

CITY OF MORENO VALLEY STANDARD PLANS

SECTION 4

STREET LIGHT AND TRAFFIC

Note: Various State's Standards for Street Light and Traffic may be used subject to review and approval from the Public Works Director/City Engineer.

City of Moreno Valley

Standard Plans Index - 2022 Edition

SECTION 4: Street Light and Traffic

Street Light

MVLT-400A-3	<i>Residential and Collector Lighting</i>
MVLT-400B-2	<i>Arterial Highway Lighting (Wireless Equipment Capable)</i>
MVLT-400C-0	<i>Arterial Highway Lighting</i>

Traffic

MVLT-410A-0	<i>Street Name Sign</i>
MVLT-410B-0	<i>Street Name Sign Abbreviations</i>
MVLT-410C-1	<i>Street Name Sign Specifications</i>
MVLT-410D-0	<i>Street Name Sign Placement</i>
MVLT-410E-0	<i>Street Name Sign Location</i>
MVLT-411A-0	<i>Internally Illuminated Street Name Sign</i>
MVLT-411B-1	<i>Internally Illuminated Street Name Sign Specifications</i>
MVLT-411C-1	<i>Internally / Retrofit Illuminated Street Name Sign Specifications</i>
MVLT-411D-0	<i>Mounting Assembly – Illuminated Street Name Sign Specifications</i>
MVLT-411E-0	<i>Structural Support for Various Luminaires on Type 1-A Pole</i>
MVLT-412-0	<i>Stop Sign Installation</i>
MVLT-413-0	<i>Marbelite Sign Installation</i>
MVLT-414A-0	<i>Sign Post Installation</i>
MVLT-414B-1	<i>Sign Post Installation Notes</i>
MVLT-414C-0	<i>Sign Post Block Out</i>
MVLT-415A-0	<i>Project Sign (Road Work)</i>
MVLT-415B-0	<i>Project Sign (Other Agencies)</i>
MVLT-415C-0	<i>Project Sign (Project Completion)</i>
MVLT-416A-0	<i>End of Road Treatment</i>
MVLT-416B-0	<i>End of Road Treatment Details</i>
MVLT-417-0	<i>Object Markers</i>
MVLT-418A-0	<i>Delineators</i>
MVLT-418B-0	<i>Delineator Placement</i>
MVLT-419-0	<i>Median Nose Treatment</i>
MVLT-420-0	<i>Street Pole Banner</i>
MVLT-430A-0	<i>Street Striping & Pavement Legend Standards & Specifications</i>
MVLT-430B-0	<i>Street Striping & Pavement Legend Standards & Specifications</i>
MVLT-430C-0	<i>Street Striping & Pavement Legend Standards & Specifications</i>
MVLT-431-0	<i>Stop Bar Legend Placement</i>
MVLT-432-0	<i>Crosswalk Location</i>
MVLT-433-0	<i>Continental Crosswalk and Advance Limit Line Placement</i>
MVLT-440A-0	<i>“Blue Dot” Type 1 Marker Placement Notes</i>
MVLT-440B-0	<i>“Blue Dot” Type 1 Marker Placement Street Intersection & Cul-de-Sac</i>
MVLT-440C-0	<i>“Blue Dot” Type 1 Marker Placement - Divided Street & Street with Turn Lane</i>
MVLT-450A-0	<i>Traffic Induction Loops (Decorative Crosswalk)</i>
MVLT-450B-0	<i>Traffic Induction Loops (Thermoplastic Crosswalk)</i>

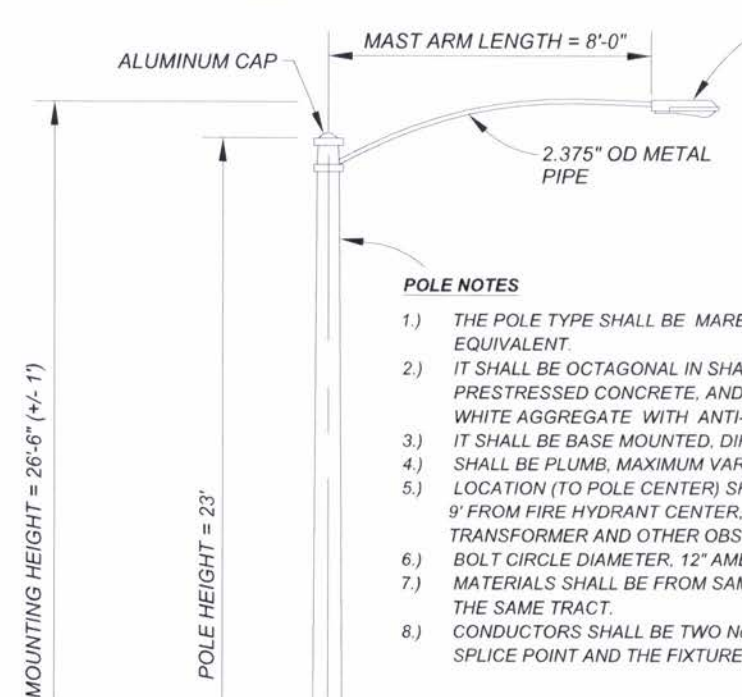
City of Moreno Valley

Standard Plans Index - 2022 Edition

SECTION 4: Street Light and Traffic (Continued)

<i>MVLT-450C-0</i>	<i>Traffic Induction Loops Wiring Details</i>
<i>MVLT-460-0</i>	<i>Type 333 Controller Cabinet Foundation Detail</i>
<i>MVLT-461-0</i>	<i>Dual Meter Traffic Signal Service Foundation</i>

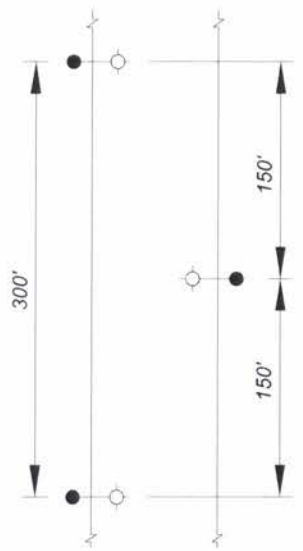
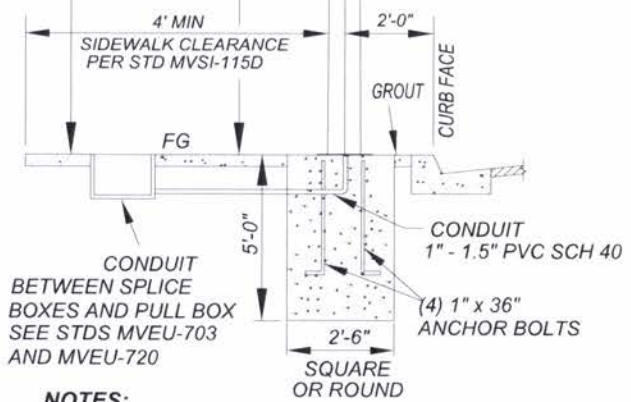
Note: *Various State's Standards for Street Light and Traffic may be used subject to review and approval from the Public Works Director/City Engineer.*



LED (LIGHT EMITTING DIODE) SHALL BE GENERAL ELECTRIC 120/240 V, EVOLVE LED MEDIUM COBRA HEAD WITH AN EVOLVE LIGHT ENGINE CONSISTING OF A NESTED CONCENTRIC AND DIRECTIONAL REFLECTORS, AN IP 65 RATED OPTICAL ENCLOSURE, AND AN INJECTION MOLDED HID ACRYLIC LENS.
 COLOR TEMPERATURE: 2700 K
 LUMENS: 3,800
 WATTS: 29 W
ERL1 0 04 B5 27 A GRAY

POLE NOTES

- 1.) THE POLE TYPE SHALL BE MARBELITE, AMERON SERIES 1C1 OR APPROVED EQUIVALENT.
- 2.) IT SHALL BE OCTAGONAL IN SHAPE, SYMMETRICALLY TAPERED, MADE OF PRECAST/PRESTRESSED CONCRETE, AND NATURAL GRAY IN COLOR WITH BLACK AND WHITE AGGREGATE WITH ANTI-GRAFFITI SURFACE.
- 3.) IT SHALL BE BASE MOUNTED, DIRECT BURIAL IS NOT ALLOWED.
- 4.) SHALL BE PLUMB, MAXIMUM VARIANCE 0.08"/FT.
- 5.) LOCATION (TO POLE CENTER) SHALL BE 2'-0" FROM FACE OF CURB, 5' FROM BCR/ECR, 9' FROM FIRE HYDRANT CENTER, 5' FROM DRIVEWAY EDGE, 5' FROM UTILITY TRANSFORMER AND OTHER OBSTRUCTIONS.
- 6.) BOLT CIRCLE DIAMETER, 12" AMERON.
- 7.) MATERIALS SHALL BE FROM SAME MANUFACTURER ALONG SAME STREET AND IN THE SAME TRACT.
- 8.) CONDUCTORS SHALL BE TWO No 8 THW WIRES WITHIN THE POLE BETWEEN THE SPLICE POINT AND THE FIXTURE.



NOTES:

- 1.) THE POLE TYPE SHALL BE MARBELITE - AMERON SERIES 1C1 (AMERON DWG No 1807-035) OR APPROVED EQUIVALENT. UTILITY IF THEY ARE IN ACCORDANCE WITH THE NATIONAL STREET LIGHTING GUIDE.
- 2.) LIGHTING SHALL BE PLACED 150' MAX (±20') OR AS APPROVED BY THE CITY ENGINEER) APART ON ALTERNATING SIDES OF THE STREET AND AS NOTED HERE:
 - A) AT THE MIDDLE OF A CUL-DE-SAC.
 - B) AT THE FAR SIDE OF A T-INTERSECTION.
 - C) AT THE END OF A CURB RETURN.
 - D) AT LOCATIONS DETERMINED BY THE CITY TO INCREASE ILLUMINATION.
- 3.) ALL CONCRETE SHALL BE 560-C-3250.
- 4.) THIS STANDARD SHALL APPLY TO STREET CLASSIFICATIONS OF COLLECTOR AND BELOW.
- 5.) FOR IN-FILL CONDITIONS, LIGHTS MAY BE LOCATED TO MATCH EXISTING CONDITIONS.

NOT TO SCALE

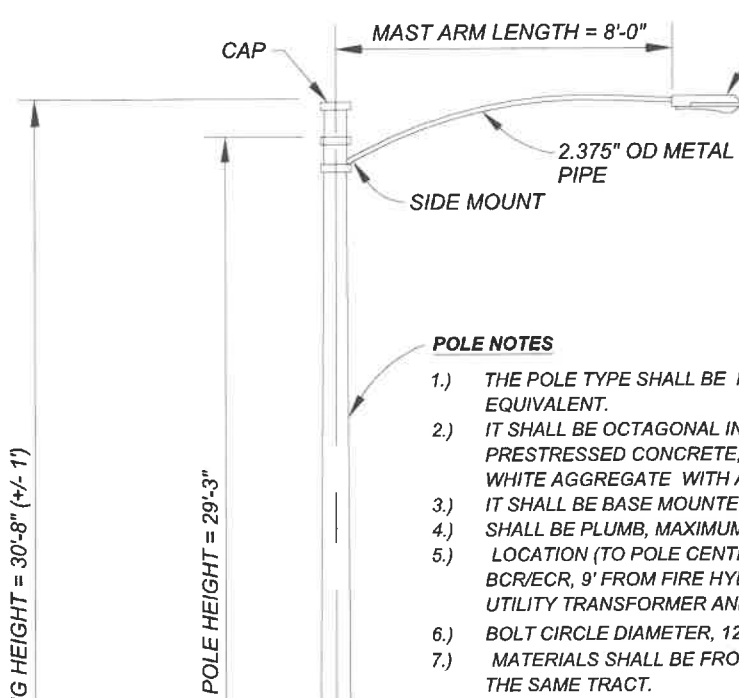


RECOMMENDED:
Wesun 10/31/23
 PRINCIPAL ENGINEER DATE
 APPROVED:
[Signature] 10/31/23
 PUBLIC WORKS DIRECTOR DATE
 CITY ENGINEER

CITY OF MORENO VALLEY
 PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION

RESIDENTIAL & COLLECTOR LIGHTING

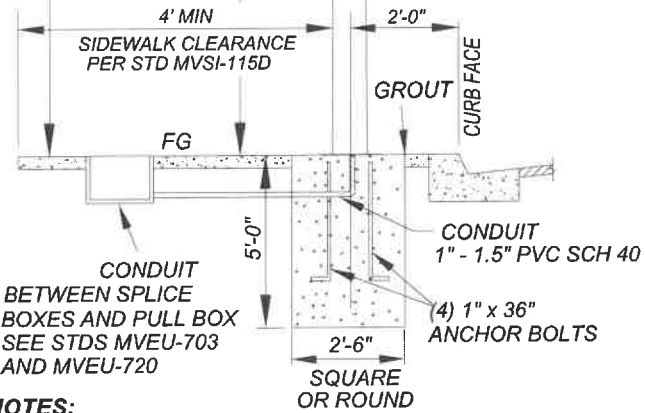
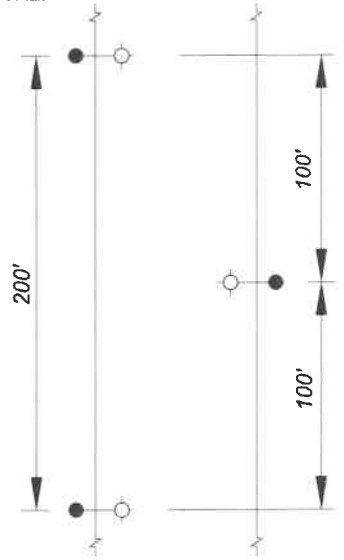
STANDARD PLAN
MVLT-400A-3
 SHEET 1 OF 3



LED (LIGHT EMITTING DIODE) SHALL BE GENERAL ELECTRIC 120/240 V, EVOLVE LED MEDIUM COBRA HEAD WITH AN EVOLVE LIGHT ENGINE CONSISTING OF A NESTED CONCENTRIC AND DIRECTIONAL REFLECTORS, AN IP 65 RATED OPTICAL ENCLOSURE, AND AN INJECTION MOLDED HID ACRYLIC LENS.
 COLOR TEMPERATURE: 4000 K
 LUMENS: 11,500
 WATTS: 98 W
ERLH 0 11 B3 40 A GRAY

POLE NOTES

- 1.) THE POLE TYPE SHALL BE MARBELITE, AMERON CBO SERIES OR APPROVED EQUIVALENT.
- 2.) IT SHALL BE OCTAGONAL IN SHAPE, SYMMETRICALLY TAPERED, MADE OF PRECAST/PRESTRESSED CONCRETE, AND NATURAL GRAY IN COLOR WITH BLACK AND WHITE AGGREGATE WITH ANTI-GRAFFITI SURFACE.
- 3.) IT SHALL BE BASE MOUNTED, DIRECT BURIAL IS NOT ALLOWED.
- 4.) SHALL BE PLUMB, MAXIMUM VARIANCE 0.08"/FT.
- 5.) LOCATION (TO POLE CENTER) SHALL BE 2'-0" FROM FACE OF CURB, 5' FROM BCR/ECCR, 9' FROM FIRE HYDRANT CENTER, 5' FROM DRIVEWAY EDGE, 5' FROM UTILITY TRANSFORMER AND OTHER OBSTRUCTIONS.
- 6.) BOLT CIRCLE DIAMETER, 12 1/2" AMERON.
- 7.) MATERIALS SHALL BE FROM SAME MANUFACTURER ALONG SAME STREET AND IN THE SAME TRACT.
- 8.) CONDUCTORS SHALL BE TWO No 8 THW WIRES WITHIN THE POLE BETWEEN THE SPLICE POINT AND THE FIXTURE.



NOTES:

- 1.) THE POLE TYPE SHALL BE MARBELITE - AMERON CBO SERIES (AMERON DWG No 1806-077A) OR APPROVED EQUIVALENT.
- 2.) LIGHTING SHALL BE SPACED 200' MAX (±20') OR AS APPROVED BY THE CITY ENGINEER) DISTANCE APART ON EACH SIDE OF THE STREET.
- 3.) THE CITY MAY REQUIRE ADDITIONAL LIGHTING IN AREAS WHERE INCREASED ILLUMINATION IS DETERMINED TO BE NEEDED.
- 4.) ALL CONCRETE SHALL BE 560-C-3250.
- 5.) THIS STANDARD SHALL APPLY TO STREET CLASSIFICATIONS OF INDUSTRIAL COLLECTOR AND ABOVE.
- 6.) FOR IN-FILL CONDITIONS, LIGHTS MAY BE LOCATED TO MATCH EXISTING CONDITIONS.

NOT TO SCALE



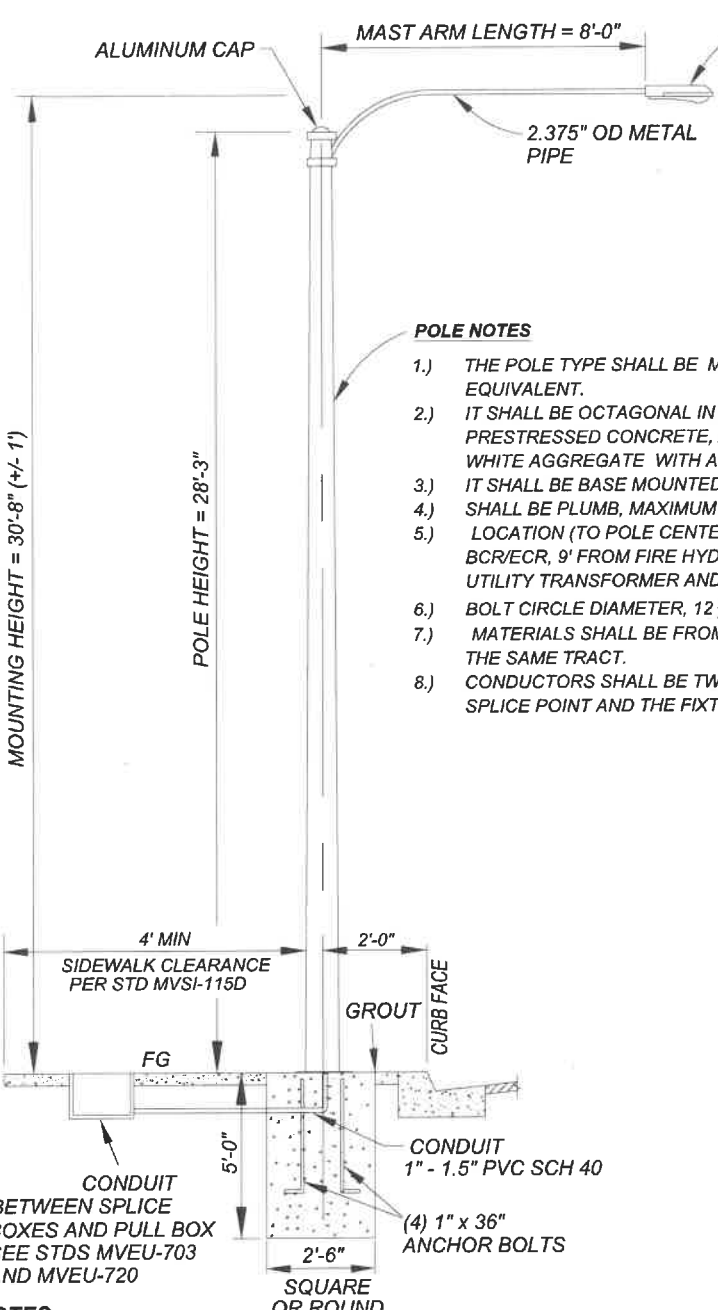
RECOMMENDED:
[Signature] 8/12/20
 DIVISION MANAGER DATE

APPROVED:
[Signature] 8/13/2020
 PUBLIC WORKS DIRECTOR / DATE
 CITY ENGINEER

CITY OF MORENO VALLEY
 PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION

ARTERIAL HIGHWAY LIGHTING
(WIRELESS EQUIPMENT CAPABLE)

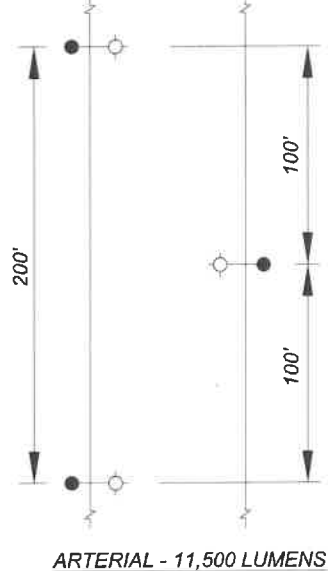
STANDARD PLAN
MVLT-400B-2
 SHEET 2 OF 3



LED (LIGHT EMITTING DIODE) SHALL BE GENERAL ELECTRIC 120/240 V, EVOLVE LED MEDIUM COBRA HEAD WITH AN EVOLVE LIGHT ENGINE CONSISTING OF A NESTED CONCENTRIC AND DIRECTIONAL REFLECTORS, AN IP 65 RATED OPTICAL ENCLOSURE, AND AN INJECTION MOLDED HID ACRYLIC LENS.
 COLOR TEMPERATURE: 4000 K
 LUMENS: 11,500
 WATTS: 98 W
ERLH 0 11 B3 40 A GRAY

POLE NOTES

- 1.) THE POLE TYPE SHALL BE MARBELITE, AMERON SERIES 1C1 OR APPROVED EQUIVALENT.
- 2.) IT SHALL BE OCTAGONAL IN SHAPE, SYMMETRICALLY TAPERED, MADE OF PRECAST/ PRESTRESSED CONCRETE, AND NATURAL GRAY IN COLOR WITH BLACK AND WHITE AGGREGATE WITH ANTI-GRAFFITI SURFACE.
- 3.) IT SHALL BE BASE MOUNTED, DIRECT BURIAL IS NOT ALLOWED.
- 4.) SHALL BE PLUMB, MAXIMUM VARIANCE 0.08"/FT.
- 5.) LOCATION (TO POLE CENTER) SHALL BE 2'-0" FROM FACE OF CURB, 5' FROM BCR/ECR, 9' FROM FIRE HYDRANT CENTER, 5' FROM DRIVEWAY EDGE, 5' FROM UTILITY TRANSFORMER AND OTHER OBSTRUCTIONS.
- 6.) BOLT CIRCLE DIAMETER, 12 1/2" AMERON.
- 7.) MATERIALS SHALL BE FROM SAME MANUFACTURER ALONG SAME STREET AND IN THE SAME TRACT.
- 8.) CONDUCTORS SHALL BE TWO No 8 THW WIRES WITHIN THE POLE BETWEEN THE SPLICE POINT AND THE FIXTURE.



* PROJECT MAY BE REQUIRED TO PROVIDE STREET LIGHTS / POLES PER CITY STANDARD MVLT-400B AT THE DISCRETION OF THE CITY ENGINEER

NOTES:

- 1.) THE POLE TYPE SHALL BE MARBELITE - AMERON SERIES 1C1 (AMERON DWG No 1206-042) OR APPROVED EQUIVALENT.*
- 2.) LIGHTING SHALL BE SPACED 200' MAX (±20') OR AS APPROVED BY THE CITY ENGINEER) DISTANCE APART ON EACH SIDE OF THE STREET.
- 3.) THE CITY MAY REQUIRE ADDITIONAL LIGHTING IN AREAS WHERE INCREASED ILLUMINATION IS DETERMINED TO BE NEEDED.
- 4.) ALL CONCRETE SHALL BE 560-C-3250.
- 5.) THIS STANDARD SHALL APPLY TO STREET CLASSIFICATIONS OF INDUSTRIAL COLLECTOR AND ABOVE.
- 6.) FOR IN-FILL CONDITIONS, LIGHTS MAY BE LOCATED TO MATCH EXISTING CONDITIONS.

