CITY OF MORENO VALLEY STANDARD PLANS

SECTION 1

STREET IMPROVEMENTS

SECTION 1: Street Improvements (Continued)

MVSI-111B-0	*Residential Driveway Approach (For Confined Right-Of-Way)*
MVSI-111C-1	*Residential Driveway Approach (For Confined Right-Of-Way)*
MVSI-112A-0	*Commercial Driveway Approach: Type 1*
MVSI-112B-0	*Commercial Driveway Approach: Type 2*
MVSI-112C-0	*Commercial Driveway Approach: Type 3*
MVSI-112D-0	*Commercial Driveway Approach: Type 4*
MVSI-113-0	*Alley Approach*
MVSI-114A-2	*Access Ramp: Type 1*
MVSI-114B-2	*Access Ramp: Type 2*
MVSI-114C-2	*Detectable Warning Surface Details and Notes*
MVSI-114D-0	*Access Ramp – Alternate Type 2 (Confined Space)*
MVSI-115A-0	*Sidewalk*
MVSI-115B-0	*Curb Separated Sidewalk*
MVSI-115C-0	*Meandering Sidewalk*
MVSI-115D-0	*Sidewalk Placement around Obstructions*
MVSI-116A-0	*News Rack Installation and Placement*
MVSI-116B-0	*News Rack Installation Notes*
MVSI-117A-0	*Single Post Mailbox Installation*
MVSI-117B-0	*Multiple Mailbox Installation for New Sidewalk*
MVSI-118A-0	*Tree Well: Type 1*
MVSI-118B-0	*Tree Well: Type 2*
MVSI-118C-0	*Tree Well: Type 3*
MVSI-118D-0	*Tree Well: Type 4*
MVSI-118E-0	*Tree Well Notes*
MVSI-119-0	*Parkway Improvement Spacing*

Curb and Gutter

MVSI-120A-0	*Type 6 Integral Curb and Gutter*
MVSI-120B-0	*Type 8 Integral Curb and Gutter*
MVSI-121A-0	*Type 6A Curb*
MVSI-121B-0	*Type 8A Curb*
MVSI-122-0	*Type D-1 Curb*
MVSI-123-0	*Type C Rolled Curb*
MVSI-124-0	*Asphalt Concrete Curb*
MVSI-125-0	*Curb Transition*
MVSI-126-0	*Curb Address Painting*
MVSI-127-1	*Cross Gutter and Spandrel*

Pavement

MVSI-130-0	*Pavement Edge Taper*
MVSI-131-1	*Join Existing Pavement Detail*
MVSI-132A-2	*Perpendicular Trench Backfill and Roadway Repair*

SECTION 1: Street Improvements (Continued)

MVSI-132B-3	*Parallel Trench Backfill and Roadway Repair*
MVSI-132C-2	*Trench Backfill and Roadway Repair Notes*
MVSI-132D-1	*Utility Pothole or Pavement Core Repair*
MVSI-132E-2	*Water Line (Up to 12" Dia) Trench Backfill and Roadway Repair*
MVSI-132F-2	*Water Line (Larger than 12" Dia) Trench Backfill and Roadway Repair*
MVSI-133-0	*Recessed Trench Plate Detail*
MVSI-134A-0	*Speed Hump Detail and Placement*
MVSI-134B-0	*Speed Hump Installation Notes*
MVSI-135-0	*Speed Table*

Median

MVSI-140-0	*Emergency Vehicle Median Access*
MVSI-141A-0	*Median Landscape Meandering Design*
MVSI-141B-0	*Median Landscape Meandering Design Notes*
MVSI-142A-1	*Median Hardscape Meandering Design*
MVSI-142B-1	*Median Hardscape Meandering Design Notes*
MVSI-143-0	*Median Taper*
MVSI-144-0	*Median Flare*
MVSI-145-0	*Restricted Left Turn Median Opening*
MVSI-146-0	*Aligned Opposite Driveways Restricted Left Turn Median*
MVSI-147A-0	*Manhole / Curb Conflict with Median Access*
MVSI-147B-0	*Manhole / Curb Conflict with Median Access*

Parkway and Residential Yard Drain

MVSI-150A-0	*Parkway Culvert*
MVSI-150B-0	*Parkway Culvert Details and Notes*
MVSI-151A-0	*Sidewalk Outlet Structure*
MVSI-151B-0	*Sidewalk Outlet Structure Notes*
MVSI-152-1	*Curb Drain: Residential*
MVSI-153A-1	*Typical Lot Drainage and Residential Yard Drain*
MVSI-153B-0	*Residential Yard Drain – B1 Typical Area Drain*
MVSI-153C-0	*Residential Yard Drain – B2 Typical Drain Downspout Inlet Detail*

Design and Construction Policies and Guidelines

MVSI-160A-2	*Design Policy*
MVSI-160B-1	*Design Policy*
MVSI-160C-1	*Roadway Design Requirements*
MVSI-161-0	*Bus Turnout*
MVSI-162-0	*Knuckle*
MVSI-163A-0	*Cul-de-Sac (Symmetrical)*
MVSI-163B-0	*Cul-de-Sac (Offset)*

SECTION 1: Street Improvements (Continued)

MVSI-164A-0	*Intersection Sight Distance*
MVSI-164B-0	*Intersection Sight Distance*
MVSI-164C-0	*Intersection Sight Distance*
MVSI-165-0	*Property Line: Corner Cut-Back, Curb Return Radius*
MVSI-166A-0	*Standard General Improvements Notes (For Land Development Division)*
MVSI-166B-1	*Standard Street Improvements Notes (For Land Development Division)*
MVSI-166C-1	*Standard Street Improvements Notes (For Land Development Division)*
MVSI-166D-1	*Standard Grading Notes*
MVSI-167A-0	*General Street Improvements Notes (For City Capital Improvement Projects)*
MVSI-167B-1	*General Street Improvements Notes (For City Capital Improvement Projects)*
MVSI-168A-1	*Standard Title Sheet (For Land Development Division)*
MVSI-168B-1	*Standard Title Sheet (For City Capital Improvement Projects)*

Monument

MVSI-170A-1	*Monument Cover*
MVSI-170B-0	*Survey Monument*
MVSI-170C-0	*Tie-out Standards*
MVSI-170D-0	*Street Centerline Monument*
MVSI-170E-0	*Monument Notes*

Utilities

MVSI-180A-0	*Normal Location of Underground Utilities*
MVSI-180B-0	*Location of Cable TV Ducts at Street Intersections*
MVSI-181A-0	*Communications Conduit in Parkway Separate Trench Detail*
MVSI-181B-0	*Communications Conduit in Sidewalk Separate Trench Detail*
MVSI-181C-0	*Communications Conduit in Pavement Separate Trench Detail*
MVSI-181D-0	*Typical Multi-Conduit Joint Trench Detail*
MVSI-182-0	*Telecommunications Trunk Conduit System and Pull Box Layout Detail*
MVSI-183-0	*Telecommunications Distribution and Service Lateral Conduit System*
MVSI-184A-0	*Telecommunications Residential Units*
MVSI-184B-0	*Telecommunications Residential Units*
MVSI-185A-0	*Telecommunication Technical Provisions*
MVSI-185B-0	*Telecommunication Technical Provisions*
MVSI-185C-0	*Telecommunication Technical Provisions*
MVSI-185D-0	*Telecommunication Technical Provisions*
MVSI-186-0	*Citywide Communication Conduits*

2:1	Slope of two feet measured horizontally for every one foot measured vertically
&	And
@	At
%	Percent
AB	Aggregate Base
AC	Asphalt Concrete
A.C.P.	Asbestos Cement Pipe
BC	Begin Curve
BCR	Begin Curb Return
Bit.	Bituminous
Bldg.	Building
BM	Bench Mark
BOW	Back of Walk
BVC	Begin Vertical Curve
CAB	Crush Aggregate Base
CB	Catch Basin
C-C	Center to Center
CF	Curb Face
C.I.	Cast Iron
C.M.P.	Corrugated Metal Pipe
CO	Cleanout
Conc	Concrete
Constr	Construct
C.U.P.	Conditional Use Permit
℄ , CL	Center line
DA	Drive Approach
Dia	Diameter
DMH	Drop Manhole
Dwy	Driveway
E	East
EC	End Curve
ECR	End Curb Return
EL	Elevation
EP, EOP	Edge of Pavement
ETW	Edge of Traveled Way
EVC	End Vertical Curve
Ex, Exist	Existing
F.B.	Field Book
FG	Finished Grade
FH	Fire Hydrant
℄ ,FL	Flow Line
FOW	Front of Walk
FS	Finished Surface
GB	Grade Break
G.L.	Ground Line
G.P.	Grading Plan
HGL	Hydraulic Grade Line
HP	High Point
Inv	Invert
IE	Invert Elevation
L	Length or Length of Arc
Lt.	Left

Max	Maximum
M.B.	Map Book
MH	Manhole
Min	Minimum
Mon	Monument
MUTCD	Manual on Uniform Traffic Control Devices
N	North
No.	Number
NTS	Not to Scale
OC	On Center
OG	Original Ground
PB	Pull Box
PC	Point of Curvature
PCC	Point of Compound Curve Portland Cement Concrete
PI	Point of Intersection
℄ , PL	Property Line
PP	Power Pole
PRC	Point of Reverse Curve
PVC	Polyvinyl Chloride
PVI	Point of Vertical Intersection
Pvmt	Pavement
Qty	Quantity
R	Radius
RCB	Reinforced Concrete Box
RCP	Reinforced Concrete Pipe
Rdwy	Roadway
Ret	Retaining
R/S	Record of Survey
Rt.	Right
R/W, ROW	Right of Way
S	South, Sewer
SD	Storm Drain
Sht	Sheet
SL	Street Light
SMH	Sewer Manhole
Spec	Specifications, Special
SS	Sanitary Sewer
Sta	Station
Std	Standard
Sdwk, S/W	Sidewalk
T	Tangent Length for Curve
TB	Top of Berm
TC	Top of Curb
TG	Top of Grade
Tr.	Tract
TS	Traffic Signal
Typ	Typical
VC	Vertical Curve
VCP	Vitrified Clay Pipe
W	West or Width
WV	Water Valve

NOT TO SCALE

RECOMMENDED: _____ DIVISION MANAGER 1/21/14 DATE

APPROVED: _____ PUBLIC WORKS DIRECTOR / CITY ENGINEER 1/29/14 DATE

CITY OF MORENO VALLEY

PUBLIC WORKS DEPARTMENT - LAND DEVELOPMENT DIVISION

ACRONYMS AND ABBREVIATIONS

STANDARD PLAN

MVSI-010A-0

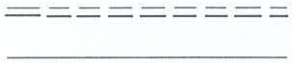
CENTER LINE

POINT OF INTERSECTION

RIGHT OF WAY, PROPERTY LINE

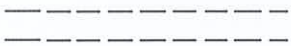
EXISTING CURB

NEW CURB



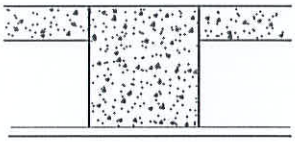
EXISTING CURB AND GUTTER

NEW CURB AND GUTTER



EXISTING SIDEWALK

NEW CONCRETE SIDEWALK

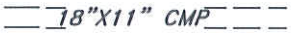


NEW CONCRETE DRIVEWAY

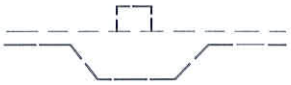
NEW PAVEMENT

NEW PAVEMENT TO BE OVERLAID OVER EXISTING PAVEMENT

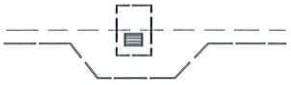
EXISTING REINFORCED CONCRETE PIPE OR STORM DRAIN



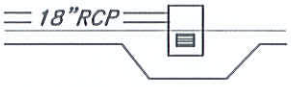
EXISTING CORRUGATED METAL PIPE OR STORM DRAIN



EXISTING CURB INLET



EXISTING CURB INLET WITH GRATING



NEW STORM DRAIN, CURB INLET AND GUTTER DEPRESSION

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: DIVISION MANAGER 1/21/14 DATE APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER 1/29/14 DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - LAND DEVELOPMENT DIVISION **DRAFTING STANDARDS AND TOPO SYMBOLS** STANDARD PLAN **MVSI-010B-0** SHEET 2 OF 4

UTILITY LINE (△" = SIZE OF UTILITY LINE, * = LISTED BELOW)

E = ELECTRICAL	S = SEWER
F = FUEL	SD = STORM DRAIN
FO = FIBER OPTICS	T = TELEPHONE
G = GAS	TV = TELEVISION CABLE
I = IRRIGATION	W = WATER
O = OIL	X = INDUSTRIAL WASTE

WATER METER

WATER VALVE

FIRE HYDRANT

TELEPHONE POLE

POLE ANCHOR

GUY POLE

TELEPHONE AND POWER ON SAME POLE

EXISTING STREET LIGHT

NEW STREET LIGHT

EXISTING TRAFFIC SIGNAL

EXISTING TRAFFIC SIGNAL DETECTOR

EXISTING TRAFFIC SIGNAL CONTROLLER

PULL BOX

NEW SIGN

NEW INFORMATIONAL SIGN

EXISTING STREET NAME SIGN

NEW STREET NAME SIGN

EXISTING HEDGE

SHRUB

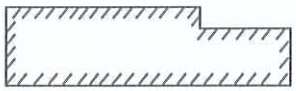
NOT TO SCALE

CITY OF MORENO VALLEY · DECEMBER 3, 1984	RECOMMENDED: DIVISION MANAGER — DATE 1/21/14 APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER — DATE 1/29/14	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - LAND DEVELOPMENT DIVISION **DRAFTING STANDARDS AND TOPO SYMBOLS** STANDARD PLAN **MVSI-010C-0** SHEET 3 OF 4

EXISTING TREE

PROPOSED TREE

PALM TREE



BUILDING

MONUMENT

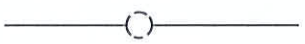
EXISTING NATURAL FLOW LINE

TOP OF SLOPE

TOE OF SLOPE

DIRECTION OF FLOW

FENCE



EXISTING MANHOLE

EXISTING SEWER CLEANOUT

NEW SANITARY SEWER AND MANHOLE

NEW SEWER CLEANOUT

NEW SANITARY SEWER MAIN WITH WYES AND LATERAL

PROFILE SYMBOLS

EXISTING PAVEMENT PROFILE

EXISTING CURB PROFILE

EXISTING SIDEWALK PROFILE

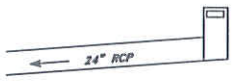
EXISTING GROUND PROFILE

FINISHED CENTERLINE GRADE

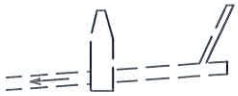
TOP OF CURB GRADE

BACK OF SIDEWALK GRADE

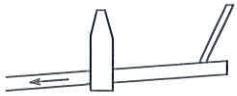
POINT OF INTERSECTION



NEW CULVERT OR STORM DRAIN AND CURB INLET



EXISTING SANITARY SEWER, MANHOLE AND CLEANOUT



NEW SANITARY SEWER, MANHOLE AND CLEANOUT

NOT TO SCALE

CITY OF MORENO VALLEY
PUBLIC WORKS DEPARTMENT - LAND DEVELOPMENT DIVISION

RECOMMENDED:
DIVISION MANAGER — DATE 11/21/14

APPROVED:
PUBLIC WORKS DIRECTOR / CITY ENGINEER — DATE 11/29/14

DRAFTING STANDARDS AND TOPO SYMBOLS

STANDARD PLAN
MVSI-010D-0

SHEET 4 OF 4

STREET CLASSIFICATION AND CROSS SECTION DESIGN STANDARDS

STANDARD CITY PLAN NO.	STREET CLASS	ROW/ CURB TO CURB (FT)	TYPICAL SECTION (PARKING, TRAVEL LANES & MEDIAN) *** (FT)	PARKWAY WIDTH (FT)	THRU LANES	LOS C CAPACITY (ADT)	TRAFFIC INDEX ▲▲	MIN BUS BAY WIDTH (FT)	MIN THICKNESS AC OVER CAB (FT)
MVSI-101A-0, MVSI-101B-0	DIVIDED MAJOR ARTERIAL	134/110 (RAISED MEDIAN)	8 | 12 | 12 | 14 | 18 | 14 | 12 | 12 | 8	12 **	6 ▲	45,000	10	10	.50/1.00
	ALT.	142/110							
MVSI-102A-0, MVSI-102B-0	MODIFIED DIVIDED MAJOR ARTERIAL	120/102 (RAISED MEDIAN)	8 | 12 | 12 | 12 | 14 | 12 | 12 | 12 | 8	9 **	6 ▲	45,000	10	10	.50/1.00
	ALT.	130/102							
MVSI-103A-0, MVSI-103B-0	4-LANE DIVIDED ARTERIAL	110/86 (RAISED MEDIAN)	8 | 12 | 14 | 18 | 14 | 12 | 8	12 **	4 ▲	30,000	10	10	.50/1.00
	ALT.	114/86							
MVSI-103C-0	6-LANE DIVIDED ARTERIAL	110/86 (RAISED MEDIAN)	13 | 11 | 12 | 14 | 12 | 11 | 13	12	6	45,000	10	10	.50/1.00
MVSI-104A-0, MVSI-104B-0	ARTERIAL	100/76	8 | 12 | 12 | 12 | 12 | 12 | 8 ****	12 **	4 ▲	20,000	10	10	.50/1.00
	ALT.	104/76	6 | 12 | 13 | 14 | 13 | 12 | 6 *****			30,000			
MVSI-105A-0, MVSI-105B-0	MINOR ARTERIAL	88/64	8 | 12 | 12 | 12 | 12 | 8 6 | 11 | 10 | 10 | 10 | 11 | 6 7 | 10 | 10 | 10 | 10 | 10 | 7	12 **	4	20,000	9	10	.45/.75
MVSI-105C-0	PIGEON PASS RD.	98/74	6 | 13 | 12 | 12 | 12 | 13 | 6	12	4 ▲	20,000	9	10	.45/.75
MVSI-106A-0	INDUSTRIAL COLLECTOR	78/56	10 | 12 | 12 | 12 | 10	11	2 ▲	10,000	10	10	.50/1.00
MVSI-106B-0	COLLECTOR	66/44	8 | 14 | 14 | 8	11	2	N/A	7	N/A	.30/.50
MVSI-107A-0	LOCAL STREET	56/36	7 | 11 | 11 | 7	10	2	N/A	6	N/A	.30/.50
MVSI-107B-0	MODIFIED LOCAL STREET	50/36	7 | 11 | 11 | 7	7	2	N/A	6	N/A	.30/.50
MVSI-104C-0, MVSI-104D-0, MVSI-104E-0	SUNNYMEAD BOULEVARD	100/72	20 | 12 | 12 | 12 | 16	12/16	4	30,000	10	10	.50/1.00
		100/68	16 | 12 | 12 | 12 | 16	16	4	30,000	10	10	.50/1.00
		100/68	16 | 12 | 12 | 12 | 16 6 | 11 | 11 | 12 | 11 | 11 | 6	16	4	30,000	10	10	.50/1.00

NOT TO SCALE

CITY OF MORENO VALLEY

PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION

STREET CLASSIFICATION AND CROSS SECTION DESIGN STANDARDS

STANDARD PLAN **MVSI-100A-1**

SHEET 1 OF 2

RECOMMENDED: EL — DIVISION MANAGER — DATE 12/11/17

APPROVED: — PUBLIC WORKS DIRECTOR/ CITY ENGINEER — DATE 9/14/18

* MAY BE USED FOR CUL-DE-SACS WITH LESS THAN 10 LOTS BUT WILL NOT BE CONSIDERED FOR NEW DEVELOPMENT PROJECTS.

** PARKWAY WIDTH FOR ALTERNATE STREET CROSS SECTIONS ARE AS FOLLOWS:

1. ALTERNATE DIVIDED MAJOR ARTERIAL	16FT
2. ALTERNATE MODIFIED DIVIDED MAJOR ARTERIAL	14FT
3. ALTERNATE DIVIDED ARTERIAL	14FT
4. ALTERNATE ARTERIAL	14FT
5. ALTERNATE MINOR ARTERIAL	14FT

*** ROW REQUIREMENTS SHALL BE BASED UPON AN ALIGNMENT STUDY AS APPROVED BY THE CITY ENGINEER. INCREASED WIDTH MAY BE REQUIRED TO ACCOMMODATE ADDITIONAL TURN LANES.

**** PAINTED MEDIAN.

***** RAISED MEDIAN, LOCATIONS DETERMINED ON A CASE-BY-CASE BASIS.

▲ LEFT TURN LANES OR POCKETS WITHOUT ELIMINATING PARKING.

▲▲ STREETS DESIGNATED AS TRUCK ROUTES SHALL HAVE A MINIMUM TI OF 10, SUBJECT TO CITY ENGINEER APPROVAL.

CASE A: WITH RIGHT TURN LANE

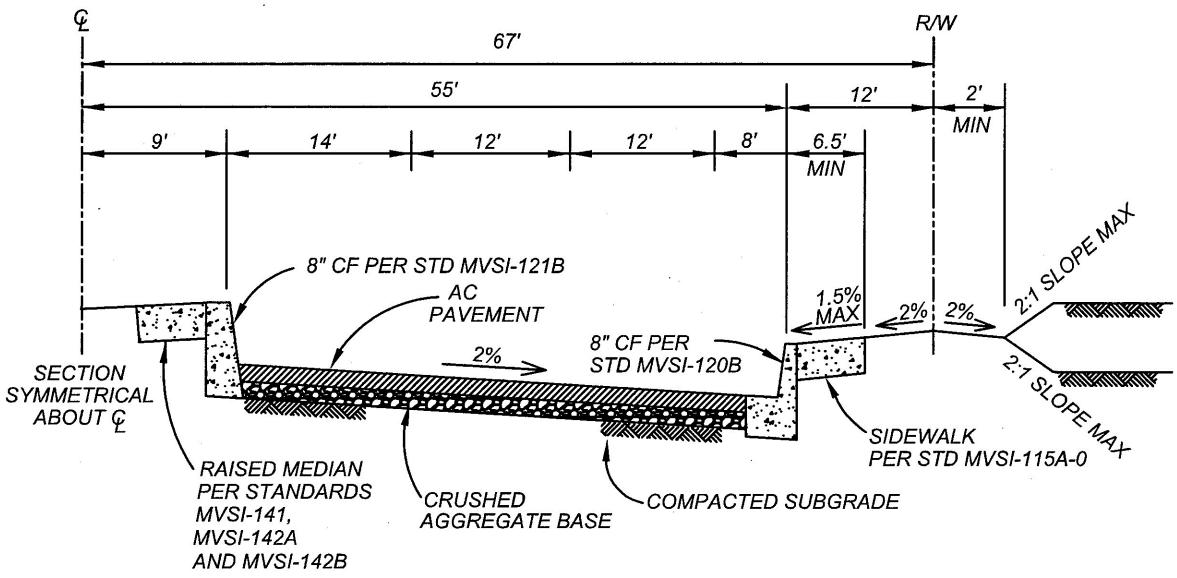
CASE B: WITH LEFT TURN LANE

NOTES:

1. PARKING MAY BE ELIMINATED ON SOME STREETS AND CLASS II BIKEWAYS STRIPED, SEE GENERAL PLAN.
2. PARKING MAY BE ELIMINATED AT INTERSECTION APPROACHES TO ACCOMMODATE TURN POCKETS.
3. ALL OF THE ABOVE LANE WIDTHS SHALL BE USED TO DESIGN STRIPING PLANS UNLESS OTHERWISE DIRECTED BY THE CITY ENGINEER.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: EL 1/22/14 DIVISION MANAGER DATE APPROVED: 1/29/14 PUBLIC WORKS DIRECTOR / CITY ENGINEER DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION **STREET CLASSIFICATION AND CROSS SECTION DESIGN STANDARDS NOTES**	STANDARD PLAN **MVSI-100B-0** SHEET 2 OF 2



TYPICAL SECTION

NOTES:

1.) ADDITIONAL RIGHT-OF-WAY MAY BE REQUIRED WHEN AN ARTERIAL HIGHWAY COINCIDES WITH AN ADOPTED ROUTE FOR AN ADDITIONAL PUBLIC FACILITY (I.E., PEDESTRIAN, BICYCLE, OR EQUESTRIAN TRAIL), OR FOR A SCENIC HIGHWAY.

2.) THICKNESS OF PAVEMENT SECTION TO BE DETERMINED BY R VALUE TESTING PER CALTRANS DESIGN METHOD TEST 301 WITH RECOMMENDED SAFETY FACTOR, MINIMUM 0.50' AC / 1.00' CAB. AC SHALL BE PLACED IN LIFTS, AND THICKNESS OF EACH LIFT SHALL NOT EXCEED 3".

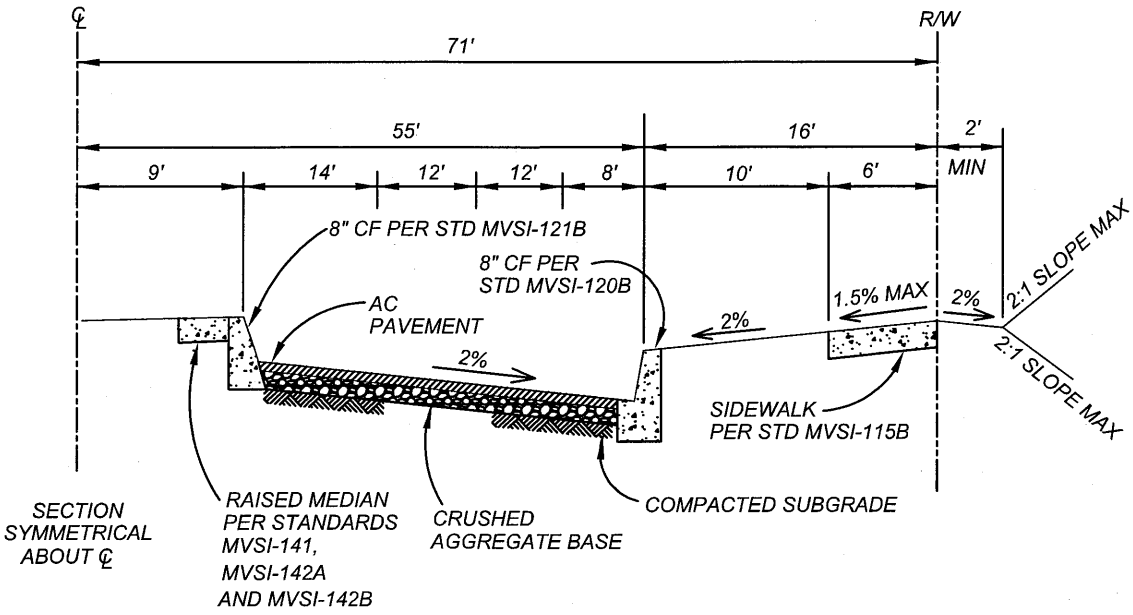
3.) MINIMUM T.I. = 10.

4.) HALF WIDTH STREETS SHALL BE CONSTRUCTED TO A WIDTH OF 1/2 STREET PLUS 23' WITH MEDIAN. *

* UNLESS OTHERWISE DIRECTED BY CITY ENGINEER

NOT TO SCALE

CITY OF MORENO VALLEY · DECEMBER 3, 1984	RECOMMENDED: EL 8/29/18 — DIVISION MANAGER / DATE APPROVED: M.L. Wray 9/4/18 — PUBLIC WORKS DIRECTOR / CITY ENGINEER / DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION **DIVIDED MAJOR ARTERIAL** STANDARD PLAN **MVSI-101A-0** SHEET 1 OF 2



TYPICAL SECTION

NOTES:

1.) ADDITIONAL RIGHT-OF-WAY MAY BE REQUIRED WHEN AN ARTERIAL HIGHWAY COINCIDES WITH AN ADOPTED ROUTE FOR AN ADDITIONAL PUBLIC FACILITY (I.E., PEDESTRIAN, BICYCLE, OR EQUESTRIAN TRAIL), OR FOR A SCENIC HIGHWAY.

2.) THICKNESS OF PAVEMENT SECTION TO BE DETERMINED BY R VALUE TESTING PER CALTRANS DESIGN METHOD TEST 301 WITH RECOMMENDED SAFETY FACTOR, MINIMUM 0.50' AC / 1.00' CAB. AC SHALL BE PLACED IN LIFTS, AND THICKNESS OF EACH LIFT SHALL NOT EXCEED 3".

3.) MINIMUM T.I. = 10.

4.) HALF WIDTH STREETS SHALL BE CONSTRUCTED TO A WIDTH OF $\frac{1}{2}$ STREET PLUS 23' WITH MEDIAN. *

5.) ALTERNATE DIVIDED MAJOR ARTERIAL IS TO BE USED IN THE FOLLOWING CIRCUMSTANCES:

a.) SPECIFIC PLANS OR OTHER LARGE RESIDENTIAL, INDUSTRIAL, OR COMMERCIAL DEVELOPMENTS WHERE ADDITIONAL RIGHT-OF-WAY CAN BE ACCOMMODATED OVER THE BREADTH OF A LARGE AREA, CAUSING LESS CONFLICT WITH MINIMUM LOT SIZE OR OTHER DEVELOPMENT REQUIREMENTS.

b.) WHERE CONFLICTS WITH UTILITIES EXIST (E.G. THE 30" HIGH PRESSURE GAS MAIN RUNNING ALONG THE NORTH SIDE OF COTTONWOOD BOULEVARD; THE HIGHGROVE HIGH VOLTAGE TRANSMISSION LINE RUNNING DOWN PIGEON PASS ROAD/FREDERICK STREET).

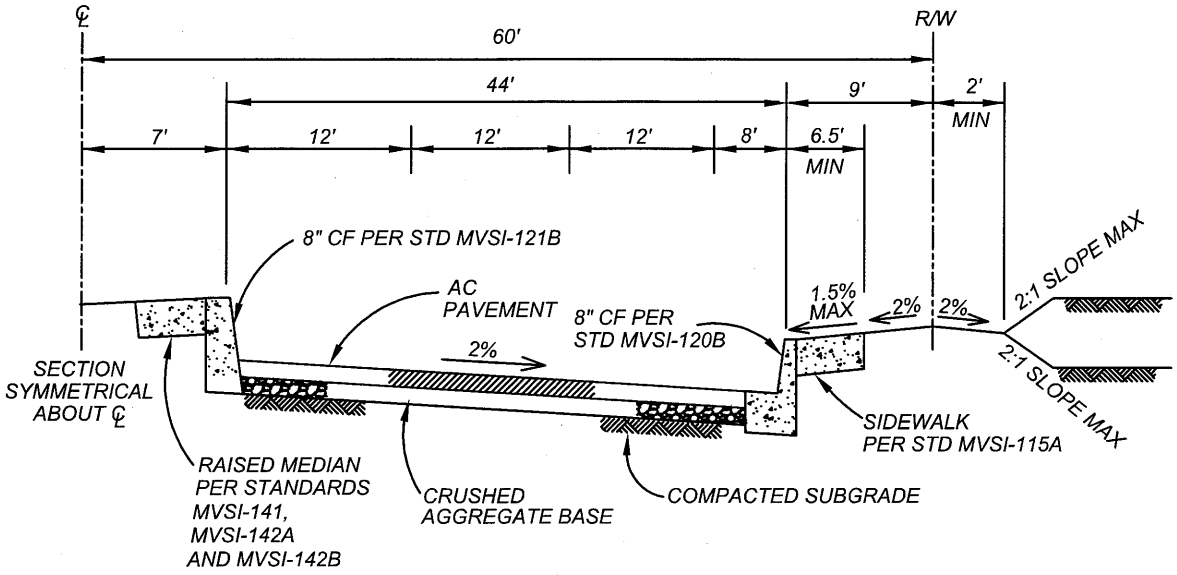
c.) WHERE PARKWAYS MUST BE EXPANDED TO ALLOW FOR ADDITIONAL PUBLIC FACILITIES.

d.) OTHER LOCATIONS AS APPROVED BY THE CITY ENGINEER.

* UNLESS OTHERWISE DIRECTED BY CITY ENGINEER

NOT TO SCALE

CITY OF MORENO VALLEY · DECEMBER 3, 1984	RECOMMENDED: EL — DIVISION MANAGER — 8/29/18 DATE APPROVED: — PUBLIC WORKS DIRECTOR / CITY ENGINEER — 9/14/18 DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION **ALTERNATE DIVIDED MAJOR ARTERIAL**
		STANDARD PLAN **MVSI-101B-0** SHEET 2 OF 2



TYPICAL SECTION

NOTES:

1.) ADDITIONAL RIGHT-OF-WAY MAY BE REQUIRED WHEN AN ARTERIAL HIGHWAY COINCIDES WITH AN ADOPTED ROUTE FOR AN ADDITIONAL PUBLIC FACILITY (I.E., PEDESTRIAN, BICYCLE, OR EQUESTRIAN TRAIL), OR FOR A SCENIC HIGHWAY.

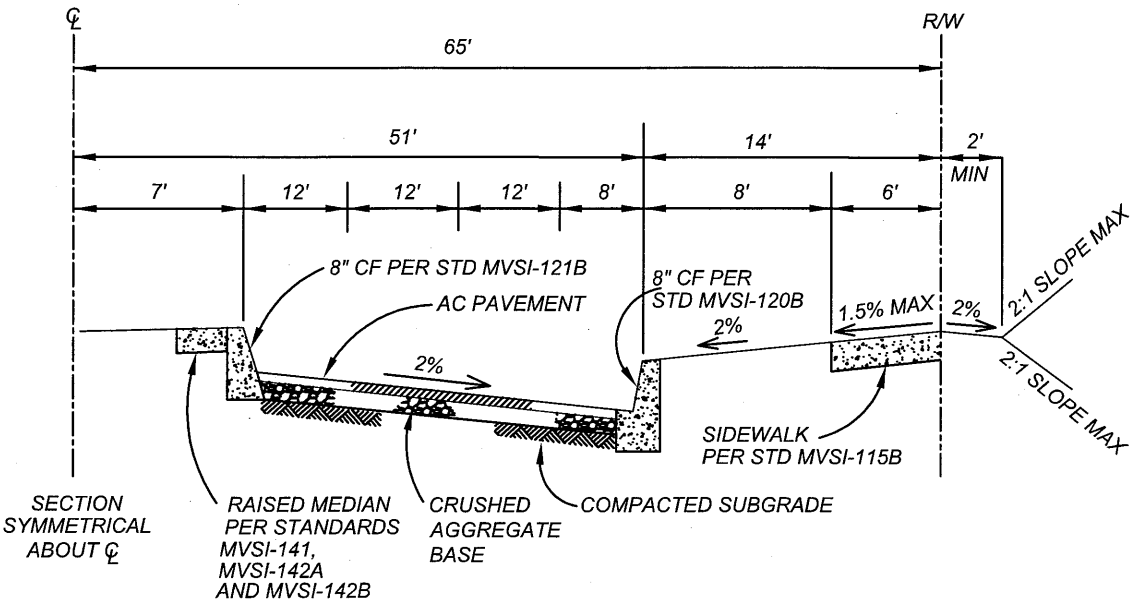
2.) THICKNESS OF PAVEMENT SECTION TO BE DETERMINED BY R VALUE TESTING PER CALTRANS DESIGN METHOD TEST 301 WITH RECOMMENDED SAFETY FACTOR, MINIMUM 0.50' AC / 1.00' CAB. AC SHALL BE PLACED IN LIFT, AND THICKNESS OF EACH LIFT SHALL NOT EXCEED 3".

3.) MINIMUM T.I. = 10.

4.) HALF WIDTH STREETS SHALL BE CONSTRUCTED TO A WIDTH OF 1/2 STREET WIDTH PLUS 21' WITH MEDIAN.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: EL 8/29/18 DIVISION MANAGER / DATE APPROVED: 9/14/18 PUBLIC WORKS DIRECTOR / CITY ENGINEER / DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION **MODIFIED DIVIDED MAJOR ARTERIAL** STANDARD PLAN **MVSI-102A-0** SHEET 1 OF 2



TYPICAL SECTION

NOTES:

1.) ADDITIONAL RIGHT-OF-WAY MAY BE REQUIRED WHEN AN ARTERIAL HIGHWAY COINCIDES WITH AN ADOPTED ROUTE FOR AN ADDITIONAL PUBLIC FACILITY (I.E., PEDESTRIAN, BICYCLE, OR EQUESTRIAN TRAIL), OR FOR A SCENIC HIGHWAY.

2.) THICKNESS OF PAVEMENT SECTION TO BE DETERMINED BY R VALUE TESTING PER CALTRANS DESIGN METHOD TEST 301 WITH RECOMMENDED SAFETY FACTOR, MINIMUM 0.50' AC / 1.00' CAB. AC SHALL BE PLACED IN LIFTS, AND THICKNESS OF EACH LIFT SHALL NOT EXCEED 3".

3.) MINIMUM T.I. = 10.

4.) HALF WIDTH STREETS SHALL BE CONSTRUCTED TO A WIDTH OF $\frac{1}{2}$ STREET WIDTH PLUS 21' WITH MEDIAN.

5.) ALTERNATE MODIFIED DIVIDED MAJOR ARTERIAL IS TO BE USED IN THE FOLLOWING CIRCUMSTANCES:

a.) SPECIFIC PLANS OR OTHER LARGE RESIDENTIAL, INDUSTRIAL, OR COMMERCIAL DEVELOPMENTS WHERE ADDITIONAL RIGHT-OF-WAY CAN BE ACCOMMODATED OVER THE BREADTH OF A LARGE AREA, CAUSING LESS CONFLICT WITH MINIMUM LOT SIZE OR OTHER DEVELOPMENT REQUIREMENTS.

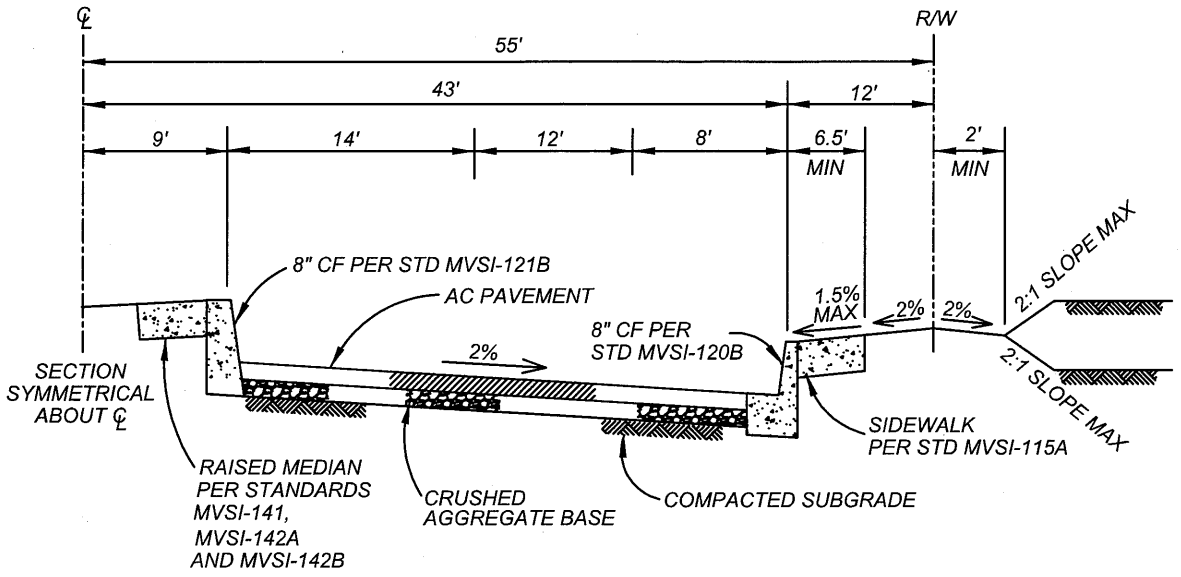
b.) WHERE CONFLICTS WITH UTILITIES EXIST (E.G. THE 30" HIGH PRESSURE GAS MAIN RUNNING ALONG THE NORTH SIDE OF COTTONWOOD BOULEVARD; THE HIGHGROVE HIGH VOLTAGE TRANSMISSION LINE RUNNING DOWN PIGEON PASS/FREDERICK STREET).

c.) WHERE PARKWAYS MUST BE EXPANDED TO ALLOW FOR ADDITIONAL PUBLIC FACILITIES.

d.) OTHER LOCATIONS AS APPROVED BY THE CITY ENGINEER.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: EL 8/29/18 DIVISION MANAGER / DATE APPROVED: M.L. Wolfe 9/14/18 PUBLIC WORKS DIRECTOR / CITY ENGINEER / DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION **ALTERNATE MODIFIED DIVIDED MAJOR ARTERIAL** STANDARD PLAN **MVSI-102B-0** SHEET 2 OF 2



TYPICAL SECTION

NOTES:

1.) ADDITIONAL RIGHT-OF-WAY MAY BE REQUIRED WHEN AN ARTERIAL HIGHWAY COINCIDES WITH AN ADOPTED ROUTE FOR AN ADDITIONAL PUBLIC FACILITY (I.E. PEDESTRIAN, BICYCLE, OR EQUESTRIAN TRAIL), OR FOR A SCENIC HIGHWAY.

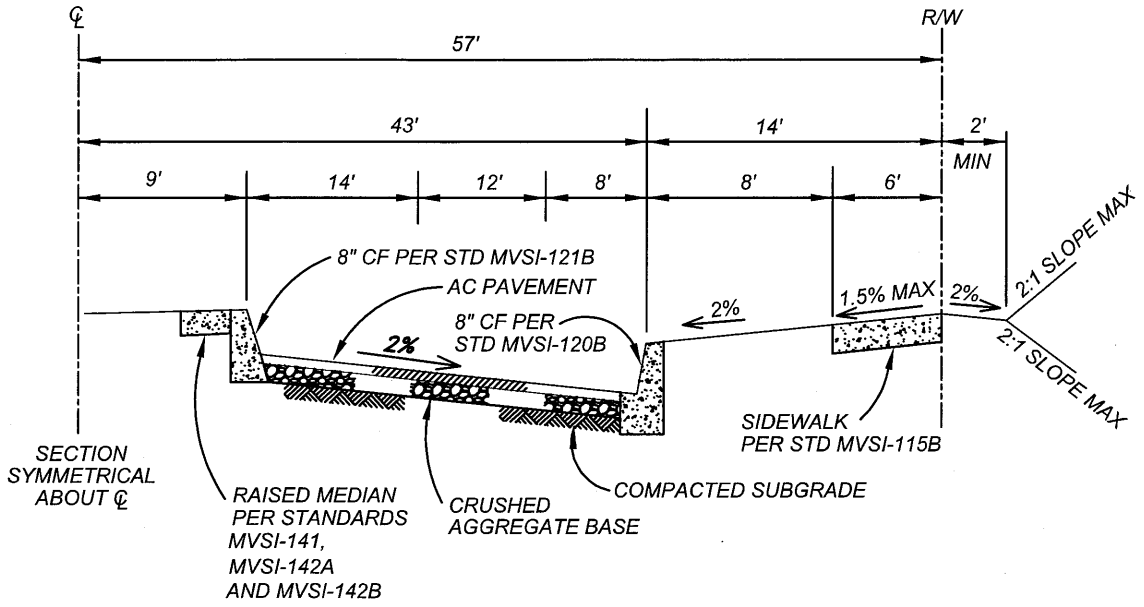
2.) THICKNESS OF PAVEMENT SECTION TO BE DETERMINED BY R VALUE TESTING PER CALTRANS DESIGN METHOD TEST 301 WITH RECOMMENDED SAFETY FACTOR, MINIMUM 0.50' AC / 1.00' CAB. AC SHALL BE PLACED IN LIFTS, AND THICKNESS OF EACH LIFT SHALL NOT EXCEED 3".

3.) MINIMUM T.I. = 10.

4.) HALF WIDTH STREETS SHALL BE CONSTRUCTED TO A WIDTH OF 1/2 STREET WIDTH PLUS 23' WITH MEDIAN.

NOT TO SCALE

CITY OF MORENO VALLEY · DECEMBER 3, 1984	RECOMMENDED: EL 8/29/18 (DIVISION MANAGER / DATE) APPROVED: 9/14/18 (PUBLIC WORKS DIRECTOR / CITY ENGINEER / DATE)	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION **4-LANE DIVIDED ARTERIAL** STANDARD PLAN **MVSI-103A-0** SHEET 1 OF 3



TYPICAL SECTION

NOTES:

1.) ADDITIONAL RIGHT-OF-WAY MAY BE REQUIRED WHEN AN ARTERIAL HIGHWAY COINCIDES WITH AN ADOPTED ROUTE FOR AN ADDITIONAL PUBLIC FACILITY (I.E. PEDESTRIAN, BICYCLE, OR EQUESTRIAN TRAIL), OR FOR A SCENIC HIGHWAY.

2.) THICKNESS OF PAVEMENT SECTION TO BE DETERMINED BY R VALUE TESTING PER CALTRANS DESIGN METHOD TEST 301 WITH RECOMMENDED SAFETY FACTOR, MINIMUM 0.50' AC / 1.00' CAB. AC SHALL BE PLACED IN LIFTS, AND THICKNESS OF EACH LIFT SHALL NOT EXCEED 3".

3.) MINIMUM T.I. = 10.

4.) HALF WIDTH STREETS SHALL BE CONSTRUCTED TO A WIDTH OF 1/2 STREET WIDTH PLUS 23' WITH MEDIAN.

5.) ALTERNATE DIVIDED ARTERIAL IS TO BE USED IN THE FOLLOWING CIRCUMSTANCES:

a.) SPECIFIC PLANS OR OTHER LARGE RESIDENTIAL, INDUSTRIAL, OR COMMERCIAL DEVELOPMENTS WHERE ADDITIONAL RIGHT-OF-WAY CAN BE ACCOMMODATED OVER THE BREADTH OF A LARGE AREA, CAUSING LESS CONFLICT WITH MINIMUM LOT SIZE OR OTHER DEVELOPMENT REQUIREMENTS.

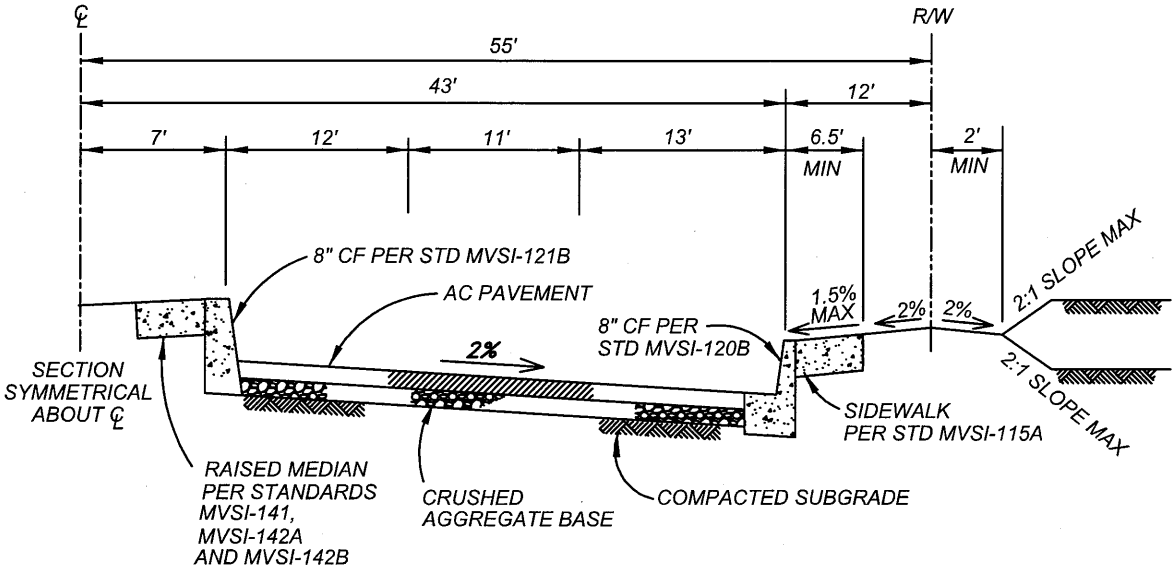
b.) WHERE CONFLICTS WITH UTILITIES EXIST (E.G. THE 30" HIGH PRESSURE GAS MAIN RUNNING ALONG THE NORTH SIDE OF COTTONWOOD BOULEVARD; THE HIGHGROVE HIGH VOLTAGE TRANSMISSION LINE RUNNING DOWN PIGEON PASS/FREDERICK STREET).

c.) WHERE PARKWAYS MUST BE EXPANDED TO ALLOW FOR ADDITIONAL PUBLIC FACILITIES.

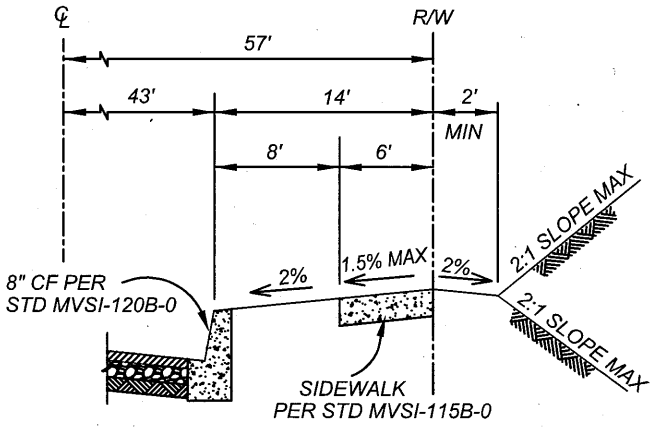
d.) OTHER LOCATIONS AS APPROVED BY THE CITY ENGINEER.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: EL 8/29/18 DIVISION MANAGER / DATE APPROVED: 9/4/18 PUBLIC WORKS DIRECTOR / CITY ENGINEER / DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION ALTERNATE DIVIDED ARTERIAL	STANDARD PLAN MVSI-103B-0 SHEET 2 OF 3



TYPICAL SECTION



ALTERNATE SECTION

NOTES:

1.) ADDITIONAL RIGHT-OF-WAY MAY BE REQUIRED WHEN AN ARTERIAL HIGHWAY COINCIDES WITH AN ADOPTED ROUTE FOR AN ADDITIONAL PUBLIC FACILITY (I.E., PEDESTRIAN, BICYCLE, OR EQUESTRIAN TRAIL), OR FOR A SCENIC HIGHWAY.

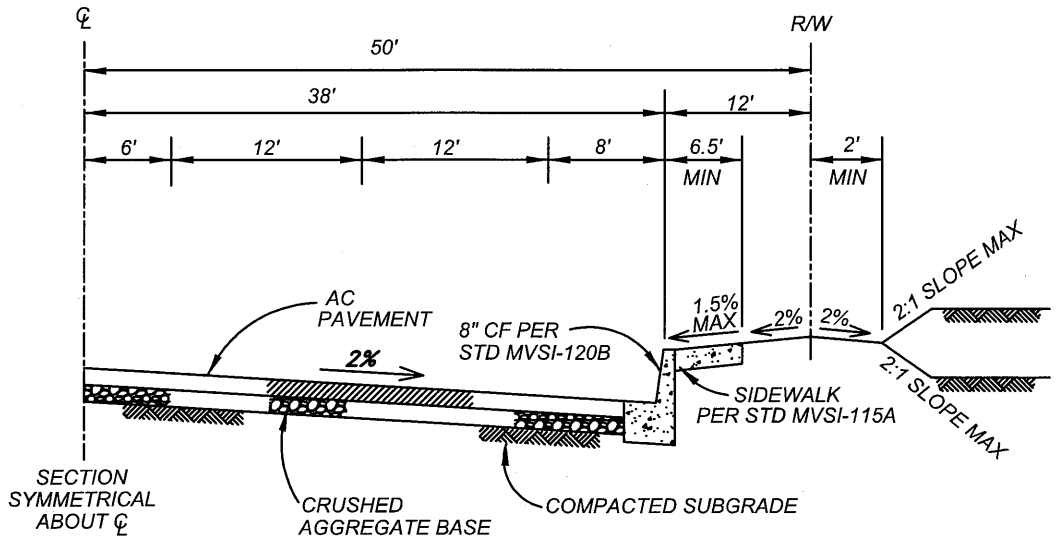
2.) THICKNESS OF PAVEMENT SECTION TO BE DETERMINED BY R VALUE TESTING PER CALTRANS DESIGN METHOD TEST 301 WITH RECOMMENDED SAFETY FACTOR, MINIMUM 0.50' AC / 1.00' CAB. AC SHALL BE PLACED IN LIFTS, AND THICKNESS OF EACH LIFT SHALL NOT EXCEED 3".

3.) MINIMUM T.I. = 10.

4.) HALF WIDTH STREETS SHALL BE CONSTRUCTED TO A WIDTH OF 1/2 STREET WIDTH PLUS 19' WITH MEDIAN.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: EL 8/29/18 DIVISION MANAGER / DATE APPROVED: 9/4/18 PUBLIC WORKS DIRECTOR / CITY ENGINEER / DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION **6-LANE DIVIDED ARTERIAL**	STANDARD PLAN **MVSI-103C-0** SHEET 3 OF 3



TYPICAL SECTION

NOTES:

1.) ADDITIONAL RIGHT-OF-WAY MAY BE REQUIRED WHEN AN ARTERIAL HIGHWAY COINCIDES WITH AN ADOPTED ROUTE FOR AN ADDITIONAL PUBLIC FACILITY (I.E. PEDESTRIAN, BICYCLE, OR EQUESTRIAN TRAIL) OR FOR A SCENIC HIGHWAY.

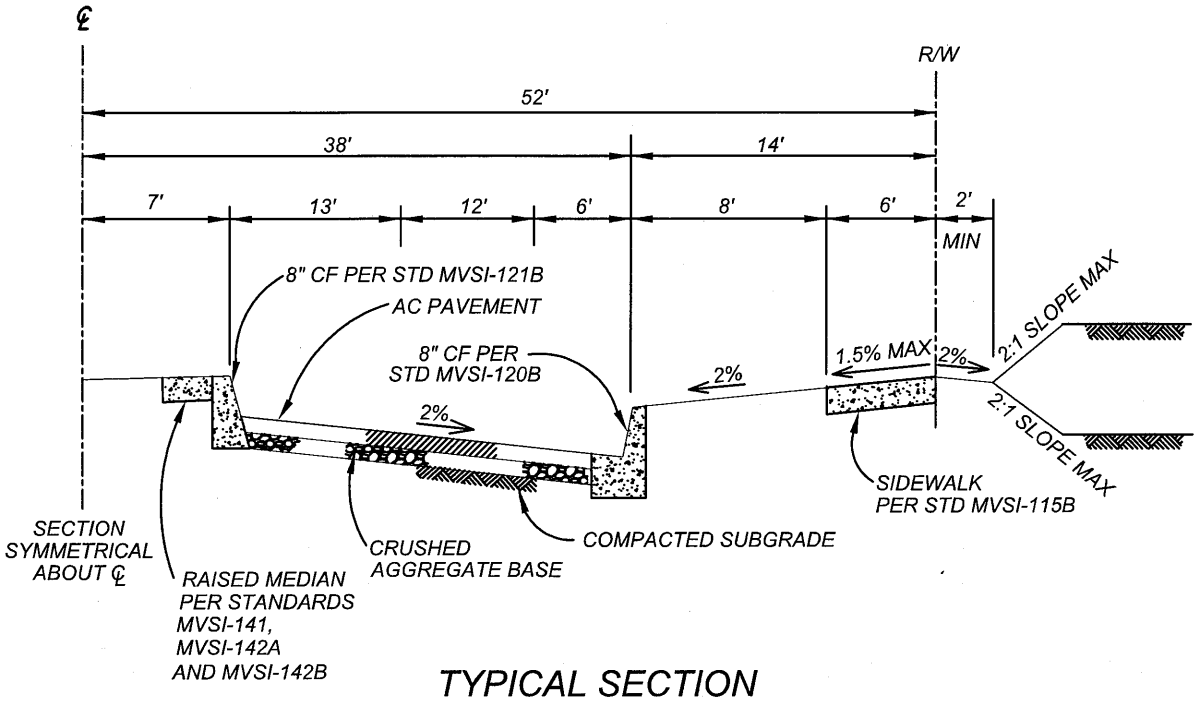
2.) THICKNESS OF PAVEMENT SECTION TO BE DETERMINED BY R VALUE TESTING PER CALTRANS DESIGN METHOD TEST 301 WITH RECOMMENDED SAFETY FACTOR, MINIMUM 0.50' AC / 1.00' CAB. AC SHALL BE PLACED IN LIFTS, AND THICKNESS OF EACH LIFT SHALL NOT EXCEED 3".

3.) MINIMUM T.I. = 10.

4.) HALF WIDTH STREETS SHALL BE CONSTRUCTED TO A WIDTH OF 1/2 STREET WIDTH PLUS 18'.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: EL 8/29/18 DIVISION MANAGER / DATE APPROVED: 9/14/18 PUBLIC WORKS DIRECTOR / CITY ENGINEER / DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION ARTERIAL STANDARD PLAN MVSI-104A-0 SHEET 1 OF 5



TYPICAL SECTION

NOTES:

1.) ADDITIONAL RIGHT-OF-WAY MAY BE REQUIRED WHEN AN ARTERIAL HIGHWAY COINCIDES WITH AN ADOPTED ROUTE FOR AN ADDITIONAL PUBLIC FACILITY (I.E. PEDESTRIAN, BICYCLE, OR EQUESTRIAN TRAIL) OR FOR A SCENIC HIGHWAY.

2.) THICKNESS OF PAVEMENT SECTION TO BE DETERMINED BY R VALUE TESTING PER CALTRANS DESIGN METHOD TEST 301 WITH RECOMMENDED SAFETY FACTOR, MINIMUM 0.50' AC / 1.00' CAB. AC SHALL BE PLACED IN LIFTS, AND THICKNESS OF EACH LIFT SHALL NOT EXCEED 3".

3.) MINIMUM T.I. = 10.

4.) HALF WIDTH STREETS SHALL BE CONSTRUCTED TO A WIDTH OF 1/2 STREET WIDTH PLUS 18'.

5.) ALTERNATE ARTERIAL IS TO BE USED IN THE FOLLOWING CIRCUMSTANCES:

a.) SPECIFIC PLANS OR OTHER LARGE RESIDENTIAL, INDUSTRIAL, OR COMMERCIAL DEVELOPMENTS WHERE ADDITIONAL RIGHT-OF-WAY CAN BE ACCOMMODATED OVER THE BREADTH OF A LARGE AREA, CAUSING LESS CONFLICT WITH MINIMUM LOT SIZE OR OTHER DEVELOPMENT REQUIREMENTS.

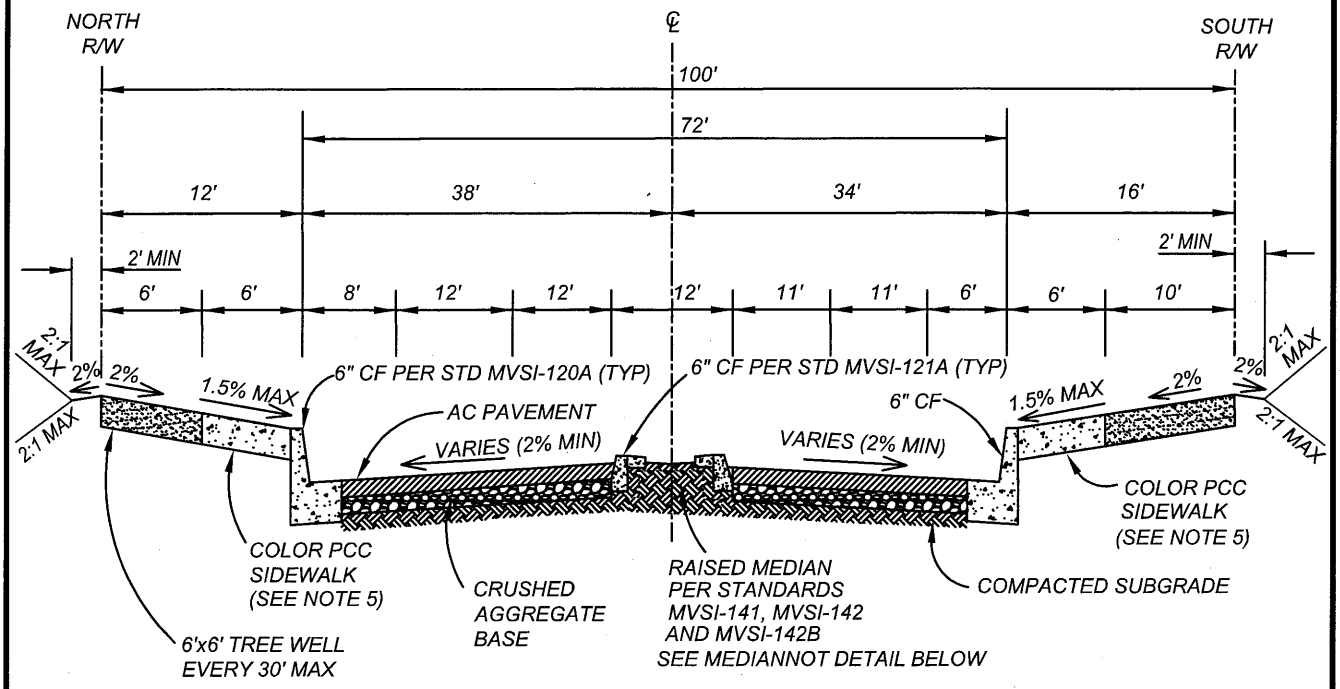
b.) WHERE CONFLICTS WITH UTILITIES EXIST (E.G. THE 30" HIGH PRESSURE GAS MAIN RUNNING ALONG THE NORTH SIDE OF COTTONWOOD BOULEVARD; THE HIGHGROVE HIGH VOLTAGE TRANSMISSION LINE RUNNING DOWN PIGEON PASS/FREDERICK STREET).

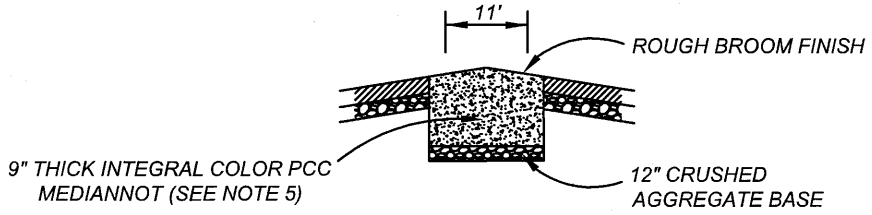
c.) WHERE PARKWAYS MUST BE EXPANDED TO ALLOW FOR ADDITIONAL PUBLIC FACILITIES.

d.) OTHER LOCATIONS AS APPROVED BY THE CITY ENGINEER.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: EL 8/29/18 DIVISION MANAGER / DATE APPROVED: 9/14/18 PUBLIC WORKS DIRECTOR / CITY ENGINEER / DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION **ALTERNATE ARTERIAL**	STANDARD PLAN **MVSI-104B-0** SHEET 2 OF 5





MEDIANNOT DETAIL

FREDERICK STREET TO GRAHAM STREET

NOTES:

1.) *ADDITIONAL RIGHT-OF-WAY MAY BE REQUIRED WHEN AN ARTERIAL HIGHWAY COINCIDES WITH AN ADOPTED ROUTE FOR AN ADDITIONAL PUBLIC FACILITY (I.E., PEDESTRIAN, BICYCLE, OR EQUESTRIAN TRAIL), OR FOR A SCENIC HIGHWAY.*

2.) *THICKNESS OF PAVEMENT SECTION TO BE DETERMINED BY R VALUE TESTING PER CALTRANS DESIGN METHOD TEST 301 WITH RECOMMENDED SAFETY FACTOR, MINIMUM 0.50' AC / 1.50' CAB. AC SHALL BE PLACED IN LIFTS, AND THICKNESS OF EACH LIFT SHALL NOT EXCEED 3".*

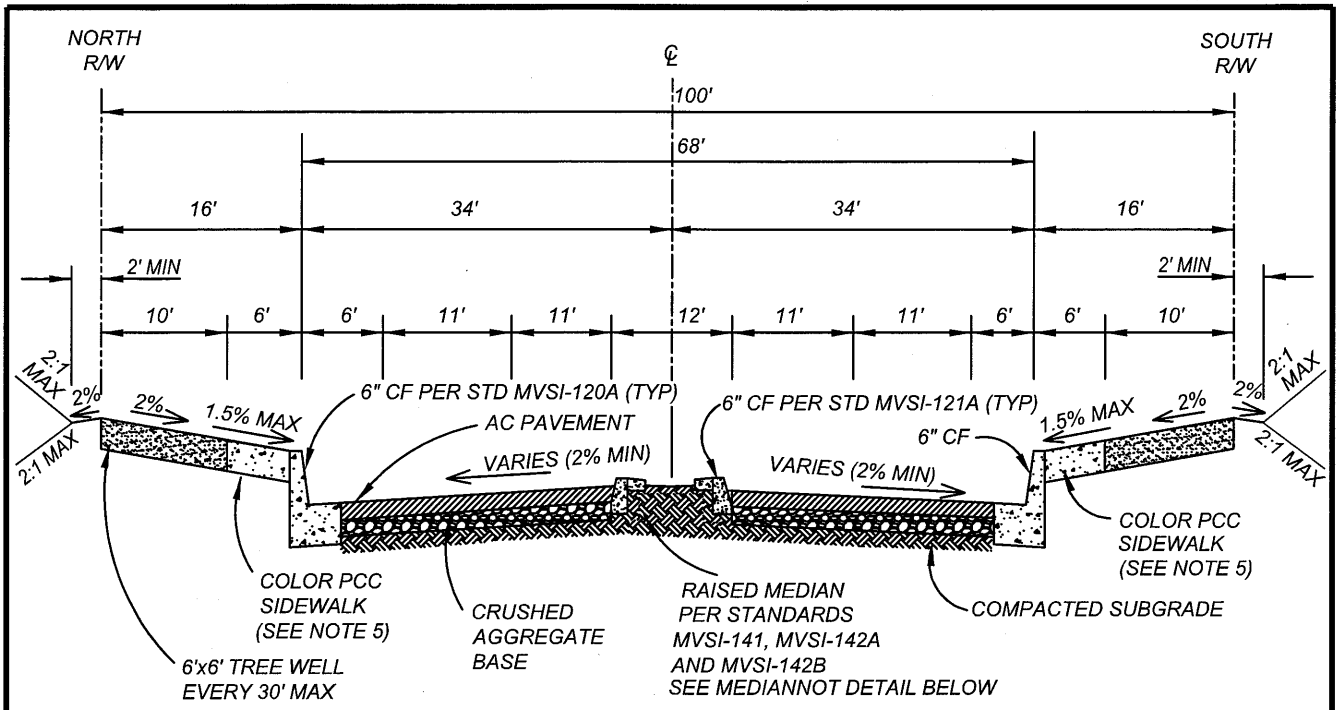
3.) *MINIMUM T.I. = 10.*

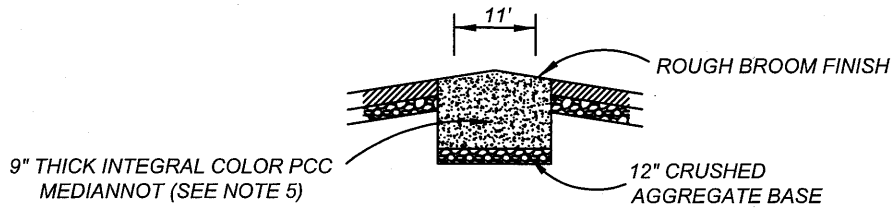
4.) *PCC PAVEMENT DESIGN IS TO BE BASED ON SOIL SUBGRADE STRENGTH PARAMETERS WITH A MINIMUM PCC FLEXURAL STRENGTH OF 600 PSI AT 28 DAYS UTILIZING CONCRETE COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS.*

5.) *MEDIANNOT IS AN INTEGRAL COLOR PCC TURN LANE. EXISTING COLOR IS ANTIQUE CORK BY L.M. SCOFIELD COMPANY.*

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: EL 8/29/18 DIVISION MANAGER / DATE APPROVED: M.L. Wolfe 9/14/18 PUBLIC WORKS DIRECTOR / CITY ENGINEER / DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION **SUNNYMEAD BOULEVARD (FREDERICK STREET TO GRAHAM STREET)** STANDARD PLAN **MVSI-104C-0** SHEET 3 OF 5





MEDIANNOT DETAIL

GRAHAM STREET TO HEACOCK STREET AND INDIAN STREET TO PERRIS BOULEVARD

NOTES:

1.) ADDITIONAL RIGHT-OF-WAY MAY BE REQUIRED WHEN AN ARTERIAL HIGHWAY COINCIDES WITH AN ADOPTED ROUTE FOR AN ADDITIONAL PUBLIC FACILITY (I.E., PEDESTRIAN, BICYCLE, OR EQUESTRIAN TRAIL), OR FOR A SCENIC HIGHWAY.

2.) THICKNESS OF PAVEMENT SECTION TO BE DETERMINED BY R VALUE TESTING PER CALTRANS DESIGN METHOD TEST 301 WITH RECOMMENDED SAFETY FACTOR, MINIMUM 0.50' AC / 1.50' CAB. AC SHALL BE PLACED IN LIFTS, AND THICKNESS OF EACH LIFT SHALL NOT EXCEED 3".

3.) MINIMUM T.I. = 10.

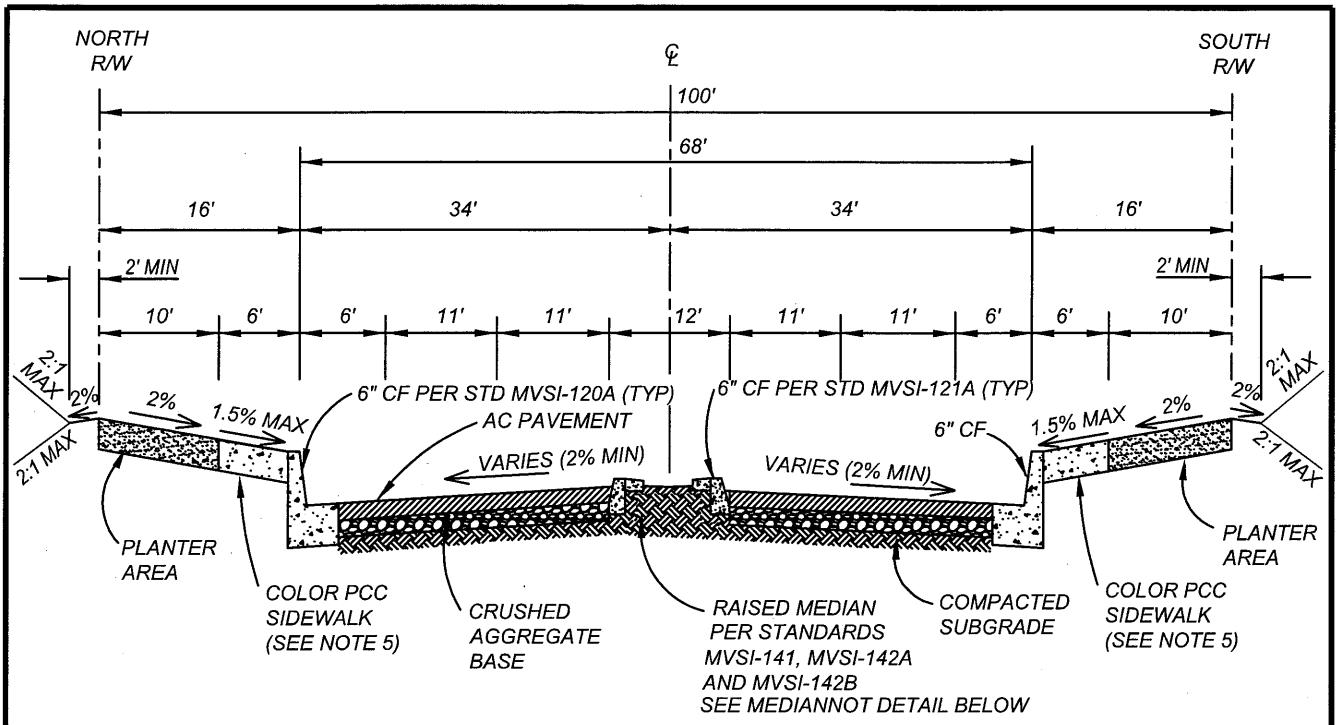
4.) PCC PAVEMENT DESIGN IS TO BE BASED ON SOIL SUBGRADE STRENGTH PARAMETERS WITH A MINIMUM PCC FLEXURAL STRENGTH OF 600 PSI AT 28 DAYS UTILIZING CONCRETE COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS.

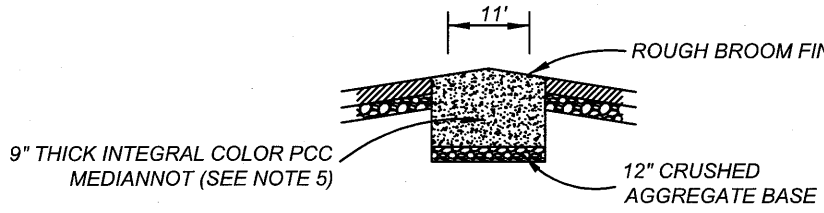
5.) MEDIANNOT IS AN INTEGRAL COLOR PCC TURN LANE. EXISTING COLOR IS ANTIQUE CORK BY L.M. SCOFIELD COMPANY.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3,1984	RECOMMENDED: EL 8/29/18 DIVISION MANAGER / DATE APPROVED: 9/14/18 PUBLIC WORKS DIRECTOR / CITY ENGINEER / DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION **SUNNYMEAD BOULEVARD** **(GRAHAM STREET TO HEACOCK STREET)** **(INDIAN STREET TO PERRIS BOULEVARD)**

STANDARD PLAN
MVSI-104D-0
SHEET 4 OF 5





MEDIANNOT DETAIL

"VILLAGE CENTER"
HEACOCK STREET TO INDIAN STREET

NOTES:

1.) *ADDITIONAL RIGHT-OF-WAY MAY BE REQUIRED WHEN AN ARTERIAL HIGHWAY COINCIDES WITH AN ADOPTED ROUTE FOR AN ADDITIONAL PUBLIC FACILITY (I.E., PEDESTRIAN, BICYCLE, OR EQUESTRIAN TRAIL), OR FOR A SCENIC HIGHWAY.*

2.) *THICKNESS OF PAVEMENT SECTION TO BE DETERMINED BY R VALUE TESTING PER CALTRANS DESIGN METHOD WITH RECOMMENDED SAFETY FACTOR, MINIMUM 0.50' AC / 1.50' CAB. AC SHALL BE PLACED IN LIFTS, AND THICKNESS OF EACH LIFT SHALL NOT EXCEED 3".*

3.) *MINIMUM T.I. = 10.*

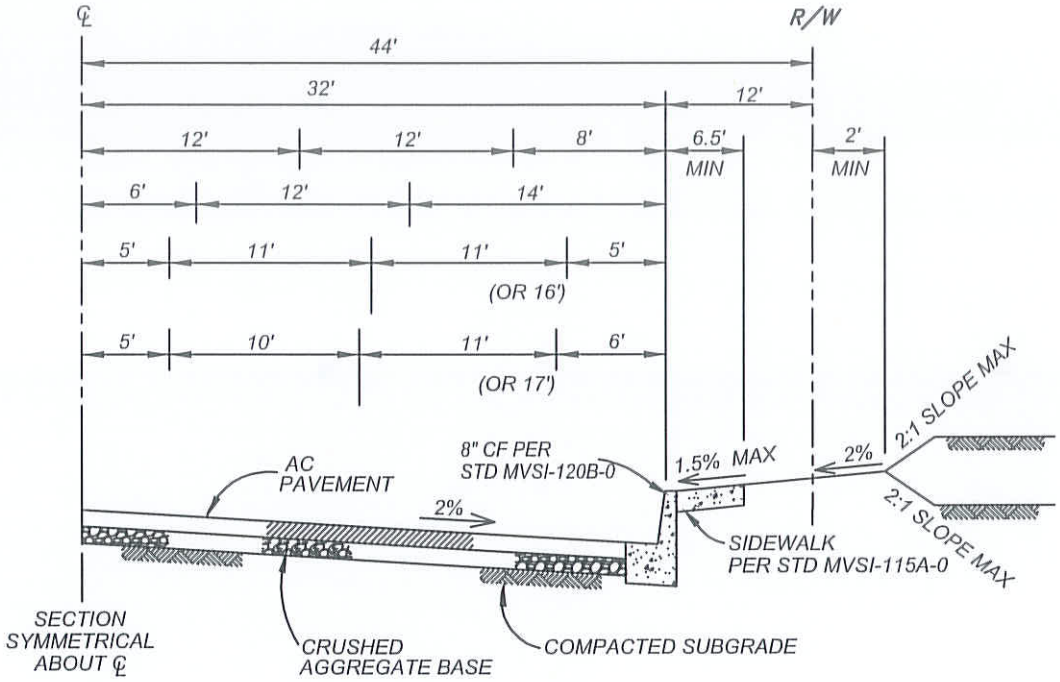
4.) *PCC PAVEMENT DESIGN IS TO BE BASED ON SOIL SUBGRADE STRENGTH PARAMETERS WITH A MINIMUM PCC FLEXURAL STRENGTH OF 600 PSI AT 28 DAYS UTILIZING CONCRETE COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS.*

5.) *MEDIANNOT IS AN INTEGRAL COLOR PCC TURN LANE. EXISTING COLOR IS ANTIQUE CORK BY L.M. SCOFIELD COMPANY.*

NOT TO SCALE

CITY OF MORENO VALLEY · DECEMBER 3, 1984	RECOMMENDED: EL — DIVISION MANAGER — 8/29/18 DATE APPROVED: — PUBLIC WORKS DIRECTOR / CITY ENGINEER — 9/14/18 DATE	**CITY OF MORENO VALLEY** PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION **SUNNYMEAD BOULEVARD (HEACOCK STREET TO INDIAN STREET)**

STANDARD PLAN
MVSI-104E-0
SHEET 5 OF 5



TYPICAL SECTION

NOTES:

1.) ADDITIONAL RIGHT-OF-WAY MAY BE REQUIRED WHEN AN ARTERIAL HIGHWAY COINCIDES WITH AN ADOPTED ROUTE FOR AN ADDITIONAL PUBLIC FACILITY (I.E. PEDESTRIAN, BICYCLE, OR EQUESTRIAN TRAIL), OR FOR A SCENIC HIGHWAY.

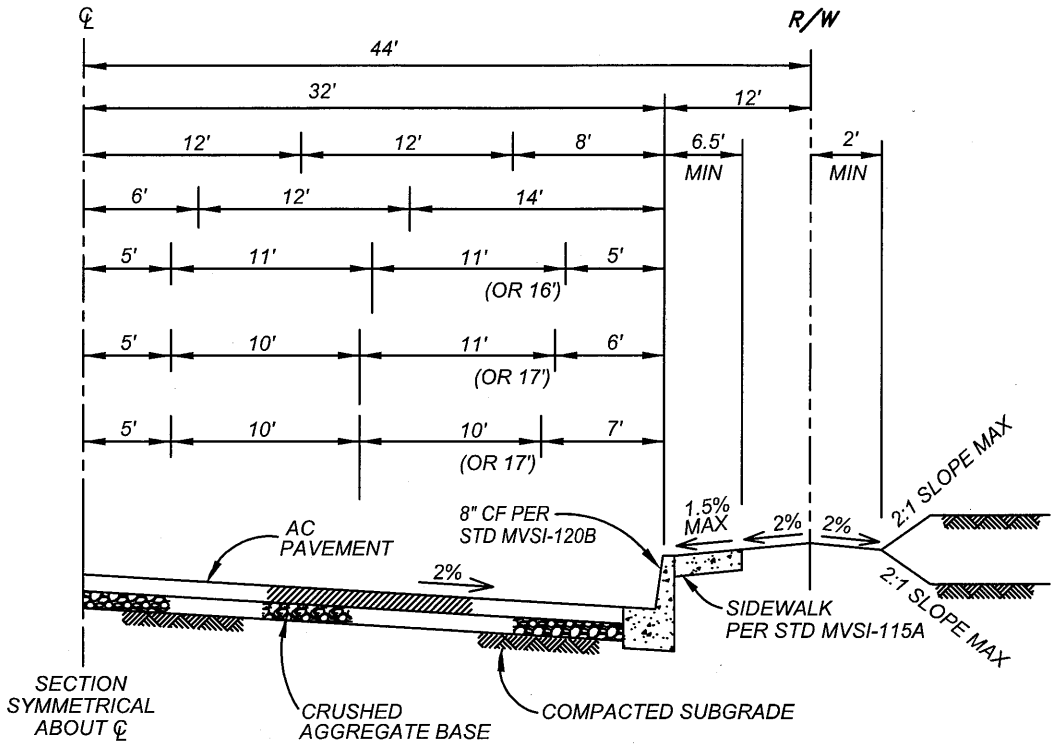
2.) THICKNESS OF PAVEMENT SECTION TO BE DETERMINED BY R VALUE TESTING PER CALTRANS DESIGN METHOD TEST 301 WITH RECOMMENDED SAFETY FACTOR, MINIMUM 0.45' AC / 0.75' CAB. AC SHALL BE PLACED IN LIFTS, AND THICKNESS OF EACH LIFT SHALL NOT EXCEED 3".

3.) MINIMUM T.I. = 9.

4.) HALF WIDTH STREETS SHALL BE CONSTRUCTED TO A WIDTH OF 1/2 STREET WIDTH PLUS 12' OR 18' (WITH DEDICATED TURN LANES).

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: EL 1/22/14 DIVISION MANAGER / DATE APPROVED: 1/29/14 PUBLIC WORKS DIRECTOR / CITY ENGINEER / DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION **MINOR ARTERIAL** STANDARD PLAN **MVSI-105A-0** SHEET 1 OF 3



TYPICAL SECTION

NOTES:

1.) ADDITIONAL RIGHT-OF-WAY MAY BE REQUIRED WHEN AN ARTERIAL HIGHWAY COINCIDES WITH AN ADOPTED ROUTE FOR AN ADDITIONAL PUBLIC FACILITY (I.E. PEDESTRIAN, BICYCLE, OR EQUESTRIAN TRAIL), OR FOR A SCENIC HIGHWAY.

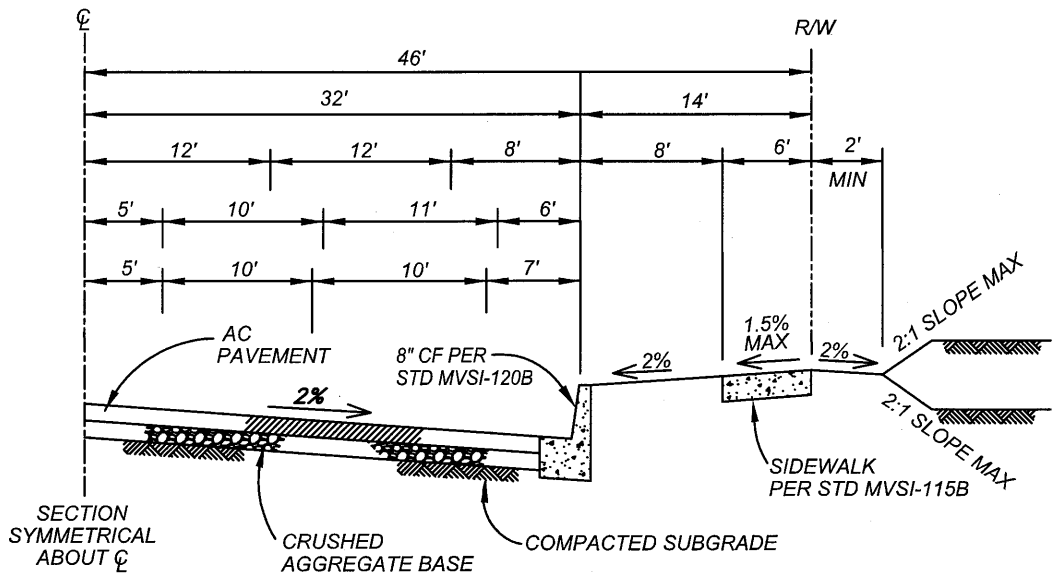
2.) THICKNESS OF PAVEMENT SECTION TO BE DETERMINED BY R VALUE TESTING PER CALTRANS DESIGN METHOD TEST 301 WITH RECOMMENDED SAFETY FACTOR, MINIMUM 0.45' AC / 0.75' CAB. AC SHALL BE PLACED IN LIFTS, AND THICKNESS OF EACH LIFT SHALL NOT EXCEED 3".

