

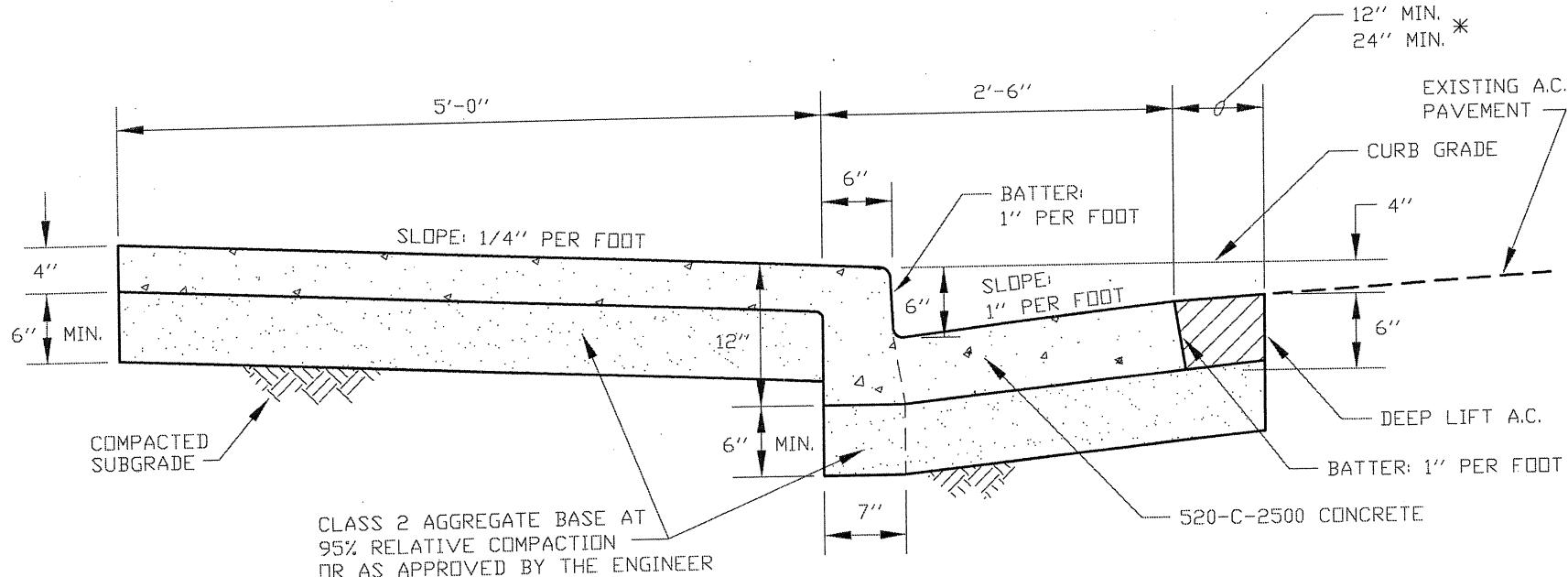
# **STREET IMPROVEMENTS DETAILS**



ENGINEERING DEPARTMENT

**TYPE "A" CURB, GUTTER, AND SIDEWALK**

CALIFORNIA 94403



**TYPE "A"**

NOTE: FOR EXPANSION JOINTS, WEAKEND PLANE JOINTS AND SCORING, SEE "MISCELLANEOUS DETAILS - CURB, GUTTER, AND SIDEWALK" STD. 3-1-141C.

NOTE: PROVIDE AND INSTALL # 4 x 12" LONG DOWELS AT 18" O.C. MAXIMUM AT THE END OF UNFINISHED CONCRETE POUR OR WHERE NEW CONCRETE JOINS EXISTING CONCRETE.

NOTE: CONCRETE SHALL CONTAIN 1LB OR 1PT OF LAMP BLACK PER CU. YD.

NOTE: CURB AND GUTTER TO BE POURED MONOLITHIC UNLESS APPROVED BY CITY ENGINEER.

\* REQUIRED ONLY WHERE EXISTING A.C. PAVEMENT IS NOT BEING RECONSTRUCTED AND ONLY FOR THE PURPOSE OF SETTING UP FORMS AT LIP OF GUTTER.

DATE	DRAWN BY	CHECKED BY	APPROVED
2002	PC	OC	<i>Mark Barnes</i> CITY ENGINEER

CASE 3 DRAWER 1 SET 141A

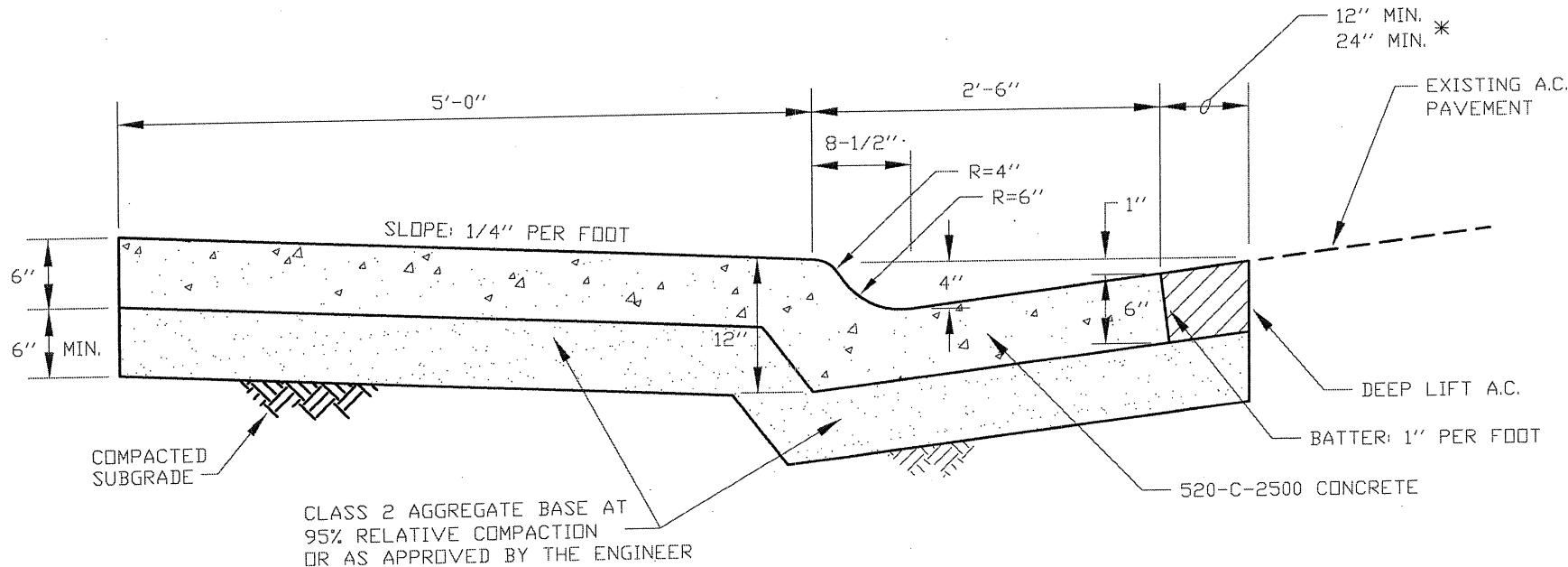


ENGINEERING DEPARTMENT

TYPICAL SECTION OF  
TYPE "B" CURB, GUTTER, AND SIDEWALK

CALIFORNIA 94403

DATE	DRAWN BY	CHECKED BY	APPROVED
2002	PC	OC	<i>Mark O. Reams</i> CITY ENGINEER

TYPE "B"

## NEED SPECIAL APPROVAL BY CITY ENGINEER

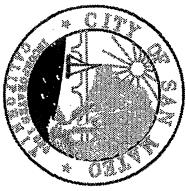
NOTE: FOR EXPANSION JOINTS, WEAKEND PLANE JOINTS AND SCORING, SEE "MISCELLANEOUS DETAILS - CURB, GUTTER, AND SIDEWALK" STD. 3-1-141C.

NOTE: PROVIDE AND INSTALL # 4 x 12" LONG DOWELS AT 18" O.C. MAXIMUM AT THE END OF UNFINISHED CONCRETE POUR OR WHERE NEW CONCRETE JOINS EXISTING CONCRETE.

NOTE: CONCRETE SHALL CONTAIN 1LB OR 1PT OF LAMP BLACK PER CU. YD.

NOTE: CURB AND GUTTER TO BE POURED MONOLITHIC UNLESS APPROVED BY CITY ENGINEER.

\* REQUIRED ONLY WHERE EXISTING A.C. PAVEMENT IS NOT BEING RECONSTRUCTED AND ONLY FOR THE PURPOSE OF SETTING UP FORMS AT LIP OF GUTTER.