NOT TO SCALE

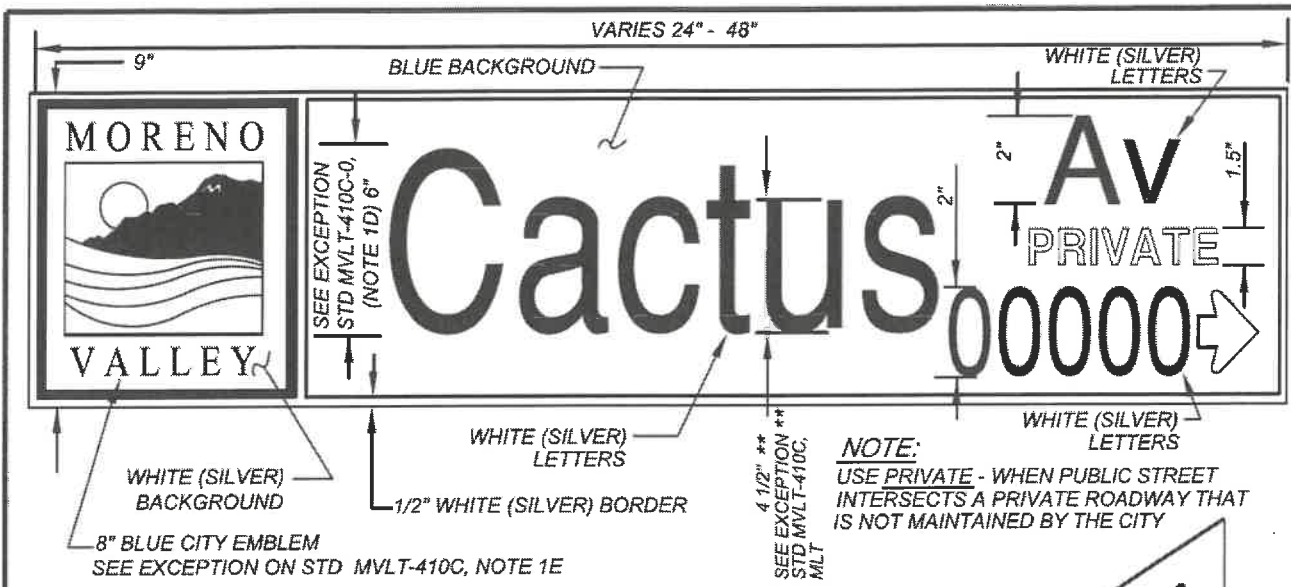


RECOMMENDED:
[Signature] 8/12/20
 DIVISION MANAGER DATE
 APPROVED:
[Signature] 8/13/2020
 PUBLIC WORKS DIRECTOR / DATE
 CITY ENGINEER

CITY OF MORENO VALLEY
 PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION

ARTERIAL HIGHWAY LIGHTING

STANDARD PLAN
MVLT-400C-0
 SHEET 3 OF 3



STANDARD STREET NAME SIGN

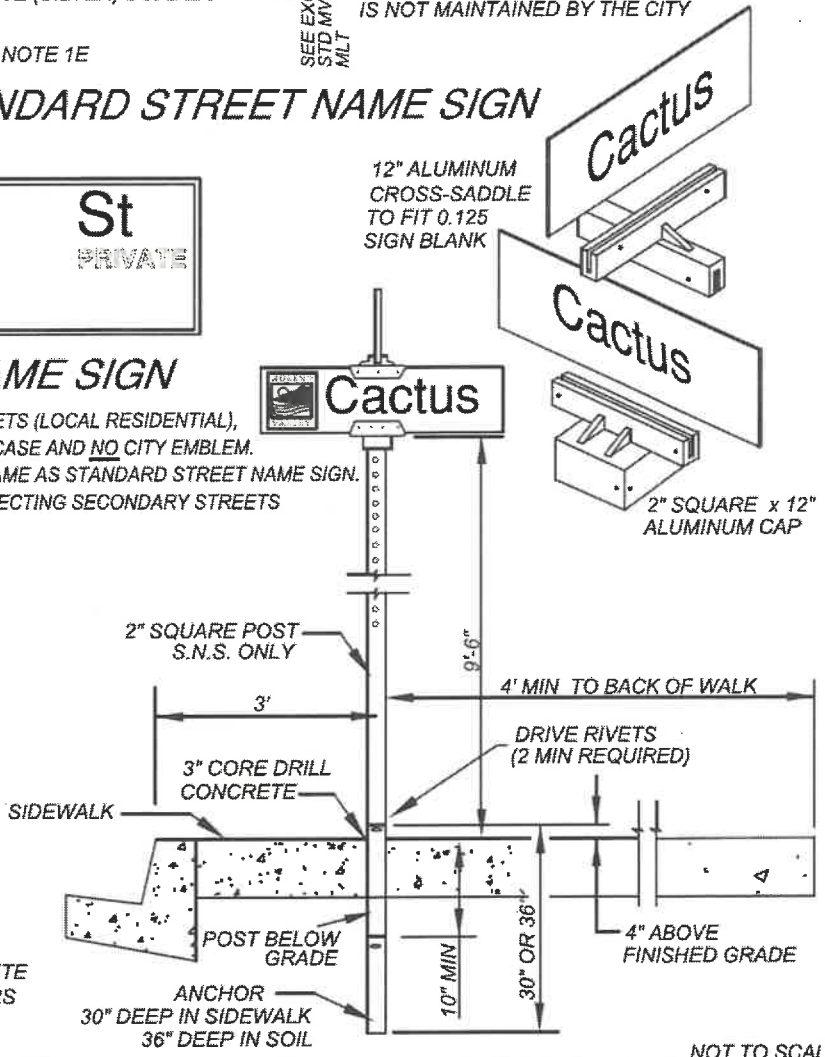
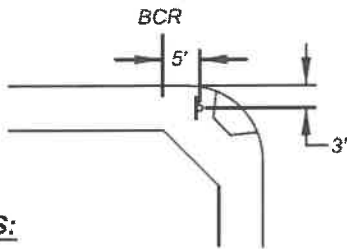


MODIFIED STREET NAME SIGN


NOTE: FOR INTERSECTING SECONDARY STREETS (LOCAL RESIDENTIAL), USE 5" UPPERCASE AND EQUIVALENT LOWER CASE AND NO CITY EMBLEM. ALL OTHER DIMENSIONS AND INSTALLATION SAME AS STANDARD STREET NAME SIGN. BLOCK NUMBERS ARE NOT SHOWN ON INTERSECTING SECONDARY STREETS

NOTES:

- 1.) EACH SIGN POST SHALL ACCOMPANY TWO STREET NAME SIGN BLADES SEE STD MVL-410C FOR COMPLETE STREET NAME SIGN SPECIFICATIONS SEE STD MVL-410D FOR COMPLETE ADDRESS AND ARROW PLACEMENT SEE STD MVL-414A & MVL-414B FOR COMPLETE SIGN POST INSTALLATION BLOCK NUMBERS NOT DISPLAYED ON INTERSECTING SECONDARY STREETS.



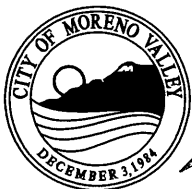
NOT TO SCALE

	RECOMMENDED: EL 7/31/19 DIVISION MANAGER DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION	
	APPROVED: M.L. Welfo 7/30/19 PUBLIC WORKS DIRECTOR / DATE CITY ENGINEER	STREET NAME SIGN	


STANDARD ABBREVIATIONS

ALLEY / ALLY / ALY	AY	LAKE / LAKES	LK
AVENUE / AVE / AVENIDA	AV	LANE	LN
BEACH	BCH	MANOR	MNR
BOULEVARD	BL	MOUNT	MT
BRIDGE	BR	MOUNTAIN	MTN
BROOK	BRK	PARK	PK
CANAL	CNL	PARKWAY	PKWY
CANYON	CYN	PLACE	PL
CENTER	CNTR	PLAZA	PLAZA
CIRCLE	CIR	POINT	PT
COAST	CST	RANCH / RANCHO	RCH
CORNER / CORNERS	COR	RIVER	RV
COURT	CT	ROAD	RD
CREEK	CEK	SPRING / SPRINGS	SPG
DRIVE	DR	SQUARE	SQ
EASTWAY	EWY	STATION	STA
ESTATES	EST	STREET	ST
EXPRESSWAY	EXPWY	SUMMIT	SUM
FIELD / FIELDS	FLD	TERRACE	TER
FORT	FT	TRAIL / TRAILS	TRL
FREEWAY	FWY	VALLEY	VLY
GROVE	GR	VILLAGE	VLG
HEIGHTS	HTS	WALK	WK
HIGHWAY	HWY	WAY	WY
HOME	HM	WESTWAY	WWY
ISLAND / ISLANDS	ISL		
JUNCTION	JCT		

NOT TO SCALE



RECOMMENDED:
EL 12/22/16
 DIVISION MANAGER DATE

APPROVED:
 1/20/17
 PUBLIC WORKS DIRECTOR / DATE
 CITY ENGINEER

CITY OF MORENO VALLEY
 PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION

**STREET NAME
 ABBREVIATIONS**

STANDARD PLAN
MVLT-410B-0
 SHEET 2 OF 5

NOTES:

1.) SIGN MATERIALS, SIZES AND FABRICATION

- A.) SIGN BLANK MUST BE 0.125 THICK ALUMINUM, 5052-H38 ALUMINUM ALLOY.
- B.) SIGN BLANK DIMENSIONS ARE 9" HIGH BY A MINIMUM OF 24" TO MAXIMUM OF 48" LONG AS REQUIRED
- C.) SIGN SHEETING MUST BE HIGH PERFORMANCE WIDE ANGLE PRISMATIC LENS REFLECTIVE WHITE (SILVER) SHEETING (3M SCOTCHLITE DIAMOND GRADE VIP 3990) . THE BACKGROUND MUST BE SCREEN PRINTED BLUE USING REFLECTIVE SHEETING MANUFACTURER MATCH COMPONENT INK (3M 8831).
- D.) SIGN STREET NAME LETTERS MUST BE WHITE (SILVER) FHWA (FEDERAL HIGHWAY ADMINISTRATION) SERIES C-6" UPPER CASE AND 4 1/2" LOWER CASE. ADDRESS BLOCK NUMBERS MUST BE WHITE (SILVER) FHWA SERIES C-2" STREET NAME SUFFIX MUST BE WHITE (SILVER) FHWA 2" UPPER CASE AND 1.5" LOWER CASE.
EXCEPTION: INTERSECTING SECONDARY STREETS USE 5" UPPER CASE AND EQUIVALENT LOWER CASE STREET NAME LETTERS.
- E.) THE LETTER SIZING AND SPACING MUST MEET FHWA SPACING GUIDELINES. MINOR VARIATIONS AS APPROVED BY THE CITY ENGINEER.
- F.) THE CITY EMBLEM MUST BE A BLUE GRAPHIC ON A WHITE (SILVER) BACKGROUND.
EXCEPTION: NO CITY EMBLEM REQUIRED FOR INTERSECTING SECONDARY STREETS.
- G.) STREET NAME MUST APPEAR ON EACH SIDE OF THE SIGN BLANK.
- H.) STREET NAME SIGN MAY BE FABRICATED USING REFLECTIVE SHEETING MANUFACTURED MATCHED COMPONENT ELECTRONIC CUTTABLE FILMS (3M E.C. 1175).
- I.) SLIGHT LAYOUT VARIATIONS ARE PERMITTED AND MUST BE APPROVED BY THE CITY ENGINEER.
- J.) CERTIFICATES OF COMPLIANCE SHALL BE SUPPLIED FOR ALL SIGNS INSTALLED.

2.) POST MATERIALS

- A.) POST MUST BE A TELES PAR 2" SQUARE POST (HOT DIPPED GALVANIZED INSIDE AND OUTSIDE). ALL SIGN POSTS SHALL BE 12 GAUGE STEEL.
- B.) ANCHORS MUST BE TELES PAR 30" OR 36" 2 1/4" SQUARE ANCHORS AND 2 1/2" SLEEVES. ALL ANCHORS AND SLEEVES SHALL BE 12 GAUGE STEEL.
- C.) DRIVE RIVETS MUST BE 3/8" STEEL COATED IN NICKEL, ZINC, OR CHROMIUM TO RESIST RUST (2 RIVETS MINIMUM REQUIRED PER POST / ANCHOR ASSEMBLY).
- D.) ALUMINUM CAP POST BRACKET MUST BE 2" SQUARE CAP WITH 12" SADDLE TO FIT 0.125 SIGN BLANK PER DETAIL MVL-410A-0
- E.) ALUMINUM CROSS SADDLE BRACKET MUST BE 12" SIGN HARDWARE HOLDING BRACKETS. MUST BE MANUFACTURED TO FIT 0.125 SIGN BLADE.

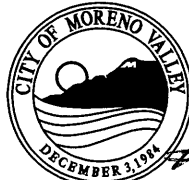

3.) STREET NAME SIGN PLACEMENT

- A.) PRIMARY STREET INTERSECTING SECONDARY STREET LOCATE ON PRIMARY STREET - SEE STD MVL-410D-0
- B.) PRIMARY STREET INTERSECTING PRIMARY STREET LOCATE ON NORTHEAST CORNER AND SOUTHWEST CORNER.
- C.) SECONDARY STREET INTERSECTING SECONDARY STREET LOCATE ON NORTHEAST CORNER OR AS APPROVED.

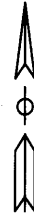
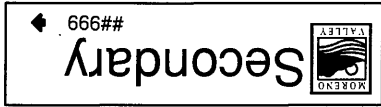
GENERAL NOTES: USE METRIC EQUIVALENTS AS REQUIRED.

COMPLETE TECHNICAL PROVISIONS ARE ON FILE WITH THE TRANSPORTATION ENGINEERING DIVISION.

NOT TO SCALE

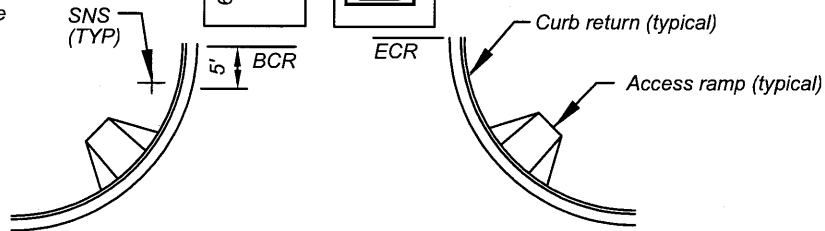
	RECOMMENDED: EL DIVISION MANAGER	12/22/16 DATE	<h2 style="margin: 0;">CITY OF MORENO VALLEY</h2> <p style="margin: 0;">PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION</p>
	APPROVED:  PUBLIC WORKS DIRECTOR / CITY ENGINEER	1/20/17 DATE	<h3 style="margin: 0;">STREET NAME SIGN SPECIFICATIONS</h3>
			SHEET 1 OF 1

Locate secondary street name sign on the bottom



NORTH or EAST
NOT TO SCALE

Street name sign (SNS) post to be a minimum of 36" from face of curb and 5' out from curb return (SNS ONLY)



Secondary

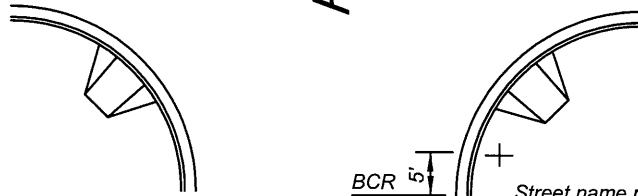
Primary

Correct corner location per street classification
See Standard 400

Use equivalent metric
Exceptions as approved by City Engineer

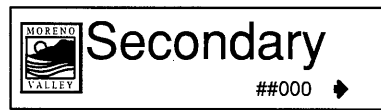
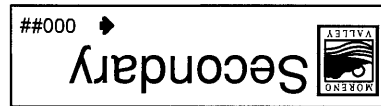
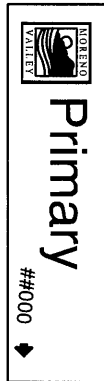
Note: Street name signs for intersecting secondary streets do not show address block numbers

Street name signs for intersecting primary and secondary streets, and above, do show address block numbers



BCR 5'

Street name post to be a minimum of 36" from face of curb and 5' out from curb return (SNS ONLY)



Locate secondary street name sign on the bottom

NOTES:

1.) ADDRESS BLOCK NUMBER POINTS IN THE LEADING DIRECTION - INCREASING ADDRESS NUMBERS FOR SOUTH AND EAST (##000➔) AND DECREASING ADDRESS NUMBERS FOR WEST AND NORTH (➔##999).

2.) SEE STD MVL-410E-0 FOR CORRECT CORNER LOCATION BASED ON STREET CLASSIFICATION.

NOT TO SCALE



RECOMMENDED:
EL 12/22/16
DIVISION MANAGER DATE

APPROVED:
[Signature] 1/20/17
PUBLIC WORKS DIRECTOR / DATE
CITY ENGINEER

CITY OF MORENO VALLEY

PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION

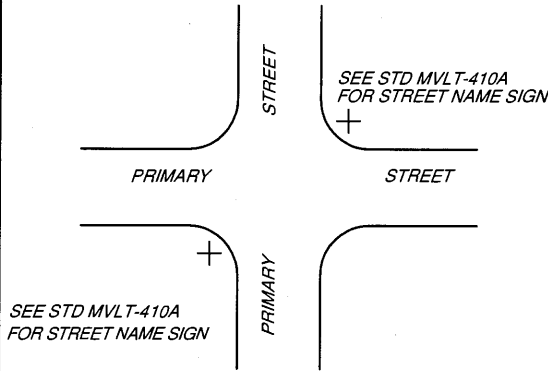
STREET NAME SIGN PLACEMENT

STANDARD PLAN
MVLT-410D-0

SHEET 4 OF 5

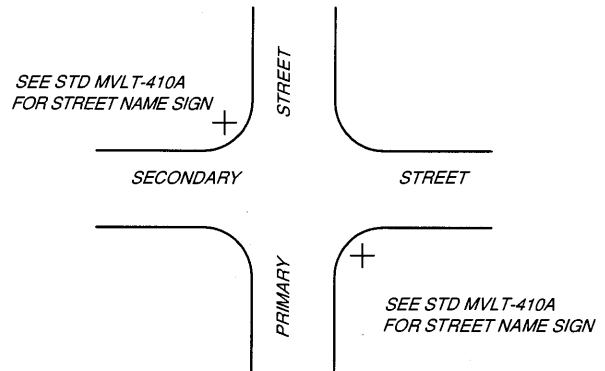
PRIMARY & PRIMARY INTERSECTION

ALWAYS LOCATE STREET NAME SIGN ON APPROACHING NEARSIDE OF NORTHEAST CORNER AND SOUTHWEST CORNER. EXCEPTIONS AS APPROVED BY CITY ENGINEER



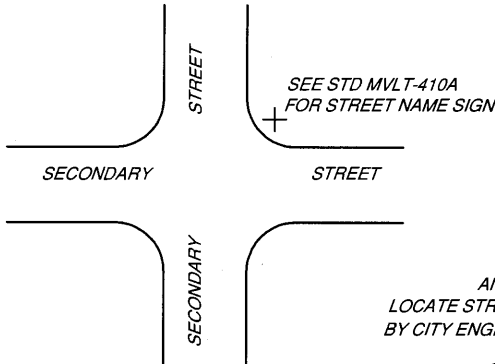
PRIMARY & SECONDARY INTERSECTION

ALWAYS LOCATE STREET NAME SIGN ON APPROACHING NEARSIDE OF PRIMARY STREET-REGARDLESS OF STREET DIRECTION EXCEPTIONS AS APPROVED BY CITY ENGINEER



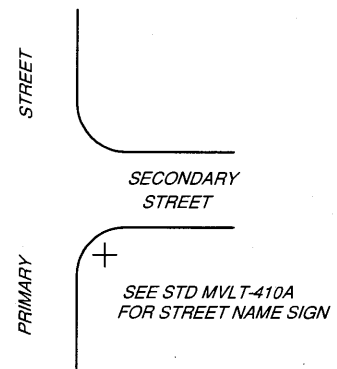
SECONDARY & SECONDARY INTERSECTION

ALWAYS LOCATE STREET NAME SIGN ON APPROACHING NEARSIDE OF NORTHEAST CORNER. EXCEPTIONS AS APPROVED BY CITY ENGINEER

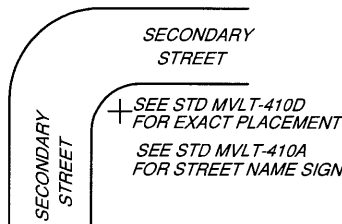


"T" INTERSECTIONS

ALWAYS LOCATE STREET NAME SIGN ON APPROACHING NEARSIDE OF THROUGH STREET. EXCEPTIONS AS APPROVED BY CITY ENGINEER



ANGLED INTERSECTION
LOCATE STREET NAME SIGN AS APPROVED BY CITY ENGINEER

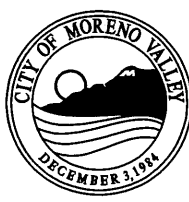



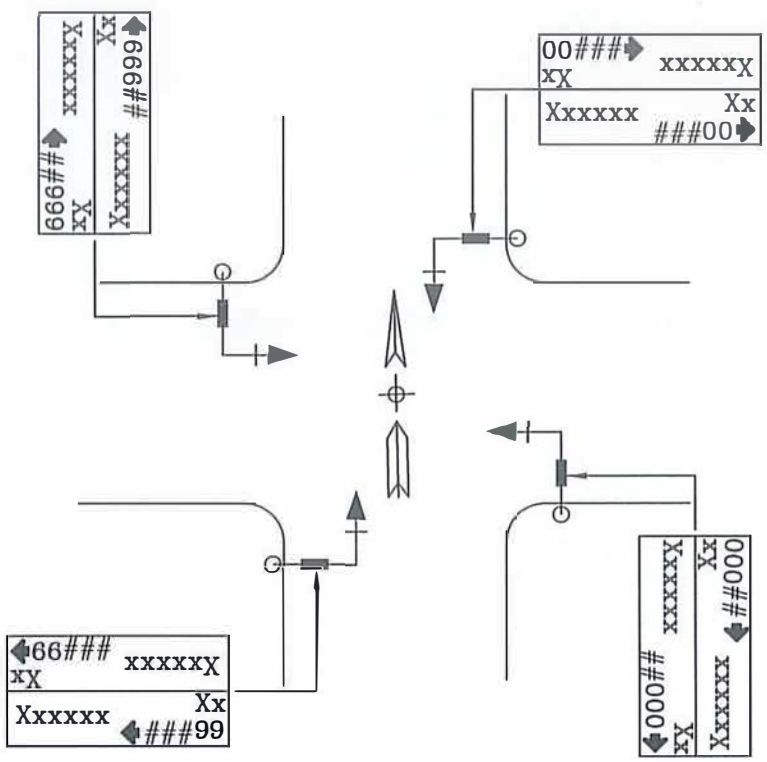
THE TERMS "PRIMARY" AND "SECONDARY" STREETS ARE INTENDED TO DENOTE WHICH STREET IS MORE IMPORTANT: E.G.: (THE WIDER STREET IS THE PRIMARY STREET)

<u>PRIMARY</u>		<u>SECONDARY</u>
ARTERIAL	VS.	COLLECTOR/RESIDENTIAL
COLLECTOR	VS.	LOCAL
LOCAL	VS.	CUL-DE-SAC

AT THE INTERSECTION OF 2 LOCAL STREETS, THE STREET CONSIDERED TO BE THE THROUGH STREET WILL BE BASED ON EXAMINATION OF NEIGHBORHOOD STREET PATTERNS BY THE FIELD ENGINEER.

NOT TO SCALE

	RECOMMENDED: EL 12/22/16 DIVISION MANAGER DATE	<h2 style="margin: 0;">CITY OF MORENO VALLEY</h2> <p style="margin: 0;">PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION</p>	
	APPROVED:  1/20/17 PUBLIC WORKS DIRECTOR / DATE CITY ENGINEER	<h3 style="margin: 0;">STREET NAME SIGN LOCATION</h3>	STANDARD PLAN <h3 style="margin: 0;">MVL-410E-0</h3>
	SHEET 5 OF 5		



NEW PANEL:

BACKGROUND:
 BLUE BACKGROUND WITH WHITE (SILVER) LEGEND AND NUMBERS.

LETTER STYLE:
 FHWA SERIES C

LETTER SIZE:
 STREET NAME.....8" UPPER CASE AND 6" LOWER CASE
 BLOCK NUMBERS.....4"
 STREET NAME SUFFIX..4" UPPER CASE AND 3" LOWER CASE

NOTE:

- 1.) ALL SPECIFICATIONS SHALL BE PER CALTRANS STANDARD PLAN ES-70 TYPE "A" SIGN EXCEPT AS NOTED ABOVE.
- 2.) SEE STANDARDS MVLT-411B-0, MVLT-411C-0 AND MVLT-411D-0 FOR INTERNALLY ILLUMINATED STREET SIGN SPECIFICATIONS.

NOT TO SCALE

	RECOMMENDED: <div style="display: flex; justify-content: space-between; align-items: center;"> EL 1/22/14 </div> DIVISION MANAGER / DATE	<h2 style="margin: 0;">CITY OF MORENO VALLEY</h2> <p style="margin: 0;">PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION</p>
	APPROVED: <div style="display: flex; justify-content: space-between; align-items: center;"> [Signature] 1/29/14 </div> PUBLIC WORKS DIRECTOR / DATE / CITY ENGINEER	<h3 style="margin: 0;">INTERNALLY ILLUMINATED STREET NAME SIGN</h3>
SHEET 1 OF 5		

INTERNALLY ILLUMINATED STREET NAME SIGN

THE SIGN PANEL, SIZED AS REQUIRED, MUST BE A MINIMUM 0.060 INCH THICK ULTRAVIOLET PROTECTED CLEAR POLYCARBONATE (LEXAN) WITH TRANSLUCENT HIGH PERFORMANCE WIDE ANGLE PRISMATIC LENS REFLECTIVE SHEETING (3M TRANSLUCENT DIAMOND GRADE VIP 3990T OR APPROVED EQUIVALENT).

THE CLEAR LEXAN SIGN PANEL MUST BE COVERED ON ONE SIDE WITH REFLECTIVE SHEETING AND MUST BE SCREEN PRINTED BLUE ON THE SHEETING SIDE USING SHEETING MANUFACTURERS MATCH COMPONENT INK (3M 883i) SO THAT THE LEGENDS ARE WHITE WITH A BLUE BACKGROUND. THE BLUE MUST MATCH THE STANDARD CALTRANS BLUE HIGHWAY GUIDE SIGNS.

THE FINISHED SIGN MUST BE IN CONFORMANCE WITH CITY STD MVLT-411 AND HAVE A BLUE BACKGROUND WITH SPECIFIED STREET NAME IN WHITE (SILVER) LEGENDS (LETTERS) AND SPECIFIED NUMBERS IN THE FOLLOWING SIZES:

STREET NAME LETTERS ARE WHITE 8" HIGH UPPERCASE AND WHITE 6" HIGH LOWERCASE.

ADDRESS NUMBERS MUST BE WHITE 4" HIGH.

STREET SUFFIX MUST BE WHITE 4" HIGH UPPERCASE AND WHITE 3" HIGH LOWERCASE.

A 1/2" WHITE BORDER MUST BE VISIBLE WHEN THE SIGN PANEL IS PLACED INSIDE THE FRAME.

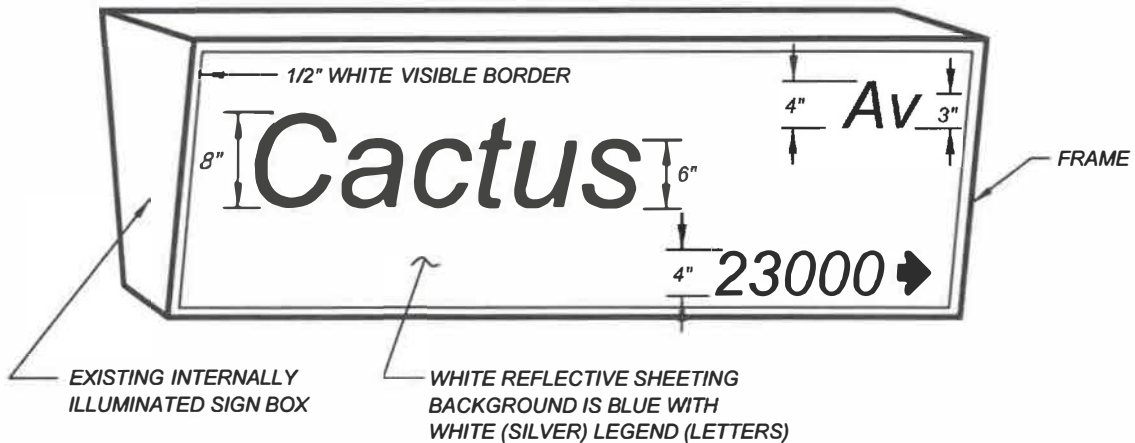
USE METRIC EQUIVALENTS AS NECESSARY. LOWERCASE LETTERS MAY BE IN PROPORTION TO UPPERCASE LETTERS.