3.) MINIMUM T.I. = 9.

4.) HALF WIDTH STREETS SHALL BE CONSTRUCTED TO A WIDTH OF 1/2 STREET WIDTH PLUS 12' OR 18' (WITH DEDICATED TURN LANES).

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: EL 8/29/18 DIVISION MANAGER / DATE APPROVED: 9/14/18 PUBLIC WORKS DIRECTOR / CITY ENGINEER / DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION **MINOR ARTERIAL** STANDARD PLAN **MVSI-105A-1** SHEET 1 OF 3



TYPICAL SECTION

NOTES:

1.) ADDITIONAL RIGHT-OF-WAY MAY BE REQUIRED WHEN AN ARTERIAL HIGHWAY COINCIDES WITH AN ADOPTED ROUTE FOR AN ADDITIONAL PUBLIC FACILITY (I.E. PEDESTRIAN, BICYCLE, OR EQUESTRIAN TRAIL), OR FOR A SCENIC HIGHWAY.

2.) THICKNESS OF PAVEMENT SECTION TO BE DETERMINED BY R VALUE TESTING PER CALTRANS DESIGN METHOD TEST 301 WITH RECOMMENDED SAFETY FACTOR, MINIMUM 0.45' AC / 0.75' CAB. AC SHALL BE PLACED IN LIFTS, AND THICKNESS OF EACH LIFT SHALL NOT EXCEED 3".

3.) MINIMUM T.I. = 9.

4.) HALF WIDTH STREETS SHALL BE CONSTRUCTED TO A WIDTH OF 1/2 STREET WIDTH PLUS 12' OR 18' (WITH DEDICATED TURN LANES).

5.) ALTERNATE MINOR ARTERIAL WILL USED ONLY IN THE FOLLOWING CIRCUMSTANCES:

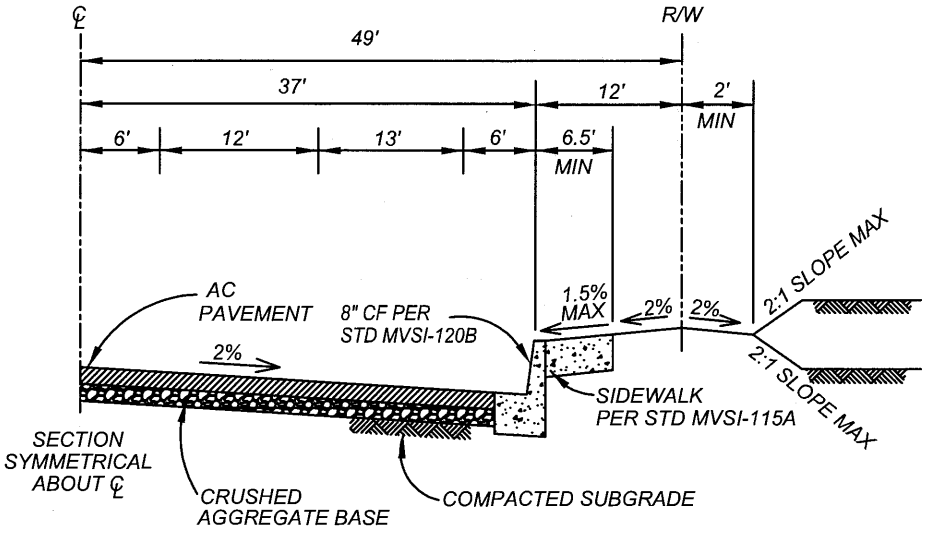
a.) SPECIFIC PLANS OR OTHER LARGE RESIDENTIAL, INDUSTRIAL, OR COMMERCIAL DEVELOPMENT WHERE ADDITIONAL RIGHT-OF-WAY CAN BE ACCOMMODATED OVER THE BREADTH OF A LARGE AREA, CAUSING LESS CONFLICT WITH MINIMUM LOT SIZE OR OTHER DEVELOPMENT REQUIREMENTS.

b.) WHERE CONFLICTS WITH UTILITIES EXIST (E.G. THE 30" HIGH PRESSURE GAS MAIN RUNNING ALONG THE NORTH SIDE OF COTTONWOOD AVENUE; THE HIGHGROVE HIGH VOLTAGE TRANSMISSION LINE RUNNING DOWN PIGEON PASS/FREDERICK STREET.)

c.) WHERE PARKWAYS MUST BE EXPANDED TO ALLOW FOR ADDITIONAL PUBLIC FACILITIES.

NOT TO SCALE

CITY OF MORENO VALLEY · DECEMBER 3, 1984	RECOMMENDED: EL 8/29/18 — DIVISION MANAGER / DATE APPROVED: 9/14/18 — PUBLIC WORKS DIRECTOR / CITY ENGINEER / DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION **ALTERNATE MINOR ARTERIAL** STANDARD PLAN **MVSI-105B-0** SHEET 2 OF 3



TYPICAL SECTION

NOTES:

1.) ADDITIONAL RIGHT-OF-WAY MAY BE REQUIRED WHEN AN ARTERIAL HIGHWAY COINCIDES WITH AN ADOPTED ROUTE FOR AN ADDITIONAL PUBLIC FACILITY (I.E. PEDESTRIAN, BICYCLE, OR EQUESTRIAN TRAIL), OR FOR A SCENIC HIGHWAY.

2.) THICKNESS OF PAVEMENT SECTION TO BE DETERMINED BY R VALUE TESTING PER CALTRANS DESIGN METHOD TEST 301 WITH RECOMMENDED SAFETY FACTOR, MINIMUM 0.45' AC / 0.75' CAB. AC SHALL BE PLACED IN LIFTS, AND THICKNESS OF EACH LIFT SHALL NOT EXCEED 3".

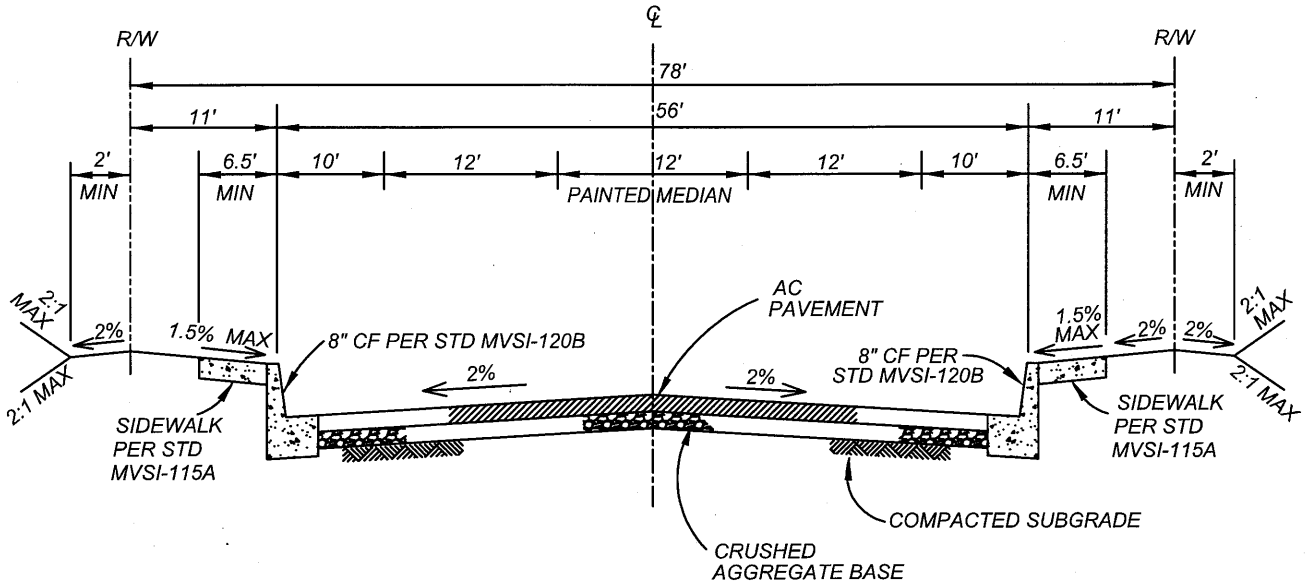
3.) MINIMUM T.I. = 9.

4.) HALF WIDTH STREETS SHALL BE CONSTRUCTED TO A WIDTH OF 1/2 STREET WIDTH PLUS 12' OR 18' (WITH DEDICATED TURN LANES).

5.) LIMITS: IRONWOOD AVENUE TO OLD LAKE DRIVE.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: EL 8/29/18 DIVISION MANAGER / DATE APPROVED: 9/14/18 PUBLIC WORKS DIRECTOR / CITY ENGINEER / DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION **PIGEON PASS ROAD** STANDARD PLAN **MVSI-105C-0** SHEET 3 OF 3



TYPICAL SECTION

NOTES:

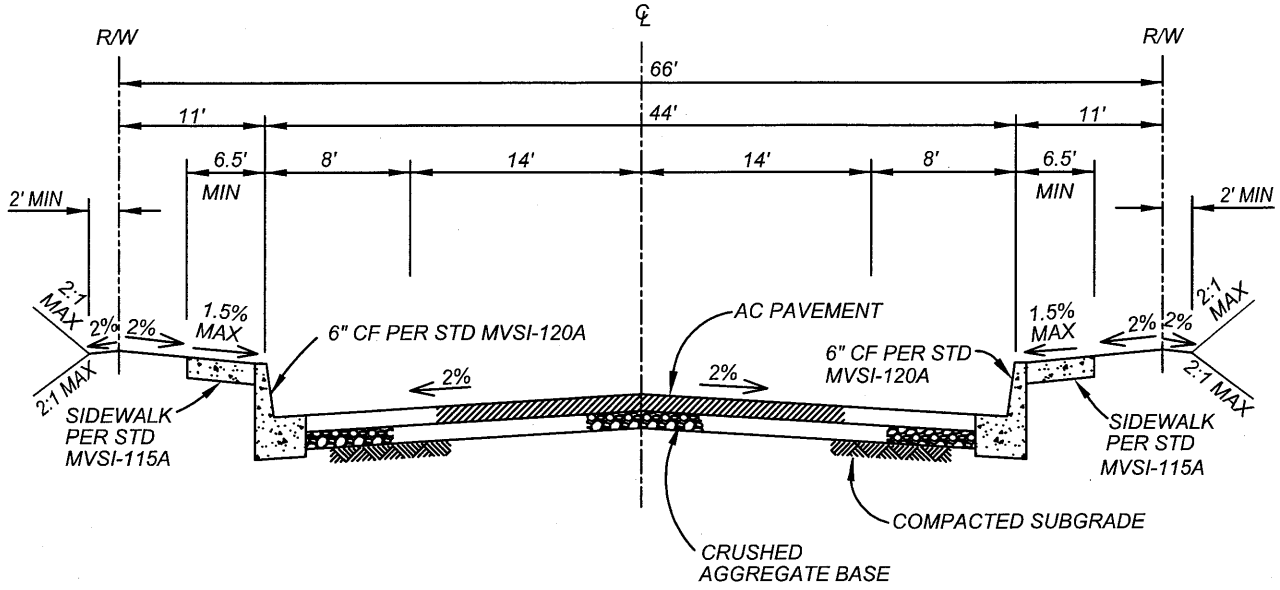
1.) THICKNESS OF PAVEMENT SECTION TO BE DETERMINED BY R VALUE TESTING PER CALTRANS DESIGN METHOD TEST 301 WITH RECOMMENDED SAFETY FACTOR, MINIMUM 0.50' AC / 1.00' CAB. AC SHALL BE PLACED IN LIFTS, AND THICKNESS OF EACH LIFT SHALL NOT EXCEED 3".

2.) MINIMUM T.I. = 10.

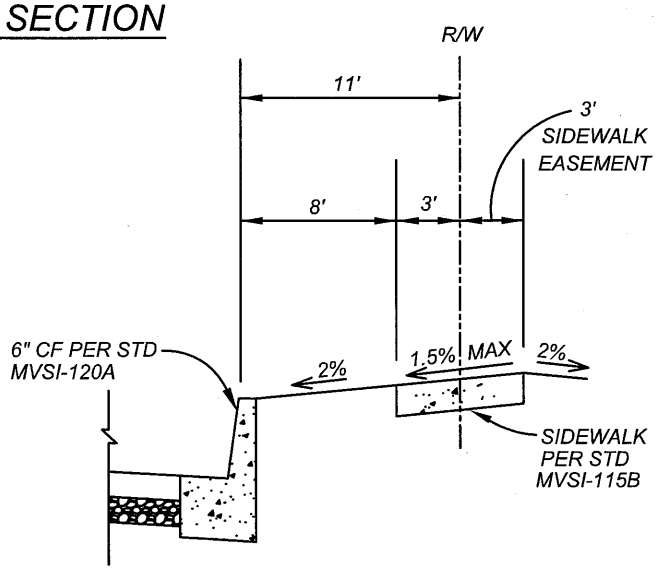
3.) HALF WIDTH STREETS SHALL BE CONSTRUCTED TO A WIDTH OF 1/2 STREET WIDTH PLUS 18'.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: EL 9/29/18 DIVISION MANAGER / DATE APPROVED: 9/14/18 PUBLIC WORKS DIRECTOR / CITY ENGINEER / DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION **INDUSTRIAL COLLECTOR** STANDARD PLAN **MVSI-106A-0** SHEET 1 OF 2



TYPICAL SECTION



ALTERNATE SECTION

NOTES:

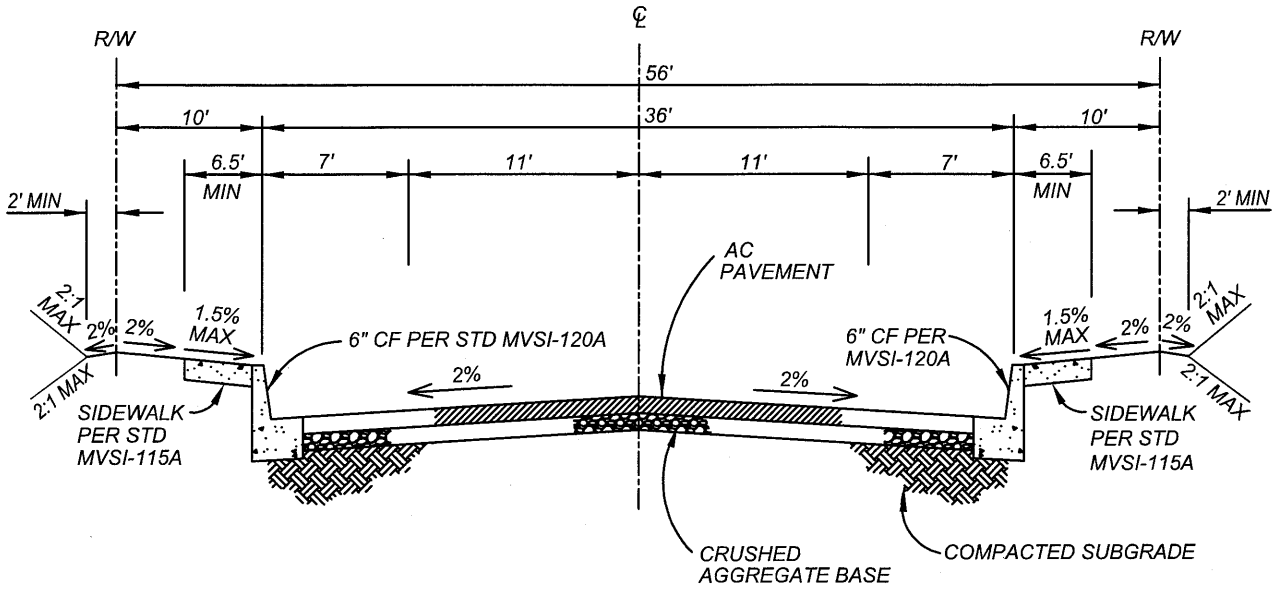
1.) THICKNESS OF PAVEMENT SECTION TO BE DETERMINED BY R VALUE TESTING PER CALTRANS DESIGN METHOD TEST 301 WITH RECOMMENDED SAFETY FACTOR, MINIMUM 0.30' AC / 0.50' CAB. AC SHALL BE PLACED IN LIFTS, AND THICKNESS OF EACH LIFT SHALL NOT EXCEED 3".

2.) MINIMUM T.I. = 7.

3.) HALF WIDTH STREETS SHALL BE CONSTRUCTED TO A WIDTH OF 1/2 STREET WIDTH PLUS 12'.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: EL 8/29/18 DIVISION MANAGER / DATE APPROVED: 9/14/18 PUBLIC WORKS DIRECTOR / CITY ENGINEER / DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION	STANDARD PLAN MVSI-106B-0
		COLLECTOR	SHEET 2 OF 2



TYPICAL SECTION

NOTES:

1.) THICKNESS OF PAVEMENT SECTION TO BE DETERMINED BY R VALUE TESTING PER CALTRANS DESIGN METHOD TEST 301 WITH RECOMMENDED SAFETY FACTOR, MINIMUM 0.30' AC / 0.50' CAB. AC SHALL BE PLACED IN LIFTS, AND THICKNESS OF EACH LIFT SHALL NOT EXCEED 3".

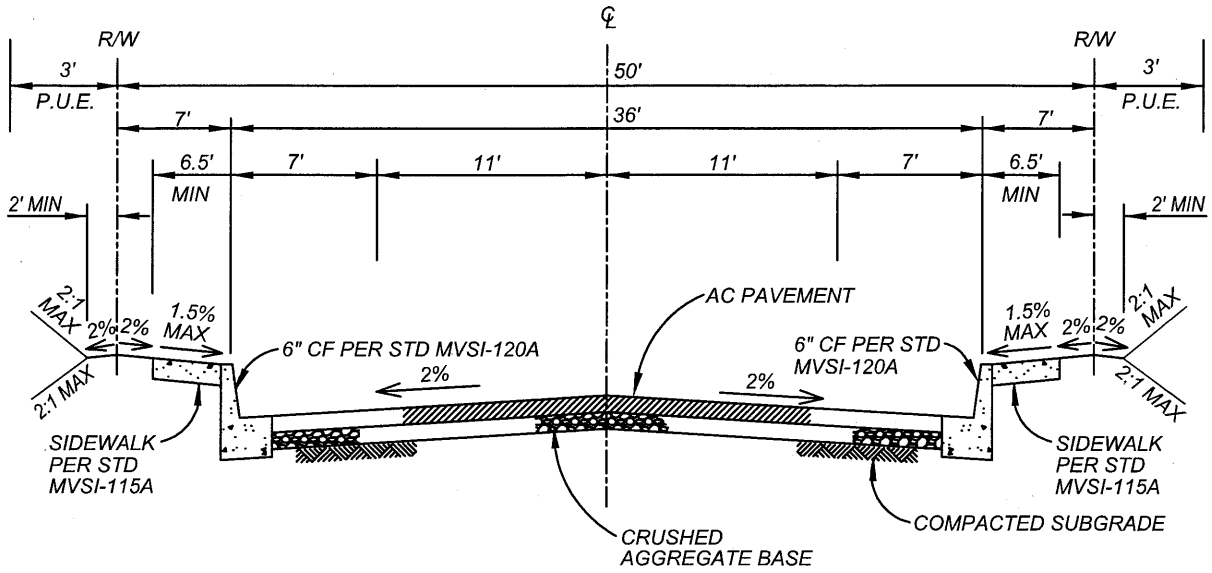
2.) MINIMUM T.I. = 6.

3.) HALF WIDTH STREETS SHALL BE CONSTRUCTED TO A WIDTH OF 1/2 STREET WIDTH PLUS 12'.

4.) ALLOWED IN R2 AND R3 ZONING DISTRICTS.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: EL DIVISION MANAGER 8/29/18 DATE APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER 9/14/18 DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION **LOCAL STREET** STANDARD PLAN **MVSI-107A-0** SHEET 1 OF 4



TYPICAL SECTION

NOTES:

1) THICKNESS OF PAVEMENT SECTION TO BE DETERMINED BY R VALUE TESTING PER CALTRANS DESIGN METHOD TEST 301 WITH RECOMMENDED SAFETY FACTOR, MINIMUM 0.30' AC / 0.50' CAB. AC SHALL BE PLACED IN LIFTS AND THICKNESS OF EACH LIFT SHALL NOT EXCEED 3".

2.) MINIMUM T.I. = 6.

3.) HALF WIDTH STREETS SHALL BE CONSTRUCTED TO A WIDTH OF 1/2 STREET WIDTH PLUS 12'.

4.) MODIFIED LOCAL STREET MAY ONLY BE USED FOR CUL-DE-SAC STREET WITH 10 OR LESS LOTS.

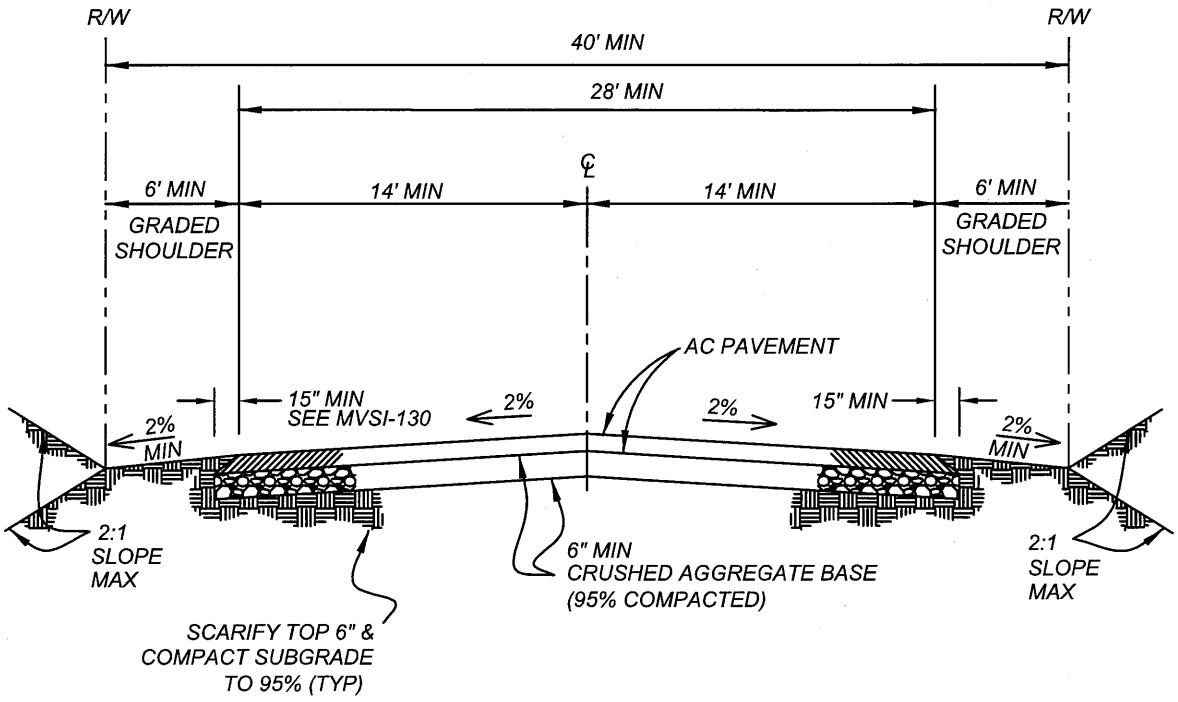
5.) MODIFIED LOCAL STREETS MAY ONLY BE USED ON A CASE-BY-CASE BASIS AFTER REVIEW AND APPROVAL BY THE CITY ENGINEER.

6.) P.U.E. - PUBLIC UTILITY EASEMENT

7.) THIS STANDARD WILL NOT BE USED FOR NEW DEVELOPMENT PROJECTS, SEE NOTE NUMBER 5.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: EL DIVISION MANAGER 8/29/18 DATE APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER 9/14/18 DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION **MODIFIED LOCAL STREET** (USE ONLY UPON APPROVAL BY THE CITY ENGINEER)	STANDARD PLAN **MVSI-107B-0** SHEET 2 OF 4



TYPICAL SECTION

NOTES:

1.) DIMENSIONS AND STRUCTURAL SECTION SHOWN MAY REQUIRE ADJUSTMENT ACCORDING TO ACTUAL CONDITIONS INCLUDING, BUT NOT LIMITED TO, DRAINAGE, SOILS, ENVIRONMENTAL, SIGHT DISTANCE, EXISTING UTILITIES, ETC..

2.) THICKNESS OF PAVEMENT SECTION TO BE DETERMINED BY R VALUE TESTING PER CALTRANS DESIGN METHOD TEST 301 WITH RECOMMENDED SAFETY FACTOR, MINIMUM 0.30' AC / 0.50' CAB. AC SHALL BE PLACED IN LIFTS, AND THICKNESS OF EACH LIFT SHALL NOT EXCEED 3".

3.) RIGHT-OF-WAY DEDICATION MAY BE REQUIRED BY SEPARATE INSTRUMENT.

4.) MINIMUM LONGITUDINAL GRADE SHALL BE 1% OR AS APPROVED BY THE CITY ENGINEER.

5.) APPLICATION OF THIS STANDARD SUBJECT TO REVIEW AND APPROVAL BY THE CITY ENGINEER. (SITE CONDITION WILL DICTATE THE APPLICABILITY OF THIS STANDARD)

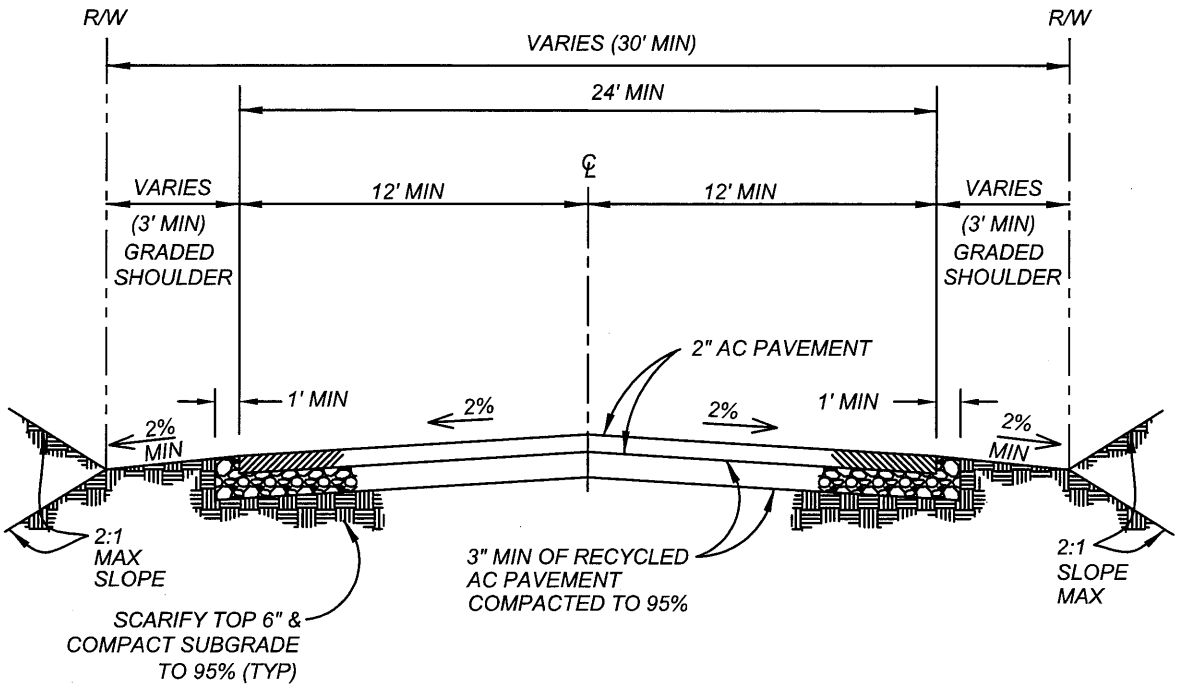
6.) GRADE SHOULDER AS NEEDED TO ACCOMMODATE DRAINAGE.

7.) EDGE OF PAVEMENT SHALL BE TAPERED PER CITY STD MVSI-130.
8.) FOR USE IN HR AND RR ZONING DISTRICTS ONLY.

9.) ALL NATURAL VEGETATED SWALES WHERE FEASIBLE.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: EL 12/8/17 DIVISION MANAGER / DATE APPROVED: 9/14/18 PUBLIC WORKS DIRECTOR / CITY ENGINEER / DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION **RURAL STREET** STANDARD PLAN **MVSI-107C-0** SHEET 3 OF 4



TYPICAL SECTION

NOTES:

1.) APPLICATION OF THIS STANDARD IS SUBJECT TO REVIEW AND APPROVAL BY THE CITY ENGINEER. DIMENSIONS AND STRUCTURAL SECTION SHOWN MAY REQUIRE ADJUSTMENT ACCORDING TO ACTUAL SITE CONDITIONS INCLUDING, BUT NOT LIMITED TO, DRAINAGE, SOILS, ENVIRONMENTAL, R-VALUE, SIGHT DISTANCE, TRAFFIC INDEX, EXISTING UTILITIES, ETC.

2.) RIGHT-OF-WAY DEDICATION MAY BE REQUIRED BY SEPARATE INSTRUMENT.

3.) LONGITUDINAL GRADE SHALL BE 1% MINIMUM AND 12% MAX OR AS APPROVED BY THE CITY ENGINEER.

4.) GRADE SHOULDER AS NEEDED TO ACCOMMODATE DRAINAGE.

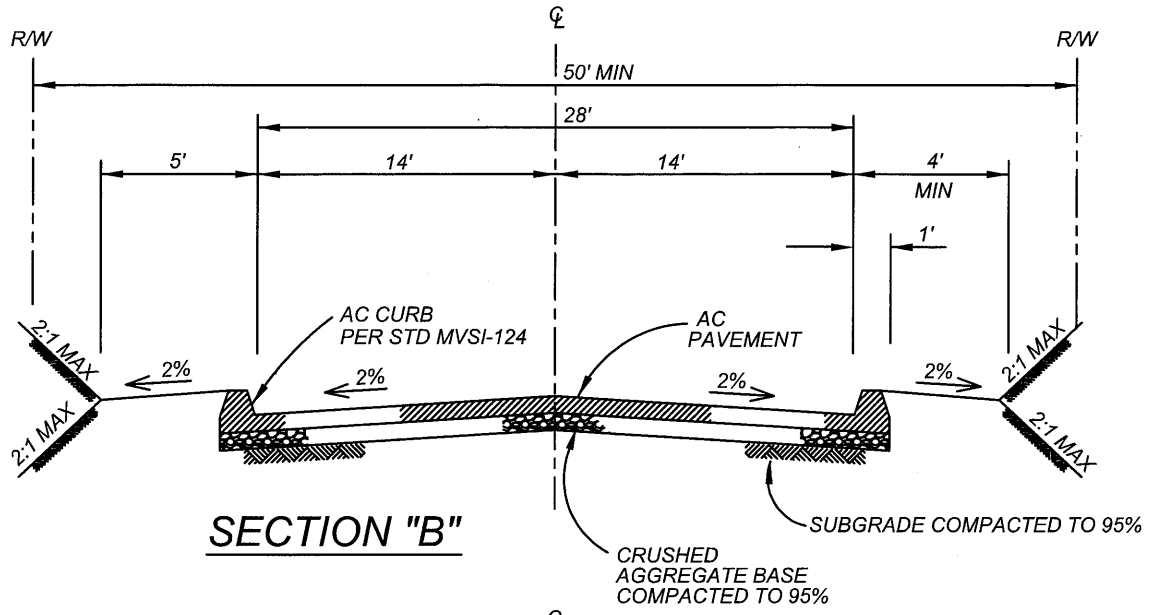
5.) RECYCLED ASPHALT TO BE ENRICHED WITH OIL AND REJUVENATORS & COMPACTED IN ONE LIFT.

6.) THIS STANDARD WILL NOT BE USED FOR NEW DEVELOPMENT TYPE PROJECTS.

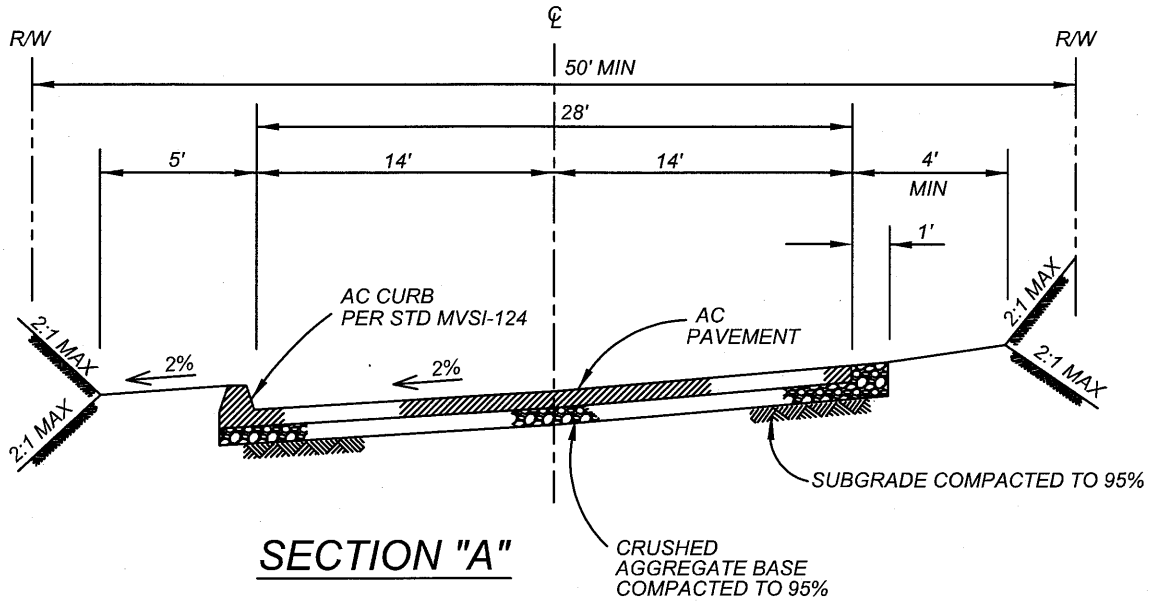
7.) SURFACE MUST BE CAPABLE OF SUPPORTING A GVW OF 80,000 LBS.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: EL 12/8/17 DIVISION MANAGER / DATE APPROVED: MZ. 9/14/18 PUBLIC WORKS DIRECTOR / CITY ENGINEER / DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION **ALL WEATHER TRANSPORTATION SURFACE**	STANDARD PLAN **MVSI-107D-0** SHEET 4 OF 4



SECTION "B"



SECTION "A"

NOTES:

1.) *DRAINAGE CONTROL TO BE APPROVED BY THE CITY ENGINEER. CONCRETE CURB AND/OR CURB AND GUTTER MAY BE REQUIRED.*

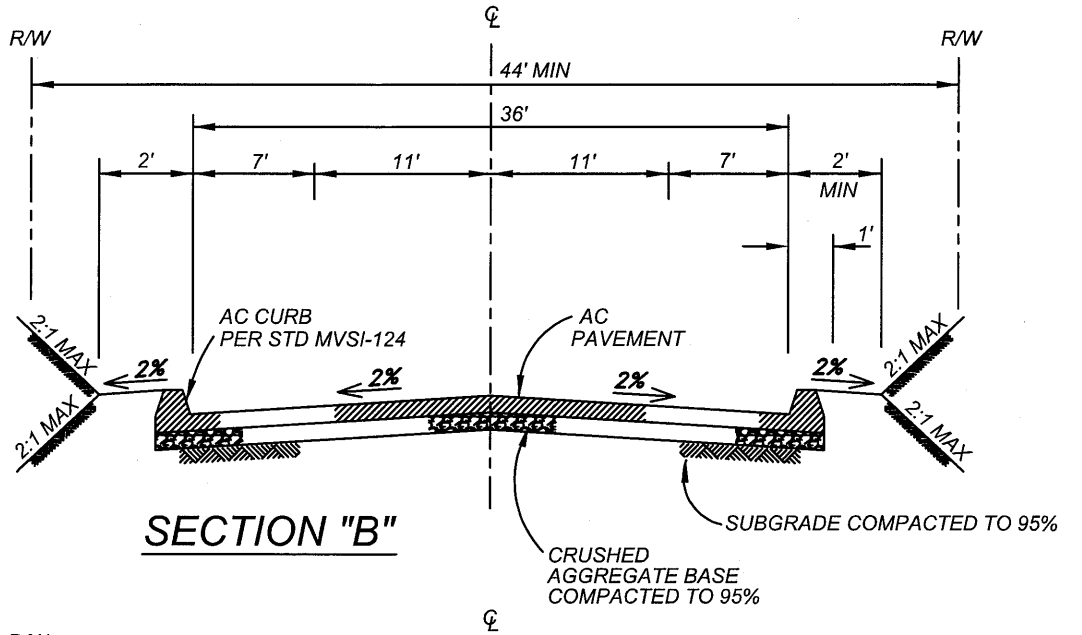
2.) *THICKNESS OF PAVEMENT SECTION TO BE DETERMINED BY R VALUE TESTING PER CALTRANS DESIGN METHOD TEST 301 WITH RECOMMENDED SAFETY FACTOR, MINIMUM 0.30' AC / 0.50' CAB. AC SHALL BE PLACED IN LIFTS, AND THICKNESS OF EACH LIFT SHALL NOT EXCEED 3".*

3.) *MINIMUM T.I. = 6.*

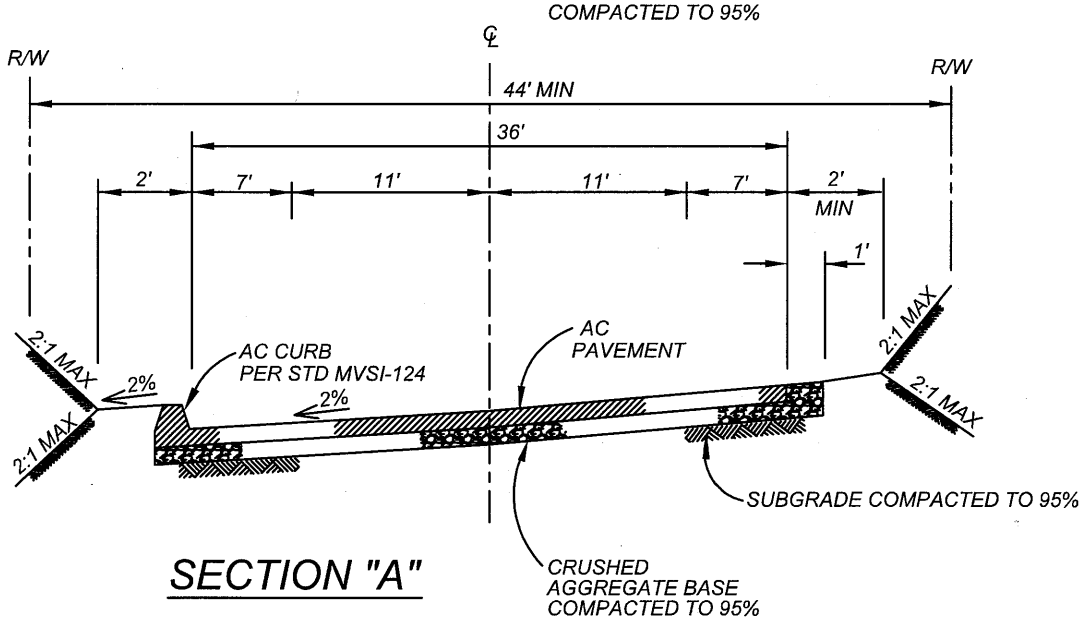
4.) *NO PARKING PERMITTED ON EITHER SIDE.*

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: EL — DIVISION MANAGER — 8/29/18 DATE APPROVED: — PUBLIC WORKS DIRECTOR / CITY ENGINEER — 9/14/18 DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION **HILLSIDE RESIDENTIAL STREET**	STANDARD PLAN **MVSI-108A-0** SHEET 1 OF 2



SECTION "B"



SECTION "A"

NOTES:

1.) *DRAINAGE CONTROL TO BE APPROVED BY THE CITY ENGINEER. CONCRETE CURB AND/OR CURB AND GUTTER MAY BE REQUIRED.*

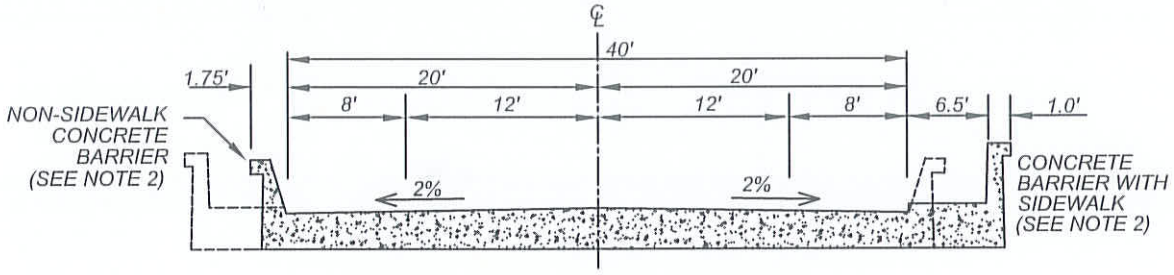
2.) *THICKNESS OF PAVEMENT SECTION TO BE DETERMINED BY R VALUE TESTING PER CALTRANS DESIGN METHOD TEST 301 WITH RECOMMENDED SAFETY FACTOR, MINIMUM 0.30' AC / 0.50' CAB. AC SHALL BE PLACED IN LIFTS, AND THICKNESS OF EACH LIFT SHALL NOT EXCEED 3".*

3.) *MINIMUM T.I. = 7.*

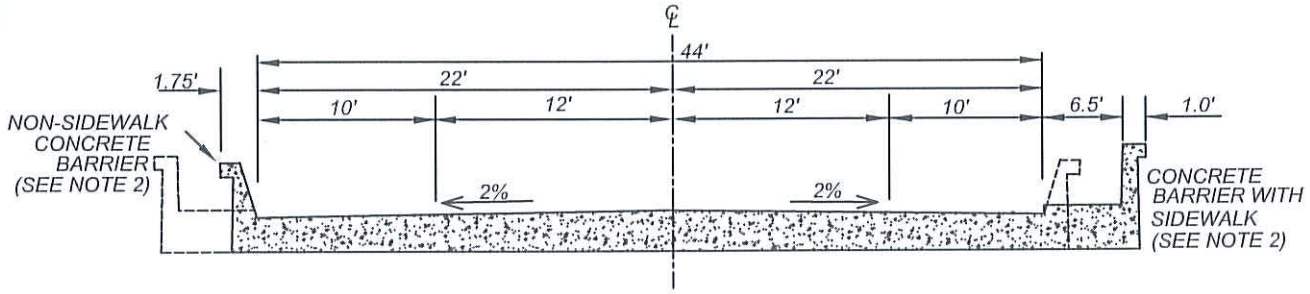
4.) *PARKING PERMITTED ON EITHER SIDE.*

NOT TO SCALE

CITY OF MORENO VALLEY · DECEMBER 3, 1984	RECOMMENDED: EL — DIVISION MANAGER — 8/29/18 DATE APPROVED: — PUBLIC WORKS DIRECTOR / CITY ENGINEER — 9/14/18 DATE	**CITY OF MORENO VALLEY** PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION **HILLSIDE COLLECTOR STREET** STANDARD PLAN **MVSI-108B-0** SHEET 2 OF 2



LOCAL STREET BRIDGE



COLLECTOR STREET BRIDGE

NOTES:

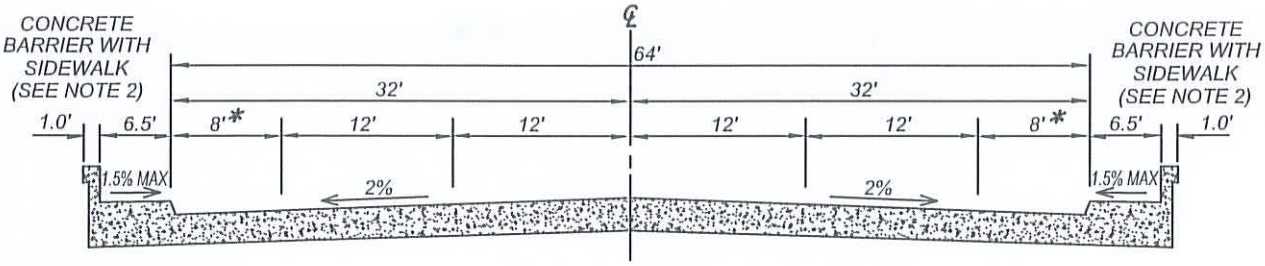
1.) BRIDGE TYPE TO BE APPROVED BY CITY ENGINEER.

2.) RAISED SIDEWALK TO BE PROVIDED ON BOTH SIDES WHEN REQUIRED BY THE CITY ENGINEER. IF NOT REQUIRED, NON-SIDEWALK CONCRETE BARRIER SHALL BE USED.

3.) CONCRETE BARRIER SHALL BE TO CALTRANS STANDARDS OR AS APPROVED BY THE CITY ENGINEER.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: DIVISION MANAGER 1/21/14 DATE APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER 1/29/14 DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION **LOCAL AND COLLECTOR STREET BRIDGE** STANDARD PLAN **MVSI-109A-0** SHEET 1 OF 3



*SUBJECT TO REVISION BY THE CITY ENGINEER

TYPICAL SECTION

NOTES:

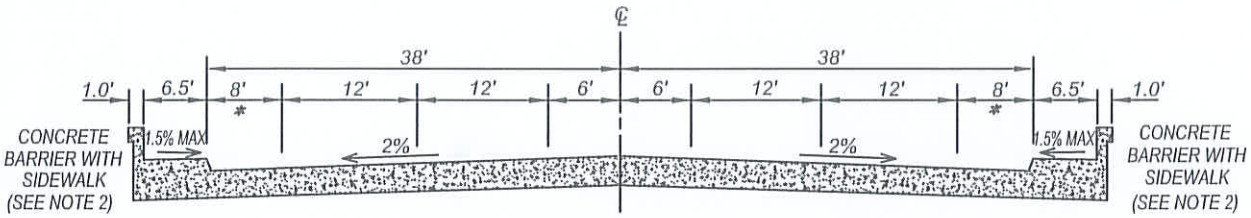
1.) BRIDGE TYPE TO BE APPROVED BY CITY ENGINEER.

2.) RAISED SIDEWALK TO BE PROVIDED ON BOTH SIDES WHEN REQUIRED BY THE CITY ENGINEER. IF NOT REQUIRED, NON-SIDEWALK CONCRETE BARRIER SHALL BE USED.

3.) CONCRETE BARRIER SHALL BE TO CALTRANS STANDARDS OR AS APPROVED BY THE CITY ENGINEER.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: DIVISION MANAGER 1/21/14 DATE APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER 1/29/14 DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION MINOR ARTERIAL BRIDGE	STANDARD PLAN MVSI-109B-0 SHEET 2 OF 3



*SUBJECT TO REVISION BY THE CITY ENGINEER

TYPICAL SECTION

NOTES:

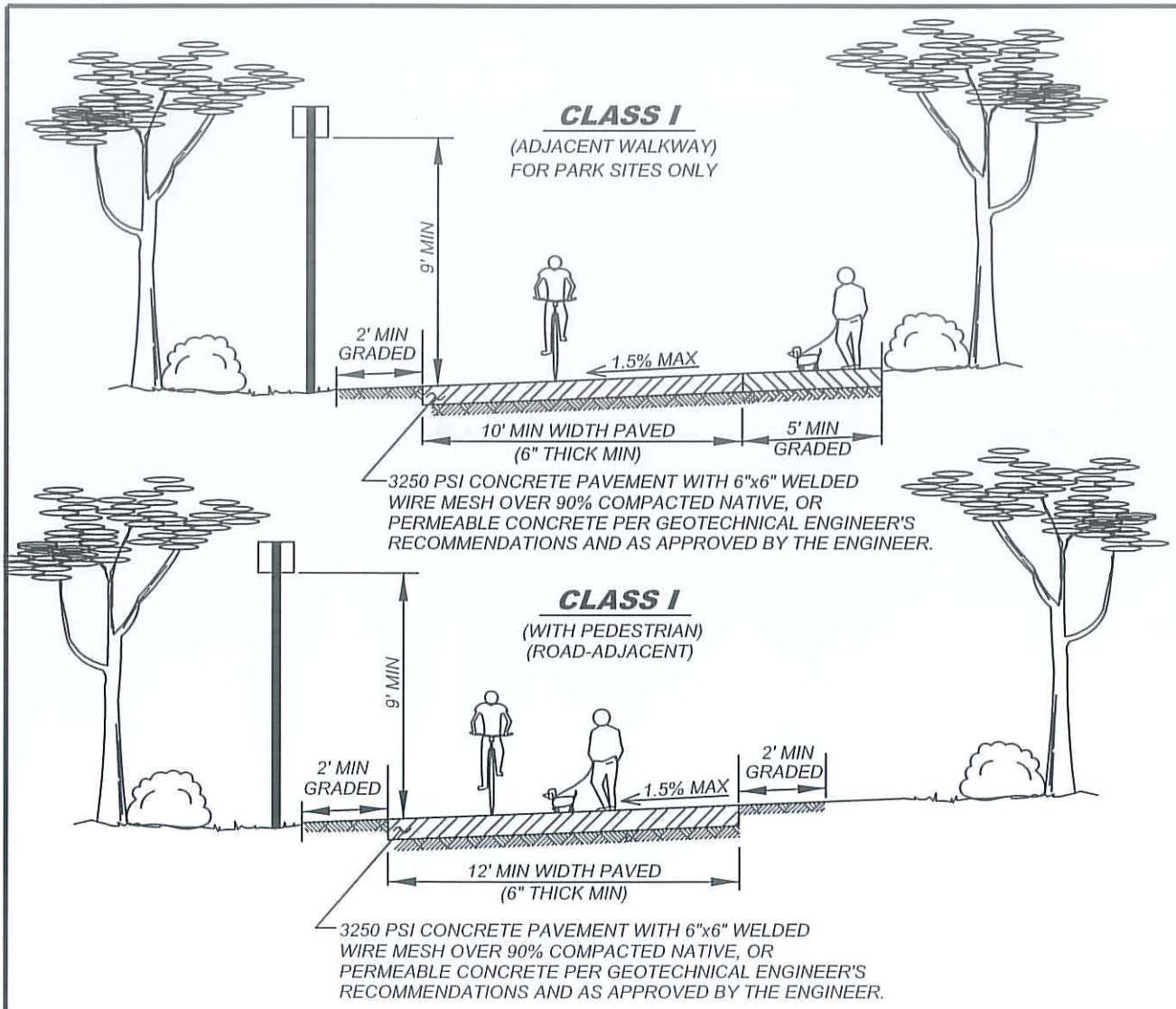
1.) BRIDGE TYPE TO BE APPROVED BY CITY ENGINEER.

2.) RAISED SIDEWALK TO BE PROVIDED ON BOTH SIDES WHEN REQUIRED BY THE CITY ENGINEER. IF NOT REQUIRED, NON-SIDEWALK CONCRETE BARRIER SHALL BE USED.

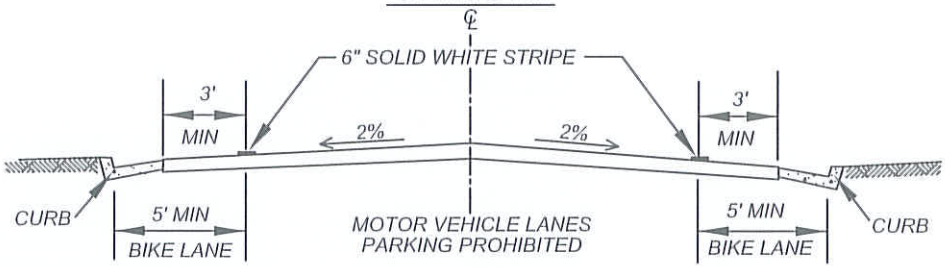
3.) CONCRETE BARRIER SHALL BE TO CALTRANS STANDARDS OR AS APPROVED BY CITY ENGINEER.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: DIVISION MANAGER 1/21/14 DATE APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER 1/29/14 DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION ARTERIAL BRIDGE	STANDARD PLAN MVSI-109C-0 SHEET 3 OF 3



CLASS II

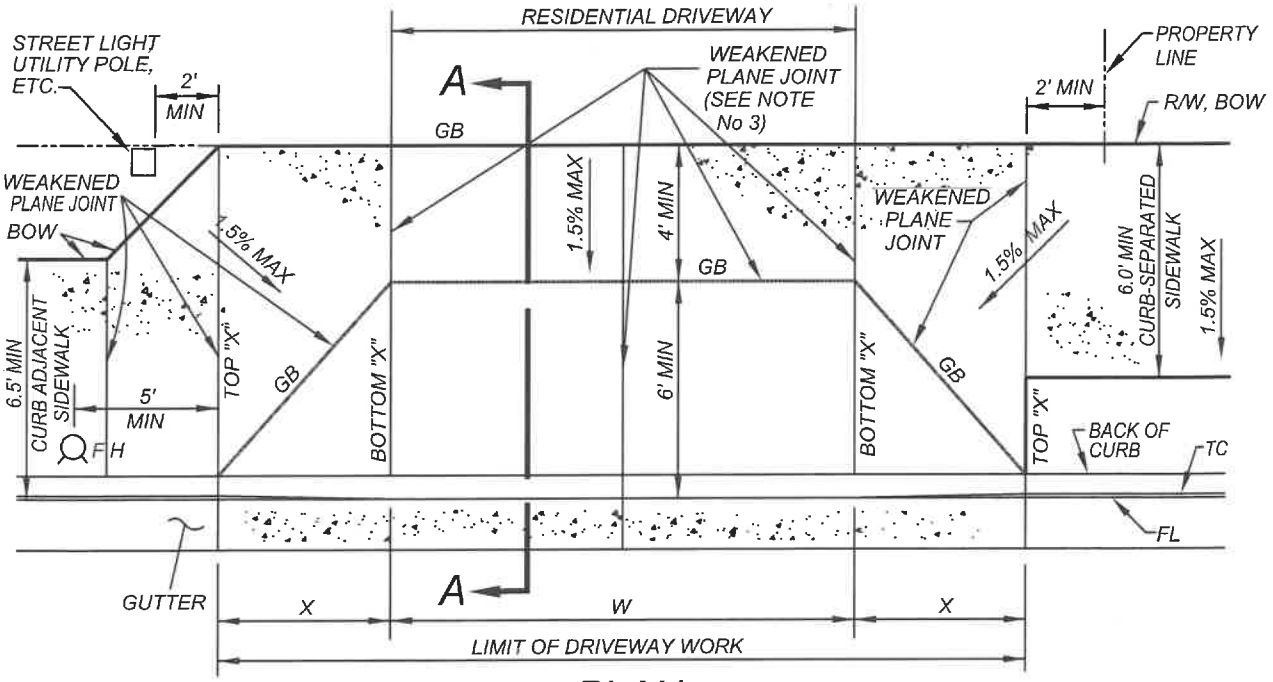


NOTES:

1.) CONCRETE MOW STRIP REQUIRED NEXT TO LANDSCAPE AREAS.
2.) CLASS I & II BIKE ROUTES TO BE STRIPED AND DESIGNATED WITH SIGNAGE.
3.) CLASS III BIKE ROUTES DESIGNATED WITH SIGNAGE AND/OR SHARROW MARKINGS.

NOT TO SCALE

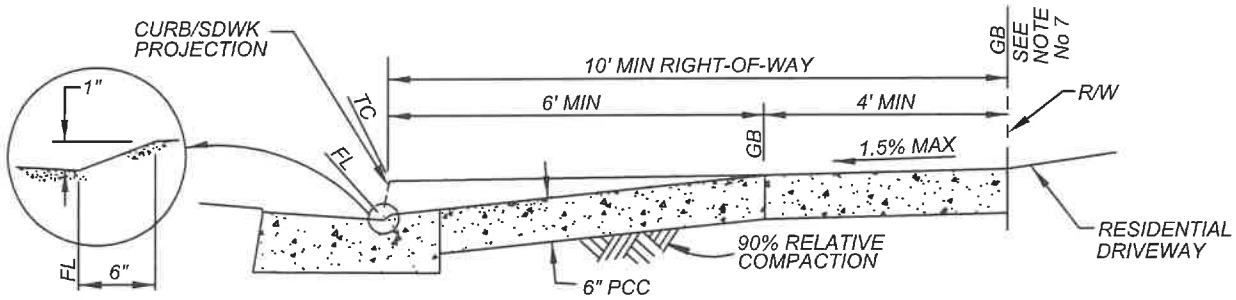
CITY OF MORENO VALLEY · DECEMBER 3, 1984	RECOMMENDED: DIVISION MANAGER — DATE 1/21/14 APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER — DATE 1/29/14	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION **TWO-WAY BIKE PATH ON SEPARATE RIGHT-OF-WAY**
		STANDARD PLAN **MVSI-110-0** SHEET 1 OF 1



PLAN

X	6" CF	8" CF
	4'	5'

W	MIN	MAX
	12'	30'



SECTION "A-A"

NOTES:

1.) ALL CONCRETE SHALL BE CLASS 560-C-3250, CURED WITH WHITE PIGMENTED CURING COMPOUND.
2.) ALL EXISTING PCC TO BE REMOVED SHALL BE SAWCUT AT THE JOINTS.
3.) DRIVEWAYS WITH 14' ≤ W ≤ 20' SHALL HAVE A MINIMUM OF 1 WEAKENED PLANE JOINT AT ½W. DRIVEWAYS WITH W > 20' SHALL HAVE WEAKENED PLANE JOINTS AT NOT TO EXCEED 5' ON CENTER. ALL DRIVEWAY WIDTHS SHALL HAVE WEAKENED PLANE LINES AT THE BOTTOM "X" LOCATION OF THE DRIVEWAY APPROACH TO CONTROL CRACKING.
4.) FOR CONSTRUCTING NEW DRIVEWAY APPROACHES ON EXISTING STREETS, A 12" WIDTH OF ASPHALT CONCRETE SHALL BE REMOVED AND REPLACED TO FULL DEPTH.
5.) DRIVEWAYS FOR CORNER LOTS SHALL BE LOCATED ADJACENT TO THE PROPERTY LINE AWAY FROM THE INTERSECTION.
6.) W DIMENSION SHALL MATCH WIDTH OF GARAGE(S) UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
7.) 14% MAX. GRADE BREAK BETWEEN DRIVEWAY AND APPROACH.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984

RECOMMENDED: _____ 7/16/19
DIVISION MANAGER — DATE

APPROVED: _____ 8/11/19
PUBLIC WORKS DIRECTOR / CITY ENGINEER — DATE

CITY OF MORENO VALLEY

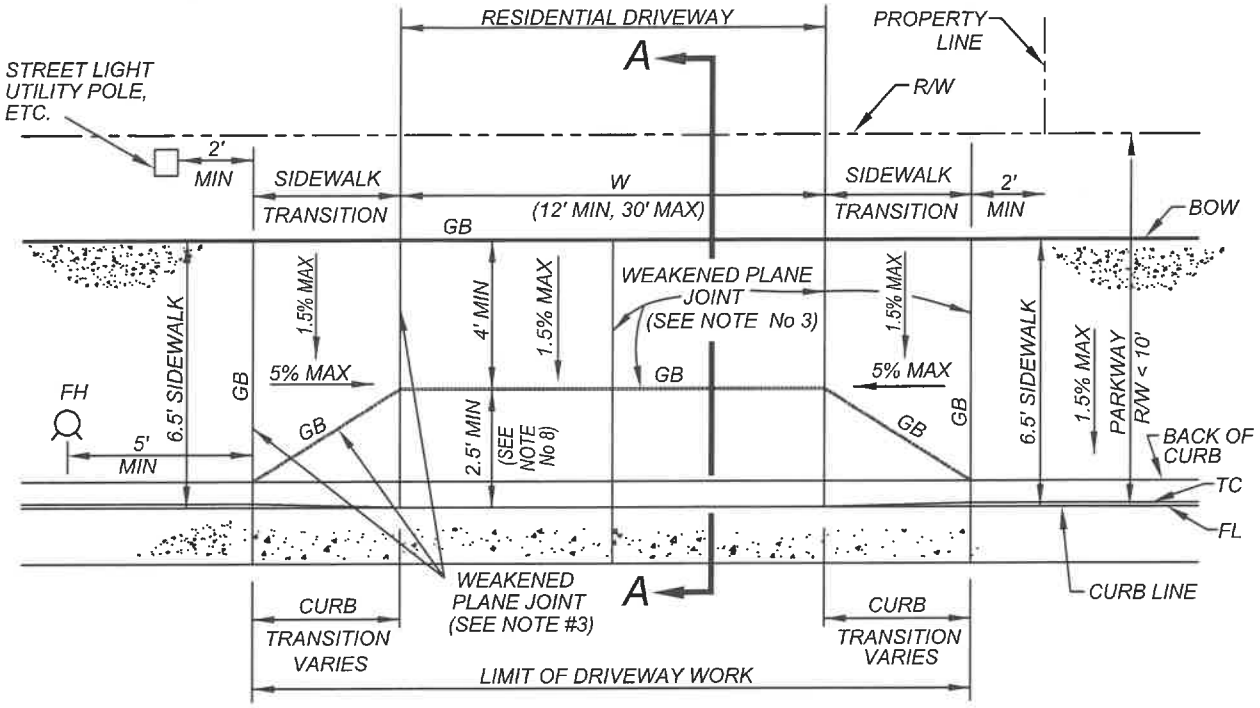
PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION

RESIDENTIAL DRIVEWAY APPROACH

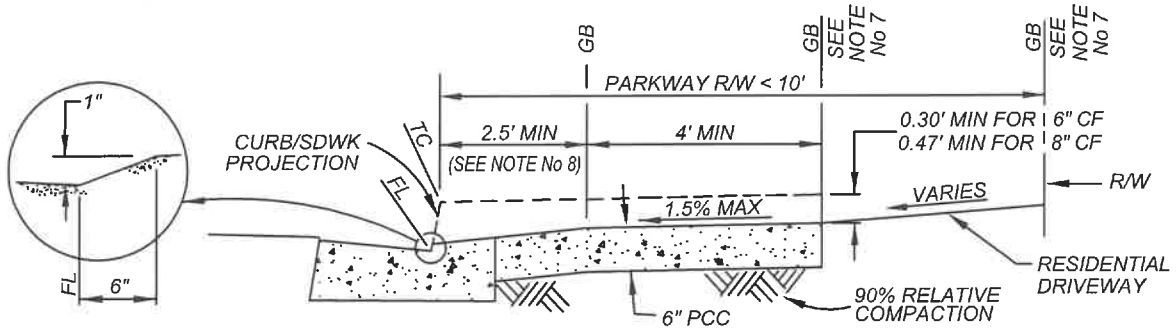
(FOR RIGHT-OF-WAY WIDTH BEHIND CURB OF 10' OR MORE)

STANDARD PLAN
MVSI-111A-0

SHEET 1 OF 3



PLAN



SECTION "A-A"

NOTES:

1.) ALL CONCRETE SHALL BE CLASS 560-C-3250, CURED WITH WHITE PIGMENTED CURING COMPOUND.
2.) ALL EXISTING PCC TO BE REMOVED SHALL BE SAW CUT AT THE JOINTS.
3.) DRIVEWAYS WITH 14' ≤ W ≤ 20' SHALL HAVE A MINIMUM OF 1 WEAKENED PLANE JOINT AT ½W. DRIVEWAYS WITH W > 20' SHALL HAVE WEAKENED PLANE JOINTS AT NOT TO EXCEED 5' ON CENTER. ALL DRIVEWAY WIDTHS SHALL HAVE WEAKENED PLANE JOINTS AT THE BOTH SIDES OF SIDEWALK TRANSITION SECTIONS OF THE DRIVEWAY APPROACH TO CONTROL CRACKING.
4.) FOR NEW DRIVEWAY APPROACHES ON EXISTING STREETS A 12" WIDTH OF ASPHALT CONCRETE SHALL BE REMOVED AND REPLACED TO FULL DEPTH.
5.) DRIVEWAYS FOR CORNER LOTS SHALL BE LOCATED ADJACENT TO THE PROPERTY LINE AWAY FROM THE INTERSECTION.
6.) W DIMENSION SHALL MATCH WIDTH OF GARAGE DOORS UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
7.) 14% MAX GRADE BREAK BETWEEN DRIVEWAY AND APPROACH.
8.) THE SLOPED SECTION OF DRIVEWAY APPROACH SHOULD BE EXTENDED TO MINIMIZE THE STEEPNESS BY UTILIZING THE MAXIMUM AVAILABLE PARKWAY RIGHT-OF-WAY WIDTH.
9.) THIS STANDARD SHALL NOT BE USED FOR NEW DEVELOPMENT.

NOT TO SCALE

CITY OF MORENO VALLEY · DECEMBER 3, 1984

RECOMMENDED: DIVISION MANAGER — DATE 7/16/19

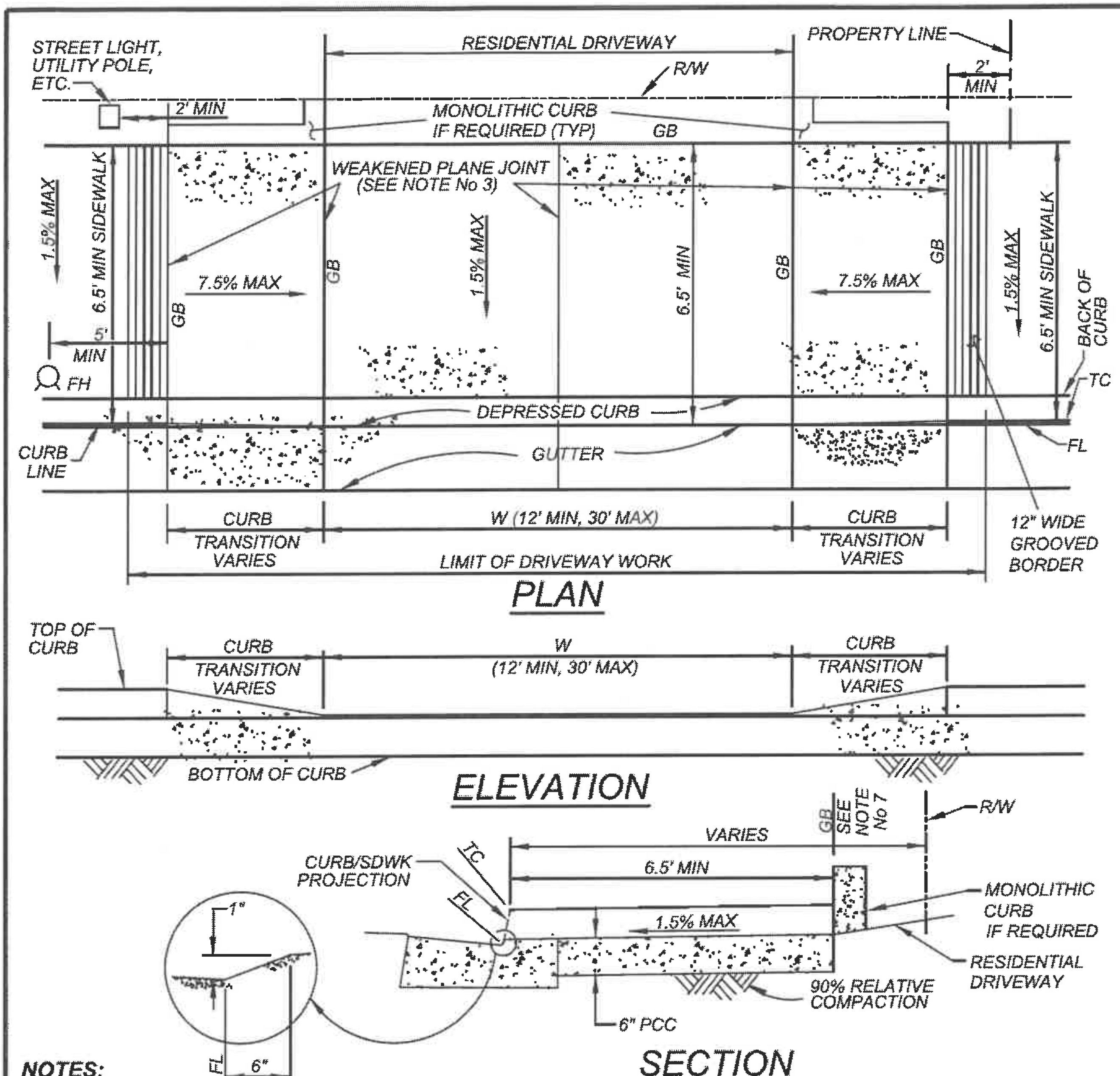
APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER — DATE 10/14/19

CITY OF MORENO VALLEY

PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION

RESIDENTIAL DRIVEWAY APPROACH (FOR CONFINED RIGHT-OF-WAY)

STANDARD PLAN
MVSI-111B-0
SHEET 2 OF 3

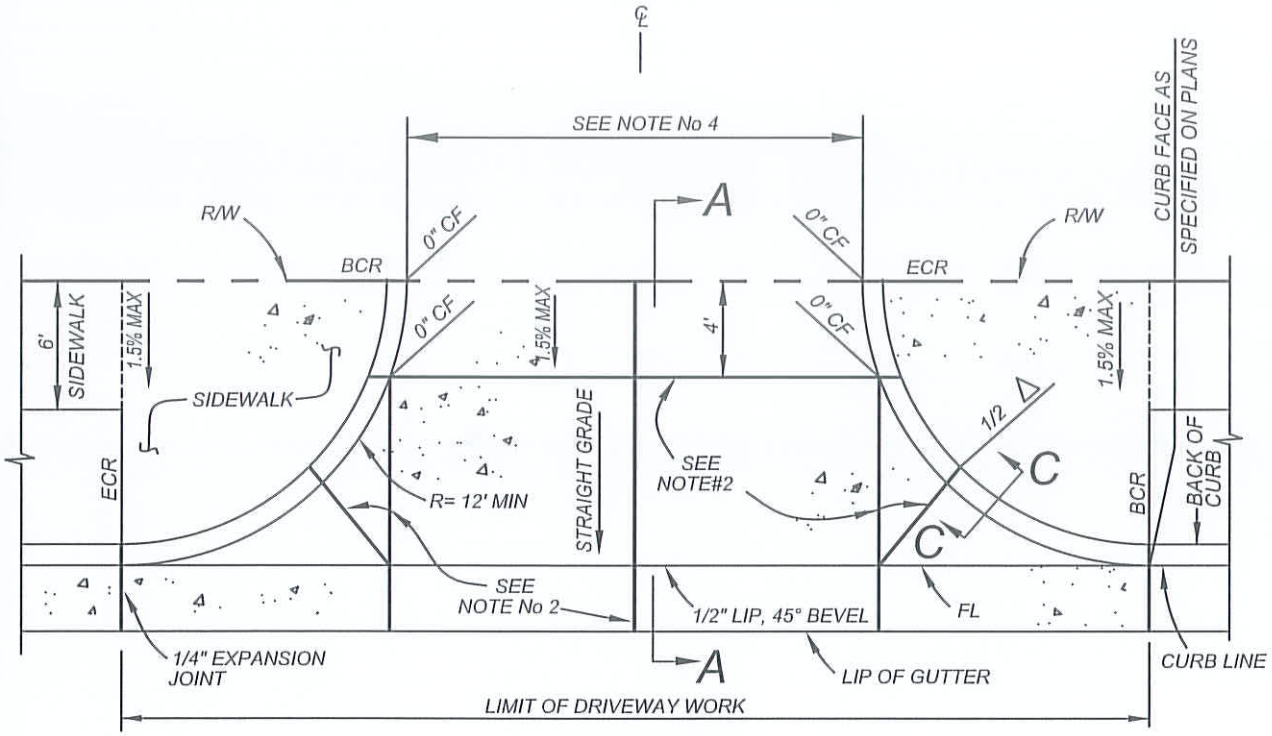


NOTES:

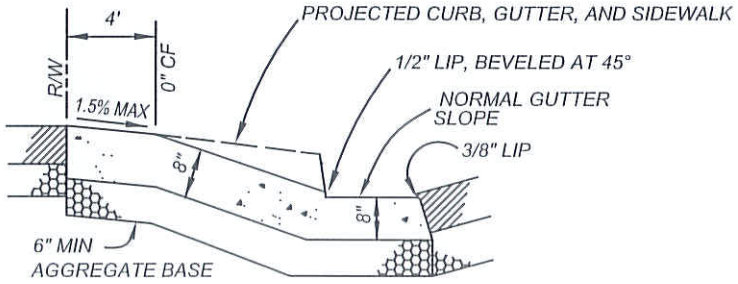
1.) ALL CONCRETE SHALL BE CLASS 560-C-3250, CURED WITH WHITE PIGMENTED CURING COMPOUND.
2.) ALL EXISTING PCC TO BE REMOVED SHALL BE SAWCUT AT THE JOINTS.
3.) DRIVEWAYS WITH 14' ≤ W ≤ 20' SHALL HAVE A MINIMUM OF 1 WEAKENED PLANE JOINT AT ½W. DRIVEWAYS WITH W > 20' SHALL HAVE WEAKENED PLANE JOINTS AT NOT TO EXCEED 5' ON CENTER. ALL DRIVEWAY WIDTHS SHALL HAVE WEAKENED PLANE LINES AT BOTH SIDES OF "CURB TRANSITIONS" SECTIONS OF THE DRIVEWAY APPROACH TO CONTROL CRACKING.
4.) FOR NEW DRIVEWAY APPROACHES ON EXISTING STREETS A 12" WIDTH OF ASPHALT CONCRETE SHALL BE REMOVED AND REPLACED TO FULL DEPTH.
5.) DRIVEWAYS FOR CORNER LOTS SHALL BE LOCATED ADJACENT TO THE PROPERTY LINE AWAY FROM THE INTERSECTION.
6.) W DIMENSION SHALL MATCH WIDTH OF GARAGE DOORS UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
7.) 14% MAXIMUM GRADE BREAK BETWEEN DRIVEWAY AND APPROACH.

NOT TO SCALE

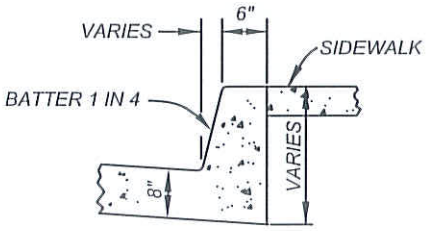
RECOMMENDED: 7/16/19 DIVISION MANAGER / DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION	
APPROVED: 10/11/19 PUBLIC WORKS DIRECTOR / CITY ENGINEER / DATE	**RESIDENTIAL DRIVEWAY APPROACH (FOR CONFINED RIGHT-OF-WAY)**	STANDARD PLAN **MVSI-111C-1** SHEET 3 OF 3



PLAN VIEW



SECTION A-A



SECTION C-C

NOTES:

1.) TYPE I APPROACH MAY BE USED WHEN SIDEWALK IS ADJACENT TO PROPERTY LINE.

2.) WEAKENED PLANE JOINTS ARE REQUIRED AT CENTERLINE OF APPROACH AND AT LOCATIONS AS SHOWN, SPACED 10' MAXIMUM AND AS NECESSARY.

3.) CONCRETE SHALL BE CLASS 560-C-3250, CURED WITH WHITE PIGMENTED CURING COMPOUND.

4.) MINIMUM WIDTH SHALL BE 24', MAXIMUM WIDTH SHALL BE 40'.

5.) 4' LONG #4 SMOOTH ROUND BARS SHALL BE USED WHEN DRIVEWAY APPROACH IS NOT POURED MONOLITHICALLY.

6.) FOR NEW DRIVEWAY APPROACHES ON EXISTING STREETS A 12" WIDTH OF ASPHALT CONCRETE SHALL BE REMOVED AND REPLACED TO FULL DEPTH.

NOT TO SCALE

CITY OF MORENO VALLEY · DECEMBER 3, 1984

RECOMMENDED: _____ DIVISION MANAGER — DATE 1/21/14

APPROVED: _____ PUBLIC WORKS DIRECTOR / CITY ENGINEER — DATE 1/29/14

CITY OF MORENO VALLEY

PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION

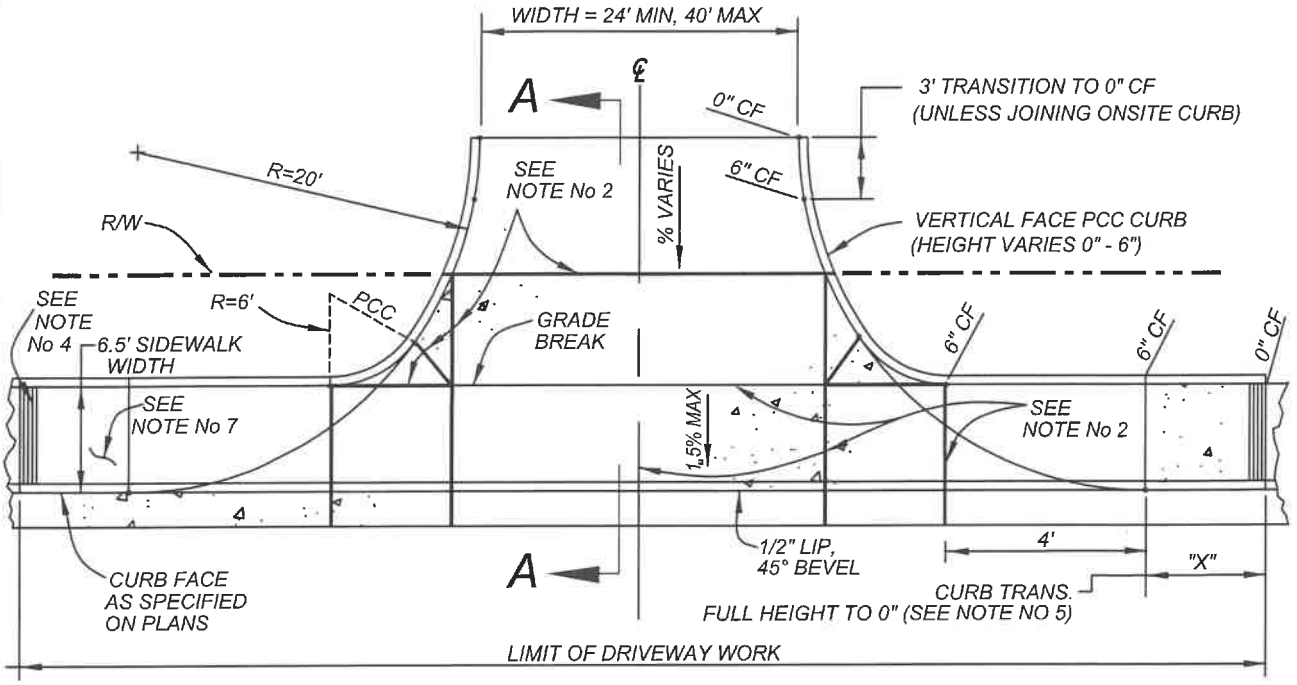
COMMERCIAL DRIVEWAY APPROACH: TYPE I

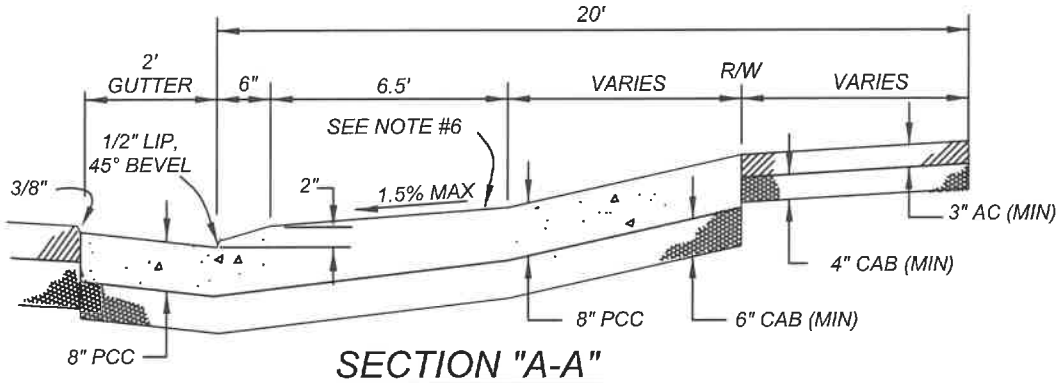
(NOT TO BE USED FOR NEW DEVELOPMENT)

STANDARD PLAN

MVSI-112A-0

SHEET 1 OF 4





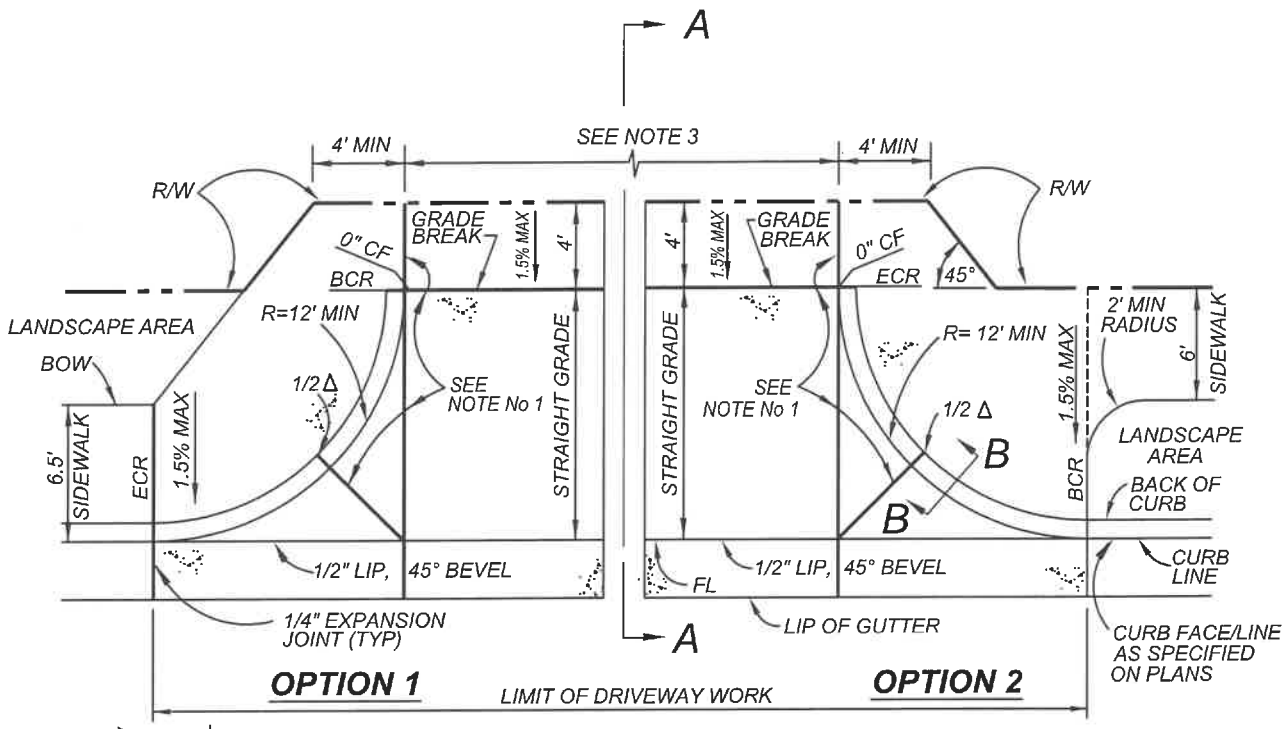
SECTION "A-A"

NOTES:

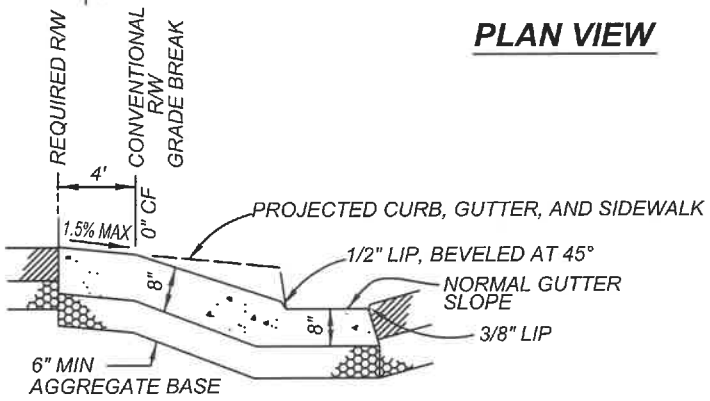
1.) TYPE II APPROACH SHALL BE USED INSTEAD OF TYPE III OR TYPE IV APPROACH FOR SITES REQUIRING SMALL SEMITRAILER (AASHTO DESIGN VEHICLE WB-40) ACCESS.
2.) WEAKENED PLANE JOINTS ARE REQUIRED AT CENTERLINE OF APPROACH AND AT LOCATIONS AS SHOWN, SPACED 10' MAX AND AS NECESSARY.
3.) CONCRETE SHALL BE CLASS 560-C-3250, CURED WITH WHITE PIGMENTED CURING COMPOUND.
4.) TOP OF SIDEWALK RAMP SHALL HAVE 12" WIDE BORDER WITH GROOVES $\frac{1}{4}$" DEEP, WITH $\frac{1}{8}$" RADIUS, AND SPACED AT $\frac{3}{4}$" OC.
5.) "X" SHALL HAVE A MAXIMUM SLOPE OF 1:12 (8.33%), AND A MINIMUM SLOPE OF 1:15 (6.67%).
6.) RAMP SURFACE SHALL BE SLIP-RESISTANT AND SHALL BE OF CONTRASTING FINISH FROM ADJACENT SIDEWALK (ROUGH BROOM FINISH OR EQUIVALENT).
7.) ALL ACCESS RAMPS SHALL BE CONSTRUCTED TO THE MOST CURRENT REQUIREMENT OF THE AMERICANS WITH DISABILITIES ACT (ADA) STANDARDS/CALIFORNIA CODE OF REGULATIONS TITLE 24-ACCESSIBILITY REGULATIONS. ADJUSTMENTS SHALL BE MADE IN THE FIELD TO ACHIEVE RAMP CONDITIONS.
8.) 4' LONG #4 SMOOTH ROUND BARS SHALL BE USED WHEN DRIVEWAY APPROACH IS NOT POURED MONOLITHICALLY.

