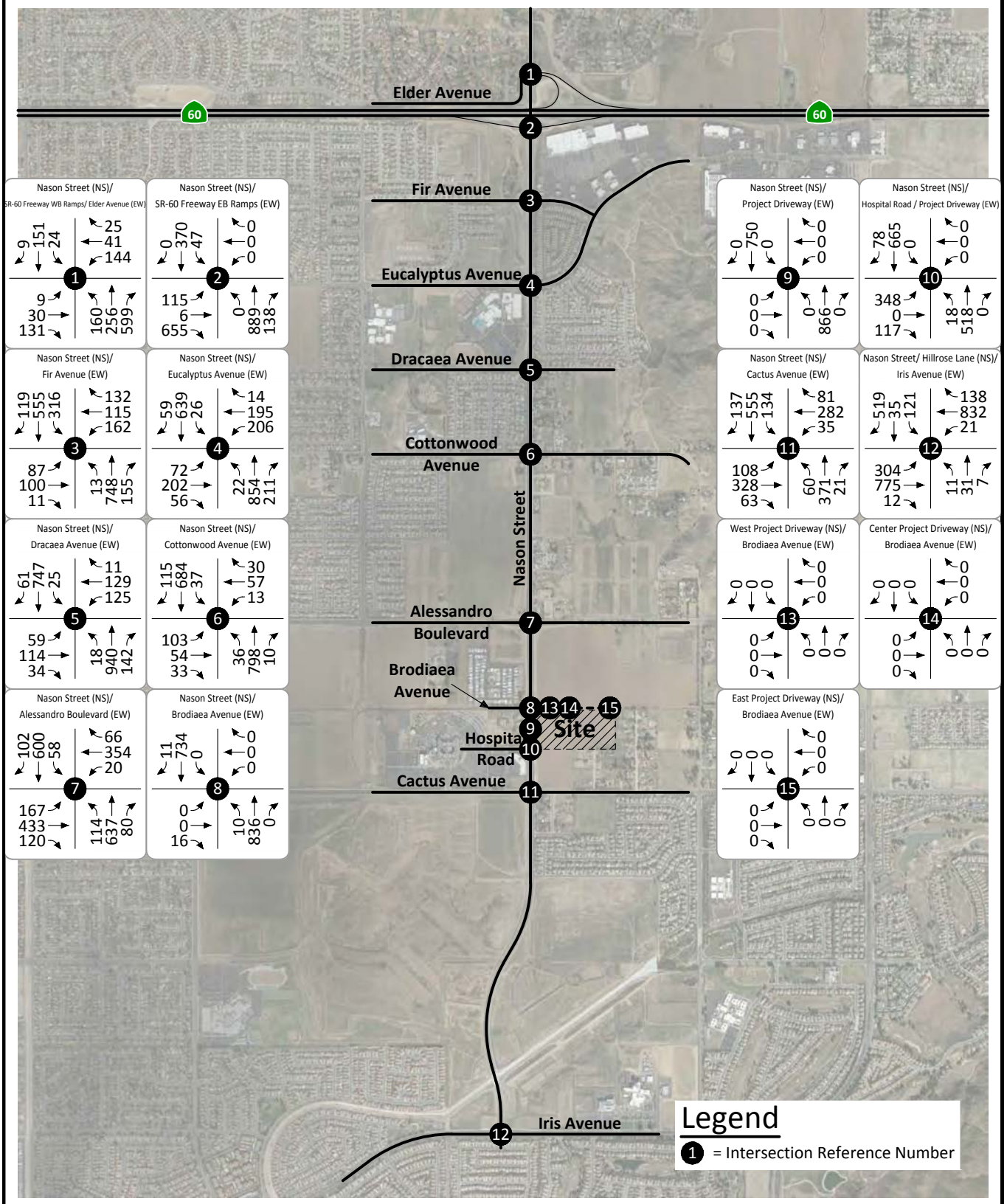

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Figure 46
Opening Year (2022) With Project
Morning Peak Hour Intersection Turning Movement Volumes

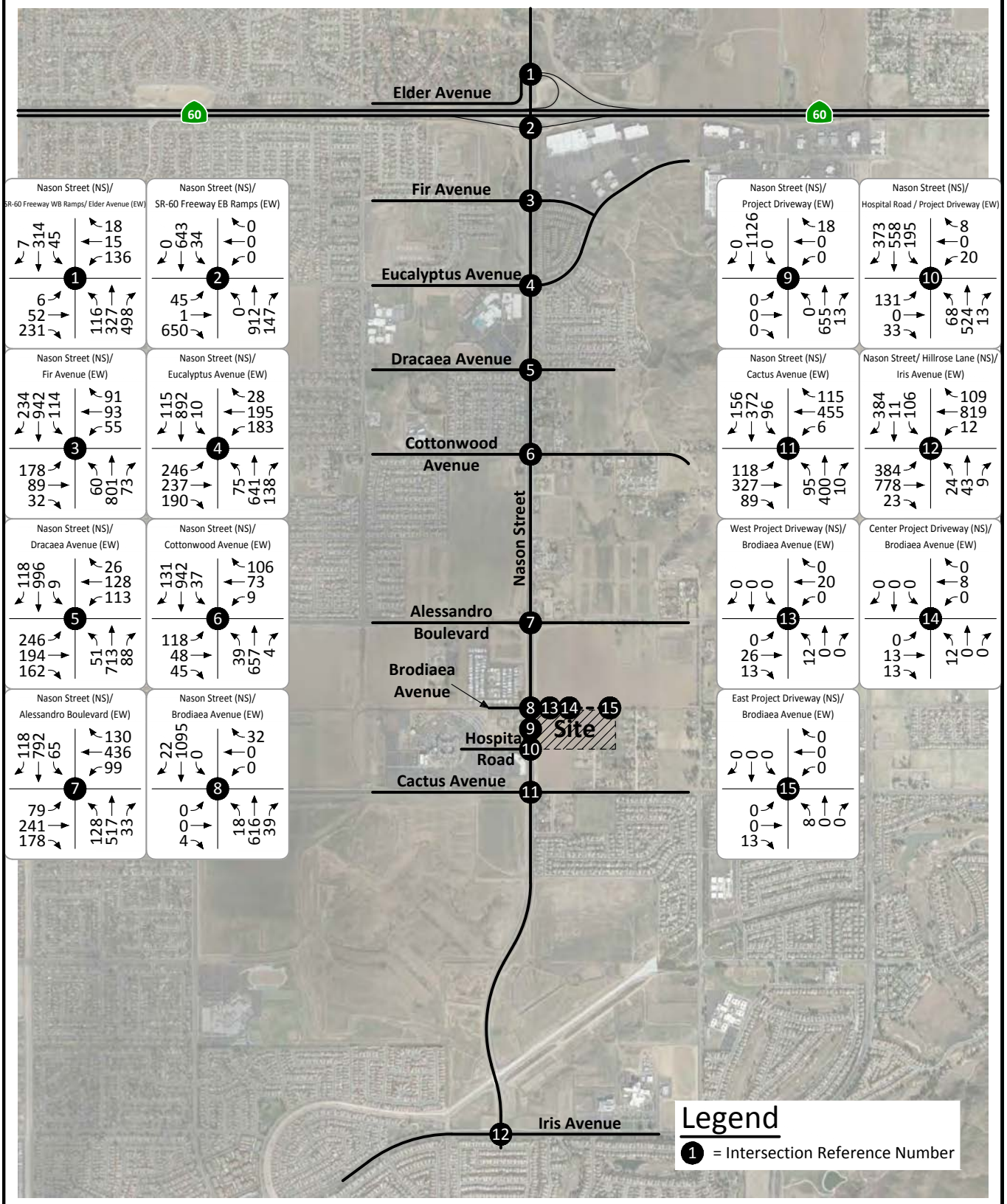

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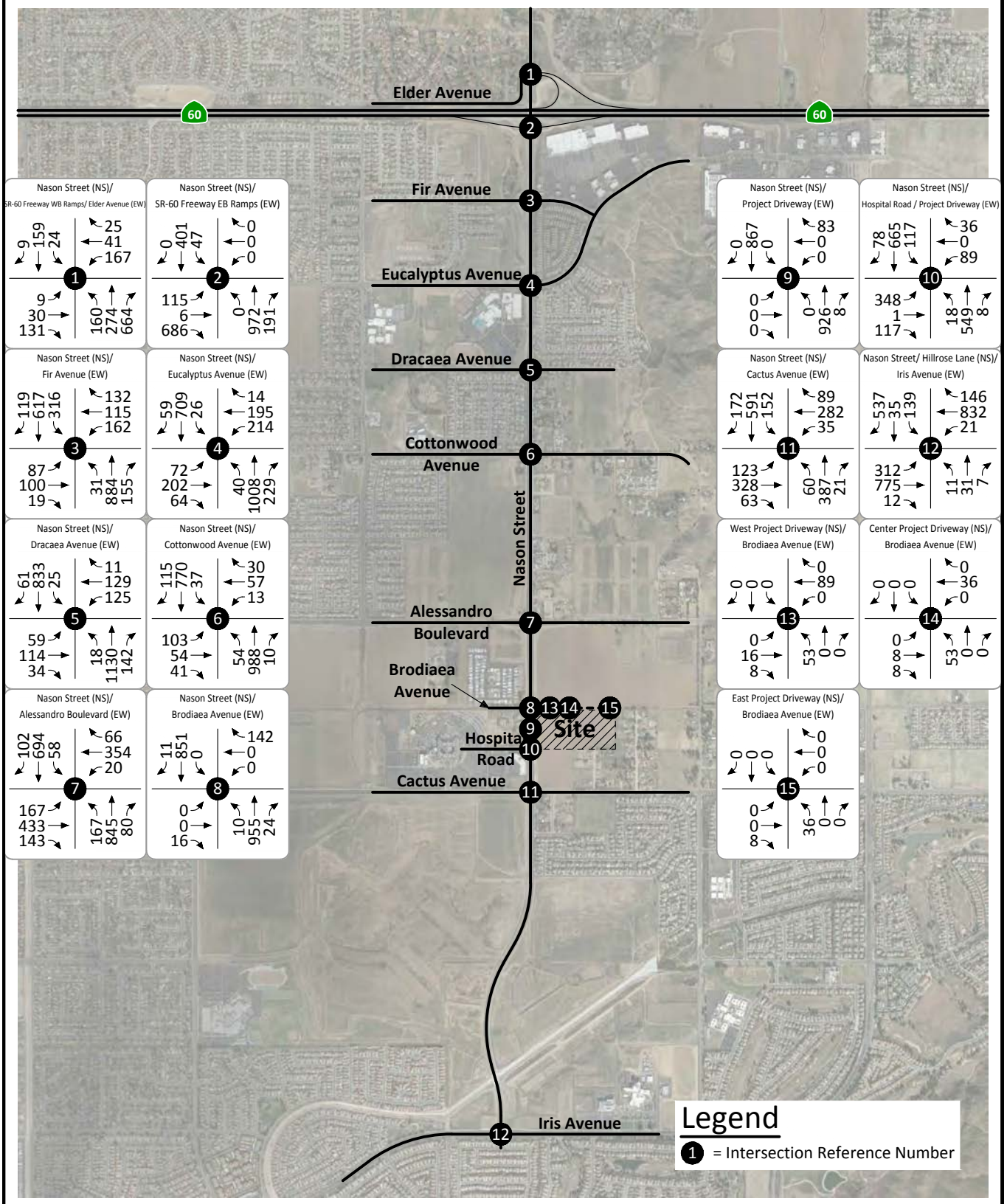
Figure 47
Opening Year (2022) With Project
Evening Peak Hour Intersection Turning Movement Volumes



