UNIFORM CONSTRUCTION STANDARDS



ADOPTED JULY, 2018

BASED ON THE RECOMMENDATION OF THE MARIN PUBLIC WORKS ASSOCIATION, I, RAUL ROJAS, DIRECTOR OF PUBLIC WORKS OF THE COUNTY OF MARIN, DO HEREBY ADOPT THESE REVISIONS TO THE UNIFORM CONSTRUCTION STANDARDS OF THE CITIES OF MARIN AND COUNTY OF MARIN IN ACCORDANCE WITH THE AUTHORITY GRANTED IN BOARD OF SUPERVISORS OF THE COUNTY OF MARIN RESOLUTION NO. 70-16, PASSED AND ADOPTED UNANIMOUSLY ON THE 20TH OF JANUARY, 1970.

RAUL ROJAS,

DIRECTOR OF PUBLIC WORKS

6/24/18

DATE

BOARD OF SUPERVISORS OF THE COUNTY OF MARIN RESOLUTION NO. 70-16

RESOLUTION ADOPTING THE 'UNIFORM CONSTRUCTION STANDARDS' OF THE CITIES OF MARIN AND COUNTY OF MARIN

WHEREAS, an organization comprised of the City Engineers of the Cities of Marin County and a representative of the Marin County Department of Public Works has formed an organization called The Marin Public Works Association; and

WHEREAS, It is in the interest of all of Marin County to use Uniform Construction Standards in the construction of roadway and subdivision improvements; and

WHEREAS, the Marin County Rublic Works Association has prepared a set of Uniform Construction Standards

NOW, THEREFORE, BE IT RESOLVED, that the Marin County Board of Supervisors adopt the "Uniform Construction Standards" of the Cities of Marin and County of Marin

BE IT FURTHER RESOLVED, that the Director of Public Works may make additions, deletions and revisions to said Uniform Construction Standards in order to maintain said Uniform Construction Standards updated and in conformance with any additions, revisions and deletions approved by the Marin County Public Works Association

PASSED AND ADOPTED at a regular meeting of the Board of Supervisors of the County of Marin, State of Callfornia, held on the 20th day of January, 1970, by the following vote:

AYES:

SUPERVISORS William A. Gnoss, Louis H. Baar, Peter R. Arrigoni,

Michael Wornum, John F. McInnis

NOES:

None None

ABSENT:

CHAIRMAN OF THE BOARD OF SUPERVISORS

ATTEST

CLEDY

ALL CITIES AND COUNTY OF MARIN TABLE OF CONTENTS

TITLE

UNIFORM STANDARDS

DWG. NO.

GENERAL ABBREVIATIONS FOR PLANS STREET STANDARDS REQUIREMENTS FOR CURB, GUTTER, SIDEWALK, DRIVEWAY AND OTHER "FLATWORK" CURB, GUTTER AND SIDEWALK DETAILS VALLEY GUTTER 110 EXAMPLES OF SIDEWALK DRIVEWAY CONNECTIONS 115 OFFSET SIDEWALK AT DRIVEWAY 120 HIGH VOLUME DRIVEWAY APPROACH 125 DRIVEWAY APPROACH (ROLLED CURB AND STANDARD CURB) 130 DRIVEWAY APPROACH (NO CURB & GUTTER) 135 STEEP DRIVEWAY DESIGN 140 SIDEWALK UNDERDRAIN RETAINING WALL, TYPE "A" (LEVEL BACKFILL) 150 RETAINING WALL, TYPE "B" (SLOPING BACKFILL) RETAINING WALL, TYPE "C" TYPICAL SOLDIER PILE WALL 165 BARRICADE GATE, TYPE "A" 180 CURB RAMP STANDARDS AND **MARCH** UNIFORM STANDARDS 2018 TABLE OF DWG. NO. ALL CITIES AND CONTENTS COUNTY OF MARIN TOC REV. DATE BY

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DWG. NO.

STORM DRAIN STANDA	ARDS				
NOTES FOR CATCH BASIN, M	MANHOLE, DROP INLET AND			200	
	ROUGH 18" DIA. PIPE)				
•	HROUGH 72" DIA. PIPE)				
	DETAIL				
	BASIN				
	STRUCTURE				
	JRNING STRUCTURE				
HEADWALL, TYPE "A"					
HEADWALL, TYPE "B"				280	
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	TRENCH DETAILS (1 OF 3)				
	STANDARD TRENCH BACKFILL & RESURF				
·	TRENCH NOTES				
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ALL CITIES AND	TABLE OF				DWG. N
COUNTY OF MARIN	CONTENTS				TOC-
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ΑT **AASHTO** AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS AΒ AGGREGATE BASE ASPHALT CONCRETE AC AGG **AGGREGATE ASTM** AMERICAN SOCIETY FOR TESTING OF MATERIALS AMERICAN PUBLIC WORKS ASSOCIATION **AWPA** BC BEGINNING OF CURVE **CALIF CALIFORNIA** CDF CONTROLLED DENSITY FILL CIVIL ENGINEER CAST IRON CE CI CL, CLR **CLEAR** COUNTY/COMPANY CO CONC CONCRÉTE CTB CEMENT TREATED BASE CU **CUBIC DEPTH** D DIA, Ø DIAMETER DWG **DRAWING** DWY, D/W **DRIVEWAY** END OF CURVE EC EX, (E) **EXISTING** FΒ FLAT BAR FC FACE OF CURB FL **FLOWLINE** FT. FEET **GALV** GALVANIZED H. HT **HEIGHT HDPE** HIGH DENSITY POLYETHYLENE **HORIZ HORIZONTAL** ID INSIDE DIAMETER IN. **INCHES** INTERMED **INTERMEDIATE** LENGTH LB **POUND** LS LAND SURVEYOR LTB LIME TREATED BASE MAT MATERIAL MAX **MAXIMUM MANUFACTURER** MFG MIN **MINIMUM** NO, # NUMBER NOS **NUMBERS** NTS NOT TO SCALE ON CENTER OC OUTSIDE DIAMETER OD **OSHA** OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION **PCC** PORTLAND CEMENT CONCRETE **PERF PERFORATED** PSI POUNDS PER SQUARE INCH PTDF PRESSURE TREATED DOUGLAS FIR **PVC** POLYVINYL CHLORIDE R, RAD **RADIUS** REV **REVISION** R/W, ROW RIGHT OF WAY S/W **SIDEWALK** SCH **SCHEDULE SPEC SPECIFICATION STANDARD** STD **THICKNESS TRANS TRANSITION TYPICAL** TYP V, VERT **VERTICAL** W **WIDTH** W/O WITHOUT **CROSS** Χ YD YARD **MARCH** UNIFORM STANDARDS 2018 **ABBREVIATIONS** DWG. NO. ALL CITIES AND FOR PLANS COUNTY OF MARIN 1

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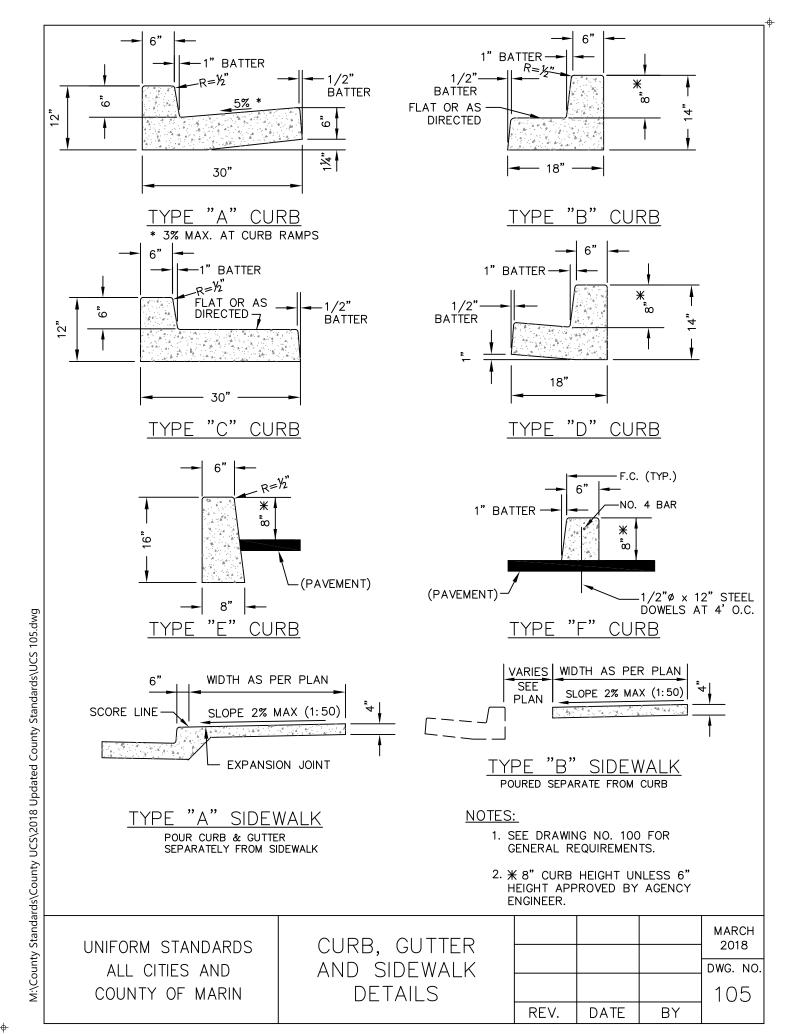
PERCENTAGE

- 1. EXISTING CONCRETE SHALL BE REMOVED AT EXPANSION OR WEAKENED PLANE JOINTS OR AT SAWCUTS AS FIELD MARKED BY AGENCY ENGINEER. SAWCUTS MUST GO ENTIRELY THROUGH CONCRETE.
- 2. FOR NEW DEVELOPMENT, NO UTILITY BOXES OR POLES WILL BE PERMITTED IN THE SIDEWALK AREA WITHOUT THE PRIOR WRITTEN APPROVAL OF THE AGENCY ENGINEER.
- 3. WHERE UNDERCUT SUBGRADE OR UNSUITABLE SUBGRADE MATERIAL IS ENCOUNTERED, THE AGENCY ENGINEER MAY REQUIRE REMEDIAL WORK TO BE DONE, INCLUDING OVER EXCAVATION AND BACKFILLING WITH CRUSHED ROCK AND, WHEN DIRECTED BY THE ENGINEER, PLACING GEOTEXTILE FABRIC BENEATH THE NEW CONCRETE SECTION.
- 4. SUBGRADE SHALL BE COMPACTED TO AT LEAST 95% RELATIVE COMPACTION IN THE TOP SIX INCHES.
- 5. NEW WORK SHALL MATCH EXISTING AS CLOSELY AS POSSIBLE IN FINISH, SCORING AND COLOR. FOR NEW INSTALLATIONS PLACED ADJACENT TO EXISTING, 2LB. DAVIS BLACK #8084 (OR EQUIVALENT) PER CU. YD. CONCRETE SHALL BE ADDED TO MIX.
- 6. EXCEPT WHERE SPECIFIED OTHERWISE HEREIN, NO ADMIXTURES SHALL BE USED WITHOUT THE PERMISSION OF THE AGENCY ENGINEER.
- 7. FORMS SHALL MEET GRADE AND FORM FACES SHALL NOT VARY FROM THE DIMENSIONS SHOWN BY MORE THAN 1/2 INCH.
- 8. NO CONCRETE SHALL BE PLACED UNTIL THE AGENCY ENGINEER HAS INSPECTED AND APPROVED FORMS AND SUBGRADE/BASE.
- 9. SUBGRADE/BASE SHALL BE THOROUGHLY WETTED IMMEDIATELY PRIOR TO PLACING CONCRETE.
- 10. CONCRETE SHALL BE A MINIMUM CLASS B (5 SACK MIX) WITH 1 INCH MAXIMUM AGGREGATE FROM AN APPROVED MIXING PLANT. NO BAGGED MIX IS PERMITTED.
- 11. CONCRETE SHALL HAVE A SLUMP OF NOT MORE THAN FOUR INCHES.
- 12. FOR SIDEWALKS AND DRIVEWAY APPROACHES, 1/4 INCH DEEP SCORE LINES SHALL BE PLACED AT FOUR FEET ON CENTER OR AS DIRECTED BY THE AGENCY ENGINEER.
- 13. WEAKENED PLANE JOINTS AT LEAST 3/4" DEEP SHALL BE PLACED AT A MINIMUM 16 FEET ON CENTER EXCEPT FOR SIDEWALKS AND DRIVEWAY APPROACHES WHICH SHALL BE A MINIMUM 5 FEET ON CENTER.
- 14. 3/8 INCH THICK EXPANSION JOINTS SHALL BE PLACED ON BOTH SIDES OF DRIVEWAY APPROACHES, AT CURB AND SIDEWALK RETURN POINTS, DRAINAGE STRUCTURES AND OTHER LOCATIONS AS SHOWN ON THE PLANS.
- 15. ALL EXPOSED EDGES SHALL BE ROUNDED WITH 1/2 INCH RADIUS TOOL.
- 16. ALL FLAT SURFACES SHALL BE LIGHT BROOM FINISHED UNLESS OTHERWISE SPECIFIED BY AGENCY ENGINEER.
- 17. CURBS, SIDEWALKS AND DRIVEWAY APPROACHES SHALL HAVE FORMS REMOVED AND BE BACKFILLED WITHIN SEVEN DAYS AFTER POURING.
- 18. THE DESIGNATED DIMENSIONS AND SLOPES MAYBE MODIFIED TO ACCOMMODATE EXISTING ADJACENT FACILITIES SUBJECT TO THE APPROVAL OF THE AGENCY ENGINEER.

