



**PUBLIC WORKS DEPARTMENT**  
**CITY STANDARD PLANS**  
**2022**






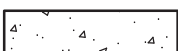
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**ABBREVIATIONS/SYMBOLS**

A.C.	ASPHALT CONCRETE
ADA	AMERICANS WITH DISABILITIES ACT
BC	BEGINNING OF CURVE
CF	CURB FACE
EC	END OF CURVE
EJ	EXPANSION JOINT
EX.	EXISTING
GB	GRADE BREAK
LBMC	LAGUNA BEACH MUNICIPAL CODE
MAX.	MAXIMUM
MIN.	MINIMUM
P.C.C	PORTLAND CEMENT CONCRETE
PROP.	PROPOSED
R/W	RIGHT-OF-WAY
SSPWC	STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION
STD.	STANDARD
TYP.	TYPICAL
WPJ	WEAKENED PLANE JOINT
☉	CENTER LINE
ℓ	FLOW LINE
ℙ	PROPERTY LINE

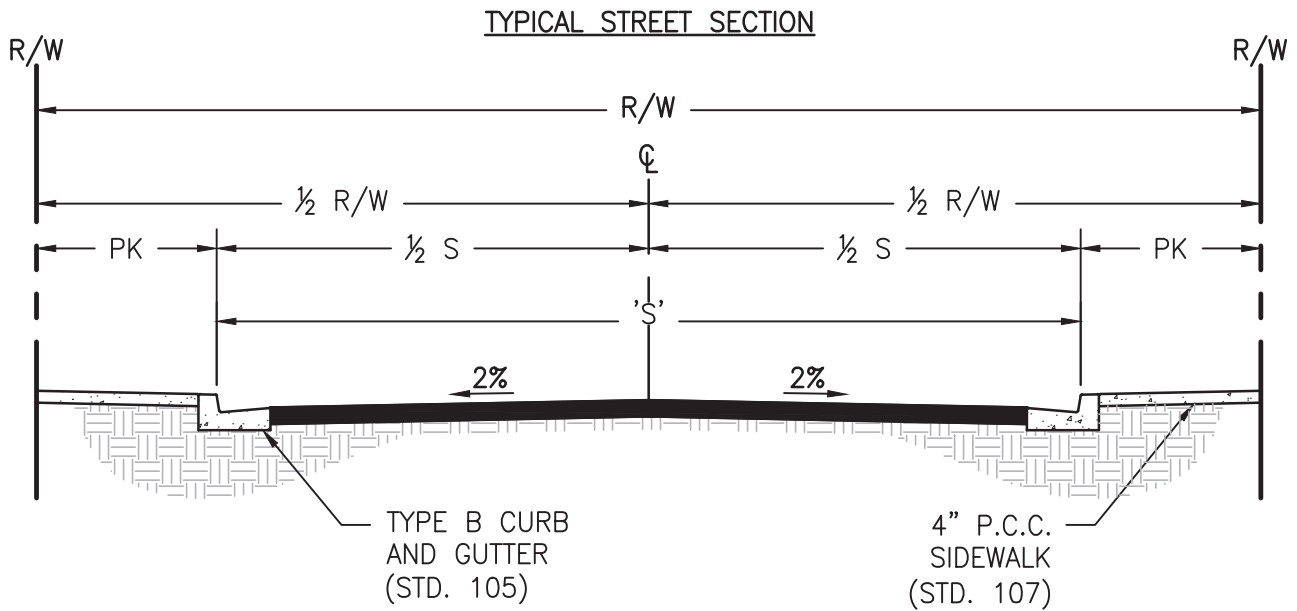
**LEGEND**

	ASPHALT CONCRETE (EXISTING)
	ASPHALT CONCRETE (PROPOSED)
	CEMENT SLURRY
	EARTH (COMPACTED NATIVE)
	PORTLAND CEMENT CONCRETE (EXISTING)
	PORTLAND CEMENT CONCRETE (PROPOSED)



**CITY OF LAGUNA BEACH PUBLIC WORKS DEPARTMENT**

REV.	DATE	<b>ABBREVIATIONS AND LEGEND</b>		STANDARD PLAN
		APPROVED BY:	03/29/2022	<b>100</b>
		MARK A. TRESTIK, CITY ENGINEER, R.C.E. 53708	DATE	<u>1</u> OF <u>1</u>



GENERAL NOTES:

1. MINIMUM LONGITUDINAL GRADES SHALL BE 0.5%.
2. MAXIMUM LONGITUDINAL GRADES SHALL BE 12%, UNLESS APPROVED BY VARIANCE IN ACCORDANCE WITH LBMC SECTION 21.12.250. LONGITUDINAL GRADES EXCEEDING 14% ARE PROHIBITED.
3. GRADE BREAKS SHALL BE TRANSITIONED BY VERTICAL CURVES IN ACCORDANCE WITH ACCEPTED AND PREVAILING ENGINEERING PRACTICE.
4. STRUCTURAL SECTION MINIMUM 6 INCHES A.C. OVER COMPACTED NATIVE.
5. DRIVEWAY HIGHPOINT SHALL BE 3.5 INCHES, MINIMUM, ABOVE STREET CENTERLINE.
6. THE DIAMOND/CRESTVIEW SPECIFIC PLAN AREA STANDARDS MAY VARY. SEE SPECIFIC PLAN FOR DETAILS AND VARIATIONS.

STANDARDS OF DESIGN				
CLASSIFICATION***	RIGHT-OF-WAY (R/W)	STREET (S)	PARKWAY (PK)	PARKING
COLLECTOR	65' (MIN.)	24' (MIN.)	4.5' (MIN.)*	BOTH SIDES
HILLSIDE COLLECTOR	44' (MIN.)	24' (MIN.)	4.5' (MIN.)*	ONE SIDE*
HILLSIDE COLLECTOR (LIMITED ACCESS)	36' (MIN.)	20' (MIN.)	4.5' (MIN.)*	ONE SIDE**
LOCAL	55' (MIN.)	20' (MIN.)	4.5' (MIN.)*	BOTH SIDES
HILLSIDE LOCAL	40' (MIN.)	20' (MIN.)	4.5' (MIN.)*	ONE SIDE*
HILLSIDE LOCAL (LIMITED ACCESS)	32' (MIN.)	20' (MIN.)	4.5' (MIN.)*	ONE SIDE**

\* MAY VARY WITH ENGINEER APPROVAL

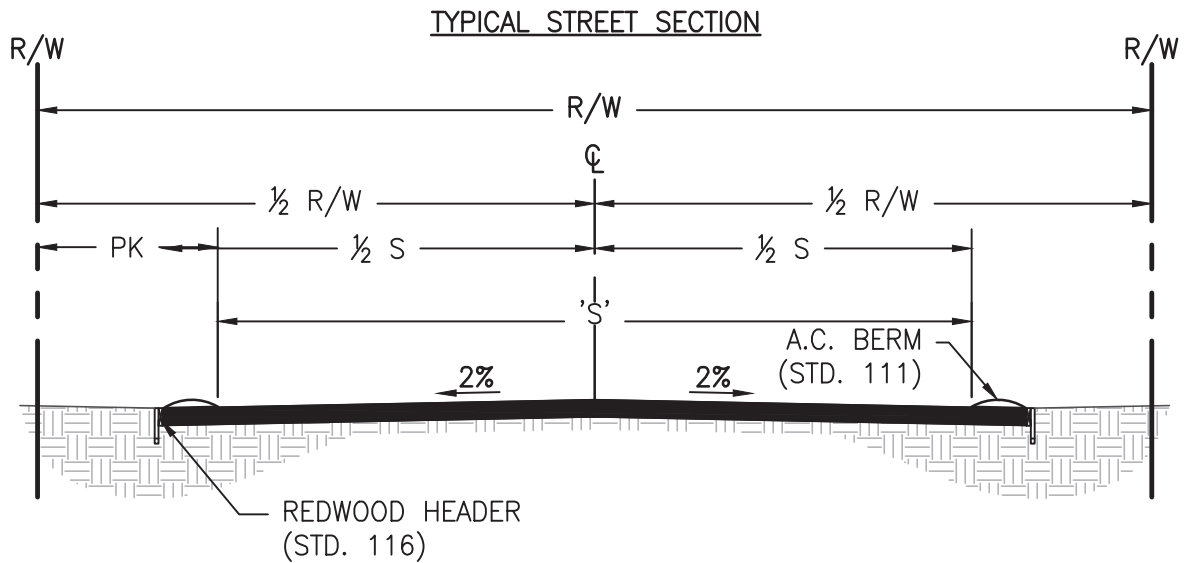
\*\* PRIOR APPROVAL REQUIRED FROM ENGINEER

\*\*\* AS DEFINED BY THE TRANSPORTATION, CIRCULATION AND GROWTH MANAGEMENT ELEMENT



**CITY OF LAGUNA BEACH PUBLIC WORKS DEPARTMENT**

REV.	DATE	<b>STREET SECTIONS (WITH CURB)</b>	STANDARD PLAN
		APPROVED BY:	<b>101</b>
		MARK A. TRESTIK, CITY ENGINEER, R.C.E. 53708	DATE
		03/29/2022	1 OF 2



GENERAL NOTES:

1. MINIMUM LONGITUDINAL GRADES SHALL BE 0.5%.
2. MAXIMUM LONGITUDINAL GRADES SHALL BE 12%, UNLESS APPROVED BY VARIANCE IN ACCORDANCE WITH LBMC SECTION 21.12.250. LONGITUDINAL GRADES EXCEEDING 14% ARE PROHIBITED.
3. GRADE BREAKS SHALL BE TRANSITIONED BY VERTICAL CURVES IN ACCORDANCE WITH ACCEPTED AND PREVAILING ENGINEERING PRACTICE.
4. STRUCTURAL SECTION MINIMUM 6 INCHES A.C. OVER COMPACTED NATIVE.
5. DRIVEWAY HIGHPOINT SHALL BE 5 INCHES, MINIMUM, ABOVE STREET CENTERLINE.
6. THE DIAMOND/CRESTVIEW SPECIFIC PLAN AREA STANDARDS MAY VARY. SEE SPECIFIC PLAN FOR DETAILS AND VARIATIONS.

STANDARDS OF DESIGN				
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HILLSIDE LOCAL (LIMITED ACCESS)	32' (MIN.)	20' (MIN.)	4.5' (MIN.)*	ONE SIDE**

\* MAY VARY WITH ENGINEER APPROVAL

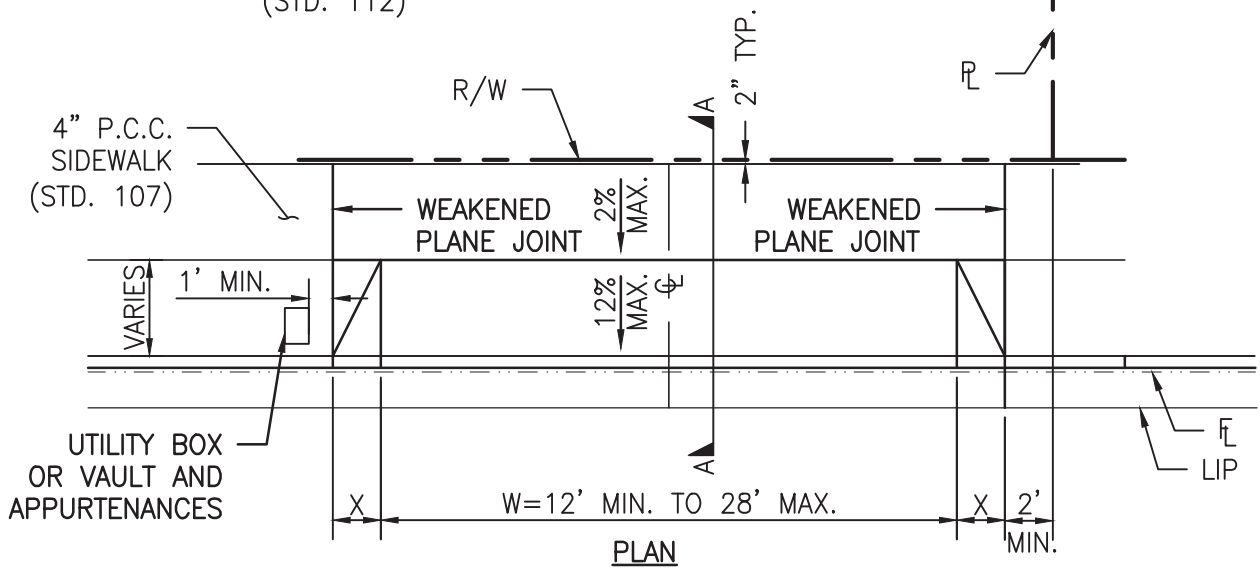
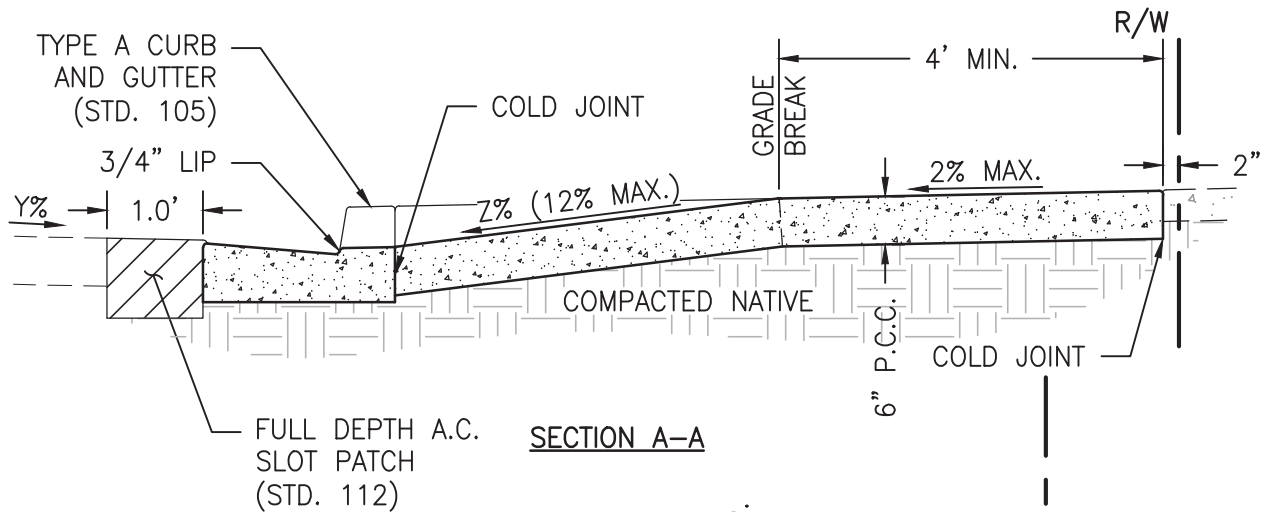
\*\* PRIOR APPROVAL REQUIRED FROM ENGINEER

\*\*\* AS DEFINED BY THE TRANSPORTATION, CIRCULATION AND GROWTH MANAGEMENT ELEMENT



**CITY OF LAGUNA BEACH PUBLIC WORKS DEPARTMENT**

REV.	DATE	<b>STREET SECTIONS (WITHOUT CURB)</b>	STANDARD PLAN
		APPROVED BY:	<b>101</b>
		MARK A. TRESTIK, CITY ENGINEER, R.C.E. 53708	DATE
		03/29/2022	2 OF 2



**NOTES:**

1. WEAKENED PLANE JOINTS SHALL BE INSTALLED AT BOTH SIDES OF A DRIVEWAY AND AT 10' INTERVALS OR MATCH ADJACENT CONSTRUCTION.
2. PORTLAND CONCRETE CEMENT MIX SHALL BE PER GREENBOOK (SSPWC), 520-C-2500.
3. REFER TO AMERICANS WITH DISABILITIES ACCESS REQUIREMENTS FOR DETAILS ON MAXIMUM PERMITTED SLOPES.
4. DRIVEWAY HIGHPOINT SHALL BE 3.5 INCHES, MINIMUM ABOVE STREET CENTERLINE.
5. COMPACTION OF NATIVE SUBGRADE SHALL MEET 95%.
6. STANDARD DOES NOT APPLY TO PROPERTIES WITHOUT ADJACENT OR CONTINUOUS CURB AND GUTTER OR SIDEWALK IMPROVEMENTS.
7. TO MINIMIZE SCRAPING  $Y\% + Z\%$  SHALL BE LESS THAN 15%.
8. REFER TO STD. 109 FOR DECORATIVE DRIVEWAY APPROACHES.