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IX. YEAR 2040 TRAFFIC CONDITIONS

To assess future traffic conditions, the Moreno Valley Traffic Model data is used for Year 2040.

A. Method of Projection

Based upon discussions with City of Moreno Valley, the Year 2040 traffic volume forecasts have been determined using the City of Moreno Valley Traffic Model data based on the Riverside County Traffic Analysis Model (RIVTAM) (see Appendix D).

The Year 2040 traffic volumes are shown in Appendix E.

B. Roadway Segment Analysis

1. Year 2040 Without Project

The roadway segment Levels of Service for Year 2035 Without Project conditions are shown in Table 18. For Year 2040 Without Project traffic conditions, the following study area roadway segments are projected to operate at an unacceptable Levels of Service, without improvements:

Nason Street south of Eucalyptus Avenue
Nason Street north of Cottonwood Avenue
Alessandro Boulevard west of Nason Street
Cactus Avenue east of Nason Street

For Year 2040 Without Project traffic conditions, the study area roadway segments are projected to operate within acceptable Levels of Service, with improvements.

Figure 48 shows the average daily traffic volumes that can be expected for Year 2040 Without Project traffic conditions.

2. Year 2040 With Project Phases I, II, and III

The roadway segment Levels of Service for Year 2040 With Project Phases I, II, and III conditions are shown in Table 19. For Year 2040 With Project Phases I, II, and III traffic conditions, the following study area roadway segments are projected to operate at an unacceptable Levels of Service, without improvements:

Nason Street south of Eucalyptus Avenue
Nason Street north of Cottonwood Avenue
Alessandro Boulevard west of Nason Street
Cactus Avenue east of Nason Street

For Year 2040 With Project Phases I, II, and III traffic conditions, the study area roadway segments are projected to operate within acceptable Levels of Service, with improvements.

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Figure 49 shows the average daily traffic volumes that can be expected for Year 2040 With Project Phases I, II, and III traffic conditions. For Year 2040 With Project Phase I, II, and III traffic conditions, Year 2040 traffic is combined with trips generated by the project.

C. Intersection Delay and Level of Service Analysis

The technique used to assess the capacity needs of an intersection is known as the Intersection Delay Method (see Appendix F). Delay and Level of Service worksheets for each analysis scenario are provided in Appendix F.

1. Year 2040 Without Project

The Year 2040 Without Project delay and Level of Service for the study area intersections are shown in Table 20. Morning and evening peak hour intersection turning movement volumes expected from the project are shown on Figures 50 and 51, respectively. For Year 2040 Without Project traffic conditions, the following study area intersections are projected to operate at unacceptable Levels of Service during the peak hours, without improvements:

Nason Street (NS) at:
- Eucalyptus Avenue (EW) - #4
- Alessandro Boulevard (EW) - #7

For Year 2040 Without Project traffic conditions, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours, with improvements.

2. Year 2040 With Project Phases I, II, and III

The Year 2040 With Project Phases I, II, and III delay and Level of Service for the study area intersections are shown in Table 21. Morning and evening peak hour intersection turning movement volumes expected from the project are shown on Figures 52 and 53, respectively. For Year 2040 With Project Phases I, II, and III traffic conditions, the following study area intersections are projected to operate at unacceptable Levels of Service during the peak hours, without improvements:

Nason Street (NS) at:
- Eucalyptus Avenue (EW) - #4
- Alessandro Boulevard (EW) - #7

For Year 2040 With Project Phases I, II, and III traffic conditions, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours, with improvements.

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Table 18

Year 2040 Without Project Roadway Segment Level of Service

Roadway	Segment	Number of Lanes[1]	Maximum Capacity at Level of Service E	Average Daily Traffic Volume	Volume to Capacity	Level of Service[2]
Nason Street	north of SR-60 Freeway WB Ramps	4D	37,500	8,000	0.213	A
	between SR-60 Freeway WB Ramps and SR-60 Freeway EB Ramps	4D	37,500	22,200	0.592	A
	between SR-60 Freeway EB Ramps and Fir Avenue	4D	37,500	23,500	0.627	B
	between Fir Avenue and Eucalyptus Avenue	4D	37,500	26,300	0.701	C
	south of Eucalyptus Avenue					
	- Without Improvements	4D	37,500	39,600	1.056	F
	- With Improvements	**6D**	56,250	39,600	0.704	C
	north of Cottonwood Avenue					
	- Without Improvements	4D	37,500	37,500	1.000	E
	- With Improvements	**6D**	56,250	37,500	0.667	B
	between Cottonwood Avenue and Alessandro Boulevard	4D	37,500	32,600	0.869	D
	between Alessandro Boulevard and Brodiaea Avenue	5D	46,850	30,200	0.645	B
	between Brodiaea Avenue and Hospital Road	4D	37,500	30,000	0.800	C
	between Hospital Road and Cactus Avenue	4D	37,500	26,900	0.717	C
	south of Cactus Avenue	4D	37,500	23,500	0.627	B
Fir Avenue	west of Nason Street	2U	12,500	7,600	0.608	B
Eucalyptus Avenue	west of Nason Street	4D	37,500	15,500	0.413	A
	east of Nason Street	4D	37,500	31,300	0.835	D
Cottonwood Avenue	west of Nason Street	2U	12,500	6,800	0.544	A
Alessandro Boulevard	west of Nason Street					
	- Without Improvements	2U	12,500	31,200	2.496	F
	- With Improvements	**4D**	37,500	31,200	0.832	D
Brodiaea Avenue	west of Nason Street	2U	12,500	300	0.024	A
Cactus Avenue	west of Nason Street	4D	37,500	14,300	0.381	A
	east of Nason Street					
	- Without Improvements	2U	12,500	14,100	1.128	F
	- With Improvements	**2D**	18,750	14,100	0.752	C

[1] #D = #-Lane Divided Roadway; #U = #-Lane Undivided Roadway; **BOLD** = Improvement.

[2] Level of Service, which is based on maximum capacity (Level of Service E).

Volume to Capacity Ratio
0.000 - 0.600
0.601 - 0.700
0.701 - 0.800
0.801 - 0.900
0.901 - 1.000
>1.000

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Table 19

Year 2040 With Project Roadway Segment Level of Service

Roadway	Segment	Number of Lanes[1]	Maximum Capacity at Level of Service E	Average Daily Traffic Volume	Volume to Capacity	Level of Service[2]
Nason Street	north of SR-60 Freeway WB Ramps	4D	37,500	8,300	0.221	A
	between SR-60 Freeway WB Ramps and SR-60 Freeway EB Ramps	4D	37,500	23,400	0.624	B
	between SR-60 Freeway EB Ramps and Fir Avenue	4D	37,500	25,600	0.683	B
	between Fir Avenue and Eucalyptus Avenue	4D	37,500	28,600	0.763	C
	south of Eucalyptus Avenue					
	- Without Improvements	4D	37,500	42,400	1.131	F
	- With Improvements	**6D**	56,250	42,400	0.754	C
	north of Cottonwood Avenue					
	- Without Improvements	4D	37,500	40,300	1.075	F
	- With Improvements	**6D**	56,250	40,300	0.716	C
	between Cottonwood Avenue and Alessandro Boulevard					
	- Without Improvements	4D	37,500	35,700	0.952	E
	- With Improvements	**6D**	56,250	35,700	0.635	B
	between Alessandro Boulevard and Brodiaea Avenue	5D	46,850	34,100	0.728	C
	between Brodiaea Avenue and Hospital Road	4D	37,500	32,700	0.872	D
	between Hospital Road and Cactus Avenue	4D	37,500	28,200	0.752	C
	south of Cactus Avenue	4D	37,500	24,000	0.640	B
Fir Avenue	west of Nason Street	2U	12,500	7,900	0.632	B
Eucalyptus Avenue	west of Nason Street	4D	37,500	15,800	0.421	A
	east of Nason Street	4D	37,500	31,600	0.843	D
Cottonwood Avenue	west of Nason Street	2U	12,500	7,100	0.568	A
Alessandro Boulevard	west of Nason Street					
	- Without Improvements	2U	12,500	32,000	2.560	F
	- With Improvements	**4D**	37,500	32,000	0.853	D
Brodiaea Avenue	west of Nason Street	2U	12,500	300	0.024	A
	east of Nason Street	2U	12,500	1,300	0.104	A
Cactus Avenue	west of Nason Street	4D	37,500	14,800	0.395	A
	east of Nason Street					
	- Without Improvements	2U	12,500	14,400	1.152	F
	- With Improvements	**2D**	18,750	14,400	0.768	C

[1] #D = #-Lane Divided Roadway; #U = #-Lane Undivided Roadway; **BOLD** = Improvement.

