CITY OF SOUTH SAN FRANCISCO

ENGINEERING DIVISION

STANDARD DETAILS

315 MAPLE AVENUE
SOUTH SAN FRANCISCO, CA 94080

DETAIL NUMBER	TITLE	CURRENT VERSION
GENERAL		
G-1A	SHEET INDEX	
G-1B	SHEET INDEX	
G-2	CITY STANDARD NOTES	DEC 2020
G-3A	DRAWING STANDARDS ABBREVIATIONS	DEC 2020
G-3B	DRAWING STANDARDS LINES AND SYMBOLS	DEC 2020
STREET GEOMETRIES		
A-1A	TYPICAL STREET SECTIONS	DEC 2021
A-1B	TYPICAL STREET SECTIONS	DEC 2021
A-1C	ALTERNATE STREET SECTIONS	DEC 2021
A-2	PRIVATE STREET SECTIONS	TBD
A-3	CURB RETURNS	TBD
A-4	CUL DE SAC	DEC 2020
A-5	CURB EXTENSIONS (BULBOUTS)	MAY 2022
A-6A	SIGHT TRIANGLE CORNER VISIBILITY	DEC 2020
A-6B	SIGHT TRIANGLES DRIVEWAY VISIBILITY	DEC 2020
A-7A	BIKE LANES	DEC 2021
A-7B	BIKE ROUTES	DEC 2020
A-7C	BIKE LANE BUFFER	FEB 2022
A-8	PARKING STANDARDS	DEC 2020
A-9	CROSSWALKS	JUNE 2022
STREET IMPROVEMENTS		
R-1	STREET IMPROVEMENT SPECIFICATIONS	MAY 2022
R-2A	CURBS AND GUTTERS	DEC 2021
R-2B	VALLEY GUTTER	DEC 2021
R-2C	DRAINAGE DITCH	JAN 2021
R-2D	CURB AND GUTTER TRANSITIONS	DEC 2021
R-3A	MONOLITHIC SIDEWALK	DEC 2022
R-3B	SEPARATED SIDEWALKS	DEC 2022
R-4A	STANDARD DRIVEWAY	DEC 2021
R-4B	LIMITED WIDTH DRIVEWAY	DEC 2021
R-5	PRIVATE ROAD DRIVEWAY	DEC 2022
R-6A	CURB RAMP STANDARDS	FEB 2022
R-6B	CURB RAMP SPECIAL DETAILS	DEC 2021
R-7A	BUS TURNOUT	DEC 2021
R-7B	VEHICLE TURNOUT	DEC 2021
R-8A	STANDARD MEDIAN	DEC 2022
R-8B	MOUNTABLE MEDIAN	DEC 2022
R-8C	TACK-ON MEDIAN	DEC 2022
R-9	SIDEWALK RESTORATION	DEC 2022
R-10A	PAVEMENT RESTORATION (TRENCHES)	MAY 2022
R-10B	PAVEMENT RESTORATION (TRENCHES)	MAY 2022
R-10C	PAVEMENT RESTORATION (TRENCHES)	APR 2023
R-10D	PAVEMENT RESTORATION DETAILS	JAN 2021
R-11	CONCRETE LANE RESTORATION	DEC 2020
R-12A	SPEED CUSHIONS LAYOUT	DEC 2022
R-12B	SPEED CUSHIONS DETAILS	DEC 2022
R-13A	CITY MONUMENT (STABLE SOIL)	AUG 2021
R-13B	CITY MONUMENT (UNSTABLE SOIL)	DEC 2020
R-13C	CORNER MONUMENT AND POST	DEC 2020

DETAIL NUMBER	TITLE	CURRENT VERSION
STORM DRAIN		
D-1	STORM DRAIN SPECIFICATIONS	JAN 2023
D-2A	STANDARD CATCH BASIN	DEC 2020
D-2B	STANDARD CATCH BASIN	DEC 2021
D-3A	STANDARD DROP INLET	DEC 2020
D-3B	STANDARD DROP INLET	DEC 2020
D-4	CATCH BASIN FRAME AND GRATE	DEC 2020
D-5	INLET MARKER	DEC 2020
D-6	SIDEWALK CURB DRAIN	DEC 2020
D-7	POP-UP EMITTER	DEC 2021
SANITARY SEWER		
S-1	SANITARY SEWER SPECIFICATIONS	DEC 2022
S-2	SANITARY SEWER LATERAL INSTALLATION	APR 2023
S-3	SANITARY SEWER LATERAL TO NEW MAIN	DEC 2020
S-4	SANITARY SEWER LATERAL TO EXISTING MAIN	DEC 2020
S-5	SANITARY SEWER CLEANOUT	APR 2023
S-6	SANITARY SEWER DROP CONNECTION	DEC 2020
UTILITIES		
U-1A	UTILITY TRENCH (TYPICAL STREETS)	MAY 2022
U-1B	UTILITY TRENCH (CONCRETE BASE STREETS)	MAY 2022
U-1C	ROCKWHEEL TRENCH	MAY 2022
U-1D	MICROTRENCH	MAY 2022
U-1E	POTHOLE RESTORATION	MAY 2022
U-2	PIPE CROSSINGS	DEC 2020
U-3A	MANHOLE SECTION (UP TO 33-INCH)	APR 2023
U-3B	MANHOLE PLAN (UP TO 33-INCH)	DEC 2021
U-4A	MANHOLE SECTION (36-INCH TO 48-INCH)	APR 2023
U-4B	MANHOLE PLAN (36-INCH TO 48-INCH)	DEC 2020
U-5	MANHOLE ADJUST-TO-GRADE	DEC 2020
U-6A	MANHOLE ABANDONMENT	DEC 2020
U-6B	PIPE ABANDONMENT	DEC 2020
ELECTRICAL		
E-1	STANDARD ELECTROLIER	DEC 2021
E-2	TRAFFIC SIGNAL SPECIFICATIONS	APR 2023
E-3	DETECTOR LOOP COLOR CODING	DEC 2020

CITY STANDARD NOTES:

1. APPROVAL OF THESE PLANS IS SUBJECT TO ALL OF THE FOLLOWING CITY STANDARD NOTES AND SHOWN ON THE PLANS.

2. APPROVAL OF THESE PLANS DOES NOT RELEASE THE PERMITTEE OR OWNER OF THE RESPONSIBILITY FOR THE CORRECTION OF MISTAKES, ERRORS, OR OMISSIONS CONTAINED THEREIN. IF DURING THE COURSE OF CONSTRUCTION OF THE IMPROVEMENTS, PUBLIC INTEREST REQUIRES A MODIFICATION OF OR A DEPARTURE FROM THE CITY SPECIFICATIONS OR THESE IMPROVEMENT PLANS, THE CITY ENGINEER SHALL HAVE THE AUTHORITY TO REQUIRE SUCH MODIFICATION OR DEPARTURE AND TO SPECIFY THE MANNER IN WHICH THE SAME IS TO BE MADE.

3. CONTRACTOR SHALL NOTIFY THE PUBLIC WORKS INSPECTOR AT LEAST 48 HOURS PRIOR TO STARTING WORK.

4. ALL CONTRACTORS WILL BE RESPONSIBLE FOR THE VERIFICATION OF ALL EXISTING UTILITIES IN THE FIELD. ALL CONTRACTORS SHALL PRE-MARK THE WORK AREA, CALL UNDERGROUND SERVICE ALERT (USA) (CALL 8-1-1) FOR A TICKET 48 HOURS BEFORE DIGGING, AND OBTAIN A TICKET NUMBER. CONTRACTOR SHALL REMOVE ALL USA MARKINGS AS SOON AS THEY ARE NO LONGER NEEDED. REMOVAL OF PAINT USA MARKINGS SHALL BE VIA HIGH PRESSURE WATER METHOD ONLY.

5. CONSTRUCTION SHALL COMPLY WITH THE SURFACE IMPROVEMENT SPECIFICATIONS (R-1), STORM DRAIN SPECIFICATIONS (D-1), SANITARY SEWER SPECIFICATIONS (S-1), AND ALL OF THE CITY STANDARD DETAILS.

6. ALL TRAFFIC STRIPING AND PAVEMENT MARKINGS SHALL BE THERMOPLASTIC WITH GLASS BEADING UNLESS NOTED OTHERWISE.

7. ALL PUBLIC OR PRIVATE FACILITIES, IRRIGATION, FURNITURE, OR LANDSCAPING THAT REQUIRE RELOCATION AS DETERMINED BY THE CITY ENGINEER SHALL BE RELOCATED AT THE SOLE EXPENSE OF THE DEVELOPER OR PERMITTEE.

8. ALL CITY SURVEY MONUMENTS SHALL BE PRESERVED. IN THE EVENT THAT A CITY MONUMENT IS LOST OR DAMAGED DUE TO CONSTRUCTION ACTIVITIES, THE CONTRACTOR, AT THE CONTRACTOR'S SOLE EXPENSE, SHALL BE RESPONSIBLE FOR THE RE-ESTABLISHMENT AND THE FILING OF A CORNER RECORD WITH THE COUNTY'S SURVEYOR'S OFFICE. A RECORD OF SURVEY SHALL BE FILED FOR ALL NEW CITY MONUMENTS SET IN CONJUNCTION WITH THIS IMPROVEMENT PLAN, UNLESS A FINAL OR PARCEL MAP REQUIRING SAID MONUMENTS IS RECORDED AS PART OF THIS PROJECT.

9. INSTALLATION AND REMOVAL OF STREET TREES REQUIRES A PERMIT FROM THE DEPARTMENT OF PARK AND RECREATION.

10. AN ACCESSIBLE PEDESTRIAN PATH OF TRAVEL SHALL BE MAINTAINED DURING CONSTRUCTION AT ALL TIMES.

11. STORAGE OF CONSTRUCTION MATERIALS AND EQUIPMENT WILL NOT BE ALLOWED IN OR UPON THE PUBLIC RIGHT-OF-WAY. ALL MATERIALS INTENDED FOR USE ON ANY PROJECT SHALL BE OFF-LOADED DIRECTLY FROM DELIVERY VEHICLES AND PLACED AS REQUIRED DURING THE COURSE OF CONSTRUCTION. SHOULD THE PERMITTEE OR CONTRACTOR WISH TO STOCKPILE MATERIALS OR EQUIPMENT NEAR THE WORK SITE, THEY SHALL OBTAIN APPROVAL FROM THE CONSTRUCTION COORDINATION COMMITTEE PRIOR TO STOCKPILING. ALL STORAGE SITES SHALL BE SECURE, INACCESSIBLE TO THE GENERAL PUBLIC, AND KEPT FREE OF CONSTRUCTION SPOILS, DEBRIS, AND TRASH. AT ALL TIMES, STORAGE SITES SHALL BE SUBJECT TO THE REVIEW AND APPROVAL OF THE CITY ENGINEER OR PUBLIC WORKS INSPECTOR.

12. CONSTRUCTION SITES SHALL BE KEPT CLEAN AT ALL TIMES. AT NOT TIME SHALL THE CONTRACTOR OR PERMITTEE BE ALLOWED TO LEAVE THE SITE PRIOR TO THOROUGHLY CLEANING SIDEWALKS, CURBS, GUTTERS, AND STREET SURFACES. CLEANING SHALL BE ACCOMPLISHED BY EITHER HAND OR MACHINE SWEEPING AS REQUIRED AT THE SOLE EXPENSE OF THE DEVELOPER OR PERMITTEE. IN NO EVENT SHALL THE CONTRACTOR BE ALLOWED TO FLUSH THE STREETS WITH WATER UNTIL SUCH TIME AS THE AREA HAS BEEN COMPLETELY AND THOROUGHLY SWEPT AND ALL DEBRIS PICKED UP AND PROPERLY DISPOSED OF.

13. ALL EXCAVATIONS IN THE PUBLIC RIGHT-OF-WAY SHALL BE BACKFILLED AND COMPLETELY COMPACTED AT THE END OF THE WORK DAY. A MINIMUM OF TWO INCHES OF TEMPORARY PAVING SHALL BE INSTALLED AND COMPACTED BY MECHANICAL MEANS TO PRODUCE A SMOOTH SURFACE FOR PEDESTRIAN AND VEHICULAR TRAFFIC. TRAFFIC PLATES SHALL REQUIRE APPROVAL FROM THE CONSTRUCTION COORDINATION COMMITTEE PRIOR TO USE UNLESS A BONAFIDE EMERGENCY HAS BEEN DECLARED. TRAFFIC PLATES SHALL BE ANCHORED EITHER BY WELDING OR PINNING. ALL EDGES SHALL BE SECURED TO PREVENT RATTLING AND MOVEMENT AS WELL AS PROTECTED WITH ASPHALT WITH A 2-FT TAPER. LONG TERM INSTALLATIONS (6 OR MORE DAYS) SHALL REQUIRE CITY ENGINEER APPROVAL AND REQUIRE THE PLATES TO BE INSTALLED FLUSH TO THE ROADWAY SURFACE.

14. CONSTRUCTION SHALL COMPLY WITH THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT'S DUST CONTROL MEASURES.

15. UPON DISCOVERY OF HAZARDOUS MATERIALS, THE CONTRACTOR SHALL PROMPTLY NOTIFY THE PUBLIC WORKS INSPECTOR IN WRITING OF ANY:

15.A. MATERIAL THAT THE CONTRACTOR BELIEVES MAY BE MATERIAL THAT IS HAZARDOUS WASTE, AS DEFINED IN THE HEALTH AND SAFETY CODE SECTION 25117.

15.B. SUBSURFACE OR LATENT PHYSICAL CONDITIONS AT THE SITE DIFFERING FROM THOSE INDICATED.

15.C. UNKNOWN PHYSICAL CONDITIONS AT THE SITE OF ANY USUAL NATURE, DIFFERENT MATERIALLY FROM THOSE ORDINARILY ENCOUNTERED AND GENERALLY RECOGNIZED AS INHERENT IN WORK OF THE CHARACTER PROVIDED FOR IN THE CONTRACT. THE DEVELOPER OR PERMITTEE'S AGENT SHALL PROMPTLY INVESTIGATE THE SUSPECTED CONDITION AND, AS NECESSARY, INITIATE FURTHER ANALYSIS OF THE PROBLEM. IF REMEDIATION IS REQUIRED, A REMEDIATION PLAN WILL BE SUBMITTED TO THE CITY ENGINEER FOR REVIEW AND, UPON APPROVAL, SHALL BE IMPLEMENTED AT THE DEVELOPER OR PERMITTEE'S SOLE EXPENSE.

16. UPON DISCOVERY OF HUMAN REMAINS AND/OR CULTURAL MATERIALS, ALL PROJECT-RELATED CONSTRUCTION SHOULD CEASE WITHIN A 100-FT RADIUS. THE CONTRACTOR SHALL NOTIFY THE SAN MATEO COUNTY CORONER IMMEDIATELY.

A	AREA
ABAND	ABANDONED
AGG	AGGREGATE
AB	AGGREGATE BASE
AC	ASPHALT CONCRETE
ACP	ASBESTOS CEMENT PIPE
AD	AREA DRAIN
ADA	AMERICANS WITH DISABILITIES ACT
APPROX	APPROXIMATE
APS	ACCESSIBLE PEDESTRIAN SIGNAL
BFP	BACK FLOW PREVENTER
BC	BACK OF CURB
BCR	BEGIN CURB RETURN
BM	BENCHMARK
BW	BACK OF WALK
CB	CATCH BASIN
CCP	CONCRETE CYLINDER PIPE
CDF	CONTROLLED DENSITY FILL
CI	CAST IRON
CIP	CAST IRON PIPE
℄, C/L	CENTER LINE
CL	CLASS
CLR	CLEARANCE, CLEAR
CLSM	CONTROLLED LOW STRENGTH MATERIAL
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
COMM	COMMUNICATIONS
COMP	COMPACTION
CONC	CONCRETE
CONST	CONSTRUCT, CONSTRUCTION
CP	COPPER PIPE
CY	CUBIC YARDS
C&G	CURB AND GUTTER
CR	CURB RETURN, CURB RAMP
CVC	CALIFORNIA VEHICLE CODE
ø, D	DIAMETER
DEFL	DEFLECTION
°, DEG	DEGREE
DI	DROP INLET
DIP	DUCTILE IRON PIPE
DIST	DISTANCE
DS	DOWNSPOUT
DTL	DETAIL
DWY, D/W	DRIVEWAY
E	ELECTRIC
EA	EACH
EASE	EASEMENT
ECR	END OF CURB RETURN
EG	EXISTING GRADE
EL	ELEVATION
EP	EDGE OF PAVEMENT
EQ	EQUAL
EX	EXISTING
E.W.	EACH WAY
FC	FACE OF CURB
FF	FINISHED FLOOR ELEVATION
FG	FINISHED GRADE ELEVATION
FS	FINISHED SURFACE ELEVATION
FDC	FIRE DEPARTMENT CONNECTION
FH	FIRE HYDRANT
FL	FLOW LINE
FM	FORCE MAIN
FT	FEET
G	GAS
GB	GRADE BREAK
GIP	GALVANIZED IRON PIPE
GPM	GALLONS PER MINUTE
GV	GATE VALVE
HDPE	HIGH-DENSITY POLYETHYLENE
HMA	HOT-MIX ASPHALT
HP	HIGH POINT
HOR	HORIZONTAL
H&T	HUB AND TACK
I.W.	INSIDE DIAMETER
INV	INVERT
IPS	IRON PIPE SIZE
IRR	IRRIGATION
JP	JOINT POLE
JT	JOINT TRENCH
LF	LINEAL FEET, LINEAR FEET
LG	LIP OF GUTTER
LP	LAMPHOLE
LS	LIFT STATION
LT	LEFT
MAX	MAXIMUM
ME, MECH	MECHANICAL
MH	MANHOLE
MIN	MINIMUM
MON	MONUMENT
MPH	MILES PER HOUR
N&S	NAIL AND SHINER
NTS	NOT TO SCALE
NO., #	NUMBER
O.C., O/C	ON CENTER
O.D.	OUTSIDE DIAMETER
PAE	PUBLIC ACCESS EASEMENT
PCC	PORTLAND CEMENT CONCRETE
PB	PULL BOX
PED	PEDESTRIAN
PKG	PARKING
POC	POINT OF CIRCULAR CURVE
POI	POINT OF INTERSECTION
ℙ, P/L	PROPERTY LINE
PP	POWER POLE
PRC	POINT OF REVERSE CURVE
PS	PUMP STATION
PSE	PUBLIC SERVICE EASEMENT
PUE	PUBLIC UTILITY EASEMENT
PVC	POLYVINYL CHLORIDE
R	RADIUS
RCB	REINFORCED CONCRETE BOX
RCP	REINFORCED CONCRETE PIPE
REBAR	REINFORCING BAR
RRFB	RECTANGULAR RAPID FLASHING BEACON
RT	RIGHT
ROW, R.O.W.	RIGHT OF WAY
RIM	RIM ELEVATION
S	SLOPE
SAN	SANITARY
SD	STORM DRAIN
SEC	SECTION
SF, SQFT	SQUARE FEET
SHT	SHEET
SL	STREET LIGHT
SS	SANITARY SEWER
SSF	CITY OF SOUTH SAN FRANCISCO
ST	STREET
STA	STATION
STD	STANDARD
STRUCT	STRUCTURAL
SUP	SUPERINTENDENT
SW	SIDEWALK
T, TELE	TELECOMM, TELEPHONE
TC	TOP OF CURB
TEMP	TEMPORARY
THK	THICKNESS
TP	TOP OF PAVEMENT
TS	TRAFFIC SIGNAL
TW	TRAVEL WAY
TYP	TYPICAL
U.S.A	UNDERGROUND SERVICE ALERT (811)
VC	VERTICAL CURVE
VCP	VITRIFIED CLAY PIPE
VIS	VISIBILITY
VERT	VERTICAL
W/	WITH
WM	WATER METER
WS	WATER SERVICE
WV	WATER VALVE
WWF	WELDED WIRE FABRIC
WWM	WELDED WIRE MESH
WYE	WYE FITTING
XING	CROSSING

SOUTH SAN FRANCISCO
PUBLIC WORKS
ENGINEERING

DRAWING STANDARDS ABBREVIATIONS

DEC 2020

G-3A

PROPOSED	EXISTING	DESCRIPTION
		SUBDIVISION / PROJECT SITE BOUNDARY
		PROPERTY / RIGHT-OF-WAY LINE
		EASEMENT LINE
		CENTERLINE
X X X	X X X	FENCE LINE
BM TBM	BM	BENCHMARK / TEMPORARY BENCHMARK
100	100	CONTOUR LINE
1.0%	1.0%	SLOPE/GRADE
		FLOWLINE
		BUILDING OUTLINE
		GUTTER, FACE OF CURB, AND BACK OF CURB
		SIDEWALK
		PAVEMENT (DEEP AC, GRIND/OVERLAY, SLURRY)
		STREET SIGN
		STORM DRAIN LINE
CB DI	CB DI	CATCH BASIN / DROP INLET
		SANITARY SEWER LINE
CO	SD SS CO	MANHOLE
		CLEANOUT
SL SL SL	SL SL SL	STREET LIGHT CONDUIT LINE
		STREET LIGHT
PB	PB	PULL BOX
W W W	W W W	WATER LINE
WM	WM	WATER METER
FH	FH	FIRE HYDRANT
OH OH OH	OH OH OH	OVERHEAD LINE
JP	JP	JOINT POLE
E E E	E E E	ELECTRIC LINE
G G G	G G G	GAS LINE
T T T	T T T	TELECOMMUNICATION LINE
		STREET TREE

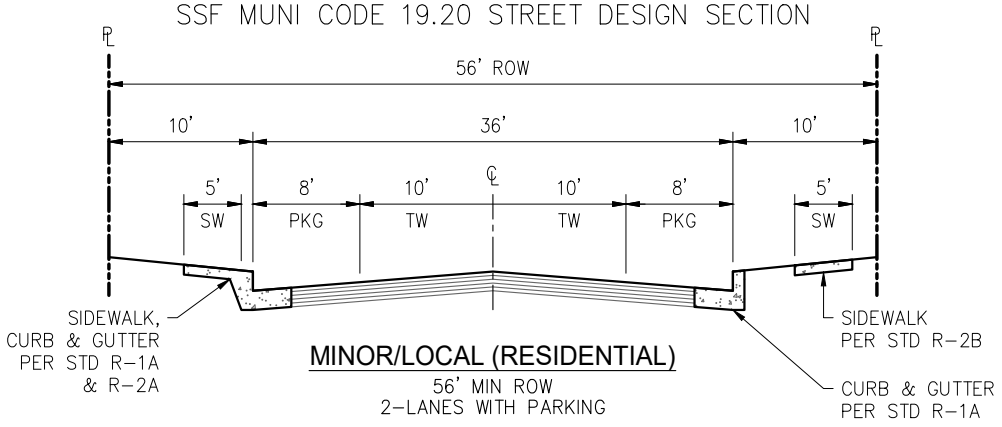
SOUTH SAN FRANCISCO
PUBLIC WORKS
ENGINEERING

DRAWING STANDARDS
LINES AND SYMBOLS

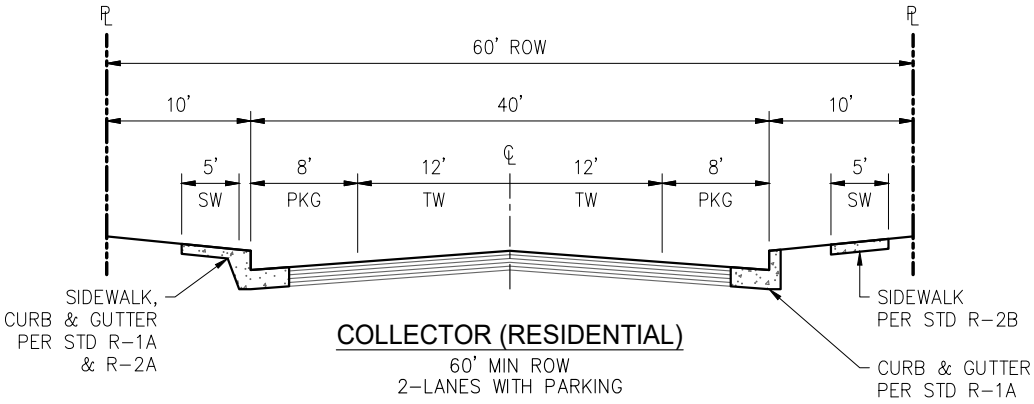
DEC 2020

G-3B

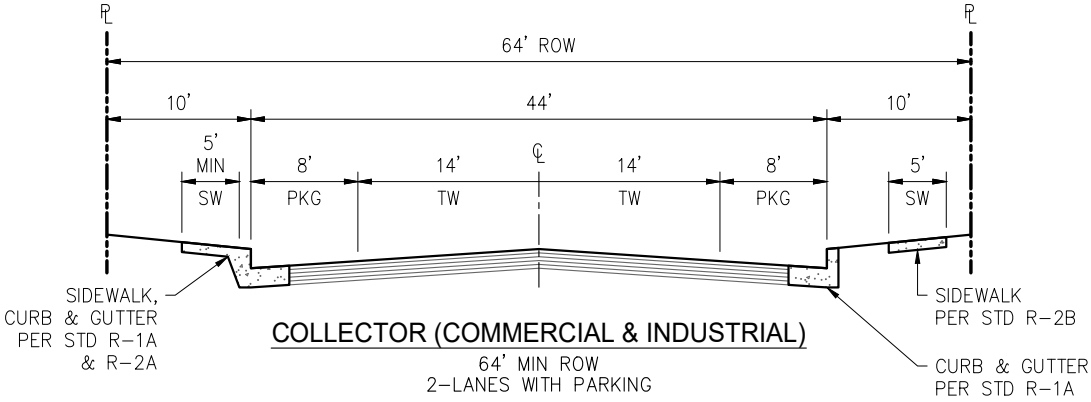
THIS DRAWING IS IN SUPPLEMENTAL TO THE
SSF MUNI CODE 19.20 STREET DESIGN SECTION



MINOR/LOCAL (RESIDENTIAL)
56' MIN ROW
2-LANES WITH PARKING



COLLECTOR (RESIDENTIAL)
60' MIN ROW
2-LANES WITH PARKING



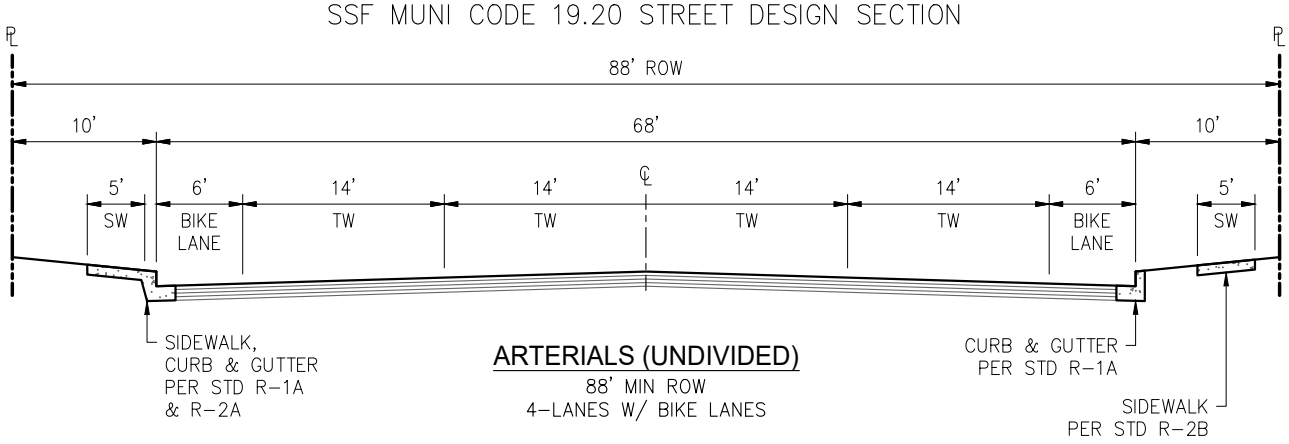
COLLECTOR (COMMERCIAL & INDUSTRIAL)
64' MIN ROW
2-LANES WITH PARKING

NOTES:

1. CITY STANDARD TRAVEL LANE WIDTH IS 12' MINIMUM. WHERE ROW WIDTH IS LIMITED, A REDUCTION TO 11' OR 10' MAY BE GRANTED WITH CITY ENGINEER APPROVAL.
2. TRAVEL WAY MAY BE REDUCED TO ALLOW FOR BIKE LANES WHERE ROW WIDTH CAN ACCOMMODATE.
3. CITY STANDARD PARALLEL PARKING STALL WIDTH IS 8'.
4. CITY STANDARD BIKE LANE WIDE IS 6' AND 5' MINIMUM. STANDARD TWO-WAY BIKEWAY WIDTH IS 10' AND 8' MINIMUM
5. CITY STANDARD SIDEWALK WIDTH IS 5' MINIMUM. STANDARD SHARED-USE PATH WIDTH IS 10' MINIMUM.
6. BOTH MONOLITHIC AND SEPARATED SIDEWALKS ARE SHOWN FOR REFERENCE. STREETS MAY HAVE MATCHING TYPES OR ONE OF EACH TYPE ON EITHER SIDE OF THE STREET.
7. VARIANCES AND DESIGN DEVIATIONS REQUIRE CITY COUNCIL APPROVAL.

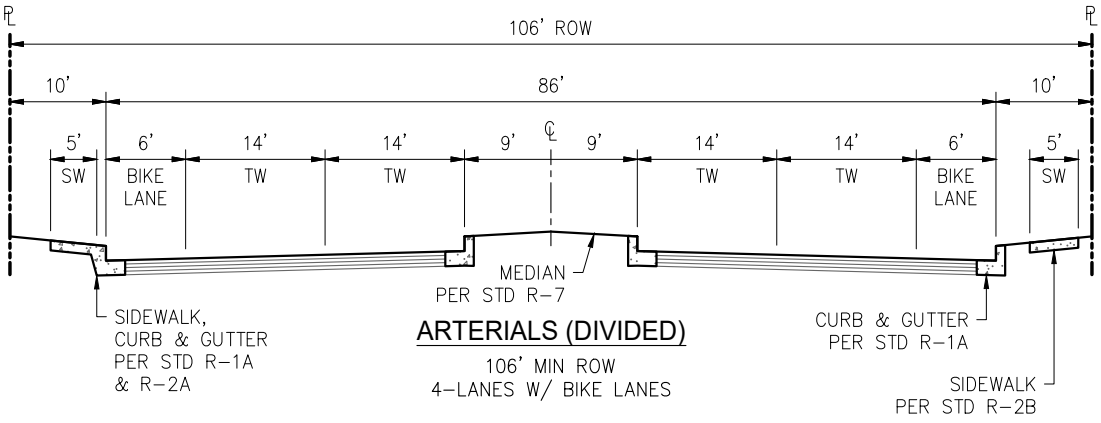
SOUTH SAN FRANCISCO PUBLIC WORKS ENGINEERING	**TYPICAL STREET SECTIONS**	**DEC 2021**
		A-1A

THIS DRAWING IS IN SUPPLEMENTAL TO THE
SSF MUNI CODE 19.20 STREET DESIGN SECTION



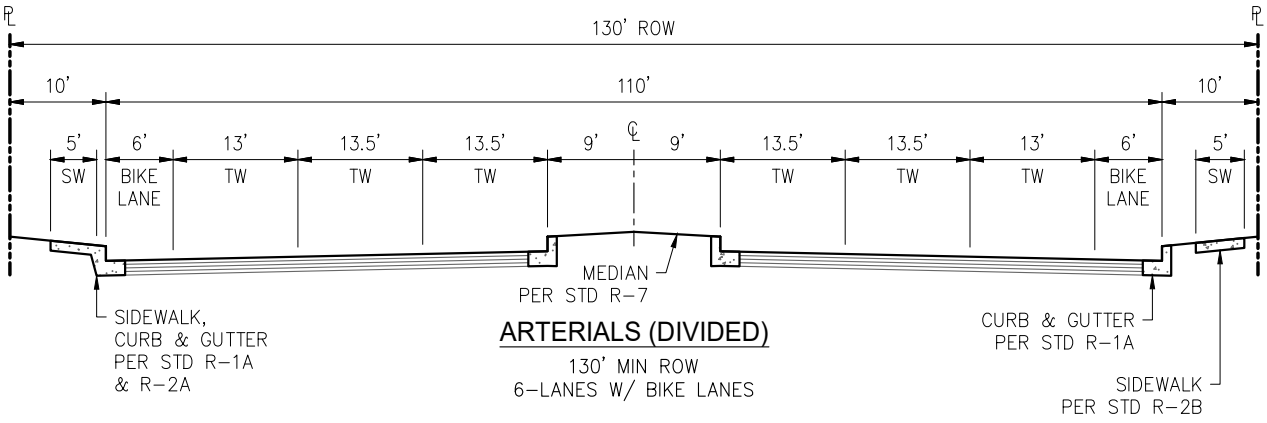
ARTERIALS (UNDIVIDED)

88' MIN ROW
4-LANES W/ BIKE LANES



ARTERIALS (DIVIDED)

106' MIN ROW
4-LANES W/ BIKE LANES



ARTERIALS (DIVIDED)

130' MIN ROW
6-LANES W/ BIKE LANES

NOTES:

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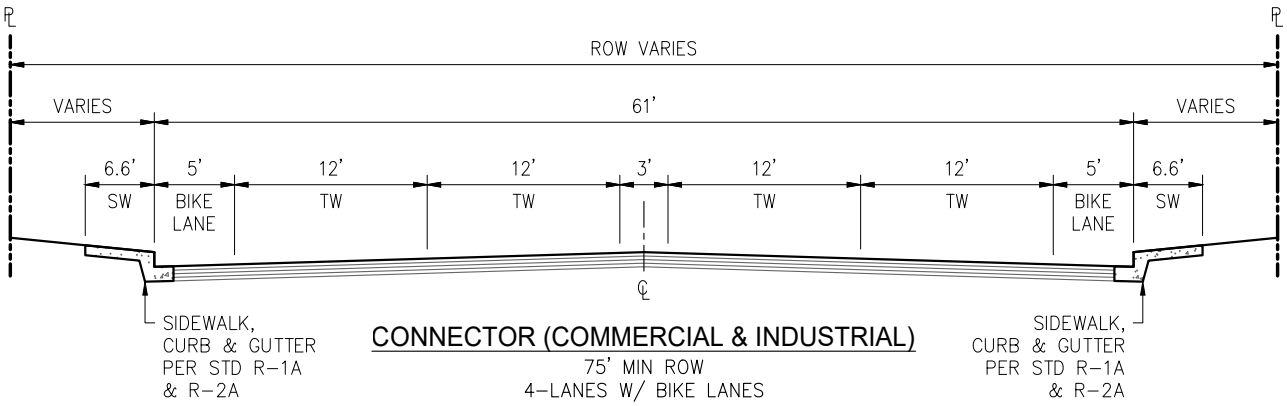
2. TRAVEL WAY MAY BE REDUCED TO ALLOW FOR BIKE LANES WHERE ROW WIDTH CAN ACCOMMODATE.
3. CITY STANDARD PARALLEL PARKING STALL WIDTH IS 8'.
4. CITY STANDARD BIKE LANE WIDE IS 6' AND 5' MINIMUM. STANDARD TWO-WAY BIKEWAY WIDTH IS 10' AND 8' MINIMUM.
5. CITY STANDARD SIDEWALK WIDTH IS 5' MINIMUM. STANDARD SHARED-USE PATH WIDTH IS 10' MINIMUM.
6. BOTH MONOLITHIC AND SEPARATED SIDEWALKS ARE SHOWN FOR REFERENCE. STREETS MAY HAVE MATCHING TYPES OR ONE OF EACH TYPE ON EITHER SIDE OF THE STREET.
7. VARIANCES AND DESIGN DEVIATIONS REQUIRE CITY COUNCIL APPROVAL.

SOUTH SAN FRANCISCO PUBLIC WORKS ENGINEERING	**TYPICAL STREET SECTIONS**	DEC 2021
		A-1B

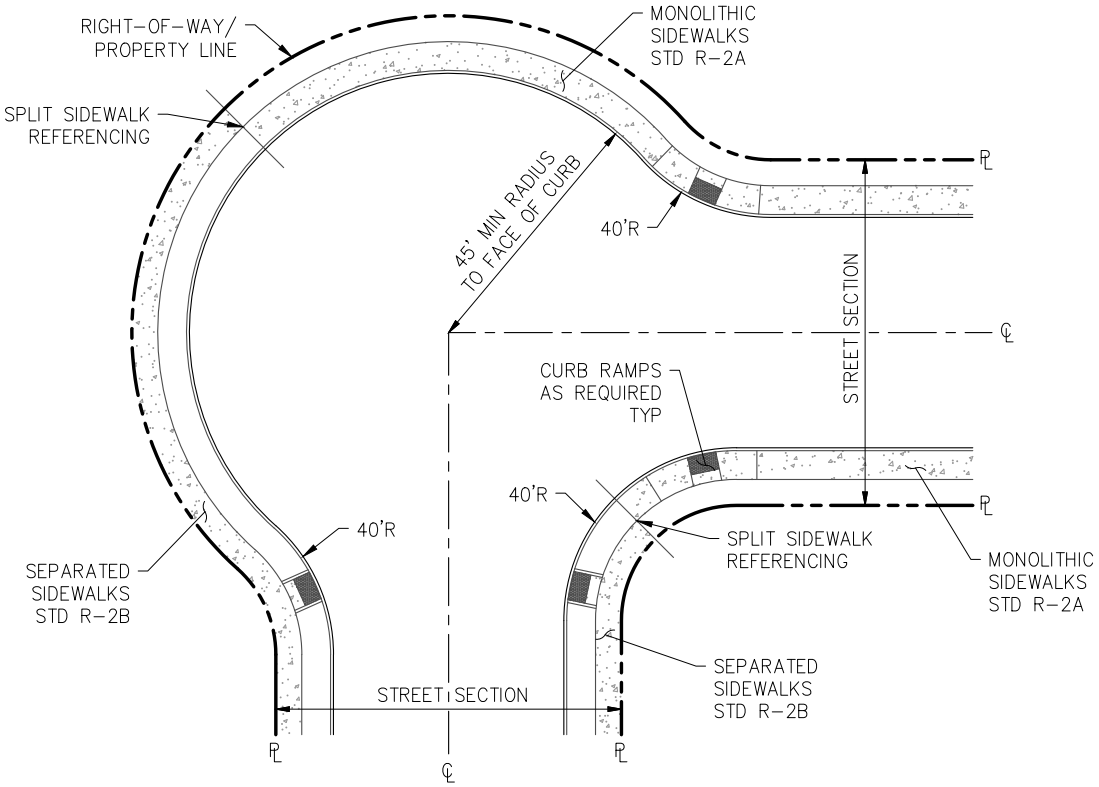


CONNECTOR (COMMERCIAL & INDUSTRIAL)

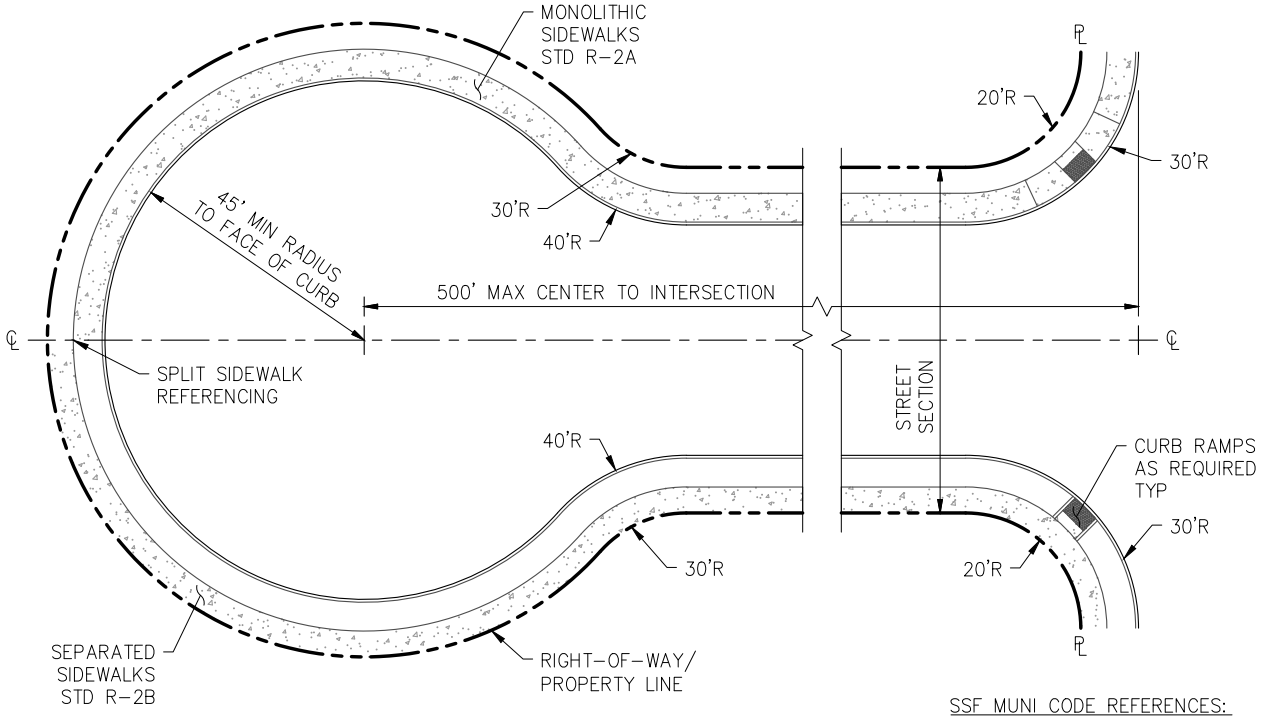
75' MIN ROW
4-LANES W/ BIKE LANES

NOTES:

1. CITY STANDARD TRAVEL LANE WIDTH IS 12' MINIMUM. WHERE ROW WIDTH IS LIMITED, A REDUCTION TO 11' OR 10' MAY BE GRANTED WITH CITY ENGINEER APPROVAL.
2. CITY STANDARD PARALLEL PARKING STALL WIDTH IS 8'.
3. CITY STANDARD BIKE LANE WIDE IS 6' AND 5' MINIMUM. STANDARD TWO-WAY BIKEWAY WIDTH IS 10' AND 8' MINIMUM.
4. CITY STANDARD SIDEWALK WIDTH IS 5' MINIMUM. STANDARD SHARED-USE PATH WIDTH IS 10' MINIMUM.



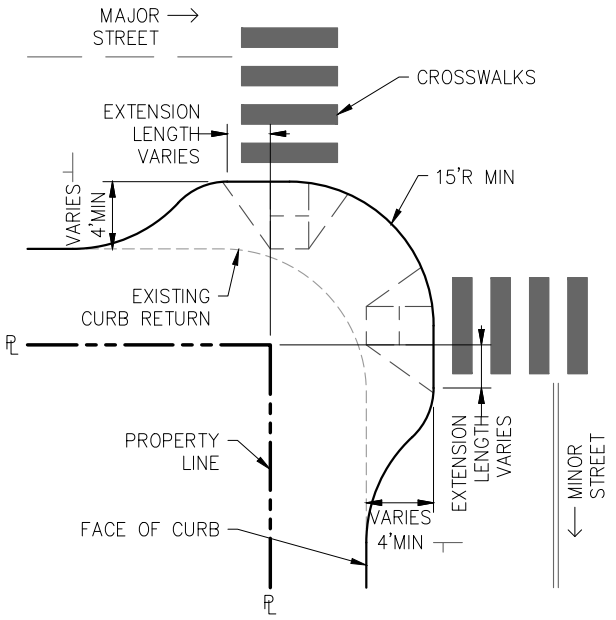
RIGHT ANGLE BEND



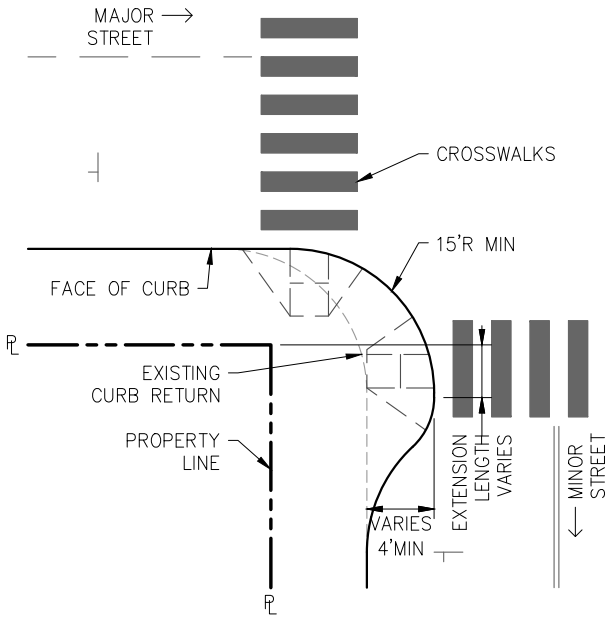
CUL-DE-SAC

SSF MUNI CODE REFERENCES:
19.16.200 CUL-DE-SAC DESIGN
19.16.230 CURVES AND SLOPES
19.20.010 STREET SECTIONS

SOUTH SAN FRANCISCO PUBLIC WORKS ENGINEERING	**CUL DE SAC**	**DEC 2020**
		A-4



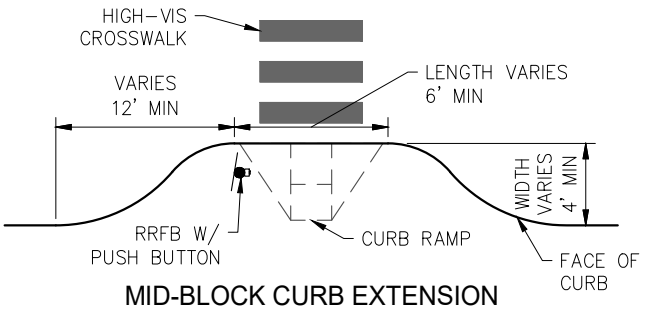
CURB EXTENSION ON BOTH STREETS



CURB EXTENSION ON MINOR STREET ONLY

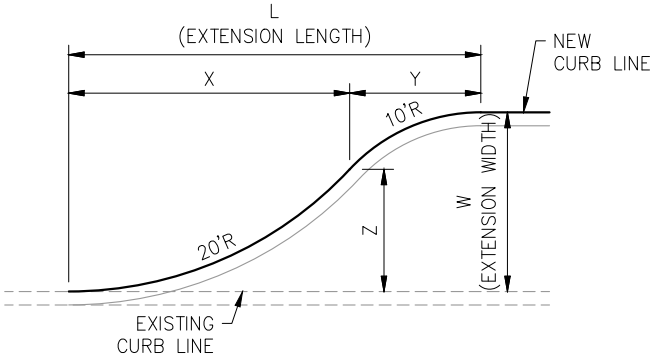
CURB EXTENSIONS (BULBOUTS) NOTES:

1. EXTENSION WIDTH SHOULD NOT EXCEED THE WIDTH OF THE ADJACENT PARKING STALL OR BIKE LANE WHICHEVER IS FARTHEST FROM THE CURB.
2. EXTENSIONS SHOULD BE USED ON MEDIUM TO LOW TRAFFIC VOLUME ROADS OR WHERE PEDESTRIAN PRIORITY IS GIVEN.
3. HIGH-VISIBILITY CROSSWALKS ARE RECOMMENDED WITH ALL CURB EXTENSIONS.
4. FOR MID-BLOCK EXTENSIONS OR UNCONTROLLED INTERSECTION CROSSINGS, HIGH-VISIBILITY CROSSWALKS AND RECTANGULAR RAPID FLASHING BEACONS (RRFB) SHALL BE PROVIDED.