CURB FACE	X
6"	3'
8"	4'



**CITY OF LAGUNA BEACH PUBLIC WORKS DEPARTMENT**

REV.	DATE

**DRIVEWAY APPROACH I (FLARED)**

APPROVED BY:

03/29/2022

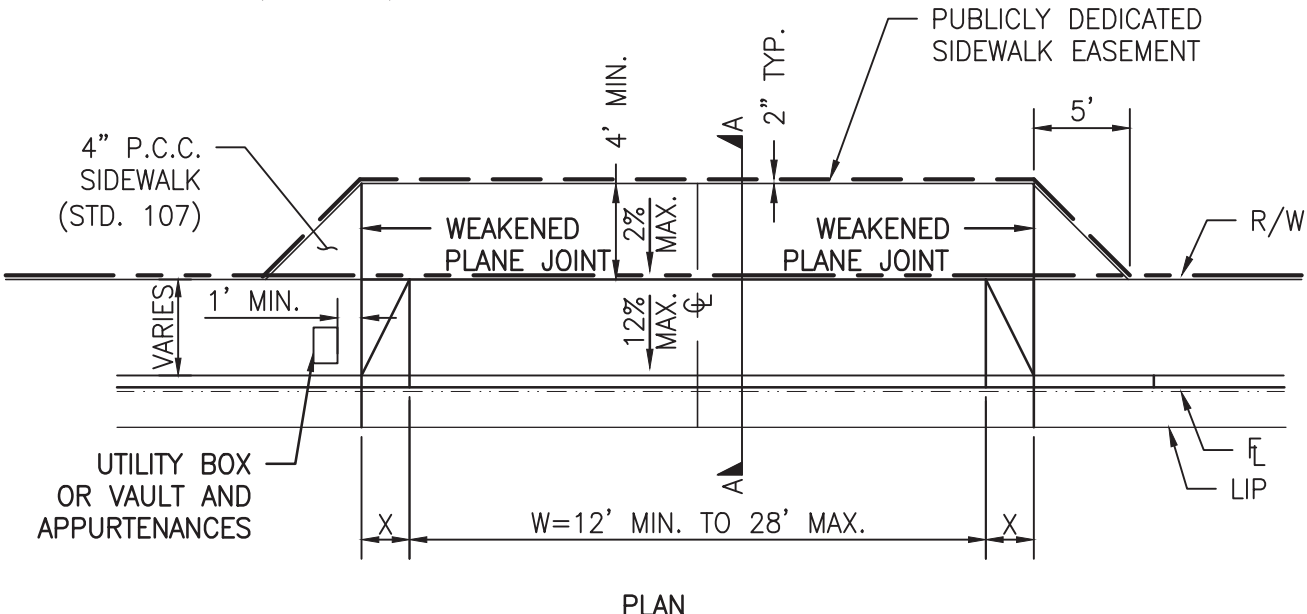
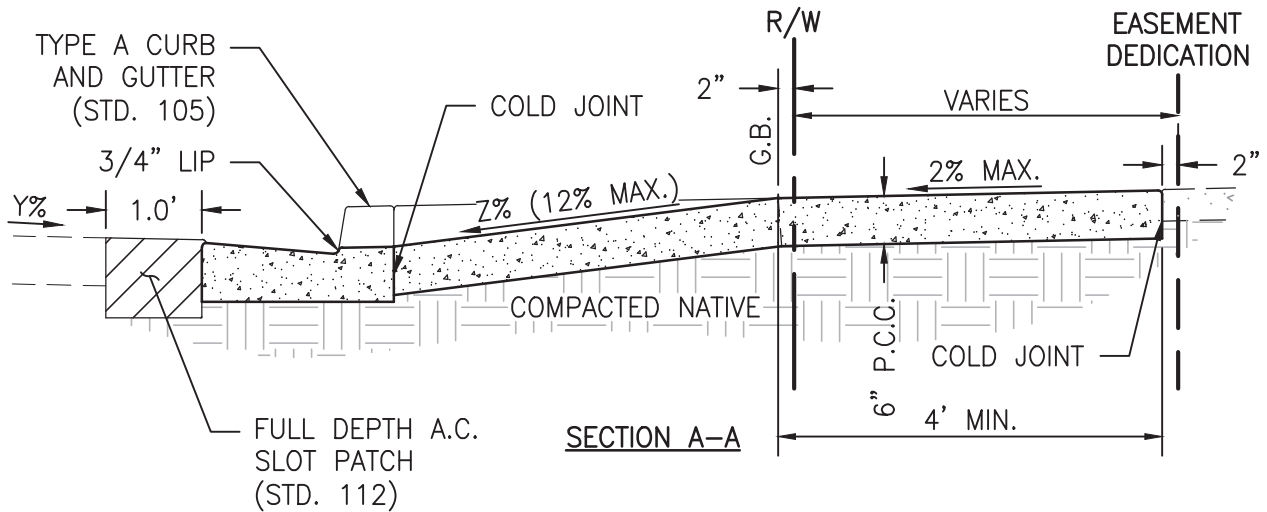
MARK A. TRESTIK, CITY ENGINEER, R.C.E. 53708

DATE

STANDARD PLAN

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1 OF 1



PLAN

NOTES:

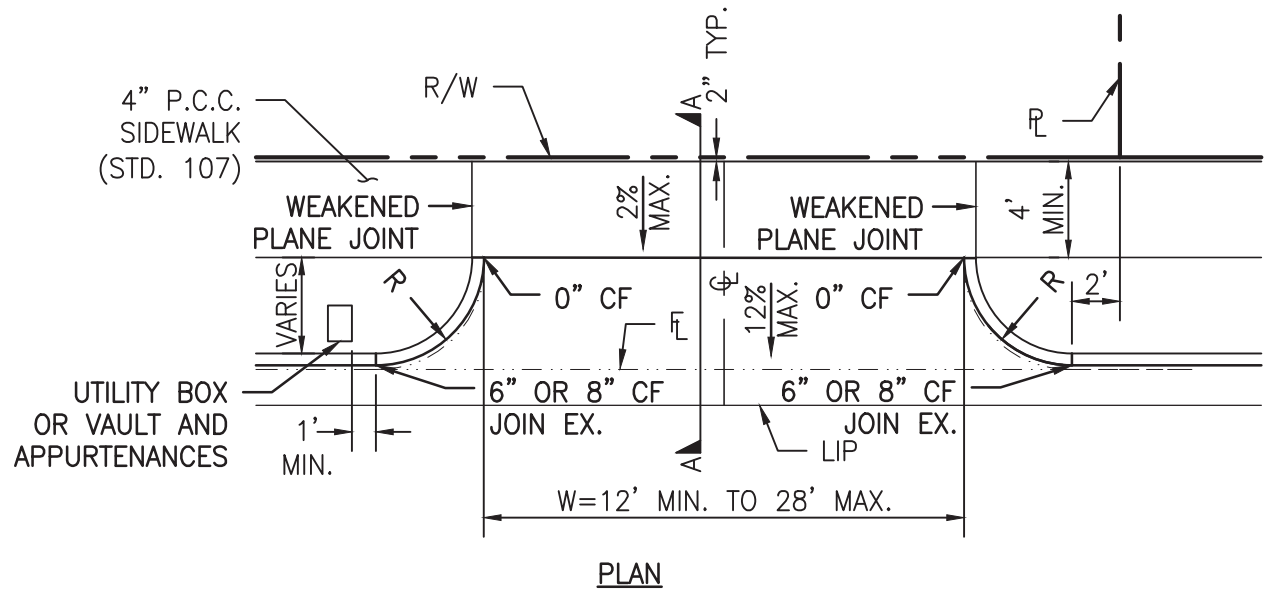
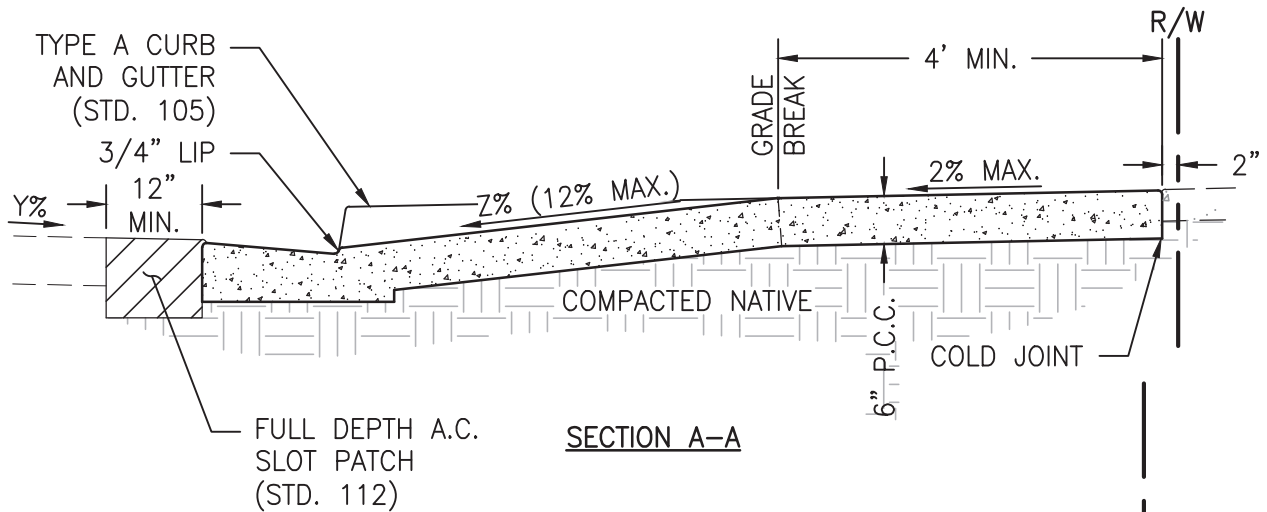
1. WEAKENED PLANE JOINTS SHALL BE INSTALLED AT BOTH SIDES OF A DRIVEWAY AND AT 10' INTERVALS OR MATCH ADJACENT CONSTRUCTION.
2. PORTLAND CONCRETE CEMENT MIX SHALL BE PER GREENBOOK (SSPWC), 520-C-2500.
3. REFER TO AMERICANS WITH DISABILITIES ACCESS REQUIREMENTS FOR DETAILS ON MAXIMUM PERMITTED SLOPES.
4. DRIVEWAY HIGHPOINT SHALL BE 3.5 INCHES, MINIMUM ABOVE STREET CENTERLINE.
5. COMPACTION OF NATIVE SUBGRADE SHALL MEET 95%.
6. TO MINIMIZE SCRAPING  $Y\% + Z\%$  SHALL BE LESS THAN 15%.

CURB FACE	X
6"	3'
8"	4'



**CITY OF LAGUNA BEACH PUBLIC WORKS DEPARTMENT**

<b>REV.</b>	<b>DATE</b>	<b>DRIVEWAY APPROACH II (FLARED)</b>	<b>STANDARD PLAN</b>
		APPROVED BY: <i>Mark A. Trestik</i>	<b>103</b>
		MARK A. TRESTIK, CITY ENGINEER, R.C.E. 53708	DATE: 03/29/2022
			1 OF 1



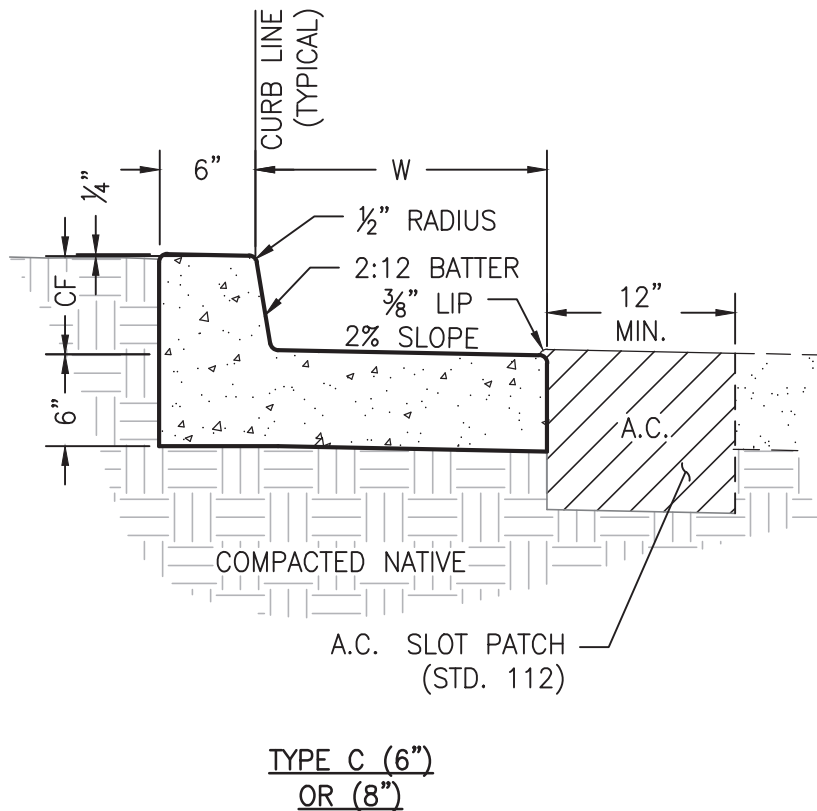
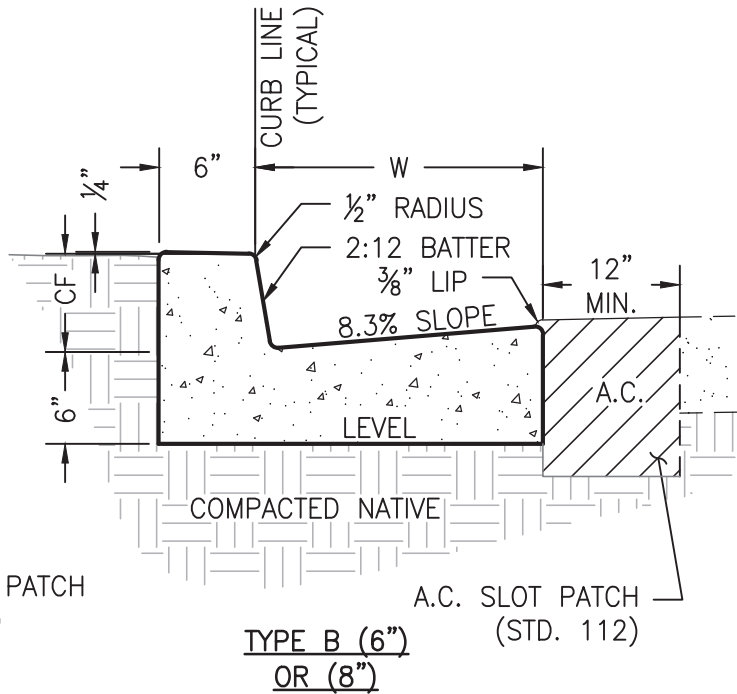
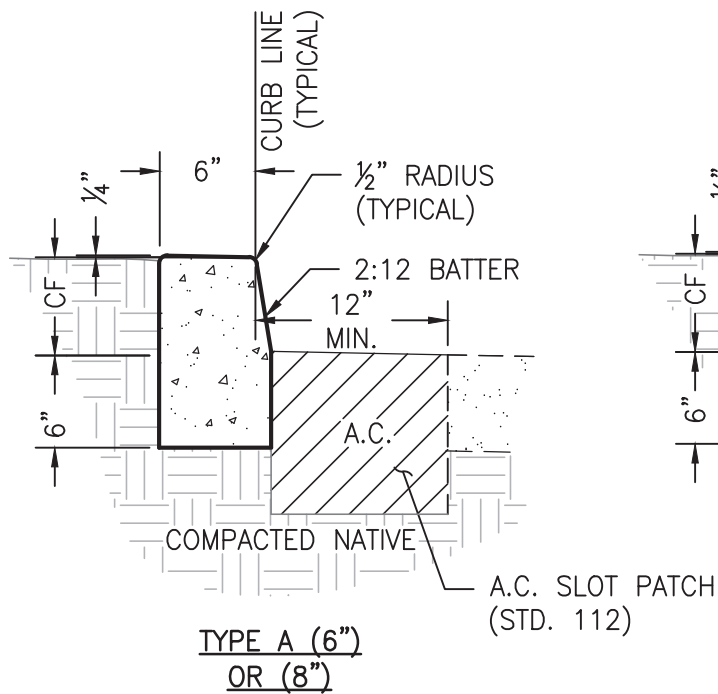
**NOTES:**

1. WEAKENED PLANE JOINTS SHALL BE INSTALLED AT BOTH SIDES OF A DRIVEWAY AND AT 10' INTERVALS OR MATCH ADJACENT CONSTRUCTION.
2. PORTLAND CONCRETE CEMENT MIX SHALL BE PER GREENBOOK (SSPWC), 520-C-2500.
3. REFER TO AMERICANS WITH DISABILITIES ACCESS REQUIREMENTS FOR DETAILS ON MAXIMUM PERMITTED SLOPES.
4. DRIVEWAY HIGHPOINT SHALL BE 3.5 INCHES, MINIMUM ABOVE FLOWLINE.
5. CURB SHALL BE INTEGRAL AND MATCH ADJACENT CONSTRUCTION.
6. 'R' EQUALS PARKWAY WIDTH, BUT SHALL BE A MINIMUM OF 3 FEET.
7. COMPACTION OF NATIVE SUBGRADE SHALL MEET 95%.
8. TO MINIMIZE SCRAPING Y% + Z% SHALL BE LESS THAN 15%.