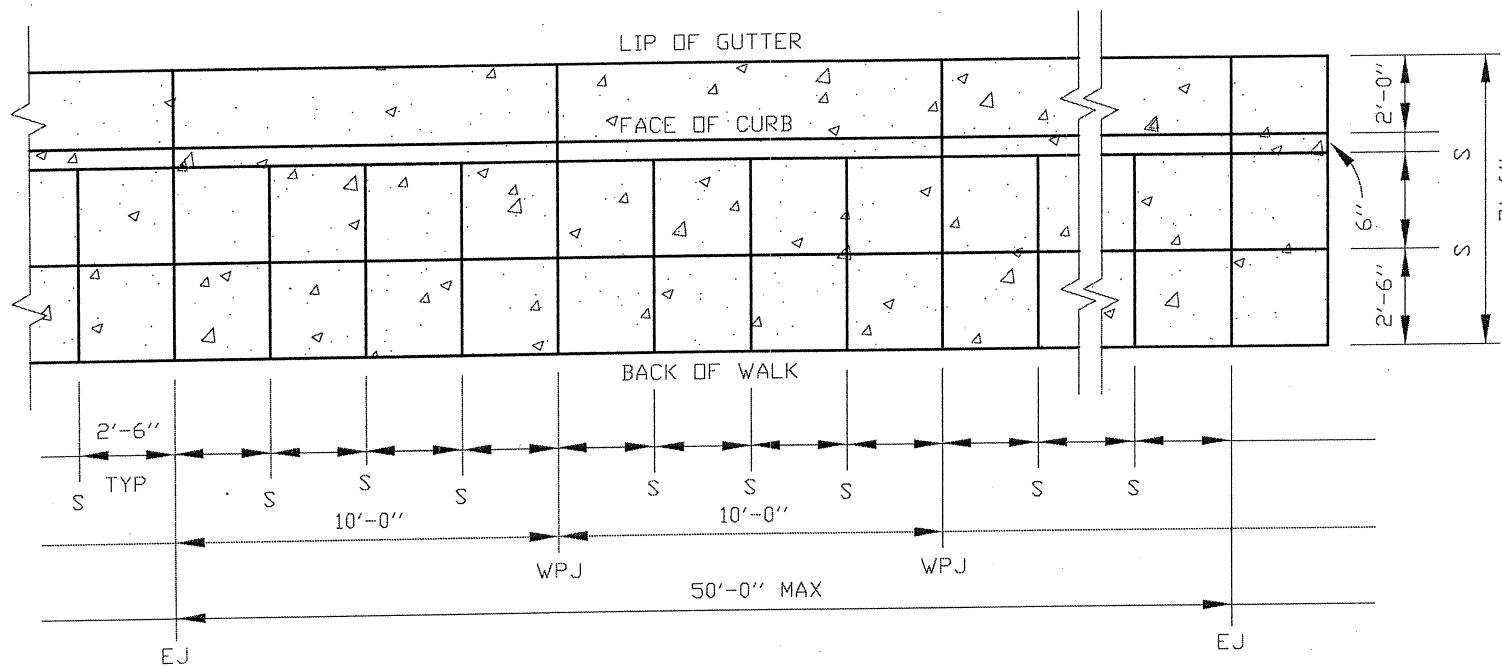
ENGINEERING DEPARTMENT

## MISCELLANEOUS DETAILS CURB, GUTTER, AND SIDEWALK

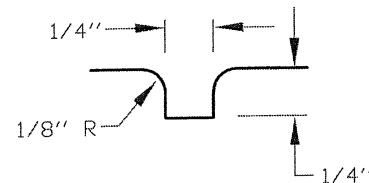
CALIFORNIA 94403

DATE	DRAWN BY	CHECKED BY	APPROVED
2002	PC	OC	<i>Mark Deems</i> CITY ENGINEER

## TYPICAL 5' SIDEWALK

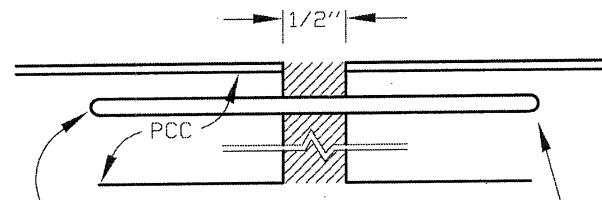


### SCORING DETAIL



### EXPANSION JOINT DETAIL

NOT REQUIRED UNLESS  
DIRECTED BY ENGINEER



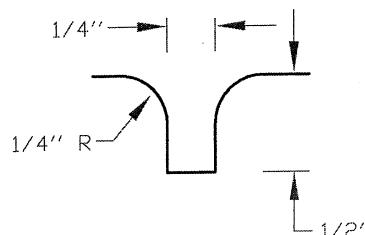
### LEGEND

S = SCORE LINE

EJ = EXPANSION JOINT

WPJ = WEAKENED PLANE JOINT

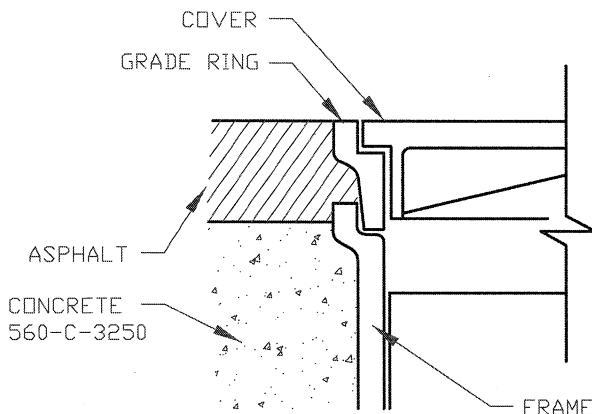
### WEAKENED PLANE JOINT DETAIL



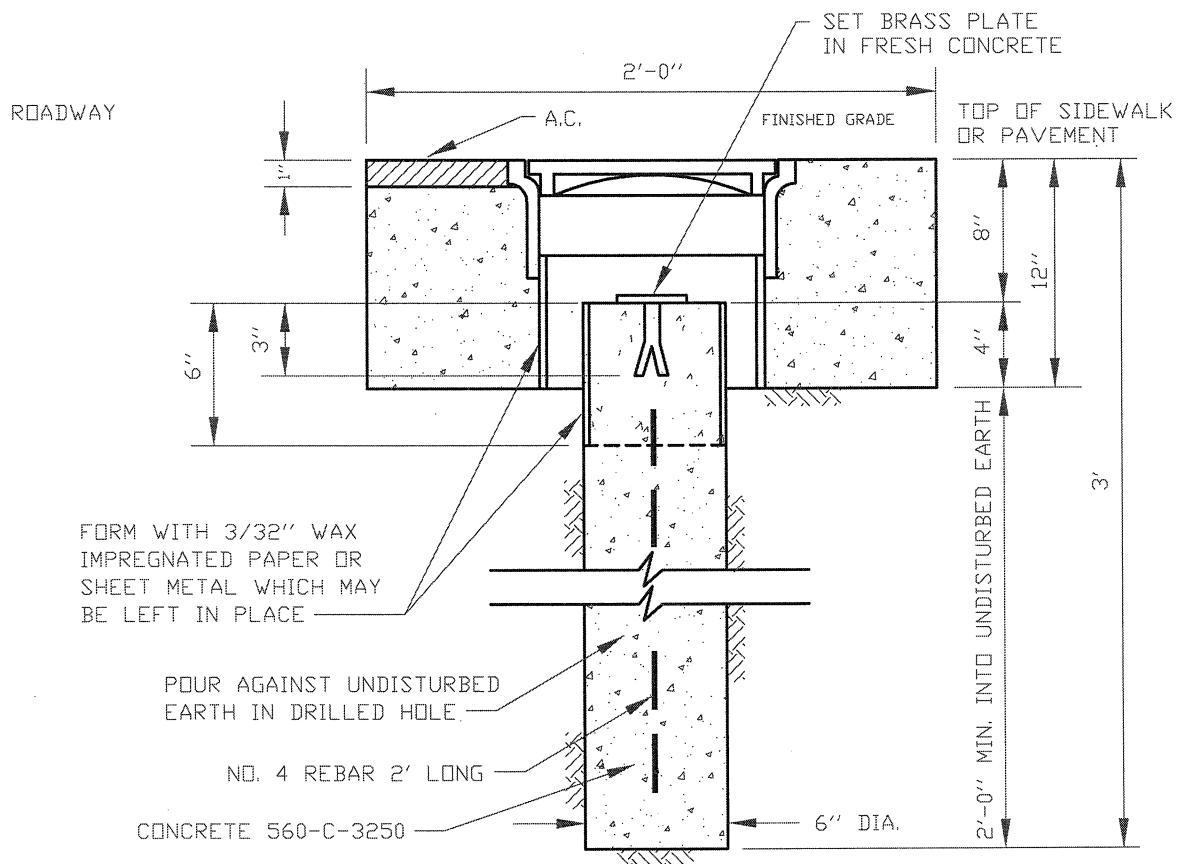
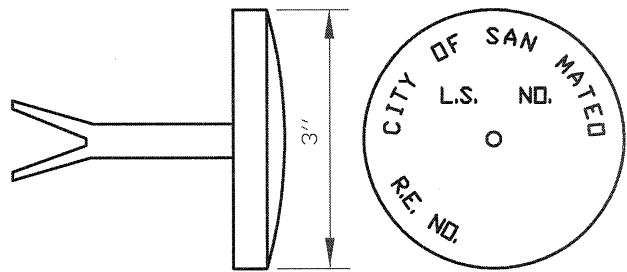
WRAP ONE SIDE  
WITH ONE LAYER  
OF BUILDING PAPER

NOTES:

1. REGISTERED ENGINEER OR LAND SURVEYOR NO. AND YEAR SHALL BE  $\frac{3}{16}$ " MIN. STAMP ON PLATE.
2. MONUMENT MARK SHALL BE A  $\frac{1}{8}$ " DIA. DRILLED HOLE OR WELL DEFINED PUNCH MARK AND CROSS PLACED WITHIN THE CLEAR CENTER AREA OF THE PLATE.
3. FRAME AND COVER SHALL BE AS DETAILED ON STD DWG 3-1-143.



GRADE RING DETAIL

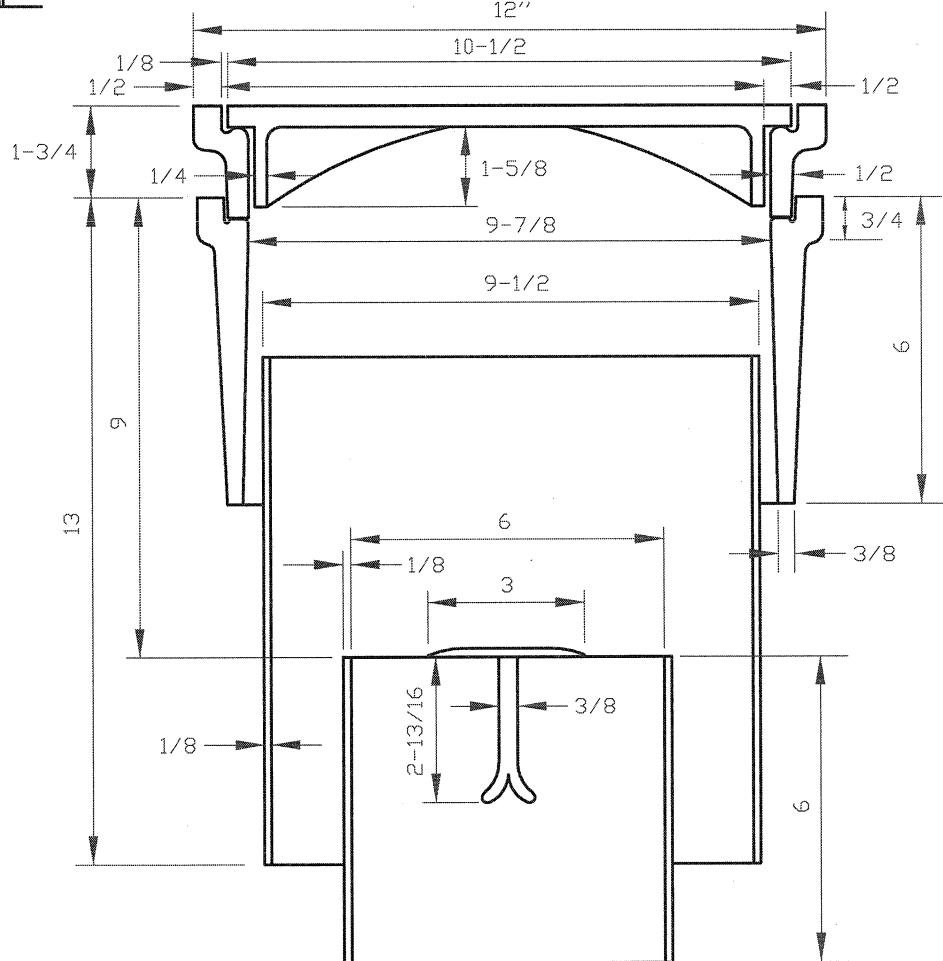
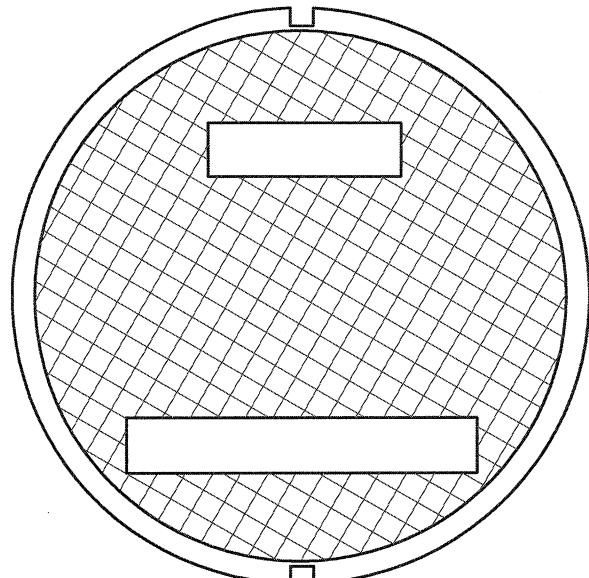
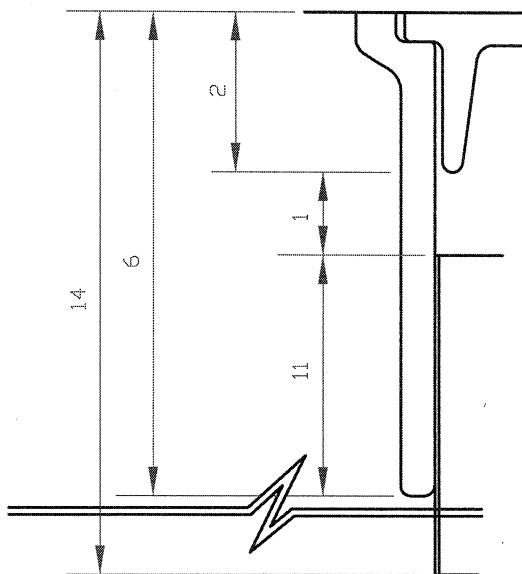


ENGINEERING DEPARTMENT

CALIFORNIA 94403

STANDARD MONUMENT

DATE	DRAWN BY	CHECKED BY	APPROVED	CASE	DRAWER	SET
2002	PC	OC	<i>Clarke Dreams</i> CITY ENGINEER	3	1	142



NOTE:

1. REFER TO STD. DWG 3-1-142.

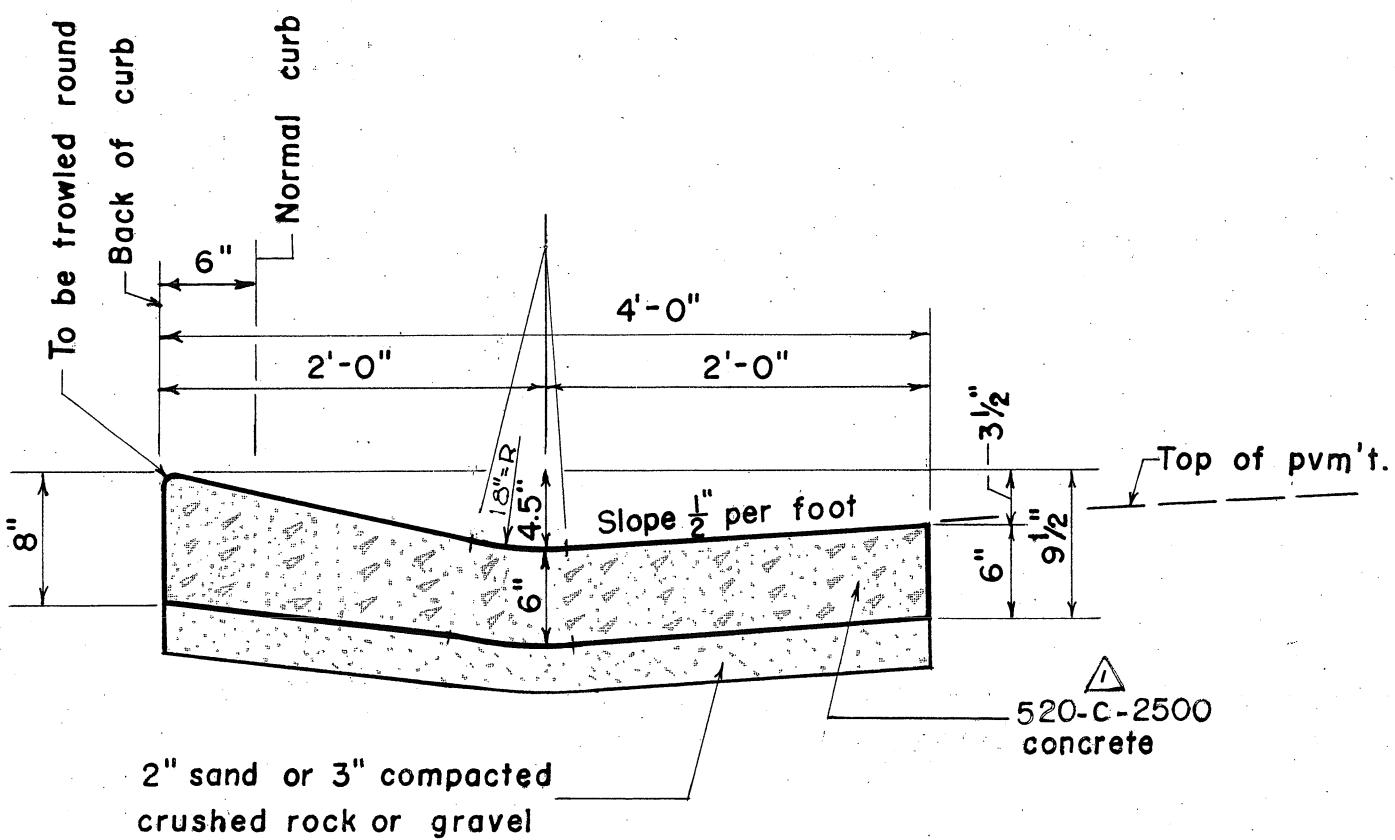


ENGINEERING DEPARTMENT

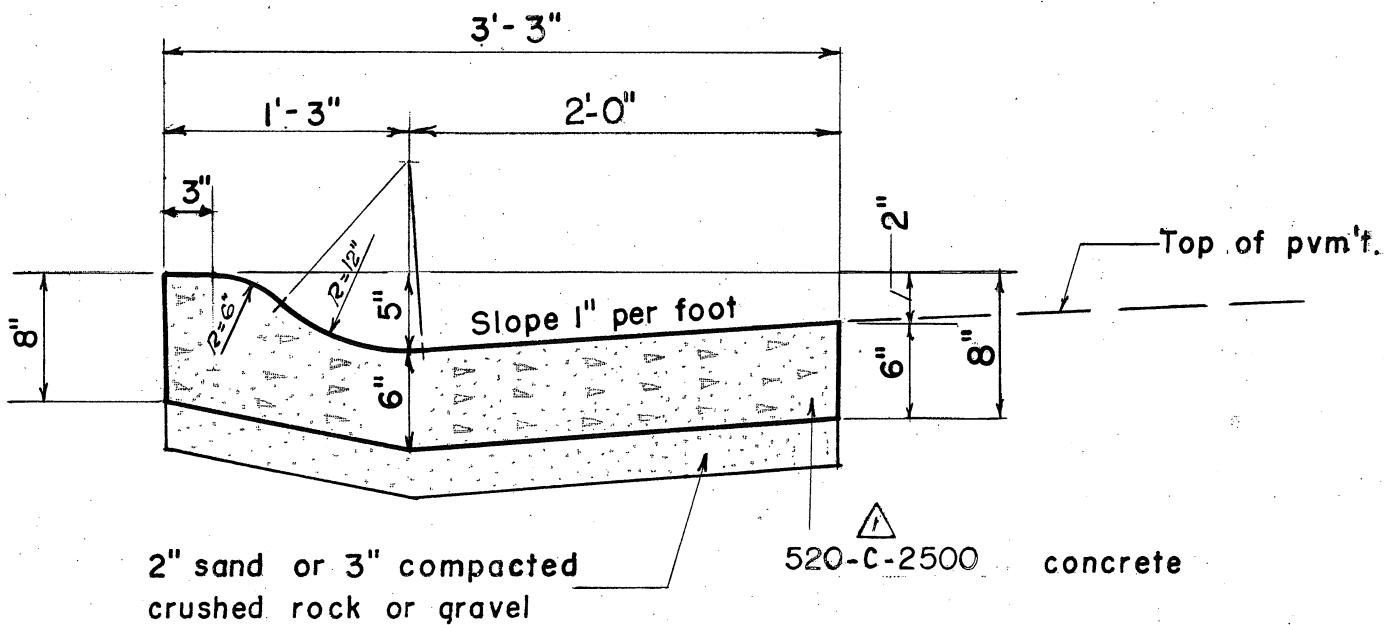
**STANDARD CAST IRON MONUMENT  
FRAME, COVER AND RISER RING**

CALIFORNIA 94403

DATE	DRAWN BY	CHECKED BY	APPROVED	CASE	DRAWER	SET
2002	PC	OC	<i>Mark Adams</i> CITY ENGINEER	3	1	143



TYPE C\*



TYPE C\*

\* To be used in special case with permission from City Engineer.