UNIFORM STANDARDS				
ALL CIT	IES AND			
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REQUIREM	ENTS FOR
CONCRET	TE CURB,
GUTTER, S	SIDEWALK,
DRIVEWAY A	AND OTHER
"FLAT	WORK"

			MARCH 2018
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VALLEY

GUTTER

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BY

2018

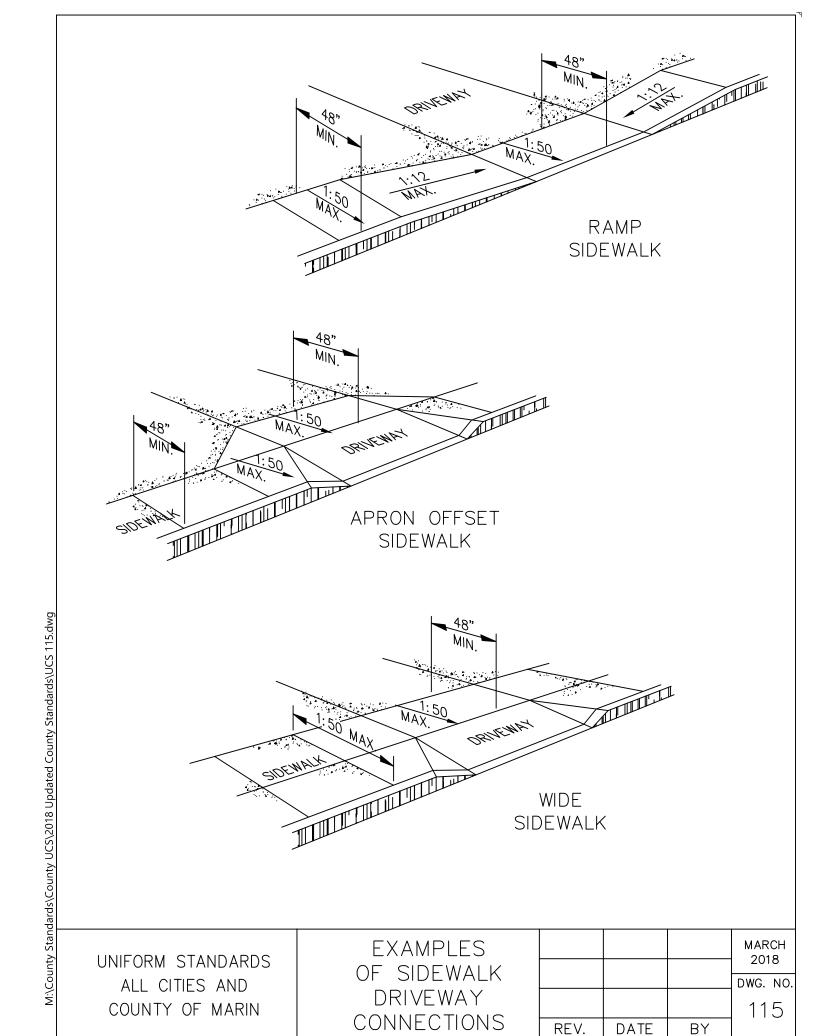
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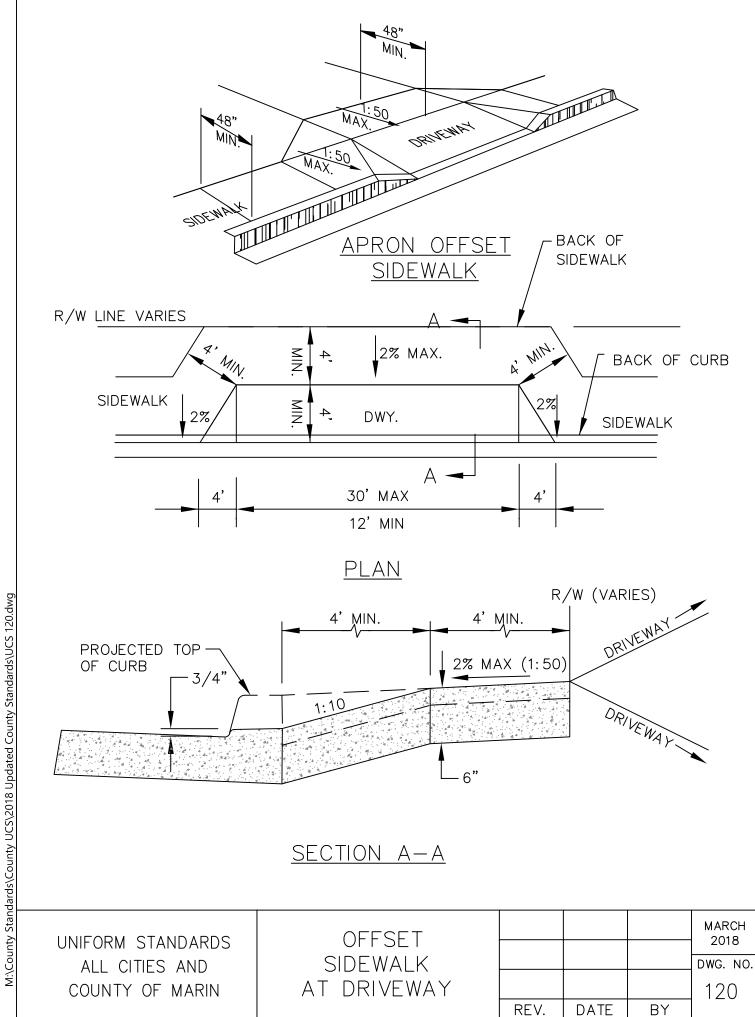
UNIFORM STANDARDS

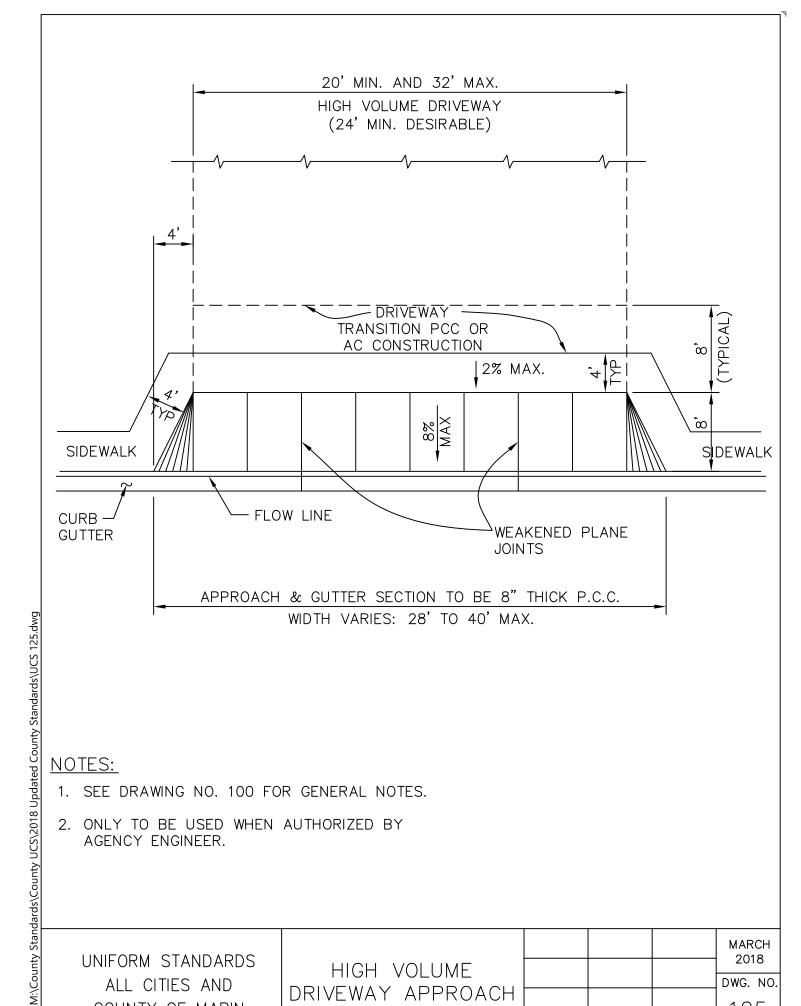
ALL CITIES AND

COUNTY OF MARIN



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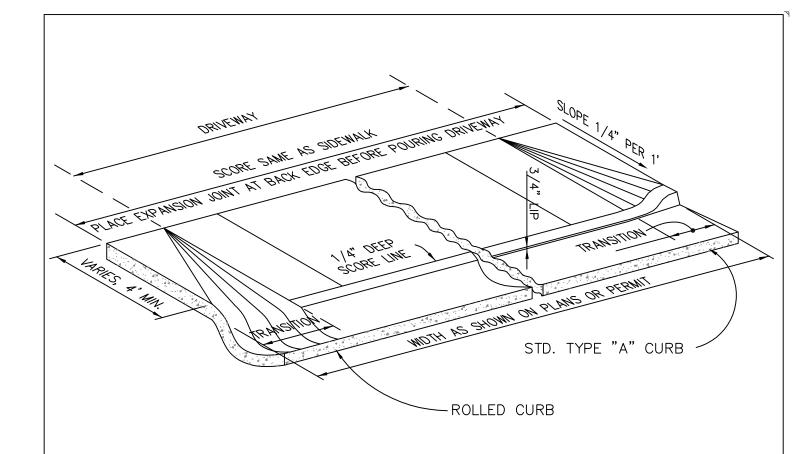


- 1. SEE DRAWING NO. 100 FOR GENERAL NOTES.
- 2. ONLY TO BE USED WHEN AUTHORIZED BY AGENCY ENGINEER.

UNIFORM STANDARDS				
ALL CITIES AND				
COUNTY OF MARIN				

HIGH VOLUME DRIVEWAY APPROACH

MARCH 2018 DWG. NO. 125 REV. DATE BY



TYPE	TRANSITION WIDTH	<u>THICKNESS</u>
	FROM DRIVEWAY PROJECTION TO OUTER EDGE OF APPROACH	
RESIDENTIAL	2' MIN.	6"
COMMERCIAL	4' MIN.	8"

- 1. SEE DRAWING NO. 100 FOR GENERAL NOTES.
- 2. THIS DRIVEWAY STANDARD MAY ONLY BE USED WHERE ANY EXISTING SIDEWALKS (OR PATHWAYS) ARE LOCATED MORE THAN 48" FROM BACK OF CURB (OR EDGE OF PAVEMENT).

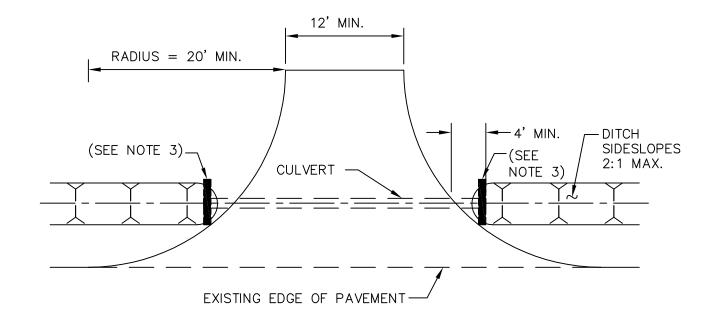
UNIFORM STANDARDS
ALL CITIES AND
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DRIVEWAY APPROACH ROLLED CURB AND STANDARD CURB

MARCH 2018

DWG. NO.