ALL LETTERS AND NUMBERS MUST BE FHWA (FEDERAL HIGHWAY ADMINISTRATION) SERIES C AND MEET CASE REQUIREMENTS AND THE LETTER SPACING MUST MEET FHWA SPACING GUIDELINE. THE ADDRESS BLOCK NUMBER ARROW MUST BE THE STANDARD HIGHWAY TYPE AND POINT IN THE LEADING DIRECTION - INCREASING ADDRESS NUMBERS FOR SOUTH AND EAST (##000➡) AND DECREASING ADDRESS NUMBERS FOR WEST AND NORTH (◆##999).

THE FINISHED SIGN PANEL MUST INCLUDE AND BE INSERTED IN A FRAME AND TOGETHER FIT INTO AN EXISTING TYPE A INTERNALLY ILLUMINATED STREET SIGN NAME SIGN. SEE CALTRANS STANDARD PLAN ES-70.

ALL SPECIFICATIONS MUST MEET CALTRANS STANDARD PLAN ES-70 TYPE A 18" x 72" SIGN EXCEPT AS NOTED. IT IS THE SIGN FABRICATOR'S RESPONSIBILITY TO VERIFY THE DIMENSIONS OR SIZE OF THE EXISTING SIGN PANELS AND SIGN PANEL FRAME BEING REPLACED. SLIGHT VARIATIONS ARE ALLOWED AND MUST BE APPROVED BY THE CITY ENGINEER.

THE LIGHT SOURCE SHALL BE LIGHT EMITTING DIODE (LED) TECHNOLOGY, ILLUMECON LIGHTING EDGE LIT SYSTEM OR AS APPROVED BY THE CITY ENGINEER. THE POWER SUPPLY SHALL INCLUDE A CLASS 2 LED DRIVER WITH A POWER FACTOR OF AT LEAST 99 PERCENT AND TOTAL HARMONIC DISTORTION OF LESS THAN 10 PERCENT, MOUNTED EXTERNALLY FROM THE LED LAMPS, CAPABLE OF BEING MOUNTED TO AN EXISTING BALLAST TRAY. THE LED LAMPS SHALL BE MOUNTED TO A ROTATING DUAL LAMP TUBE HOUSING CONSTRUCTED OF ALUMINUM WITH RECESSED LEDS, SIZE NOT TO EXCEED 5/8" DIAMETER PER LAMP. LAMPS SHALL MOUNT IN ADAPTERS MANUFACTURED TO ACCOMMODATE SLIM LINE, HO, AND BI PIN EXISTING SOCKETS AS REQUIRED.



NOT TO SCALE



RECOMMENDED:
Wei Sun 2/1/2022
 DIVISION MANAGER DATE
 APPROVED:
[Signature] 2/1/22
 PUBLIC WORKS DIRECTOR / DATE
 CITY ENGINEER

CITY OF MORENO VALLEY
 PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION

**INTERNALLY ILLUMINATED
 STREET NAME SIGN
 SPECIFICATIONS**

STANDARD PLAN
MVLT-411B-1
 SHEET 2 OF 5

RETROFIT INTERNALLY ILLUMINATED STREET NAME SIGN

THE SIGN PANEL, SIDE AS REQUIRED, MUST BE A MINIMUM 0.060 INCH THICK ULTRAVIOLET PROTECTED CLEAR POLYCARBONATE (LEXAN) WITH TRANSLUCENT HIGH PERFORMANCE WIDE ANGLE PRISMATIC LENS REFLECTIVE SHEETING (3M TRANSLUCENT DIAMOND GRADE VIP 3990T OR APPROVED EQUIVALENT).

THE CLEAR LEXAN SIGN PANEL MUST BE COVERED ON ONE SIDE WITH REFLECTIVE SHEETING AND MUST BE SCREEN PRINTED BLUE ON THE SHEETING SIDE USING SHEETING MANUFACTURERS MATCH COMPONENT INK (3M 883j) SO THAT THE LEGENDS ARE WHITE WITH A BLUE BACKGROUND. THE BLUE MUST MATCH THE STANDARD CALTRANS BLUE HIGHWAY GUIDE SIGNS.

THE FINISHED SIGN MUST BE IN CONFORMANCE WITH CITY STD MVLT-411 AND HAVE A BLUE BACKGROUND WITH SPECIFIED STREET NAME IN WHITE (SILVER) LEGENDS (LETTERS) AND SPECIFIED NUMBERS IN THE FOLLOWING SIZES:

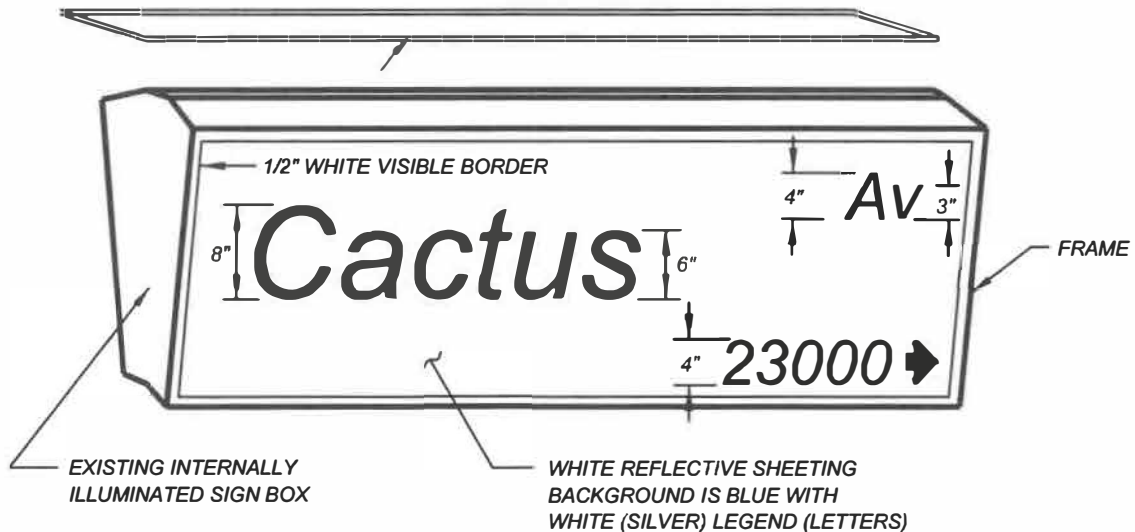
STREET NAME LETTERS ARE WHITE 8" HIGH UPPERCASE AND WHITE 6" HIGH LOWERCASE.
 ADDRESS NUMBERS MUST BE WHITE 4" HIGH.
 STREET SUFFIX MUST BE WHITE 4" HIGH UPPERCASE AND WHITE 3" HIGH LOWERCASE.
 A 1/2" WHITE BORDER MUST BE VISIBLE WHEN THE SIGN PANEL IS PLACED INSIDE THE FRAME.
 USE METRIC EQUIVALENTS AS NECESSARY. LOWERCASE LETTERS MAY BE IN PROPORTION TO UPPERCASE LETTERS.


ALL LETTERS AND NUMBERS MUST BE FHWA (FEDERAL HIGHWAY ADMINISTRATION) SERIES C AND MEET CASE REQUIREMENTS AND THE LETTER SPACING MUST MEET FHWA SPACING GUIDELINE. THE ADDRESS BLOCK NUMBER ARROW MUST BE THE STANDARD HIGHWAY TYPE AND POINT IN THE LEADING DIRECTION - INCREASING ADDRESS NUMBERS FOR SOUTH AND EAST (##000➔) AND DECREASING ADDRESS NUMBERS FOR WEST AND NORTH (◆##999).

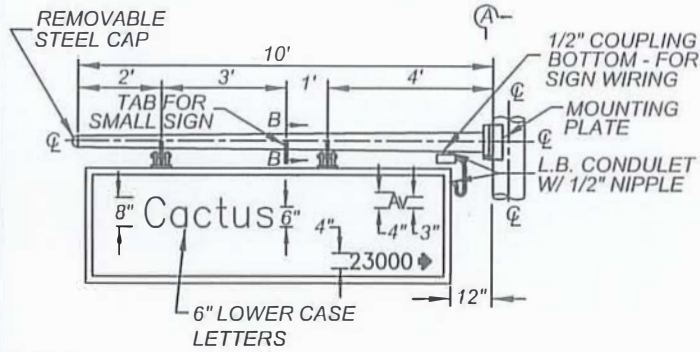
THE FINISHED SIGN PANEL MUST INCLUDE AND BE INSERTED IN A FRAME AND TOGETHER FIT INTO AN EXISTING TYPE A INTERNALLY ILLUMINATED STREET SIGN NAME SIGN. SEE CALTRANS STANDARD PLAN ES-70.

ALL SPECIFICATIONS MUST MEET CALTRANS STANDARD PLAN ES-70 TYPE A 18" x 72" SIGN EXCEPT AS NOTED. IT IS THE SIGN FABRICATOR'S RESPONSIBILITY TO VERIFY THE DIMENSIONS OR SIZE OF THE EXISTING SIGN PANELS AND SIGN PANEL FRAME BEING REPLACED. SLIGHT VARIATIONS ARE ALLOWED AND MUST BE APPROVED BY THE CITY ENGINEER.

THE LIGHT SOURCE SHALL BE LIGHT EMITTING DIODE (LED) TECHNOLOGY, ILLUMECON LIGHTING EDGE LIT SYSTEM OR AS APPROVED BY THE CITY ENGINEER. THE POWER SUPPLY SHALL INCLUDE A CLASS 2 LED DRIVER WITH A POWER FACTOR OF AT LEAST 99 PERCENT AND TOTAL HARMONIC DISTORTION OF LESS THAN 10 PERCENT, MOUNTED EXTERNALLY FROM THE LED LAMPS, CAPABLE OF BEING MOUNTED TO AN EXISTING BALLAST TRAY. THE LED LAMPS SHALL BE MOUNTED TO A ROTATING DUAL LAMP TUBE HOUSING CONSTRUCTED OF ALUMINUM WITH RECESSED LEDS, SIZE NOT TO EXCEED 5/8" DIAMETER PER LAMP. LAMPS SHALL MOUNT IN ADAPTERS MANUFACTURED TO ACCOMMODATE SLIM LINE, HO, AND BI PIN EXISTING SOCKETS AS REQUIRED.



	RECOMMENDED: <i>Wes San</i> 2/1/2022 DIVISION MANAGER / DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION	
	APPROVED: <i>[Signature]</i> 2/4/22 PUBLIC WORKS DIRECTOR / DATE CITY ENGINEER	INTERNALLY - RETROFIT ILLUMINATED STREET NAME SIGN SPECIFICATIONS	



NOTES FOR MOUNTING ASSEMBLY

- ① LOWER MOUNTING ASSEMBLY, WITH GASKET.
- ② UPPER MOUNTING ASSEMBLY (TAB).
- ③ BOLT, 1/2", STAINLESS STEEL, WITH SELF-LOCKING NUT.
- ④ FLAT WASHER, STAINLESS STEEL.
- ⑤ BUSHING, BRONZE.
- ⑥ MOUNTING BOLT, 1/4" MINIMUM, WITH NUT AND LOCKWASHER, OR SELF-LOCKING NUT AND COTTER KEY.

NOTE:

FOR INTERNALLY ILLUMINATED STREET NAME SIGN, MOUNTING HARDWARE, AND ELECTRICAL DETAILS SEE CITY STD MVL-411B-0 STATE STANDARD ES-70 AND THE SPECIAL PROVISIONS.

HORIZONTAL MAST ARM

INSTALL IISNS ON HORIZONTAL MAST ARM 8 FEET ABOVE TOP OF SMA SIMPLEX TO CENTER OF IISNS ARM SIMPLEX. THE MANUFACTURER SHALL PROVIDE CERTIFICATION TO THE CITY THAT THE POLE IS DESIGNED TO ACCOMMODATE THE ADDITIONAL MAST ARM, MOUNTINGS AND INTERNALLY ILLUMINATED STREET NAME SIGN.

NOTES FOR HORIZONTAL MAST ARM

ROUND TAPERED STEEL TUBE 0.1793" WITH MAXIMUM TAPER OF 0.14 INCHES PER FOOT AND 5 1/2" OD MAXIMUM AT POLE, ASTM A-36 & 53. IN LIEU OF THE TORQUE REQUIREMENTS FOR HS BOLTS, CAP SCREWS SHALL BE TIGHTENED BY THE TURN-OF-NUT METHOD, 1/3 TURN FROM SNUG TIGHT CONDITION. NO WASHER WILL BE REQUIRED. CALTRANS STANDARD DRAWING ES-6S, DETAIL 'F', FATIGUE RESISTANT WELD, IS REQUIRED AT IISNS ARM PLATE AND POLE BASE PLATE.

SPECIFICATIONS

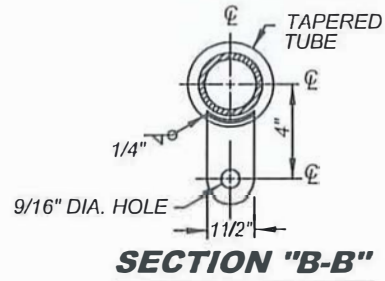
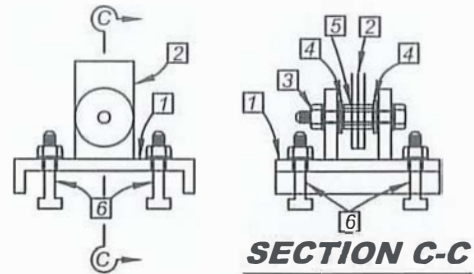
DESIGN: AASHTO SPECIFICATIONS FOR THE DESIGN AND CONSTRUCTION OF STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, DATED 2004 (4TH EDITION).

WIND LOADINGS: 100 MPH AASHTO

UNIT STRESSES

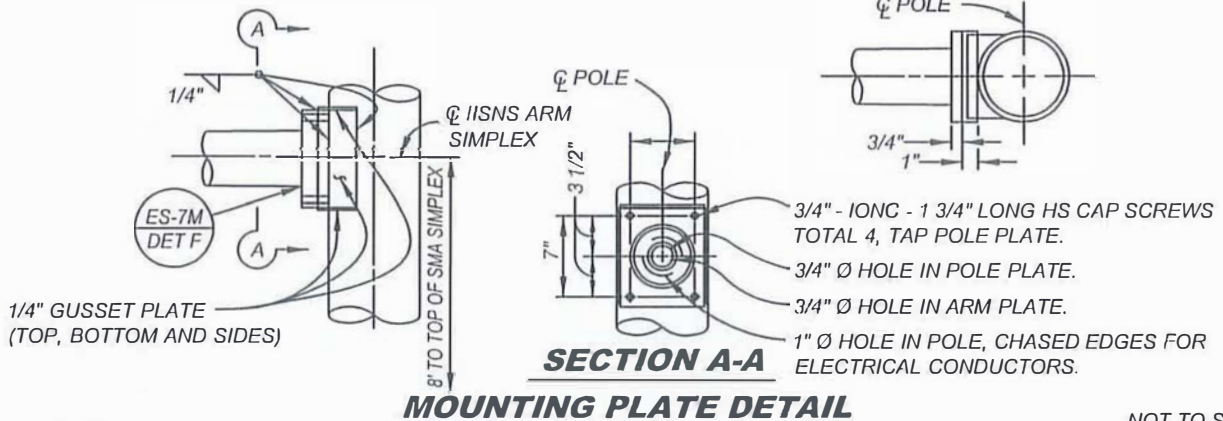
STRUCTURAL STEEL : $f_y = 331 \text{ MPa}$ (TAPERED SHEET STEEL)
 $f_y = 248 \text{ MPa}$ UNLESS NOTED OTHERWISE

CONSTRUCTION: STANDARD SPECIFICATIONS AND THE SPECIAL PROVISIONS.



NOTES:

- 1. MATERIAL: STEEL OF 48,000 PSI MIN. YIELD AFTER FABRICATION.
- 2. HOT DIP GALVANIZED FINISH. PER ASTM A-123.
- 3. ALL WELDS SHALL CONFORM TO AWS D1.1 SPECIFICATIONS.
- 3. BASE PLATES AND FLANGES SHALL BE PER ASTM A-35 & A-36 STEEL



NOT TO SCALE

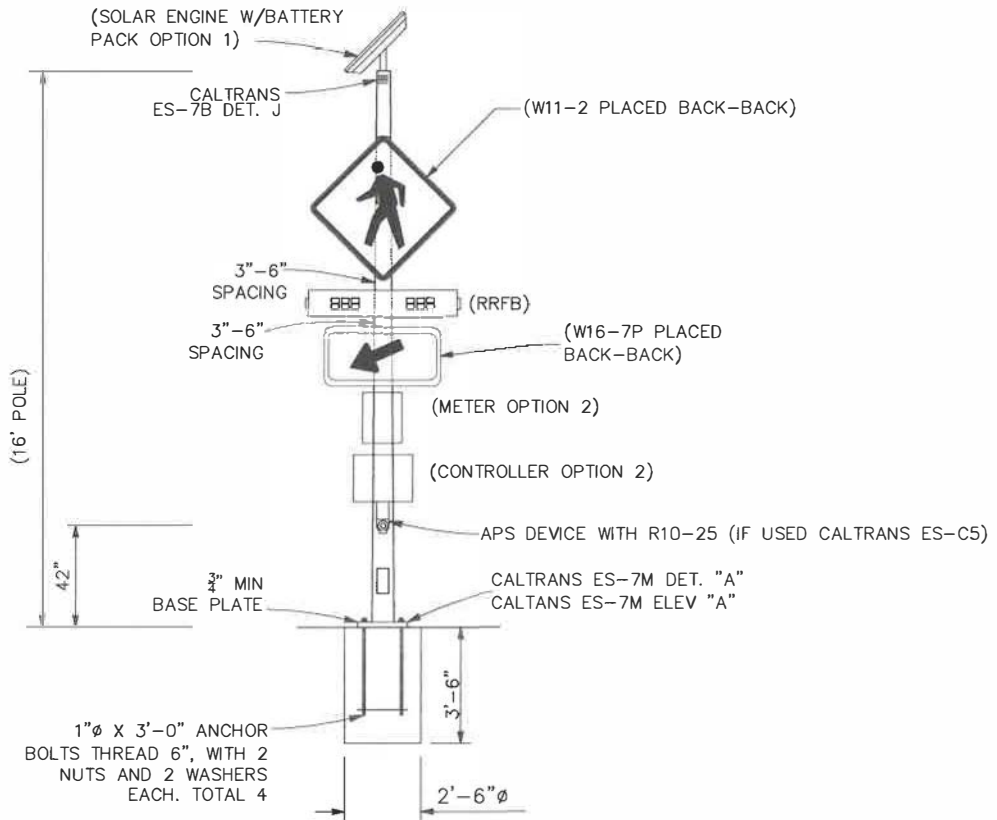


RECOMMENDED:
 EL 1/22/14
 DIVISION MANAGER DATE
 APPROVED: [Signature] 1/29/14
 PUBLIC WORKS DIRECTOR / DATE
 CITY ENGINEER

CITY OF MORENO VALLEY
 PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION

**MOUNTING ASSEMBLY -
 ILLUMINATED STREET NAME
 SIGN SPECIFICATIONS**

STANDARD PLAN
MVL-411D-0
 SHEET 4 OF 5




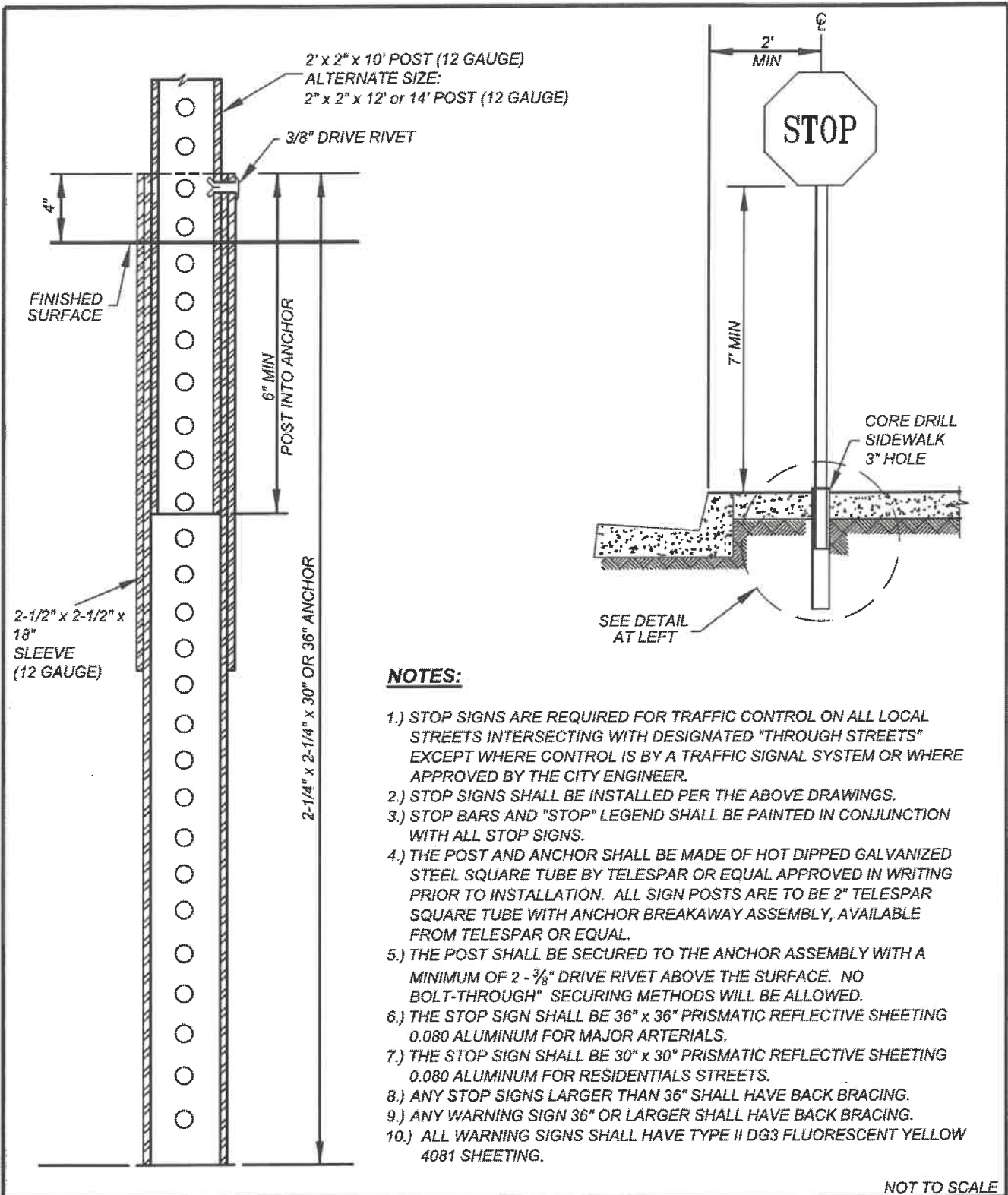
SAMPLE OF A RECTANGULAR RAPID FLASHING BEACON SETUP
ON TYPE 1-A POLE
EXHIBIT "A"


GENERAL NOTES:

1. INSTALL TYPE 1-A POLE (16' FT) WITH FOUNDATION PER CALTRANS 2010 STANDARD ES-7B AND CITY STANDARDS (SEE EXHIBIT "A").
2. TYPE 1-A POLE CAN BE USED FOR STRUCTURAL SUPPORTS FOR LUMINAIRES FROM CALTRANS ES-7A THROUGH ES-7L WHICH INCLUDE THE FOLLOWING: TRAFFIC SIGNALS - PEDESTRIAN SIGNALS - STREET NAME SIGNS - LUMINAIRES - PUSH BUTTON ASSEMBLIES - ACCESSIBLE PEDESTRIAN SIGNALS - FLASHING BEACONS - RECTANGULAR RAPID FLASHING BEACONS - SPEED FEEDBACK - CERTAIN ASSOCIATED SIGN PANELS - CERTAIN OTHER MISCELLANEOUS ITEMS.
3. INSTALLATION OF DEVICES ATTACHED TO TYPE 1-A POLE SHALL BE COMPLETED IN ACCORDANCE WITH MANUFACTURE SPECIFICATIONS.
4. DIMENSIONS, MATERIALS, AND ATTACHMENTS WHICH MAY VARY BETWEEN MANUFACTURERS WILL REQUIRE CITY ENGINEER APPROVAL.
5. DESIGN PLANS SHOULD BE CONSULTED FOR VARIATIONS AND APPROVED BY CITY ENGINEER.
6. ALL SIGNS AND DEVICES MUST MEET THE CALIFORNIA MANUAL OF TRAFFIC CONTROL DEVICES GUIDELINES.
7. ANY MODIFICATIONS MADE MUST BE APPROVE BY CITY ENGINEER.
8. MINIMUM SIGN CLEARANCE SHALL BE AT 7FT FROM BASE OF POLE.