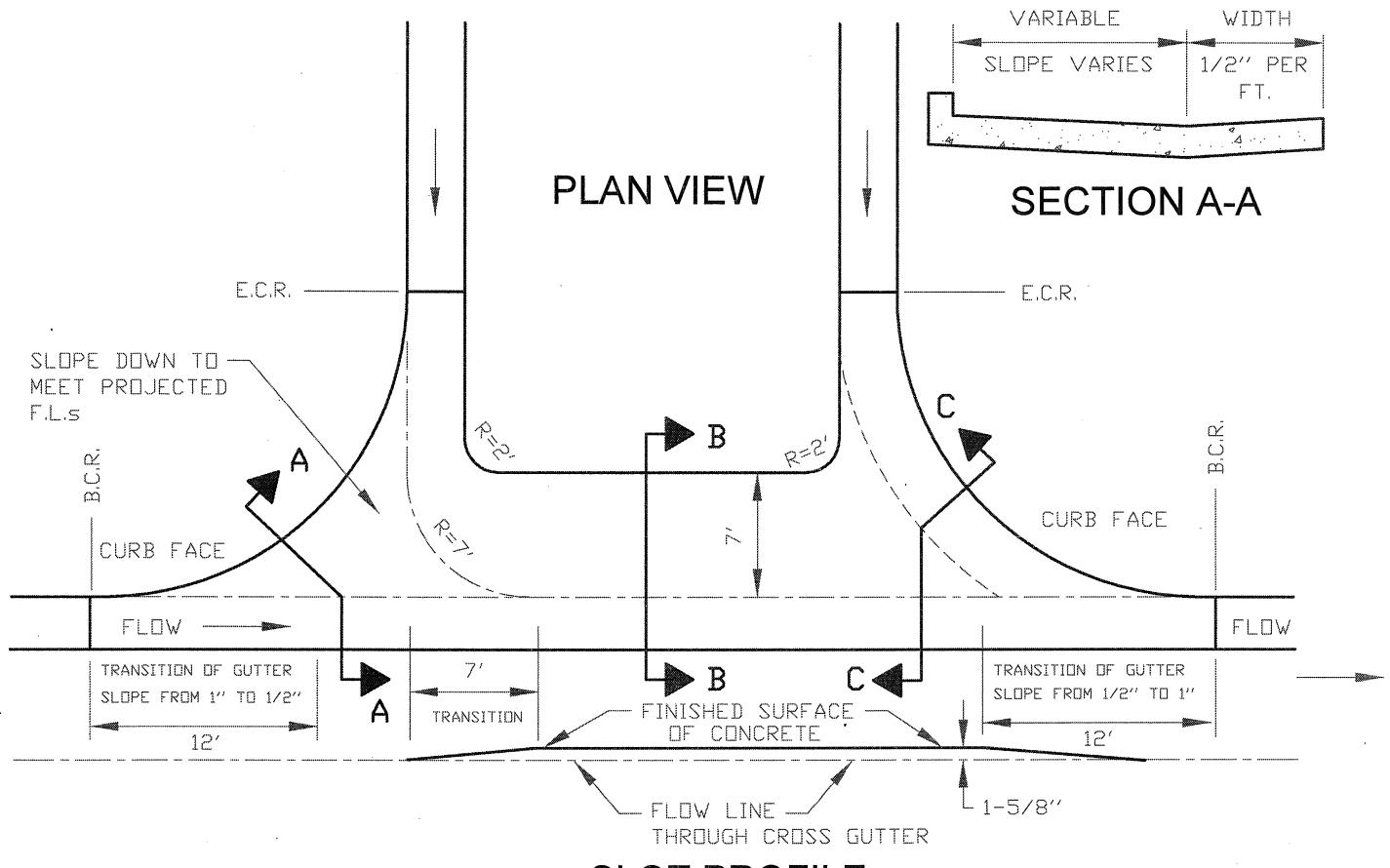
REVISION JUNE 28 1989

STANDARD  
TYPICAL SECTIONS OF ROLLED TYPE CURB AND GUTTER

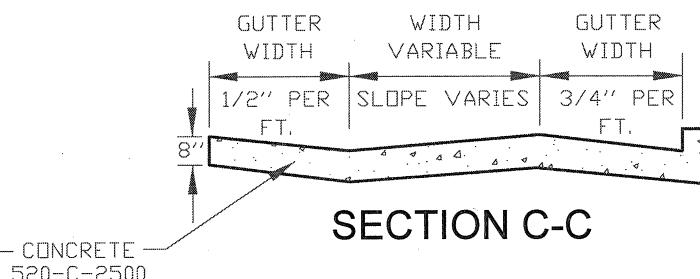
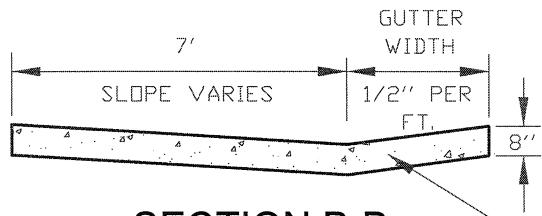
SAN MATEO, CALIF.

DATE	DRAWN BY	CHK. BY	APPROVED	PLAN CASE	DRAWER	SHEET
1973	C. P. W.	J. G.	<i>[Signature]</i>	3	1	144

CITY ENGINEER



### SLOT PROFILE

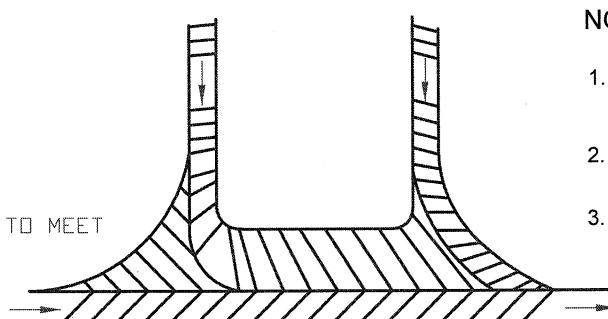


CONCRETE 520-C-2500

### NOTES:

1. TO BE USED ON GRADES NO GREATER THAN 2% NOR LESS THAN 1%.
2. THIS DESIGN SHALL BE USED ONLY WHEN SPECIFIED.
3. CONCRETE 520-C-2500.

WARP PAVEMENT TO MEET VALLEY GUTTER.



### FLOW SKETCH

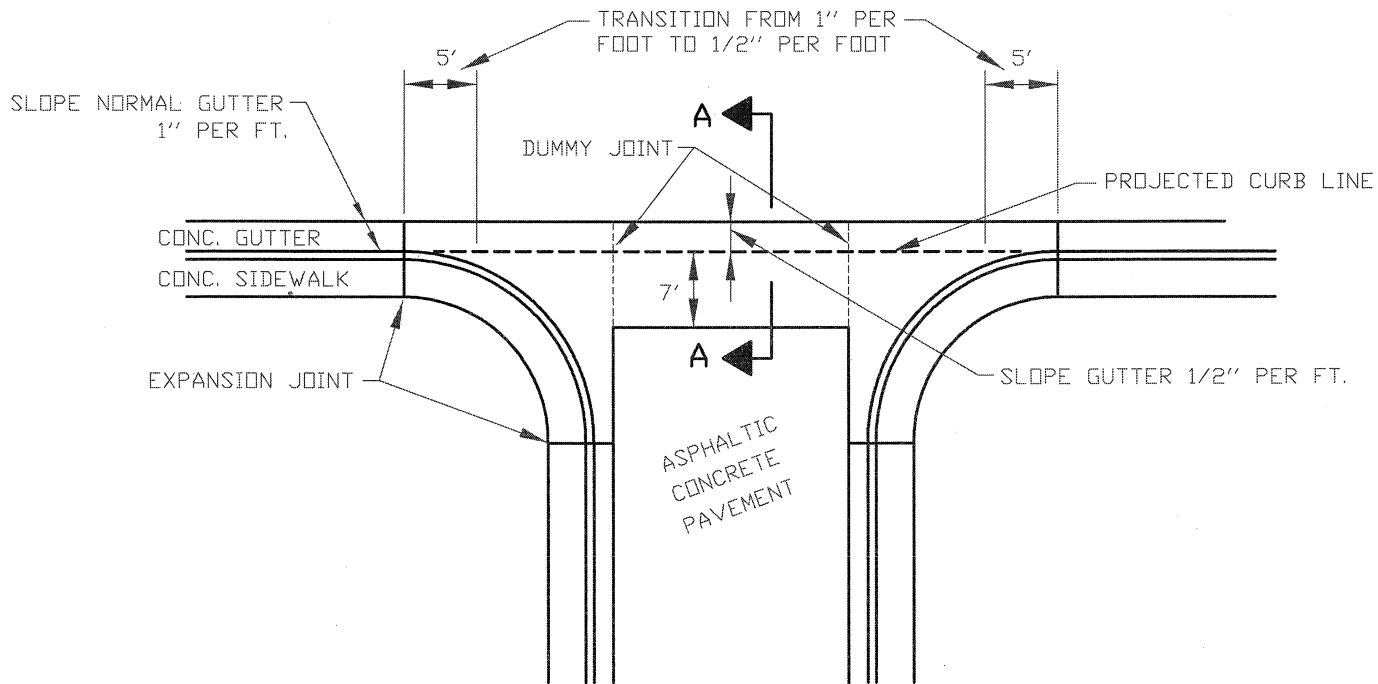


ENGINEERING DEPARTMENT

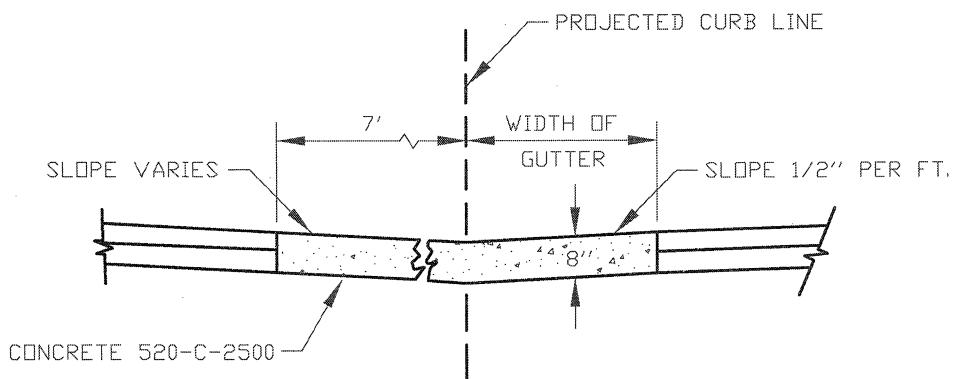
CALIFORNIA 94403

### SPECIAL CONCRETE VALLEY GUTTER

DATE	DRAWN BY	CHECKED BY	APPROVED	Clark Ohans	CASE	DRAWER	SET
2002	PC	OC			3	1	145



PLAN



SECTION A-A

NOTE:

WARP PAVEMENT TO MEET VALLEY GUTTER.  
FLOW LINE OF GUTTER SHALL BE MAINTAINED -  
NOT THE LIP OF GUTTER.



ENGINEERING DEPARTMENT

CALIFORNIA 94403

STANDARD CONCRETE VALLEY GUTTER

DATE  
2002

DRAWN BY  
PC

CHECKED BY  
OC

APPROVED

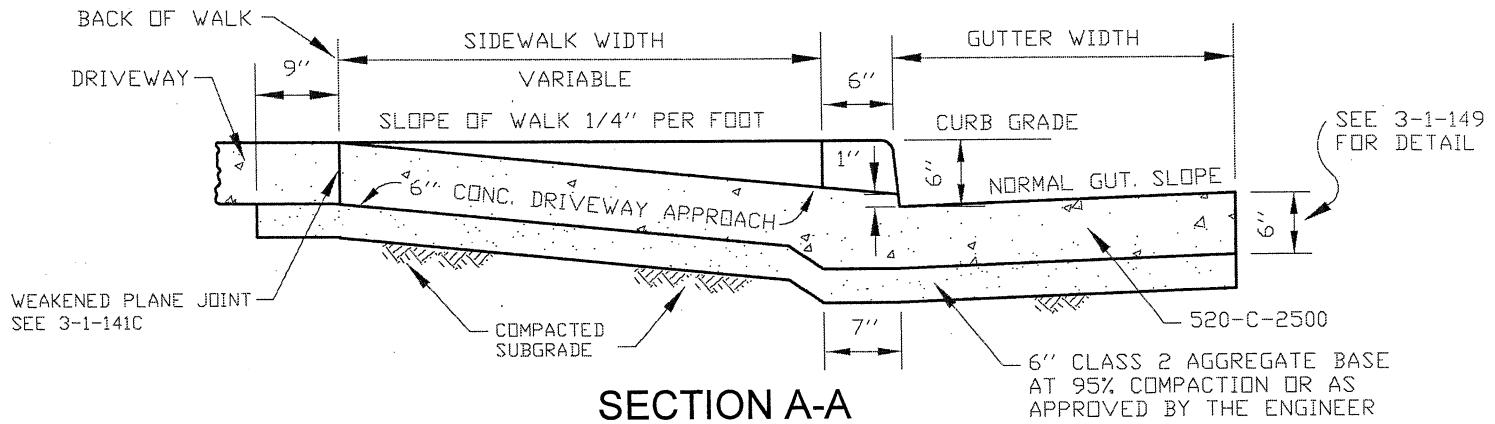
*John O'Bryan*  
CITY ENGINEER

CASE  
3

DRAWER  
1

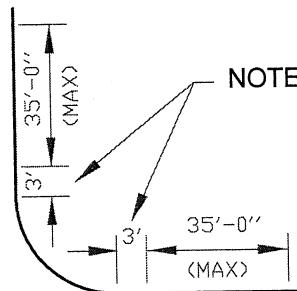
SET  
146

# FOR PLAN AND ELEVATION DETAIL REFER TO CURRENT CALTRANS STANDARD PLAN A87A



## NOTES:

- 1: WHEN EXISTING CONCRETE IMPROVEMENTS ARE TO BE REMOVED AND REPLACED WITH NEW DRIVEWAY THEY SHALL BE CUT WITH A CONCRETE SAW.
- 2: PROVIDE A SAFETY ISLAND WITH NOT LESS THAN 20' OF PARKING AREA BETWEEN DRIVEWAYS UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
- 3: IF EXPANSION JOINT FALLS IN DRIVEWAY, PLACE IN CENTER BETWEEN CURB CUTS.
- 4: W = WIDTH OF DRIVEWAY
- 5: CONCRETE SHALL CONTAIN 1 LB. OR 1 PT. OF LAMP BLACK PER CUBIC YARD.
- 6: PROVIDE AND INSTALL #4 x 12" LONG DOWELS AT 18" O.C. MAXIMUM AT THE END OF UNFINISHED CONCRETE POUR OR WHERE NEW CONCRETE JOINS EXISTING CONCRETE.