NOT TO SCALE

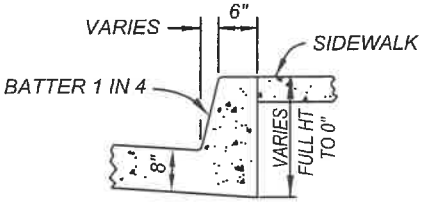
CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: Henry Ngo 7/16/19 DIVISION MANAGER / DATE APPROVED: M.L. Wolfe 10/11/19 PUBLIC WORKS DIRECTOR / CITY ENGINEER / DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION **COMMERCIAL DRIVEWAY APPROACH: TYPE II** STANDARD PLAN **MVSI-112B-0** SHEET 2 OF 4



PLAN VIEW



SECTION A-A



SECTION B-B

NOTES:

1.) WEAKENED PLANE JOINT REQUIRED AT CENTERLINE OF APPROACH AND AT LOCATIONS AS SHOWN, SPACED 10' MAX AS NECESSARY.

2.) CONCRETE SHALL BE CLASS 560-C-3250, CURED WITH WHITE PIGMENTED CURING COMPOUND.

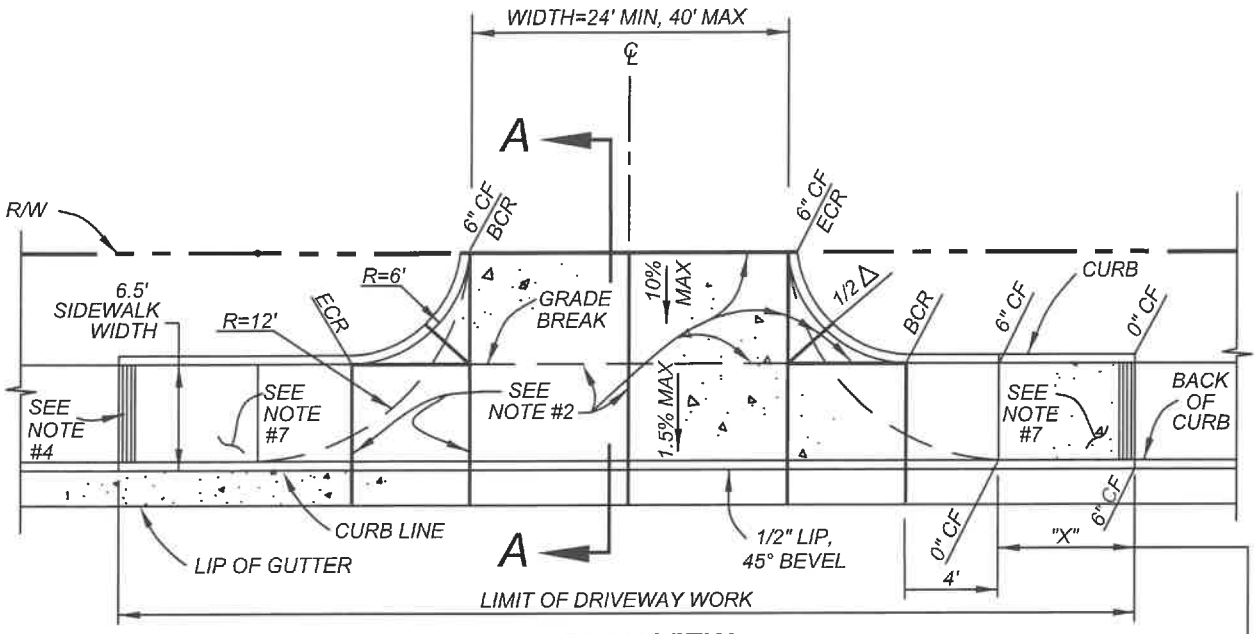
3.) MINIMUM WIDTH SHALL BE 24', MAXIMUM WIDTH SHALL BE 40' FOR COMMERCIAL DEVELOPMENT. FOR INDUSTRIAL PROJECTS , MAXIMUM WIDTH SHALL BE DETERMINED BY A TRUCK TURNING ANALYSIS, SUBJECT TO CITY APPROVAL. IF THIS STANDARD IS APPROVED FOR USE FOR BIKEWAY APPROACHES IN PARKS, WIDTH SHALL BE 16'.

4.) TYPE III APPROACH FOR PARKS AND TRAILS SHALL INCLUDE #4 REBARS AT 18" ON CENTER (2 DIRECTIONS).

5.) 4' LONG #4 SMOOTH ROUND BARS SHALL BE USED WHEN DRIVEWAY APPROACH IS NOT POURED MONOLITHICALLY.

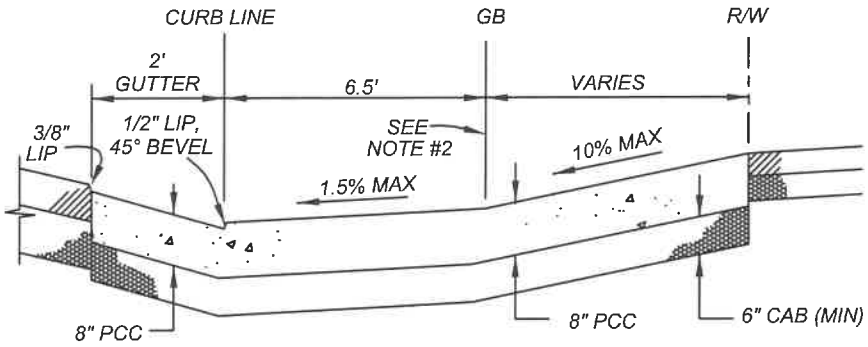
NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: Hanuyyo 7/16/19 DIVISION MANAGER / DATE APPROVED: 10/11/19 PUBLIC WORKS DIRECTOR / CITY ENGINEER / DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION **COMMERCIAL DRIVEWAY APPROACH: TYPE III** (FOR NEW DEVELOPMENT)
		STANDARD PLAN **MVSI-112C-0** SHEET 3 OF 4



PLAN VIEW

CURB TRANS.
FULL HEIGHT TO 0"
SEE NOTE #5



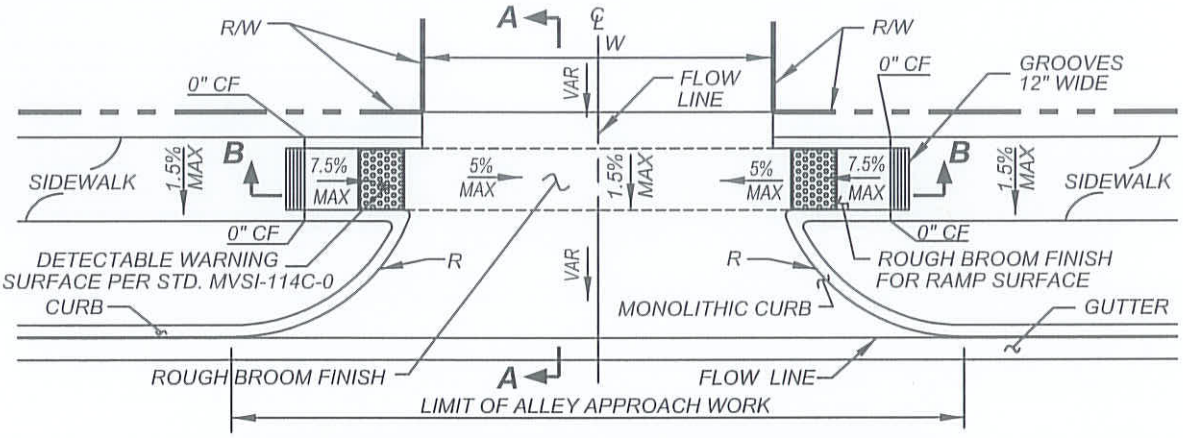
SECTION "A-A"

NOTES:

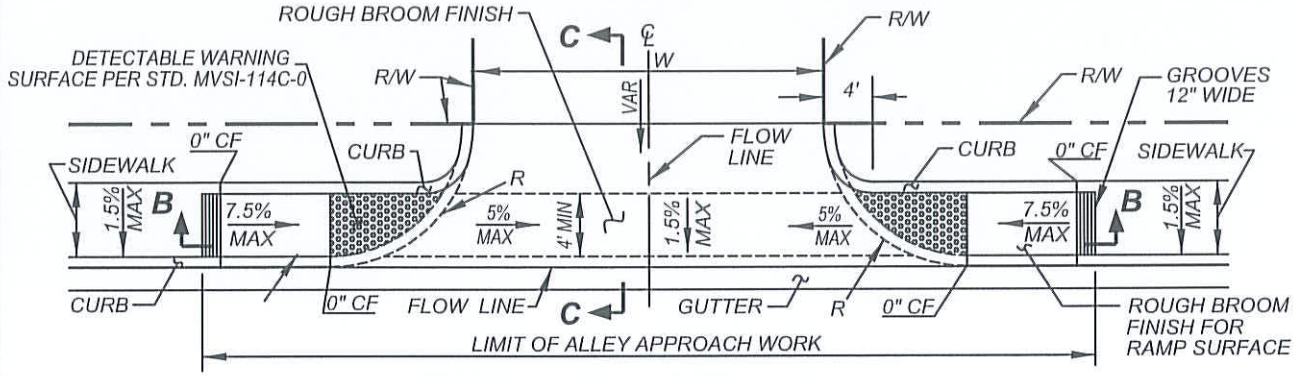
1.) TYPE IV APPROACH SHALL BE USED WHEN SIDEWALK IS ADJACENT TO CURB AND RIGHT-OF-WAY IS NOT AVAILABLE TO BUILD A TYPE III APPROACH.
2.) WEAKENED PLANE JOINT REQUIRED AT CENTERLINE OF APPROACH AND AT LOCATIONS AS SHOWN, SPACED 10' MAX AND AS NECESSARY.
3.) CONCRETE SHALL BE CLASS 560-C-3250, CURED WITH WHITE PIGMENTED CURING COMPOUND.
4.) TOP OF SIDEWALK RAMP SHALL HAVE A 12" WIDE BORDER WITH GROOVES $\frac{1}{4}$" DEEP, WITH $\frac{1}{8}$" RADIUS, AND SPACED AT $\frac{3}{4}$" OC.
5.) "X" SHALL HAVE A MAXIMUM SLOPE OF 1:12 (8.33%), AND A MINIMUM SLOPE OF 1:15 (6.67%).
6.) RAMP SURFACE SHALL BE SLIP-RESISTANT AND SHALL BE OF CONTRASTING FINISH FROM ADJACENT SIDEWALK (ROUGH BROOM FINISH OR EQUIVALENT).
7.) ALL ACCESS RAMPS SHALL BE CONSTRUCTED TO THE MOST CURRENT REQUIREMENT OF THE AMERICANS WITH DISABILITIES ACT (ADA) STANDARDS/CALIFORNIA CODE OF REGULATIONS TITLE 24-ACCESSIBILITY REGULATIONS. ADJUSTMENTS SHALL BE MADE IN THE FIELD TO ACHIEVE RAMP CONDITIONS.
8.) FOR NEW DRIVEWAY APPROACHES ON EXISTING STREETS A 12" WIDTH OF ASPHALT CONCRETE SHALL BE REMOVED AND REPLACED TO FULL DEPTH.

NOT TO SCALE

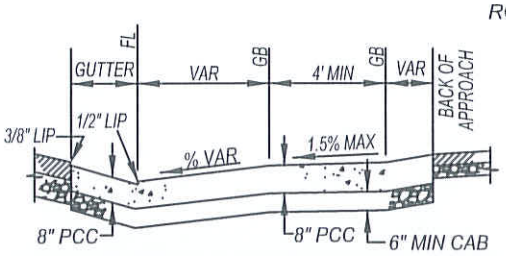
CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: Henry Ngo DIVISION MANAGER 7/16/19 DATE APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER 10/11/19 DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION **COMMERCIAL DRIVEWAY APPROACH: TYPE IV**
		STANDARD PLAN **MVSI-112D-0** SHEET 4 OF 4



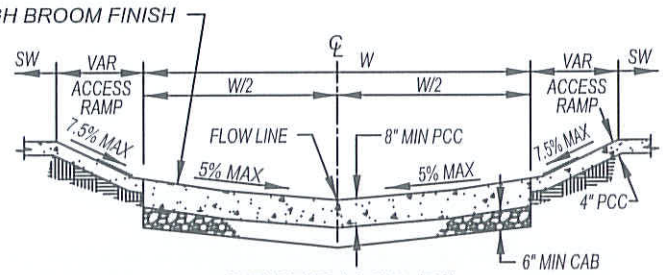
AT CURB-SEPARATED SIDEWALK LOCATION



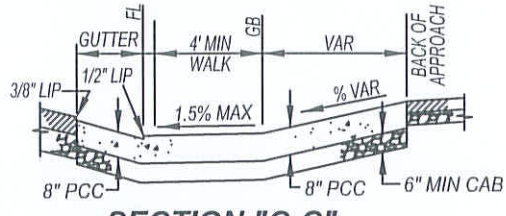
AT CURB-ADJACENT SIDEWALK LOCATION



SECTION "A-A"



SECTION "B-B"



SECTION "C-C"

NOTES:

1.) CURB RETURNS SHALL HAVE A RADIUS (R) OF 12 FEET UNLESS OTHERWISE SPECIFIED. CURB RADIUS SHALL NOT EXCEED PARKWAY WIDTH.
2.) ALL CONCRETE SHALL BE CLASS 560-C-3250, CURED WITH WHITE PIGMENTED CURING COMPOUND.
3.) RAMP SURFACE SHALL BE SLIP-RESISTANT WITH ROUGH BROOM FINISH OR EQUIVALENT.

NOT TO SCALE

CITY OF MORENO VALLEY
DECEMBER 3, 1984

RECOMMENDED:
DIVISION MANAGER — DATE 1/21/14

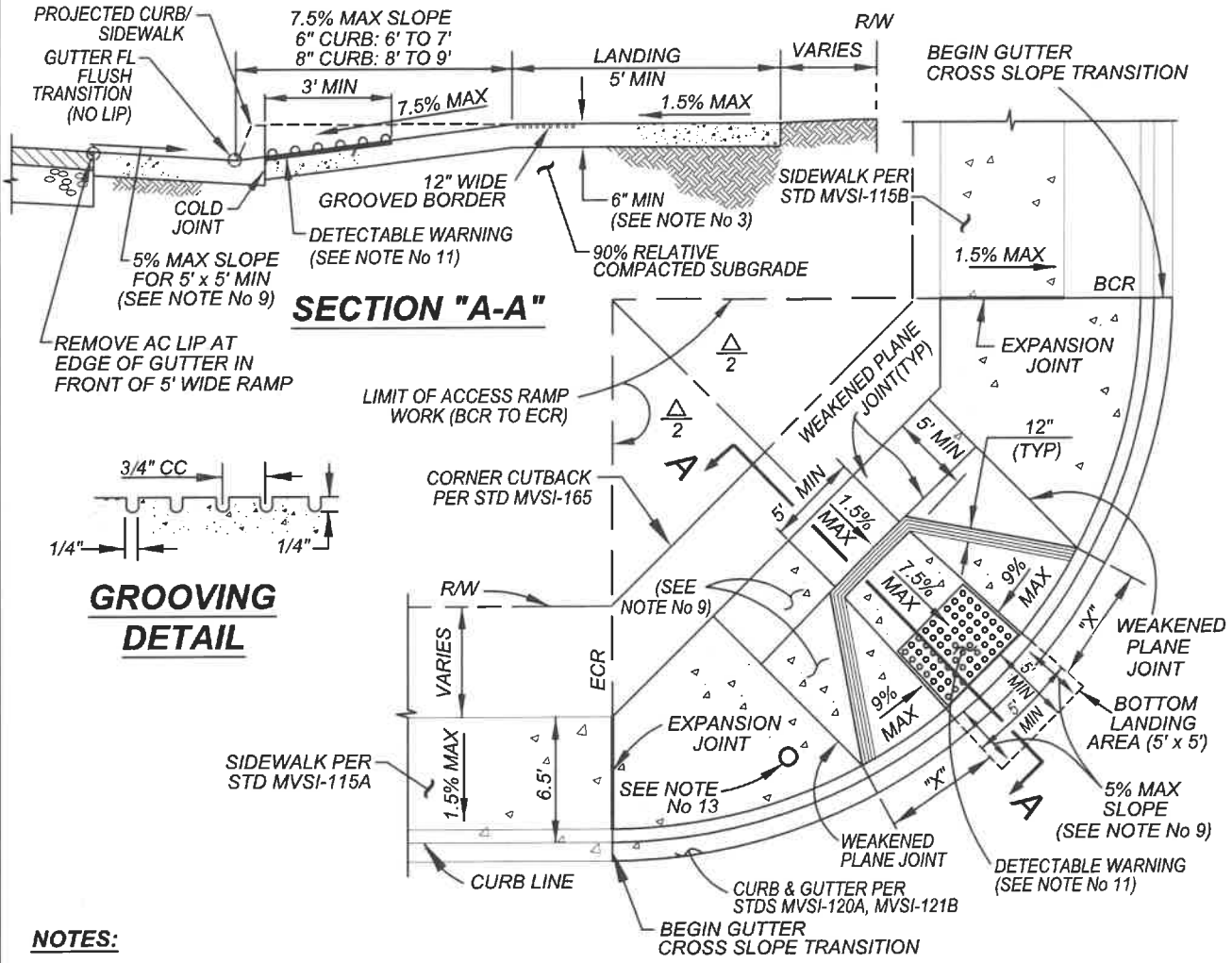
APPROVED:
PUBLIC WORKS DIRECTOR / CITY ENGINEER — DATE 1/29/14

CITY OF MORENO VALLEY

PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION

ALLEY APPROACH

STANDARD PLAN
MVSI-113-0
SHEET 1 OF 1



NOTES:

1.) ALL ACCESS RAMPS SHALL BE CONSTRUCTED TO THE MOST CURRENT REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA) STANDARDS/CALIFORNIA CODE OF REGULATIONS TITLE 24-ACCESSIBILITY REGULATIONS. ADJUSTMENTS SHALL BE MADE IN THE FIELD TO ACHIEVE RAMP CONDITIONS.

2.) CONCRETE SHALL BE CLASS 560-C-3250, CURED WITH WHITE PIGMENTED CURING COMPOUND OVER 90% RELATIVE COMPACTION.

3.) THICKNESS OF RAMP AND LANDING AREAS AROUND THE RAMP WITHIN THE CURB RETURN, FROM BCR TO ECR, SHALL BE 6" MINIMUM. RAMP AND LANDING AREAS SHALL BE POURED MONOLITHIC.

4.) A 4' MINIMUM DEPTH LANDING IS REQUIRED AT THE TOP OF THE RAMP OVER THE ENTIRE RAMP WIDTH. CROSS SLOPE OF LANDING MAY NOT EXCEED 1.5% IN ANY DIRECTION.

5.) RAMP SIDES ALONG "X" SHALL HAVE A MAXIMUM SLOPE OF 10%.

6.) GROOVED BORDER SHALL BE 12" WIDE ALONG THE TOP AND SIDES OF THE RAMP AT THE LEVEL SURFACE OF THE SIDEWALK. OMIT GROOVES ADJACENT TO NON-PAVED AREAS.

7.) RAMP SURFACE AND FLARED SIDES SHALL BE SLIP-RESISTANT (ROUGH BROOM FINISH OR EQUIVALENT) AND SHALL BE OF CONTRAST FINISH FROM ADJACENT SIDEWALK (MEDIUM BROOM FINISH).

8.) SEE STANDARD PLAN MVLT-432 FOR CROSSWALK LOCATION DETAIL. SEE STANDARD PLAN MVSI-165 FOR R/W CORNER CUT-BACK.

9.) SLOPES JOINING BOTTOM OF THE RAMP (I.E. ROAD GUTTERS) SHALL NOT EXCEED 5%. THE SLOPES JOINING TOP OF RAMP SHALL NOT EXCEED 1.5%.

10.) DIMENSIONS SHOWN FOR SLOPING PORTIONS OF RAMP VARY DUE TO FIELD CONDITIONS.

11.) DETECTABLE WARNING SURFACES ARE REQUIRED ON ALL CURB RAMPS THAT ENTER INTO A VEHICULAR TRAVELED WAY. SEE STANDARD PLAN MVSI-114C FOR DETECTABLE WARNING SURFACE DETAILS AND NOTES.

12.) FOR NEW ACCESS RAMPS ON EXISTING STREETS, A 12" WIDTH OF PAVEMENT SHALL BE REMOVED AND REPLACED TO FULL DEPTH FOR CONSTRUCTION OF CURB AND GUTTER.

13.) FOR TRAFFIC SIGNAL LOCATIONS, A 30"x48" 2% MAXIMUM LANDING AREA SHALL BE LOCATED ADJACENT TO THE PEDESTRIAN PUSH BUTTON.

NOT TO SCALE

RECOMMENDED: _____ DIVISION MANAGER — 8/14/19 DATE

APPROVED: _____ PUBLIC WORKS DIRECTOR / CITY ENGINEER — 10/11/19 DATE

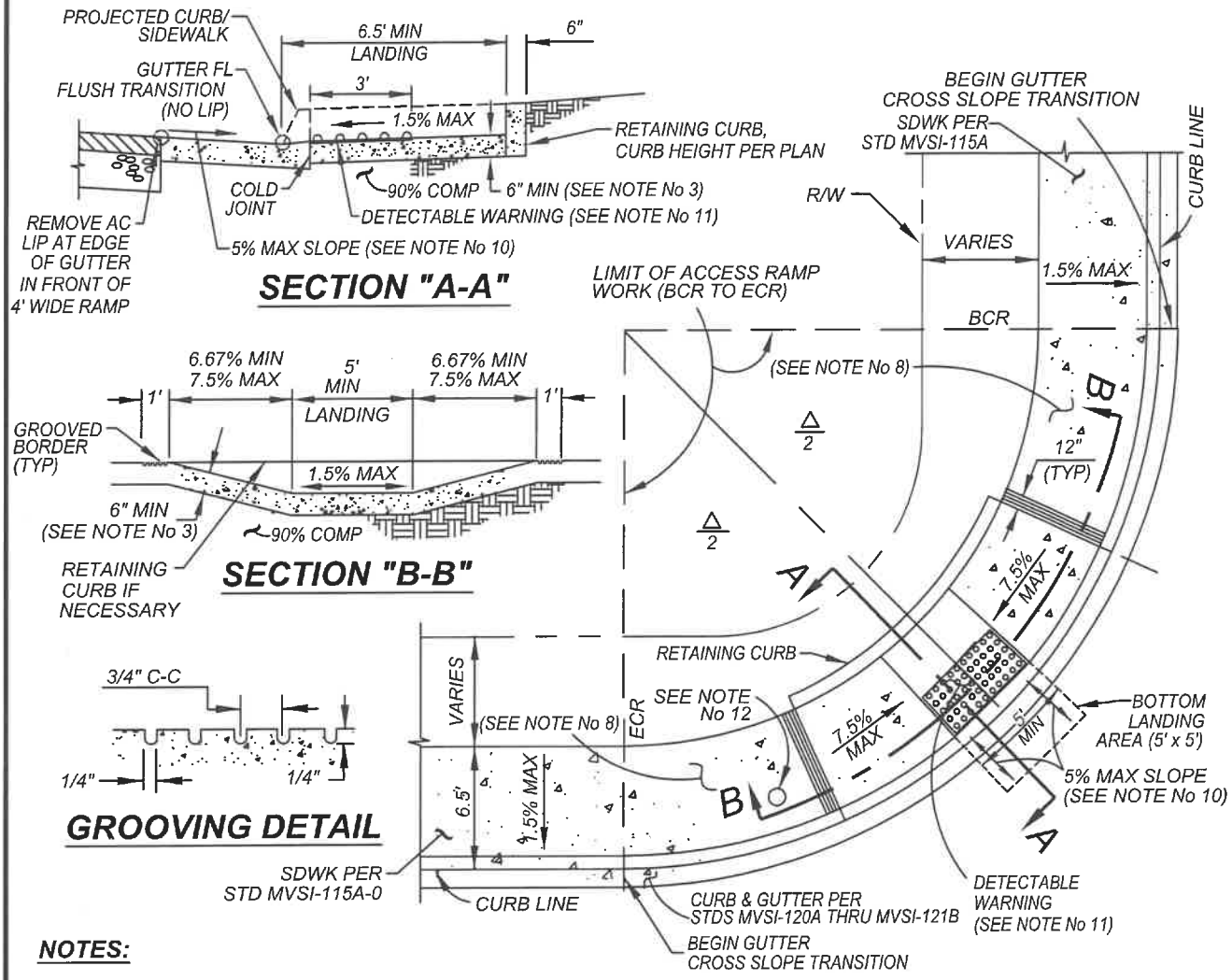
CITY OF MORENO VALLEY

PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION

ACCESS RAMP - TYPE 1

STANDARD PLAN **MVSI-114A-2**

SHEET 1 OF 4



NOTES:

1.) TYPE 2 RAMP MAY BE USED WHEN MINIMUM DISTANCE OF 4' AT TOP OF TYPE 1 RAMP CANNOT BE ACHIEVED.
2.) ALL ACCESS RAMPS SHALL BE CONSTRUCTED TO THE MOST CURRENT REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA) STANDARDS/CALIFORNIA CODE OF REGULATIONS TITLE 24-ACCESSIBILITY REGULATIONS. ADJUSTMENTS SHALL BE MADE IN THE FIELD TO ACHIEVE RAMP CONDITIONS.
3.) THICKNESS OF RAMP AND LANDING AREAS ON BOTH SIDES OF THE RAMP WITHIN CURB RETURN, FROM BCR TO ECR,SHALL BE 6" MINIMUM. RAMP AND LANDING AREAS SHALL BE POURED MONOLITHIC.
4.) CONCRETE SHALL BE CLASS 560-C-3250, CURED WITH WHITE PIGMENTED CURING COMPOUND OVER 90% RELATIVE COMPACTION.
5.) CROSS SLOPE OF LANDING MAY NOT EXCEED 1.5% IN ANY DIRECTION.
6.) RAMP SIDES SHALL HAVE A MAXIMUM SLOPE OF 7.5% AND A MINIMUM SLOPE OF 6.67%.
7.) GROOVED BORDER SHALL BE 12" WIDE ALONG THE TOP OF THE RAMP AT THE LEVEL SURFACE OF THE SIDEWALK. OMIT GROOVES ADJACENT TO NON-PAVED AREAS.
8.) RAMP SURFACE AND SIDES SHALL BE SLIP-RESISTANT (ROUGH BROOM FINISH OR EQUIVALENT) AND SHALL BE OF CONTRASTING FINISH FROM ADJACENT SIDEWALK.
9.) SEE STANDARD PLAN MVLT-432 FOR CROSSWALK LOCATION DETAIL.
10.) SLOPES JOINING BOTTOM OF THE RAMP (I.E. ROAD GUTTERS) SHALL NOT EXCEED 5%. THE SLOPES JOINING TOP OF RAMP SHALL NOT EXCEED 1.5% IN ANY DIRECTION.
11.) DETECTABLE WARNING SURFACES ARE REQUIRED ON ALL CURB RAMPS THAT ENTER INTO A VEHICULAR TRAVELED WAY. SEE STANDARD PLAN MVSI-114C FOR DETECTABLE WARNING SURFACE DETAILS AND NOTES.
12.) FOR TRAFFIC SIGNAL LOCATIONS, A 30" x 48" 2% MAXIMUM LANDING AREA SHALL BE LOCATED ADJACENT TO THE PEDESTRIAN PUSH BUTTON.
13.) ALL EXPOSED CORNERS OF THE RETAINING CURB SHALL BE FINISHED WITH 1/2" RADIUS.

NOT TO SCALE

CITY OF MORENO VALLEY — DECEMBER 3, 1984

RECOMMENDED: Hernandez — DIVISION MANAGER — 7/16/19 DATE

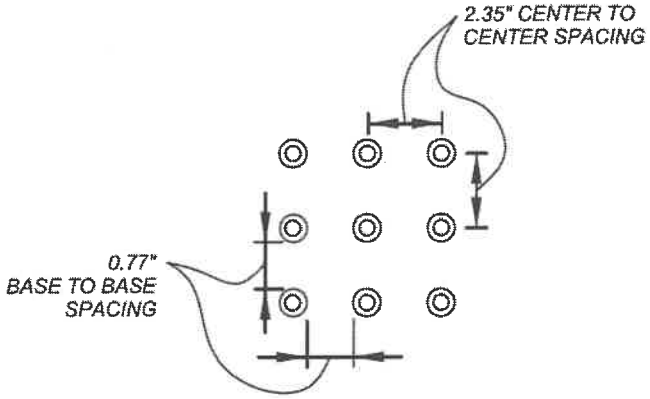
APPROVED: — PUBLIC WORKS DIRECTOR / CITY ENGINEER — DATE

CITY OF MORENO VALLEY

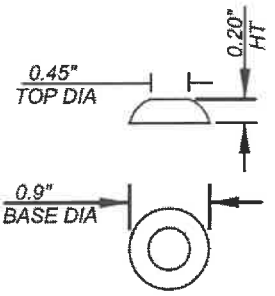
PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION

ACCESS RAMP - TYPE 2

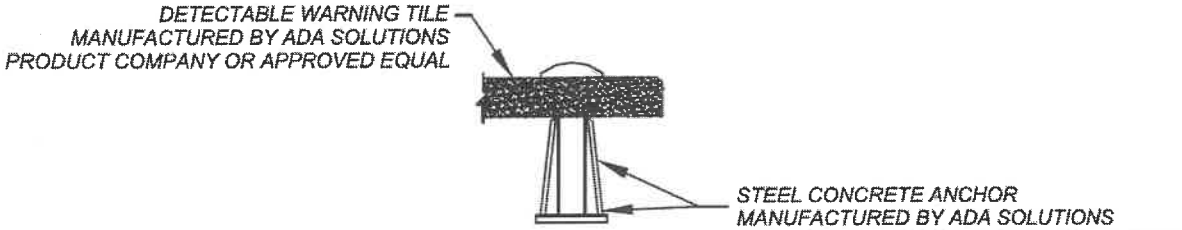
STANDARD PLAN
MVSI-114B-2



RAISED TRUNCATED DOME PATTERN
(IN-LINE)



RAISED TRUNCATED DOME



ANCHOR DETAIL

NOTES:

1.) DETECTABLE WARNING, MOUNTED FLUSH, SURFACE SHALL BE CAST-IN-PLACE DETECTABLE WARNING TILE WITH STEEL ANCHORS, MANUFACTURED BY ADA SOLUTIONS OR APPROVED EQUAL, AND SHALL MEET ALL ADA REQUIREMENTS AS WELL AS STATE TITLE 24 REQUIREMENTS.

2.) COLOR SHALL BE YELLOW CONFORMING TO FEDERAL STANDARD 595B, COLOR No 33538.

3.) DETECTABLE WARNING SURFACE SHALL CONFORM TO THE DETAILS ON THIS STANDARD PLAN.

4.) DETECTABLE WARNING SURFACE SHALL BE FULL WIDTH OF RAMP AND 3 FOOT MINIMUM IN DEPTH OF RAMP AND UTILIZE A SINGLE PIECE.

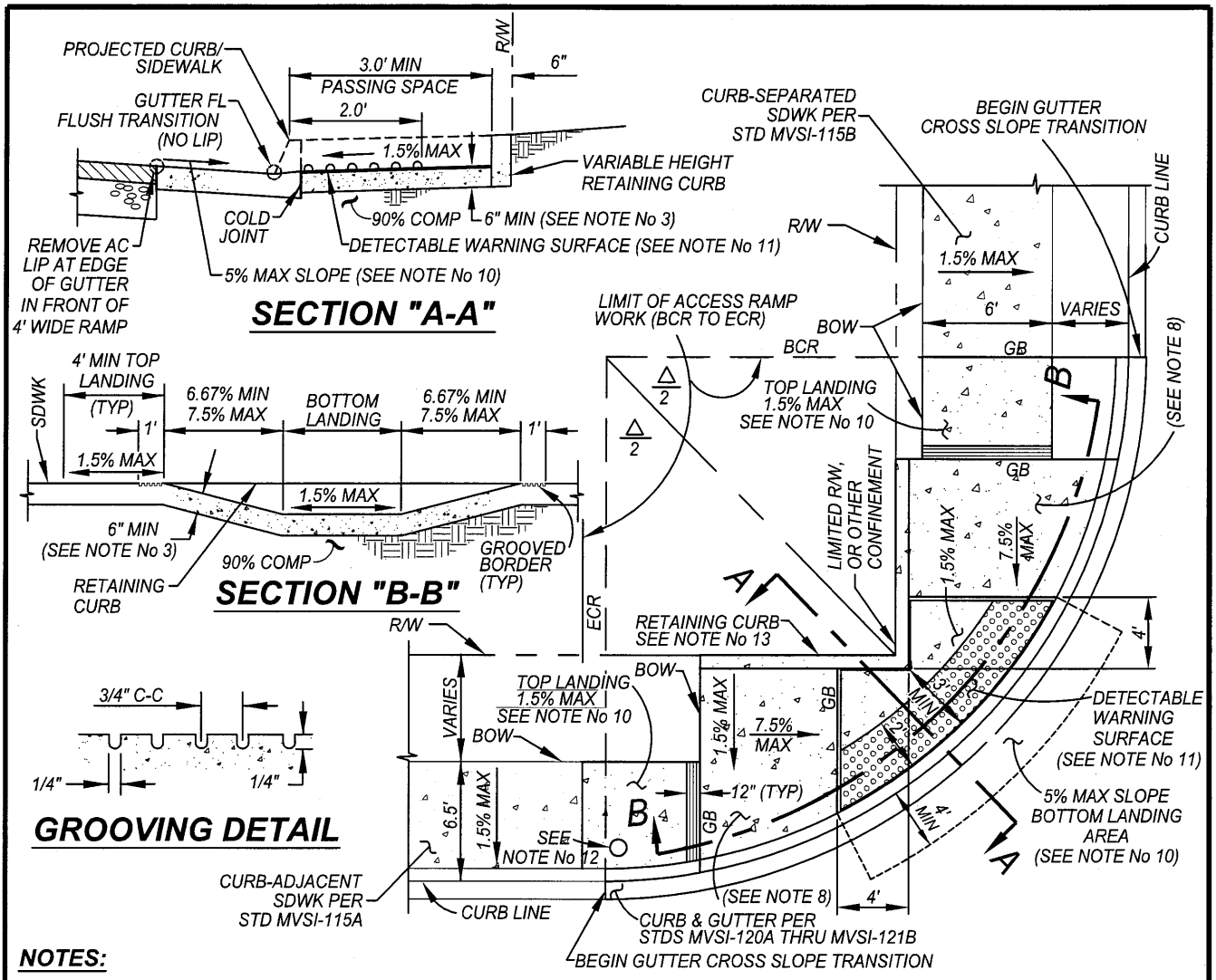
5.) DETECTABLE WARNING SURFACE SHALL BE INSTALLED SO THAT DOMES ARE ALIGNED PARALLEL TO CENTERLINE OF ACCESS RAMP.

6.) THE EDGE OF THE DETECTABLE WARNING SURFACE NEAREST THE STREET SHALL BE BETWEEN 6" AND 8" FROM THE GUTTER FLOW LINE.

7.) RETROFIT INSTALLATION SHALL BE DETECTABLE WARNING TILE (PER NOTE 1) TIED DOWN TO EXISTING RAMP SURFACE WITH ANCHORS AND SEALED WITH WATERPROOFING ADHESIVE. NO SELF-ADHESIVE SURFACE APPLIED DOME MATS ALLOWED. TILE SHALL BE INSTALLED FLUSH WITH THE RAMP SURFACE. PERIMETER "LIP" SHALL NOT EXCEED 1/4".

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: DIVISION MANAGER 7/16/19 DATE APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER 10/16/19 DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION **DETECTABLE WARNING SURFACE DETAILS AND NOTES**	STANDARD PLAN **MVSI-114C-2** SHEET 3 OF 4



NOTES:

1.) ALTERNATE TYPE 2 RAMP MAY BE USED FOR CAPITAL IMPROVEMENTS, WITH APPROVAL, WHEN A STANDARD TYPE 1 OR TYPE 2 RAMP CANNOT BE ACHIEVED DUE TO CONFINEMENT RESTRICTIONS SUCH AS R/W OR OTHER PHYSICAL CONSTRAINTS.

2.) ALL ACCESS RAMPS SHALL BE CONSTRUCTED TO THE MOST CURRENT REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA) STANDARDS/CALIFORNIA CODE OF REGULATIONS TITLE 24-ACCESSIBILITY REGULATIONS. ADJUSTMENTS SHALL BE MADE IN THE FIELD TO ACHIEVE RAMP CONDITIONS.

3.) THICKNESS OF RAMP AND LANDING AREAS ON BOTH SIDES OF THE RAMP WITHIN CURB RETURN, FROM BCR TO ECR,OR BEYOND BCR/ECR AS REQUIRED, SHALL BE 6" MINIMUM. RAMP AND LANDING AREAS SHALL BE POURED MONOLITHICALLY.

4.) CONCRETE SHALL BE CLASS 560-C-3250, CURED WITH WHITE PIGMENTED CURING COMPOUND.

5.) CROSS SLOPE OF LANDING SHALL NOT EXCEED 1.5% IN ANY DIRECTION.

6.) RAMP SIDES SHALL HAVE A MAXIMUM SLOPE OF 7.5% AND A MINIMUM SLOPE OF 6.67%.

7.) GROOVED BORDER SHALL BE 12" WIDE ALONG THE TOP OF THE RAMP AT THE LEVEL SURFACE OF THE SIDEWALK. OMIT GROOVES ADJACENT TO NON-PAVED AREAS.

8.) RAMP SURFACE AND SIDES SHALL BE SLIP-RESISTANT (ROUGH BROOM FINISH OR EQUIVALENT) AND SHALL BE OF CONTRASTING FINISH FROM ADJACENT SIDEWALK.

9.) SEE STANDARD PLAN MVLT-432 FOR CROSSWALK LOCATION DETAIL.

10.) SLOPES JOINING BOTTOM OF THE RAMP (I.E. ROAD GUTTERS) SHALL NOT EXCEED 5%. THE SLOPES JOINING TOP OF RAMP (TOP LANDING) SHALL NOT EXCEED 1.5% IN ANY DIRECTION FOR 4' MIM.

11.) DETECTABLE WARNING SURFACES ARE REQUIRED ON ALL CURB RAMPS THAT ENTER INTO A VEHICULAR TRAVELED WAY. SEE STANDARD PLAN MVSI-114C FOR DETECTABLE WARNING SURFACE DETAILS AND NOTES.

12.) FOR TRAFFIC SIGNAL LOCATIONS, A 30"x48" 2% MAXIMUM LANDING AREA SHALL BE LOCATED ADJACENT TO THE PEDESTRIAN PUSH BUTTON.

13.) ALL EXPOSED CORNERS OF THE RETAINING CURB SHALL BE FINISHED WITH 1/2" RADIUS.

NOT TO SCALE

CITY OF MORENO VALLEY — DECEMBER 3, 1984

RECOMMENDED:
DIVISION MANAGER — DATE 1-6-17

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

CITY OF MORENO VALLEY

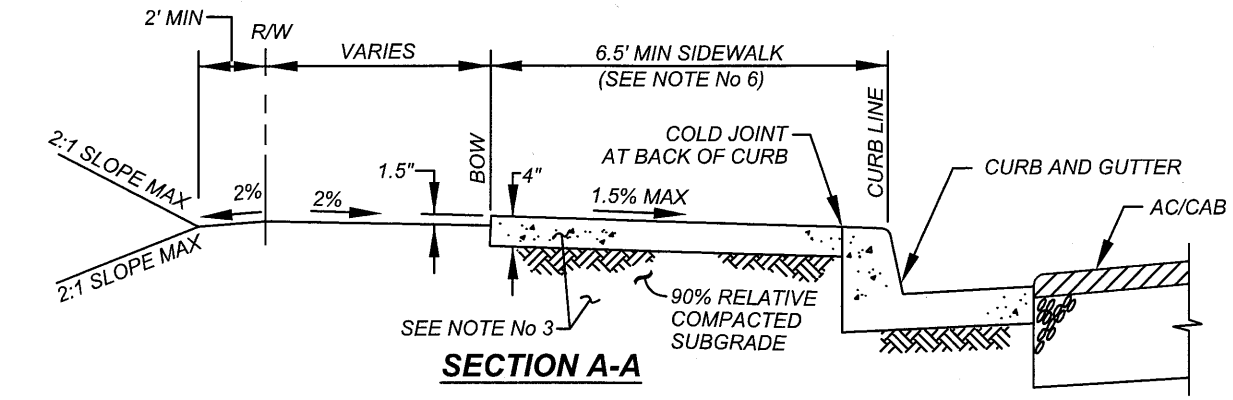
PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION

ACCESS RAMP - ALTERNATE TYPE 2 (CONFINED SPACE)

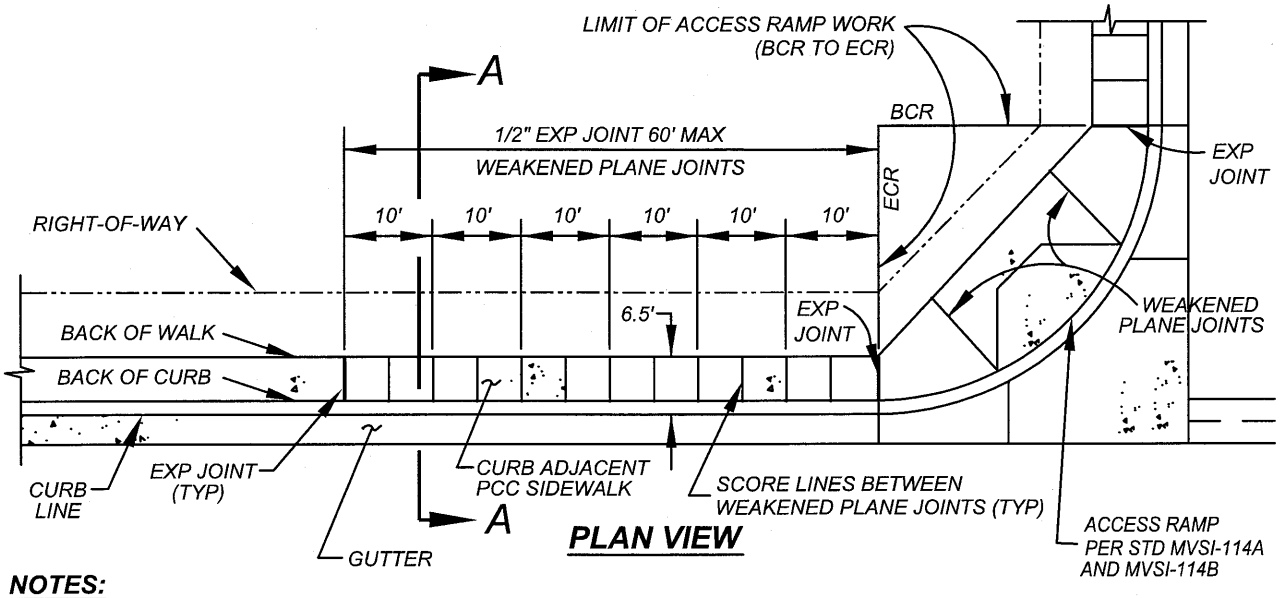
(NOT TO BE USED FOR NEW DEVELOPMENT)

STANDARD PLAN
MVSI-114D-0

SHEET 4 OF 4



SECTION A-A



PLAN VIEW

NOTES:

1.) THICKNESS OF SIDEWALK SHALL BE 4" EXCEPT IN DRIVEWAY APRONS, WHERE 6" IS REQUIRED FOR SINGLE FAMILY RESIDENTIAL DRIVEWAYS, AND 8" IS REQUIRED FOR COMMERCIAL DRIVEWAYS.

2.) SIDEWALK SHALL HAVE 1/2" WIDE PREMOLDED EXPANSION JOINTS AND 1- 1/2" DEEP WEAKENED PLANE JOINTS AT INTERVALS SHOWN HEREON. JOINTS SHALL HAVE EDGES WITH 1/4" RADIUS.

3.) CONCRETE SHALL BE CLASS 560-C-3250, MEDIUM BROOM FINISH, CURED WITH WHITE PIGMENTED CURING COMPOUND OVER 90% RELATIVE COMPACTED SUBGRADE. ALTERNATIVELY, IF APPROVED BY THE CITY ENGINEER, PERVIOUS PCC MAY BE USED. PERVIOUS PCC AND SUBGRADE SHALL MEET THE REQUIREMENTS OF SECTIONS 303-8 AND 201-1.1.6 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION.

4.) 18" MOISTURE PENETRATION REQUIRED PRIOR TO PLACING CONCRETE IN SIDEWALK AREA (NON-EXPANSIVE SOIL AS DETERMINED BY SOILS TEST ARE EXEMPT AND REQUIRE ONLY SURFACE WETTING).

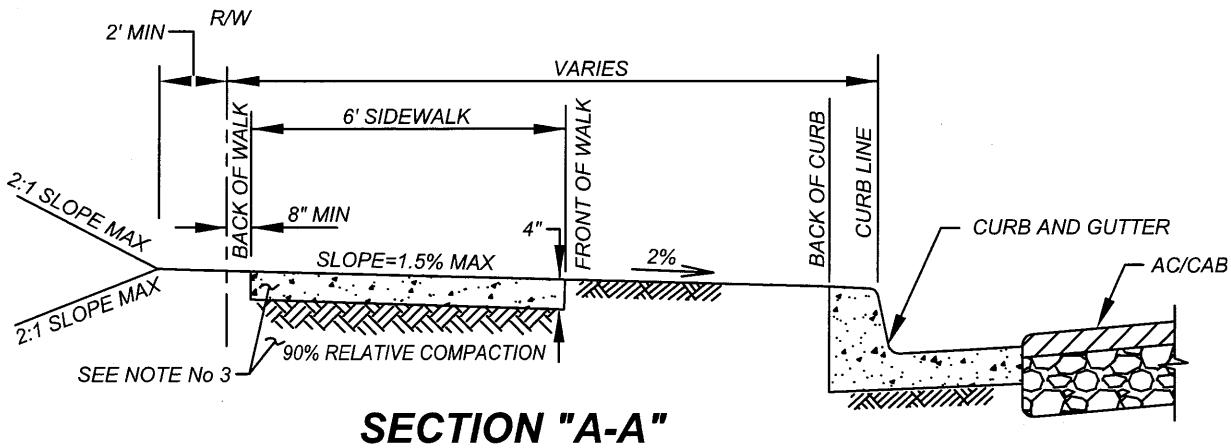
5.) SIDEWALKS SHALL BE FORMED IN SUCH A MANNER AS TO MAINTAIN 48" MINIMUM OF UNOBSTRUCTED PEDESTRIAN WAY AT ALL LOCATIONS, INCLUDING BUT NOT LIMITED TO STREET LIGHTS, ELECTROLIERS, POWER POLES, AND FIRE HYDRANTS. SEE STANDARD MVSI-115D.

6.) FOR NEW DEVELOPMENT, CURB ADJACENT SIDEWALK WIDTH SHALL BE 6.5' MINIMUM. SIDEWALK WIDTH OF LESS THAN 6.5' MAY BE USED TO REPLACE SHORT LENGTH OF EXISTING SIDEWALK TO MATCH EXISTING AS APPROVED BY CITY ENGINEER.

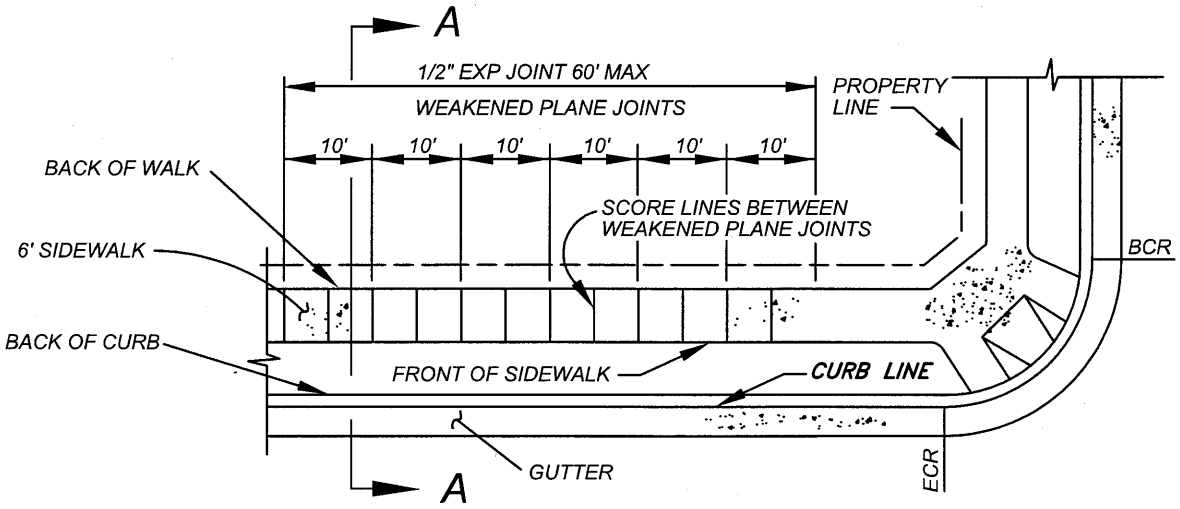
7.) WHERE NEW 6.5' WIDE SIDEWALK JOINS EXISTING NARROWER SIDEWALK, A 5:1 TRANSITION IS REQUIRED.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: HN 8/28/18 DIVISION MANAGER / DATE APPROVED: 9/4/18 PUBLIC WORKS DIRECTOR / CITY ENGINEER / DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION **SIDEWALK** STANDARD PLAN **MVSI-115A-0** SHEET 1 OF 4



SECTION "A-A"



PLAN VIEW

NOTES:

1.) THICKNESS OF SIDEWALK SHALL BE 4" EXCEPT IN DRIVEWAY APRONS WHERE 6" IS REQUIRED FOR RESIDENTIAL DRIVEWAYS AND 8" IS REQUIRED FOR COMMERCIAL DRIVEWAYS.

2.) SIDEWALK SHALL HAVE 1/2" WIDE PREMOLDED EXPANSION JOINTS AND 1- 1/2" DEEP WEAKENED PLANE JOINTS AT INTERVALS SHOWN HEREON. JOINTS SHALL HAVE EDGES WITH 1/4" RADIUS.

3.) CONCRETE SHALL BE CLASS 560-C-3250, MEDIUM BROOM FINISH, CURE WITH WHITE PIGMENTED CURING COMPOUND OVER 90% RELATIVE COMPACTED SUBGRADE. ALTERNATIVELY, IF APPROVED BY THE CITY ENGINEER, PERVIOUS PCC MAY BE USED. PERVIOUS PCC AND SUBGRADE SHALL MEET THE REQUIREMENTS OF SECTIONS 303-8 AND 201-1.1.6 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS. CONSTRUCTION, LATEST EDITION.

4.) 18" MOISTURE PENETRATION REQUIRED PRIOR TO PLACING CONCRETE IN SIDEWALK AREA (NON-EXPANSIVE SOIL AS DETERMINED BY SOILS TEST ARE EXEMPT AND REQUIRE ONLY SURFACE WETTING.)

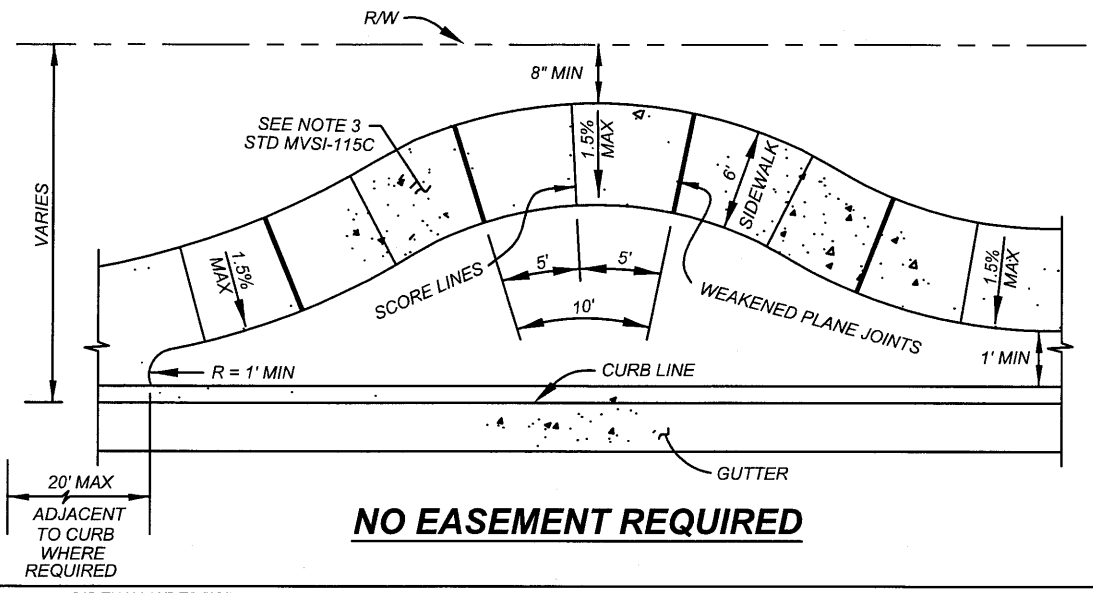
5.) PARKWAY FROM CURB TO PROPERTY LINE TO BE BROUGHT TO GRADE BY CONTRACTOR BEFORE FINAL APPROVAL.

6.) SIDEWALKS SHALL BE FORMED IN SUCH A MANNER AS TO MAINTAIN 48" MINIMUM OF UNOBSTRUCTED PEDESTRIAN WAY AT ALL LOCATIONS, INCLUDING BUT NOT LIMITED TO STREET LIGHTS, ELECTROLIERS, POWER POLES, AND FIRE HYDRANTS. SEE STD MVSI-115D.

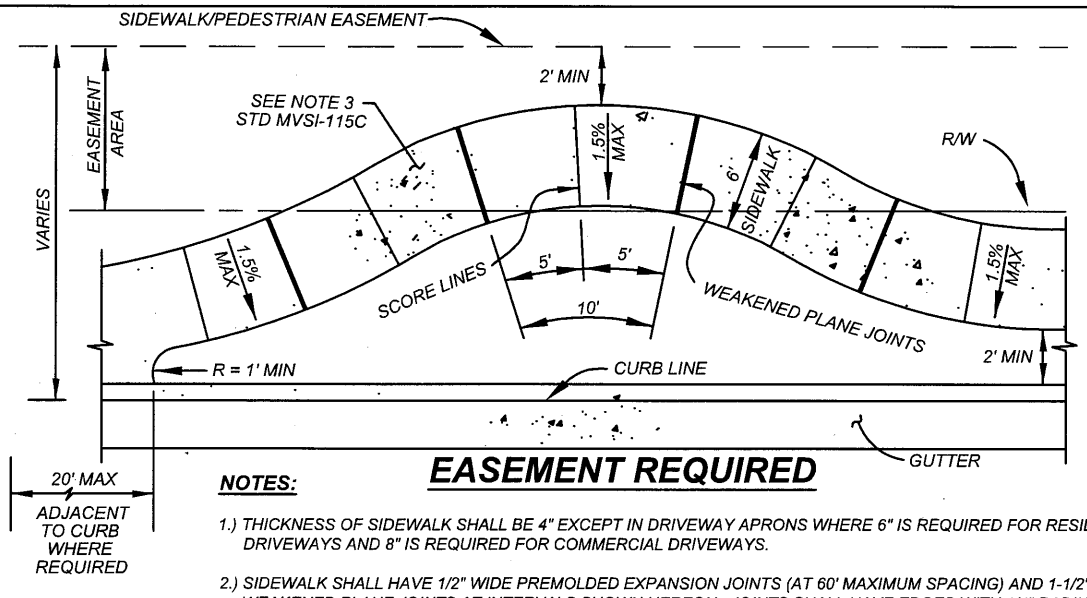
7.) WHERE NEW 6.0' WIDE SIDEWALK JOINS EXISTING NARROWER SIDEWALK, A 5:1 TRANSITION IS REQUIRED.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: DIVISION MANAGER 1-6-17 DATE APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER 1/20/17 DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION CURB SEPARATED SIDEWALK STANDARD PLAN MVSI-115B-0 SHEET 2 OF 4



NO EASEMENT REQUIRED



EASEMENT REQUIRED

NOTES:

1.) THICKNESS OF SIDEWALK SHALL BE 4" EXCEPT IN DRIVEWAY APRONS WHERE 6" IS REQUIRED FOR RESIDENTIAL DRIVEWAYS AND 8" IS REQUIRED FOR COMMERCIAL DRIVEWAYS.

2.) SIDEWALK SHALL HAVE 1/2" WIDE PREMOLDED EXPANSION JOINTS (AT 60' MAXIMUM SPACING) AND 1-1/2" DEEP WEAKENED PLANE JOINTS AT INTERVALS SHOWN HEREON. JOINTS SHALL HAVE EDGES WITH 1/4" RADIUS.

3.) CONCRETE SHALL BE CLASS 560-C-3250, MEDIUM BROOM FINISH, CURED WITH WHITE PIGMENT CURING COMPOUND OVER 90% RELATIVE COMPACTED SUBGRADE. ALTERNATIVELY, IF APPROVED BY THE CITY ENGINEER, PERVIOUS PCC MAY BE USED. PERVIOUS PCC AND SUBGRADE SHALL MEET THE REQUIREMENTS OF SECTIONS 303-8 AND 201-1.1.6 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION.

4.) 18" MOISTURE PENETRATION REQUIRED PRIOR TO PLACING CONCRETE IN SIDEWALK AREA (NON-EXPANSIVE SOIL AS DETERMINED BY SOIL TEST ARE EXEMPT AND REQUIRE ONLY SURFACE WETTING.)

5.) PARKWAY FROM CURB TO PROPERTY LINE TO BE BROUGHT TO GRADE BY CONTRACTOR BEFORE FINAL APPROVAL.

6.) SIDEWALKS SHALL BE FORMED IN SUCH A MANNER AS TO MAINTAIN 48" MINIMUM OF UNOBSTRUCTED PEDESTRIAN WAY AT ALL LOCATIONS, INCLUDING BUT NOT LIMITED TO STREET LIGHTS, ELECTROLIERS, POWER POLES, AND FIRE HYDRANTS. SEE STD MVSI-115D.

7.) SIDEWALK SHALL MEANDER AS DETERMINED BY THE CITY ENGINEER.

8.) ALL CROSS SLOPES ON SIDEWALK WILL BE 1.5% MAXIMUM.

NOT TO SCALE

CITY OF MORENO VALLEY · DECEMBER 3, 1984

RECOMMENDED:
DIVISION MANAGER — DATE 1-6-17

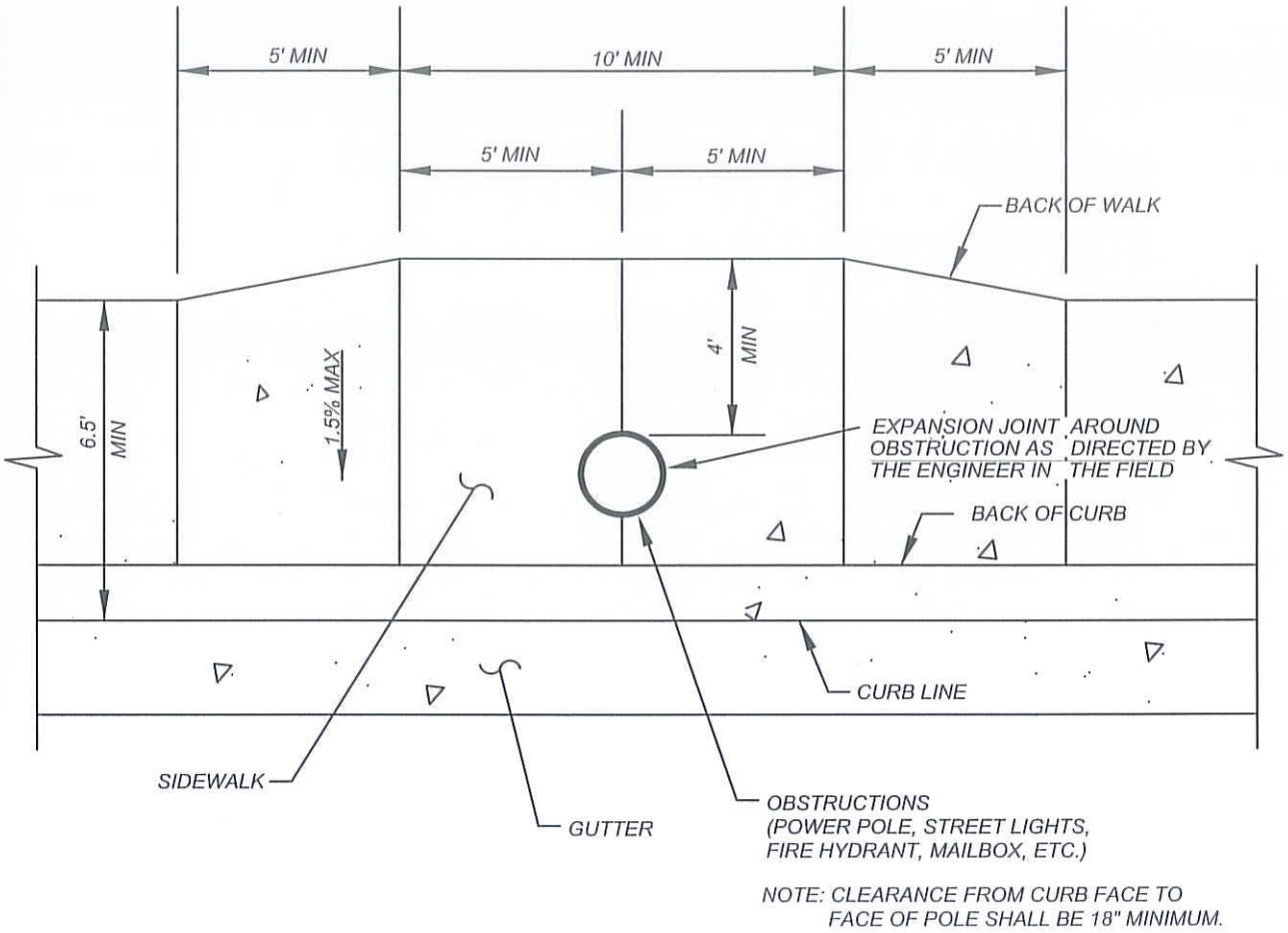
APPROVED:
PUBLIC WORKS DIRECTOR / CITY ENGINEER — DATE 1/20/17

CITY OF MORENO VALLEY

PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION

MEANDERING SIDEWALK

STANDARD PLAN
MVSI-115C-0



NOTE: CLEARANCE FROM CURB FACE TO FACE OF POLE SHALL BE 18" MINIMUM.

NOTES:

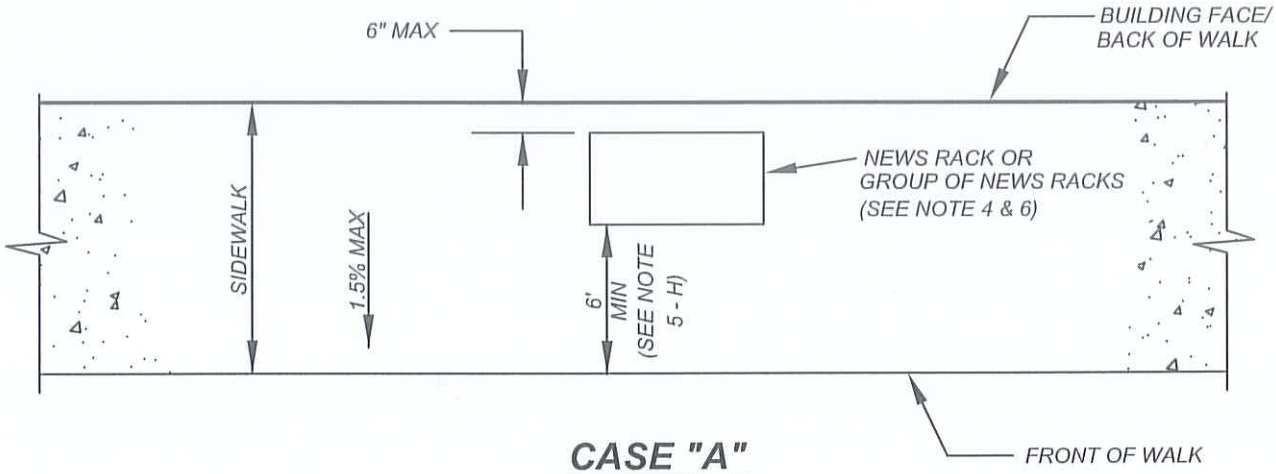
1.) SIDEWALK SHALL WIDEN TO MINIMUM 4' CLEARANCE FOR A MINIMUM LENGTH OF 10', CENTERED AROUND OBSTRUCTION.

2.) MINIMUM TRANSITION LENGTH SHALL BE 5'.

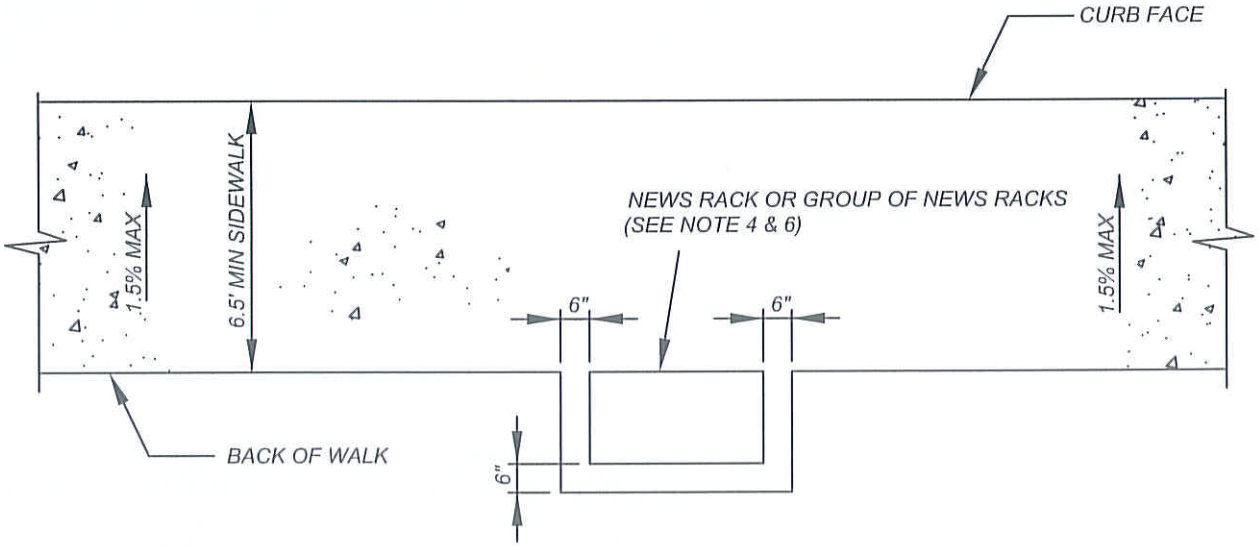
3.) ALL CROSS SLOPES ON SIDEWALK WILL BE 1.5% MAXIMUM.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: DIVISION MANAGER 1/21/14 DATE APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER 1/29/14 DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION **SIDEWALK PLACEMENT AROUND OBSTRUCTIONS**	STANDARD PLAN **MVSI-115D-0** SHEET 4 OF 4



CASE "A"



CASE "B"

NOT TO SCALE

CITY OF MORENO VALLEY · DECEMBER 3, 1984	RECOMMENDED: DIVISION MANAGER — DATE 1/21/14 APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER — DATE 1/29/14	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION **NEWS RACK INSTALLATION AND PLACEMENT**
		STANDARD PLAN **MVSI-116A-0** SHEET 1 OF 2

NOTES:

1.) NO NEWS RACK SHALL BE INSTALLED, USED OR MAINTAINED WHICH PROJECTS ONTO, INTO OR OVER ANY PART OF THE ROADWAY OR PUBLIC STREET, OR WHICH RESTS, WHOLLY OR IN PART UPON, ALONG, OR OVER ANY PORTION OF THE ROADWAY OF ANY PUBLIC STREET.

2.) NEWS RACK PLACED ADJACENT TO THE WALL OF A BUILDING SHALL BE PLACED PARALLEL TO SUCH WALL AND NOT MORE THAN SIX (6) INCHES FROM THE WALL.

3.) EXCEPT WITH THE WRITTEN PERMISSION OF THE OWNER OF SUCH PROPERTY, NO NEWS RACK SHALL BE CHAINED, BOLTED OR OTHERWISE ATTACHED TO ANY PROPERTY NOT OWNED BY THE OWNER OF THE NEWS RACK OR TO ANY PERMANENTLY FIXED OBJECT.

4.) NO NEWS RACK SHALL BE CHAINED, BOLTED, OR OTHERWISE ATTACHED TO ANY FIXTURE LOCATED IN THE PUBLIC RIGHT-OF-WAY, EXCEPT TO OTHER NEWS RACK. NO MORE THAN SIX NEWS RACK MAY BE JOINED TOGETHER IN THIS MANNER, AND A SPACE OF NO LESS THAN THREE (3) FEET SHALL SEPARATE EACH GROUP OF SIX NEWS RACK SO ATTACHED.

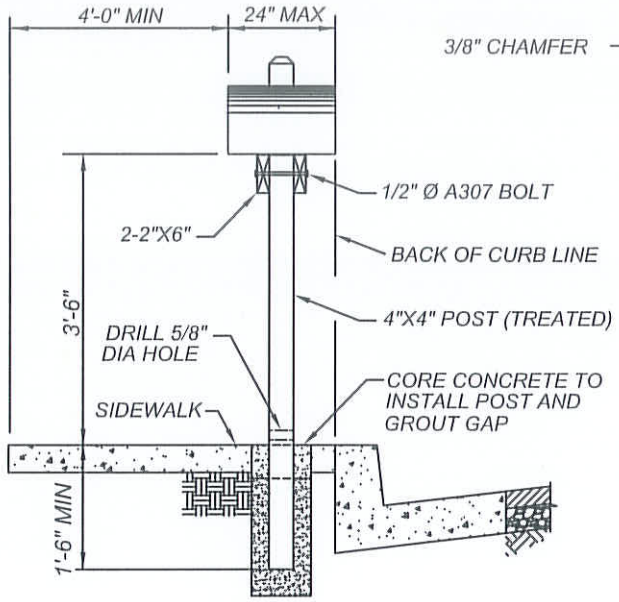
5.) NO NEWS RACK SHALL BE PLACED, INSTALLED, USED OR MAINTAINED:

A. WITHIN FIVE (5) FEET OF ANY MARKED CROSSWALK;
B. WITHIN FIFTEEN (15) FEET OF THE CURB RETURN OF ANY UNMARKED CROSSWALK;
C. WITHIN FIVE (5) FEET OF ANY FIRE HYDRANT, FIRE CALL BOX, POLICE CALL BOX OR OTHER EMERGENCY FACILITY;
D. WITHIN FIVE (5) FEET OF ANY DRIVEWAY;
E. WITHIN THREE (3) FEET AHEAD OR TWENTY-FIVE (25) FEET TO THE REAR OF ANY SIGN MARKING A DESIGNATED BUS STOP;
F. WITHIN FIVE (5) FEET OF THE OUTER END OF ANY BUS BENCH;
G. WITHIN FIVE (5) FEET OF ANY SIDEWALK OBSTRUCTION WHICH SHALL INCLUDE, BUT NOT BE LIMITED TO: TRAFFIC SIGNALS, STREET LIGHT POLES, TREES, SIGN POSTS, TELEPHONE AND UTILITY POLES;
H. AT ANY LOCATION WHEREBY THE CLEAR SPACE FOR THE PASSAGEWAY OF PEDESTRIANS IS REDUCED TO LESS THAN SIX (6) FEET;
I. WITHIN THREE (3) FEET OF OR ON ANY PUBLIC AREA IMPROVED WITH LAWN, FLOWERS, SHRUBS, TREES OR OTHER LANDSCAPING, OR WITHIN THREE (3) FEET OF ANY DISPLAY WINDOW OF ANY BUILDING ABUTTING THE SIDEWALK OR PARKWAY OR IN SUCH A MANNER AS TO INTERFERE WITH THE REASONABLE USE OF SUCH WINDOW FOR DISPLAY PURPOSES;
J. WITHIN ONE HUNDRED (100) FEET OF ANY OTHER NEWS RACK ON THE SAME SIDE OF THE STREET IN THE SAME BLOCK CONTAINING THE SAME ISSUE OR EDITION OF THE SAME PUBLICATION, UNLESS THE DISTRIBUTOR ESTABLISHES TO THE SATISFACTION OF THE PUBLIC WORKS DIRECTOR THAT (a) THERE IS INSUFFICIENT ROOM IN ONE NEWS RACK FOR THE PUBLICATIONS WHICH MAY BE SOLD IN ONE DAY, OR (b) IT PUBLISHES MORE THAN ONE EDITION FOR SALE AT THE SAME TIME;
K. ON ANY ACCESS RAMP FOR DISABLED PERSONS;
L. WITHIN ONE HUNDRED (100) FEET OF THE ENTRANCES TO PUBLIC GATHERING PLACES WHERE QUEUING OF PEDESTRIAN TRAFFIC MAY OCCUR;
M. AT ANY LOCATION WHERE VEHICULAR SIGHT DISTANCE IS IMPAIRED AS DETERMINED BY STANDARD TRAFFIC ENGINEERING PRINCIPLES.

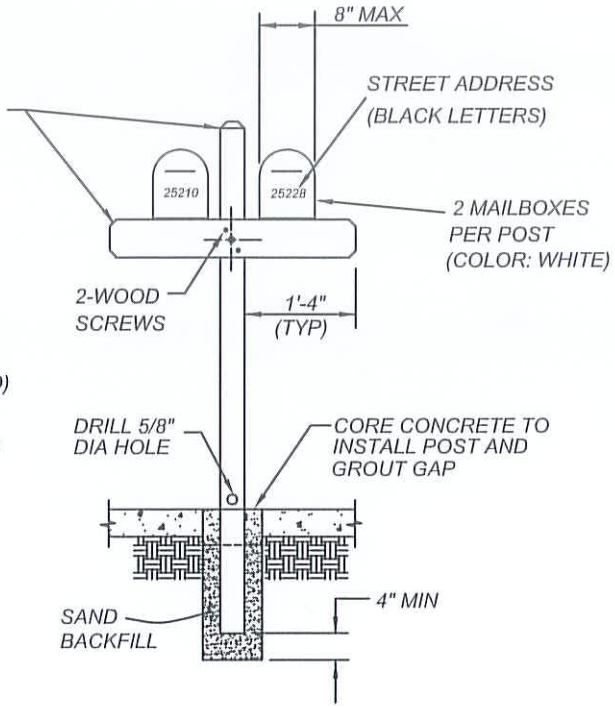
6.) NO NEWS RACK SHALL EXCEED FIVE (5) FEET IN HEIGHT, THIRTY (30) INCHES IN WIDTH, OR TWO (2) FEET IN DEPTH.

NOT TO SCALE

CITY OF MORENO VALLEY · DECEMBER 3, 1984	RECOMMENDED: DIVISION MANAGER — DATE 1/21/14 APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER — DATE 1/29/14	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION **NEWS RACK INSTALLATION NOTES** STANDARD PLAN **MVSI-116B-0** SHEET 2 OF 2



SIDE VIEW



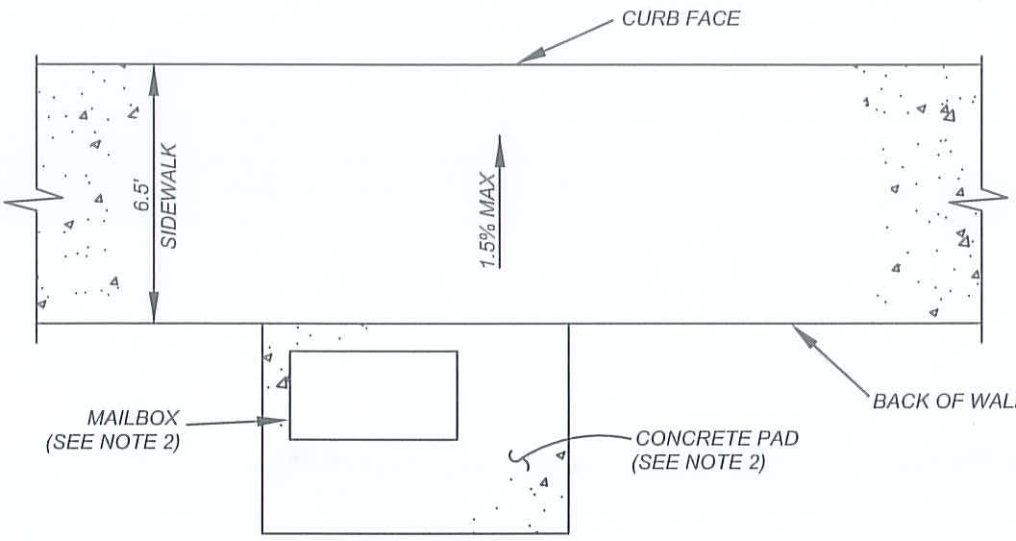
FRONT VIEW

NOTES:

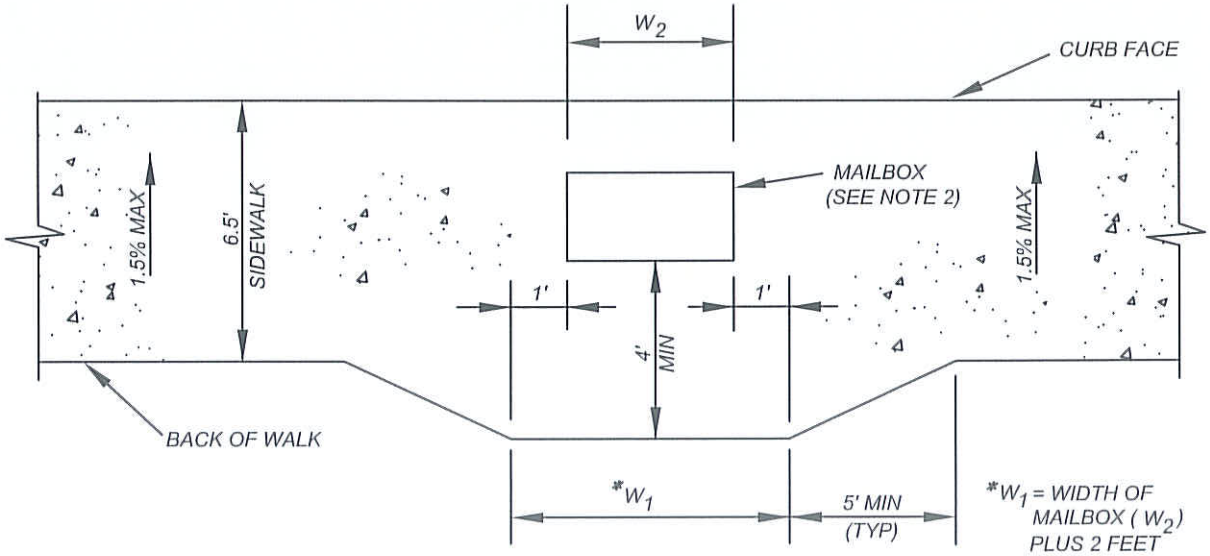
1.) TOP AND END OPENING MAILBOXES PERMITTED PROVIDED THAT THE FACE OF MAILBOX DOES NOT EXTEND INTO BACK OF CURB LINE. OPENING MUST FACE STREET.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: DIVISION MANAGER 1/21/14 DATE APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER 1/29/14 DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION **SINGLE POST MAILBOX INSTALLATION** STANDARD PLAN **MVSI-117A-0** SHEET 1 OF 2



CASE "A"



CASE "B"

NOTES:

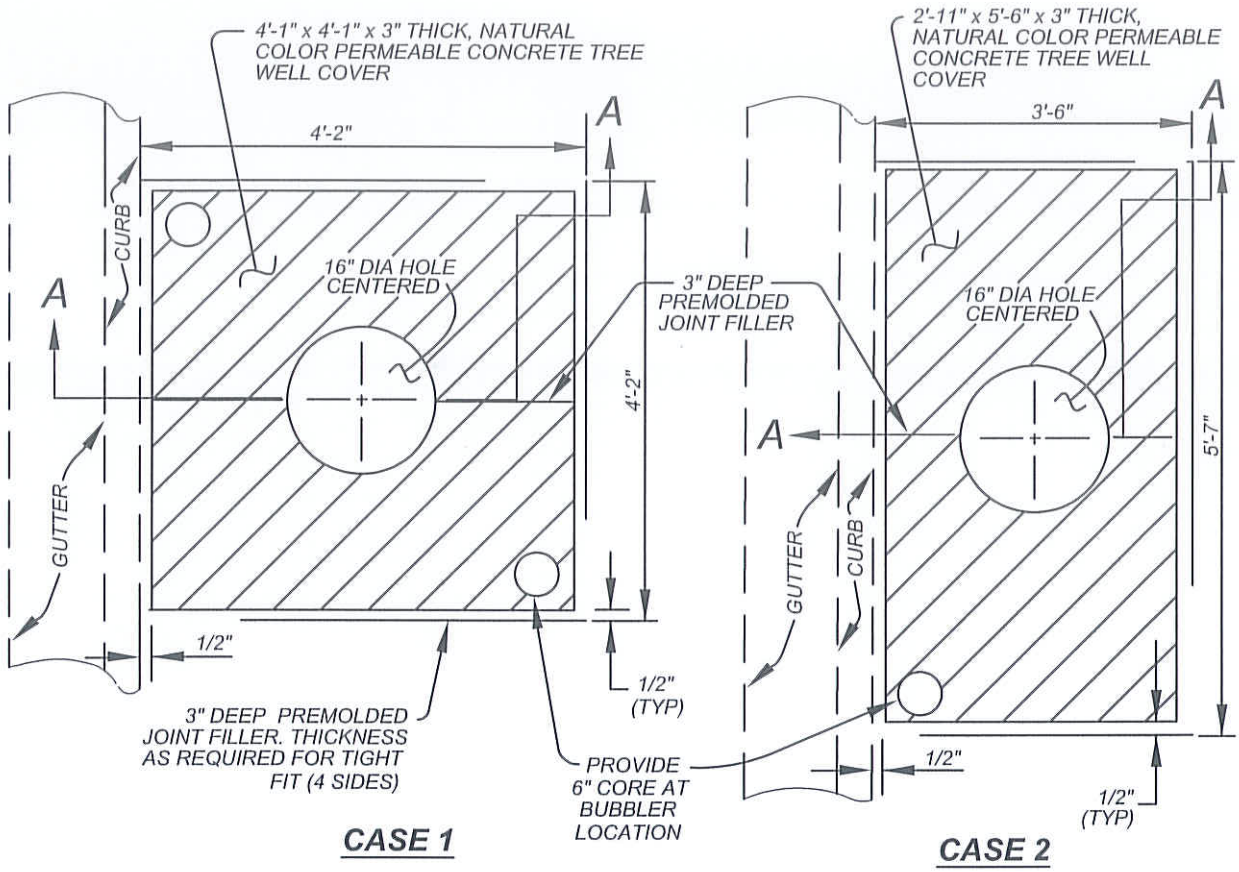
1.) CASE "A" SHALL BE THE PREFERRED LOCATION FOR MAILBOX. WHEN FIELD CONDITIONS INDICATE, CASE "B" MAY BE USED.