MID-BLOCK CURB EXTENSION

W	L	X	Y	Z
4'	15.0'	10.0'	5.0'	2.7'
5'	16.6'	11.1'	5.5'	3.3'
6'	18.0'	12.0'	6.0'	4.0'
7'	19.3'	12.8'	6.4'	4.7'
8'	20.4'	13.6'	6.8'	5.3'



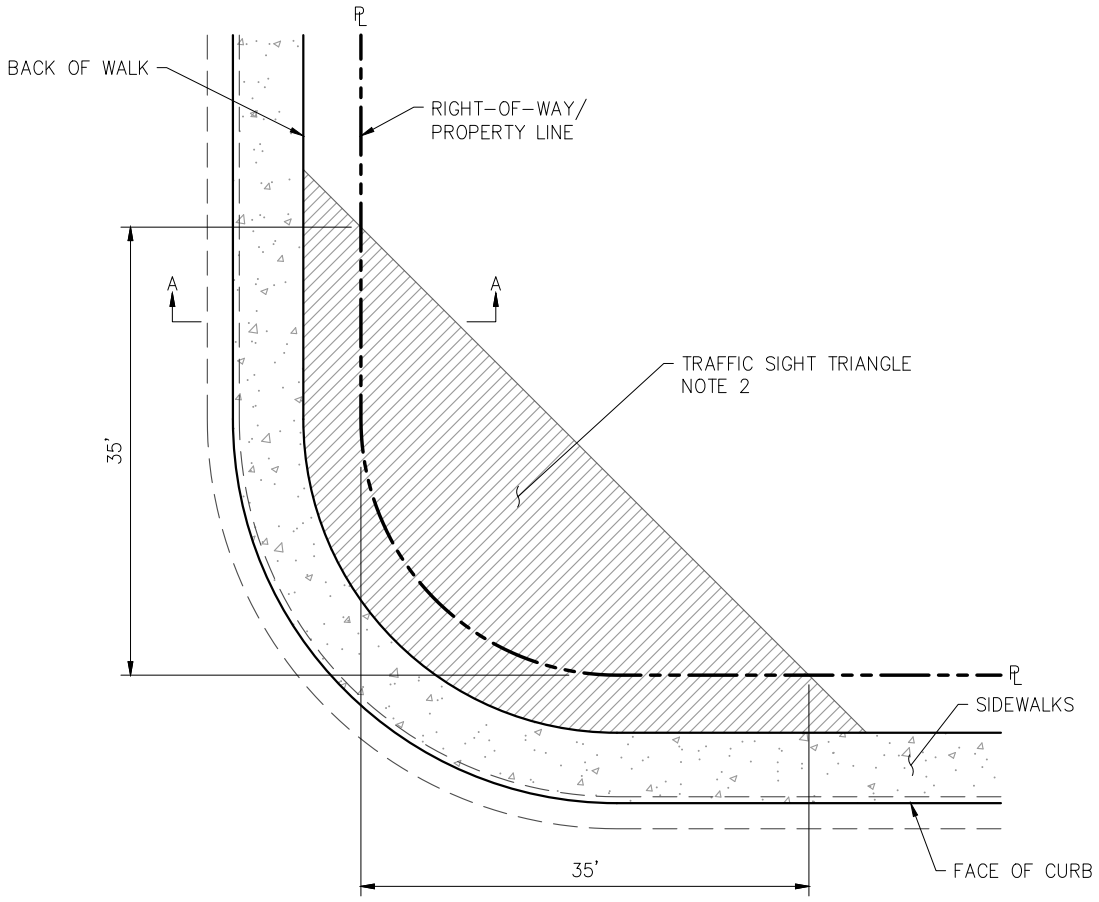
CURB EXTENSION DIMENSIONS

SOUTH SAN FRANCISCO
PUBLIC WORKS
ENGINEERING

CURB EXTENSIONS (BULBOUTS)

MAY 2022

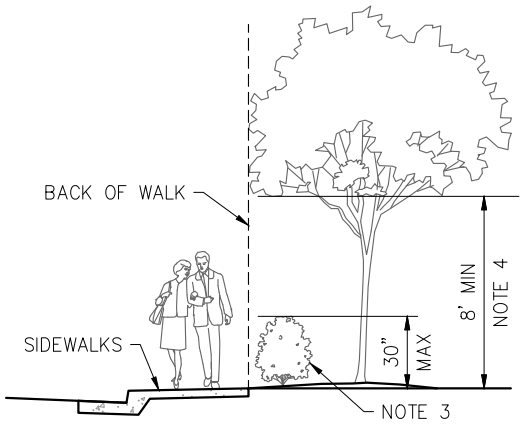
A-5



CORNER PLAN

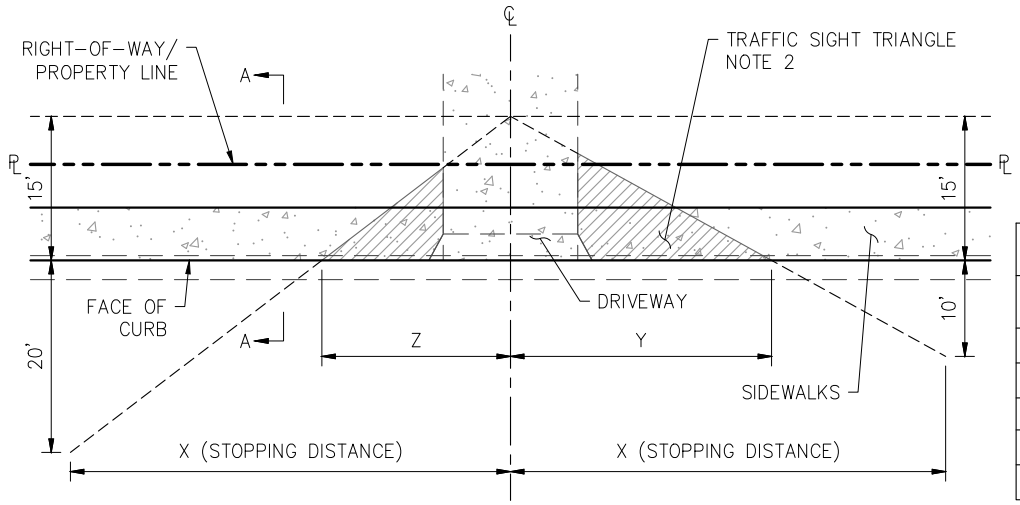
NOTES:

1. THIS DRAWING IS A GUIDELINE BASED ON SSF MUNI CODE 20.300.017.A. CASES NOT ADDRESSED BY THIS SHEET OR THE MUNI CODE SHALL REQUIRE CITY ENGINEER APPROVAL.
2. TRAFFIC SIGHT TRIANGLE SHALL BE MEASURED 35' FROM THE INTERSECTION POINT OF THE PROPERTY LINES.
3. VEGETATION, FENCES, OR OTHER STRUCTURES SHALL BE NO TALLER THAN 30" ABOVE THE CURB WITHIN TRAFFIC SIGHT TRIANGLE.
4. TREES SHALL BE TRIMMED BACK TO THE TRUNK AT LEAST 8' ABOVE THE CURB.
5. THE FOLLOWING ARE EXEMPT FROM THESE RESTRICTIONS:
   a. PERMANENT BUILDINGS
   b. UTILITY POLES
   c. CITY SIGNAGE OR SIGNALS
   d. PLANTS IN OPEN GROWTH HABITATS THAT DO NOT FORM A HEDGE AND TRIMMED TO LEAVE UNOBSTRUCTED CROSS VISIBILITY.
   e. WHERE THE GROUND CONTOUR PHYSICALLY CONSTRICTS CROSS VISIBILITY.



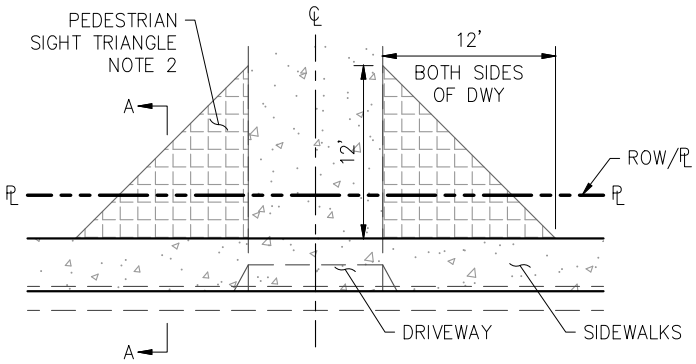
SECTION A-A

SOUTH SAN FRANCISCO PUBLIC WORKS ENGINEERING	**SIGHT TRIANGLE CORNER VISIBILITY**	**DEC 2020**
		A-6A

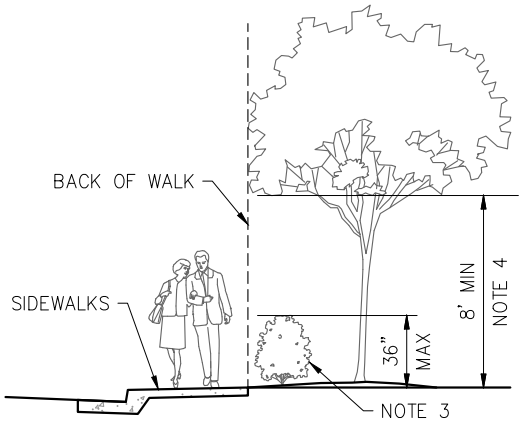


STOPPING DISTANCE TABLE			
SPEED	X	Y	Z
(MPH)	(FT)	(FT)	(FT)
25	150	90	65
30	200	120	85
35	250	150	110
40	300	180	130

DRIVEWAY PLAN
TRAFFIC SAFETY



DRIVEWAY PLAN
PEDESTRIAN SAFETY



SECTION A-A

NOTES:

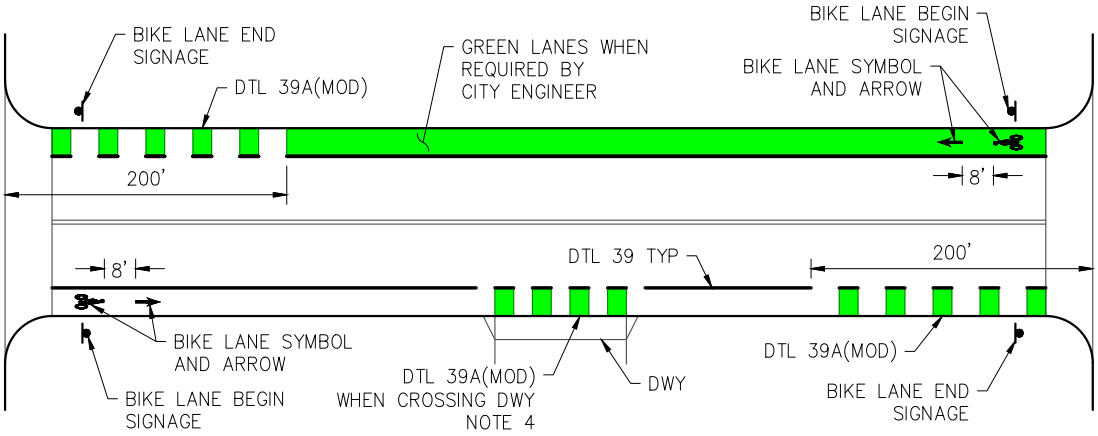
1. THIS DRAWING IS A GUIDELINE BASED ON SSF MUNI CODE 20.300.017.B. CASES NOT ADDRESSED BY THIS SHEET OR THE MUNI CODE SHALL REQUIRE CITY ENGINEER APPROVAL.
2. TRAFFIC SIGHT TRIANGLE SHALL BE BASED ON STOPPING SIGHT DISTANCES AS POSTED IN THE STOPPING DISTANCE TABLE ABOVE.
3. VEGETATION, FENCES, OR OTHER STRUCTURES SHALL BE NO TALLER THAN 36" ABOVE THE CURB WITHIN TRAFFIC SIGHT TRIANGLE OR PEDESTRIAN SIGHT TRIANGLE.
4. TREES SHALL BE TRIMMED BACK TO THE TRUNK AT LEAST 8' ABOVE THE CURB.
5. THE FOLLOWING ARE EXEMPT FROM THESE RESTRICTIONS:
   a. PERMANENT BUILDINGS
   b. UTILITY POLES
   c. CITY SIGNAGE OR SIGNALS
   d. PLANTS IN OPEN GROWTH HABITATS THAT DO NOT FORM A HEDGE AND TRIMMED TO LEAVE UNOBSTRUCTED CROSS VISIBILITY.
   e. WHERE THE GROUND CONTOUR PHYSICALLY CONSTRICTS CROSS VISIBILITY.

SOUTH SAN FRANCISCO
PUBLIC WORKS
ENGINEERING

SIGHT TRIANGLES
DRIVEWAY VISIBILITY

DEC 2020

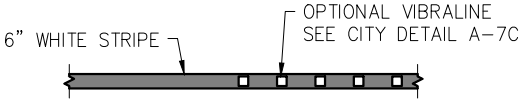
A-6B



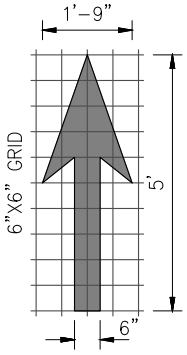
TYPICAL BIKE LANE LAYOUTS

BIKE LANE BEGIN

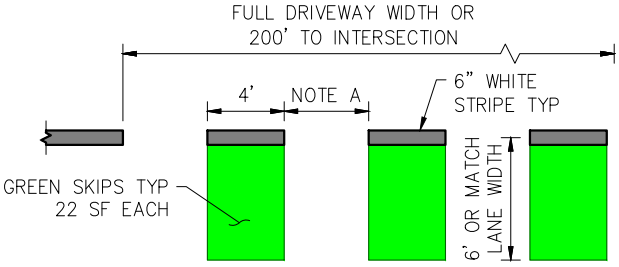
BIKE LANE END



BIKE LANE LINE
DETAIL 39



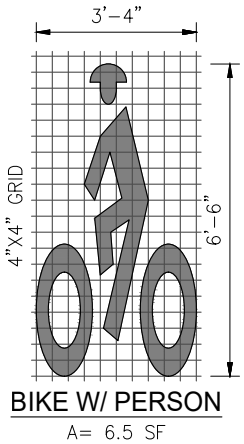
BIKE LANE ARROW
A= 3.25 SF



GREEN SKIPS NOTES:

A. SPACING SHALL BE 8' BETWEEN SKIPS FOR INTERSECTION APPROACHES AND 4' BETWEEN SKIPS FOR DRIVEWAY CROSSINGS.

BIKE LANE GREEN SKIPS
DETAIL 39A(MOD)



BIKE W/ PERSON
A= 6.5 SF

BIKE LANES NOTES:

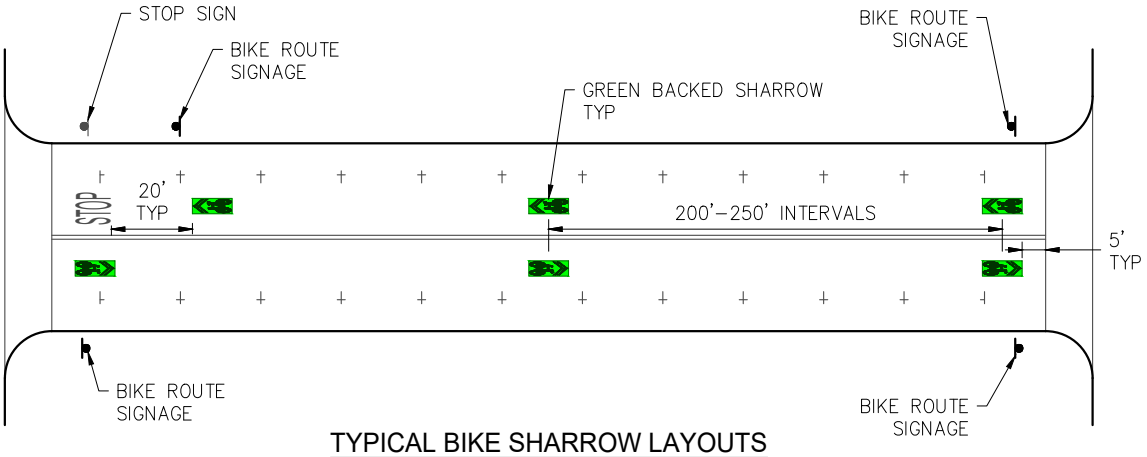
1. ALL WHITE STRIPING SHALL BE THERMOPLASTIC WITH GLASS BEADING. ALL GREEN STRIPING SHALL BE CYCLEGRIP MMAX OR EQUAL NON-SLIP HIGH VISIBILITY TREATMENT.
2. BIKE LANES CONSIST OF A 6" WHITE STRIPE PER CALTRANS DETAIL 39, WITH OPTIONAL VIBRALINE ADDED FOR DETAIL 39(MOD). BIKE LANE STANDARD WIDTH IS 6' MEASURED FROM FACE OF CURB TO MIDDLE OF WHITE STRIPE.
3. FULLY PAINTED GREEN LANES SHALL ONLY BE INSTALLED AS REQUIRED BY CITY ENGINEER.
4. BIKE LANE APPROACHES TO AN INTERSECTION, THROUGH A DRIVEWAY, OR ANY OTHER MOTOR VEHICLE TO CYCLIST CONFLICT ZONE SHALL PROVIDE GREEN SKIPS. SINGLE FAMILY RESIDENTIAL DRIVEWAYS ARE EXEMPT FROM GREEN SKIPS.
5. AT BEGINNING OF EACH BLOCK OR AFTER AN INTERSECTION, BIKE LANES SHALL HAVE THE BIKE SYMBOL WITH PERSON AND ARROW.
6. BIKE LANES SHALL HAVE "BIKE LANE BEGIN" AND "BIKE LANE END" SIGNAGE FOR EACH BLOCK.
7. ALL MARKINGS AND SIGNAGE ARE BASED ON CALTRANS STANDARD PLANS.
8. ALL CATCH BASINS ALONG BIKE LANE SHALL HAVE A BIKE SAFE GRATE. STANDARD GRATE IS TYPE 24-10S.

SOUTH SAN FRANCISCO
PUBLIC WORKS ENGINEERING

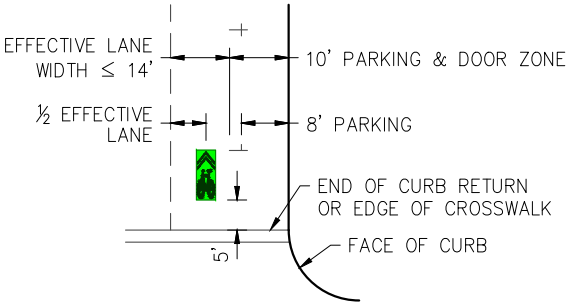
BIKE LANES

DEC 2022

A-7A

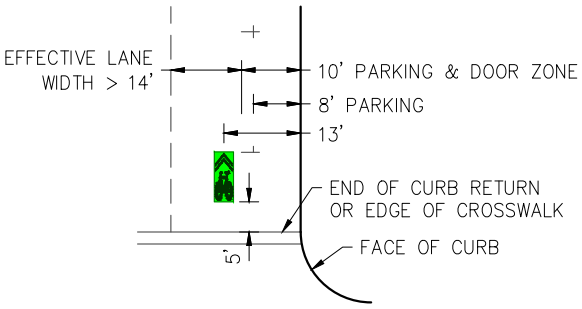


TYPICAL BIKE SHARROW LAYOUTS

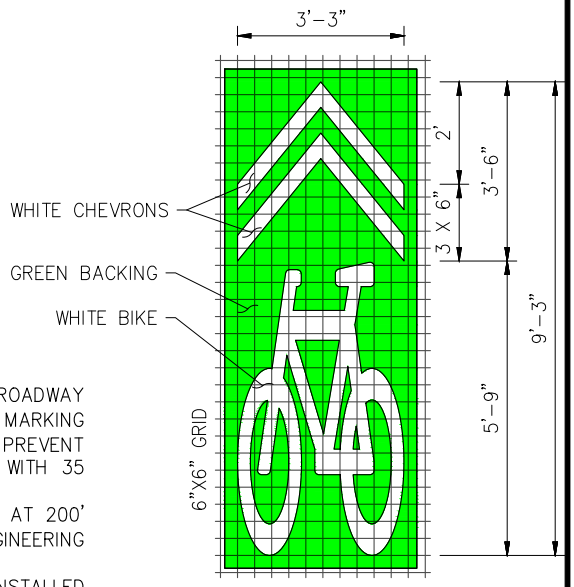


SHARROW PLACEMENT CASE 1

BIKE ROUTE SIGN
SG45(CA)



SHARROW PLACEMENT CASE 2

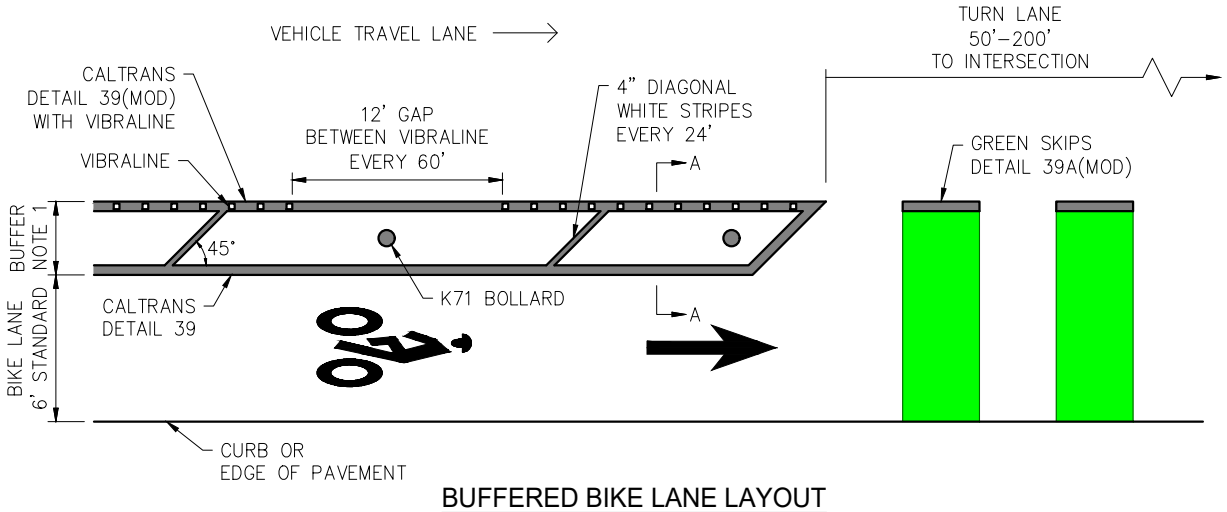


GREEN BACKED SHARROW
WHITE A= 11.5 SF
GREEN A= 36.5 SF

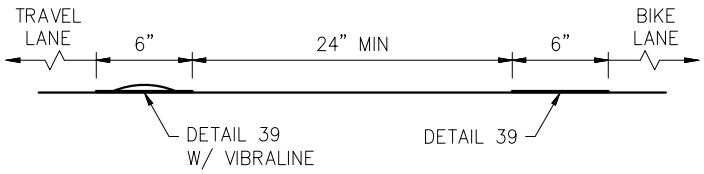
BIKE LANES NOTES:

1. BIKE ROUTES SHALL BE IDENTIFIED WITH SHARROWS (CALTRANS SHARED ROADWAY BICYCLE MARKINGS WITH GREEN BACKING EXTENDING 3" BEYOND MARKING DIMENSIONS) AND SHOULD BE USED WHERE PHYSICAL CONSTRAINTS PREVENT USING BIKE LANES. BIKE ROUTES SHALL NOT BE INSTALLED ON ROADS WITH 35 MPH OR GREATER POSTED SPEED LIMITS WITH CITY ENGINEER APPROVAL.
2. SHARROWS SHALL BE PROVIDED BEFORE AND AFTER INTERSECTIONS AND AT 200' TO 250' INTERVALS IN BETWEEN. INTERVALS ARE SUBJECT TO ENGINEERING DIVISION PLACEMENT.
3. WHERE TRAVEL LANE WIDTH IS 14' OR LESS, SHARROWS SHALL BE INSTALLED CENTERED IN THE TRAVEL LANE PER CASE 1.
4. WHERE TRAVEL LANE WIDTH IS MORE THAN 14', SHARROWS SHALL BE INSTALLED 5' FROM THE CURB OR 5' FROM THE PARKING STALLS PER CASE 2.
5. BIKE LANES SHALL HAVE BIKE ROUTE SIGNAGE AT THE BEGINNING AND END FOR EACH BLOCK.
6. ALL MARKINGS AND SIGNAGE ARE BASED ON CALTRANS STANDARD PLANS.

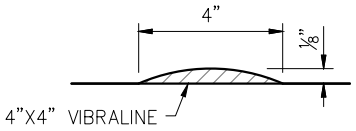
SOUTH SAN FRANCISCO PUBLIC WORKS ENGINEERING	**BIKE ROUTES**	**DEC 2020**
		A-7B



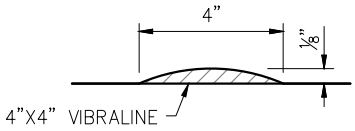
BUFFERED BIKE LANE LAYOUT



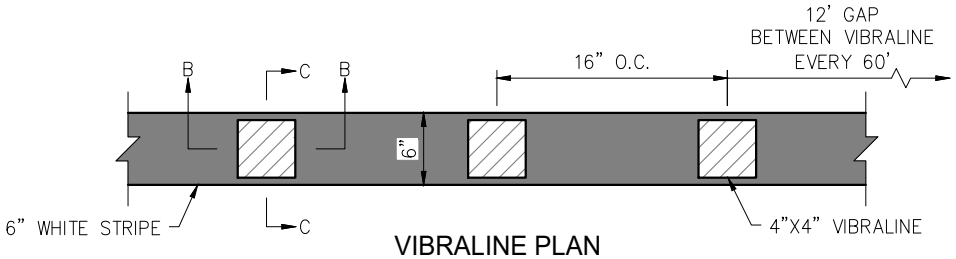
SECTION A-A



SECTION B-B



SECTION C-C

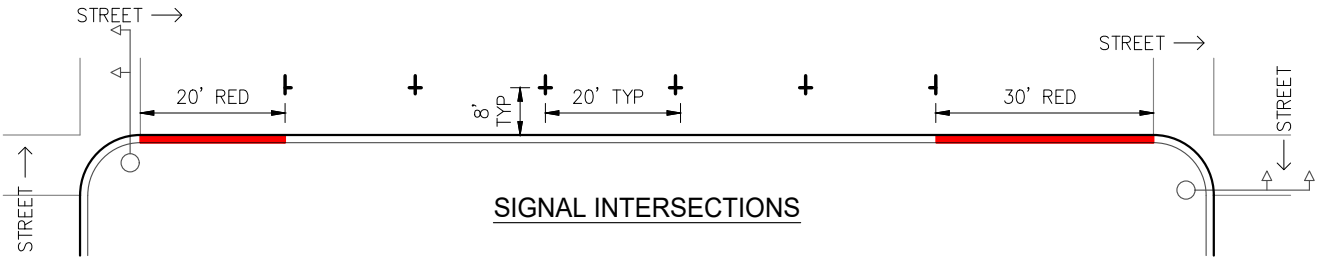


VIBRALINE PLAN
DETAIL 39(MOD)

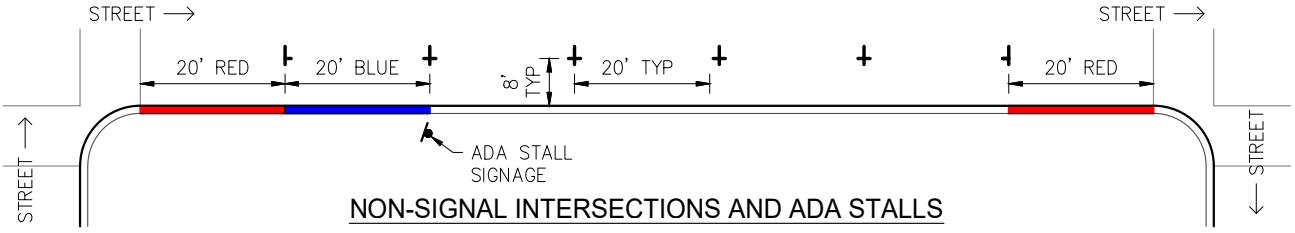
BIKE BUFFER NOTES:

1. BUFFER SHALL BE 24" MINIMUM INCLUDING THE WIDTH OF THE PARALLEL WHITE LINES.
2. ALL BUFFER STRIPING SHALL BE THERMOPLASTIC WITH GLASS BEADING. FOR GREEN SKIPS REFER TO CITY DETAIL A–7A.
3. VIBRALINE SHALL BE INSTALLED ON ANY BUFFER WHERE K71 BOLLARDS ARE NOT INSTALLED. VIBRALINE SHALL BE PLACED WITH VIBRALINE THERMOPLASTIC OR APPROVED EQUIVALENT.
4. K71 BOLLARDS SHALL BE PLACED AT THE BEGINNING, BETWEEN DIAGONAL STRIPES, AND AT THE ENDS OF BUFFERED BIKE LANES. FOR 2' TO 4' BUFFERS, PLACE K71 BOLLARD CENTERED IN THE BUFFER, OR FOR WIDER BUFFERS, PLACE 2' FROM THE BIKE LANE EDGE. K71 BOLLARD SHALL BE BRIGHT GREEN WITH WHITE REFLECTIVE COLLARS UNLESS DIRECTED OTHERWISE BY THE CITY ENGINEER.

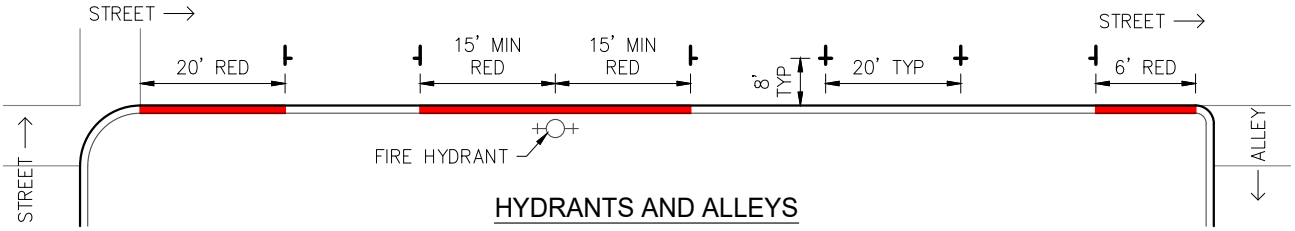
SOUTH SAN FRANCISCO PUBLIC WORKS ENGINEERING	**BIKE LANE BUFFER**	**DEC 2022** **A-7C**



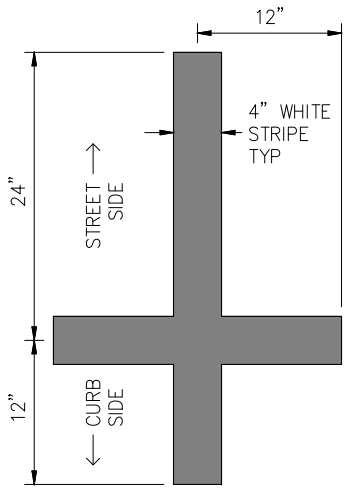
SIGNAL INTERSECTIONS



NON-SIGNAL INTERSECTIONS AND ADA STALLS



HYDRANTS AND ALLEYS



PARKING TEE

A= 1.6 SF

PARKING NOTES:

1. PARKING STALLS SHALL BE 20' LONG AND 8' WIDE.
2. WHERE PARKING IDENTIFICATION IS REQUIRED, PARKING STALLS SHALL BE IDENTIFIED BY PARKING TEES.
3. PARKING TEES SHALL BE WHITE THERMOPLASTIC WITH GLASS BEADING.
4. PARKING METERS SHALL BE LOCATED WITHIN 3' OF THE NOSE END OF THE PARKING STALL AND 18" O.C. FROM THE FACE OF CURB.
5. PARKING METERS SHALL BE PAINTED TO MATCH WHERE CURB IS COLORED YELLOW, GREEN, OR WHITE.
6. PARKING PROHIBITION MEASURED FROM THE EDGE OF CURB RETURN OR THE OUTSIDE EDGE OF THE CROSSWALK STRIPING.

CASE 1 (SIGNALIZED INTERSECTIONS):
AT ALL SIGNALIZED INTERSECTIONS, PARKING SHALL BE PROHIBITED FOR 30' MIN ON THE NEAR SIDE AND 20' MIN ON THE FAR SIDE.

CASE 2 (NON-SIGNALIZED INTERSECTIONS):
AT ALL NON-SIGNALIZED INTERSECTIONS, PARKING SHALL BE PROHIBITED FOR 20' MIN ON EITHER SIDE.

CASE 3 (ADA-STALLS):
ADA STALLS SHALL BE LOCATED SUCH THAT PERSONS WITH DISABILITIES ARE NOT COMPELLED TO WALK OR WHEEL BEHIND PARKED VEHICLES BESIDES THEIR OWN. STALLS SHALL BE MARKED WITH BLUE CURB AND ADA STALL SIGN R99C(CA).

CASE 4 (FIRE HYDRANTS):
PARKING SHALL BE PROHIBITED 15' MIN ON EITHER SIDE OF A FIRE HYDRANT.

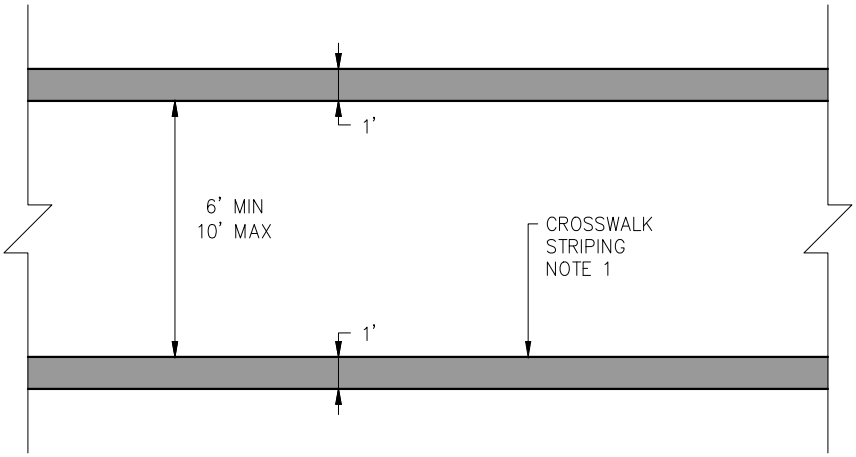
CASE 5 (ALLEYWAYS):
PARKING SHALL BE PROHIBITED 6' ON THE NEAR AND FAR SIDE OF AN INTERSECTION TO AN ALLEY.

SOUTH SAN FRANCISCO
PUBLIC WORKS
ENGINEERING

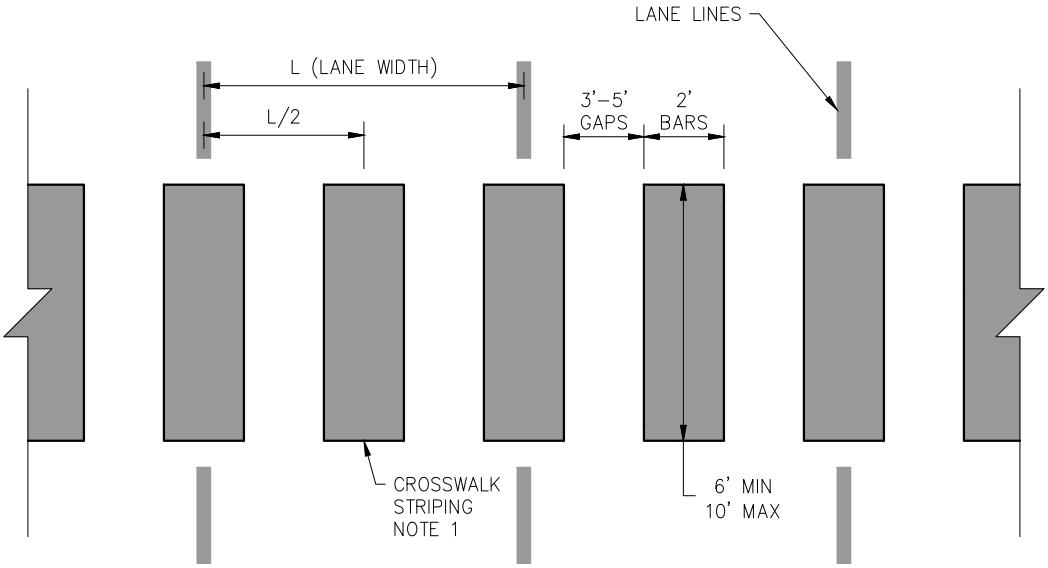
PARKING STANDARDS

DEC 2020

A-8



STANDARD CROSSWALK
BASIC



HIGH-VISIBILITY CROSSWALK
CONTINENTAL

CROSSWALK NOTES:

1. CROSSWALK STRIPING SHALL BE WHITE THERMOPLASTIC PAINT WITH GLASS BEADING. WHERE CROSSWALK IS ADJACENT TO A K–12 SCHOOL OR ON A DESIGNATED SCHOOL ROUTE, CROSSWALK SHALL BE YELLOW. ALL CROSSWALKS IN THE SAME INTERSECTION SHALL BE YELLOW WHENEVER ONE CROSSWALK IS DESIGNATED AS YELLOW.
2. HIGH–VISIBILITY CROSSWALKS SHALL BE USED IN DESIGNATED MID–BLOCK CROSSINGS, HIGH–PEDESTRIAN AREAS, CORRIDORS, OR AS DIRECTED BY THE CITY ENGINEER. HIGH–VISIBILITY CROSSWALKS SHALL ONLY BE CONTINENTAL PATTERNED.
3. CONTINENTAL CROSSWALKS SHALL BE INSTALLED PARALLEL TO THE CURB. STAGGERED CROSSWALKS SHALL BE INSTALLED TO PLACE VEHICLE WHEEL PATHS BETWEEN THE PAINTED BARS.

SOUTH SAN FRANCISCO PUBLIC WORKS ENGINEERING	**CROSSWALKS**	**DEC 2022** **A-9**

STREET IMPROVEMENT NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING NECESSARY PERMITS AND CONTACTING PUBLIC WORKS INSPECTOR FOR PRE-CONSTRUCTION MEETINGS AND INSPECTIONS FOR CONSTRUCTION AND RESTORATION IN THE PUBLIC RIGHT-OF-WAY.
2. ALL WORK IN THE PUBLIC RIGHT-OF-WAY SHALL BE PERFORMED BY A CALIFORNIA LICENSED CLASS "A" CONTRACTOR, UNLESS OTHERWISE APPROVED BASED ON THE SCOPE OF WORK AND THE CONTRACTOR'S LICENSE.
3. ALL FINAL PAVEMENT RESTORATION SHALL BE COMPLETED NO LATER THAN 10 WORKING DAYS AFTER UTILITY AND CONCRETE INSTALLATION.
4. ANY STRIPING OR SIGNAGE REMOVED OR DAMAGED BY CONSTRUCTION SHALL BE REPLACED BY THE CONTRACTOR. ALL RESTRIPING SHALL BE COMPLETED 2 DAYS AND NO LATER THAN 7 DAYS AFTER THE PAVEMENT HAS BEEN PLACED.
5. CONCRETE FORMS AND SUBGRADE SHALL BE INSPECTED BY THE PUBLIC WORKS INSPECTOR PRIOR TO PLACEMENT OF CONCRETE.

SAWCUTS: SHALL BE FULL DEPTH AND PERFORMED AFTER A USA TICKET (811) HAS BEEN CALLED. SAWCUTTING IN CONCRETE SHALL ONLY BE PERFORMED AT EXISTING JOINTS.

CONCRETE: SHALL MEET CALTRANS CLASS A 6-SACK MIX WITH ¾" TO 1" AGGREGATE AND MINIMUM 3,000 PSI. ADD ½ TO ¾ POUNDS BY WEIGHT OR 1 PINT BY VOLUME OF LAMPBLACK PER CUBIC YARD OF CONCRETE MIX. MAX SLUMP OF 4". NO ADMIXTURES WITHOUT APPROVAL OF THE CITY ENGINEER. CURE VIA THE IMPERVIOUS MEMBRANE METHOD. BROOM FINISH ALL SURFACES AND PERPENDICULAR TO PATH OF TRAVEL FOR SIDEWALKS.

FORMS: FACES SHALL NOT VARY FROM THE PLAN DIMENSIONS BY MORE THAN 0.02 FEET. FORMS SHALL MEET GRADE.

ASPHALT: ASPHALT SHALL BE PLACED AS HOT MIX ASPHALT ("HMA") ONLY. ½" ASPHALT CONCRETE (95% COMPACTION) MATCHING EXISTING PAVEMENT THICKNESS OR 4" MINIMUM, WHICHEVER IS GREATER, SHALL BE USED IN STREETS. TACK COAT ALL EDGES AND SURFACES PRIOR TO HMA PLACEMENT. ASPHALT PAVEMENT RESTORATION SHALL BE MADE FLUSH WITH THE ADJACENT SURFACES AT CONFORMS AND EDGES WITH A MAXIMUM TOLERANCE OF ⅛". ALL FINISHED EDGES SHALL BE SEALED. REFER TO PAVEMENT RESTORATION DETAILS FOR EXTENTS.

BASE: BASE MATERIAL UNDER CONCRETE OR ASPHALT SHALL MEET CLASS II AGGREGATE BASE STANDARDS. THOROUGHLY WET BASE PRIOR TO PLACING CONCRETE. TACK COAT BASE PRIOR TO PLACING HMA.

SUBGRADE: SHALL BE COMPACTED TO 90% RELATIVE COMPACTION WITHIN LIMITS OF CONCRETE SIDEWALK AND CURB RAMPS; EVERYWHERE ELSE, INCLUDING AREAS BENEATH CONCRETE AND ASPHALT, SHALL BE COMPACTED TO 95% RELATIVE COMPACTION. WHERE UNSUITABLE SUBGRADE MATERIAL IS ENCOUNTERED, REMEDIAL WORK SHALL BE DONE, INCLUDING BUT NOT LIMITED TO, OVER-EXCAVATING AND REPLACING WITH CLASS II AGGREGATE BASE. IF SITE CONDITIONS PREVENT ACHIEVING THE REQUIRED RELATIVE COMPACTION, A FABRIC MAY BE USED IF APPROVED BY THE CITY ENGINEER.

EXPANSION JOINTS: SHALL BE FULL DEPTH OF THE CONCRETE WITH A ½" THICK FULL-DEPTH ASPHALTIC FIBER PLACED BETWEEN AND USING ½"X12" SLIP DOWELS. EXPANSION JOINTS SHALL BE CONSTRUCTED AT A MAXIMUM OF 50' INTERVALS IN CONCRETE CURBS, GUTTERS, SIDEWALKS, RETURNS, DRIVEWAYS, AND AT COLD JOINTS. EXPANSION JOINT ASPHALTIC FIBER SHALL BE PLACED AROUND BASE OF UTILITY POLES AND HYDRANTS TO PREVENT CONCRETE FROM CONTACTING THE APPURTENANCE. FINISH CONCRETE ADJACENT TO EXPANSION JOINTS WITH AN EDGER TOOL.

CONTROL JOINTS: SHALL BE 1" MINIMUM DEEP AND ¼" MINIMUM WIDE. CONTROL JOINTS SHALL BE CONSTRUCTED AT A MAXIMUM OF 10' INTERVALS IN CONCRETE CURBS GUTTERS, SIDEWALKS, RETURNS, AND DRIVEWAYS.

SCORE JOINTS: SHALL BE ¼" DEEP PLACED STRAIGHT AND UNIFORMLY SPACED BETWEEN CONTROL JOINTS ON SIDEWALKS. SCORE JOINTS SHALL NOT EXCEED 30" INTERVALS TRANSVERSELY OR 36" INTERVALS LONGITUDINALLY. SCORE JOINTS SHALL BE LEFT IN A CLEANLY ROUNDED CONDITION.

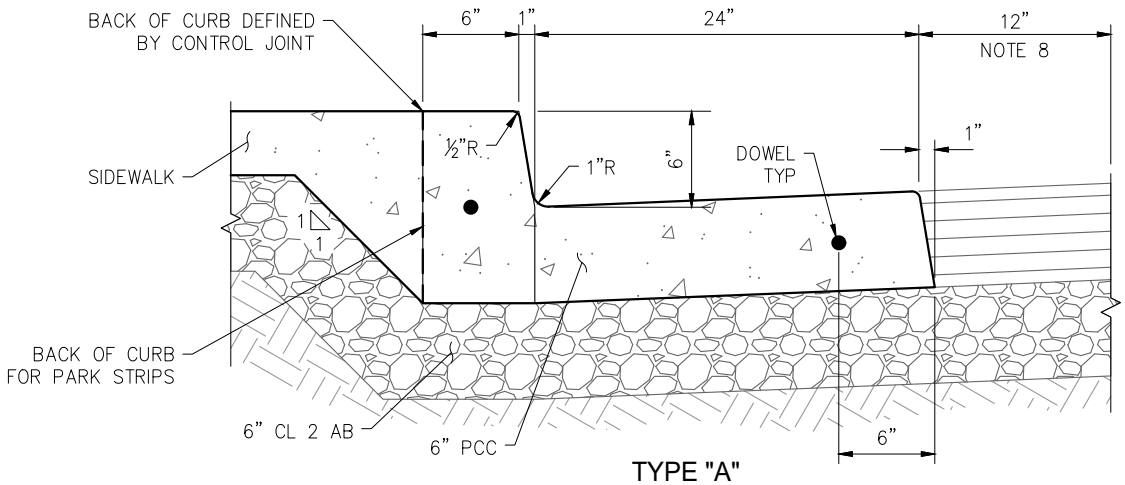
SIDEWALKS: RUNNING SLOPE SHALL NOT EXCEED STREET SLOPE. CROSS SLOPE SHALL BE DESIGNED FOR A MAXIMUM 1.5% AND CONSTRUCTED TO BE LESS THAN 2.0%.

GUTTERS: STANDARD GUTTER WIDTH SHALL BE 24". NEW CONSTRUCTION SHALL INSTALL NEW GUTTERS OR REPLACE EXISTING GUTTERS WITH THE STANDARD 24". MINOR PROJECTS PERFORMING REPAIRS ONLY MAY MATCH THE EXISTING GUTTER WIDTH. GUTTER WIDTH TRANSITIONS SHALL BE 6' MINIMUM.

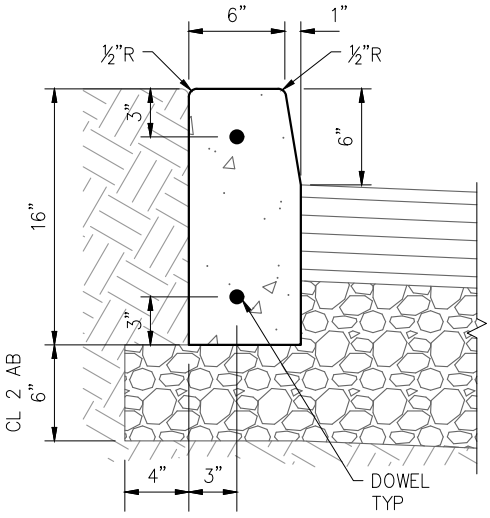
AC PLUG: WHERE NEW CONCRETE IS BEING POURED ADJACENT TO EXISTING AC PAVEMENT, A 12" WIDE BAND OF PAVEMENT SHALL BE REMOVED AND REPLACED FOR THE FULL DEPTH (MINIMUM) OF THE CONCRETE BEING POURED.

SIGNAGE: ALL POSTS SHALL BE 2" DIAMETER ROUND GALVANIZED POLES. POST SHALL BE 18" MINIMUM CLEARANCE TO FACE OF CURB. POST FOUNDATION SHALL BE 4-6" WIDE AND 18" DEEP CONCRETE.

STRIPING: ALL TRAFFIC STRIPING AND PAVEMENT MARKINGS SHALL BE HOT-APPLIED THERMOPLASTIC PAINT WITH GLASS BEADING. PREFORMED THERMOPLASTIC SHALL ONLY BE ALLOWED FOR STRIPING RESTORATION FOR TRENCH RESTORATIONS.



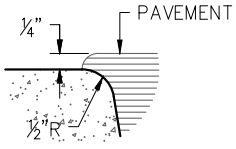
TYPE "A"
CURB AND GUTTER



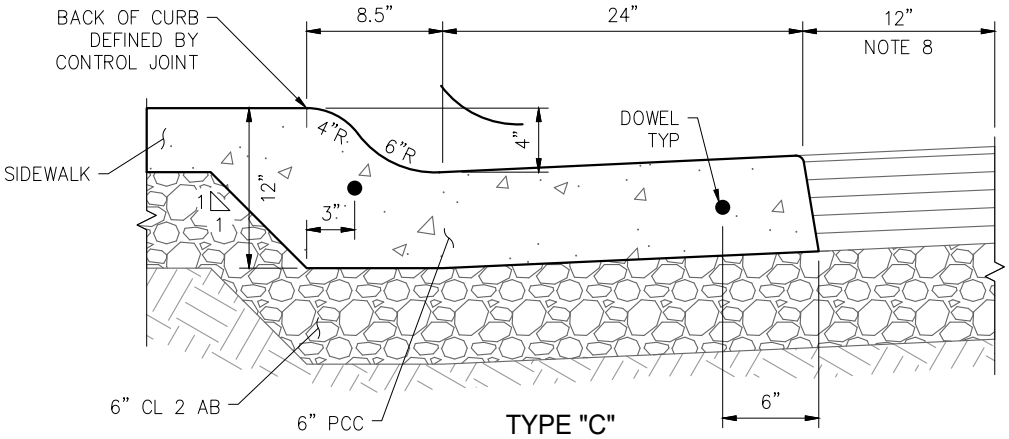
TYPE "B"
VERTICAL CURB

NOTES:

1. NEW CONSTRUCTION SHALL USE TYPE A OR B ONLY. TYPE C SHALL ONLY BE USED TO REPAIR DAMAGED EXISTING ROLLED CURBS.
2. EXPANSION, CONTROL, AND SCORE JOINTS SHALL BE PLACED PER SPECIFICATIONS ON CITY DETAIL R-1.
3. GUTTER SHALL BE SLOPED TOWARD THE CURB A MINIMUM 2% OR MAXIMUM 6%.
4. PAVEMENT INTERFACE TO GUTTER LIP SHALL MATCH DETAIL A FOR ALL CASES, EXCEPT THE INTERFACE SHALL BE FLUSH WHERE STREET SLOPES AWAY FROM GUTTER.
5. NEW CONCRETE SHALL CONFORM TO EXISTING AT THE NEAREST JOINT UNLESS APPROVED OTHERWISE.
6. AGGREGATE BASE SHALL BE PLACED, COMPACTED, AND EXTEND 1' BEYOND LIP OF GUTTER PRIOR TO FORMING AND POURING CONCRETE.
7. WHERE INSTALLING NEW CURB AND GUTTER IN EXISTING STREETS, A 12" WIDE SECTION OF DEEP LIFT ASPHALT SHALL BE PROVIDED.