REV. DATE BY



- 1. SUBJECT TO APPROVAL OF AGENCY ENGINEER, INDICATED DRIVEWAY CONFIGURATION MAY BE MODIFIED TO BETTER ACCOMMODATE TOPOGRAPHIC CONSTRAINTS.
- 2. CULVERT SHALL BE A MINIMUM 15 INCH DIAMETER AND BE PLACED IN LINE WITH ROADSIDE DITCH.
- 3. FOR CMP* OR HDPE* CULVERTS, A HEADWALL IS REQUIRED AT EACH END. FOR RCP* CULVERTS, HEADWALLS ARE RECOMMENDED BUT NOT REQUIRED.
- 4. MINIMUM 1 FOOT COVER IS REQUIRED FOR CMP*, HDPE* OR CLASS III RCP CULVERT. MINIMUM 6 INCH COVER IS REQUIRED FOR CLASS IV RCP CULVERT.
- RADIUS MAY BE SMALLER THAN 20' IF REQUIRED TO MEET FIELD CONDITIONS AND APPROVED BY AGENCY ENGINEER.
 - *CMP CORRUGATED METAL PIPE *HDPE — HIGH DENSITY POLYETHYLENE PIPE
 - *RCP REINFORCED CONCRETE PIPE

UNIFORM STANDARDS
ALL CITIES AND
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DRIVEWAY
APPROACH
NO CURB & GUTTER

MARCH 2018

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- CURB EXISTS.
- 2. FOR MAXIMUM GRADE BREAKS, SEE CHART.
- 3. MAXIMUM GRADIENT MEASURED ALONG THE DRIVEWAY CENTERLINE SHOULD NOT BE STEEPER THAN 18%, AND SHALL NOT BE STEEPER THAN 25%.
- 4. SEE DWG. NOS. 110, 115, 120, 125, 130 AND 135 FOR DRIVEWAY RAMP DETAILS.
- 5. IF PAVEMENT CROSS SLOPE EXCEEDS 4%, A MODIFIED DRIVEWAY PROFILE SHALL BE USED WITH THE SLOPE OF THE DRIVEWAY RAMP REDUCED SUCH THAT THE DIFFERENCE IN SLOPE OF THE DRIVEWAY RAMP AND THE SLOPE OF A LINE BETWEEN THE GUTTER AND A POINT ON THE ROADWAY 5' FROM GUTTER LINE SHALL NOT EXCEED 15% REDUCE DRIVEWAY RAMP SLOPE, NOT THE GUTTER SLOPE. OTHER DIMENSIONS SHALL BE MODIFIED AS APPROVED BY THE AGENCY
- 6. THE GRADE AT (5) SHALL BE A MINIMUM OF 0.5' ABOVE REFERENCE LINE.
- 7. SPECIAL ENGINEERING DESIGNS MAY BE REQUIRED FOR UNIQUE SITUATIONS.
- 8. THE GEOMETRIC LAYOUT OF A PROPOSED DRIVEWAY SHALL BE REVIEWED AND APPROVED BY THE AGENCY ENGINEER PRIOR TO CONSTRUCTION.

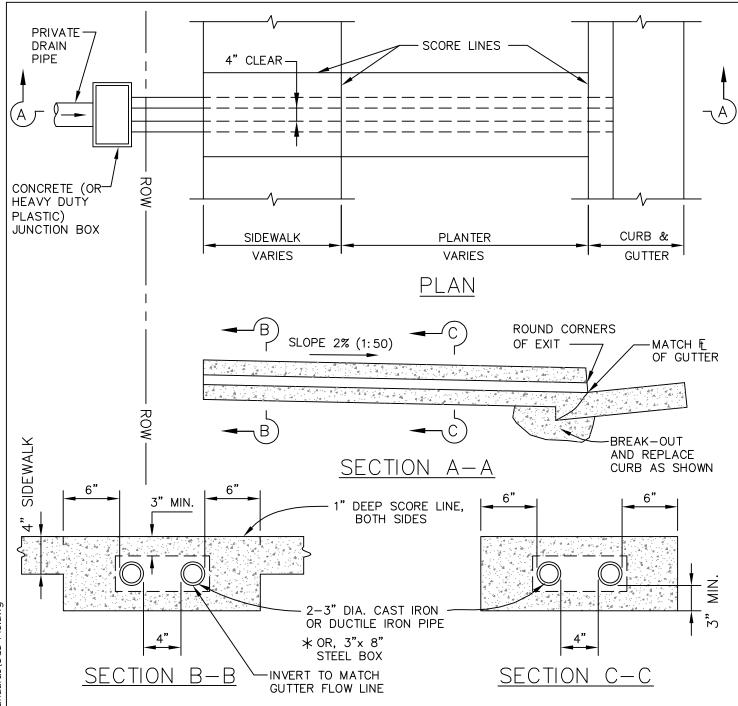
GRADE BREAK CHART

#	MAXIMUM GRADE BREAK
1	9%
2	14%
3	15%
4	9%
(5)	16%
6	11%
7	9%
8	10%
9	12%

UNIFORM STANDARDS ALL CITIES AND COUNTY OF MARIN

STEEP DRIVEWAY DESIGN

MARCH 2018 DWG. NO. 140 REV. DATE BY

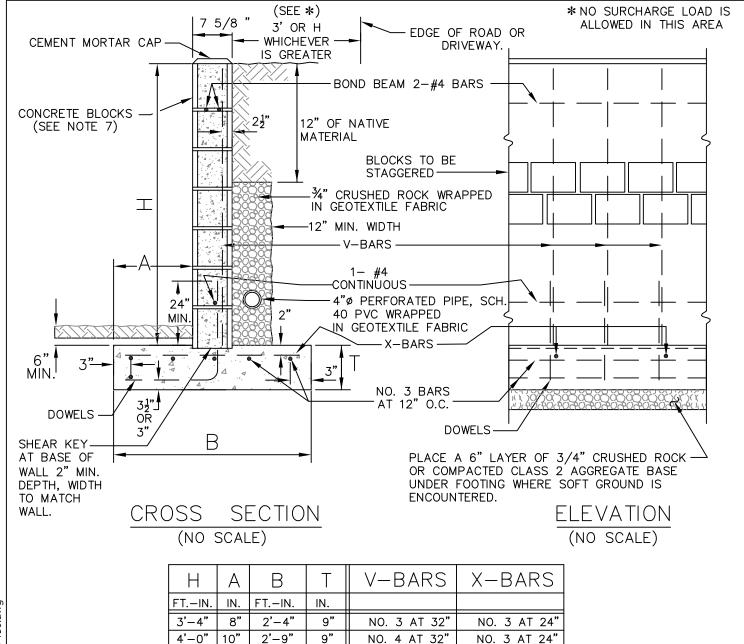


- 1. CONCRETE SHALL BE CLASS "B" (5 SACK MIX).
- 2. PLASTIC PIPE IS NOT ALLOWED.
- 3. WHERE UNDERDRAINS ARE INSTALLED AT LOCATIONS WHERE CURB, GUTTER AND SIDEWALK IS EXISTING, REMOVE 20" OF CURB AND 1 SQUARE OF SIDEWALK BETWEEN SAW—CUTS. REPLACE CURB AS SHOWN IN SECTION A—A ABOVE.
- 4. NO CONCRETE SHALL BE PLACED PRIOR TO FORM INSPECTION BY THE AGENCY ENGINEER.
- 5. ALL CONCRETE SHALL BE BROOM FINISHED.
- * 6. IF REQUIRED BY AGENCY ENGINEER FOR HEAVY FLOWS.

UNIFORM	STANDARDS
ALL CI	TIES AND
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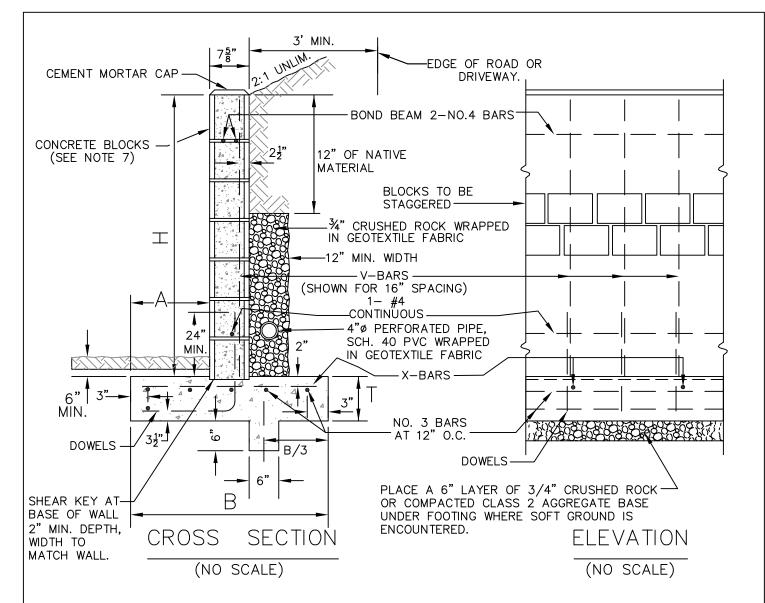
SIDEWALK UNDERDRAIN

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			145
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- 1. CONCRETE FOR FOOTING TO BE CLASS "A" (6 SACK 3000 PSI) WITH 3/4" AGGREGATE AND 4 INCH MAX. SLUMP.
- 2. FILL ALL CELLS WITH 7 SACK CONCRETE WITH 3/8" AGGREGATE OR 3:1 MORTAR.
- 3. DOWELS SHALL BE SAME IN SIZE AND SPACING AS V-BARS. THEY SHALL PROJECT 40 BAR DIAMETERS, 24 INCH MIN. INTO THE CELLS AND EXTEND TO THE TOE OF FOOTING. LAPPING BARS SHALL BE TIED.
- 4. WALLS SHALL NOT BE BACKFILLED UNTIL 7 DAYS AFTER CELLS ARE FILLED.
- 5. WALLS OVER 100' LONG SHALL HAVE VERTICAL EXPANSION JOINTS. WALLS OVER 50' LONG SHALL HAVE VERTICAL CONTRACTION JOINTS. SEE AGENCY ENGINEER FOR DETAILS.
- 6. NO CONCRETE SHALL BE PLACED UNTIL FORMS AND STEEL HAVE BEEN INSPECTED AND APPROVED BY THE AGENCY ENGINEER.
- 7. BLOCKS SHALL BE GRADE N OR BETTER (f'm=1,500 PSI).
- 8. NO FRONT FACE WEEP HOLES ALLOWED IF SIDEWALK OR PAVEMENT SLOPES AWAY FROM WALL.
- 9. SUBJECT TO THE APPROVAL OF AGENCY ENGINEER, DESIGN FOR DRAINAGE CONVEYANCE BEHIND WALL MAY BE MODIFIED TO UTILIZE PREFABRICATED DRAINAGE DEVICES.
- 10. CEMENT MORTAR MUST MEET A MINIMUM COMPRESSIVE STRENGTH OF 1,800 psi IN 28 DAYS. THE USE OF PLASTIC CEMENT IS NOT PERMITTED FOR MORTAR.
- 11. MATERIALS FOR BRICKS SHALL BE CEMENT BLOCK CONSTRUCTION.

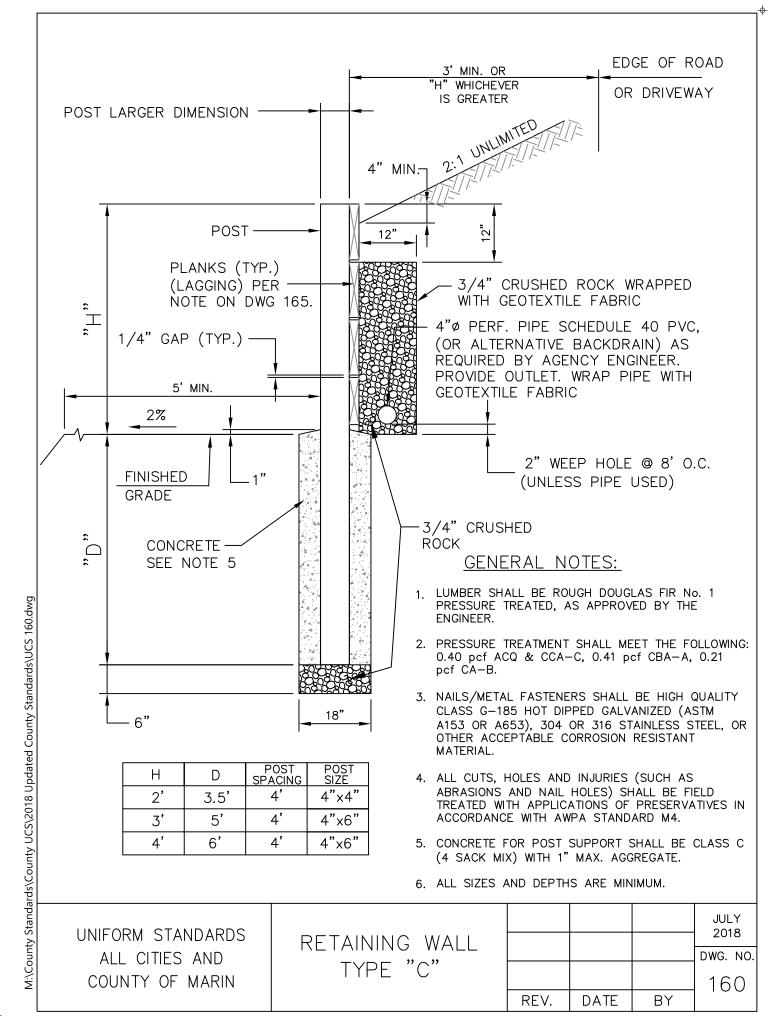
UNIFORM STANDARDS	RETAINING				JULY 2018
ALL CITIES AND	WALL 				DWG. NO.
COUNTY OF MARIN	TYPE "A"				150
	LEVEL BACKFILL	REV.	DATE	BY	