[2] Level of Service, which is based on maximum capacity (Level of Service E).

Volume to Capacity Ratio
0.000 - 0.600
0.601 - 0.700
0.701 - 0.800
0.801 - 0.900
0.901 - 1.000
>1.000

Attachment: Tech Study Traffic Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

Table 20

Year 2040 Without Project Intersection Delay and Level of Service

Intersection	Jurisdiction	Traffic Control[3]	Intersection Approach Lanes[1]												Peak Hour Delay-LOS[2]	
			Northbound			Southbound			Eastbound			Westbound				
			L	T	R	L	T	R	L	T	R	L	T	R	Morning	Evening
Nason Street (NS) at:																
SR-60 Freeway WB Ramps (EW) - #1	California Department of Transportation	TS	1	2	1>	1	1.5	0.5	1	1	1>	1	1	1>	22.5-C	22.3-C
SR-60 Freeway EB Ramps (EW) - #2	California Department of Transportation	TS	0	2	d	1	2	0	1	0.5	1.5	0	0	0	24.6-C	26.4-C
Fir Avenue (EW) - #3	City of Moreno Valley	TS	1	2	d	1	2	1	1	0.5	0.5	1	1	1>	19.8-B	28.1-C
Eucalyptus Avenue (EW) - #4	City of Moreno Valley															
	- Without Improvements	TS	1	2	1	1	2	d	1	2	d	1	2	d	47.7-D	66.4-E
	- With Improvements	TS	1	2	1	1	2	d	1	2	d	1	**1.5**	**0.5**	31.9-C	34.9-C
Dracaea Avenue (EW) - #5	City of Moreno Valley	TS	1	2	d	1	2	d	1	0.5	0.5	1	0.5	0.5	23.2-C	16.9-B
Cottonwood Avenue (EW) - #6	City of Moreno Valley	TS	1	2	d	1	2	1	1	1	1	1	1.5	0.5	22.7-C	22.6-C
Alessandro Boulevard (EW) - #7	City of Moreno Valley															
	- Without Improvements	TS	1	2	1	1	3	1	2	2	1	2	1	1	68.4-E	80.7-F
	- With Improvements	TS	1	2	1	1	3	1	2	2	1	2	**2**	1	31.0-C	36.3-D
Brodiaea Avenue (EW) - #8	City of Moreno Valley	CSS	1	2	0	0	2.5	0.5	0	0	1	0	0	0	14.7-B	15.2-C
Hospital Road/Project Access (EW) - #10	City of Moreno Valley	TS	1	2	0	1	2	1	1	0	1	0	0	0	8.7-A	13.9-B
Cactus Avenue (EW) - #11	City of Moreno Valley	TS	2	2	1	1	2	1	1	1	1	1	0.5	0.5	38.1-D	41.5-D
Iris Avenue (EW) - #12	City of Moreno Valley	TS	1	0.5	0.5	1	1	1>	2	3	d	1	3	1	32.0-C	49.8-D

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left; T = Through; R = Right; > = Right Turn Overlap; d = De Facto Right Turn; **BOLD** = Improvement

[2] Delay and level of service calculated using the following analysis software: Vistro version 4.00-00. Per the Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal; CSS = Cross Street Stop

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Table 21

Year 2040 With Project Intersection Delay and Level of Service

Intersection	Jurisdiction	Traffic Control[3]	Intersection Approach Lanes[1] Northbound L	Northbound T	Northbound R	Southbound L	Southbound T	Southbound R	Eastbound L	Eastbound T	Eastbound R	Westbound L	Westbound T	Westbound R	Peak Hour Delay-LOS[2] Morning	Peak Hour Delay-LOS[2] Evening
Nason Street (NS) at:																
SR-60 Freeway WB Ramps (EW) - #1	California Department of Transportation	TS	1	2	1>	1	1.5	0.5	1	1	1>	1	1	1>	16.1-B	18.5-B
SR-60 Freeway EB Ramps (EW) - #2	California Department of Transportation	TS	0	2	d	1	2	0	1	0.5	1.5	0	0	0	15.8-B	19.2-B
Fir Avenue (EW) - #3	City of Moreno Valley	TS	1	2	d	1	2	1	1	0.5	0.5	1	1	1>	20.5-C	33.4-C
Eucalyptus Avenue (EW) - #4	City of Moreno Valley															
	- Without Improvements	TS	1	2	1	1	2	d	1	2	d	1	2	d	57.2-E	76.1-E
	- With Improvements	TS	1	2	1	1	2	d	1	2	d	1	**1.5**	**0.5**	35.9-D	38.1-D
Dracaea Avenue (EW) - #5	City of Moreno Valley	TS	1	2	d	1	2	d	1	0.5	0.5	1	0.5	0.5	27.4-C	19.4-B
Cottonwood Avenue (EW) - #6	City of Moreno Valley	TS	1	2	d	1	2	1	1	1	1	1	1.5	0.5	24.4-C	25.5-C
Alessandro Boulevard (EW) - #7	City of Moreno Valley															
	- Without Improvements	TS	1	2	1	1	3	1	2	2	1	2	1	1	78.8-E	99.9-F
	- With Improvements	TS	1	2	1	1	3	1	2	2	1	2	**2**	1	33.8-C	43.9-D
Brodiaea Avenue (EW) - #8	City of Moreno Valley	CSS	1	**1.5**	**0.5**	0	2.5	0.5	0	0	1	0	0	1	16.4-C	23.9-C
Project Access (EW) - #9	City of Moreno Valley	CSS	0	2	**1**	0	3	0	0	0	0	0	0	**1**	12.8-B	18.8-C
Hospital Road/Project Access (EW) - #10	City of Moreno Valley	TS	1	2	**1**	1	2	1	0.5	0.5	1	**0.5**	**0.5**	**1**	16.1-B	26.5-C
Cactus Avenue (EW) - #11	City of Moreno Valley	TS	2	2	1	1	2	1	1	1	1	1	0.5	0.5	42.3-D	44.6-D
Iris Avenue (EW) - #12	City of Moreno Valley	TS	1	0.5	0.5	1	1	1>	2	3	d	1	3	1	32.2-C	51.9-D
Project West Access (NS) at:																
Brodiaea Avenue (EW) - #13	City of Moreno Valley	**CSS**	**0.5**	0	**0.5**	0	0	0	0	**0.5**	**0.5**	**0.5**	**0.5**	0	8.7-A	9.3-A
Project Central Access (NS) at:																
Brodiaea Avenue (EW) - #14	City of Moreno Valley	**CSS**	**0.5**	0	**0.5**	0	0	0	0	**0.5**	**0.5**	**0.5**	**0.5**	0	8.6-A	8.7-A
Project East Access (NS) at:																
Brodiaea Avenue (EW) - #15	City of Moreno Valley	**CSS**	**0.5**	0	**0.5**	0	0	0	0	**0.5**	**0.5**	**0.5**	**0.5**	0	8.5-A	8.5-A

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left; T = Through; R = Right; > = Right Turn Overlap; d = De Facto Right Turn; **BOLD** = Improvement

[2] Delay and level of service calculated using the following analysis software: Vistro version 4.00-00. Per the Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signa
stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal; CSS = Cross Street Stop

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Figure 48
Year 2040 Without Project Average Daily Traffic Volumes