DETAIL A



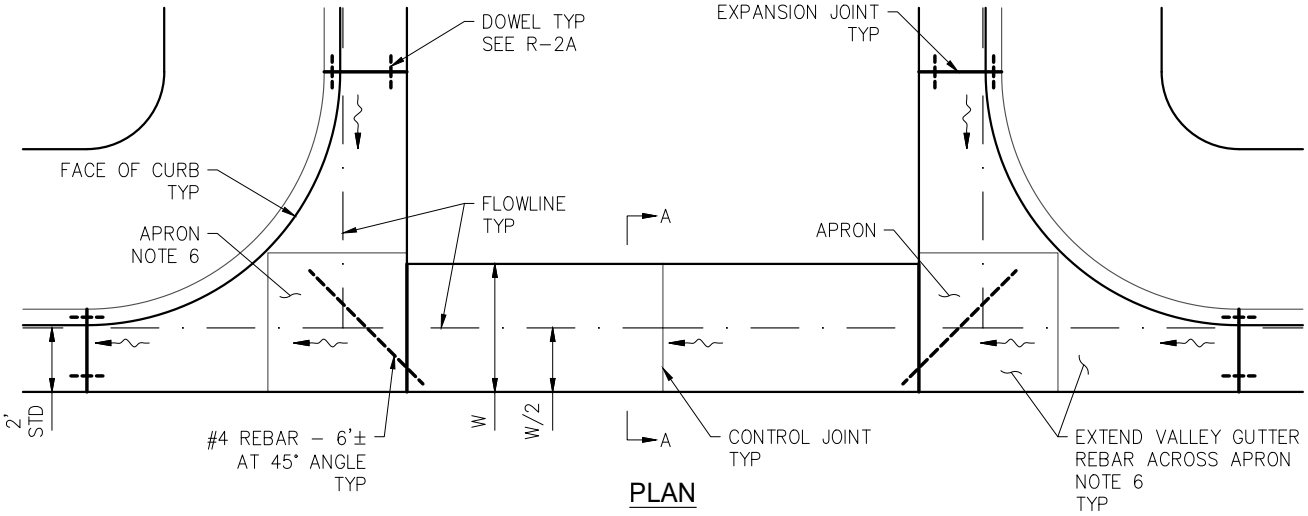
TYPE "C"
ROLLED CURB AND GUTTER
(FOR REPAIRS ONLY)

SOUTH SAN FRANCISCO
PUBLIC WORKS
ENGINEERING

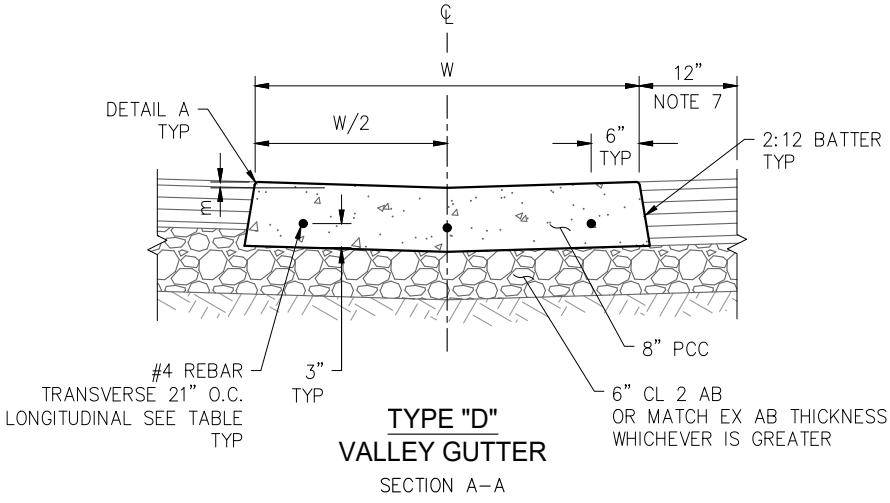
CURBS AND GUTTERS

DEC 2021

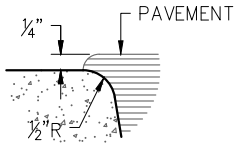
R-2A



PLAN



TYPE "D"
VALLEY GUTTER
SECTION A-A



DETAIL A

NOTES:

1. VALLEY GUTTERS REQUIRE APPROVAL BY THE CITY ENGINEER.
2. VALLEY GUTTERS SHALL NOT BE INSTALLED WHERE LONGITUDINAL SLOPE EXCEEDS 6%.
3. CROSS SLOPE SHALL NOT EXCEED 4%.
4. EXPANSION JOINTS SHALL BE PLACED AS SHOWN AND AT 50' MAX INTERVALS WITH ½"X12" SLIP DOWELS.
5. CONTROL JOINTS SHALL BE PLACED CENTER BETWEEN EXPANSION JOINTS OR AT MAXIMUM 10' INTERVALS.
6. PROVIDE #4 REBAR 21" O.C. E.W. IN APRON. GUTTER REBAR SHALL EXTEND ACROSS THE APRON.
7. WHERE INSTALLING NEW VALLEY GUTTER IN EXISTING STREETS, A 12" WIDE SECTION OF DEEP LIFT ASPHALT SHALL BE PROVIDED.
8. GUTTER FLOW ARROWS SHOWN ON THE PLAN ARE FOR EXAMPLE ONLY. DESIGN FLOWLINE SHALL FLOW TOWARD A CITY STORM DRAIN FACILITY AND SHALL NOT HAVE PONDING WITHIN THE GUTTER.

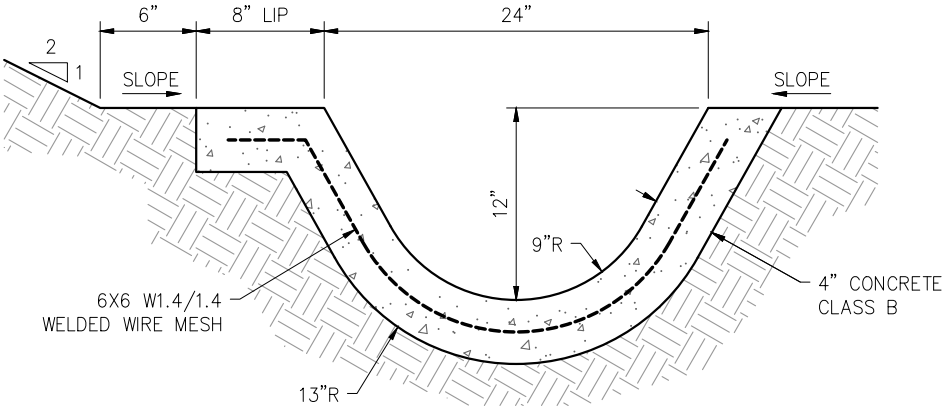
VALLEY GUTTER SPECS			
CONCRETE		LONGITUDINAL REBAR	
W	m	#4 REBAR	EQUAL SPACING
(FT)	(IN)	COUNT	(IN)
4	3/4	3	21
6	1	3	33
8	1 1/2	4	30

SOUTH SAN FRANCISCO
PUBLIC WORKS
ENGINEERING

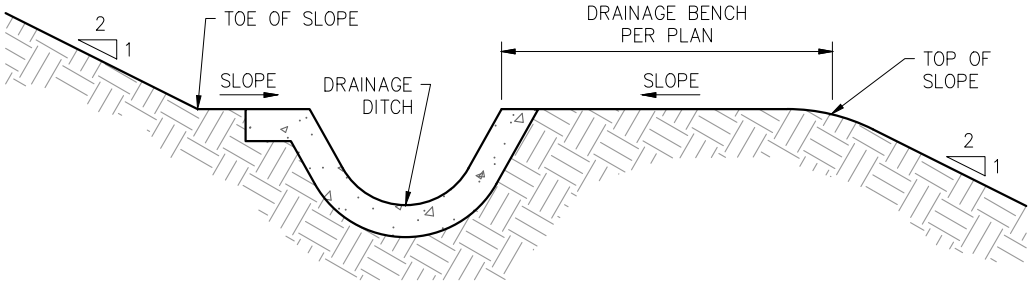
VALLEY GUTTER

DEC 2021

R-2B



TYPE "E"
CONCRETE DITCH

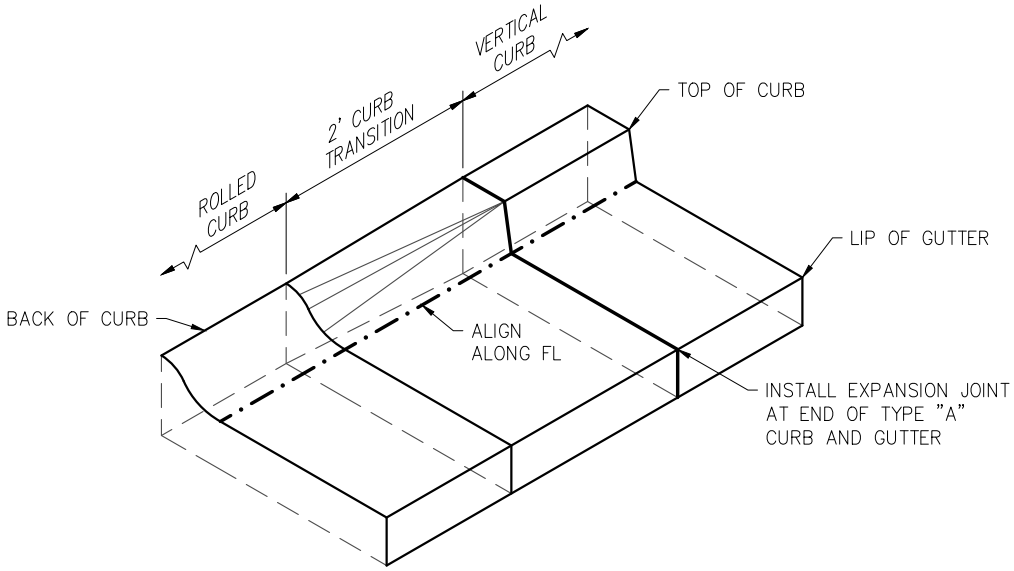


TYPICAL DRAINAGE BENCH

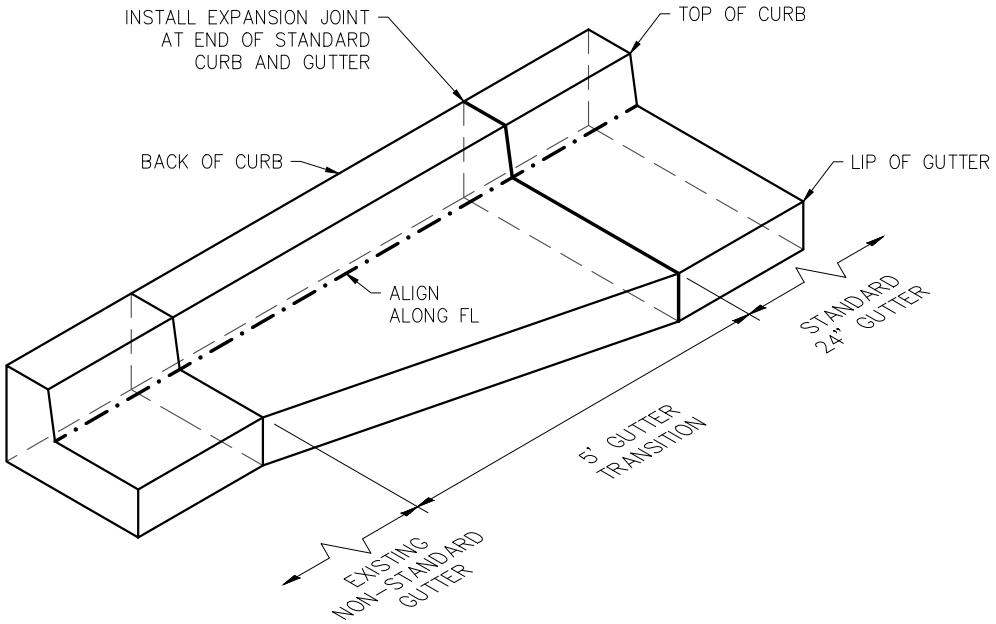
NOTES:

1. CONCRETE SHALL BE CLASS B WITH ½ TO ¾ POUNDS BY WEIGHT OR 1 PINT BY VOLUME ADDED PER CUBIC YARD OF CONCRETE MIX.
2. PROVIDE EXPANSION JOINTS EVERY 20' AND CONTROL JOINTS EVERY 10'.
3. INSTALL 8" LIP ON THE UPPER SIDE OF THE DRAINAGE DITCH.
4. SLOPE TOWARD DITCH BETWEEN TOE OF UPPER SLOPE AND TOP OF LOWER SLOPE.
5. UPPER AND LOWER SLOPE SHALL HAVE A MAX 2:1 RATIO.

SOUTH SAN FRANCISCO PUBLIC WORKS ENGINEERING	**DRAINAGE DITCH**	**JAN 2021**
		R-2C



VERTICAL TO ROLLED CURB TRANSITION



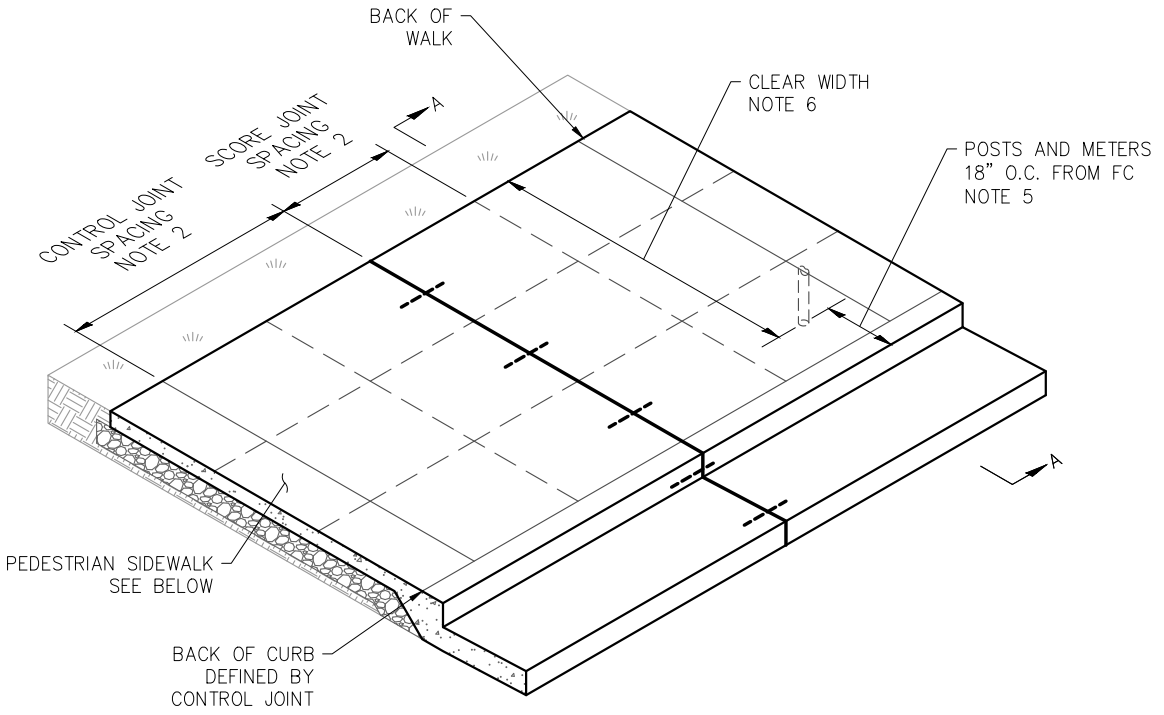
GUTTER WIDTH CONFORM TRANSITION

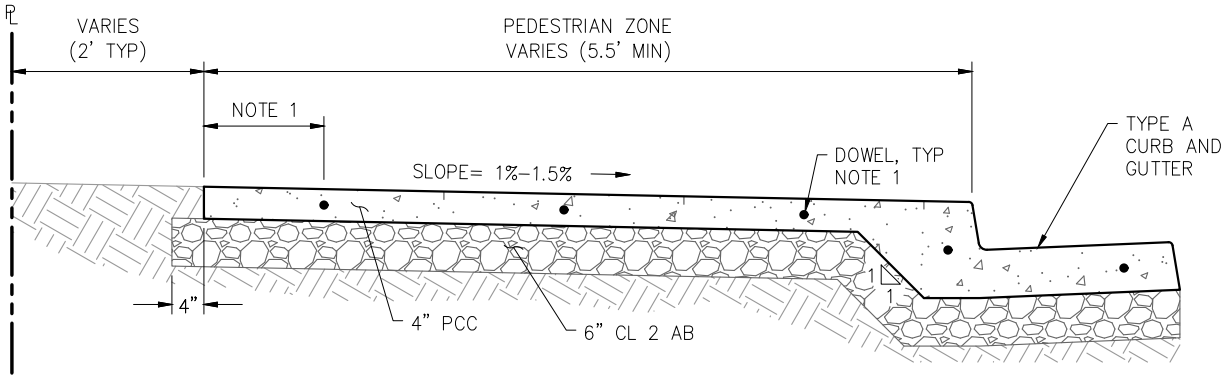
SOUTH SAN FRANCISCO
PUBLIC WORKS
ENGINEERING

CURB AND GUTTER TRANSITIONS

DEC 2021

R-2D



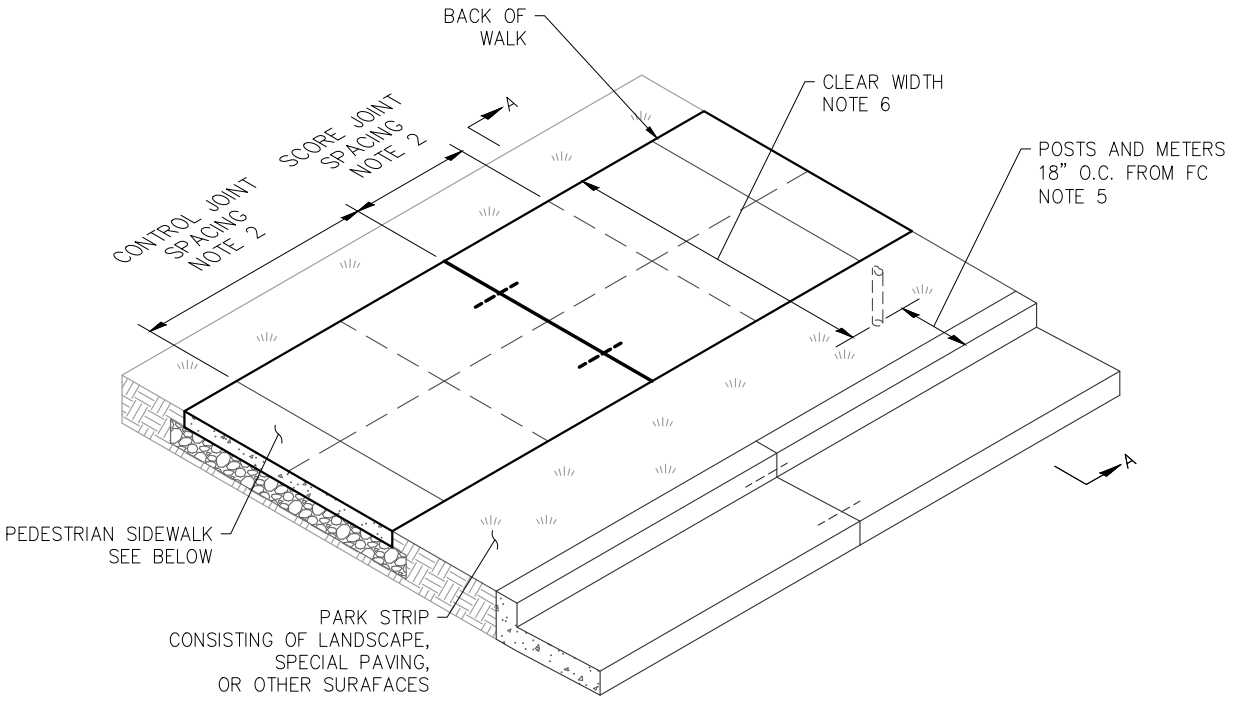


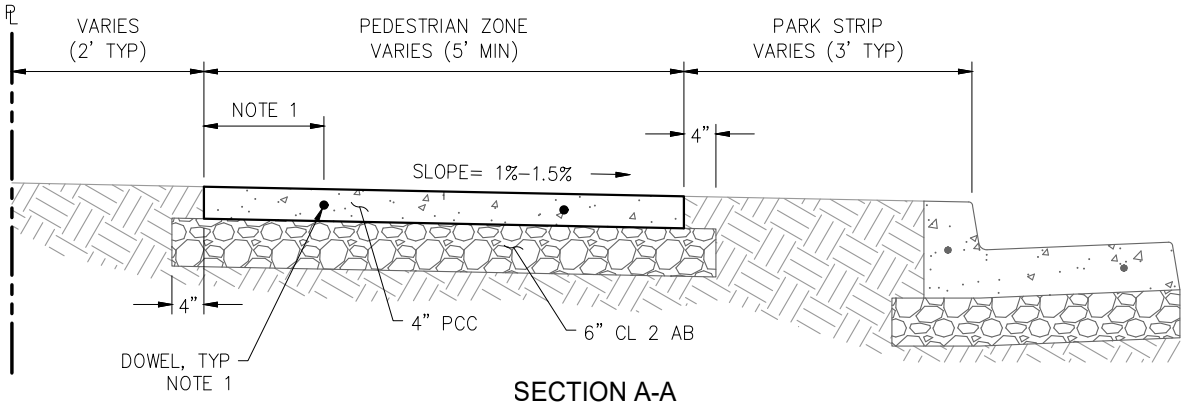
SECTION A-A

NOTES:

1. EXPANSION JOINTS SHALL BE PLACED WITH ½"X12" SLIP DOWELS (CENTER DOWELS BETWEEN CONTROL AND SCORE JOINTS FOR 3' OR SMALLER PANELS, OR TWO EVEN–SPACED DOWELS FOR 3' TO 5' PANELS).
2. EXPANSION, CONTROL, AND SCORE JOINTS SHALL BE PLACED PER SPECIFICATIONS ON CITY DETAIL R–1.
3. NEW CONCRETE SHALL CONFORM TO EXISTING AT THE NEAREST JOINT.
4. WHERE EXISTING SIDEWALK WIDTHS ARE LESS THAN THE MINIMUM 5', PROVIDE A SIDEWALK WIDTH TRANSITION OF ONE PANEL LENGTH.
5. POSTS FOR SIGNAGE, PEDESTRIAN PUSH BUTTONS, OR PARKING METERS SHALL BE SET 18" ON CENTER FROM THE FACE OF CURB. ALL OTHER VERTICAL OBSTRUCTIONS SHALL PROVIDE 18" MIN CLEARANCE TO FACE OF CURB.
6. THE CLEAR WIDTH PEDESTRIAN PATH OF TRAVEL AT LOCATIONS OF VERTICAL OBSTRUCTIONS SHALL BE A MINIMUM OF 32" CLEARANCE FOR A LENGTH NOT GREATER THAN 24".
7. IN THE GRAND AVENUE DOWNTOWN AREA: RESTORATION SHALL BE A FULL PANEL (BRICK LINE TO BRICK LINE) OR AS DIRECTED BY THE PUBLIC WORKS INSPECTOR IN THE FIELD. SIDEWALK PATTERN, MATERIAL, AND FINISH SHALL MATCH EXISTING.

SOUTH SAN FRANCISCO PUBLIC WORKS ENGINEERING	**MONOLITHIC SIDEWALK**	**DEC 2022**
		R-3A



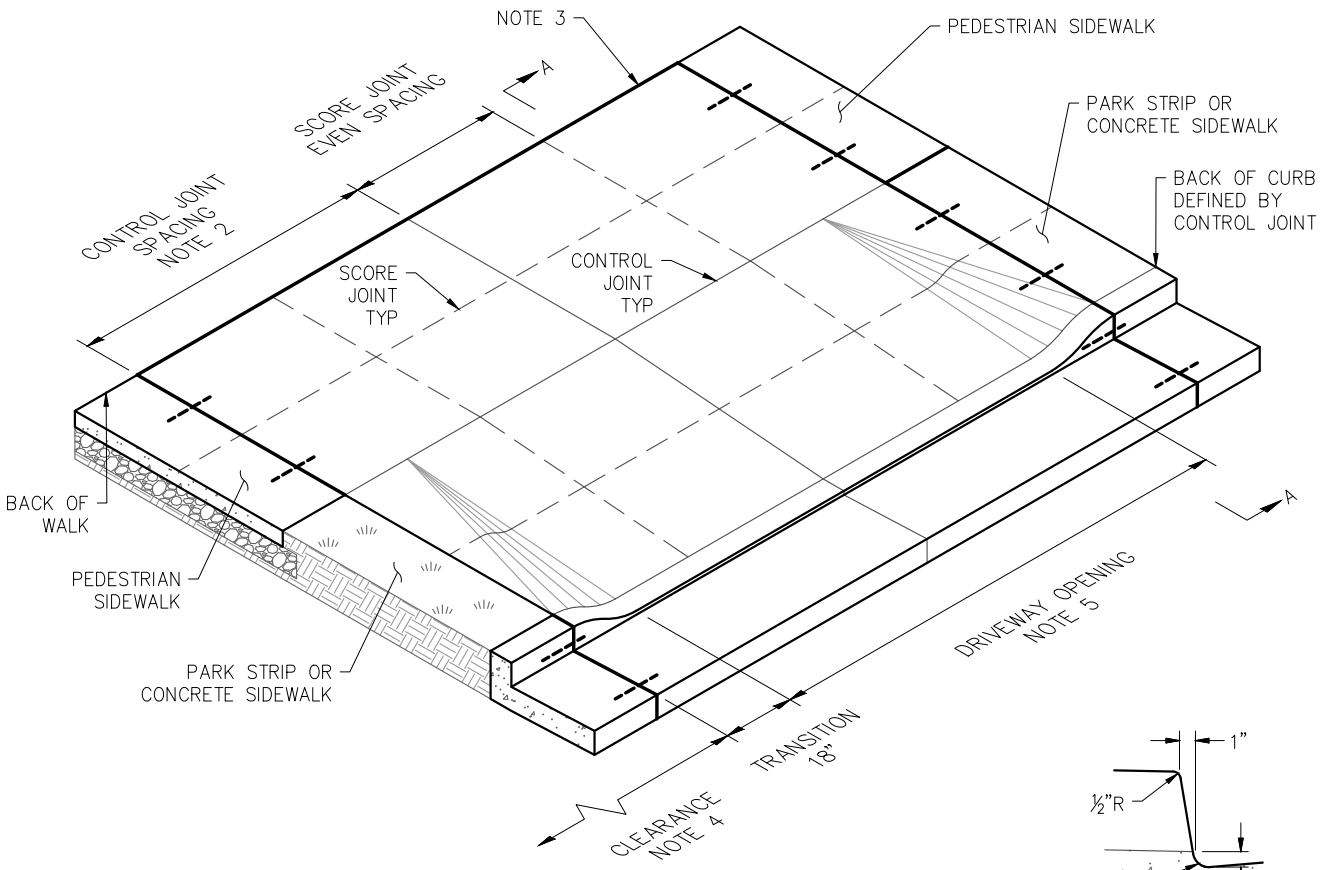


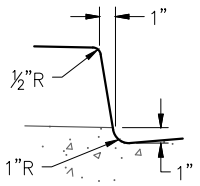
SECTION A-A

NOTES:

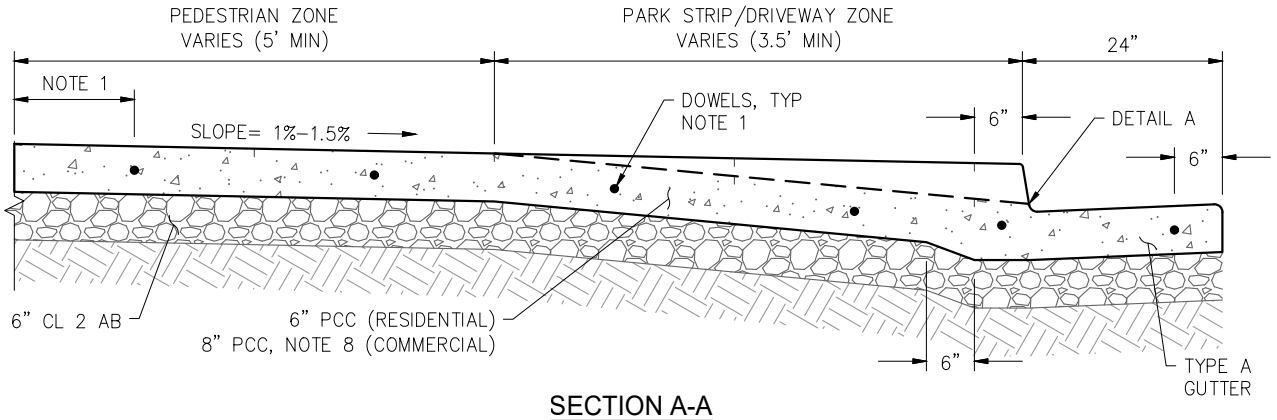
1. EXPANSION JOINTS SHALL BE PLACED WITH ½"X12" SLIP DOWELS (CENTER DOWELS BETWEEN CONTROL AND SCORE JOINTS FOR 3' OR SMALLER PANELS, OR TWO EVEN–SPACED DOWELS FOR 3' TO 5' PANELS).
2. EXPANSION, CONTROL, AND SCORE JOINTS SHALL BE PLACED PER SPECIFICATIONS ON CITY DETAIL R–1.
3. NEW CONCRETE SHALL CONFORM TO EXISTING AT THE NEAREST JOINT.
4. WHERE EXISTING SIDEWALK WIDTHS ARE LESS THAN THE MINIMUM 5', PROVIDE A SIDEWALK WIDTH TRANSITION OF ONE PANEL LENGTH.
5. POSTS FOR SIGNAGE, PEDESTRIAN PUSH BUTTONS, OR PARKING METERS SHALL BE SET 18" ON CENTER FROM THE FACE OF CURB. ALL OTHER VERTICAL OBSTRUCTIONS SHALL PROVIDE 18" MIN CLEARANCE TO FACE OF CURB.
6. THE CLEAR WIDTH PEDESTRIAN PATH OF TRAVEL AT LOCATIONS OF VERTICAL OBSTRUCTIONS SHALL BE A MINIMUM OF 32" CLEARANCE FOR A LENGTH NOT GREATER THAN 24".
7. IN THE GRAND AVENUE DOWNTOWN AREA: RESTORATION SHALL BE A FULL PANEL (BRICK LINE TO BRICK LINE) OR AS DIRECTED BY THE PUBLIC WORKS INSPECTOR IN THE FIELD. SIDEWALK PATTERN, MATERIAL, AND FINISH SHALL MATCH EXISTING.

SOUTH SAN FRANCISCO PUBLIC WORKS ENGINEERING	**SEPARATED SIDEWALKS**	**DEC 2022**
		R-3B





DETAIL A



SECTION A-A

NOTES:

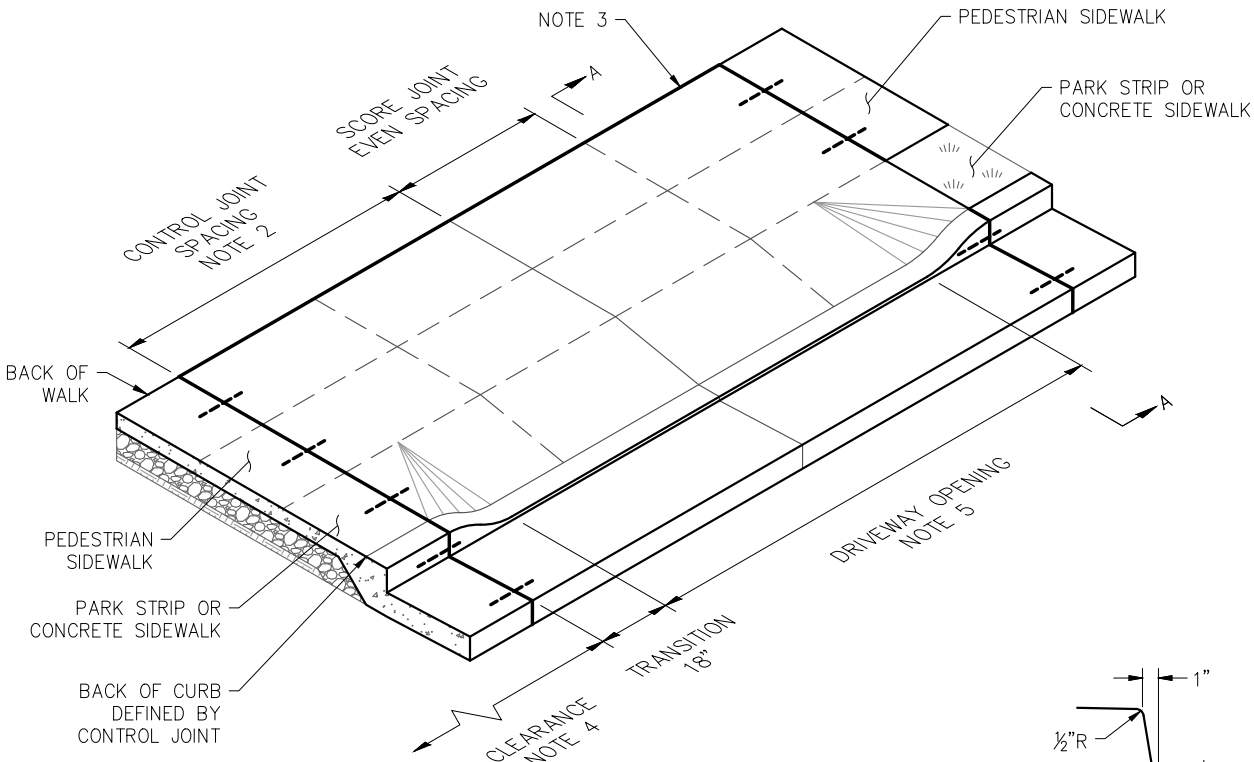
1. EXPANSION JOINTS SHALL BE PLACED AT DRIVEWAY EDGES WITH ½"X12" SLIP DOWELS (CENTER DOWELS BETWEEN CONTROL AND SCORE JOINTS FOR 3' OR SMALLER PANELS, OR TWO EVEN–SPACED DOWELS FOR 3' TO 5' PANELS).
2. CONTROL JOINTS SHALL BE PLACED AT THE CENTERLINE OF THE DRIVEWAY OR 10' MAX INTERVALS.
3. PROVIDE EXPANSION JOINT BETWEEN PUBLIC R.O.W. AND PRIVATE DRIVEWAY.
4. DRIVEWAY EDGE MINIMUM CLEARANCES ARE 1' TO PARCEL LINE AND CURB INLETS, 5' TO FIRE HYDRANTS, 15' TO CURB RETURNS, AND 22' TO THE NEAREST DRIVEWAY ON SAME PARCEL.
5. RESIDENTIAL DRIVEWAY OPENINGS SHALL BE 10' TO 12'. RESIDENTIAL DOUBLE CAR DRIVEWAYS REQUIRE PLANNING DIVISION APPROVAL AND SHALL BE 24' MAX. COMMERCIAL DRIVEWAYS SHALL BE 16' TO 30'. DRIVEWAYS IN EXCESS OF 30' REQUIRE APPROVAL FROM PLANNING DIVISION AND CITY ENGINEER.
6. DRIVEWAY SHALL BE POURED MONOLITHIC WITH THE GUTTER.
7. NEW CONCRETE SHALL CONFORM TO EXISTING AT THE NEAREST JOINT.
8. COMMERCIAL DRIVEWAYS SHALL BE 8" THICK PCC AND INCLUDE REINFORCEMENT CONSISTING OF #4 REBAR AT 18" ON CENTER EACH WAY OR 6"X6" METAL WIRE MESH.

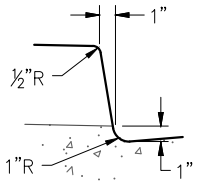
SOUTH SAN FRANCISCO
PUBLIC WORKS
ENGINEERING

STANDARD DRIVEWAY

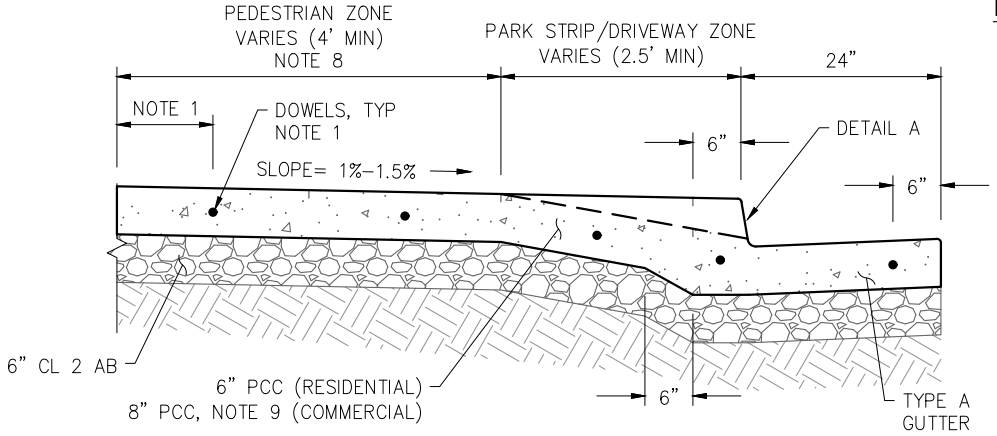
DEC 2021

R-4A





DETAIL A

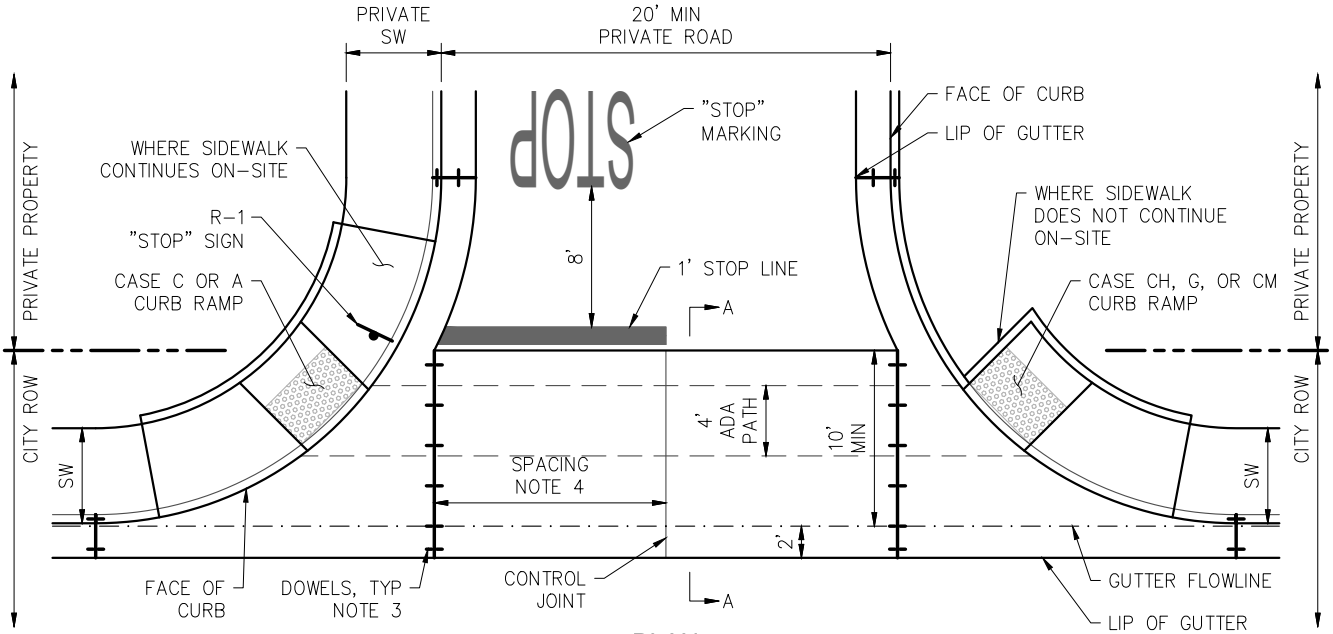


SECTION A-A

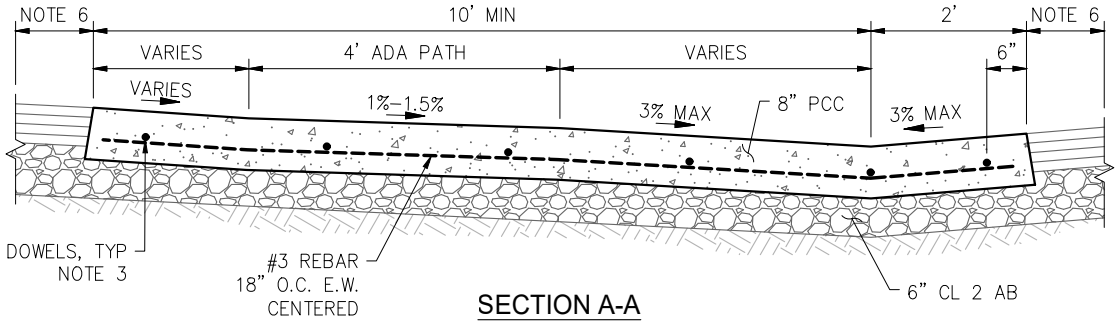
NOTES:

1. EXPANSION JOINTS SHALL BE PLACED AT DRIVEWAY EDGES WITH ½"X12" SLIP DOWELS (CENTER DOWELS BETWEEN CONTROL AND SCORE JOINTS FOR 3' OR SMALLER PANELS, OR TWO EVEN–SPACED DOWELS FOR 3' TO 5' PANELS).
2. CONTROL JOINTS SHALL BE PLACED AT THE CENTERLINE OF THE DRIVEWAY OR 10' MAX INTERVALS.
3. PROVIDE EXPANSION JOINT BETWEEN PUBLIC R.O.W. AND PRIVATE DRIVEWAY.
4. DRIVEWAY EDGE MINIMUM CLEARANCES ARE 1' TO PARCEL LINE AND CURB INLETS, 5' TO FIRE HYDRANTS, 15' TO CURB RETURNS, AND 22' TO THE NEAREST DRIVEWAY ON SAME PARCEL.
5. RESIDENTIAL DRIVEWAY OPENINGS SHALL BE 10' TO 12'. RESIDENTIAL DOUBLE CAR DRIVEWAYS REQUIRE PLANNING DIVISION APPROVAL AND SHALL BE 24' MAX. COMMERCIAL DRIVEWAYS SHALL BE 16' TO 30'. DRIVEWAYS IN EXCESS OF 30' REQUIRE APPROVAL FROM PLANNING DIVISION AND CITY ENGINEER.
6. DRIVEWAY SHALL BE POURED MONOLITHIC WITH THE GUTTER.
7. NEW CONCRETE SHALL CONFORM TO EXISTING AT THE NEAREST JOINT.
8. WHERE CONSTRAINED BY R.O.W. WIDTHS, REDUCE TO 36" MINIMUM WITH CITY ENGINEER APPROVAL.
9. COMMERCIAL DRIVEWAYS SHALL BE 8" THICK PCC AND INCLUDE REINFORCEMENT CONSISTING OF #4 REBAR AT 18" ON CENTER EACH WAY OR 6"X6" METAL WIRE MESH.

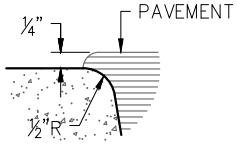
SOUTH SAN FRANCISCO PUBLIC WORKS ENGINEERING	**LIMITED WIDTH DRIVEWAY**	**DEC 2021**
		R-4B



PLAN



SECTION A-A

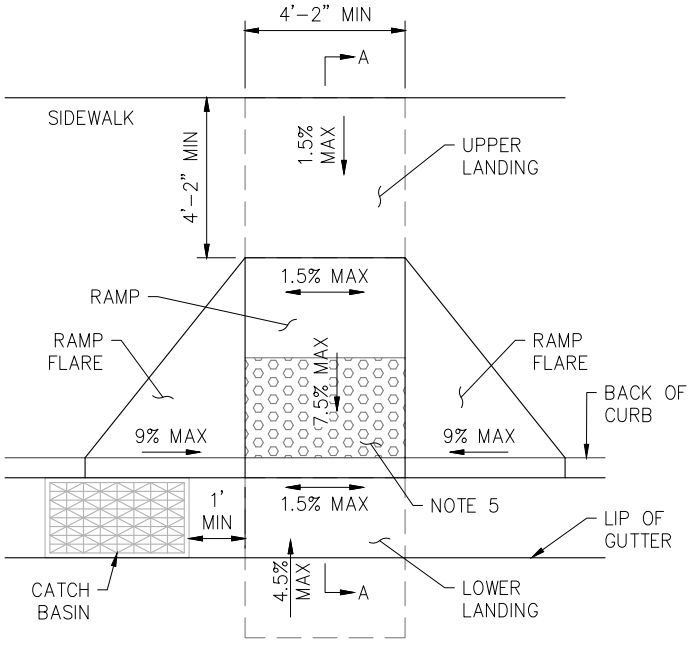


DETAIL A

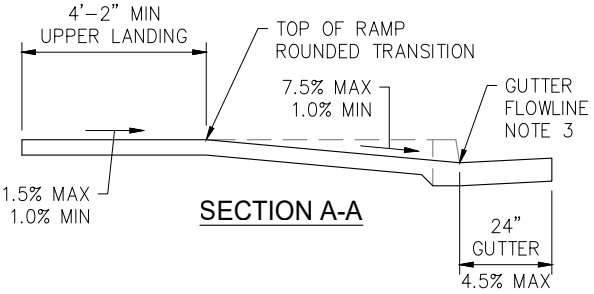
NOTES:

1. PUBLIC ACCESS EASEMENT SHALL BE GRANTED AS REQUIRED TO ALLOW PUBLIC TO USE OF CURB RAMPS.
2. CONCRETE APRON CROSS SLOPES SHALL NOT EXCEED 3%.
3. EXPANSION JOINTS SHALL BE PLACED WITH ½"X12" SLIP DOWELS AT 30" O.C.
4. CONTROL JOINTS SHALL BE PLACED AT THE CENTERLINE OF THE DRIVEWAY OR 10' MAX INTERVALS.
5. BASE ROCK SHALL EXTEND 1' BEYOND LIP OF GUTTER PRIOR TO POURING CONCRETE.
6. WHERE INSTALLING NEW DRIVEWAY ON EXISTING STREETS, A 12" WIDE SECTION OF DEEP LIFT ASPHALT SHALL BE PROVIDED.
7. THE INTERFACE BETWEEN GUTTER CONCRETE AND ASPHALT PAVEMENT SHALL CONFORM TO DETAIL A.
8. CALTRANS CURB RAMP CASES A, C, G, CH AND CM ARE ACCEPTABLE CURB RAMP LAYOUTS.