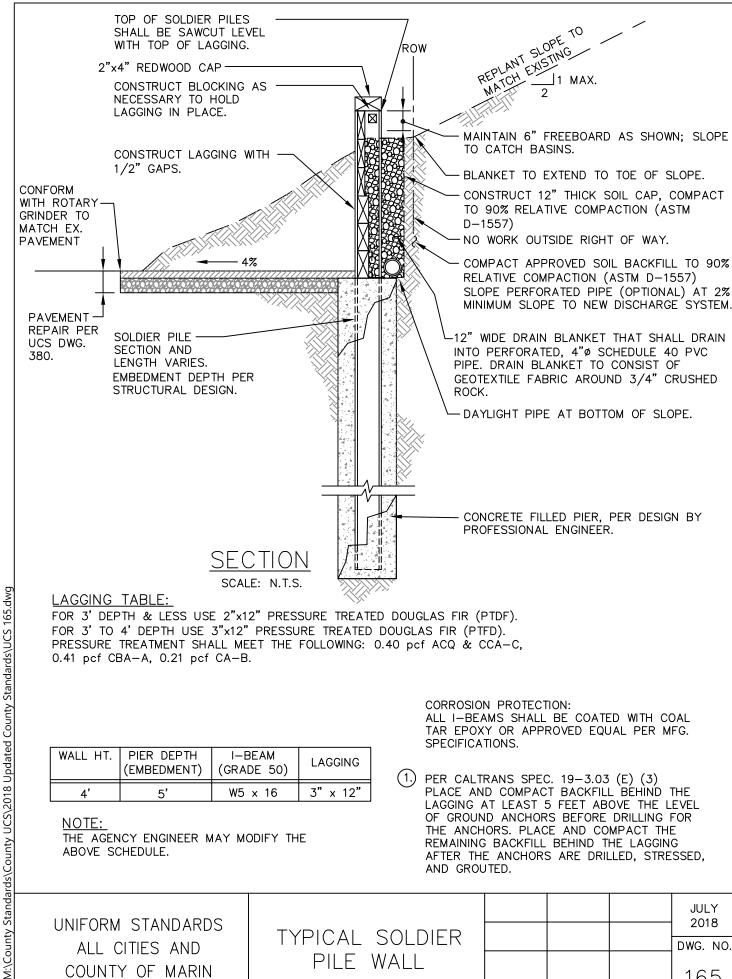
	Н	Α	В	Т	V-BARS	X-BARS
	FTIN.	IN.	FTIN.	IN.		
Ì	3'-4"	8"	2'-4"	9"	NO. 3 AT 32"	NO. 3 AT 24"
	4'-0"	10"	2'-9"	9"	NO. 4 AT 32"	NO. 3 AT 24"

- 1. CONCRETE FOR FOOTING TO BE CLASS "A" (6 SACK 3000 PSI) WITH 3/4" AGGREGATE AND 4 INCH MAX. SLUMP.
- 2. FILL ALL CELLS WITH 7 SACK CONCRETE WITH 3/8" AGGREGATE OR 3:1 MORTAR.
- 3. DOWELS SHALL BE SAME IN SIZE AND SPACING AS V-BARS. THEY SHALL PROJECT 40 BAR DIAMETERS, 24" MIN. INTO THE CELLS AND EXTEND TO THE TOE OF FOOTING.
- 4. WALLS SHALL NOT BE BACKFILLED UNTIL 7 DAYS AFTER CELLS ARE FILLED.
- WALLS OVER 100' LONG SHALL HAVE VERTICAL EXPANSION JOINTS. WALLS OVER 50' LONG SHALL HAVE VERTICAL
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 NO CONCRETE SHALL BE PLACED UNTIL FORMS AND STEEL HAVE BEEN INSPECTED AND APPROVED BY THE
- NO CONCRETE SHALL BE PLACED UNTIL FORMS AND STEEL HAVE BEEN INSPECTED AND APPROVED BY TH AGENCY ENGINEER.
- 7. BLOCKS SHALL BE GRADE N OR BETTER (f'm=1,500 PSI).
- 8. NO FRONT FACE WEEP HOLES ALLOWED IF SIDEWALK OR PAVEMENT SLOPES AWAY FROM WALL.
- 9. SUBJECT TO THE APPROVAL OF AGENCY ENGINEER, DESIGN FOR DRAINAGE CONVEYANCE BEHIND WALL MAY BE MODIFIED TO UTILIZE PREFABRICATED DRAINAGE DEVICES.

LINITODM STANDADDS	retaining wall				JULY 2018
UNIFORM STANDARDS ALL CITIES AND	TYPE "B"				DWG. NO.
COUNTY OF MARIN	SLOPING				155
	BACKFILL	REV.	DATE	BY	



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FOR 3' DEPTH & LESS USE 2"x12" PRESSURE TREATED DOUGLAS FIR (PTDF). FOR 3' TO 4' DEPTH USE 3"x12" PRESSURE TREATED DOUGLAS FIR (PTFD). PRESSURE TREATMENT SHALL MEET THE FOLLOWING: 0.40 pcf ACQ & CCA-C, 0.41 pcf CBA-A, 0.21 pcf CA-B.

WALL HT.	PIER DEPTH (EMBEDMENT)	I-BEAM (GRADE 50)	LAGGING
4'	5'	W5 x 16	3" x 12"

NOTE:

THE AGENCY ENGINEER MAY MODIFY THE ABOVE SCHEDULE.

CORROSION PROTECTION:

ALL I-BEAMS SHALL BE COATED WITH COAL TAR EPOXY OR APPROVED EQUAL PER MFG. SPECIFICATIONS.

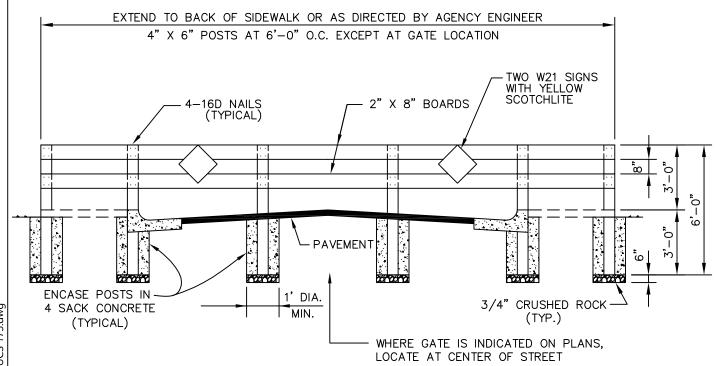
(1.) PER CALTRANS SPEC. 19—3.03 (E) (3) PLACE AND COMPACT BACKFILL BEHIND THE LAGGING AT LEAST 5 FEET ABOVE THE LEVEL OF GROUND ANCHORS BEFORE DRILLING FOR THE ANCHORS. PLACE AND COMPACT THE REMAINING BACKFILL BEHIND THE LAGGING AFTER THE ANCHORS ARE DRILLED, STRESSED, AND GROUTED.

UNIFORM STANDARDS ALL CITIES AND COUNTY OF MARIN

TYPICAL SOLDIER PILE WALL

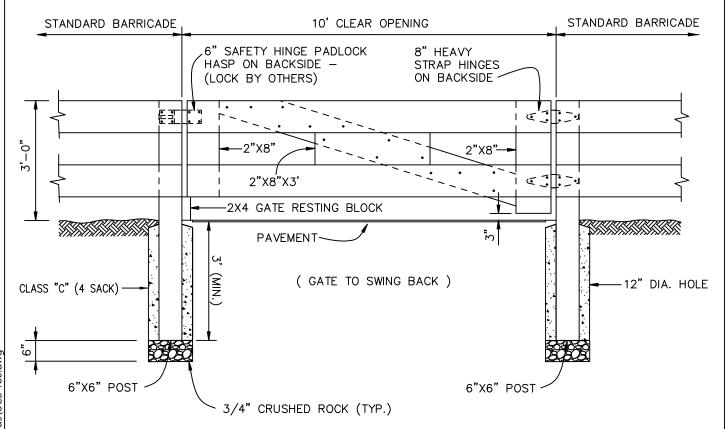
			2018
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- ALL WOOD SHALL BE PRESSURE TREATED DOUGLAS FIR (PTDF) (NO.1 GRADE).
 POSTS 0.40 pcf ACQ & CCA-C, 0.41 pcf CBA-A, 0.21 pcf CA-B
 BOARDS 0.25 pcf ACQ & CCA-C, 0.20 pcf CBA-A, 0.10 pcf CA-B
- 2. ALL EXPOSED SURFACES SHALL BE PAINTED WITH 1 PRIME COAT AND 2 COATS OF EXTERIOR WHITE WHERE REQUIRED BY LOCAL AGENCY.
- 3. ALL POSTS SHALL BE SET PLUMB IN CLASS "C" (4 SACK) CONCRETE.
- 4. BOARDS AND POST TOPS SHALL BE LEVEL.
- 5. ALL FASTENERS SHALL BE 304 OR 316 STAINLESS STEEL, CLASS G-185 HOT-DIPPED GALVANIZED (ASTM A153 OR A653) OR POLYESTER-COATED.

LINIEGDM CTANDADDC					MARCH 2018
UNIFORM STANDARDS	BARRICADE				2016
ALL CITIES AND					DWG. NO.
COUNTY OF MARIN	TYPE "A"				175
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- 1. SEE DRAWING NO. 175 FOR GENERAL NOTES AND STANDARD BARRICADE.
- 2. NAILS SHALL BE 16d.
- 3. HINGE AND HASP BOLTS SHALL BE THRU BOLTS, 4"
- 4. SEE TYPE A BARRICADE (DRAWING NO. 175) FOR PRESSURE TREATMENT AND FASTENER REQUIREMENTS.

UNIFORM STANDARDS
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BARRICADE GATE TYPE "A"

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CURB RAMPS: CURB RAMPS SHALL COMPLY WITH CALTRANS STANDARD PLANS A88A AND A88B, BUT

MAY BE MODIFIED BY THE AGENCY ENGINEER TO FIT FIELD CONDITIONS. THE LATEST UPDATED

PLANS MAY BE DOWNLOADED FROM THE COUNTY UCS WEBSITE:

HTTP: //WWW.CO.MARIN.CA.US/STANDARDS.CFM

OR FROM THE CALTRANS WEBSITE:

HTTP: //WWW.DOT.CA.GOV/HQ/ESC/OE/PROJECT_PLANS/HTM/06_PLANS_DISCLAIM_US.HTM.

PEDESTRIAN PATH—OF—TRAVEL: A SAFE AND ACCESSIBLE PEDESTRIAN PATH—OF—TRAVEL SHALL BE MAINTAINED AT ALL TIMES BY THE CONTRACTOR DURING CONSTRUCTION. WHERE NECESSARY, TEMPORARY PATH OF TRAVEL IMPROVEMENTS MAY INCLUDE, BUT IS NOT LIMITED TO, TEMPORARY CURB RAMPS, PROTECTED WALKWAYS WHEN PEDESTRIANS ARE DIRECTED INTO THE VEHICLE TRAVEL WAY, AND SIGNAGE TO REDIRECT PEDESTRIAN TRAFFIC. ALL TEMPORARY MEASURES SHALL BE COMPLIANT WITH STATE AND FEDERAL DISABLED ACCESS REQUIREMENTS, INCLUDING THE AMERICANS WITH DISABILITIES ACT AND THE CALIFORNIA BUILDING CODE, TITLE 24. PEDESTRIAN PATH OF TRAVEL DETOURS SHALL NOT CREATE SIGHT DISTANCE CONSTRAINTS FOR MOTORISTS. THE CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF ALL TEMPORARY PEDESTRIAN PATH IMPROVEMENTS. THE CONTRACTOR SHALL SUBMIT PROPOSED TEMPORARY PEDESTRIAN PATH OF TRAVEL FOR APPROVAL PRIOR TO CONSTRUCTION.