<b>CITY OF LAGUNA BEACH PUBLIC WORKS DEPARTMENT</b>		<b>DRIVEWAY APPROACH (RADIUS)</b>		STANDARD PLAN <b>104</b>
REV.	DATE	APPROVED BY: <i>Mark A. Trestik</i>	03/29/2022	1 OF 1
		MARK A. TRESTIK, CITY ENGINEER, R.C.E. 53708	DATE	





**NOTES:**

1. THE LAST NUMBER IN THE DESIGNATION IS THE CURB FACE (CF) HEIGHT IN INCHES.
2. GUTTER WIDTH, W, IS 24" UNLESS SPECIFIED OTHERWISE.
3. TYPES A, B, AND C SHALL BE CONSTRUCTED FROM PORTLAND CONCRETE CEMENT (P.C.C.) 520-C-2500.
4. ALL EXPOSED CORNERS ON P.C.C. CURBS AND GUTTERS SHALL BE ROUNDED WITH A 1/2" RADIUS.
5. FINISH SHALL BE LIGHT BROOM FINISH, EXCEPT IN THE FLOWLINE, WHICH SHALL HAVE A SMOOTH STEEL TROWEL FINISH.
6. COMPACTION OF NATIVE SUBGRADE SHALL MEET 95%.



**CITY OF LAGUNA BEACH PUBLIC WORKS DEPARTMENT**

REV.	DATE

**P.C.C. CURB AND GUTTER**

APPROVED BY:

MARK A. TRESTIK, CITY ENGINEER, R.C.E. 53708

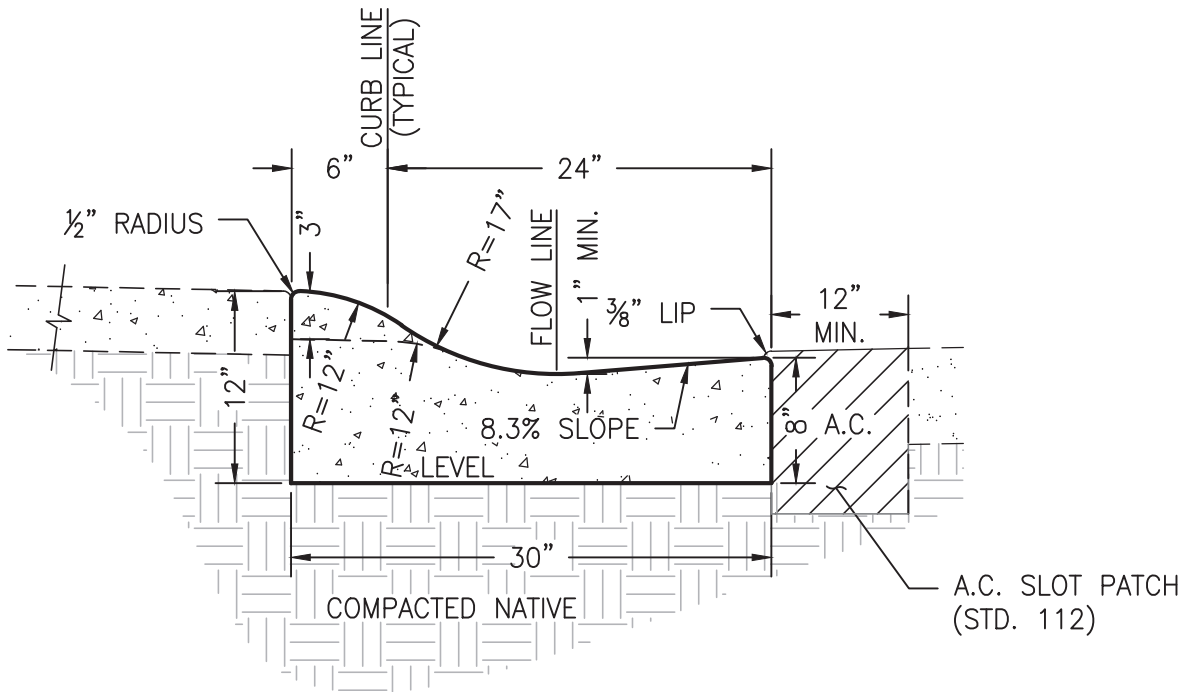
03/29/2022

DATE

STANDARD PLAN

**105**

1 OF 1



**5" ROLLED CURB**

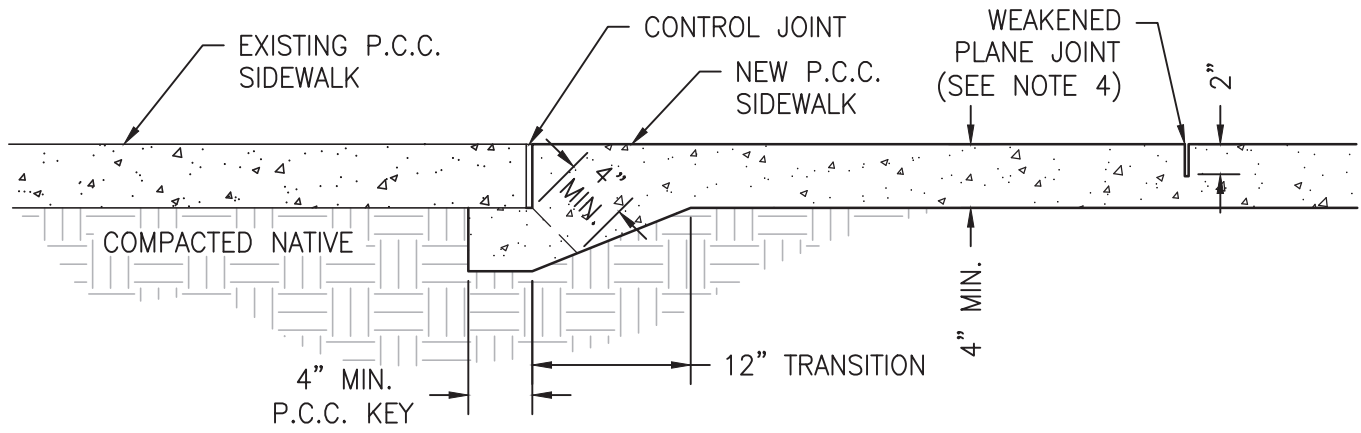
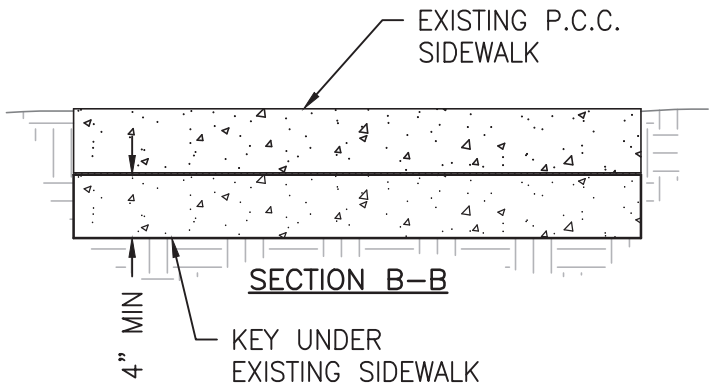
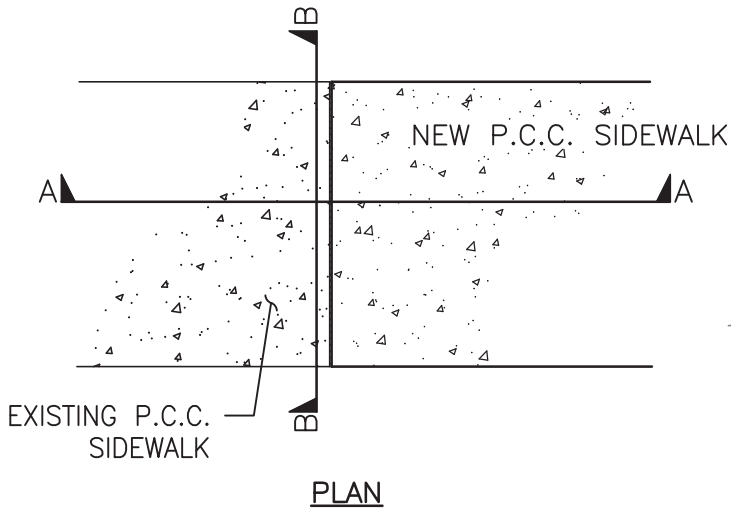
**NOTES:**

1. GUTTER WIDTH SHALL BE 24" UNLESS SPECIFIED OTHERWISE.
2. ROLLED CURB SHALL BE CONSTRUCTED FROM PORTLAND CONCRETE CEMENT (P.C.C.) 520-C-2500.
3. CURB TRANSITIONS SHALL BE 15 FEET MINIMUM, EACH DIRECTION, FROM NEW CURB TO EXISTING.
4. ALL EXPOSED CORNERS ON P.C.C. CURBS AND GUTTERS SHALL BE ROUNDED WITH A 1/2" RADIUS.
5. FINISH SHALL BE LIGHT BROOM FINISH, EXCEPT IN THE FLOWLINE, WHICH SHALL HAVE A SMOOTH STEEL TROWEL FINISH.
6. COMPACTION OF NATIVE SUBGRADE SHALL MEET 95%.



**CITY OF LAGUNA BEACH PUBLIC WORKS DEPARTMENT**

REV.	DATE	P.C.C. ROLLED CURB AND GUTTER		STANDARD PLAN
		APPROVED BY:	03/29/2022	106
		MARK A. TRESTIK, CITY ENGINEER, R.C.E. 53708	DATE	1 OF 1



**NOTES:**

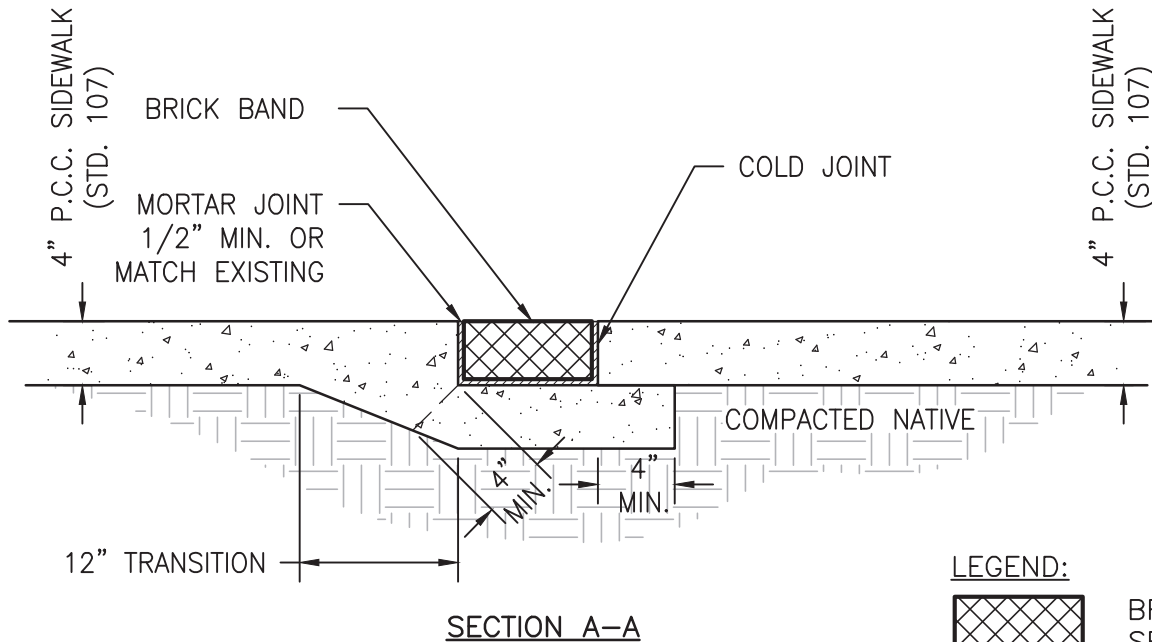
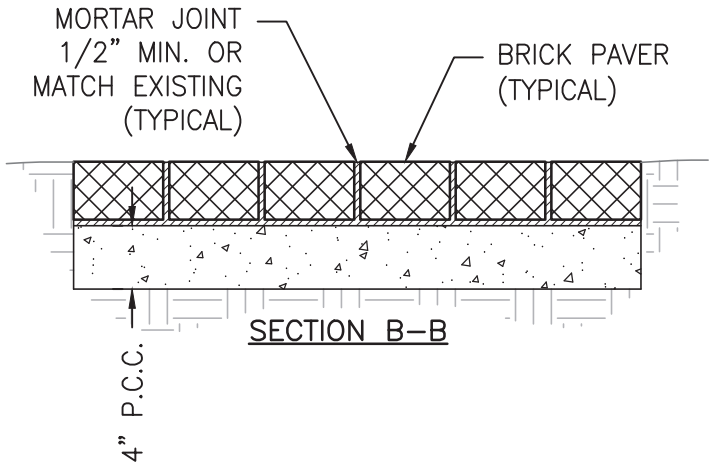
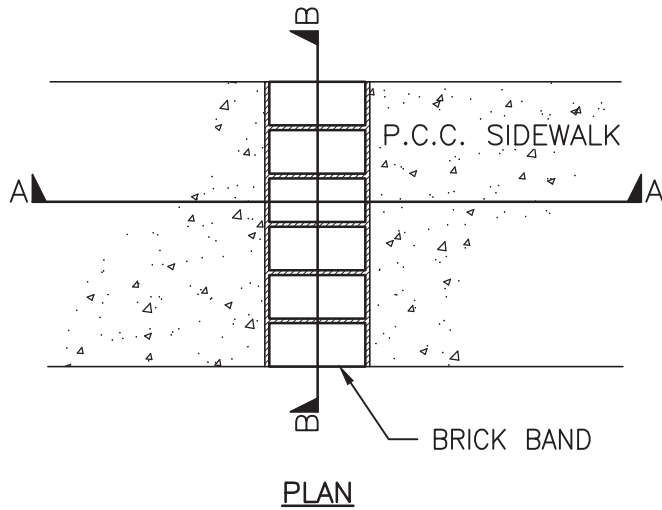
**SECTION A-A**

1. REPLACE ENTIRE PANEL OF FULL WIDTH SIDEWALK TO NEAREST CONTROL JOINT.
2. PORTLAND CONCRETE CEMENT MIX SHALL BE PER GREENBOOK (SSPWC), 520-C-3250.
3. COMPACTION OF NATIVE SUBGRADE SHALL MEET 90%, UNLESS SPECIFIED OTHERWISE BY THE CITY ENGINEER.
4. WEAKENED PLANE JOINTS SHALL BE CONSTRUCTED PER GREENBOOK (SSPWC) SECTION 303-5.4.3, AT REGULAR INTERVAL NOT EXCEEDING 10 FEET.
5. MATCH SCORING PATTERNS OF ADJACENT SIDEWALK. ROUGH FINISH SCORING PATTERNS REQUIRED IN AREAS NEAR BEACH ACCESS POINTS.