NOTE: NO DRIVEWAY SHALL BE CONSTRUCTED WITHIN THREE FEET OF ANY CURB RETURN.



ENGINEERING DEPARTMENT

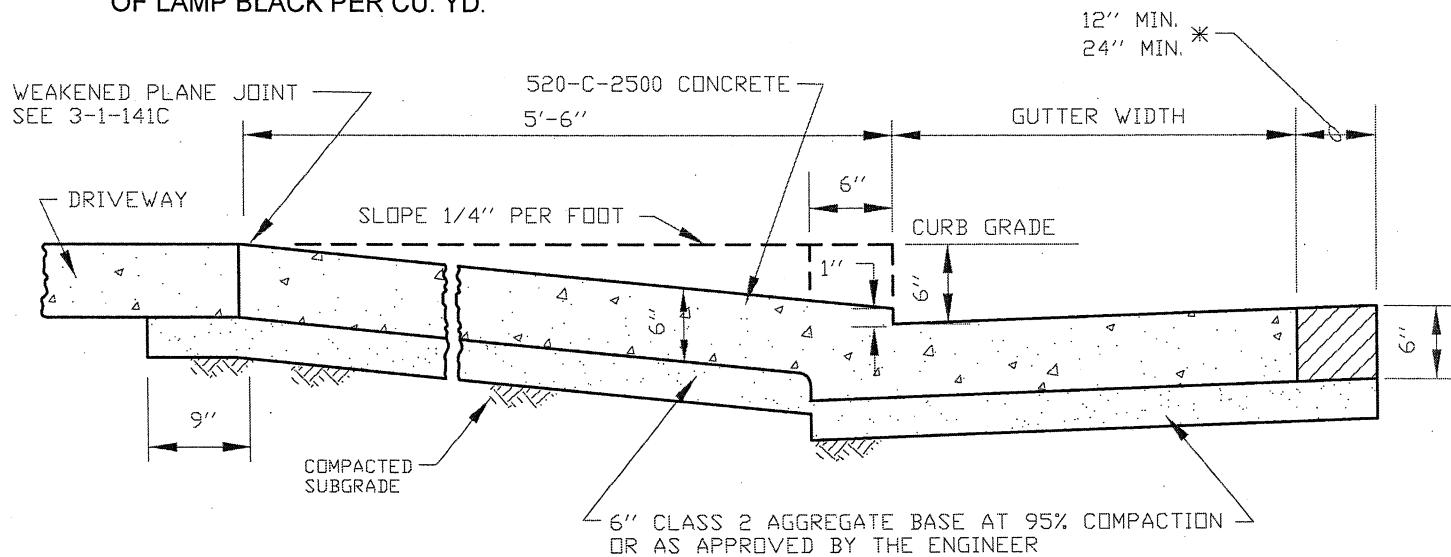
## STANDARD COMMERCIAL DRIVEWAY APPROACH

DATE	DRAWN BY	CHECKED BY	APPROVED	CASE	DRAWER	SET
2002	PC	OC		3	1	148

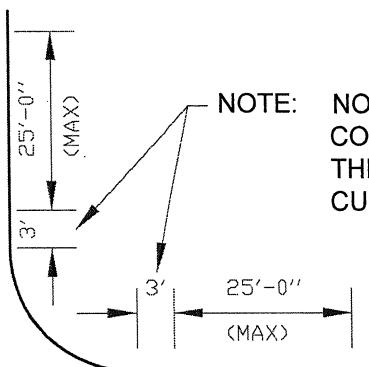
CALIFORNIA 94403

# FOR PLAN AND ELEVATION DETAIL REFER TO CURRENT CALTRANS STANDARD PLAN A87A

NOTE: CONCRETE SHALL CONTAIN 1 LB. OR 1 PINT  
OF LAMP BLACK PER CU. YD.



## SECTION A-A



NOTE: NO DRIVEWAY SHALL BE  
CONSTRUCTED WITHIN  
THREE FEET OF ANY  
CURB RETURN.

\* REQUIRED ONLY WHERE EXISTING A.C. PAVEMENT  
IS NOT BEING RECONSTRUCTED AND ONLY FOR  
THE PURPOSE OF SETTING UP FORMS AT LIP OF  
GUTTER.

NOTE: WHEN EXISTING CONCRETE IMPROVEMENTS ARE TO BE REMOVED  
AND REPLACED WITH NEW DRIVEWAY THEY SHALL BE CUT WITH A  
CONCRETE SAW.

PROVIDE AND INSTALL #4 x 12" LONG DOWELS AT 18" O.C. MAXIMUM  
AT THE END OF UNFINISHED CONCRETE POUR OR WHERE NEW  
CONCRETE JOINS EXISTING CONCRETE.

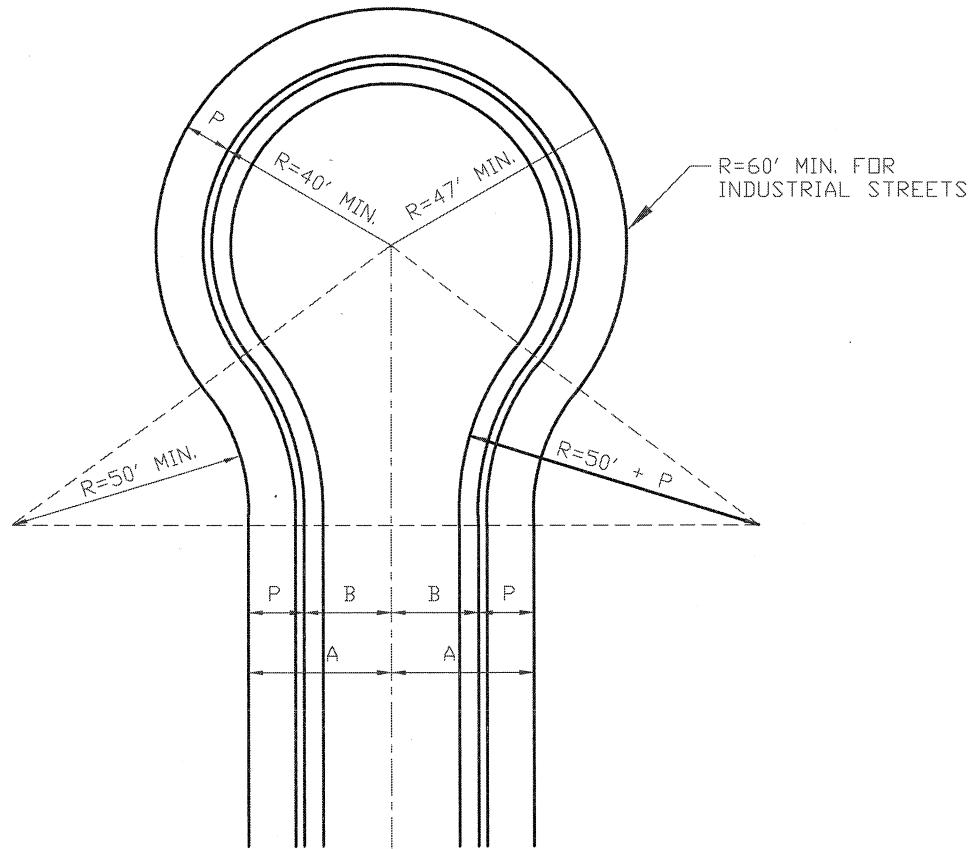


ENGINEERING DEPARTMENT

CALIFORNIA 94403

## STANDARD RESIDENTIAL DRIVEWAY APPROACH

DATE	DRAWN BY	CHECKED BY	APPROVED	CASE	DRAWER	SET
2002	PC	OC		3	1	149



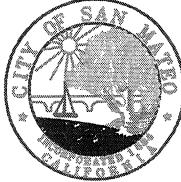
NOTES:

A = 25' MINIMUM

B = 18' MINIMUM UNLESS OTHERWISE APPROVED

P = 7' MINIMUM (CURB, SIDEWALK, ETC.)

FOR TYPICAL SECTIONS SEE STANDARD DRAWING

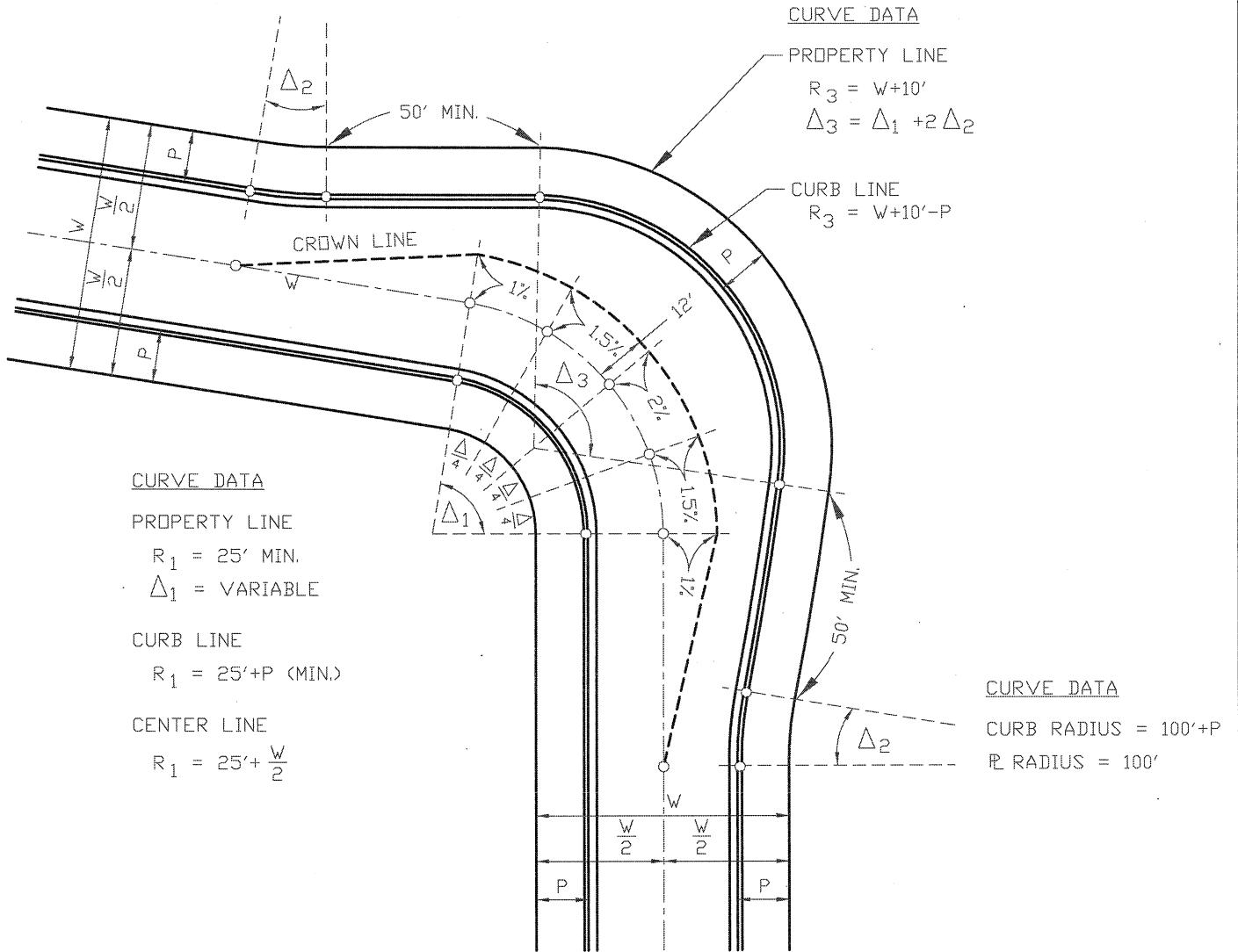


ENGINEERING DEPARTMENT

CALIFORNIA 94403

STANDARD CUL-DE-SAC

DATE	DRAWN BY	CHECKED BY	APPROVED	SIGNATURE	CASE	DRAWER	SET
2002	PC	OC		<i>Charles Adams</i> CITY ENGINEER	3	1	150



NOTES:

1. USE NORMAL SECTION FROM INNER CURB TO CENTER LINE.
2. FROM CROWN LINE TO OUTER CURB, THE MAXIMUM SLOPE IS 1" PER FOOT.
3. SUPERELEVATION PERCENTAGES SHOWN ARE STRAIGHT FROM  $\mathbb{Q}$  TO CROWN LINE.
4. ELEVATIONS ARE REQUIRED WHERE CIRCLED  $\circ$ .
5. WHEN STREETS HAVE TILT-TYPE SECTION, THE CROWN LINE WILL NOT NECESSARILY TERMINATE ON  $\mathbb{Q}$  AT  $\angle$  POINT OF CURB.