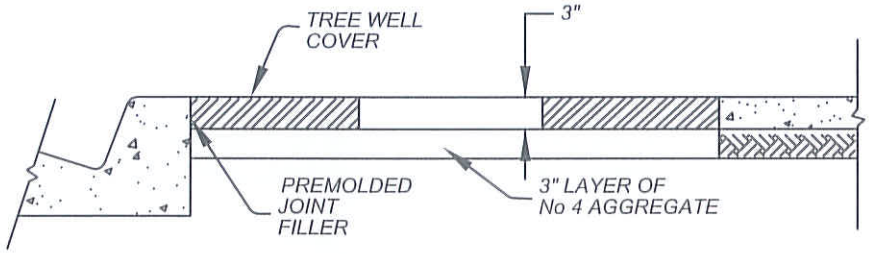
2.) MAILBOX LOCATION, FOUNDATION, PAD, ANCHOR BOLTS AND BOLT HOLES SHALL CONFORM TO SPECIFICATIONS FURNISHED BY THE POSTMASTER.

3.) NO MAILBOXES SHALL BE LOCATED ON ARTERIAL ROADWAYS.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: DIVISION MANAGER 1/21/14 DATE APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER 1/29/14 DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION **MULTIPLE MAILBOX INSTALLATION FOR NEW SIDEWALK** STANDARD PLAN **MVSI-117B-0** SHEET 2 OF 2

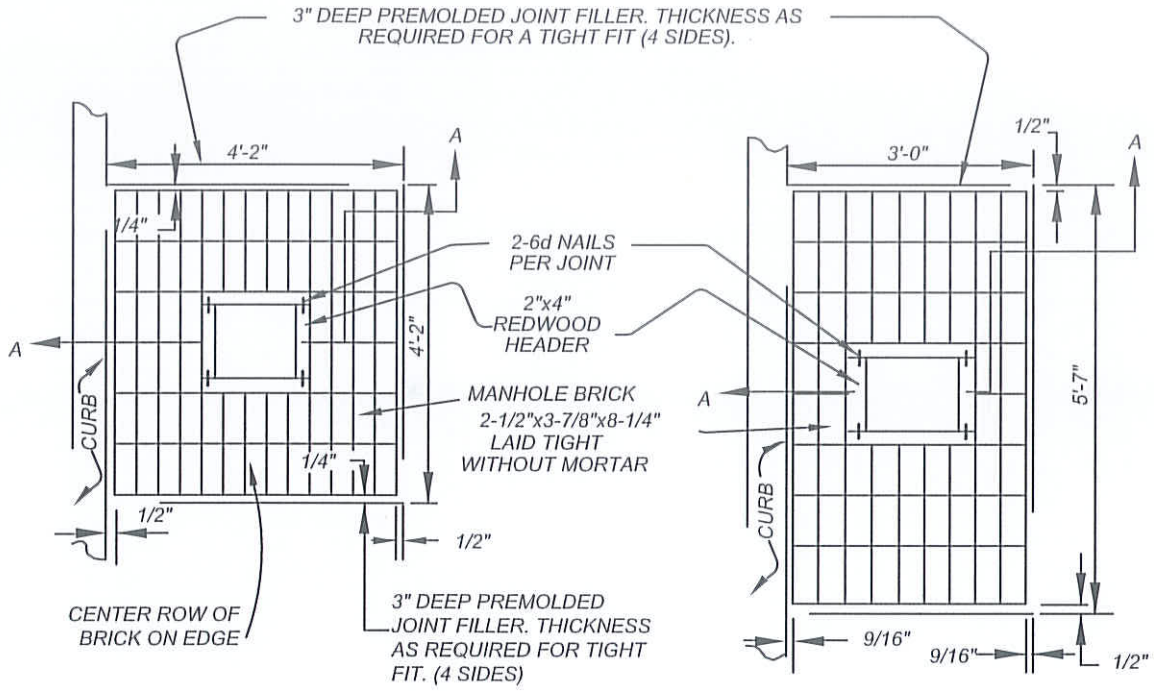




SECTION "A-A"

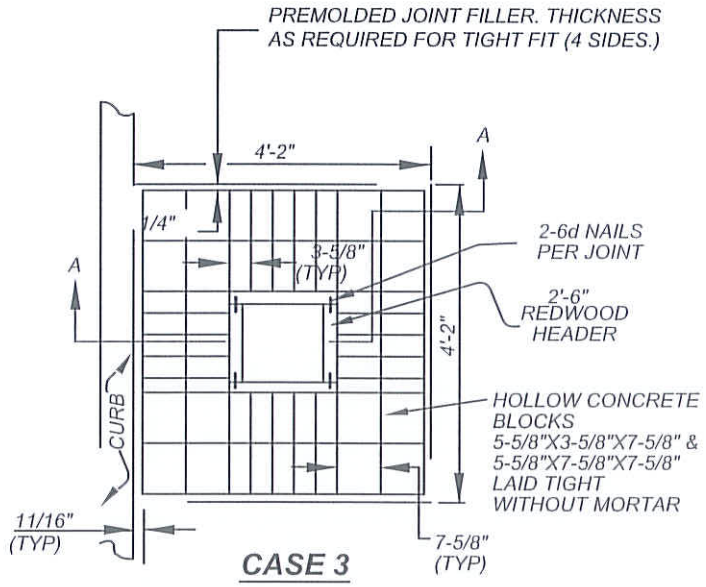
NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: DIVISION MANAGER 1-16-14 DATE APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER 1/29/14 DATE	CITY OF MORENO VALLEY FINANCIAL & MANAGEMENT SERVICES DEPARTMENT - SPECIAL DISTRICTS DIVISION **TREE WELL - TYPE 1** STANDARD PLAN **MVSI-118A-0** SHEET 1 OF 5

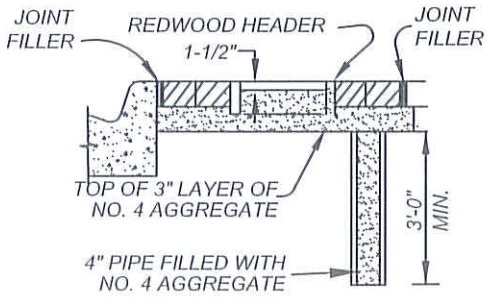


CASE 1

CASE 2



CASE 3



SECTION "A-A"

NOT TO SCALE

RECOMMENDED: CS 1/24/14
DIVISION MANAGER DATE

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

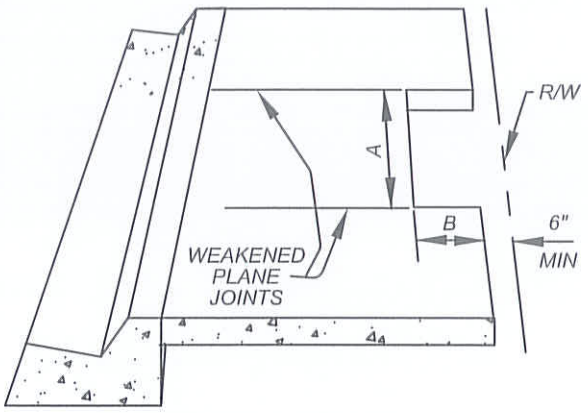
CITY OF MORENO VALLEY

FINANCIAL & MANAGEMENT SERVICES DEPARTMENT - SPECIAL DISTRICTS DIVISION

TREE WELL - TYPE 2

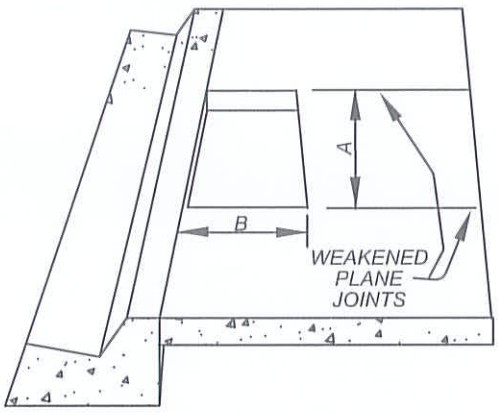
STANDARD PLAN
MVSI-118B-0

SHEET 2 OF 5



PARKWAYS LESS THAN 8'

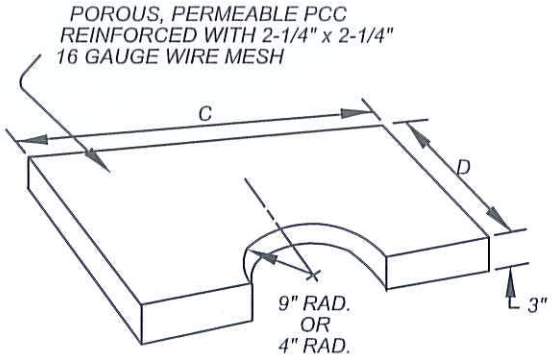
CASE 1: 1'-6" x 3' TREE WELL
CASE 2: 2'-4" TREE WELL



PARKWAYS 8' OR GREATER
2 COVERS REQUIRED

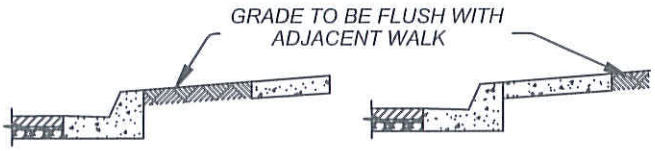
CASE 3: 3'-3" TREE WELL
CASE 4: 4'-4" TREE WELL

TREE WELLS



POROUS TREE WELL COVER

CASE	A	B	C	D
1	3'-0"	1'-6"	2'-11"	1'-5 1/2"
2	4'-0"	2'-0"	3'-11"	1'-11 1/2"
3	3'-0"	3'-0"	2'-11"	1'-5 1/2"
4	4'-0"	4'-0"	3'-11"	1'-11 1/2"



TYPICAL SECTIONS

NOTES:

1.) TREE WELLS SHALL BE SPACED AS DIRECTED BY THE CITY ENGINEER OR INDICATED ON THE CONTRACT DOCUMENTS.
2.) LOCATION OF TREES WILL BE SUBJECT TO THE FOLLOWING CONDITIONS:
   A. MIN. 25' FROM CURB RETURNS.
   B. MIN. 15' FROM LIGHT STANDARDS.
   C. MIN. 5' FROM FIRE HYDRANTS
   D. MIN. 5' FROM DRIVEWAYS (PER STD. MVSI-119-0).
3.) COVERS ARE TO BE COLORED BUFF USING AN ACCEPTABLE COLORING AGENT.
4.) TREE WELLS ARE TO BE BACKFILLED WITH CLEAN DIRT AND FLUSH WITH ADJACENT WALK UNTIL TREES ARE PLANTED.
5.) PARKWAYS LESS THAN 8':
   CASE 1-UNLESS OTHERWISE SPECIFIED.
   CASE 2-USE WHERE THERE IS AN EXISTING FENCE OR WALL AT THE PROPERTY LINE.
   CASE 3-UNLESS OTHERWISE SPECIFIED.
   CASE 4-MAY BE SPECIFIED WITH WALKS 7' OR GREATER.

NOT TO SCALE

RECOMMENDED: CJS 1.16.14
DIVISION MANAGER DATE

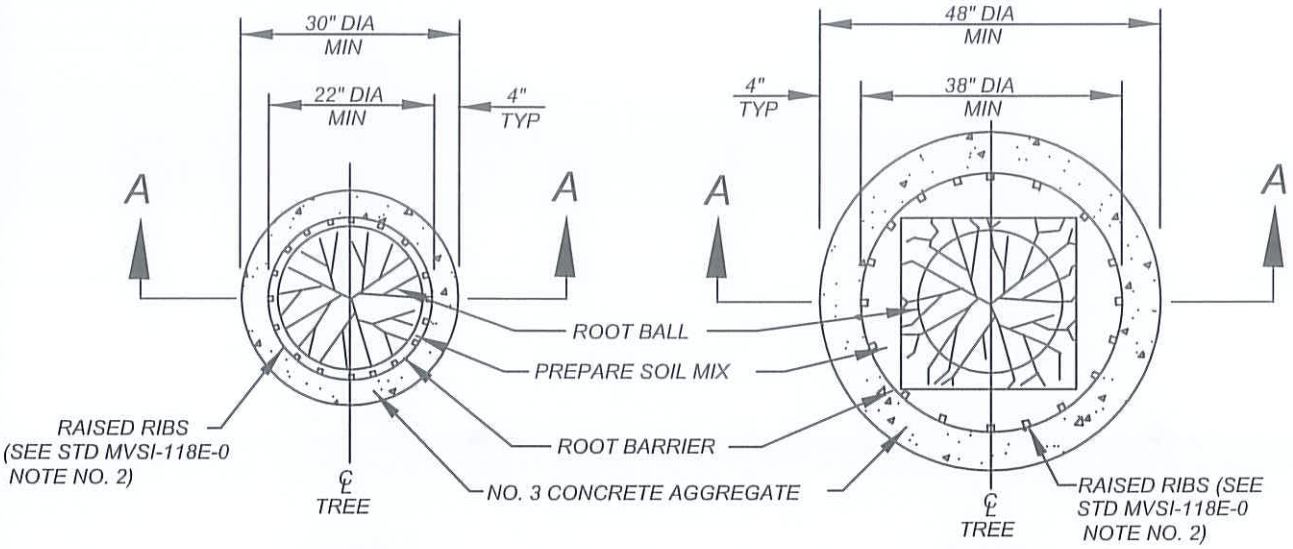
APPROVED: 1/29/14
PUBLIC WORKS DIRECTOR / CITY ENGINEER DATE

CITY OF MORENO VALLEY

FINANCIAL & MANAGEMENT SERVICES DEPARTMENT - SPECIAL DISTRICTS DIVISION

TREE WELL - TYPE 3

STANDARD PLAN
MVSI-118C-0

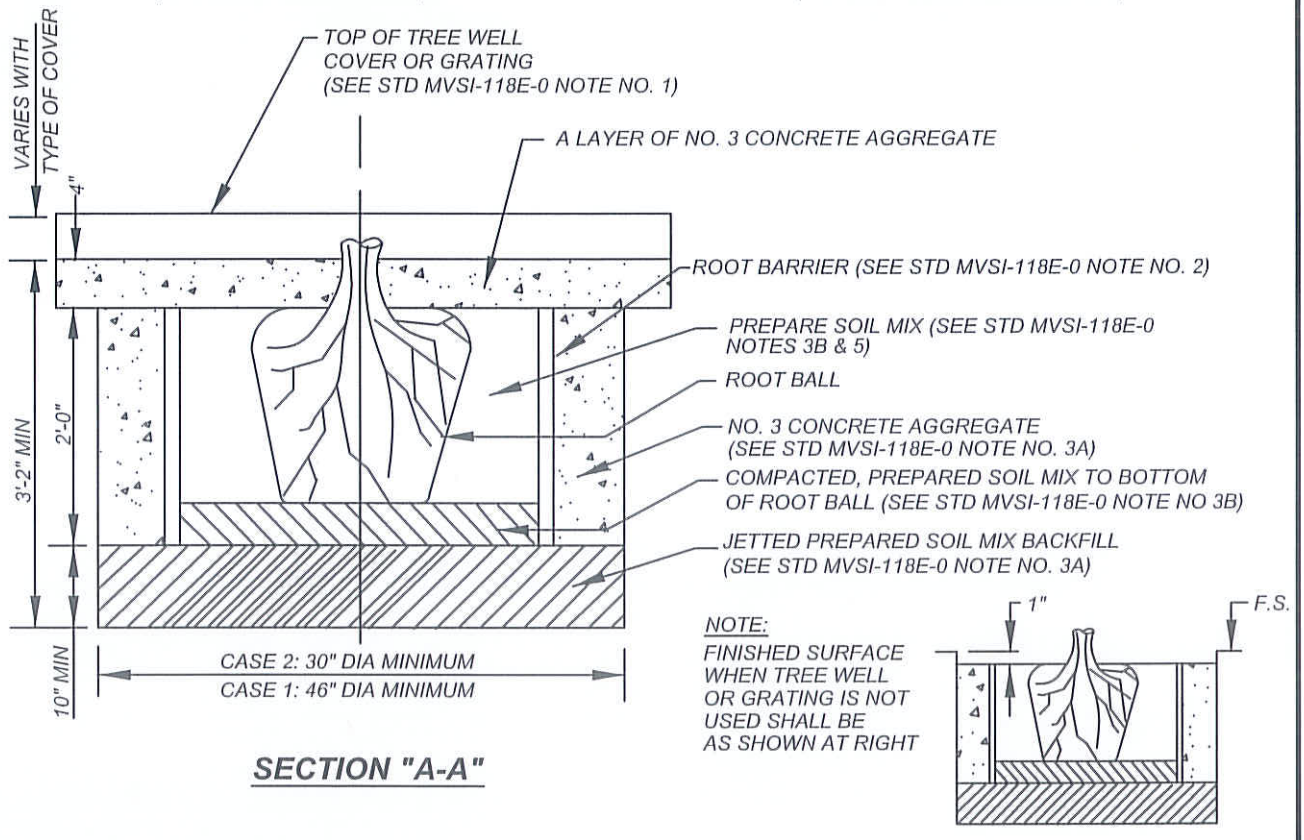


CASE 2

(15 GALLON SIZE OR LESS)

CASE 1

(BOXED TREE 24" SIZE OR LESS)



SECTION "A-A"

NOTE:
FINISHED SURFACE WHEN TREE WELL OR GRATING IS NOT USED SHALL BE AS SHOWN AT RIGHT

NOT TO SCALE

RECOMMENDED:
DIVISION MANAGER — DATE: 1-16-14

APPROVED:
PUBLIC WORKS DIRECTOR / CITY ENGINEER — DATE: 1/29/14

CITY OF MORENO VALLEY

FINANCIAL & MANAGEMENT SERVICES DEPARTMENT - SPECIAL DISTRICTS DIVISION

TREE WELL - TYPE 4

STANDARD PLAN
MVSI-118D-0

NOTES:

1.) SEE PROJECT PLANS FOR TYPE OF TREE WELL COVER OR TREE GUARD AND GRATING TO BE USED.

2.) ROOT BARRIER SHALL BE FABRICATED FROM A HIGH DENSITY AND HIGH IMPACT PLASTIC SUCH AS POLYVINYL CHLORIDE, ABS OR POLYETHYLENE AND HAVE A MINIMUM THICKNESS OF 0.6 INCH. THE PLASTIC SHALL HAVE ½" HIGH RAISED VERTICAL RIBS ON THE INNER SURFACE SPACED NOT MORE THAN 6" APART. INSTALLATION PER MANUFACTURER'S PRINTED INSTRUCTIONS.

3.) PLANTING SHALL CONFORM TO SUBSECTION 308-4 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, EXCEPT THAT:

A. THE LOWER 10" OF THE EXCAVATION SHALL BE BACKFILLED WITH PREPARED SOIL MIX AND JETTED PRIOR TO PLACING THE ROOT BARRIER AND THE NO. 3 CONCRETE AGGREGATE.

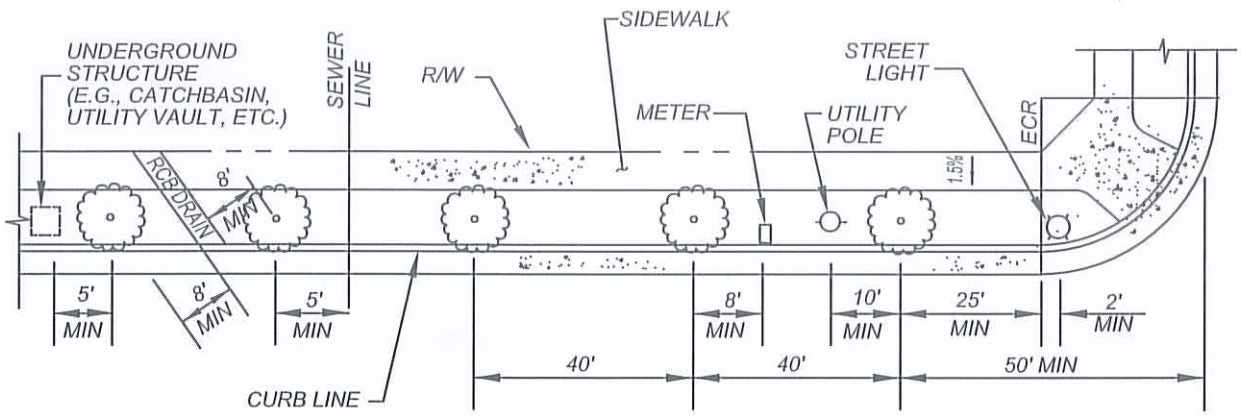
B. PREPARED SOIL MIX SHALL BE PLACED IN THE PLANTING HOLE AND COMPACTED TO BOTTOM OF ROOT BALL ELEVATION PRIOR TO PROCEEDING WITH TREE PLANTING.

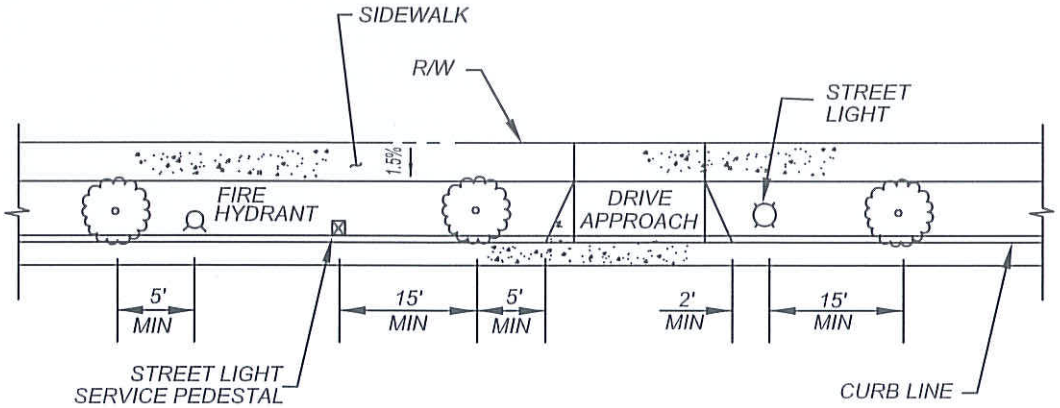
4.) AFTER PLANTING, EACH TREE SHALL BE WATERED IMMEDIATELY WITH A MINIMUM OF 20 GALLONS OF WATER. REPEAT THE WATERING TWICE IN THE NEXT 3 DAYS, AT NO CLOSER THAN 24 HOUR INTERVALS.

5.) AFTER THE TREE HAS BEEN WATERED FOR THREE DAYS, ALLOW THE SOIL TO DRY SUFFICIENTLY, THEN TAMP AND GRADE THE SOIL. PLACE AND GRADE THE LAYER OF CONCRETE AGGREGATE IN ORDER TO SET THE TREE WELL COVER OR GRATING FIRMLY AND FLUSH WITH THE TOP OF THE SIDEWALK OR CURB.

NOT TO SCALE

CITY OF MORENO VALLEY · DECEMBER 3, 1984	RECOMMENDED: DIVISION MANAGER 1-16-14 DATE APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER 1/29/14 DATE	CITY OF MORENO VALLEY FINANCIAL & MANAGEMENT SERVICES DEPARTMENT - SPECIAL DISTRICTS DIVISION **TREE WELL NOTES**	STANDARD PLAN **MVSI-118E-0** SHEET 5 OF 5





NOTES:

1.) DRIVE APPROACHES SHALL NOT BE LOCATED OVER SEWER OR WATER LATERALS.

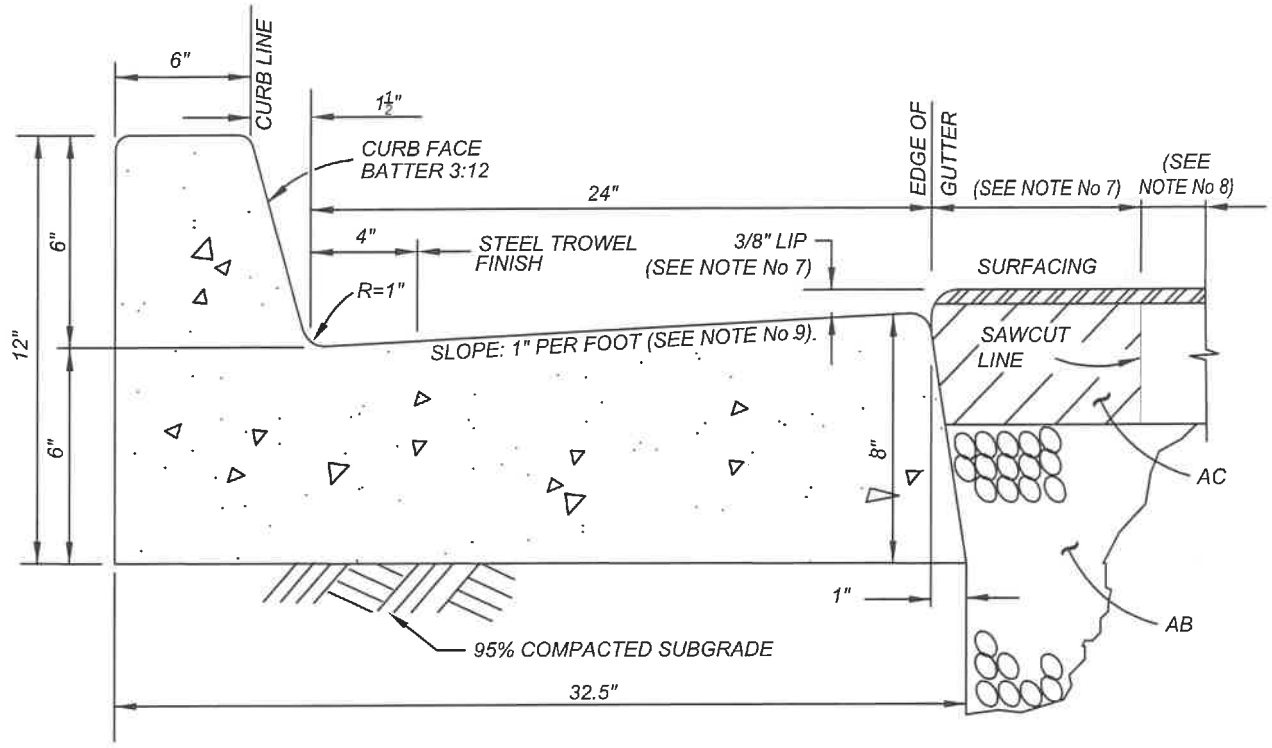
2.) WATER METERS AND STREET LIGHTS SHALL BE A MINIMUM OF 2' FROM DRIVE APPROACHES.

3.) FIRE HYDRANTS SHALL BE A MINIMUM OF 5' FROM DRIVE APPROACHES.

4.) ALTERNATE LOCATION AND SPACING MAY BE REQUIRED BY CITY ENGINEER TO PROVIDE FOR SIGHT CLEARANCE OR OTHER SAFETY CONCERNS.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: DIVISION MANAGER 1/21/14 DATE APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER 1/29/14 DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION **PARKWAY IMPROVEMENT SPACING** STANDARD PLAN **MVSI-119-0** SHEET 1 OF 1



NOTES:

1.) CONCRETE SHALL BE CLASS 560-C-3250 PCC, CURED WITH WHITE PIGMENTED CURING COMPOUND.

2.) ALL EXPOSED CORNERS SHALL BE FINISHED WITH 1/2" RADIUS UNLESS OTHERWISE STATED.

3.) CURB FINISH SHALL BE FINE BROOM, GUTTER FINISH SHALL BE ROUGH.

4.) EXISTING PCC SHALL BE SAWCUT AT WEAKENED PLANE JOINT PRIOR TO REMOVAL.

5.) CURBS SHALL HAVE WEAKENED PLANE JOINTS AT 10' INTERVALS; NO SCORE LINES ALLOWED.

6.) WHEN CURB AND GUTTER IS PLACED BY AN EXTRUSION MACHINE, FINISHING WORK SHALL PROVIDE AN ACCEPTABLE FINISH AND WEAKENED PLANE JOINTS MAY BE SAWCUT.

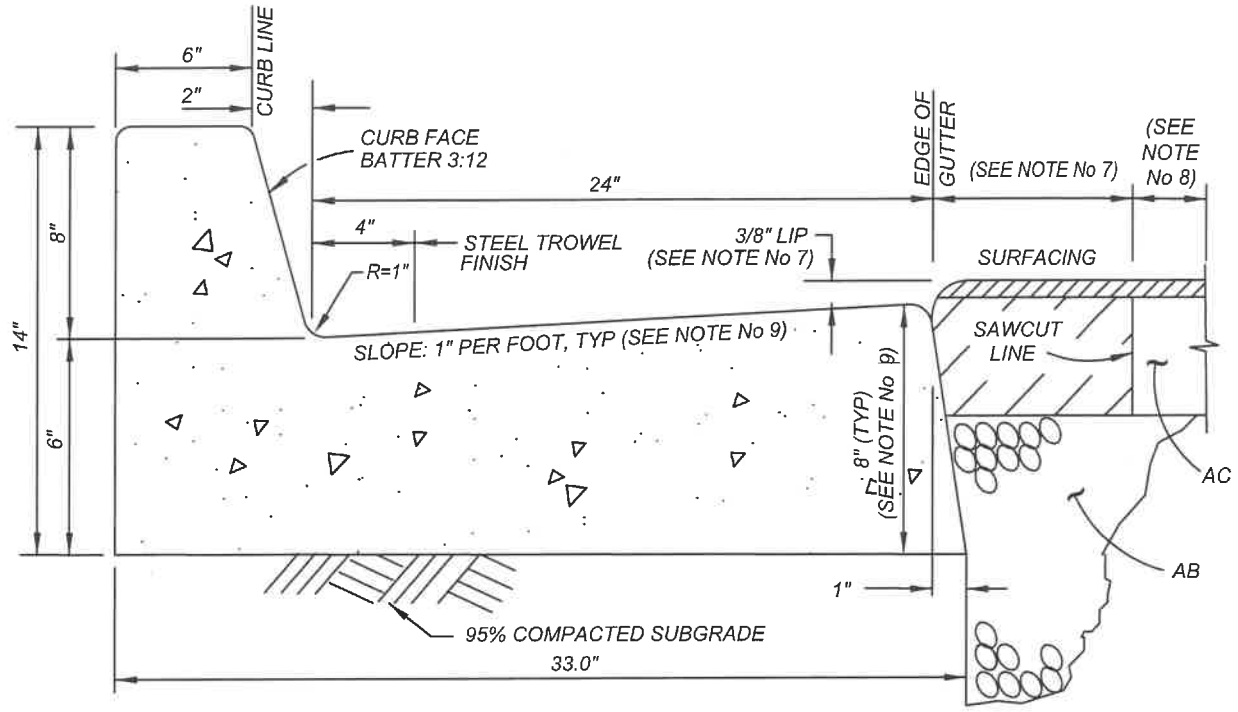
7.) A MINIMUM 1' WIDE AC PAVEMENT REPAIR PATCH IS REQUIRED WHEN CURB AND GUTTER IS PLACED ADJACENT TO EXISTING AC PAVEMENT. PAVEMENT SURFACE NEAR BOTTOM OF ACCESS RAMP SHALL BE FLUSH WITH EDGE OF GUTTER (NO LIP) AND PAVEMENT SLOPE SHALL NOT EXCEED 5% IN ANY DIRECTION. REFER TO STDS MVSI-114A AND MVSI-114B FOR REQUIREMENTS.

8.) A MINIMUM 1' WIDE GRIND/COLDMILL 0.10' DEEP SLOT OR AS DIRECTED BY THE CITY ENGINEER. SEE STD MVSI-132B FOR FINISH OVERLAY REQUIREMENTS.

9.) GUTTER SLOPE NEAR BOTTOM OF ACCESS RAMP SHALL NOT EXCEED 5% (HIKE = 1.2" MAX) REFER TO STDS MVSI-114A AND MVSI-114B FOR REQUIREMENTS.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: DIVISION MANAGER — DATE 7/16/19 APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER — DATE 10/16/19	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION **TYPE 6 INTEGRAL CURB AND GUTTER** STANDARD PLAN **MVSI-120A-0** SHEET 1 OF 2



NOTES:

1.) CONCRETE SHALL BE CLASS 560-C-3250 PCC, CURED WITH WHITE PIGMENTED CURING COMPOUND.

2.) ALL EXPOSED CORNERS SHALL BE FINISHED WITH $\frac{1}{2}$" RADIUS UNLESS OTHERWISE STATED.

3.) CURB FINISH SHALL BE FINE BROOM, GUTTER FINISH SHALL BE ROUGH.

4.) EXISTING PCC SHALL BE SAWCUT AT WEAKENED PLANE JOINT PRIOR TO REMOVAL.

5.) CURBS SHALL HAVE WEAKENED PLANE JOINTS AT 10' INTERVALS; NO SCORE LINES ALLOWED.

6.) WHEN CURB AND GUTTER IS PLACED BY AN EXTRUSION MACHINE, FINISHING WORK SHALL PROVIDE AN ACCEPTABLE FINISH AND WEAKENED PLANE JOINTS MAY BE SAWCUT.

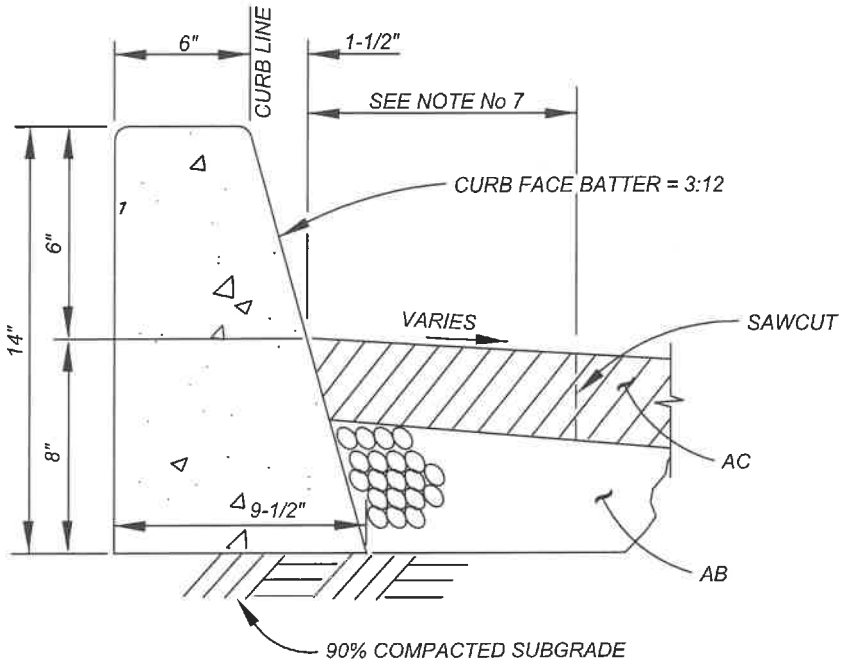
7.) A MINIMUM 1' WIDE AC PAVEMENT REPAIR PATCH IS REQUIRED WHEN CURB AND GUTTER IS PLACED ADJACENT TO EXISTING AC PAVEMENT. PAVEMENT SURFACE NEAR BOTTOM OF ACCESS RAMP SHALL BE FLUSH WITH EDGE OF GUTTER (NO LIP) AND PAVEMENT SLOPE SHALL NOT EXCEED 5% IN DIRECTION OF TRAVEL FOR WHEELCHAIRS. REFER TO STDS MVSI-114A AND MVSI-114B FOR REQUIREMENTS.

8.) A MINIMUM 1' WIDE GRIND/COLDMILL 0.10' DEEP SLOT OR AS DIRECTED BY THE CITY ENGINEER. SEE STD MVSI-132B FOR FINISH OVERLAY REQUIREMENTS.

9.) GUTTER SLOPE NEAR BOTTOM OF ACCESS RAMP SHALL NOT EXCEED 5% (HIKE = 1.2" MAX) REFER TO STDS MVSI-114A AND MVSI-114B FOR REQUIREMENTS.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: Hannigan 7/16/19 DIVISION MANAGER / DATE APPROVED: M L Wolf 10/16/19 PUBLIC WORKS DIRECTOR / CITY ENGINEER / DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION **TYPE 8 INTEGRAL CURB AND GUTTER** STANDARD PLAN **MVSI-120B-0** SHEET 2 OF 2



NOTES:

1.) CONCRETE SHALL BE CLASS 560-C-3250 PCC, CURED WITH WHITE PIGMENTED CURING COMPOUND.

2.) ALL EXPOSED CORNERS SHALL BE FINISHED WITH $\frac{1}{2}$" RADIUS.

3.) FINISH SHALL BE FINE BROOM.

4.) EXISTING PCC SHALL BE SAWCUT AT JOINT PRIOR TO REMOVAL.

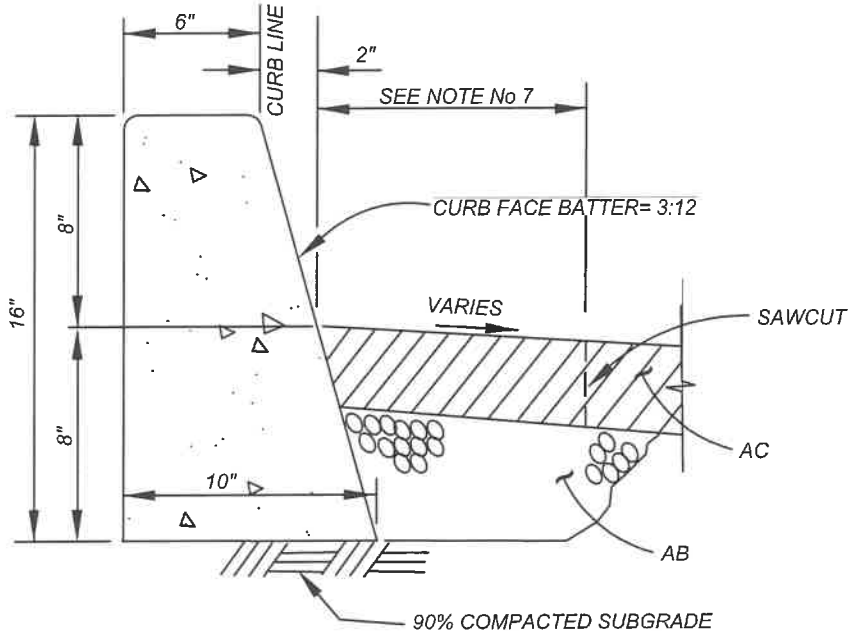
5.) WEAKENED PLANE JOINTS AT 10' INTERVALS.

6.) WHEN CURB AND GUTTER IS PLACED BY AN EXTRUSION MACHINE, FINISHING WORK SHALL PROVIDE AN ACCEPTABLE FINISH AND WEAKENED PLANE JOINTS MAY BE SAWCUT.

7.) MINIMUM 1' WIDE AC PAVEMENT REPAIR PATCH IS REQUIRED WHEN CURB AND GUTTER IS PLACED ADJACENT TO EXISTING AC PAVEMENT.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: DIVISION MANAGER 7/16/19 DATE APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER 10/15/19 DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION	STANDARD PLAN MVSI-121A-0 SHEET 1 OF 2
		TYPE 6A CURB	



NOTES:

1.) CONCRETE SHALL BE CLASS 560-C-3250 PCC, CURED WITH WHITE PIGMENTED CURING COMPOUND.

2.) ALL EXPOSED CORNERS SHALL BE FINISHED WITH $\frac{1}{2}$" RADIUS.

3.) FINISH SHALL BE FINE BROOM.

4.) EXISTING PCC SHALL BE SAWCUT AT JOINT PRIOR TO REMOVAL.

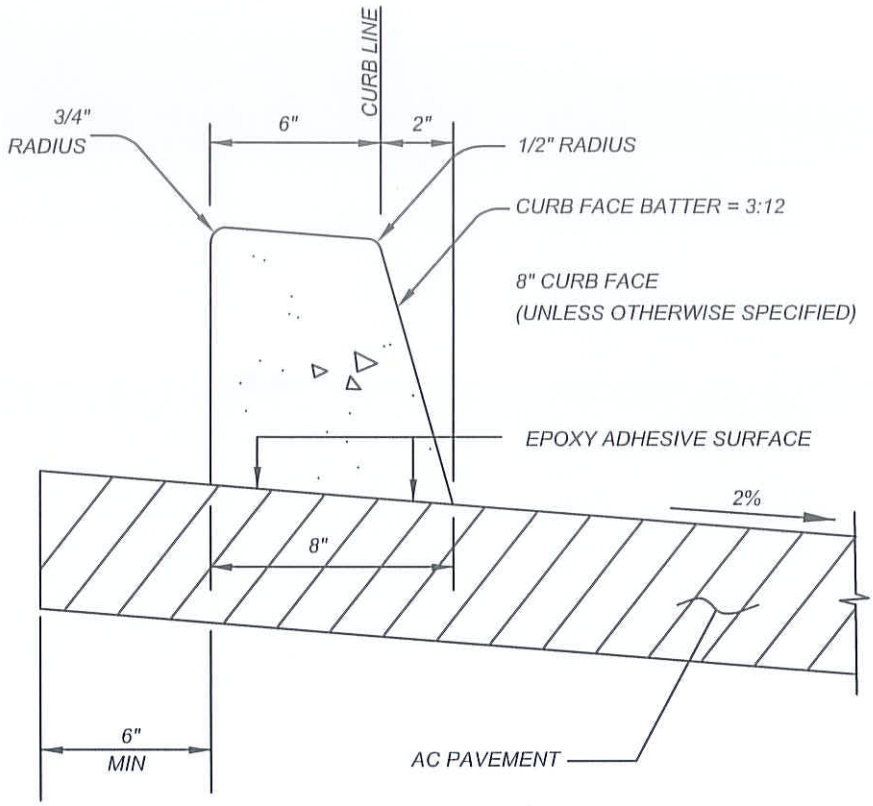
5.) WEAKENED PLANE JOINTS AT 10' INTERVALS.

6.) WHEN CURB AND GUTTER IS PLACED BY AN EXTRUSION MACHINE, FINISHING WORK SHALL PROVIDE AN ACCEPTABLE FINISH AND WEAKENED PLANE JOINTS MAY BE SAWCUT.

7.) MINIMUM 1' WIDE AC PAVEMENT REPAIR PATCH IS REQUIRED WHEN CURB AND GUTTER IS PLACED ADJACENT TO EXISTING AC PAVEMENT.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: DIVISION MANAGER — DATE 7/16/19 APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER — DATE 10/16/19	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION **TYPE 8A CURB** STANDARD PLAN **MVSI-121B-0** SHEET 2 OF 2



NOTES:

1.) CONCRETE SHALL BE CLASS 560-C-3250 PCC, CURED WITH WHITE PIGMENTED CURING COMPOUND.

2.) ALL EXPOSED CORNERS SHALL BE FINISHED WITH $\frac{1}{2}$" RADIUS UNLESS OTHERWISE STATED.

3.) FINISH SHALL BE FINE BROOM.

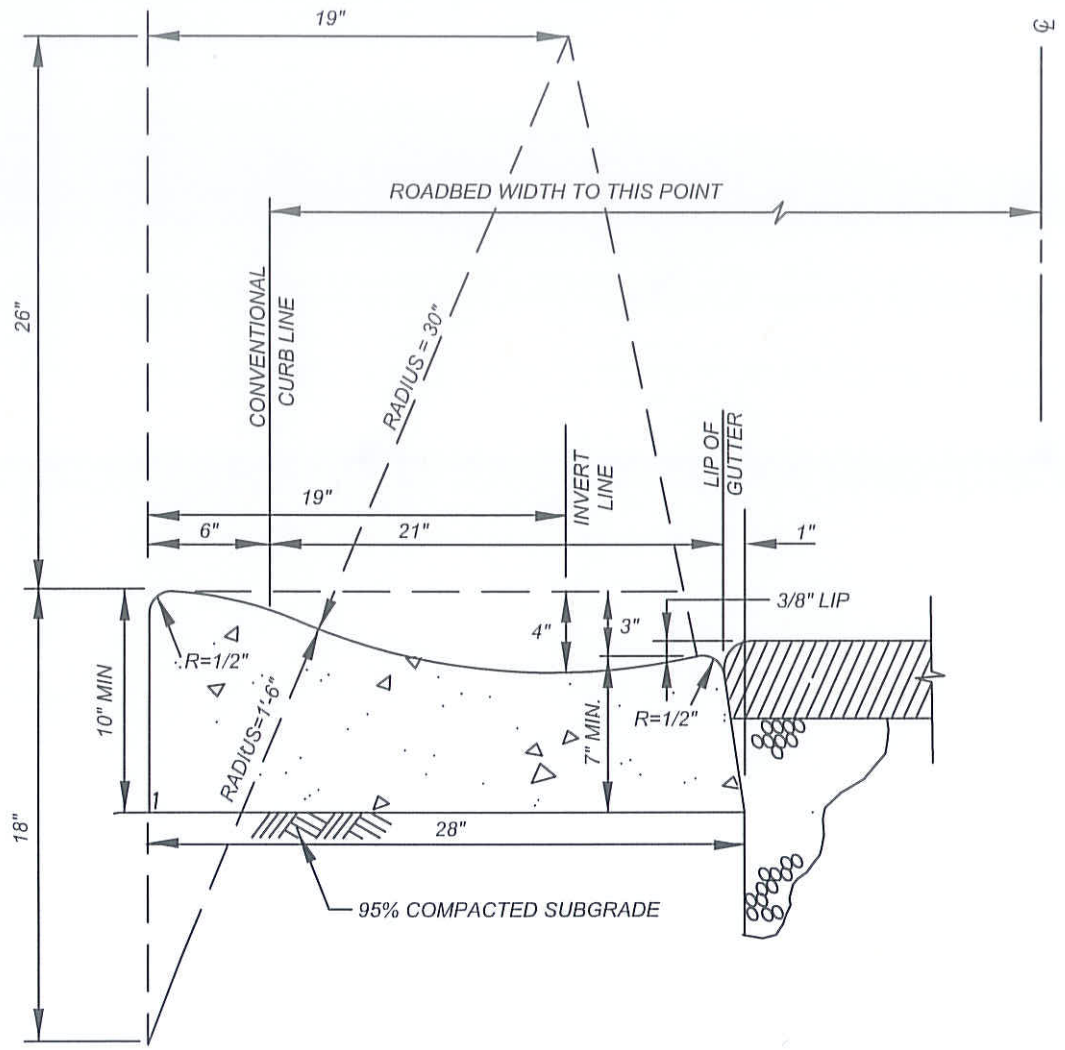
4.) EXISTING PCC SHALL BE SAWCUT AT JOINT PRIOR TO REMOVAL.

5.) CURBS SHALL HAVE EXPANSION JOINTS AT BCR AND ECR AND WEAKENED PLANE JOINTS AT 10' INTERVALS ONLY.

6.) WHEN CURB AND GUTTER IS PLACED BY AN EXTRUSION MACHINE, FINISHING WORK SHALL PROVIDE AN ACCEPTABLE FINISH AND WEAKENED PLANE JOINTS MAY BE SAWCUT.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: DIVISION MANAGER 1/21/14 DATE APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER 1/29/14 DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION **TYPE D-1 CURB** STANDARD PLAN **MVSI-122-0** SHEET 1 OF 1



NOTES:

1.) CONCRETE SHALL BE CLASS 560-C-3250 PCC, CURED WITH WHITE PIGMENTED CURING COMPOUND.

2.) ALL EXPOSED CORNERS SHALL BE FINISHED WITH $\frac{1}{2}$" RADIUS.

3.) FINISH SHALL BE FINE BROOM.

4.) EXISTING PCC SHALL BE SAWCUT AT SCORELINE PRIOR TO REMOVAL.

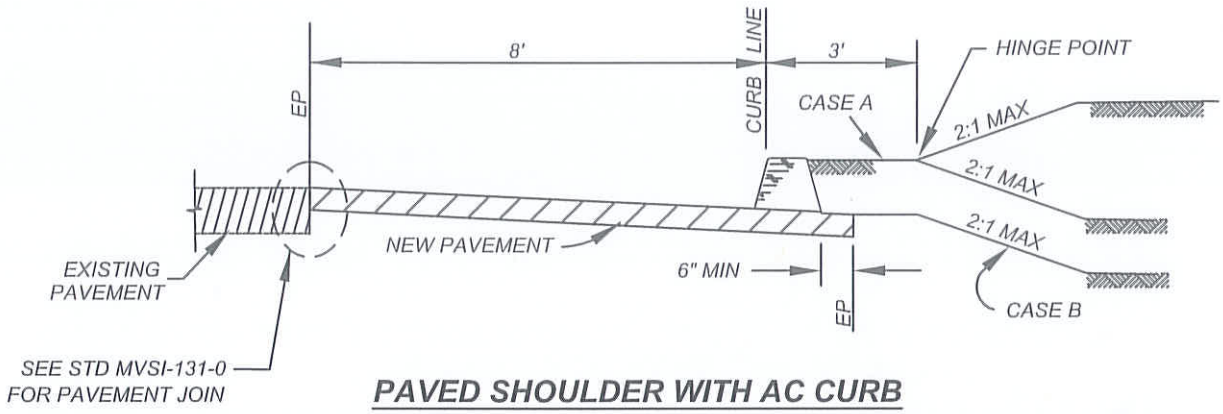
5.) CURBS SHALL HAVE EXPANSION JOINTS AT 60' INTERVALS, AND WEAKENED PLANE JOINTS AT 10' INTERVALS ONLY; NO SCORELINE ALLOWED.

6.) WHEN ROLLED CURB IS PLACED BY AN EXTRUSION MACHINE, FINISHING WORK SHALL PROVIDE AN ACCEPTABLE FINISH AND WEAKENED PLANE JOINTS MAY BE SAWCUT.

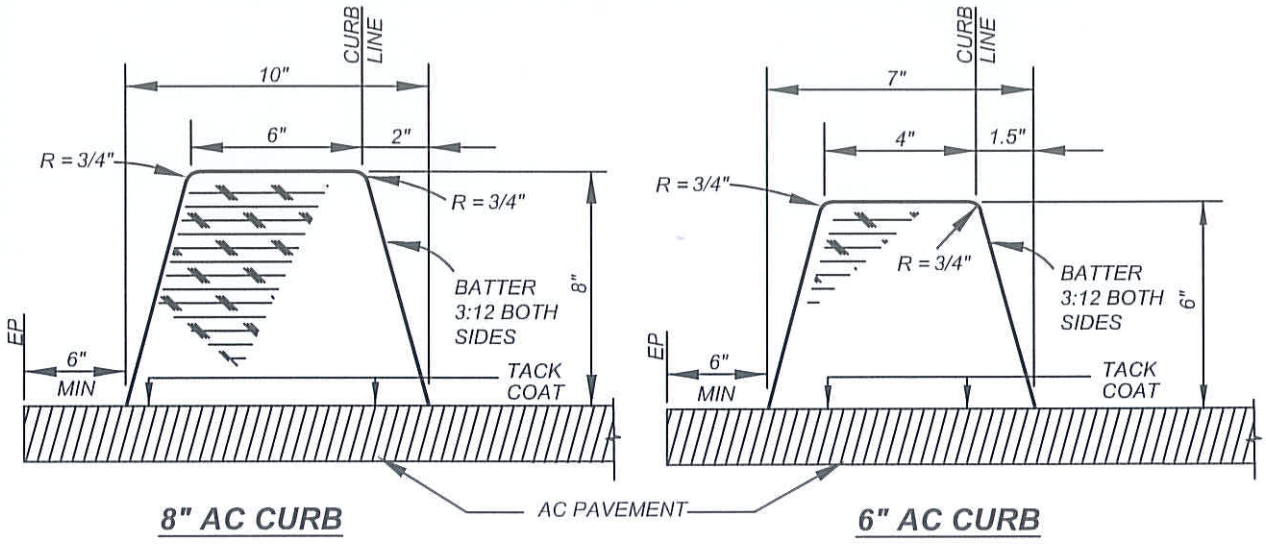
7.) ROLLED CURB MAY BE USED WITH THE APPROVAL OF THE CITY ENGINEER.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: DIVISION MANAGER 1/21/14 DATE APPROVED: PUBLIC WORKS DIRECTOR/ CITY ENGINEER 1/29/14 DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION **TYPE C ROLLED CURB** STANDARD PLAN **MVSI-123-0** SHEET 1 OF 1



PAVED SHOULDER WITH AC CURB



8" AC CURB

6" AC CURB

NOTES:

1.) THE ASPHALT CONCRETE MIXTURE SHALL BE TYPE III D-PG 70-10 WITH A MINIMUM ASPHALT BINDER OF 5.8 PERCENT.

2.) PRIOR TO PLACEMENT, A TACK COAT SHALL BE APPLIED TO THE EXISTING SURFACE. TACK COAT SHALL BE PG 64-10 AT AN APPROXIMATE RATE OF 0.05 GALLON PER SQUARE YARD OR GRADE SS-1h EMULSIFIED ASPHALT AT AN APPROXIMATE RATE OF 0.05 TO 0.10 GALLON PER SQUARE YARD.

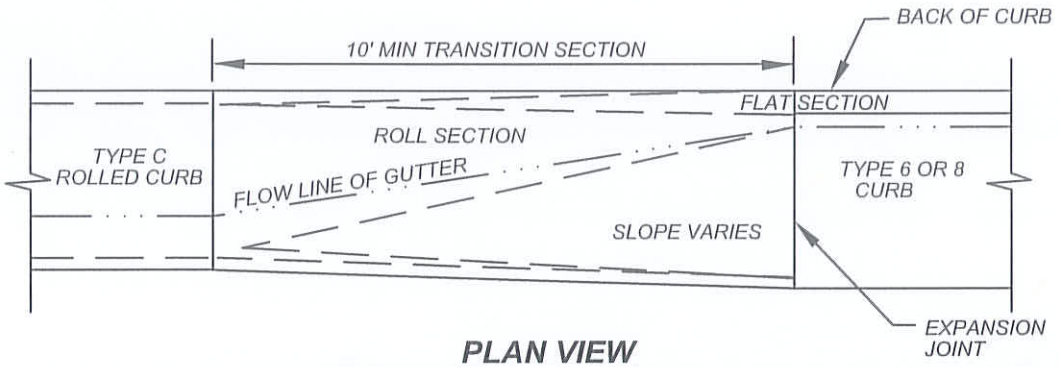
3.) THE TEMPERATURE OF THE MIX AT THE TIME OF PLACEMENT SHALL NOT BE LESS THAN 250°F OR MORE THAN 285° F.

4.) ALL EXTRUDERS AND SHOES SHALL BE APPROVED BY THE CITY ENGINEER.

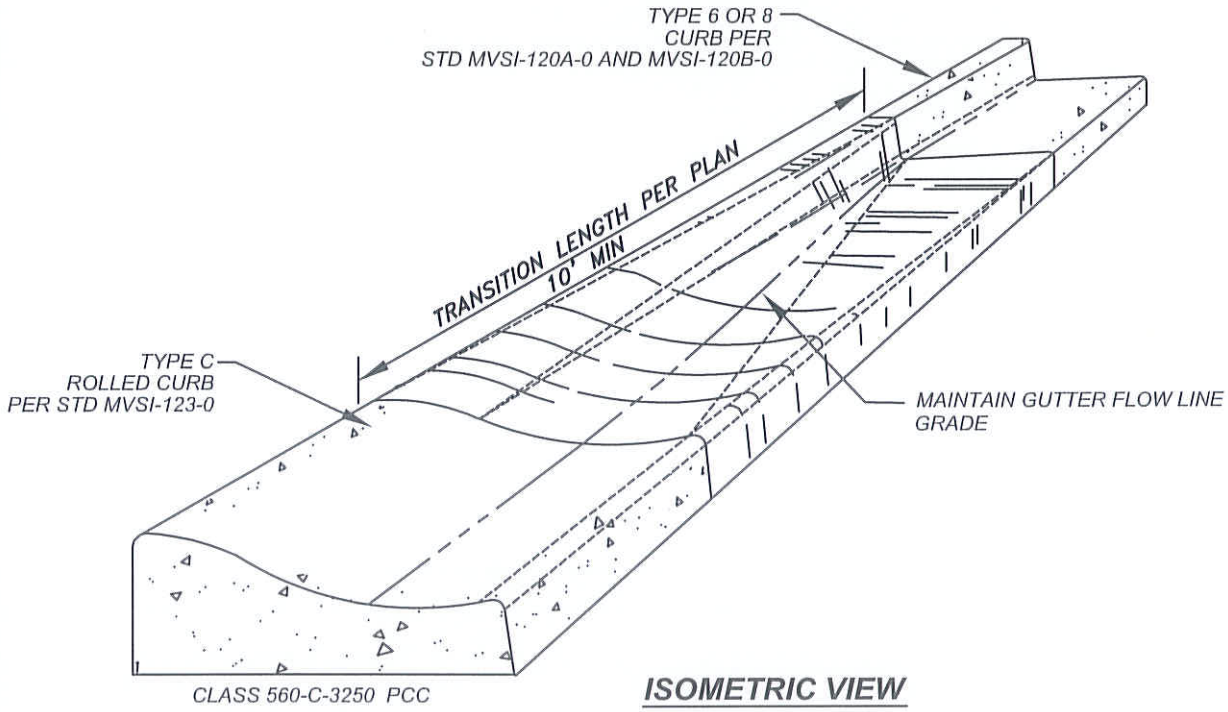
5.) USE CASE A BACKFILL UNLESS NOTED OTHERWISE.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: DIVISION MANAGER 1/21/14 DATE APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER 1/29/14 DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION ASPHALT CONCRETE CURB STANDARD PLAN MVSI-124-0 SHEET 1 OF 1



PLAN VIEW



ISOMETRIC VIEW

NOTE:

TO BE USED ONLY WHEN ROLLED CURB HAS BEEN APPROVED FOR USE BY THE CITY ENGINEER PRIOR TO DESIGN.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: DIVISION MANAGER 1/21/14 DATE APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER 1/29/14 DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION **CURB TRANSITION**
		STANDARD PLAN **MVSI-125-0** SHEET 1 OF 1

NOTES:

1.) BACKGROUND SHALL BE PAINTED WITH GOOD QUALITY HIGH GLOSS REFLECTIVE WHITE PAINT.

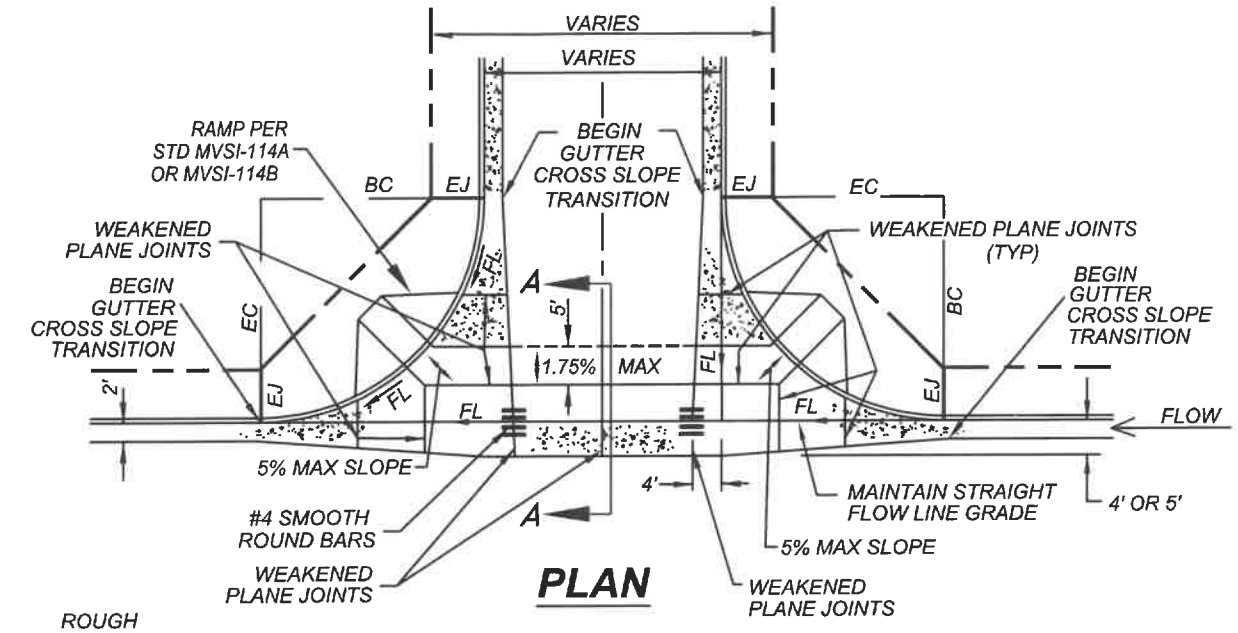
2.) NUMBERS SHALL BE PAINTED WITH GOOD QUALITY FLAT BLACK PAINT.

3.) NUMBERS SHALL BE CENTERED VERTICALLY WITH NO BORDERS.

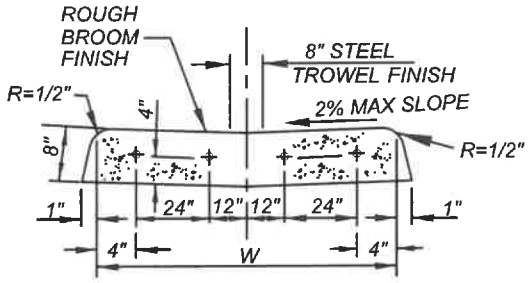
4.) NUMBERS SHALL BE PLACED ALONG CURB FACE , 3' FROM THE TOP OF X ON THE MAIN DRIVEWAY APPROACH THAT IS CLOSEST TO THE CENTER OF THE LOT.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: DIVISION MANAGER 1/21/14 DATE APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER 1/29/14 DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION **CURB ADDRESS PAINTING** STANDARD PLAN **MVSI-126-0** SHEET 1 OF 1

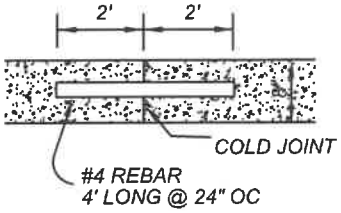


PLAN

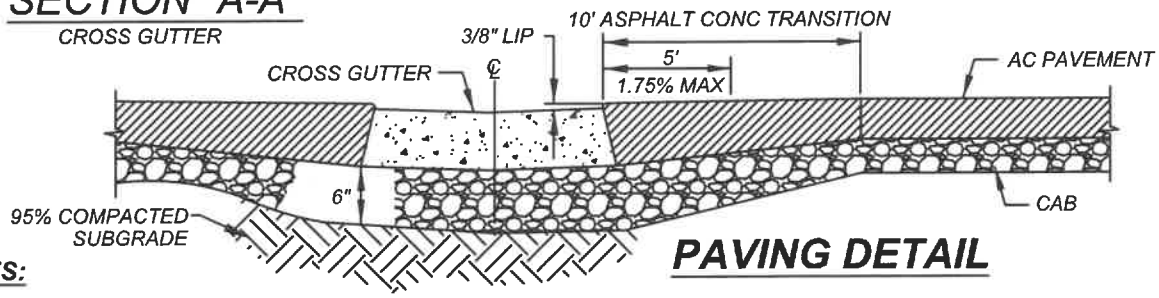


SECTION "A-A"

CROSS GUTTER



REBAR DETAIL



PAVING DETAIL

NOTES:

1.) ALL CONCRETE SHALL BE CLASS 560-C-3250, CURED WITH WHITE PIGMENTED DURING COMPOUND.
2.) COAT 1/2 THE LENGTH OF DOWELS WITH GREASE TO PROVIDE SLIPPAGE.
3.) DIMENSIONS MAY BE INCREASED DEPENDING ON DRAINAGE CONSIDERATIONS.
4.) 6" THICK CLASS (2) AGGREGATE BASE SHALL BE PLACED AND COMPACTED TO 95% RELATIVE COMPACTION UNDER 8" THICK CROSS GUTTER AND SPANDRELS.
5.) DOWELS REQUIRED WHEN CROSS GUTTER AND SPANDREL ARE POURED SEPARATELY.
6.) SPANDREL WEAKENED PLANE JOINT LOCATIONS WILL BE DETERMINED BY ACCESS RAMP LOCATIONS.
7.) A MINIMUM 1' WIDE AC PAVEMENT REPAIR PATCH IS REQUIRED WHEN CROSS GUTTER IS PLACED ADJACENT TO EXISTING AC PAVEMENT.
8.) THE MINIMUM DISTANCE W = 10' ON ARTERIAL STREETS, 8' ON OTHERS.

NOT TO SCALE

RECOMMENDED:
DIVISION MANAGER — DATE: 8/14/19

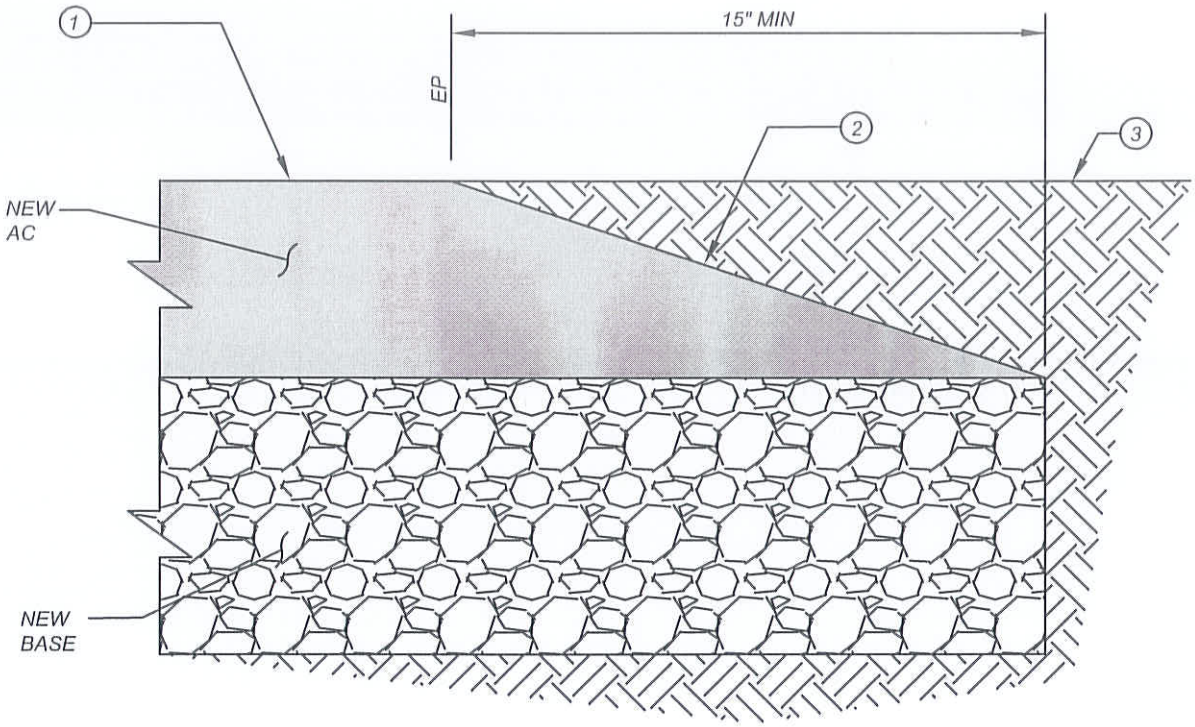
APPROVED:
PUBLIC WORKS DIRECTOR / CITY ENGINEER — DATE: 10/11/19

CITY OF MORENO VALLEY

PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION

CROSS GUTTER AND SPANDREL

STANDARD PLAN
MVSI-127-1
SHEET 1 OF 1



LEGEND:

(1) AC FINISH GRADE.

(2) 1:3 TAPERED EDGE OF PAVEMENT (1 VERTICAL : 3 HORIZONTAL).

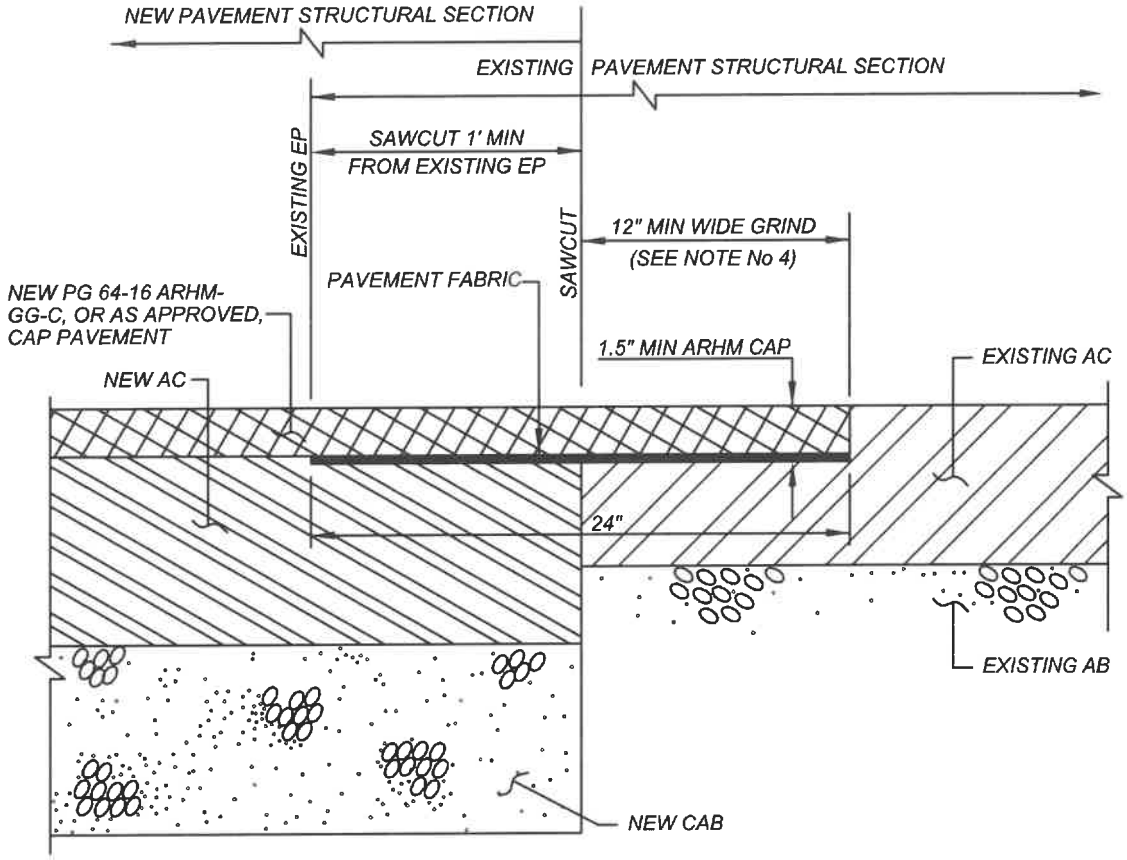
(3) SHOULDER FINISH GRADE.

NOTES:

1.) TAPERED EDGE OF PAVEMENT SHALL BE PLACED AT ALL EDGE OF PAVEMENT LOCATIONS WHERE CURB DOES NOT EXIST.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: DIVISION MANAGER 1/21/14 DATE APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER 1/29/14 DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION PAVEMENT EDGE TAPER STANDARD PLAN MVSI-130-0 SHEET 1 OF 1



NOTES:

1.) THIS STANDARD SHALL APPLY TO PROJECTS THAT REQUIRE NEW ROADWAY WIDENING OR EXTENSION THAT ABUTS TO EXISTING ROADWAY, OR AS APPROVED BY THE CITY ENGINEER.

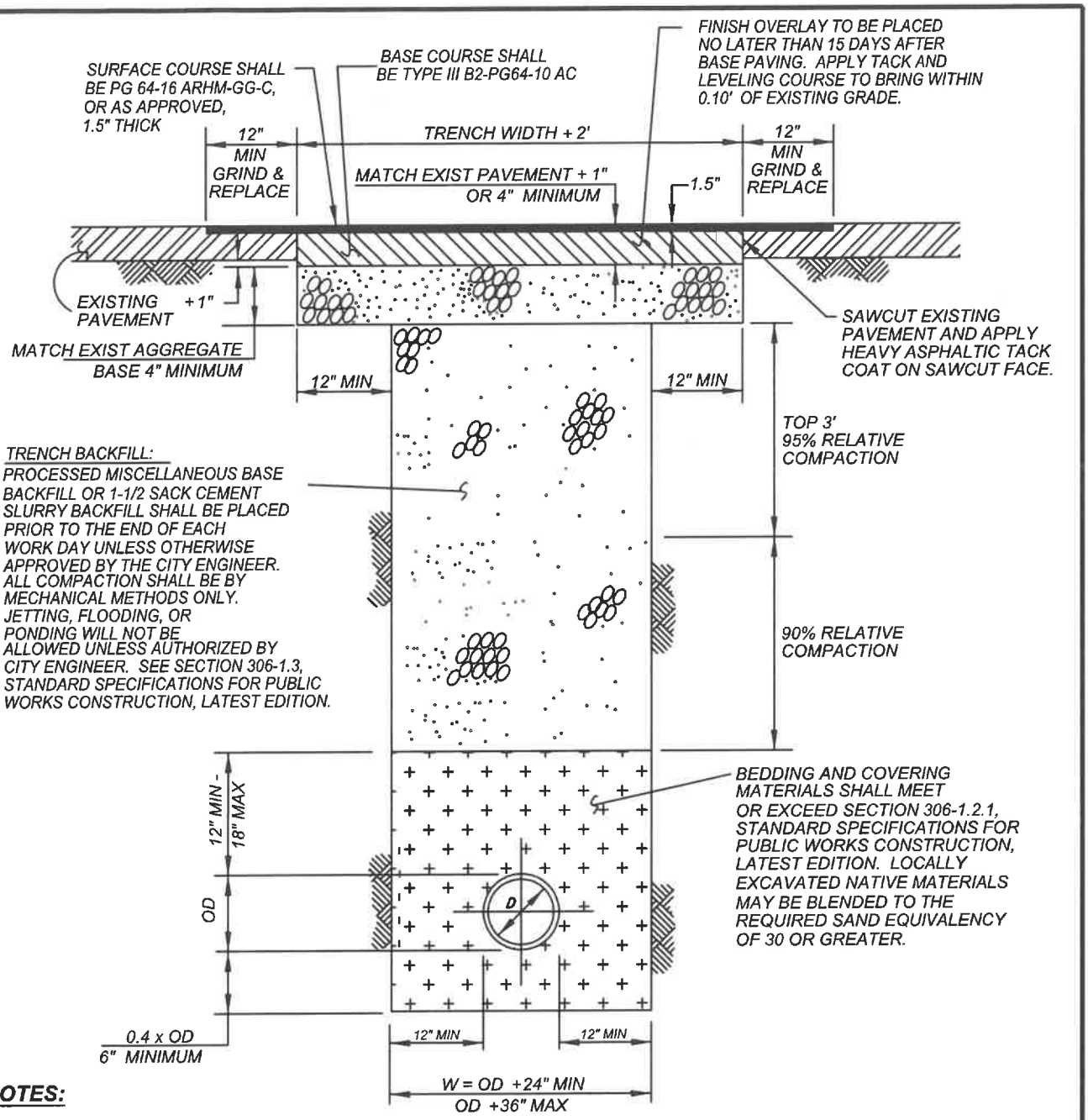
2.) THE NEW ROADWAY STRUCTURAL SECTION SHALL BE IN ACCORDANCE WITH THE PROJECT'S CITY-APPROVED GEOTECHNICAL REPORT.

3.) PAVEMENT FABRIC SHALL BE IN ACCORDANCE WITH THE THE LATEST VERSION OF THE "GREENBOOK" STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION AND/OR THE PROJECT'S CITY-APPROVED SPECIFICATIONS OR AS RECOMMENDED BY A GEOTECHNICAL ENGINEER/REGISTERED CIVIL ENGINEER AND APPROVED BY THE CITY

4.) NEW ARHM PAVEMENT SHALL BE EXTENDED TO BIKE LANE STRIPING OR NEAREST LANE LINES AS REQUIRED BY THE CITY ENGINEER.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: MDL 10/20/20 DIVISION MANAGER / DATE APPROVED: 10/29/2020 PUBLIC WORKS DIRECTOR / CITY ENGINEER / DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION **JOIN EXISTING PAVEMENT DETAIL**	STANDARD PLAN **MVSI-131-1** SHEET 1 OF 1



NOTES:

1.) SEE ADDITIONAL REQUIREMENTS, STD No MVSI-132C.

2.) ALL TRENCHES SHALL HAVE PROCESSED MISCELLANEOUS BASE BACKFILL OR 1-½ SACK CEMENT SLURRY BACKFILL UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.

3.) ALL TRENCHING AND BACKFILL SHALL BE DONE IN ACCORDANCE WITH SECTION 306, STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION.

4.) ALL TEMPORARY PAVING SHALL HAVE A MINIMUM 2" OF AC ON LOCAL STREETS AND 3" ON ALL OTHERS, UNLESS PERMANENT PAVEMENT IS PLACED IMMEDIATELY.

5.) NEW FINISH ARHM OVERLAY AT ENDS OF TRENCH SHALL BE EXTENDED TO FULL WIDTH OF EXISTING BIKE LANES OR NEAREST LANE LINE AS DIRECTED BY THE CITY ENGINEER.

NOT TO SCALE

RECOMMENDED: MDL 10/20/20
DIVISION MANAGER DATE

APPROVED: 10/22/20
PUBLIC WORKS DIRECTOR / CITY ENGINEER DATE

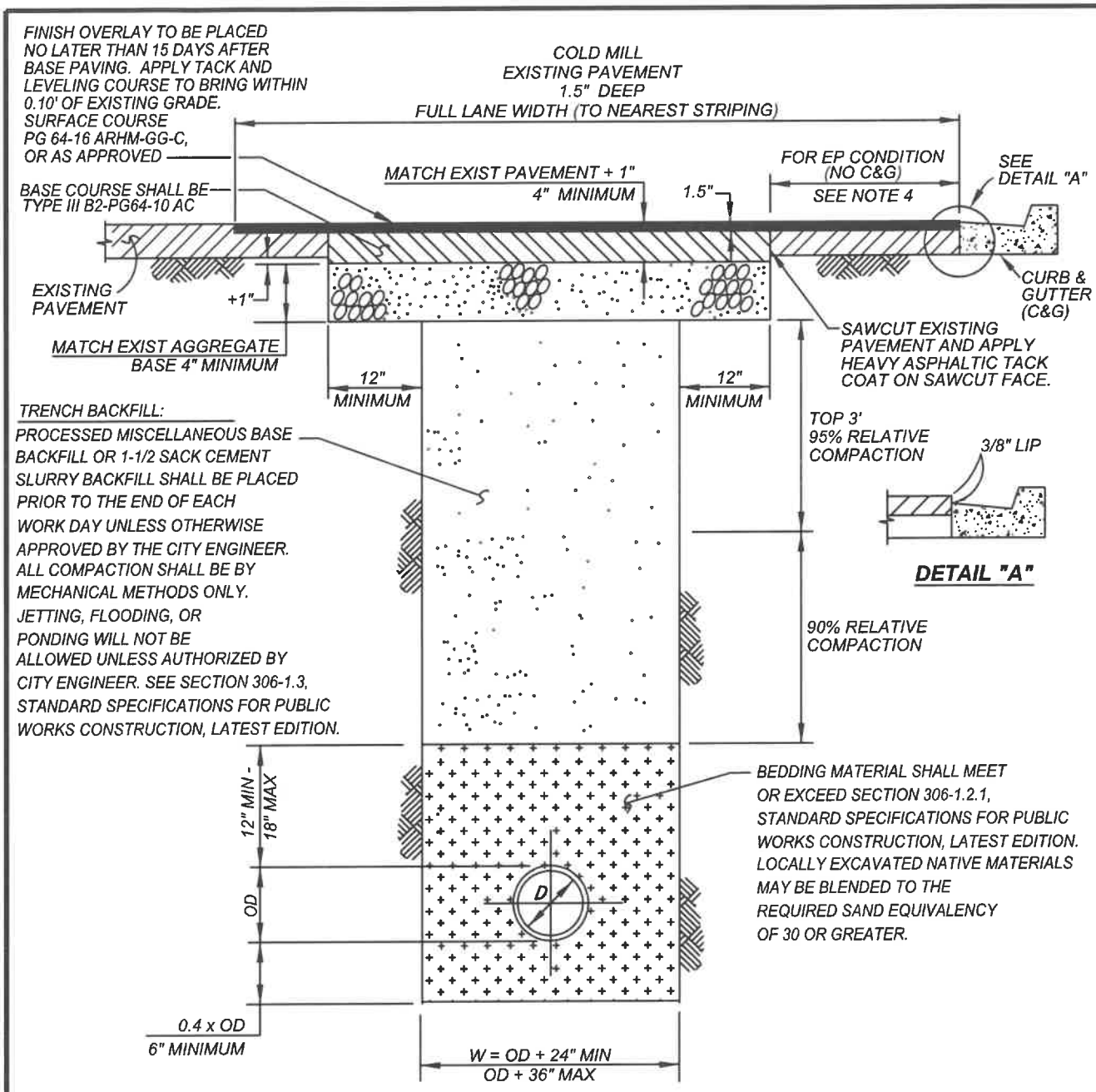
CITY OF MORENO VALLEY

PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION

PERPENDICULAR TRENCH BACKFILL AND ROADWAY REPAIR

STANDARD PLAN
MVSI-132A-2

SHEET 1 OF 6



NOTES:

1.) SEE ADDITIONAL REQUIREMENTS, STD No MVSI-132C.
2.) ALL TRENCHING AND BACKFILL SHALL BE DONE IN ACCORDANCE WITH SECTION 306, STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION.
3.) ALL TEMPORARY PAVING SHALL HAVE A MINIMUM 2" OF AC ON LOCAL STREETS AND 3" ON ALL OTHERS.
4.) FOR EDGE OF PAVEMENT (EP) CONDITION (NO CURB AND GUTTER), REMOVE AND REPLACE FULL DEPTH PAVEMENT (AB AND AC) REMNANTS UP TO 6'.