**CITY OF LAGUNA BEACH PUBLIC WORKS DEPARTMENT**

REV.		DATE	<b>SIDEWALK</b>		STANDARD PLAN <b>107</b>
APPROVED BY:			<i>Mark A. Trestik</i>		DATE
MARK A. TRESTIK, CITY ENGINEER, R.C.E. 53708			03/29/2022		
					1 OF 1



**NOTES:**

1. MAINTAIN EXISTING SCORING PATTERN.
2. REPLACE ENTIRE PANEL OF FULL WIDTH SIDEWALK TO NEAREST CONTROL JOINT.
3. BRICK MATERIAL TO BE APPROVED BY ENGINEER.
4. MORTAR PER STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREENBOOK) LATEST EDITION.
5. BRICK SIZES AND COLOR TO MATCH ADJACENT BRICK BANDING.
6. COMPACTION OF NATIVE SUBGRADE SHALL MEET 90%, UNLESS SPECIFIED OTHERWISE BY THE ENGINEER.



**CITY OF LAGUNA BEACH PUBLIC WORKS DEPARTMENT**

REV.	DATE

**SIDEWALK BRICK BAND**

APPROVED BY:

MARK A. TRESTIK, CITY ENGINEER, R.C.E. 53708

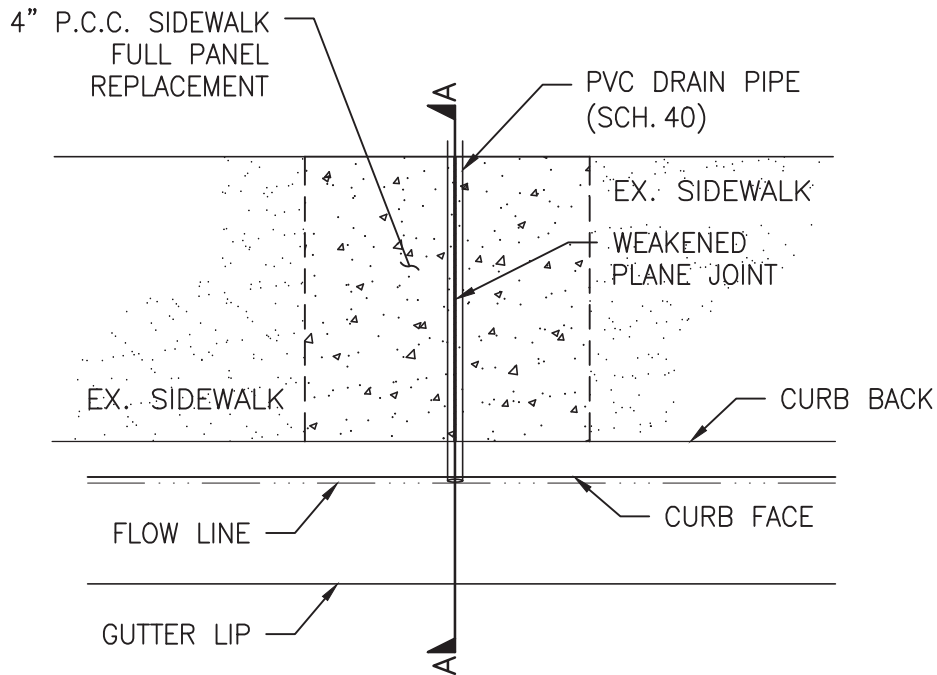
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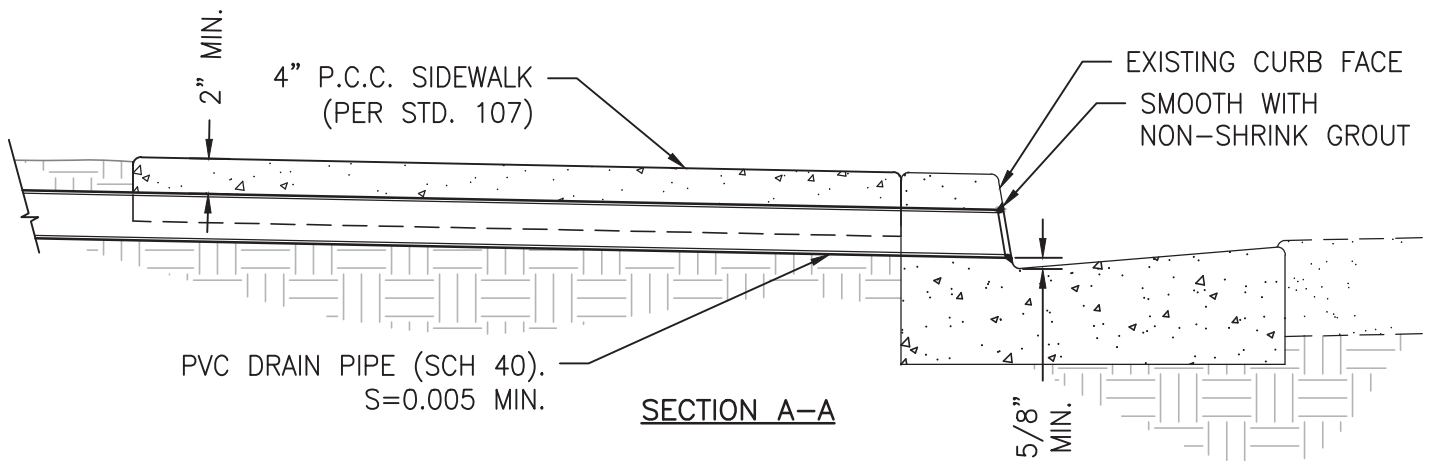
STANDARD PLAN

**108**

1 OF 1



PLAN



SECTION A-A

NOTES:

1. MAXIMUM PIPE SIZE TO BE 3" DIAMETER FOR 6" CURB AND 4" DIAMETER FOR 8" CURB.
2. PORTLAND CONCRETE CEMENT MIX SHALL BE PER GREENBOOK (SSPWC), 520-C-2500.
3. COMPACTION OF NATIVE SUBGRADE SHALL MEET 90%, UNLESS SPECIFIED OTHERWISE BY THE CITY ENGINEER.
4. WEAKENED PLANE JOINTS SHALL BE CONSTRUCTED PER GREENBOOK (SSPWC) SECTION 303-5.4.3.
5. CORE DRILL EXISTING CURB A MINIMUM OF 5/8" ABOVE FLOW LINE AND CHAMFER EDGES AT CURB FACE. FILL ANNULAR SPACE AND SMOOTH WITH NON-SHRINK GROUT AFTER PIPE PLACEMENT.



CITY OF LAGUNA BEACH PUBLIC WORKS DEPARTMENT

REV.	DATE

CURB DRAIN OUTLET

APPROVED BY:

03/29/2022

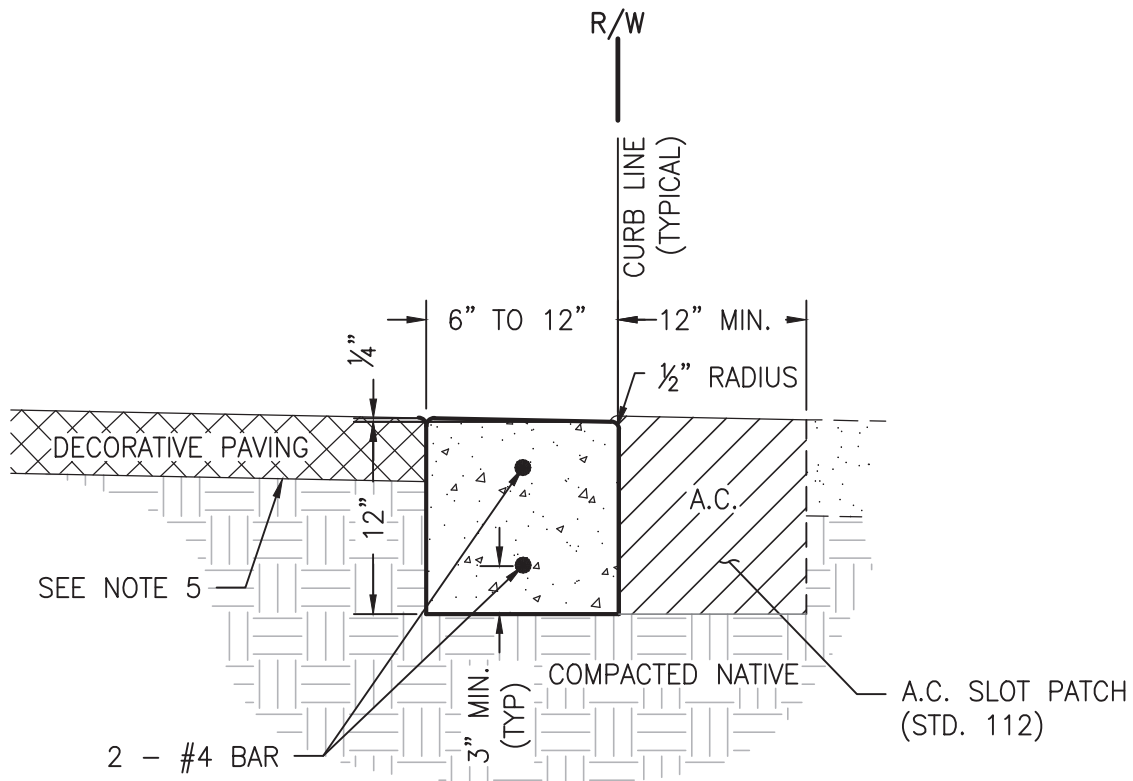
MARK A. TRESTIK, CITY ENGINEER, R.C.E. 53708

DATE

STANDARD PLAN

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1 OF 1



P.C.C. HEADER FOR DECORATIVE PAVING

NOTES:

1. DECORATIVE PAVING HEADER SHALL BE CONSTRUCTED FROM PORTLAND CONCRETE CEMENT (PCC) 560-C-3250.
2. ALL EXPOSED CORNERS ON PCC HEADERS SHALL BE ROUNDED WITH A 1/2" RADIUS.
3. FINISH SHALL BE LIGHT BROOM FINISH.
4. COMPACTION OF NATIVE SUBGRADE SHALL MEET 95%, UNLESS SPECIFIED OTHERWISE BY THE CITY ENGINEER.
5. PRIVATE IMPROVEMENTS WITHIN THE PUBLIC RIGHT-OF-WAY REQUIRE A REVOCABLE ENCROACHMENT PERMIT, AND ARE SUBJECT TO APPROVAL BY THE ENGINEER.



**CITY OF LAGUNA BEACH PUBLIC WORKS DEPARTMENT**

REV.	DATE

**DECORATIVE PAVING HEADER**

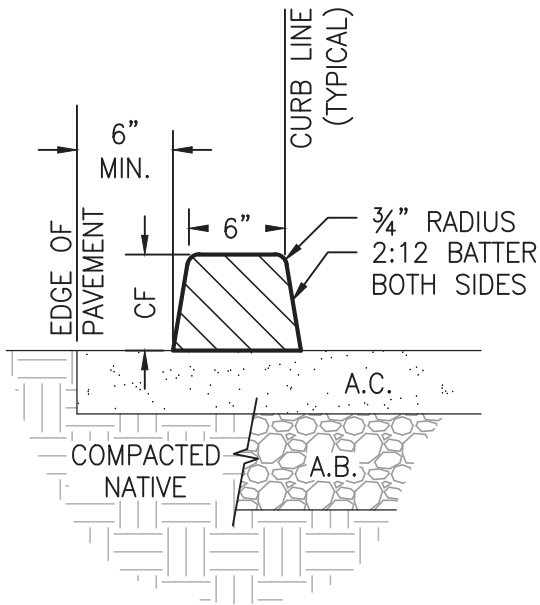
APPROVED BY: *Mark A. Trestik*

MARK A. TRESTIK, CITY ENGINEER, R.C.E. 53708

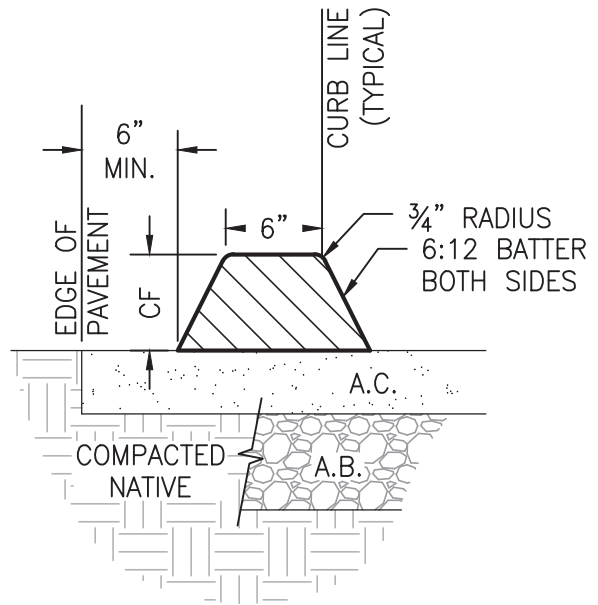
03/29/2022

DATE

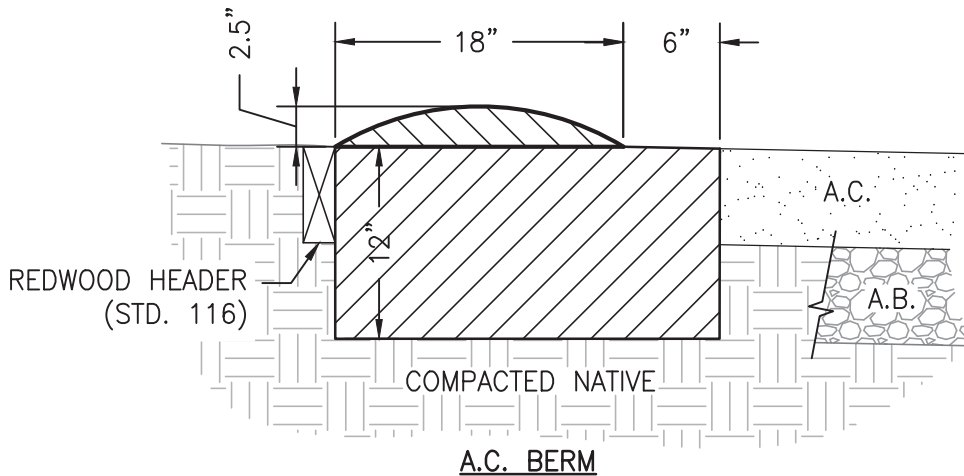
STANDARD  
PLAN  
**110**  
1 OF 1



**TYPE 1 – A.C. DIKE**



**TYPE 2 – A.C. DIKE**



**A.C. BERM**

**LEGEND**



PG 70-10 TYPE D WITH 1%  
ADDITIONAL BINDER



PG 64-10 TYPE C2 OR III-C3

**NOTES:**

1. TACK COAT ALL SURFACES TO BE PAVED AND ADJACENT SURFACES TO BE PAVED AGAINST WITH EITHER SS-1H EMULSIFIED ASPHALT OR PG 64-10 PAVING ASPHALT.



**CITY OF LAGUNA BEACH PUBLIC WORKS DEPARTMENT**

REV.	DATE

**A.C. DIKES AND BERM**

APPROVED BY:

03/29/2022

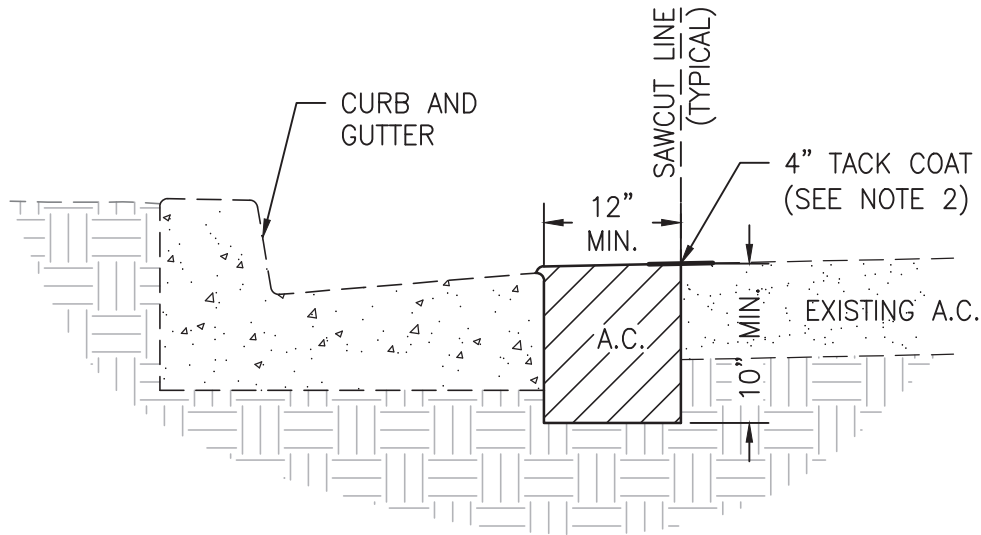
MARK A. TRESTIK, CITY ENGINEER, R.C.E. 53708

DATE

STANDARD  
PLAN

**111**

1 OF 1



**LEGEND**



ASPHALT CONCRETE WEARING COURSE

**NOTES:**

1. ALL ASPHALT CONSTRUCTION SHALL BE TYPE C2-PG 64-10 PER STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREENBOOK, LATEST EDITION). TACK COAT ALL SURFACES TO BE PAVED AND ADJACENT SURFACES TO BE PAVED AGAINST.
2. APPLY A 4" WIDE BAND OF TACK COAT WITH EITHER SS-1H EMULSIFIED ASPHALT OR PG 64-10 PAVING ASPHALT. CENTERED ON THE VERTICAL JOINT ALONG THE PERIMETER OF THE SLOT PATCH.
3. BACKFILL SLOT PATCH UNTIL PAVED.