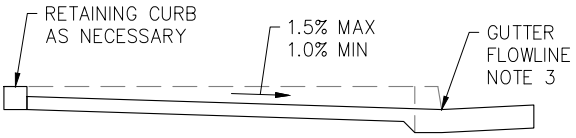
SOUTH SAN FRANCISCO PUBLIC WORKS ENGINEERING	**PRIVATE ROAD DRIVEWAY**	**DEC 2022**
		R-5



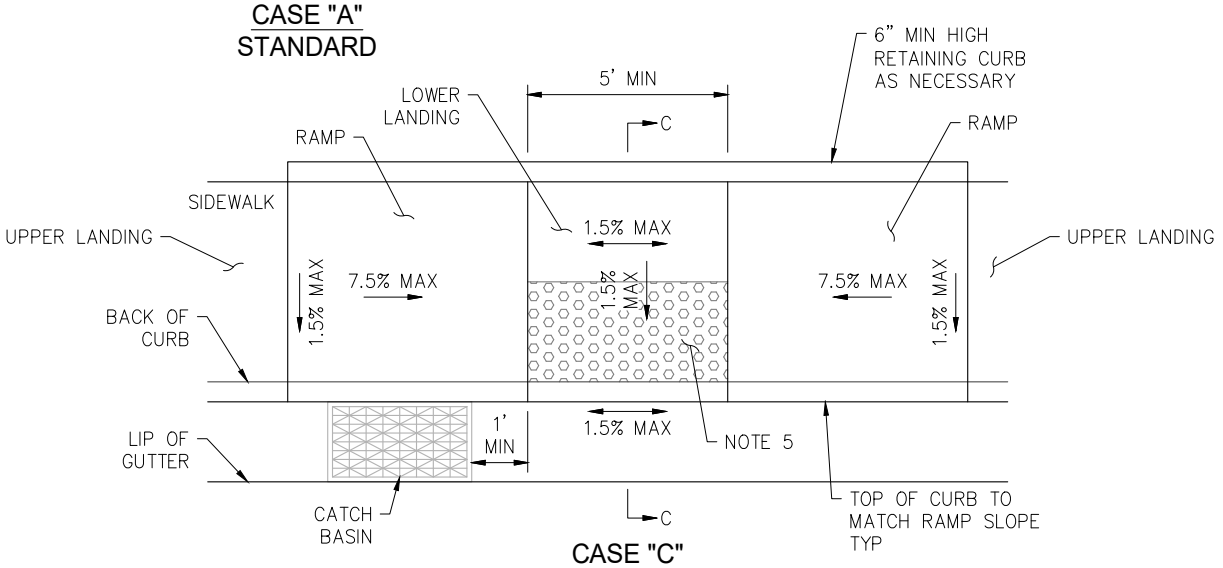
CASE "A"
STANDARD



SECTION A-A



SECTION C-C

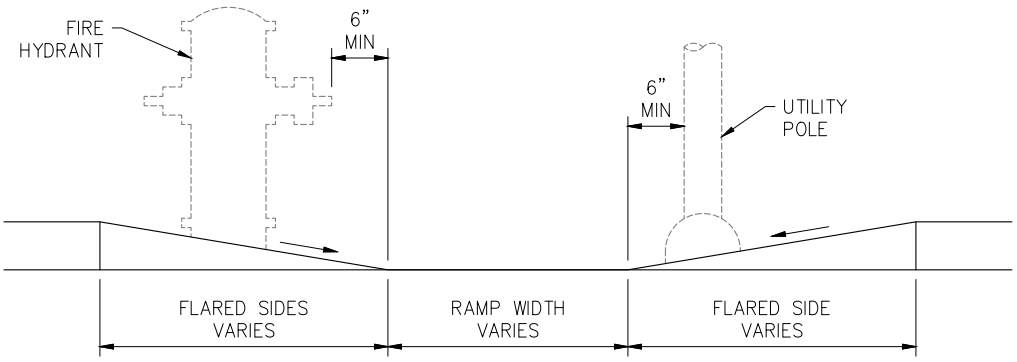


CASE "C"
NARROW SIDEWALKS

NOTES:

1. ALL CITY CURB RAMPS ARE BASED ON CALTRANS STANDARD PLAN A88A. CONSTRUCTION SHALL COMPLY WITH WHICHEVER STANDARD IS MORE STRICT. REFER TO CALTRANS STANDARD PLANS FOR ALL OTHER DETAILS RELATED TO CURB RAMPS.
2. AS SITE CONDITIONS DICTATE, CASE A SHALL BE USED FOR CORNER AND MIDBLOCK RAMPS AND SHALL BE DIRECTIONAL AND PARALLEL TO THE PEDESTRIAN PATH OF TRAVEL. CASE C MAY BE USED ON SIDEWALKS WITH LIMITED WIDTH.
3. RAMPS AND SIDEWALKS SHALL ALL SLOPE TOWARD THE GUTTER AT 1% MINIMUM SLOPE. NO CASE SHALL ALLOW FOR THE GUTTER FLOW LINE TO DRAIN ONTO THE RAMP OR SIDEWALK.
4. SIDEWALK AND RAMP THICKNESS IS 4" MINIMUM. SEE STD R-3A & R-3B.
5. DETECTABLE WARNING SURFACE SHALL BE YELLOW COLOR #33538 OF FED-STD-595. NO UTILITY BOXES ALLOWED WITHIN THE DETECTABLE WARNING AREA. TACK ON DETECTABLE WARNING SURFACES ONLY ALLOWED FOR RETROFITTING EXISTING CURB RAMPS THAT HAVE ADA-COMPLIANT SLOPES.
6. LANDINGS SHALL HAVE 4'-2" MINIMUM WIDTH AND LENGTH AND BE DESIGNED TO 1.0%-1.5% CROSS SLOPE AND RUNNING SLOPE, EXCEPT WHERE STREET RUNNING SLOPE EXCEEDS 5% THEN THE UPPER LANDING SHALL BE DESIGNED AS LEVEL TO THE EXTENT FEASIBLE.
7. LOWER LANDINGS WITHIN THE ROADWAY, SUCH AS CASE A, SHALL HAVE 4'-2" MINIMUM WIDTH AND LEGTH AND BE DESIGNED TO 1.0%-1.5% CROSS SLOPE PARALLEL TO THE CURB AND 1.0%-4.5% MAX SLOPE PERPENDICULAR TO THE CURB.
8. CATCH BASINS SHALL BE RELOCATED OUTSIDE OF THE LOWER LANDING OF A RAMP.
9. FOR ANY CASE UNABLE TO BE ADDRESSED BY THIS STANDARD OR THE CALTRANS STANDARD PLANS DUE TO PHYSICAL CONSTRAINTS, MODIFIED RAMPS ON DETAIL R-6B SHALL BE USED.
10. ANY SIGNAGE, SIGN POSTS, OR PAVEMENT STRIPING REMOVED DURING CONSTRUCTION OF A CURB RAMP SHALL BE REPLACED AND/OR REINSTALLED AS DIRECTED BY THE PUBLIC WORKS INSPECTOR.

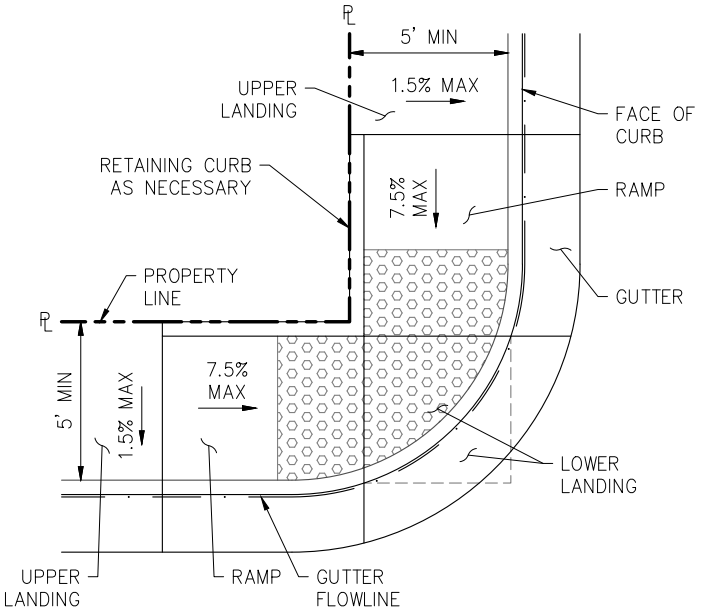
SOUTH SAN FRANCISCO PUBLIC WORKS ENGINEERING	**CURB RAMP STANDARDS**	**FEB 2022**
		R-6A



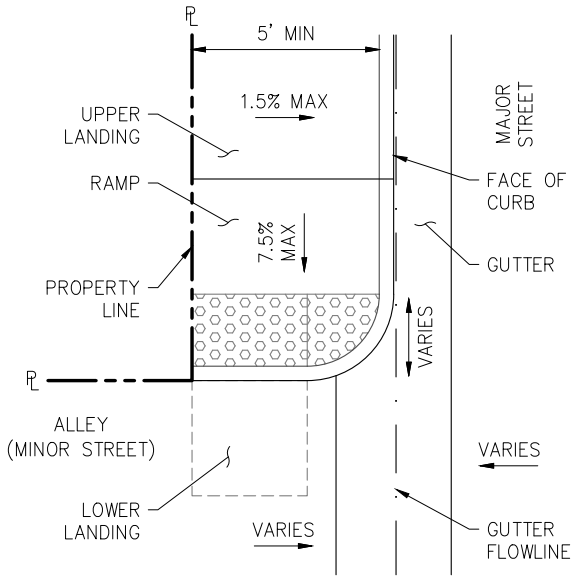
OBSTRUCTION CLEARANCES

RAMP OBSTRUCTION NOTES:

1. EXISTING FIRE HYDRANTS AND UTILITY POLES MAY BE ALLOWED WITHIN RAMP FLARES.
2. NEW FIRE HYDRANTS AND UTILITY POLES SHALL NOT BE INSTALLED IN NEW RAMP FLARES.
3. UTILITY BOXES SHALL NOT BE INSTALLED IN THE RAMP.



MERGED CURB RAMP



ALLEY CROSSING CURB RAMP

SPECIAL RAMP NOTES:

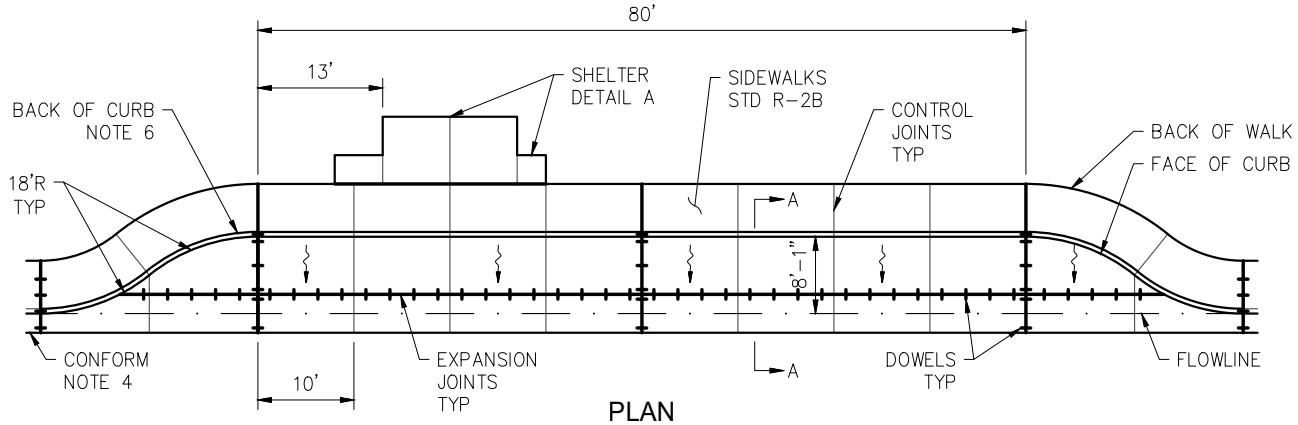
1. LANDINGS SHALL HAVE 4'–2" MINIMUM WIDTH AND LENGTH AND BE DESIGNED TO 1.0%–1.5% CROSS SLOPE AND RUNNING SLOPE, EXCEPT WHERE STREET RUNNING SLOPE EXCEEDS 5% THEN THE UPPER LANDING SHALL BE DESIGNED AS LEVEL TO THE EXTENT FEASIBLE.
2. LOWER LANDINGS WITHIN THE ROADWAY, SUCH AS CASE A, SHALL HAVE 4'–2" MINIMUM WIDTH AND LEGTH AND BE DESIGNED TO 1.0%–1.5% CROSS SLOPE PARALLEL TO THE CURB AND 1.0%–4.5% MAX SLOPE PERPENDICULAR TO THE CURB.

SOUTH SAN FRANCISCO
PUBLIC WORKS
ENGINEERING

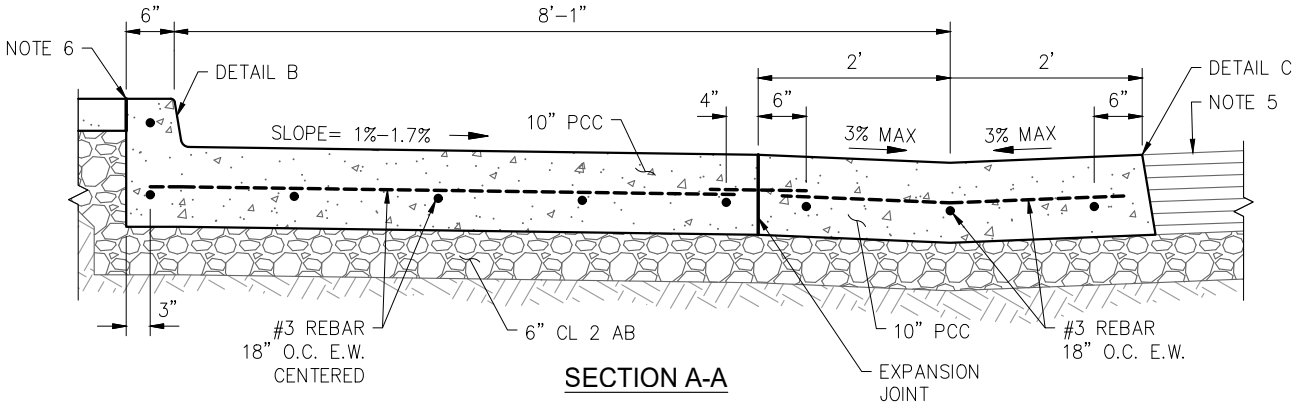
CURB RAMP SPECIAL DETAILS

DEC 2021

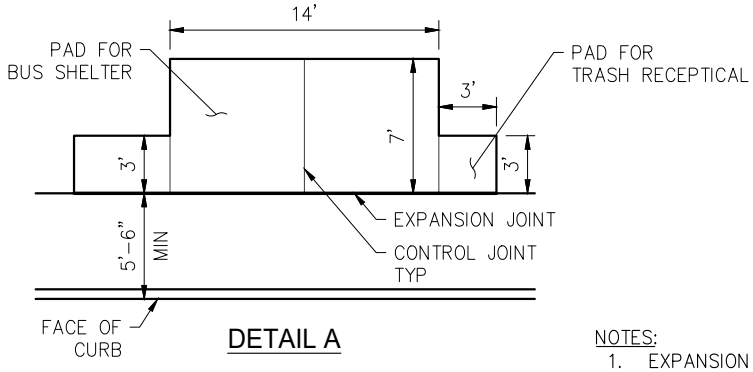
R-6B



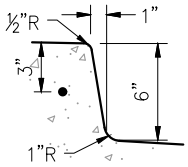
PLAN



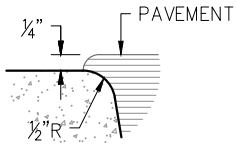
SECTION A-A



DETAIL A



DETAIL B



DETAIL C

NOTES:

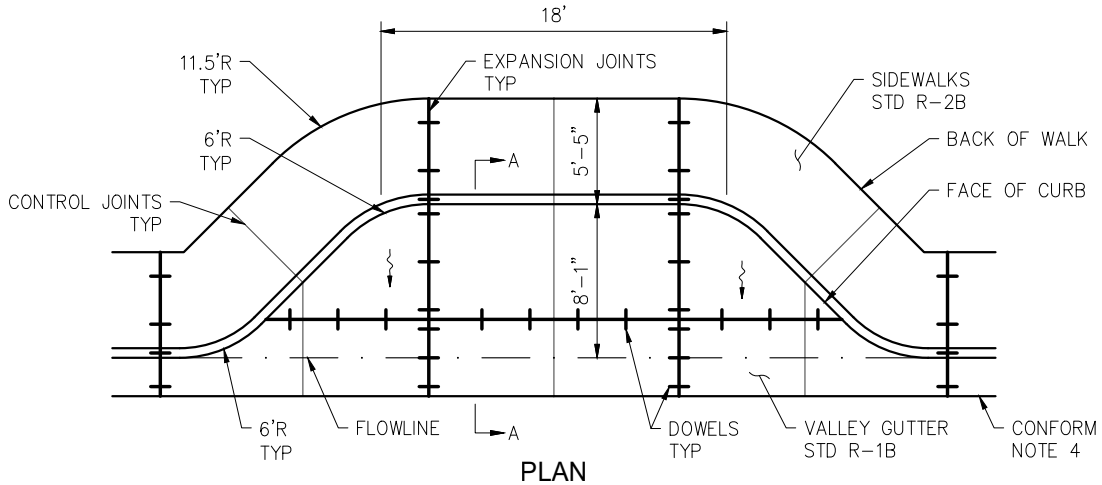
1. EXPANSION JOINTS SHALL BE PLACED AT 50' INTERVALS OR AS SHOWN WITH ½"X12" SLIP DOWELS AT 30" O.C.
2. NEW CONCRETE SHALL CONFORM TO EXISTING AT THE NEAREST JOINT UNLESS APPROVED OTHERWISE.
3. CONTROL AND SCORE JOINTS SHALL BE PLACED PER SPECIFICATIONS ON CITY DETAIL R-1.
4. BASE ROCK SHALL EXTEND 1' BEYOND LIP OF GUTTER PRIOR TO POURING CONCRETE.
5. WHERE INSTALLING PAD IN EXISTING STREETS, A 12" WIDE SECTION OF DEEP LIFT ASPHALT SHALL BE PROVIDED.
6. POUR SIDEWALK SEPARATELY FROM CURB.
7. PAVEMENT FOR SIDEWALK EXTENSION, BUS SHELTER, AND TRASH RECEPTACLE SHALL BE 4"PCC/6"AB.
8. PUBLIC ACCESS EASEMENT SHALL BE GRANTED TO THE CITY AS NECESSARY.

SOUTH SAN FRANCISCO
PUBLIC WORKS
ENGINEERING

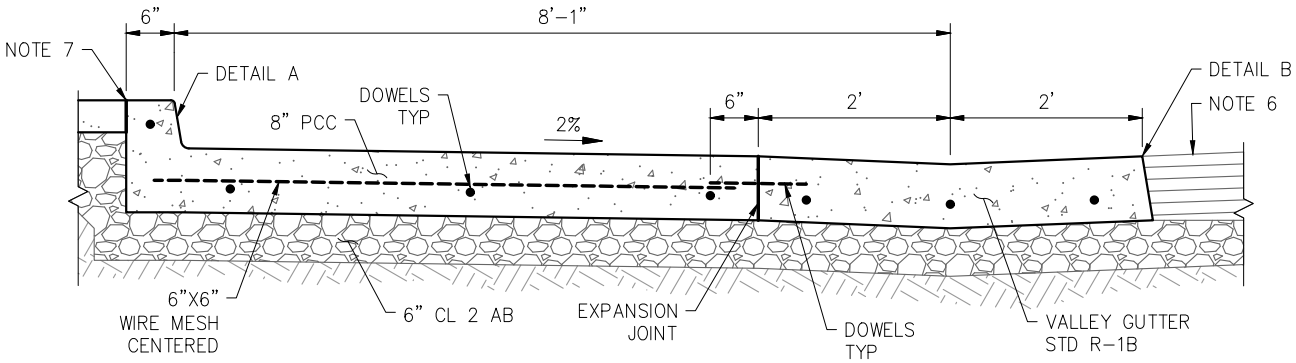
BUS TURNOUT

DEC 2021

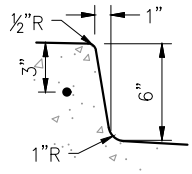
R-7A



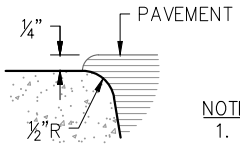
PLAN



SECTION A-A



DETAIL A

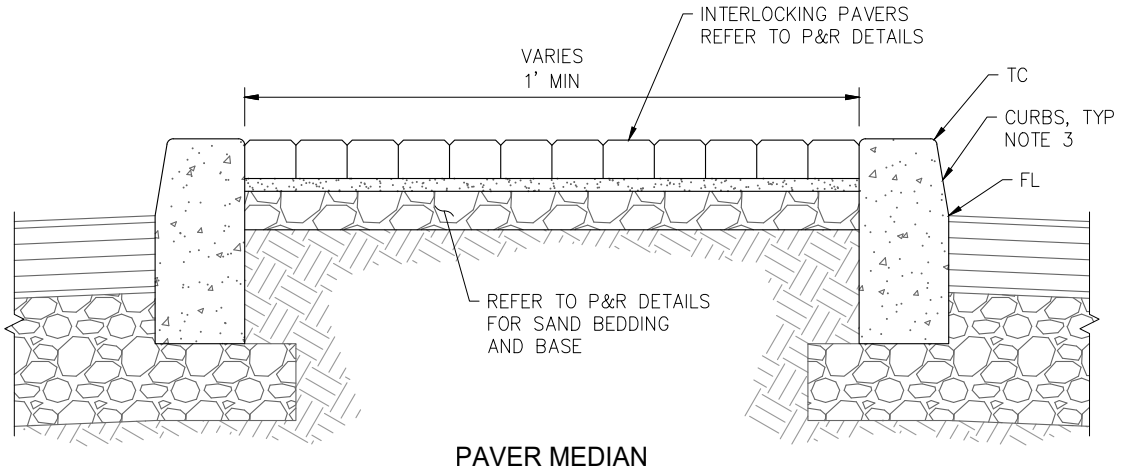


DETAIL B

NOTES:

1. VEHICLE TURNOUT DESIGNED FOR SINGLE VEHICLE ONLY. USE BULBOUTS TO DEFINE A PARKING AISLE INSTEAD.
2. EXPANSION JOINTS SHALL BE PLACED PER PLAN WITH ½"X12" SLIP DOWELS AT 30" O.C.
3. CONTROL AND SCORE JOINTS SHALL BE PLACED PER SPECIFICATIONS ON CITY DETAIL R-1.
4. NEW CONCRETE SHALL CONFORM TO EXISTING AT THE NEAREST JOINT UNLESS APPROVED OTHERWISE.
5. BASE ROCK SHALL EXTEND 1' BEYOND LIP OF GUTTER PRIOR TO POURING CONCRETE.
6. WHERE INSTALLING PAD IN EXISTING STREETS, A 12" WIDE SECTION OF DEEP LIFT ASPHALT SHALL BE PROVIDED.
7. POUR SIDEWALK SEPARATELY FROM CURB.
8. PUBLIC ACCESS EASEMENT SHALL BE GRANTED TO THE CITY AS NECESSARY.

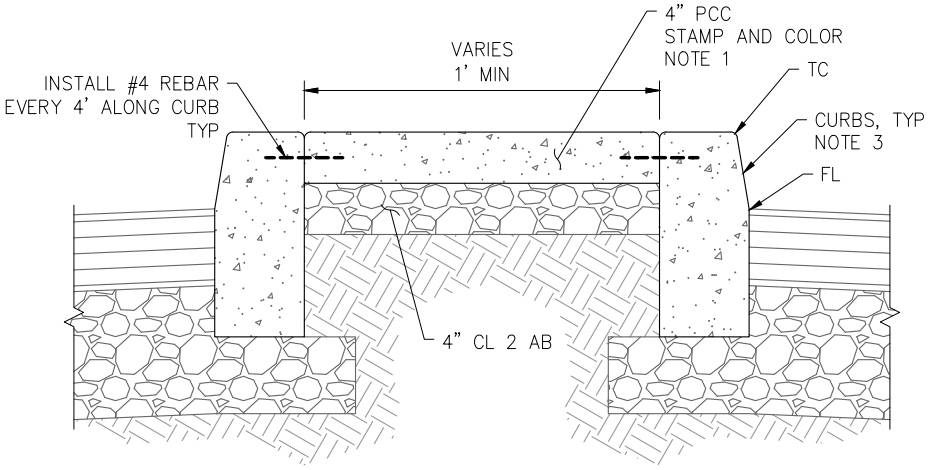
SOUTH SAN FRANCISCO PUBLIC WORKS ENGINEERING	**VEHICLE TURNOUT**	**DEC 2021**
		R-7B



PAVER MEDIAN

NOTES:

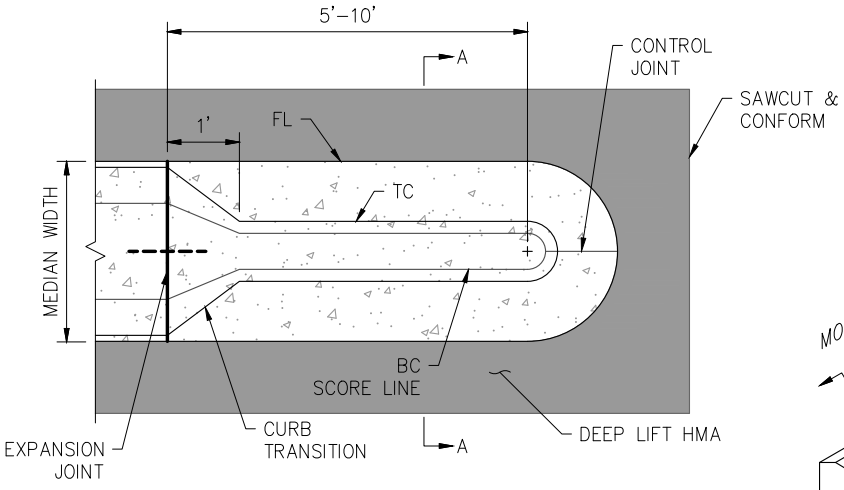
1. PAVER AND/OR LANDSCAPED MEDIANS SHALL COMPLY WITH PARKS & RECREATION DIVISION (P&R) STANDARD DETAILS AND BE INSTALLED WHERE DIRECTED BY P&R.
2. MEDIANS SHALL HAVE A MINIMUM 1% SLOPE TOWARD THE CURB OR DRAIN.
3. CURB SHALL BE TYPE "B" VERTICAL CURB WHEN ROAD SLOPES AWAY FROM MEDIAN AND TYPE "A" CURB AND GUTTER WHEN ROAD SLOPES TOWARD MEDIAN.
4. ALL UTILITY OR SERVICE BOXES SHALL BE RESET TO GRADE AS REQUIRED.



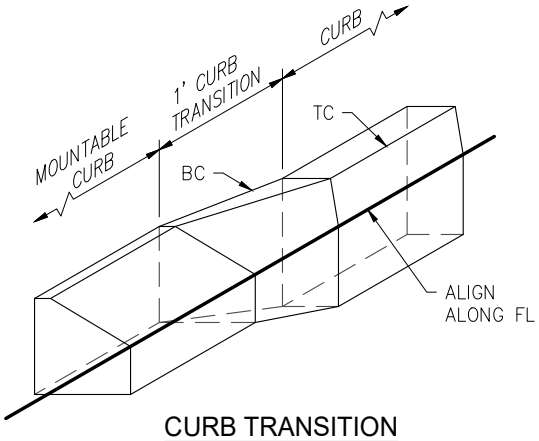
CONCRETE MEDIAN

NOTES:

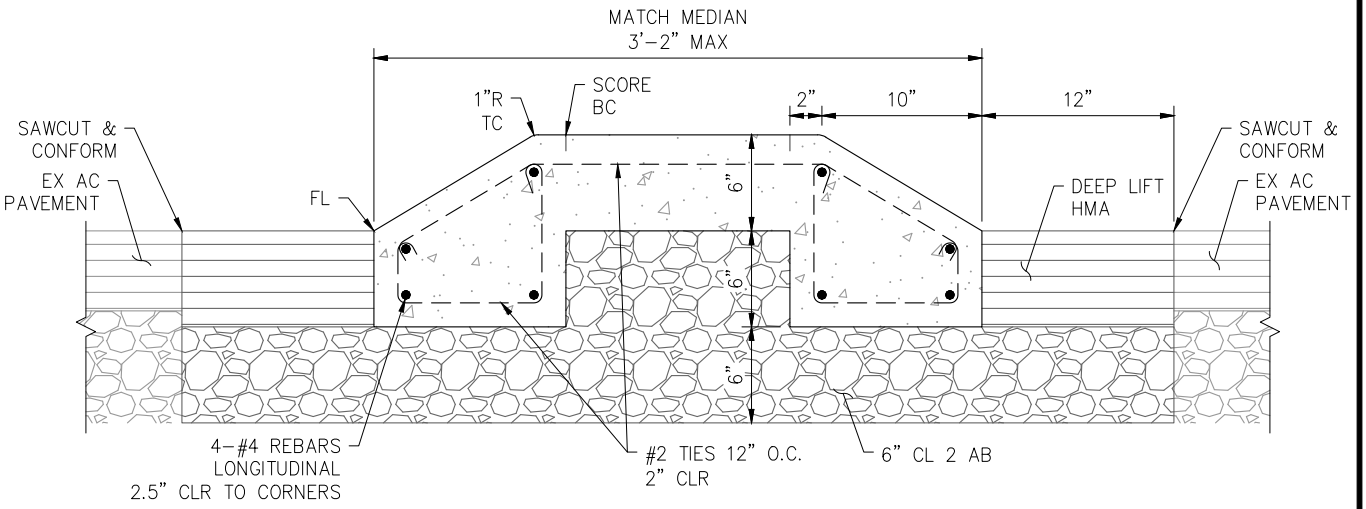
1. STAMP PATTERN AND COLORING SHALL BE APPROVED BY PARKS & RECREATION PRIOR TO INSTALL. A SAMPLE MAY BE REQUIRED TO BE SUBMITTED FOR REVIEW.
2. MEDIANS SHALL HAVE A MINIMUM 1% SLOPE TOWARD THE CURB OR DRAIN.
3. CURB SHALL BE TYPE "B" VERTICAL CURB WHEN ROAD SLOPES AWAY FROM MEDIAN AND TYPE "A" CURB AND GUTTER WHEN ROAD SLOPES TOWARD MEDIAN.
4. ALL UTILITY OR SERVICE BOXES SHALL BE RESET TO GRADE AS REQUIRED.



MOUNTABLE MEDIAN
PLAN



CURB TRANSITION

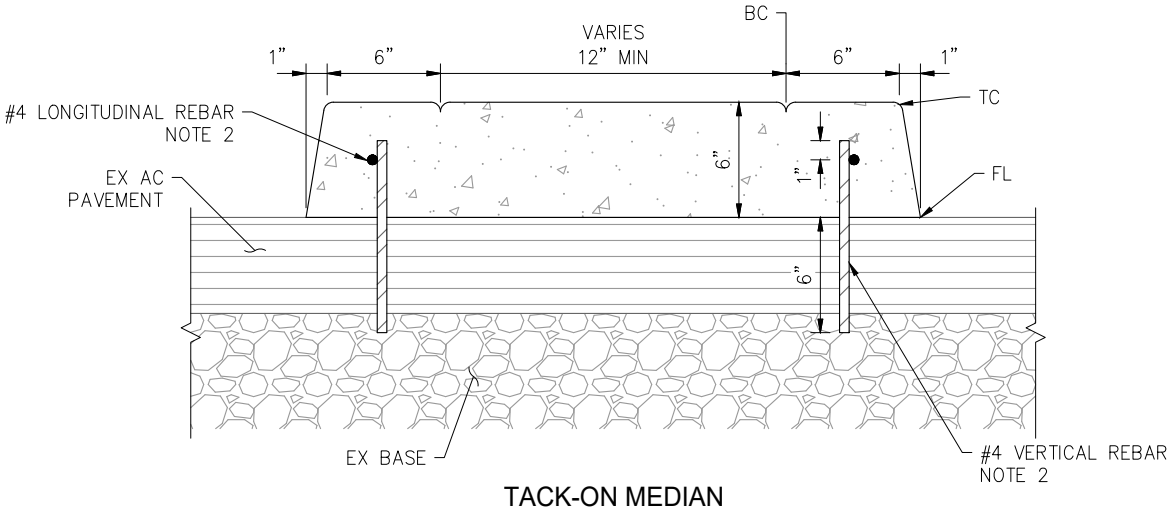


MOUNTABLE MEDIAN
SECTION A-A

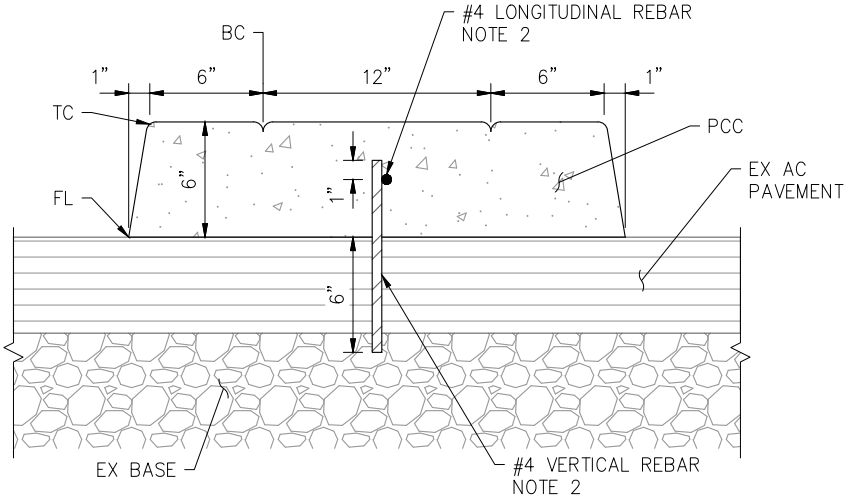
MOUNTABLE MEDIAN NOTES:

1. MOUNTABLE MEDIAN SHALL ONLY BE INSTALLED WHERE DIRECTED BY THE CITY ENGINEER AND USED ON MEDIANS 2'–3' WIDE WHERE VEHICULAR TRAFFIC IS EXPECTED TO CROSS OVER (INTERSECTIONS AND DRIVEWAYS).
2. MOUNTABLE MEDIAN SHALL MATCH THE WIDTH OF THE MEDIAN CONNECTING TO IT.
3. EXPANSION JOINT SHALL BE PLACED BETWEEN MOUNTABLE MEDIAN AND THE STANDARD MEDIAN ½"X12" SLIP DOWELS (CENTER BETWEEN CONTROL JOINTS).

SOUTH SAN FRANCISCO PUBLIC WORKS ENGINEERING	**MOUNTABLE MEDIAN**	**DEC 2022**
		R-8B



TACK-ON MEDIAN

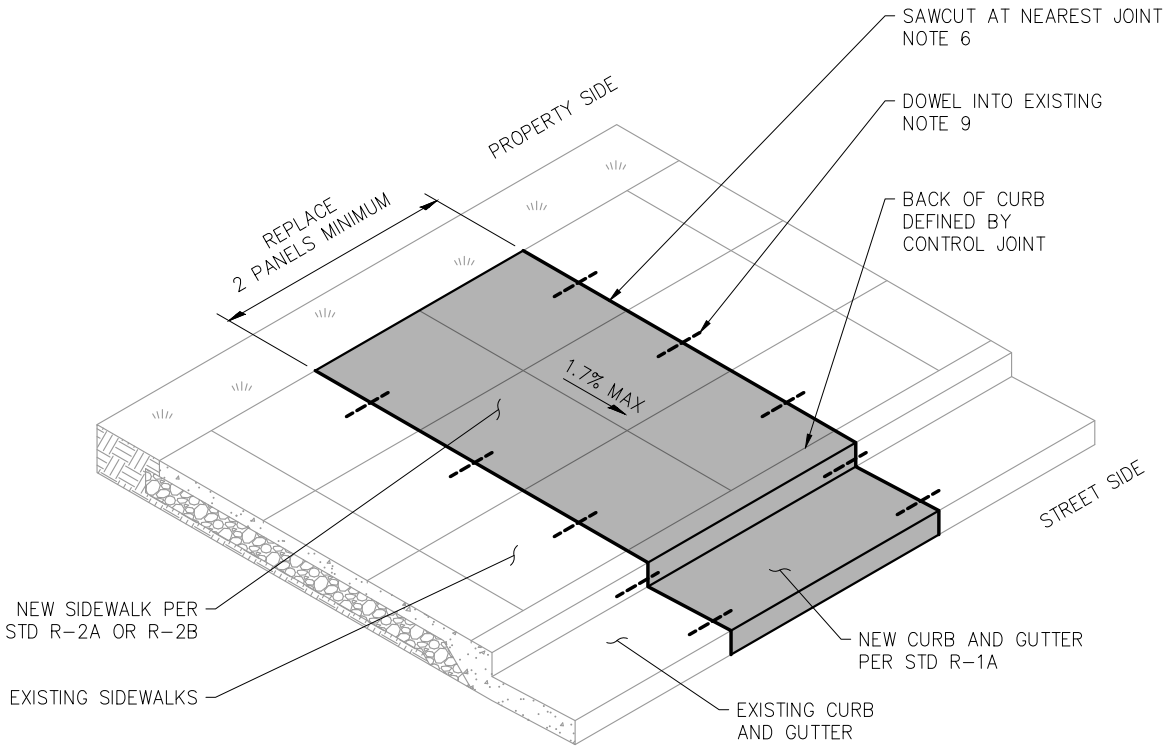


TACK-ON MEDIAN
2' WIDE

TACK–ON MEDIAN NOTES:

1. USE OF TACK–ON MEDIANS REQUIRES SPECIAL APPROVAL FROM CITY ENGINEER.
2. WITHIN 35–FT OF INTERSECTION, ONLY STANDARD CONCRETE MEDIANS AND MOUNTABLE MEDIANS SHALL BE USED.
3. 4# LONGITUDINAL REBAR WIRED WITH #14 WIRE TO VERTICAL #4 REBAR 12" LONG GROUTED IN HOLES DRILLED 4' O.C.
4. PROVIDE SCORE LINE 6" BEHIND TOP OF CURB TO CREATE THE BACK OF CURB LINE.

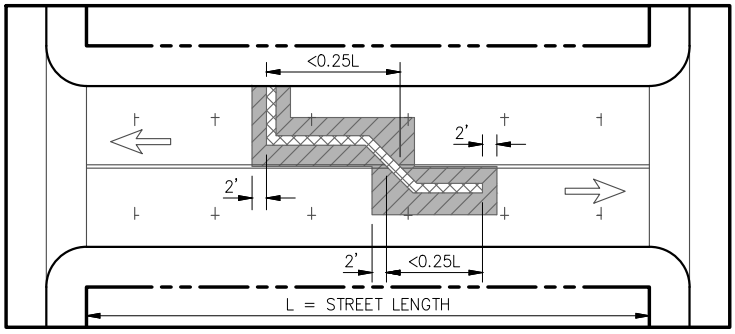
SOUTH SAN FRANCISCO PUBLIC WORKS ENGINEERING	**TACK-ON MEDIAN**	**DEC 2020** **R-8C**



NOTES:

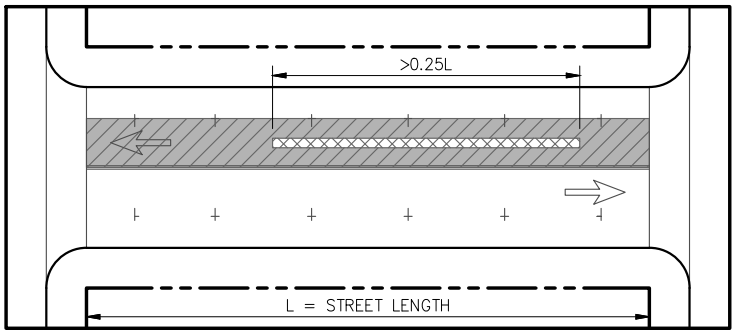
1. THIS DETAIL IS FOR SIDEWALK RESTORATION AND REPLACEMENT DUE TO CONSTRUCTION WHERE THE MINIMUM LIMITS FOR REPLACEMENT SHALL BE AS SHOWN.
2. FOR SIDEWALK REPAIR DUE TO WEATHERING CRACKING, TREE UPHEAVAL, OR ADA NON-COMPLIANCE, THEN A SINGLE PANEL MAY BE REPAIRED INDIVIDUALLY.
3. NO PARTIAL PANEL REPAIRS ALLOWED. SIDEWALK RESTORATION SHALL REPLACE THE ENTIRE SIDEWALK PANEL.
4. RESTORATION SHALL MATCH THE EXISTING SIDEWALK WIDTH UNLESS OTHERWISE REQUIRED BY THE CITY ENGINEER.
5. WHERE SIDEWALK IS ADJACENT TO CURB AND GUTTER, RESTORATION SHALL INCLUDE REPLACEMENT OF THE CURB AND GUTTER TO INSTALL AS MONOLITHIC SIDEWALK, CURB, AND GUTTER.
6. SAWCUTTING SHALL BE AT EXISTING SIDEWALK JOINTS. IF EXISTING CURB AND GUTTER JOINTS DO NOT ALIGN WITH THE SIDEWALK JOINTS, CONTINUE THE SAWCUT FROM THE SIDEWALK THROUGH THE GUTTER TO CREATE A NEW JOINT.
7. NEW SIDEWALK SHALL BE FLUSH WITH EXISTING SIDEWALK. WHERE EXISTING SIDEWALK CROSS-SLOPE IS NOT ADA-COMPLIANT, LIMITS OF SIDEWALK CONFORM SHALL BE DESIGNATED IN THE FIELD BY THE PUBLIC WORKS INSPECTOR.
8. NEW GUTTER FLOWLINE SHALL BE FLUSH WITH EXISTING FLOWLINE.
9. DOWEL INTO EXISTING CONCRETE. WHERE EXISTING SIDEWALK THICKNESS IS LESS THAN 3", NEW SIDEWALK SHALL KEY INTO THE EXISTING SIDEWALK INSTEAD OF DOWELING IN.
10. IN THE GRAND AVENUE DOWNTOWN AREA: RESTORATION SHALL BE A FULL PANEL (BRICK LINE TO BRICK LINE) OR AS DIRECTED BY THE PUBLIC WORKS INSPECTOR IN THE FIELD. SIDEWALK PATTERN, MATERIAL, AND FINISH SHALL MATCH EXISTING.

SOUTH SAN FRANCISCO PUBLIC WORKS ENGINEERING	**SIDEWALK RESTORATION**	**DEC 2022** **R-9**



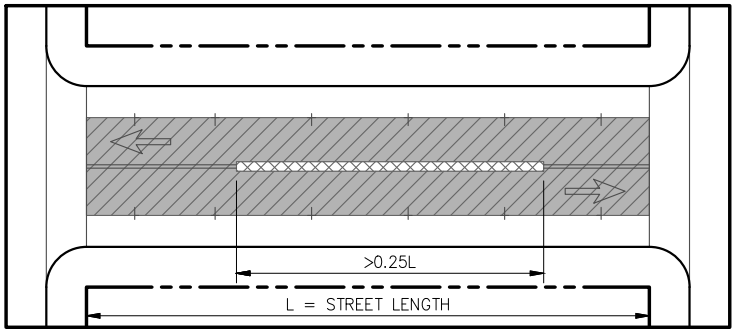
RULE 1: TRENCH <25% LENGTH OF STREET

RESTORATION RULE 1:
FOR TRENCHES LESS THAN 25% OF THE TOTAL STREET LENGTH, ASPHALT SURFACE SHALL BE RESTORED FOR THE FULL WIDTH OF ANY AFFECTED LANE AND 2' PAST THE TRENCH. FOR UNMARKED STREETS, RESTORE TO THE CENTER OF THE STREET.



RULE 2: TRENCH >25% LENGTH OF STREET

RESTORATION RULE 2:
FOR TRENCHES 25% OR MORE OF THE TOTAL STREET LENGTH, ASPHALT SURFACE SHALL BE RESTORED FOR THE FULL WIDTH AND FULL LENGTH OF ANY AFFECTED LANE.



RULE 3: TRENCH OVER CENTERLINE

RESTORATION RULE 3:
FOR TRENCHES CROSSING OVER THE CENTERLINE, BOTH LANES SHALL BE RESTORED FOR THE FULL WIDTH THEN APPLY RULE 1 OR 2. DEPICTED ABOVE IS A TRENCH CROSSING THE CENTERLINE AND LONGER THAN 25% OF THE STREET.

LEGEND

- APPROXIMATE AREA OF ASPHALT CONCRETE PAVEMENT RESTORATION
- APPROXIMATE AREA OF TRENCH
- CROSSWALK TO BE RESTRIPED
- PROPERTY LINE
- CENTER LINE
- LANE LINE
- CROSSWALK
- TRAFFIC FLOW
- PARKING TEE

TRENCH RESTORATION NOTES:

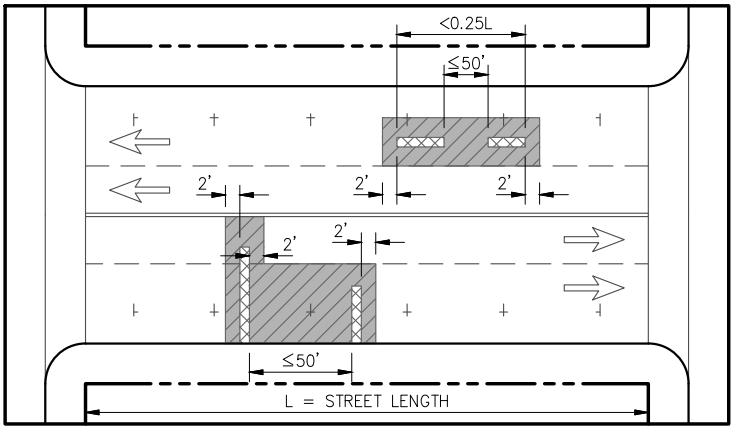
1. AFTER UTILITY FACILITY REPAIRS OR INSTALLATION, TRENCH SHALL BE BACKFILLED PER CITY STANDARD U-7.
2. ALL OPEN TRENCHES SHALL BE BACKFILLED AND TEMPORARILY PAVED WITH HMA PRIOR TO FINISHING THE WORK DAY. BOLTED TRAFFIC RATED PLATES REQUIRE CONSTRUCTION COORDINATION COMMITTEE APPROVAL.
3. ALL RESTORATION SHALL BE COMPLETED IN A TIMELY MANNER. AFTER BACKFILL IS RESTORED AND COMPACTED, BASE LAYER SHALL BE INSTALLED, AND HOT MIX ASPHALT SHALL BE PLACED WITHIN 120 HOURS.
4. AFTER RESTORATION OF ASPHALT, ALL STRIPING SHALL BE RESTORED PER CITY STANDARDS WITHIN 2-7 DAYS. ALLOW ASPHALT TO CURE FOR A MINIMUM OF 2 DAYS PRIOR TO STRIPING.

SOUTH SAN FRANCISCO
PUBLIC WORKS
ENGINEERING

PAVEMENT RESTORATION (TRENCHES)

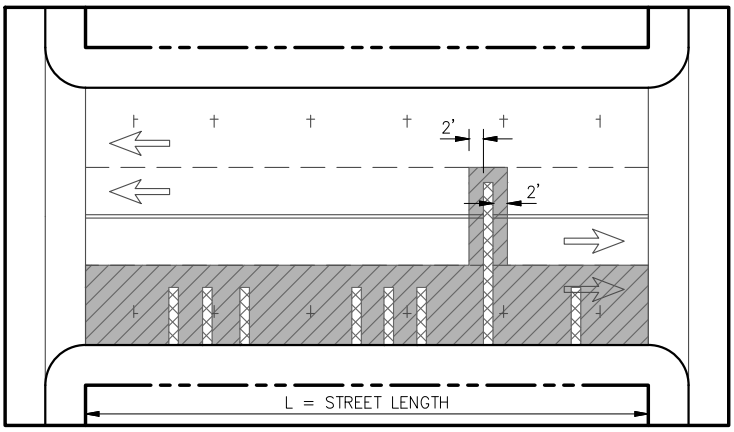
MAY 2022

R-10A



RULE 4: TRENCHS WITHIN 50' TO EACH OTHER

RESTORATION RULE 4:
FOR TWO OR MORE TRENCHES WITHIN 50' OF ONE ANOTHER, THE PAVEMENT RESTORATION SHALL BE CONTINUOUS BETWEEN THE TWO TRENCHES AND APPLIED PER LANE. FOR LONGITUDINAL TRENCHES, THIS RULE APPLIES BETWEEN THE TWO NEAREST ENDS; HOWEVER, THE TOTAL LENGTH OF THE TWO TRENCHES COMBINED STALL BE LESS THAN 25% OF THE STREET.



RULE 5: 8 OR MORE LATERALS ON SAME BLOCK

RESTORATION RULE 5:
FOR PROJECTS INSTALLING 8 OR MORE LATERALS ON THE SAME BLOCK OR WHEN 50% OR MORE OF THE PROPERTIES ON A BLOCK REQUIRE LATERAL TRENCHES, THE PAVEMENT RESTORATION SHALL EXTEND THE ENTIRE LENGTH OF THE BLOCK FOR. THIS APPLIES PER LANE.

LEGEND

- APPROXIMATE AREA OF ASPHALT CONCRETE PAVEMENT RESTORATION
- APPROXIMATE AREA OF TRENCH
- CROSSWALK TO BE RESTRIPED
- PROPERTY LINE
- CENTER LINE
- LANE LINE
- CROSSWALK
- TRAFFIC FLOW
- PARKING TEE

TRENCH RESTORATION NOTES:

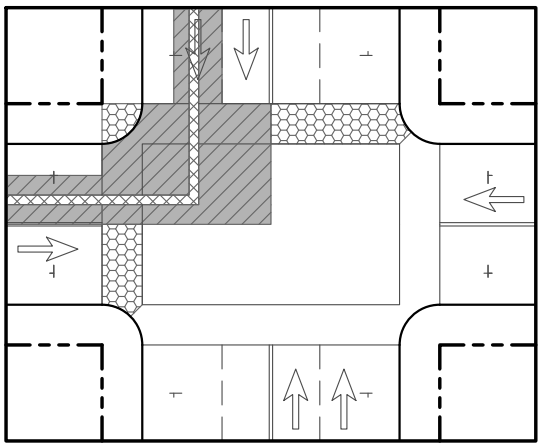
1. AFTER UTILITY FACILITY REPAIRS OR INSTALLATION, TRENCH SHALL BE BACKFILLED PER CITY STANDARD U-7.
2. ALL OPEN TRENCHES SHALL BE BACKFILLED AND TEMPORARILY PAVED WITH HMA PRIOR TO FINISHING THE WORK DAY. BOLTED TRAFFIC RATED PLATES REQUIRE CONSTRUCTION COORDINATION COMMITTEE APPROVAL.
3. ALL RESTORATION SHALL BE COMPLETED IN A TIMELY MANNER. AFTER BACKFILL IS RESTORED AND COMPACTED, BASE LAYER SHALL BE INSTALLED, AND HOT MIX ASPHALT SHALL BE PLACED WITHIN 120 HOURS.
4. AFTER RESTORATION OF ASPHALT, ALL STRIPING SHALL BE RESTORED PER CITY STANDARDS WITHIN 2-7 DAYS. ALLOW ASPHALT TO CURE FOR A MINIMUM OF 2 DAYS PRIOR TO STRIPING.