NOT TO SCALE

CITY OF MORENO VALLEY — DECEMBER 3, 1984

RECOMMENDED: DIVISION MANAGER — DATE 10/13/20

APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER — DATE 10/28/2020

CITY OF MORENO VALLEY

PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION

PARALLEL TRENCH BACKFILL AND ROADWAY REPAIR

STANDARD PLAN
MVSI-132B-3

REQUIREMENTS
FOR TRENCHES OR OTHER EXCAVATIONS WITHIN
PUBLIC RIGHTS-OF-WAY OR EASEMENTS

ALL WORK AND MATERIAL SHALL BE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION," LATEST EDITION, UNLESS OTHERWISE SPECIFIED, INCLUDING AMENDMENTS AND SUPPLEMENTS THERETO, EXCEPTING AS HEREBY SUPPLEMENTED AND AMENDED.

A. STANDARD REQUIREMENTS

1. **BEDDING**: BEDDING SHALL BE DEFINED AS THAT MATERIAL SUPPORTING, SURROUNDING AND EXTENDING TO ONE FOOT ABOVE THE FACILITY. EXCEPT WHERE CONCRETE ENCASEMENT IS USED, MATERIALS USED FOR BEDDING SHALL BE SAND, GRAVEL, CRUSHED AGGREGATE, NATIVE FREE-DRAINING AND GRANULAR MATERIAL HAVING A SAND EQUIVALENT OF NOT LESS THAN THIRTY (30).

2. **BACKFILL**: BACKFILL SHALL BE DEFINED AS THAT MATERIAL ON AND ABOVE THE BEDDING AND EXTENDING TO THE SUBGRADE FOR REPLACEMENT OF PUBLIC IMPROVEMENTS OR TO FINISH GRADE WHERE NO PUBLIC IMPROVEMENTS EXIST. MATERIALS USED FOR BACKFILL: IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS AND THIS STANDARD PLAN.

B. REPLACEMENT REQUIREMENTS

1. **BASE**: BASE MATERIAL REPLACEMENT SHALL BE NO LESS IN THICKNESS THAN THE EXISTING AND IN NO CASE LESS THAN FOUR INCHES IN THICKNESS AND SHALL BE CLASS 2 AGGREGATE BASE PER SECTION 25 OF CALTRANS STANDARD SPECIFICATIONS, LATEST EDITION. CERTIFICATION SHALL BE REQUIRED THAT THIS MATERIAL MEETS THE SPECIFICATIONS.

2. **PAVEMENT**: PERMANENT PAVEMENT REPLACEMENT SHALL BE NO LESS IN THICKNESS THAN THE EXISTING PLUS ONE INCH AND, IN NO CASE, LESS THAN FOUR INCHES IN THICKNESS FOR BITUMINOUS ROADWAYS AND SHALL BE INSTALLED TO SAWCUT LIMITS PER CITY STANDARD AS FOLLOWS:

a.) PERMANENT ASPHALT PAVEMENT REPLACEMENT SHALL BE BASE COURSE TYPE III, B2-PG64-10, SURFACE COURSE PG 64-16 ASPHALT RUBBER HOT MIX (ARHM-GG-C), OR AS APPROVED BY THE CITY ENGINEER.

b.) WHEN TEMPORARY PAVEMENT RESURFACING IS PLACED, IT SHALL BE REMOVED AND PERMANENT PAVEMENT REPLACEMENT PLACED WITHIN A PERIOD NOT-TO-EXCEED FIFTEEN (15) WORKING DAYS FOLLOWING THE PLACEMENT OF THE TEMPORARY PAVEMENT. TEMPORARY PAVING WILL BE MAINTAINED BY THE CONTRACTOR TO PROVIDE A SAFE, SMOOTH RIDE.

c.) TRENCHES WITHIN 25 FEET OF EACH OTHER SHALL REQUIRE A 0.15' GRIND AND ARHM OVERLAY FOR THE ENTIRE AREA BETWEEN TRENCHES.

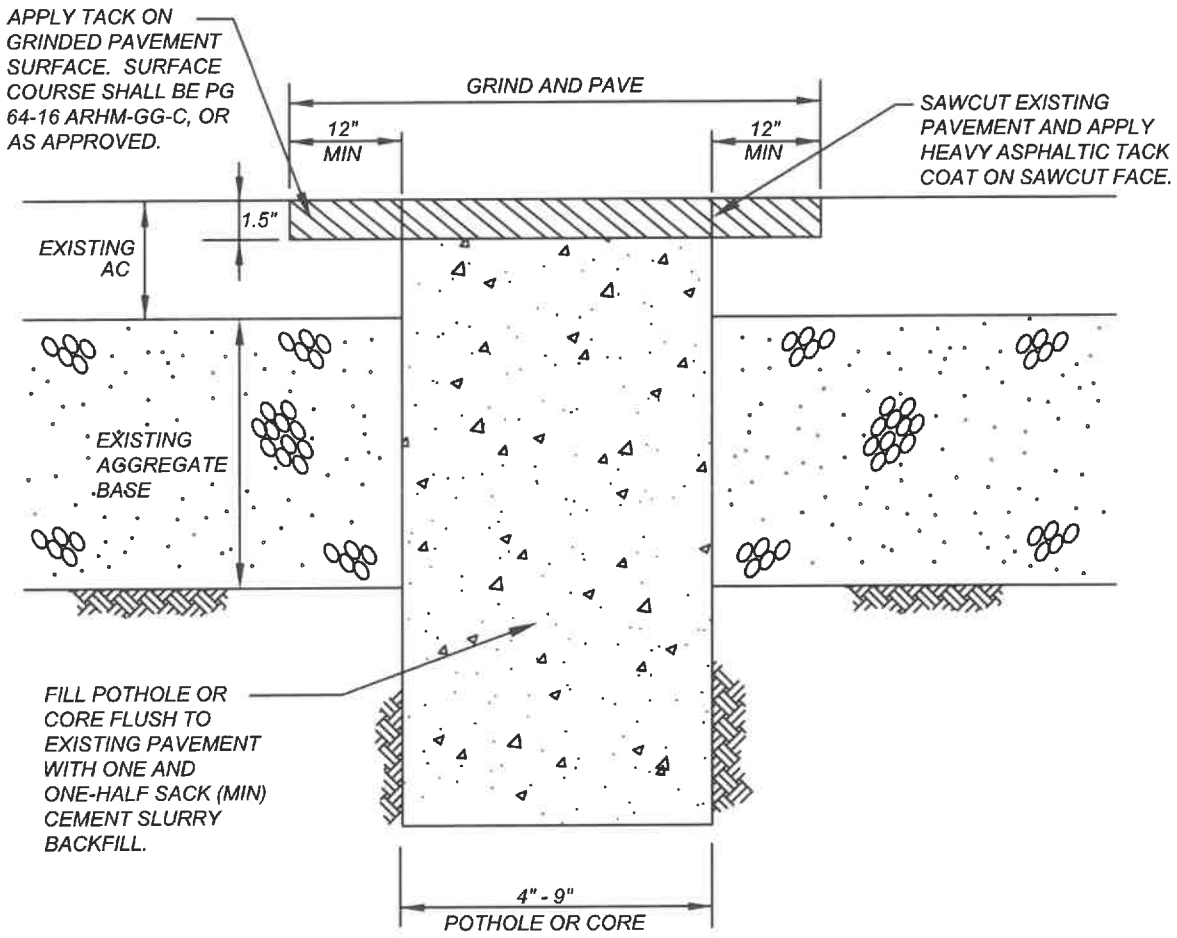
3. **STRIPING**: ANY DISTURBED/DAMAGED STRIPING DUE TO TRENCHING WORK SHALL BE RESTORED AND REFRESHED TO THE ENGINEER'S SATISFACTION.

4. **TESTING**: ALL TESTING SHALL BE PROVIDED BY THE CONTRACTOR. COMPACTION REPORTS SHALL BE SUBMITTED TO THE CITY ENGINEER.

5. **PROHIBITION OF PAVEMENT CUTTING**: ASPHALT CONCRETE PAVEMENT LESS THAN THREE (3) YEARS OLD SHALL NOT BE CUT EXCEPT FOR EMERGENCY REPAIRS OR AS SPECIFICALLY APPROVED IN WRITING BY THE CITY ENGINEER. SPECIAL REQUIREMENTS WILL BE IMPOSED FOR REPAVING.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 1, 1984	RECOMMENDED: MDL DIVISION MANAGER 10/17/20 DATE APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER 10/29/2020 DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION **TRENCH BACKFILL AND ROADWAY REPAIR NOTES**	STANDARD PLAN **MVSI-132C-2** SHEET 3 OF 6

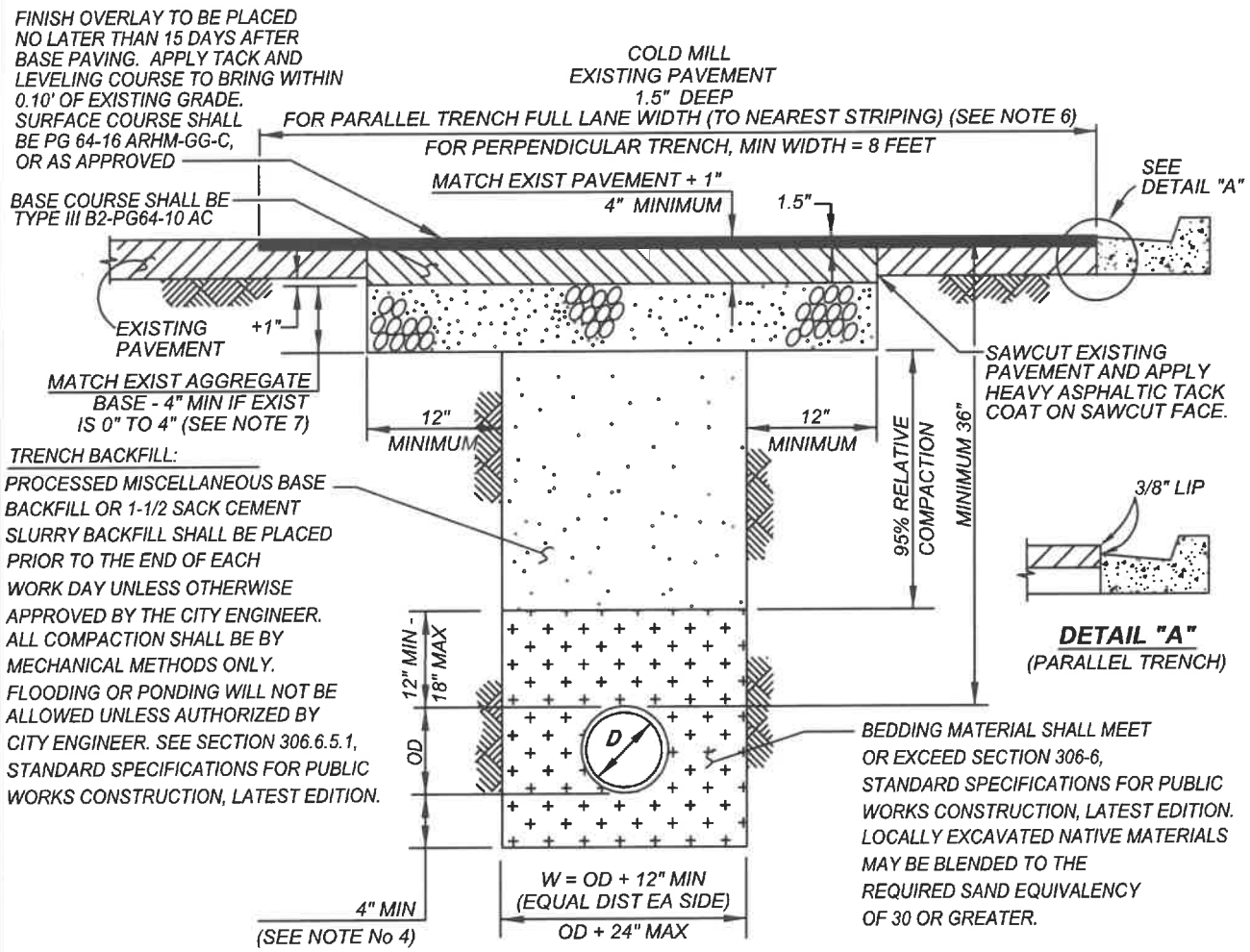


NOTE:

1.) SEE TRENCH BACKFILL AND ROADWAY REPAIR NOTES STD No MVSI-132C.
2. WHEN MULTIPLE POTHOLES SPACED 24" OR LESS ARE RUN PARALLEL TO THE TRAFFIC LANE, STANDARD PLAN MVSI-132B SHALL BE USED.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3,1984	RECOMMENDED: MDL 10/13/20 DIVISION MANAGER DATE APPROVED: ML Mc 10/28/20 PUBLIC WORKS DIRECTOR / CITY ENGINEER DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION **UTILITY POTHOLE OR PAVEMENT CORE REPAIR**	STANDARD PLAN **MVSI-132D-1** SHEET 4 OF 6



NOTES:

1.) SEE ADDITIONAL REQUIREMENTS, STD No MVSI-132C.

2.) ALL TRENCHING AND BACKFILL SHALL BE DONE IN ACCORDANCE WITH SECTION 306, STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION.

3.) ALL TEMPORARY PAVING SHALL HAVE A MINIMUM 2" OF AC ON LOCAL STREETS AND 3" ON ALL OTHERS.

4.) INCREASE BEDDING UNDER PIPE FROM 4" TO 6" FOR ROCK SUBGRADES.

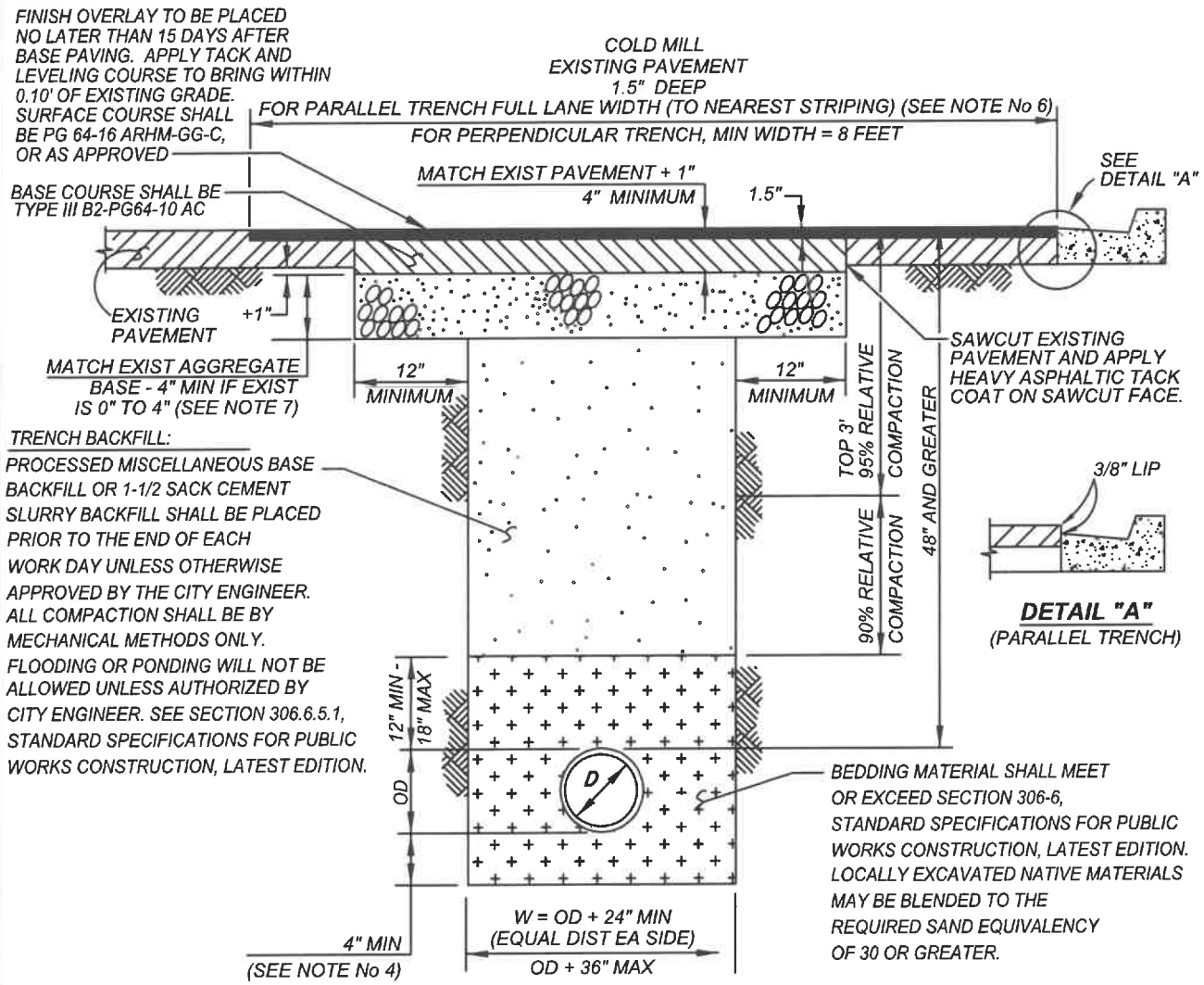
5.) USE THIS STANDARD PLAN FOR UP TO AND INCLUDING 12" DIAMETER WATER LINE WITH 36" COVER OVER PIPE.

6.) LANE WIDTH REQUIREMENT MAY BE REDUCED AT DISCRETION OF CITY ENGINEER.

7.) 1-1/2 SACK CEMENT SLURRY MAY BE USED IF USED FOR TRENCH BACKFILL.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: DIVISION MANAGER 10/13/20 DATE APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER 10/29/2020 DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION **WATER LINE (UP TO 12" DIA) TRENCH BACKFILL AND ROADWAY REPAIR**	STANDARD PLAN **MVSI-132E-2** SHEET 5 OF 6



NOTES:

1.) SEE ADDITIONAL REQUIREMENTS, STD No MVSI-132C.

2.) ALL TRENCHING AND BACKFILL SHALL BE DONE IN ACCORDANCE WITH SECTION 306, STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION.

3.) ALL TEMPORARY PAVING SHALL HAVE A MINIMUM 2" OF AC ON LOCAL STREETS AND 3" ON ALL OTHERS.

4.) INCREASE BEDDING UNDER PIPE FROM 4" TO 6" FOR ROCK SUBGRADES.

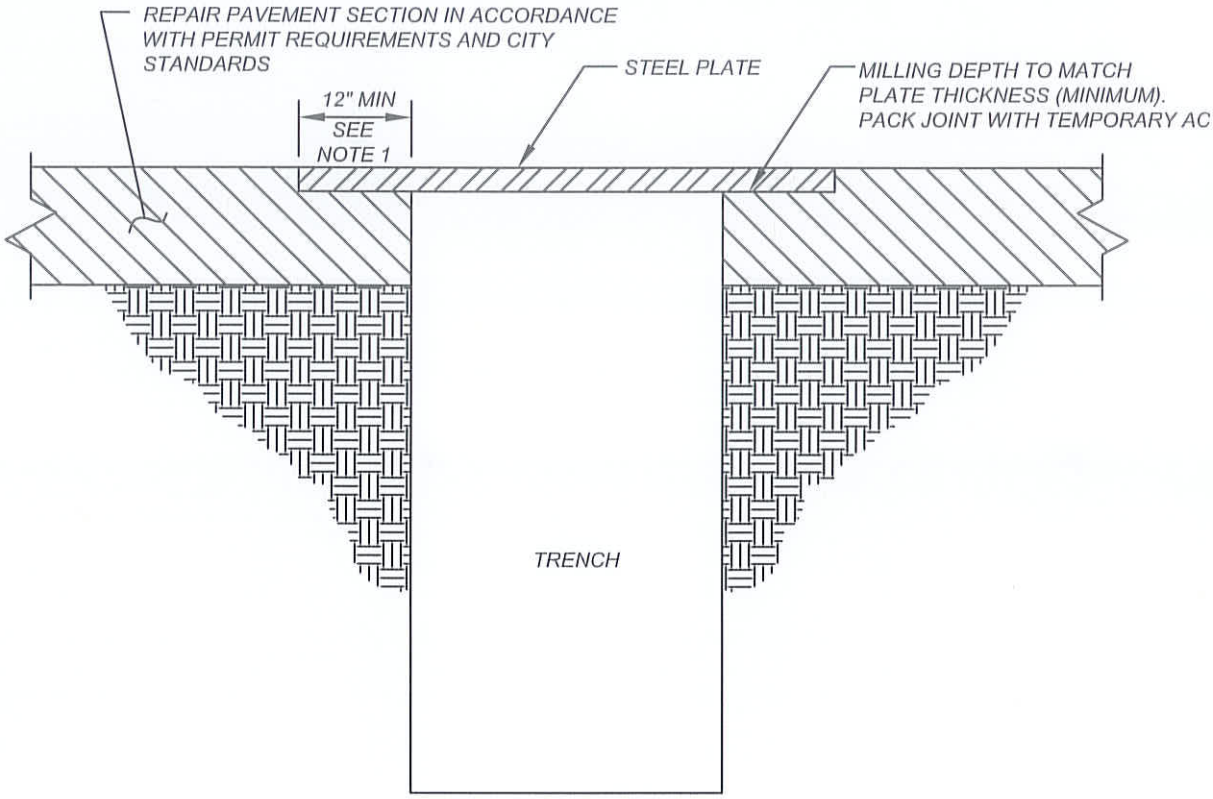
5.) USE THIS STANDARD PLAN FOR WATER LINE OF GREATER THAN 12" DIAMETER. MINIMUM COVER OVER PIPE IS 48".

6.) LANE WIDTH REQUIREMENT MAY BE REDUCED AT DISCRETION OF CITY ENGINEER.

7.) 1-1/2 SACK CEMENT SLURRY MAY BE USED IF USED FOR TRENCH BACKFILL.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: MDL 10/13/20 DIVISION MANAGER DATE APPROVED: 10/29/20 PUBLIC WORKS DIRECTOR / CITY ENGINEER DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION **WATER LINE (LARGER THAN 12" DIA) TRENCH BACKFILL AND ROADWAY REPAIR**
		STANDARD PLAN **MVSI-132F-2** SHEET 6 OF 6



TYPICAL TRENCH PLATE DETAIL

NOTES:

1.) THE CONTRACTOR SHALL PROVIDE A MINIMUM 12" LAP OF STEEL PLATE ON EACH SIDE OF TRENCH TO ASSURE NO SLIPPING OF PLATE OR COLLAPSING OF TRENCH WALL. WHERE 12" LAP CANNOT BE MET, ENGINEERING DESIGN IS REQUIRED AND SHALL BE APPROVED BY THE CITY ENGINEER.

2.) STEEL PLATE MUST FIT SNUG WITHIN THE RECESSED AREA AND INSTALLED TO OPERATE WITH MINIMUM NOISE.

3.) THE PAVEMENT SHALL BE COLD PLANED TO A DEPTH EQUAL TO THE THICKNESS OF THE PLATE AND TO A WIDTH AND LENGTH EQUAL TO THE DIMENSIONS OF THE PLATE.

4.) THIS STANDARD SHALL BE IMPLEMENTED ON ALL PROJECTS WITHIN THE VEHICULAR TRAVELED WAY UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.

5.) MULTIPLE PLATES MUST BE TACK WELDED AS NEEDED TO SECURE PLATES, 6" MINIMUM.

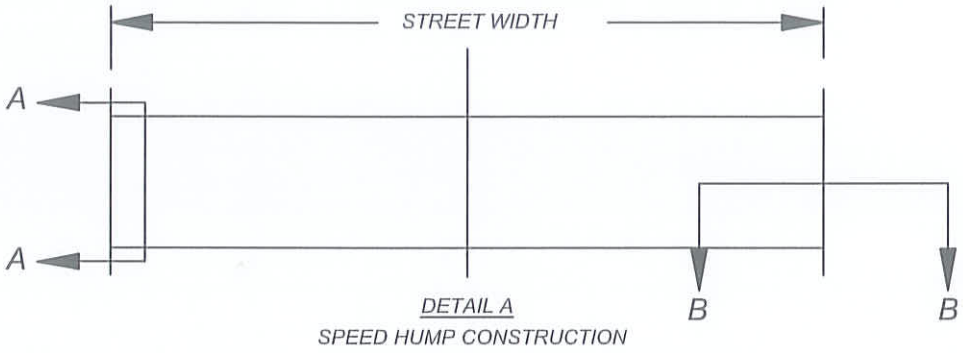
6.) ALL PLATES MUST MEET REQUIRED TRAFFIC LOADS, AND BE SKID-RESISTANT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE APPROPRIATE SELECTION AND MAINTENANCE OF THE STEEL PLATES.

7.) STEEL PLATES MUST BE REMOVED AND PERMANENT PAVEMENT SHALL BE PLACED WITHIN FIFTEEN (15) WORKING DAYS OR AS APPROVED BY THE CITY ENGINEER.

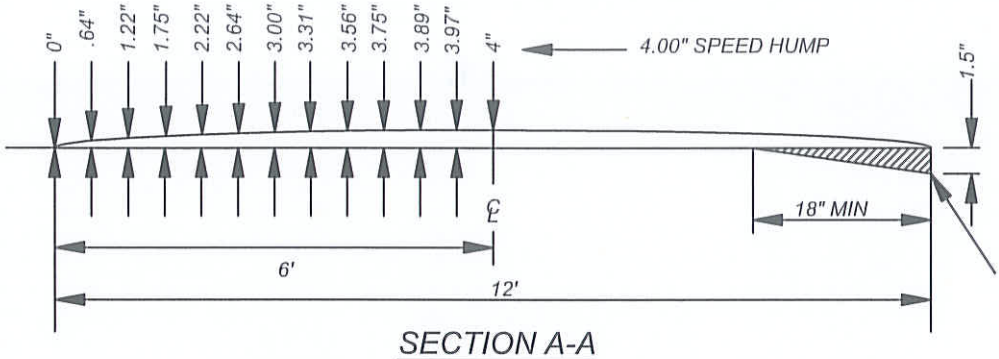
8.) ADVANCE WARNING SIGNS "STEEL PLATES AHEAD" SHALL BE PLACED WHEN PLATING IS WITHIN THE TRAVELED WAY.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: DIVISION MANAGER 1/21/14 DATE APPROVED: PUBLIC WORKS DIRECTOR/ CITY ENGINEER 1/29/14 DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION **RECESSED TRENCH PLATE DETAIL** STANDARD PLAN **MVSI-133-0** SHEET 1 OF 1

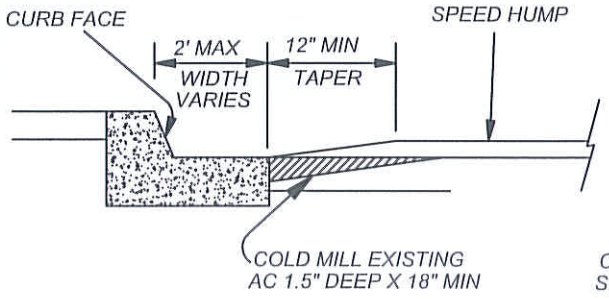


DETAIL A
SPEED HUMP CONSTRUCTION

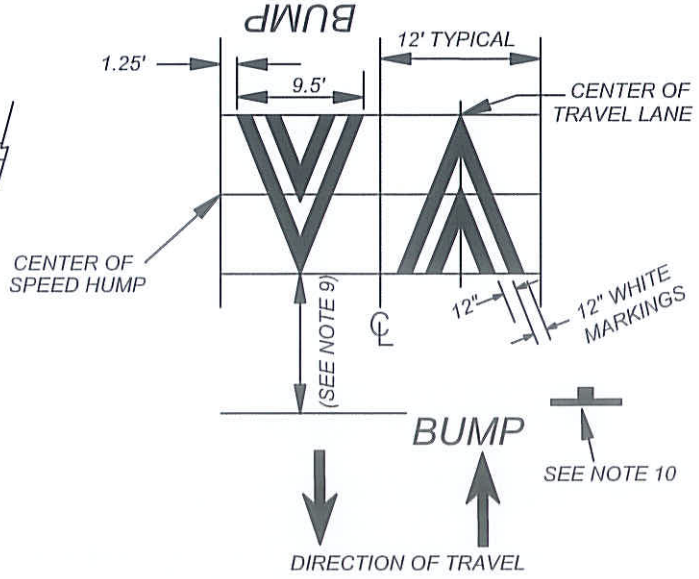


SECTION A-A
SPEED HUMP DIMENSIONS AND CROSS-SECTIONS

COLD MILL 1.5" DEPTH BY 1.5' MINIMUM (TYP ALL EDGES) BOTTOM OF MILLING CAN TAPER TOWARD CENTER OF HUMP.



SECTION B-B
SPEED HUMP ROADWAY EDGE TREATMENTS
(TYP ALL EDGES)



DETAIL "B"
TYPICAL SIGNING AND PAVEMENT MARKINGS FOR SPEED HUMPS

NOT TO SCALE

CITY OF MORENO VALLEY · DECEMBER 3, 1984	RECOMMENDED: EL 1/22/14 DIVISION MANAGER / DATE APPROVED: 1/29/14 PUBLIC WORKS DIRECTOR / CITY ENGINEER / DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION **SPEED HUMP DETAIL AND PLACEMENT**
		STANDARD PLAN **MVSI-134A-0** SHEET 1 OF 2

NOTES:

1.) CLEAN AND PLACE SS-1H BINDER MATERIAL PRIOR TO PLACEMENT OF ASPHALT MATERIAL. - SECTION 302-5.4

2.) INSTALLATION OF SPEED HUMPS SHALL BE COMPLETED IN TWO LIFTS.
- 1ST LIFT: FURNISH AND PLACE TYPE III B2-PG64-10 ASPHALT MATERIAL.
- 2ND LIFT: FURNISH AND PLACE TYPE III C3-PG64-10 ASPHALT MATERIAL.

3.) STRIPE 12" WIDE CHEVRONS ON ASPHALT PAVING PER DETAIL "B".

4.) STENCIL "BUMP" LEGEND IN 8' LETTERS. OBTAIN APPROVAL OF STENCIL PRIOR TO INSTALLATION.

5.) ALL STRIPING MUST BE INSTALLED PER THE LATEST CALTRANS STANDARD PLANS A10A THROUGH A24E, THE LATEST CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD) AND CITY OF MORENO VALLEY STANDARD PLANS, SECTION 4.

6.) ALL STENCILS USED FOR INSTALLING PAVEMENT MARKINGS MUST CONFORM TO THE LATEST CALTRANS STENCILINGS STANDARD A24A THROUGH A24E.

7.) ALL STRIPING MUST BE INSTALLED USING THERMOPLASTIC (UNLESS OTHERWISE SPECIFIED) PER THE LATEST CALTRANS STANDARD SPECIFICATIONS. ALL PAVEMENT MARKINGS (LEGENDS) MUST BE THERMOPLASTIC.

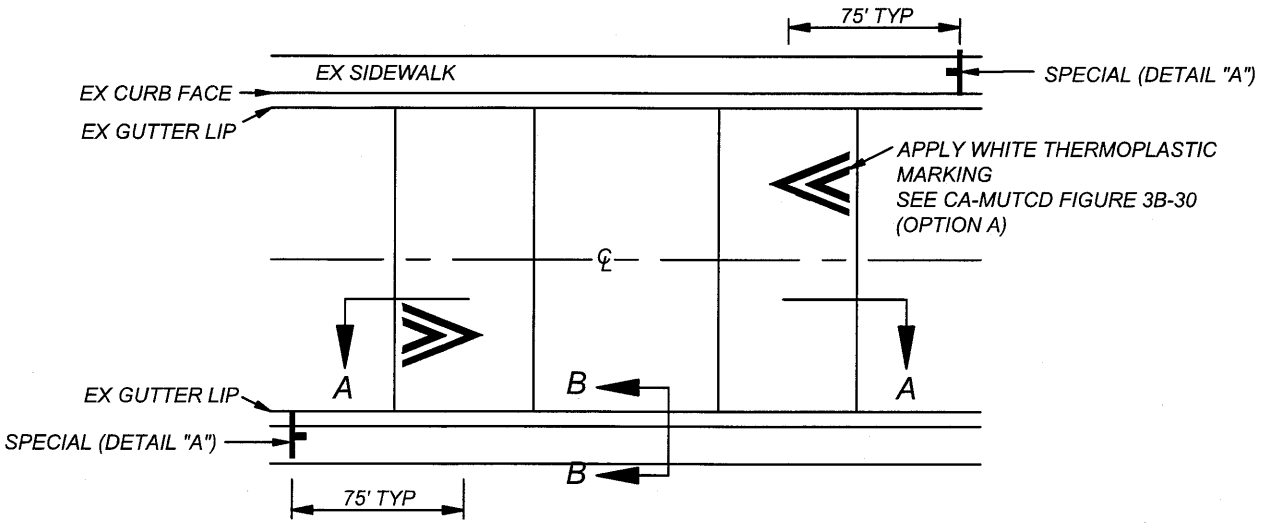
8.) THE PLACEMENT OF SPEED HUMPS SHALL BE DETERMINED BY THE CITY TRAFFIC ENGINEER.

9.) THE PLACEMENT OF PAVEMENT MARKINGS ("BUMP" LEGEND) SHALL BE INSTALLED DIRECTLY ADJACENT TO THE SPEED BUMP SIGN LOCATIONS CENTERED ON THE VEHICLE'S DIRECTION OF TRAVEL OR AS DETERMINED BY THE CITY TRAFFIC ENGINEER.

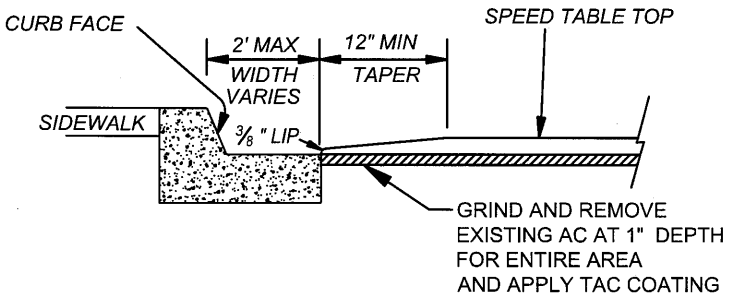
10.) NEW W13-1 (15) & W8-1 ("BUMP") ON NEW POST SHALL BE INSTALLED PER CITY STDS MVLT-414A-0 AND MVLT-414B-0. LOCATION OF THE SIGN WILL BE DETERMINED BY THE CITY TRAFFIC ENGINEER.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: EL 1/22/14 DIVISION MANAGER DATE APPROVED: 1/29/14 PUBLIC WORKS DIRECTOR / CITY ENGINEER DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION **SPEED HUMP INSTALLATION NOTES**	STANDARD PLAN **MVSI-134B-0** SHEET 2 OF 2

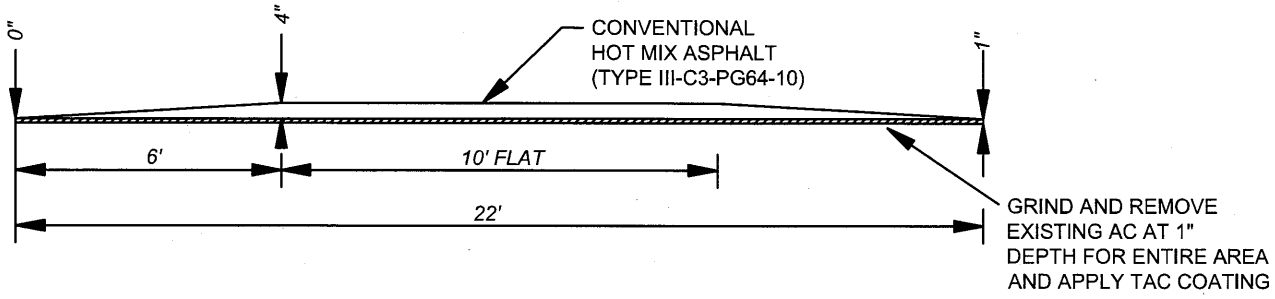


SPECIAL (DETAIL "A") SIGN
6" SERIES/E LETTERS



SECTION B-B

SPEED TABLE ROADWAY EDGE TREATMENTS
(TYP ALL EDGES)



SECTION A-A

NOT TO SCALE

RECOMMENDED:
EL — DIVISION MANAGER — 12/22/16 — DATE

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

CITY OF MORENO VALLEY

PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION

SPEED TABLE

STANDARD PLAN
MVSI-135-0
SHEET 1 OF 1

CITY OF MORENO VALLEY

RECOMMENDED:

DIVISION MANAGER — DATE 1-6-17

APPROVED:

PUBLIC WORKS DIRECTOR/ CITY ENGINEER — DATE 1/20/17

CITY OF MORENO VALLEY

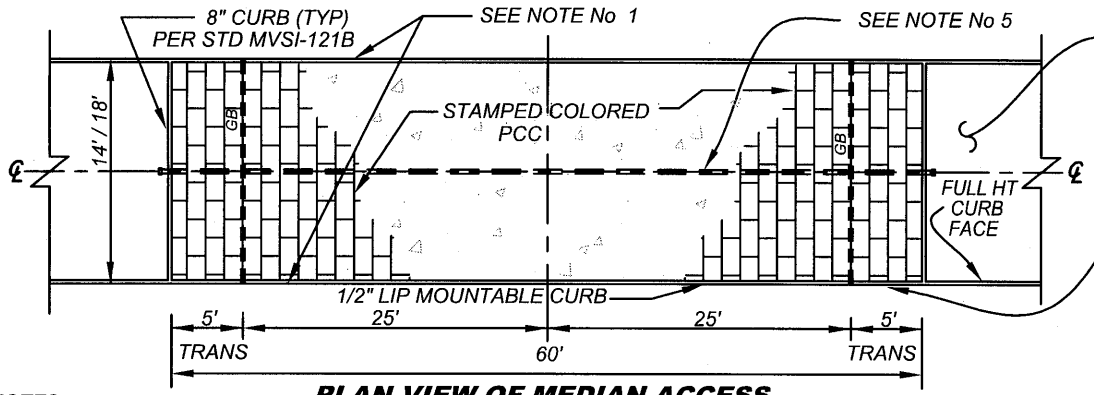
PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION

EMERGENCY VEHICLE MEDIAN ACCESS

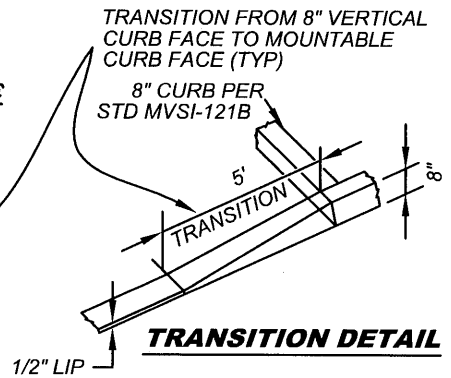
STANDARD PLAN

MVSI-140-0

SHEET 1 OF 1



PLAN VIEW OF MEDIAN ACCESS

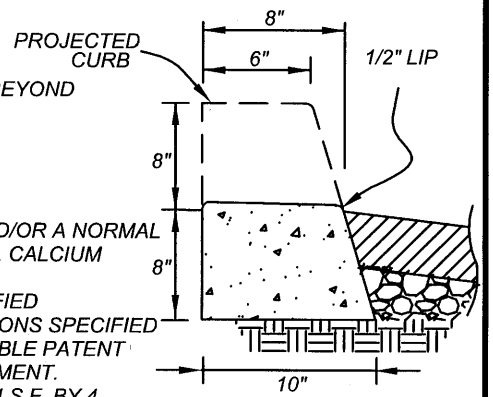


TRANSITION DETAIL

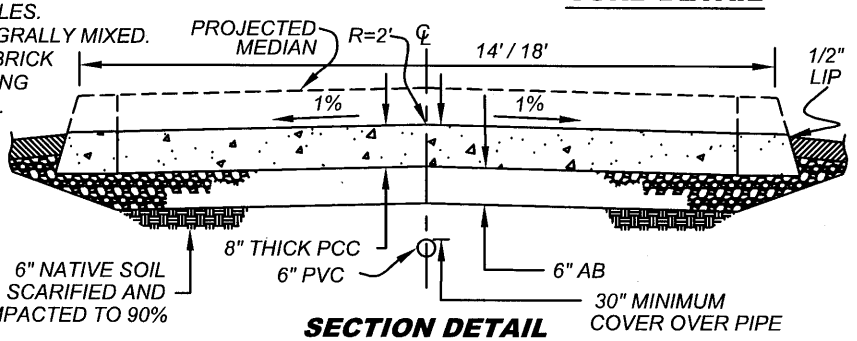
NOTES:

1.) LOCATION OF THE MEDIAN ACCESS SHOULD BE AS APPROVED BY THE TRANSPORTATION DIVISION AND IN CONSULTATION WITH THE FIRE DEPARTMENT.
2.) SEE STD MVSI-121B-0 FOR TYPE "8A" CURB.
3.) ALL LANDSCAPE, IRRIGATION, AND DRAINAGE PLANS AND DEVICES SHALL BE APPROVED BY THE CITY PRIOR TO INSTALLATION.
4.) THE LANDSCAPE PLAN SHALL MINIMIZE RUNOFF TO THE PAVEMENT.
5.) A 6" PVC CL 315 PIPE SHALL BE INSTALLED ALONG THE CENTERLINE OF THE MEDIAN, EXTENDING 6" BEYOND THE CURB/HARDSCAPE ON BOTH SIDES, AND CAPPED AT BOTH ENDS.
6.) SEE STD MVLI-561A-0 OR MVLI-561B-0 FOR SLEEVING DETAIL.
7.) MODIFICATIONS TO THIS STANDARD MAY BE MADE BY THE CITY ENGINEER.
8.) CONSTRUCT TRANSVERSE AND LONGITUDINAL WEAKENED - PLANE JOINTS IN CONCRETE PAD AT APPROXIMATELY 10' INTERVALS.
9.) CONCRETE SHALL BE CLASS 560-C-3250. AN AIR-ENTRAINING AGENT CONFORMING TO ASTM C260 AND/OR A NORMAL SET OR RETARDED SET WATER REDUCING ADMIXTURE CONFORMING WITH ASTM C494 MAY BE USED. CALCIUM CHLORIDE WILL NOT BE ALLOWED. THE SLUMP SHALL NOT EXCEED 4".
10.) THE CONTRACTOR FOR THE STAMPED CONCRETE SHALL PROVIDE EVIDENCE THAT THEY ARE QUALIFIED TO AND HAS PREVIOUSLY PRODUCED SUCH TEXTURED PAVING AND CAN COMPLY WITH THE PROVISIONS SPECIFIED HEREIN. THE CONTRACTOR SHALL ALSO STIPULATE THAT THEY WILL NOT INFRINGE ON ANY APPLICABLE PATENT RIGHTS AND WILL HOLD THE CITY HARMLESS FROM ANY DAMAGES ARISING FROM PATENT INFRINGEMENT.
11.) THE CONTRACTOR SHALL SUBMIT A SAMPLE OF THE SPECIFIED STAMPED CONCRETE A MINIMUM OF 4 S.F. BY 4 INCHES OR SHALL INDICATE TWO LOCATIONS WITHIN A 10 MILE LIMIT FROM THE CITY, WHERE THEIR PRIOR WORK OF SIMILAR STAMPED CONCRETE CAN BE OBSERVED. THE SAMPLES SHALL MEET THE APPROVAL OF THE CITY ENGINEER AND ALL WORK SHALL MATCH THE APPROVED SAMPLES.
12.) COLORING MIXTURE FOR STAMPED CONCRETE SHALL BE INTEGRALLY MIXED.
13.) THE COLORING MIXTURE FOR STAMPED CONCRETE SHALL BE "BRICK RED" No 160, BY DAVIS COLORS, OR APPROVED EQUAL, MATCHING CITY ENGINEER'S SELECTED AND APPROVED SAMPLE PATTERN. A TRANSLUCENT CURING COMPOUND SHALL BE APPLIED UNIFORMLY TO CONCRETE IMMEDIATELY AFTER FINISHING.
14.) THE CONTRACTOR SHALL DELIVER TO THE CITY ENGINEER TWO LABELS FROM THE PACKAGES CONTAINING THE SELECTED COLORING AGENT USED IN THE COURSE OF THE SPECIFIED WORK.

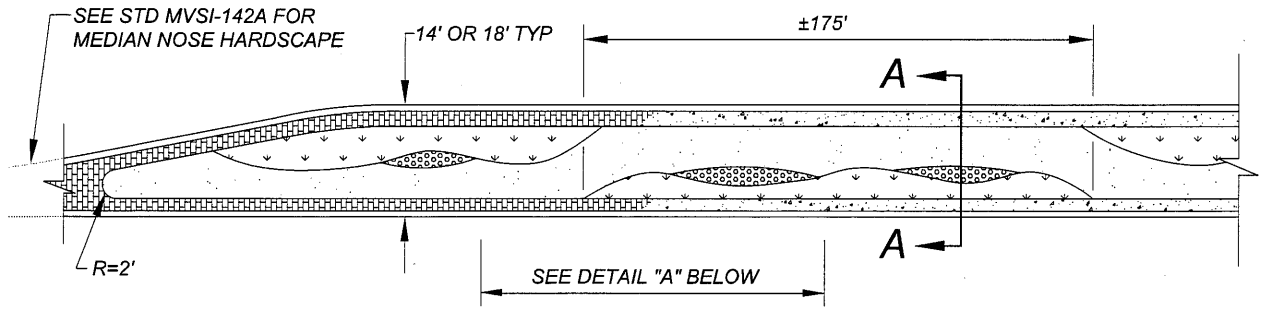
NOT TO SCALE



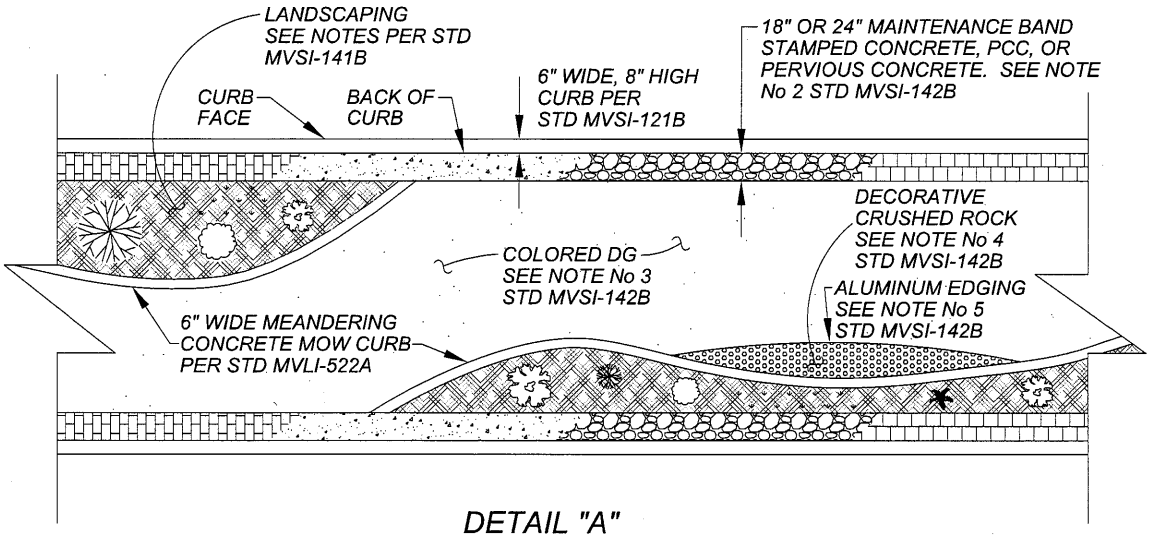
MOUNTABLE CURB DETAIL



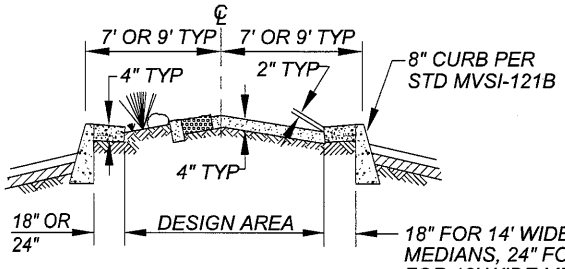
SECTION DETAIL



TYPICAL LAYOUT / MEDIAN LANDSCAPE DESIGN



DETAIL "A"



SECTION "A-A"

NOTE: SEE MVSI-141B-0 FOR MEDIAN LANDSCAPE NOTES

NOT TO SCALE

CITY OF MORENO VALLEY · DECEMBER 3, 1984

RECOMMENDED:

DIVISION MANAGER — DATE 1-6-17

APPROVED:

PUBLIC WORKS DIRECTOR / CITY ENGINEER — DATE 1/20/17

CITY OF MORENO VALLEY

PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION

MEDIAN LANDSCAPE MEANDERING DESIGN

STANDARD PLAN

MVSI-141A-0

SHEET 1 OF 2

NOTES:

1.) MAINTENANCE BAND, DECORATIVE CRUSHED ROCK, ALUMINUM EDGING, DECOMPOSED GRANITE, PER STD MVSI-142A-1 AND MVSI-142B-1.

2.) ALL PLANTS SHALL HAVE WATER CONSERVATION ATTRIBUTES AND SHALL BE CLIMATE-APPROPRIATE FOR MORENO VALLEY. IN GENERAL, PLANTS MAY BE SELECTED FROM THE INLAND EMPIRE GARDEN FRIENDLY PLANT GUIDE (WWW.IEGARDEN FRIENDLY.COM), AND AS APPROVED BY THE CITY ENGINEER.

3.) IRRIGATION SHALL BE PER THE WATER CONSERVATION IN LANDSCAPING ACT OF 2006 (ASSEMBLY BILL No 1881) - CALIFORNIA'S MODEL WATER EFFICIENT LANDSCAPE ORDINANCE. PER THE ORDINANCE, WATER CONSERVATION SHALL INCLUDE WATER EFFICIENT LANDSCAPE DESIGN, INSTALLATION, AND MAINTENANCE INCLUDING, BUT NOT LIMITED TO, PLANT SELECTION AND GROUPINGS OF PLANTS BASED ON WATER NEEDS AND CLIMATIC, GEOGRAPHICAL, OR TOPOGRAPHICAL CONDITIONS; EFFICIENT IRRIGATION SYSTEMS; PRACTICES THAT FOSTER LONG TERM WATER CONSERVATION; AND ROUTINE REPAIR AND MAINTENANCE OF IRRIGATION SYSTEMS.

4.) FOR STANDARD MEDIAN SECTION: DRAINAGE RUNOFF SHALL FLOW LONGITUDINALLY ALONG BACK OF MOW STRIP TO APPROVED DRAINAGE COLLECTION DEVICE, AS NECESSARY.

5.) PLACEMENT OF PLANTS SHALL NOT OBSTRUCT THE FLOW OF WATER TO THE EXTENT THAT IT WILL OVER FLOW CURBS.

6.) ALL LANDSCAPE, IRRIGATION, AND DRAINAGE PLANS AND DEVICES SHALL BE APPROVED BY THE CITY PRIOR TO INSTALLATION.

7.) THE LANDSCAPE AND IRRIGATION PLANS SHALL MINIMIZE RUNOFF TO THE PAVEMENT, MINIMIZE MAINTENANCE, PROMOTE WATER CONSERVATION AND ASSURE DESIGN CONTINUITY OF THE PROPOSED PROJECT WITH EXISTING MEDIANS ON THE STREET. THE LANDSCAPE PLAN SO PREPARED SHALL CONSIST OF AREAS OF CREATIVE HARDSCAPE AND PLANTING, WITH NO MORE THAN 25% HARDSCAPE. THE LANDSCAPE PLAN SHALL BE SUBJECT TO FINAL APPROVAL BY THE CITY ENGINEER.

8.) LANDSCAPING DESIGN SHALL BE PER THE CITY'S PUBLIC WORKS LANDSCAPE DESIGN GUIDELINES AND THE CITY'S STANDARD PLANS, AS FOUND ON THE CITY'S WEBSITE. BELOW ARE EXAMPLES OF APPROVED SHRUBS/PLANTS AND TREES.

EXAMPLES OF APPROVED SHRUBS/PLANTS:

COMMON NAME:	SCIENTIFIC NAME:
MEDICINAL ALOE	ALOE VERA
DEER GRASS	MUHLENBERGIA
DESERT SPOON	DASYLIRION WHEELERI
LANTANA	LANTANA
MEXICAN GRASS TREE	DASYLIRION LONGISIMUM
RED YUCCA	HESPERALOE PARVIFLORA
SILVERY CASSIA	CASSIA PHYLLODINEA
SOCIETY GARLIC	TULBAGHIA VIOLACEA
TEXAS LAUREL	SOPHORA SECUNDIFLOTRA
TEXAS SAGE	LEUCOPHYLLUM C. THUNDERCLOUD
VISTA JOJOBA	SIMMONDSIA CHINENSIS

EXAMPLES OF APPROVED TREES:

AUSTRALIAN WILLOW	GEIJERA PARVIFLORA
CALIFORNIA FAN PALM	WASHINGTON FILIFERA
CHITALPA	CHITALPA TASHKENTENIS
CRAPE MYRTLE	LAGERSTROEMIA INDICA
PALO VERDE 'DESERT MUSEUM'	CERCIDIUM
AFGHAN PINE	PINUS ELDARICA
STRAWBERRY TREE	ARBUTUS UNEDO
THORNLESS MESQUITE	PROSOPIS CHILENSIS

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984

RECOMMENDED: DIVISION MANAGER 2/26/15 DATE

APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER 2/26/15 DATE

CITY OF MORENO VALLEY

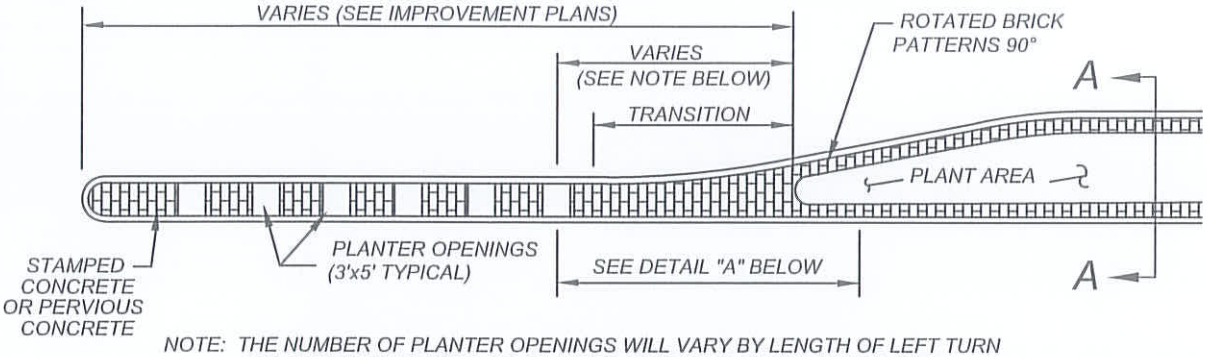
PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION

MEDIAN LANDSCAPE MEANDERING DESIGN NOTES

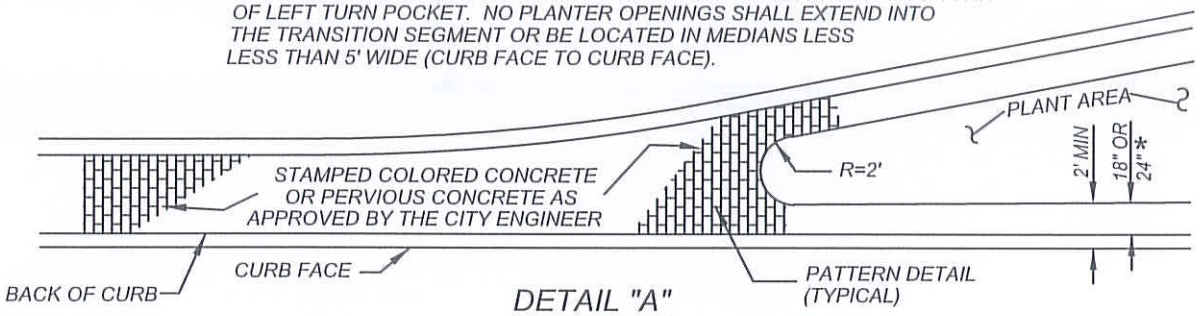
STANDARD PLAN

MVSI-141B-0

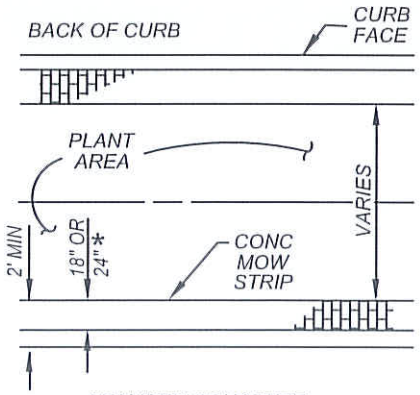
SHEET 2 OF 2

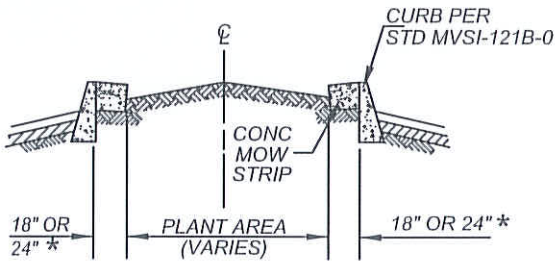


NOTE: THE NUMBER OF PLANTER OPENINGS WILL VARY BY LENGTH OF LEFT TURN OF LEFT TURN POCKET. NO PLANTER OPENINGS SHALL EXTEND INTO THE TRANSITION SEGMENT OR BE LOCATED IN MEDIANS LESS LESS THAN 5' WIDE (CURB FACE TO CURB FACE).



DETAIL "A"

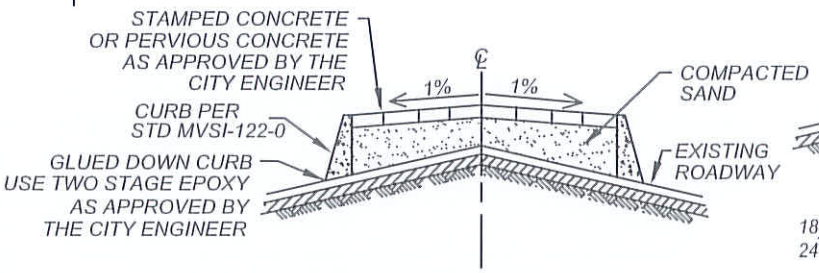




* 18" FOR 14' WIDE MEDIANS, 24" FOR 18' WIDE MEDIANS

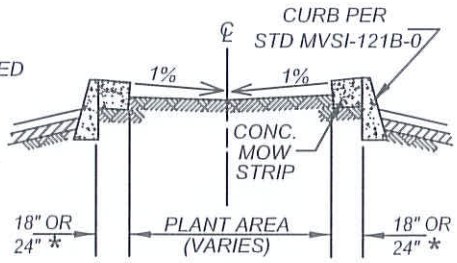
SECTION "A-A"

LANDSCAPE OPTION
STANDARD MEDIAN SECTION (SEE STD MVSI-141-0)



ALTERNATIVE SECTION "A-A"

GLUED DOWN OPTION WITHOUT LANDSCAPING



ALTERNATIVE SECTION "A-A"

LANDSCAPE OPTION
ALTERNATE MEDIAN SECTION (SEE STD MVSI-141-0)

NOTE: SEE STD MVSI-142B-0 FOR STAMPED CONCRETE NOTES.

NOT TO SCALE

RECOMMENDED:
DIVISION MANAGER — DATE 1/21/14

APPROVED:
PUBLIC WORKS DIRECTOR/ CITY ENGINEER — DATE 1/29/14

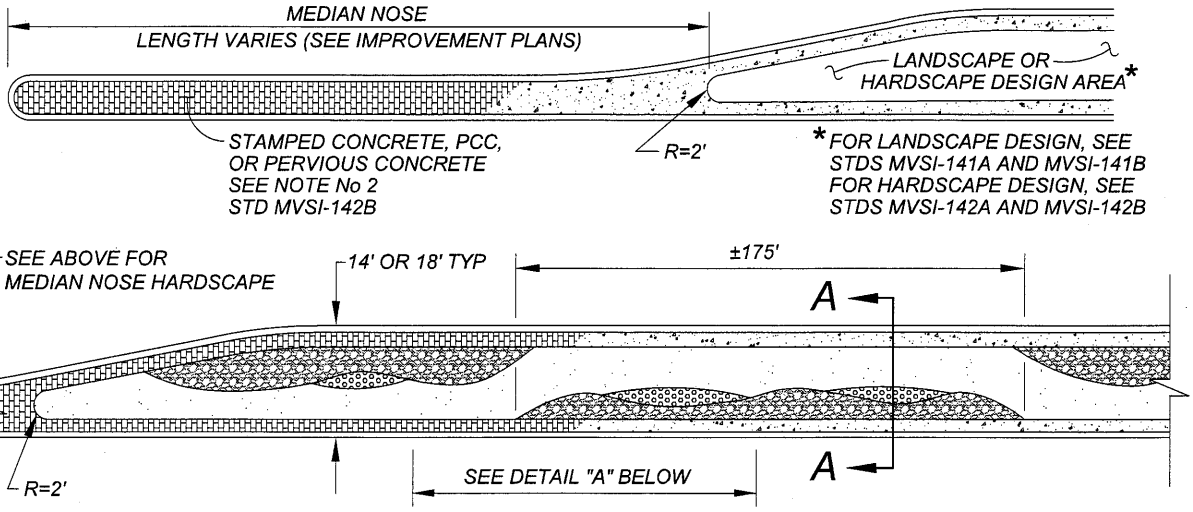
CITY OF MORENO VALLEY

PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION

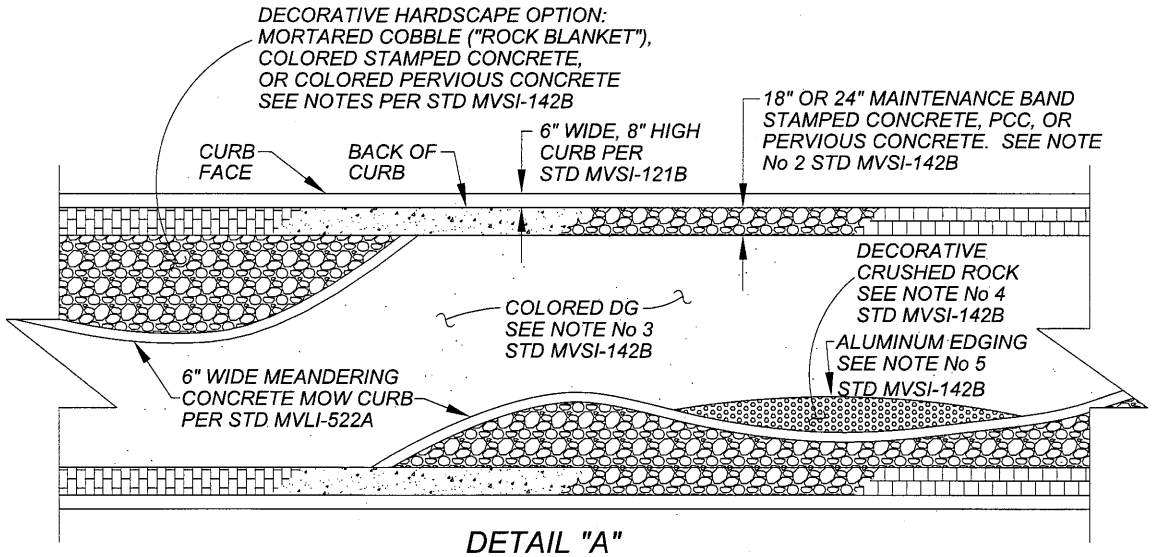
MEDIAN HARDSCAPE

STANDARD PLAN
MVSI-142A-0

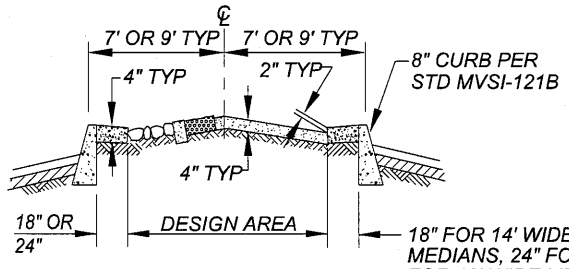
SHEET 1 OF 2



TYPICAL LAYOUT / MEDIAN HARDSCAPE DESIGN



DETAIL "A"



SECTION "A-A"

NOTE: See MVSI-142B-1 FOR MEDIAN HARDSCAPE NOTES

NOT TO SCALE

CITY OF MORENO VALLEY — DECEMBER 3, 1984

RECOMMENDED:
DIVISION MANAGER — DATE 1-6-17

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

CITY OF MORENO VALLEY

PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION

MEDIAN HARDSCAPE MEANDERING DESIGN

STANDARD PLAN
MVSI-142A-1
SHEET 1 OF 2

REVISION 1: STD REVISED TO INCLUDE A MEANDERING DESIGN

NOTES:

1.) DECORATIVE HARDSCAPE OPTION SHALL BE MORTARED COBBLE ("ROCK BLANKET"), COLORED STAMPED CONCRETE, OR COLORED PERVIOUS CONCRETE PER APPROVED PLANS. COLOR AND PATTERN SHALL VARY FROM MAINTENANCE BANDS.

2.) MAINTENANCE BANDS AND MEDIAN NOSES SHALL BE BRICK PATTERN COLORED STAMPED CONCRETE, PCC, OR PERVIOUS CONCRETE , 4" THICK, 18" WIDE FOR 14' WIDE MEDIANS, AND 24" WIDE FOR 18' WIDE MEDIANS, AND PER APPROVED PLANS. THE MAINTENANCE BAND SHALL BE STAMPED BRICK PATTERN (SEE No 8) IF REQUIRED TO MATCH THE BRICK PATTERN OF EXISTING MEDIANS ADJACENT TO THE PROJECT. IF THE MAINTENANCE BAND IS NOT REQUIRED TO MATCH EXISTING MEDIANS, THE BAND MAY BE STAMPED CONCRETE WITH A GRAY COBBLE DESIGN, A BUFF SQUARE FLAGSTONE DESIGN, OR AS APPROVED BY THE CITY ENGINEER. ALTERNATIVELY THE BAND MAY BE PCC CLASS 560-C-3250, CURED WITH WHITE PIGMENTED CURING COMPOUND OVER 90% RELATIVE COMPACTED SUBGRADE, OR PERVIOUS CONCRETE (SEE No 9), AS APPROVED BY THE CITY ENGINEER.

3.) DECOMPOSED GRANITE (DG) SHALL BE 4" THICK WITH STABILIZER. COLOR SHALL BE "WHEAT", IN CONTRAST WITH ADJACENT COLORS, OR AS OTHERWISE APPROVED. INSTALL DG OVER WATER-PERMEABLE LINER OVER 90% RELATIVE COMPACTED SUBGRADE. AVAILABLE FROM DECORATIVE STONE SOLUTIONS, (800) 699-1878.

4.) DECORATIVE CRUSHED ROCK SHALL BE VARIABLE DIAMETER (3/8" MIN, 1" MAX) AND PLACED 4" THICK FROM DECORATIVE STONE SOLUTIONS, OR APPROVED EQUAL. COLOR SHALL BE "APACHE BROWN", IN CONTRAST WITH ADJACENT COLORS, OR AS OTHERWISE APPROVED. INSTALL CRUSHED ROCK OVER WATER-PERMEABLE LINER OVER 90% RELATIVE COMPACTED SUBGRADE.

5.) CLEANLINE ALUMINUM EDGING 1/8" x 5-1/2" MILL FINISH (NATURAL ALUMINUM) FROM PERMALOC CORPORATION, OR APPROVED EQUAL, SHALL BE USED TO SEPARATE THE ROCK FROM THE DG AREA. TOP OF EDGING SHALL BE FLUSH WITH TOP OF ROCK.

6.) 6" WIDE, 6" DEEP MEANDERING CONCRETE MOW CURB SHALL BE PER STD MVLI-522A-0.

7.) DECORATIVE HARDSCAPE OPTION MORTARED COBBLE ("ROCK BLANKET") SHALL USE ROCK THAT IS CLEAN, SMOOTH, AND OBTAINED FROM A SINGLE SOURCE. ROCK SHALL BE LIGHT GREY GRANITE COBBLE FROM KRC ROCK, OR APPROVED EQUAL, AND SHALL APPROXIMATELY MATCH IN COLOR, SIZE AND SHAPE OF ROCK BLANKETS IN THE GENERAL VICINITY. ROCK SHALL CONFORM TO THE FOLLOWING GRADING:

ROCK SIZE (INCHES)	PERCENTAGE
12	10
10	40
8	40
6	10

A SAMPLE OF THE ROCK SHALL BE SUBMITTED TO THE CITY ENGINEER FOR APPROVAL PRIOR TO DELIVERY OF THE ROCK TO THE PROJECT SITE. THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH A 6' x 6' TEST PANEL OF THE ROCK BLANKET FOR APPROVAL PRIOR TO INSTALLING THE ROCK BLANKET IN PLACE. ALL OTHER MATERIALS, SITE PREPARATION, AND PLACEMENT SHALL BE PER APPROVED PROJECT PLANS, PROJECT BID DOCUMENTS, AND PER SECTION 20-12 'ROCK BLANKET' OF THE CALTRANS STANDARD SPECIFICATIONS, LATEST VERSION.

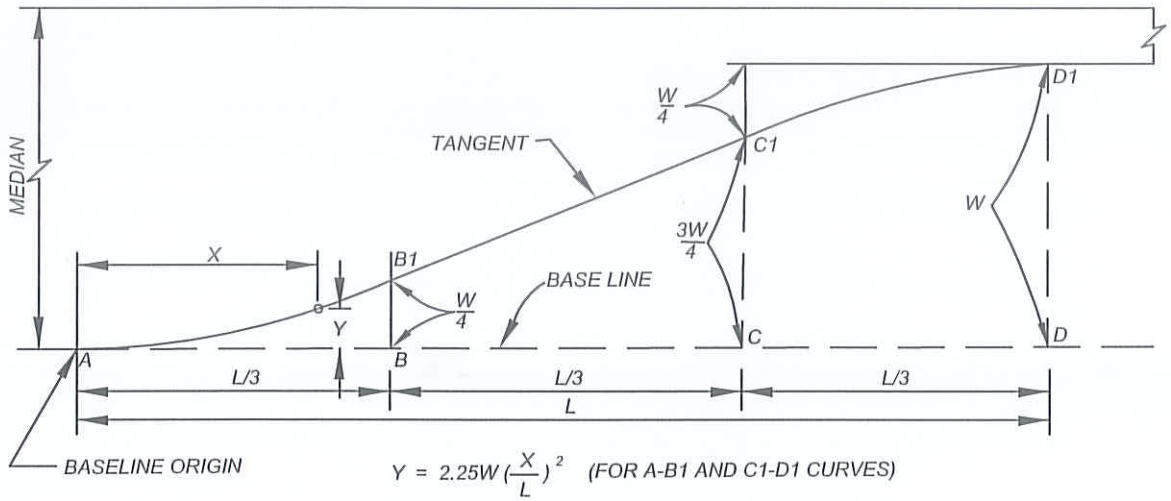
8.) DECORATIVE HARDSCAPE OPTION COLORED STAMPED CONCRETE SHALL BE INSTALLED BY A QUALIFIED CONTRACTOR. THE CONTRACTOR SHALL SUBMIT FOR APPROVAL A SAMPLE OF THE STAMPED CONCRETE A MINIMUM OF 4 SF BY 4" THICK, OR SHALL INDICATE TWO LOCATIONS WITHIN A 10 MILE LIMIT FROM THE CITY WHERE THEIR PREVIOUS WORK CAN BE OBSERVED. CONCRETE WORK SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF SECTIONS 200, 201, AND 303 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORK CONSTRUCTION, LATEST EDITION, AND AS APPROVED BY THE CITY ENGINEER. STAMPED CONCRETE SHALL BE A MINIMUM OF 4" THICK. CONCRETE MIX SHALL BE PROPORTIONED USING 560-C-3250. AN AIR-ENTRAINING AGENT CONFORMING TO ASTM C260 AND/OR A NORMAL SET OR RETARDED SET WATER REDUCING ADMIXTURE CONFORMING WITH ASTM C494 MAY BE USED. CALCIUM CHLORIDE WILL NOT BE ALLOWED. THE SLUMP SHALL NOT EXCEED 4". THE COLORING MIXTURE FOR THE STAMPED CONCRETE SHALL BE INTEGRALLY MIXED. THE COLORING MIXTURE FOR THE STAMPED CONCRETE SHALL BE AS SPECIFIED ON THE APPROVED PLANS AND AS APPROVED BY THE CITY ENGINEER. A TRANSLUCENT CURING COMPOUND SHALL BE APPLIED UNIFORMLY TO THE CONCRETE IMMEDIATELY AFTER FINISHING. THE CONTRACTOR SHALL DELIVER TO THE CITY ENGINEER TWO LABELS FROM THE PACKAGES CONTAINING THE SELECTED COLORING AGENT USED IN THE COURSE OF THE SPECIFIED WORK. THE CONTRACTOR SHALL USE THE STAMPING TOOL SPECIFIED ON THE PLANS AND/OR AS APPROVED BY THE CITY ENGINEER.

9.) DECORATIVE HARDSCAPE OPTION COLORED PERVIOUS CONCRETE SHALL MEET THE REQUIREMENTS FOR PERVIOUS CONCRETE AND SUBGRADE OF SECTIONS 303-8 AND 201-1.1.6 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION. COLOR PER APPROVED PLANS.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3,1984	RECOMMENDED: DIVISION MANAGER 2/26/15 DATE APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER 2/26/15 DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION **MEDIAN HARDSCAPE MEANDERING DESIGN NOTES** STANDARD PLAN **MVSI-142B-1** SHEET 2 OF 2

REVISION 1: STD REVISED TO INCLUDE A MEANDERING DESIGN



$Y = 2.25W\left(\frac{X}{L}\right)^2$ (FOR A-B1 AND C1-D1 CURVES)

L = LENGTH OF TAPER
W = MAXIMUM OFFSET DISTANCE FROM BASELINE
X = DISTANCE ALONG BASELINE FROM ORIGIN
Y = OFFSET FROM BASELINE

L	DISTANCE X											
60'	5'	10'	15'	20'	25'	30'	35'	40'	45'	50'	55'	60'
72'	6'	12'	18'	24'	30'	36'	42'	48'	54'	60'	66'	72'
90'	7.5'	15'	22.5'	30'	37.5'	45'	52.5'	60'	67.5'	75'	82.5'	90'
120'	10'	20'	30'	40'	50'	60'	70'	80'	90'	100'	110'	120'
180'	15'	30'	45'	60'	75'	90'	105'	120'	135'	150'	165'	180'
W	**OFFSET Y**											
10'	0.16'	0.62'	1.41'	2.50'	3.75'	5.00'	6.25'	7.50'	8.59'	9.38'	9.84'	10.00'
11'	0.17'	0.69'	1.55'	2.75'	4.13'	5.50'	6.88'	8.25'	9.45'	10.31'	10.83'	11.00'
12'	0.19'	0.75'	1.69'	3.00'	4.50'	6.00'	7.50'	9.00'	10.31'	11.25'	11.81'	12.00'
22'	0.34'	1.38'	3.09'	5.50'	8.25'	11.00'	13.75'	16.50'	18.91'	20.63'	21.66'	22.00'
24'	0.38'	1.50'	3.38'	6.00'	9.00'	12.00'	15.00'	18.00'	20.63'	22.50'	23.63'	24.00'

NOTES:

1.) TO DETERMINE OFFSET DISTANCE FOR ANY LENGTH OF TAPER USE THE FORMULA $Y=2.25W(X/L)^2$ FOR THE PORTIONS A-B1 AND C1-D1 WHICH ARE PARABOLIC CURVES. THE PORTION B1-C1 IS A TANGENT. WHEN THE BASE LINE IS CURVED, THE OFFSETS ARE APPLIED TO THE CURVED BASE LINE, AND B1-C1 IS NO LONGER A TANGENT.

NOT TO SCALE

CITY OF MORENO VALLEY · DECEMBER 3, 1984

RECOMMENDED: _____ 1/21/14
DIVISION MANAGER — DATE

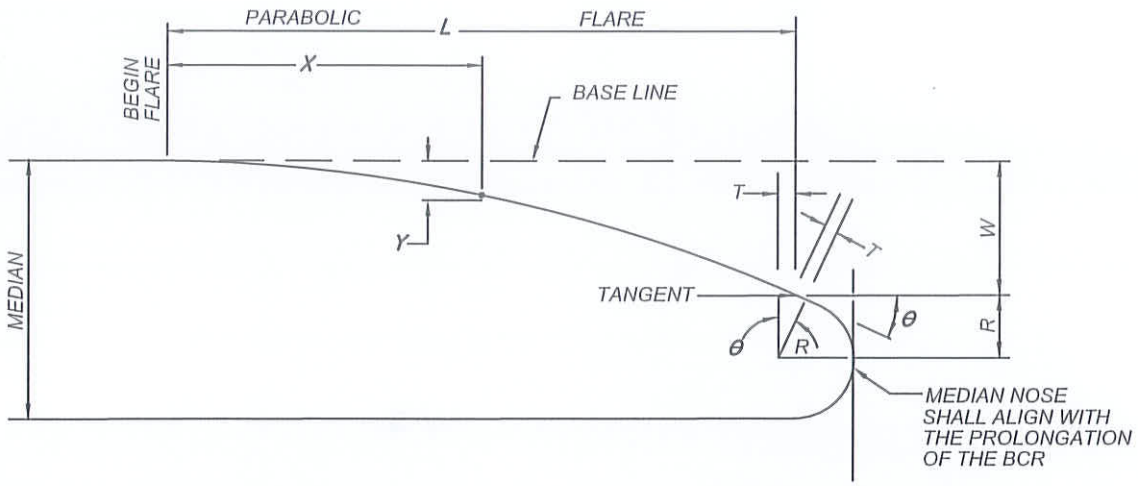
APPROVED: _____ 1/29/14
PUBLIC WORKS DIRECTOR / CITY ENGINEER — DATE

CITY OF MORENO VALLEY

PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION

MEDIAN TAPER

STANDARD PLAN
MVSI-143-0
SHEET 1 OF 1



$$Y = W\left(\frac{X}{L}\right)^2$$

L=LENGTH OF FLARE IN FEET, PER PLAN
W=MAXIMUM OFFSET DISTANCE IN FEET, PER PLAN
X=DISTANCE ALONG BASELINE IN FEET
Y=OFFSET FROM BASELINE IN FEET

$$\text{TAN}\ \theta = \frac{2W}{L}$$

$$T = R\ \text{TAN}\frac{\theta}{2}$$

T=TANGENT
R=RADIUS OF NOSE IN FEET
θ= MAXIMUM FLARE DEFLECTION ANGLE

OFFSET Y

L \ X	10'	15'	20'	25'	30'	40'	45'	50'	60'	70'	75'	80'	90'	100'

FOR W/L=1:5

25'	0.80'	1.80'	3.20'	5.00'										
50'	0.40'	0.90'	1.60'	2.50'	3.60'	6.40'	8.10'	10.00'						

FOR W/L=1:10

50'	0.20'	0.45'	0.80'	1.25'	1.80'	3.20'	4.05'	5.00'						
100'	0.10'	0.23'	0.40'	0.63'	0.90'	1.60'	2.03'	2.50'	3.60'	4.90'	5.63'	6.40'	8.10'	10.00'

FOR W/L=1:15

45'	0.15'	0.33'	0.59'	0.93'	1.33'	2.37'	3.00'							
75'	0.09'	0.20'	0.36'	0.56'	0.80'	1.42'	1.80'	2.22'	3.20'	4.36'	5.00'			
90'	0.07'	0.17'	0.30'	0.46'	0.67'	1.19'	1.50'	1.85'	2.67'	3.63'	4.17'	4.74'	6.00'	

NOTES:

1.) IF STATION OF RADIUS POINT IS NOT GIVEN ON PLAN, TANGENT , T, MAY BE IGNORED. PLANS SHALL SPECIFY L AND W.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984

RECOMMENDED: DIVISION MANAGER — DATE 1/21/14

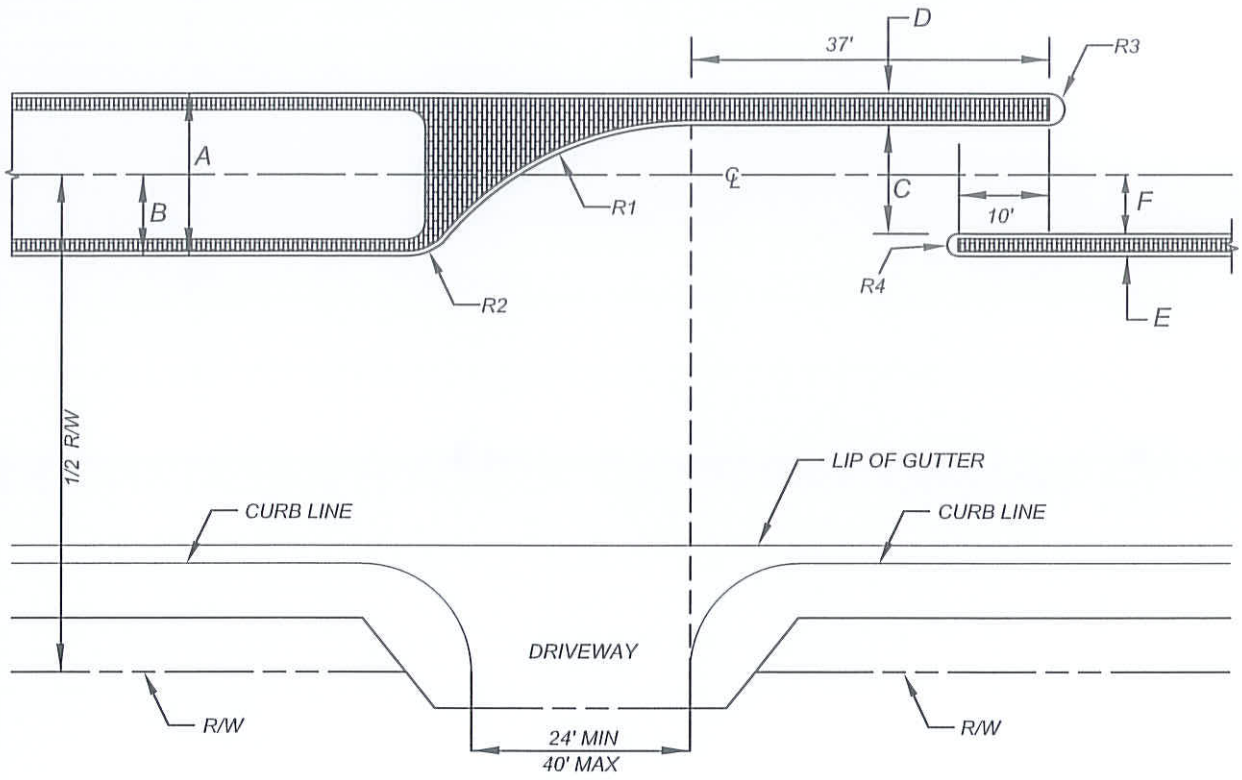
APPROVED: PUBLIC WORKS DIRECTOR/ CITY ENGINEER — DATE 1/29/14

CITY OF MORENO VALLEY

PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION

MEDIAN FLARE

STANDARD PLAN
MVSI-144-0
SHEET 1 OF 1



PLAN VIEW

FULL R/W	1/2 R/W	A	B	C	D	E	F
110'	55'	18'	9'	12'	3.5'	2.5'	6.5'
110' *	55' *	14'	7'	11'	1.5'	1.5'	5.5'
114'	57'	18'	9'	12'	3.5'	2.5'	6.5'
120'	60'	14'	7'	11'	1.5'	1.5'	5.5'
130'	65'	14'	7'	11'	1.5'	1.5'	5.5'
134'	67'	18'	9'	12'	3.5'	2.5'	6.5'

CURVE DATA

CURVE	RADIUS	DELTA	LENGTH
R1	35.00'	51°00'00"	31.27'
R2	6.00'	40°00'00"	4.23'
R3	1.75'	180°00'00"	5.50'
R4	1.25'	180°00'00"	3.93'

*** PERRIS BOULEVARD ONLY**

NOTES:

1.) TO BE USED, AS APPLICABLE, WITH STDS MVSI-101A-0 & MVSI-101B-0, MVSI-102A-0 & MVSI-102B-0, MVSI-103A-0 ~ MVSI-103C-0 AND MVSI-121B-0. FOR LANDSCAPED MEDIAN REFER TO STDS MVSI-141-0, MVSI-142A-0, AND MVSI-142B-0.