**CITY OF LAGUNA BEACH PUBLIC WORKS DEPARTMENT**

REV.	DATE

**A.C. SLOT PATCH**

APPROVED BY:

MARK A. TRESTIK, CITY ENGINEER, R.C.E. 53708

03/29/2022

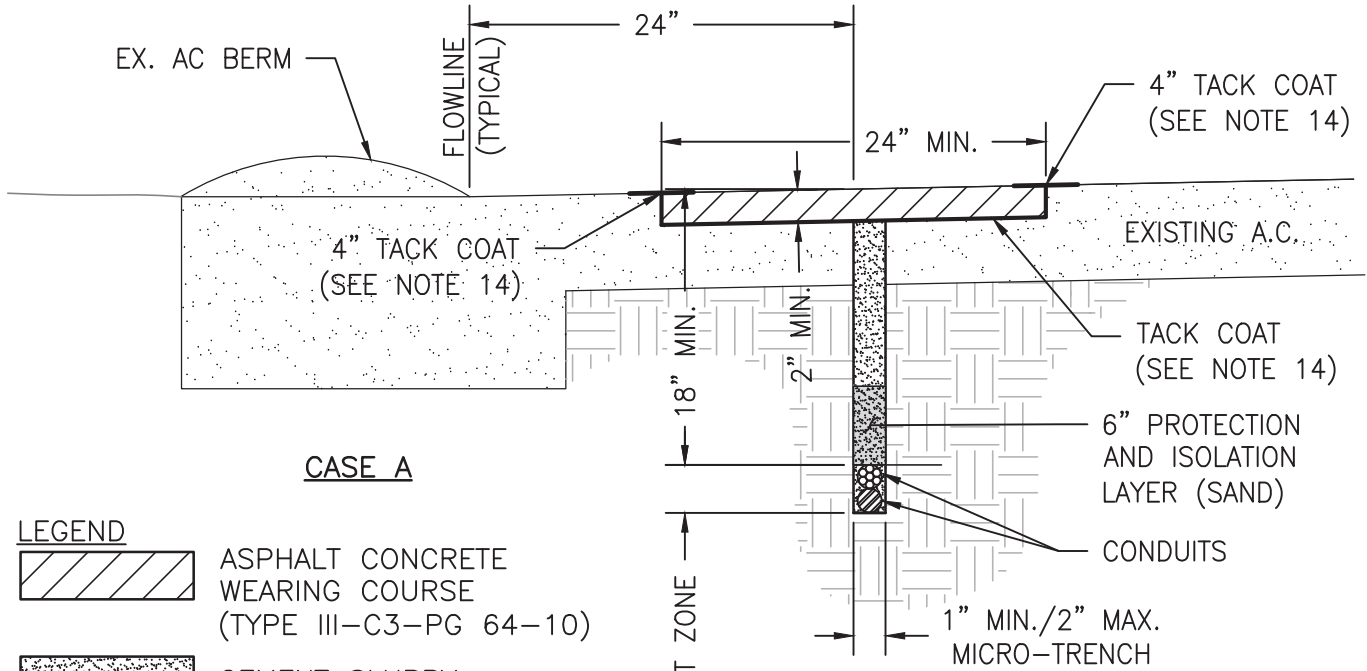
DATE

STANDARD PLAN

**112**



1 OF 1

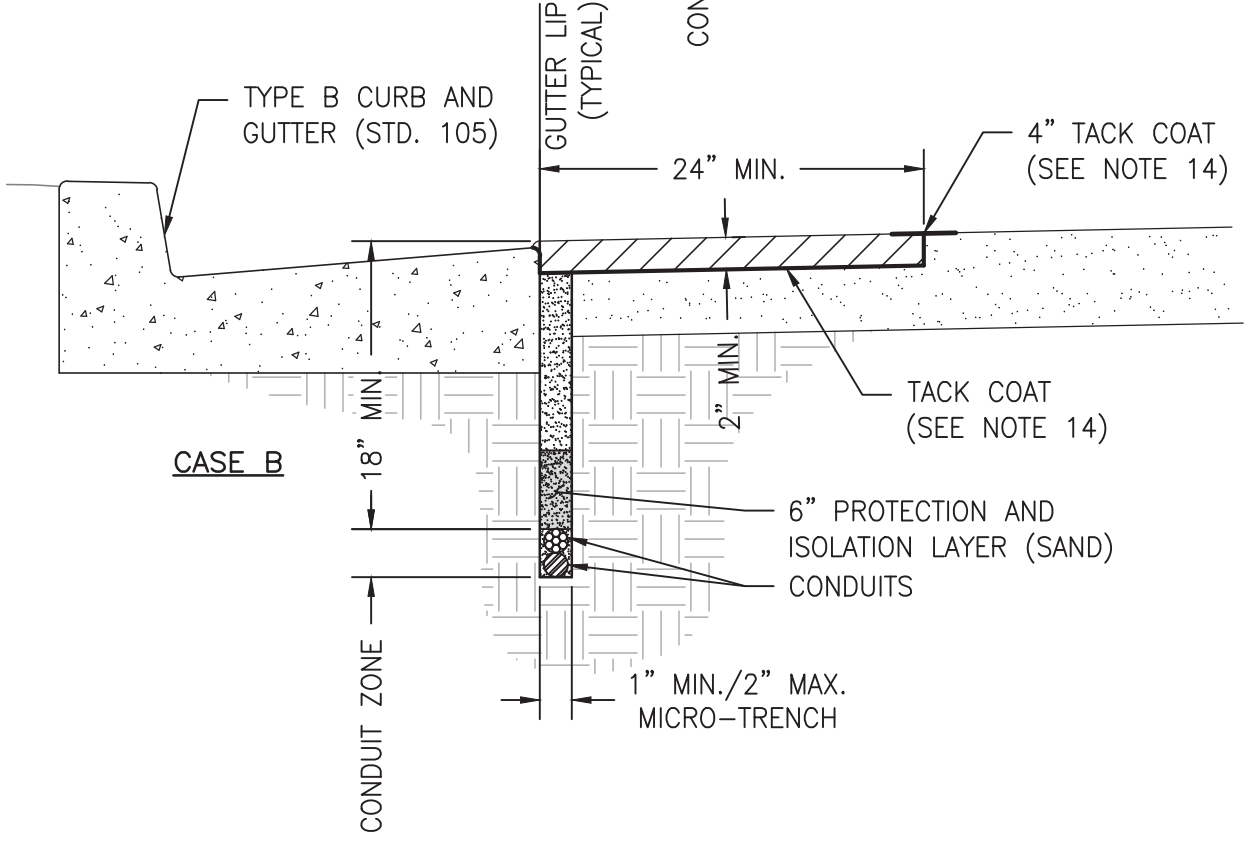




**CASE A**

**LEGEND**

-  ASPHALT CONCRETE WEARING COURSE (TYPE III-C3-PG 64-10)
-  CEMENT SLURRY



**CASE B**



**CITY OF LAGUNA BEACH PUBLIC WORKS DEPARTMENT**

REV.	DATE

**MICRO-TRENCHING**

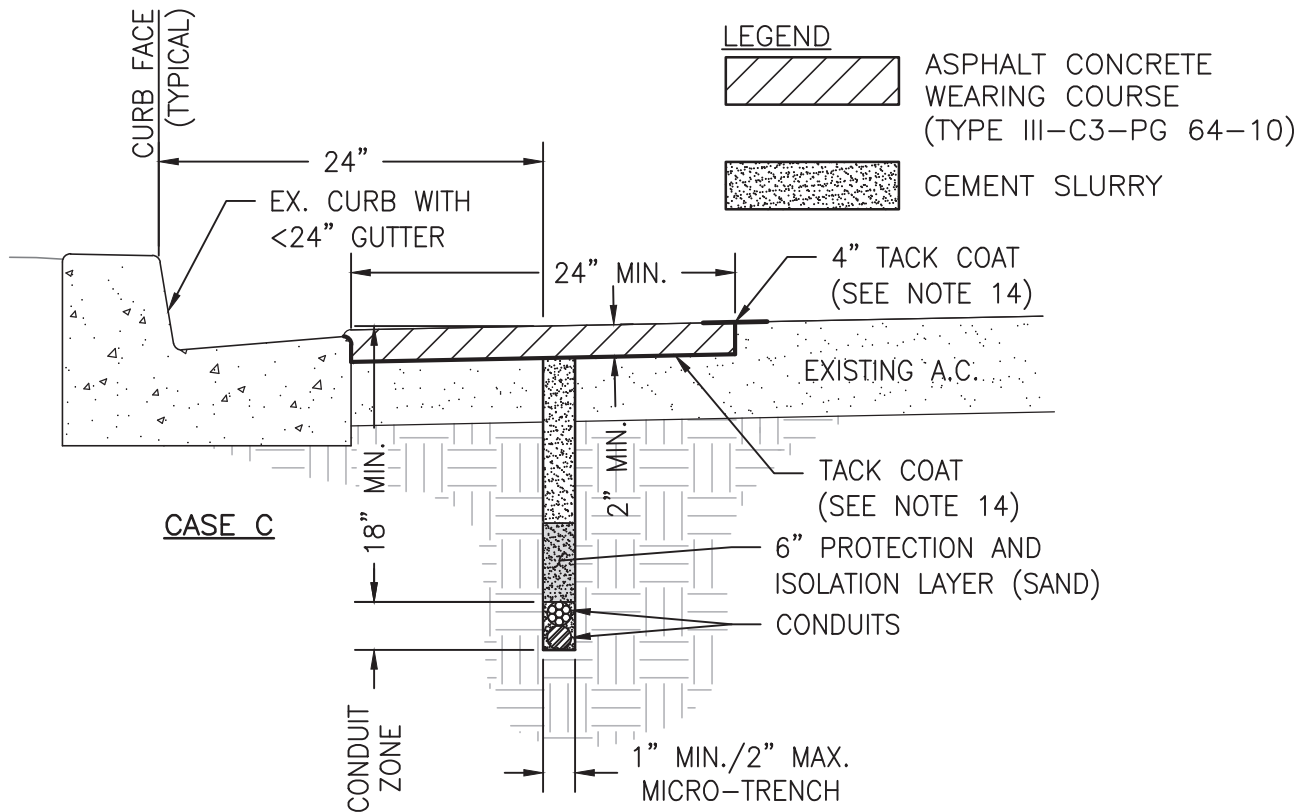
APPROVED BY: 

03/29/2022

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MARK A. TRESTIK, CITY ENGINEER, R.C.E. 53708 DATE

STANDARD PLAN  
**113**  
1 OF 4



**NOTES:**

1. ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (SSPWC) "GREENBOOK"
2. MICRO-TRENCHING SHALL ONLY BE USED TO INSTALL TELECOMMUNICATION CONDUITS.
3. MICRO-TRENCHING SHALL NOT BE ALLOWED IN CONCRETE PAVED STREETS, ALLEYS, SIDEWALKS, PARKWAYS, CURBS OR GUTTERS. ANY SLURRY SPILLAGE ONTO ALL ADJACENT SURFACES TO BE REMOVED.
4. MICRO-TRENCHING BORING SHALL BE CONSTRUCTED TO AVOID DISTURBING UNDER CURB, SIDEWALKS, SPANDRELS OR OTHER CONCRETE IMPROVEMENTS.
5. STREETS SLURRY SEALED OR OVERLAYED IN THE PAST FIVE YEARS REQUIRE SPECIAL STREET RESTORATION. REPAIR SHALL BE TO THE FULL STREET WIDTH OR AS APPROVED BY THE ENGINEER.
6. THE CONTRACTOR SHALL IDENTIFY ALL EXISTING UTILITIES, INCLUDING SERVICE CONNECTIONS IN THE FIELD. THE CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT (U.S.A.) AT LEAST 48 HOURS PRIOR TO START OF WORK AT 8-1-1, OR TOLL-FREE AT 1-800-422-4133. THE CONTRACTOR SHALL FURTHER SUPPLEMENT THE FINDINGS OF U.S.A. TO DETERMINE THE EXACT LOCATIONS AND DEPTHS OF ALL UTILITIES BY USING A MOBILE GROUND PENETRATING RADAR SYSTEM. THE CONTRACTOR SHALL POT HOLE ALL CROSSING UTILITIES AND PARALLEL UTILITIES WITHIN 18-INCHES OF THE PROPOSED ALIGNMENT TO A DEPTH OF 6-INCHES BELOW THE BOTTOM OF THE MICRO-TRENCH, TO DETERMINE THE EXISTING UTILITY ALIGNMENT AND ELEVATION. POTHOLES SHALL BE IMMEDIATELY BACKFILLED AND COMPACTED IN ACCORDANCE WITH THE SPECIFICATIONS OR RESTORED AS DIRECTED BY THE ENGINEER.



**CITY OF LAGUNA BEACH PUBLIC WORKS DEPARTMENT**

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			APPROVED BY:	03/29/2022	
			 MARK A. TRESTIK, CITY ENGINEER, R.C.E. 53708		DATE

NOTES (CONTINUED):

7. IF EXISTING UTILITIES ARE DAMAGED, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE INSPECTOR, ENGINEER AND UTILITY OWNER TO PERFORM THE REPAIRS PROMPTLY ACCORDING TO THEIR REQUIREMENTS AND PER ASSOCIATED CITY PERMITS.
8. THE FOLLOWING ITEMS SHALL BE SUBMITTED TO, AND APPROVED BY THE ENGINEER PRIOR TO BEGINING WORK:
  - a. DETAILED SITE PLAN INCLUDING THE LENGTH OF MICRO-TRENCH AND LOCATION RELATIVE TO EDGE OF PAVEMENT/ CURB FACE/ BERM.
  - b. TYPICAL MICRO-TRENCH DETAIL THAT INCLUDES WIDTH, PINS, DEPTH OF COVER, AND BACKFILL MATERIAL.
  - c. DETAIL SHOWING CONDUIT FROM MAIN MICRO-TRENCH ALIGNMENT TO LATERAL SURFACE CONNECTIONS INCLUDING TO ANY JUNCTION/PULL BOX. INCLUDE SPECIFIC INFORMATION OF DEPTH, SIZE, AND METHOD OF EXCAVATION BELOW EXISTING CURB AND GUTTER.
    - c.1. VAULT AND/OR JUNCTION/PULL BOX SHALL BE CLEARLY IDENTIFIED ON THE PLAN.
  - d. CUT SHEETS OF PROPOSED EQUIPMENT PARTICULARLY SUITABLE FOR MICRO-TRENCHING, INCLUDING:
    - d.1. MICRO-TRENCHER CAPABLE OF MEETING TARGET DEPTH AND WIDTH IN A SINGLE PASS WITH AN INTEGRAL HOOD AND ASSOCIATED VACUUM SYSTEM. SELECTION OF CUTTING WHEEL SHALL BE SUCH THAT IT MINIMIZES DAMAGE TO THE ADJACENT AC SURFACE.
    - d.2. MOBILE CONCRETE/SLURRY PLACEMENT WITH AN ON-BOARD VIBRATOR AND NARROW TROUGH TO MATCH MICRO-TRENCH WIDTH.
    - d.3. MOBILE GROUND PENETRATING RADAR SYSTEM THAT IS CAPABLE OF LOCATING BOTH METALLIC AND NON-METALLIC PIPES AND CABLES TO A DEPTH OF 24-INCHES.
    - d.4. OTHER SITE-SPECIFIC ITEMS AS REQUIRED BY THE ENGINEER.
8. MICRO-TRENCH SHALL BE CONSTRUCTED WITH CONTINUOUS UNIFORM STRAIGHT AND NEAT EDGES. MICRO-TRENCH ALIGNMENTS SHALL BE CONSTRUCTED WITH 50 FT. MINIMUM STRAIGHT SEGMENTS AND SHALL CONSIST OF RUNS PARALLEL TO THE STREET CENTERLINE. STREET CROSSING MAY BE DONE PROVIDED THE ALIGNMENT IS PERPENDICULAR TO THE STREET CENTERLINE TO THE EXTENT POSSIBLE.
9. EXPANSION OF THE TRENCH WHEN EXISTING CONDITIONS OF THE ASPHALT CONCRETE WARRANT SHALL BE APPROVED BY THE ENGINEER.
10. UP TO TWO (2) VERTICALLY STACKED CONDUITS CAN BE PLACED WITHIN A MICRO-TRENCH.
11. ANCHORS/SPACERS SHALL BE PLACED AT A MAXIMUM OF 10- FEET APART ALONG THE ALIGNMENT TO ENSURE THE CONDUIT DOES NOT RISE FROM THE BOTTOM OF THE MICRO-TRENCH.
12. MICRO-TRENCH TO BE BACK FILLED FLUSH TO THE FINISHED SURFACE WITH CEMENT SLURRY (2500 PSI). COLD PLANE ASPHALT AND CEMENT SLURRY TO A MINIMUM DEPTH OF 2 INCHES AND REPLACE WITH ASPHALT CONCRETE WEARING COURSE. MINIMUM COLD PLANE WIDTH SHALL BE 24 INCHES. MATCHING OF SLURRY COLOR TO THE BEST EXTENT POSSIBLE.