SOUTH SAN FRANCISCO
PUBLIC WORKS
ENGINEERING

PAVEMENT RESTORATION (TRENCHES)

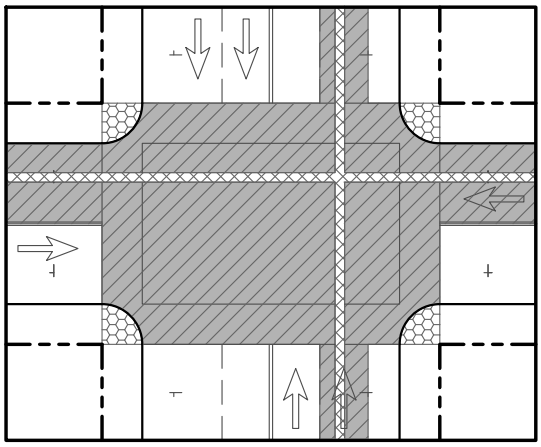
MAY 2022

R-10B



RULE 6: TRENCH THROUGH 1 INTERSECTION QUADRANT

RESTORATION RULE 6:
WHEN A TRENCH AFFECTS A SINGLE INTERSECTION QUADRANT, THE PAVEMENT RESTORATION SHALL INCLUDE THE ENTIRE QUADRANT AND REPLACE THE CORNER CURB RAMP PER DOJ TITLE 28 CHAPTER I PART 35 SECTION 151. THE REST OF THE AFFECTED CROSSWALKS OUTSIDE OF THE RESTORATION AREA SHALL BE RESTRIPED.



RULE 7: 3 OR MORE INTERSECTION QUADRANTS AFFECTED

RESTORATION RULE 7:
WHEN A TRENCH AFFECTS THREE OR FOUR QUADRANTS OF AN INTERSECTION, THE ENTIRE INTERSECTION SHALL BE RESTORED. ALL CORNER CURB RAMPS SHALL BE REPLACED PER DOJ TITLE 28 CHAPTER I PART 35 SECTION 151. ALL CROSSWALKS AND ANY OTHER AFFECTED STRIPING SHALL BE RESTRIPED.

LEGEND

- APPROXIMATE AREA OF ASPHALT CONCRETE PAVEMENT RESTORATION
- APPROXIMATE AREA OF TRENCH
- AFFECTED CROSSWALKS AND CURB RAMPS TO BE RESTORED
- PROPERTY LINE
- CENTER LINE
- LANE LINE
- CROSSWALK
- TRAFFIC FLOW
- PARKING TEE

TRENCH RESTORATION NOTES:

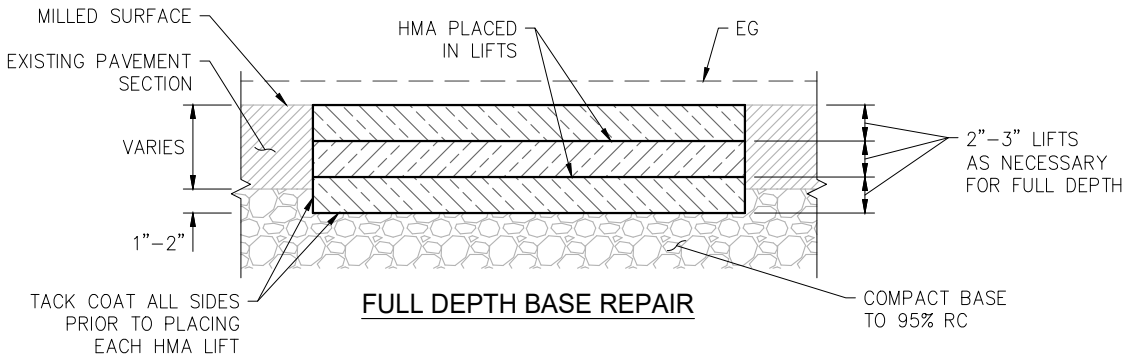
1. AFTER UTILITY FACILITY REPAIRS OR INSTALLATION, TRENCH SHALL BE BACKFILLED PER CITY STANDARD U-7.
2. ALL OPEN TRENCHES SHALL BE BACKFILLED AND TEMPORARILY PAVED WITH HMA PRIOR TO FINISHING THE WORK DAY. BOLTED TRAFFIC RATED PLATES REQUIRE CONSTRUCTION COORDINATION COMMITTEE APPROVAL.
3. ALL RESTORATION SHALL BE COMPLETED IN A TIMELY MANNER. AFTER BACKFILL IS RESTORED AND COMPACTED, BASE LAYER SHALL BE INSTALLED, AND HOT MIX ASPHALT SHALL BE PLACED WITHIN 120 HOURS.
4. AFTER RESTORATION OF ASPHALT, ALL STRIPING SHALL BE RESTORED PER CITY STANDARDS WITHIN 2-7 DAYS. ALLOW ASPHALT TO CURE FOR A MINIMUM OF 2 DAYS PRIOR TO STRIPING.

SOUTH SAN FRANCISCO
PUBLIC WORKS
ENGINEERING

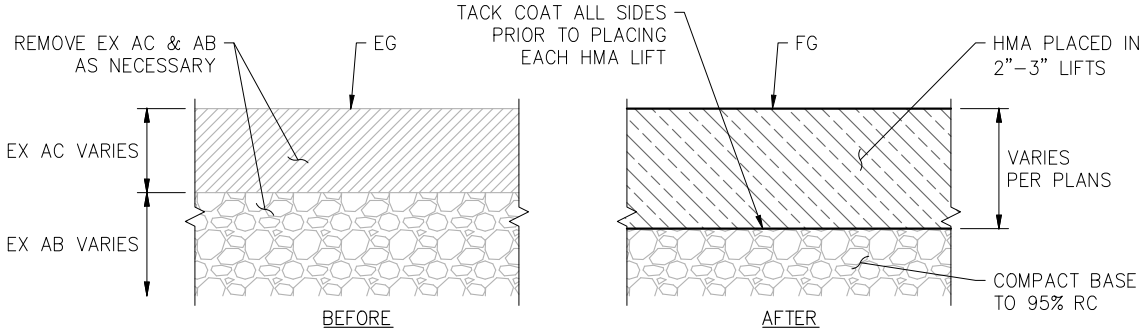
PAVEMENT RESTORATION (TRENCHES)

APR 2023

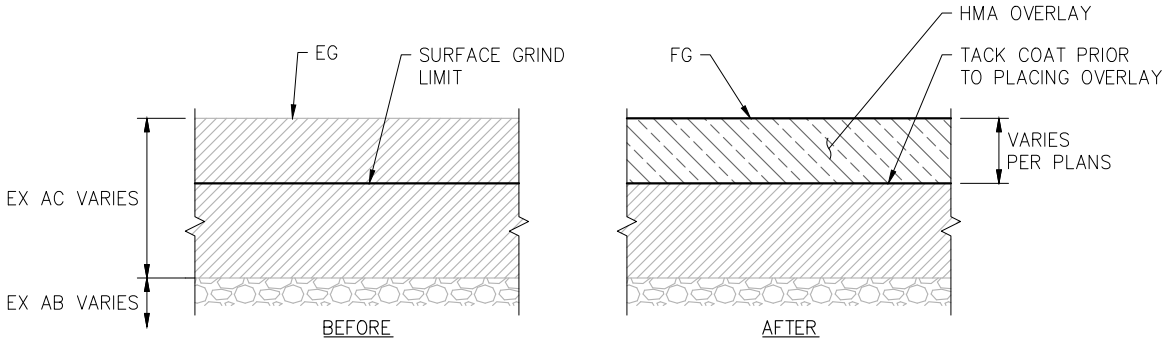
R-10C



FULL DEPTH BASE REPAIR



SURFACE RECONSTRUCT (REMOVE AC/AB, PLACE HMA)

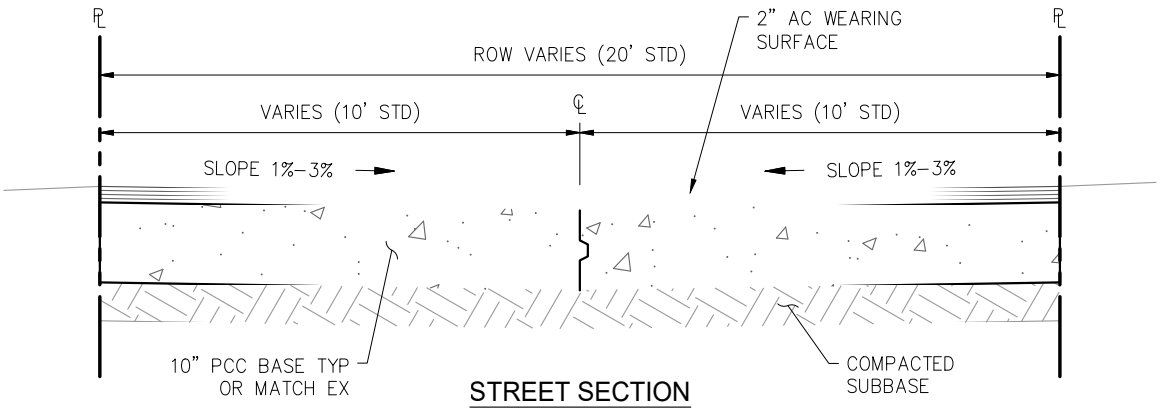


GRIND AND OVERLAY

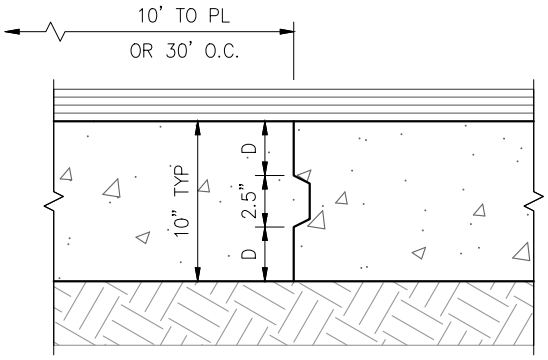
PAVEMENT RESTORATION & REPAIR NOTES:

1. APPROXIMATE BASE REPAIR DIMENSIONS SHALL BE NOTED ON PLANS. LOCATIONS AND SIZES OF BASE REPAIRS SHALL BE MARKED IN THE FIELD BY THE CONTRACTOR AND PUBLIC WORKS INSPECTOR DURING A FIELD VISIT PRIOR TO PERFORMING THE REPAIR.
2. TACK COAT SHALL BE APPLIED TO ALL PAVEMENT SURFACES PRIOR TO PLACEMENT OF EACH LIFT OF HOT MIX ASPHALT.
3. HOT MIX ASPHALT SHALL BE PLACED IN 2" MINIMUM AND 3" MAXIMUM LIFTS.
4. ALL FINISHED EDGES SHALL BE SEALED.
5. OVER–EXCAVATE 6" IF UNSUITABLE BASE MATERIAL IS ENCOUNTERED. REPLACE UNSUITABLE MATERIAL AND COMPACT TO 95% RELATIVE COMPACTION.

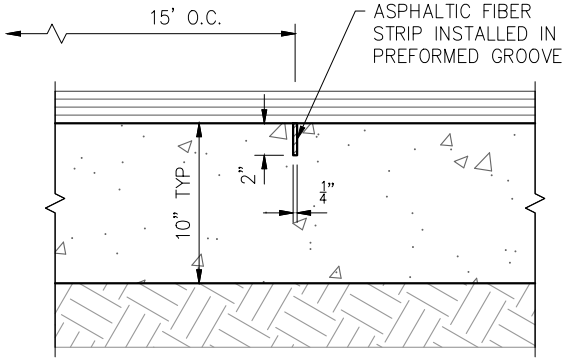
SOUTH SAN FRANCISCO PUBLIC WORKS ENGINEERING	**PAVEMENT RESTORATION DETAILS**	**JAN 2021**
		R-10D



STREET SECTION



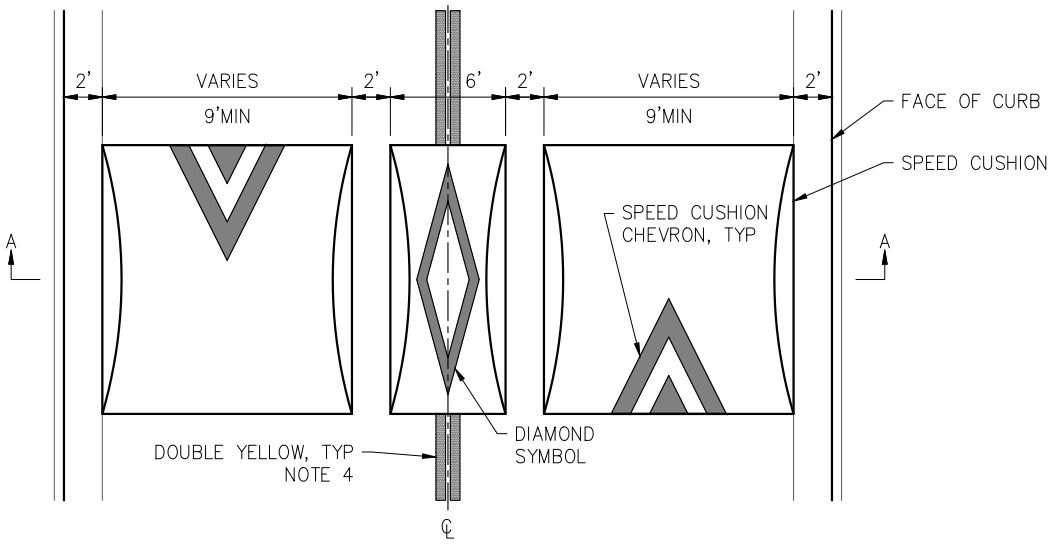
CONSTRUCTION JOINT



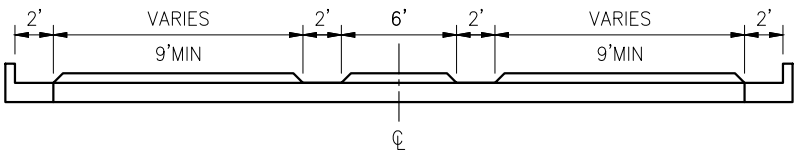
CONTROL JOINT

NOTES:
1. LONGITUDINAL TRENCHES SHALL RESTORE SURFACE AC FROM EDGE OF ROW TO CENTERLINE FOR ANY SIDE OF THE ROAD AFFECTED. FOR TRENCHES CROSSING THE CENTERLINE, ENTIRE WIDTH OF ROAD SHALL HAVE NEW SURFACE AC.
2. ALL CONCRETE SHALL BE CLASS A 6–SACK PER CALTRANS STANDARDS.

SOUTH SAN FRANCISCO PUBLIC WORKS ENGINEERING	**CONCRETE LANE RESTORATION**	DEC 2020 **R-11**

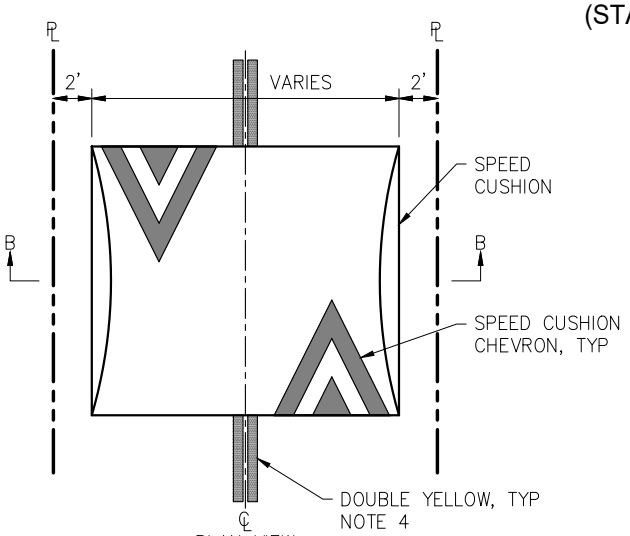


PLAN VIEW

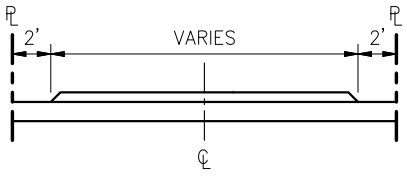


SECTION A–A

SPEED CUSHIONS (STANDARD ROW)



PLAN VIEW



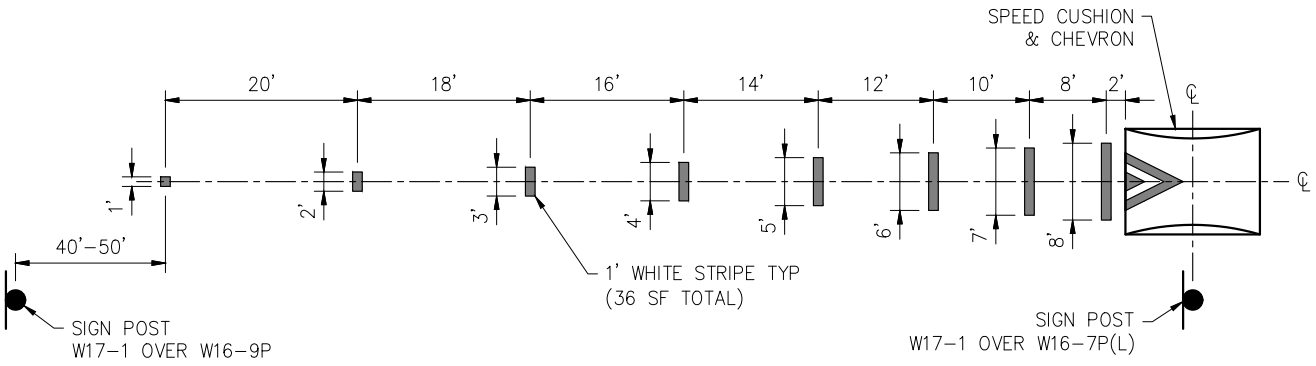
SECTION B–B

SPEED CUSHIONS (LIMITED ROW)

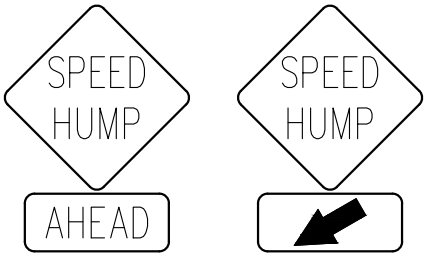
NOTES:

1. ALL STRIPING SHALL BE WHITE THERMOPLASTIC PAINT WITH GLASS BEADING.
2. SPEED CUSHIONS SHALL EXTEND TO THE LIP OF GUTTER OR 2–FT FROM EDGE OF PAVEMENT WHERE NO GUTTER EXISTS.
3. SPEED CUSHION CHEVRON SHALL BE INSTALLED ON THE SIDE FACING THE FLOW OF TRAFFIC AND CENTERED ON THE TRAVEL LANE.
4. FOR ROADS WITH TWO–WAY TRAFFIC, A DOUBLE YELLOW CENTERLINE (CALTRANS DETAIL 21) SHALL BE PAINTED 75–FT IN ADVANCE OF THE SPEED CUSHIONS TO THE EDGE OF THE SPEED CUSHIONS, ON BOTH SIDES OF THE SPEED CUSHION.
5. SIGNAGE SHALL BE INSTALLED FOR ALL SPEED CUSHIONS PER DETAIL R–12B.
6. ADVANCED SPEED CUSHION WARNING STRIPING SHALL BE INSTALLED AT THE DIRECTION OF THE CITY ENGINEER, PER DETAIL R–12B.

SOUTH SAN FRANCISCO PUBLIC WORKS ENGINEERING	**SPEED CUSHIONS LAYOUT**	DEC 2022
		R-12A

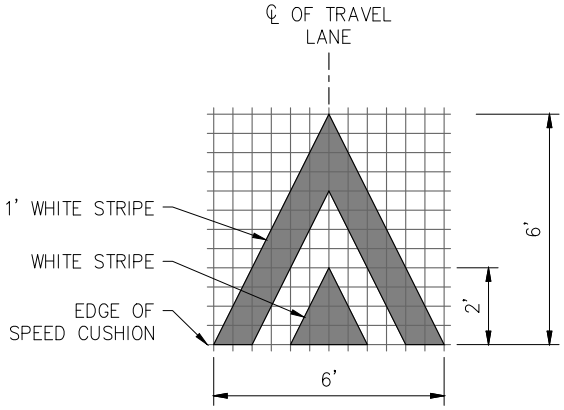


ADVANCED SPEED CUSHION WARNING



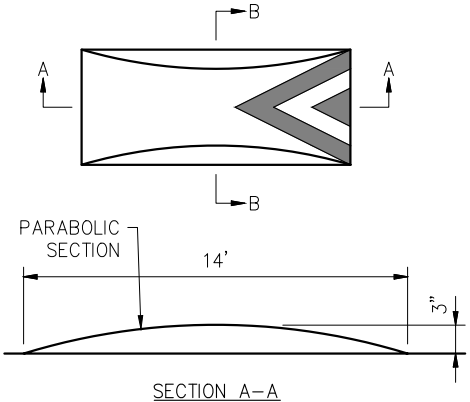
W17-1 OVER W16-9P

W17-1 OVER W16-7P (L)

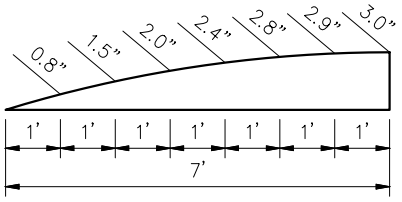


SPEED CUSHION CHEVRON

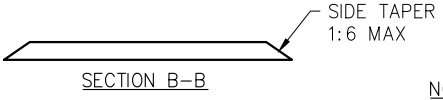
A= 12 SF



SECTION A–A

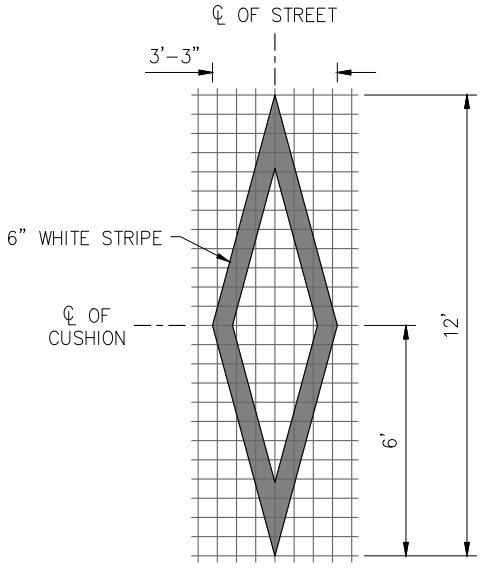


PARABOLIC SECTION



SECTION B–B

SPEED CUSHION



DIAMOND SYMBOL

A= 10.5 SF

NOTES:

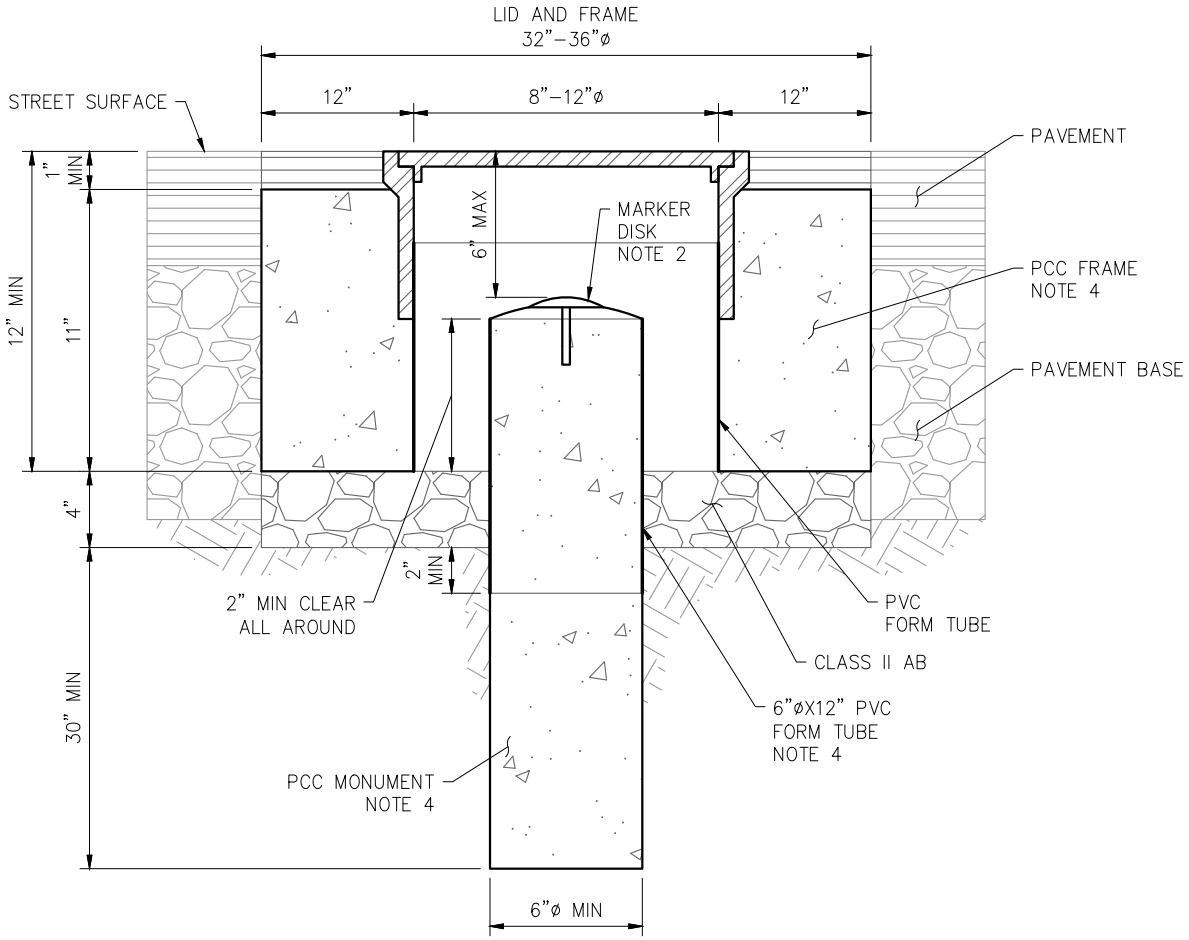
1. ALL STRIPING SHALL BE WHITE THERMOPLASTIC PAINT WITH GLASS BEADING.

SOUTH SAN FRANCISCO
PUBLIC WORKS
ENGINEERING

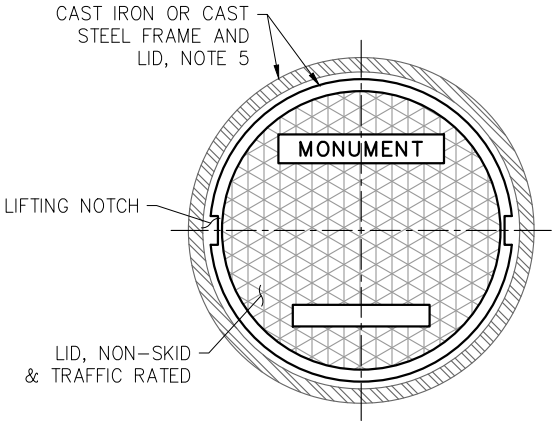
SPEED CUSHIONS DETAILS

DEC 2022

R-12B



TYPE "A"
STABLE SOILS

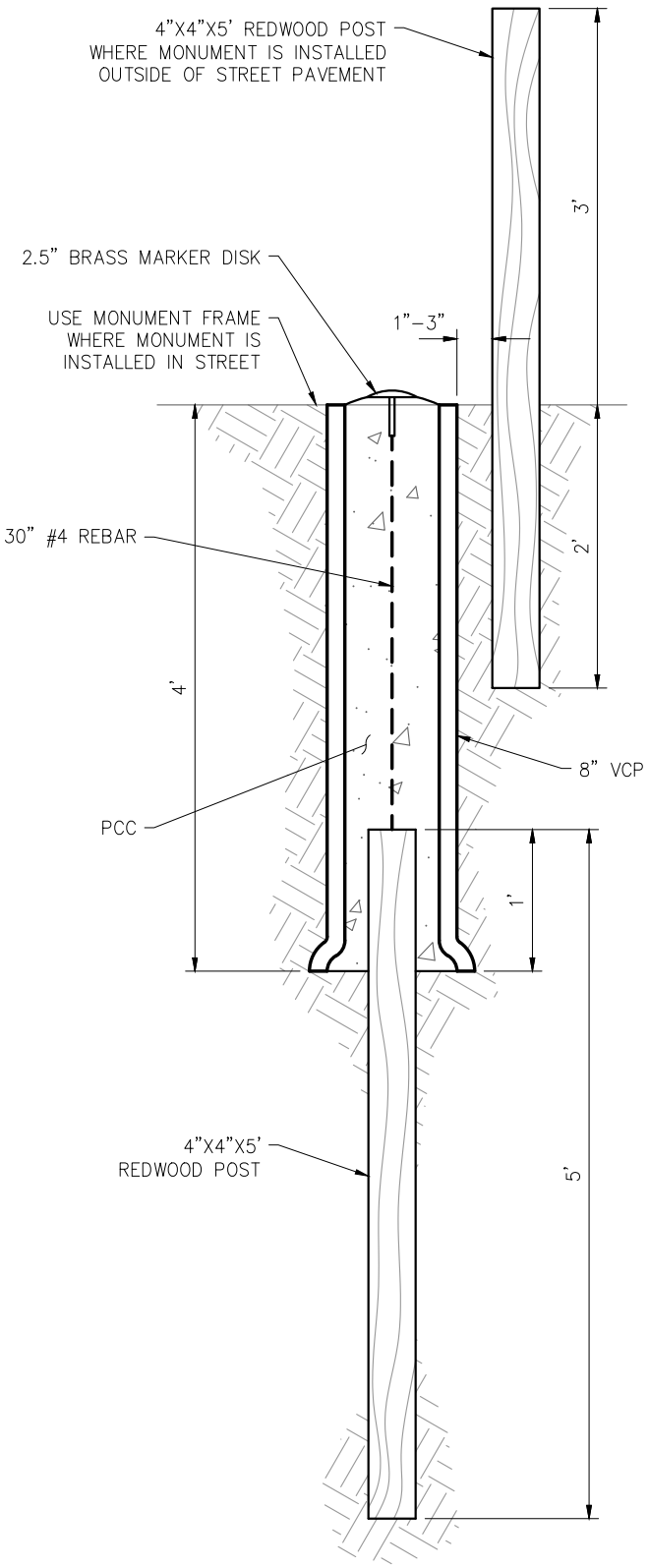


MONUMENT LID

NOTES:

1. CITY DATUM IS NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
2. MARKER DISK SHALL BE 2.5" BRASS DISK.
3. EXACT POINT TO BE DETERMINED BY ACCURATE SURVEY AND CLEARLY PUNCHED IN TOP OF BRASS MARKER TOGETHER WITH SURVEYOR'S LICENSE IN ⅛" HIGH NUMERALS.
4. CONCRETE MONUMENT AND CONCRETE FRAME SHALL BE CONSTRUCTED USING PVC FORM TUBES WHICH MAY BE LEFT IN PLACE.
5. CAST FRAME AND LID SHALL BE D&L SUPPLY COMPANY MODELS K–6015–01 AND K–6015–R1 OR APPROVED EQUIVALENT.

SOUTH SAN FRANCISCO PUBLIC WORKS ENGINEERING	**CITY MONUMENT (STABLE SOIL)**	**AUG 2021** **R-13A**



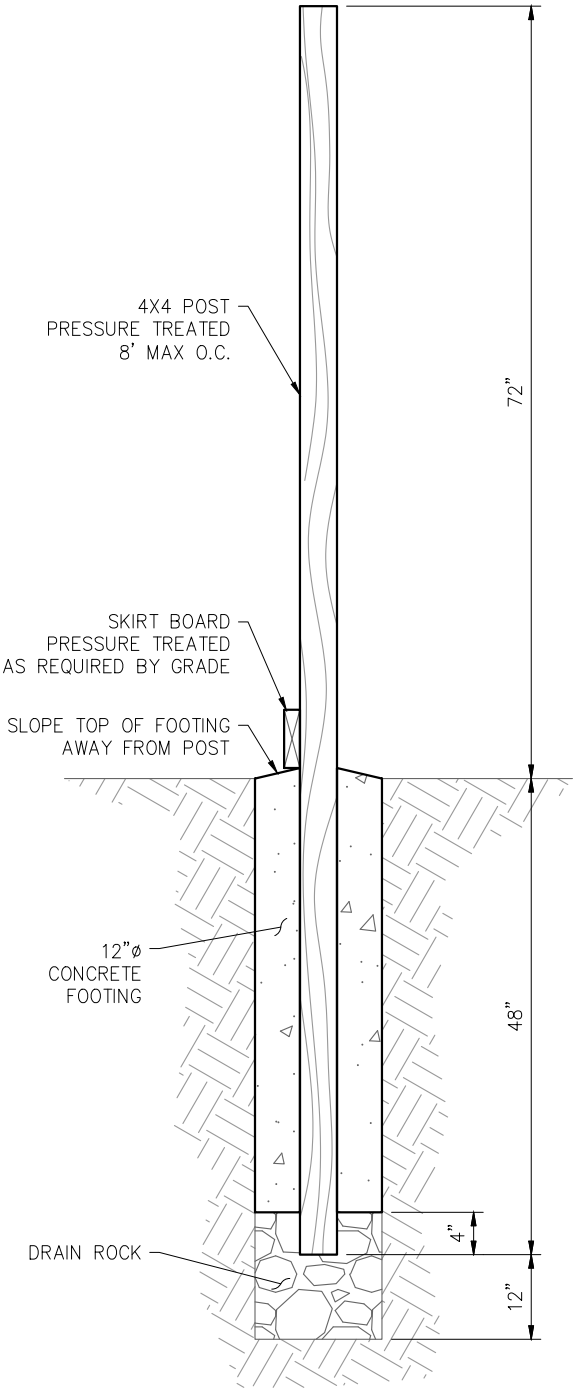
TYPE "B"
UNSTABLE SOILS

SOUTH SAN FRANCISCO
PUBLIC WORKS
ENGINEERING

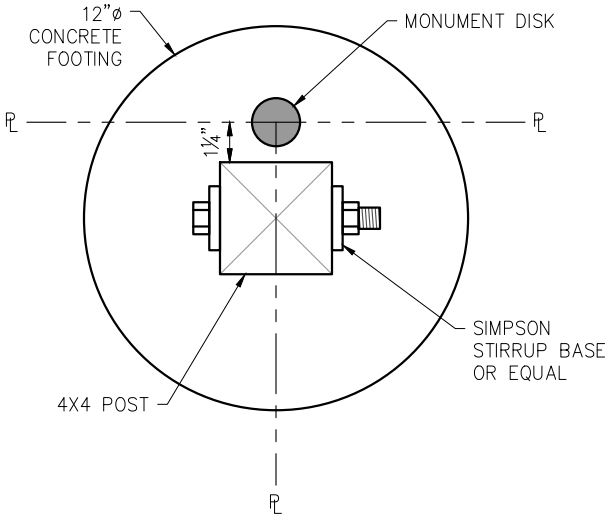
CITY MONUMENT (UNSTABLE SOIL)

DEC 2020

R-13B



TYPICAL WOOD FENCE POST



REAR PROPERTY CORNER MONUMENT

NOTES:
1. DEEPER FOOTING MAY BE REQUIRED BY CITY.

SOUTH SAN FRANCISCO PUBLIC WORKS ENGINEERING	**CORNER MONUMENT AND POST**	**DEC 2020** **R-13C**

STORM DRAIN FACILITIES NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING NECESSARY PERMITS AND CONTACTING PUBLIC WORKS INSPECTOR FOR COMPLIANCE TEST AND INSPECTION FOR EACH STORM DRAIN FACILITY INSTALLATION.
2. CONTRACTOR SHALL PROVIDE VIDEO INSPECTION OF ALL STORM MAINS FROM THE UPSTREAM MANHOLE TO THE DOWNSTREAM MANHOLE OF THE SEGMENT OF STORM MAIN AFFECTED.
3. STORM DRAIN LATERALS SHALL CONNECT DIRECTLY TO THE BACK OF AN EXISTING OR NEW CATCH BASIN OR CONNECT TO THE STORM DRAIN MAIN VIA A MANHOLE.
4. SIDEWALK CURB DRAINS SHALL ONLY BE ALLOWED WITH APPROVAL FROM THE CITY ENGINEER.
5. SIDEWALK, CURB, GUTTER, PAVEMENT, STRIPING, AND SIGNAGE SHALL BE RESTORED IF DISTURBED BY PROJECT.
6. NO STORM DRAIN FACILITIES (ROOF LEADERS, AREA DRAINS, ETC) ARE NOT ALLOWED TO BE CONNECTED TO SEWER LATERAL AND SHALL BE PERMANENTLY DISCONNECTED FROM SEWER LATERAL.
7. STORMWATER LOW IMPACT DEVELOPMENT TREATMENT FACILITIES INSTALLED IN THE CITY R.O.W. SHALL BE APPROVED BY THE WATER QUALITY CONTROL PLANT C.3 DIVISION AND ENGINEERING DIVISION AND REQUIRE AN OPERATIONS & MAINTENANCE AGREEMENT BETWEEN PROPERTY OWNER AND CITY OF SOUTH SAN FRANCISCO. NON-LID TREATMENT FACILITIES ARE NOT ALLOWED WITHIN THE CITY R.O.W.

LIDS: ALL STORM DRAIN STRUCTURE LIDS OR COVERS SHALL BE IMPRINTED WITH "STORM" FOR IDENTIFICATION.

PIPE: FOR PIPES LESS THAN 12", MATERIAL SHALL BE POLYVINYL CHLORIDE PIPE (PVC SDR 26).
FOR PIPES 12" OR GREATER, MATERIAL SHALL BE DUAL-WALL CORRUGATED-EXTERIOR SMOOTH-INTERIOR HIGH-DENSITY POLYETHYLENE (HDPE N-12 OR EQUAL). WHERE LIMITED BY ROADWAY LOADING REQUIREMENTS, REINFORCED CONCRETE PIPE OR DUCTILE IRON PIPE MAY BE USED WITH CITY ENGINEER APPROVAL.

COUPLINGS: PIPE SEGMENTS SHALL BE CONNECTED BY BELL AND SPIGOT.

CLEANOUTS: PRIVATE STORM DRAIN LATERALS SHALL HAVE AN ON-SITE TWO-WAY CLEANOUT OR MANHOLE PRIOR TO EXITING THE PROPERTY. PRIVATE STORM DRAIN LATERALS SHALL CONNECT TO EXISTING OR NEW PUBLIC STORM DRAIN MANHOLES WITHIN THE PUBLIC RIGHT-OF-WAY. CONNECTION TO A CATCH BASIN REQUIRES CITY ENGINEER APPROVAL.

COVER: PROVIDE A MINIMUM 36" COVER FROM FINISHED GRADE TO THE TOP OF PIPE. WHERE PIPE COVER IS LESS THAN 36", A CONCRETE CAP SHALL BE PROVIDED.

BACKFILL: SHALL BE CLASS 1 TYPE A PERMEABLE OR CONTROLLED DENSITY FILL (CDF) PLACED 4" BELOW AND 6" TO 12" ABOVE STORM DRAIN LINE AND SHALL BE CLASS 2 AGGREGATE BASE (95% COMPACTION) OR CDF FOR THE REMAINDER OF THE BACKFILL TO BOTTOM OF ASPHALT PAVEMENT SECTION.

CONCRETE: SHALL BE 3,000 PSI CONCRETE. STATE CLASS A-6 SACK MIX WITH ¾" TO 1" AGGREGATE. CONCRETE MIX SHALL HAVE ½ TO ¾ POUNDS BY WEIGHT OR 1 PINT BY VOLUME OF LAMPBLACK PER CUBIC YARD OF CONCRETE MIX.

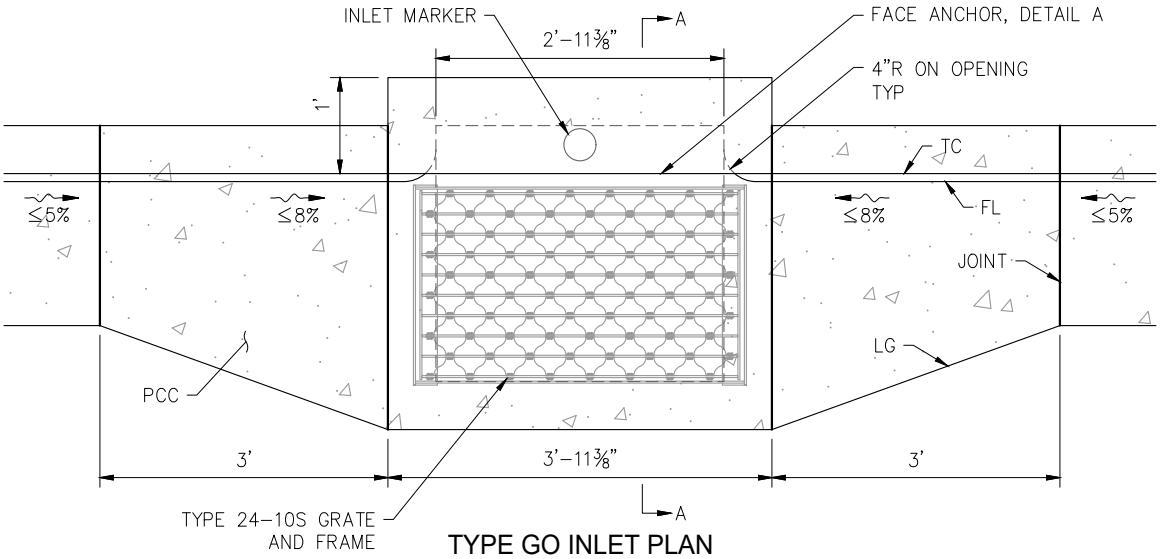
DOWELS: NEW CONCRETE SHALL TIE INTO EXISTING CONCRETE WITH ¼"X12" DOWELS, 6" EMBEDMENT ON EITHER SIDE.

ASPHALT: ASPHALT SHALL BE PLACED AS HOT MIX ASPHALT ("HMA") ONLY. ½" ASPHALT CONCRETE (95% COMPACTION) MATCHING EXISTING PAVEMENT THICKNESS OR 4" MINIMUM, WHICHEVER IS GREATER, SHALL BE USED IN STREETS. TACK COAT ALL EDGES AND SURFACES PRIOR TO HMA PLACEMENT. ASPHALT PAVEMENT RESTORATION SHALL BE MADE FLUSH WITH THE ADJACENT SURFACES AT CONFORMS AND EDGES WITH A MAXIMUM TOLERANCE OF ⅛". ALL FINISHED EDGES SHALL BE SEALED. REFER TO PAVEMENT RESTORATION DETAILS FOR EXTENTS.

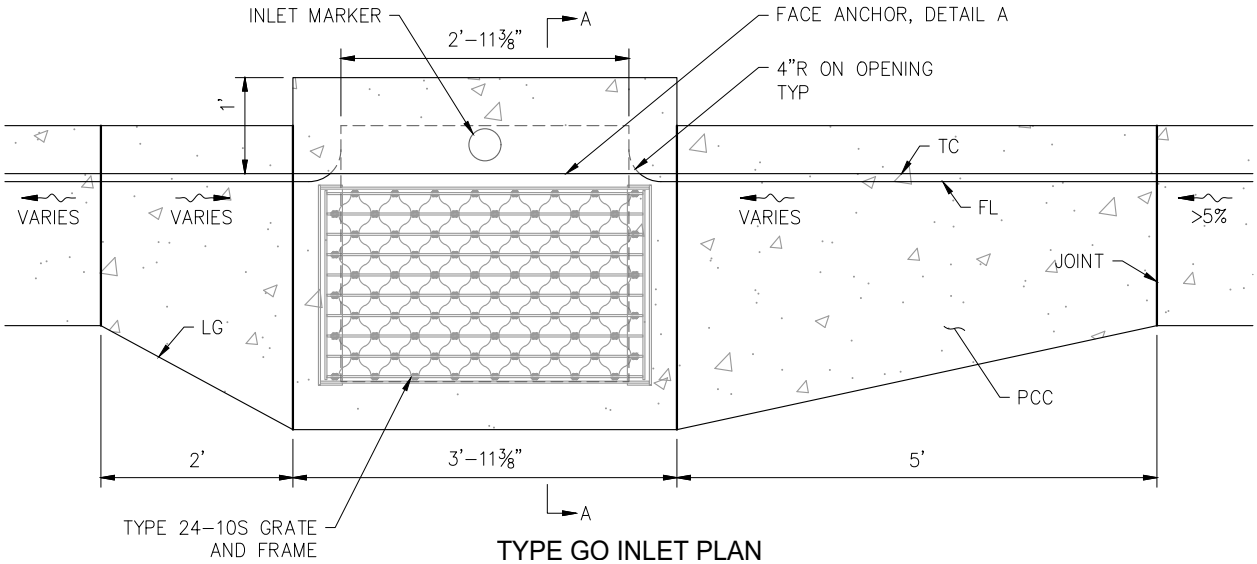
PRIVATE SERVICE ABANDONMENT:

CITY STORM MAIN CONNECTION:
1. DIG HOLE NEXT TO MAIN TO FIND LATERAL CONNECTION POINT.
2. REMOVE ENTIRE WYE FITTING OR SEGMENT OF MAIN IF IMPROPERLY INSTALLED WITH A TAP.
3. REPLACE WITH NEW SECTION OF MAIN PIPE MATCHING INTERIOR DIAMETER.

STORM SERVICE LATERAL:
1. AFTER DISCONNECTING FROM THE MAIN, PLUG LATERAL PIPE END WITH COMPACTED EARTH AND 8" CONCRETE PLUG.
2. LOCATE LATERAL STRUCTURES (CLEANOUTS OR MANHOLES) UPSTREAM FROM THE CONNECTION POINT BETWEEN CURB AND PROPERTY LINE.
3. IF FOUND, DIG UP AND REMOVE LATERAL STRUCTURES.
4. PLUG LATERAL PIPE ENDS ENDS WITH CONCRETE.



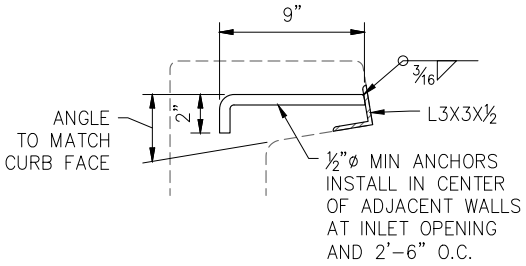
TYPE GO INLET PLAN
GUTTER SLOPE ≤5%



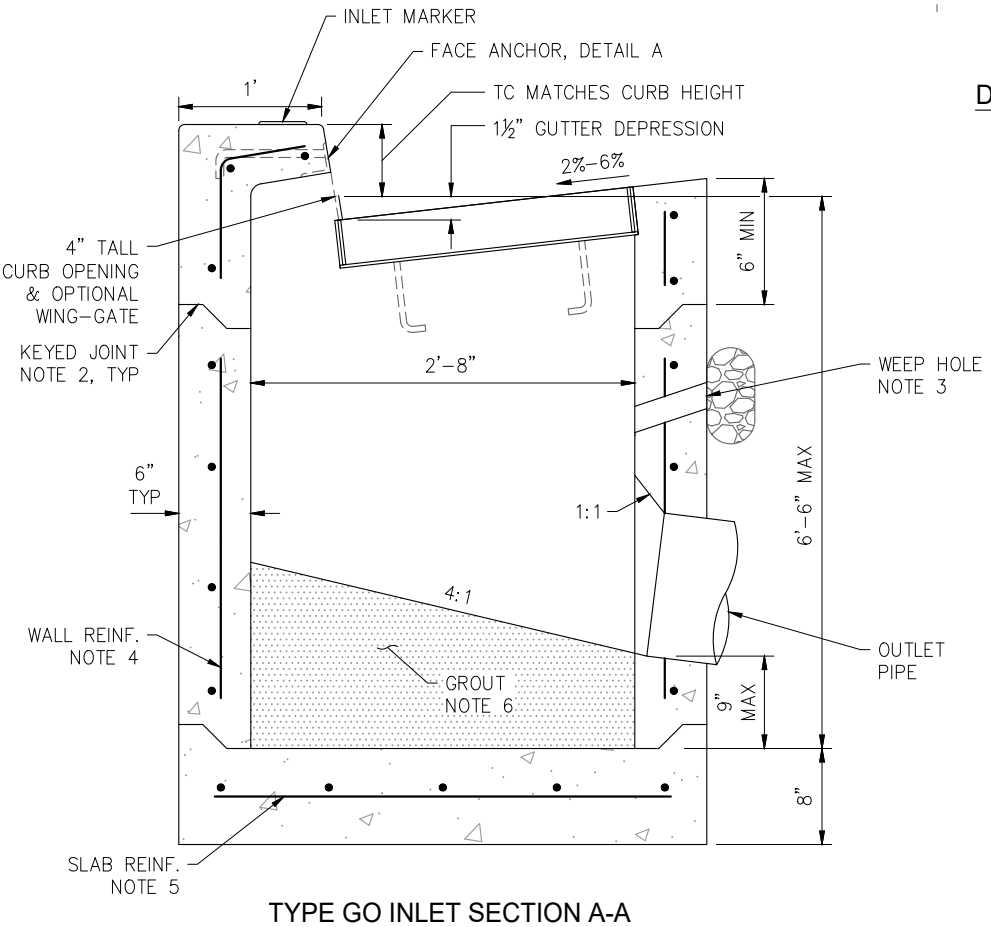
TYPE GO INLET PLAN
GUTTER SLOPE >5%

NOTES:
1. ATTACH INLET MARKER (MEDALLION) ON TOP OF THE INLET HOOD. INLET MARKER TO BE PROVIDED BY PUBLIC WORKS.