2.) FOR COMMERCIAL DRIVEWAY APPROACH REFER TO STDS MVSI-112A-0 ~ MVSI-112D-0.

3.) SIGNAGE PER THE CA MUTCD LATEST EDITION.

4.) TRUCK TURNING DIAGRAMS SHALL BE SUBMITTED TO SHOW NO CONFLICT WITH DRIVEWAY OR MEDIAN STRUCTURES.

NOT TO SCALE

CITY OF MORENO VALLEY · DECEMBER 3, 1984

RECOMMENDED:
DIVISION MANAGER — DATE 1/21/14

APPROVED:
PUBLIC WORKS DIRECTOR / CITY ENGINEER — DATE 1/29/14

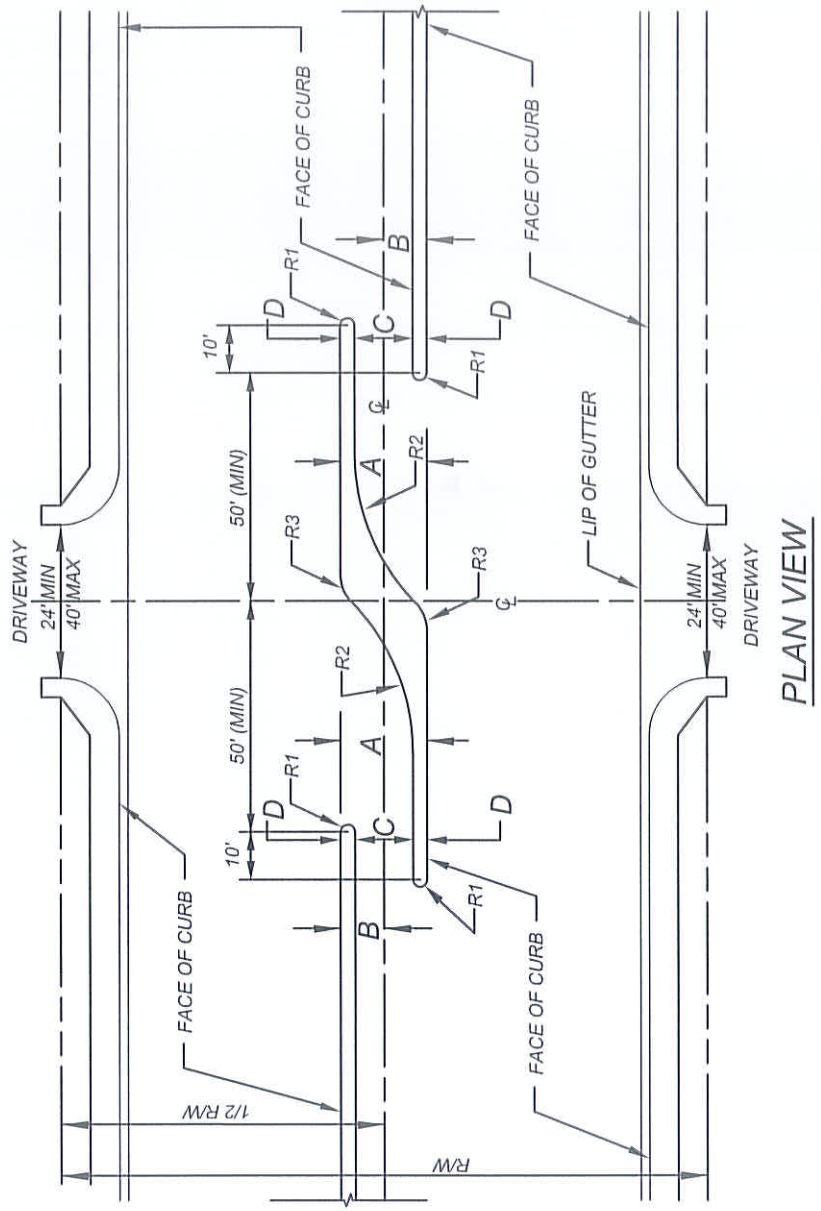
CITY OF MORENO VALLEY

PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION

RESTRICTED LEFT TURN MEDIAN OPENING

STANDARD PLAN
MVSI-145-0

SHEET 1 OF 1



PLAN VIEW

CURVE DATA									
		RADIUS		DELTA		LENGTH			
	WIDTH A	14'	18'	14'	18'	14'	18'		
	R1	.75'	1.5'	180°	180°	2.35'	4.71'		
	R2	45'		39°	45°	30.95'	35.34'		
	R3	8'		44°	39°	6.17'	5.5'		

* PERRIS BOULEVARD ONLY

FULL R/W	½ R/W	A	B	C	D		
110'	55'	18'	9'	12'	3'		
110' *	55' *	14'	7'	11'	1.5'		
114'	57'	18'	9'	12'	3'		
120'	60'	14'	7'	11'	1.5'		
130'	65'	14'	7'	11'	1.5'		
134'	67'	18'	9'	12'	3'		

NOTES:

1.) TO BE USED, AS APPLICABLE, WITH STDS MVSI-101A-0, MVSI-101B-0, MVSI-102A-0, MVSI-102B-0, MVSI-103A-0 ~ MVSI-103C-0, MVSI-121A-0 AND MVSI-121B-0. FOR LANDSCAPED MEDIANS REFER TO STDS MVSI-141-0, MVSI-142A-0 AND MVSI-142B-0.

2.) FOR COMMERCIAL DRIVEWAY APPROACH REFER TO STDS MVSI-112A-0 ~ MVSI-112D-0.

3.) SIGNAGE PER THE CA MUTCD LATEST EDITION.

4.) TRUCK TURNING DIAGRAMS SHALL BE SUBMITTED TO SHOW NO CONFLICT WITH DRIVEWAY OR MEDIAN STRUCTURES.

NOT TO SCALE

CITY OF MORENO VALLEY · DECEMBER 3, 1984

RECOMMENDED:
DIVISION MANAGER — DATE 1/21/14

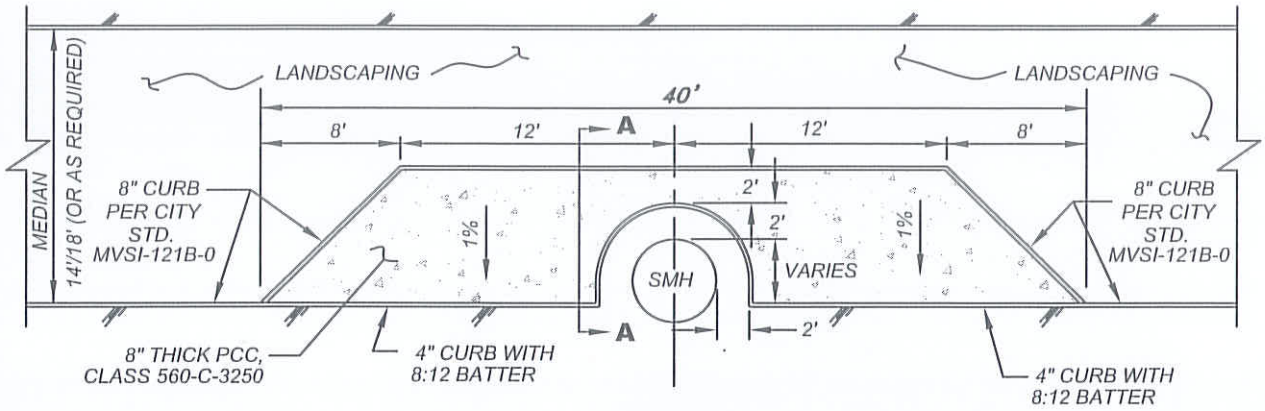
APPROVED:
PUBLIC WORKS DIRECTOR / CITY ENGINEER — DATE 1/29/14

CITY OF MORENO VALLEY

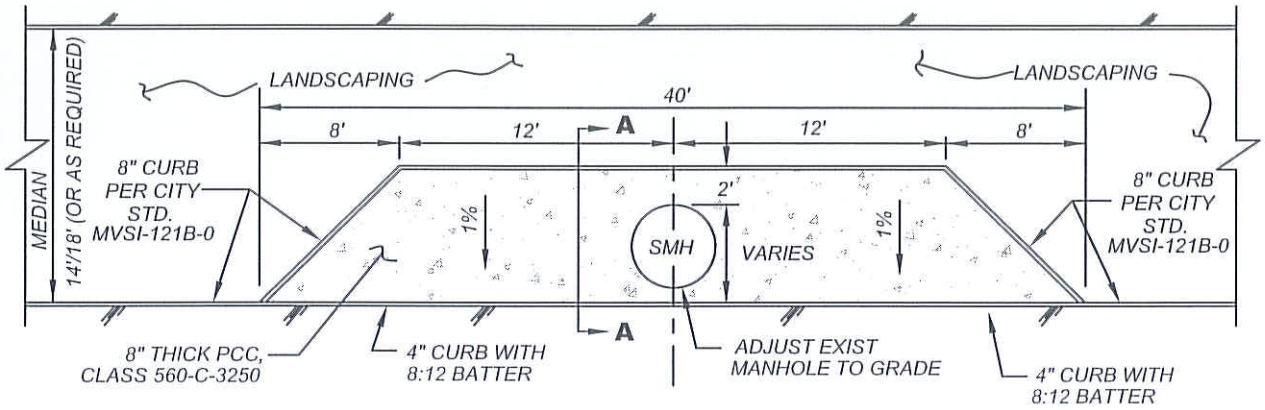
PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION

ALIGNED OPPOSITE DRIVEWAYS RESTRICTED LEFT TURN MEDIAN

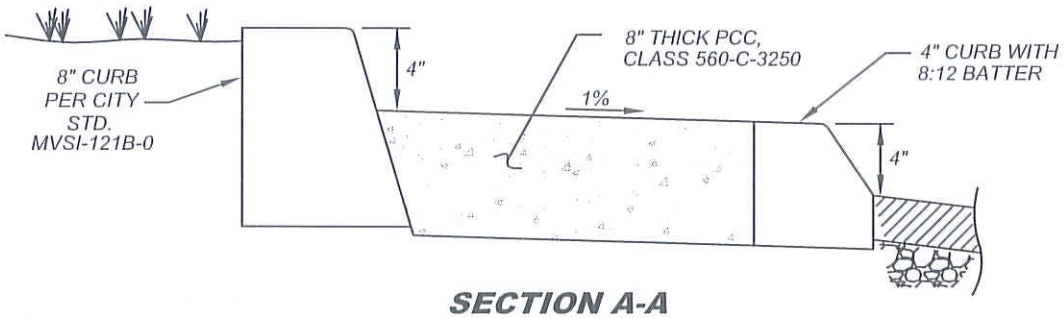
STANDARD PLAN
MVSI-146-0
SHEET 1 OF 1



CASE I



CASE II



SECTION A-A

NOT TO SCALE

CITY OF MORENO VALLEY

PUBLIC WORKS DEPARTMENT - LAND DEVELOPMENT DIVISION

RECOMMENDED:
DIVISION MANAGER — DATE 11/21/14

APPROVED:
PUBLIC WORKS DIRECTOR / CITY ENGINEER — DATE 1/29/14

MANHOLE/CURB CONFLICT WITH MEDIAN ACCESS

STANDARD PLAN
MVSI-147A-0

SHEET 1 OF 2

NOTES:

1.) SEE STD. MVSI-121B-0 FOR TYPE "8A" CURB.

2.) ALL LANDSCAPE, IRRIGATION, AND DRAINAGE PLANS AND DEVICES SHALL BE APPROVED BY THE CITY PRIOR TO INSTALLATION.

3.) THE LANDSCAPE PLAN SHALL MINIMIZE RUNOFF TO THE PAVEMENT.

4.) MODIFICATIONS TO THIS STANDARD MAY BE MADE BY THE CITY ENGINEER.

5.) CONSTRUCT TRANSVERSE AND LONGITUDINAL WEAKENED - PLANE JOINTS IN CONCRETE PAD AT APPROXIMATELY 10' INTERVALS.

6.) CONCRETE SHALL BE CLASS 560-C-3250. AN AIR-ENTRAINING AGENT CONFORMING TO ASTM C260 AND/OR A NORMAL SET OR RETARDED SET WATER REDUCING ADMIXTURE CONFORMING WITH ASTM C494 MAY BE USED. CALCIUM CHLORIDE WILL NOT BE ALLOWED. THE SLUMP SHALL NOT EXCEED 4".

7.) THE CONTRACTOR FOR THE STAMPED CONCRETE SHALL PROVIDE CONCLUSIVE PROOF THAT THEY ARE QUALIFIED TO AND HAS PREVIOUSLY PRODUCED SUCH TEXTURED PAVING AND CAN COMPLY WITH THE PROVISIONS SPECIFIED HEREIN. THE CONTRACTOR SHALL ALSO STIPULATE THAT THEY WILL NOT INFRINGE ON ANY APPLICABLE PATENT RIGHTS AND WILL HOLD THE CITY HARMLESS FROM ANY DAMAGES ARISING FROM PATENT INFRINGEMENT.

8.) THE CONTRACTOR SHALL SUBMIT A SAMPLE OF THE SPECIFIED STAMPED CONCRETE A MINIMUM OF 4 S.F. BY 4 INCHES OR SHALL INDICATE TWO LOCATIONS WITHIN A 10 MILE LIMIT FROM THE CITY, WHERE THEIR PRIOR WORK OF SIMILAR STAMPED CONCRETE CAN BE OBSERVED. THE SAMPLES SHALL MEET THE APPROVAL OF THE CITY ENGINEER AND ALL WORK SHALL MATCH THE APPROVED SAMPLES.

9.) THE COLORING MIXTURE FOR THE STAMPED CONCRETE SHALL BE INTEGRALLY MIXED.

10.) THE COLORING MIXTURE FOR THE STAMPED CONCRETE SHALL BE "BRICK RED" NO. 160, BY DAVIS COLORS, OR APPROVED EQUAL, MATCHING THE CITY ENGINEER'S SELECTED AND APPROVED SAMPLE PATTERN. A TRANSLUCENT CURING COMPOUND SHALL BE APPLIED UNIFORMLY TO THE CONCRETE IMMEDIATELY AFTER FINISHING.

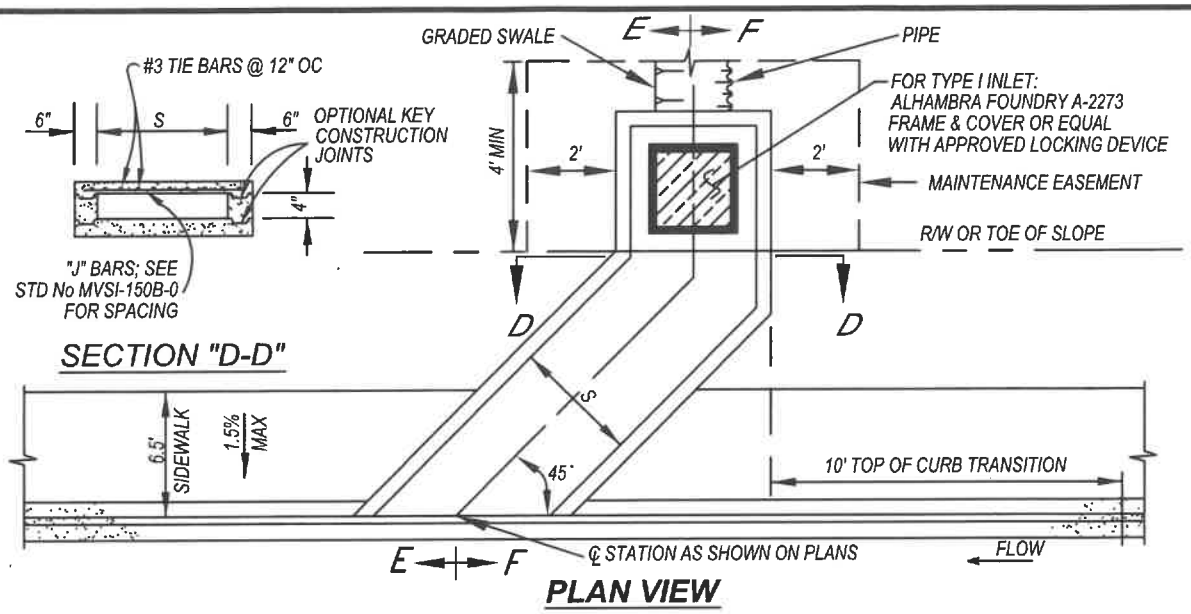
11.) THE CONTRACTOR SHALL DELIVER TO THE CITY ENGINEER (FOR APPROVAL PRIOR TO INSTALLATION) TWO LABELS FROM THE PACKAGES CONTAINING THE SELECTED COLORING AGENT USED IN THE COURSE OF THE SPECIFIED WORK.

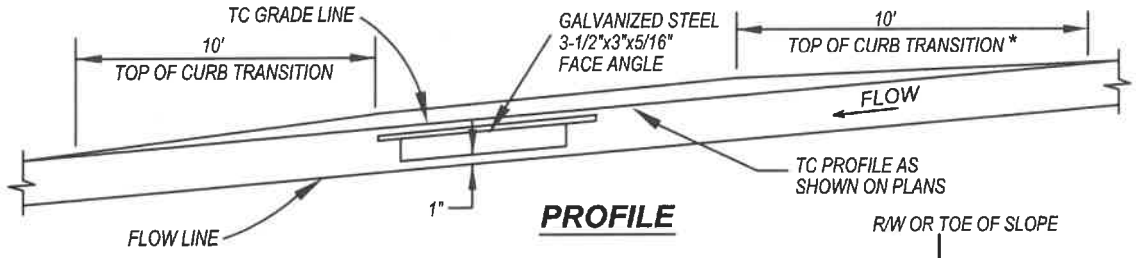
12.) FOR CASE I, MH IN CURB LINE, THE CONTRACTOR SHALL CONSTRUCT 4" HIGH CURB AROUND MANHOLE RIM WITH A 2' OFFSET

13.) FOR CASE II, MH WITHIN MEDIAN, THE CONTRACTOR SHALL RAISE MANHOLE RIM TO PROPOSED GRADE OF MEDIAN HARDSCAPE.

NOT TO SCALE

CITY OF MORENO VALLEY · DECEMBER 3, 1984	RECOMMENDED: DIVISION MANAGER 11/21/14 DATE APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER 12/29/14 DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - LAND DEVELOPMENT DIVISION **MANHOLE/CURB CONFLICT WITH MEDIAN ACCESS**	STANDARD PLAN **MVSI-147B-0** SHEET 2 OF 2

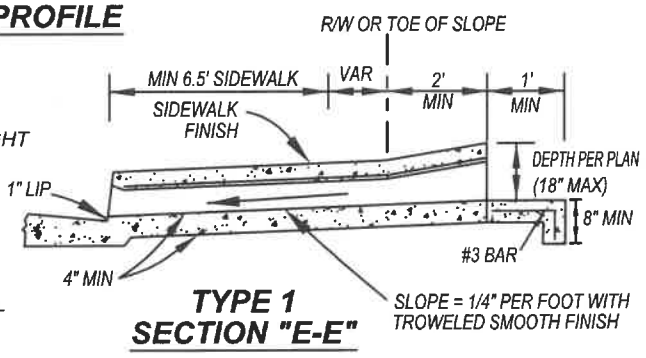


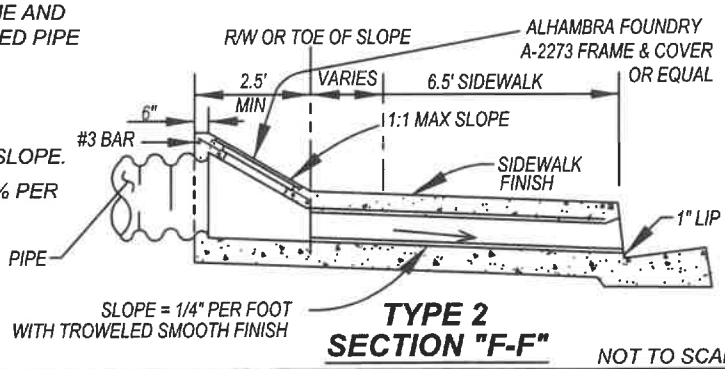


NOTES:

1) SPAN "S" AND HEIGHT OF OPENING AND CURB FACE HEIGHT AT CULVERT SHALL BE NOTED ON PLANS.
2) SEE STD PLAN No MVSI-150B FOR DETAILS AND NOTES.
3) CONCRETE SHALL BE CLASS 560-C-3250.
4) FACE ANGLE SHALL BE ANCHORED BY FULL PENETRATION WITH A 3-5/8" x 6-3/8" STEEL STUD OR BUTT WELD.
5) UNLESS OTHERWISE SPECIFIED, STANDARD FRAME AND COVER SHALL BE ALHAMBRA FOUNDRY GALVANIZED PIPE OR APPROVED EQUAL.
6) 1 INCH STEEL CLEARANCE MINIMUM FROM FACE OF CONCRETE.
7) TOP OF INLET STRUCTURE TO MATCH ADJACENT SLOPE.
8) SIDEWALK CROSS SLOPE SHALL NOT EXCEED 1.5% PER ADA REQUIREMENTS.

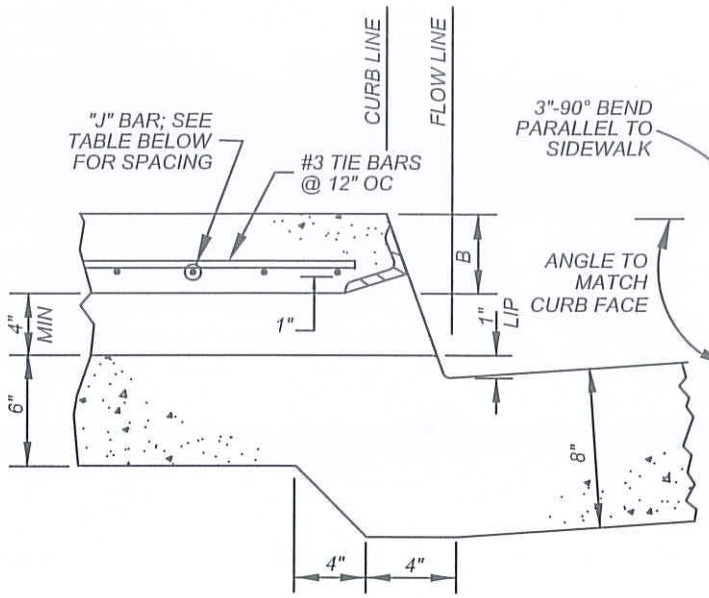
TOP OF CURB TRANSITION IS REQUIRED FOR * 6" CURBS OR 8" CURBS WITH S > 4.0'.



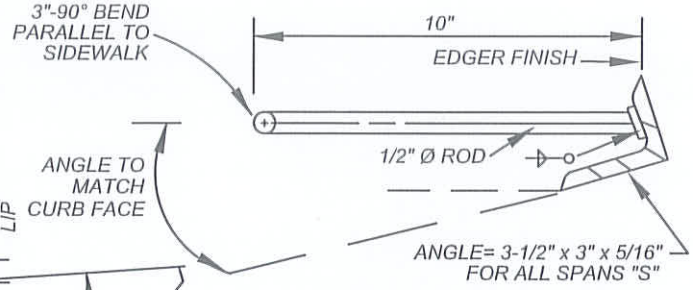


NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: Henry Ngo 8/14/19 DIVISION MANAGER DATE APPROVED: 10/11/19 PUBLIC WORKS DIRECTOR / CITY ENGINEER DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION **PARKWAY CULVERT**
		STANDARD PLAN **MVSI-150A-0** SHEET 1 OF 2



OUTLET DETAIL



LENGTH OF CURB OPENING	NO. OF ANCHORS
3' OR LESS	2
3'-0" TO 6'-0"	3

FACE ANGLE ANCHOR DETAIL

SPAN "S"	B	STEEL SCHEDULE J-BARS		
		SIZE	SPACING C-C	LENGTH
2'-0"	3"	#3	7"	2'-9"
2'-6"	3"	#3	7"	3'-3"
3'-0"	3"	#3	7"	3'-9"
3'-6"	3"	#3	6"	4'-3"
4'-0"	3"	#3	5"	4'-9"
4'-6"	4"	#3	6-1/2"	5'-3"
5'-0"	4"	#3	5"	5'-9"
5'-6"	4"	#3	4"	6'-3"
6'-0"	4"	#3	3-1/2"	6'-9"

STEEL SCHEDULE TABLE

NOTES:

1.) FLOOR OF PARKWAY CULVERT SHALL HAVE A SMOOTH TROWELED FINISH.

2.) ALL EXPOSED METAL SHALL BE GALVANIZED AFTER FABRICATION.

3.) HEIGHT OF CURB OPENING FOR PARKWAY CULVERT WILL VARY WITH TYPE OF CURB.

4.) SPAN "S" AND HEIGHT OF CURB OPENING WILL BE DETERMINED FROM THE REQUIRED HYDRAULIC CAPACITY AND LIMITED TO THE DIMENSION IN STEEL SCHEDULE TABLE.

5.) REINFORCING STEEL SHALL BE 1" CLEAR TO INSIDE OF CULVERT UNLESS OTHERWISE SPECIFIED.

6.) CONSTRUCT PCC WALK AS SPECIFIED ON PLAN. THE CONTRACT PRICE PAID FOR PCC SIDEWALK ITEM SHALL INCLUDE WALK CONSTRUCTED IN CONJUNCTION WITH PARKWAY CULVERT.

7.) TYPE, DIMENSIONS, AND ELEVATIONS PER IMPROVEMENT PLAN.

NOT TO SCALE

CITY OF MORENO VALLEY · DECEMBER 3, 1984

RECOMMENDED: _____ DIVISION MANAGER — DATE 1/21/14

APPROVED: _____ PUBLIC WORKS DIRECTOR / CITY ENGINEER — DATE 1/29/14

CITY OF MORENO VALLEY

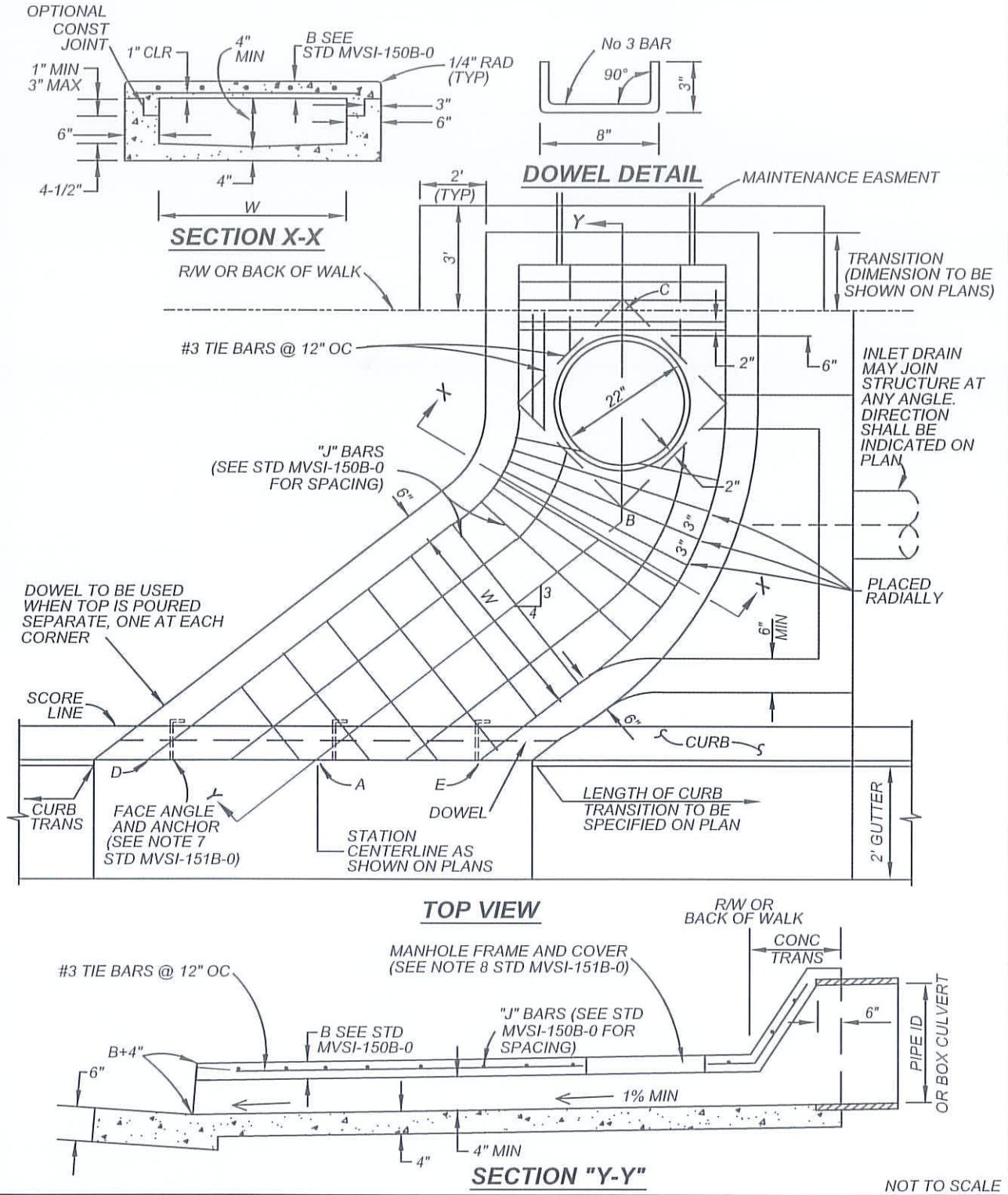
PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION

PARKWAY CULVERT DETAILS AND NOTES

STANDARD PLAN

MVSI-150B-0

SHEET 2 OF 2



CITY OF MORENO VALLEY
DECEMBER 3, 1984

RECOMMENDED:
DIVISION MANAGER — DATE 1/21/14

APPROVED:
PUBLIC WORKS DIRECTOR / CITY ENGINEER — DATE 1/29/14

CITY OF MORENO VALLEY

PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION

SIDEWALK OUTLET STRUCTURE

STANDARD PLAN
MVSI-151A-0

SHEET 1 OF 2

NOTES:

1.) CONCRETE SHALL BE CLASS 560-C-3250 PCC, CURED WITH WHITE PIGMENTED CURING COMPOUND.

2.) THE SURFACE OF ALL EXPOSED CONCRETE SHALL CONFORM IN SLOPE, GRADE, FINISH, AND SCORING TO EXISTING CURB, GUTTER AND WALK ADJACENT TO THE STRUCTURE.

3.) CURVATURE OF CONCRETE SURFACE SHALL BE SHAPED BY CURVED FORMS AND SHALL NOT BE SHAPED BY PLASTERING.

4.) THE INVERT OF THE STRUCTURE SHALL BE GIVEN A STEEL TROWELED FINISH AND CONSTRUCTED ON A STRAIGHT GRADE FROM THE INLET INVERT THROUGH POINT B TO POINT A.

5.) DIMENSIONS (UNLESS OTHERWISE INDICATED ON THE PROJECT PLANS):

AB	=	5'
BC	=	3'
DE	=	5'
W	=	3'

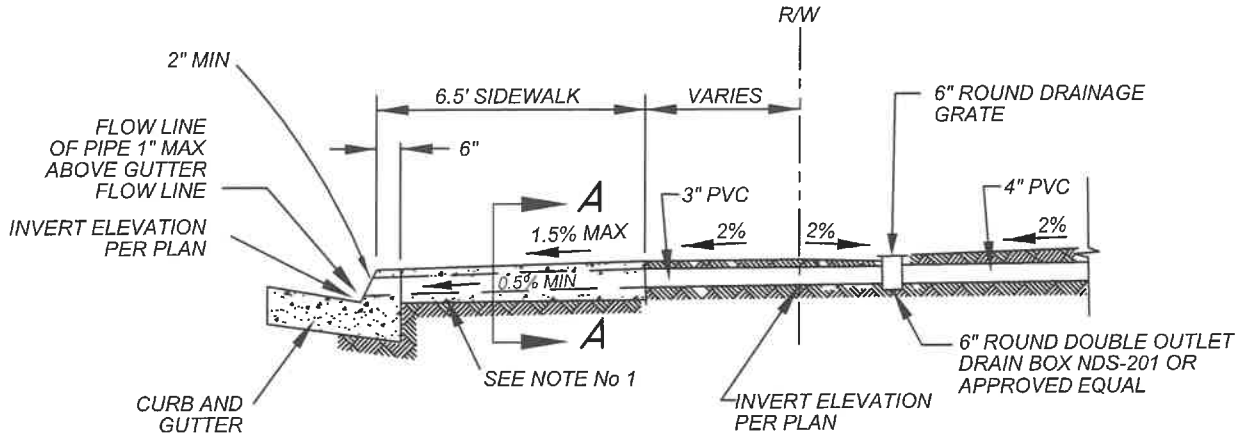
6.) DOWELS SHALL BE REQUIRED AT EACH CORNER AND AT 2 FEET OC (MAX) WHEN THE TOP SLAB IS CONSTRUCTED SEPARATELY. WHEN THE TOP SLAB IS CONSTRUCTED MONOLITHIC WITH ADJACENT SIDEWALK, THE DOWELS MAY BE OMITTED.

7.) INSTALL FACE ANGLE AND ANCHORS AT THE OUTLET OF THE STRUCTURE IN CONFORMANCE WITH STANDARD PLAN No MVSI-150B-0.

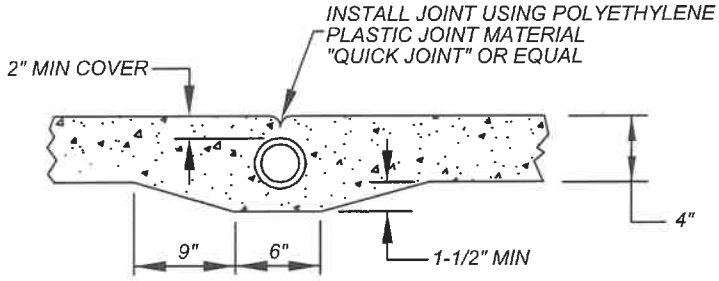
8.) INSTALL CATCH BASIN MANHOLE FRAME AND COVER CONFORMING TO STANDARD MVFE-300E-0.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: DIVISION MANAGER 1/21/14 DATE APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER 1/29/14 DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION **SIDEWALK OUTLET STRUCTURE NOTES** STANDARD PLAN **MVSI-151B-0** SHEET 2 OF 2



ELEVATION



SECTION "A-A" SIDEWALK

NOTES:

1) DRAINS SHALL BE 3 INCH DIA PVC PIPE (SCHEDULE 40) OR RECTANGULAR CAST IRON BOX FOR 6 INCH CURB FACE AND 4 INCH DIA PVC PIPE (SCHEDULE 40) OR RECTANGULAR CAST IRON BOX FOR 8 INCH CURB FACE. PIPE MUST BE CONTINUOUS, NO JOINTS ALLOWED WITHIN CONCRETE SIDEWALK.

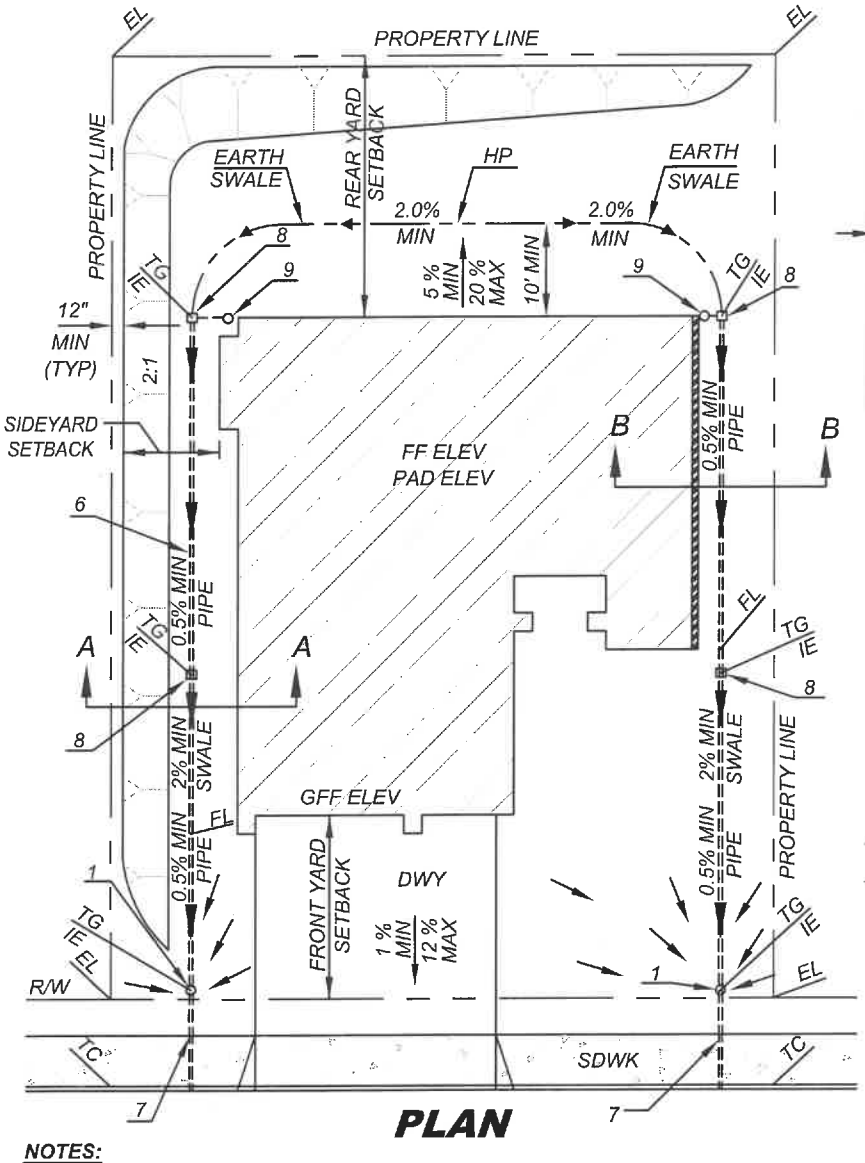
2) THE CURB SHALL BE CORED FOR ALL DRAIN PIPES.

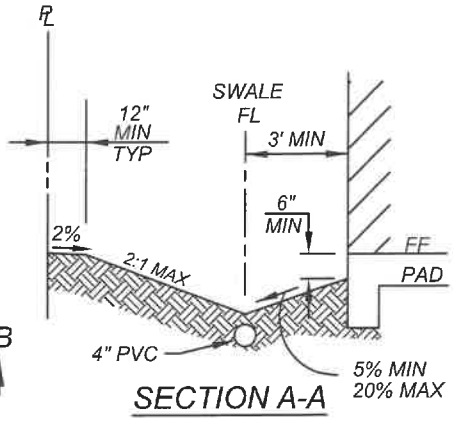
3) THE NUMBER OF PIPES AT ANY LOCATION SHALL NOT EXCEED 4 @ 12" OC.

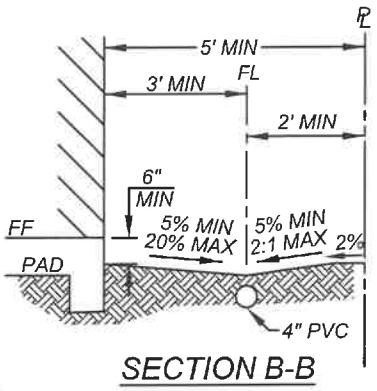
4) FOR ALL SINGLE FAMILY RESIDENTIAL LOTS AS APPROVED BY THE CITY ENGINEER.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: DIVISION MANAGER 7/16/19 DATE APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER 10/16/19 DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION **CURB DRAIN - RESIDENTIAL** STANDARD PLAN **MVSI-152-1** SHEET 1 OF 1







NOTES:

1.) 6 INCH ROUND NDS-201 DOUBLE OUTLET DRAIN BOX AND DRAINAGE GRATE, OR APPROVED EQUAL.
2.) ALL FITTINGS BY: NDS, INC (OR EQUAL)
3.) DO NOT GLUE GRATE OR RISER TO PIPE.
4.) GLUE SHALL BE "IPS WELD ON" # 773 SOLVENT.
5.) USE TEE WITH 90° SWEEP WHEN CONNECTING GRATE OR CLEAN-OUT TO AREA DRAIN SYSTEM.
6.) COMPLETE YARD DRAIN SYSTEM.
7.) CONSTRUCT YARD DRAIN AND CLEAN-OUT PER STD MVSI-152.
8.) TYPICAL AREA DRAIN PER STD MVSI-153B.
9.) TYPICAL DOWNSPOUT PER STD MVSI-153C.
10.) SEE STD MVSI-160B-0 GRADING REQUIREMENTS.

LEGEND:

========== 4" PVC PIPE
—— – – —— FLOW LINE
▬▬▬▬▬▬▬▬ DEEPENED FOOTINGS, AS REQUIRED
o 6" DRAIN BOX AND GRATE
□ AREA DRAIN ASSEMBLY (SEE STD MVSI-153B)

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984

RECOMMENDED: MDL 7/3/19
DIVISION MANAGER DATE

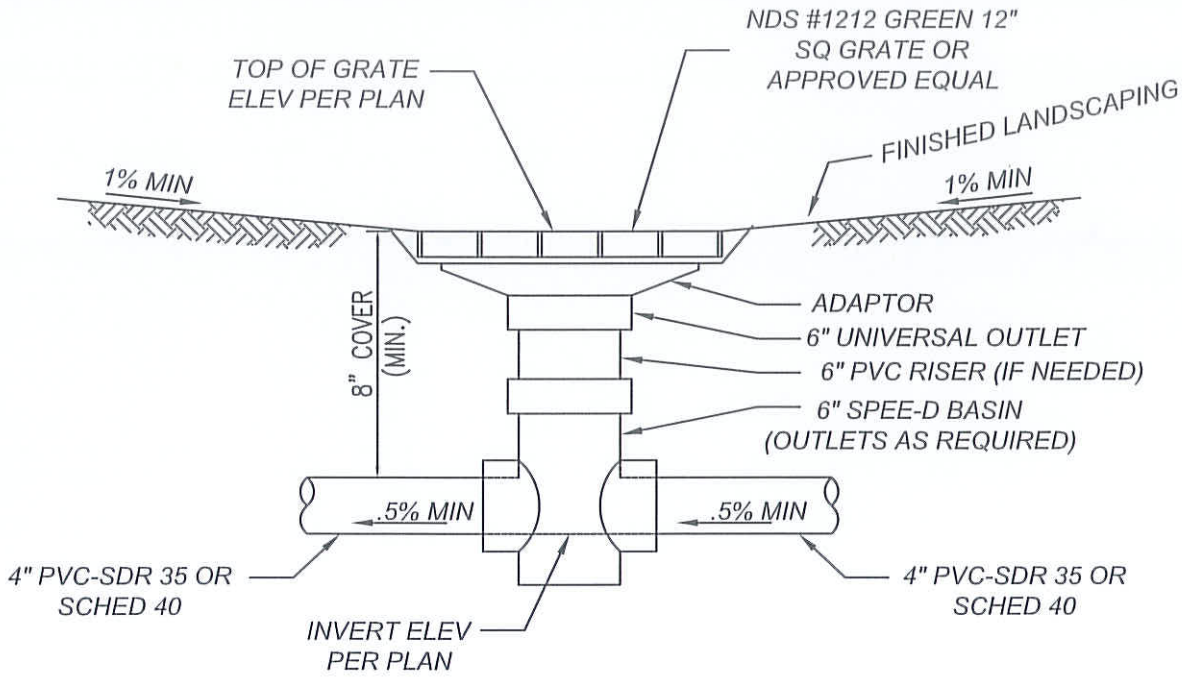
APPROVED: M L Wolfe 7/30/19
PUBLIC WORKS DIRECTOR / CITY ENGINEER DATE

CITY OF MORENO VALLEY

PUBLIC WORKS DEPARTMENT - LAND DEVELOPMENT DIVISION

TYPICAL LOT DRAINAGE AND YARD DRAIN

STANDARD PLAN
MVSI-153A-1
SHEET 1 OF 3

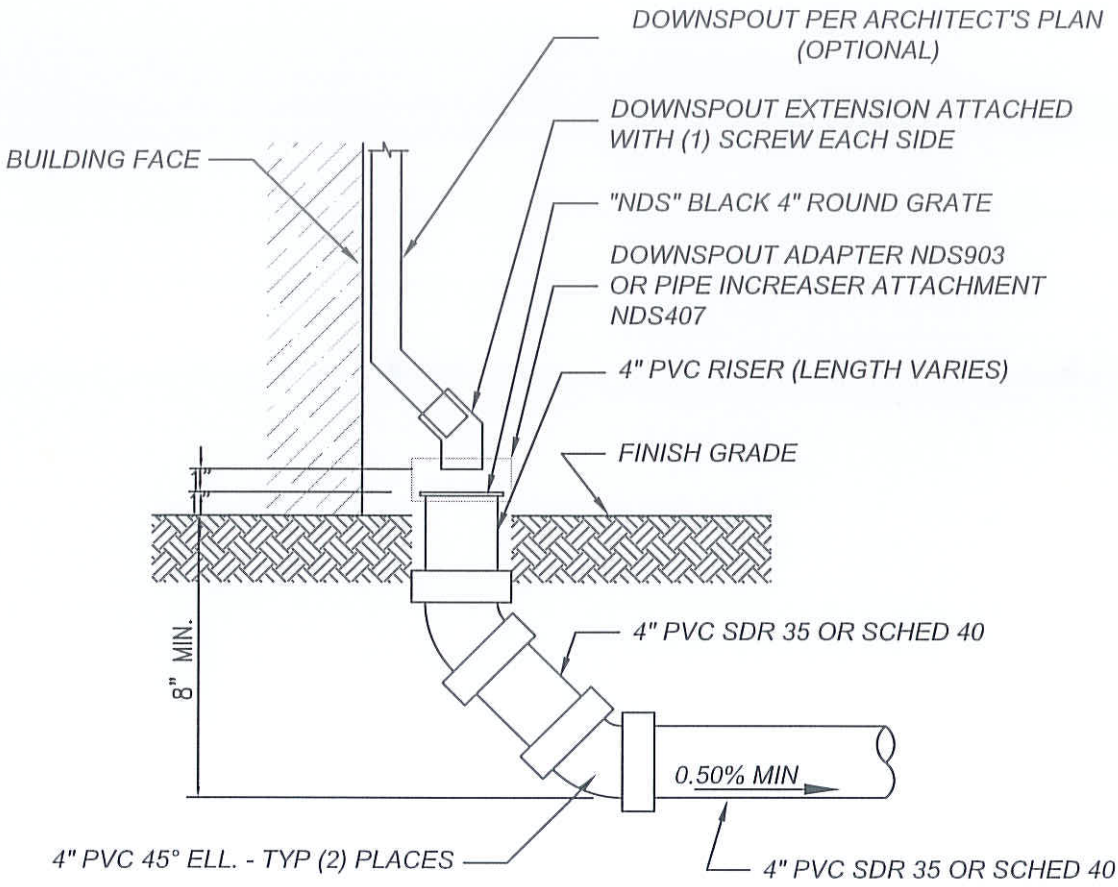


NOTES:

1. REFER TO FINISH LANDSCAPING DRAWING
2. DO NOT GLUE RISER TO PIPE (NEED TO BE ABLE TO REMOVE FOR MAINTENANCE PURPOSES).

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: DIVISION MANAGER 1/21/14 DATE APPROVED: PUBLIC WORKS DIRECTOR/ CITY ENGINEER 1/29/14 DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - LAND DEVELOPMENT DIVISION **RESIDENTIAL YARD DRAIN B1- TYPICAL AREA DRAINS**	STANDARD PLAN **MVSI-153B-0** SHEET 2 OF 3



NOTES:

1.) ALL DOWNSPOUTS TO CONNECT TO AREA DRAIN SYSTEM.
2.) ONLY ALLOWED WHEN DISCHARGE IS PART OF AN APPROVED NPDES / WQMP SYSTEM.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: DIVISION MANAGER 1/21/14 DATE APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER 1/29/14 DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - LAND DEVELOPMENT DIVISION **RESIDENTIAL YARD DRAIN B2 - TYPICAL DRAIN DOWNSPOUT INLET DETAIL**	STANDARD PLAN **MVSI-153C-0** SHEET 3 OF 3

DESIGN POLICY

ANY CHANGES TO THE FOLLOWING REQUIRES PRIOR APPROVAL BY THE CITY ENGINEER:

STREET DESIGN

- GRADES: 1% TO 9% FOR ARTERIALS, 12 % MAXIMUM FOR LOCALS AND COLLECTORS (SEE ROADWAY DESIGN STANDARD PLAN MVSI-160C); EXCEPT AT INTERSECTIONS, WHERE GRADES SHALL NOT EXCEED 4% ON THROUGH STREETS FOR 100 FEET BEFORE THE CURB RETURNS, AND 2% ON SIDE (CONNECTING) STREETS FOR 50 FEET BEFORE THE CURB RETURNS.
- MINIMUM GRADES: 1% MINIMUM UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER. HOWEVER, ABSOLUTE MINIMUM GRADE SHALL BE NO LESS THAN 0.65%.
- GRADE BREAKS: 0.5% MAXIMUM, EXCESS OF 0.5% REQUIRES 100' MINIMUM VC. 50' MINIMUM BETWEEN GRADE BREAKS. GRADE BREAKS SHALL NOT EXCEED 0.5% TOTAL IN 200'.
- PROFILE MAXIMUM GRADIENT ADJACENT TO CROSS GUTTER: 2.50%.
- CHANGE IN PROFILE GRADES SHOULD NOT EXCEED 6% THROUGH VERTICAL CURVE.
- STREET STRUCTURAL SECTION SHALL BE PER CITY STANDARD OR SOIL ENGINEERS RECOMMENDATION, WHICHEVER IS GREATER.
- NO CROSS GUTTER AT INTERSECTION OF ARTERIAL STREETS WHERE CATCH BASINS CAN BE INSTALLED UPSTREAM.
- THE PAVEMENT CROSS SLOPE/GRADE ALONG THE ALIGNMENT OF ALL PEDESTRIAN CROSSWALKS MUST NOT EXCEED 1.5% OR PER LATEST ADA REQUIREMENTS.
- ALL PAVEMENT REPAIR SURFACE COURSE SHALL BE PG 64-16 ASPHALT RUBBER HOT MIX (ARHM-GG-C) OR AS APPROVED BY THE CITY ENGINEER. SEE CITY STANDARDS No MVSI-132, A THROUGH F.

STREET CROSS SLOPE

- GRADES: 1.7% MINIMUM, 2% STANDARD (ALL NEW STREETS), 3.5% MAXIMUM.
- WIDENING OR JOINING EXISTING STREET REQUIRES COPY OF WORK SHEET SHOWING PROPOSED AND EXISTING X-SLOPES, ELEVATIONS, ETC., CROSS SECTIONS TO BE TAKEN EVERY 50 FEET.

STREET ALIGNMENT

- CENTERLINE RADIUS: SEE STANDARD No MVSI-160C.
- STREET INTERSECTIONS AND STREET/DRIVEWAY INTERSECTIONS: 90° ± 5°.
- 0+00: TO BE GOOD, KNOWN POINT, PREFER CENTERLINE INTERSECTION.
- STATIONING: WEST TO EAST AND NORTH TO SOUTH, PREFER LEFT TO RIGHT ON DRAWING.
- 100 FEET TANGENT BETWEEN HORIZONTAL CURVES.

STORM DRAINS (REFER TO RIVERSIDE COUNTY FLOOD CONTROL DISTRICT DESIGN MANUAL FOR ALL OTHER CRITERIA)

- MATERIAL: RCP, OR AS APPROVED BY THE CITY ENGINEER.
- SIZE: 24" MINIMUM MAINLINE, 24" MINIMUM CATCH BASIN LATERAL.
- SLOPE: 0.003 MINIMUM MAINLINE , 0.005 MIN ALL OTHERS AND SHOW HGL.
- SUBMIT ANY CALCULATIONS USED (CATCH BASIN SIZING, HYDROLOGY, ETC.).
- ALL STORM DRAIN SYSTEMS (AND LATERALS) SHALL BE DESIGNED TO A 100-YEAR STORM EVENT, UNLESS PRIOR APPROVAL BY THE CITY ENGINEER IS GIVEN.
- CATCH BASINS SHALL HAVE A MINIMUM OF 1.0' OF FREEBOARD AT THE CURB OPENING ABOVE THE HGL.

STREET CAPACITY

- ALL DEPTHS OF WATER ARE NOT TO EXCEED ROW ELEVATION FOR 100YR FLOOD AND DEPTHS OF WATER FOR 10YR FLOOD ARE NOT TO EXCEED TOP OF CURB ELEVATION. HOWEVER, ONE LANE OF TRAFFIC FLOW IN EACH DIRECTION OF TRAVEL MUST REMAIN OPEN ALONG ARTERIAL STREETS AND ABOVE AND 12' TRAVEL PATH ON LOCAL AND COLLECTOR STREETS DURING THE 100 YR FLOOD EVENT. ALL EXCESS FLOWS THAT DO NOT MEET THIS CRITERIA MUST BE CAPTURED IN A STORM DRAIN SYSTEM.

MONUMENTATION

- ALL MONUMENTS SHALL BE INSTALLED PER STANDARD PLANS MVSI-170-0 SERIES.
- NAIL AND TAG ON TOP OF CURB AT ALL PROPERTY LINE PROLONGATIONS.
- CENTERLINE TIE SHEETS REQUIRED AT COMPLETION OF WORK (8 1/2" x 11" MYLAR) TRACTS AND COMMERCIAL PARCEL MAPS AND/OR WHEN NEW INTERSECTION STREETS ARE CREATED.

CURB RETURN / HEIGHTS

- RADIUS: 25 FEET MINIMUM FOR LOCAL STREETS, 35' FOR INDUSTRIAL AND ABOVE, 50' AT INTERSECTION OF 2 TRUCK ROUTES.
- ELEVATIONS: SHOW BCR, 1/4, 1/2, 3/4, DELTAS , AND ECR.
- DIFFERENCE IN BCR ELEVATION AND ECR ELEVATION SHOULD NOT EXCEED 2 FEET, PREFER 1.5 FOOT, MAXIMUM.
- 6 INCH CURB FACE IN RESIDENTIAL.
- 8 INCH CURB FACE ON INDUSTRIAL COLLECTORS AND ABOVE.
- GUTTER HIKEUP AND ADJACENT ROADWAY PAVEMENT AT CURB RAMP MUST MEET ADA REQUIREMENTS.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 1, 1984	RECOMMENDED: MDL DIVISION MANAGER 10/13/20 DATE APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER 10/29/2020 DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - LAND DEVELOPMENT DIVISION DESIGN POLICY	STANDARD PLAN MVSI-160A-2 SHEET 1 OF 3

DESIGN POLICY (continued)

ANY CHANGES TO THE FOLLOWING REQUIRES PRIOR APPROVAL:

WATER AND SEWER LINES

-- REFER TO EMWD DESIGN CRITERIA.

GRADING PLANS

-- CHECK THE GRADING REGULATIONS IN THE CITY MUNICIPAL CODE CAREFULLY.
-- GRADING PLAN TO SHOW ALL EXISTING AND PROPOSED ELEVATIONS AND CONTOURS, ADJACENT ELEVATIONS, PROPOSED ELEVATIONS OF HOUSE PADS, LOT CORNERS, SWALES, HIGH AND LOW POINTS.
-- ENGINEER SHALL SUBMIT ROUGH GRADING PLANS AND PRECISE GRADING PLANS UNLESS APPROVED OTHERWISE BY THE CITY ENGINEER.
-- ALL SLOPES SHALL BE ON LOWER PROPERTY.
-- A CORNER LOT WITH A SIDEYARD SLOPE ADJACENT TO A SIDEWALK TO BE 5:1 MAXIMUM SLOPE.
-- NO COMMON SWALES PERMITTED. (NOT ON PROPERTY LINE)
-- GRADING PLANS AND STREET IMPROVEMENT PLANS SHOULD BE REVIEWED AT THE SAME TIME.
-- CALCULATIONS SHALL BE SUBMITTED TO VERIFY YARDAGES. (EARTHWORK)
-- TEMPORARY EROSION CONTROL PLANS SHALL BE REQUIRED TO BE SUBMITTED WITH GRADING PLANS. THIS DOES NOT REPLACE A STORM WATER POLLUTION PREVENTION PLAN (SWPPP).
-- RETAINING WALLS REQUIRE SEPARATE BUILDING PERMIT. ALL WALLS MUST SHOW TOP OF WALL (TW) AND TOP OF FOOTING (TF) ELEVATIONS AND LENGTHS. DRAINAGE IS **NOT** ALLOWED TO FLOW AGAINST OR OVER THE WALL. A DRAINAGE STRUCTURE IS REQUIRED ADJACENT TO THE TOP OF THE WALL.
-- A PRELIMINARY SOILS INVESTIGATION REPORT PREPARED BY A REGISTERED GEOTECHNICAL ENGINEER IS REQUIRED.
-- SLOPES SHALL NOT EXCEED 2:1.
-- SUBDRAINS ARE REQUIRED WHEN FILLS ARE PLACED OVER NATURAL DRAINAGE COURSES.
-- SIDE AND REAR OF BUILDING PAD WILL BE ELEVATED SUCH THAT THE PAD AREA WILL HAVE A SLOPE OF 5% MINIMUM, 20% MAXIMUM, TOWARD AN ACCEPTABLE DRAINAGE OUTLET. GRADED SWALES WILL HAVE A MINIMUM SLOPE OF 2%. THE SWALE CENTERLINE SHALL BE 3' MINIMUM AWAY FROM THE PAD ALONG SIDE YARDS AND 10' MINIMUM ALONG THE REAR. THERE SHALL BE 2' MINIMUM DISTANCE FROM GRADED SWALE CENTERLINE AND PROPERTY LINES. THE FIRST FOOT FROM THE PROPERTY LINE SHALL BE AT 2% SLOPE AWAY FROM THE PROPERTY LINE THEN UP TO A 2:1 SLOPE MAY BE CONSTRUCTED (SEE STD MVSI-154).
-- ENGINEERED FILLS SHALL BE COMPACTED TO NOT LESS THAN 90% OF MAXIMUM DENSITY AS DETERMINED BY ASTM TEST D1557.
-- ALL CUT SLOPES OVER 5' AND FILL SLOPES OVER 3' SHALL BE PLANTED.
-- DRIVEWAYS SHALL NOT EXCEED 12% MAXIMUM SLOPE.
-- ALL WALL/FENCES SHALL BE AT THE TOP OF SLOPES.
-- DRAINAGE SHALL BE DIRECTED TO AREA DRAINS. NO DEVELOPMENT SHALL DRAIN OVER DRIVEWAYS OR SIDEWALKS.
-- COMMERCIAL, OFFICE, AND INDUSTRIAL PARKING LOT DRIVE AISLES, PARKING LOT DRIVES, AND PARKING STALLS SHALL NOT EXCEED 5% SLOPE. AT DISABLED PARKING STALLS, MAXIMUM SLOPE SHALL NOT EXCEED 2% IN ANY DIRECTION. ALONG ADA PATH OF TRAVEL, MAXIMUM LONGITUDINAL SLOPE SHALL NOT EXCEED 5% AND MAXIMUM CROSS SLOPE SHALL NOT EXCEED 2%.

COST ESTIMATES

-- SUBMIT BREAK DOWN OF COST ON A PER ITEM BASIS. PROVIDE CALCULATIONS WORK SHEETS ALONG WITH LIST OF ASSUMPTION. (SEE CITY COST ESTIMATE SPREAD SHEET ON THE CITY WEB SITE).
-- DENSITY FOR ASPHALT CONCRETE AND AGGREGATE BASE: 150 lb/ft³.
-- SUBMIT EARTHWORK QUANTITIES WITH CALCULATIONS USED.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: MDL 10/13/20 DIVISION MANAGER / DATE APPROVED: 10/29/2020 PUBLIC WORKS DIRECTOR / CITY ENGINEER / DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - LAND DEVELOPMENT DIVISION **DESIGN POLICY**	STANDARD PLAN **MVSI-160B-1** SHEET 2 OF 3

STREET CLASSIFICATION

		RURAL STREET (STD MVSI-107C)	MODIFIED LOCAL (STD MVSI-107B)	GENERAL LOCAL (STD MVSI-107A)	COLLECTOR (STD MVSI-106B), INDUSTRIAL COLLECTOR (STD MVSI-106A)	MINOR ARTERIAL (STD MVSI-105A)	ARTERIAL (STD MVSI-104A)	DIVIDED ARTERIAL (STD MVSI-103A)	MODIFIED DIVIDED MAJOR ARTERIAL (STD MVSI-102A)	DIVIDED MAJOR ARTERIAL (STD MVSI-101A)	EXPRESSWAY (STD MVSI-101A)
R/W (FT)		40	50	56	66 78	88	100	110	120	134	134
CURB TO CURB WIDTH (FT)		28	36	36	44 56	64	76	86	102	110	110
MINIMUM RADII HORIZONTAL (FT)	FLAT (0-4%)	300	300	300	850	1600	2000	-	2000	2000	2000
	ROLLING (4-6%)	300	300	300	550	–	–	–	–	–	–
	MOUNTAINOUS (> 6%)	150	150	150	300	–	–	–	–	-	-
MAXIMUM GRADE (%)	FLAT	4	4	4	4	3	3	-	3	3	3
	ROLLING	9	9	9	8	6	6	7	6	6	6
	MOUNTAINOUS	12	12	12	12	9	9	9	9	-	-
DESIGN SPEED (MPH)	FLAT	30	30	30	45	55	60	-	60	60	60
	ROLLING	30	30	30	35	48	55	45	55	55	55
	MOUNTAINOUS	20	20	25	30	35	48	35	48	-	-
INTERSECTION (℄ TO ℄) INTERVALS (FT)		N/A	200	200	200	(1) 330	(1) 660	(2) 660	(1) 1320	(1) 1320	(1),(2) 5280

(1) DIRECT RESIDENTIAL ACCESS RESTRICTED.

(2) DIRECT ACCESS RESTRICTED.

NOTES:

1.) MINIMUM GRADE = 1.0 %

2.) ROADWAY DESIGN LESS THAN SHOWN REQUIRES APPROVAL OF THE CITY ENGINEER.

NOT TO SCALE

CITY OF MORENO VALLEY · DECEMBER 3, 1984

RECOMMENDED: DIVISION MANAGER — DATE 12/29/16

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

CITY OF MORENO VALLEY

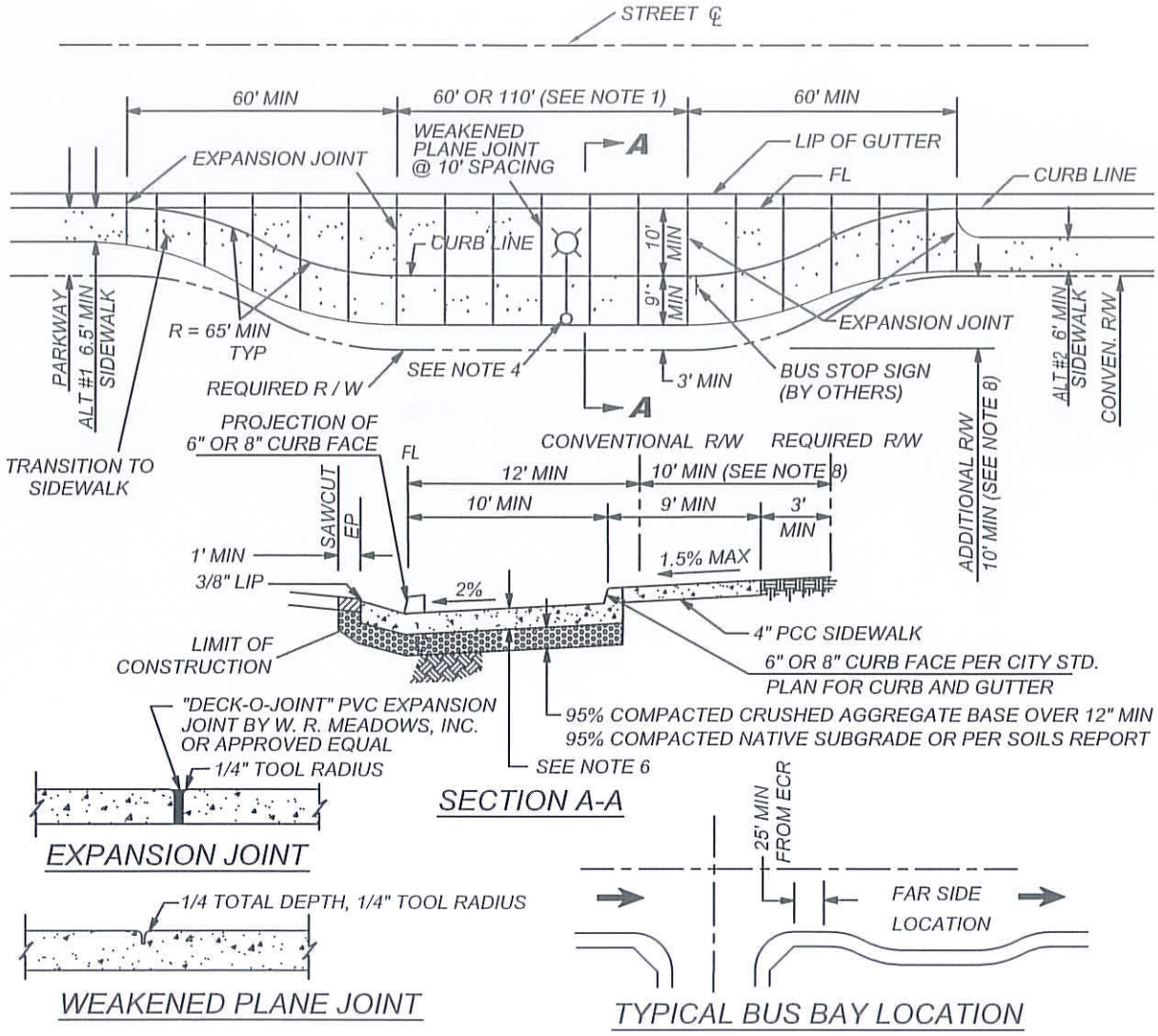
PUBLIC WORKS DEPARTMENT - LAND DEVELOPMENT DIVISION

ROADWAY DESIGN REQUIREMENTS

STANDARD PLAN

MVSI-160C-1

SHEET 3 OF 3

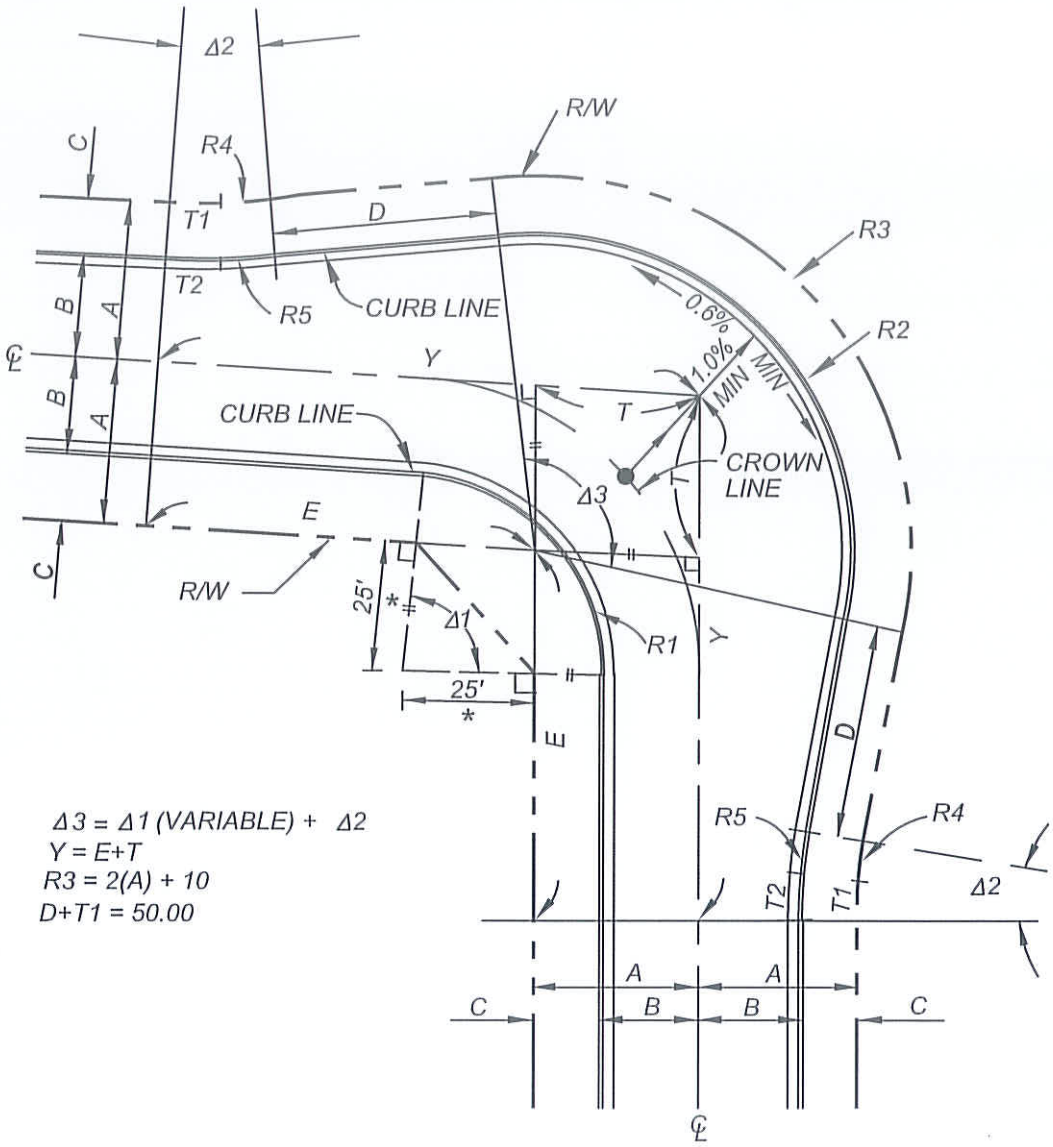


NOTES:

1. LENGTH OF STORAGE DETERMINED BY SINGLE OR DOUBLE BUS STOP AS SPECIFIED BY SERVING TRANSIT AGENCY AND APPROVED BY THE CITY ENGINEER.
2. IF BENCH/SHELTER IS PROPOSED, 4 FEET MINIMUM OF SIDEWALK CLEARANCE IS REQUIRED.
3. FAR SIDE BUS BAY LOCATION IS PREFERRED, PER ABOVE DETAIL.
4. ADDITIONAL STREET LIGHTING WITH LONGER MAST ARM MAY BE REQUIRED AS DETERMINED BY THE CITY ENGINEER.
5. CONSTRUCT EXPANSION JOINTS (AT 60' SPACING) AND WEAKENED PLANE JOINTS (AT 10' SPACING) OR AS DIRECTED BY THE CITY ENGINEER.
6. PCC PAVEMENT THICKNESS SHALL BE DETERMINED BY THE ENGINEER. STRUCTURAL SECTION CALCULATIONS ARE REQUIRED. MINIMUM THICKNESS SHALL BE 8" PCC WITH #4 REBARS AT 24" OC IN BOTH DIRECTIONS OVER 6"AB OVER 12" MIN. 95% COMPACTED NATIVE SUBGRADE OR PER SOIL REPORT. CONCRETE SHALL BE CLASS 560-C-3250.
7. CURB SHALL BE POURED MONOLITHIC WITH PCC PAVEMENT.
8. ADDITIONAL R/W AND / OR EASEMENTS MAY BE REQUIRED BY CITY ENGINEER.
9. LOCATION OF BUS TURNOUT SHOULD BE AS APPROVED BY THE TRANSPORTATION DIVISION AND IN CONSULTATION WITH THE APPROPRIATE TRANSIT AGENCY.

NOT TO SCALE

CITY OF MORENO VALLEY · DECEMBER 3, 1984	RECOMMENDED: DIVISION MANAGER — DATE 1/21/14 APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER — DATE 1/29/14	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION **BUS TURNOUT** STANDARD PLAN **MVSI-161-0** SHEET 1 OF 1



$\Delta 3 = \Delta 1$ (VARIABLE) + $\Delta 2$
$Y = E+T$
$R3 = 2(A) + 10$
$D+T1 = 50.00$

R/W	ROADWAY IMPROVEMENT WIDTH	A	B	C	D	E	R1	R2	R3	Δ2	R4	T1	R5	T2
50	36	25	18	7	40.91	69.09	34	53	60	10°23'20"	100	9.09	107	9.91
56	36	28	18	10	40.99	70.00	35	56	66	10°17'48"	100	9.01	110	9.91
60	40	30	20	10	41.04	70.60	35	60	70	10°14'12"	100	8.96	110	9.85
66	44	33	22	11	41.12	71.49	36	65	76	10°08'58"	100	8.88	111	9.86
78	56	39	28	11	41.26	73.23	36	77	88	9°58'58"	100	8.73	111	9.69

DISTANCES IN FEET

NOTES:

1.) THE VALUE FOR "T" & "Y" WILL VARY ACCORDING TO DESIGN.
2.) LIMITS OF CROSS SLOPE, CROWN LINE TO OUTSIDE GUTTER: MINIMUM OF 1%.

* 25' REGARDLESS OF R/W WIDTH.