**CITY OF LAGUNA BEACH PUBLIC WORKS DEPARTMENT**

REV.	DATE	<b>MICRO-TRENCHING</b>		STANDARD PLAN
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		MARK A. TRESTIK, CITY ENGINEER, R.C.E. 53708	DATE	3 OF 4

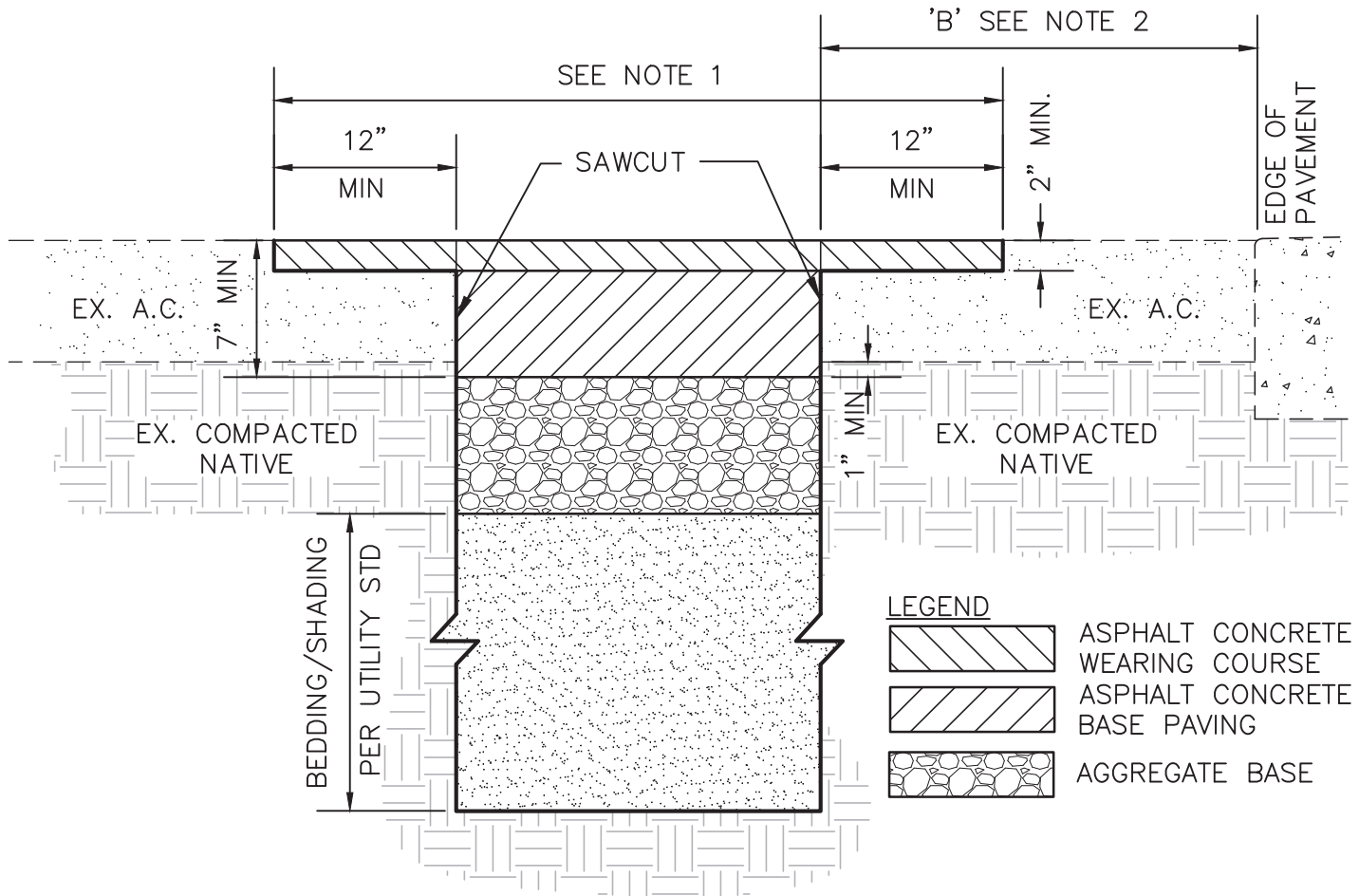
NOTES (CONTINUED):

13. COMMENCEMENT OF SURFACE PREPARATION SUCH AS GRINDING/CHIPPING FOR ASPHALT CONCRETE PAVING REPLACEMENT WILL OCCUR NO SOONER THAN 48 HOURS AFTER SLURRY BACKFILL OF TRENCH. FIELD CONDITIONS OR MATERIAL USED MAY NECESSITATE A LONGER WAIT AS DETERMINED BY THE INSPECTOR.
14. AS SOON AS BACKFILL HAS CURED, WITHIN 30 CALENDAR DAYS, ASPHALT CONCRETE SHALL BE GROUND AND CAPPED AS FOLLOWS:
  - a. TACK COAT ALL EDGES WITH EITHER SS-1H EMULSIFIED ASPHALT OR PG 64-10 PAVING ASPHALT IMMEDIATELY BEFORE THE ADJOINING ASPHALT CONCRETE IS PLACED.
  - b. APPLY A 4" WIDE BAND OF TACK COAT CENTERED ON THE VERTICAL JOINT ALONG THE PERIMETER OF TRENCH REPAIR.
15. AS-BUILTS, GROUND PENETRATION MONITORING REPORT AND A POST-CONSTRUCTION VIDEO INCLUSIVE OF MICRO-TRENCH IMPROVEMENTS AND ANY SEWER LATERAL CROSSINGS SHALL BE SUBMITTED BY THE CONTRACTOR TO THE ENGINEER.
16. EACH MICRO-TRENCH SHALL INCLUDE A TRACER WIRE AND 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 FEET IN LENGTH, PLACE THE TAG NEAR EACH END OF THE MICRO-TRENCH AND AT INTERVALS NOT TO EXCEED 50 FEET.



**CITY OF LAGUNA BEACH PUBLIC WORKS DEPARTMENT**

REV.	DATE	MICRO-TRENCHING		STANDARD PLAN
		APPROVED BY: <i>Mark A. Trestik</i>	03/29/2022	113
		MARK A. TRESTIK, CITY ENGINEER, R.C.E. 53708	DATE	4 OF 4



**NOTES:**

- TRENCH TO BE BASE PAVED FLUSH WITH EXISTING PAVEMENT PRIOR TO COLD PLANING AND APPLICATION OF WEARING COURSE.
- REMOVE AND REPLACE ASPHALT CONCRETE TO EDGE OF GUTTER OR EDGE OF PAVEMENT WHERE 'B' IS LESS THAN 36"
- COMPACTION OF NATIVE AND BACKFILLED SUBGRADE MATERIAL SHALL MEET 95% RELATIVE DENSITY.
- ASPHALT CONCRETE SHALL BE PLACED IN LIFTS NOT TO EXCEED 4-INCHES THICK.
- STREETS SLURRY SEALED OR OVERLAYED IN THE PAST FIVE YEARS REQUIRE SPECIAL STREET RESTORATION. REPAIR SHALL BE TO THE FULL STREET WIDTH OR AS APPROVED BY THE ENGINEER.
- NOTIFY ENGINEER PRIOR TO PAVING IF EXISTING PAVEMENT THICKNESS EXCEEDS 6-INCHES.
- ALL ASPHALT CONSTRUCTION SHALL BE PER STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREENBOOK, LATEST EDITION). WEARING COURSE SHALL BE TYPE III-C3-PG 64-10.
- TACK COAT ALL SURFACES TO BE PAVED AND ADJACENT SURFACES TO BE PAVED AGAINST WITH EITHER SS-1H EMULSIFIED ASPHALT OR PG 64-10 PAVING ASPHALT.
- APPLY A 4" WIDE BAND OF TACK COAT CENTERED ON THE VERTICAL JOINT ALONG THE PERIMETER OF TRENCH REPAIR.



**CITY OF LAGUNA BEACH PUBLIC WORKS DEPARTMENT**

REV.	DATE

**TRENCH PAVEMENT RESTORATION**

APPROVED BY:

MARK A. TRESTIK, CITY ENGINEER, R.C.E. 53708

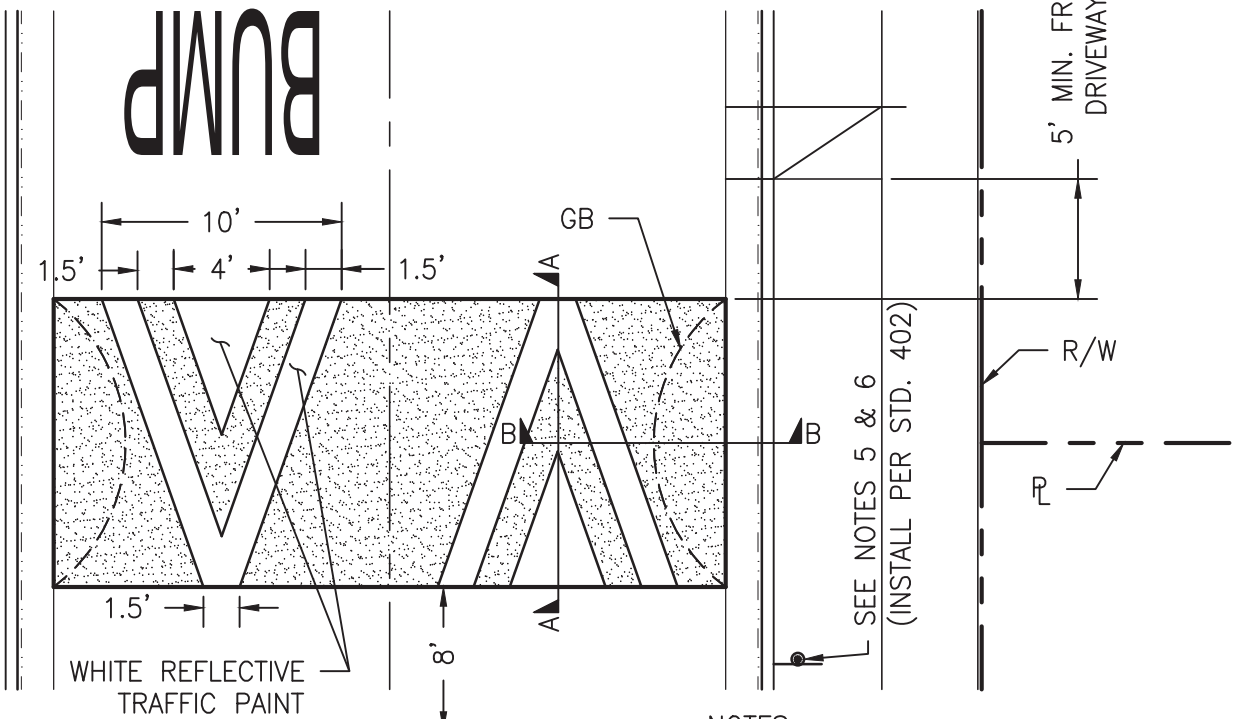
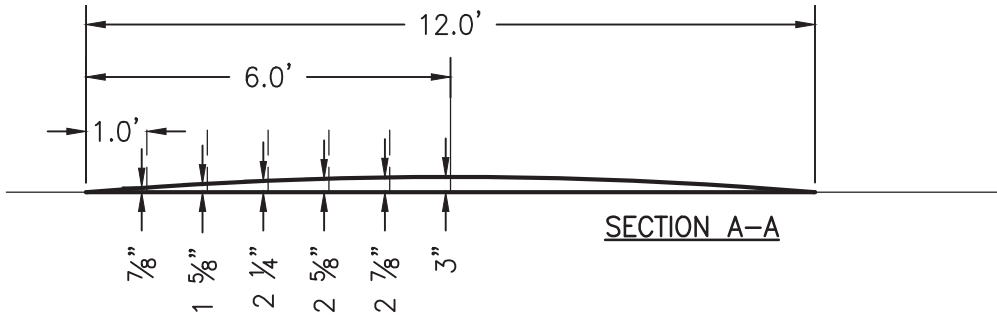
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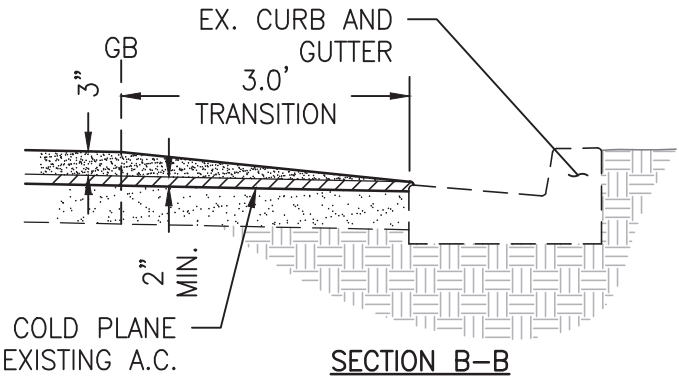


WHITE REFLECTIVE TRAFFIC PAINT

8" WHITE REFLECTIVE LETTER LEGEND (TRAFFIC PAINT)

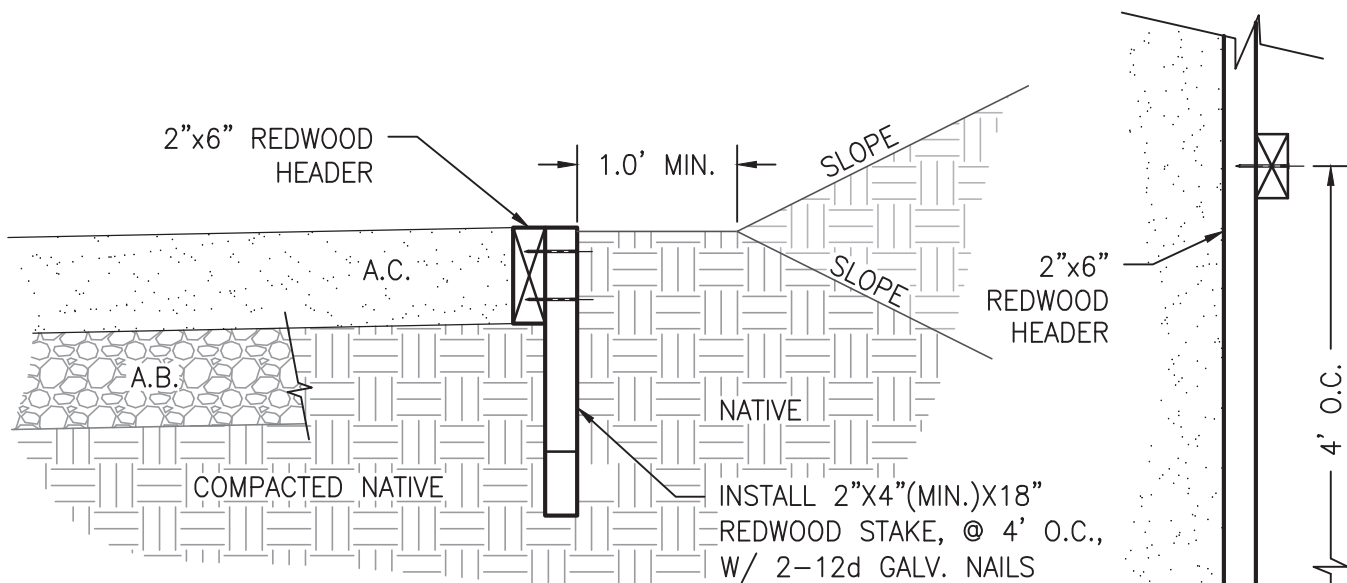
**BUMP**

- NOTES:**
1. ASPHALT SHALL BE TYPE C2-PG 64-10 (1/2"), OR AS DIRECTED BY THE ENGINEER.
  2. ASPHALT SHALL BE PLACED IN TWO INCH (2") LIFTS.
  3. EDGE OF SPEED HUMP SHALL BE FIVE FEET (5') MINIMUM FROM EDGE OF DRIVEWAY.
  4. WHEREVER POSSIBLE SPEED HUMPS SHALL BE PLACED AT PROPERTY LINES.
  5. WARNING SIGNS W8-1 AND W13-1P, PER CA MUTCD (2014), SHALL BE INSTALLED IN EACH DIRECTION, AS DIRECTED BY THE ENGINEER.
  6. ADVANCED WARNING SIGN W84 (CA), PER CA MUTCD (2014), SHALL BE INSTALLED IN EACH DIRECTION, AS DIRECTED BY THE ENGINEER.