SOUTH SAN FRANCISCO PUBLIC WORKS ENGINEERING	**STANDARD CATCH BASIN**	**DEC 2020** **D-2A**



DETAIL A

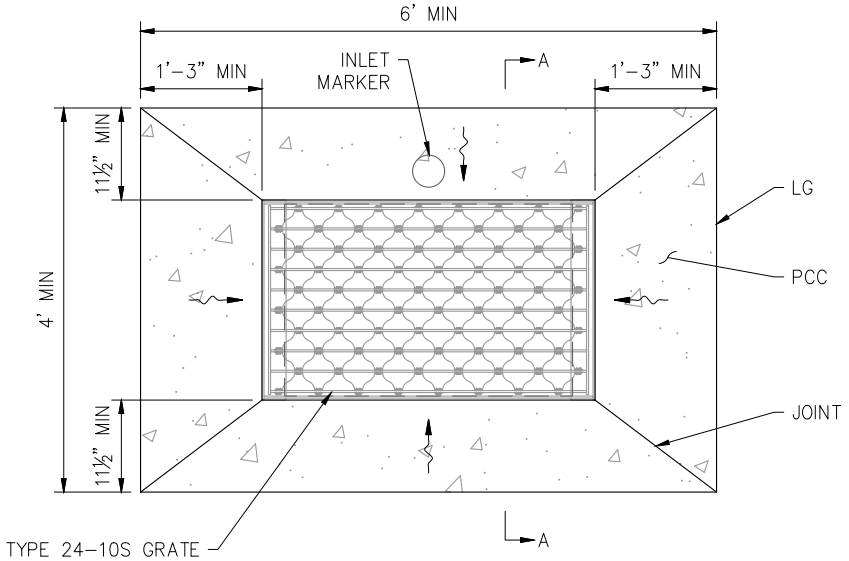


TYPE GO INLET SECTION A-A

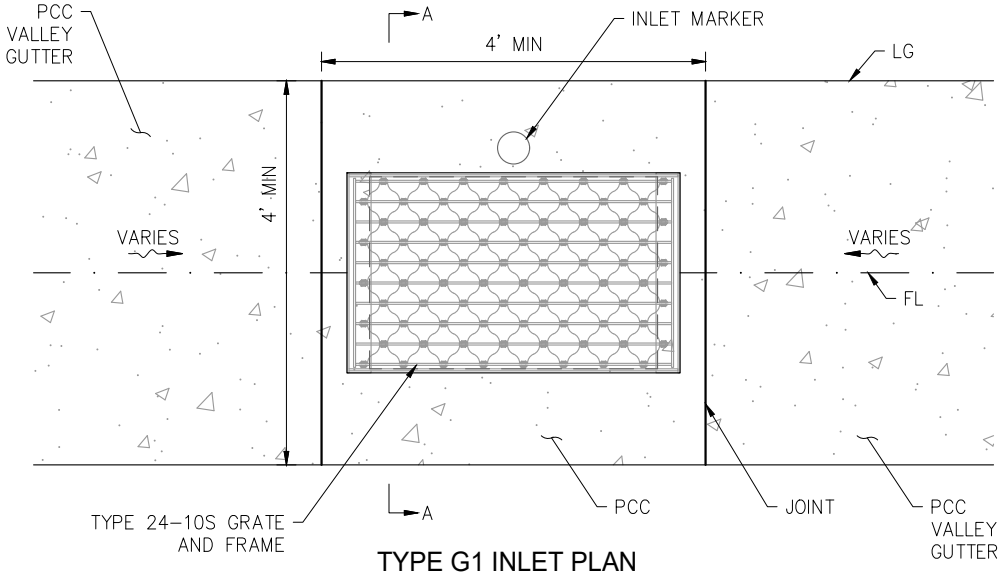
NOTES:

1. MAXIMUM HEIGHT ALLOWED IS 6'-6". REFER TO CALTRANS STANDARD PLANS FOR HEIGHTS TALLER THAN 6'-6".
2. PROVIDE PRECAST INLETS WITH SEPARATE TOP SECTIONS FOR FINAL GRADE ADJUSTMENT.
3. PROVIDE KEYED JOINTS SEALED WITH RAM-NEK OR EQUAL. JOINT DESIGN MAY VARY, BUT MUST BE 1"-3" DEPTH. FOR KEYED JOINTS, KEYWAY UP, KEYWAY DOWN, OR TONGUE UP CONFIGURATIONS ARE ALLOWED. ONLY ONE KEY TYPE ALLOWED PER INLET.
4. 2" WEEP HOLE SHALL BE DRILLED ON FRONT AND SIDE WALLS 1' BELOW GRADE AND PROTECTED BY 1 CUBIC FOOT OF FILTER MATERIAL WRAPPED IN NON-WOVEN FABRIC.
5. FOR WALL REINFORCEMENT, PROVIDE #4 HORIZONTAL REBARS AT 9" O.C. AND #3 VERTICAL REBARS AT 8" O.C.
6. FOR BASE SLAB REINFORCEMENT, PROVIDE #4 REBAR AT 10" EACH WAY.
7. EXCEPT FOR INLETS USED AS JUNCTION BOXES, BASIN FLOORS SHALL HAVE WOOD TROWEL FINISH AND MINIMUM SLOPE OF 4:1 FROM ALL DIRECTIONS TOWARD OUTLINE PIPE CASTING GROUT ON TOP OF THE BOTTOM SLAB. GROUT PRIOR TO BACKFILLING.
8. CAST-IN-PLACE INLET, BASE, AND RISERS MAY BE ALLOWED WHEN COMPLIANT WITH CALTRANS STANDARDS.

SOUTH SAN FRANCISCO PUBLIC WORKS ENGINEERING	**STANDARD CATCH BASIN**	**DEC 2021**
		D-2B



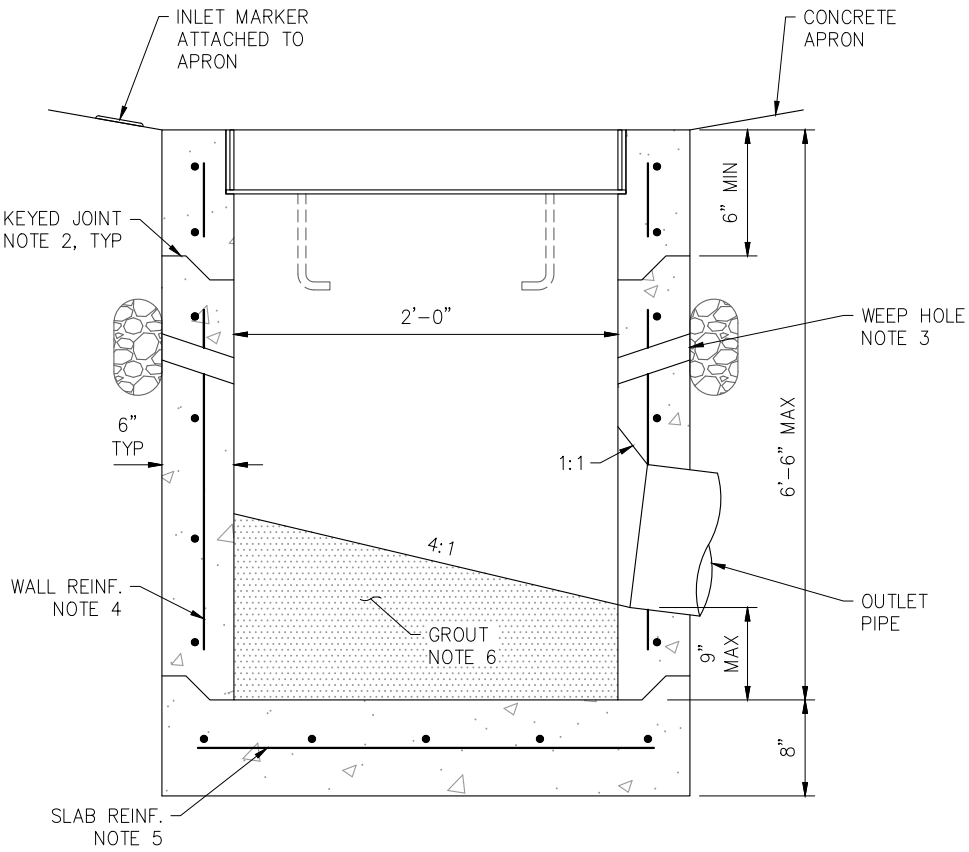
TYPE G1 INLET PLAN
AREA DRAIN



TYPE G1 INLET PLAN
VALLEY GUTTER DRAIN

NOTES:
1. ATTACH INLET MARKER (MEDALLION) ON THE APRON OF THE INLET. INLET MARKER TO BE PROVIDED BY PUBLIC WORKS.

SOUTH SAN FRANCISCO PUBLIC WORKS ENGINEERING	**STANDARD DROP INLET**	DEC 2020
		D-3A

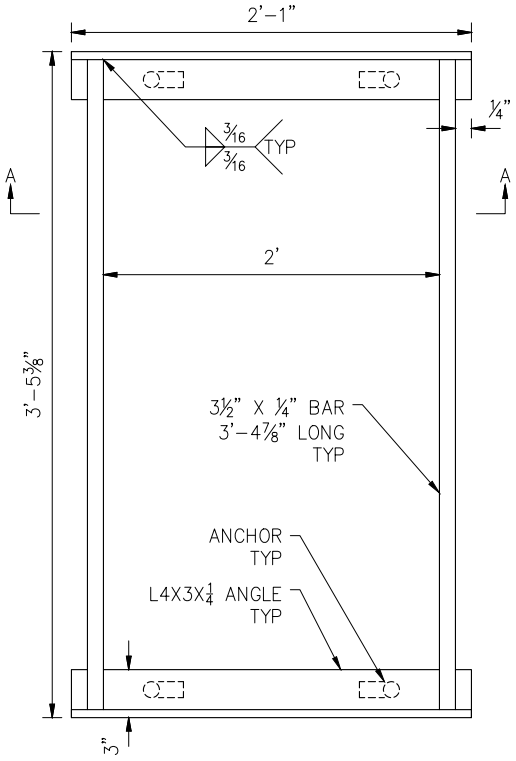


TYPE G1 INLET SECTION A-A

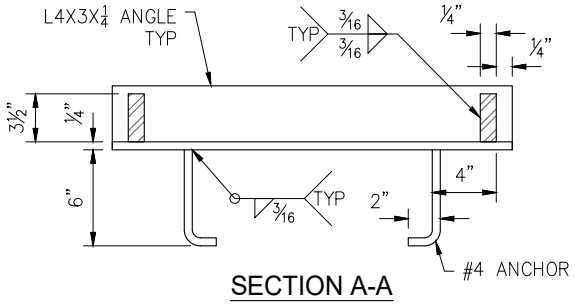
NOTES:

1. MAXIMUM HEIGHT ALLOWED IS 6'-6". REFER TO CALTRANS STANDARD PLANS FOR HEIGHTS TALLER THAN 6'-6".
2. PROVIDE PRECAST INLETS WITH SEPARATE TOP SECTIONS FOR FINAL GRADE ADJUSTMENT.
3. PROVIDE KEYED JOINTS SEALED WITH RAM-NEK OR EQUAL. JOINT DESIGN MAY VARY, BUT MUST BE 1"-3" DEPTH. FOR KEYED JOINTS, KEYWAY UP, KEYWAY DOWN, OR TONGUE UP CONFIGURATIONS ARE ALLOWED. ONLY ONE KEY TYPE ALLOWED PER INLET.
4. 2" WEEP HOLE SHALL BE DRILLED ON ALL SIDE WALLS 1' BELOW GRADE AND PROTECTED BY 1 CUBIC FOOT OF FILTER MATERIAL WRAPPED IN NON-WOVEN FABRIC.
5. FOR WALL REINFORCEMENT, PROVIDE #4 HORIZONTAL REBARS AT 9" O.C. AND #3 VERTICAL REBARS AT 8" O.C.
6. FOR BASE SLAB REINFORCEMENT, PROVIDE #4 REBAR AT 10" EACH WAY.
7. EXCEPT FOR INLETS USED AS JUNCTION BOXES, BASIN FLOORS SHALL HAVE WOOD TROWEL FINISH AND MINIMUM SLOPE OF 4:1 FROM ALL DIRECTIONS TOWARD OUTLINE PIPE CASTING GROUT ON TOP OF THE BOTTOM SLAB. GROUT PRIOR TO BACKFILLING.
8. CAST-IN-PLACE INLET, BASE, AND RISERS MAY BE ALLOWED WHEN COMPLIANT WITH CALTRANS STANDARDS.

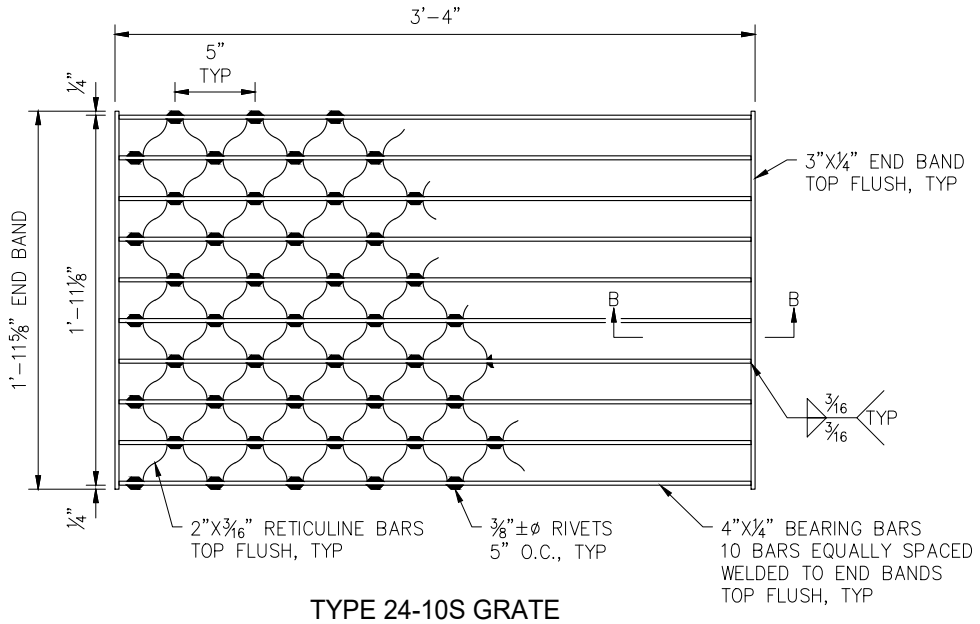
SOUTH SAN FRANCISCO PUBLIC WORKS ENGINEERING	**STANDARD DROP INLET**	DEC 2020
		D-3B



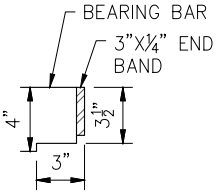
INLET FRAME



SECTION A-A



TYPE 24-10S GRATE
BIKE SAFE

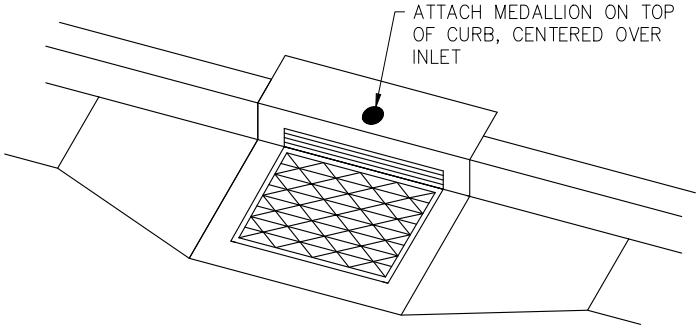


SECTION B-B

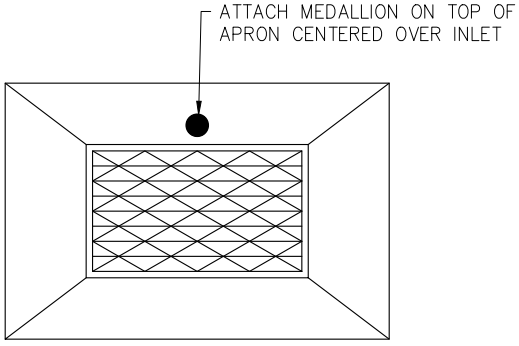
SOUTH SAN FRANCISCO PUBLIC WORKS ENGINEERING	**CATCH BASIN FRAME AND GRATE**	DEC 2020 **D-4**

INLET MARKER (MEDALLION)

NOTES:
1. MEDALLION IS ANODIZED ALUMINUM (COLORED BLUE AND SILVER) AND FURNISHED BY CITY PUBLIC WORKS.
2. MEDALLION IS TO BE ATTACHED TO INLETS USING EPOXY CEMENT.



CATCH BASIN LOCATION



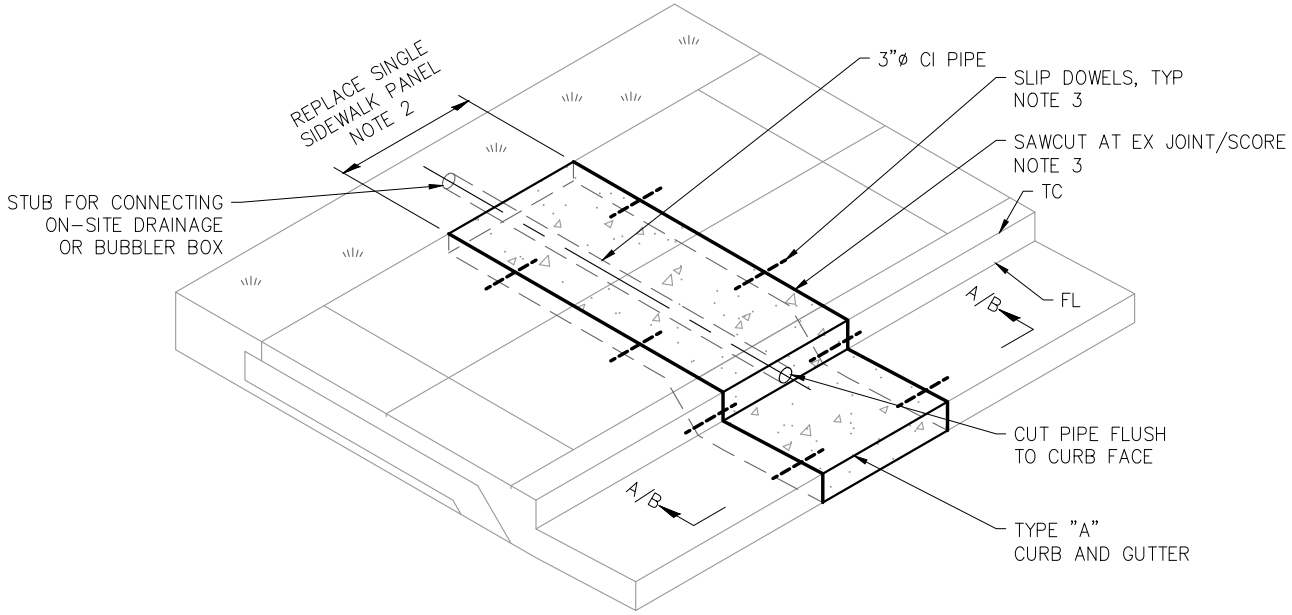
DROP INLET LOCATION

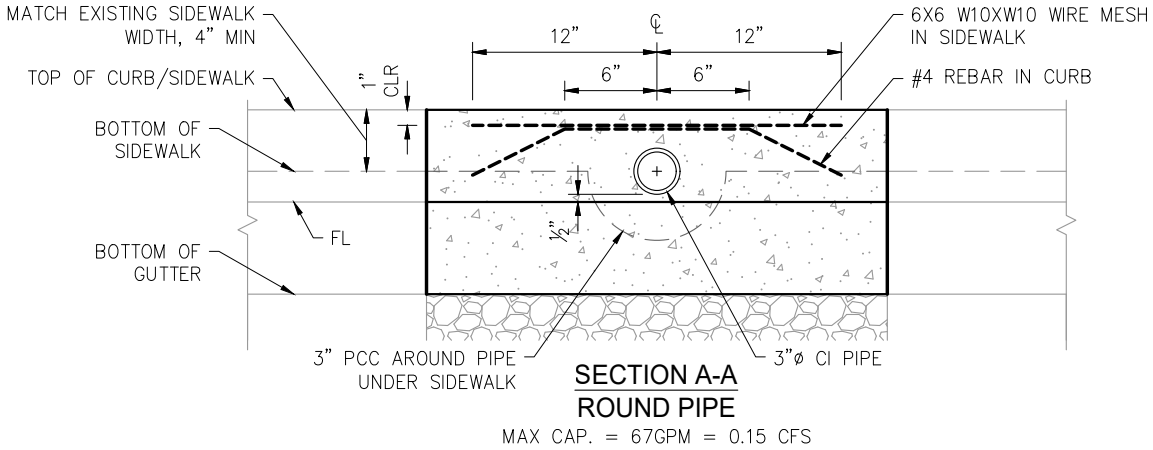
SOUTH SAN FRANCISCO
PUBLIC WORKS
ENGINEERING

INLET MARKER

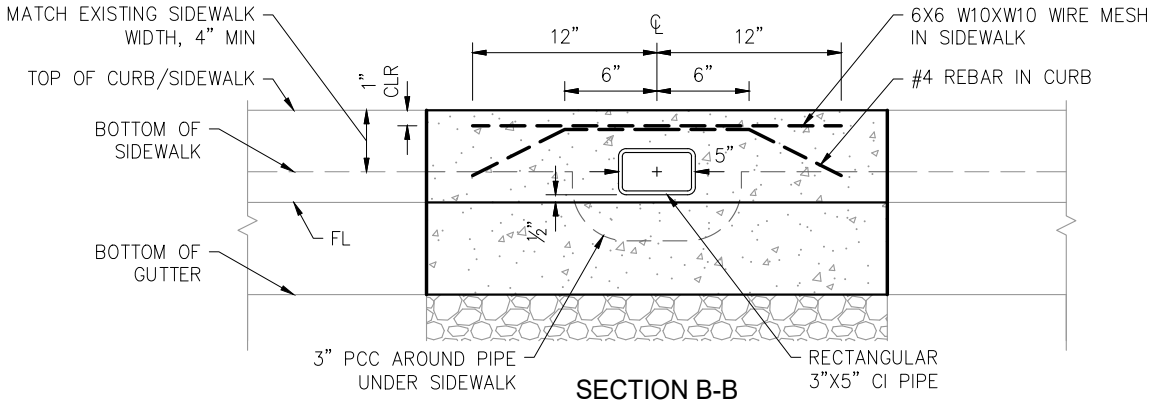
DEC 2020

D-5





SECTION A-A
ROUND PIPE
MAX CAP. = 67GPM = 0.15 CFS



SECTION B-B
RECTANGULAR PIPE
MAX CAP. = 107GPM = 0.24 CFS

NOTES:

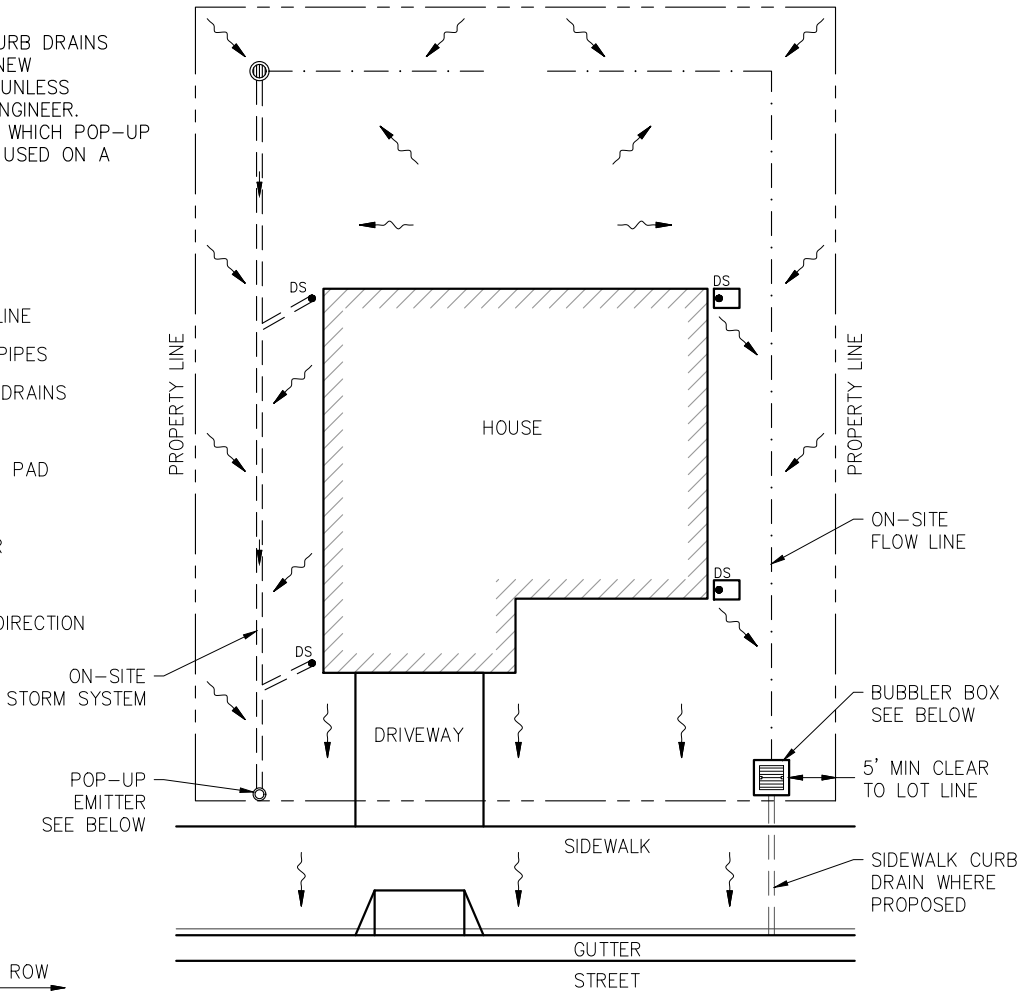
1. SIDEWALK DRAINS SHALL NOT BE INSTALLED ON NEW PROJECTS UNLESS APPROVED BY THE CITY ENGINEER.
2. SIDEWALK DRAIN PIPE SHALL BE INSTALLED IN CENTER BETWEEN TWO JOINTS, OR FOR MULTIPLE PIPES, PROVIDE 7½"" MINIMUM CLEARANCE TO A JOINT.
3. SAWCUT SIDEWALK PANELS AT EXISTING JOINTS OR SCORE MARKS. CONSTRUCTION JOINTS SHALL BE INSTALLED WITH ½"X12" SLIP DOWELS EMBEDDED 6" ON BOTH SIDES. PLACE DOWELS CENTERED BETWEEN JOINTS FOR 3' OR SMALLER PANELS, OR TWO EVEN-SPACED DOWELS FOR 3' TO 5' PANELS.
4. MULTIPLE PIPES SHALL REQUIRE CITY ENGINEER APPROVAL. 3" MIN CLEARANCE BETWEEN PIPES WHERE ALLOWED.

SOUTH SAN FRANCISCO PUBLIC WORKS ENGINEERING	**SIDEWALK CURB DRAIN**	**DEC 2020** **D-6**

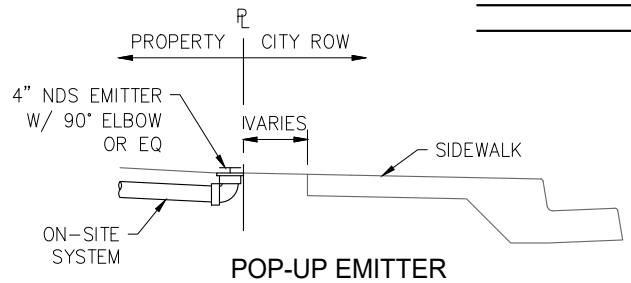
NOTES:
1. POP-UP EMITTERS AND CURB DRAINS SHALL NOT BE USED ON NEW CONSTRUCTION PRJOECTS UNLESS APPROVED BY THE CITY ENGINEER.
2. CITY STAFF SHALL DIRECT WHICH POP-UP OR BUBBLER TYPE TO BE USED ON A CASE BY CASE BASIS.

LEGEND:

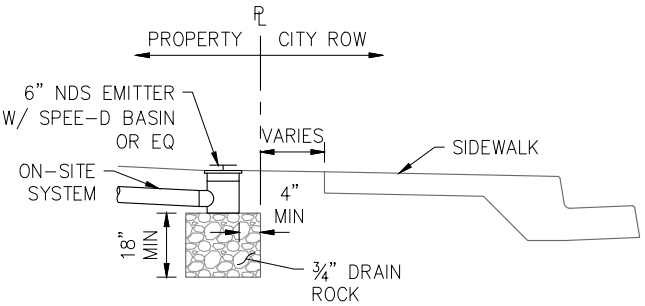
- PROPERTY LINE
- SURFACE FLOW LINE
- ON-SITE DRAIN PIPES
- SIDEWALK CURB DRAINS
- DS — DOWNSPOUT
- DS — DOWNSPOUT AND PAD
- AREA DRAIN
- POP-UP EMITTER
- BUBBLER BOX
- SURFACE FLOW DIRECTION



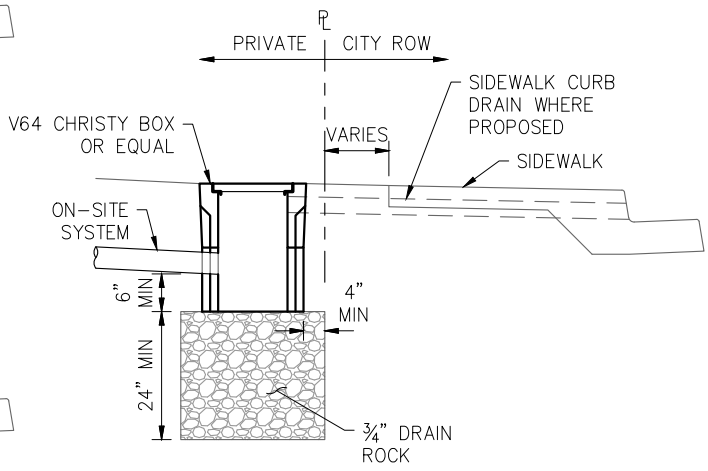
DRAINAGE LAYOUT PLANS



POP-UP EMITTER



POP-UP EMITTER BASIN



BUBBLER BOX

SOUTH SAN FRANCISCO PUBLIC WORKS ENGINEERING	**POP-UP EMITTER**	**DEC 2021**
		D-7

SANITARY SEWER FACILITIES NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING NECESSARY PERMITS AND CONTACTING PUBLIC WORKS INSPECTOR FOR COMPLIANCE TEST AND INSPECTION FOR EACH SEWER FACILITY. CONTRACTOR SHALL HOLD AN ACTIVE CLASS A OR C-42 LICENSE.
2. CONTRACTOR SHALL PROVIDE VIDEO INSPECTION OF ALL SANITARY SEWER MAINS FROM THE UPSTREAM MANHOLE TO THE DOWNSTREAM MANHOLE OF THE SEGMENT OF SANITARY SEWER MAIN AFFECTED.
3. ALL LATERALS SHALL BE PRESSURE TESTED WITH EITHER AIR OR WATER USING THE METHODS DESCRIBED IN THE APWA "GREEN BOOK".
4. SIDEWALK, CURB, GUTTER, PAVEMENT, STRIPING, AND SIGNAGE SHALL BE RESTORED IF DISTURBED BY PROJECT.
5. NO STORM DRAIN FACILITIES (ROOF LEADERS, AREA DRAINS, ETC) ARE NOT ALLOWED TO BE CONNECTED TO SEWER LATERAL AND SHALL BE PERMANENTLY DISCONNECTED FROM SEWER LATERAL.
6. NO SANITARY SEWER INTERCEPTORS, SEPARATORS, GREASE TRAPS, OR OTHER PRIVATE MAINTENANCE STRUCTURES ARE ALLOWED IN THE CITY R.O.W.
7. ONLY ONE SEWER LATERAL IS ALLOWED PER PARCEL PER SSF MUNI CODE.

PIPE: FOR PIPES LESS THAN 24", MATERIAL SHALL BE POLYVINYL CHLORIDE PIPE (PVC SDR 26). FOR PIPES 24" OR GREATER, MATERIAL SHALL BE SEAMLESS HIGH-DENSITY POLYETHYLENE (HDPE SDR 17). WHERE LIMITED BY ROADWAY LOADING REQUIREMENTS, REINFORCED CONCRETE PIPE MAY BE USED WITH CITY ENGINEER APPROVAL.

COUPLINGS: SHALL BE MISSION MR 56 ADJUSTABLE REPAIR COUPLINGS OR EQUAL.

CLEANOUTS: LATERAL SHALL HAVE A WYE FITTING WITHIN THE FIRST SIDEWALK PANEL OR 24"-36" BEHIND CURB UNLESS OTHERWISE APPROVED BY THE PUBLIC WORKS DEPARTMENT. ANY MECHANICAL FITTINGS SHALL BE TORQUED TO NO LESS THAN 55LBS. RISER SHALL MATCH THE LATERAL MATERIAL AND BE CAPPED WITH A POP-UP RELIEF CAP/VALVE.

VAULT BOX: CLEANOUT VAULT BOX SHALL BE PRECAST G05 BOX (TRAFFIC RATED) WHERE VEHICULAR TRAFFIC IS EXPECTED OR PRECAST F08 BOX FOR SIDEWALKS AND LANDSCAPE.

LIDS: ALL SANITARY SEWER STRUCTURE LIDS OR COVERS SHALL BE IMPRINTED WITH "SEWER" OR "SANITARY SEWER" FOR IDENTIFICATION.

COVER: PROVIDE A MINIMUM 36" COVER FROM FINISHED GRADE TO THE TOP OF PIPE. WHERE PIPE COVER IS LESS THAN 36", A CONCRETE CAP SHALL BE PROVIDED.

BACKFILL: SHALL BE CLASS 1 TYPE A PERMEABLE OR CONTROLLED DENSITY FILL (CDF) PLACED 4" BELOW AND 6" TO 12" ABOVE SEWER LINE AND SHALL BE CLASS 2 AGGREGATE BASE (95% COMPACTION) OR CDF FOR THE REMAINDER OF THE BACKFILL.

CONCRETE: SHALL BE 3,000 PSI CONCRETE. STATE CLASS A-6 SACK MIX WITH ¾" TO 1" AGGREGATE. CONCRETE MIX SHALL HAVE ½ TO ¾ POUNDS BY WEIGHT OR 1 PINT BY VOLUME OF LAMPBLACK PER CUBIC YARD OF CONCRETE MIX.

DOWELS: NEW CONCRETE SHALL TIE INTO EXISTING CONCRETE WITH ¼"X12" DOWELS, 6" EMBEDMENT ON EITHER SIDE.

ASPHALT: ½" ASPHALT CONCRETE (95% COMPACTION) POURED AS HOT MIX ASPHALT MATCHING EXISTING PAVEMENT THICKNESS OR 4" MINIMUM, WHICHEVER IS GREATER, SHALL BE USED IN STREETS. TACK COAT ALL EDGES AND SURFACES PRIOR TO HMA PLACEMENT. FINISH SURFACE SHALL BE MADE FLUSH WITH THE ADJACENT SURFACES AT CONFORMS AND EDGES WITH A MAXIMUM TOLERANCE OF 0.01' LONGITUDINALLY AND 0.02' TRANSVERSELY. ALL FINISHED EDGES SHALL BE SEALED. REFER TO ASPHALT RESTORATION DETAIL.

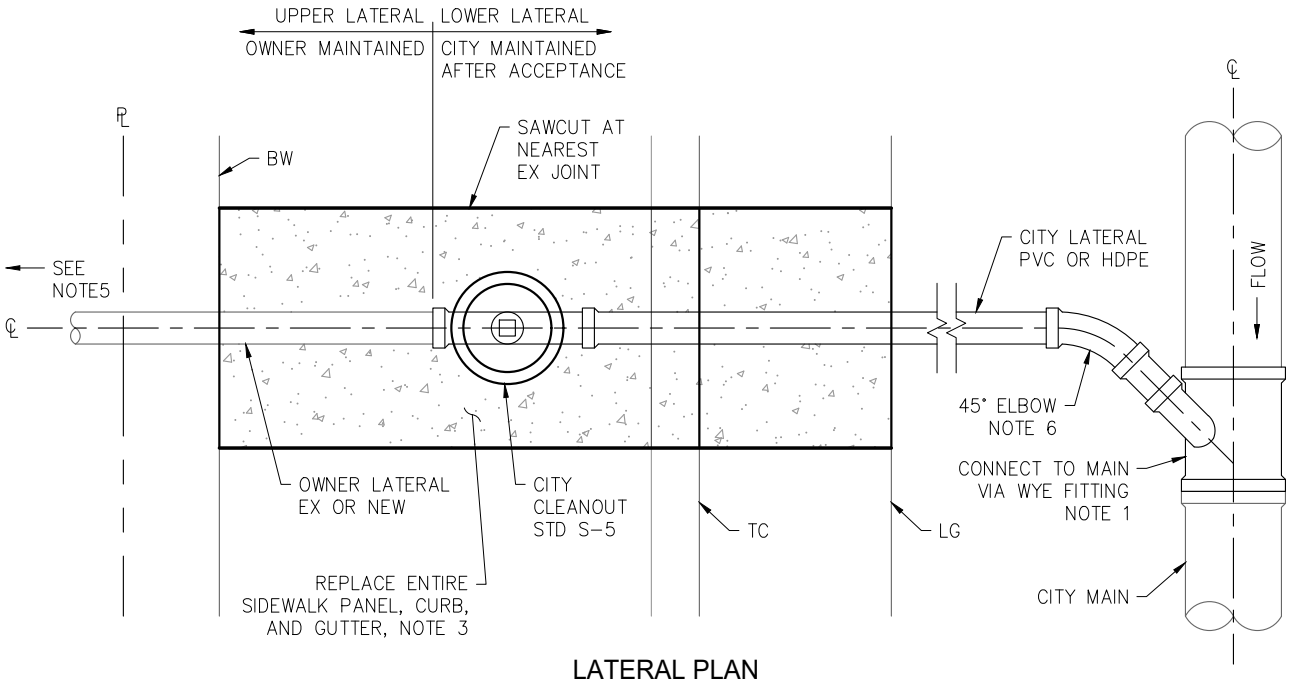
PRIVATE SERVICE ABANDONMENT:

CITY SEWER MAIN CONNECTION:

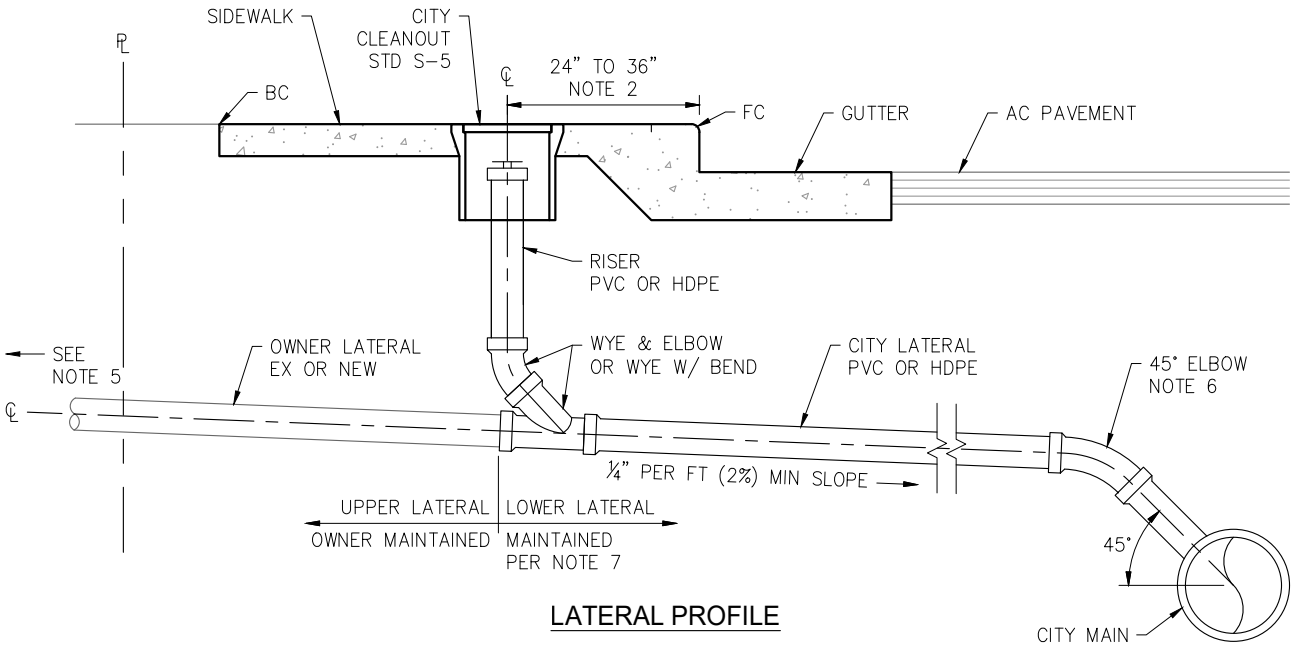
1. DIG HOLE NEXT TO MAIN TO FIND LATERAL CONNECTION POINT.
2. REMOVE ENTIRE WYE FITTING OR SEGMENT OF MAIN IF IMPROPERLY INSTALLED WITH A TAP.
3. REPLACE WITH NEW SECTION OF MAIN PIPE MATCHING INTERIOR DIAMETER.

SEWER SERVICE LATERAL:

1. AFTER DISCONNECTING FROM THE MAIN, PLUG LATERAL PIPE END WITH COMPACTED EARTH AND 8" CONCRETE PLUG..
2. LOCATE LATERAL STRUCTURES (CLEANOUT OR MANHOLE BEHIND CURB) IF EXISTS.
3. IF FOUND, DIG UP AND REMOVE LATERAL STRUCTURES.



LATERAL PLAN

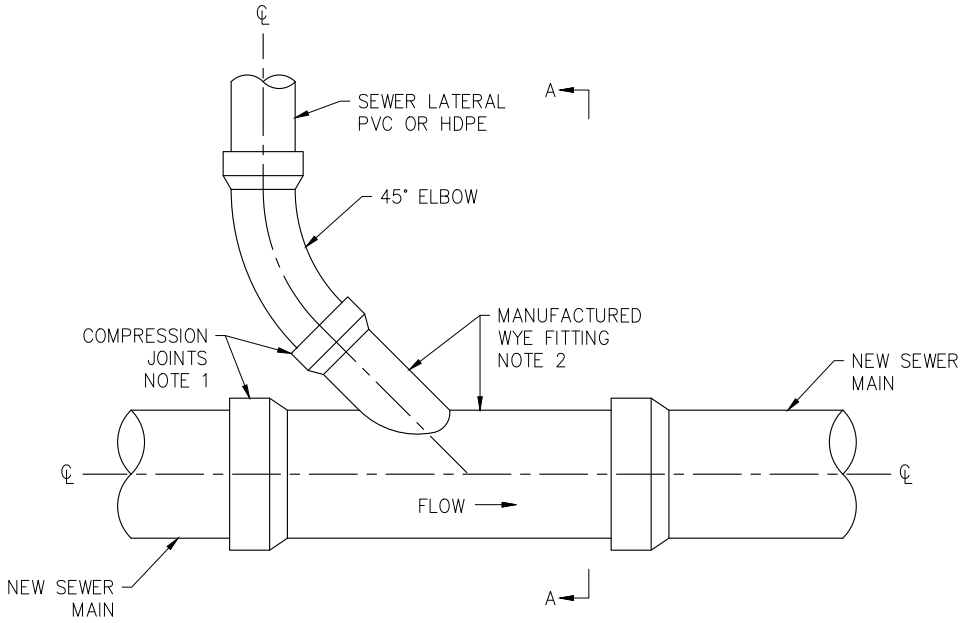


LATERAL PROFILE

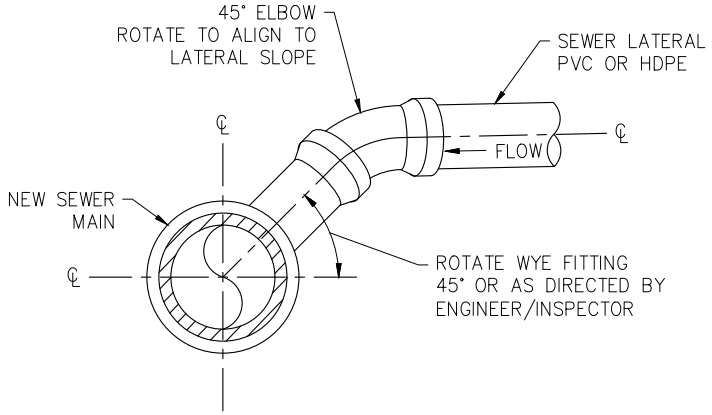
NOTES:

1. LATERAL CONNECTION TO CITY MAIN SHALL BE VIA A WYE FITTING OR NEW MANHOLE ONLY. TAP OR SADDLE CONNECTIONS ARE NOT ALLOWED. MANHOLES ARE REQUIRED FOR LATERALS 8" OR LARGER.
2. INSTALL CLEANOUT CENTERED IN THE SIDEWALK PANEL CLOSEST TO THE CURB OR 24" TO 36" FROM THE FACE OF CURB.
3. SIDEWALK, CURB, AND GUTTER SHALL BE RESTORED ACCORDING TO CITY STANDARDS. SAWCUTS SHALL BE MADE AT THE EXISTING JOINTS. PARTIAL SIDEWALK PANEL SAWCUTTING/REMOVAL IS NOT ALLOWED.
4. PAVEMENT SHALL BE RESTORED ACCORDING TO CITY STANDARDS.
5. THE SEWER LATERAL SHALL INCLUDE A BUILDING CLEANOUT APPROXIMATELY 2-FT FROM THE BUILDING AND A BACKWATER VALVE SHALL BE INSTALLED WITHIN THE PROPERTY.
6. WHERE SEWER MAIN INVERT ELEVATION IS OVER 60" FROM THE SURFACE, VERTICAL BEND SHALL BE REQUIRED.
7. PER SSF MUNI CODE 14.14.040, SEWER LATERAL MAINTENANCE IS THE RESPONSIBILITY OF THE PROPERTY OWNER UP TO THE SEWER MAIN. AFTER INSTALLATION OF A CLEANOUT AND ACCEPTANCE BY THE PUBLIC WORKS INSPECTOR, A CERTIFICATE OF COMPLIANCE WILL BE GRANTED FOR A CERTAIN DURATION PER THE CODE. THE CITY WILL MAINTAIN THE SEWER LATERAL FROM THE CITY CLEANOUT TO THE MAIN, KNOWN AS THE "LOWER LATERAL" FOR PROPERTIES THAT HAVE AN ACTIVE CERTIFICATE OF COMPLIANCE.

SOUTH SAN FRANCISCO PUBLIC WORKS ENGINEERING	**SANITARY SEWER LATERAL INSTALLATION**	**APR 2023** **S-2**



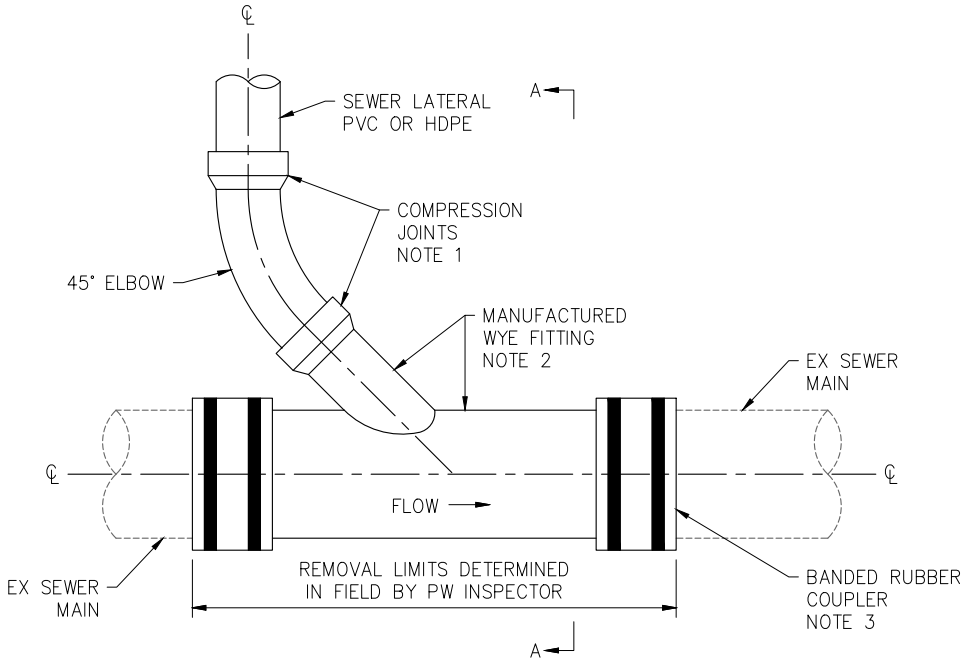
LATERAL CONNECTION PLAN



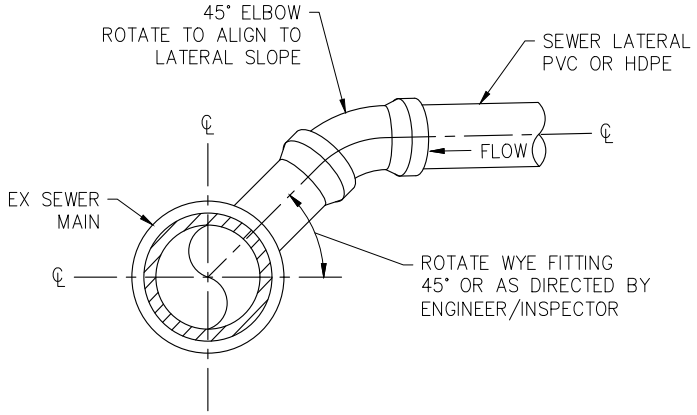
SECTION A-A

NOTES:
1. MANUFACTURED WYE FITTINGS SHALL HAVE PLAIN ENDS.
2. HDPE LATERAL TO HDPE MAIN SHALL BE FUSED.