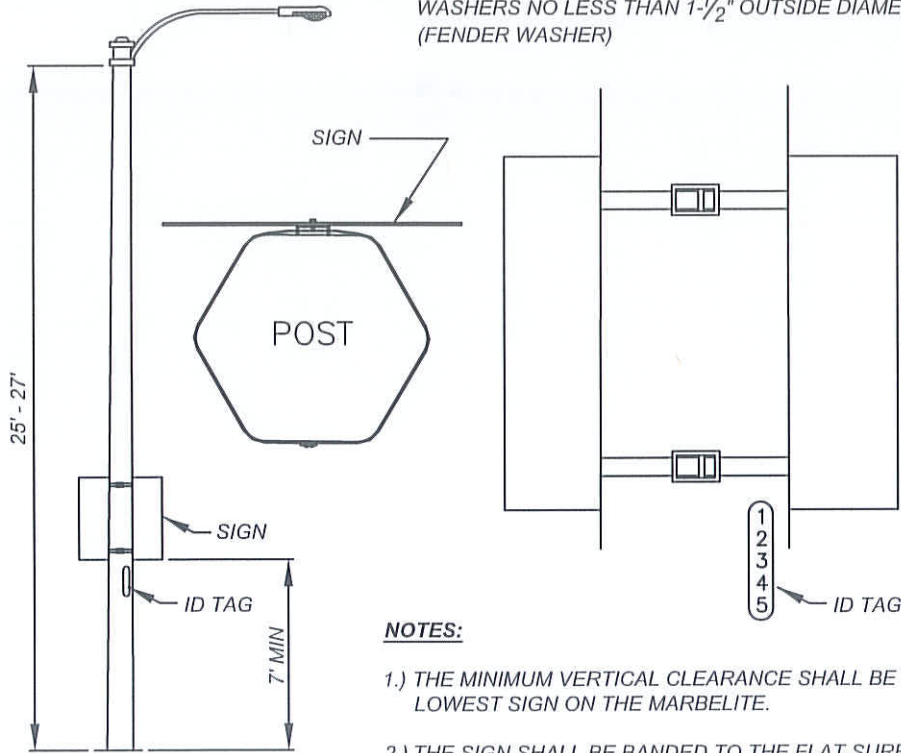
NOT TO SCALE

	RECOMMENDED: <i>W. Sun</i> 7/31/2023 DIVISION MANAGER DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION	
	APPROVED: <i>[Signature]</i> 8/19/23 PUBLIC WORKS DIRECTOR / DATE CITY ENGINEER	STRUCTURAL SUPPORT FOR VARIOUS LUMINAIRES ON TYPE 1-A POLE	STANDARD PLAN MVLT-411E-0
	SHEET 5 OF 5		



	RECOMMENDED: EL DIVISION MANAGER	7/3/19 DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION	STANDARD PLAN MVLT-412-0
	APPROVED: MZ. Ward PUBLIC WORKS DIRECTOR / CITY ENGINEER	7/3/19 DATE		STOP SIGN INSTALLATION

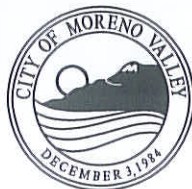
- BAND-IT** - C406 OR EQUAL. 316 STAINLESS STEEL
3/4" WIDTH
.030" THICKNESS
- BRACKET** - BAND-IT, DOO1 OR EQUAL. 1 BOLT
STRAIGHT LEG STAINLESS STEEL.
- BUCKLES** - BAND-IT C456 OR EQUAL. EAR LOCKED
316 STAINLESS STEEL 3/4".
- BOLTS** - 1" x 5/16" COARSE THREAD STAINLESS STEEL.
- WASHERS** - ALL SIGNS SHALL BE INSTALLED WITH 5/16" ZINC
COATED WASHERS LARGER THAN THE HEAD OF THE BOLT.
ANY SIGN 24" OR LARGER SHALL BE INSTALLED WITH
WASHERS NO LESS THAN 1" OUTSIDE DIAMETER
ANY SIGN 30" OR LARGER SHALL BE INSTALLED WITH
WASHERS NO LESS THAN 1-1/2" OUTSIDE DIAMETER
(FENDER WASHER)



NOTES:

- 1.) THE MINIMUM VERTICAL CLEARANCE SHALL BE 7' TO THE BOTTOM OF THE LOWEST SIGN ON THE MARBELITE.
- 2.) THE SIGN SHALL BE BANDED TO THE FLAT SURFACE OF THE MARBELITE THAT BEST ACCOMMODATES A 90° ANGLE TO ON COMING TRAFFIC UNLESS OTHERWISE SPECIFIED.
- 3.) THE BAND SHALL BE TIGHTENED TO A POINT AT WHICH IT DOES NOT BREAK, YET PREVENTS MOVEMENT BY HAND OF THE SIGN, BAND, OR BRACKET.
- 4.) ALL SIGNS BEING BANDED TO MARBELITE SHALL HAVE NO LESS THAN 2 BANDS (UPPER AND LOWER). ANY SIGN LARGER THAN 36" SHALL HAVE NO LESS THAN 3 BANDS (UPPER, LOWER, AND MIDDLE).
- 5.) UNDER NO CIRCUMSTANCES SHALL THE BANDS COVER THE IDENTIFICATION TAG ON THE MARBELITE.
- 6.) INSTALLATION OF 2 OR MORE SIGNS ON A SINGLE POST SHALL NOT OVERLAP. SIGNS SHOULD HAVE A 1" GAP BETWEEN EACH SIGN.

NOT TO SCALE



RECOMMENDED:
 EL 1/22/14
 DIVISION MANAGER DATE
 APPROVED:
 [Signature] 1/29/14
 PUBLIC WORKS DIRECTOR / DATE
 CITY ENGINEER

CITY OF MORENO VALLEY
 PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION

**MARBELITE
 SIGN INSTALLATION**

STANDARD PLAN
MVLT-413-0

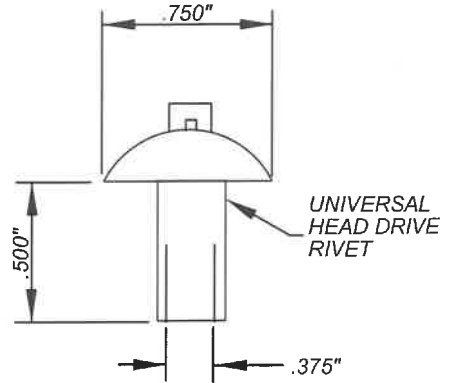
SHEET 2 OF 2

RIVET LOCATIONS
(SEE NOTE 6 ON
STD No MVL-414B-0)

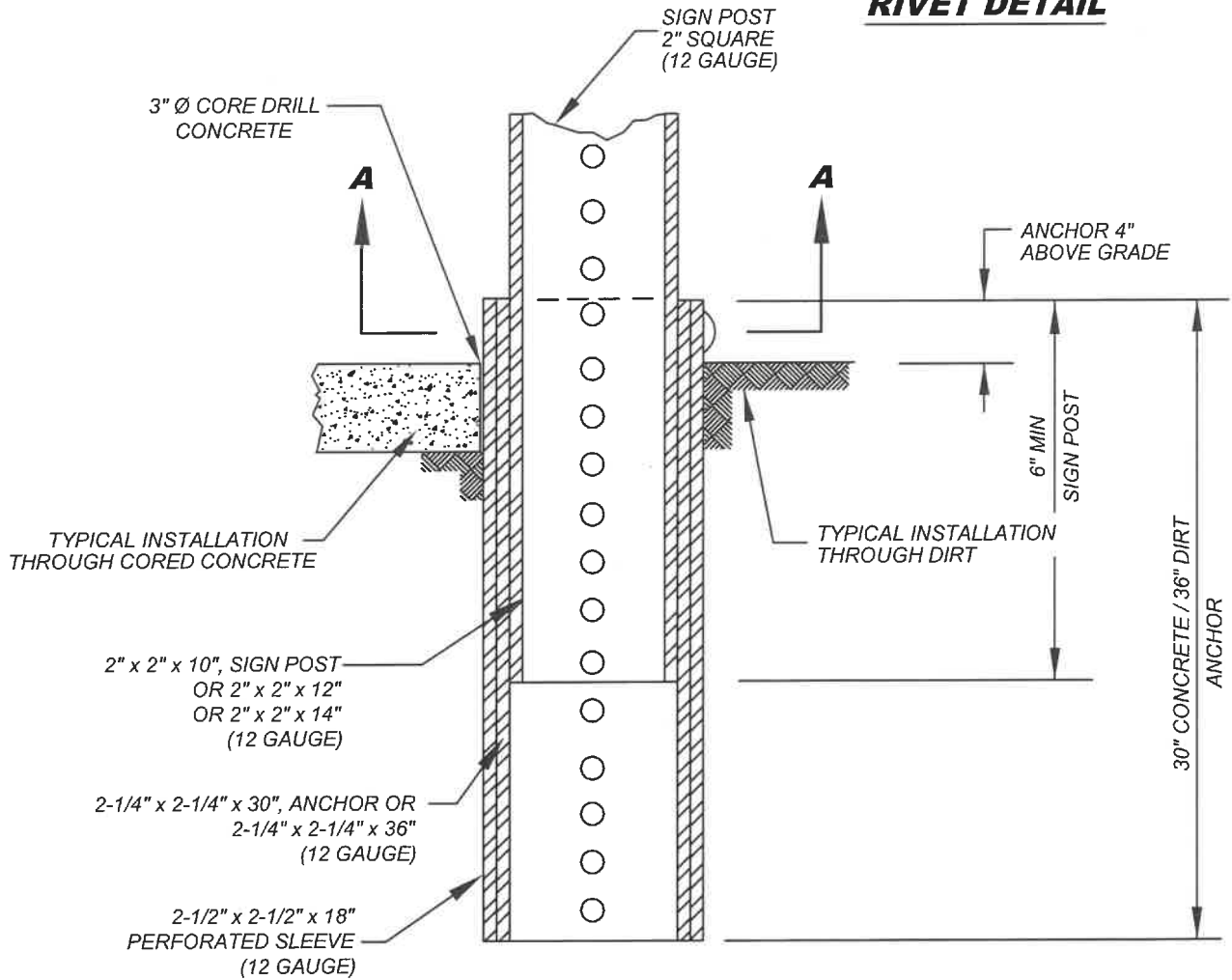
DIRECTION OF
TRAFFIC FLOW

STREET
SIDE
OF
POST

SECTION "A-A"



RIVET DETAIL



TYPICAL SECTION

NOT TO SCALE



RECOMMENDED:

EL

DIVISION MANAGER

5/14/19

DATE

APPROVED:

MJ. Wolfe

6/4/19

PUBLIC WORKS DIRECTOR / DATE
CITY ENGINEER

CITY OF MORENO VALLEY

PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION

SIGN POST INSTALLATION

STANDARD PLAN

MVLT-414A-0

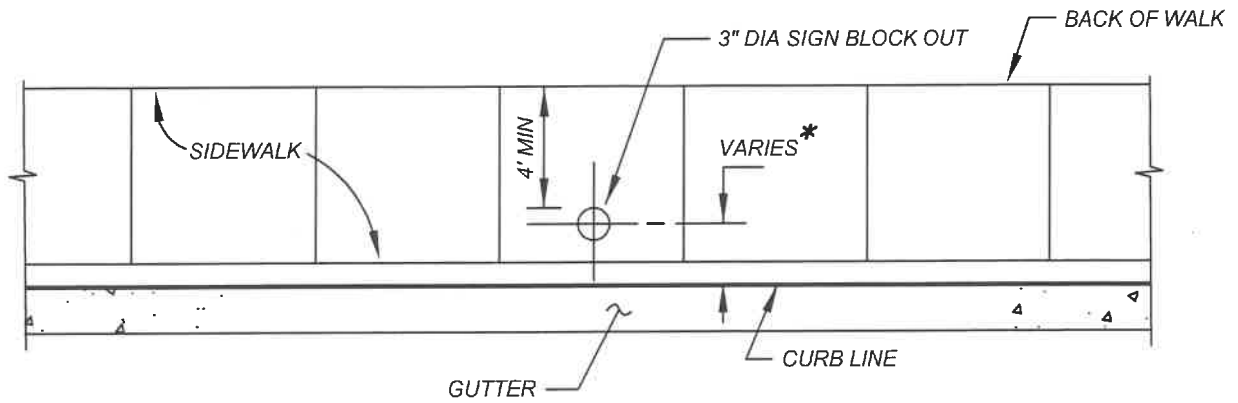
SHEET 1 OF 3

NOTES:

- 1.) SQUARE PERFORATED STEEL TUBE POSTS WITH TWO-PIECE ANCHOR AND SLEEVE, "TELESPAR", SHALL BE USED FOR ALL TRAFFIC CONTROL AND INFORMATIONAL SIGNS WITHIN THE PUBLIC RIGHT-OF-WAY.
- 2.) THE NUMBER OF POSTS REQUIRED FOR SIGN INSTALLATION SHALL BE DETERMINED BY THE AREA OF THE SIGN OR COMBINATION OF SIGNS TO BE INSTALLED. A SINGLE POST SHALL BE USED WHERE BOTH THE LENGTH AND WIDTH ARE FORTY-EIGHT (48") INCHES OR LESS. DOUBLE POSTS SHALL BE USED WHERE EITHER THE LENGTH OR THE WIDTH EXCEEDS FORTY-EIGHT (48") INCHES.
- 3.) THE TWO-PIECE ANCHOR AND SLEEVE ASSEMBLY SHALL CONSIST OF A TWO AND A QUARTER INCHES SQUARE BY THIRTY (30) INCHES (2-1/4" x 30") [THROUGH SIDEWALKS], OR THIRTY-SIX (36) INCHES [THROUGH SOIL] ANCHORED WITH A TWO AND ONE-HALF INCHES SQUARE BY EIGHTEEN (18) INCHES (2-1/2" x 18") SLEEVE. ALL SLEEVES AND ANCHORS SHALL BE TWELVE (12) GAUGE.
- 4.) THE ANCHOR AND SLEEVE ASSEMBLIES SHALL BE DRIVEN SIMULTANEOUSLY UNTIL ONLY FOUR (4") INCHES REMAINS ABOVE GROUND LEVEL.
- 5.) ALL DIRT SHALL BE REMOVED FROM THE INSIDE TOP SIX (6") INCHES MINIMUM OF THE ANCHOR ASSEMBLY TO ALLOW FOR INSTALLATION OF THE SIGN POST.
- 6.) INSTALL THE TWO (2") INCHES SQUARE SIGN POST MINIMUM SIX (6") INCHES INTO THE ANCHOR ASSEMBLY AND SECURE IN PLACE WITH TWO (2) 3/8-INCH DRIVE RIVETS AS SHOWN. THE RIVETS SHALL BE INSTALLED ON THE SIDE FACING TRAFFIC FLOW, AND THE SIDE OF APPROACHING TRAFFIC AS SHOWN IN ORDER TO ACHIEVE THE MAXIMUM BREAK-AWAY EFFECT.
- 7.) INSTALLATION ACCORDING TO THESE REQUIREMENTS IS ESSENTIAL TO MAINTAIN THE BREAK-AWAY CHARACTERISTICS OF THE POST SYSTEM. UNDER NO CIRCUMSTANCES SHALL THE ANCHOR ASSEMBLY BE SECURED IN CONCRETE FOOTINGS.
- 8.) THE BOTTOM OF THE LOWEST SIGN ON THE POST SHALL BE A MINIMUM OF SEVEN (7') FEET ABOVE THE FINISHED SURFACE.
- 9.) SEE CITY STANDARD PLAN NO. MVLT-414C FOR PLACEMENT OF SIGN POST.
- 10.) ALL ANCHOR ASSEMBLIES SHALL BE CORE DRILLED WITH THREE (3") INCHES DIAMETER THROUGH CONCRETE AND ASPHALT.
- 11.) ALL SIGNS ATTACHED TO PERFORATED POSTS SHALL HAVE ZINC COATED OR STAINLESS STEEL WASHERS BEHIND THE RIVET THAT ARE LARGER THAN THE HEAD OF THE RIVET (FENDER WASHERS PREFERRED).
- 12.) ALL REGULATORY, WARNING, AND GUIDE SIGNS INSTALLED SHALL BE GREATER THAN 0.080 INCHES IN THICKNESS WITH SHEETING.
- 13.) ALL SIGNS THIRTY-SIX (36") INCHES OR LARGER SHALL BE INSTALLED WITH BACK BRACES SPECIFICALLY DESIGNED FOR TWO (2") INCHES SQUARE PERFORATED POSTS (2-INCH RISE).
- 14.) ALL SIGNS FIFTY (50") INCHES OR GREATER SHALL BE INSTALLED WITH ONE AND ONE-HALF INCHES BY ONE AND ONE-HALF INCHES (1-1/2" x 1-1/2") ALUMINUM U-CHANNEL BACK BRACES THAT ARE SPECIFICALLY DESIGNED FOR TWO (2") INCHES SQUARE PERFORATED POSTS.

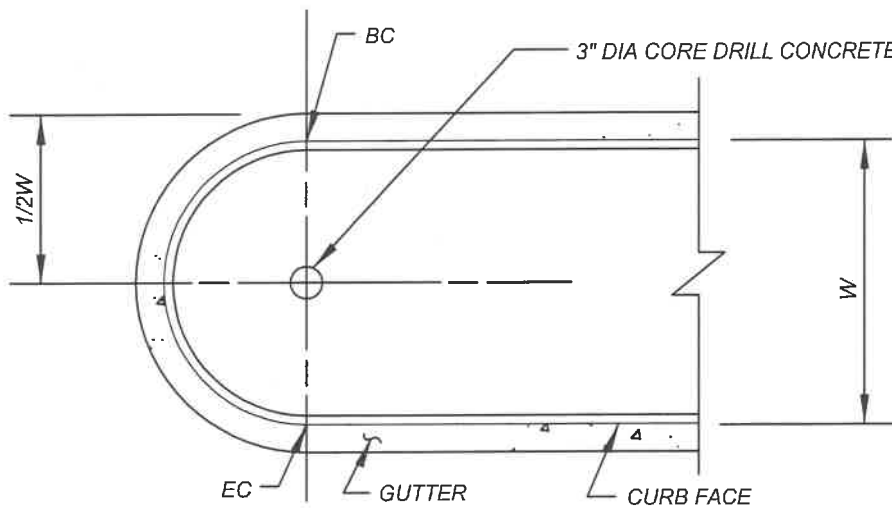
NOT TO SCALE

	RECOMMENDED: <i>Wei Sun</i> 1/31/23 PRINCIPAL ENGINEER DATE	<h2 style="margin: 0;">CITY OF MORENO VALLEY</h2> <p style="margin: 0;">PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION</p>
	APPROVED: <i>William Miller</i> 1/31/23 PUBLIC WORKS DIRECTOR / DATE CITY ENGINEER	<h3 style="margin: 0;">SIGN POST INSTALLATION NOTES</h3>



SIDEWALK LOCATION

*DISTANCE DETERMINED BY WIDTH OF SIGN.



MEDIAN LOCATION

NOTES:

- 1.) SIGN POST 3" CORE DRILL SHALL BE USED FOR ANY SIGN IN CONCRETE.
- 2.) SIGNS LARGER THAN 48 INCHES OR LOCATIONS WHERE SIDEWALKS ARE LESS THAN 5 FEET WIDE, SIGN POST MUST BE INSTALLED BEHIND THE SIDEWALK.
- 3.) SEE STANDARD PLAN NO. MVS1-115D-0 FOR SIDEWALK PLACEMENT AROUND OBSTRUCTIONS.

NOT TO SCALE

	RECOMMENDED: <i>EL</i> DIVISION MANAGER	<i>5/14/19</i> DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION	STANDARD PLAN MVLT-414C-0
	APPROVED: <i>MAL. WOLFE</i> PUBLIC WORKS DIRECTOR/ CITY ENGINEER	<i>6/4/19</i> DATE		SIGN POST BLOCK OUT



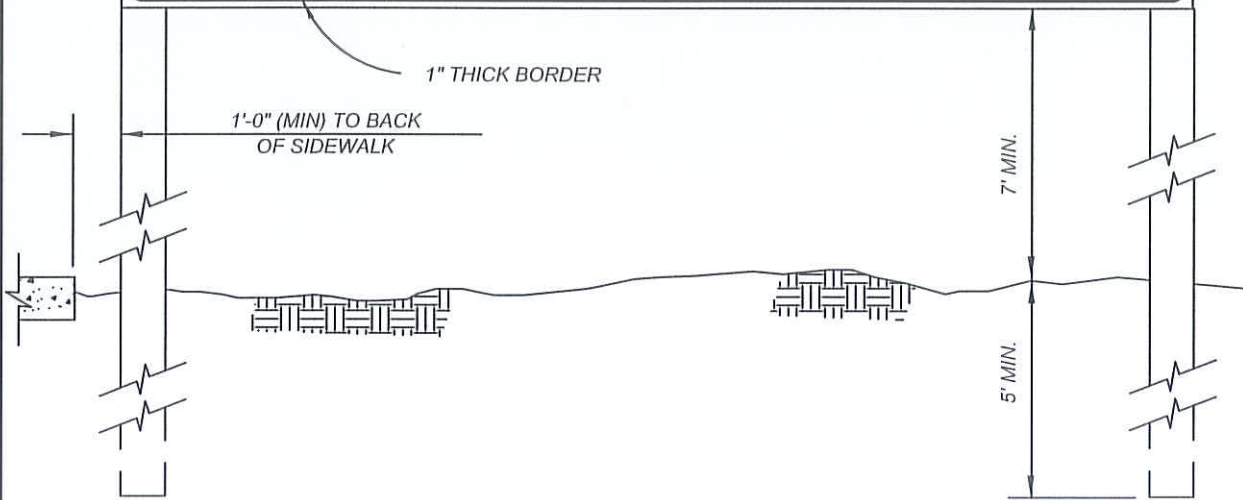
City of Moreno Valley Road Work

Project Description and Limits

Start - Completion Date

City Council:
<Name>, Mayor
<Name>, Mayor Pro Tem
<Name Only>
<Name Only>
<Name Only>

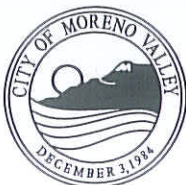
Moreno Valley Public Works
951.413.3130
www.moreno-valley.ca.us



NOTES:

- 1.) SIGNS SHALL BE SECURELY MOUNTED ON (2) 4" x 4" POSTS.
- 2.) SIGNS SHALL BE MADE WITH NEW MATERIAL AND IN ONE PANEL. OUTSIDE DIMENSIONS SHALL BE 4' x 8'.
- 3.) LETTERS AND BORDER SHALL BE BLACK ON WHITE BACKGROUND.
- 4.) ENGINEER TO PROVIDE PROJECT DESCRIPTION, LIMITS, NAMES OF CURRENT CITY COUNCIL MEMBERS AND GRAPHICS.
- 5.) CITY CAN PROVIDE "PROOF" LAYOUT IN DIGITAL FORMAT.
- 6.) CONTRACTOR / DEVELOPER TO PROVIDE FINAL "PROOF" ON 11" x 17" PAPER FROM VENDOR FOR CITY APPROVAL PRIOR TO MANUFACTURING THE SIGN.
- 7.) CONTRACTOR / DEVELOPER TO PROVIDE PHOTOGRAPH OF ACTUAL 4' x 8' SIGN FOR CITY APPROVAL PRIOR TO INSTALLATION.

NOT TO SCALE



RECOMMENDED:

DIVISION MANAGER

DATE

APPROVED:

PUBLIC WORKS DIRECTOR /
CITY ENGINEER

DATE

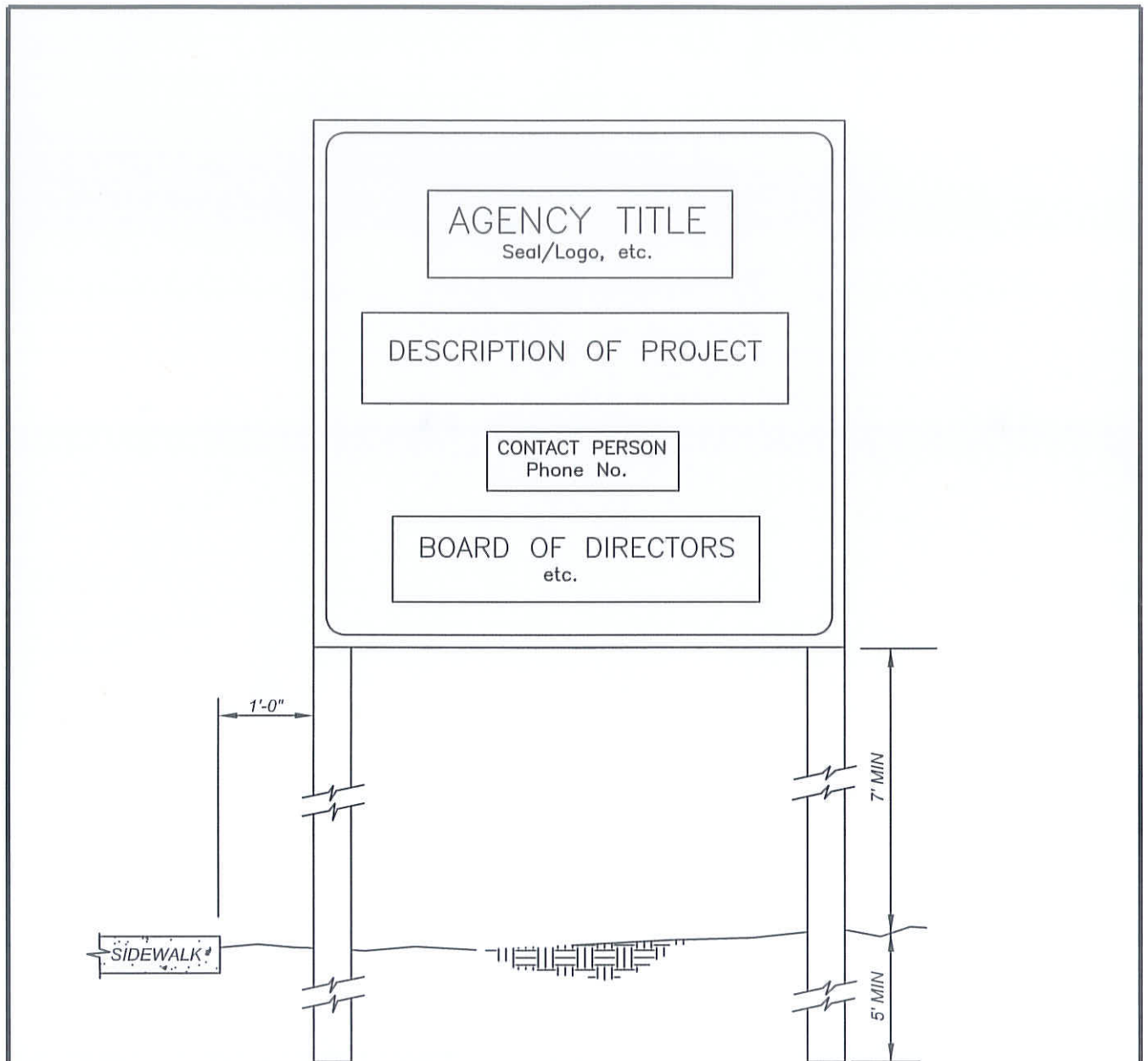
CITY OF MORENO VALLEY
PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION

**PROJECT SIGN
(ROAD WORK)**

STANDARD PLAN

MVLT-415A-0

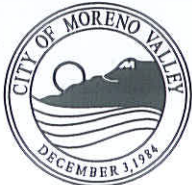


SHEET 1 OF 3

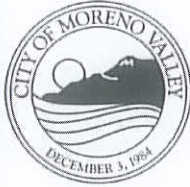


NOTES:

- 1.) SIGNS SHALL BE SECURELY MOUNTED ON (2) 4" x 4" POSTS.
- 2.) OUTSIDE DIMENSIONS SHALL BE 4' x 8'.
- 3.) LETTERS AND BORDER SHALL BE BLACK ON WHITE BACKGROUND.
- 4.) SIGN TO BE INSTALLED PRIOR TO FIRST DAY OF WORK.
- 5.) MINIMUM 2 SIGNS TO BE INSTALLED.