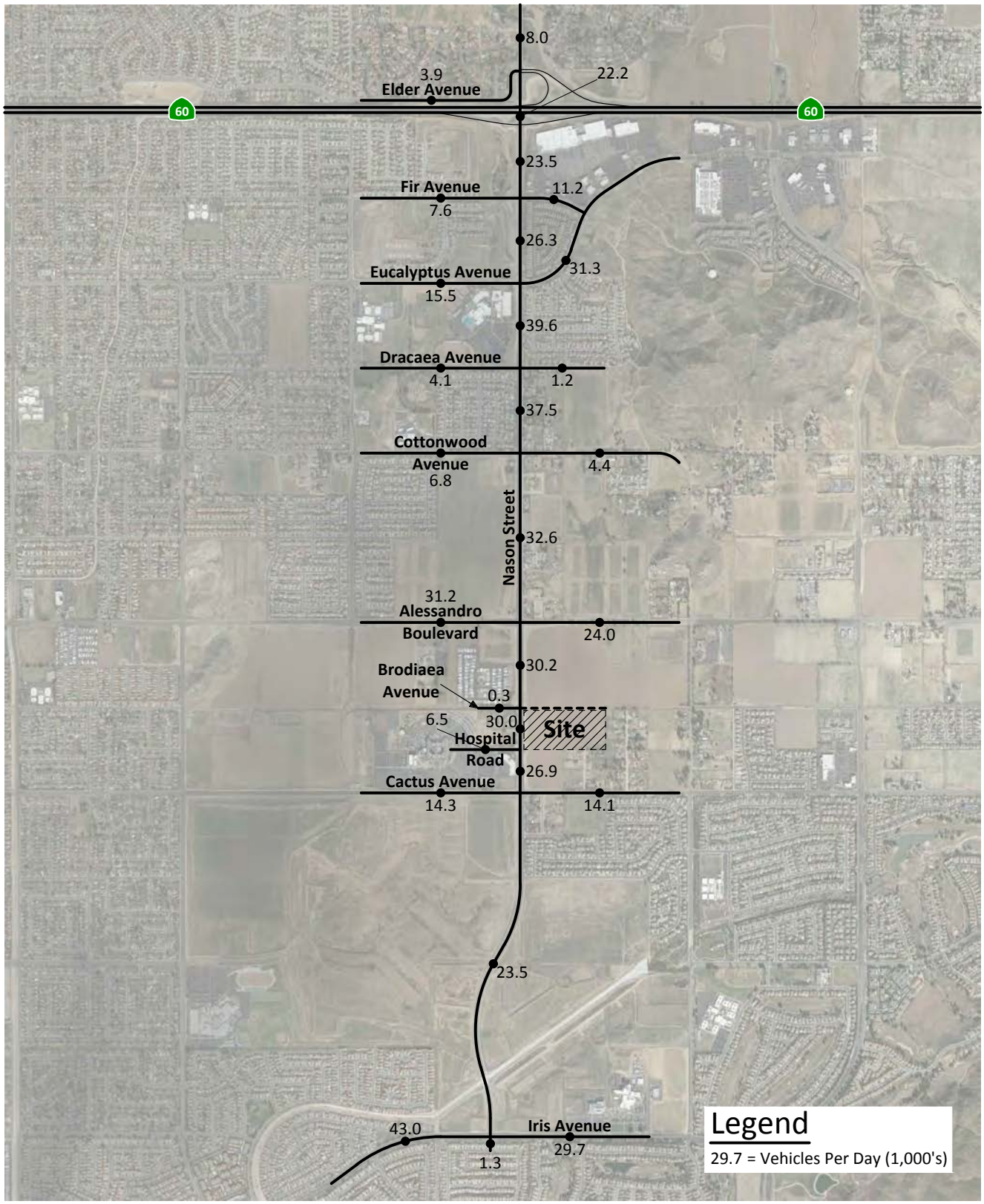

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Figure 49
Year 2040 With Project Average Daily Traffic Volumes

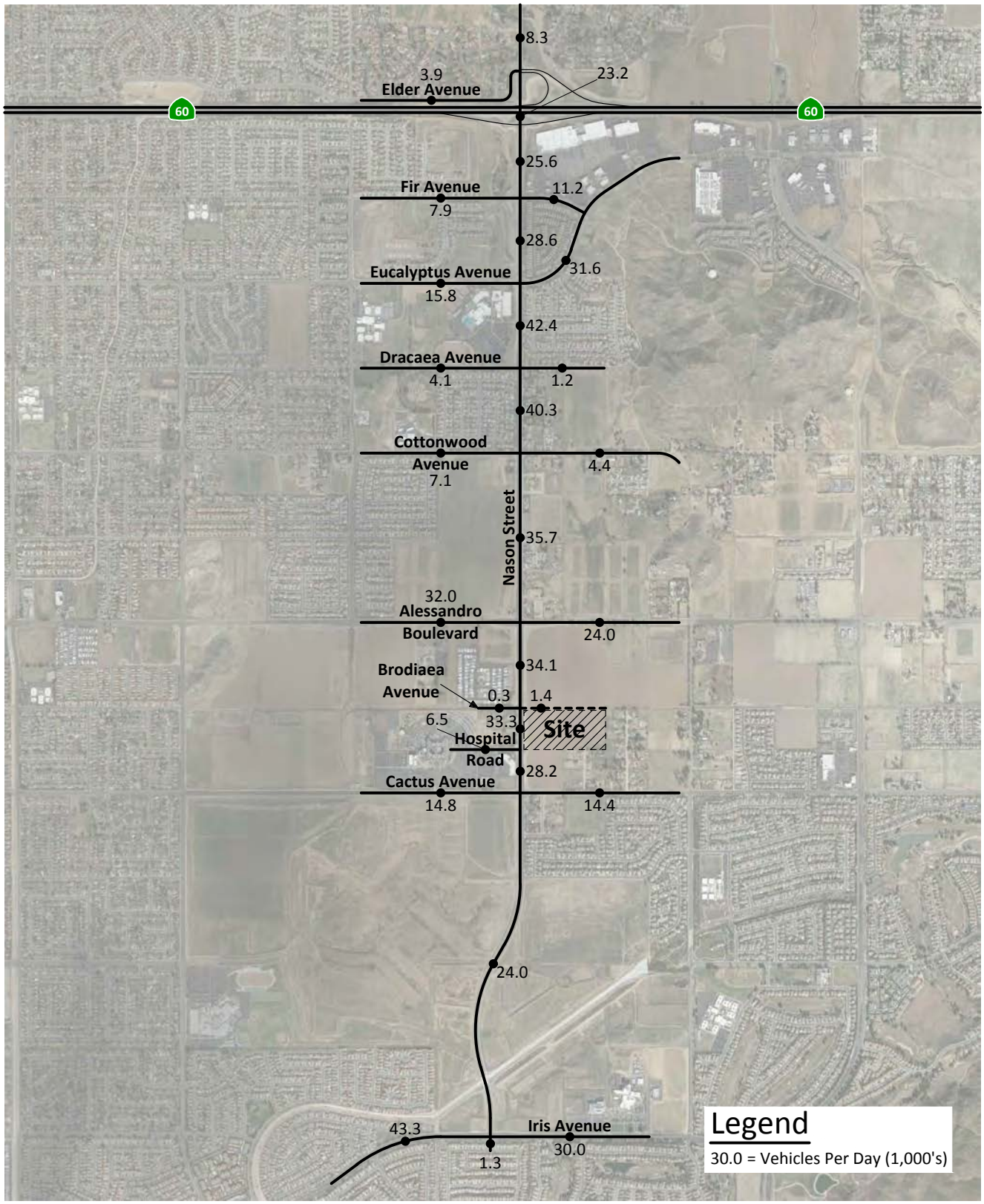

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Figure 50
Year 2040 Without Project
Morning Peak Hour Intersection Turning Movement Volumes

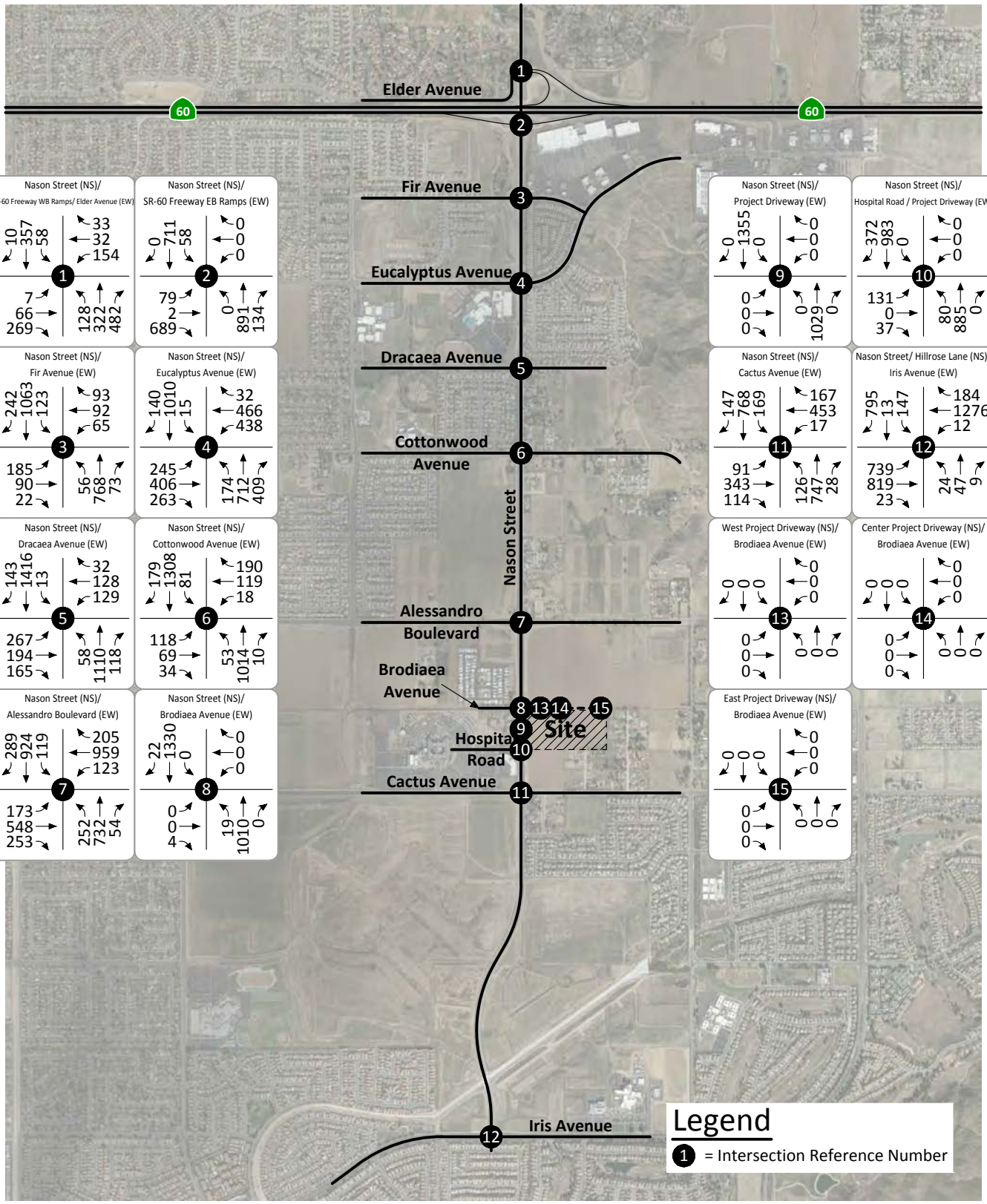

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Figure 51
Year 2040 Without Project
Evening Peak Hour Intersection Turning Movement Volumes