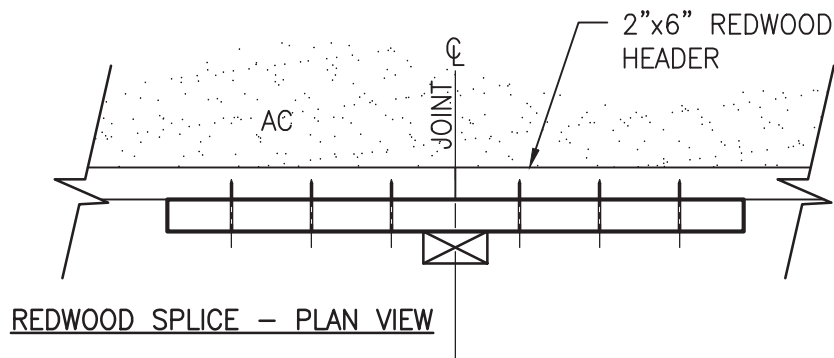
CITY OF LAGUNA BEACH PUBLIC WORKS DEPARTMENT		SPEED HUMP		STANDARD PLAN
REV.	DATE	APPROVED BY:	03/29/2022	115
		<i>Mark A. Trestik</i>		
		MARK A. TRESTIK, CITY ENGINEER, R.C.E. 53708	DATE	1 OF 1



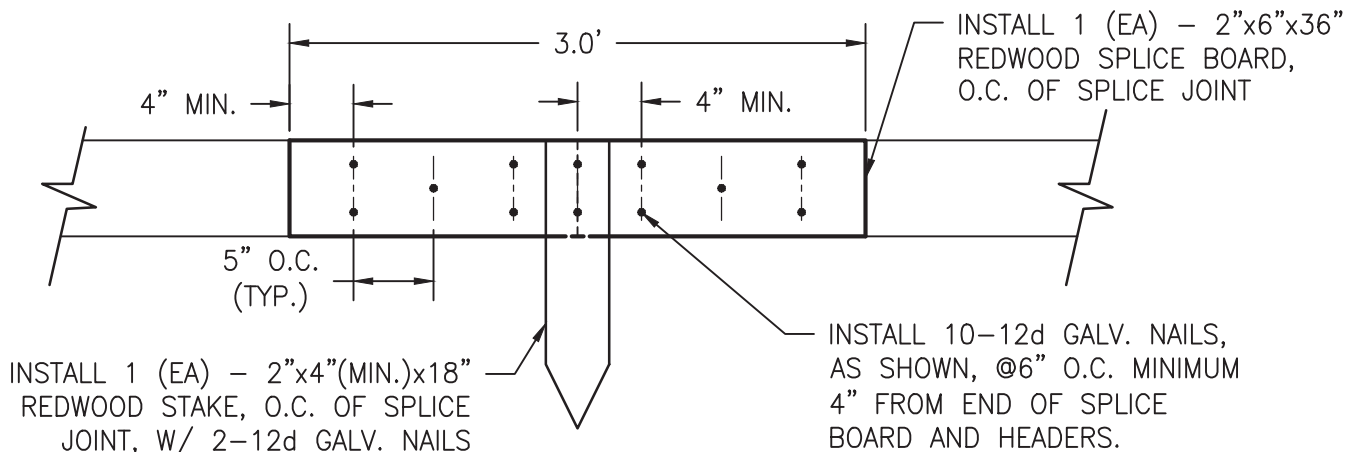


**REDWOOD HEADER - TYPICAL SECTION**

**PLAN VIEW**



**REDWOOD SPLICE - PLAN VIEW**



**REDWOOD SPLICE DETAIL - ELEVATION VIEW**



**CITY OF LAGUNA BEACH PUBLIC WORKS DEPARTMENT**

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**REDWOOD PAVING HEADER**

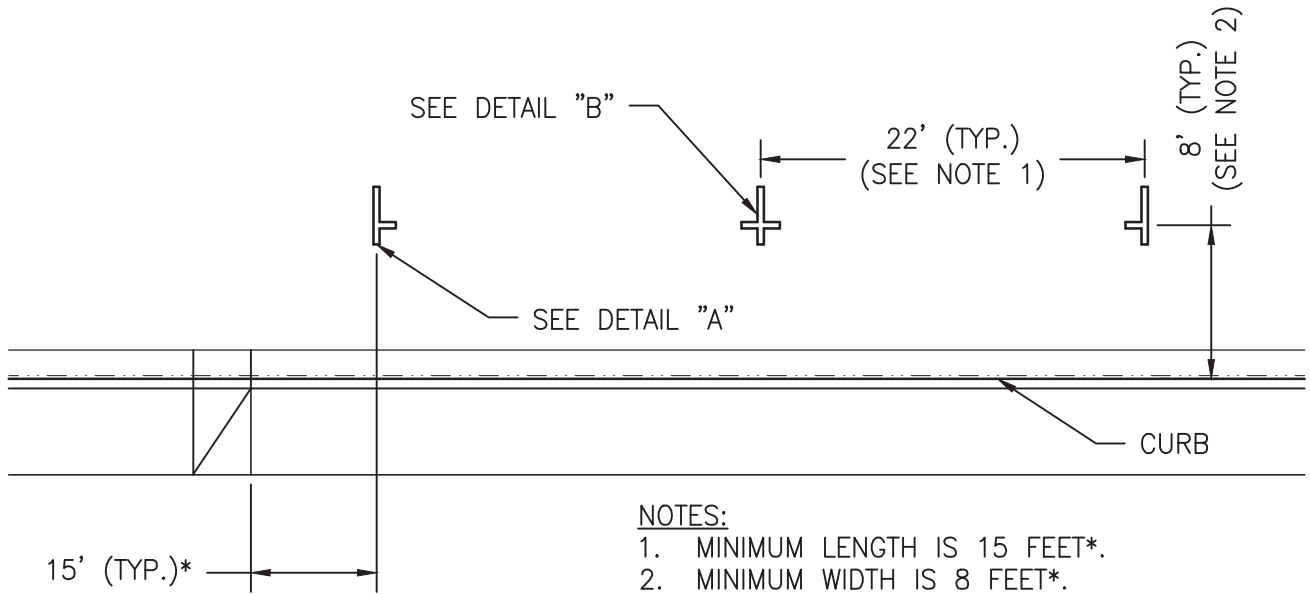
APPROVED BY: *Mark A. Trestik*

MARK A. TRESTIK, CITY ENGINEER, R.C.E. 53708

03/29/2022

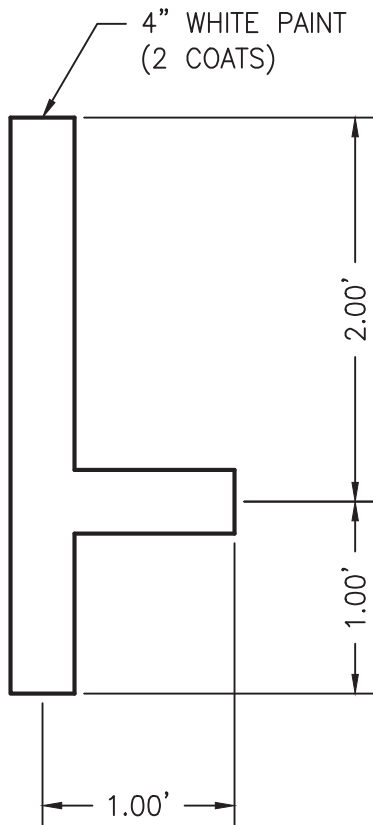
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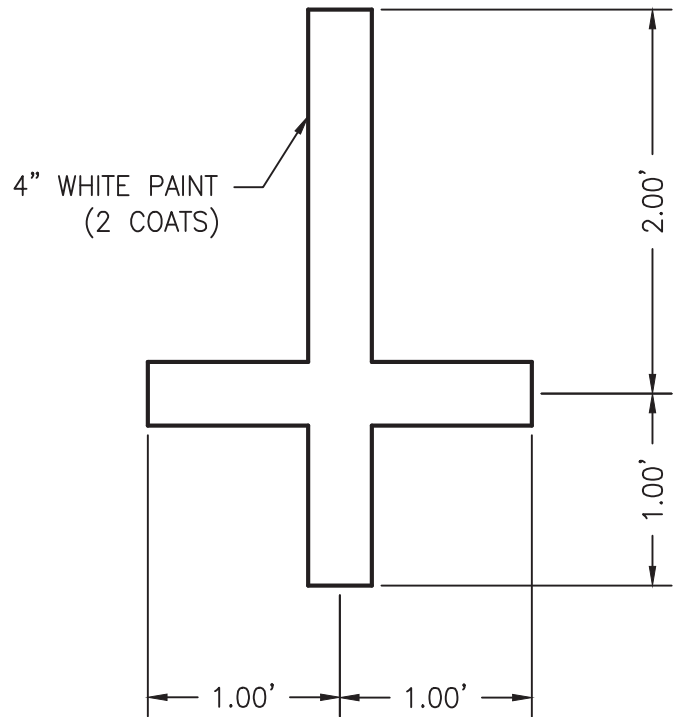


**NOTES:**

1. MINIMUM LENGTH IS 15 FEET\*.
  2. MINIMUM WIDTH IS 8 FEET\*.
- \*MAY VARY WITH ENGINEER APPROVAL.



**DETAIL "A"**



**DETAIL "B"**



**CITY OF LAGUNA BEACH PUBLIC WORKS DEPARTMENT**

REV.	DATE

**PARKING BRACKET**

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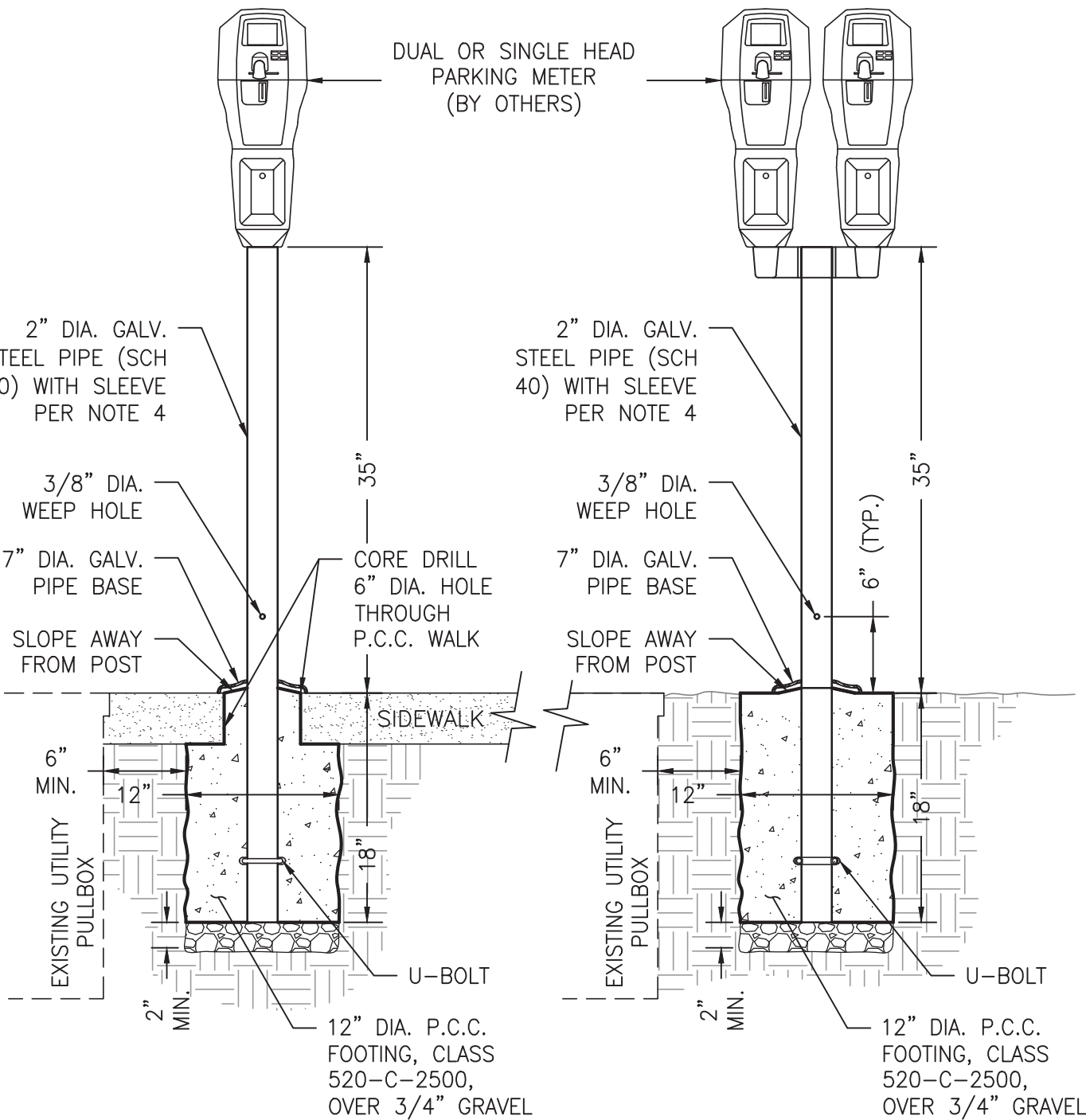
DATE

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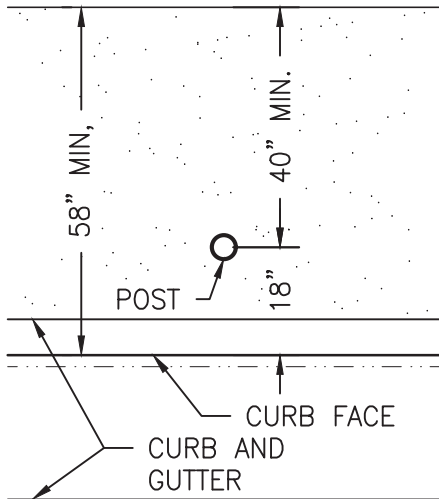