SOUTH SAN FRANCISCO PUBLIC WORKS ENGINEERING	**SANITARY SEWER LATERAL TO NEW MAIN**	DEC 2020 **S-3**



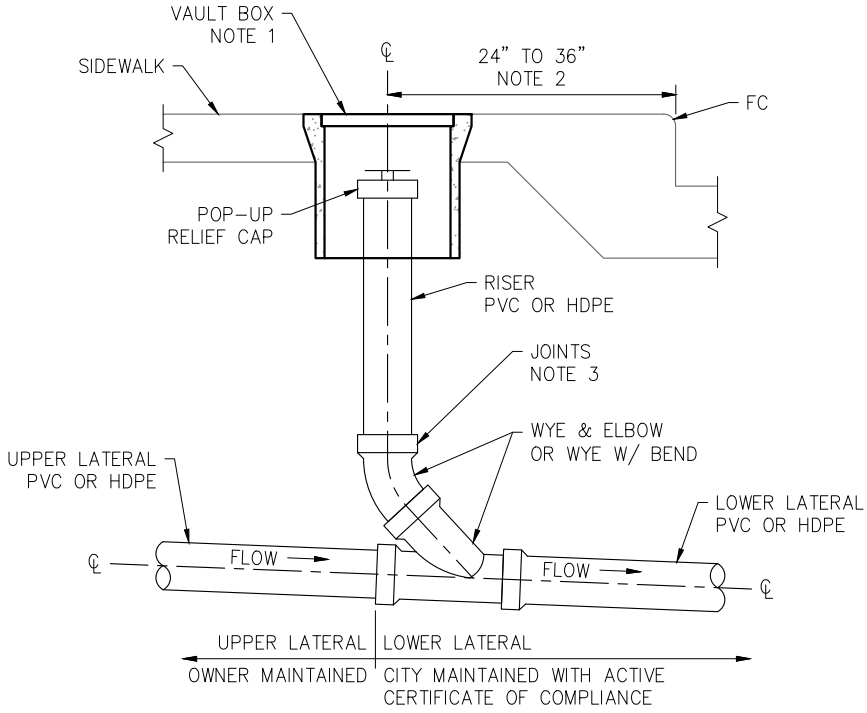
LATERAL CONNECTION PLAN



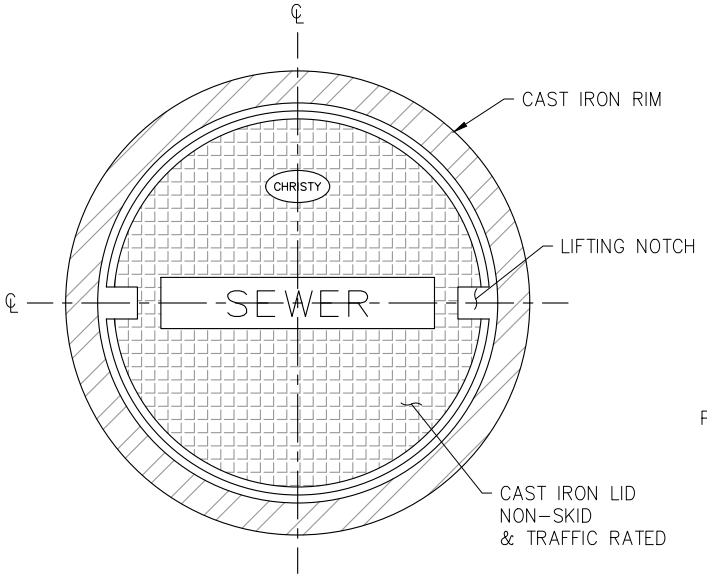
SECTION A-A

NOTES:
1. MANUFACTURED WYE FITTINGS SHALL HAVE PLAIN ENDS.
2. HDPE LATERAL TO HDPE MAIN SHALL BE FUSED.
3. COUPLINGS SHALL BE BANDED, RUBBER COUPLING WITH TWO S.S. CLAMPS, FERNCO STRONG–BACK RC OR MISSION FLEX–SEAL ARC, ADJUSTABLE REPAIR COUPLINGS. COUPLINGS SHALL ONLY BE USED FOR LATERAL CONNECTION REPLACEMENT OR INSTALLATION ON EXISTING MAINS.

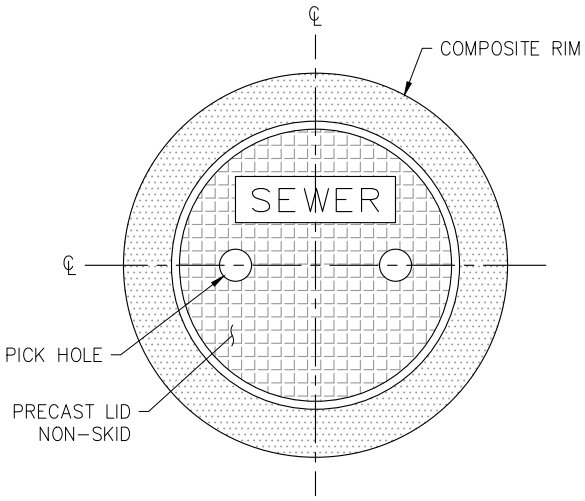
SOUTH SAN FRANCISCO PUBLIC WORKS ENGINEERING	**SANITARY SEWER LATERAL TO EXISTING MAIN**	**DEC 2020** **S-4**



CLEANOUT PROFILE



PRECAST G05 BOX
(TRAFFIC RATED)

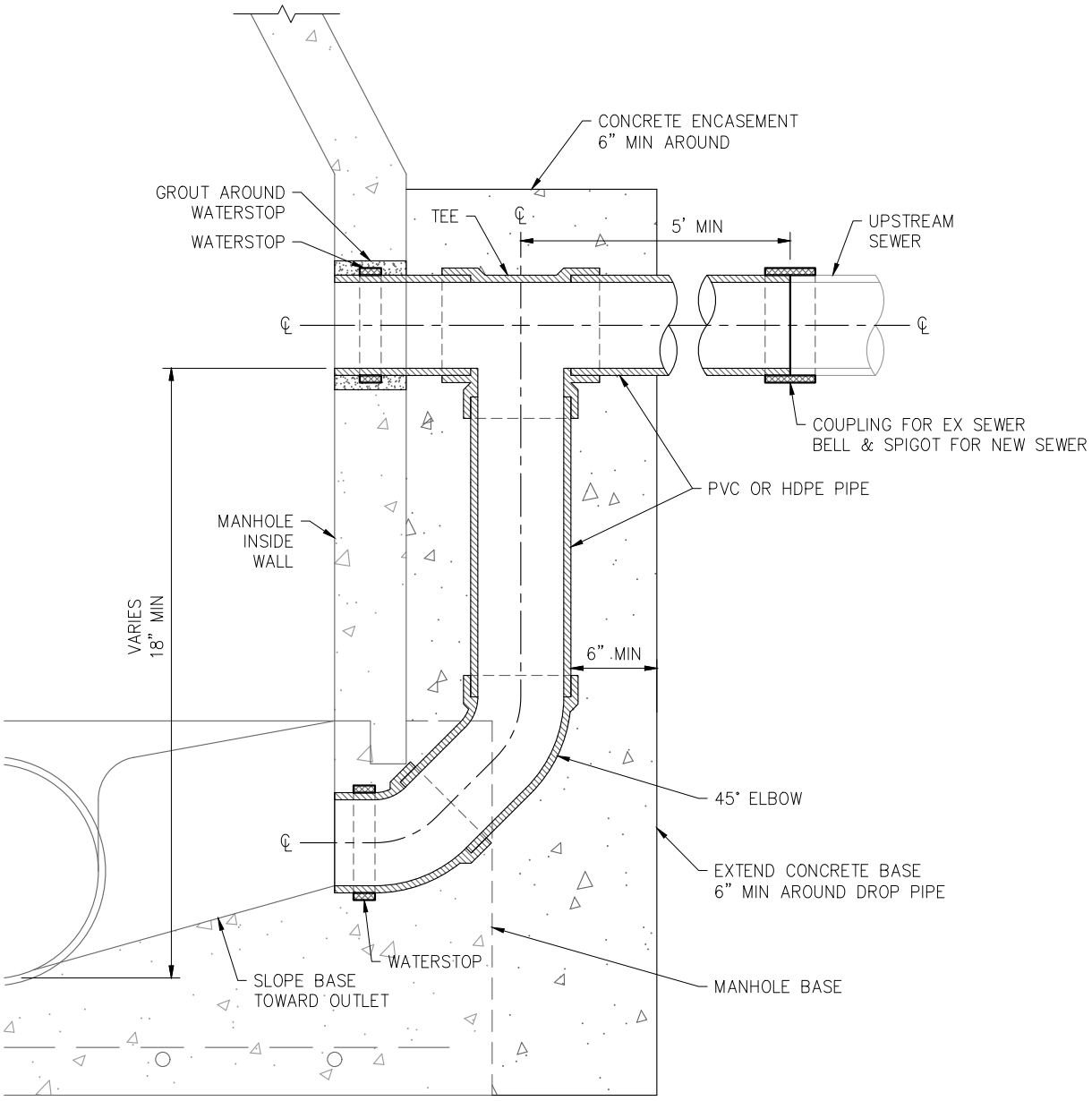


PRECAST F08 BOX
(NON-TRAFFIC)

NOTES:

1. CLEANOUT VAULT BOX SHALL BE CHRISTY F08 FOR SIDEWALKS OR LANDSCAPE AND CHRISTY G05 FOR DRIVEWAYS, STREETS, LANES, OR DRIVE AISLES.
2. INSTALL CLEANOUT CENTERED IN THE SIDEWALK PANEL CLOSEST TO THE CURB OR, PER SSF MUNI CODE 14.14.040A, WITHIN 2.5' OF THE SEWER MAIN.
3. COUPLINGS SHALL BE :
   PVC: COMPRESSION JOINT / GASKETED BELL & SPIGOT JOINTS
   HDPE: FUSED JOINTS
4. CLEANOUT AND RISER SIZE SHALL MATCH THE LATERAL SIZE.
5. CLEANOUT LIDS SHALL HAVE "SEWER" MARKINGS FROM MANUFACTURER.

SOUTH SAN FRANCISCO PUBLIC WORKS ENGINEERING	**SANITARY SEWER CLEANOUT**	**APR 2023** **S-5**

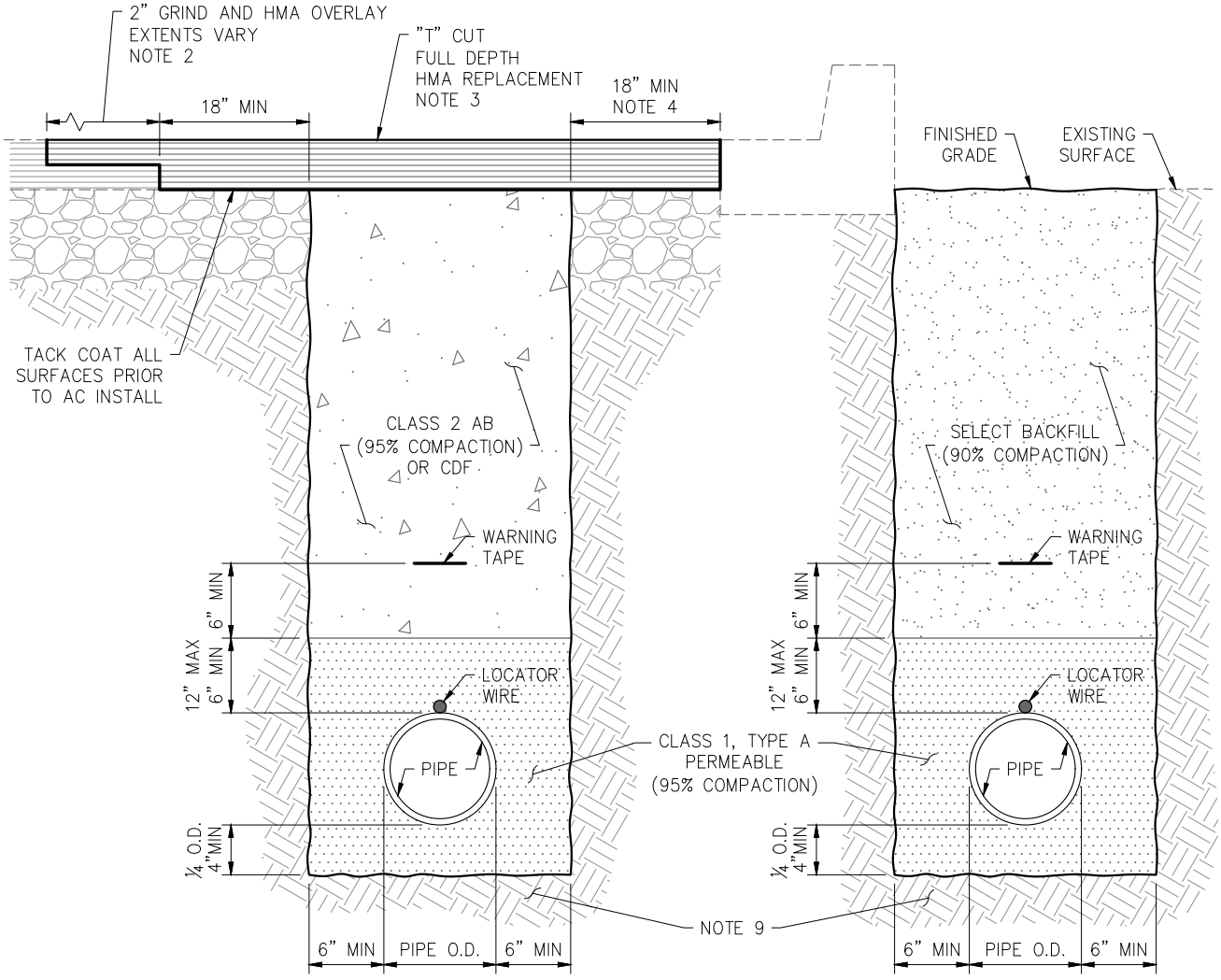


DROP MANHOLE SECTION

NOTES:

1. DROP CONNECTION SHALL BE USED WHERE ELEVATION DIFFERENCE BETWEEN INLET AND OUTLET INVERTS IS 18" OR GREATER.
2. ALL PIPING SHALL BE PVC OR HDPE.
3. DROP CONNECTION SHALL BE ENCASED IN CONCRETE 6" MIN AROUND DROP PIPE.
4. WATERSTOPS SHALL BE A-LOK, KORE-N-SEAL, OR APPROVED EQUAL. GROUT AROUND WATERSTOP.
5. INLETS SHALL BE FLUSH WITH MANHOLE INSIDE WALL.

SOUTH SAN FRANCISCO PUBLIC WORKS ENGINEERING	**SANITARY SEWER DROP CONNECTION**	DEC 2020 **S-6**



TRENCH SECTION 1
(PAVED AREA)

TRENCH SECTION 2
(UNPAVED AREA)

NOTES:

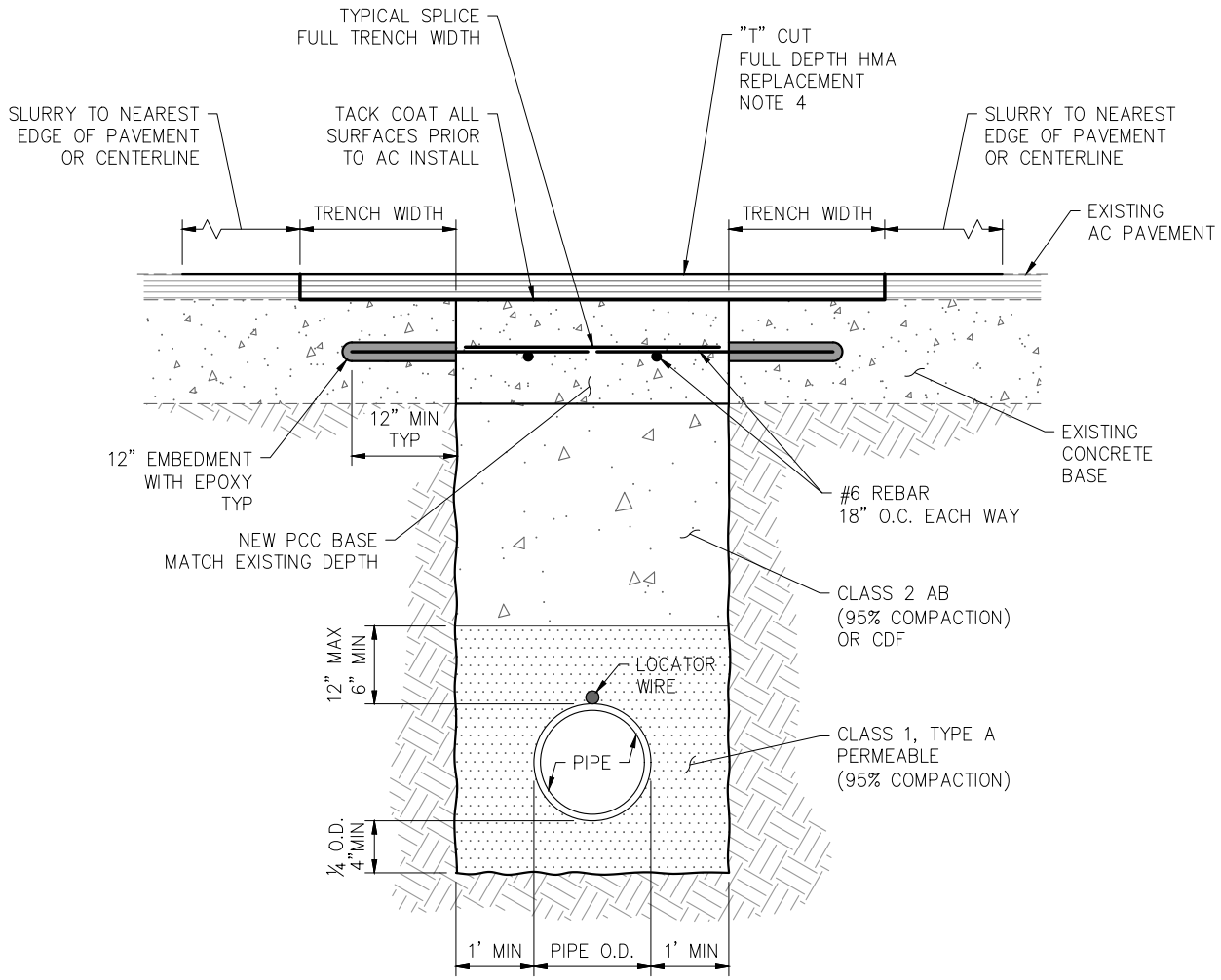
1. CONTRACTOR SHALL IDENTIFY ALL EXISTING UTILITIES, INCLUDING SERVICE CONNECTIONS, IN THE FIELD. CONTACT UNDERGROUND SERVICE ALERT (U.S.A.) BY CALLING 8–1–1 AT LEAST 48 HOURS PRIOR TO START OF WORK.
2. A 2" GRIND AND OVERLAY WITH HOT–MIX–ASPHALT SHALL BE REQUIRED FOR ALL TRENCH RESTORATION IN THE ROADWAY. EXTENTS SHALL BE PER STANDARD DETAILS R–10A THROUGH R–10C.
3. "T" CUT SHALL CONSIST OF REMOVAL AND REPLACEMENT WITH HOT–MIX–ASPHALT OF THE EXISTING PAVEMENT FOR FULL DEPTH OF THE EXISTING ASPHALT CONCRETE LAYER OR 4" MINIMUM, WHICHEVER IS GREATER. PAVEMENT CORE SAMPLES ARE RECOMMENDED ON MAJOR UTILITY TRENCHING PROJECTS PRIOR TO START OF TRENCHING.
4. WHERE THE "T" CUT LIMIT IS WITHIN 3' OF THE ADJACENT CURB OR GUTTER, THE "T" CUT SHALL BE EXTENDED TO THE ADJACENT CURB OR GUTTER.
5. ALL STRIPING OR SIGNAGE DISTURBED BY THE PROJECT SHALL BE RESTORED TO CITY STANDARDS.
6. FOR PAVED AREAS, BACKFILL SHALL BE CLASS 2 AGGREGATE BASE AT 95% COMPACTION. CONTROLLED DENSITY FILL (CDF) SHALL REQUIRE CITY ENGINEER APPROVAL.
7. FOR UNPAVED AREAS, SELECT BACKFILL MATERIAL SHALL BE MATERIAL FROM EXCAVATION, FREE FROM STONES OR LUMPS EXCEEDING 3" IN GREATEST DIMENSION, VEGETATION MATTER, OR UNSATISFACTORY MATERIAL.
8. PROVIDE LOCATOR WIRE ALONG TOP OF PIPE FOR WATER PIPES OR SANITARY SEWER FORCE MAINS.
9. WHERE UNSUITABLE SUBBASE MATERIAL IS ENCOUNTERED, TRENCH SHALL OVEREXCAVATE BY 4" AND BACKFILL WITH CLASS 1, TYPE A PERMEABLE MATERIAL.
10. PRIOR TO FINISHING THE WORK DAY, OPEN TRENCHES SHALL BE BACKFILLED AND TEMPORARILY PAVED WITH HMA.

SOUTH SAN FRANCISCO
PUBLIC WORKS
ENGINEERING

UTILITY TRENCH (TYPICAL STREETS)

MAY 2022

U-1A

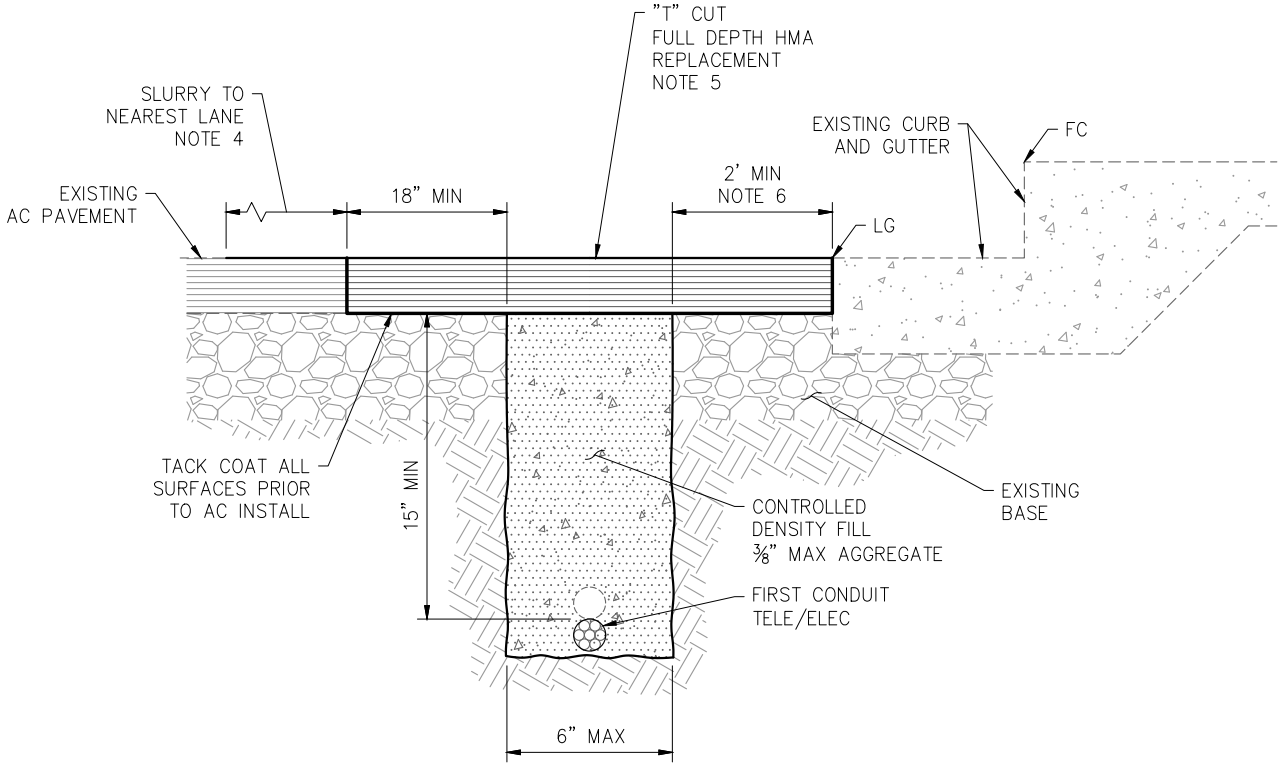


TRENCH SECTION 3
(CONCRETE BASE STREETS)

NOTES:

1. CONTRACTOR SHALL IDENTIFY ALL EXISTING UTILITIES, INCLUDING SERVICE CONNECTIONS, IN THE FIELD. CONTACT UNDERGROUND SERVICE ALERT (U.S.A.) BY CALLING 8–1–1 AT LEAST 48 HOURS PRIOR TO START OF WORK.
2. SAWCUT FULL CONCRETE BASE DEPTH PRIOR TO TRENCHING.
3. BORE 12" MINIMUM INTO EXISTING CONCRETE BASE SLAB AND INSTALL #6 REBAR WITH EPOXY AS SHOWN. EPOXY SHALL CONFORM TO CALTRANS SPECIFICATIONS.
4. "T" CUT SHALL CONSIST OF REMOVAL AND REPLACEMENT WITH HOT–MIX–ASPHALT OF FULL DEPTH OF THE ASPHALT CONCRETE WEARING SURFACE FOR 3 TIMES THE TRENCH WIDTH.
5. A SLURRY SEAL BEYOND THE "T" CUT SHALL EXTEND TO THE NEAREST CENTERLINE OR EDGE OF PAVEMENT AND SHALL BE REQUIRED FOR ALL TRENCH RESTORATIONS ON CONCRETE BASE STREETS.
6. WHERE THE "T" CUT LIMIT IS WITHIN 3' OF THE ADJACENT CURB, GUTTER OR EDGE OF PAVEMENT, THE "T" CUT SHALL BE EXTENDED TO THE ADJACENT CURB, GUTTER, OR EDGE OF PAVEMENT.
7. ALL STRIPING OR SIGNAGE DISTURBED BY THE PROJECT SHALL BE RESTORED TO CITY STANDARDS.
8. CONCRETE SHALL BE CLASS A 6–SACK PER CALTRANS STANDARDS.
9. PRIOR TO FINISHING THE WORK DAY, OPEN TRENCHES SHALL BE BACKFILLED AND TEMPORARILY PAVED WITH HMA.

SOUTH SAN FRANCISCO PUBLIC WORKS ENGINEERING	**UTILITY TRENCH (CONCRETE BASE STREETS)**	**MAY 2022** **U-1B**

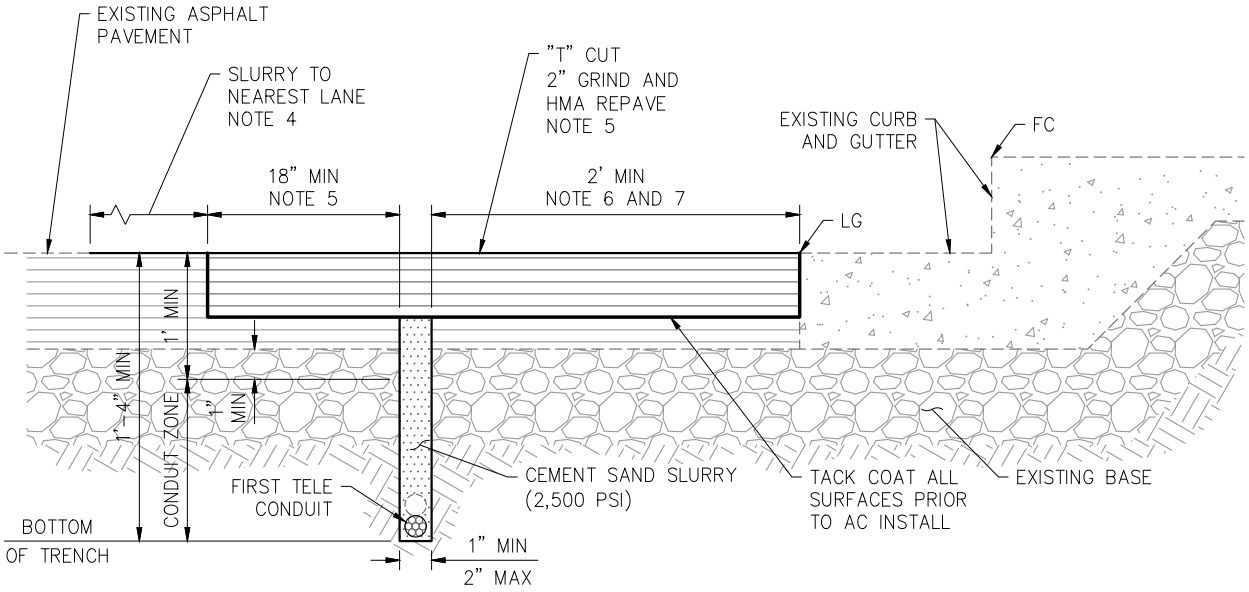


ROCKWHEEL TRENCH SECTION

NOTES:

1. ROCKWHEEL TRENCHES SHALL ONLY BE USED TO INSTALL TELECOMMUNICATION OR ELECTRICAL CONDUITS IN ASPHALT CONCRETE ROADWAYS.
2. ROCKWHEEL TRENCHES ARE NOT ALLOWED ON OR THROUGH CONCRETE BASE STREETS, SIDEWALKS, PARKWAYS, CURBS, OR GUTTERS.
3. CONTRACTOR SHALL IDENTIFY ALL EXISTING UTILITIES, INCLUDING SERVICE CONNECTIONS, IN THE FIELD.
   A. CONTACT UNDERGROUND SERVICE ALERT (U.S.A.) BY CALLING 8–1–1 AT LEAST 48 HOURS PRIOR TO START OF WORK.
   B. CONTRACTOR SHALL USE MOBILE GROUND PENETRATING RADAR TO SUPPLEMENT THE U.S.A. INFORMATION.
   C. CONTRACTOR SHALL POTHOLE ANY CROSSING UTILITY OR PARALLEL UTILITY WITHIN 18–INCH OF PROPOSED ALIGNMENT TO A DEPTH OF 6–INCHES BELOW THE BOTTOM OF THE MICROTRENCH. POTHOLES SHALL BE IMMEDIATELY BACKFILLED.
4. A SLURRY SEAL SHALL BE REQUIRED FOR ALL ROCKWHEEL TRENCH RESTORATION BEYOND THE "T" CUT IN THE ROADWAY. EXTENTS SHALL BE PER STANDARD DETAILS R–10A THROUGH R–10C.
5. "T" CUT SHALL CONSIST OF REMOVAL AND REPLACEMENT WITH HOT–MIX–ASPHALT OF THE EXISTING PAVEMENT FOR FULL DEPTH OF THE EXISTING ASPHALT CONCRETE LAYER OR 4" MINIMUM, WHICHEVER IS GREATER. PAVEMENT CORE SAMPLES ARE RECOMMENDED ON MAJOR UTILITY TRENCHING PROJECTS PRIOR TO START OF TRENCHING.
6. THE EDGE OF THE ROCKWHEEL TRENCH SHALL HAVE A 2' MINIMUM HORIZONTAL CLEARANCE TO THE LIP OF GUTTER OR FACE OF CURB WHERE NO GUTTER EXISTS.
7. WHERE THE "T" CUT LIMIT IS WITHIN 3' OF THE ADJACENT CURB OR GUTTER, THE "T" CUT SHALL BE EXTENDED TO THE ADJACENT CURB OR GUTTER.
8. UP TO TWO (2) CONDUITS MAY BE VERTICALLY STACKED CONDUITS PER ROCKWHEEL TRENCH.
9. CONDUIT ZONE SHALL BE A MINIMUM 15" BELOW THE PAVEMENT SURFACE
10. ALL STRIPING OR SIGNAGE DISTURBED BY THE PROJECT SHALL BE RESTORED TO CITY STANDARDS.
11. PRIOR TO FINISHING THE WORK DAY, OPEN TRENCHES SHALL BE BACKFILLED AND TEMPORARILY PAVED WITH HMA.

SOUTH SAN FRANCISCO PUBLIC WORKS ENGINEERING	**ROCKWHEEL TRENCH**	**MAY 2022**
		U-1C

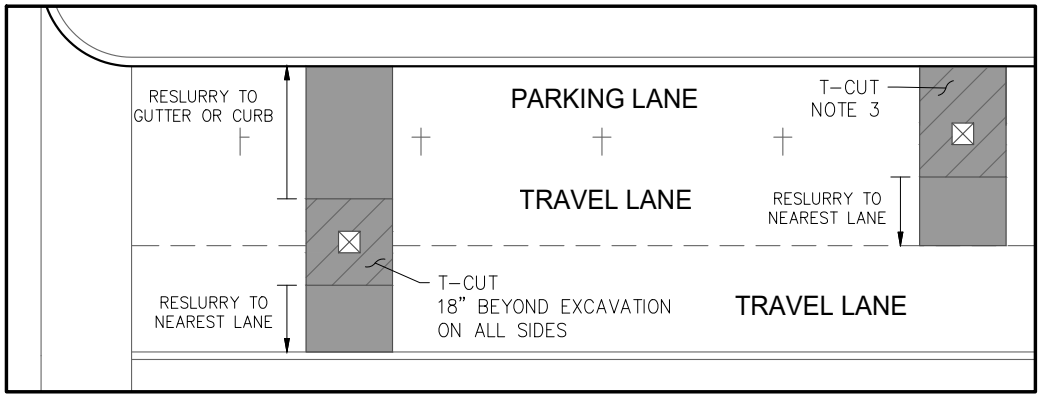


MICROTRENCH SECTION

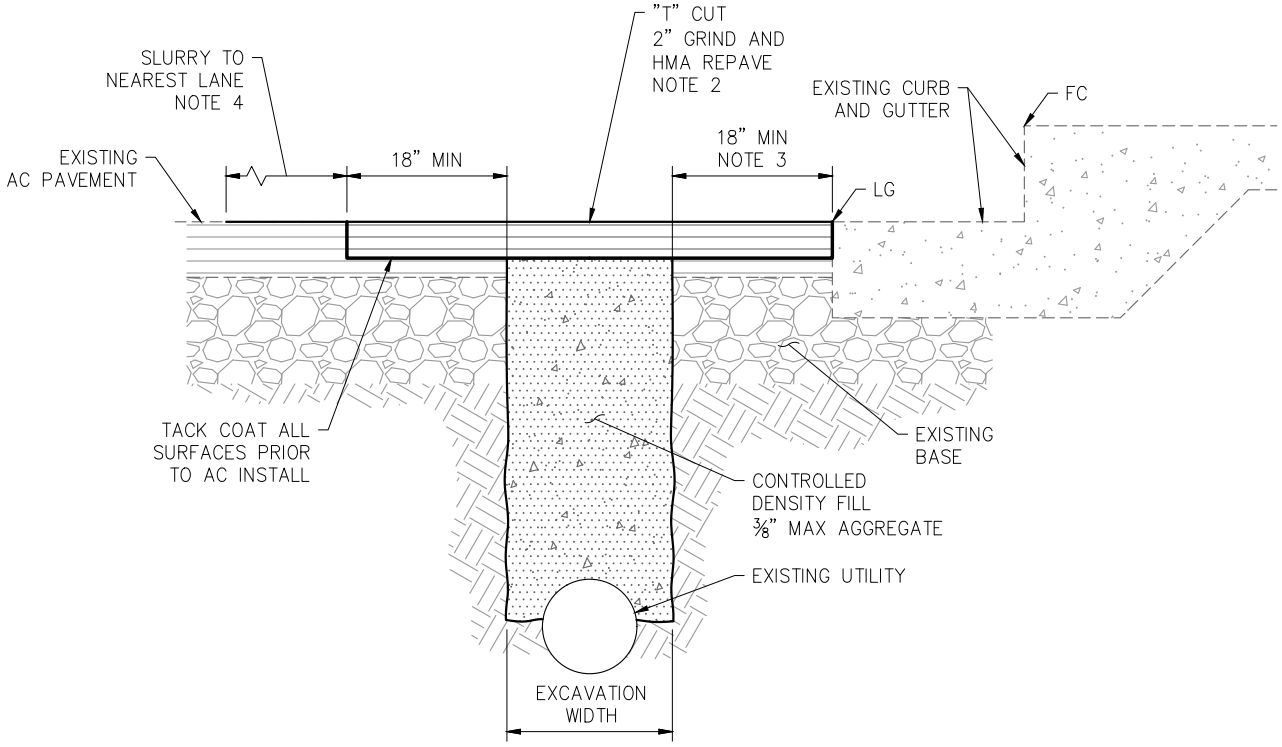
NOTES:

1. MICROTRENCHING SHALL ONLY BE USED TO INSTALL TELECOMMUNICATION CONDUITS IN ASPHALT CONCRETE ROADWAYS.
2. MICROTRENCHING IS NOT ALLOWED ON OR THROUGH CONCRETE BASE STREETS, SIDEWALKS, PARKWAYS, CURBS, OR GUTTERS.
3. CONTRACTOR SHALL IDENTIFY ALL EXISTING UTILITIES, INCLUDING SERVICE CONNECTIONS, IN THE FIELD.
   A. CONTACT UNDERGROUND SERVICE ALERT (U.S.A.) BY CALLING 8-1-1 AT LEAST 48 HOURS PRIOR TO START OF WORK.
   B. CONTRACTOR SHALL USE MOBILE GROUND PENETRATING RADAR TO SUPPLEMENT THE U.S.A. INFORMATION.
   C. CONTRACTOR SHALL POTHOLE ANY CROSSING UTILITY OR PARALLEL UTILITY WITHIN 18-INCH OF PROPOSED ALIGNMENT TO A DEPTH OF 6-INCHES BELOW THE BOTTOM OF THE MICROTRENCH. POTHOLES SHALL BE IMMEDIATELY BACKFILLED.
4. A SLURRY SEAL SHALL BE REQUIRED FOR ALL MICROTRENCH RESTORATION BEYOND THE "T" CUT IN THE ROADWAY. EXTENTS SHALL BE PER STANDARD DETAILS R-10A THROUGH R-10C.
5. "T" CUT SHALL CONSIST OF A 2" GRIND AND REPAVE WITH HOT-MIX-ASPHALT OF THE EXISTING ASPHALT CONCRETE LAYER FOR 18" MINIMUM BEYOND THE MICROTRENCH WIDTH ON EITHER SIDE.
6. THE EDGE OF THE MICROTRENCH SHALL HAVE A 2' MINIMUM HORIZONTAL CLEARANCE TO THE LIP OF GUTTER OR FACE OF CURB WHERE NO GUTTER EXISTS.
7. WHERE THE "T" CUT LIMIT IS WITHIN 3' OF THE ADJACENT CURB OR GUTTER, THE "T" CUT SHALL BE EXTENDED TO THE ADJACENT CURB OR GUTTER.
8. UP TO TWO (2) CONDUITS MAY BE VERTICALLY STACKED CONDUITS PER MICROTRENCH.
9. CONDUIT ZONE SHALL BE A MINIMUM 1' BELOW THE PAVEMENT SURFACE AND MINIMUM 1" BELOW THE BOTTOM OF THE EXISTING ASPHALT CONCRETE LAYER, WHICHEVER IS GREATER, AND THE BOTTOM OF MICROTRENCH SHALL BE A MINIMUM 1'-4" BELOW THE PAVEMENT SURFACE.
10. ALL MICROTRENCHES SHALL BE IDENTIFIED WITH A METAL IDENTIFICATION TAG LISTING THE OWNER, YEAR OF CONSTRUCTION, AND INCLUDE THE WORDS "NOT A SURVEY POINT". IF THE WORK IS MORE THAN 50' IN LENGTH, PLACE THE TAG NEAR EACH END OF THE MICROTRENCH AND AT INTERVALS NOT EXCEEDING 50'.
11. ALL STRIPING OR SIGNAGE DISTURBED BY THE PROJECT SHALL BE RESTORED TO CITY STANDARDS.
12. PRIOR TO FINISHING THE WORK DAY, OPEN TRENCHES SHALL BE BACKFILLED AND TEMPORARILY PAVED WITH HMA.

SOUTH SAN FRANCISCO PUBLIC WORKS ENGINEERING	**MICROTRENCH**	**MAY 2022**
		U-1D



POTHOLE RESTORATION LIMITS

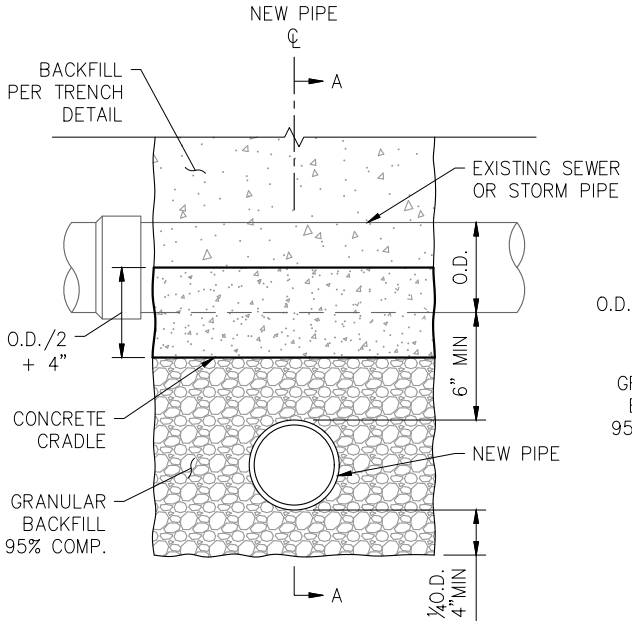


POTHOLE SECTION

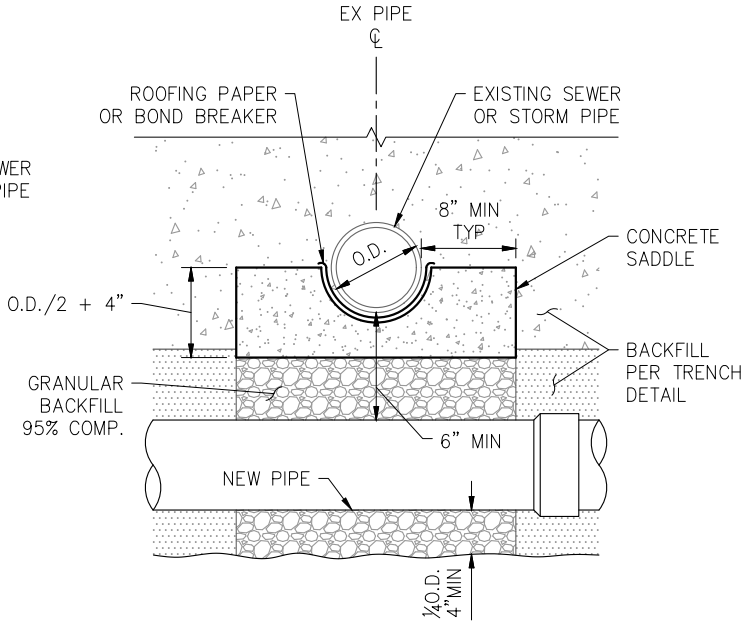
NOTES:

1. CONTRACTOR SHALL IDENTIFY ALL EXISTING UTILITIES, INCLUDING SERVICE CONNECTIONS, IN THE FIELD. CONTACT UNDERGROUND SERVICE ALERT (U.S.A.) BY CALLING 8–1–1 AT LEAST 48 HOURS PRIOR TO START OF WORK.
2. "T" CUT SHALL CONSIST OF 2" GRIND AND OVERLAY WITH HOT–MIX–ASPHALT OF THE EXISTING PAVEMENT EXTENDING 18" BEYOND THE EXCAVATION ON ALL SIDES
3. WHERE THE "T" CUT LIMIT IS WITHIN 3' OF THE ADJACENT CURB OR GUTTER, THE "T" CUT SHALL BE EXTENDED TO THE ADJACENT CURB OR GUTTER.
4. A SLURRY SEAL BEYOND THE "T" CUT SHALL EXTEND TO THE NEAREST LANE OR EDGE OF PAVEMENT AND SHALL BE REQUIRED FOR ALL POTHOLE RESTORATIONS.
5. ALL STRIPING OR SIGNAGE DISTURBED BY THE PROJECT SHALL BE RESTORED TO CITY STANDARDS.
6. FOR PAVED AREAS, BACKFILL SHALL BE CONTROLLED DENSITY FILL (CDF).
7. FOR UNPAVED AREAS, SELECT BACKFILL MATERIAL SHALL BE MATERIAL FROM EXCAVATION, FREE FROM STONES OR LUMPS EXCEEDING 3" IN GREATEST DIMENSION, VEGETATION MATTER, OR UNSATISFACTORY MATERIAL.

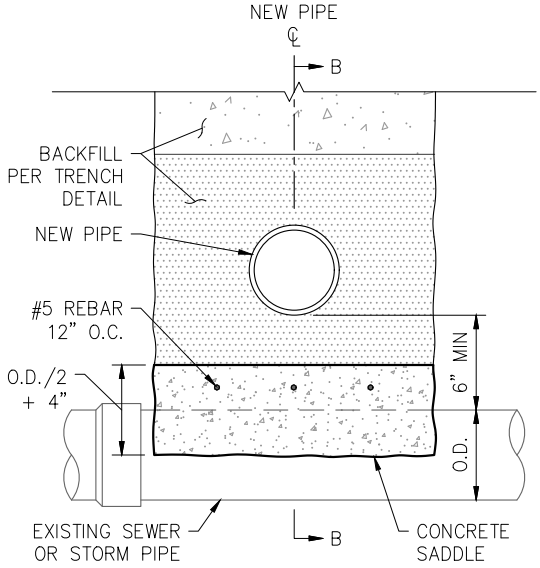
SOUTH SAN FRANCISCO PUBLIC WORKS ENGINEERING	**POTHOLE RESTORATION**	**MAY 2022** **U-1E**



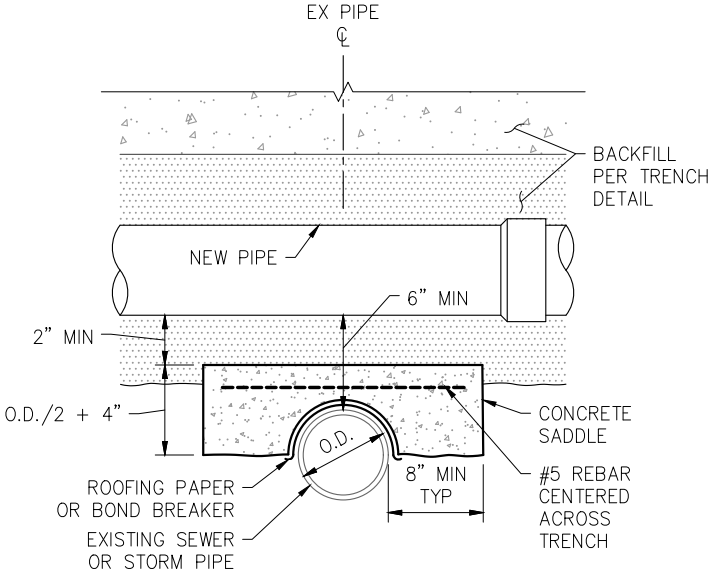
NEW PIPE UNDER
EXISTING PIPE



SECTION A-A



NEW PIPE OVER
EXISTING PIPE

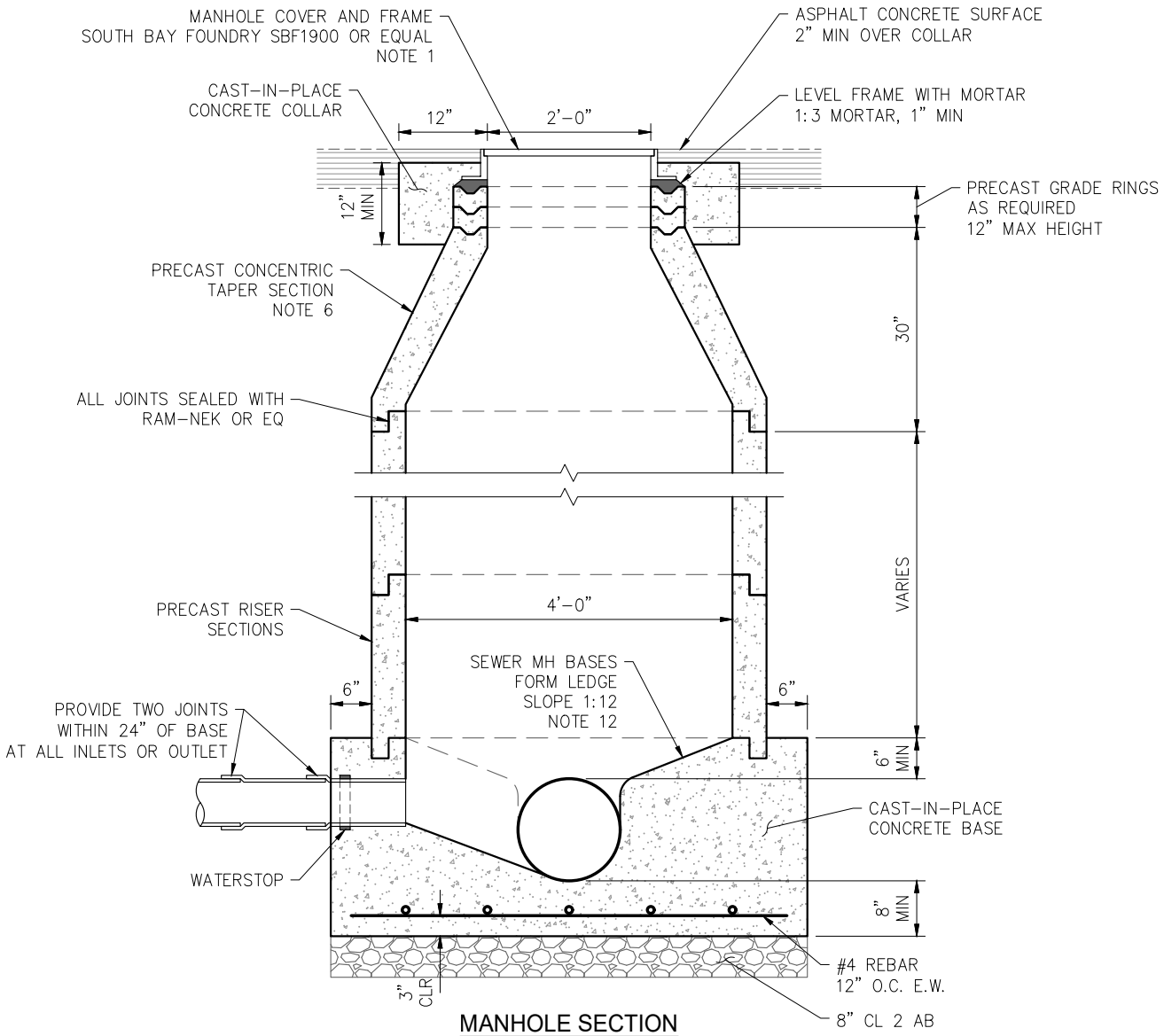


SECTION B-B

NOTES:

1. PIPE CROSSINGS WITH VERTICAL CLEARANCE BETWEEN 6" TO 12" SHALL COMPLY WITH THE ABOVE DETAILS. UNDER NO CASE SHALL THE VERTICAL CLEARANCES BETWEEN STORM DRAIN AND SANITARY SEWER PIPES BE LESS THAN 6".
2. FOR SANITARY SEWERS CROSSING WATER MAINS, VERTICAL CLEARANCE AND CROSSING DETAIL SHALL COMPLY WITH CALIFORNIA WATER SERVICE OR WESTBOROUGH WATER DISTRICT AS APPLICABLE.