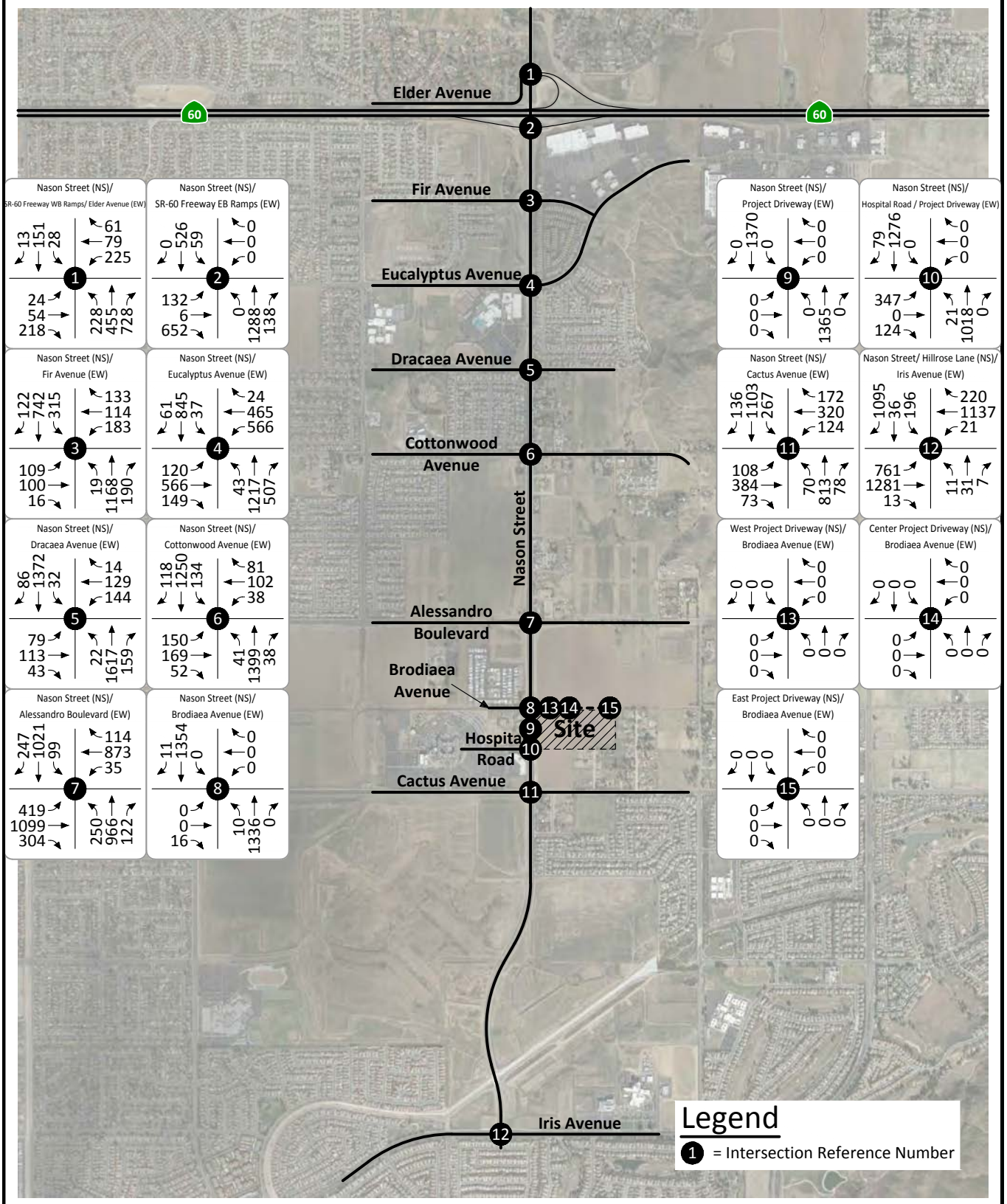

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Figure 52
Year 2040 With Project
Morning Peak Hour Intersection Turning Movement Volumes

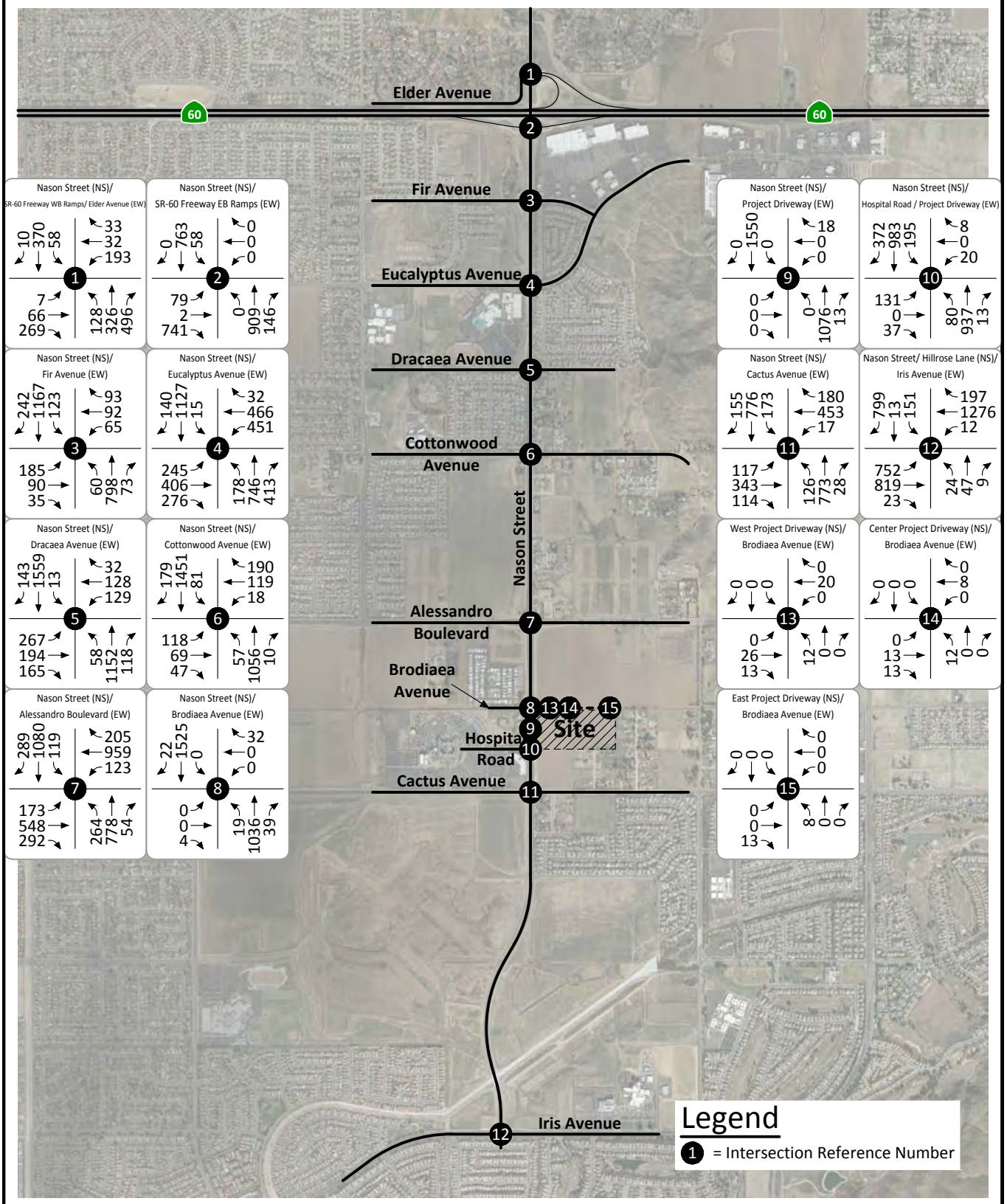

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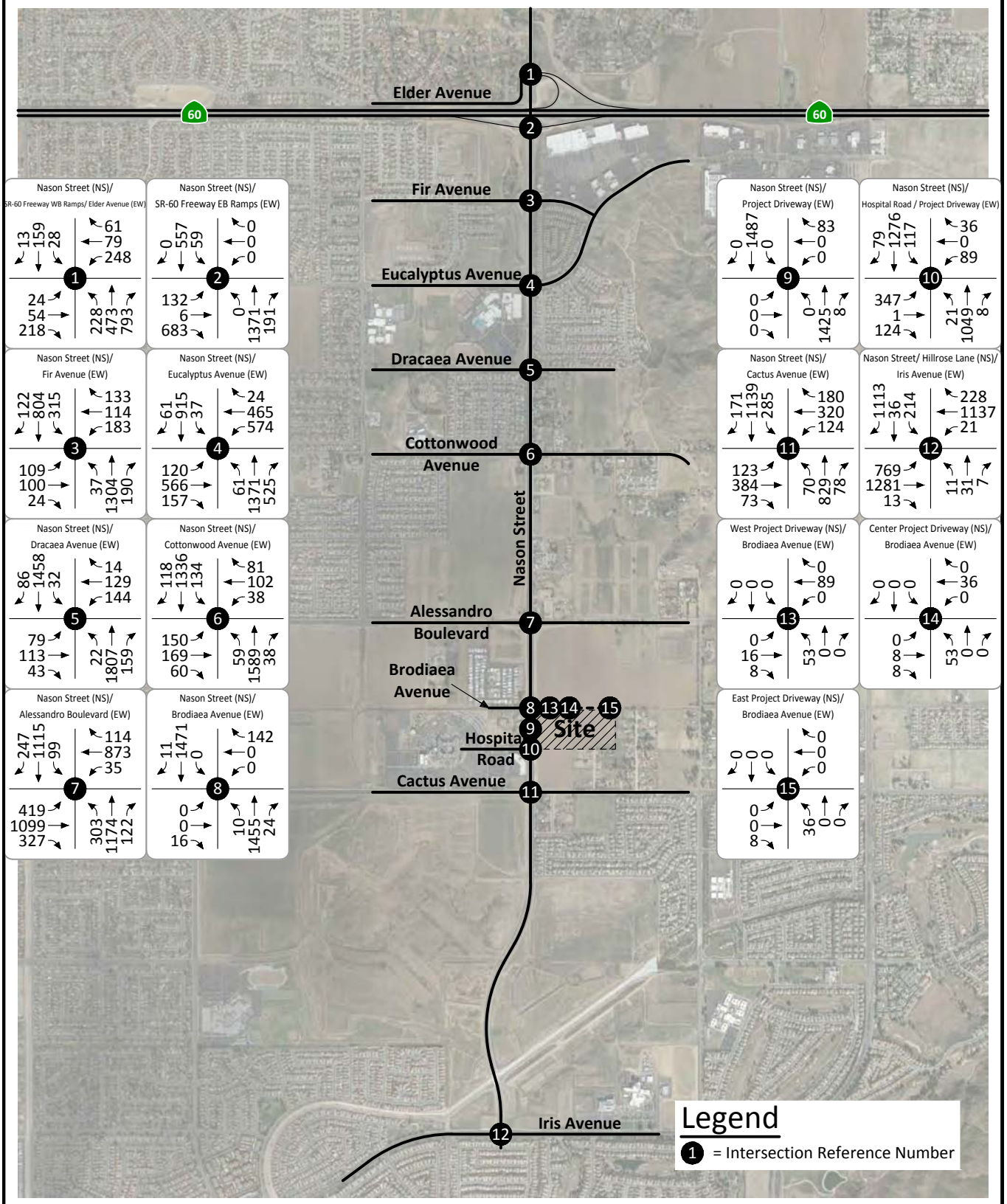
Figure 53
Year 2040 With Project
Evening Peak Hour Intersection Turning Movement Volumes