FOR EXAMPLES OF MAINTAINING SAFE AND ACCESSIBLE PEDESTRIAN ACCESS THROUGH CONSTRUCTION SITES, SEE THE COUNTY UCS WEBSITE:

HTTP://WWW.CO.MARIN.CA.US/DEPTS/PW/MAIN/INDEX/PED ACCESS.HTM
OTHER EXAMPLES MAY BE FOUND AT:

HTTP://WWW.SFGOV.ORG/SITE/MOD_PAGE.ASP?ID=42353

HTTP: //SAFETY.FHWA.DOT.GOV/WZ/DOCS/WZPEDEST.PDF

HTTP: //WWW.ACCESS-BOARD.GOV/PROWAC/COMMREPT/PART3-03.HTM

UNIFORM STANDARDS
ALL CITIES AND
COUNTY OF MARIN

CURB RAMP
STANDARDS AND
PEDESTRIAN ACCESS
THROUGH
CONSTRUCTION SITES

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CATCH BASIN, TURNING STRUCTURE, MANHOLE AND DROP INLET NOTES

- 1. CONCRETE SHALL BE CLASS "A" (6 SACK MIX) UNLESS OTHERWISE NOTED. STRUCTURE TOPS CAST WITH ADJACENT CURB/SIDEWALK MAY BE CLASS "B" CONCRETE.
- 2. BASE SHALL BE PLACED AGAINST UNDISTURBED EARTH, SIDES MAY BE FORMED OR PLACED AGAINST UNDISTURBED EARTH.
- 3. WHERE CONDUITS ARE ENCOUNTERED THAT ARE LARGER IN DIAMETER THAN THE WIDTH OF THE WALL THROUGH WHICH THEY PASS, THE INSIDE DIMENSION OF THE WALLS PERPENDICULAR TO THE DIRECTION OF THE PIPE SHALL BE INCREASED TO 12" WIDER THAN THE OUTSIDE DIAMETER OF THE PIPE.
- 4. EXPANSION JOINTS SHALL BE PLACED THROUGH CURB AND SIDEWALK AT BOTH SIDES OF CATCH BASINS AND SHALL BE LIMIT OF PAYMENT FOR CURB AND GUTTER. UNIT PRICES FOR DRAINAGE STRUCTURES SHALL INCLUDE CURB, GUTTER AND SIDEWALK POURED WITH DRAINAGE STRUCTURE.
- 5. NO CONCRETE SHALL BE PLACED PRIOR TO FORM AND STEEL APPROVAL BY THE AGENCY ENGINEER.
- 6. SEE DRAWING NO. 215 FOR STEP (AS REQUIRED BY AGENCY ENGINEER) AND MANHOLE CASTING DETAIL.
- 7. SEE DRAWING NO. 220 FOR CATCH BASIN GRATE DETAIL.
- 8. WALL THICKNESS, REINFORCING, AND STEP (AS REQUIRED BY AGENCY ENGINEER)
 REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE TABLE BELOW, UNLESS OTHERWISE INDICATED BY THE PROJECT PLANS OR DIRECTED BY THE AGENCY ENGINEER.
- 9. PLACE 2" WEEPHOLES AS REQUIRED BY THE AGENCY ENGINEER.
- 10. EQUIVALENT PRECAST STRUCTURES MAY BE SUBSTITUTED AS APPROVED BY THE AGENCY ENGINEER.
- 11. WALL THICKNESS SHALL NOT EXCEED 10" ON ANY STRUCTURE.
- 12. PRECAST INLETS AND MANHOLES SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS AND BE DESIGNED TO WITHSTAND H-20 LOADING.

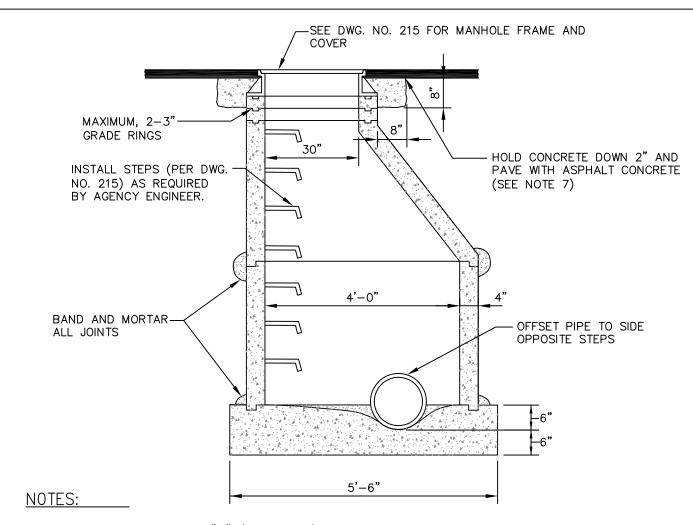
DEPTH	WALL THICKNESS (SEE NOTE #11)	WALL REINFORCEMENT	STEPS REQUIRED
LESS THAN 3'	6"	NO. 4 AT 12" BOTH WAYS	NO
LESS THAN 3'	8"	NONE OUTSIDE ROADWAY. NO. 4 AT 12" BOTH WAYS WITHIN OR ADJACENT TO ROAD.	NO
3' TO 8'	6"	NO. 4 AT 12" BOTH WAYS	AS REQUIRED BY THE AGENCY ENGINEER
OVER 8'	8"	NO. 4 AT 12" BOTH WAYS	AS REQUIRED BY THE AGENCY ENGINEER

UNIFORM STANDARDS
ALL CITIES AND
COUNTY OF MARIN

NOTES FOR CATCH BASIN, MANHOLE, DROP INLET & TURNING STRUCTURE MARCH 2018

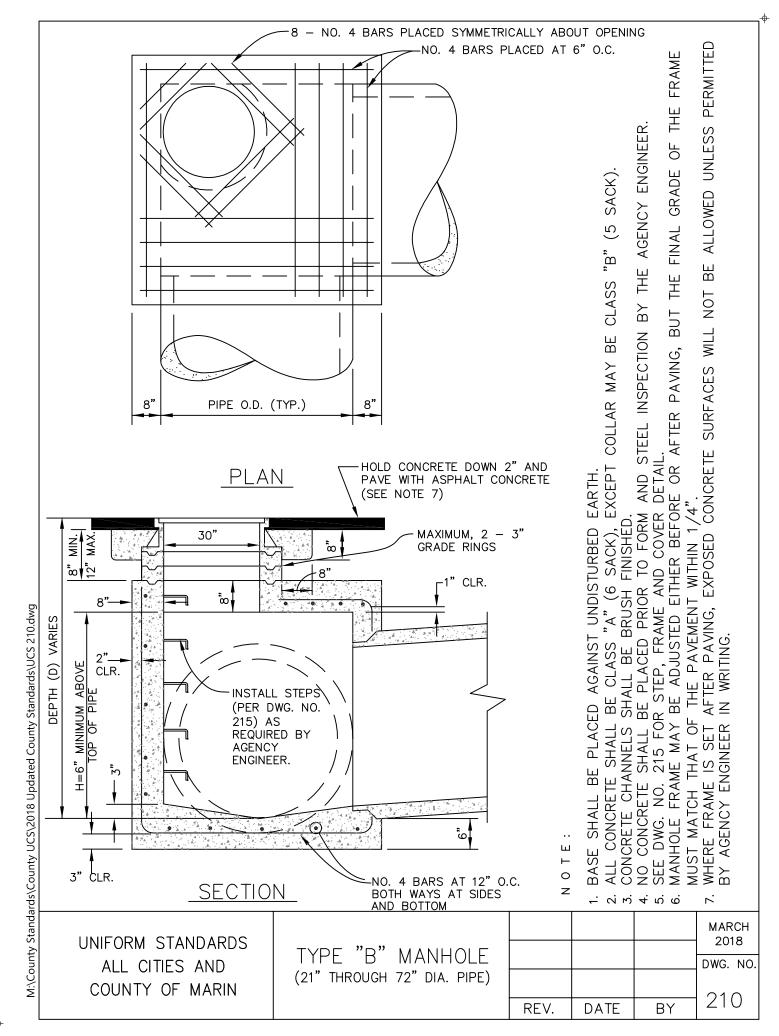
DWG. NO.

REV. DATE BY 200

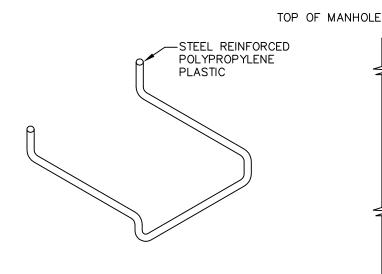


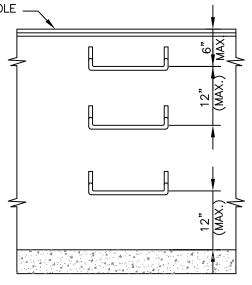
- 1. BASE SHALL BE CLASS "B" (5 SACK) CONCRETE PLACED AGAINST UNDISTURBED EARTH.
- 2. CONDUIT SHALL BE LAID THROUGH MANHOLE WHENEVER POSSIBLE.
- 3. CONCRETE CHANNELS SHALL BE BRUSH FINISHED.
- 4. PRECAST BARREL AND ECCENTRIC CONE SHALL CONFORM TO ASTM SPECIFICATION C-478 EXCEPT THAT TYPE II CEMENT SHALL BE USED.
- 5. MORTAR JOINTS SHALL BE 2 PARTS SAND TO 1 PART CEMENT.
- 6. MANHOLE FRAME MAY BE ADJUSTED EITHER BEFORE OR AFTER PAVING, BUT THE FINAL GRADE OF THE FRAME MUST MATCH THAT OF THE PAVING WITHIN 1/4".
- 7. WHERE FRAME IS SET AFTER PAVING, EXPOSED CONCRETE SURFACES WILL NOT BE ALLOWED EXCEPT AS PERMITTED BY AGENCY ENGINEER IN WRITING.
- 8. COLLAR SHALL BE CLASS "B" (5 SACK) CONCRETE.
- 9. NO CONCRETE SHALL BE PLACED PRIOR TO FORM INSPECTION BY THE AGENCY ENGINEER.

					MARCH
UNIFORM STANDARDS	TYPE "A" MANHOLE				2018
ALL CITIES AND	(6" THROUGH 18" DIA. PIPE)				DWG. NO.
COUNTY OF MARIN					205
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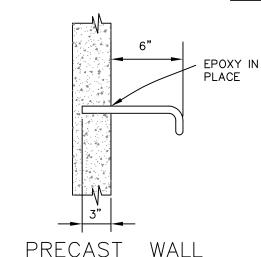








STEP DETAIL



1" Min.

STEPS SPACED AT 12"
O. C.

FIRST STEP TO BE 12"
ABOVE BOTTOM

STEPS SHALL BE CAST INTO WALL

AT FACTORY

CAST IN PLACE WALL

MANHOLE FRAME AND COVER

INSTALLED IN SIDEWALK

PHOENIX P-1067

SOUTH BAY FOUNDRY

SBF-1967

OR APPROVED EQUAL

NON-SIDEWALK INSTALLATIONS

PHOENIX P-1067; P-1090; P-1005

SOUTH BAY FOUNDRY SBF-1900-REG;

SBF-1905

OR APPROVED EQUAL

NOTE:

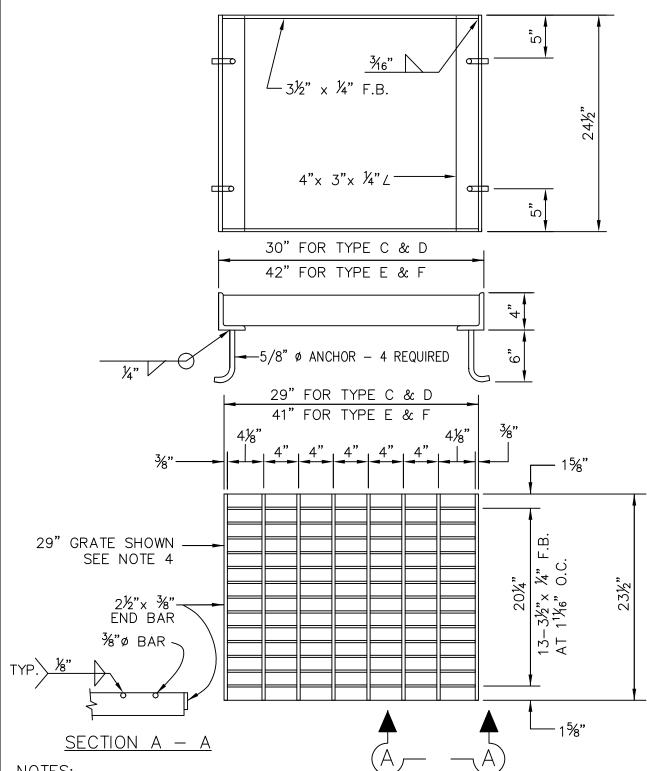
INSTALLATION OF STEPS SHALL BE AS REQUIRED BY AGENCY ENGINEER.
WHERE INSTALLED, STEPS SHALL BE STEEL REINFORCED POLYPROPYLENE PLASTIC. CENTRAL PRECAST CONCRETE
CO. DWG. No. PS2-PF OR EQUIVALENT. STEPS TO BE CAST IN PLACE OR PRESS FITTED INTO PROVIDED HOLES
AS PER MANUFACTURER. INSTALL STEPS WITH LOWEST RUNG 1'-0" ABOVE THE FLOOR AND HIGHEST RUNG NOT
MORE THAN 6" BELOW TOP OF MANHOLE. THE SPACING BETWEEN STEPS SHALL NOT EXCEED 1'-0" AND SHALL
BE UNIFORM THROUGHOUT THE LENGTH OF THE WALL. PLACE STEPS IN THE WALL WITHOUT A PIPE OPENING. NO
STEPS REQUIRED WHERE HEIGHT FROM BOTTOM TO TOP OF MANHOLE IS LESS THAN 30".