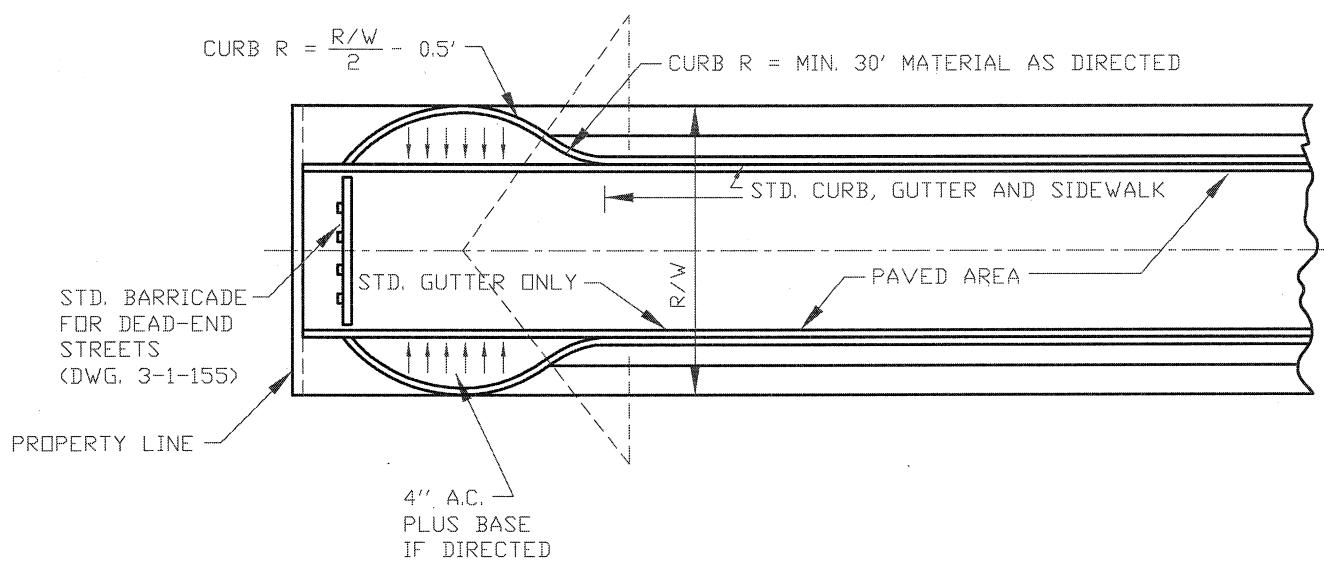


ENGINEERING DEPARTMENT

CALIFORNIA 94403

STANDARD KNUCKLE

DATE	DRAWN BY	CHECKED BY	APPROVED	CASE	DRAWER	SET
2002	PC	OC	<i>Mark Thomas</i> CITY ENGINEER	3	1	151



## TEMPORARY TURNAROUND

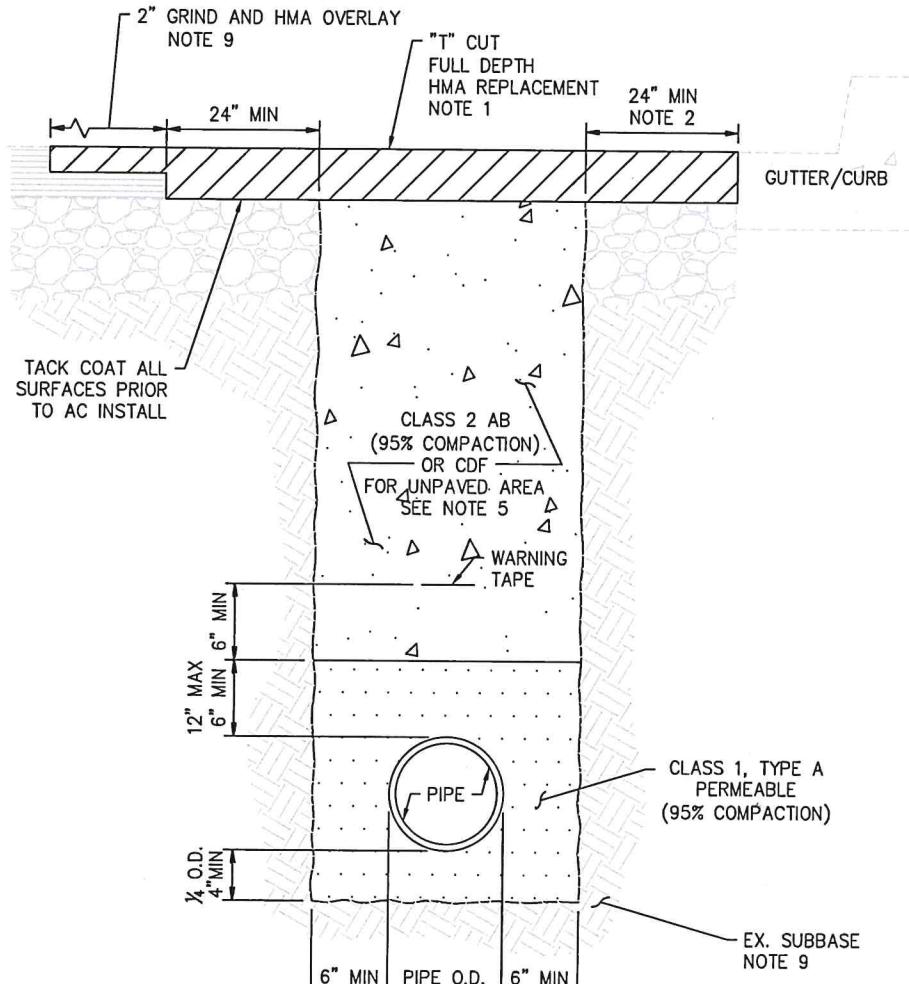


ENGINEERING DEPARTMENT

CALIFORNIA 94403

## TEMPORARY TURNAROUND

DATE	DRAWN BY	CHECKED BY	APPROVED	CASE	DRAWER	SET
2002	PC	OC	<i>Charles Stevens</i> CITY ENGINEER	3	1	152



TRENCH SECTION 1  
(PAVED/UNPAVED AREA)

NOTES:

1. "T" CUT SHALL CONSIST OF REMOVAL AND REPLACEMENT WITH HOT MIX ASPHALT FOR FULL DEPTH OF THE EXISTING ASPHALT CONCRETE LAYER OR 4" MINIMUM, WHICHEVER IS GREATER.
2. WHERE THE "T" CUT EDGE IS WITHIN 3' OF THE ADJACENT CURB OR GUTTER, THE "T" CUT SHALL BE EXTENDED TO THE ADJACENT CURB OR GUTTER.
3. ALL STRIPING OR SIGNAGE DISTURBED BY THE PROJECT SHALL BE RESTORED TO CITY STANDARDS.
4. FOR PAVED AREAS, BACKFILL SHALL BE CLASS 2 AGGREGATE BASE AT 95% COMPACTION. CONTROLLED DENSITY FILL (CDF) SHALL REQUIRE CITY ENGINEER APPROVAL.
5. 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.
6. WHERE UNSUITABLE SUBBASE MATERIAL IS ENCOUNTERED, TRENCH SHALL OVEREXCAVATE BY 12" AND BACKFILL WITH CLASS 1, TYPE A PERMEABLE MATERIAL.
7. PRIOR TO FINISHING THE WORK DAY, OPEN TRENCHES SHALL BE PLATED OR BACKFILLED AND PAVED WITH HMA. ON ARTERIAL STREETS, PLATES SHALL BE TACK-WELDED TOGETHER AND SHALL BE RECESSED TO BE FLUSH WITH EXISTING PAVEMENT.
8. ASPHALT TYPE SHALL MATCH EXISTING ASPHALT. IF TYPE A, HOT MIX ASPHALT SHALL MEET 2010 CALTRANS STANDARD SPECIFICATIONS SECTION 39 (15% RAP).
9. PAVEMENT RESTORATION PER CITY STANDARD DETAIL NOS. 153F-153H.



UTILITY TRENCH (TYPICAL STREETS)

APPROVED  
*Malin*  
PUBLIC WORKS DIRECTOR

DATE

JUNE 2024

SCALE

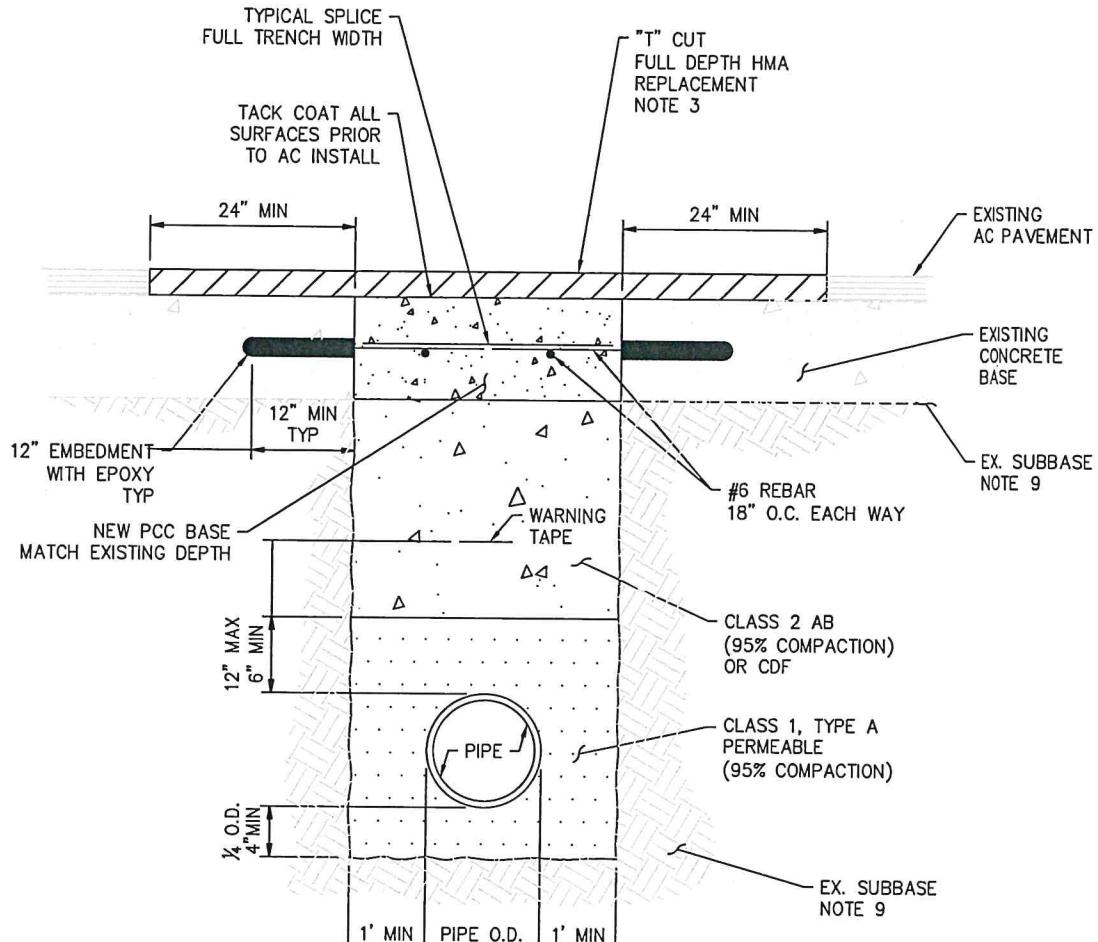
N.T.S.

SHEET

1 OF 5

SET

153A



TRENCH SECTION  
(CONCRETE BASE STREETS)

NOTES:

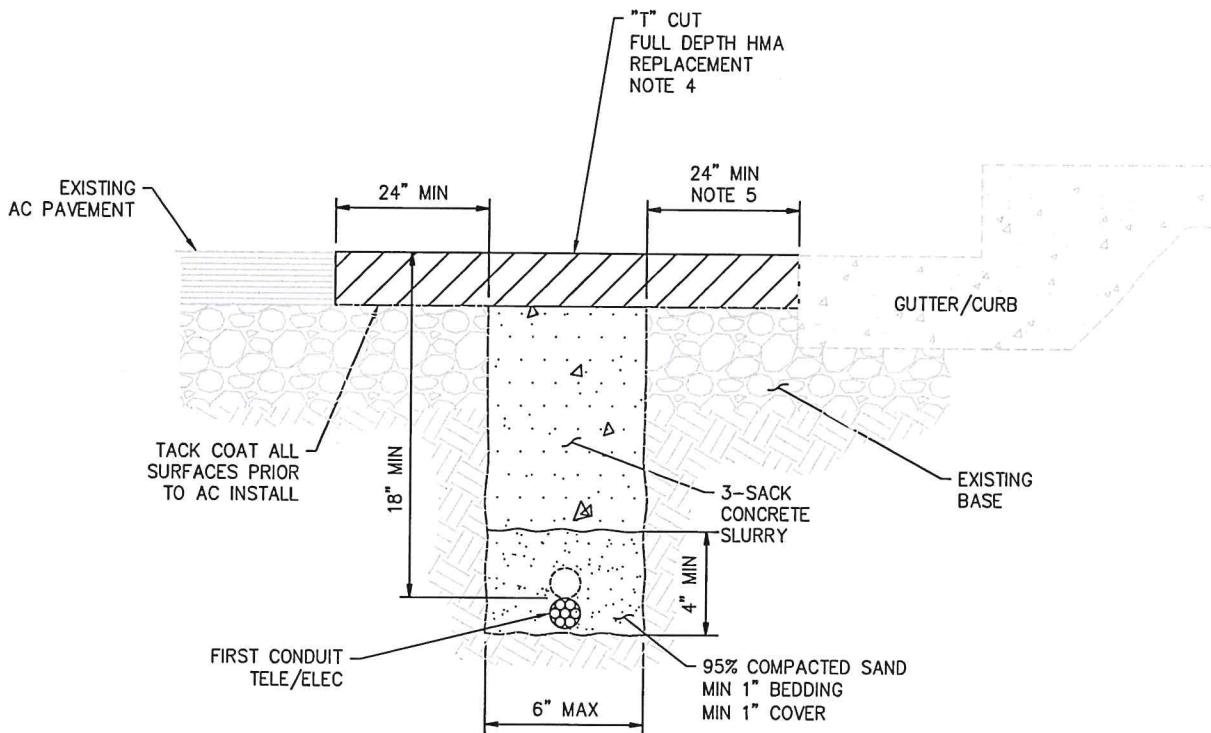
1. SAWCUT FULL CONCRETE BASE DEPTH PRIOR TO TRENCHING.
2. BORE 12" MINIMUM INTO EXISTING CONCRETE BASE SLAB AND INSTALL #6 REBAR WITH EPOXY AS SHOWN. EPOXY SHALL CONFORM TO CALTRANS SPECIFICATIONS.
3. "T" CUT SHALL CONSIST OF REMOVAL AND REPLACEMENT WITH HOT MIX ASPHALT OF FULL DEPTH OF THE ASPHALT CONCRETE.
4. WHERE THE "T" CUT EDGE 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.
5. ALL STRIPING OR SIGNAGE DISTURBED BY THE PROJECT SHALL BE RESTORED TO CITY STANDARDS.
6. CONCRETE SHALL BE 3,500 PSI, 5.5 SACK, 1.5" MAX COARSE AGGREGATE.
7. PRIOR TO FINISHING THE WORK DAY, OPEN TRENCHES SHALL BE PLATED OR BACKFILLED AND PAVED WITH HMA. ON ARTERIAL STREETS, PLATES SHALL BE TACK-WELDED TOGETHER AND SHALL BE RECESSED TO BE FLUSH WITH EXISTING PAVEMENT.
8. ASPHALT TYPE SHALL MATCH EXISTING ASPHALT. IF TYPE A, HOT MIX ASPHALT SHALL MEET 2010 CALTRANS STANDARD SPECIFICATIONS SECTION 39 (15% RAP).
9. PAVEMENT RESTORATION PER CITY STANDARD DETAIL NOS. 153F-153H.
10. WHERE UNSUITABLE SUBBASE MATERIAL IS ENCOUNTERED, TRENCH SHALL OVEREXCAVATE BY 12" AND BACKFILL WITH CLASS 1, TYPE A PERMEABLE MATERIAL.