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X. VEHICLE QUEUING ANALYSIS

A. Vehicle Queuing Locations

Pursuant to the scoping discussions with City of Moreno Valley staff, the study area includes the following queuing areas (see Appendix B):

Nason Street (NS) at:
- Alessandro Avenue (EW) - #7
  - Northbound Left Turn

Nason Street (NS) at:
- Brodiaea Avenue (EW) - #8
  - Northbound Left Turn
  - Northbound Right Turn
  - Southbound Left Turn
  - Southbound Right Turn
  - Eastbound Left Turn
  - Eastbound Right Turn
  - Westbound Left Turn
  - Westbound Right Turn

Nason Street (NS) at:
- Project Access (EW) - #9
  - Northbound Right Turn
  - Westbound Right Turn

Nason Street (NS) at:
- Hospital Road (EW) - #10
  - Northbound Left Turn
  - Northbound Right Turn
  - Southbound Left Turn
  - Southbound Right Turn
  - Eastbound Left Turn
  - Eastbound Right Turn
  - Westbound Left Turn
  - Westbound Right Turn

Project West Access (NS) at:
- Brodiaea Avenue (EW) - #13
  - Northbound Left Turn
  - Northbound Right Turn
  - Eastbound Right Turn
  - Westbound Left Turn

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Project Central Access (NS) at:
- Brodiaea Avenue (EW) - #14
  - Northbound Left Turn
  - Northbound Right Turn
  - Eastbound Right Turn
  - Westbound Left Turn

Project East Access (NS) at:
- Brodiaea Avenue (EW) - #15
  - Northbound Left Turn
  - Eastbound Right Turn

B. Vehicle Queuing Storage Lengths

The existing vehicle queuing storage lengths have been measured using aerial photographs and the results are shown in Table 22.

C. Vehicle Queuing Analysis

The vehicle queuing analysis from the Synchro software (see Appendix G) is summarized in Table 22. As shown in the summary table, all future vehicle queuing demands are able to be contained in the vehicle queuing storage areas.

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Table 22

Queuing Analysis Summary[1]

Intersection	Movement	Approximate Storage Length (Feet)	95th-Percentile Queue Length (Feet)										
			Existing Plus Project		Opening Year (2020) With Project		Opening Year (2021) With Project		Opening Year (2022) With Project		Long-Range Year (2040) With Project		Adequate Storage Provided
			Morning	Evening	Morning	Evening	Morning	Evening	Morning	Evening	Morning	Evening	
Nason Street (NS) at:													
Alessandro Boulevard (EW) - #7	Northbound Left	285	50	153	129	127	185	122	172	196	442	506	Yes[2]
Brodiaea Avenue (EW) - #8	Northbound Left	160	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	Yes
	Northbound Right	570	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	Yes
	Southbound Right	1200	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	Yes
	Eastbound Right	220	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	Yes
	Westbound Right	280	<25	50	<25	<25	<25	150	<25	50	<25	53	Yes
	Northbound Right	270	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	Yes
Project Driveway (EW) - #9	Westbound Right	240	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	Yes
	Northbound Right	540	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	Yes
Hospital Road (EW) - #10	Northbound Left	230	66	<25	51	<25	61	26	74	32	88	36	Yes
	Southbound Right	245	32	13	27	<25	25	<25	29	<25	45	26	Yes
	Southbound Left	250	227	156	<25	28	125	112	192	160	178	162	Yes
	Eastbound Right	650	<25	34	<25	27	<25	29	<25	36	6	38	Yes
	Eastbound Left	650	89	301	75	206	92	218	112	344	93	372	Yes
	Westbound Right	230	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	Yes
	Westbound Left	230	27	84	<25	<25	<25	<25	31	94	<25	93	Yes
West Project Driveway (NS) at:	Northbound Right	37	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	Yes
Brodiaea Avenue (EW) - #13	Northbound Left	37	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	Yes
	Eastbound Right	280	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	Yes
	Westbound Left	265	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	Yes
Center Project Driveway (NS) at:	Northbound Right	37	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	Yes
Brodiaea Avenue (EW) - #14	Northbound Left	37	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	Yes
	Eastbound Right	265	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	Yes
	Westbound Left	600	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	Yes
East Project Driveway (NS) at:	Northbound Left	37	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	Yes
Brodiaea Avenue (EW) - #15	Eastbound Right	600	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	Yes

[1] Assuming 25 feet of queue per vehicle, a queue length of less than 25 feet indicates nominal queuing.

[2] The traffic impact analysis assumes a single left turn pocket for northbound Nason Street at Alessandro Boulevard. The maximum projected queue length is just slightly greater than the single lane storage capacity. In the future, there will be two northbound left turn lanes. At that point, the queuing will be adequately accommodated within the provided storage area.

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XI. RECOMMENDATIONS

A. Site Access

The project site is proposed to provide access to Nason Street and Brodiaea Avenue.

Existing signing and striping along Nason Street adjacent to the project site needs to be modified to accommodate the proposed project access.

The existing traffic signal at Nason Street (NS) at Hospital Road (EW) - #10 needs to be modified to accommodate the proposed project access.

With more than one entrance, adequate emergency access is assured because there is more than one way of reaching any point within the site.

As is the case for any roadway design, the City of Moreno Valley should periodically review traffic operations in the vicinity of the project once the project is constructed to assure that the traffic operations are satisfactory.

B. Roadway Improvements

Site-specific circulation and access recommendations are depicted on Figure 54.

Construct Nason Street from Brodiaea Avenue to Hospital Road its ultimate half-section width as a Divided Major Arterial (120 foot right-of-way) in conjunction with development, including landscaping and parkway improvements, as necessary.

Construct Brodiaea Avenue from Nason Street to the east project boundary at its ultimate half-section width in conjunction with development, including landscaping and parkway improvements, as necessary.

On-site traffic signing/striping should be implemented in conjunction with detailed construction plans for the project site.

Sight distance at project accesses shall comply with standard California Department of Transportation and City of Moreno Valley sight distance standards. The final grading, landscaping, and street improvement plans shall demonstrate that sight distance standards are met. Such plans must be reviewed by the City and approved as consistent with this measure prior to issue of grading permits.

Participate in the phased construction of off-site traffic signals through payment of traffic signal mitigation fees. The traffic signals within the study area at buildout should specifically include an interconnect of the traffic signals to function in a coordinated system.

As is the case for any roadway design, the City of Moreno Valley should periodically review traffic operations in the vicinity of the project once the project is constructed to assure that the traffic operations are satisfactory.

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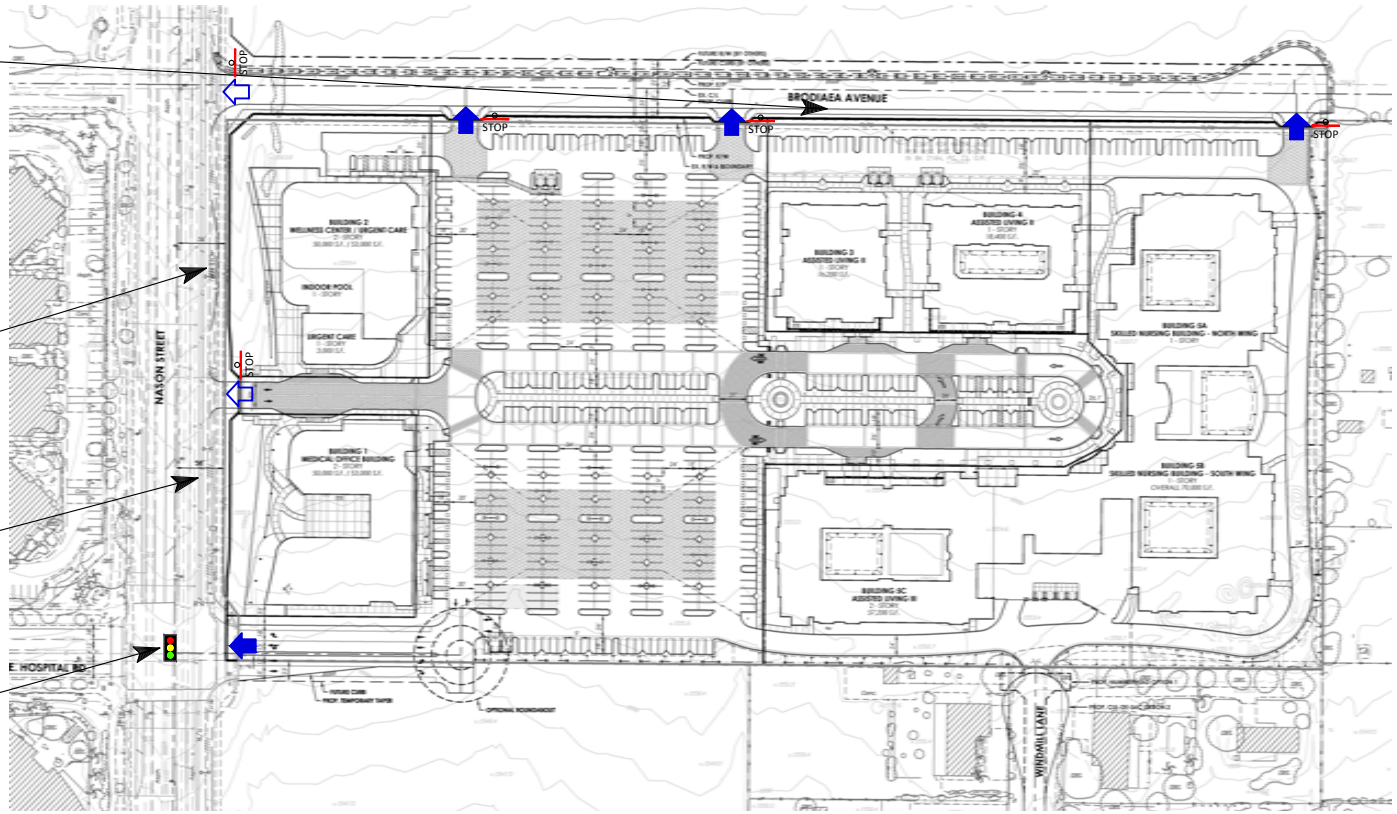
Figure 54
Circulation Recommendations