UNIFORM STANDARDS
ALL CITIES AND
COUNTY OF MARIN

STEP & MANHOLE CASTING DETAIL

(WHERE REQUIRED BY AGENCY ENGINEER)

			MARCH 2018
			DWG. NO.
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REV.	DATE	BY	215
	REV.	REV. DATE	REV. DATE BY



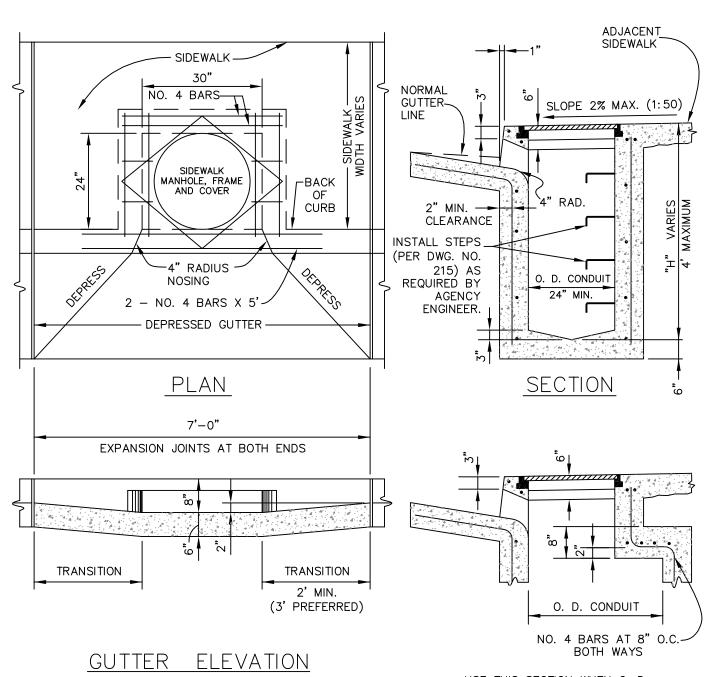
- 1. ALL STEEL SHALL BE STRUCTURAL GRADE.
- 2. ALL STEEL SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION.
- TOP AND BOTTOM SURFACES OF GRATE SHALL BE GROUND FLUSH AFTER WELDING.
- FOR 40" GRATE USE STATE STD. GRATE TYPE 24-9 OR 24-12.
- 5. FOR GRATES IN A PEDESTRIAN PATH OF TRAVEL, GRATE OPENINGS SHALL BE }" PERPENDICULAR TO THE WALKING DIRECTION.

UNIFORM	STA	NDARDS
ALL CI	TIES	AND
COUNTY	OF	MARIN

CATCH	BASIN
GRA	\TE
DET	All

			MARCH 2018	
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USE THIS SECTION WHEN O. D. OF CONDUIT EXCEEDS WALL WIDTH

NOTE:

- 1. SEE DWG. NO. 200 FOR GENERAL NOTES.
- 2. TOP SHALL BE CAST IN PLACE.
- 3. ADJACENT SIDEWALK SHALL BE POURED MONOLITHIC WITH TOP.

LINIEODIA CTANDADDO					MARCH 2018
UNIFORM STANDARDS	TYPF "A"				
ALL CITIES AND	I TPE A				DWG. NO.
	L CATCH BASIN				
COUNTY OF MARIN					205
		REV.	DATE	BY	

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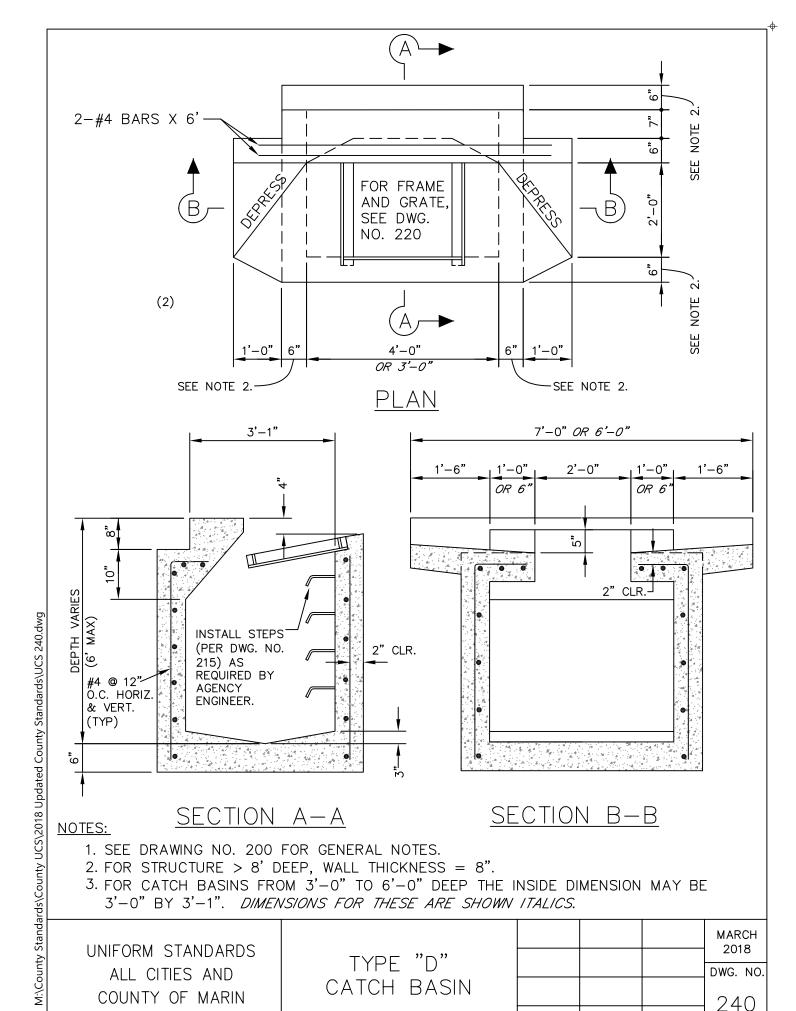
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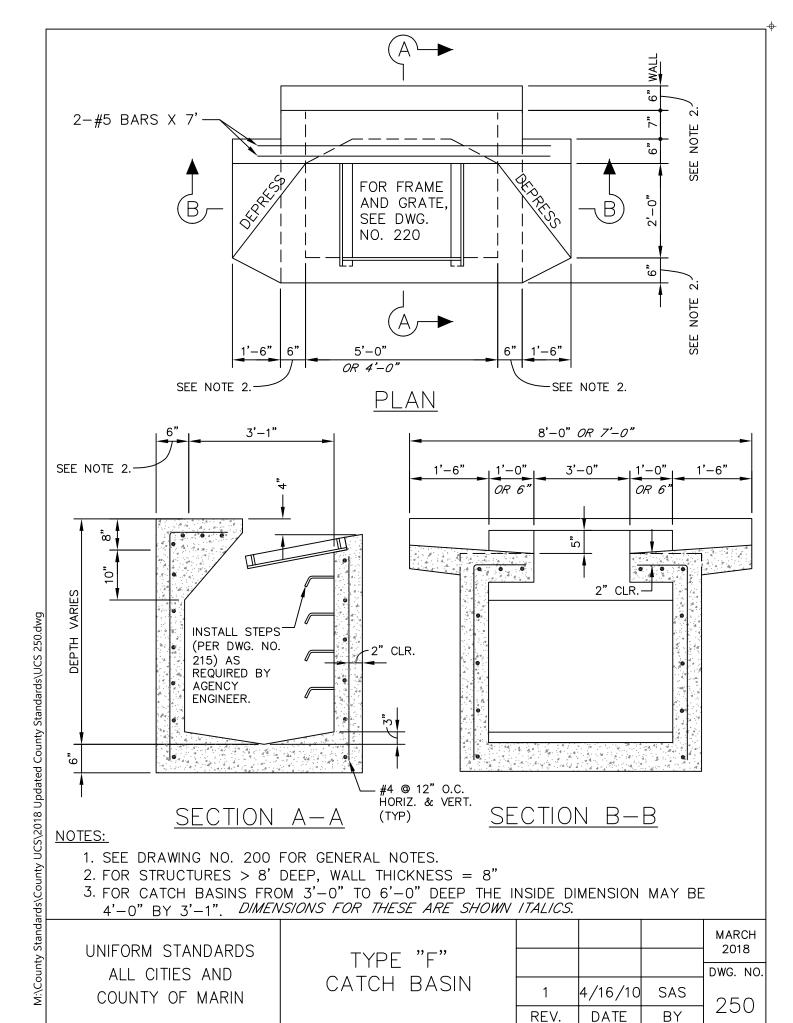


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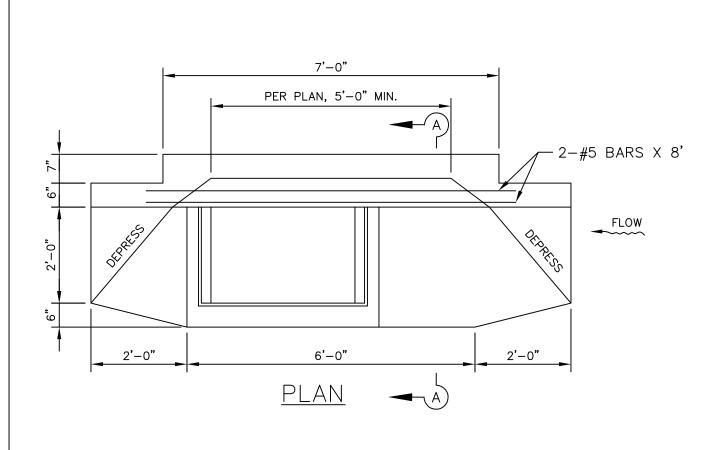
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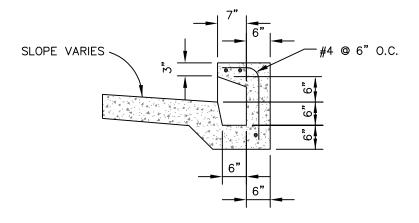
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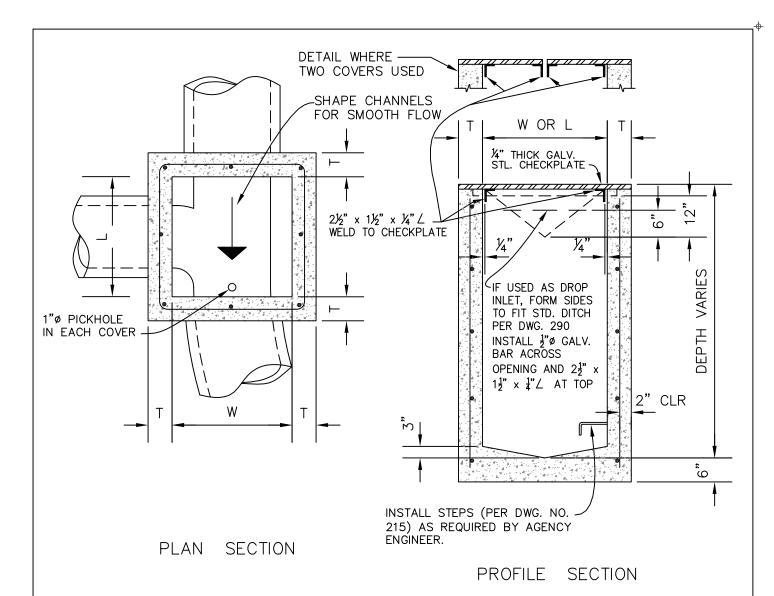
SECTION A-A

UNIFORM STANDARDS
ALL CITIES AND
COUNTY OF MARIN

GALLERY INLET FOR CATCH BASIN MARCH 2018

DWG. NO.