NOT TO SCALE

	RECOMMENDED:  DIVISION MANAGER / 1/21/14 DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION	STANDARD PLAN MVLT-415B-0
	APPROVED:  PUBLIC WORKS DIRECTOR / 1/29/14 CITY ENGINEER	PROJECT SIGN (OTHER AGENCIES)	SHEET 2 OF 3



City of Moreno Valley

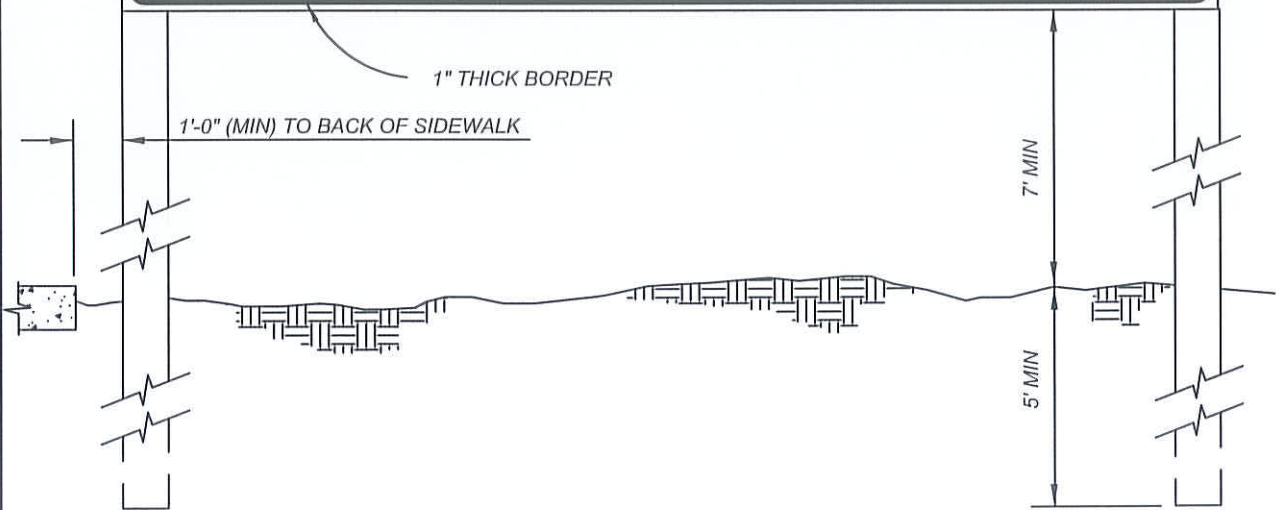
Project Completion

Roadway Improvements

Thank you for your cooperation

City Council:
<Name>, Mayor
<Name>, Mayor Pro Tem
<Name Only>
<Name Only>
<Name Only>

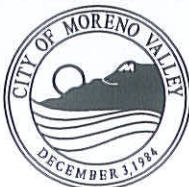
Moreno Valley Public Works
951.413.3130
www.moreno-valley.ca.us



NOTES:

- 1.) SIGNS SHALL BE SECURELY MOUNTED ON (2) 4" x 4" POSTS.
- 2.) SIGNS SHALL BE MADE WITH NEW MATERIAL AND IN ONE PANEL. OUTSIDE DIMENSIONS SHALL BE 4' x 8'.
- 3.) LETTERS AND BORDER SHALL BE BLACK ON WHITE BACKGROUND.
- 4.) ENGINEER TO PROVIDE PROJECT DESCRIPTION, LIMITS, NAMES OF CURRENT CITY COUNCIL MEMBERS AND GRAPHICS.
- 5.) CITY CAN PROVIDE "PROOF" LAYOUT IN DIGITAL FORMAT.
- 6.) CONTRACTOR / DEVELOPER TO PROVIDE FINAL "PROOF" ON 11" x 17" PAPER FROM VENDOR FOR CITY APPROVAL PRIOR TO MANUFACTURING THE SIGN.
- 7.) CONTRACTOR / DEVELOPER TO PROVIDE PHOTOGRAPH OF ACTUAL 4' x 8' SIGN FOR CITY APPROVAL PRIOR TO INSTALLATION.

NOT TO SCALE



RECOMMENDED:

[Signature] / 1/21/14
DIVISION MANAGER / DATE

[Signature] / 1/29/14
APPROVED: PUBLIC WORKS DIRECTOR / DATE
CITY ENGINEER

CITY OF MORENO VALLEY

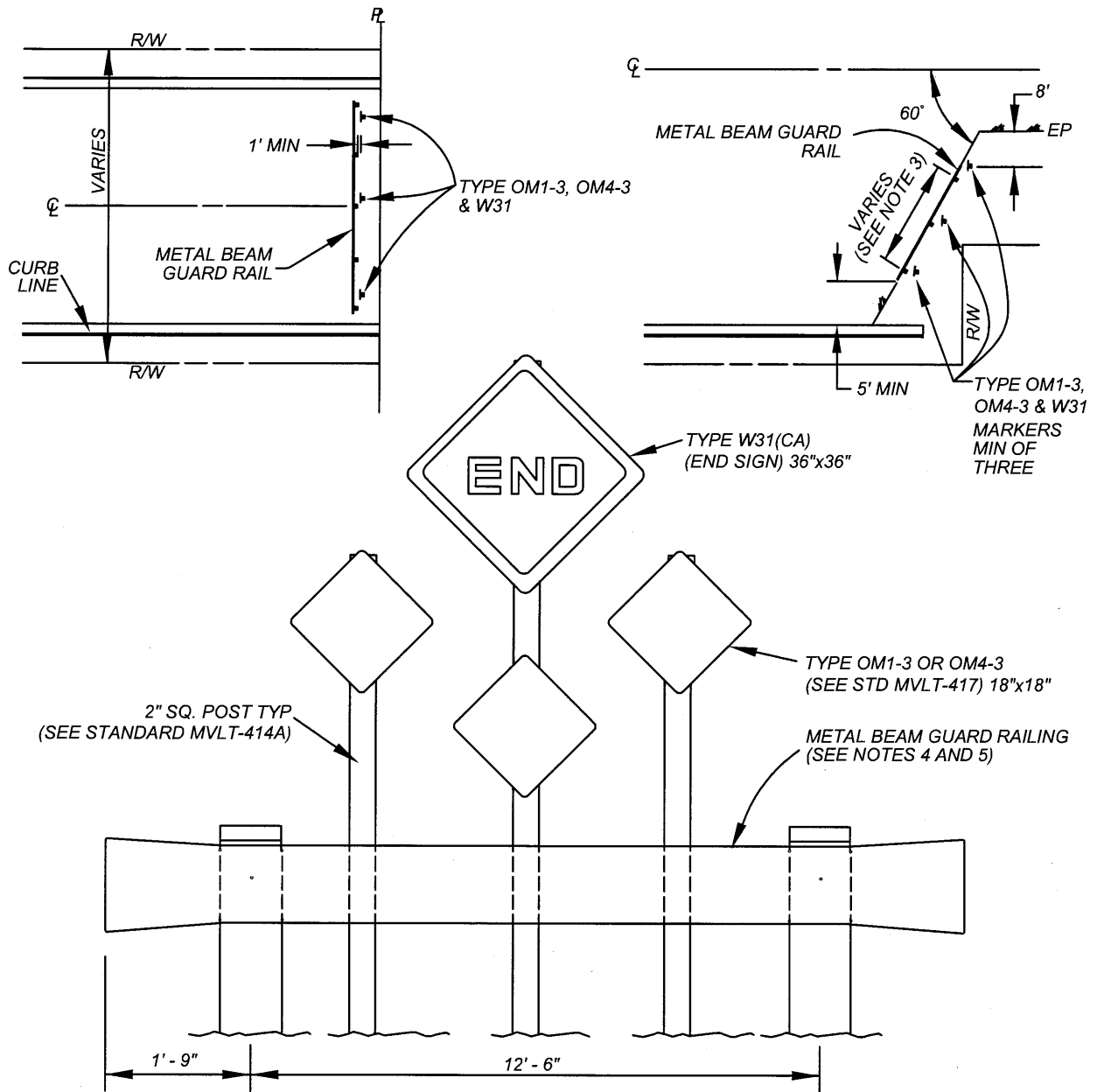
PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION

PROJECT SIGN (PROJECT COMPLETION)

STANDARD PLAN

MVLT-415C-0

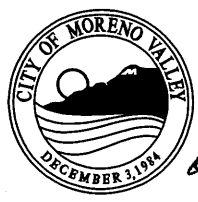
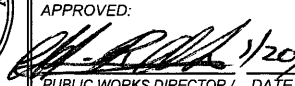
SHEET 3 OF 3

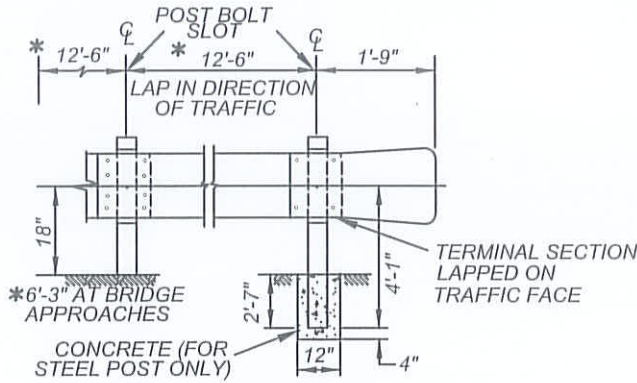


NOTES:

- 1.) THREE TYPE OM1-3 OR OM4-3 AND ONE W31 (END SIGN) SHALL BE PLACED AT THE END OF EACH ROADWAY AS SHOWN ON THIS STANDARD DRAWING, AND ONLY AT THE DIRECTION OF THE CITY ENGINEER.
- 2.) TYPE OM1-3 OR OM4-3 SIGNS OR TYPE W31 (END SIGNS) SHALL BE PLACED AS SHOWN WITH REFLECTIVE FACE IN DIRECT LINE OF SIGHT FOR APPROACHING MOTORIST.
- 3.) LENGTH OF METAL BEAM GUARD RAILING SHALL BE IN MULTIPLES OF 12'-6", PLUS 1'-9" FOR EACH END PIECE.
- 4.) SEE STANDARD DRAWING NUMBER MVLT-416B FOR METAL BEAM GUARD RAILING DETAILS.
- 5.) SHALL BE USED ONLY WITH THE APPROVAL BY CITY TRAFFIC ENGINEER.

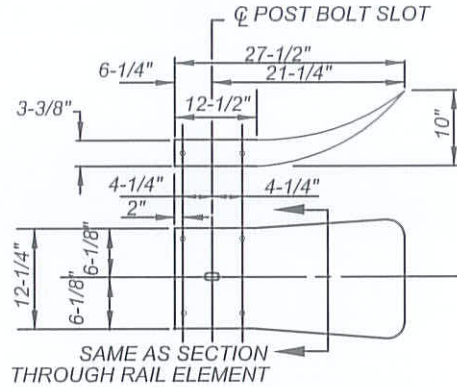
NOT TO SCALE

	RECOMMENDED: EL <small>DIVISION MANAGER</small>	12/22/16 <small>DATE</small>	<h2 style="margin: 0;">CITY OF MORENO VALLEY</h2> <p style="margin: 0;">PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION</p>
	APPROVED:  <small>PUBLIC WORKS DIRECTOR / DATE</small> <small>CITY ENGINEER</small>	1/20/17 <small>DATE</small>	<h3 style="margin: 0;">END OF ROAD TREATMENT</h3>
			<small>SHEET 1 OF 2</small>

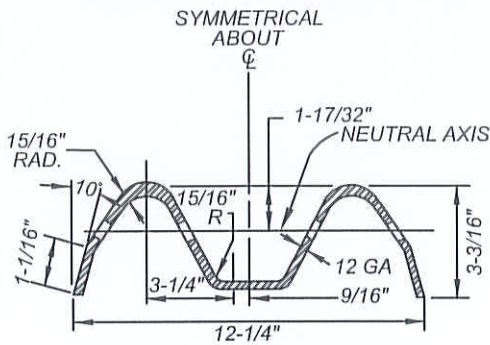


INSTALLATION

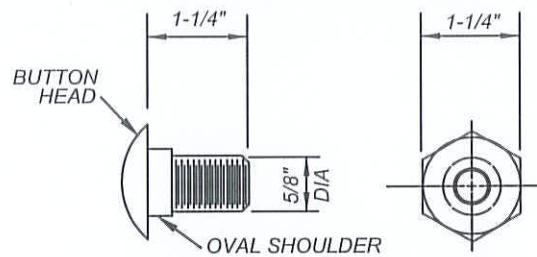
NOTE: GUARD RAILING FLARES AT BRIDGE APPROACHES SHALL HAVE A MINIMUM RADIUS OF 150'.



TERMINAL SECTION

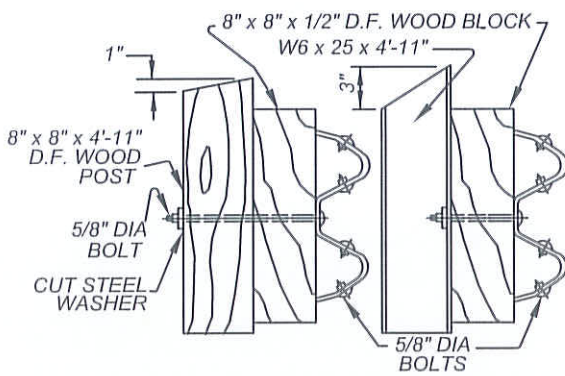


SECTION THROUGH RAIL ELEMENT

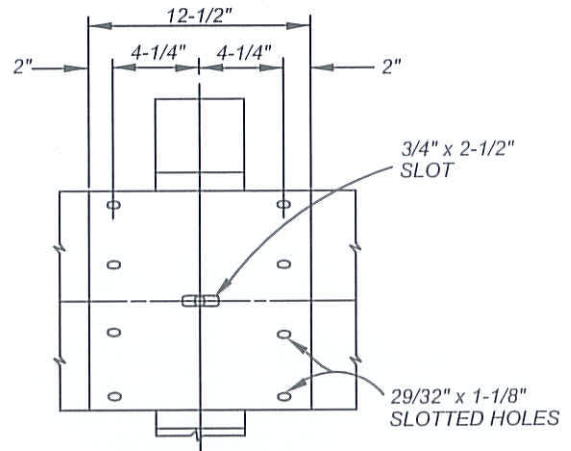


SPLICE BOLT AND NUT

POST BOLT: SIMILAR EXCEPT LENGTH

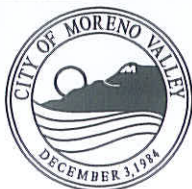


ARRANGEMENT OF POSTS



RAIL SPLICE

NOT TO SCALE

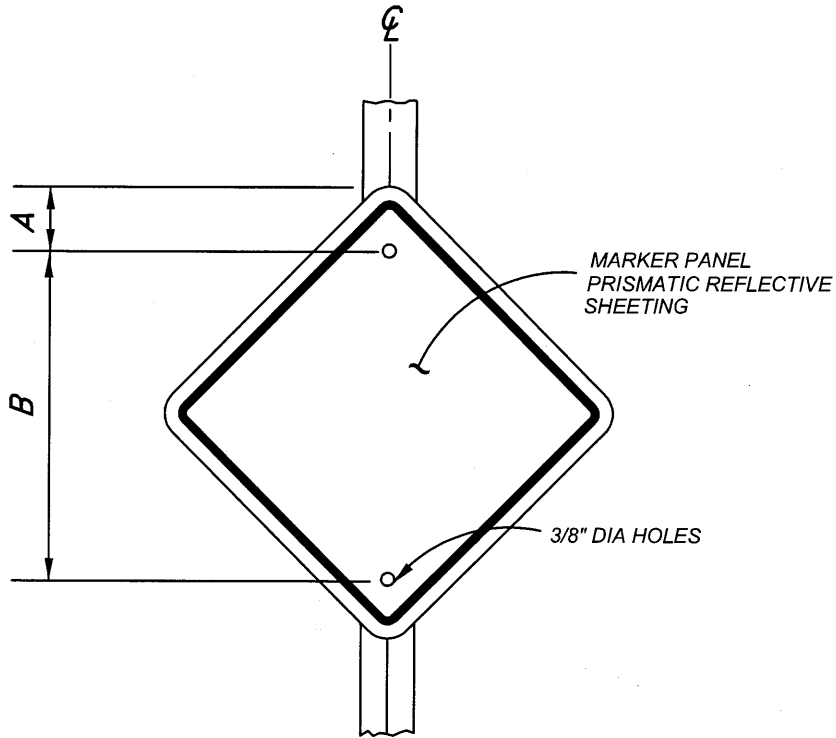


RECOMMENDED:
EL 1/22/14
 DIVISION MANAGER DATE
 APPROVED:
[Signature] 1/29/14
 PUBLIC WORKS DIRECTOR DATE
 CITY ENGINEER

CITY OF MORENO VALLEY
 PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION

END OF ROAD TREATMENT DETAILS

STANDARD PLAN
MVLT-416B-0
 SHEET 2 OF 2



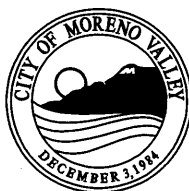

TYPE OM1-3 & OM4-3

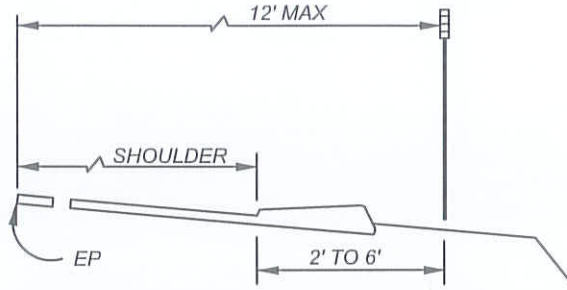
TYPE	SIZE	BORDER WIDTH	MARGIN WIDTH	A	B	C	CORNER RADIUS
OM1-3 & OM4-3	18"x18"	3/8"	3/8"	3"	18"	---	1-1/2"

NOTES:

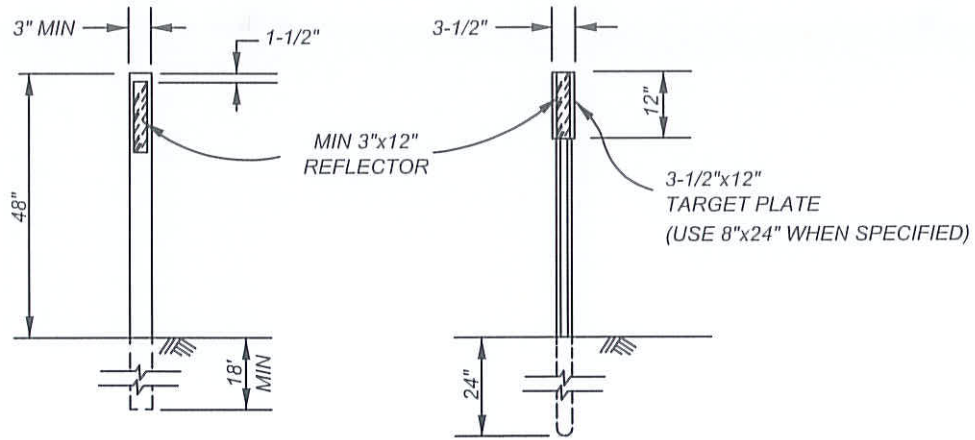
- 1.) "OM1-3"-YELLOW DG3 BACKGROUND WITH BLACK BORDER.
- 2.) "OM4-3"-RED PRISMATIC BACKGROUND WITH BLACK BORDER.
- 3.) "OM1-3"-ORANGE PRISMATIC BACKGROUND WITH BLACK BORDER.

NOT TO SCALE

	RECOMMENDED: EL 12/22/16 <small>DIVISION MANAGER DATE</small>	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION	<small>STANDARD PLAN</small>
	APPROVED:  1/20/17 <small>PUBLIC WORKS DIRECTOR / DATE</small> <small>CITY ENGINEER</small>		OBJECT MARKERS



DELINEATOR POSITIONING



CLASS 1 FLEXIBLE POST

CLASS 2 METAL POST

DELINEATORS

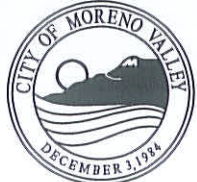

DELINEATOR REFLECTORIZATION

TYPE	REFLECTOR COLOR	
	FRONT	BACK
E	WHITE	WHITE (SEE NOTE 1)
F	WHITE	NONE
G	YELLOW	NONE
I	YELLOW	YELLOW (SEE NOTE 1)

NOTES:

- 1.) THE REFLECTOR USED ON BACK OF DELINEATOR SHALL BE ONE 3" SQUARE REFLECTIVE SHEETING ON CLASS 1 DELINEATOR AND ONE STANDARD REFLEX REFLECTOR ON CLASS 2 DELINEATOR.
- 2.) THE TYPE OF REFLECTORIZATION AND THE CLASS OF DELINEATOR TO BE INSTALLED WILL BE DESIGNATED ON THE PLANS AS E-1, F-2, ETC.

NOT TO SCALE

	RECOMMENDED: EL 1/22/14 DIVISION MANAGER DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION	
	APPROVED:  PUBLIC WORKS DIRECTOR / DATE CITY ENGINEER	DELINEATORS	

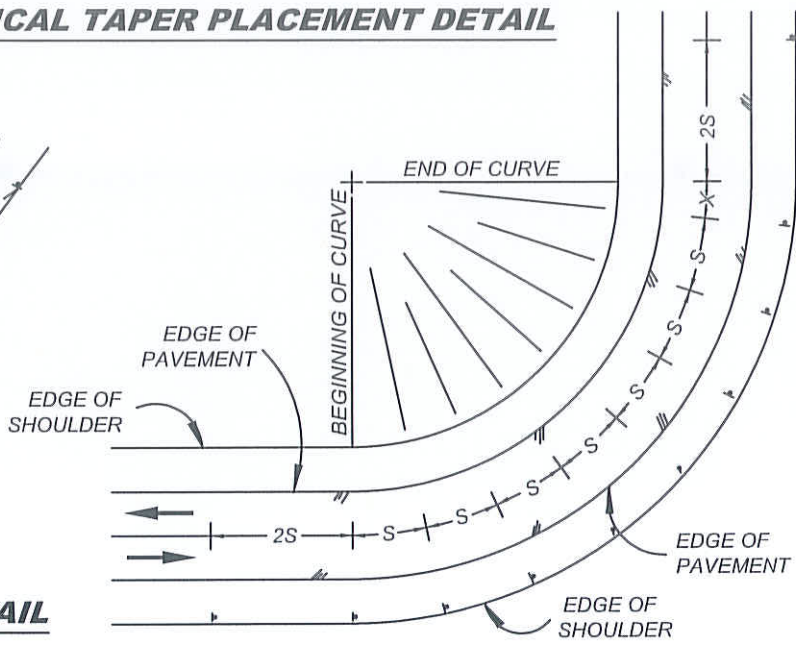
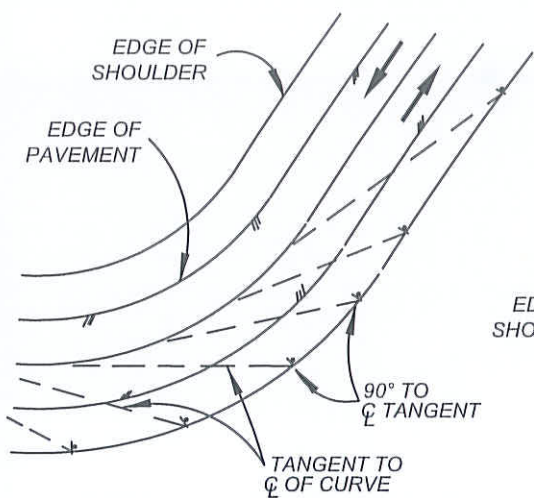
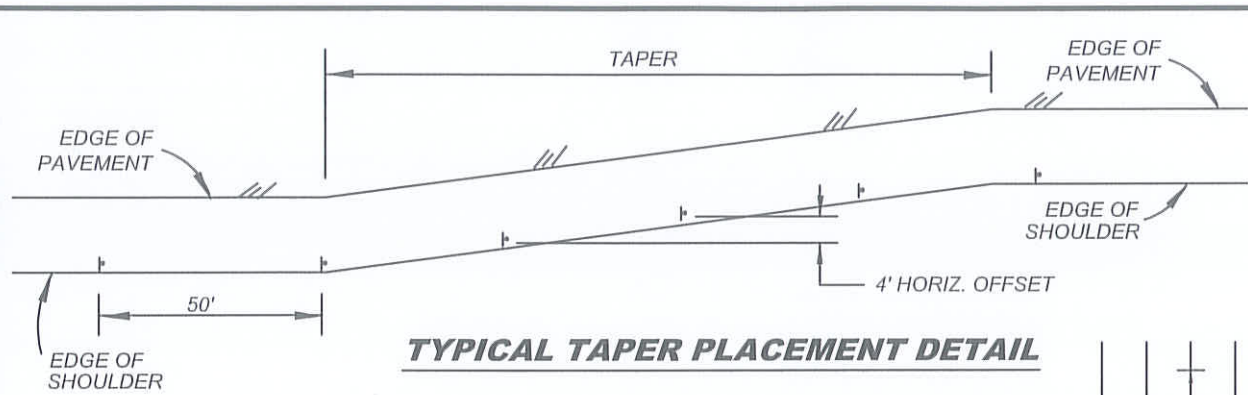


TABLE 1

R in feet	S in feet
50'	20'
75'	20'
100'	25'
150'	30'
200'	35'
300'	40'
400'	40'
500'	40'
600'	40'
700'	75'
800'	80'
900'	85'
1000'	90'
1200'	100'
1400'	110'
1600'	115'
1800'	125'
2000'	130'

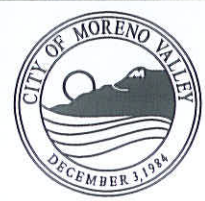
NOTES:

- 1.) MAXIMUM SPACING BETWEEN DELINEATORS = 300', MINIMUM = 20'.
- 2.) DELINEATOR SPACING ON CURVES LESS THAN 2000' RADIUS SHALL CONFORM TO THE SPACING INDICATED IN TABLE 1.
- 3.) PRORATE DISTANCE "X" AMONG ALL SPACING WITHIN CURVE SO LAST DELINEATOR FALLS AT THE END OF CURVE.