Construct Brodiaea Avenue from Nason Street to the east project boundary at its ultimate half-section width in conjunction with development, including landscaping and parkway improvements, as necessary.

Construct Nason Street from Brodiaea Avenue to Hospital Road its ultimate half-section width as a Divided Major Arterial (120 foot right-of-way) in conjunction with development, including landscaping and parkway improvements, as necessary.

Existing signing and striping along Nason Street adjacent to the project site needs to be modified to accommodate the proposed project access.

The existing traffic signal at Nason Street (NS) at Hospital Road (EW) - #10 needs to be modified to accommodate the proposed project access.



On-site traffic signing/striping should be implemented in conjunction with detailed construction plans for the project site.

Sight distance at project accesses shall comply with standard California Department of Transportation and City of Moreno Valley sight distance standards. The final grading, landscaping, and street improvement plans shall demonstrate that sight distance standards are met. Such plans must be reviewed by the City and approved as consistent with this measure prior to issue of grading permits.

Participate in the phased construction of off-site traffic signals through payment of traffic signal mitigation fees. The traffic signals within the study area at buildout should specifically include an interconnect of the traffic signals to function in a coordinated system.

As is the case for any roadway design, the City of Moreno Valley should periodically review traffic operations in the vicinity of the project once the project is constructed to assure that the traffic operations are satisfactory.

Legend

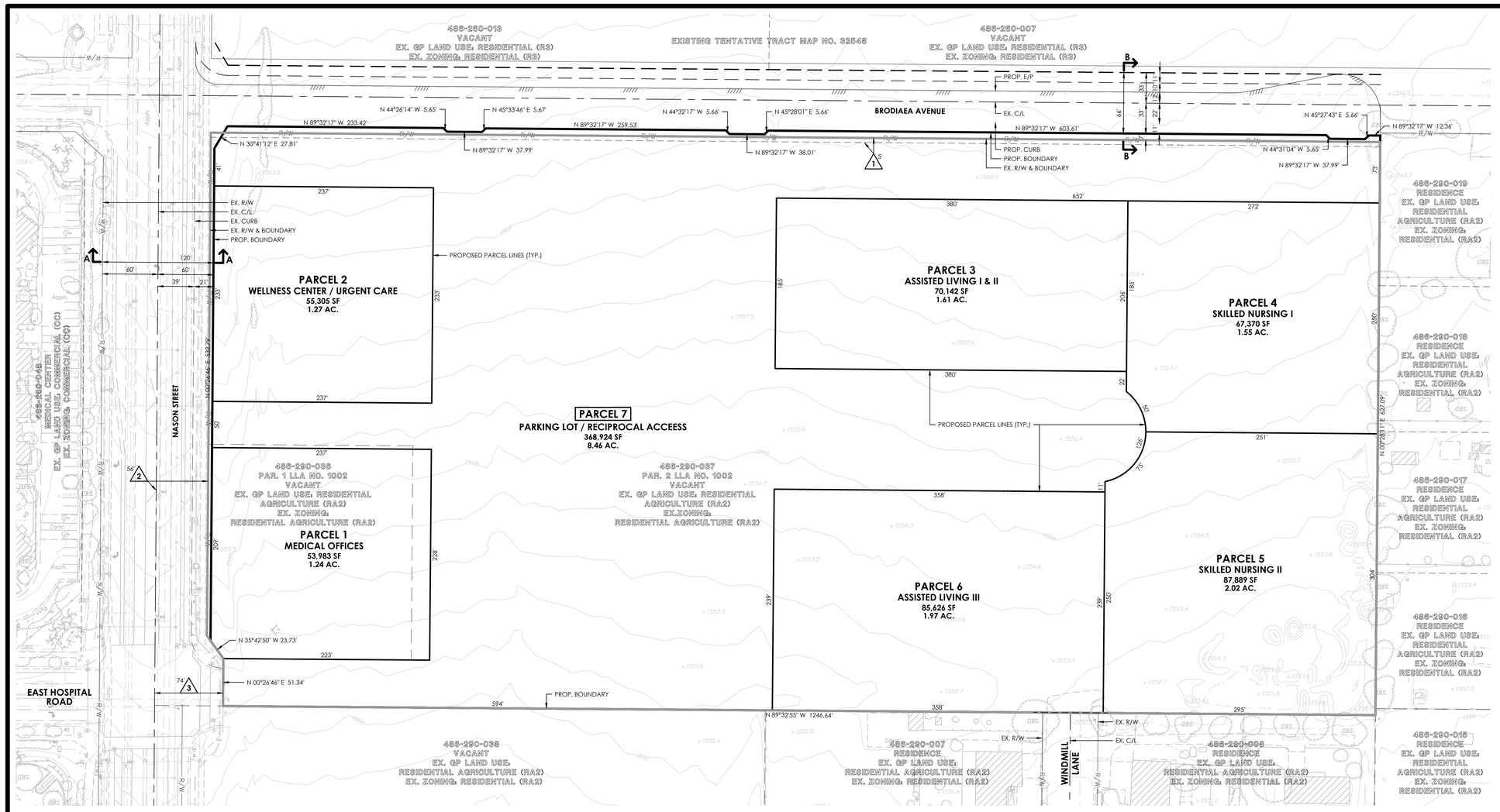
= Traffic Signal
= Stop Sign
= Full Access Driveway
= Right Turns In/Out Only Access Driveway

N

KUNZMAN ASSOCIATES, INC.
OVER 40 YEARS OF EXCELLENT SERVICE

JN 6462a

Attachment: Tech Study Traffic Report [Revision 1] (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-



IN THE CITY OF MORENO VALLEY, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

TENTATIVE PARCEL MAP NO. 36227

EXHIBIT DATE: SEPTEMBER 28, 2016

REVISIONS

NO.	DATE	DESCRIPTION
1	01/18/17	UPDATED PARCEL MAP & INDEX MAP TO REFLECT THE PROPOSED WINDMILL LANE HAMMERHEAD LAYOUT
2	03/30/17	ADDED A BLANKET EASEMENT NOTE TO THE DATA TABLE PER CITY COMMENTS

DATA TABLE

APPLICANT / LAND OWNER:	GALAXY MANAGEMENT INC.		
ADDRESS:	5067 WALNUT GROVE AVENUE SAN GABRIEL, CALIFORNIA 91776		
CONTACT:	RICHARD TORNG	**TELEPHONE:**	(626) 818-4858
EXHIBIT PREPARER:	MSA CONSULTING, INC.		
ADDRESS:	34200 BOB HOPE DRIVE RANCHO MIRAGE, CALIFORNIA 92270		
CONTACT:	PAUL DEPALATIS, AICP	**TELEPHONE:**	(760) 320-9811
SOURCE OF TOPOGRAPHY:	INLAND AERIAL SURVEYS, INC.		
ADDRESS:	7117 ARLINGTON AVENUE, SUITE "A" RIVERSIDE, CALIFORNIA 92503		
DATE OF TOPOGRAPHY:	MAY 18, 2016	**TELEPHONE:**	(951) 687-4252
ASSESSOR'S PARCEL NUMBER:	486-290-036 & -037		

LEGAL DESCRIPTION:

LOT 3 AND A PORTION OF LOT 4 OF BLOCK 131 MAP NO. 1 BEAR VALLEY AND ALESSANDRO DEVELOPMENT CO. PER M.B. 11/10, SECTION 15 TOWNSHIP 3 SOUTH RANGE 3 WEST, SAN BERNARDINO BASE AND MERIDIAN.

LAND USE DESCRIPTION:	ACREAGE
EXISTING GROSS ACREAGE:	17.98 AC.
PUBLIC STREET DEDICATION (NASON STREET):	0.05 AC.
PUBLIC STREET DEDICATION SUB-TOTAL:	17.93 AC.
PUBLIC STREET VACATION (BRODIAEA AVENUE):	0.19 AC.
PROPOSED NET ACREAGE:	18.12 AC.
PROPOSED PARCEL 1 (MEDICAL OFFICES):	1.24 AC.
PROPOSED PARCEL 2 (WELLNESS CENTER / URGENT CARE):	1.27 AC.
PROPOSED PARCEL 3 (ASSISTED LIVING I & II):	1.61 AC.
PROPOSED PARCEL 4 (SKILLED NURSING I):	1.55 AC.
PROPOSED PARCEL 5 (SKILLED NURSING II):	2.02 AC.
PROPOSED PARCEL 6 (ASSISTED LIVING III):	1.97 AC.
PROPOSED PARCEL 7 (PARKING LOT / RECIPROCAL ACCESS):	8.46 AC.