UTILITY TRENCH (CONCRETE BASE STREETS)

APPROVED  
*Matthew J. Soto*  
PUBLIC WORKS DIRECTOR

DATE	JUNE 2024	SCALE	N.T.S.	SHEET	2 OF 5	SET
						153B



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, GUTTERS, OR LATERALS UNLESS APPROVED BY THE CITY.
3. CONTRACTOR SHALL POTHOLE ANY CROSSING UTILITY OR PARALLEL UTILITY (INCLUDING LATERALS) WITHIN 18-INCH OF PROPOSED ALIGNMENT TO A DEPTH OF 6-INCHES BELOW THE BOTTOM OF THE ROCKWHEEL TRENCH. POTHOLE SHALL BE IMMEDIATELY BACKFILLED.
4. "T" CUT SHALL CONSIST OF REMOVAL AND REPLACEMENT WITH HOT MIX ASPHALT FOR FULL DEPTH OF THE EXISTING ASPHALT CONCRETE LAYER OR 4" MINIMUM, WHICHEVER IS GREATER.
5. 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.
6. WHERE THE "T" CUT EDGE IS WITHIN 3' OF THE ADJACENT CURB OR GUTTER, THE "T" CUT SHALL BE EXTENDED TO THE ADJACENT CURB OR GUTTER.
7. UP TO TWO (2) CONDUITS MAY BE VERTICALLY STACKED CONDUITS PER ROCKWHEEL TRENCH.
8. ALL STRIPPING OR SIGNAGE DISTURBED BY THE PROJECT SHALL BE RESTORED TO CITY STANDARDS.
9. PRIOR TO FINISHING THE WORK DAY, OPEN TRENCHES SHALL BE PLATED OR BACKFILLED AND PAVED WITH HMA. ON ARTERIAL STREETS, PLATES SHALL BE TACK-WELDED TOGETHER AND SHALL BE RECESSED TO BE FLUSH WITH EXISTING PAVEMENT.
10. ASPHALT TYPE SHALL MATCH EXISTING ASPHALT. IF TYPE A, HOT MIX ASPHALT SHALL MEET 2010 CALTRANS STANDARD SPECIFICATIONS SECTION 39 (15% RAP).



**ROCKWHEEL TRENCH**

APPROVED

PUBLIC WORKS DIRECTOR

DATE

JUNE 2024

SCALE

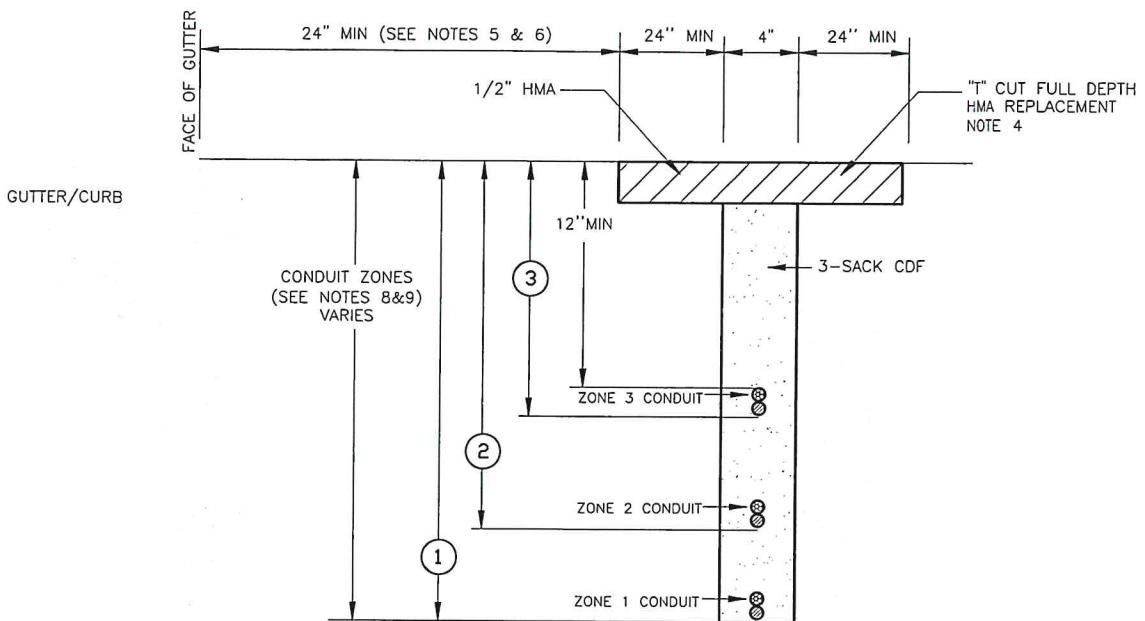
N.T.S.

SHEET

3 OF 5

SET

153C



### SECTION VIEW

CONDUIT ZONES	
(1)	20" - 26" (IF CONFLICTS ARE PRESENT, SEE ZONE 2)
(2)	16" - 20" (IF CONFLICTS ARE PRESENT, SEE ZONE 3)
(3)	12" - 16"

#### NOTES:

1. MICROTRENCHING SHALL ONLY BE USED TO INSTALL TELECOMMUNICATION CONDUITS IN ASPHALT CONCRETE ROADWAYS.
2. MICROTRENCH IS NOT ALLOWED ON OR THROUGH CONCRETE BASE STREETS, SIDEWALKS, PARKWAYS, CURBS, GUTTERS OR LATERALS UNLESS APPROVED BY THE CITY.
3. CONTRACTOR SHALL IDENTIFY ALL EXISTING UTILITIES, INCLUDING SERVICE CONNECTIONS, IN THE FIELD. CONTRACTOR SHALL POTHOLE ANY CROSSING UTILITY OR PARALLEL UTILITY (INCLUDING LATERALS) WITHIN 18-INCH OF PROPOSED ALIGNMENT TO A DEPTH OF 6-INCHES BELOW THE BOTTOM OF THE MICROTRENCH. POTHOLE SHALL BE IMMEDIATELY BACKFILLED.
4. "T" CUT SHALL CONSIST OF REMOVEAL AND REPLACEMENT WITH HOT MIX ASPHALT OF FULL DEPTH OF THE ASHALT CONCRETE.
5. 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.
6. WHERE THE "T" CUT EDGE IS WITHIN 3' OF THE ADJACENT CURB OR GUTTER, THE "T" CUT SHALL BE EXTENDED TO THE ADJACENT CURB OR GUTTER.
7. UP TO TWO (2) VERTICALLY STACKED CONDUITS CAN BE PLACED WITHIN A MICROTRENCH. AT THE DISCRETION OF THE CITY ENGINEER, AN ADDITIONAL CONDUIT SHALL BE PLACED ABOVE THE APPLICANT'S CONDUITS, FOR USE BY THE CITY.
8. CONDUITS MUST BE PLACED IN ZONE 1 FIRST. IF THERE ARE CONFLICTS PRESENT, THEN ZONE 2 MAY BE UTILIZED. ZONE 3 CAN BE USED ONLY IF THEY ARE CONFLICTS PRESENT IN BOTH ZONES 2 AND 3.
9. THE CONDUIT SHALL BE INSTALLED AT A MINIMUM DEPTH OF 12-INCHES BELOW THE EXISTING AC 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 PLATED OR BACKFILLED AND PAVED WITH HMA.
13. ASPHALT TYPE SHALL MATCH EXISTING ASPHALT. IF TYPE A, HOT MIX ASPHALT SHALL MEET 2010 CALTRANS STANDARD SPECIFICATIONS SECTION 39 (15% RAP).



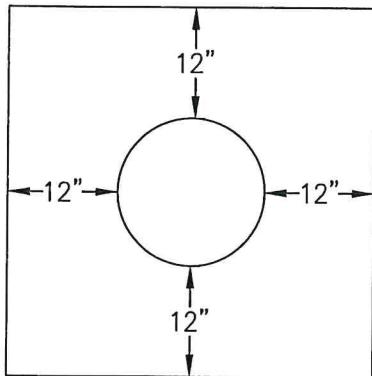
### MICROTRENCH

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 PUBLIC WORKS DIRECTOR

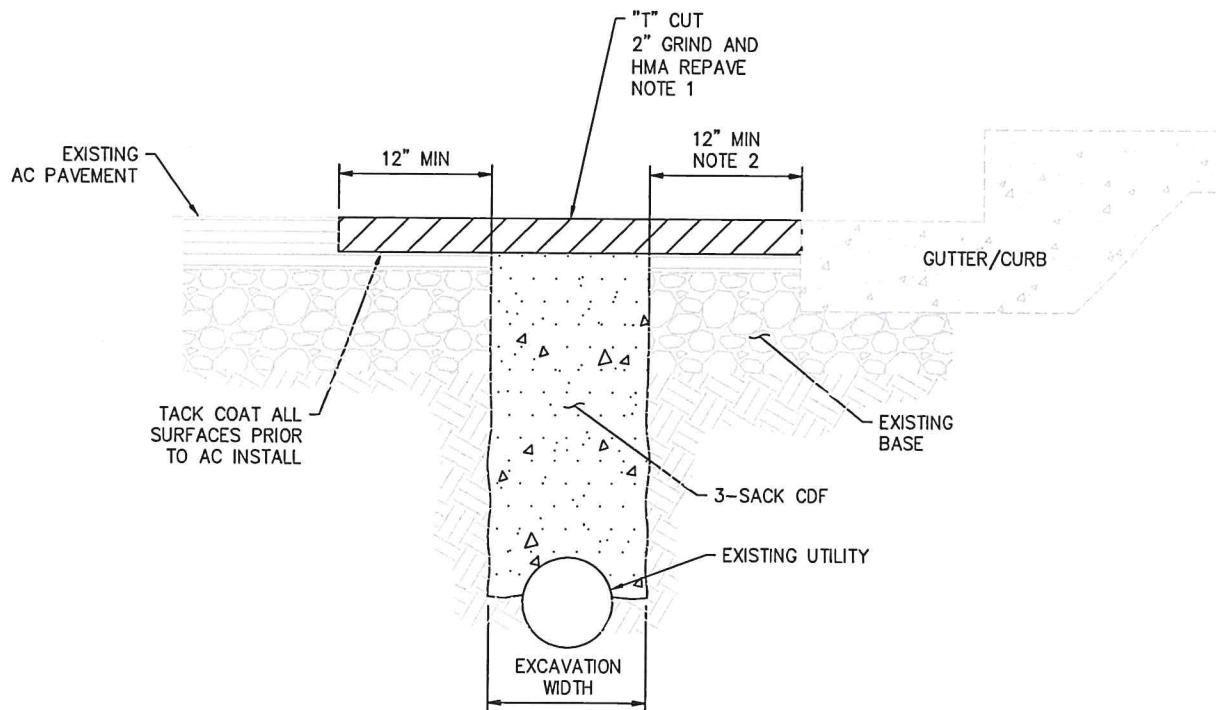
DATE  
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SCALE  
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SET  
 4 OF 5 153D



POTHOLE RESTORATION LIMIT



POTHOLE SECTION

NOTES:

1. "T" CUT SHALL CONSIST OF 2" GRIND AND OVERLAY WITH HOT MIX ASPHALT OF THE EXISTING PAVEMENT EXTENDING 12" BEYOND THE EXCAVATION ON ALL SIDES
2. WHERE THE "T" CUT EDGE IS WITHIN 3' OF THE ADJACENT CURB OR GUTTER, THE "T" CUT SHALL BE EXTENDED TO THE ADJACENT CURB OR GUTTER.
3. ALL STRIPING OR SIGNAGE DISTURBED BY THE PROJECT SHALL BE RESTORED TO CITY STANDARDS.
4. FOR PAVED AREAS, BACKFILL SHALL BE CONTROLLED DENSITY FILL (CDF).
5. 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.
6. ASPHALT TYPE SHALL MATCH EXISTING ASPHALT. IF TYPE A, HOT MIX ASPHALT SHALL MEET 2010 CALTRANS STANDARD SPECIFICATIONS SECTION 39 (15% RAP).
7. WHEN MULTIPLE POTHOLES WHOSE OUTSIDE EDGES ARE WITHIN 24" OF EACH OTHER, "T" CUT RESTORATION SHALL BE CONTINUOUS.



**POTHOLE RESTORATION**

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DATE

JUNE 2024

SCALE

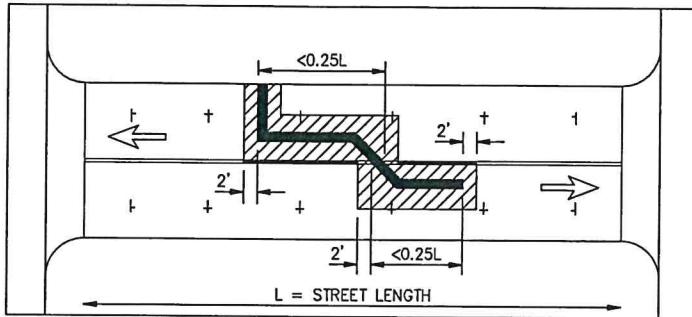
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5 of 5

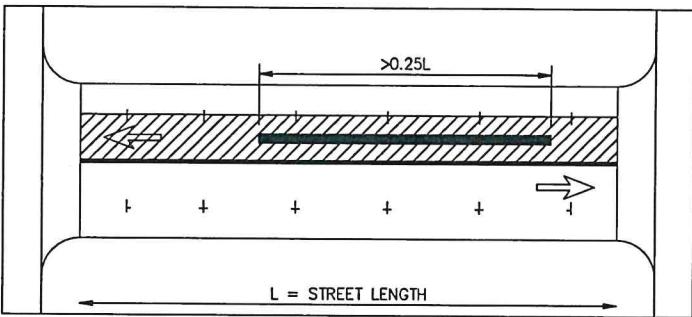
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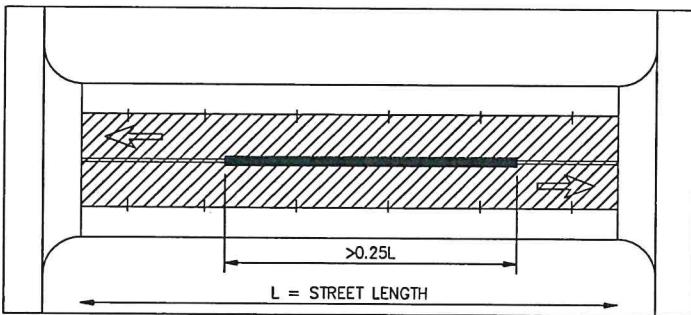
#### CASE 1: TRENCH <25% LENGTH OF STREET

FOR TRENCHES LESS THAN 25% OF THE TOTAL STREET LENGTH, ASPHALT 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.



#### CASE 2: TRENCH >25% LENGTH OF STREET

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



#### CASE 3: TRENCH OVER CENTERLINE

FOR TRENCHES CROSSING OVER THE CENTERLINE, BOTH LANES SHALL BE RESTORED FOR THE FULL WIDTH, THEN APPLY 25% RULES ABOVE.

#### LEGEND

APPROXIMATE AREA OF  
ASPHALT PAVEMENT  
RESTORATION

— CENTER LINE

APPROXIMATE AREA OF  
TRENCH

— LANE LINE

— CROSSWALK

→ TRAFFIC FLOW

+ + + PARKING TEE

#### TRENCH RESTORATION NOTES:

1. ASPHALT TYPE SHALL MATCH EXISTING ASPHALT. IF TYPE A, HOT MIX ASPHALT SHALL MEET 2010 CALTRANS STANDARD SPECIFICATIONS SECTION 39 (15% RAP).
2. ALL RESTORATION SHALL BE COMPLETED IN A TIMELY MANNER. AFTER BACKFILL IS RESTORED AND COMPAKTED, ASPHALT SHALL BE PLACED WITHIN 5 DAYS.