SOUTH SAN FRANCISCO PUBLIC WORKS ENGINEERING	**PIPE CROSSINGS**	**DEC 2020**
		U-2

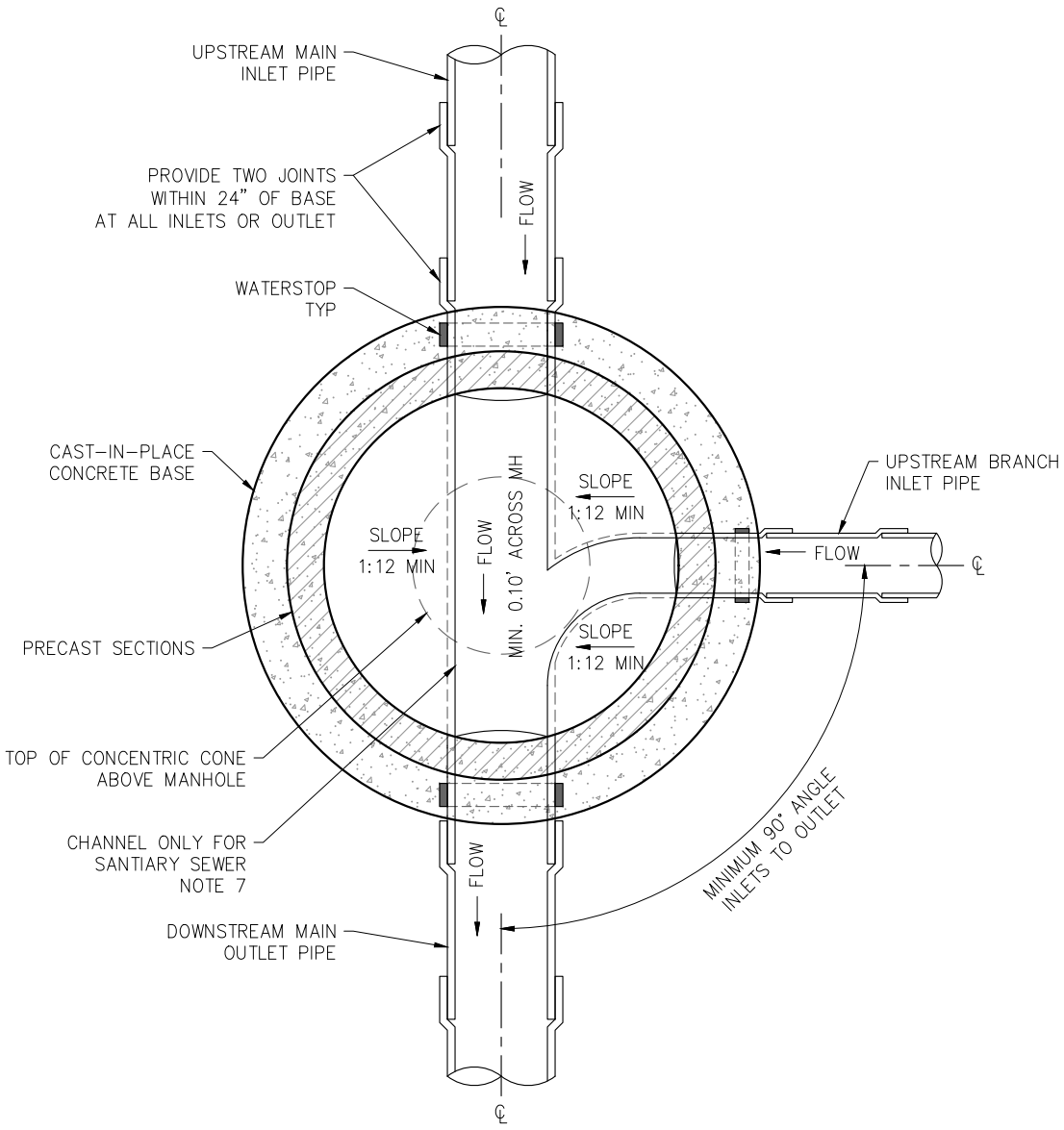


MANHOLE SECTION
(33" OR SMALLER MAINS)

NOTES:

1. MANHOLE FRAME AND COVER SHALL BE SOUTH BAY FOUNDRY MODEL SBF1900 (OR APPROVED EQUAL) IMPRINTED WITH EITHER "STORM DRAIN" OR "SANITARY SEWER" MATCHING SYSTEM MAIN TYPE. FRAME AND COVER SHALL BE FLUSH WITH EXISTING GRADE (OR FINISHED GRADE IN NEW PAVEMENTS).
2. CAST-IN-PLACE CONCRETE COLLAR AND BASE SHALL BE CLASS A 6-SACK PER CALTRANS STANDARDS PLACED AGAINST UNDISTURBED EARTH OR APPROVED BACKFILL MATERIAL AT 95% COMPACTION.
3. FRAME AND BASE SHALL BE SET TO THE PRECAST SECTIONS WITH 1:3 MORTAR MIX.
4. WHEN INSTALLED IN PAVED STREETS, A MINIMUM 2" ASPHALT CONCRETE LAYER SHALL BE PLACED ABOVE THE CONCRETE COLLAR AND FLUSH WITH THE EXISTING GRADE (OR FINISHED GRADE ON NEW STREETS). TACK COAT ALL SURFACES PRIOR TO PLACING ASPHALT CONCRETE.
5. PRECAST SECTIONS SHALL CONFORM TO ASTM C-478 SPECIFICATIONS.
6. PRECAST CONCENTRIC TAPER SECTION SHALL BE USED.
7. ALL JOINTS SHALL BE SEALED WITH RAM-NEK OR APPROVED EQUAL.
8. WATERSTOPS SHALL BE PROVIDED ON ALL INLET AND OUTLET PIPE ENTRY POINTS. WATERSTOPS SHALL BE A-LOK, KORE-N-SEAL, OR APPROVED EQUAL WITH GROUT AROUND WATERSTOP.
9. ALL MANHOLES SHALL PROVIDE A MINIMUM 0.10' DROP ACROSS THE MANHOLE.
10. SOFFIT ELEVATION OF ALL INLET PIPES SHALL SHALL BE NO LESS THAN THE SOFFIT ELEVATION OF THE OUTLET PIPE, EXCEPT FOR OVERFLOW OUTLETS.
11. CAST-IN-PLACE RISER AND CONES MAY BE ALLOWED WHEN COMPLIANT WITH CALTRANS STANDARDS.
12. CHANNELIZE BASE ONLY FOR SANITARY SEWER MANHOLES. SEE CITY DETAIL U-3B FOR PLAN.

SOUTH SAN FRANCISCO PUBLIC WORKS ENGINEERING	**MANHOLE SECTION (UP TO 33-INCH)**	**APR 2023** **U-3A**

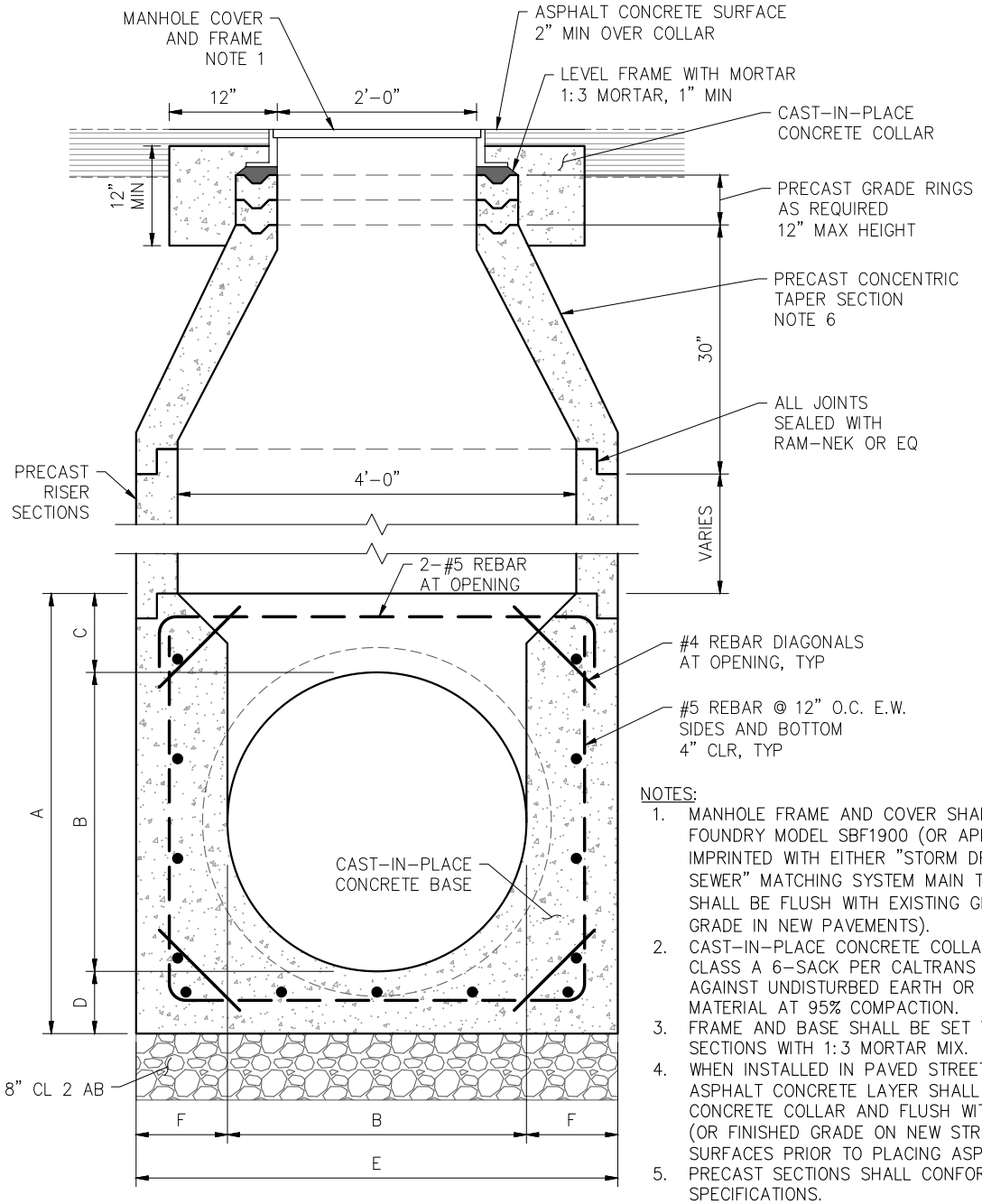


MANHOLE PLAN

NOTES:

1. CAST-IN-PLACE CONCRETE BASE SHALL BE CLASS A 6-SACK PER CALTRANS STANDARDS PLACED AGAINST UNDISTURBED EARTH OR APPROVED BACKFILL MATERIAL AT 95% COMPACTION.
2. BASE SHALL BE SET TO THE PRECAST SECTIONS WITH 1:3 MORTAR MIX.
3. PRECAST SECTIONS SHALL CONFORM TO ASTM C-478 SPECIFICATIONS.
4. WATERSTOPS SHALL BE PROVIDED ON ALL INLET AND OUTLET PIPE ENTRY POINTS. WATERSTOPS SHALL BE A-LOK, KORE-N-SEAL, OR APPROVED EQUAL WITH GROUT AROUND WATERSTOP.
5. ALL MANHOLES SHALL PROVIDE A MINIMUM 0.10' DROP ACROSS THE MANHOLE.
6. CROWN ELEVATION OF ALL INLET PIPES SHALL SHALL BE NO LESS THAN THE CROWN ELEVATION OF THE OUTLET PIPE, EXCEPT FOR OVERFLOW OUTLETS.
7. CHANNELIZE BASE ONLY FOR SANITARY SEWER MANHOLES. SEE CITY DETAIL U-3A FOR SECTION.

SOUTH SAN FRANCISCO PUBLIC WORKS ENGINEERING	**MANHOLE PLAN (UP TO 33-INCH)**	**DEC 2021** **U-3B**



MANHOLE SECTION
(36"-48" MAINS)

MANHOLE BASE DIMENSIONS						
DIA.	A	B	C	D	E	F
36"	53"	36"	9.5"	7.5"	58"	11"
42"	60"	42"	10"	8"	60"	9"
48"	68"	48"	11"	9"	66"	9"

NOTES:

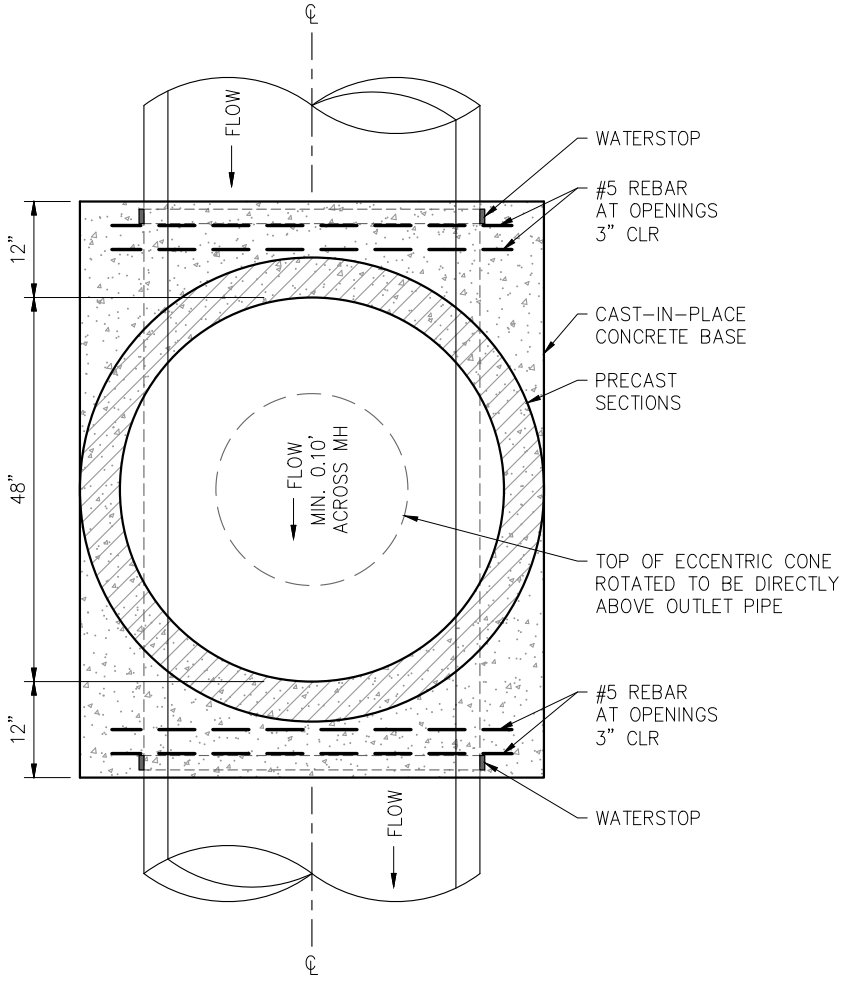
1. MANHOLE FRAME AND COVER SHALL BE SOUTH BAY FOUNDRY MODEL SBF1900 (OR APPROVED EQUAL) IMPRINTED WITH EITHER "STORM DRAIN" OR "SANITARY SEWER" MATCHING SYSTEM MAIN TYPE. FRAME AND COVER SHALL BE FLUSH WITH EXISTING GRADE (OR FINISHED GRADE IN NEW PAVEMENTS).
2. CAST-IN-PLACE CONCRETE COLLAR AND BASE SHALL BE CLASS A 6-SACK PER CALTRANS STANDARDS PLACED AGAINST UNDISTURBED EARTH OR APPROVED BACKFILL MATERIAL AT 95% COMPACTION.
3. FRAME AND BASE SHALL BE SET TO THE PRECAST SECTIONS WITH 1:3 MORTAR MIX.
4. WHEN INSTALLED IN PAVED STREETS, A MINIMUM 2" ASPHALT CONCRETE LAYER SHALL BE PLACED ABOVE THE CONCRETE COLLAR AND FLUSH WITH THE EXISTING GRADE (OR FINISHED GRADE ON NEW STREETS). TACK COAT ALL SURFACES PRIOR TO PLACING ASPHALT CONCRETE.
5. PRECAST SECTIONS SHALL CONFORM TO ASTM C-478 SPECIFICATIONS.
6. PRECAST CONCENTRIC TAPER SECTION SHALL BE USED.
7. WATERSTOPS SHALL BE PROVIDED ON ALL INLET AND OUTLET PIPE ENTRY POINTS. WATERSTOPS SHALL BE A-LOK, KORE-N-SEAL, OR APPROVED EQUAL WITH GROUT AROUND WATERSTOP.
8. LAY CUT PIPE THROUGH MANHOLE MANHOLE AND CONFORM TO CONTOUR OF BASE.
9. ALL MANHOLES SHALL PROVIDE A MINIMUM 0.10' DROP ACROSS THE MANHOLE.
10. SOFFIT ELEVATION OF ALL INLET PIPES SHALL BE NO LESS THAN THE SOFFIT ELEVATION OF THE OUTLET PIPE, EXCEPT FOR OVERFLOW PIPES.
11. CAST-IN-PLACE RISERS AND CONE MAY BE ALLOWED WHEN COMPLIANT WITH CALTRANS STANDARDS.

SOUTH SAN FRANCISCO
PUBLIC WORKS
ENGINEERING

MANHOLE SECTION (36-INCH TO 48-INCH)

APR 2023

U-4A

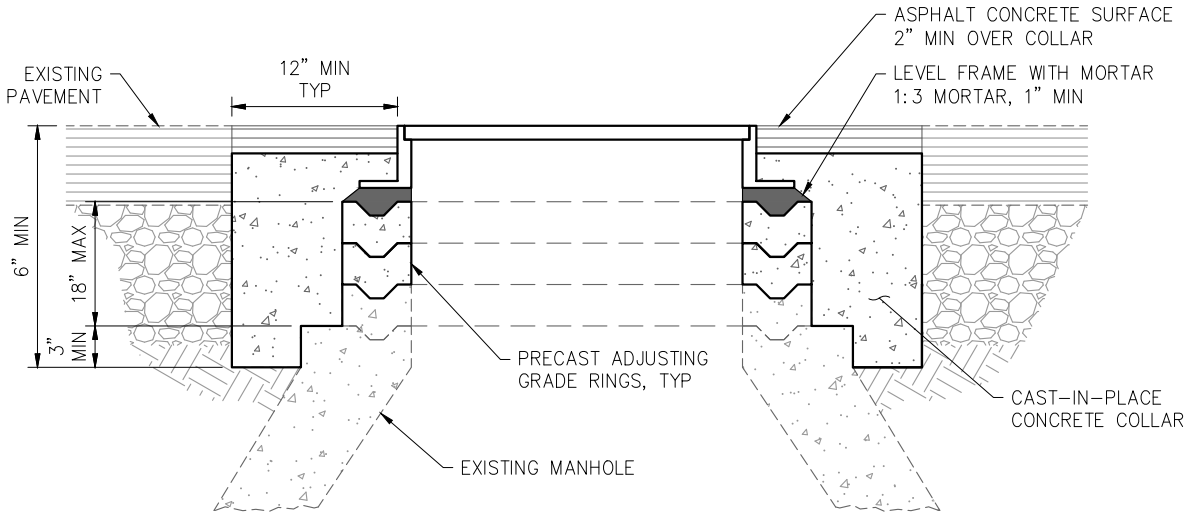


MANHOLE PLAN

NOTES:

1. CAST-IN-PLACE CONCRETE BASE SHALL BE CLASS A 6-SACK PER CALTRANS STANDARDS PLACED AGAINST UNDISTURBED EARTH OR APPROVED BACKFILL MATERIAL AT 95% COMPACTION.
2. BASE SHALL BE SET TO THE PRECAST SECTIONS WITH 1:3 MORTAR MIX.
3. PRECAST SECTIONS SHALL CONFORM TO ASTM C-478 SPECIFICATIONS.
4. PRECAST CONCENTRIC TAPER SECTION SHALL BE USED.
5. WATERSTOPS SHALL BE PROVIDED ON ALL INLET AND OUTLET PIPE ENTRY POINTS. WATERSTOPS SHALL BE A-LOK, KORE-N-SEAL, OR APPROVED EQUAL WITH GROUT AROUND WATERSTOP.
6. LAY CUT PIPE THROUGH MANHOLE MANHOLE AND CONFORM TO CONTOUR OF BASE.
7. ALL MANHOLES SHALL PROVIDE A MINIMUM 0.10' DROP ACROSS THE MANHOLE.
8. CROWN ELEVATION OF ALL INLET PIPES SHALL BE NO LESS THAN THE CROWN ELEVATION OF THE OUTLET PIPE, EXCEPT FOR OVERFLOW PIPES.

SOUTH SAN FRANCISCO PUBLIC WORKS ENGINEERING	**MANHOLE PLAN (36-INCH TO 48-INCH)**	**DEC 2020** **U-4B**

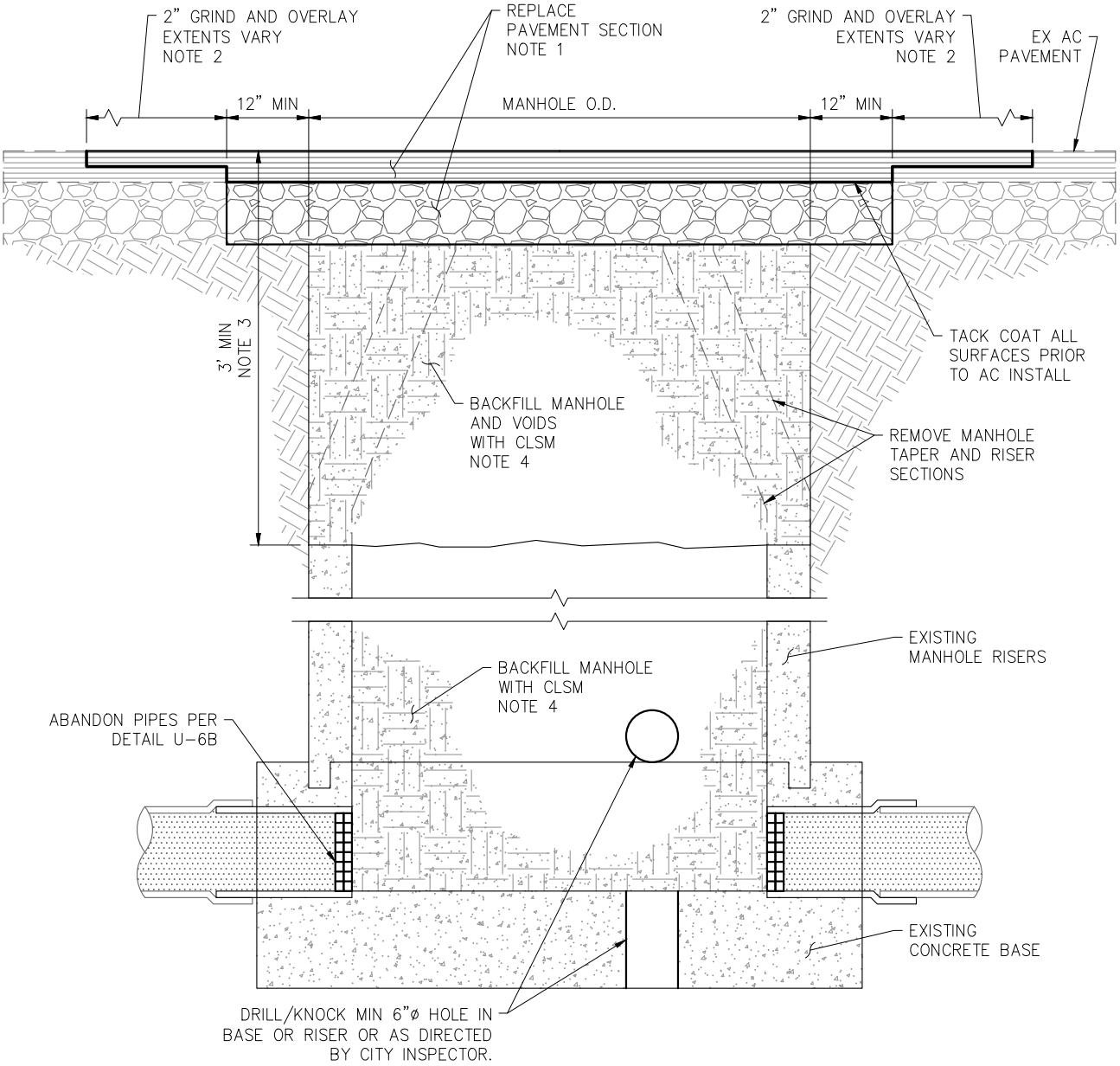


MANHOLE ADJUSTMENT TO GRADE

NOTES:

1. THIS DETAIL SHALL BE USED WHERE FRAME AND COVERS ARE BEING ADJUSTED TO GRADE.
2. FRAMES AND COVERS SHALL BE RAISED WITHIN 48 HOURS OF FINAL PAVING.
3. SEAL ALL JOINTS WITH RAM-NEK OR EQUAL.
4. GRADE RINGS SHALL BE A MAXIMUM OF 12" HIGH FOR NEW CONSTRUCTION AND MAXIMUM 18" HIGH FOR EXISTING MANHOLES. FOR ADJUSTMENTS THAT WOULD EXCEED 18" OF GRADE RINGS, THE MANHOLE SHALL HAVE NEW PRECAST RISER SECTIONS INSTALLED.
5. CONCRETE COLLAR SHALL BE PLACED AGAINST NEATLY EDGED EXCAVATION.

SOUTH SAN FRANCISCO PUBLIC WORKS ENGINEERING	**MANHOLE ADJUST-TO-GRADE**	**DEC 2020**
		U-5

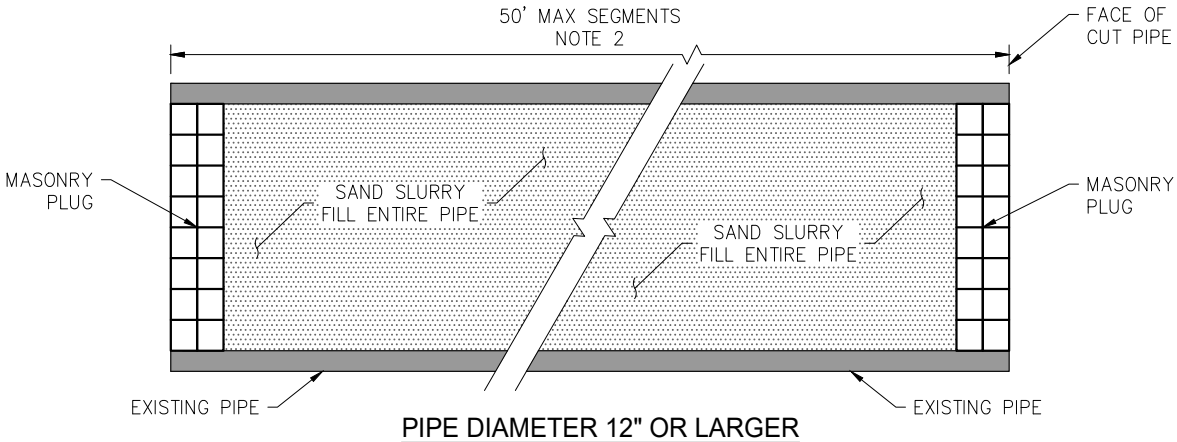


MANHOLE ABANDONMENT SECTION

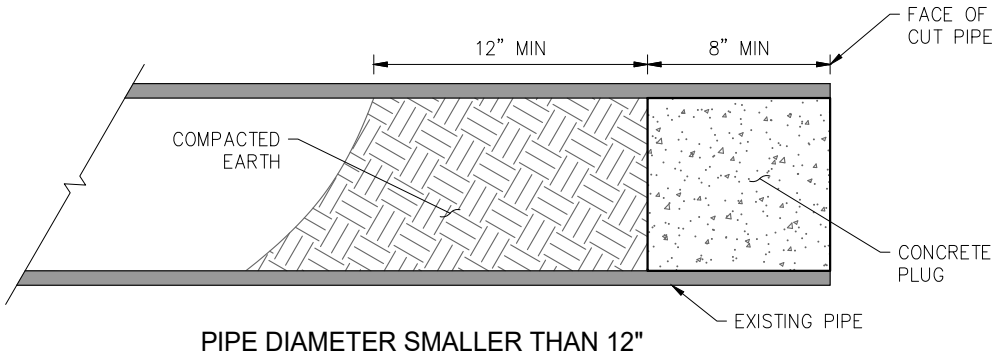
NOTES:

1. "T" CUT RESTORATION SHALL EXTEND 12" BEYOND THE OUTER DIAMETER OF THE MANHOLE. REMOVE AND REPLACE THE PAVEMENT SECTION MATCH EXISTING OR 4"AC/8"AB. BASE LAYER SHALL BE CLASS 2 AGGREGATE BASE MATCHING THE EXISTING BASE LAYER OR 8" MINIMUM. ASPHALT CONCRETE LAYER SHALL BE HOT-MIX ASPHALT MATCHING EXISTING ASPHALT LAYER OR 4" MINIMUM.
2. A 2" GRIND AND OVERLAY SHALL BE REQUIRED FOR ALL TRENCH RESTORATION IN THE ROADWAY. EXTENTS SHALL BE PER STANDARD DETAILS R-10A THROUGH R-10C.
3. REMOVE FRAME, COVER, TAPER, AND RISER SECTIONS DOWN TO A MINIMUM 4' FROM THE SURFACE.
4. PLUG ALL PIPES PER STANDARD DETAIL U-6B PIPE ABANDONMENT.
5. AFTER PLUGGING ALL PIPES CONNECTED TO THE MANHOLE, BACKFILL THE REMAINDER OF THE MANHOLE AND ALL OTHER VOIDS WITH CONTROLLED LOW STRENGTH MATERIAL (CLSM).

SOUTH SAN FRANCISCO PUBLIC WORKS ENGINEERING	**MANHOLE ABANDONMENT**	**DEC 2020**
		U-6A



PIPE DIAMETER 12" OR LARGER

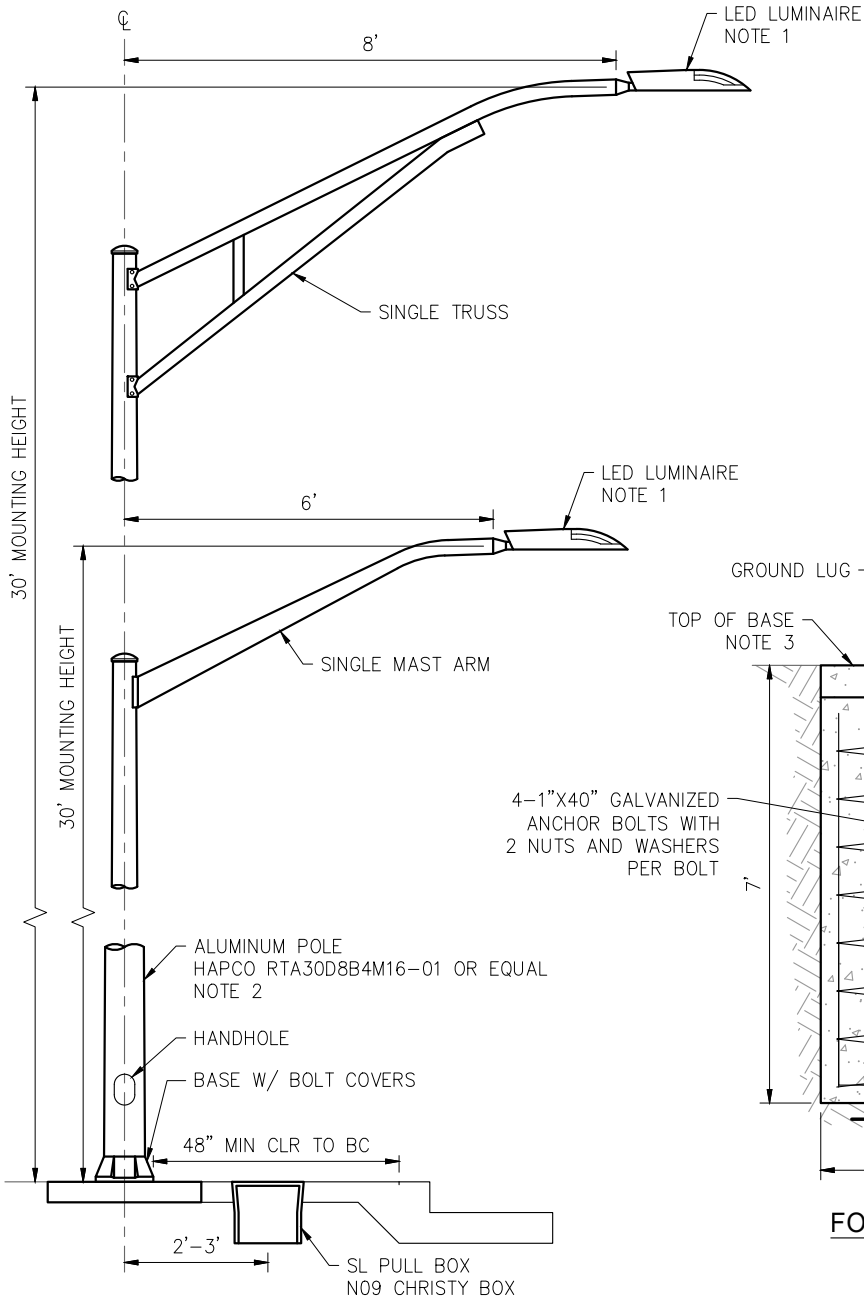


PIPE DIAMETER SMALLER THAN 12"

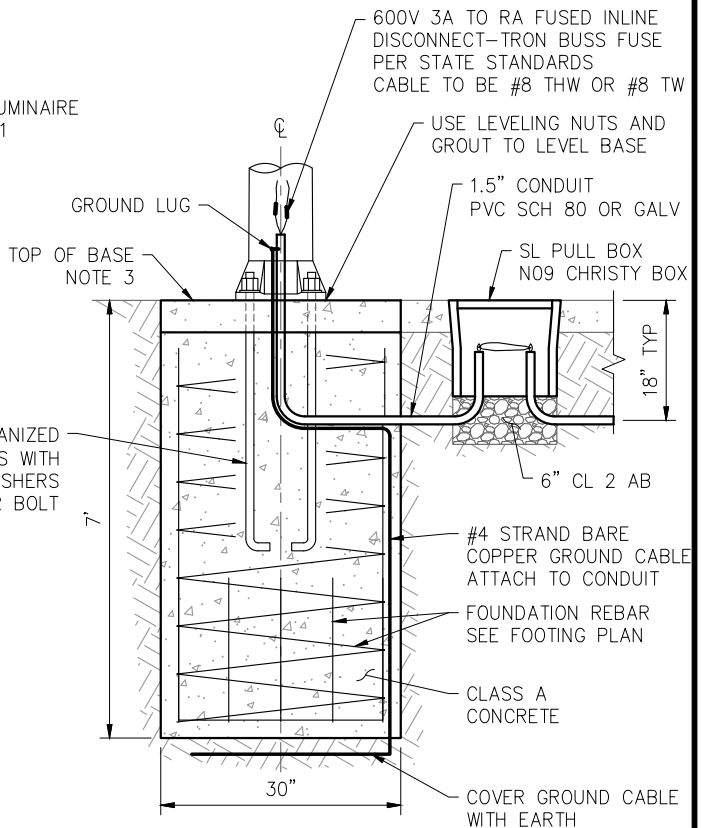
NOTES:

1. ALL PIPE PLUGS SHALL BE INSTALLED TO THE SATISFACTION OF THE PUBLIC WORKS INSPECTOR.
2. ABANDONED PIPES, 12" OR LARGER, SHALL BE BROKEN INTO 50' SEGMENTS AND COMPLETELY FILLED WITH SAND SLURRY.
3. FOR SERVICE LATERALS AT MAIN, CUT OUT AND REMOVE MAIN SECTION AND REPLACE WITH NEW MAIN PIPE. CAP AND ABANDON SERVICE LATERAL PER THE ABOVE DETAILS.
4. FOR ALL PIPE ABANDONMENT IN BAY MUD OR EAST OF 101, ALL PIPE SIZES SHALL BE ENTIRELY FILLED WITH SAND SLURRY AND PLUGGED.

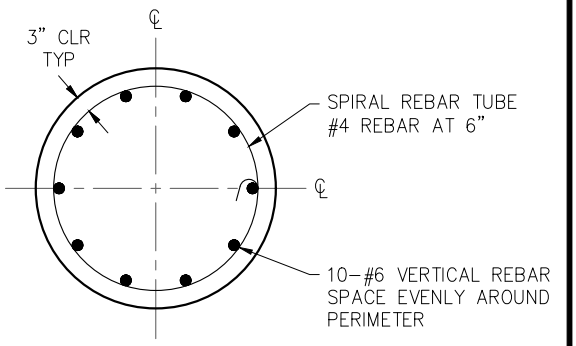
SOUTH SAN FRANCISCO PUBLIC WORKS ENGINEERING	**PIPE ABANDONMENT**	**DEC 2020**
		U-6B



POLE ELEVATION



FOOTING SECTION



FOOTING PLAN

NOTES:

1. LUMINAIRES SHALL BE LED MODELS CREE XPS1 (SINGLE) OR CREE XPS2 (DOUBLE) AS DIRECTED BY THE ELECTRICAL DIVISION. CONFIRM WITH THE ELECTRICAL DIVISION PRIOR TO ORDERING MATERIALS.
2. STREET LIGHT POLE SHALL BE HAPCO ALUMINUM SATIN FINISH OR EQUAL UNLESS OTHERWISE APPROVED BY THE PLANNING DIVISION. MAST ARM TYPE SHALL BE PER THE ELECTRICAL DIVISION DIRECTION.
3. STREET LIGHT PULL BOX SHALL BE N09 CHRISTY BOX IMPRINTED WITH "STREET LIGHT" ON THE LID.
4. WHERE STREET LIGHT IS BEING INSTALLED WITHIN NEW SIDEWALK, THE TOP 4" OF THE FOUNDATION SHALL BE POURED MONOLITHIC WITH THE SIDEWALK.
5. REFER TO CALTRANS STANDARD PLANS FOR ANY OTHER APPLICABLE DETAILS NOT COVERED BY THIS SHEET.

SOUTH SAN FRANCISCO PUBLIC WORKS ENGINEERING	**STANDARD ELECTROLIER**	**DEC 2021** **E-1**

TRAFFIC SIGNALS NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR CONTACTING PUBLIC WORKS ELECTRICAL DIVISION FOR PRE-CONSTRUCTION MEETINGS AND INSPECTIONS FOR CONSTRUCTION OF STREET LIGHTS AND SIGNAL LIGHTS.
2. ALL WORK IN THE PUBLIC RIGHT-OF-WAY SHALL BE PERFORMED BY A CALIFORNIA LICENSED CLASS "A" CONTRACTOR, UNLESS OTHERWISE APPROVED BASED ON THE SCOPE OF WORK AND THE CONTRACTOR'S LICENSE.
3. ALL NEW OR REPLACED SIGNAL LIGHT SYSTEMS SHALL CONSIST OF THE FOLLOWING EQUIPMENT UNLESS OTHERWISE APPROVED TO BE OMITTED OR REVISED BY THE PUBLIC WORKS ELECTRICAL DIVISION.

POLE: SIGNAL POLE SHALL COMPLY WITH CALTRANS STANDARDS. COLOR SHALL BE STEEL OR GREY.

CABINET: SHALL BE A 350i ATC CABINET. CABINET SHALL BE TESTED BY THE ELECTRICAL DIVISION 30 DAYS PRIOR TO FIELD INSTALLATION

CONTROLLER: SHALL BE A 2070LX CONTROLLER WITH D4 SOFTWARE INSTALLED. CONTROLLER SHALL BE TESTED BY THE ELECTRICAL DIVISION 30 DAYS PRIOR TO FIELD INSTALLATION

DETECTION: INTERSECTION TRAFFIC DETECTION SHALL CONSIST OF THE ITERIS VANTAGE VECTOR HYBRID SYSTEM.

MANAGEMENT: INTERSECTION TRAFFIC MANAGEMENT SHALL BE INTEGRATED INTO THE CITY'S SYSTEM. THE INTERSECTION SHALL INCLUDE THE KIMLEY-HORN ADAPTIVE TRAFFIC CONTROL SYSTEM SWITCHES FOR THE KITS ADVANCED TRAFFIC MANAGEMENT SYSTEM (ATMS).

BATTERY: BACK-UP BATTERY SYSTEM SHALL BE ECONOLITE ZINBLUE2 1500 W UNINTERRUPTIBLE POWER SUPPLY (UPS) SYSTEM WITH 2 SHELF MOUNTING BATTERIES. BACK-UP BATTERY SYSTEM AND BATTERY SHALL BE INSTALLED INSIDE THE CABINET.

PEDESTRIAN: PEDESTRIAN PUSH BUTTON SYSTEM SYSTEM SHALL BE INSTALLED FOR CROSSINGS AND CONSIST OF THE POLARA iCCU-S2 SHELF MOUNT CONTROL UNIT AND iN2 (iNAVIGATOR 2-WIRE) PUSH BUTTON EQUIPMENT iDETECT - TOUCHLESS ACTIVATION (iDS). SIGNAL HOUSING SHALL BE MCCAIN PEDESTRIAN SIGNAL HOUSING 16-INCH POLYCARBONITE BLACK WITH 16-INCH VANTAGE VISOR. PEDESTRIAN SIGNAL SHALL BE GTX CITY LED COUNTDOWN PEDESTRIAN SIGNAL.

STREET SIGN: MAST ARM MOUNTED STREET SIGNS SHALL BE TEMPLE EDGE-LIT INTERNALLY-ILLUMINATED LED SIGNS. COLORS SHALL COMPLY WITH CALTRANS STANDARDS.

SIGNALS: SIGNAL LIGHTS ASSEMBLY AND VISORS SHALL BE POLYCARBONITE BLACK. SIGNAL BACKPLATES SHALL BE 5-INCH WIDTH ABS INTEGRALLY MOLDED WITH REFLECTIVE TAPE. SIGNAL MODULES SHALL BE GTX CITY VLA MODEL (CALTRANS) LED 12-INCH.

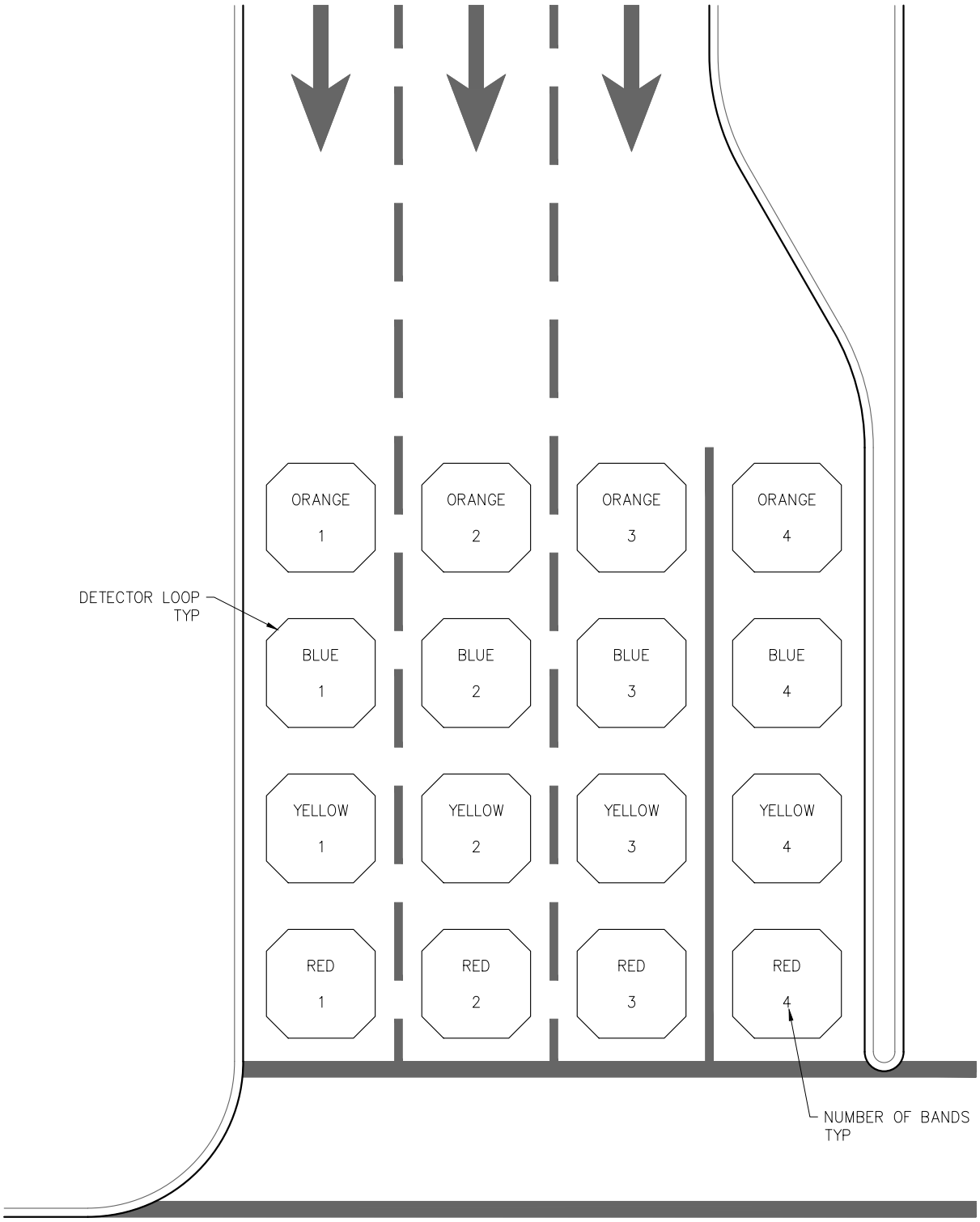
LUMINAIRES: STREET LIGHT SHALL BE CREE XSP2 LED STREET / AREA LUMINAIRE STREET LIGHT FIXTURE.

PREEMPTION: EMERGENCY VEHICLE PREEMPTION (EVP) SHALL CONSIST OF THE OPTICOM INFRARED SYSTEM.

MOUNTING: ALL MOUNTING CONFIGURATIONS SHALL BE PER CALTRANS STANDARDS UNLESS OTHERWISE APPROVED.

CONNECTION: RUN FIBER OR SIGNAL INTERCONNECT CABLE TO NEAREST INTERSECTION AND SPLICE CABLE INTO CITY SIGNAL SYSTEM. PULL BOXES SHALL BE CHRISTY N48 WITH "SSF FIBER" AS THE COVER LABEL.

CONDUITS: STREET LIGHT CONDUITS SHALL BE 2-INCH MINIMUM. ANY EMPTY CONDUIT INSTALLED FOR FUTURE USE SHALL HAVE PULL ROPES INSTALLED.



NOTES:
1. THIS DETAIL IS FOR REPAIR OR RELOCATION OF DETECTOR LOOPS. CITY INTERSECTIONS SHALL BE UPGRADED TO CAMERA DETECTION UNLESS OTHERWISE APPROVED.

SOUTH SAN FRANCISCO PUBLIC WORKS ENGINEERING	**DETECTOR LOOP COLOR CODING**	**DEC 2020** **E-3**