NOT TO SCALE

RECOMMENDED: _____ DIVISION MANAGER 1/21/14 DATE

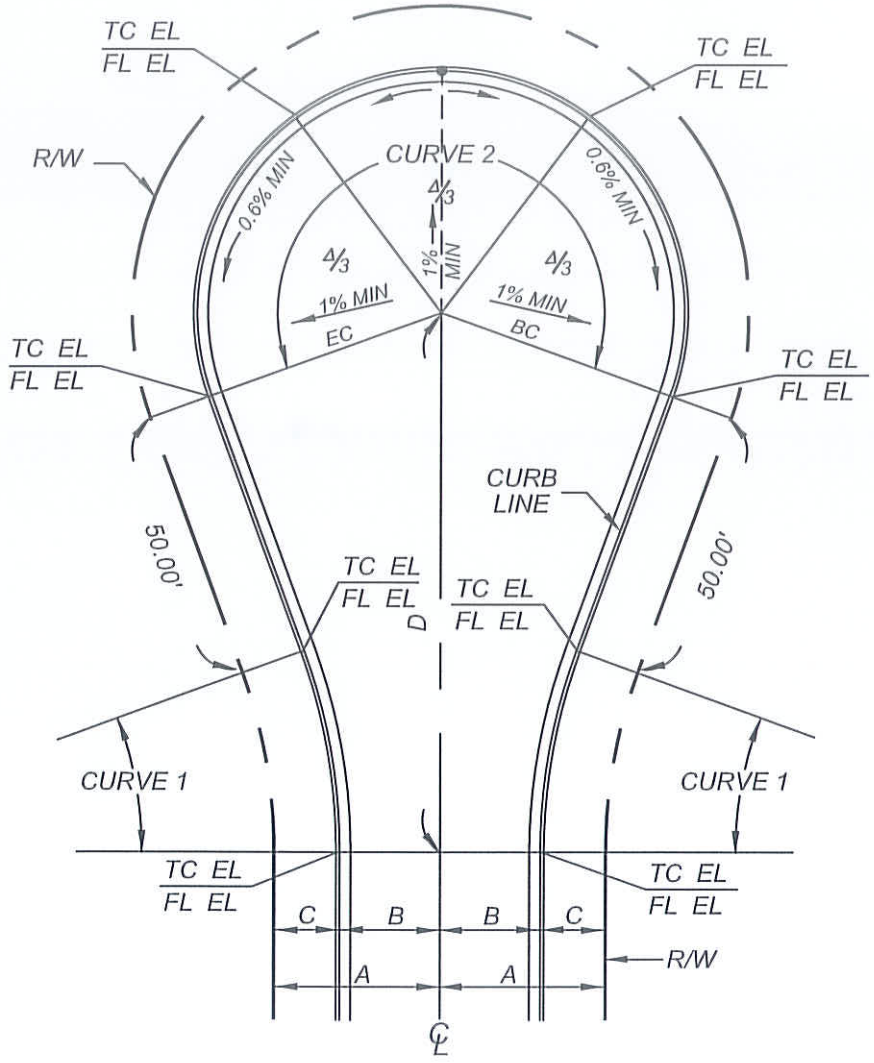
APPROVED: _____ PUBLIC WORKS DIRECTOR / CITY ENGINEER 1/29/14 DATE

CITY OF MORENO VALLEY

PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION

KNUCKLE

STANDARD PLAN
MVSI-162-0
SHEET 1 OF 1



					CURVE 1					CURVE 2				
					△	CURB		R/W		△	CURB		R/W	
R/W	A	B	C	D		R	L	R	L		R	L	R	L
50'	25'	18'	7'	88.88'	16°23'22"	107'	30.61'	100'	28.60'	212°46'43"	38'	141.12'	45'	167.12'
56'	28'	18'	10'	89.55'	16°18'41"	110'	31.31'	100'	28.47'	212°37'22"	38'	141.02'	48'	178.12'
60'	30'	20'	10'	86.63'	15°00'38"	110'	28.82'	100'	26.20'	210°01'17"	38'	139.29'	48'	175.95'
66'	33'	22'	11'	83.74'	13°38'40"	111'	26.44'	100'	23.82'	207°17'21"	38'	137.48'	49'	177.28'
78'	39'	28'	11'	95.39'	17°12'31"	111'	33.33'	100'	30.03'	214°25'02"	50'	187.11'	61'	226.27'
88'	44'	32'	12'	103.27'	19°15'21"	112'	37.64'	100'	33.61'	218°30'42"	58'	221.20'	70'	266.96'

NOT TO SCALE

CITY OF MORENO VALLEY · DECEMBER 3, 1984

RECOMMENDED:
DIVISION MANAGER — DATE 1/21/14

APPROVED:
PUBLIC WORKS DIRECTOR / CITY ENGINEER — DATE 1/29/14

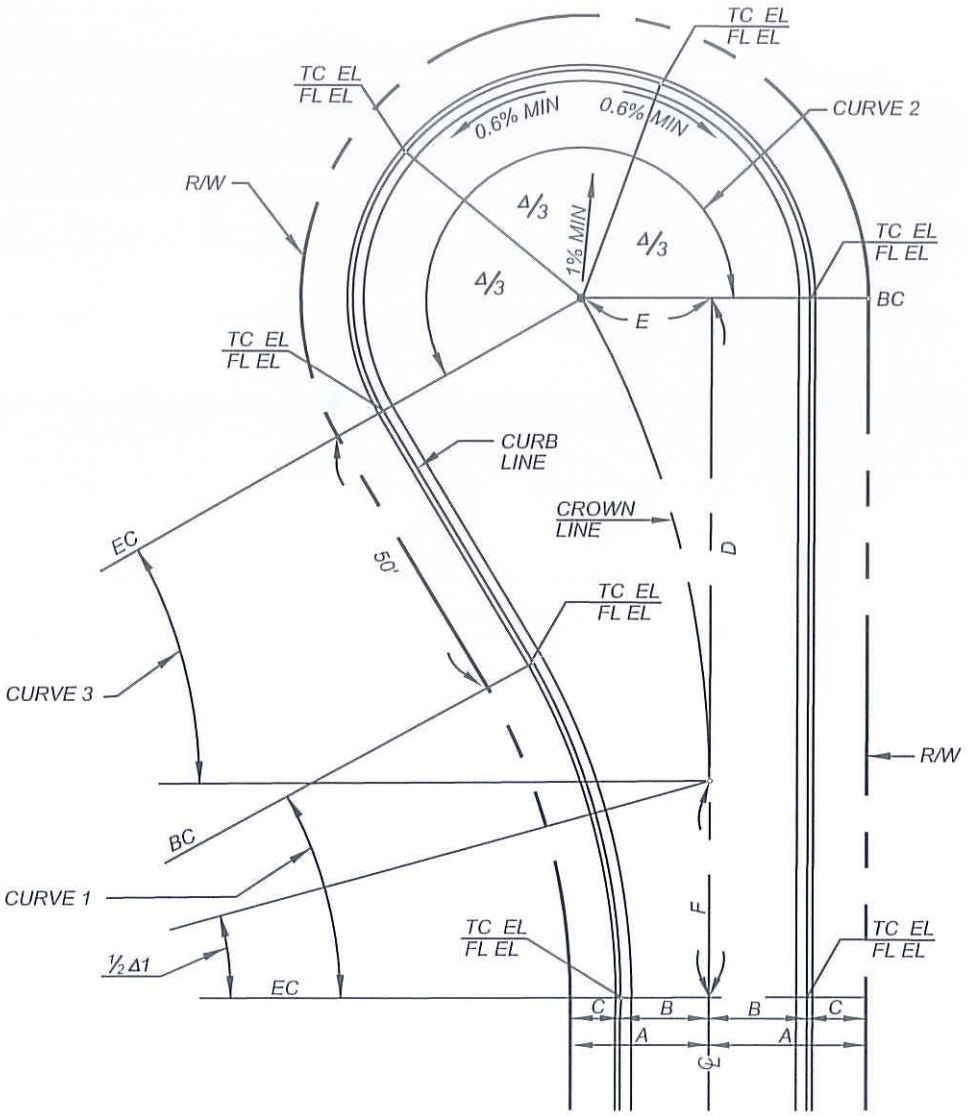
CITY OF MORENO VALLEY

PUBLIC WORKS DEPARTMENT - LAND DEVELOPMENT DIVISION

CUL-DE-SAC (SYMMETRICAL)

STANDARD PLAN
MVSI-163A-0

SHEET 1 OF 2



R/W	A	B	C	D	E	F	CURVE 1 Δ	CURVE 1 CURB R	CURVE 1 CURB L	CURVE 1 R/W R	CURVE 1 R/W L	CURVE 2 Δ	CURVE 2 CURB R	CURVE 2 CURB L	CURVE 2 R/W R	CURVE 2 R/W L	CURVE 3 Δ	CURVE 3 CROWN LINE R	CURVE 3 CROWN LINE L
50'	25'	18'	7'	111.80'	20'	30.17'	27°46'18"	107'	51.86'	100'	48.47'	207°46'18"	38'	137.80'	45'	163.18'	27°46'18"	173.63'	84.16'
56'	28'	18'	10'	112.87'	20'	31.44'	27°35'48"	110'	52.98'	100'	48.17'	207°35'48"	38'	137.68'	48'	173.92'	27°35'48"	175.79'	84.67'
60'	30'	20'	10'	108.90'	18'	29.45'	25°31'48"	110'	49.01'	100'	44.56'	205°31'48"	38'	136.31'	48'	172.18'	25°31'48"	184.35'	82.14'
66'	33'	22'	11'	104.94'	16'	27.47'	23°20'19"	111'	45.21'	100'	40.73'	203°20'19"	38'	134.86'	49'	173.90'	23°20'19"	195.54'	79.65'
78'	39'	28'	11'	121.37'	22'	35.69'	28°47'56"	111'	55.79'	100'	50.26'	208°47'56"	50'	182.21'	61'	222.30'	28°47'56"	177.87'	89.40'

NOT TO SCALE

CITY OF MORENO VALLEY · DECEMBER 3, 1984

RECOMMENDED:
DIVISION MANAGER — DATE 11/21/14

APPROVED:
PUBLIC WORKS DIRECTOR / CITY ENGINEER — DATE 1/29/14

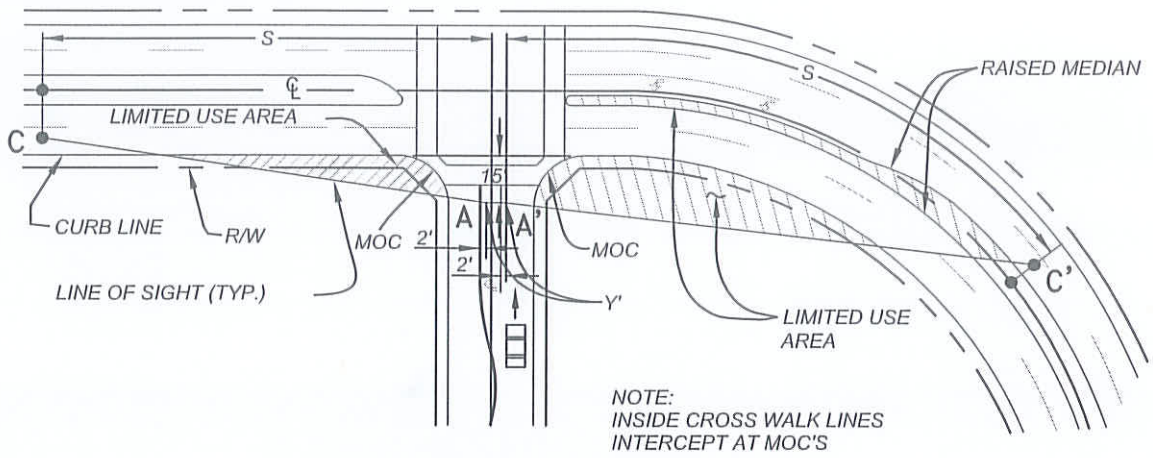
CITY OF MORENO VALLEY

PUBLIC WORKS DEPARTMENT - LAND DEVELOPMENT DIVISION

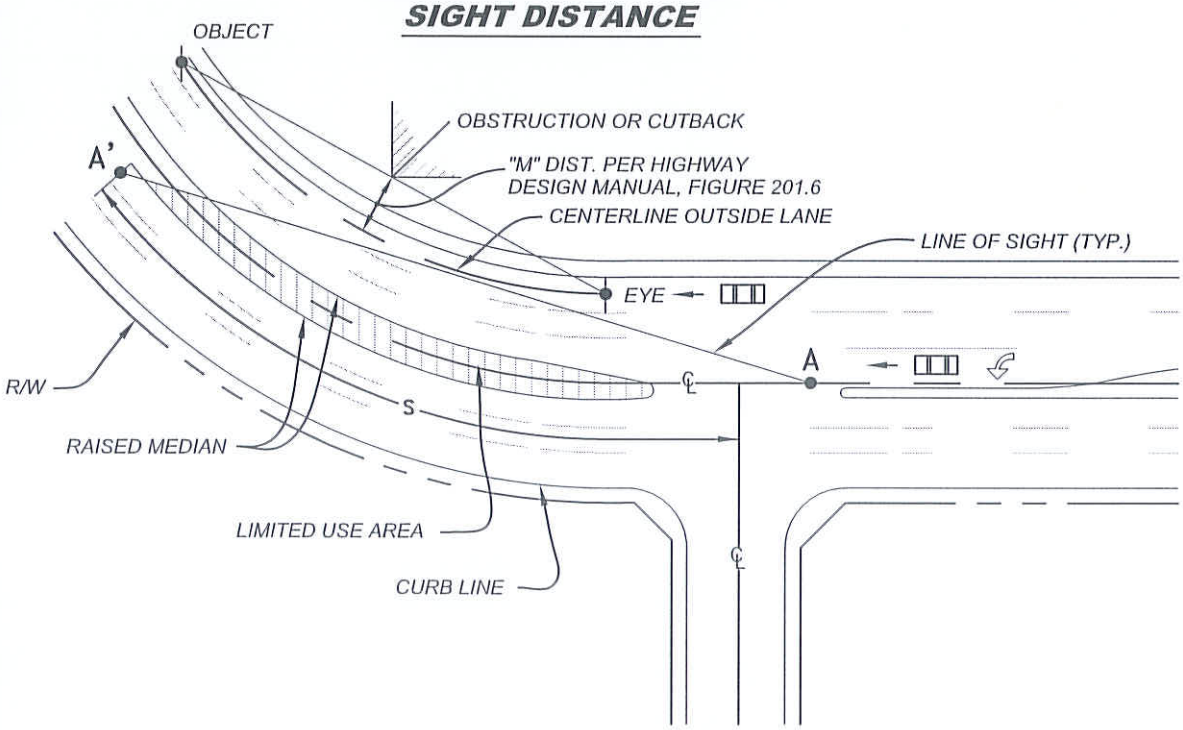
CUL-DE-SAC (OFFSET)

STANDARD PLAN
MVSI-163B-0

SHEET 2 OF 2



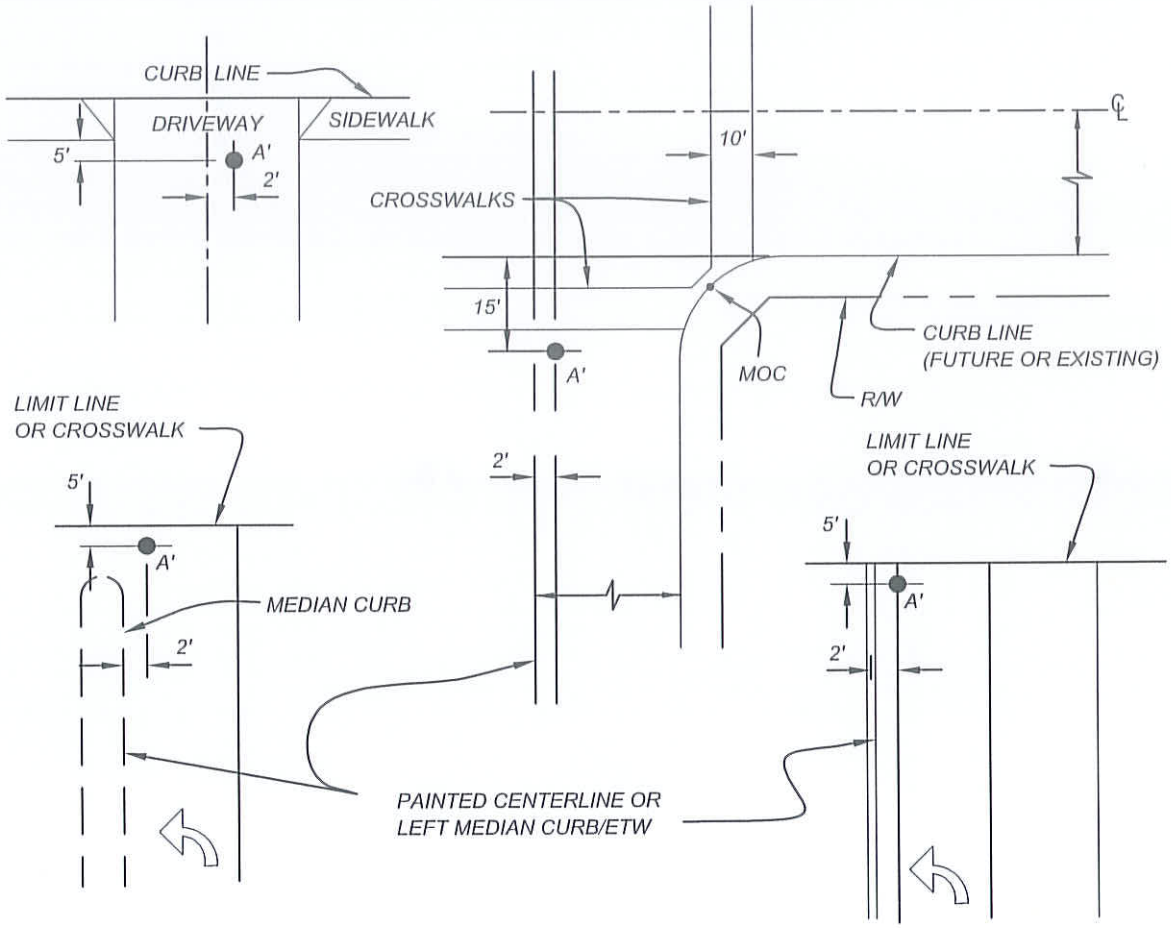
LEFT AND RIGHT TURN OUT AND CROSS TRAFFIC SIGHT DISTANCE



LEFT TURN IN AND OBSTRUCTION SIGHT DISTANCE

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: EL 1/22/14 DIVISION MANAGER / DATE APPROVED: 1/29/14 PUBLIC WORKS DIRECTOR / CITY ENGINEER / DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION **INTERSECTION SIGHT DISTANCE**	STANDARD PLAN **MVSI-164A-0** SHEET 1 OF 3



DESIGN OR 85TH PERCENTILE SPEED (MPH)	CORNER SIGHT DISTANCE (FT)
25	275
30	330
35	385
40	440
45	495
50	550
55	605
60	660
65	715

TABLE SOURCE: CALTRANS HIGHWAY DESIGN MANUAL TABLE 405.1A

NOTES:

1. ● = POINT OF MEASUREMENT.
2. FOR INTERSECTION CASES, SEE STD MVSI-164C-0 FOR APPLICATION.
3. REFER TO STD MVSI-164A-0 FOR LINE OF SIGHT APPLICATION TO DISTANCE (S).
4. WHERE VEHICLES ARE BACKING INTO ON COMING TRAFFIC, A' SHALL BE 13' VERSUS 5'.
5. MOC - MIDDLE OF CURB RETURN.
6. ETW - EDGE OF TRAVELED WAY.

✳ - REQUIRED

✳✳ - RECOMMENDED

NOT TO SCALE

RECOMMENDED:
EL 1/22/14
DIVISION MANAGER DATE

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

CITY OF MORENO VALLEY

PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION

INTERSECTION SIGHT DISTANCE

STANDARD PLAN
MVSI-164B-0

NOTES:

1. THE DISTANCE S REPRESENTS THE INTERSECTION SIGHT DISTANCE MEASURED ALONG THE CENTERLINE OF THE ROAD. THE INTERSECTION SIGHT DISTANCE IS THE DISTANCE REQUIRED TO ALLOW STOPPING DISTANCE FOR THE DRIVER ON THE CROSS ROAD (OR LEFT TURN POCKET) TO CROSS THE MAIN ROADWAY OR TURN LEFT WHILE THE APPROACH VEHICLE TRAVELS AT THE ASSUMED DESIGN SPEED OF THE MAIN ROADWAY.

2. THE DISTANCE S SHOULD BE INCREASED BY 20% FROM THE AMOUNT SHOWN ON THE STOPPING DISTANCE TABLE ON SUSTAINED DOWNGRADES STEEPER THAN 3% AND LONGER THAN ONE MILE.

3. POINTS A AND A' ARE THE LOCATIONS OF A DRIVER'S LINE OF SIGHT (3.5 FOOT EYE HEIGHT) TO ONCOMING VEHICLES (4.25 FOOT OBJECT HEIGHT) LOCATED AT POINTS C AND C' WHILE IN A VEHICLE AT AN INTERSECTION FIFTEEN FEET FROM THE EDGE OF THE TRAVELED WAY.

4. THE DISTANCE Y' IS THE 2 FOOT DISTANCE MEASURED FROM THE LEFT EDGE OF THE TRAVELED WAY TO THE LOCATION OF THE DRIVER.

5. THE LIMITED USE AREA IS DETERMINED BY THE GRAPHICAL METHOD USING THE APPROPRIATE DISTANCES GIVEN IN THE TABLE IN STANDARD MVSI-164B-0. IT SHALL BE USED FOR THE PURPOSE OF PROHIBITING OR CLEARING OBSTRUCTIONS IN ORDER TO MAINTAIN ADEQUATE SIGHT DISTANCE AT INTERSECTIONS.

6. THE LINE OF SIGHT LINE SHALL BE SHOWN AT INTERSECTIONS ON ALL LANDSCAPING PLANS, GRADING PLANS, AND TENTATIVE TRACT PLANS. IN CASES, WHERE AN INTERSECTION IS LOCATED ON A VERTICAL CURVE, A PROFILE OF THE LINE OF SIGHT MAY BE REQUIRED. THE LANDSCAPE PLAN SUBMITTED SHALL SHOW THE NAME, LOCATION AND MATURE DIMENSIONS, PLOTTED TO SCALE OF ALL THE PROPOSED TREES WITHIN THE LIMITED USE AREA.

7. OBSTRUCTIONS SUCH AS BUS SHELTERS, WALLS OR LANDSCAPING WITHIN THE LIMITED USE AREA WHICH COULD RESTRICT THE LINE OF SIGHT SHALL NOT BE PERMITTED. DRIVEWAYS ARE NOT PERMITTED WITHIN "T" INTERSECTION AREA DUE TO SIGHT DISTANCE RESTRICTION BY ENTERING VEHICLES.

   a. PLANTS AND SHRUBS WITHIN THE LIMITED USE ARE SHALL BE OF THE TYPE THAT WILL GROW NO HIGHER THAN 30 INCHES ABOVE THE TOP OF CURB AND SHALL BE MAINTAINED AT A HEIGHT WHICH WILL ASSURE THAT THE 30 INCH MAXIMUM HEIGHT IS NOT EXCEEDED BETWEEN MAINTENANCE INTERVALS. MAINTENANCE AT A LOWER HEIGHT MAY BE REQUIRED ON CREST VERTICAL CURVES PER NOTE 6 ABOVE.

   b. A PROFILE DETAIL OF THE LINE OF SIGHT MAY BE REQUIRED TO VERIFY 12" MINIMUM VERTICAL CLEARANCE ABOVE VARIABLE HEIGHT OBSTRUCTIONS SUCH AS SLOPE LANDSCAPING, PLANTS, SHRUBS AND PERIMETER WALLS.

   c. THE TOE OF SLOPE MAY NOT ENCROACH INTO THE LIMITED USE AREA UNLESS THE REQUIREMENTS OF (b) ABOVE ARE SATISFIED.

   d. IN LIEU OF PROVIDING A PROFILE OF THE LINE OF SIGHT PER NOTE 7.b. ABOVE, THE TOE OF SLOPE SHALL NOT ENCROACH INTO THE LIMITED USE AREA, AND THE LIMITED USE AREA SHALL SLOPE 2% MAXIMUM BETWEEN THE LINE OF SIGHT AND THE BACK OF SIDEWALK.

8. NO PARKING IS ALLOWED WITHIN THE LIMITED USE AREA.

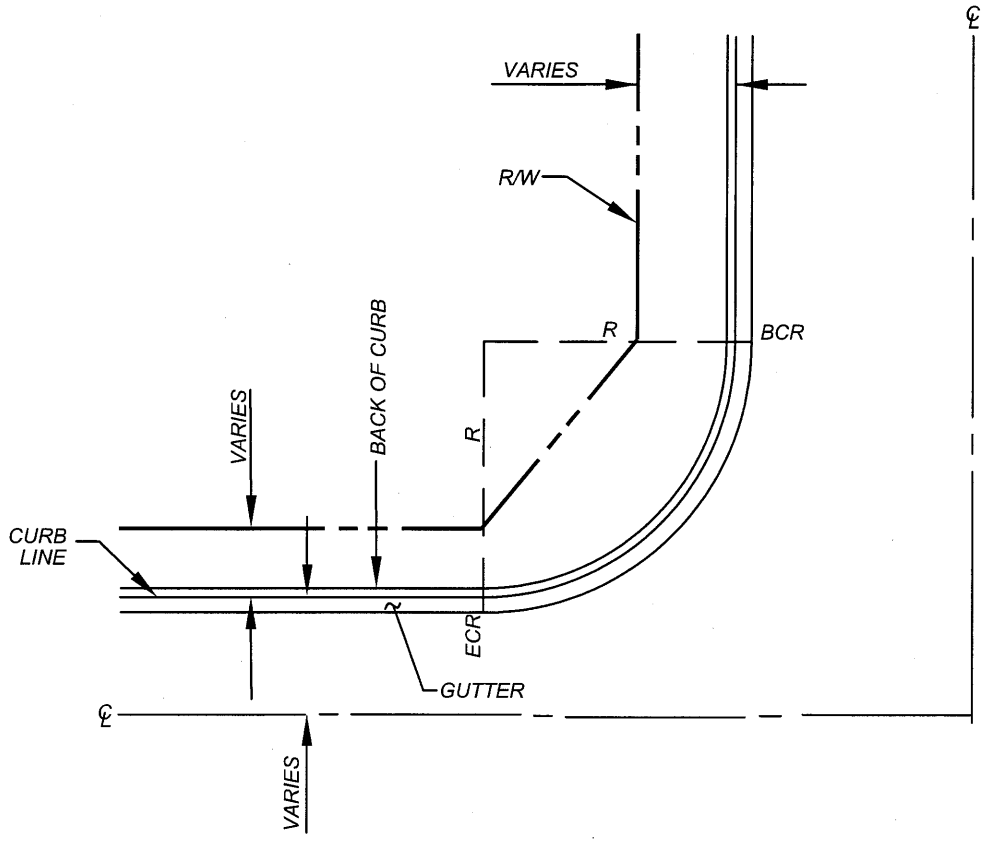
9. TREES ARE GENERALLY NOT PERMITTED WITHIN ANY PORTION OF THE LIMITED USE AREA. EXCEPTIONS ARE ALLOWED WHEN THE SPECIES HAS A MATURE TRUNK DIAMETER OF 6 INCHES OR LESS.

10. MEDIAN AREAS LESS THAN FIVE (5) FEET IN WIDTH SHALL NOT BE LANDSCAPED.

11. INTERSECTION SIGHT DISTANCE AT RIGHT ANGLE INTERSECTIONS IS MEASURED FROM THE IDENTIFIED MEASUREMENT POINT A', IN ACCORDANCE WITH THE DIAGRAMS ON STD MVSI-164B-0.

NOT TO SCALE

CITY OF MORENO VALLEY · DECEMBER 3, 1984	RECOMMENDED: EL / DIVISION MANAGER — 1/22/14 / DATE APPROVED: / PUBLIC WORKS DIRECTOR / CITY ENGINEER — 1/29/14 / DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION **INTERSECTION SIGHT DISTANCE**	STANDARD PLAN **MVSI-164C-0** SHEET 3 OF 3



NOTES:

1.) R = 25' IF INTERSECTING STREETS HAVE A WIDTH LESS THAN 64' CURB TO CURB.

2.) R = 35' IF EITHER INTERSECTING STREET HAS A WIDTH EQUAL TO OR GREATER THAN 64' CURB TO CURB, EXCEPT IN CASES WHERE SPECIAL DESIGN EXISTS.

3.) TYPICALLY, R=50' AT THE INTERSECTION OF 2 TRUCK ROUTES OR STREETS THAT PRIMARILY SERVE INDUSTRIAL USES. CORNER CUT-BACK AREA MAY BE REDUCED AS APPROVED BY THE CITY ENGINEER. CURB RETURN RADII MAY BE REDUCED IF ADEQUATE TRUCK TURNING RADII CAN BE ESTABLISHED, AS APPROVED BY THE CITY ENGINEER.

NOT TO SCALE

CITY OF MORENO VALLEY · DECEMBER 3, 1984

RECOMMENDED: MDL — DIVISION MANAGER — 12/29/16 DATE

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

CITY OF MORENO VALLEY

PUBLIC WORKS DEPARTMENT - LAND DEVELOPMENT DIVISION

PROPERTY LINE CORNER CUT-BACK CURB RETURN RADIUS

STANDARD PLAN

MVSI-165-0

SHEET 1 OF 1

STANDARD GENERAL IMPROVEMENT NOTES (LAND DEVELOPMENT DIVISION):

(APPLICABLE FOR DEVELOPER RELATED PROJECTS)

1.) *ALL WORK CALLED FOR ON THE PLANS SHALL BE IN COMPLIANCE WITH CURRENT CITY STANDARD PLANS ADOPTED BY THE CITY COUNCIL.*
2.) *A CONSTRUCTION PERMIT MUST BE OBTAINED FROM THE LAND DEVELOPMENT DIVISION COUNTER BY THE CONTRACTOR PRIOR TO GRADING AND/OR CONSTRUCTION WORK OF ANY TYPE WITHIN THE PUBLIC RIGHT-OF-WAY.*
3.) *AN ENCROACHMENT PERMIT IS REQUIRED IN ALL CASES WHERE WORK WILL INTERFERE WITH EITHER VEHICULAR OR PEDESTRIAN TRAFFIC.*
4.) *CITY INSPECTION OF THE WORK CALLED FOR ON THE PLANS SHALL NOT IN ANY WAY RELIEVE THE CONTRACTOR AND / OR THE DEVELOPER OF THEIR OBLIGATION TO PERFORM THE WORK IN COMPLIANCE WITH THE PLANS.*
5.) *ANY ALTERATIONS OR VARIANCES FROM THE PLANS, EXCEPT MINOR ADJUSTMENTS IN THE FIELD TO MEET EXISTING CONDITIONS, SHALL BE REQUESTED IN WRITING AND MAY NOT BE INSTITUTED UNTIL APPROVED BY THE CITY ENGINEER OR DESIGNATED REPRESENTATIVE ACTING SPECIFICALLY ON HIS/HER INSTRUCTIONS.*
6.) *THE GRADING AND/OR IMPROVEMENT PLANS ARE APPROVED FOR A PERIOD OF TWO (2) YEARS FROM THE DATE SIGNED BY THE CITY ENGINEER. AFTER THE TWO (2) YEAR PERIOD HAS LAPSED, THE ENGINEER OF RECORD MAY BE REQUIRED TO SUBMIT AND PROCESS FOR THE CITY ENGINEER APPROVAL, UPDATED PLANS THAT COMPLY WITH THE MOST CURRENT CITY STANDARDS, PRACTICES AND POLICIES.*
7.) *ALL ELEVATIONS SHOWN ON THE PLAN ARE ESTABLISHED BY LOCAL BENCH MARK. SURVEY MONUMENTS SHALL BE PROTECTED IN PLACE.*
8.) *QUANTITIES AS SHOWN ON THE PLAN ARE ESTIMATED AND THE CONTRACTOR IS ADVISED THAT ALL FINAL QUANTITIES OF MATERIAL AND WORK IN PLACE MAY BE SOMEWHAT GREATER OR LESS THAN THOSE INDICATED ON THE PLANS.*
9.) *CONCRETE GUTTERS, ALLEY APPROACHES, DRIVEWAYS AND OTHER CONCRETE ITEMS SUBJECT TO VEHICULAR TRAFFIC SHALL BE BARRICADED WITH NO VEHICULAR TRAFFIC PERMITTED FOR A PERIOD NO LESS THAN SEVEN DAYS FOLLOWING THE PLACEMENT OF SAID CONCRETE ITEM(S). WHEN THE GENERAL PROVISIONS CALL FOR THE USE OF SAID CONCRETE ITEM(S) FOR VEHICULAR TRAFFIC EARLIER THAN THE SEVENTH DAY FOR CONVENIENCE OF OPERATION OR WHEN THE CONTRACTOR SO DESIRES, CONCRETE CONTAINING EIGHT SACKS OF CEMENT PER CUBIC YARD SHALL BE USED UNDER THE DIRECTION OF THE CITY ENGINEER TO ALLOW TRAFFIC AFTER 72 HOURS OF PLACEMENT OF CONCRETE.*
10.) *IRRIGATION LINE WITHIN ANY CITY STREET SHALL HAVE A THIRTY INCH MINIMUM COVER FROM FINISH SURFACE UNLESS SAID IRRIGATION LINE IS ENCASED IN CONCRETE OR BEDDED IN A SPECIAL CONCRETE CRADLE.*
11.) *THE CONTRACTOR SHALL OPERATE IN A MANNER COMPLIANT WITH ALL APPLICABLE SECTIONS OF THE MUNICIPAL CODE AND COMPLIANT WITH ALL APPLICABLE CITY COUNCIL RESOLUTIONS.*
12.) *THE LOCATION OF UNDERGROUND UTILITY OR IRRIGATION LINES AS SHOWN ON THE PLANS, IS APPROXIMATE, AND SINCE THE ACTUAL LOCATION MAY BE SOMEWHAT DIFFERENT FROM THAT SHOWN, THE CONTRACTOR IS REQUIRED TO CONTACT THE INTERESTED UTILITY OR WATER COMPANY BEFORE EXCAVATING IN THE VICINITY OF ANY SUCH LINES.*
13.) *PARKWAY TREES INSTALLED BY THE DEVELOPER SHALL BE PLANTED AND MAINTAINED IN COMPLIANCE WITH THE APPROPRIATE CITY STANDARD.*
14.) *ALL STREET NAME AND TRAFFIC REGULATORY SIGNS INDICATED ON THE PLANS WILL BE INSTALLED BY THE DEVELOPER IN ACCORDANCE WITH THE APPROPRIATE CITY STANDARDS.*
15.) *IF THE STREETS LIGHTS INDICATED ON THE PLANS ARE SERVICED BY SOUTHERN CALIFORNIA EDISON (SCE), THE STREET LIGHTS SHALL BE INSTALLED BY SCE. IF THE STREET LIGHTS INDICATED ON THE PLANS ARE SERVICED BY MORENO VALLEY UTILITY (MVU), THE STREET LIGHTS SHALL BE INSTALLED BY THE DEVELOPER. THE DEVELOPER SHALL WORK DIRECTLY WITH THE CORRESPONDING UTILITY PURVEYOR WHEN THE LIGHTS ARE TO BE SERVED FROM AN UNDERGROUND SYSTEM.*
16.) *AN APPROVED WEED KILLER SHALL BE APPLIED TO THE PREPARED BASE PRIOR TO ASPHALT PAVING IN ALL AREAS WHERE THERE IS ANY EVIDENCE OF HUMUS OR ORGANIC MATERIAL PRESENT IN THE BASE (EITHER NATIVE OR IMPORTED) MATERIAL. ALL WEED KILLERS SHALL BE APPLIED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND INSTRUCTIONS.*
17.) *PROVISIONS SHALL BE MADE BY THE CONTRACTOR FOR CONTRIBUTORY DRAINAGE AT ALL TIMES.*
18.) *WHEN APPLICABLE, ALL ANTI-GRAFFITI COATING SHALL BE VITROCEM HI-BUILD GRAFFITI GLAZED COATING FOR CONCRETE BLOCK OR AN EQUAL APPROVED BY THE CITY ENGINEER.*
19.) *HOURS OF OPERATION ARE 7:00 AM - 7:00 PM MONDAY - FRIDAY; 8:00 AM - 4:00 PM (RESIDENTIAL). SATURDAY BY PRIOR APPOINTMENT ONLY. NO WORK ON SUNDAY OR PUBLIC HOLIDAY WITHOUT PRIOR CITY APPROVAL.*

NOTES: THESE NOTES SHALL BE PLACED ON THE TITLE SHEET OF ALL SUBMITTED PLANS BY DEVELOPERS.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: DIVISION MANAGER 9/13/18 DATE APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER 9/14/18 DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - LAND DEVELOPMENT DIVISION **STANDARD GENERAL IMPROVEMENT NOTES (FOR LAND DEVELOPMENT DIVISION)**	STANDARD PLAN **MVSI-166A-0** SHEET 1 OF 4

STANDARD STREET IMPROVEMENT NOTES (LAND DEVELOPMENT DIVISION):

1.) THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEARING OF THE PROPOSED WORK AREA, AND RELOCATION COSTS OF ALL EXISTING UTILITIES. PERMITTEE MUST INFORM CITY OF CONSTRUCTION SCHEDULE AT LEAST 48 HOURS PRIOR TO BEGINNING OF CONSTRUCTION. INSPECTION TELEPHONE: (951) 413-3179.

2.) THE DEVELOPER SHALL INSTALL STREET NAME SIGNS CONFORMING TO THE APPROPRIATE CITY STANDARDS.

3.) ALL WORK PERFORMED SHALL BE IN ACCORDANCE WITH CITY STANDARDS, RIVERSIDE COUNTY STANDARDS, THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, CURRENT EDITION, INCLUDING SUPPLEMENTS, EXCEPT AS OTHERWISE NOTED ON THE PROJECT PLANS OR AS OTHERWISE APPROVED BY THE CITY ENGINEER.

4.) IT SHALL BE THE RESPONSIBILITY OF THE OWNER TO NOTIFY THE ENGINEER TO INSTALL STREET CENTERLINE MONUMENTS AS REQUIRED BY THE CITY ORDINANCE FOR NEW DEVELOPMENT AND REPLACEMENT OF DISTURBED OR COVERED EXISTING MONUMENTS.

5.) IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER OR CONTRACTOR TO APPLY TO THE LAND DEVELOPMENT OFFICE, PERMIT SECTION, PRIOR TO CONSTRUCTION FOR A PERMIT FOR ALL WORK WITHIN CURRENT OR FUTURE DEDICATED PUBLIC RIGHT OF WAY.

6.) ASPHALT CONCRETE (AC) PAVING OF CITY STREETS SHALL BE THE MINIMUM REQUIRED ON THE TYPICAL CROSS SECTION OF EACH CLASSIFICATION SUBJECT TO R VALUE TESTING AND STRUCTURAL SECTIONS DETERMINED BASED ON R VALUE TEST RESULTS AND TRAFFIC INDEX OF STREET CLASSIFICATION. CLASS II CRUSHED AGGREGATE BASE (CAB) PLACED WITHIN THE PUBLIC RIGHT OF WAY SHALL BE NATURAL CRUSHED AB (CLASS II PER CALTRANS STANDARDS FOR SIEVE ANALYSIS) OR AS DIRECTED BY THE CITY ENGINEER.

7.) CURB DEPRESSIONS AND DRIVEWAY APPROACHES SHALL BE CONSTRUCTED ACCORDING TO THE APPROPRIATE CITY STANDARDS AND AS DIRECTED IN THE FIELD.

8.) ALL UNDERGROUND FACILITIES, WITH LATERALS, SHALL BE IN PLACE PRIOR TO PAVING THE STREET SECTION INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING: SEWER, WATER, ELECTRIC, GAS, AND DRAINAGE. CITY STORM DRAINS SHALL BE VIDEO RECORDED. SUBMIT RECORDING TO THE LAND DEVELOPMENT DIVISION.

9.) ALL STREET SECTIONS ARE TENTATIVE. ADDITIONAL SOIL TEST SHALL BE TAKEN AFTER ROUGH GRADING TO DETERMINE THE EXACT STREET SECTION REQUIREMENTS.

10.) AGGREGATE SLURRY, AS DEFINED IN SECTION 203-5 OF STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, SHALL BE APPLIED TO STREETS AT THE CONCLUSION OF THE ONE-YEAR WARRANTY PERIOD. LATEX SHALL BE APPLIED TO SLURRY MIX. ALL STRIPING SHALL BE REPLACED AS PER APPROVED SIGNING / STRIPING PLAN.

11.) INSTALL STREET TREES IN ACCORDANCE WITH THE APPROPRIATE CITY OF MORENO VALLEY ORDINANCE.

12.) BLUE DOTS SHALL BE INSTALLED ADJACENT TO ANY REQUIRED FIRE HYDRANT AND APPROVED BY THE FIRE DEPARTMENT.

13.) NO PUBLICLY TRAVELED STREET SHALL BE CLOSED TO TRAFFIC WITHOUT PRIOR CITY COUNCIL APPROVAL.

14.) CITY APPROVAL OF PLANS DOES NOT RELIEVE THE DEVELOPER OR CONSULTANT FROM RESPONSIBILITY FOR THE CORRECTION OF ERRORS AND OMISSIONS DISCOVERED DURING CONSTRUCTION. UPON REQUEST THE PLAN REVISIONS SHALL BE PROMPTLY SUBMITTED TO THE CITY ENGINEER FOR APPROVAL.

15.) THE QUANTITY, THICKNESS AND LIMITS OF AREAS NOTED FOR PG 64-16 ARHM-GG-C, OR AS APPROVED BY THE CITY ENGINEER, OVERLAY ARE FOR ESTIMATION PURPOSES ONLY. THE EXACT THICKNESS OF ANY ARHM OVERLAY SHALL BE DETERMINED BY A COMBINATION OF SOILS TESTING FOR STRUCTURAL SOUNDNESS OF THE EXISTING ROADWAY SECTION, CONFORMANCE WITH SECTION 8 (EARTHWORK) OF THE RIVERSIDE COUNTY ROAD IMPROVEMENT STANDARDS AND SPECIFICATIONS, CONFORMANCE TO THE LATEST TRAFFIC INDEX RATING AND TO THE DIRECTION OF THE CITY ENGINEER FOR REMOVAL OR REPAIR OF UNSUITABLE PAVED SECTIONS. PAVEMENT AREAS WHICH HAVE BEEN DETERMINED TO BE UNSUITABLE FOR OVERLAY DUE TO CRACKING, SUBSIDENCE, IRREGULAR SURFACE, AGE, MATERIAL COMPOSITION, OR WATER DAMAGE SHALL BE REMOVED OR REPAIRED AT THE DIRECTION OF THE CITY ENGINEER. THE ENGINEER OF RECORD SHALL REVISE THE STREET IMPROVEMENT PLANS SHOWING THE AFFECTED AREA UPON NOTIFICATION BY THE CITY ENGINEER.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: MDL 10/13/20 DIVISION MANAGER / DATE APPROVED: 10/29/2020 PUBLIC WORKS DIRECTOR / CITY ENGINEER / DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - LAND DEVELOPMENT DIVISION **STANDARD STREET IMPROVEMENT NOTES (FOR LAND DEVELOPMENT DIVISION)**	STANDARD PLAN **MVSI-166B-1** SHEET 2 OF 4

STANDARD STREET IMPROVEMENT NOTES (LAND DEVELOPMENT DIVISION):

16.) UTILITY TRENCH BACKFILL SHALL BE CONSTRUCTED TO 90% RELATIVE COMPACTION UNLESS OTHERWISE SPECIFIED AND SHALL BE CERTIFIED BY THE DEVELOPER'S SOILS ENGINEER PRIOR TO THE INSTALLATION OF CLASS II CRUSHED AGGREGATE BASE AND PAVING OF THE NEW STREET. PLEASE REFER TO STD PLAN MVSI-132A, MVSI-132B & MVSI-132C FOR TRENCH BACKFILL WITHIN AN EXISTING STREET.

17.) SEWER AND WATER LATERALS SHALL BE MARKED ON THE CURB ACCORDING TO LOCAL WATER PURVEYOR STANDARDS.

18.) ALL WATER VALVES OR SEWER MANHOLES SHALL BE RAISED TO GRADE IN ACCORDANCE WITH LOCAL WATER SURVEYOR STANDARDS.

19.) NO TRENCHES SHALL BE LEFT OPEN OVERNIGHT UNLESS APPROVED BY THE CITY ENGINEER.

20.) IF ANY UTILITIES OR FACILITIES CONFLICT WITH PROPOSED IMPROVEMENTS, WORK SHALL STOP AND THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY.

21.) ALL UTILITIES SHALL BE INSTALLED, TESTED AND APPROVED BY THE APPROPRIATE UTILITY COMPANY PRIOR TO PAVING.

22.) ALL TRAFFIC CONTROL DEVICES AND SIGNS SHALL BE IN PLACE PRIOR TO PAVING. STREET MARKINGS AND STRIPING SHALL BE COMPLETED PRIOR TO STREET OPENING.

23.) THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. THESE LOCATIONS ARE APPROXIMATE AND SHALL BE CONFIRMED IN THE FIELD BY CONTRACTORS, SO THAT ANY NECESSARY ADJUSTMENT CAN BE MADE IN ALIGNMENT AND / OR GRADE OF THE PROPOSED IMPROVEMENT. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT ANY UTILITY LINES SHOWN AND OTHER LINES NOT OF RECORD OR NOT SHOWN ON THESE PLANS.

24.) TRAFFIC CONTROL, SIGNING AND STRIPING MUST BE IN CONFORMANCE TO THE LATEST VERSION OF THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD).

25.) AN "AS-BUILT" STREET IMPROVEMENT PLAN SHALL BE SUBMITTED AT THE COMPLETION OF WORK.

26.) HOURS OF OPERATION ARE 7:00 AM - 7:00 PM MONDAY - FRIDAY; 8:00 AM - 4:00 PM (RESIDENTIAL). SATURDAY BY PRIOR APPOINTMENT ONLY. NO WORK ON SUNDAY OR PUBLIC HOLIDAY WITHOUT PRIOR CITY APPROVAL.

27.) STREETS SHALL BE DESIGNED TO HAVE A 1% MINIMUM CENTERLINE (LONGITUDINAL) SLOPE UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER. HOWEVER, THE ABSOLUTE MINIMUM SLOPE SHALL BE NO LESS THAN 0.65%.

28.) ALL PAVEMENT REPAIR SURFACE COURSE SHALL BE PG 64-14 ASPHALT RUBBER HOT MIX (ARHM-GG-C), OR AS APPROVED BY THE CITY ENGINEER. SEE STANDARDS No MVSI-132, A THROUGH F. ARHM SHALL CONFORM TO SECTION 203-11 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION.

NOTES:

1.) THESE NOTES SHALL BE PLACED ON THE TITLE SHEET OF ALL SUBMITTED STREET IMPROVEMENT PLANS BY DEVELOPERS.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 1, 1984	RECOMMENDED: MDL 10/13/20 DIVISION MANAGER DATE APPROVED: 10/29/2020 PUBLIC WORKS DIRECTOR / CITY ENGINEER DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - LAND DEVELOPMENT DIVISION **STANDARD STREET IMPROVEMENT NOTES (FOR LAND DEVELOPMENT DIVISION)**	STANDARD PLAN **MVSI-166C-1** SHEET 3 OF 4

STANDARD GRADING NOTES:

1.) ALL WORK SHALL CONFORM TO THE CITY OF MORENO VALLEY GRADING REGULATIONS, THE ADOPTED CALIFORNIA BUILDING CODE, AND THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.

2.) IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL UTILITIES OR STRUCTURES ABOVE OR BELOW GROUND, SHOWN OR NOT SHOWN ON THESE PLANS. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ALL DAMAGE TO ANY UTILITIES OR STRUCTURES CAUSED BY HIS/HER OPERATION.

3.) ADJACENT STREETS ARE TO BE CLEANED DAILY OF ALL DIRT AND DEBRIS THAT ARE THE RESULT OF OPERATION.

4.) DUST SHALL BE CONTROLLED BY WATERING OR OTHER APPROVED METHODS.

5.) HOURS OF OPERATION ARE 7:00 AM - 7:00 PM MONDAY - FRIDAY; 8:00 AM - 4:00 PM (RESIDENTIAL). SATURDAY BY PRIOR APPOINTMENT ONLY. NO WORK ON SUNDAY OR PUBLIC HOLIDAY WITHOUT PRIOR CITY APPROVAL.

6.) THE CITY PUBLIC WORKS DEPT SHALL BE CONTACTED AT (951) 413-3120 TO SCHEDULE A PRE-GRADING MEETING 48 HOURS PRIOR TO BEGINNING OF GRADING.

7.) ALL GRADING SHALL BE COMPLETED UNDER THE SUPERVISION OF A REGISTERED SOILS ENGINEER OF RECORD IN CONFORMANCE WITH RECOMMENDATIONS OF THE PRELIMINARY SOILS INVESTIGATION BY _____ DATED _____.

8.) TWO SETS OF THE FINAL SOILS REPORT SHALL BE SUBMITTED TO THE ENGINEERING DEPT FOR REVIEW AND APPROVAL PRIOR TO THE ISSUANCE OF A BUILDING PERMIT. THE SOILS REPORT SHALL REFLECT THE FACT THAT THE COMPACTION HAS BEEN OBTAINED NOT ONLY IN THE BUILDING PAD LOCATIONS, BUT IN THE REMAINDER OF THE SITE, INCLUDING THE SLOPES. FINAL SOILS GRADING CERTIFICATION SHALL BE SUBMITTED BY THE SOILS ENGINEER OF RECORD THAT THE FINAL GRADING CONFORMS TO APPENDIX J OF THE CALIFORNIA BUILDING CODE (CBC) AND THE APPROVED GRADING PLAN.

9.) ALL SLOPES SHALL BE A MAXIMUM OF 2:1, CUT OR FILL, UNLESS OTHERWISE RECOMMENDED BY REGISTERED SOILS ENGINEER AND APPROVED BY THE CITY ENGINEER.

10.) ALL PADS AND SWALES SHALL DRAIN A MINIMUM OF 2%, ADJACENT TO AND WITHIN 10' OF A BUILDING, THEN A MINIMUM OF 1% TO THE STREET OR DRIVES.

11.) ALL TRENCH BACKFILLS SHALL BE TESTED AND CERTIFIED BY THE SOILS ENGINEER OF RECORD TO NOT LESS THAN 90% MAXIMUM DENSITY AS DETERMINED BY ASTM SOIL COMPACTION TEST D1557. THE TOP 1.5 FT. OF SUBGRADE BELOW THE STREET PAVEMENT STRUCTURAL SECTION SHALL BE COMPACTED TO 95% RELATIVE COMPACTION.

12.) SEPARATE PERMITS SHALL BE REQUIRED FOR ANY IMPROVEMENT WORK WITHIN THE PUBLIC RIGHT OF WAY.

13.) CUT SLOPES GREATER THAN 5 FEET IN VERTICAL HEIGHT, AND FILL SLOPES GREATER THAN 3 FEET IN VERTICAL HEIGHT SHALL BE PLANTED WITH APPROVED GROUND COVER OR OTHER APPROVED SLOPE EROSION CONTROL METHOD TO PROTECT SLOPE FROM EROSION AND INSTABILITY IN ACCORDANCE WITH THE GRADING REGULATIONS.

14.) SEPARATE PERMITS FROM THE BUILDING DEPT SHALL BE REQUIRED FOR ALL WALLS AND FENCES.

15.) SEPARATE PERMITS FROM THE BUILDING DEPT SHALL BE REQUIRED FOR ALL ONSITE WATER AND SEWER INSTALLATIONS.

16.) ALL SLOPES ADJACENT TO THE PUBLIC RIGHT OF WAY SHALL BE SET BACK 2 FEET IF HEIGHT IS LESS THAN 10 FEET, AND 3 FEET IF HEIGHT IS GREATER THAN 10 FEET.

17.) DAMAGED OR ALTERED PUBLIC IMPROVEMENTS SHALL BE REPAIRED OR REPLACED AS REQUIRED BY THE CITY ENGINEER.

18.) AN "AS - BUILT" GRADING PLAN SHALL BE SUBMITTED AT THE COMPLETION OF WORK, AND PRIOR TO THE ISSUANCE OF THE OCCUPANCY PERMIT.

19.) CERTIFICATION BY THE RCE OF RECORD THAT THE ROUGH GRADING SOIL COMPACTION HAS BEEN COMPLETED PER ITEMS 7, 8, AND 11 AND THE SITE CONFORMS TO THIS PLAN AS TO LINE AND GRADE SHALL BE REQUIRED PRIOR TO ISSUANCE OF BUILDING PERMIT.

20.) THE RCE OF RECORD SIGNING THESE PLANS IS RESPONSIBLE FOR ASSURING THE ACCURACY AND ACCEPTABILITY OF THE DESIGN HEREON. IN THE EVENT OF DISCREPANCIES ARISING DURING CONSTRUCTION, THE RCE OF RECORD SHALL BE RESPONSIBLE FOR DETERMINING AN ACCEPTABLE SOLUTION AND REVISING THE PLANS FOR APPROVAL BY THE CITY ENGINEER.

21.) ALL IMPORTED SOIL SHALL HAVE A CERTIFICATE GIVEN TO THE CITY ENGINEER STATING THAT THE SOIL IS FREE FROM CONTAMINANTS BEFORE SOIL IS UNLOADED.

I HEREBY STATE THAT THIS PLAN WAS PREPARED UNDER MY SUPERVISION AND THAT IT CONFORMS TO THE LATEST EDITION OF THE CALIFORNIA BUILDING CODE (CBC) AS MODIFIED BY CITY OF MORENO VALLEY ORDINANCES, THE INTERIM GUIDELINES, AND THE PRELIMINARY SOILS REPORT PREPARED FOR THIS PROJECT.

_____ _____

NAME DATE

RCE #_____

NOTE: THESE NOTES SHALL BE PLACED ON ALL GRADING PLANS.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: _____ DIVISION MANAGER 9/13/18 DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - LAND DEVELOPMENT DIVISION
	APPROVED: _____ PUBLIC WORKS DIRECTOR / CITY ENGINEER 9/14/18 DATE	**STANDARD GRADING NOTES**
		STANDARD PLAN **MVSI-166D-1** SHEET 4 OF 4

GENERAL STREET IMPROVEMENT NOTES:

(FOR CITY CAPITAL IMPROVEMENT PROJECTS)

1. ALL WORK SHALL CONFORM TO THE CONTRACT DOCUMENTS IN EFFECT AT THE TIME OF BID, THE CITY OF MORENO VALLEY "STANDARD PLANS," AND OTHER AGENCIES' APPLICABLE "STANDARD PLANS" AS NOTED ON THE PLANS AND IN THE SPECIAL PROVISIONS.
2. ALL TRAFFIC SIGNAL WORK SHALL CONFORM TO THE CONTRACT DOCUMENTS IN EFFECT AT THE TIME OF BID, SECTION 86 "SIGNALS AND LIGHTING" OF CALTRANS STANDARD SPECIFICATIONS, CALTRANS STANDARD PLANS, AND THE SPECIAL PROVISIONS.
3. TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE CALIFORNIA M.U.T.C.D. PART 6 "TEMPORARY TRAFFIC CONTROL".
4. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN A CITY OF MORENO VALLEY BUSINESS LICENSE AND ENCROACHMENT PERMIT.
5. PRIOR TO START OF CONSTRUCTION, THE CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT, PROVIDE ALERT NUMBER TO CITY ENGINEER AND ALL NECESSARY UTILITY COMPANIES.
6. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL FILE AN APPLICATION FOR A FIRE HYDRANT METER WITH THE APPROPRIATE WATER AGENCY.
7. REQUEST FOR INSPECTION TO THE CITY OF MORENO VALLEY SHALL BE MADE BY THE CONTRACTOR AT LEAST TWENTY-FOUR (24) HOURS BEFORE THE SERVICES THEREOF WILL BE REQUIRED AT (951) 413-3130.
8. WORK IN PUBLIC STREETS, ONCE BEGUN, SHALL BE WITHOUT DELAY SO AS TO PROVIDE MINIMUM INCONVENIENCE TO ADJACENT PROPERTY OWNERS AND TO THE TRAVELING PUBLIC. FAILURE TO COMPLY WILL BE A VIOLATION OF THE CONTRACT. CONTRACTOR SHALL PROVIDE ACCESS TO RESIDENCES AND BUSINESSES AT ALL TIMES.
9. NO PUBLIC TRAVELED STREET SHALL BE CLOSED TO TRAFFIC WITHOUT PRIOR CITY COUNCIL APPROVAL.
10. PROVISIONS SHALL BE MADE BY THE CONTRACTOR AT ALL TIMES FOR CONTRIBUTORY DRAINAGE.
11. THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES, CONDUITS OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF AVAILABLE RECORDS, THESE LOCATIONS ARE APPROXIMATE. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT ANY UTILITY LINES SHOWN AND OTHER LINES NOT ON RECORD OR NOT SHOWN ON THESE PLANS.
12. THE CONTRACTOR SHALL EXCAVATE INSPECTION HOLES (POT HOLES) AND DETERMINE THE LOCATION AND DEPTH OF ALL UNDERGROUND STRUCTURES AND UTILITIES THAT ARE IN THE VICINITY OF OR THAT MAY BE AFFECTED BY THE PROPOSED IMPROVEMENT WORK PRIOR TO ANY CONSTRUCTION WORK WHICH COULD DAMAGE OR CONFLICT WITH SAID STRUCTURES OR UTILITIES.
13. THE CONTRACTOR SHALL PROTECT IN PLACE ALL EXISTING TRAFFIC SIGNAL CONDUIT WITHIN 6" ABOVE PROPOSED SUB GRADE SURFACE AND ALL CONDUIT BELOW PROPOSED SUBGRADE SURFACE. ALL EXISTING CONDUIT THAT IS MORE THAN 6" ABOVE THE PROPOSED SUBGRADE SURFACE SHALL BE RELOCATED TO WITHIN 6" BELOW PROPOSED SUBGRADE SURFACE.
14. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IF THE IMPROVEMENTS CONFLICT WITH EXISTING FACILITIES AND WORK IN THE CONFLICTING LOCATION SHALL STOP.
15. ANY ALTERATIONS OR VARIANCES FROM THE PLANS, EXCEPT MINOR ADJUSTMENTS IN THE FIELD TO MEET EXISTING CONDITIONS, SHALL BE REQUESTED IN WRITING AND MAY NOT BE INSTITUTED UNTIL APPROVED BY THE CITY ENGINEER OR REPRESENTATIVES ACTING SPECIFICALLY ON THE CITY ENGINEERS INSTRUCTIONS.
16. INSPECTION BY THE CITY INSPECTOR SHALL NOT, IN ANY WAY, RELIEVE THE CONTRACTOR OF HIS/HER OBLIGATIONS TO COMPLETELY AND DILIGENTLY PERFORM ALL WORK IN COMPLIANCE WITH THE APPROVED PLANS AND SPECIFICATIONS.
17. ALL ELEVATIONS SHOWN ON THE PLANS ARE ESTABLISHED BY LOCAL BENCH MARKS. SURVEY MONUMENTS SHALL BE PROTECTED IN PLACE.
18. ALL AC AND PCC SHALL BE SAWCUT UNLESS OTHERWISE SPECIFIED.
19. NO TRENCHES EXCEPT CURB AND GUTTER, SHALL BE LEFT OPEN OVERNIGHT UNLESS APPROVED BY THE CITY ENGINEER IN WRITING.
20. ALL UTILITIES SHALL BE INSTALLED, INSPECTED, TESTED AND APPROVED BY THE APPROPRIATE UTILITY COMPANY PRIOR TO PAVING. PROOF OF SUCH INSPECTION/APPROVAL SHALL BE SUPPLIED TO THE CITY INSPECTOR OR REPRESENTATIVE.
21. IRRIGATION LINES WITHIN ANY CITY STREET SHALL HAVE A 30" MINIMUM COVER FROM FINISH SURFACE, UNLESS SAID IRRIGATION LINE HAS BEEN APPROVED BY THE CITY ENGINEER IN WRITING TO BE ENCASED IN CONCRETE OR BEDDED IN A SPECIAL CONCRETE CRADLE.
22. THE CONTRACTOR SHALL COMPACT THE UPPER SIX INCHES OF SUBGRADE/AGGREGATE BASE TO A MINIMUM RELATIVE DENSITY OF 90/95 PERCENT RESPECTIVELY PER ASTM 1556-82 TESTING METHOD, OR AS DIRECTED BY THE ENGINEER.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984

RECOMMENDED: _____ 1/21/14
DIVISION MANAGER — DATE

APPROVED: _____ 1/29/14
PUBLIC WORKS DIRECTOR / CITY ENGINEER — DATE

CITY OF MORENO VALLEY

PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION

GENERAL STREET IMPROVEMENT NOTES

(FOR CITY CAPITAL IMPROVEMENT PROJECTS)

STANDARD PLAN
MVSI-167A-0

GENERAL STREET IMPROVEMENT NOTES:

(FOR CITY CAPITAL IMPROVEMENT PROJECTS)

23. SUBGRADE MATERIAL PLACED FOR CURBS, GUTTERS, DRIVEWAY APPROACHES, AND SIDEWALKS SHALL BE TO A RELATIVE COMPACTION OF 90 PERCENT.
24. ALL PORTLAND CEMENT CONCRETE (PCC) REMOVALS, INCLUDING, BUT NOT LIMITED TO CROSS GUTTERS, CURBS, DRIVEWAY APPROACHES, SIDEWALK, AND SPANDRELS SHALL BE MADE BY REMOVING AND REPLACING THE ENTIRE SECTION BETWEEN JOINTS. IF ANY UTILITY CUTS ARE MADE IN PCC IMPROVEMENTS, THE ENTIRE SECTION SHALL BE REMOVED AND REPLACED.
25. CONCRETE SIDEWALKS, CURBS AND GUTTERS, OR OTHER CONCRETE STRUCTURES WHICH WILL NOT BE SUBJECTED TO VEHICULAR TRAFFIC, SHALL BE BARRICADED FOR A PERIOD OF AT LEAST SEVEN (7) DAYS FOLLOWING PLACEMENT OF THE SAID CONCRETE STRUCTURE. FOR DRIVEWAYS, CROSS GUTTERS, SPANDRELS OR OTHER STRUCTURES WHICH WILL BE SUBJECTED TO VEHICULAR TRAFFIC, THE CONTRACTOR SHALL USE CONCRETE CONTAINING EIGHT SACKS OF CEMENT AND ADDITIVES THAT PROVIDE HIGH EARLY STRENGTH IN ORDER TO UTILIZE EARLIER USE OF CONSTRUCTED FACILITIES, AS EARLY AS 24-HOUR AFTER PLACING OF CONCRETE. THE CONTRACTOR SHALL OBTAIN WRITTEN APPROVAL FROM THE CITY ENGINEER FOR TRAFFIC USE TO BE PERMITTED THEREON TWENTY-FOUR HOURS AFTER THE PLACING OF CONCRETE.
26. ALL TRAFFIC CONTROL DEVICES AND SIGNS SHALL BE IN PLACE AND APPROVED BY THE CITY PRIOR TO PAVING. DELINEATION SHALL BE COMPLETED PRIOR TO STREET OPEN.
27. THE CONTRACTOR SHALL NOT PLACE ASPHALT CONCRETE PAVING UNTIL SUBGRADE OR AGGREGATE BASE HAS BEEN INSPECTED AND APPROVED BY THE CITY AND SHALL INCLUDE A COPY OF THE CERTIFICATION OF BASE/COMPACTION BY THE GEOTECHNICAL ENGINEER.
28. THE CONTRACTOR SHALL PLACE THE ARHM FINISH SURFACE COURSE PAVING AFTER ALL BASE COURSE PAVING HAS BEEN COMPLETED. TACK COAT SHALL BE PLACED BETWEEN ALL COURSES OF PAVING.
29. THE CONTRACTOR SHALL ADJUST WATER VALVE COVERS TO FINISH GRADE DURING PAVING, LOOSEN AFTER PAVING, AND PAINT BLUE.
30. BLUE DOTS SHALL BE INSTALLED TO INDICATE THE LOCATION OF FIRE HYDRANTS.
31. ALL TREE BRANCHES OVERHANGING THE SIDEWALK SHALL BE TRIMMED CLEAR TO A MINIMUM HEIGHT OF 10 FEET ABOVE FINISHED SURFACE/GROUND SURFACE AND BRANCHES OVERHANGING THE ROADWAY SHALL BE TRIMMED CLEAR TO A MINIMUM HEIGHT OF 18 FEET.
32. ALL IRRIGATION SHALL BE RELOCATED BEHIND IMPROVEMENTS, AND REPLACED WITH THE SAME STANDARD OF MATERIALS OR HIGHER. ALL LANDSCAPING SHALL COMPLY WITH THE CONTRACT DOCUMENTS.
33. ALL PAVEMENT REPAIR SURFACE COURSE SHALL BE PG 64-14 ASPHALT RUBBER HOT MIX (ARHM-GG-C), OR AS APPROVED BY THE CITY ENGINEER. SEE STANDARDS No MVSI-132, A THROUGH F. ARHM SHALL CONFORM TO SECTION 203-11 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: HN DIVISION MANAGER 10/14/20 DATE APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION **GENERAL STREET IMPROVEMENT NOTES** **(FOR CITY CAPITAL IMPROVEMENT PROJECTS)**	STANDARD PLAN **MVSI-167B-1** SHEET 2 OF 2

FOR LATEST DWG AND PDF FILES

VISIT CITY'S WEB SITE

22"x34" BORDER (24"x36" SHEET SIZE)
1" OFFSET (ALL AROUND)

CITY OF MORENO VALLEY
DECEMBER 3, 1984

RECOMMENDED:
DIVISION MANAGER — DATE 9/2/17

APPROVED:
INTERIM CITY ENGINEER — DATE 9/2/17

CITY OF MORENO VALLEY

PUBLIC WORKS DEPARTMENT - LAND DEVELOPMENT DIVISION

STANDARD TITLE SHEET
(FOR LAND DEVELOPMENT DIVISION)

STANDARD PLAN
MVSI-168A-1

SHEET 1 OF 2

NOT TO SCALE

PROJECT TITLE

CITY'S NOTES

SEE CITY STANDARD PLANS, SECTION 1 (STD MVSI-166)

CONSTRUCTION NOTES WITH QUANTITIES

LEGEND

"NOTE"

* MINIMUM TEXT HEIGHT IS 0.10"
* YOUR CHOICE OF FONTS AS LONG AS IT IS READABLE AND NO FANCY TEXT.
* BOLD ALL HEADING (MAY BE UNDERLINED)
* HEADING SHOULD BE AT LEAST 1.5 TIME LARGER THAN THE BODY OF THE TEXT.
* ALL CAPITAL LETTERS
* 24" x 36" SHEET SIZE

"MISCELLANEOUS ITEMS"

- ACREAGE: GROSS, NET AND DISTURBED
- EARTHWORK, CY
- SOURCE AND DATE OF TOPOGRAPHY
- LEGAL DESCRIPTIONS
- FEMA FLOODZONE DESIGNATION

SHEET INDEX MAP

UTILITY COMPANIES	EMERGENCY NUMBERS
BOX SPRINGS MUTUAL WATER COMPANY	(951) 653-8419
CHARTER SPECTRUM	(877) 906-9121
EASTERN MUNICIPAL WATER DIST	(951) 928-3777
EDGEMONT COMMUNITY SERVICES DISTRICT	(951) 784-2632
FRONTIER COMMUNICATION	(800) 921-9101
S.C. EDISON COMPANY	(800) 655-4555
S.C. GAS COMPANY	(800) 427-2200
SUNESYS	(951) 279-0400
RIVERSIDE TRANSIT AGENCY	(951) 565-5184
UNDERGROUND SERVICE ALERT	(800) 227-2600
MORENO VALLEY UTILITY ADMINISTRATION	(951) 413-3500
SPECIAL DISTRICTS ADMINISTRATION	(951) 413-3480
TRAFFIC SIGNAL MAINTENANCE (CITY)	(951) 413-3140
VERIZON WIRELESS	(800) 923-0204

VICINITY MAP

ROUGH/PRECISE GRADING PLANS

SHEET INDEX

DESCRIPTION	SHEET NO.
TITLE SHEET	
DETAIL SHEET	
GRADING PLAN	
ON-SITE UTILITY PLAN (PGP)	
HORIZONTAL CONTROL PLAN	
EROSION CONTROL PLAN	
CONDITIONS OF APPROVAL (ON RGP)	

OR

IMPROVEMENT PLANS

SHEET INDEX

DESCRIPTION	SHEET NO.
TITLE SHEET	
DETAIL SHEET	
STREET-PLANS & PROFILES	
TRAFFIC-SIGNAL PLANS	
SIGNING AND STRIPING PLANS	
CONDITIONS OF APPROVAL	

DECLARATION OF ENGINEER OF RECORD

I HEREBY DECLARE THAT THE DESIGN OF THE IMPROVEMENTS AS SHOWN ON THESE PLANS COMPLIES WITH PROFESSIONAL ENGINEERING STANDARDS AND PRACTICES. AS THE ENGINEER IN RESPONSIBLE CHARGE OF DESIGN OF THESE IMPROVEMENTS, I ASSUME FULL RESPONSIBLE CHARGE FOR SUCH DESIGN. I UNDERSTAND AND ACKNOWLEDGE THAT THE PLAN CHECK OF THESE PLANS BY THE CITY OF MORENO VALLEY IS A REVIEW FOR THE LIMITED PURPOSE OF ENSURING THAT THE PLANS COMPLY WITH CITY PROCEDURES, APPLICABLE POLICIES, AND ORDINANCES. THE PLAN CHECK IS NOT A DETERMINATION OF THE TECHNICAL ADEQUACY OF THE DESIGN OF THE IMPROVEMENTS. SUCH PLAN CHECK DOES NOT, THEREFORE, RELIEVE ME OF MY RESPONSIBILITY FOR THE DESIGN OF THESE IMPROVEMENTS. AS ENGINEER OF RECORD (EOR), I AGREE TO INDEMNIFY AND HOLD THE CITY OF MORENO VALLEY, THE MORENO VALLEY HOUSING AUTHORITY, AND THE MORENO VALLEY COMMUNITY SERVICES DISTRICT (CSD), ITS OFFICERS, AGENTS, AND EMPLOYEES HARMLESS FROM ANY AND ALL LIABILITY OF CLAIMS, DAMAGES, OR INJURIES TO ANY PERSON OR PROPERTY WHICH MIGHT ARISE FROM THE NEGLIGENT ACTS, ERRORS, OR OMISSIONS OF THE ENGINEER OF RECORD. I HAVE READ AND INFORMED THE PROJECT APPLICANT/DEVELOPER THAT APPROVAL OF THESE PLANS DO NOT RELIEVE THEM FROM THE REQUIREMENTS OF THE CONDITIONS OF APPROVAL (ATTACHED HEREIN OR IN OTHER APPROVED IMPROVEMENT PLANS).

I ALSO HEREBY DECLARE THAT I HAVE COMPARED THESE PLANS WITH ALL APPLICABLE ADA TITLE II AND TITLE 24 REQUIREMENTS FOR DISABILITY ACCESS FOR THIS PROJECT, AND THESE PLANS ARE IN FULL COMPLIANCE WITH THOSE REQUIREMENTS.

ROUGH/PRECISE GRADING PLANS

EARTHWORK	QUANTITIES CUT	FILL
ROUGH GRADING	___CY	___CY
OVER-EXCAVATION WORK	___CY	___CY
REMEDIAL WORK	___CY	___CY
SHRINKAGE (____%)	___CY	___CY
SUBTOTAL PROJECT EARTHWORK QUANTITIES	___CY	___CY
IMPORT MATERIAL		___CY
EXPORT MATERIAL	___CY	
TOTAL PROJECT EARTHWORK QUANTITIES	___CY	___CY

OWNER, APPLICANT, DEVELOPER, ENGINEERING FIRM

COMPANY NAME CONTACT NAME

ADDRESS PHONE

FAX E-MAIL

GEOTECH AND GEOLOGIST CERTIFICATION

THIS GRADING PLAN HAS BEEN REVIEWED BY THE UNDERSIGNED AND FOUND TO BE IN CONFORMANCE WITH THE RECOMMENDATIONS AS OUTLINED IN THE FOLLOWING SOILS AND GEOLOGICAL REPORT FOR THIS PROJECT.

REPORT TITLE:
REPORT DATE:
FIRM NAME:
BY: GEOTECHNICAL ENGINEER DATE
OR
BY: ENGINEERING GEOLOGIST DATE

THE GRADING AND/OR IMPROVEMENT PLANS ARE APPROVED FOR A PERIOD OF TWO (2) YEARS FROM THE DATE SIGNED BY THE CITY ENGINEER. AFTER THE TWO (2) YEAR PERIOD HAS LAPSED, THE ENGINEER OF RECORD MAY BE REQUIRED TO SUBMIT AND PROCESS FOR CITY ENGINEER APPROVAL UPDATED PLANS THAT COMPLY WITH THE MOST CURRENT CITY STANDARDS, PRACTICES, AND POLICIES.

ENGINEER'S NOTICE TO CONTRACTORS

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. THESE LOCATIONS ARE APPROXIMATE AND SHALL BE CONFIRMED IN THE FIELD BY THE CONTRACTOR, SO THAT ANY NECESSARY ADJUSTMENT CAN BE MADE IN ALIGNMENT AND/OR GRADE OF THE PROPOSED IMPROVEMENT. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT ANY UTILITY LINES SHOWN AND ANY OTHER LINES NOT OF RECORD OR NOT SHOWN ON THESE PLANS.

Underground Service Alert
Call: TOLL FREE
1-800
227-2600
WWW.DIG811.COM

PAXX-XXXX WDID No (Sheet 1 Only) WQMP No (Sheet 1 Only)

BENCHMARK	BASIS OF BEARING

REVIEW BY CITY STAFF

OFFICE	INITIAL	DATE
ENGINEERING DIVISION MANAGER		
LAND DEVELOPMENT		
PLANNING		
TRANSPORTATION		
PARKS AND COMMUNITY SERVICES		
SPECIAL DISTRICTS		
STORM WATER MANAGEMENT PMSM		

MARK	DATE	INITIAL	DESCRIPTION	REC.	APPR.	DATE
		E.O.R.	REVISION			

CITY OF MORENO VALLEY APPROVALS

RECOMMENDED: DATE

APPROVED: DATE

ENGINEER OF RECORD'S SEAL

ENGINEER OF RECORD'S COMPANY LOGO

UNDER THE SUPERVISION OF:

NAME RCE 000000 DATE

CITY OF MORENO VALLEY

<TYPE OF PLAN> (STREET, GRADING, ETC.)

MAP No, APN, ADDRESS AND/OR PROJECT NAME

TITLE SHEET

SHEET _OF__

CITY ID No

22"x34" BORDER (24"x36" SHEET SIZE)
1" OFFSET (ALL AROUND)

FOR LATEST DWG AND PDF FILES
VISIT CITY'S WEB SITE

PLAN TYPE
PROJECT NAME - LIMITS
PROJECT No XXX XXXX

GENERAL STREET IMPROVEMENT NOTES

1. ALL WORK SHALL CONFORM TO THE CONTRACT DOCUMENTS IN EFFECT AT THE TIME OF BID, THE CITY OF MORENO VALLEY "STANDARD PLANS," AND OTHER AGENCIES' APPLICABLE "STANDARD PLANS" AS NOTED ON THE PLANS AND IN THE SPECIAL PROVISIONS.
2. ALL TRAFFIC SIGNAL WORK SHALL CONFORM TO THE CONTRACT DOCUMENTS IN EFFECT AT THE TIME OF BID, SECTION 86 "SIGNALS AND LIGHTING" OF CALTRANS STANDARD SPECIFICATIONS, CALTRANS STANDARD PLANS, AND THE SPECIAL PROVISIONS.
3. TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE CA MUTCD PART 6 "TEMPORARY TRAFFIC CONTROL OR APPROVED TRAFFIC CONTROL PLANS."
4. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN A CITY OF MORENO VALLEY BUSINESS LICENSE AND ENCROACHMENT PERMIT.
5. PRIOR TO START OF CONSTRUCTION, THE CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT, PROVIDE ALERT NUMBER TO CITY ENGINEER AND ALL NECESSARY UTILITY COMPANIES.
6. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL FILE AN APPLICATION FOR A FIRE HYDRANT METER WITH THE APPROPRIATE WATER AGENCY.
7. REQUEST FOR INSPECTION TO THE CITY OF MORENO VALLEY SHALL BE MADE BY THE CONTRACTOR AT LEAST TWENTY-FOUR (24) HOURS BEFORE THE SERVICES THEREOF WILL BE REQUIRED AT (951) 413-3035.
8. WORK IN PUBLIC STREETS, ONCE BEGUN, SHALL BE WITHOUT DELAY SO AS TO PROVIDE MINIMUM INCONVENIENCE TO ADJACENT PROPERTY OWNERS AND TO THE TRAVELING PUBLIC. FAILURE TO COMPLY WILL BE A VIOLATION OF THE CONTRACT. CONTRACTOR SHALL PROVIDE ACCESS TO RESIDENCES AND BUSINESSES AT ALL TIMES.
9. NO PUBLIC TRAVELED STREET SHALL BE CLOSED TO TRAFFIC WITHOUT PRIOR CITY COUNCIL APPROVAL.
10. PROVISIONS SHALL BE MADE BY THE CONTRACTOR AT ALL TIMES FOR CONTRIBUTORY DRAINAGE.
11. THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES, CONDUITS OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. THESE LOCATIONS ARE APPROXIMATE. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT ANY UTILITY LINES SHOWN AND OTHER LINES NOT ON RECORD OR NOT SHOWN ON THESE PLANS.
12. THE CONTRACTOR SHALL EXCAVATE INSPECTION HOLES (POT HOLES) AND DETERMINE THE LOCATION AND DEPTH OF ALL UNDERGROUND STRUCTURES AND UTILITIES THAT ARE IN THE VICINITY OF OR THAT MAY BE AFFECTED BY THE PROPOSED IMPROVEMENT WORK PRIOR TO ANY CONSTRUCTION WORK WHICH COULD DAMAGE OR CONFLICT WITH SAID STRUCTURES OR UTILITIES.
13. THE CONTRACTOR SHALL PROTECT IN PLACE ALL EXISTING TRAFFIC SIGNAL CONDUIT WITHIN 6" ABOVE PROPOSED SUB GRADE SURFACE AND ALL CONDUIT BELOW PROPOSED SUBGRADE SURFACE. ALL EXISTING CONDUIT THAT IS MORE THAN 6" ABOVE THE PROPOSED SUBGRADE SURFACE SHALL BE RELOCATED TO WITHIN 6" BELOW PROPOSED SUBGRADE SURFACE.
14. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IF THE IMPROVEMENTS CONFLICT WITH EXISTING FACILITIES AND WORK IN THE CONFLICTING LOCATION SHALL STOP.
15. ANY ALIGNMENTS OR VARIANCES FROM THE PLANS, EXCEPT MINOR ADJUSTMENTS IN THE FIELD TO MEET EXISTING CONDITIONS, SHALL BE REQUESTED IN WRITING AND MAY NOT BE INSTITUTED UNTIL APPROVED BY THE CITY ENGINEER OR REPRESENTATIVES ACTING SPECIFICALLY ON THE CITY ENGINEERS INSTRUCTIONS.
16. INSPECTION BY THE CITY INSPECTOR SHALL NOT, IN ANY WAY, RELIEVE THE CONTRACTOR OF HIS/HER OBLIGATIONS TO CONFIDENTLY AND DILIGENTLY PERFORM ALL WORK IN CONFORMANCE WITH THE APPROVED PLANS AND SPECIFICATIONS.
17. ALL ELEVATIONS SHOWN ON THE PLANS ARE ESTABLISHED BY LOCAL BENCH MARKS. SURVEY MONUMENTS SHALL BE PROTECTED IN PLACE.
18. ALL A.C. AND P.C.C. SHALL BE SAWCUT UNLESS OTHERWISE SPECIFIED.
19. NO TRENCHES EXCEPT CURB AND GUTTER, SHALL BE LEFT OPEN OVERNIGHT UNLESS APPROVED BY THE CITY ENGINEER IN WRITING.
20. ALL UTILITIES SHALL BE INSTALLED, INSPECTED, TESTED AND APPROVED BY THE APPROPRIATE UTILITY COMPANY PRIOR TO PAVING. PROOF OF SUCH INSPECTION/APPROVAL SHALL BE SUPPLIED TO THE CITY INSPECTOR OR REPRESENTATIVE.
21. IRRIGATION LINES WITHIN ANY CITY STREET SHALL HAVE A 30" MINIMUM COVER FROM FINISH SURFACE, UNLESS SAID IRRIGATION LINE HAS BEEN APPROVED BY THE CITY ENGINEER IN WRITING TO BE ENCASED IN CONCRETE OR BEDDED IN A SPECIAL CONCRETE CRADLE.
22. THE CONTRACTOR SHALL COMPACT THE UPPER SIX INCHES OF SUBGRADE/AGGREGATE BASE TO A MINIMUM RELATIVE DENSITY OF 90/95 PERCENT RESPECTIVELY PER ASTM D559-82, TESTING METHOD, OR AS DIRECTED BY THE ENGINEER.
23. SUBGRADE MATERIAL PLACED FOR CURBS, GUTTERS, DRIVEWAY APPROACHES, AND SIDEWALKS SHALL BE TO A RELATIVE COMPACTION OF 90 PERCENT.
24. ALL PORTLAND CEMENT CONCRETE (PCC) REMOVALS, INCLUDING, BUT NOT LIMITED TO, CROSS GUTTERS, CURBS, DRIVEWAY APPROACHES, SIDEWALK AND SPANDRELS SHALL BE MADE BY REMOVING AND REPLACING THE ENTIRE SECTION BETWEEN JOINTS. IF ANY UTILITY CUTS ARE MADE IN PCC IMPROVEMENTS, THE ENTIRE SECTION SHALL BE REMOVED AND REPLACED.
25. CONCRETE SIDEWALKS, CURBS AND GUTTERS, OR OTHER CONCRETE STRUCTURES WHICH WILL NOT BE SUBJECTED TO VEHICULAR TRAFFIC, SHALL BE BARRICADED FOR A PERIOD OF AT LEAST SEVEN (7) DAYS FOLLOWING PLACEMENT OF THE SAID CONCRETE. STRUCTURES, FOR DRIVEWAYS, CROSS GUTTERS, SPANDRELS OR OTHER STRUCTURES WHICH WILL BE SUBJECTED TO VEHICULAR TRAFFIC, THE CONTRACTOR SHALL USE CONCRETE CONTAINING EIGHT SACKS OF CEMENT AND ADDITIVES THAT PROVIDE HIGH EARLY STRENGTH IN ORDER TO UTILIZE EARLIER USE OF CONSTRUCTED FACILITIES, AS EARLY AS 24-HOUR AFTER PLACING OF CONCRETE. THE CONTRACTOR SHALL OBTAIN WRITTEN APPROVAL FROM THE CITY ENGINEER FOR TRAFFIC USE TO BE PERMITTED THEREON TWENTY-FOUR HOURS AFTER THE PLACING OF CONCRETE.
26. ALL TRAFFIC CONTROL DEVICES AND SIGNS SHALL BE IN PLACE AND APPROVED BY THE CITY PRIOR TO PAVING. DELINEATION SHALL BE COMPLETED PRIOR TO STREET OPEN.
27. THE CONTRACTOR SHALL NOT PLACE ASPHALT CONCRETE PAVING UNTIL SUBGRADE OR AGGREGATE BASE HAS BEEN INSPECTED AND APPROVED BY THE CITY AND SHALL INCLUDE A COPY OF THE CERTIFICATION OF BASE/COMPACTION BY THE GEOTECHNICAL ENGINEER.
28. THE CONTRACTOR SHALL PLACE THE FINISH (CAP) COURSE PAVING AFTER ALL BASE COURSE PAVING HAS BEEN COMPLETED. TACK COAT SHALL BE PLACED BETWEEN ALL COURSES OF PAVING.
29. THE CONTRACTOR SHALL ADJUST WATER VALVE COVERS TO FINISH GRADE DURING PAVING, LOOSEN AFTER PAVING, AND PAINT BLUE.
30. BLUE DOTS SHALL BE INSTALLED TO INDICATE THE LOCATION OF FIRE HYDRANTS.
31. ALL TREE BRANCHES OVER-HANGING THE SIDEWALK SHALL BE TRIMMED CLEAR TO A MINIMUM HEIGHT OF 10 FEET ABOVE FINISHED SURFACE/GROUND SURFACE AND BRANCHES OVER-HANGING THE ROADWAY SHALL BE TRIMMED CLEAR TO A MINIMUM HEIGHT OF 16 FEET.
32. ALL EROSION SHALL BE RELOCATED BEHIND IMPROVEMENTS, AND REPLACED WITH THE SAME STANDARD OF MATERIALS OR HIGHER. ALL LANDSCAPING SHALL COMPLY WITH THE CONTRACT DOCUMENTS.

CITY OF MORENO VALLEY
DECEMBER 3, 1984

PROJECT LOCATION

VICINITY MAP
NOT TO SCALE

PLAN INDEX

UTILITY COMPANIES

BOX SPRINGS MUTUAL WATER COMPANY	(951) 653-5419
CHARTER SPECTRUM	(877) 906-9121
EASTERN MUNICIPAL WATER DIST	(951) 928-3777
EDGEMONT COMMUNITY SERVICES DISTRICT	(951) 784-2632
FRONTIER COMMUNICATION	(800) 921-8101
S.C. EDISON COMPANY	(800) 655-4555
S.C. GAS COMPANY	(800) 427-2200
SUNESYS	(951) 278-0400
RIVERSIDE TRANSIT AGENCY	(951) 565-5164
UNDERGROUND SERVICE ALERT	(800) 227-2600
MORENO VALLEY UTILITY ADMINISTRATION	(951) 413-3500
SPECIAL DISTRICTS ADMINISTRATION	(951) 413-3480
TRAFFIC SIGNAL MAINTENANCE (CITY)	(951) 413-3140
VERIZON WIRELESS	(800) 922-0204

DECLARATION OF DESIGN ENGINEER OF RECORD

I HEREBY DECLARE THAT THE DESIGN OF THE IMPROVEMENTS AS SHOWN ON THESE PLANS COMPLIES WITH PROFESSIONAL ENGINEERING STANDARDS AND PRACTICES. AS THE ENGINEER IN RESPONSIBLE CHARGE OF DESIGN OF THESE IMPROVEMENTS, I ASSUME FULL RESPONSIBLE CHARGE FOR SUCH DESIGN. I UNDERSTAND AND ACKNOWLEDGE THAT THE PLAN CHECK OF THESE PLANS BY THE CITY OF MORENO VALLEY IS A REVIEW FOR THE LIMITED PURPOSE OF ENSURING THAT THE PLANS COMPLY WITH CITY PROCEDURES, APPLICABLE POLICIES AND ORDINANCES. THE PLAN CHECK IS NOT A DETERMINATION OF THE TECHNICAL ADEQUACY OF THE DESIGN OF THE IMPROVEMENTS. SUCH PLAN CHECK DOES NOT, THEREFORE, RELIEVE ME OF MY RESPONSIBILITY FOR THE DESIGN OF THESE IMPROVEMENTS. AS ENGINEER OF RECORD (E.O.R.), I AGREE TO INDEMNIFY AND HOLD THE CITY OF MORENO VALLEY, THE MORENO VALLEY HOUSING AUTHORITY, AND THE MORENO VALLEY COMMUNITY SERVICES DISTRICT (CSD), ITS OFFICERS, AGENTS AND EMPLOYEES HARMLESS FROM ANY AND ALL LIABILITY OF CLAIMS, DAMAGES OR INJURIES TO ANY PERSON OR PROPERTY WHICH MIGHT ARISE FROM THE NEGLIGENT ACTS, ERRORS OR OMISSIONS OF THE ENGINEER OF RECORD.

I ALSO HEREBY DECLARE THAT I HAVE COMPARED THESE PLANS WITH ALL APPLICABLE A.D.A. AND TITLE 24 REQUIREMENTS FOR DISABILITY ACCESS FOR THIS PUBLIC PROJECT, AND THESE PLANS ARE IN FULL COMPLIANCE WITH THOSE REQUIREMENTS.

(SIGNATURE) _____ _____
NAME: _____ RCE _____ DATE

NOTICE TO CONTRACTORS

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY THE SEARCH OF AVAILABLE RECORDS. THESE LOCATIONS ARE APPROXIMATE AND SHALL BE CONFIRMED IN FIELD BY THE CONTRACTOR, SO THAT ANY NECESSARY ADJUSTMENT CAN BE MADE IN ALIGNMENT AND/OR GRADE OF THE PROPOSED IMPROVEMENTS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT ANY UTILITY FACILITIES SHOWN AND ANY OTHER FACILITIES NOT ON RECORD OR NOT SHOWN ON THESE PLANS.

THE CONTRACTOR SHALL POSSESS THE CLASS (OR CLASSES) OF LICENSE AS SPECIFIED IN THE "NOTICE INVITING BIDS" OF THE BID DOCUMENTS.

DIGALERT 811 BE
1-800-227-2600
2 Working Days Before You Dig

BASIS OF BEARINGS:	BENCH MARK:

NO.	REVISIONS	APPR.	DATE
	DESIGNED BY ___ DRAWN BY ___ CHECKED BY ___		

CITY OF MORENO VALLEY APPROVALS

APPROVED BY	DATE	BY
CITY TRAFFIC ENGINEER		
MAINTENANCE AND OPERATIONS MANAGER		
TRAFFIC OPERATIONS SUPERVISOR		
SENIOR ENGINEER		

RECOMMENDED: _____ DIVISION MANAGER _____ DATE 9/12/17
APPROVED: _____ INTERIM CITY ENGINEER _____ DATE 9/12/17

NAME OF CONSULTING FIRM
ADDRESS
CITY, STATE, ZIP
TEL: ( ) - FAX: ( ) -
EMAIL:

PREPARED UNDER SUPERVISION OF
(SIGNATURE) _____ DATE
NAME:
RCE:

ENGINEER OF RECORD'S SEAL

PLAN TYPE
STREET NAME
TYPE OF IMPROVEMENTS (STREET, STORM DRAIN, ETC.)
PROJECT LIMITS

ACCT No XXXX-XX-XX-XXXX
SHEET __X__ OF __X__
PROJECT No XXX XXXX

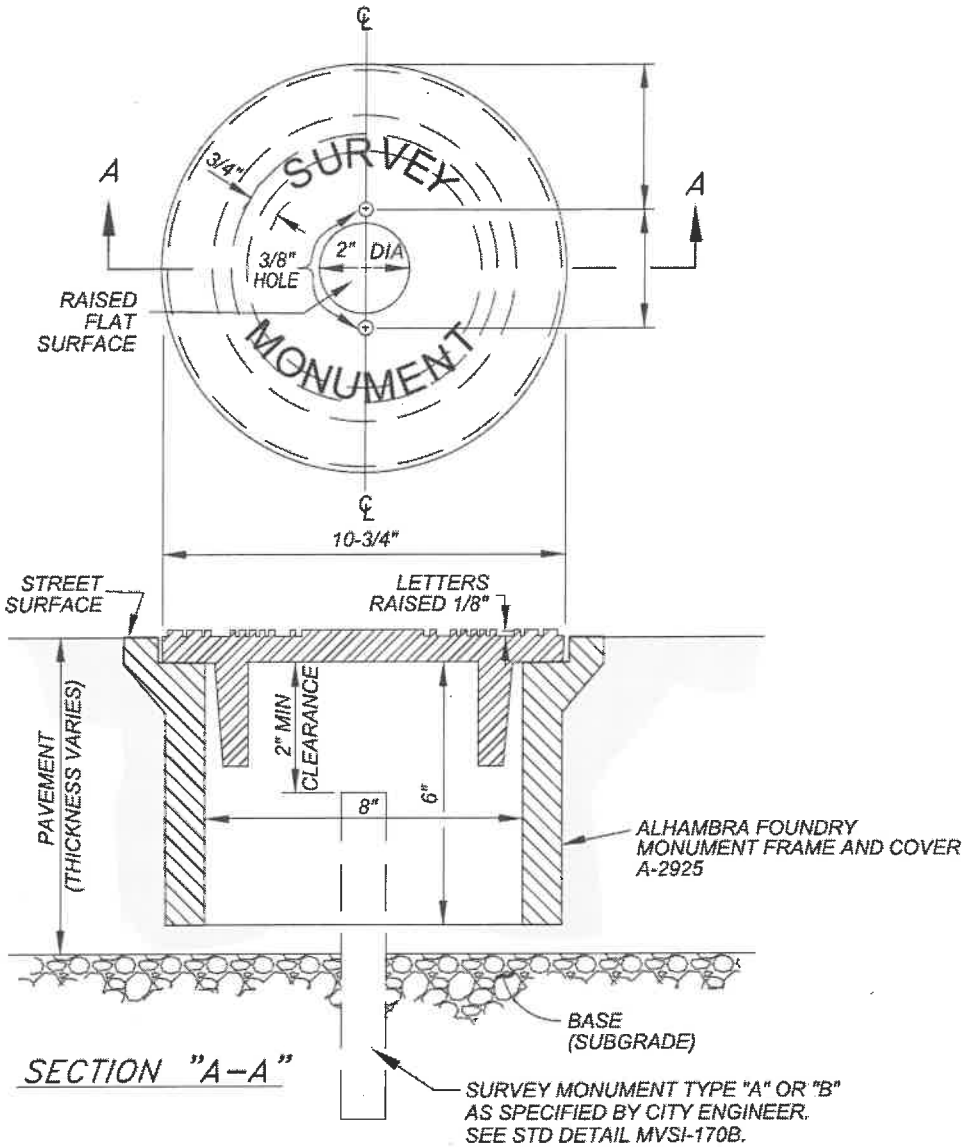
CITY OF MORENO VALLEY
PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION

STANDARD PLAN
MVSI-168B-1

STANDARD TITLE SHEET
(FOR CITY CAPITAL IMPROVEMENT PROJECTS)

SHEET 2 OF 2

NOT TO SCALE



NOTES:

1.) CAST IRON SHALL CONFORM TO SECTION 206-3 OF "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION."