REV. DATE BY 255



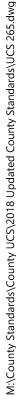
DEPTH	L	W	COVER(S)
LESS THAN 3'	24"	24"	1-36"x36"
3' TO 6'	36"	36"	2-24"x48"
OVER 6'	36"	48"	2-30"x48"

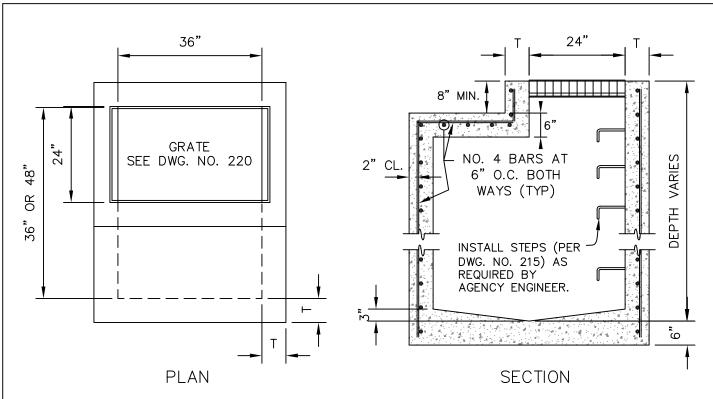
- 1. LENGTHS AND WIDTHS WILL VARY AS NECESSARY TO ACCOMMODATE SIZE AND ANGLES OF CONNECTING PIPES.
- 2. SEE DRAWING NO. 200 FOR GENERAL NOTES, WALL THICKNESS (T), REINFORCING AND STEP REQUIREMENTS.
- 3. SIDE ENTRY CONFIGURATION MAY BE MODIFIED TO ACCOMMODATE FIELD CONDITIONS WITH THE APPROVAL OF THE AGENCY ENGINEER.

UNIFORM STANDARDS	
ALL CITIES AND	F
COUNTY OF MARIN	

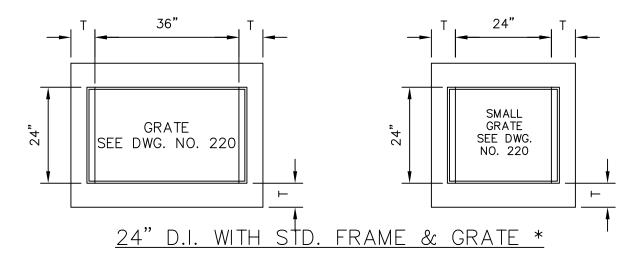
DROP INLET AND TURNING STRUCTURE

			MARCH 2018
			DWG. NO.
			260
REV.	DATE	BY	200





36"/48" D.I. WITH STD. FRAME & GRATE *



DEPTH	INSIDE DIMENSION	FRAME SIZE
LESS THAN 3'	24" X 24" OR 24" X 36"	24 1/2" X 30" OR 24 1/2" X 41"
5' TO 6'	36" X 36"	24 1/2" X 41"
OVER 6'	36" X 48"	24 1/2" X 41"

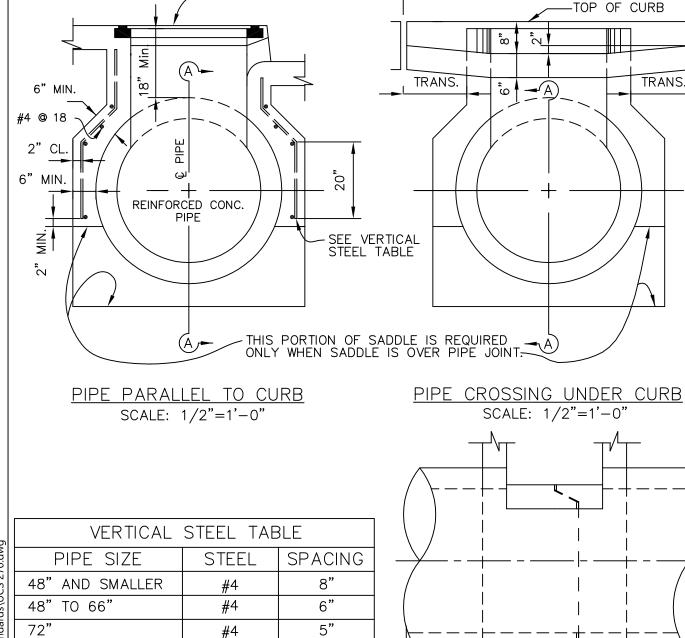
* REFER TO PLAN FOR SIZE.

NOTE: SEE DRAWING NO. 200 FOR GENERAL NOTES, WALL THICKNESS (T), REINFORCING AND STEP REQUIREMENTS.

UNIFORM STANDARDS
ALL CITIES AND
COUNTY OF MARIN

GRATED DROP
INLET AND TURNING
STRUCTURE

			MARCH 2018
			DWG. NO.
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SHOWN WITH TYPE A INLET

NOTES:

6" MINIMUM OR TO FIRM FOUNDATION —

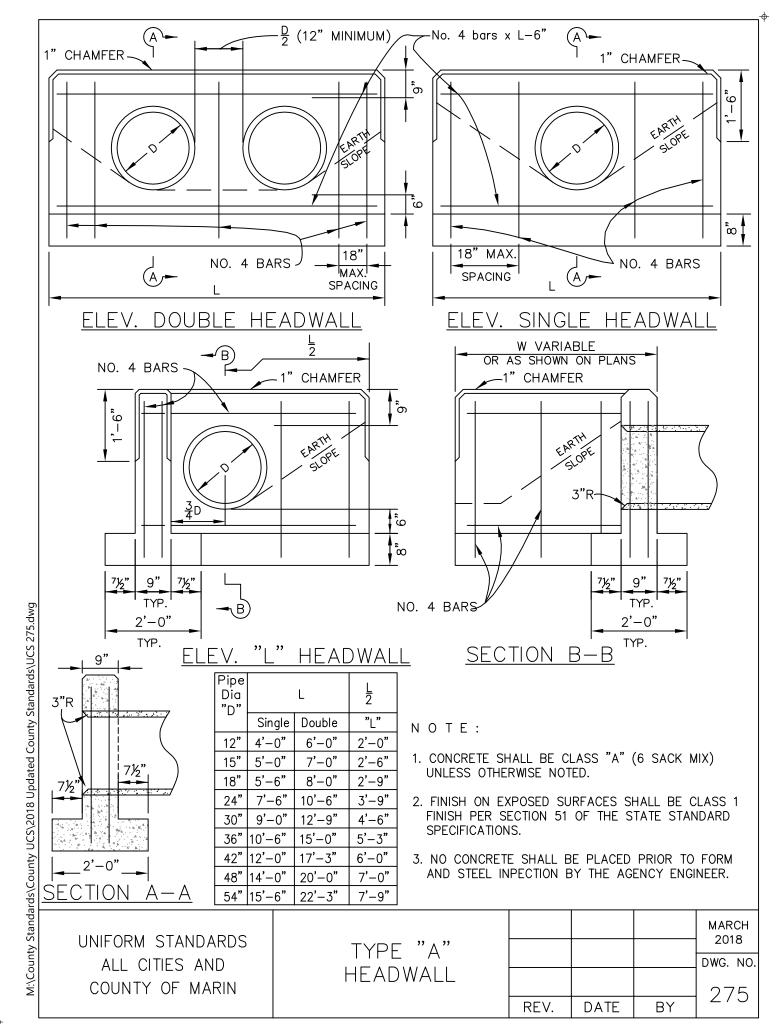
 $\frac{\text{SECTION } A - A}{\text{SCALE: } 1/2"=1'-0"}$

EXPANSION JOINTS AT BOTH ENDS

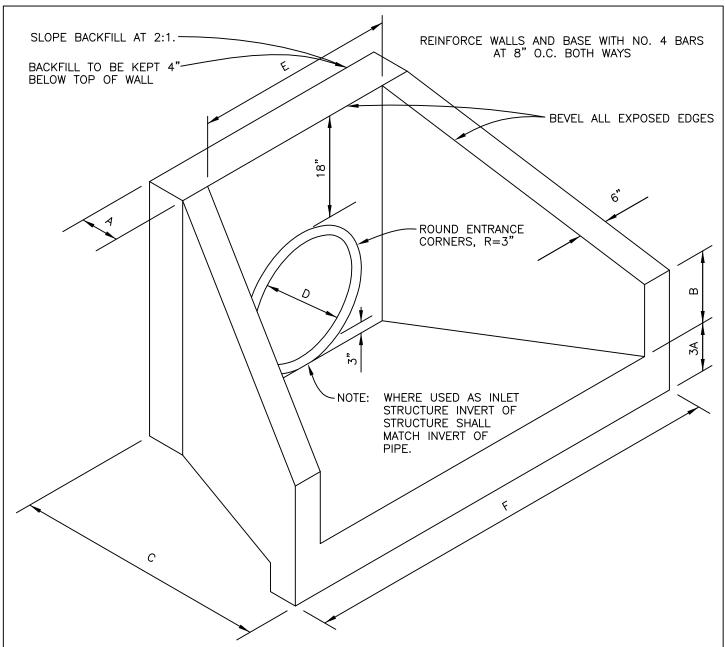
- 1. FOR CATCH BASIN DETAILS, SEE UNIFORM CONSTRUCTION STANDARDS DRAWING NOS. 200 THROUGH 255. MAY ALSO BE USED WITH INLETS, PER DRAWING NOS. 260 AND 265.
- 2. THIS DETAIL MAY BE USED AS AN ALTERNATE WHERE PIPE DIAMETER EXCEEDS DIMENSION OF CATCH BASIN.
- 3. USE WHERE PIPE DIA. TO STD. CATCH BASIN RATIO IS <3:1, OTHERWISE USE MANHOLE.

UNIFORM STANDARDS
ALL CITIES AND
COUNTY OF MARIN

SADDLE TYPE CATCH BASIN | MARCH 2018 | DWG. NO. | REV. DATE BY 270



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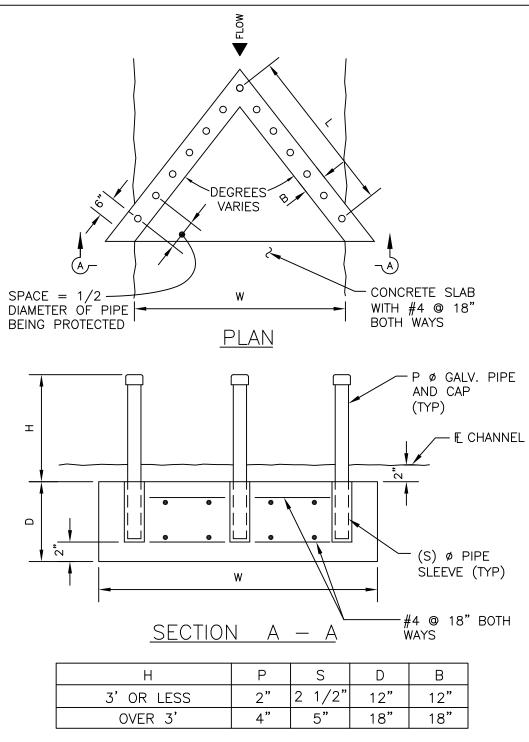
USE DIMENSIONS BELOW UNLESS OTHERWISE SHOWN ON PLANS

D	А	В	С	E	F
18" OR LESS	6"	12"	36"	D + 1'	C + E
21" TO 36"	8"	18"	50"	D + 1'	C + E
39" TO 72"	10"	18"	72"	D + 1'	C + E

NOTES:

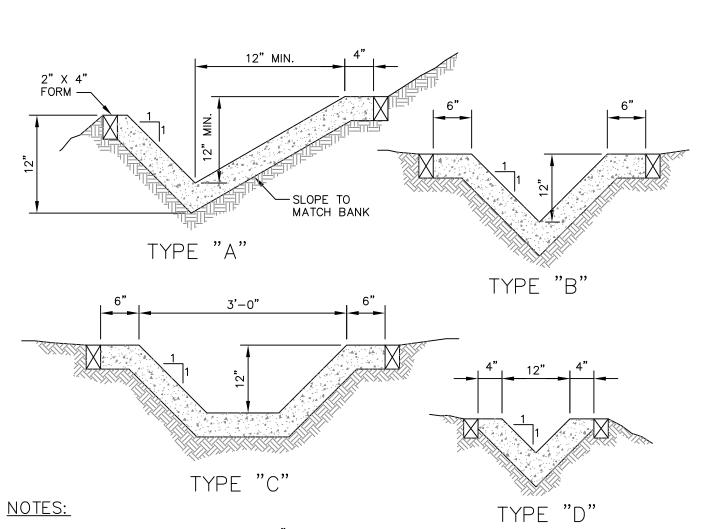
- 1. CONCRETE SHALL BE CLASS "A" (6 SACK MIX) UNLESS OTHERWISE NOTED.
- 2. FINISH ON EXPOSED SURFACES SHALL CONFORM TO CLASS 1 FINISH PER SECTION 51 OF THE STATE STANDARD SPECIFICATIONS.
- 3. NO CONCRETE SHALL BE PLACED PRIOR TO FORM AND STEEL INSPECTION BY THE AGENCY ENGINEER.

LINUEODIA CTANDADDO					MARCH 2018
UNIFORM STANDARDS	TYPF "R"				2018
ALL CITIES AND					DWG. NO.
COUNTY OF MADIN	HEADWALL				
COUNTY OF MARIN					loonl
		REV.	DATE	BY	200



- 1. L, AND W, SHALL BE 3 TIMES THE DIAMETER OF PIPE BEING PROTECTED UNLESS OTHERWISE SHOWN ON PLANS.
- 2. H, SHALL BE 2 TIMES THE DIAMETER OF THE PIPE BEING PROTECTED UNLESS OTHERWISE SHOWN ON PLANS.
- 3. PIPE SHALL BE STANDARD WEIGHT, CONCRETE SHALL BE CLASS "B" (5 SACK).