LEGEND:

- S = DELINEATOR SPACING IN FEET. $S = 3\sqrt{R-50}$.
- R = CENTERLINE CURVE RADIUS IN FEET.
- ▬ = DELINEATOR TYPE F CLASS I
- X = DISTANCE REMAINING WITHIN CURVE FROM LAST CALCULATED DELINEATOR TO END OF CURVE.

NOT TO SCALE

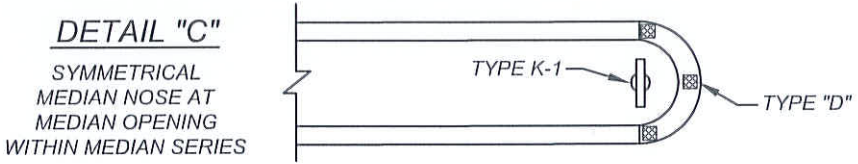
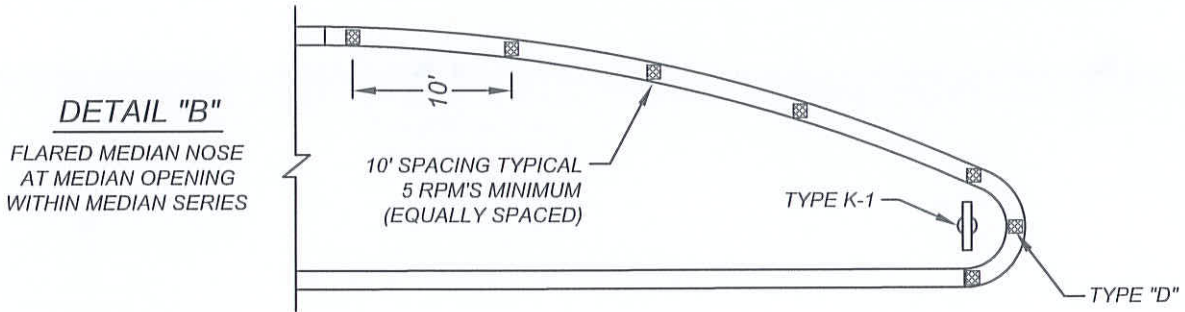
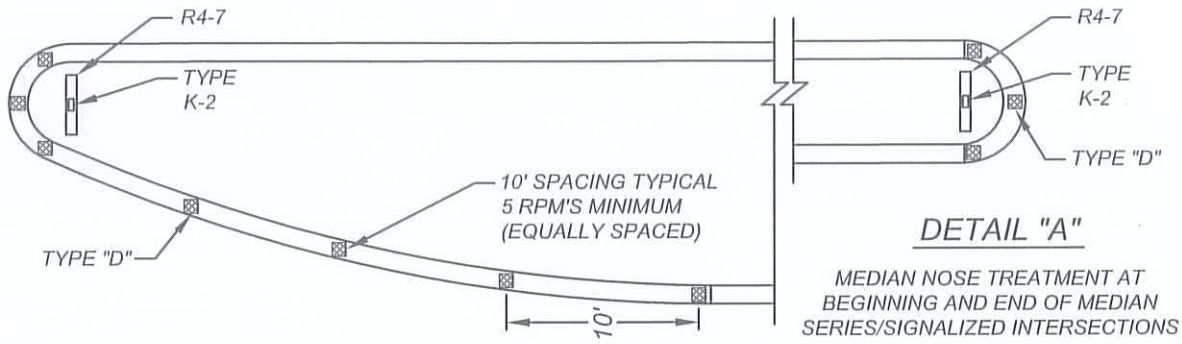


RECOMMENDED:
 EL 1/22/14
 DIVISION MANAGER DATE
 APPROVED: [Signature] 1/29/14
 PUBLIC WORKS DIRECTOR / DATE
 CITY ENGINEER

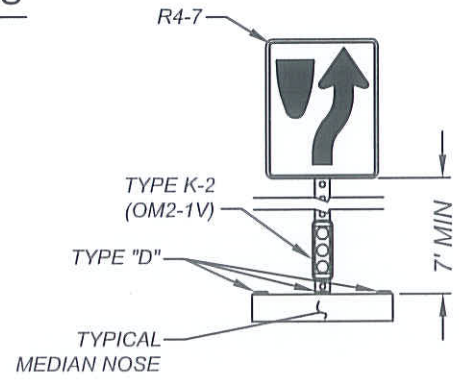
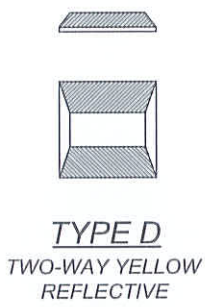
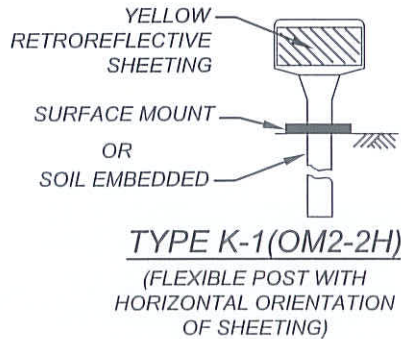
CITY OF MORENO VALLEY
 PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION

DELINEATOR PLACEMENT

STANDARD PLAN
MVLT-418B-0
 SHEET 2 OF 2



MARKER DETAILS

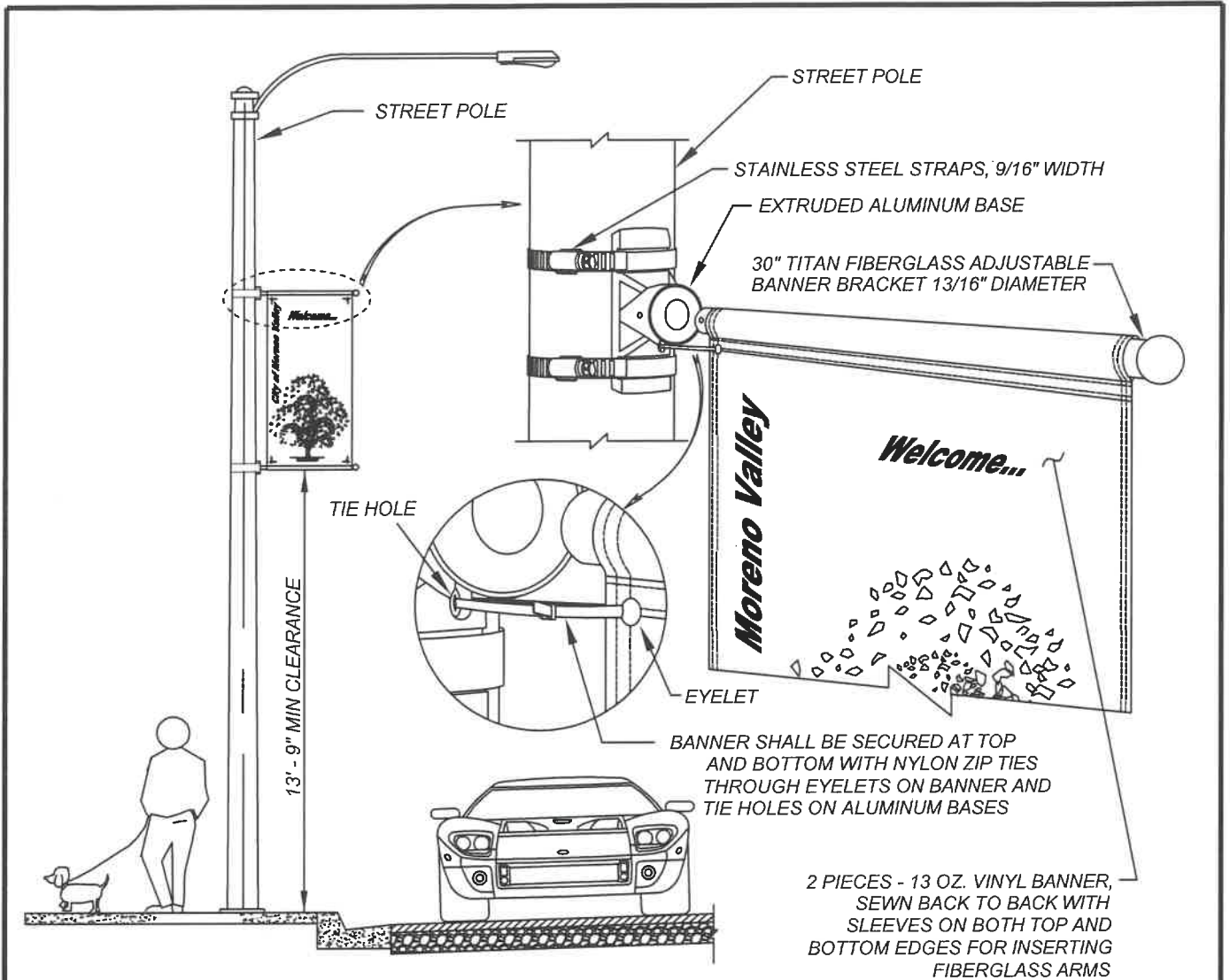


LEGENDS

- R4-7 MEDIAN SIGN AND TYPE K-2 (OM2-1V) OBJECT MARKER
- TYPE K-1 (OM2-2H) OBJECT MARKER
- TYPE "D" RAISED PAVEMENT MARKER

NOT TO SCALE


	RECOMMENDED: DIVISION MANAGER	1/22/14 DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION
	APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER	1/29/14 DATE	MEDIAN NOSE TREATMENT

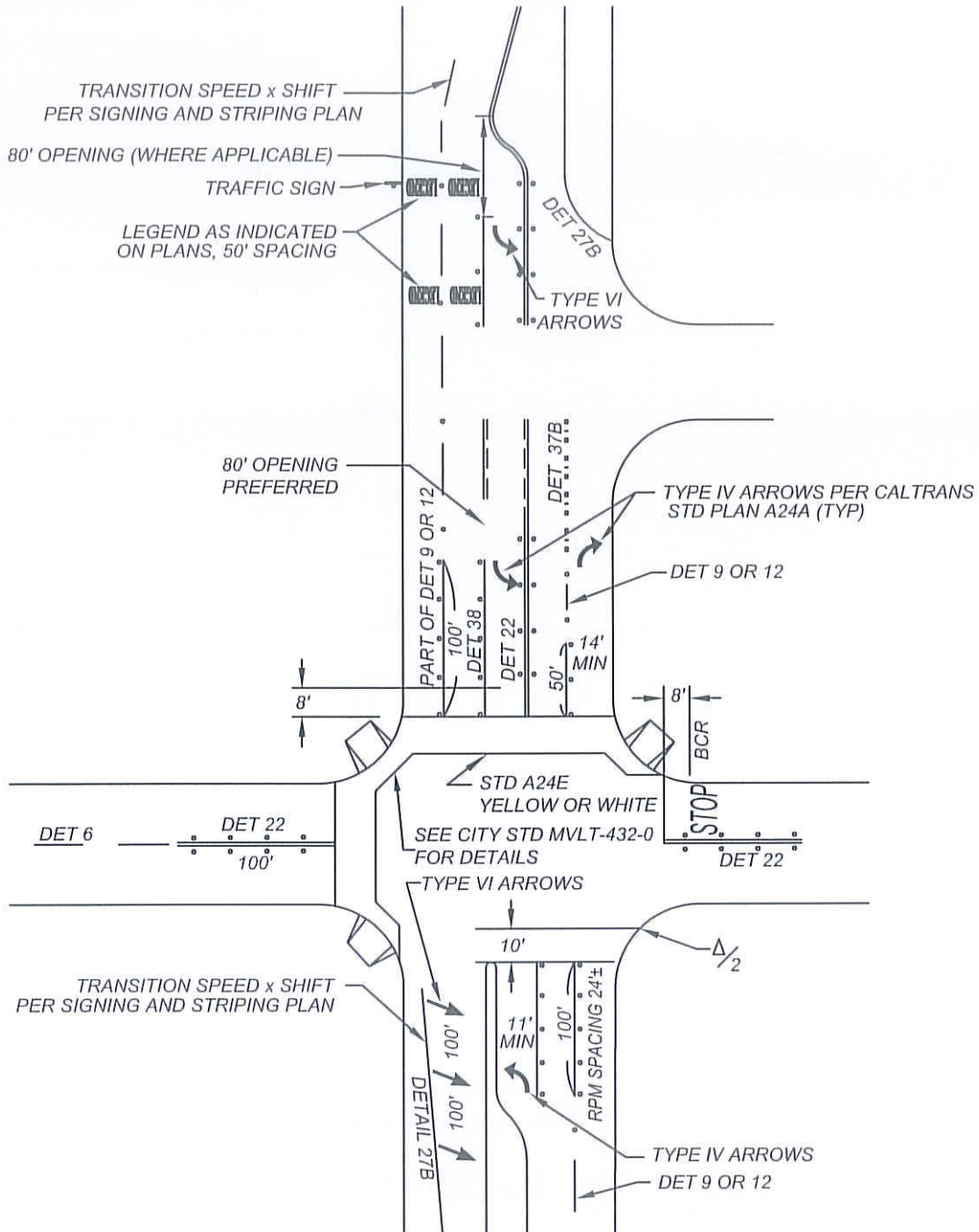


NOTES:

- 1.) THE BANNER SIZE SHALL BE 30" x 84". TOTAL SURFACE AREA OF BANNER AND ANY TRAFFIC SIGNS ON LUMINAIRE STANDARD SHALL NOT EXCEED 18 SQUARE FEET.
- 2.) INKS USED SHALL BE 4-COLOR PROCESS, UV STABILIZING INKS, AND HAVE A LIFE EXPECTANCY OF FIVE (5) YEARS.
- 3.) PRINT SHALL BE ON BOTH SIDES OF BANNER.
- 4.) BANNER ARTWORK SHALL BE REVIEWED AND APPROVED BY CITY MANAGER'S OFFICE OR CITY COUNCIL PRIOR TO PRINTING OF BANNER.
- 5.) FIBERGLASS BANNER ARM SHALL BE FLEXIBLE TO WITHSTAND UP TO 90 MPH WINDS (ARM WILL FLEX IN HIGH WINDS THEN RETURN TO ITS NORMAL POSITION ON THE POLE).
- 6.) ALUMINUM BASE OF BANNER ARM SHALL BE SECURED TO STREET POLE BY MEANS OF STAINLESS STEEL STRAPS ONLY. HOLES SHALL NOT BE PUNCHED, DRILLED, OR BURNED IN ANY POLES.
- 7.) DEPENDING ON POLE OWNERSHIP, BANNER INSTALLATION WILL REQUIRE SEPARATE APPROVALS FROM OWNER.

NOT TO SCALE

	RECOMMENDED: <i>EL</i> DIVISION MANAGER	<i>5/14/09</i> DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION	STANDARD PLAN MVLT-420-0
	APPROVED: <i>M.L. Wolfe</i> PUBLIC WORKS DIRECTOR / CITY ENGINEER	<i>6/4/09</i> DATE		



NOTES:

1.) TYPICAL STRIPING DETAIL PER CALTRANS DETAILS OR CITY STANDARDS.

NOT TO SCALE

	RECOMMENDED:  DIVISION MANAGER DATE: 1/22/14	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION	
	APPROVED:  PUBLIC WORKS DIRECTOR / CITY ENGINEER DATE: 1/29/14	STREET STRIPING & PAVEMENT LEGEND STANDARDS & SPECIFICATIONS	

TRAFFIC STRIPES AND PAVEMENT MARKING REQUIREMENTS:

ALL WORK AND MATERIALS SHALL CONFORM TO THE LATEST PROVISIONS SET FORTH IN SECTION 84, "TRAFFIC STRIPES AND PAVEMENT LEGENDS" OF THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, EXCEPT AS NOTED OTHERWISE.

MATERIALS

PAINT FOR TRAFFIC STRIPING AND PAVEMENT LEGENDS SHALL BE WHITE, YELLOW OR BLACK AS REQUIRED, SHALL BE WATER BORNE TRAFFIC PAINT, FAST DRY CONFORMING TO CALIFORNIA STATE SPECIFICATIONS AND SHALL BE REVIEWED AND APPROVED BY THE CITY ENGINEER OR DESIGNEE PRIOR TO APPLICATION. ALL STENCILS USED TO PAINT PAVEMENT LEGENDS MUST CONFORM TO THE LATEST CALTRANS APPROVED METRIC STENCILING STANDARDS.

REFLECTIVE PAVEMENT MARKERS SHALL BE OF THE PRISMATIC REFLECTOR TYPE (3M MODEL 291-2Y YELLOW, 290-W WHITE) AS OUTLINED IN SECTION 85-1.05 OF THE CALTRANS STANDARD SPECIFICATIONS. NON-REFLECTIVE PAVEMENT MARKERS SHALL COMPLY WITH THE REQUIREMENTS OUTLINED IN SECTION 85-1.04A OF THE LATEST EDITION OF THE CALTRANS STANDARD SPECIFICATIONS.

TYPE "A" MARKERS SHALL BE PLASTIC AND SHALL NOT BE CERAMICS.

APPLICATION

THE CONTRACTOR SHALL LAYOUT AND CATTRACK THE ALIGNMENT OF THE PROPOSED STRIPING AT 15 FOOT INTERVALS AND "SPOT" THE PROPOSED PAVEMENT LEGENDS AS CALLED FOR ON THE STRIPING PLANS. STRIPING SHALL VARY NO MORE THAN 1/2 INCH IN 50 FEET FROM THE SPECIFIED ALIGNMENT. MINOR VARIATIONS MAY BE WAIVED BY THE CITY ENGINEER OR DESIGNEE.

THE CONTRACTOR SHALL NOT PROCEED WITH THE PAINTING OF ANY PAVEMENT LEGENDS AND/OR STRIPING UNTIL THE CATTRACKING AND SPOTTING IS CHECKED AND APPROVED BY THE CITY ENGINEER OR DESIGNEE.

ALL PAVEMENT LEGENDS SHALL BE INSTALLED USING A METRIC STENCIL.

TRAFFIC STRIPING AND PAVEMENT LEGENDS SHALL BE APPLIED IN TWO (2) COATS WITH AIRLESS EQUIPMENT. ALL TRAFFIC STRIPING SHALL BE PERFORMED WITH A ROADLINER TRUCK MOUNTED STRIPING MACHINE.

THE SECOND COAT OF PAINT SHALL NOT BE APPLIED UNTIL AT LEAST SEVEN (7) CALENDAR DAYS AFTER THE FIRST COAT. EACH COAT OF PAINT SHALL BE APPLIED AT THE WET FILM THICKNESS OF 10-12 MILS FOR WHITE AND YELLOW PAINT AND 7 MILS FOR BLACK PAINT. ALL PAINT SHALL BE APPLIED AT A RELATIVE HUMIDITY BELOW 75% AND AN AMBIENT TEMPERATURE ABOVE 55 °F, UNLESS WAIVED BY THE CITY ENGINEER OR DESIGNEE.

A CONTINUOUS TWO COAT 3-INCH WIDE BLACK STRIPE SHALL BE PAINTED BETWEEN THE TWO 6-INCH WIDE YELLOW STRIPES OF A DOUBLE TRAFFIC STRIPE. THIS SPECIFICATION APPLIES TO BOTH DOUBLE YELLOW CENTERLINE STRIPING AND CONTINUOUS TURN POCKET STRIPING DETAILS. THE BLACK STRIPE SHALL BE APPLIED CONCURRENTLY WITH THE SECOND COAT OF YELLOW STRIPES.

EXCEPT FOR BLACK PAINT, REFLECTIVE GLASS BEADS SHALL BE UNIFORMLY INCORPORATED IN ALL COATS OF PAINT CONCURRENTLY WITH THE APPLICATION OF THE PAINT. THE GLASS BEADS SHALL BE EMBEDDED IN THE COAT OF TRAFFIC PAINT BEING APPLIED TO A DEPTH OF AT LEAST ONE-HALF THEIR DIAMETERS. THE REFLECTIVE GLASS BEADS SHALL BE APPLIED TO THE FIRST COAT OF PAINT AT THE RATE OF 6 POUNDS OF BEADS PER GALLON OF PAINT AND TO THE SECOND COAT OF PAINT AT THE RATE OF 8 POUNDS OF BEADS PER GALLON OF PAINT.

ASPHALT SURFACES SHALL BE DRY, CLEAN, AND FREE OF CONTAMINANTS SUCH AS SURFACE OILS OR EXISTING ROAD MARKING MATERIALS. CONTAMINANTS SHALL BE REMOVED BY MECHANICAL MEANS. MATERIAL SHALL BE APPLIED ONLY WITH EQUIPMENT WHICH IS SPECIFICALLY DESIGNED AND CAPABLE OF PROPERLY MIXING AT THE POINT AND TIME OF APPLICATION.

ANY STRIPING OR PAVEMENT LEGENDS NOT SHOWN ON THE APPROVED PLAN, BUT DEEMED NECESSARY BY THE CITY ENGINEER OR DESIGNEE, SHALL BE INSTALLED BY THE CONTRACTOR PRIOR TO FINAL ACCEPTANCE OF THE STREET.

CONTRACTOR SHALL INSTALL BLUE MARKERS (3M TYPE DB OR EQUAL) ADJACENT TO FIRE HYDRANTS PER CITY STANDARDS MVL-440A, MVL-440B AND MVL-440C.

NEWLY PAINTED STRIPING AND PAVEMENT LEGENDS SHALL BE PROTECTED FROM DAMAGE BY PUBLIC TRAFFIC OR OTHER CAUSES UNTIL THE PAINT IS THOROUGHLY DRY. ANY EXISTING OR NEWLY PAINTED STRIPING OR PAVEMENT LEGENDS WHICH ARE DAMAGED AS A RESULT OF THE CONSTRUCTION, INCLUDING WHEEL LEGENDS BY PUBLIC TRAFFIC AND THE CONSTRUCTION EQUIPMENT, SHALL BE REPAINTED BY THE CONTRACTOR.

NOT TO SCALE

	RECOMMENDED: <i>Wei Sun</i> 2/1/2022 DIVISION MANAGER / DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION STREET STRIPING & PAVEMENT LEGEND STANDARDS & SPECIFICATIONS	STANDARD PLAN MVL-430B-1
	APPROVED: <i>[Signature]</i> 2/1/22 PUBLIC WORKS DIRECTOR / DATE CITY ENGINEER		SHEET 2 OF 3

TRAFFIC STRIPES AND PAVEMENT MARKING REQUIREMENTS:

APPLICATION (CONTINUATION)

ALL WORK SHALL CONFORM TO THE LATEST PROVISIONS SET FORTH IN SECTION 85, "PAVEMENT MARKERS" OF THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS EXCEPT AS NOTED OTHERWISE IN THE CONTRACT TECHNICAL PROVISIONS.

REFLECTIVE PAVEMENT MARKERS MUST BE NEW AND INSTALLED PER THE APPROVED PLAN. INSTALLATION OF REFLECTIVE PAVEMENT MARKERS SHALL BE ACCOMPLISHED WITH THE USE OF A BITUMINOUS TYPE HOT-MELT ADHESIVE SUITABLE FOR BONDING MARKERS TO PORTLAND CEMENT, ASPHALTIC CONCRETE AND CHIP-SEALED ROAD SURFACES. THE COMPOSITION OF THE MATERIAL MUST BE SUCH THAT ITS PROPERTIES WILL NOT DETERIORATE WHEN HEATED TO AND APPLIED AT TEMPERATURES UP TO 425° F. USING EITHER AIR OR OIL JACKETED MELTERS.

REFLECTIVE PAVEMENT 3M TYPE MARKERS SHALL BE PLACED ON A LOCATION ESTABLISHED BY THE APPLICABLE CALTRANS STRIPING DETAIL NOTED ON THE APPROVED STRIPING PLAN.

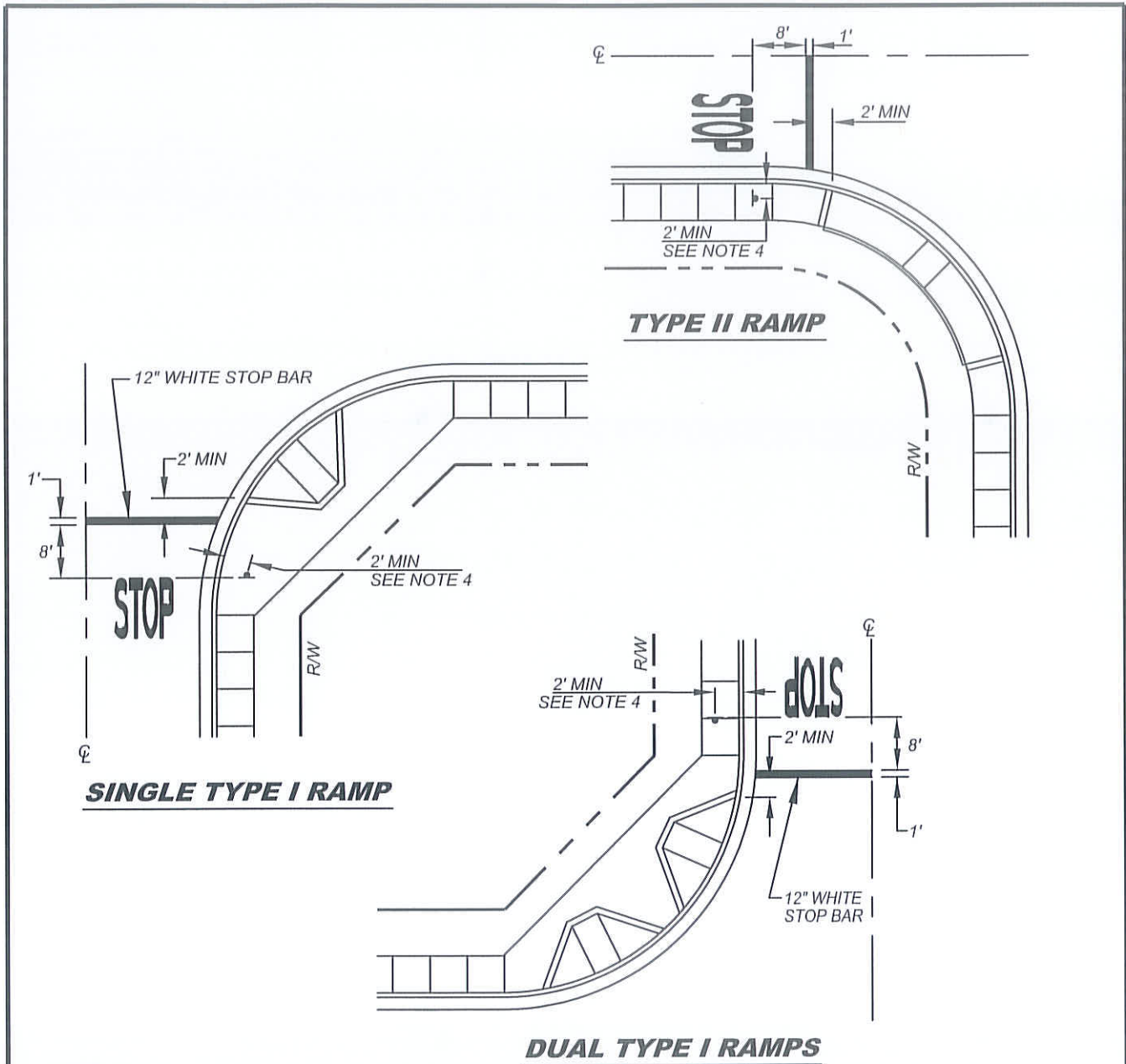
EXISTING TRAFFIC STRIPING AND PAVEMENT LEGENDS THAT DO NOT CONFORM TO THE APPROVED PLAN SHALL BE REMOVED BY WET SANDBLASTING AND/OR GRINDING MACHINE APPROVED BY CITY TRAFFIC ENGINEER OR DESIGNEE. BLACKOUT PAINTING OF EXISTING NON CONFORMING TRAFFIC STRIPING OR PAVEMENT LEGENDS SHALL NOT BE ALLOWED.