2.) LETTERING SHALL BE AS SHOWN HEREON, 1/8" HIGH, AND SHALL BE CAST INTEGRAL WITH THE CASTING.

3.) THE 3/8" DIAMETER HOLES IN THE COVER SHALL BE AS SHOWN HEREON, AND SHALL EITHER BE FORMED BY PROVIDING A REMOVABLE PLUG PRIOR TO CASTING OR DRILLED AFTER CASTING HAS COOLED AND BEFORE COATING IS APPLIED. THE HOLES SHALL NOT BE PUNCHED.

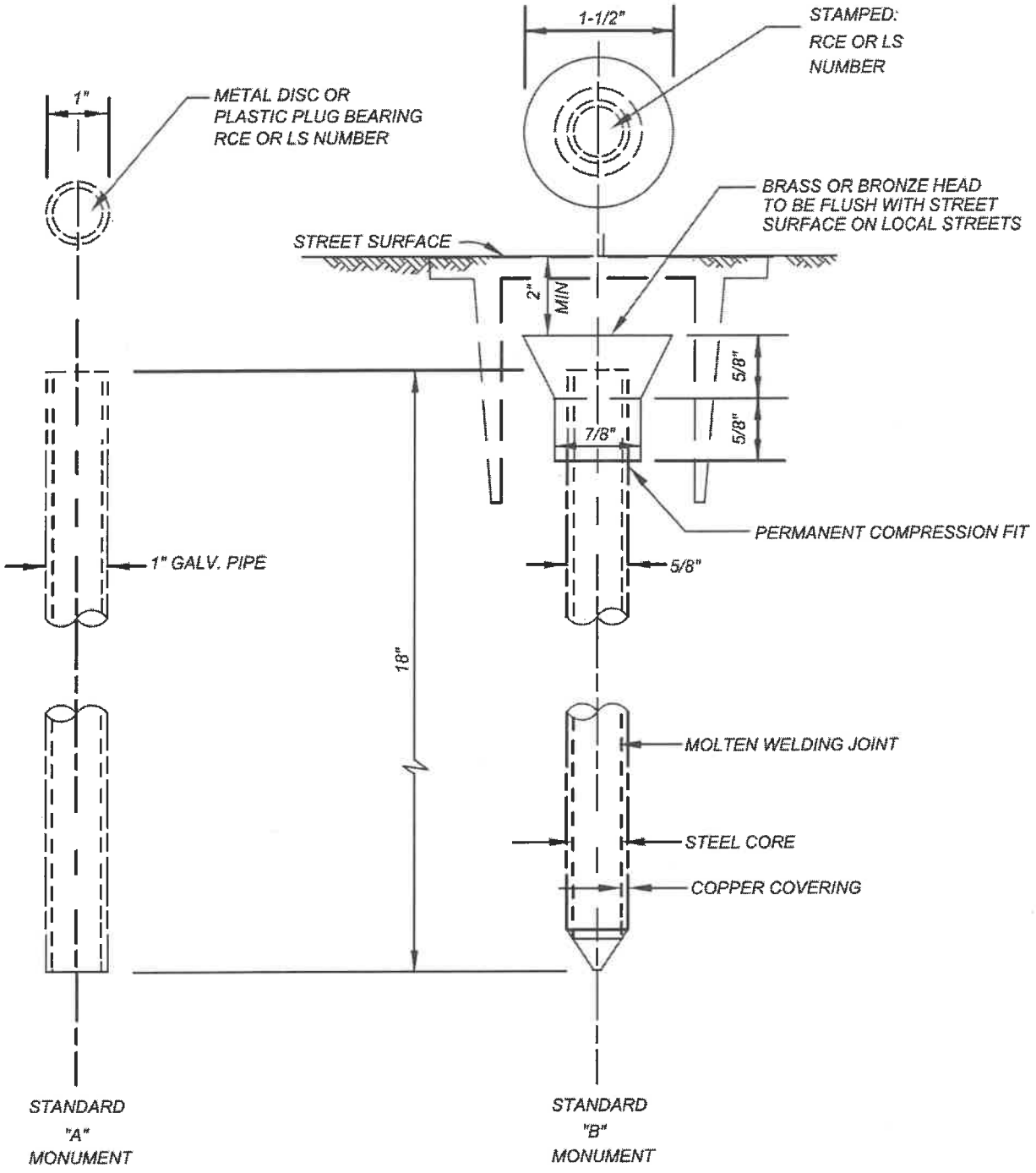
4.) AFTER CASTING HAS COOLED, IT SHALL BE GIVEN AN ASPHALTIC COATING CONFORMING TO SECTION 206-3.6 OF THE STANDARD SPECIFICATIONS.

5.) DURING INSTALLATION, WHEN THE PAVEMENT IS FOUND TO BE LESS THAN 6-5/8" THICK, THE BASE OF THE MONUMENT COVER SHALL BE CUT SO THAT IT DOES NOT EXTEND INTO THE BASE. APPLY A COAT OF ASPHALTIC COATING OR ASPHALT PAINT TO ANY UNCOATED SURFACE OR CUTEDGE.

6.) MONUMENTS AT STREET INTERSECTIONS, COLLECTORS AND ABOVE, SHALL HAVE MONUMENT COVERS.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: DIVISION MANAGER 7/8/19 DATE APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER 7/30/19 DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - LAND DEVELOPMENT DIVISION	STANDARD PLAN MVSI-170A-1
		MONUMENT COVER	SHEET 1 OF 5

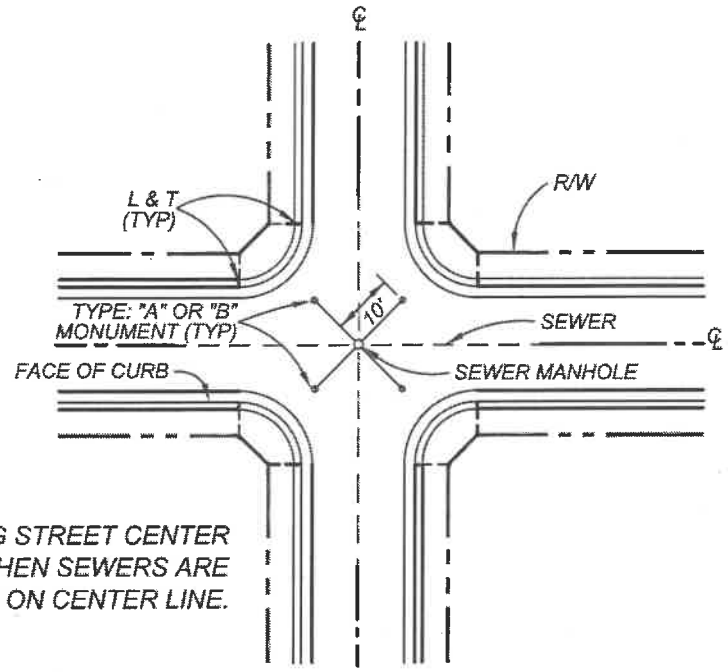


NOTES:

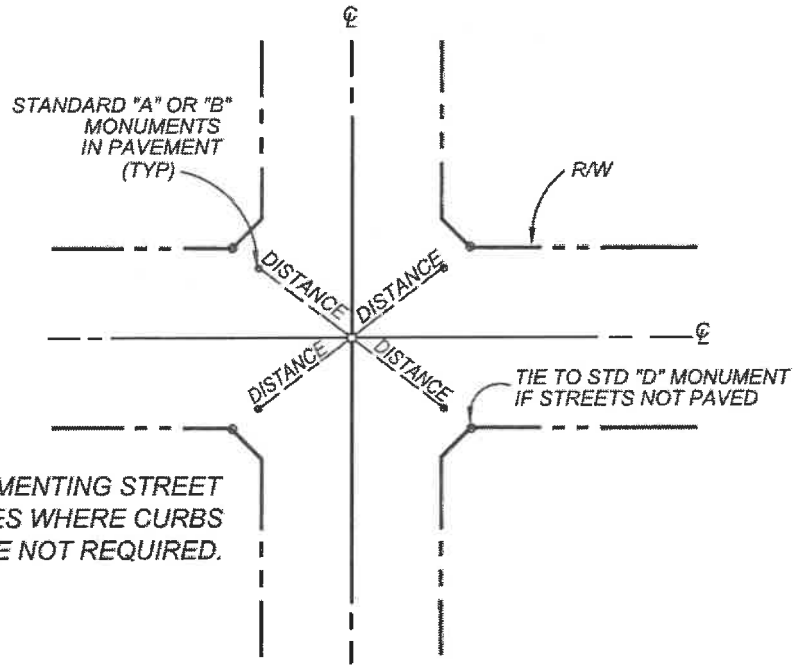
1.) SEE STD No MVSI-170E FOR TIE-OUT/MONUMENT NOTES.
2.) MONUMENTS AT STREET INTERSECTIONS, STANDARD KNUCKLE INTERSECTION, AND CUL-DE-SAC RADIAL POINTS SHALL HAVE MONUMENT COVERS.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: DIVISION MANAGER 7/2/19 DATE APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER 7/30/19 DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - LAND DEVELOPMENT DIVISION	STANDARD PLAN MVSI-170B-0
		SURVEY MONUMENT	SHEET 2 OF 5



MONUMENTING STREET CENTER LINES WHEN SEWERS ARE LOCATED ON CENTER LINE.



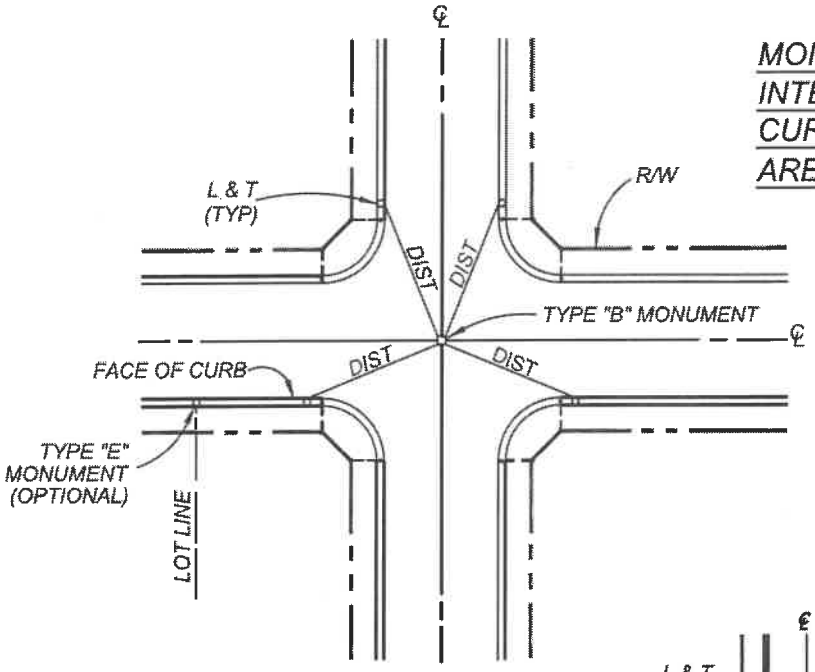
MONUMENTING STREET CENTER LINES WHERE CURBS ARE NOT REQUIRED.

NOTES:

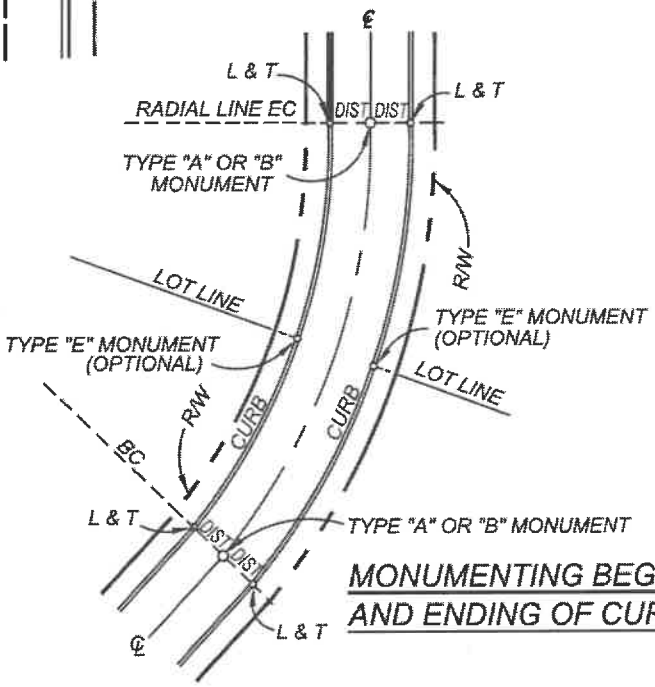
1.) L & T AS SHOWN HEREON INDICATES LEAD AND TACK OR STEEL PIN MONUMENT SET IN CURB.
2.) LEAD AND TACK OR STEEL PIN MONUMENT WITNESS TO PROPERTY CORNER MAY BE SET, NOT REQUIRED.
3.) SEE STD No MVSI-170B FOR TYPE "A" AND TYPE "B" MONUMENT.
4.) SEE STD No MVSI-170E FOR TIE-OUT/MONUMENT NOTES.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: MDL DIVISION MANAGER 7/8/19 DATE APPROVED: M.L. Wolfe PUBLIC WORKS DIRECTOR / CITY ENGINEER 7/30/19 DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - LAND DEVELOPMENT DIVISION **TIE-OUT STANDARDS** STANDARD PLAN **MVSI-170C-0** SHEET 3 OF 5



MONUMENTING STREET INTERSECTIONS WHERE CURB AND GUTTERS ARE INSTALLED



MONUMENTING BEGINNING AND ENDING OF CURVE

NOTES:

1.) L & T SHOWN HEREON INDICATES LEAD AND TACK OR STEEL PIN MONUMENT SET IN CONCRETE CURB.

2.) LEAD AND TACK OR STEEL PIN MONUMENT WITNESS TO PROPERTY CORNER MAY BE SET ("E" MONUMENT) IN LIEU OF SETTING FRONT LOT CORNERS.

3.) THE PI OF THE CURVE C OF A STREET MAY BE MONUMENTED IN LIEU OF EC AND BC IF THE PI FALLS WITHIN THE TRAVELED WAY. IT SHALL BE REFERENCED WITH L & T's IN CURB.

4.)SEE STD MVSI-170B AND MVSI-170E FOR TIE-OUT/MONUMENT NOTES.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984

RECOMMENDED: MDL 7/2/19
DIVISION MANAGER DATE

APPROVED: 7/30/19
PUBLIC WORKS DIRECTOR / CITY ENGINEER DATE

CITY OF MORENO VALLEY

PUBLIC WORKS DEPARTMENT - LAND DEVELOPMENT DIVISION

STREET CENTERLINE MONUMENT

STANDARD PLAN
MVSI-170D-0

NOTES:

1.) **GENERAL REQUIREMENTS:** THE SUBDIVISION BOUNDARIES, LOT CORNERS, CITY LIMITS, ROAD, STREET, HIGHWAY CENTERLINE, ANGLE POINTS IN ALL LINES, BEGINNING AND END OF ALL CURVED LINES, SHALL BE MONUMENTED IN ACCORDANCE WITH THE HEREINAFTER DESCRIBED STANDARD MONUMENTS AND PROCEDURES. ANY MONUMENT HAVING CHARACTERISTICS OTHER THAN THE HEREINAFTER DESCRIBED MAY BE USED ONLY UPON WRITTEN APPROVAL OF THE CITY ENGINEER. IF AN EXISTING RECORD AND IDENTIFIED MONUMENT IS FOUND ON THE GROUND AT THE LOCATION OF A SUBDIVISION CORNER, THIS MONUMENT MAY BE USED IN LIEU OF REPLACEMENT WITH A NEW MONUMENT PROVIDED THE EXISTING MONUMENT IS A TYPE CONSIDERED TO BE DURABLE.

2.) **STANDARD "A" MONUMENTS:** THIS MONUMENT IS TO BE ONE INCH (INSIDE DIAMETER) GALVANIZED IRON PIPE EIGHTEEN (18") INCHES LONG. A METAL DISC OR PLASTIC PLUG BEARING THE REGISTERED CIVIL ENGINEER OR LAND SURVEYOR NUMBER SHALL BE SECURELY AFFIXED TO THE TOP OF THE PIPE. THE TOP SURFACE OF THE MONUMENT SHALL BE 2⅔" MINIMUM BELOW THE PAVED STREET SURFACE WITH MONUMENT COVER. SEE STANDARD PLANS No's MVSI-170A AND MVSI-170B. THIS MONUMENT IS NOT TO BE USED WITHOUT A MONUMENT COVER.

3.) **STANDARD "B" MONUMENTS:** THIS MONUMENT IS TO BE AN EIGHTEEN (18") INCH COPPER CLAD STEEL PIN WITH ONE-HALF (1-½") INCH CONICAL BRASS CAP. THE MONUMENT MAY BE USED AS AN ALTERNATIVE TO THE TYPE "A" MONUMENT TO MARK CENTERLINE CONTROL IN PAVED STREETS. THE MONUMENT IS TO BE DRIVEN 2" MINIMUM BELOW THE STREET SURFACE WITH MONUMENT COVER. AFTER SETTING THE MONUMENT, THE REGISTERED CIVIL ENGINEER OR LAND SURVEYOR NUMBER SHALL BE STAMPED INTO THE SURFACE OF THE BRASS CAP. SEE STANDARD PLAN No's MVSI-170A AND MVSI-170B. THIS MONUMENT SHALL BE FLUSH WITH STREET SURFACE WHEN PLACED IN LOCAL STREETS.

4.) **STANDARD "C" MONUMENTS:** THIS MONUMENT TO CONSIST OF A ½" REBAR, 18" LONG WITH APPROPRIATE STAMPED CAP. SEE MONUMENT SCHEDULE BELOW FOR USE OF THIS MONUMENT.

5.) **STANDARD "D" MONUMENTS:** THIS MONUMENT TO CONSIST OF A ¾" INSIDE DIAMETER x 18" LONG GALVANIZED IRON PIPE DRIVEN TO A POINT NOT TO EXCEED 1" ABOVE THE NATURAL GROUND SURFACE. THE EXACT POINT OF INTERSECTION OF THE LINES SHALL BE MARKED AS SHOWN ON STANDARD MVSI-170C-0, AND ON THE TOP CENTER OF THE PIPE BY A SUITABLE TACK OR NAIL, WHICH IN TURN SHALL BE USED TO SECURE TO THE STAKE THE METAL DISK BEARING THE REGISTERED CIVIL ENGINEER OR LAND SURVEYOR NUMBER OR PLASTIC PLUG WITH RCE OR LS NUMBER. SEE MONUMENT SCHEDULE BELOW FOR USE OF THIS MONUMENT.

6.) **STANDARD "E" MONUMENTS:** THIS MONUMENT TO CONSIST OF LEAD PLUG OR STEEL PIN WITH METAL IDENTIFICATION DISK SET IN CONCRETE CURB. SEE MONUMENT SCHEDULE BELOW FOR USE OF THIS MONUMENT.

7.) **MONUMENT SCHEDULE:**

STANDARD	USE OF MONUMENT	REMARKS
"A"	TRACT BOUNDARY CONTROL: STREET CENTERLINE CONTROL--UNPAVED AND PAVED	AS SPECIFIED BY THE CITY ENGINEER.
"B"	STREET CENTERLINE CONTROL	MAY BE USED IN LIEU OF TYPE "A" MONUMENT IN PAVED STREETS. TYPE "B" SHALL BE USED AT ALL STREET INTERSECTIONS
"C"	LOT CORNER ANGLE POINT IN LOT LINE, EC AND BC, LOT LINE, RIGHT-OF-WAY LINE	
"D"	SAME AS "C"	
"E"	SAME AS "C"	ALL LOT CORNER MONUMENT EXCEPT WHEN LOT CORNER IS COINCIDENT WITH BOUNDARY CORNER MAY BE SET IN THE FACE OF THE CURB ON THE PROLONGATION OF THE LOT LINE. IN THE EVENT IMPROVEMENTS IN A SUBDIVISION INCLUDE A BLOCK WALL ALONG THE REAR LOT LINES, A STANDARD "E" MONUMENT MAY BE SET ON BOTH SIDES OF THE BLOCK WALL TO INDICATE DIRECTION OF THE SIDE LOT LINES. SUCH POINTS SHALL BE NOTED ON THE FINAL MAP AS "POINTS ON LINE".

8.) **MONUMENTS TIES:** UPON COMPLETION OF THE TRACT MONUMENTATION, THE ENGINEER OR LICENSED LAND SURVEYOR SHALL FURNISH TO THE CITY ENGINEER TIES TO ALL STREET CENTERLINE MONUMENTS. SUCH TIES ARE TO BE PERMANENT PHYSICAL OBJECTS, THERE BEING NOT LESS THAN 3 AND PREFERABLY 4 TIES TO EACH MONUMENT. WHENEVER CURB AND GUTTER IS INSTALLED, STREET CENTERLINE MONUMENTS ARE TO BE TIED TO PERMANENT POINTS SET IN THE CURB. THESE PERMANENT POINTS TO CONSIST OF EITHER OF THE FOLLOWING: LEAD AND TACK OR STEEL PIN DRIVEN INTO THE CONCRETE. USE OF A CROSS CUT INTO THE CONCRETE WILL NOT BE ACCEPTABLE. CROSS OVER TIES ARE PREFERRED WHEN MADE WITH TRANSIT AND TAPE. THE TIES FURNISHED TO THE CITY ENGINEER ARE TO BE PREPARED ON 8-½" x 11" SHEETS OF MYLAR. SKETCH TO BE CLEAR AND LEGIBLE AND SPACED TO AVOID CONFUSION OR MISINTERPRETATION.

NOT TO SCALE

CITY OF MORENO VALLEY · DECEMBER 3, 1984

RECOMMENDED: MDL — DIVISION MANAGER — DATE 7/8/19

APPROVED: M.L. Wolfe — PUBLIC WORKS DIRECTOR / CITY ENGINEER — DATE 7/30/19

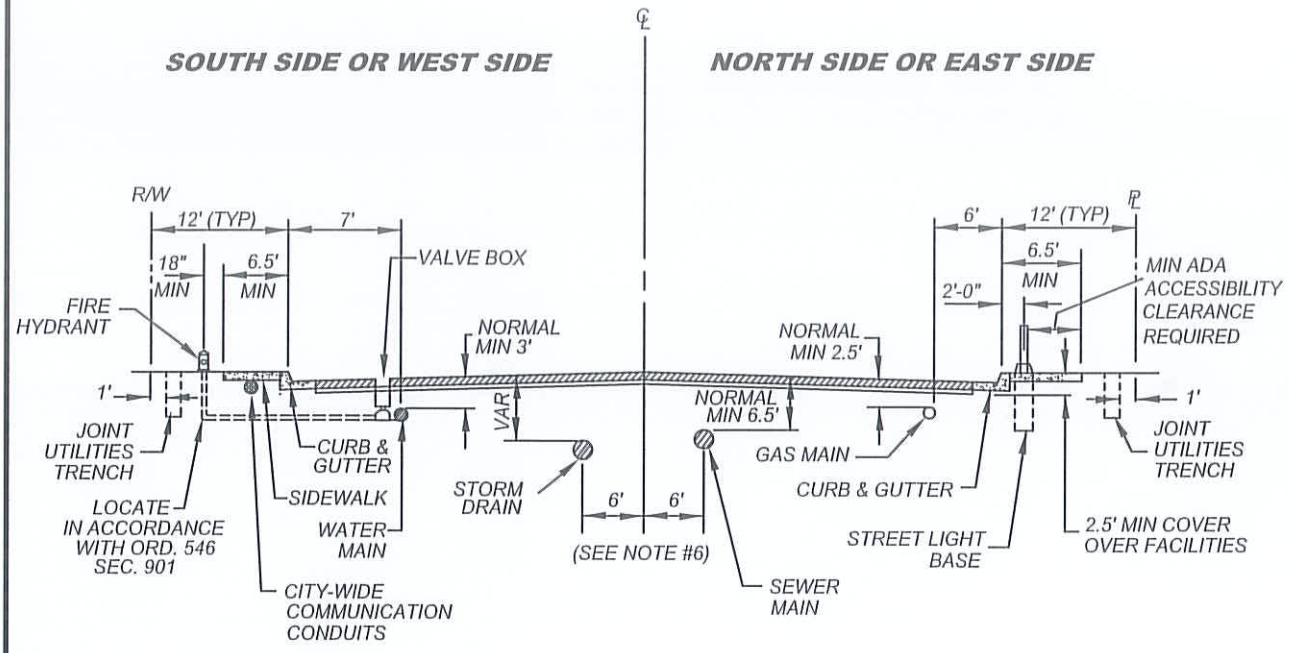
CITY OF MORENO VALLEY

PUBLIC WORKS DEPARTMENT - LAND DEVELOPMENT DIVISION

MONUMENT NOTES

STANDARD PLAN **MVSI-170E-0**

SHEET 5 OF 5



NOTES:

1.) LOCATION AND DEPTH OF EXISTING AND PROPOSED UTILITIES MUST BE PROVIDED BY THE SUBDIVIDER AND SHOWN ON ANY PLANS SUBMITTED TO THE CITY ENGINEER FOR APPROVAL.

2.) CHANGES MAY BE PERMITTED BY CITY ENGINEER IN CASES OF CONFLICTING FACILITIES.

3.) CONFLICTS BETWEEN UTILITY COMPANIES FACILITIES, EXISTING AND PROPOSED, MUST BE MUTUALLY RESOLVED BY THE UTILITY COMPANIES.

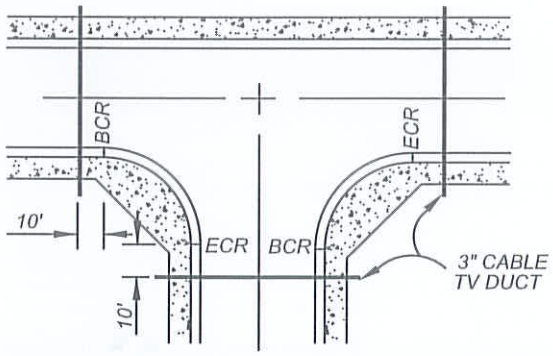
4.) FOR COMMERCIAL SIDEWALKS, THE FIRE HYDRANT SHALL BE PLACED WITHIN THE SIDEWALK 1.5' BEHIND FACE OF CURB.

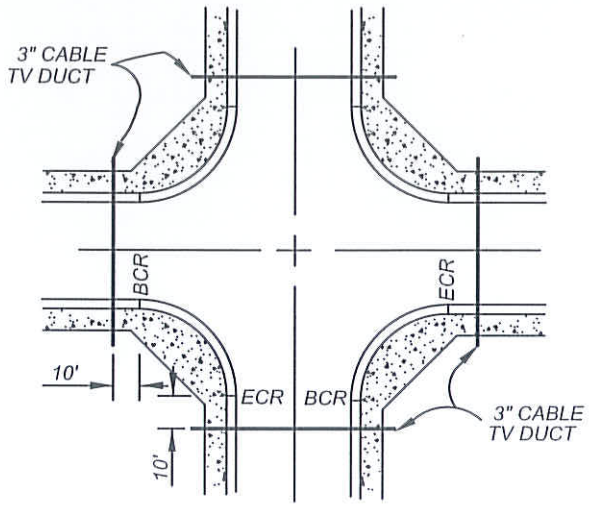
5.) SEE STD NO'S. MVLT-400A-0 AND MVLT-400B-0 FOR LIGHTING DETAILS.

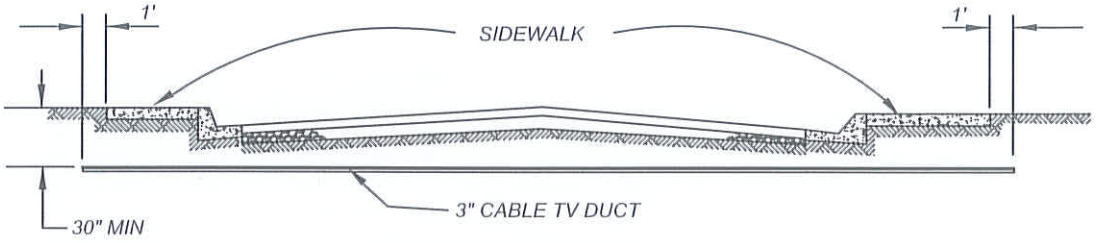
6.) FOR STREETS WITH RAISED MEDIANS, THE OFFSET DISTANCES OF STORM DRAIN AND SEWER MAIN FROM THE STREET CENTERLINE SHALL BE PER THE CITY ENGINEER'S REVIEW AND APPROVAL.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3,1984	RECOMMENDED: DIVISION MANAGER 1/21/14 DATE APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER 1/29/14 DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION **NORMAL LOCATION OF UNDERGROUND UTILITIES**
		STANDARD PLAN **MVSI-180A-0** SHEET 1 OF 2



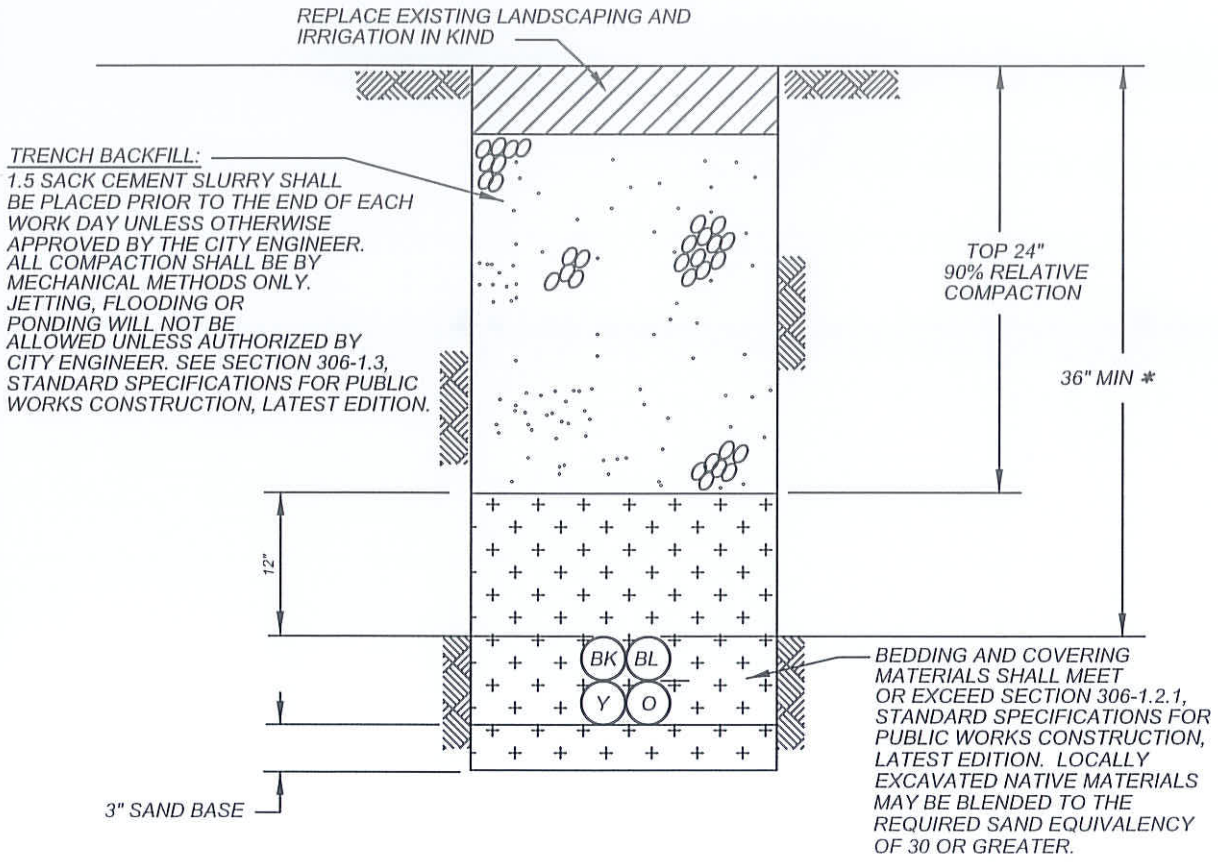




TYPICAL CROSS SECTION

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: DIVISION MANAGER 1/21/14 DATE APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER 5/29/14 DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION **LOCATION OF CABLE TV DUCTS AT STREET INTERSECTIONS**
		STANDARD PLAN **MVSI-180B-0** SHEET 2 OF 2



* 36" MIN FOR TRUNK AND DISTRIBUTION CONDUIT SYSTEM AND 18" MIN. FOR SERVICE LATERAL CONDUIT SYSTEM.

NOTES:

1. SEE STD No MVSI-185A-0 ~ MVSI-185D-0 FOR TECHNICAL PROVISIONS OF COMMUNICATIONS FACILITIES.
2. ALL TRENCHING AND BACKFILL SHALL BE DONE IN ACCORDANCE WITH SECTION 306, STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION.
3. FOUR-WAY CLIP SPACERS SHALL BE INSTALLED EVERY 50' TO HOLD CONDUITS IN A UNIFORM ORDER AS SHOWN THROUGH OUT THE LENGTH OF THE TRENCH.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984

RECOMMENDED:
DIVISION MANAGER — DATE 1/21/14

APPROVED:
PUBLIC WORKS DIRECTOR / CITY ENGINEER — DATE 1/29/14

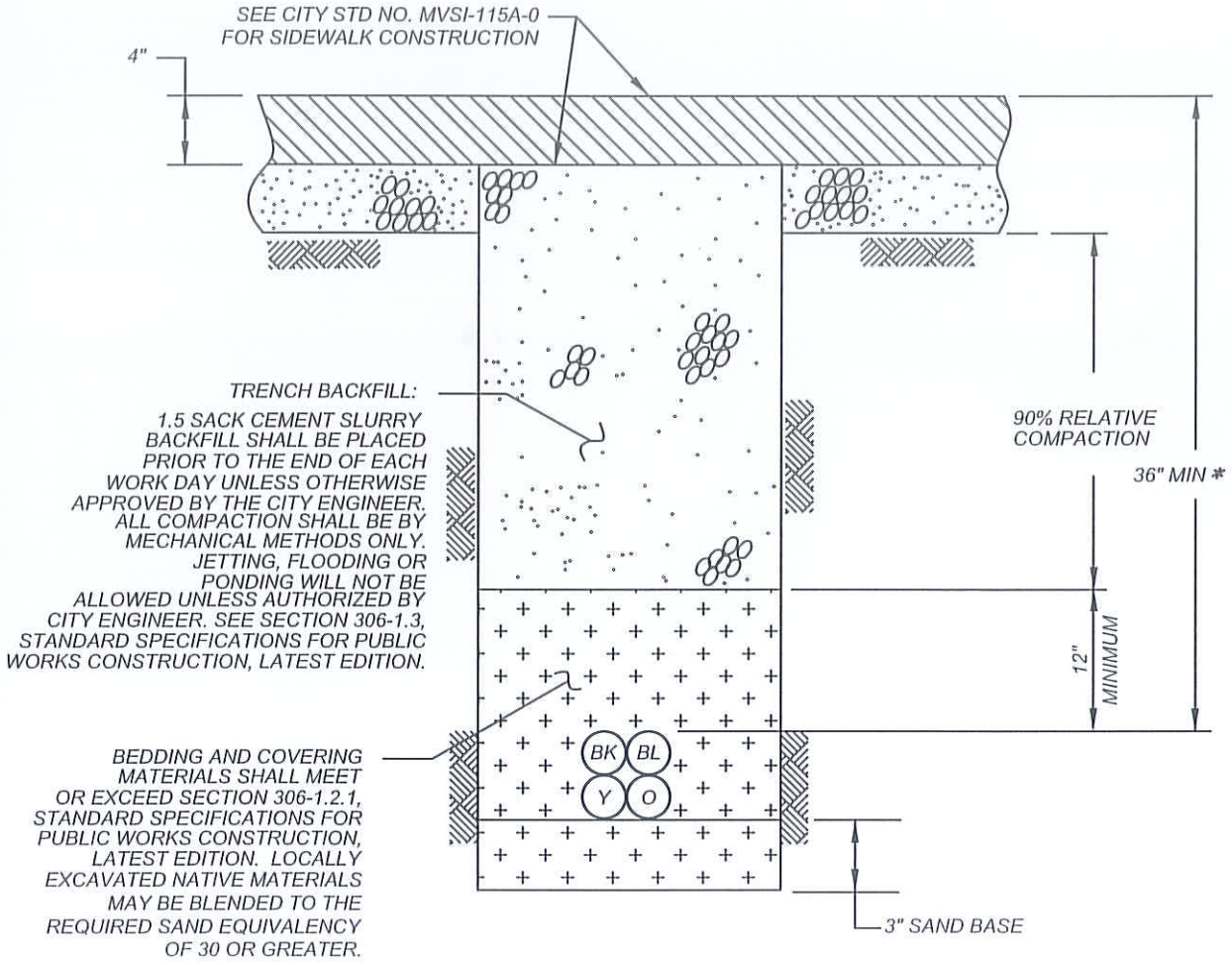
CITY OF MORENO VALLEY

PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION

COMMUNICATIONS CONDUIT IN PARKWAY SEPARATE TRENCH DETAIL

STANDARD PLAN
MVSI-181A-0

SHEET 1 OF 4



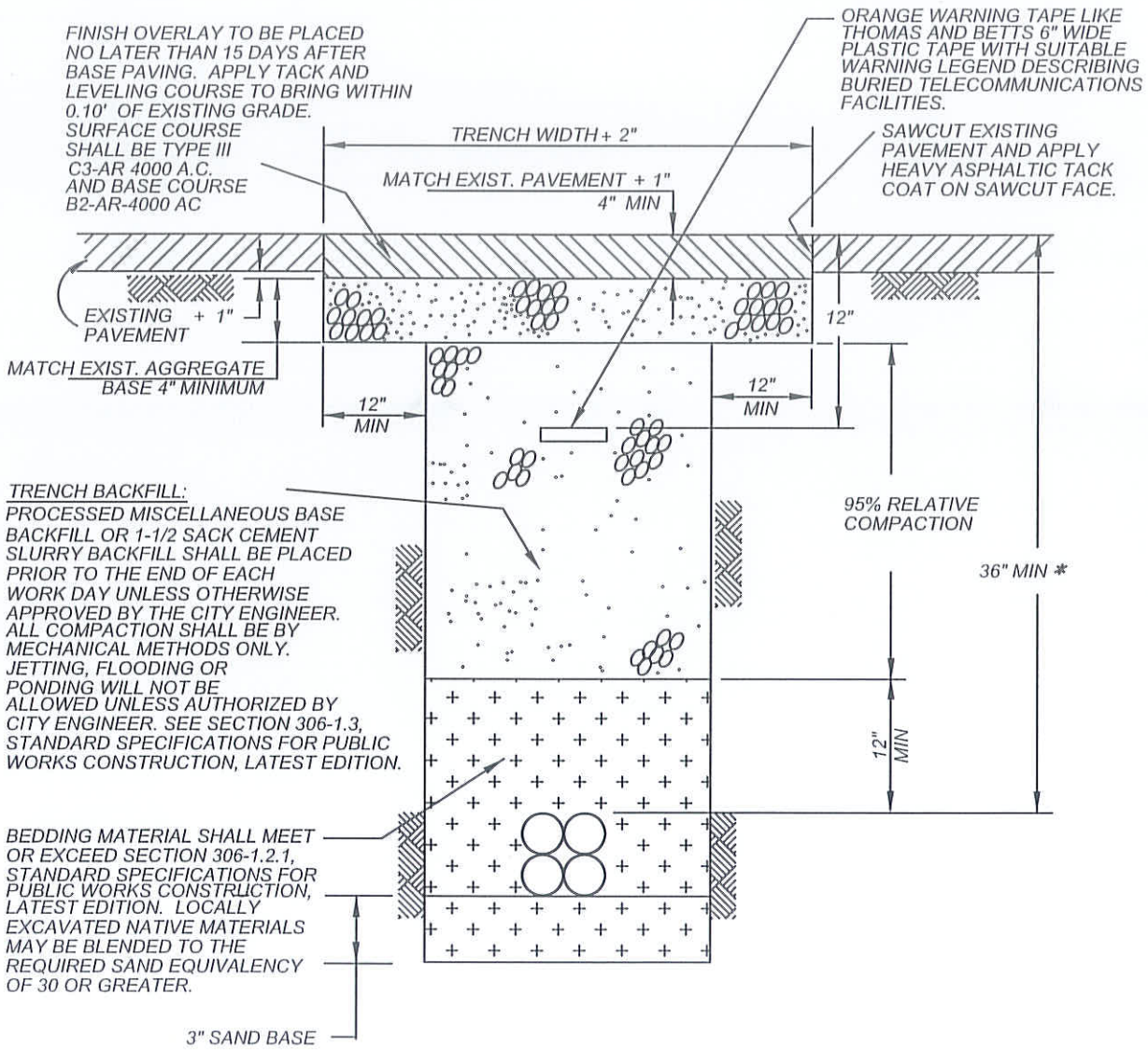
* 36" MIN FOR TRUNK AND DISTRIBUTION CONDUIT SYSTEM AND 18" MIN FOR SERVICE LATERAL CONDUIT SYSTEM.

NOTES:

1. SEE STDS MVSI-185A-0 ~ MVSI-185D-0 FOR TECHNICAL PROVISIONS OF COMMUNICATIONS FACILITIES.
2. ALL TRENCHING AND BACKFILL SHALL BE DONE IN ACCORDANCE WITH SECTION 306, STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION.
3. FOUR-WAY CLIP SPACERS SHALL BE INSTALLED EVERY 50' TO HOLD CONDUITS IN A UNIFORM ORDER AS SHOWN THROUGH OUT THE LENGTH OF THE TRENCH.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3,1984	RECOMMENDED: DIVISION MANAGER 1/21/14 DATE APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER 1/29/14 DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION **COMMUNICATIONS CONDUIT IN SIDEWALK SEPARATE TRENCH DETAIL**
		STANDARD PLAN **MVSI-181B-0** SHEET 2 OF 4



* 36" MIN FOR TRUNK AND DISTRIBUTION CONDUIT SYSTEM AND 18" MIN. FOR SERVICE LATERAL CONDUIT SYSTEM.

NOTES:

1.) SEE STD. NO. MVSI-185A-0 ~ MVSI-185D-0 FOR TECHNICAL PROVISIONS OF COMMUNICATIONS FACILITIES.

2.) ALL TRENCHING AND BACKFILL SHALL BE DONE IN ACCORDANCE WITH SECTION 306, STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION.

NOT TO SCALE

CITY OF MORENO VALLEY · DECEMBER 3, 1984

RECOMMENDED: _____ DIVISION MANAGER 1/21/14 DATE

APPROVED: _____ PUBLIC WORKS DIRECTOR / CITY ENGINEER 1/29/14 DATE

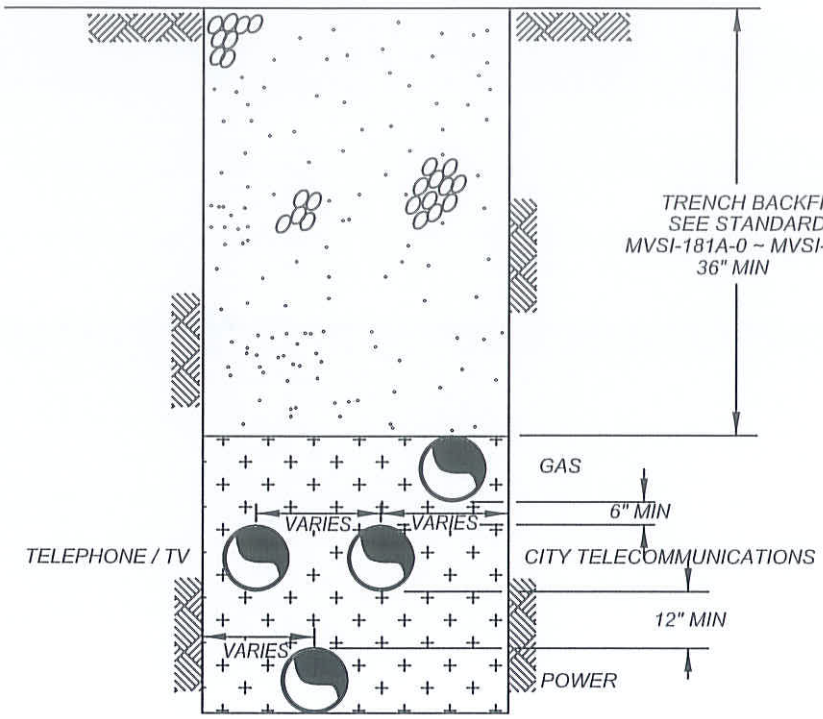
CITY OF MORENO VALLEY

PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION

COMMUNICATIONS CONDUIT IN PAVEMENT SEPARATE TRENCH DETAIL

STANDARD PLAN
MVSI-181C-0

SHEET 3 OF 4

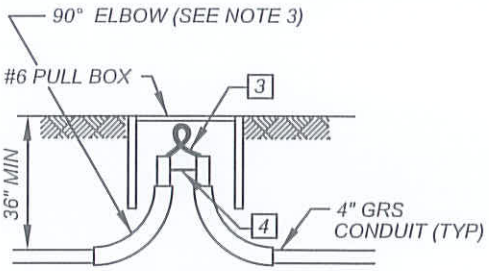


NOTES:

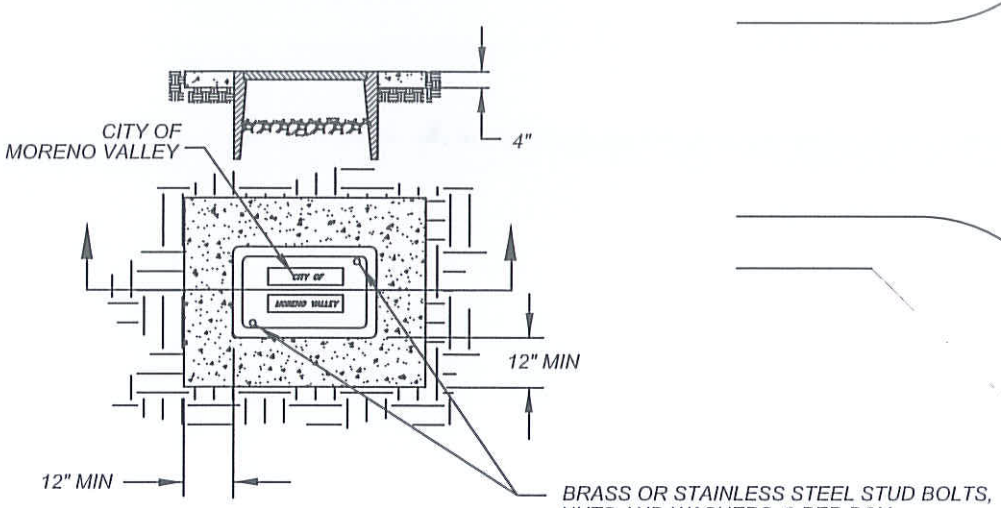
1.) SEE STD. NO. MVSI-185A-0 ~ MVSI-185D-0 FOR TECHNICAL PROVISIONS OF TELECOMMUNICATIONS FACILITIES.

NOT TO SCALE

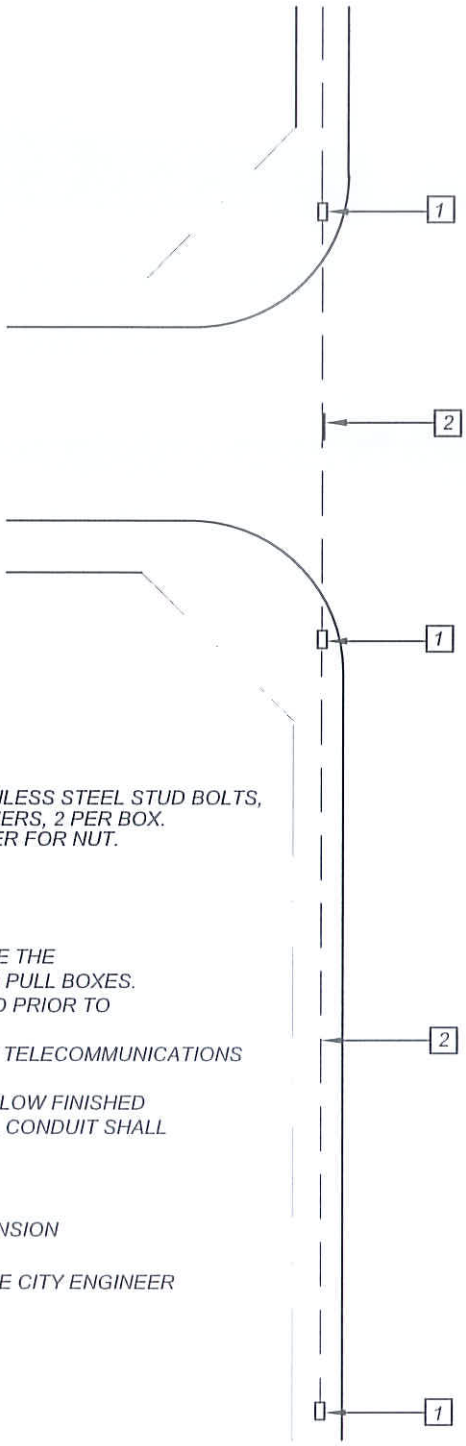
CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: DIVISION MANAGER 1/21/14 DATE APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER 1/29/14 DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION **TYPICAL MULTI-CONDUIT JOINT TRENCH DETAIL**	STANDARD PLAN **MVSI-181D-0** SHEET 4 OF 4



4" GRS CONDUIT SWEEP DETAIL



NO. 6(E) PULLBOX IN LANDSCAPE:



NOTES:

1.) THE CITY ENGINEER OR DESIGNATED REPRESENTATIVE SHALL APPROVE THE EXACT LOCATION OF ALL GALVANIZED RIGID STEEL CONDUIT (GRS) AND PULL BOXES.
2.) THE LOCATION OF GRS CONDUIT AND PULL BOXES WILL BE DETERMINED PRIOR TO SUBMITTAL OF THE ENGINEERING PLANS.
3.) SEE STD No MVSI-185A-0 ~ MVSI-185D-0 FOR TECHNICAL PROVISIONS OF TELECOMMUNICATIONS FACILITIES.
4.) DISTRIBUTION SYSTEM CONDUIT SHALL BE 2" PVC, SCHEDULE 40, 36" BELOW FINISHED GRADE AND PER STD No MVSI-181D-0 IF APPLICABLE. SERVICE LATERAL CONDUIT SHALL BE 1" PVC, SCHEDULE 40, 18" BELOW FINISHED GRADE.

LEGEND:

[1] FURNISH AND INSTALL No 6 PULL BOX (MAX 400' SPACING) & EXTENSION

[2] FURNISH AND INSTALL NEW 4" GRS CONDUIT, AS APPROVED BY THE CITY ENGINEER OR HIS REPRESENTATIVE.

[3] LOOP CABLES

[4] COPPER STRAP FOR GROUND.

NOT TO SCALE

CITY OF MORENO VALLEY
DECEMBER 3, 1984

RECOMMENDED:
DIVISION MANAGER — DATE 1/21/14

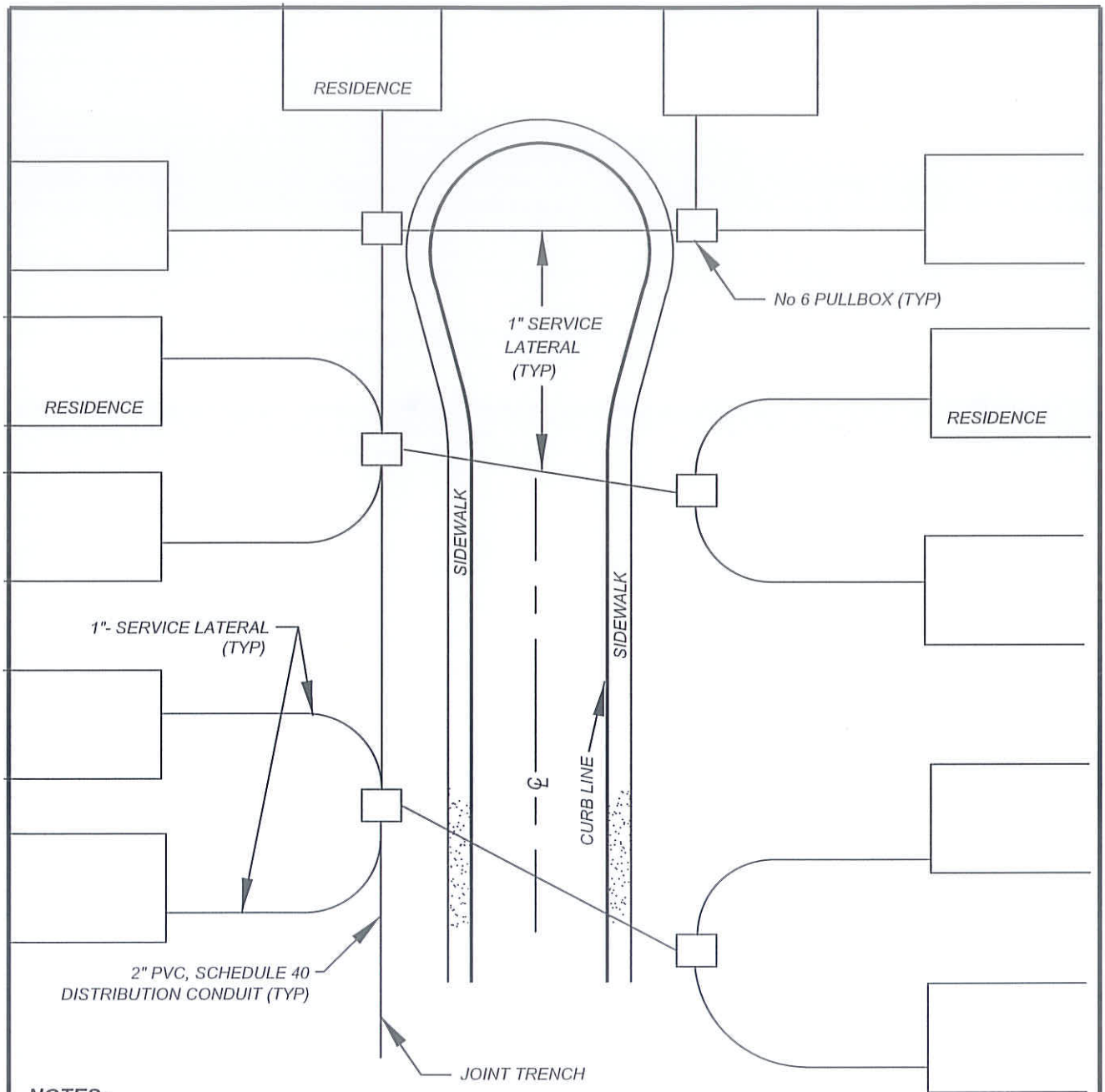
APPROVED:
PUBLIC WORKS DIRECTOR / CITY ENGINEER — DATE 5/29/14

CITY OF MORENO VALLEY

PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION

TELECOMMUNICATIONS TRUNK CONDUIT SYSTEM & PULLBOX LAYOUT DETAIL

STANDARD PLAN
MVSI-182-0
SHEET 1 OF 1



NOTES:

1.) SEE STD MVSI-180A-0 FOR NORMAL LOCATION OF UNDERGROUND UTILITIES.

2.) ALL TRENCHING AND BACKFILL SHALL BE DONE IN ACCORDANCE WITH TELECOMMUNICATION STANDARDS FOR TYPE OF SURFACE COVER. SEE TELECOMMUNICATION STDS MVSI-181A-0 ~ MVSI-181D-0, PAGES 1 THROUGH 4.

3.) MAINTAIN MINIMUM 12" FROM ALL TRENCH OCCUPANTS EXCEPT CATV PER CALIFORNIA PUBLIC UTILITY COMMISSION GENERAL ORDER 128.

NOT TO SCALE

CITY OF MORENO VALLEY · DECEMBER 3, 1984

RECOMMENDED:
DIVISION MANAGER — DATE 1/21/14

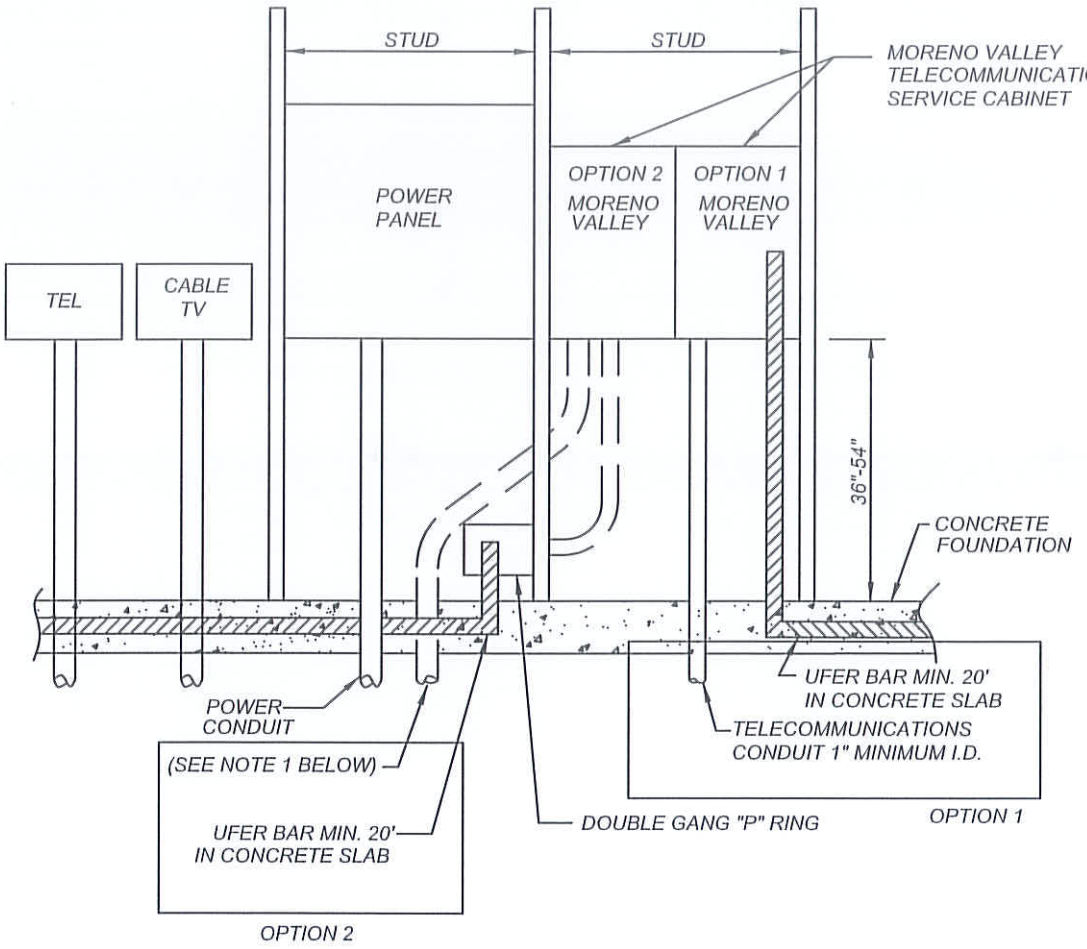
APPROVED:
PUBLIC WORKS DIRECTOR / CITY ENGINEER — DATE 1/29/14

CITY OF MORENO VALLEY

PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION

TELECOMMUNICATIONS DISTRIBUTION AND SERVICE LATERAL CONDUIT SYSTEM

STANDARD PLAN
MVSI-183-0
SHEET 1 OF 1



NOTES:

1.) IF THE TELECOMMUNICATIONS CONDUIT ENTERS THE SAME BAY AS THE POWER CONDUIT (DASHED CONDUIT IN DETAIL ABOVE), SWEEPS MUST BE PLACED BY THE DEVELOPER INTO THE TELECOMMUNICATIONS SERVICE CABINET. CONDUIT SWEEPS MUST BE OF ADEQUATE RADIUS TO ALLOW FOR CABLE PLACEMENT.

2.) THE DEVELOPER IS PROVIDED WITH THREE OPTIONS RELATED TO GROUNDING. THE ORDER OF PRIORITY IS AS FOLLOWS.
   A. UFER BAR EXTENDED INTO TELECOMMUNICATIONS SERVICE CABINET.
   B. CONDUIT FROM UFER TO TELECOMMUNICATIONS SERVICE CABINET.
   C. DEVELOPER INSTALLED #12 GROUND WIRE FROM UFER TO TELECOMMUNICATIONS SERVICE CABINET.

   THE GROUNDING MEDIUM JUST BE PERMANENTLY ACCESSIBLE BY PLACEMENT OF A DOUBLE GANG "P" RING (3") MOUNTED ON THE BUILDING EXTERIOR.

3.) THE MINIMUM DIMENSIONS OF THE MORENO VALLEY TELECOMMUNICATIONS SERVICE CABINET SHOULD BE 8" H x 6" W x 4"D.

TELECOMMUNICATIONS STANDARD UNDERGROUND SERVICE ARRANGEMENTS FOR RESIDENTIAL BUILDING (1 TO 2 LIVING UNITS)

NOT TO SCALE

CITY OF MORENO VALLEY · DECEMBER 3, 1984

RECOMMENDED: _____ DIVISION MANAGER 1/21/14 DATE

APPROVED: _____ PUBLIC WORKS DIRECTOR / CITY ENGINEER 1/29/14 DATE

CITY OF MORENO VALLEY

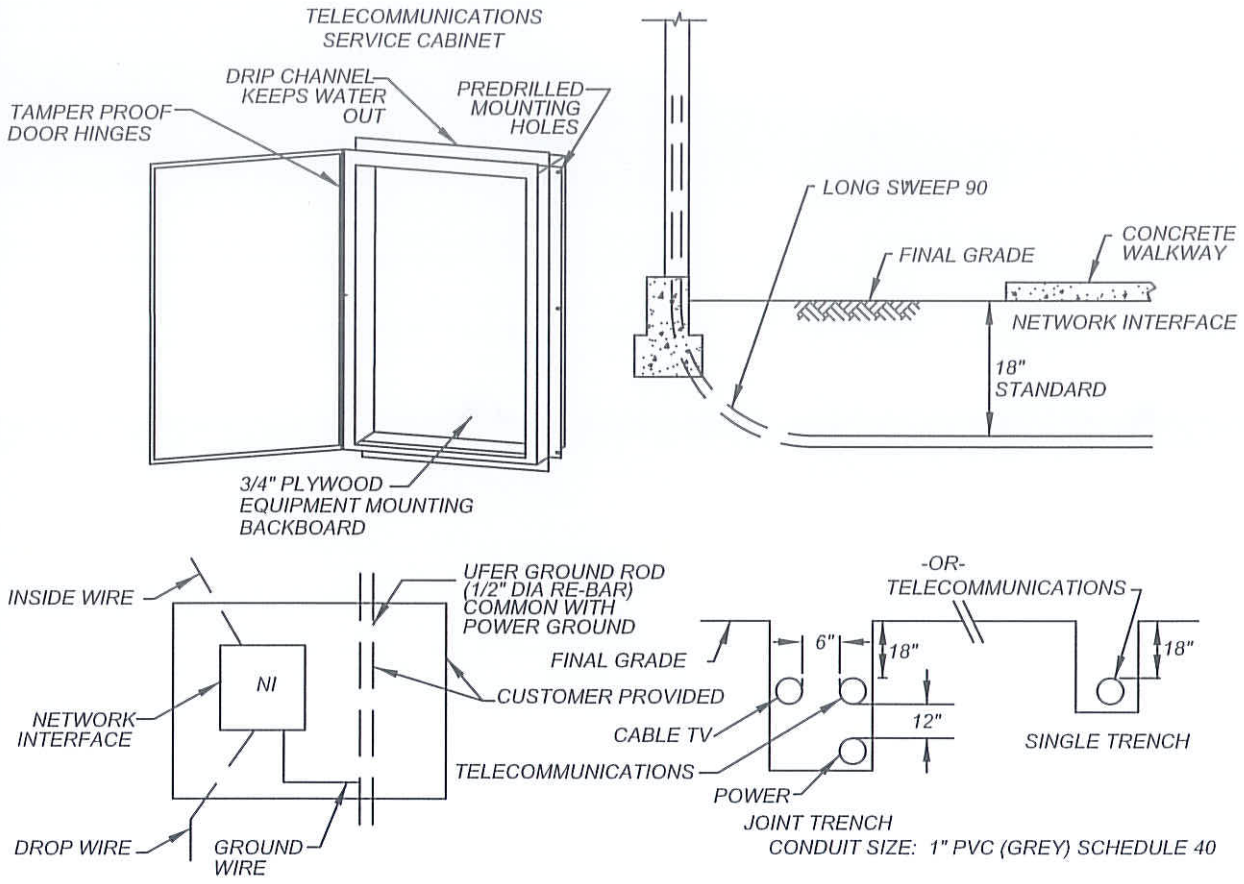
PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION

TELECOMMUNICATIONS RESIDENTIAL UNITS

STANDARD PLAN

MVSI-184A-0

SHEET 1 OF 2



TYPICAL CABINET LAYOUT

WEATHERPROOF EXTERIOR MOUNTING NOTES:

1.) SAFE ALL - METAL CONSTRUCTION - METAL CONSTRUCTION PERMITS COMMON GROUND FOR ALL INSTALLATIONS. ALL METAL PARTS ARE PROTECTED WITH SPECIAL EARTH-TONE POLYURETHANE COVERING.

2.) STANDARD CONSTRUCTION REQUIREMENTS - THE TELECOMMUNICATIONS SERVICE CABINET IS PROVIDED FOR MOUNTING ON 2" x 4" STUDS ON 16" CENTER ON THE OUTSIDE BUILDING WALL. THE BOTTOM OF THE CABINET SHOULD BE 36" - 59" ABOVE FINAL GRADE.

3.) BURIED SERVICE - PROVIDE AN ENTRANCE CONDUIT STUBBED THROUGH THE FOUNDATION.

4.) SPECIFICATIONS - TELECOMMUNICATIONS SERVICE CABINET WITH GALVANIZED STEEL FINISH HAS MINIMUM DIMENSIONS OF 8" H x 6"W x 4"D.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: DIVISION MANAGER 1/21/14 DATE APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER 1/29/14 DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION **TELECOMMUNICATIONS RESIDENTIAL UNITS** STANDARD PLAN **MVSI-184B-0** SHEET 2 OF 2

TECHNICAL PROVISIONS FOR INSTALLATION OF UNDERGROUND CONDUIT AND RELATED FACILITIES FOR THE TELECOMMUNICATION CONDUIT SYSTEM IN THE CITY OF MORENO VALLEY, CALIFORNIA

GENERAL DESCRIPTION OF REQUIREMENTS

All new telecommunication plant installations serving new or existing single-family residential, multi-family residential, mobile homes, and commercial property within the boundaries of the City of Moreno Valley ("City"), shall be provided with underground conduit, pull boxes, pull lines, and all related items, as more fully described below, for the future installation of telecommunications system trunk and/or distribution fiber optic cables, and related facilities ("the conduit system").

Installation of said facilities shall be coordinated with all cable television companies and utilities (i.e., electric power, telephone service, gas, etc.), which will provide their services via underground facilities within the same development area. Conduits shall typically be placed in a shared trench with telephone and cable television conduits. Prior to any physical installation of facilities, including but not limited to digging and/or trenching, all applicable City permits must be secured. Underground Service Alert of Southern California ("USA"), or its successor(s), must be properly notified by the excavator prior to the start of the actual excavation.

The City reserves the right, particularly in locations where other City improvements exist, to require that conduits be installed by jacking the conduit, in accordance with Section 306-8, "Microtunneling," of the latest edition of the Standard Specifications for Public Works Construction (Green book).

The conduit system shall generally consist of trunk and distribution conduits installed between and swept into pull boxes mounted at finished grade. Service laterals to locations designated by the City shall emanate from the trunk and/or distribution pull boxes and then terminate at the service location.

All underground conduit and facilities shall be installed to provide for continuous and sealed runs between pull boxes so as to retard the ingress into the conduit system of liquids and/or other foreign materials.

The installation of the conduit system shall be constructed in strict conformance and compliance with all federal, state, and local requirements, and specifically the requirements of the State of California Public Utilities Commission General Order 95 and General Order 128, as amended. Should General Order 95 and/or General Order 128 become null, void, or otherwise be declared unenforceable in whole or in part by court or legislative action, then the requirements of the American National Standards Institute shall apply in place of General Order 95 and/or General Order 128 to the extent that General Order 95 and/or General Order 128 are unenforceable. The City specifically reserves the right to modify, extend in scope, or reduce in scope specific construction requirements, which in the opinion of the City Engineer, are necessary to protect the public.

Testing shall conform to the provisions in Section 86-2.05C, "Installation," of the latest edition of the Caltrans Standard Specifications and these Technical Provisions. The Contractor is responsible for all costs involved in testing the conduit system. Backfill material shall not be placed until the conduit system has been inspected and approved for backfilling by the Engineer.

NOT TO SCALE

CITY OF MORENO VALLEY DECEMBER 3, 1984	RECOMMENDED: DIVISION MANAGER 1/21/14 DATE APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER 1/29/14 DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION **TELECOMMUNICATIONS TECHNICAL PROVISIONS**	STANDARD PLAN **MVSI-185A-0** SHEET 1 OF 4

SECTION A
CONDUIT SIZE, TYPE, COVER, AND LOCATION
TRUNK, DISTRIBUTION, AND SERVICE LATERAL CONDUIT SYSTEM

Within the City of Moreno Valley right-of-way and public utility easements, the following construction standards shall apply to the construction of the trunk conduit system:

***A-1**. All conduit runs and related facilities (i.e., pull boxes, etc.) shall be plotted and shown on drawings which shall be filed with, and approved by the City Engineer prior to the installation of the conduit system. No change in location of the conduit system shall be made prior to, or at the time of physical installation, unless authorized in writing in advance by the City Engineer. After completion of installation, all conduit runs and related facilities shall be accurately plotted as installed on the As-Built Drawings. Location measurements shall be made from the curb face (or from the centerline of the road if no curb exists), and shall be shown on the As-Built Drawings, which shall be filed with the City Engineer within thirty days after conduit installation. As-Built Drawings shall be 1"=50' scale on 24"x36" Mylar sheets and shall include details and general notes.*

***A-2**. A polypropylene, polyethylene, nylon, or other City approved non-organic type pull line shall be installed into the conduit. Pull lines shall have a breaking strength of no less than five hundred (500) pounds. Pull lines shall extend no less than three feet (3') beyond each end of the conduit. Each terminus of the conduit run shall be secured with a City-approved conduit end plug/cap in such a way as to retard the ingress into the conduit system of liquids and/or other foreign materials. Pull line shall be secured at each end to the end plug/cap in such a way as to retard the ingress into the conduit system of liquids and other foreign materials.*

***A-3**. Conduit system pull boxes shall be no smaller than Caltrans Standard Plan No. 6 pull boxes. Pull box lid shall be labeled "City of Moreno Valley." All pull box lids shall be secured with two brass or stainless steel tamper-proof stud bolts, nuts, and washers per Standard No. C.*

***A-4**. Each pull box shall be placed as to intercept and break continuous straight conduit runs at intervals of no more than four hundred feet (400'), with two (2) 90 degree (90°) wide sweeps, each with a minimum radius of not less than six times the inside diameter of the conduit, into pull boxes at each end of the conduit run. In the event that conduit installation necessitates the installation of additional sweeps between pull boxes, a pull box shall be placed after every 360 degrees (360°) (cumulative in any direction) of sweep, including the sweeps into and out of pull boxes. A copper tie strap between all conduits shall ground all conduits within pullboxes.*

***A-5**. Pull boxes shall typically be placed in parkway areas behind the sidewalk. Pull boxes may be placed in roads or other traffic areas only upon approval by the City Engineer, and shall have a traffic bearing concrete body and lid. Pull boxes shall not be installed in sidewalk areas or in driveways unless otherwise authorized in writing by the City Engineer. All lids shall be permanently marked with the inscription "City of Moreno Valley." All lids shall have an integral system to secure the lid to the main body of the vault.*

NOT TO SCALE

CITY OF MORENO VALLEY · DECEMBER 3, 1984	RECOMMENDED: DIVISION MANAGER 1/21/14 DATE APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER 1/29/14 DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION **TELECOMMUNICATIONS TECHNICAL PROVISIONS**	STANDARD PLAN **MVSI-185B-0** SHEET 2 OF 4

SECTION B
CONDUIT SIZE, TYPE, COVER, AND LOCATION
TRUNK CONDUIT SYSTEM

Within the City of Moreno Valley right-of-way and public utility easements, the following construction standards shall apply to the construction of the trunk conduit system:

***B-1**. Hot-dip galvanized rigid steel (GRS) conduit conforming to the requirements in UL Publication UL 6 for Rigid Metallic Conduit, with metallic fittings, shall be furnished and installed in continuous runs. Conduit size shall be no smaller than four inches (4") in diameter. Trunk conduit system shall be installed on all arterial streets. Trunk conduit may also be installed on designated collector streets at the direction of the City Engineer. Orange warning tape shall be installed directly above trunk conduit and 12 inches (12") below finished grade, per Standard No. A.*

***B-2**. Trunk conduit shall be placed underground so as to provide for a minimum cover of 36 inches (36") below finished grade as measured from the top of the conduit. Backfill requirements shall be per City Standard Plan No. A and may be modified by the City Engineer.*

SECTION C
CONDUIT SIZE, TYPE, COVER, AND LOCATION
DISTRIBUTION AND SERVICE LATERAL CONDUIT SYSTEM

Within the City of Moreno Valley, the following construction standards shall apply to the construction of the distribution and service lateral conduit system that originate at trunk conduit system pull boxes.

***C-1**. Polyvinyl chloride (PVC), Schedule 40, conduit shall be furnished and installed in continuous runs. The distribution conduit size shall be two inches (2") in diameter. Service lateral conduit shall be one inch (1") PVC, Schedule 40. Service laterals that exceed two hundred fifty feet (250') in length shall be two inch (2") PVC, Schedule 40. The minimum strength of the service entry conduits through foundations shall be equal to, or greater than PVC, Schedule 40. Conduit shall be laid, connected, and solvent welded in continuous runs. "Bell" type overlapping ends of no less than one inch (1"), or slip couplets shall be used to join sections of conduit. Manufacturer's instructions shall be followed in solvent welding conduit sections so as to prevent ingress into the conduit system of liquids and/or other foreign materials. PVC conduit shall be assembled together so that the manufacturer's identification markings are facing up and readable from the top of the trench. Orange warning tape shall be installed directly above distribution conduit and 12 inches (12") below finished grade, per Standard No. A.*

***C-2**. Distribution conduit shall be placed underground so as to provide for a minimum cover of 36 inches (36") below finished grade as measured from the top of the conduit. Service lateral conduit shall be placed underground so as to provide for a minimum cover of 18 inches (18") below finished grade as measured from the top of the conduit. Where service lateral conduit crosses public roadway, minimum cover shall be 36 inches (36") below finished grade. Backfill requirements shall be per City Standard Plan No. A, and may be modified by the City Engineer.*

NOT TO SCALE

CITY OF MORENO VALLEY · DECEMBER 3, 1984	RECOMMENDED: DIVISION MANAGER — DATE 1/21/14 APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER — DATE 1/29/14	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION **TELECOMMUNICATIONS TECHNICAL PROVISIONS**	STANDARD PLAN **MVSI-185C-0** SHEET 3 OF 4

C-3. At each designated service location, the service lateral conduit system shall extend through the foundation to the rear of a Service Inlet Box co-located in the common utility service area at the service location. It is the policy of the City to co-locate all service entries into a structure.

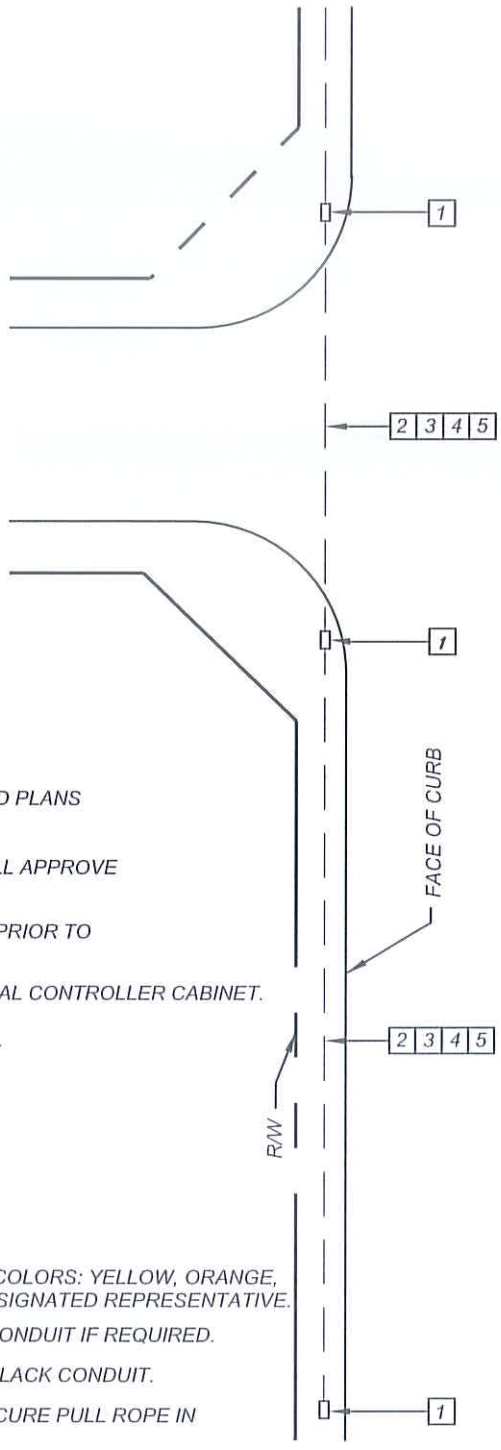
C-4. A Service Inlet Box ("service box") shall be placed at the terminus of each service lateral per Standard No. E. The service box shall be designed to be secured to studs on 16" centers. The finish shall be galvanized steel.

C-5. Service box lids shall be permanently marked with the inscription "City of Moreno Valley," or any other inscription that is authorized in writing in advance by the City Engineer. Lids shall have an integral device to secure the lid to the main body of the service box.

C-6. A service trench must be provided from the property line to the riser protection conduit. It may be a joint trench for use by several utilities, or a single trench for telecommunications facilities only. Riser protection conduit may be any standard electrical trade conduit except aluminum or flexible steel. Access to the point of connection to the grounding medium must be permanently concealed in walls that are to be finished on both the exterior and interior surfaces.

NOT TO SCALE

CITY OF MORENO VALLEY · DECEMBER 3, 1984	RECOMMENDED: DIVISION MANAGER 1/21/14 DATE APPROVED: PUBLIC WORKS DIRECTOR / CITY ENGINEER 1/29/14 DATE	CITY OF MORENO VALLEY PUBLIC WORKS DEPARTMENT - CAPITAL PROJECTS DIVISION **TELECOMMUNICATIONS TECHNICAL PROVISIONS**	STANDARD PLAN **MVSI-185D-0** SHEET 4 OF 4



NOTES:

1. ALL WORK AND MATERIALS SHALL CONFORM TO CALTRANS STANDARD PLANS AND SPECIFICATIONS.
2. THE CITY TRAFFIC ENGINEER OR DESIGNATED REPRESENTATIVE SHALL APPROVE THE EXACT LOCATION OF ALL CONDUITS AND PULL BOXES.
3. THE LOCATION OF CONDUITS AND PULL BOXES WILL BE DETERMINED PRIOR TO SUBMITTAL OF THE ENGINEERING PLANS.
4. INTERCONNECT SHALL NOT BE SPLICED EXCEPT IN THE TRAFFIC SIGNAL CONTROLLER CABINET.
5. CONDUIT SHALL BE INSTALLED UNDER SIDEWALK WHERE APPLICABLE.
6. SEE STDS MVSI-181A-0 AND MVSI-181B-0 FOR TRENCH DETAIL.

LEGEND:

[1] FURNISH AND INSTALL P48 FIBERGLASS PULL BOX @ 600' SPACING.

[2] FURNISH AND INSTALL FOUR (4) 1.5" HDPE SCHEDULE 80 CONDUITS (COLORS: YELLOW, ORANGE, BLUE, AND BLACK) AS APPROVED BY CITY TRAFFIC ENGINEER OR DESIGNATED REPRESENTATIVE.

[3] FURNISH AND INSTALL 6 PAIR No 19 INTERCONNECT CABLE IN ONE CONDUIT IF REQUIRED.

[4] FURNISH AND INSTALL No 10 GAUGE BARE COPPER TRACE WIRE IN BLACK CONDUIT.

[5] FURNISH AND INSTALL 3/16" NYLON PULL ROPE IN EACH CONDUIT. SECURE PULL ROPE IN EACH TERMINATING PULLBOX.

NOT TO SCALE

CITY OF MORENO VALLEY · DECEMBER 3, 1984

RECOMMENDED: EL — DIVISION MANAGER — 1/22/14 DATE

APPROVED: — PUBLIC WORKS DIRECTOR / CITY ENGINEER — 1/29/14 DATE

CITY OF MORENO VALLEY

PUBLIC WORKS DEPARTMENT - TRANSPORTATION ENGINEERING DIVISION

CITYWIDE COMMUNICATION CONDUITS

STANDARD PLAN

MVSI-186-0

SHEET 1 OF 1