## PAVEMENT RESTORATION (TRENCHES)

APPROVED

*Matthew Salas*

PUBLIC WORKS DIRECTOR

DATE

JUNE 2024

SCALE

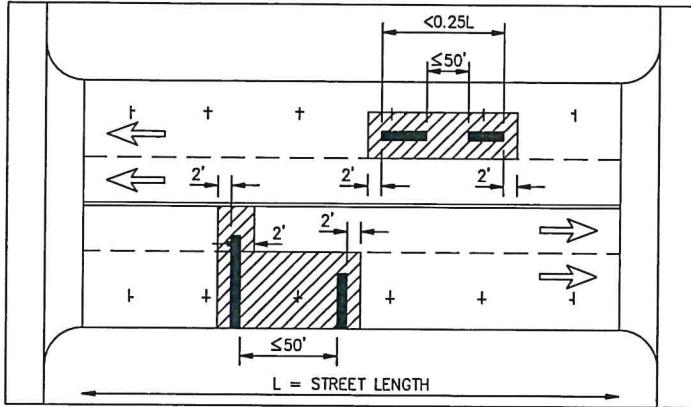
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1 of 3

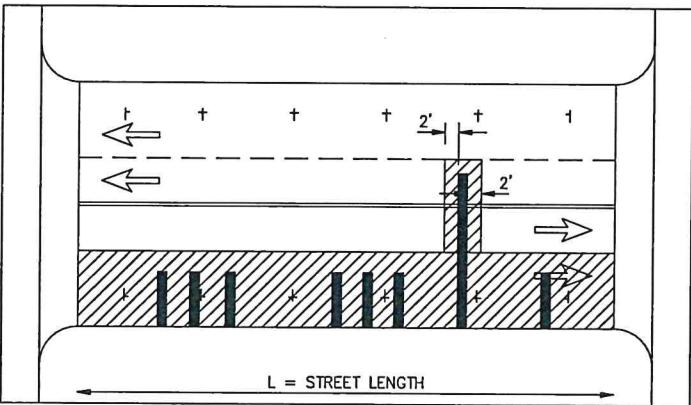
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#### CASE 4: TRENCHES WITHIN 50' TO EACH OTHER

FOR TWO OR MORE TRENCHES WITHIN 50' OF ONE ANOTHER, ASPHALT 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 SHALL BE LESS THAN 25% OF THE STREET.



#### CASE 5: 8 OR MORE LATERALS ON SAME BLOCK

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, ASPHALT RESTORATION SHALL EXTEND THE ENTIRE LENGTH OF THE BLOCK FOR THIS APPLIES PER LANE.

#### LEGEND

- APPROXIMATE AREA OF ASPHALT PAVEMENT RESTORATION
- CENTER LINE
- LANE LINE
- CROSSWALK
- TRAFFIC FLOW
- ⊕ ⊕ ⊕ PARKING TEE
- APPROXIMATE AREA OF TRENCH

#### TRENCH RESTORATION NOTES:

1. ASPHALT TYPE SHALL MATCH EXISTING ASPHALT. IF TYPE A, HOT MIX ASPHALT SHALL MEET 2010 CALTRANS STANDARD SPECIFICATIONS SECTION 39 (15% RAP).
2. ALL RESTORATION SHALL BE COMPLETED IN A TIMELY MANNER. AFTER BACKFILL IS RESTORED AND COMPAKTED, ASPHALT SHALL BE PLACED WITHIN 5 DAYS.



#### PAVEMENT RESTORATION (TRENCHES)

APPROVED

*Matt Van Fahn*  
PUBLIC WORKS DIRECTOR

DATE

JUNE 2024

SCALE

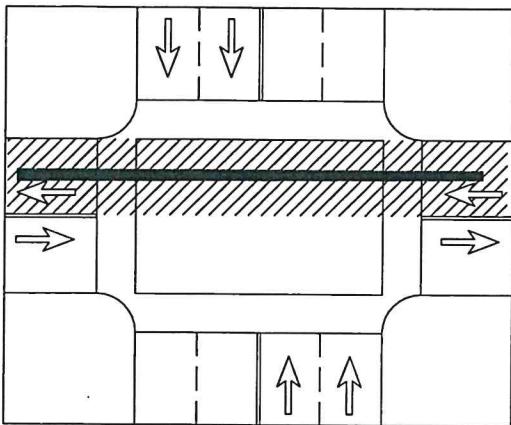
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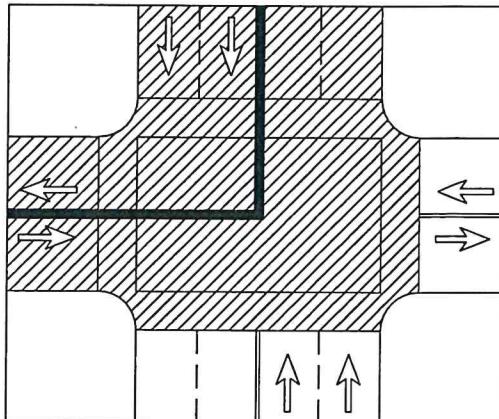
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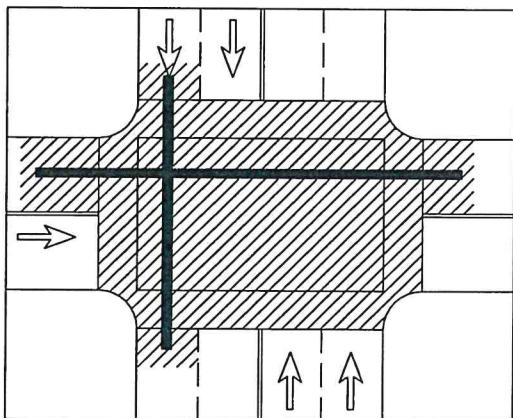
**CASE 6A: SINGLE STREET WIDTH ONLY**

AC RESTORATION FOR TRENCHES THRU AN INTERSECTION ALONG ONE SIDE OF THE ROADWAY.  
MINIMUM RESTORATION WIDTH – ONE LANE AISLE



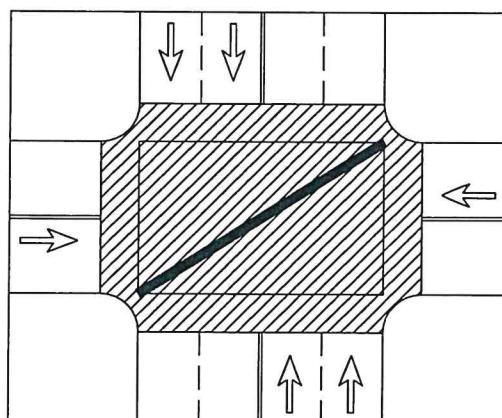
**CASE 7: CENTERLINE**

AC RESTORATION OF TRENCHES ALONG CENTERLINE AND INTERSECTING AT THE INTERSECTION OF THE ROADWAY.



**CASE 6B: INTERSECTION OPEN TRENCH  
SINGLE STREET WIDTH**

AC RESTORATION OF TRENCHES MEETING AT INTERSECTION OF ROADWAY NOT ALONG CENTERLINE.



**CASE 8: DIAGONAL AT INTERSECTION ONLY**

AC RESTORATION OF TRENCHES WITH DIAGONAL OPEN TRENCH.  
MINIMUM RESTORATION WIDTH – INTERSECTION.

LEGEND



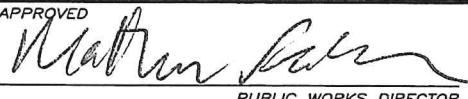
TRENCH RESTORATION NOTES:

1. ASPHALT TYPE SHALL MATCH EXISTING ASPHALT. IF TYPE A, HOT MIX ASPHALT SHALL MEET 2010 CALTRANS STANDARD SPECIFICATIONS SECTION 39 (15% RAP).
2. ALL RESTORATION SHALL BE COMPLETED IN A TIMELY MANNER. AFTER BACKFILL IS RESTORED AND COMPAKTED, ASPHALT SHALL BE PLACED WITHIN 5 DAYS.



**PAVEMENT RESTORATION (TRENCHES)**

APPROVED

  
Matthew Sals  
PUBLIC WORKS DIRECTOR

DATE

JUNE 2024

SCALE

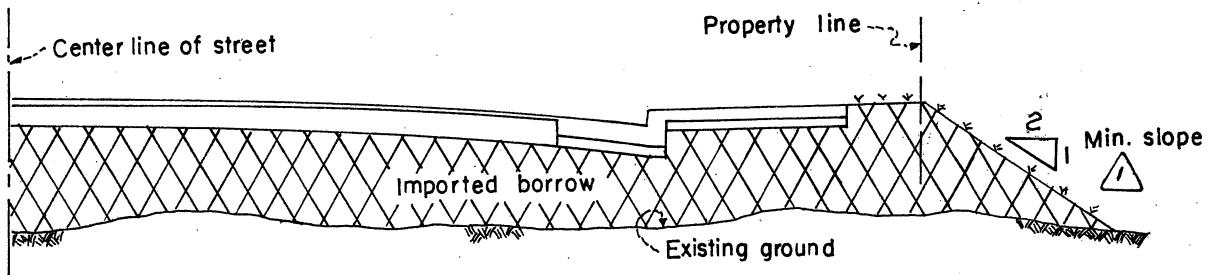
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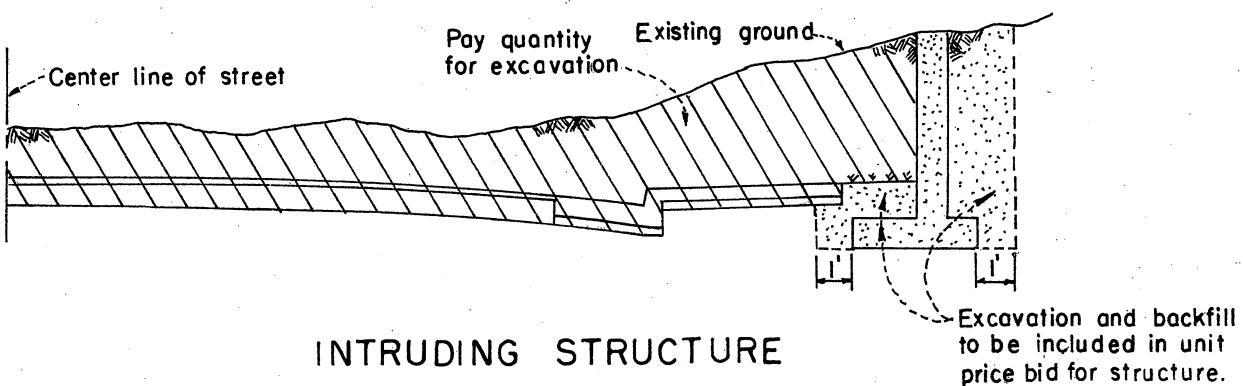
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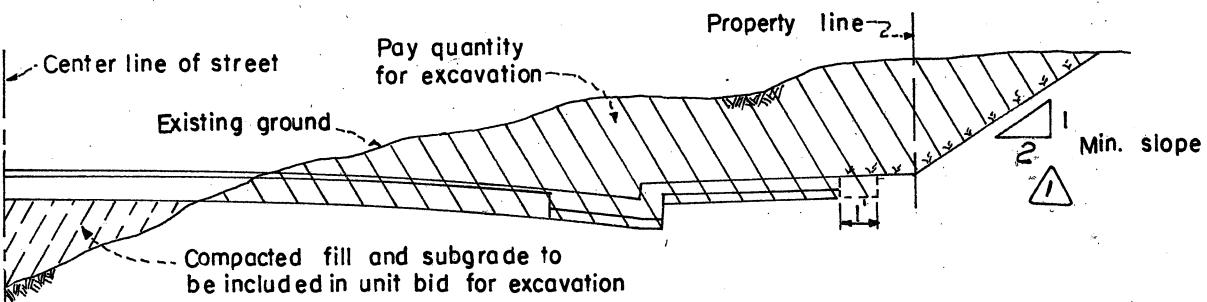
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FILL