EXISTING REFLECTIVE PAVEMENT MARKERS THAT DO NOT CONFORM TO THE APPROVED PLAN SHALL BE REMOVED BY THE CONTRACTOR PRIOR TO ANY CATTRACKING OR OTHER WORK RELATED TO THE TRAFFIC STRIPING.

THERMOPLASTIC SHALL BE APPLIED TO ALL PAVEMENT LEGENDS AT 80 TO 120 MILS THICK WITH THE EXCEPTION OF SPEED LEGENDS.

NOT TO SCALE

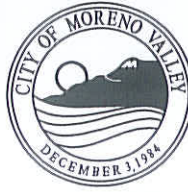




	RECOMMENDED: EL 12/22/16 DIVISION MANAGER DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION	STANDARD PLAN
	APPROVED:  1/20/17 PUBLIC WORKS DIRECTOR / DATE CITY ENGINEER		MVLT-430C-0
STREET STRIPING & PAVEMENT LEGEND STANDARDS & SPECIFICATIONS			SHEET 3 OF 3

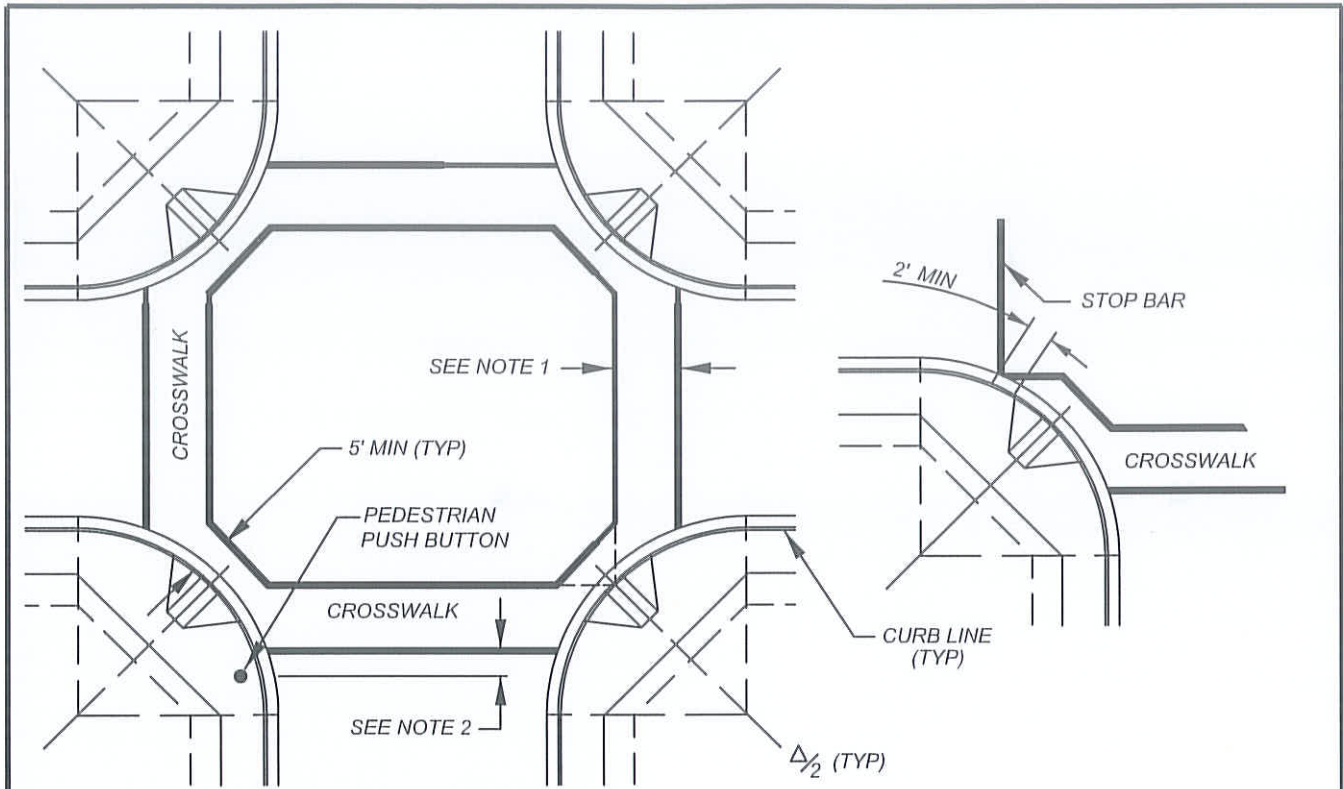


NOTES:

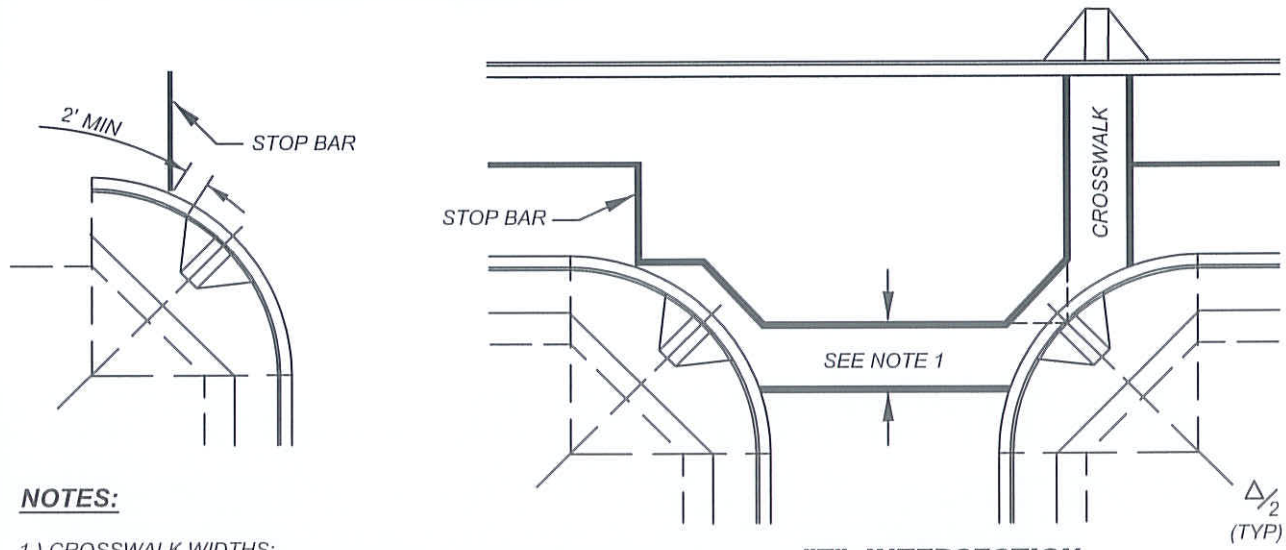
- 1.) ALL LETTERS WILL BE IN CONFORMANCE WITH THE CALTRANS STANDARD FOR PAVEMENT MARKINGS WORDS (LATEST EDITION).
- 2.) ONE STOP LEGEND SHALL BE INSTALLED IN CENTER OF EACH TRAVEL LANE.
- 3.) STOP BAR AND PAVEMENT MARKINGS SHALL BE THERMOPLASTIC.
- 4.) IF SIDEWALK IS LESS THAN 6' WIDE , THE SIGN AND POST SHALL BE INSTALLED BEHIND THE SIDEWALK.

NOT TO SCALE

	RECOMMENDED: <div style="display: flex; justify-content: space-between;"> <div style="text-align: center;">  DIVISION MANAGER </div> <div style="text-align: center;">  DATE </div> </div>	<h2 style="margin: 0;">CITY OF MORENO VALLEY</h2> <p style="margin: 0;">PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION</p>	STANDARD PLAN <h3 style="margin: 0;">MVL-431-0</h3>
	APPROVER: <div style="display: flex; justify-content: space-between;"> <div style="text-align: center;">  PUBLIC WORKS DIRECTOR / CITY ENGINEER </div> <div style="text-align: center;">  DATE </div> </div>	<h2 style="margin: 0;">STOP BAR LEGEND PLACEMENT</h2>	



FOUR LEG INTERSECTION




"T" INTERSECTION

NOTES:

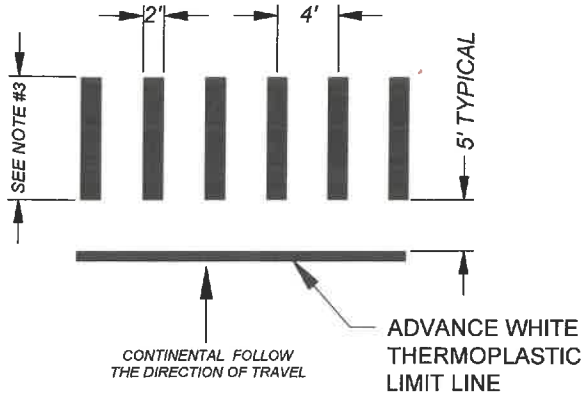
- 1.) CROSSWALK WIDTHS:
 10' (INSIDE TO INSIDE) CROSSWALK FOR ROAD WIDTH 44' OR LESS
 12' (INSIDE TO INSIDE) CROSSWALK FOR ROAD WIDTH MORE THAN 44'.
- 2.) PEDESTRIAN PUSH BUTTON SHOULD BE LOCATED NOT MORE THAN 5' FROM CROSSWALK. SEPARATE PUSH BUTTON POSTS SHOULD BE USED WHEN THE SIGNAL POLES ARE MORE THAN 5' FROM CROSSWALK.
- 3.) STOP BAR AND CROSSWALK SHALL BE THERMOPLASTIC, LOCATION TO BE DETERMINED IN FIELD.
- 4.) THE ENGINEER WILL DETERMINE CROSSWALK LOCATIONS THAT VARY FROM THIS STANDARD.

NOT TO SCALE

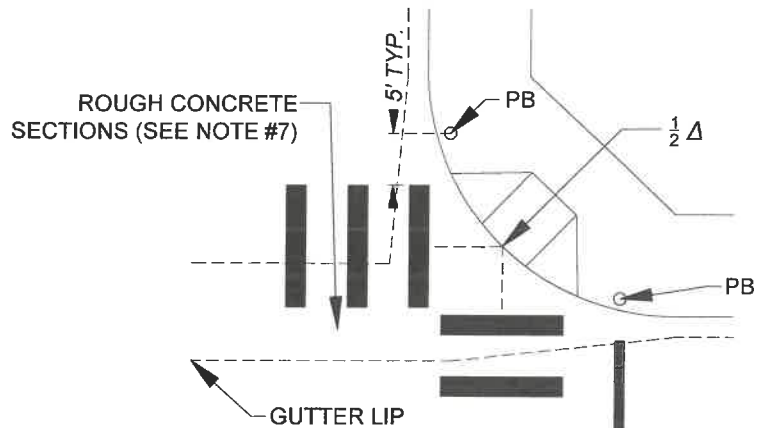
	RECOMMENDED: <div style="display: flex; justify-content: space-between;"> <i>EL</i> <i>1/21/14</i> </div> DIVISION MANAGER DATE	<h2 style="margin: 0;">CITY OF MORENO VALLEY</h2> <p style="margin: 0;">PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION</p>	STANDARD PLAN <h3 style="margin: 0;">MVL-432-0</h3>
	APPROVED: <div style="display: flex; justify-content: space-between;"> <i>[Signature]</i> <i>1/29/14</i> </div> PUBLIC WORKS DIRECTOR / DATE CITY ENGINEER	<h2 style="margin: 0;">CROSSWALK LOCATION</h2>	SHEET 1 OF 1

CONTINENTAL CROSSWALK PLACEMENT

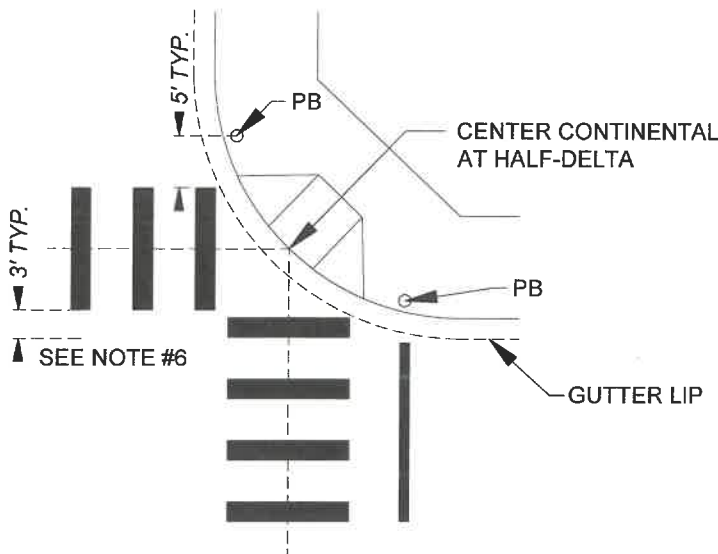
TYPICAL CONTINENTAL MARKINGS



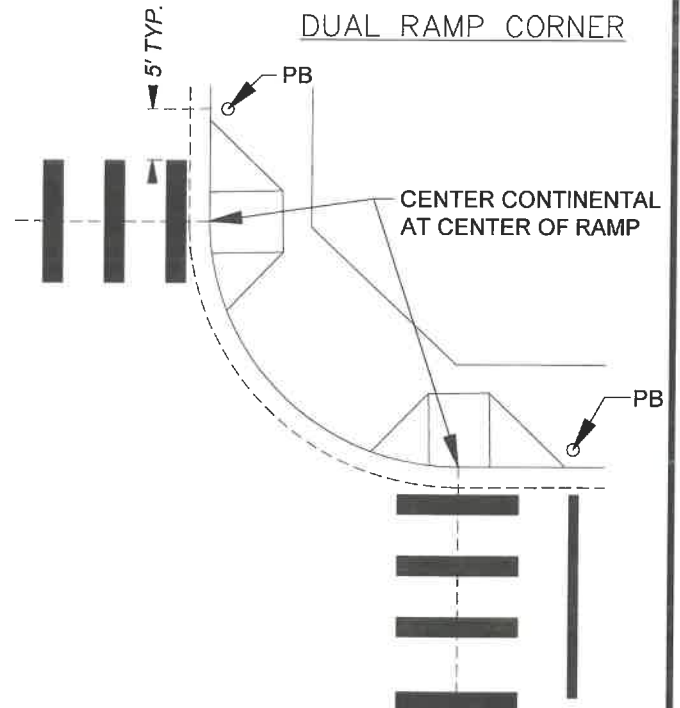
CONCRETE CROSS-GUTTER INTERSECTION



SINGLE RAMP CORNER



DUAL RAMP CORNER

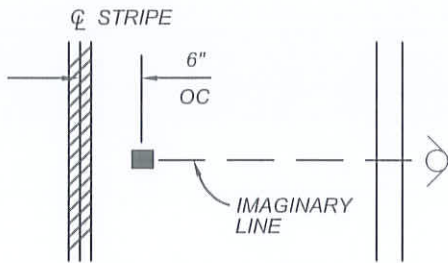


GENERAL NOTES:

1. CONTINENTAL CROSSWALKS SHALL BE ALIGNED PARALLEL TO THE DIRECTION OF VEHICLE TRAVEL.
2. ADVANCE THERMOPLASTIC 12" WHITE LIMIT LINE PLACEMENT SHALL BE INSTALLED 5FT FOR THE APPROACH LANES LEADING TO CONTROLLED INTERSECTION CROSSINGS.
3. CONTINENTAL CROSSWALKS SHALL BE 10FT WIDE FOR ROADWAYS WIDTH OF 44 OR LESS AND 12FT WIDE FOR ROADWAYS GREATER THAN 44FT; UNLESS WIDTH IS SPECIFIED ON PLAN BY CITY ENGINEER.
4. CONTINENTAL CROSSWALKS SHALL BE IN THERMOPLASTIC WHITE UNLESS NOTED THERMOPLASTIC YELLOW FOR SCHOOL CROSSING.
5. CONTINENTAL CROSSWALKS SHALL BE INSTALLED WITH RETROREFLECTIVITY COMPLIANT AND SKID RESISTANT.
6. CONTINENTAL CROSSWALK SHALL NOT IMPEDE INTO THE INTERSECTION OR OPPOSING DIRECTION OF VEHICLE TRAVEL. SEE DETAIL "SINGLE RAMP CORNER" SHOWING 3FT SET-BACK FROM GUTTER LIP.
7. ALL THERMOPLASTIC INSTALLATION ON TOP OF CONCRETE SURFACE MUST HAVE CONCRETE WATER BLASTED TO ROUGH UP CONCRETE SURFACE BEFORE APPLYING PRIMER APPLICATION AND THERMOPLASTIC MARKING, AS DIRECTED BY ENGINEER.

NOT TO SCALE

	RECOMMENDED: <i>W. J. Smith</i> 8/10/22 DIVISION MANAGER DATE	<h2 style="margin: 0;">CITY OF MORENO VALLEY</h2> PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION
	APPROVED: <i>[Signature]</i> 8/15/22 PUBLIC WORKS DIRECTOR/ DATE CITY ENGINEER	<h3 style="margin: 0;">CONTINENTAL CROSSWALK AND ADVANCE LIMIT LINE PLACEMENT</h3>



UNMARKED STREETS: PLACE MARKER 6" FROM EDGE OF IMAGINARY LINE OF STREET ON HYDRANT SIDE.

MARKED STREETS: PLACE MARKER 6" FROM CENTERLINE OF PAINTED LINE TO CENTERLINE OR MARKER ON HYDRANT SIDE.

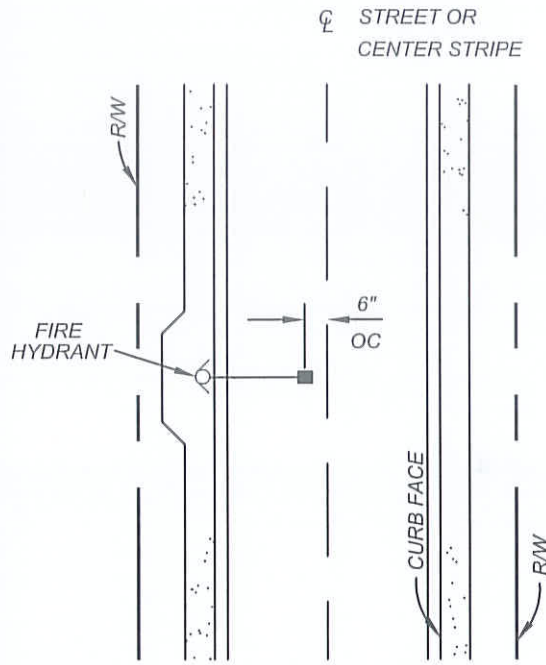


NOTES:

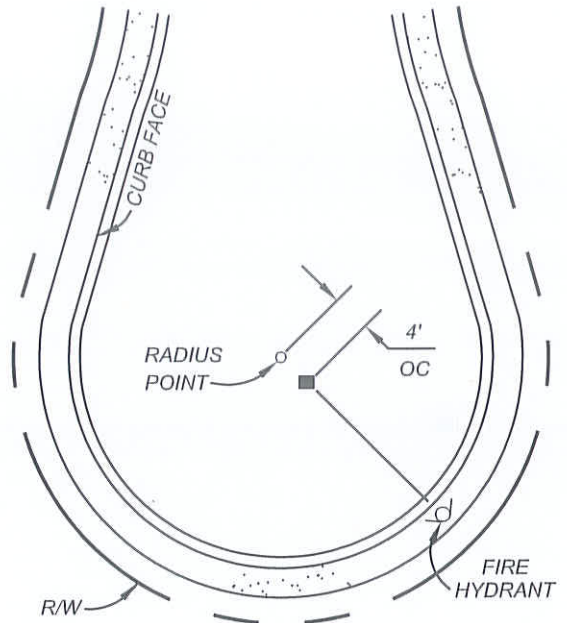
- 1.) THE REFLECTIVE SIDE SHALL FACE THE FLOW OF TRAFFIC.
- 2.) THE "BLUE DOT" SHALL BE IN LINE WITH THE FIRE HYDRANT, EXCEPT WHERE TWO (2) DOTS ARE USED FOR INTERSECTIONS.
- 3.) A BLUE REFLECTIVE MARKER WILL BE PLACED 6" FROM THE CENTER OF THE PAINTED LINES AS PER PLACEMENT STD MVL-440B-0 OR MVL-440C-0 AS APPLICABLE. IF NO TRAFFIC LINE EXIST, PLACE BLUE DOT 6" FROM CENTER OF THE STREET ON THE FIRE HYDRANT SIDE. (SEE STANDARD PLACEMENT DETAIL HEREON.)
- 4.) IF A PAINTED TRAFFIC LIMIT LINE FOR STOP SIGNS EXISTS, PLACE THE SECOND "BLUE DOT" 2 FEET BACK FROM LINE, 6" ON CENTER FROM PAINTED TRAFFIC LIMIT LINE (SEE STD MVL-440B-0, "STREET INTERSECTION")
- 5.) IF NO TRAFFIC LIMIT LINE FOR STOP SIGNS EXISTS, PLACE "BLUE DOT" IN LINE WITH SIDEWALK EDGE ON THE SIDE CLOSEST TO THE PROPERTY LINE, 6" ON CENTER FROM THE CENTER OF THE STREET LINE (SEE STD MVL-440B-0, "STREET INTERSECTION").
- 6.) THE "BLUE DOT" SHALL BE APPLIED USING HOT MELT BITUMINOUS ADHESIVE. THE MARKER SHALL BE APPLIED TO A DRY, DIRT FREE STREET AND ENOUGH ADHESIVE SHALL BE APPLIED SO THAT SOME ADHESIVE Oozes OUT AROUND THE EDGES OF THE "BLUE DOT".