EXISTING ZONING:	RESIDENTIAL AGRICULTURE - 2 UNITS PER ACRE (RA2)
PROPOSED ZONING:	OFFICE (O) WITH MEDICAL USE OVERLAY (MUO)
EXISTING GENERAL PLAN LAND USE:	RESIDENTIAL AGRICULTURE: MAX. 2 DU/AC (RA2)
PROPOSED GENERAL PLAN LAND USE:	RESIDENTIAL/OFFICE (R/O)

EXISTING EASEMENT NOTES:

1	5' EASEMENT FOR WATER LINES PER BOOK 2164, PAGE 73, RECORDED OCTOBER 16, 1957, OF OFFICIAL RECORDS.
2	56' RIGHT OF WAY PER DOCUMENT 2013-0407043 RECORDED AUGUST 20, 2013, OF OFFICIAL RECORDS.
3	74' RIGHT OF WAY PER DOCUMENT 2013-0407043 RECORDED AUGUST 20, 2013, OF OFFICIAL RECORDS.
-	WE HEREBY DEDICATE TO THE CITY OF MORENO VALLEY A PERPETUAL NON-EXCLUSIVE BLANKET EASEMENT OVER PARCEL 1 AND 2 OF LLA NO. 1002 FOR THE ELECTRICAL UTILITY PURPOSES. THE EASEMENT WILL INCLUDE RIGHTS OF INGRESS-EGREE FOR THE PURPOSE OF CONSTRUCTION, OPERATION, MAINTENANCE, FACILITY REPAIR AND METER READING.

PUBLIC UTILITY PURVEYORS:		
ELECTRIC:	MORENO VALLEY ELECTRIC UTILITY	(877) 811-8700
GAS:	THE GAS COMPANY	(800) 427-2200
TELEPHONE:	VERIZON COMPANY	(800) 483-5000
WATER:	EASTERN MUNICIPAL WATER DISTRICT	(951) 928-6146
CABLE:	TIME WARNER CABLE	(866) 489-2249
SEWER:	EASTERN MUNICIPAL WATER DISTRICT	(951) 928-6146
USA:	UNDERGROUND SERVICE ALERT	(800) 227-2600

FEMA FLOOD ZONE DESIGNATION:

ZONE X - AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

AS SHOWN ON RIVERSIDE COUNTY, CALIFORNIA, FLOOD INSURANCE RATE MAPS, COMMUNITY PANEL MAP NUMBERS 06065C-0765G & 06065C-0770G EFFECTIVE DATE: AUGUST 28, 2008.

LIQUEFACTION:	LOW MODERATE & MODERATE LIQUEFACTION ZONE

NOTES:

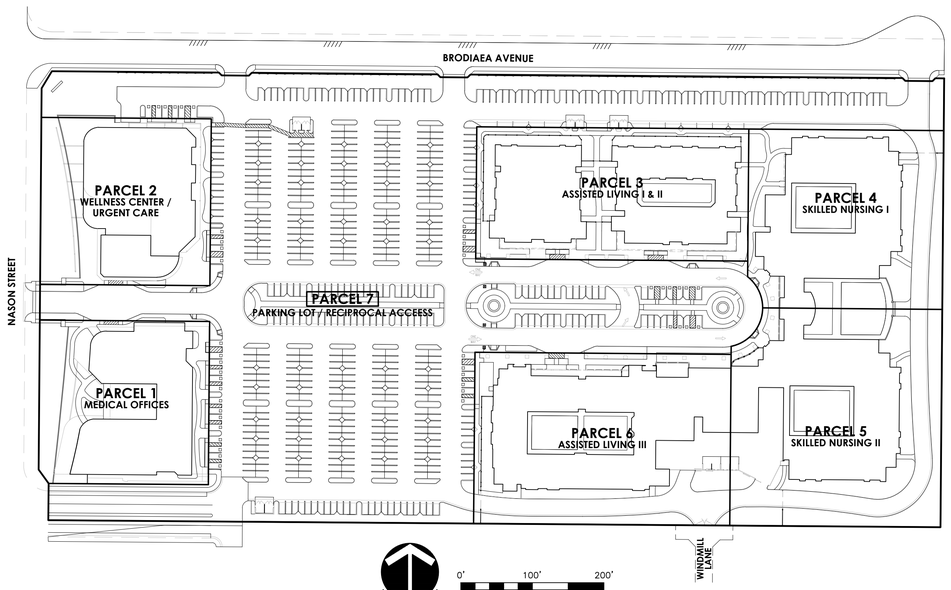
1. THIS MAP INCLUDES THE ENTIRE CONTIGUOUS OWNERSHIP OF THE LAND DIVIDER.
2. THERE ARE NO EXISTING DWELLINGS, BUILDINGS, OR OTHER STRUCTURES KNOWN ON THIS PROPERTY.

ABBREVIATIONS

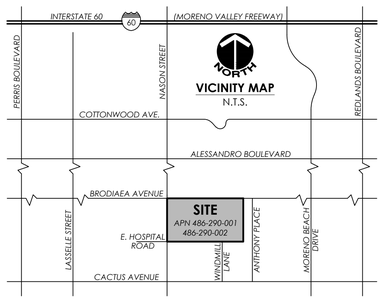
(E)	EAST	NO.	NUMBER
(N)	NORTH	N.T.S.	NOT TO SCALE
(S)	SOUTH	O/H	OVERHEAD
(W)	WEST	OS/PP	OPEN SPACE / PARKS
A.C.	ASPHALT CONCRETE	PG.	PAGE
AC	ACREAGE	P/L	PROPERTY LINE
APN	ASSESSORS PARCEL NUMBER	PROP.	PROPOSED
BNDRY	BOUNDARY	P.U.E.	PUBLIC UTILITY EASEMENT
C/L	CENTERLINE	R	RADIUS
C&G	CURB AND GUTTER	R-L	LOW DENSITY (RESIDENTIAL)
E/P	EDGE OF PAVEMENT	R/W	RIGHT OF WAY
ESMT.	EASEMENT	SF	SQUARE FEET
EX.	EXISTING	STD.	STANDARD
MAX.	MAXIMUM	TYP.	TYPICAL
M.B.	MAP BOOK	UG	UNDERGROUND
MIN.	MINIMUM		

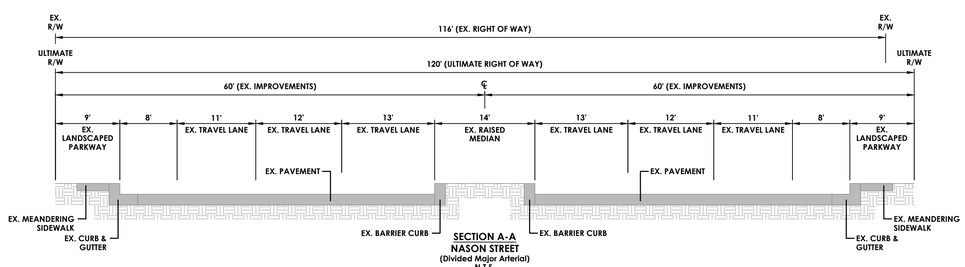
LEGEND

679.3	EXISTING SPOT ELEVATIONS
	EXISTING CONTOURS
X	EXISTING EASEMENT DELTA
C	EXISTING CABLE
DRN	EXISTING IRRIGATION DRAIN LINE
	EXISTING EASEMENT
E	EXISTING ELECTRIC
G	EXISTING GAS
IRR	EXISTING IRRIGATION
	EXISTING LOT LINE
	EXISTING EDGE OF PAVEMENT
T	EXISTING TELEPHONE
O/H T	EXISTING OVERHEAD TELEPHONE
R/W	EXISTING RIGHT OF WAY
S	EXISTING SEWER
FM	EXISTING SEWER FORCE MAIN
W	EXISTING WATER
	PROPOSED BOUNDARY
	PROPOSED TENTATIVE PARCEL MAP LOTS
	PROPOSED AND EXISTING CENTER LINE
	PROPOSED CURB
	PROPOSED EASEMENT
	PROPOSED RIGHT OF WAY

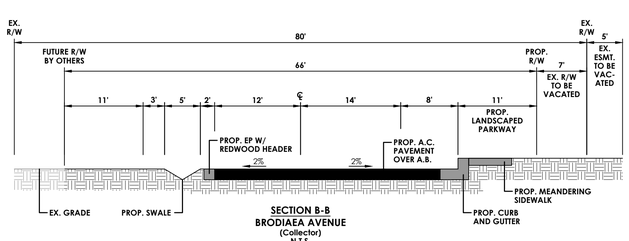


INDEX MAP

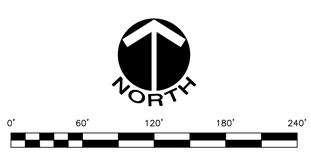




SECTION A-A
NASON STREET
(Divided Major Arterial)
N.T.S.



SECTION B-B
BRODIAEA AVENUE
(Collector)
N.T.S.



MSA CONSULTING, INC.
PLANNING ■ CIVIL ENGINEERING ■ LAND SURVEYING
34200 BOB HOPE DRIVE ■ RANCHO MIRAGE ■ CA 92270
TELEPHONE (760) 320-9811 ■ FAX (760) 323-7893

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Attachment: TPM 36227 (2847 : PEN16-0048-0049, PEN16-0051-0057, PEN17-0013 Majestic Moreno Valley)

R:\1968\ACAD\Planning\Tentative Maps\1968 TPM 36227.dwg, 1/18/2018 7:41:07 AM, dgallerani, MSA Consulting, Inc.