INTRUDING STRUCTURE



CUT & FILL

TYPICAL SECTIONS



REVISION JUNE 28 1989

SAN MATEO

CALIFORNIA

METHOD & LIMITS FOR CALCULATING EARTHWORK

DATE  
1973

DRAWN BY  
RUJ

CHK. BY  
JEG

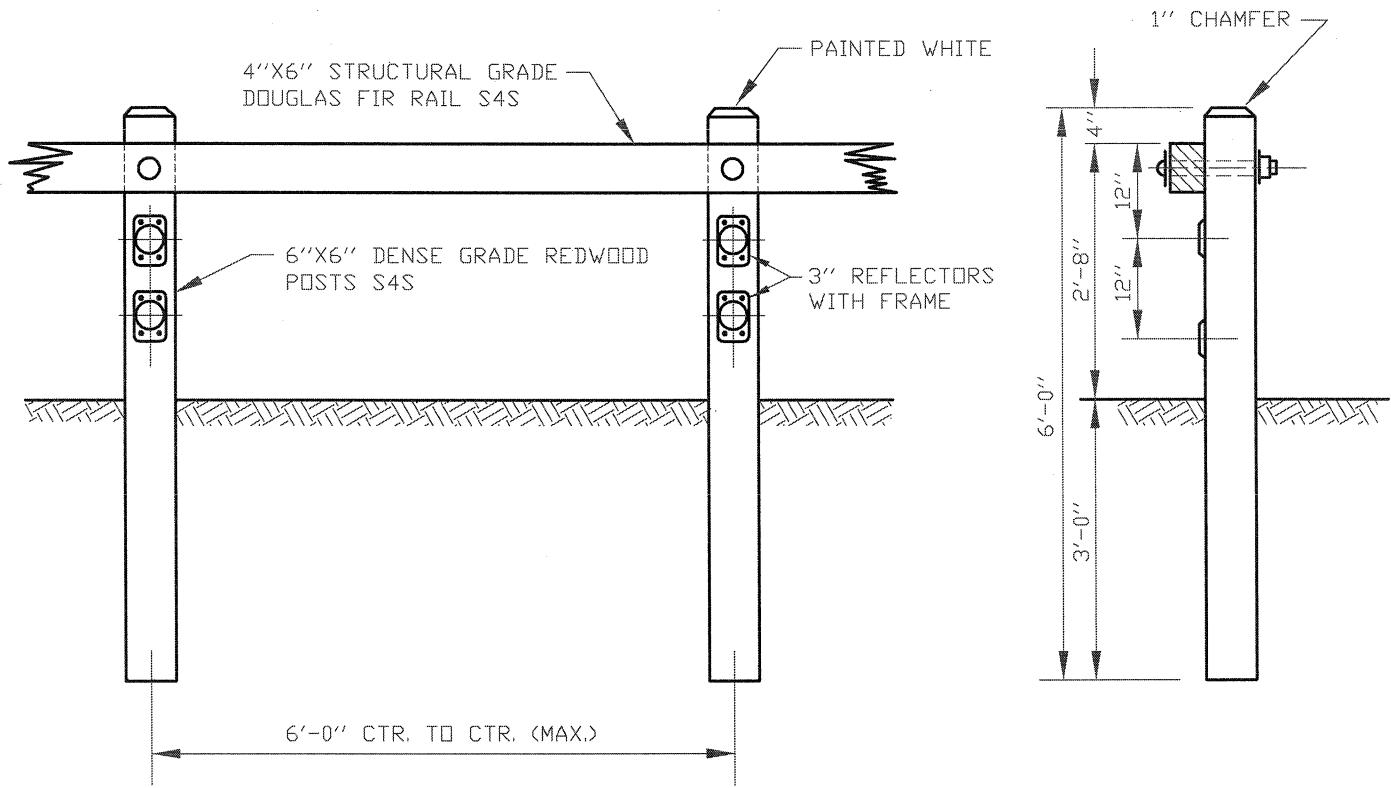
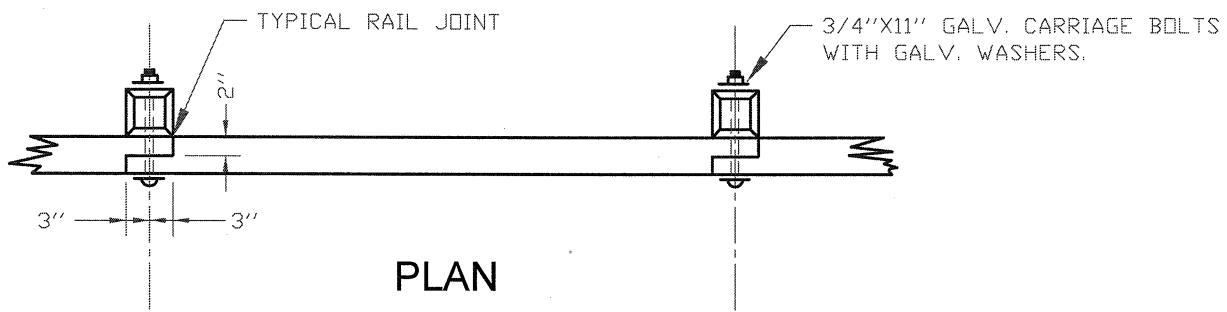
APPROVED

CITY ENGINEER

PLAN CASE  
3

DRAWER  
1

SHEET  
154

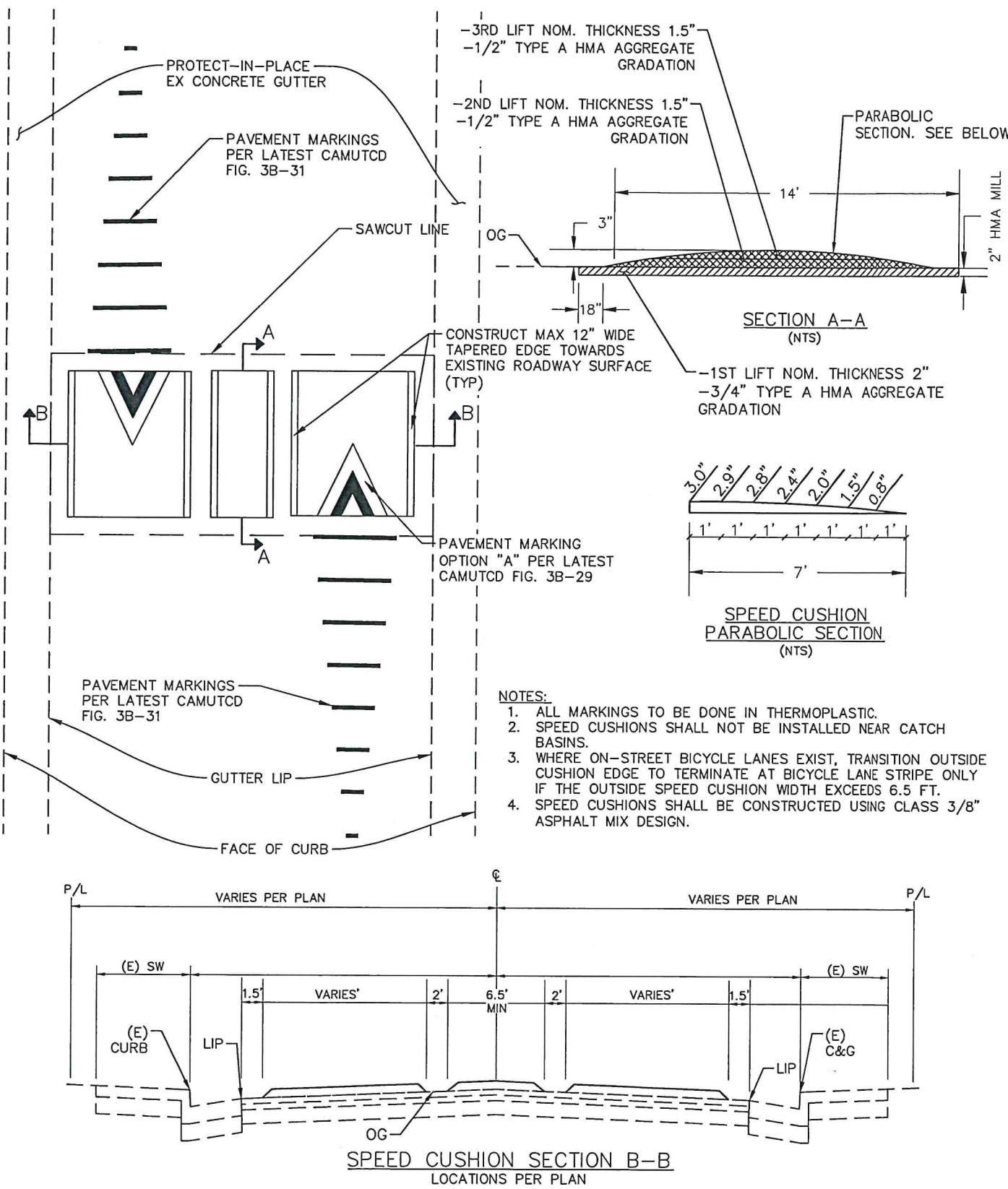


ENGINEERING DEPARTMENT

CALIFORNIA 94403

**STANDARD BARRICADES FOR DEAD END STREETS**

DATE	DRAWN BY	CHECKED BY	APPROVED	CASE	DRAWER	SET
2002	PC	OC	<i>Mark Dreams</i> CITY ENGINEER	3	1	155



## ASPHALT SPEED CUSHION

APPROVED

MATTHEW V. VELA  
PUBLIC WORKS DIRECTOR

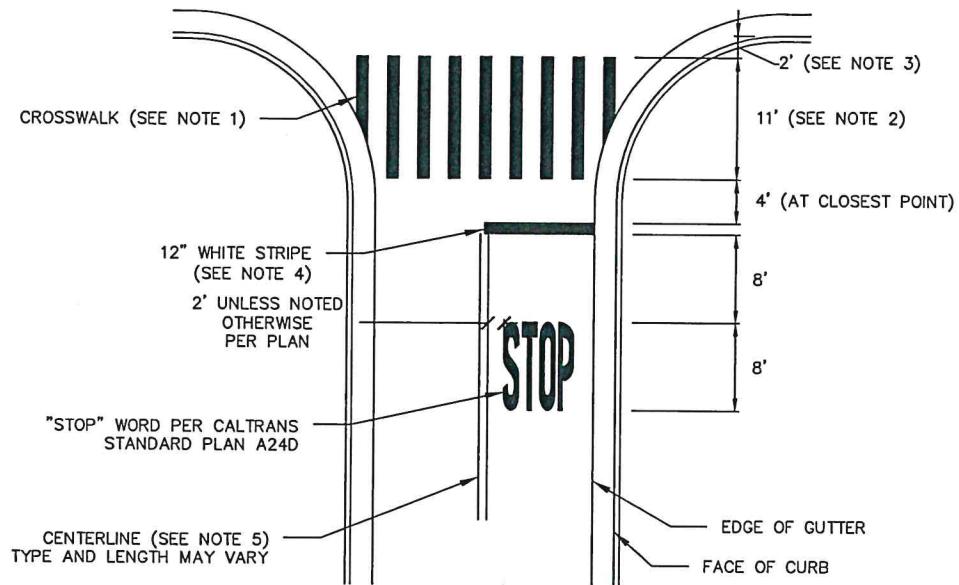
DATE

JUNE 2024

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1 OF 1SET  
156

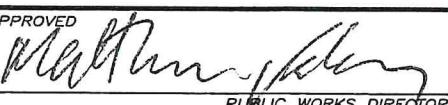


NOTES:

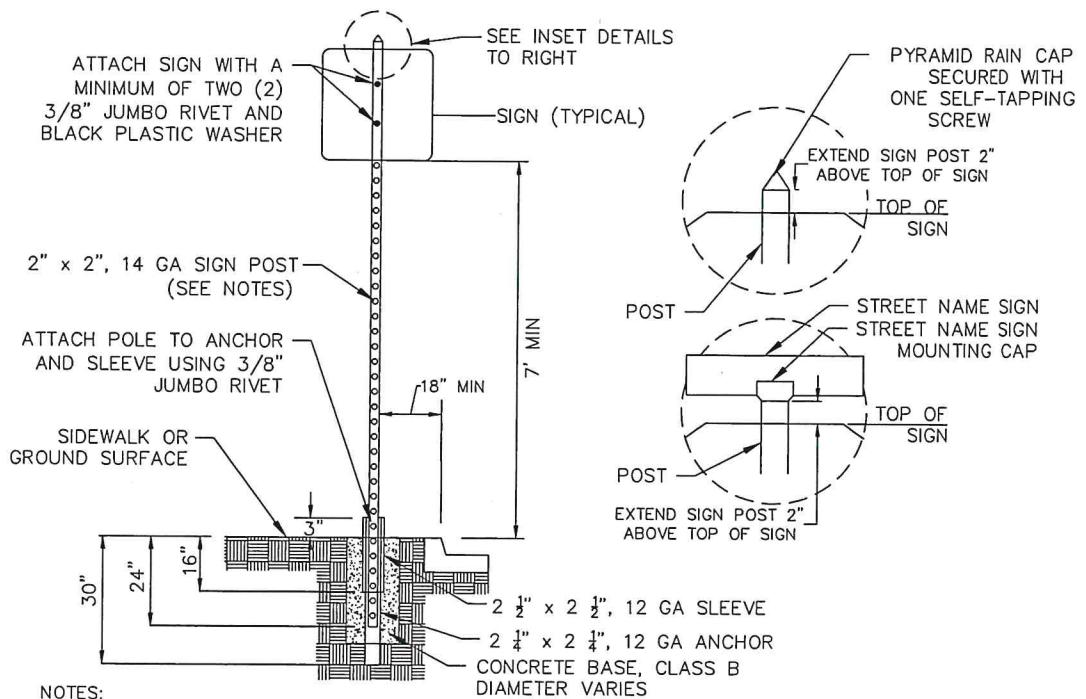
1. INSTALL WHITE CONTINENTAL CROSSWALK UNLESS OTHERWISE SPECIFIED ON PLANS. SEE CALTRANS STANDARD PLAN A24F FOR ADDITIONAL GUIDANCE.
2. 11' UNLESS OTHERWISE SPECIFIED ON PLANS.
3. DESIRED SETBACK OF CROSSWALK IS 2'. ADJUST AS NEEDED TO SATISFY ACCESSIBILITY REQUIREMENTS FOR LOCATION OF CROSSWALK RELATIVE TO PEDESTRIAN RAMPS.
4. LIMIT LINE SHALL BE PERPENDICULAR TO PATH OF VEHICULAR TRAVEL. IF THE CROSSWALK IS NOT PERPENDICULAR TO THE PATH OF VEHICULAR TRAVEL, THE CLOSEST DISTANCE BETWEEN THE CROSSWALK AND THE LIMIT LINE SHALL BE 4 FEET.
5. INCLUDE CENTERLINE ON ROADWAYS WITH CURB-TO-CURB WIDTH OF 34' OR GREATER, OR AS OTHERWISE SPECIFIED ON PLANS.



**PAVEMENT MARKINGS FOR STOP CONTROLLED  
INTERSECTION APPROACH WITH MARKED CROSSWALK**

APPROVED  
  
 PUBLIC WORKS DIRECTOR

DATE	SCALE	SHEET	SET
JUNE 2024	N.T.S.	1 OF 1	260



NOTES:

1. METAL POSTS SHALL BE TRINITY HIGHWAY SQR-LOC EZ-OUT OR APPROVED EQUAL. SIGN POST MUST BE BREAKAWAY.
2. AT INSTALLATION, COVER HOLES BELOW CONCRETE WITH TAPE TO PREVENT CONCRETE FROM FALLING INTO SLEEVE AND ANCHOR.
3. THE SIGN POST SHALL BE LOCATED AT THE BACK OF WALK OR AS DIRECTED BY THE ENGINEER. PLACEMENT OF THE SIGN POST SHALL MAINTAIN A MINIMUM OF 3' HORIZONTAL CLEAR ACCESSIBLE PATH OF TRAVEL IN THE SIDEWALK.
4. UTILIZE RED GREASE ON RIVET BOLT PRIOR TO INSTALLATION.
5. DIAMETER OF CONCRETE BASE SHALL VARY DEPENDING ON THE PLACEMENT OF THE SIGN POST. IF THE SIGN POST IS PLACED WITHIN CITY SIDEWALK, THE DIAMETER OF THE CONCRETE BASE SHALL MATCH THE DIAMETER OF THE CORING BIT USED, MINIMUM 6". IF THE SIGN POST IS PLACED WITHIN NATIVE GROUND SURFACE, THE DIAMETER OF THE CONCRETE BASE SHALL BE 12" MINIMUM.



**TYPICAL SIGN POST INSTALLATION**

APPROVED

  
Matthew A. Clark  
PUBLIC WORKS DIRECTOR

DATE

JUNE 2024

SCALE

N.T.S.

SHEET

1 OF 1

SET

261

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# REFER TO CALTRANS STANDARD PLANS A88A & A88B

## STANDARD WHEEL CHAIR RAMP

SAN MATEO, CALIF.

DATE	PREP. BY	CHK. BY	APPROVED	PLAN CASE	DRAWER	SHEET
1999	H.A	D.C	<i>Janice E. Porcary</i> 01/08/99 DIRECTOR OF PUBLIC WORK	3	1	157

**REFER TO  
CALTRANS  
STANDARD PLANS  
A88A & A88B**

CITY OF SAN MATEO

CALIFORNIA 94403

**WHEELCHAIR RAMP  
ON STATE HIGHWAY**

DATE	DRAWN BY	CHECKED	APPROVED	CASE	DRAWER	SET
1983	RLG	TL	<i>Arch Lekry</i> CITY ENGINEER	3	1	159