NOT TO SCALE

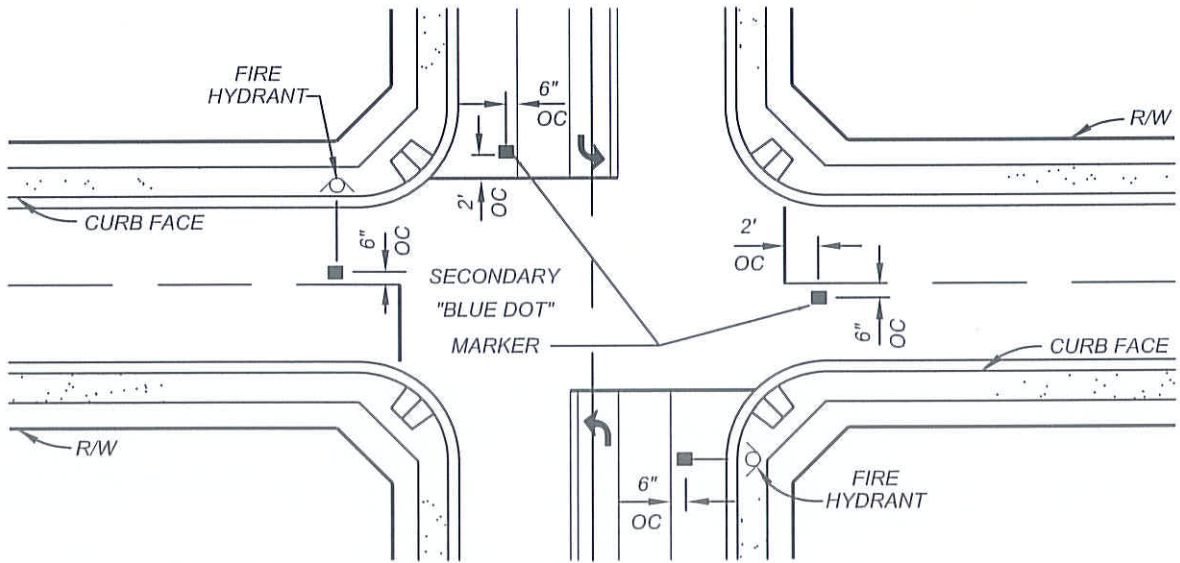
	RECOMMENDED: <i>EL</i> DIVISION MANAGER DATE: <i>1/22/14</i>	<h2 style="margin: 0;">CITY OF MORENO VALLEY</h2> <p style="margin: 0;">PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION</p>	
	APPROVED: PUBLIC WORKS DIRECTOR / DATE: <i>1/29/14</i> CITY ENGINEER	<h3 style="margin: 0;">"BLUE DOT" TYPE I MARKER PLACEMENT NOTES</h3>	
SHEET 1 OF 3			



TWO LANE STREET



CUL-DE-SAC





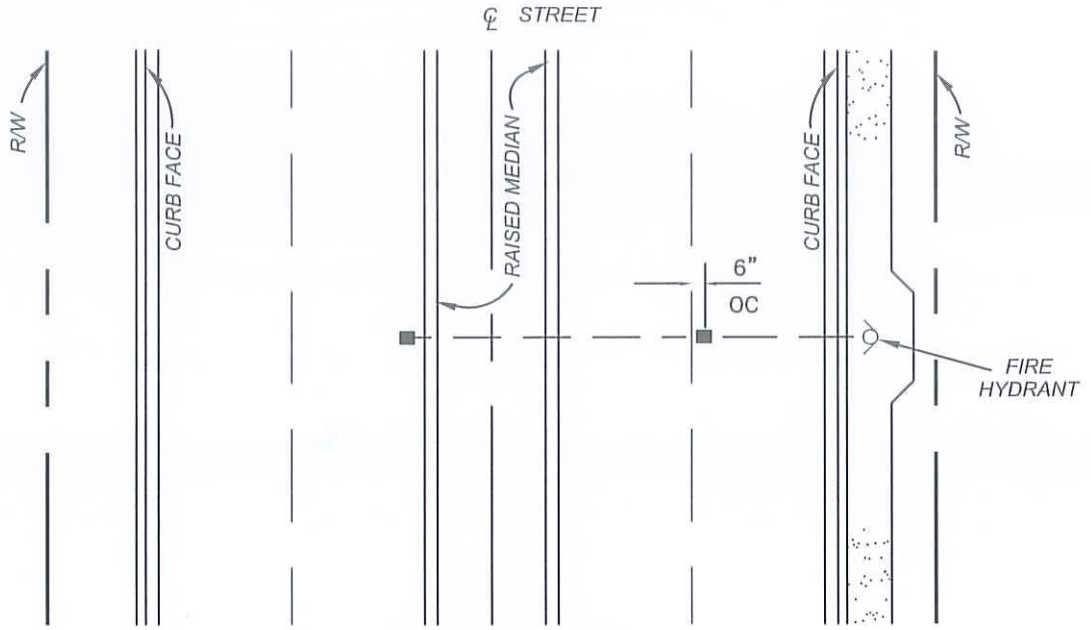
STREET INTERSECTION

NOTE:

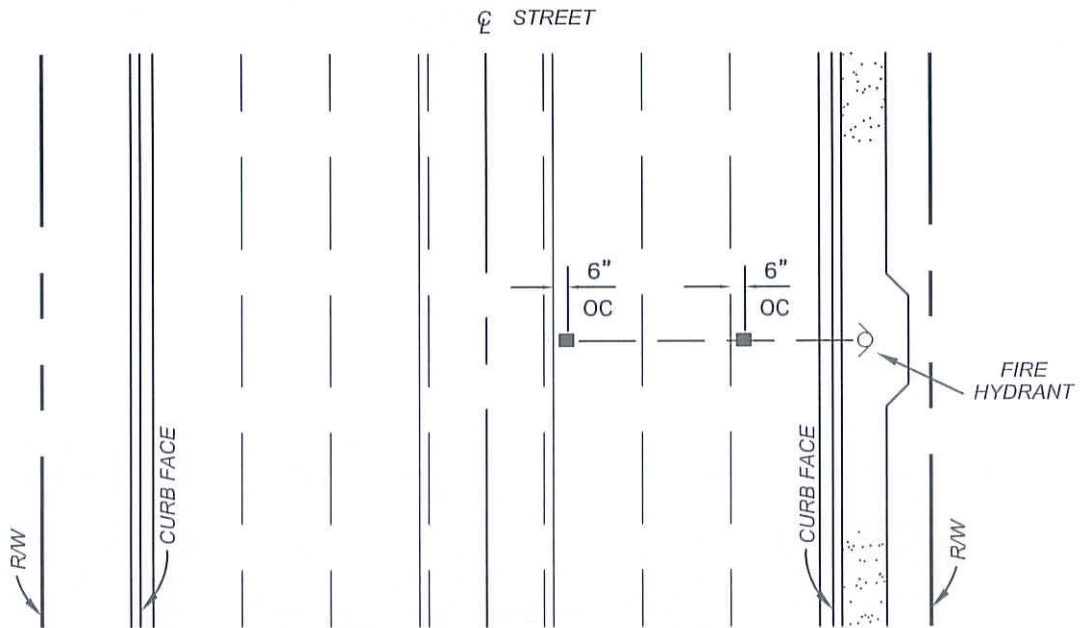
1.) FOR NOTES REGARDING "BLUE DOT" MARKER PLACEMENT, SEE STD PLAN MVLT-440A-0

NOT TO SCALE

	RECOMMENDED: <i>EL</i> DIVISION MANAGER DATE: <i>1/21/14</i>	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION	
	APPROVED:  PUBLIC WORKS DIRECTOR / CITY ENGINEER DATE: <i>1/29/14</i>	"BLUE DOT" TYPE I MARKER PLACEMENT INTERSECTION & CUL-DE-SAC	



DIVIDED STREET



STREET WITH TURN LANE

NOTE:

1.) FOR NOTES REGARDING "BLUE DOT" MARKER PLACEMENT, SEE STD PLAN MVL-440A-0

NOT TO SCALE



RECOMMENDED:
 EL 1/22/14
 DIVISION MANAGER DATE
 APPROVED:
 PUBLIC WORKS DIRECTOR / DATE
 CITY ENGINEER 1/29/14

CITY OF MORENO VALLEY
 PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION

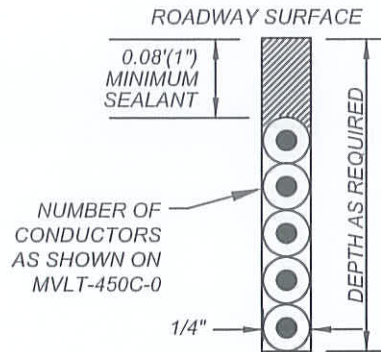
**"BLUE DOT" TYPE I MARKER PLACEMENT
 DIVIDED STREET &
 STREET WITH TURN LANE**

STANDARD PLAN
MVL-440C-0
 SHEET 3 OF 3

NOTES:

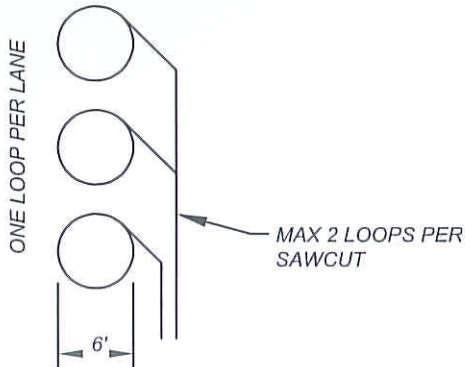
- 1.) WORK SHALL BE PER CALTRANS STANDARD PLANS ES-5A AND ES-5B EXCEPT AS SHOWN HEREON.
- 2.) LOOP SPACING SHALL BE 10' APART, WITH FIRST LOOP INSTALLED 1' INTO THE CROSSWALK OR LIMIT LINE.
- 3.) LOOPS SHALL BE CENTERED IN THE TRAVELED PORTION OF THE LANE UNLESS OTHERWISE SHOWN ON THE PLANS.
- 4.) THERE SHALL BE NO MORE THAN TWO LOOPS PER HOMERUN.
- 5.) LOOP WIRE SHALL BE TYPE "2" WIRE.
- 6.) LOOP WIRE SHALL BE ONE CONTINUOUS PIECE OF WIRE FROM THE PULL BOX THROUGH THE LOOP BACK TO THE PULL BOX. NO SPLICING WILL BE ALLOWED IN THE LOOP WIRE IN THE STREET. SPLICING IS PERMITTED AT THE PULL BOX ONLY.
- 7.) WHEN POSSIBLE, LOOPS WILL BE PLACED IN THE BASE COURSE OF PAVING. NO MORE THAN 2 TWISTED PAIRS SHALL BE INSTALLED IN ONE SAWED SLOT.
- 8.) SAWCUTS SHALL BE BACK FILLED USING "HOT MELT RUBBERIZED ASPHALT" AND NO OTHER BACKFILL MATERIAL SHALL BE USED.
- 9.) SEE STD PLAN MVL-450C-0 FOR ADDITIONAL REQUIREMENTS

TYPICAL SAW CUT

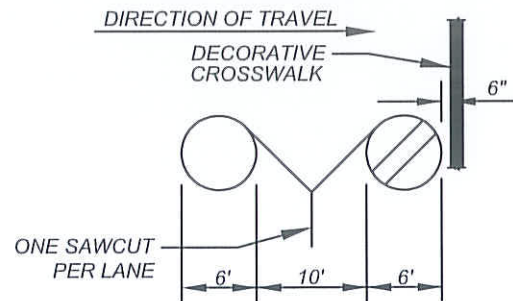


ADVANCE/COUNT

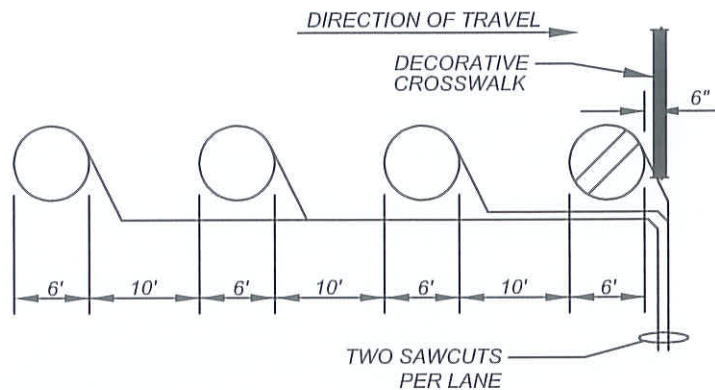
DIRECTION OF TRAVEL →



THRU LANES



LEFT TURN LANES



LEGEND

- TYPE "E" LOOP PER CALTRANS STD PLAN ES-5B
- CALTRANS TYPE "D" LOOP (MODIFIED)—SAWCUT TYPE "E" LOOP AND TRISECT WITH TWO STRAIGHT SAWCUTS @ 21" OC, ORIENTED AT 45° RELATIVE TO DIRECTION OF TRAVEL

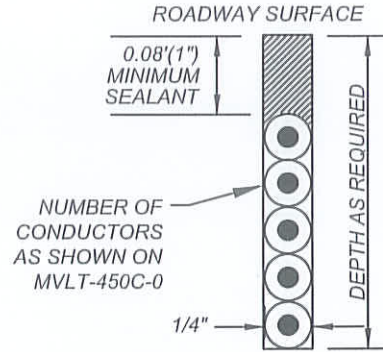
NOT TO SCALE

	RECOMMENDED: DIVISION MANAGER DATE 1/22/14	<h2 style="margin: 0;">CITY OF MORENO VALLEY</h2> <p style="margin: 0;">PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION</p>	
	APPROVED: PUBLIC WORKS DIRECTOR DATE 1/27/14 CITY ENGINEER	<h3 style="margin: 0;">TRAFFIC INDUCTION LOOPS (DECORATIVE CROSSWALK)</h3>	

NOTES:

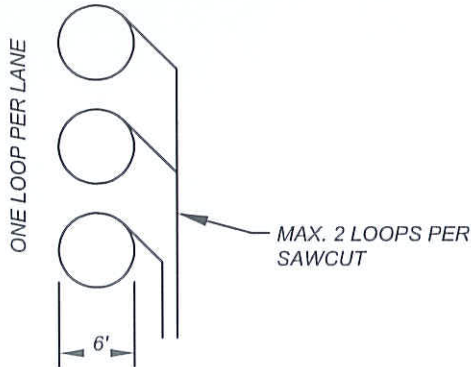
- 1.) WORK SHALL BE PER CALTRANS STANDARD PLANS ES-5A AND ES-5B EXCEPT AS SHOWN HEREON.
- 2.) LOOP SPACING SHALL BE 10' APART, WITH FIRST LOOP INSTALLED 1' INTO THE CROSSWALK OR LIMIT LINE.
- 3.) LOOPS SHALL BE CENTERED IN THE TRAVELED PORTION OF THE LANE UNLESS OTHERWISE SHOWN ON THE PLANS.
- 4.) THERE SHALL BE NO MORE THAN TWO LOOPS PER HOMERUN.
- 5.) LOOP WIRE SHALL BE TYPE "2" WIRE.
- 6.) LOOP WIRE SHALL BE ONE CONTINUOUS PIECE OF WIRE FROM THE PULL BOX THROUGH THE LOOP BACK TO THE PULL BOX. NO SPLICING WILL BE ALLOWED IN THE LOOP WIRE IN THE STREET. SPLICING IS PERMITTED AT THE PULL BOX ONLY.
- 7.) WHEN POSSIBLE, LOOPS WILL BE PLACED IN THE BASE COURSE OF PAVING. NO MORE THAN 2 TWISTED PAIRS SHALL BE INSTALLED IN ONE SAWED SLOT.
- 8.) SAWCUTS SHALL BE BACK FILLED USING "HOT MELT RUBBERIZED ASPHALT" AND NO OTHER BACKFILL MATERIAL SHALL BE USED.
- 9.) SEE STD MVL-450C-0 FOR ADDITIONAL REQUIREMENTS

TYPICAL SAW CUT



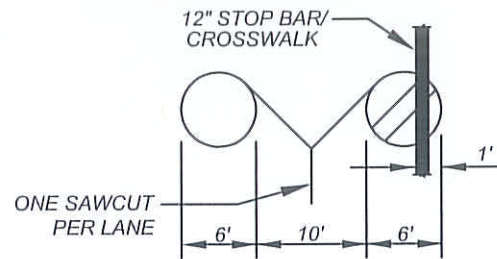
ADVANCE/COUNT

DIRECTION OF TRAVEL →



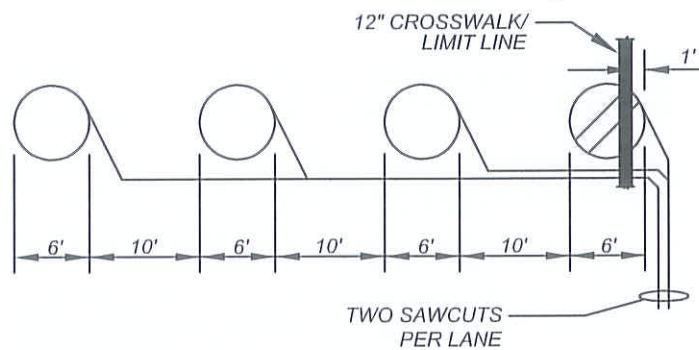
THRU LANES

DIRECTION OF TRAVEL →



LEFT TURN LANES

DIRECTION OF TRAVEL →



LEGEND

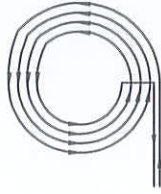
- TYPE "E" LOOP PER CALTRANS STD PLAN ES-5B
- CALTRANS TYPE "D" LOOP (MODIFIED)—SAWCUT TYPE "E" LOOP AND TRISECT WITH TWO STRAIGHT SAWCUTS @ 21" OC, ORIENTED AT 45° RELATIVE TO DIRECTION OF TRAVEL

NOT TO SCALE

	RECOMMENDED: DIVISION MANAGER DATE: 1/21/14	<h2 style="margin: 0;">CITY OF MORENO VALLEY</h2> <p style="margin: 0;">PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION</p>	STANDARD PLAN MVL-450B-0
	APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER DATE: 1/29/14	<h3 style="margin: 0;">TRAFFIC INDUCTION LOOPS (THERMOPLASTIC CROSSWALK)</h3>	SHEET 2 OF 3

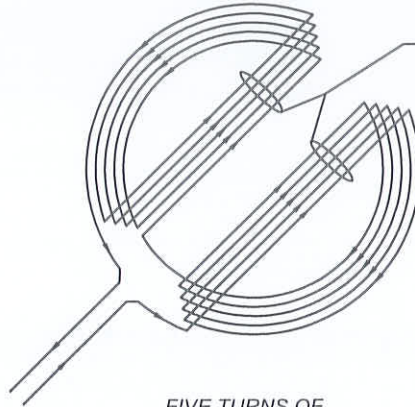
WINDINGS

TYPE "E" LOOP



FOUR TURNS OF LOOP WIRE

TYPE "D" LOOP (MOD)

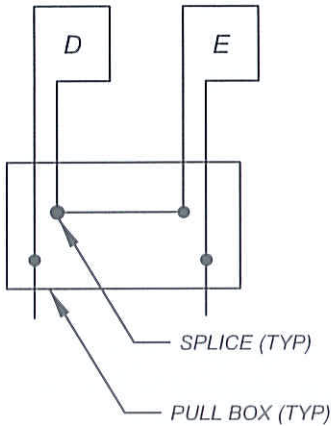


FIVE TURNS OF LOOP WIRE

DIRECTION OF CURRENT FLOW SHALL BE THE SAME IN THESE TWO SAWCUTS

CONNECTIONS

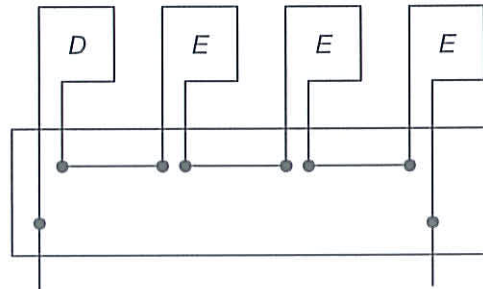
TWO LOOPS IN LANE



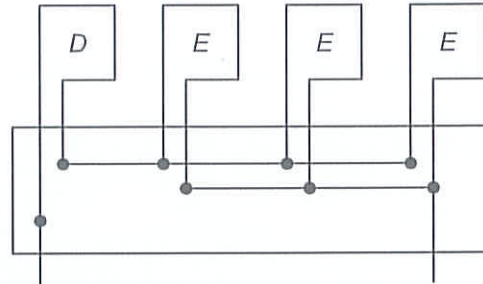
FOUR LOOPS IN LANE

SERIES

WIRING METHOD TO BE DETERMINED BY THE ENGINEER.

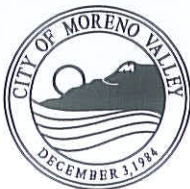


**SERIES/
PARALLEL**



SEE STD PLAN MVL-450A-0 OR MVL-450B-0 (AS APPLICABLE) FOR ADDITIONAL REQUIREMENTS.

NOT TO SCALE

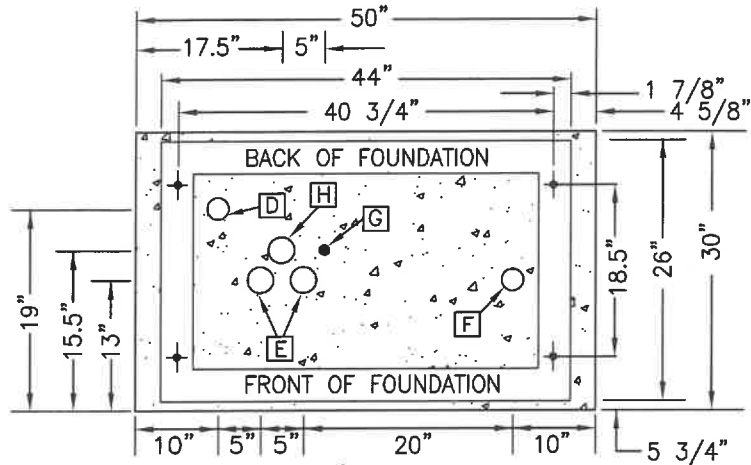


RECOMMENDED:
 EL 1/21/14
 DIVISION MANAGER DATE
 APPROVED:
 [Signature] 1/29/14
 PUBLIC WORKS DIRECTOR / DATE
 CITY ENGINEER

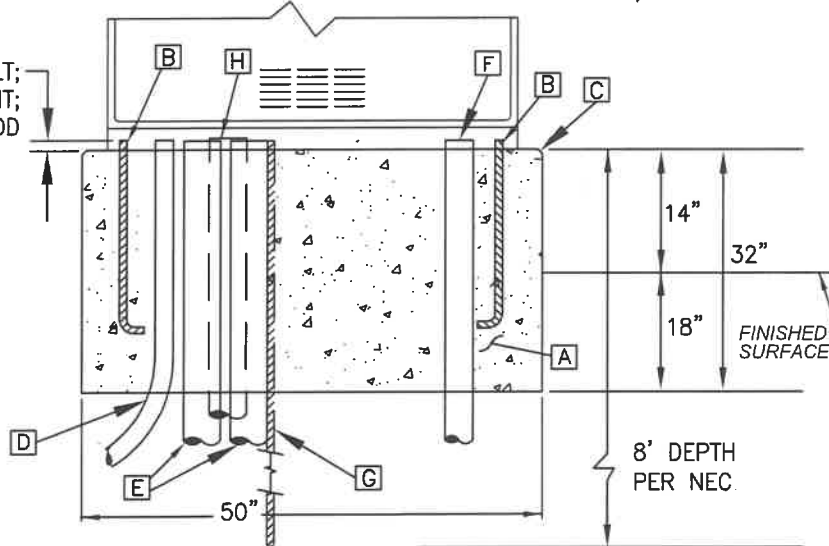
CITY OF MORENO VALLEY
 PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION

**TRAFFIC INDUCTION LOOPS
 WIRING DETAILS**

STANDARD PLAN
MVL-450C-0
 SHEET 3 OF 3



1.5"-2", ANCHOR BOLT;
2"-4", CONDUIT;
6", GROUND ROD



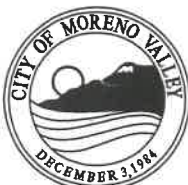
CONSTRUCTION NOTES:

- A 560-C-3250 PORTLAND CEMENT CONCRETE FOUNDATION
- B 3/4" x 18" GALVANIZED ANCHOR BOLTS (ASTM A307)
- C 3/8" CHAMFER TYPICAL
- D 2" SERVICE CONDUIT TO SERVICE ENCLOSURE
- E 4" SIGNAL CONDUCTOR CONDUITS TO ADJACENT PULL BOX
- F 2" CONDUIT FOR SIGNAL INTERCONNECT, PHONE OR FUTURE FIBER-OPTIC COMMUNICATION CABLE
- G GROUND ROD, 8 FT MIN INTO EARTH, EXCLUDING CONCRETE (APPROXIMATELY 10.5 FT ROD)
- H 3" CONDUIT FOR FUTURE CONDUCTORS

GENERAL NOTES:

1. INSTALL IN ACCORDANCE WITH CALTRANS STD PLAN ES-3C (NOTES 3, 7, AND 17 OF ES-4B MAY NOT APPLY).
2. FINAL LOCATION OF CONDUITS SHALL BE APPROVED PRIOR TO FOUNDATION POUR.
3. ALL CONDUITS IN CONTROLLER FOUNDATION SHALL BE SCHEDULE 80 PVC.
4. THE FOUNDATION SHALL BE CONSTRUCTED USING A STEEL FORM. THE CONCRETE SHALL BE VIBRATED. THE OUTSIDE EXPOSED FINISH SURFACE SHALL BE FREE OF VOIDS/HOLES AND SHALL BE TO THE SATISFACTION OF THE ENGINEER.

NOT TO SCALE



RECOMMENDED:

EL

7/3/19
DATE

DIVISION MANAGER

APPROVED:

M.L. W... 7/30/19
PUBLIC WORKS DIRECTOR / DATE
CITY ENGINEER

CITY OF MORENO VALLEY

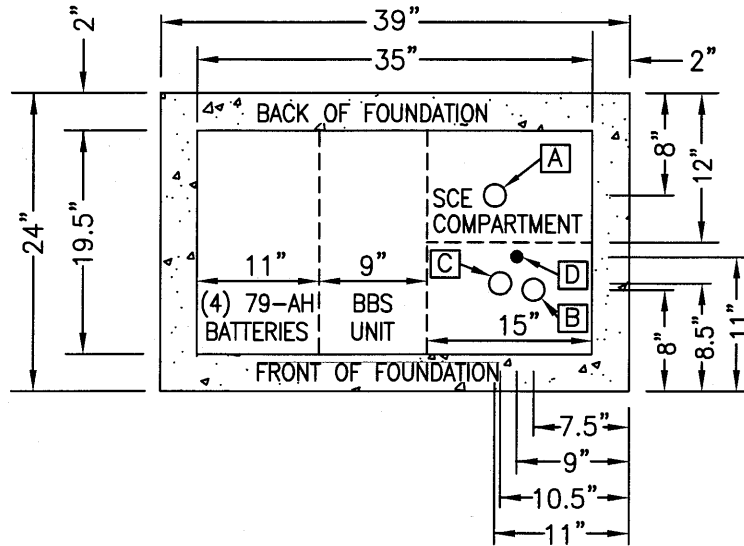
PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION

**TYPE 333
CONTROLLER CABINET
FOUNDATION DETAIL**

STANDARD PLAN

MVLT-460-0

SHEET 1 OF 1



FOUNDATION FOR MYERS
MODEL MEUG35-UPS-M100TS (MOD)

CONSTRUCTION NOTES:

- A** SCE 3" PVC CONDUIT
- B** 2" PVC CONDUIT TO CONTROLLER FOUNDATION
- C** 2" PVC CONDUIT TO #6 PULL BOX
- D** 8' GROUND ROD (COPPER)


GENERAL NOTES:

1. INSTALL IN ACCORDANCE WITH MYERS POWER PRODUCTS, INC SPECIFICATIONS
2. TOP OF 40"x24" FOUNDATION SHALL BE 3" ABOVE FINISHED SURFACE.
3. FINAL LOCATION OF CONDUITS SHALL BE APPROVED PRIOR TO FOUNDATION POUR.
4. THE FOUNDATION SHALL BE CONSTRUCTED USING A STEEL FORM. THE CONCRETE SHALL BE VIBRATED. THE OUTSIDE EXPOSED FINISH SURFACE SHALL BE FREE OF VOIDS/HOLES AND SHALL BE TO THE SATISFACTION OF THE ENGINEER.

NOT TO SCALE



RECOMMENDED:
EL 1/12/17
 DIVISION MANAGER DATE

APPROVED:

 PUBLIC WORKS DIRECTOR / DATE
 CITY ENGINEER

CITY OF MORENO VALLEY
 PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION

**DUAL METER
 TRAFFIC SIGNAL
 SERVICE FOUNDATION**

STANDARD PLAN
MVLT-461-0

SHEET 1 OF 1