SIDEWALK SETTING

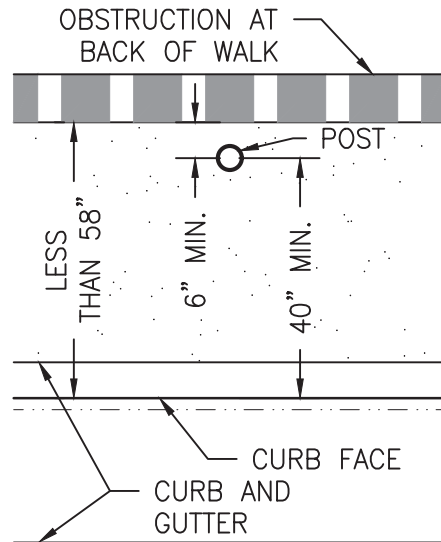
EARTHEN SETTING



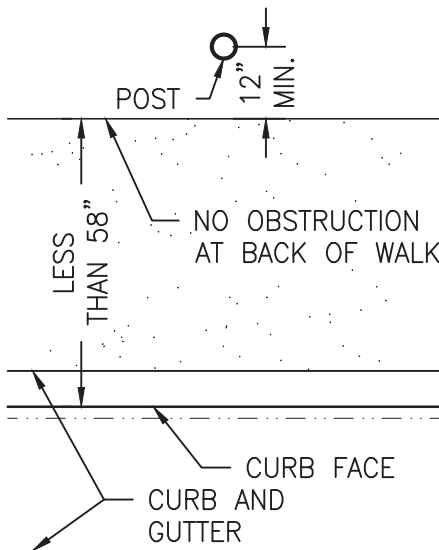
<b>CITY OF LAGUNA BEACH PUBLIC WORKS DEPARTMENT</b>		
<b>PARKING METER POST</b>		
REV.	DATE	APPROVED BY: <i>Mark A. Trestik</i>
		03/29/2022
		DATE
		MARK A. TRESTIK, CITY ENGINEER, R.C.E. 53708
STANDARD PLAN		401
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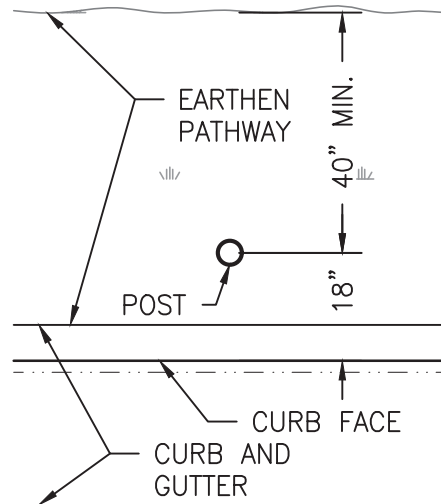
**CASE A**  
FRONT OF SIDEWALK



**CASE B**  
BACK OF SIDEWALK



**CASE C**  
BEHIND SIDEWALK



**CASE D**  
EARTHEN SETTING  
(NO SIDEWALK)

**NOTES:**

1. CONTRACTOR SHALL CONTACT THE PARKING METER SUPERVISOR AT (949)497-0349 A MINIMUM OF 48 HOURS PRIOR TO STARTING WORK THAT WILL AFFECT EXISTING OR PROPOSED PARKING METER POSTS.
2. DURING POST REPLACEMENT, CONTRACTOR SHALL REMOVE EXISTING POST AND POST FOOTING, RECOMPACT SURROUNDING SUBGRADE AND INSTALL NEW POST AND POST FOOTING.
3. IF CONDITIONS EXIST OTHER THAN WHAT IS ESTABLISHED IN THIS STANDARD DETAIL, SPECIAL PROVISIONS MAY BE CONSIDERED WITH THE APPROVAL OF THE CITY ENGINEER.
4. INSTALL 2 -1/2" DIA. GALVANIZED STEEL PIPE (SCH 40) SLEEVE OVER POST BEFORE MOUNTING HEAD. SLEEVE LENGTHS SHALL BE: A) SINGLE HEAD = 32-7/8"; B) DUAL HEAD = 29-3/4".



**CITY OF LAGUNA BEACH PUBLIC WORKS DEPARTMENT**

REV.	DATE

**PARKING METER POST**

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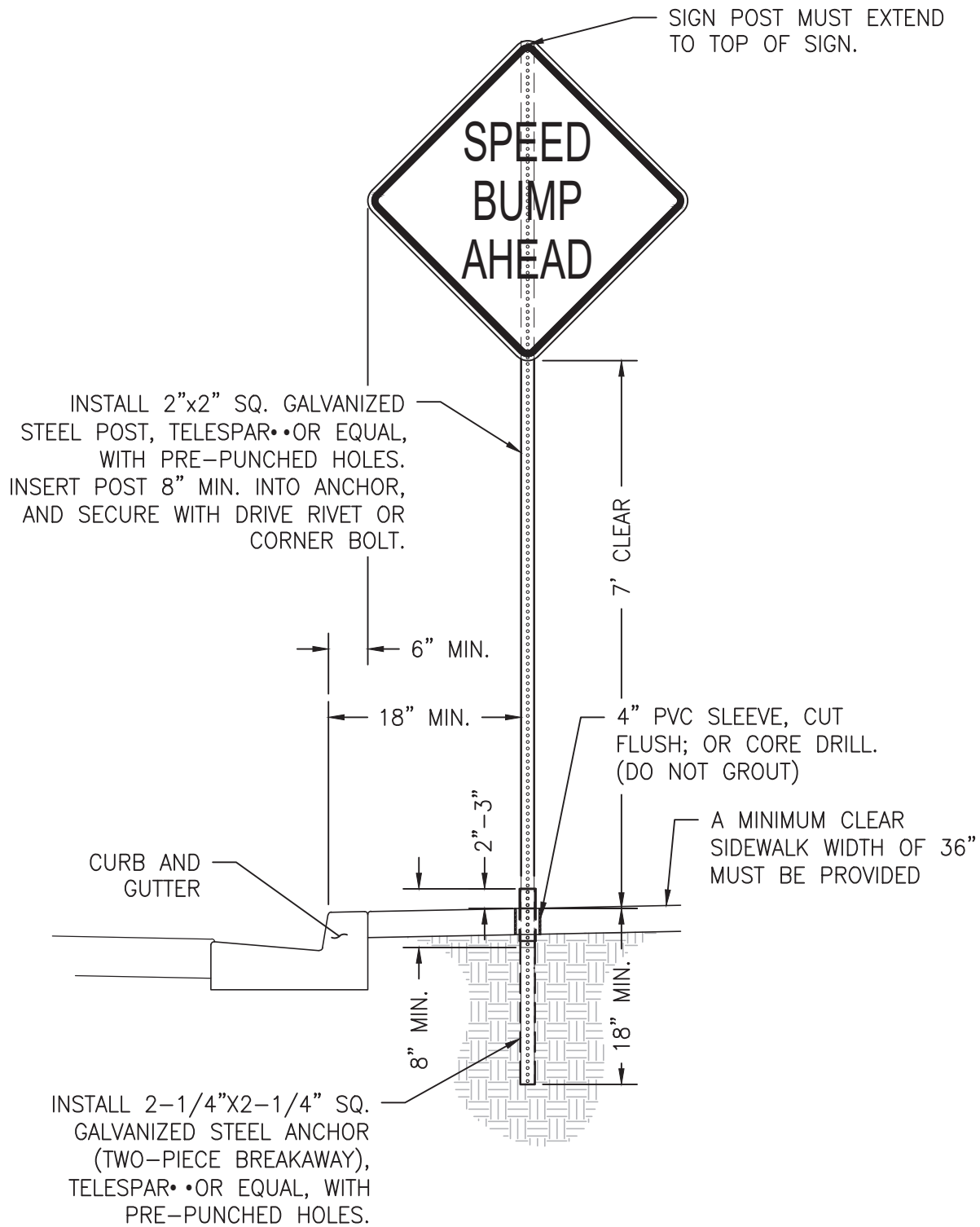
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STANDARD PLAN

**401**

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CITY OF LAGUNA BEACH PUBLIC WORKS DEPARTMENT

REV.	DATE

STREET SIGN

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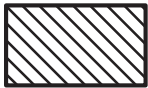
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POSTED SPEED	
MPH	'D'
25	150 FEET
30	180 FEET
35	210 FEET
40	240 FEET
45	270 FEET
50	300 FEET

## CONTROLLED INTERSECTION

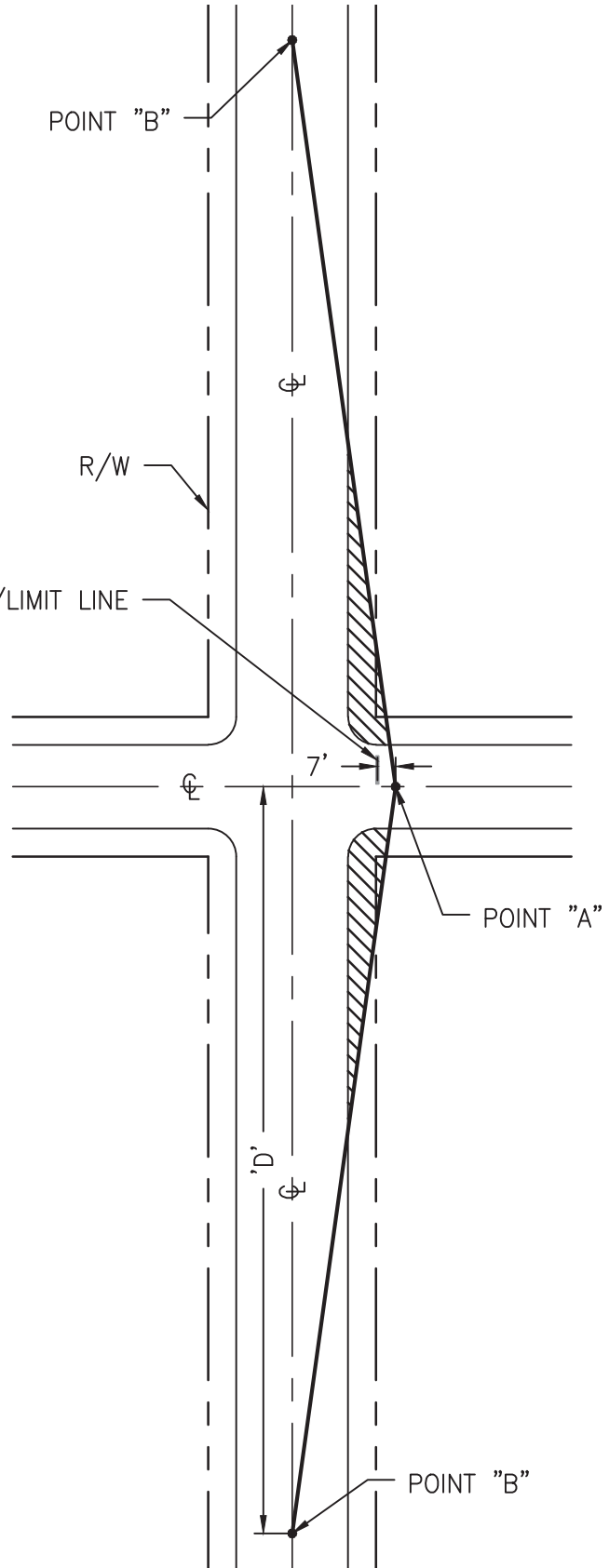
### LEGEND



CORNER CUTOFF

### NOTES:

1. POINT "A" SHALL BE LOCATED AT A POINT WHICH MEASURES SEVEN FEET (7') BEHIND THE STOP BAR ALONG THE CENTERLINE OF THE STREET.
2. POINT "B" SHALL BE ESTABLISHED BASED ON THE CRITICAL SPEED, OR POSTED SPEED, OF APPROACHING VEHICLES IN FEET PER SECOND (MILES PER HOUR x 1.5) TIMES FOUR (4) SECONDS.
3. THE CORNER CUTOFF SHALL BE CLEAR OF ANY FENCE, SIGN, WALL, BUILDING, OR MOUND OF EARTH, OR FREE OF ANY SIGN, HEDGES, SHRUBS, TREES, OR MOUNDS OF EARTH HIGHER THAN TWO AND ONE-HALF FEET (2.5') ABOVE THE NEAREST STREET FINISHED SURFACE ELEVATION (SEE LBMC 11.30.010). EXCEPTIONS PER LBMC. 11.30.020.



CITY OF LAGUNA BEACH PUBLIC WORKS DEPARTMENT

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### INTERSECTION VISIBILITY

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03/29/2022

MARK A. TRESTIK, CITY ENGINEER, R.C.E. 53708

DATE

STANDARD PLAN

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1 OF 2

POSTED SPEED	
MPH	'D'
25	150 FEET
30	180 FEET
35	210 FEET
40	240 FEET
45	270 FEET
50	300 FEET

## UNCONTROLLED INTERSECTION

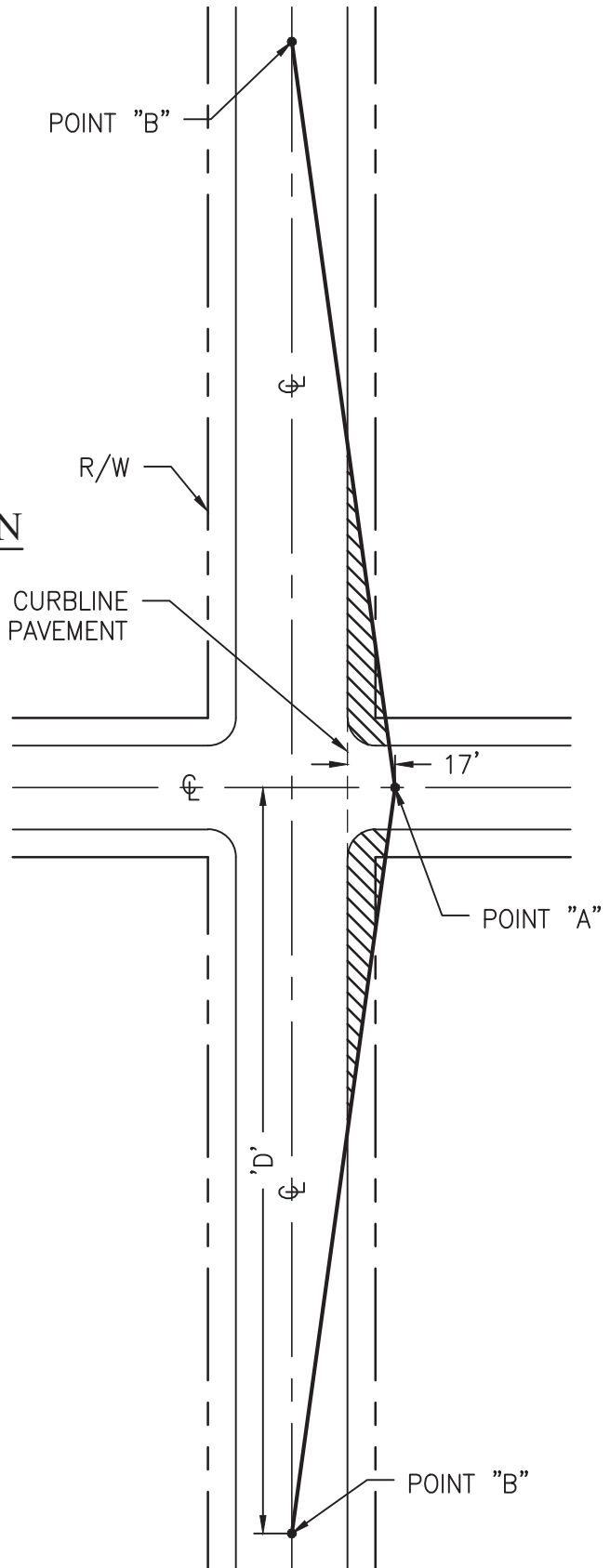
### LEGEND



CORNER CUTOFF

### NOTES:

1. POINT "A" SHALL BE LOCATED AT A POINT WHICH MEASURES SEVENTEEN FEET (17') BEHIND A PROLONGATION THROUGH THE INTERSECTION OF THE CURBLINE OR EDGE OF PAVEMENT ALONG THE CENTERLINE OF THE STREET.
2. POINT "B" SHALL BE ESTABLISHED BASED ON THE CRITICAL SPEED, OR POSTED SPEED, OF APPROACHING VEHICLES IN FEET PER SECOND (MILES PER HOUR x 1.5) TIMES FOUR (4) SECONDS.
3. THE CORNER CUTOFF SHALL BE CLEAR OF ANY FENCE, SIGN, WALL, BUILDING, OR MOUND OF EARTH, OR FREE OF ANY SIGN, HEDGES, SHRUBS, TREES, OR MOUNDS OF EARTH HIGHER THAN TWO AND ONE-HALF FEET (2.5') ABOVE THE NEAREST STREET FINISHED SURFACE ELEVATION (SEE LBMC 11.30.010). EXCEPTIONS PER LBMC. 11.30.020.



## CITY OF LAGUNA BEACH PUBLIC WORKS DEPARTMENT

REV.	DATE

### INTERSECTION VISIBILITY

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