LINUEODIA CTANDADOC					MARCH 2018
UNIFORM STANDARDS ALL CITIES AND	TYPE "A"				DWG. NO.
COUNTY OF MARIN	TRASH RACK				005
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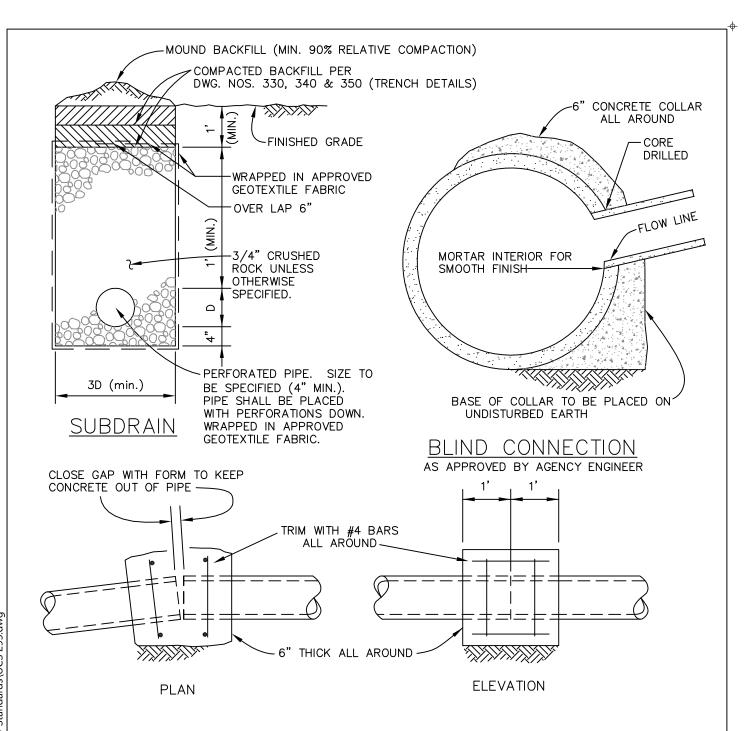


- I. ALL SECTIONS SHALL BE AT LEAST 4" THICK.
- 2. CONCRETE SHALL BE CLASS "B" (5 SACK).
- 3. BOTH SIDES OF THE DITCH SHALL BE FORMED WITH 2" X 4" LUMBER, AS SHOWN UNLESS OMITTED BY THE AGENCY ENGINEER.
- 4. CONCRETE FINISH SHALL CONFORM TO ORDINARY SURFACE FIINISH PER SECTION 51 OF THE STATE STANDARD SPECIFICATIONS.
- 5. DITCH SIDES SHALL BE BACKFILLED AND COMPACTED IMMEDIATELY AFTER THE REMOVAL OF SIDE FORMS.
- 6. NO CONCRETE SHALL BE PLACED PRIOR TO FORM INSPECTION BY THE AGENCY ENGINEER.
- 7. ON FILLED GROUND, NO DITCH IS TO BE CONSTRUCTED UNTIL CERTIFICATION OF COMPACTION IS PROVIDED TO THE AGENCY BY THE GEOTECHNICAL ENGINEER.
- 8. NO EXPANSION JOINTS SHALL BE REQUIRED.

UNIFORM STA	ANDARDS
ALL CITIES	S AND
COUNTY OF	MARIN

CONCRETE LINED DITCHES

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CONCRETE COLLAR

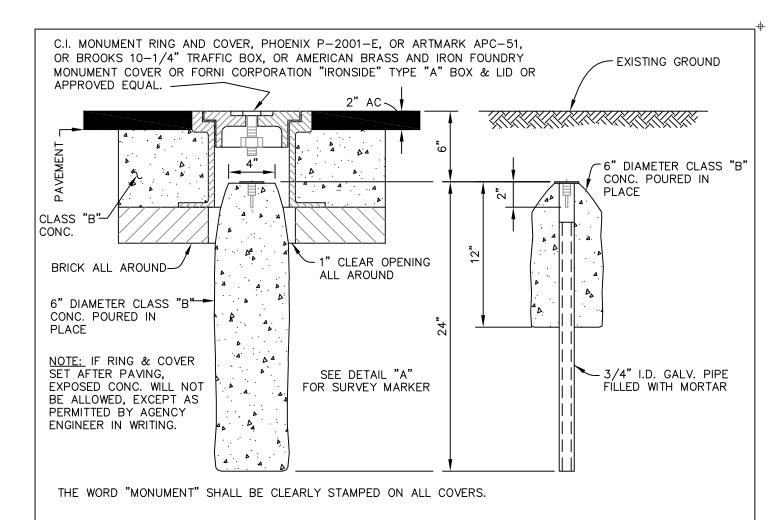
NOTES:

- 1. PERFORATED PIPE SHALL BE SCH. 40 PVC, HDPE, OR APPROVED EQUAL.
- 2. ALL CONCRETE SHALL BE CLASS "B" (5 SACK MIX) UNLESS OTHERWISE NOTED.

UNIFORM STANDARDS
ALL CITIES AND
COUNTY OF MARIN

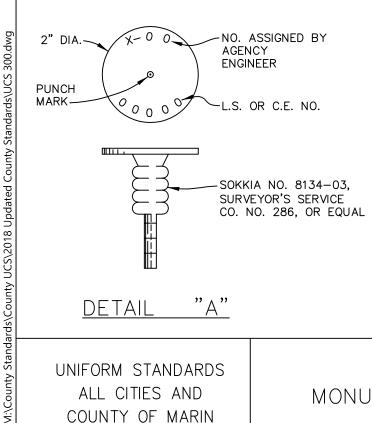
BLIND CONNECTION, CONCRETE COLLAR, & SUBDRAIN

				MARCH 2018
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				295
	REV.	DATE	BY	25



STREET MONUMENT

PIPE MONUMENT



NOTES:

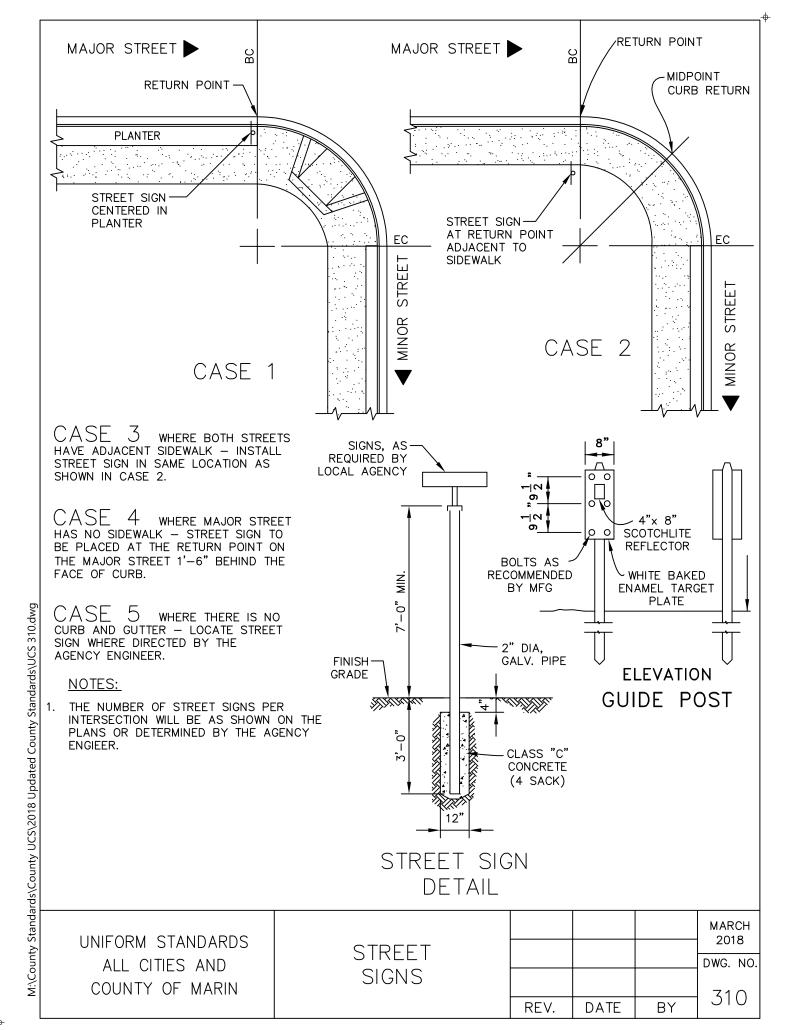
- 1. MONUMENTS SHALL BE SET AT THE LOCATIONS DESIGNATED ON THE PLANS AND ON THE FINAL MAP.
- 2. STREET MONUMENTS SHALL BE USED IN ALL PAVED AREAS AND OTHER LOCATIONS AS SHOWN ON THE PLANS. IRON PIPE MONUMENTS SHALL BE USED AT ALL OTHER LOCATIONS IN THE PUBLIC RIGHT OF WAY.
- 3. NO CONCRETE SHALL BE PLACED PRIOR TO EXCAVATION INSPECTION BY THE AGENCY ENGINEER.
- 4. MONUMENTS SET ON SUBDIVISION BOUNDARIES SHALL BE 3/4" DIAMETER GALVANIZED IRON PIPE 24" LONG FILLED WITH MORTAR.

UNIFORM STANDARDS ALL CITIES AND

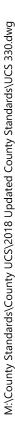
COUNTY OF MARIN

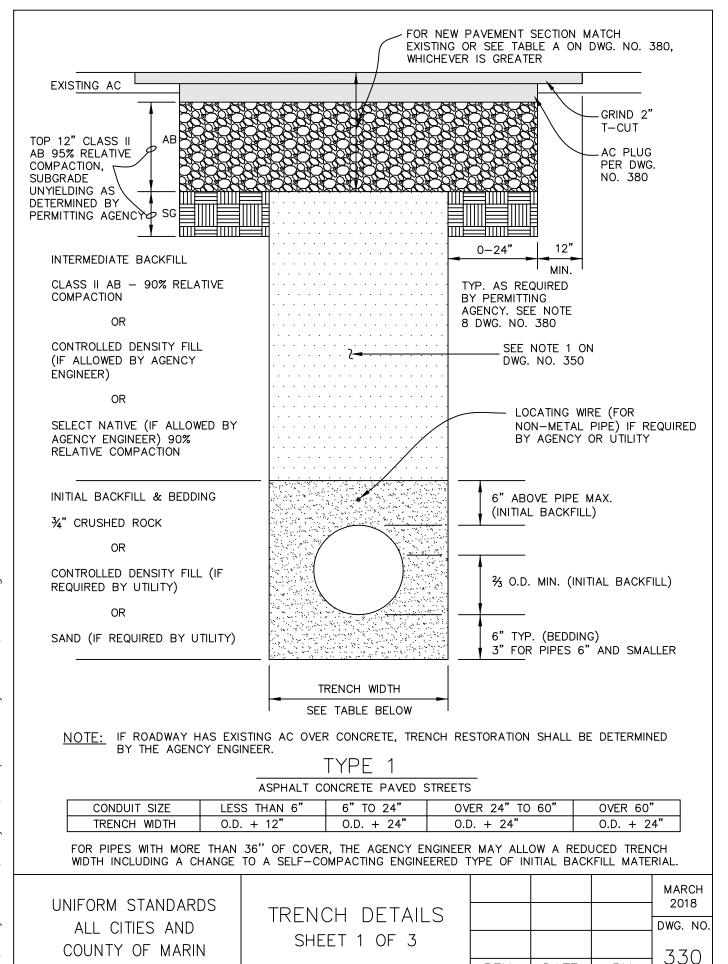
MONUMENTS

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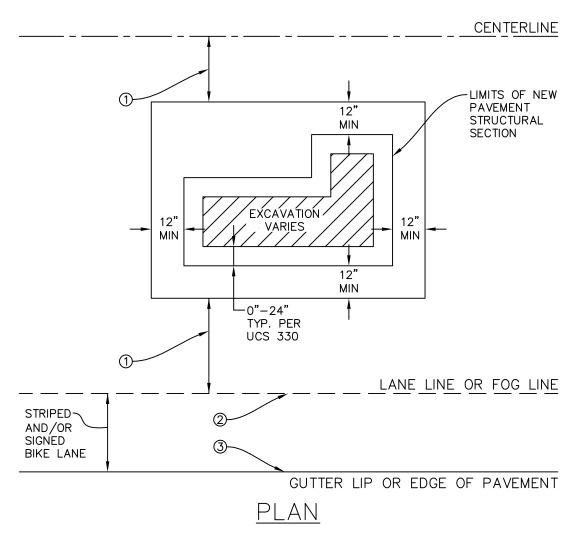
MATERIAL AND COMPACTION REQUIREMENT FOR TRENCH BACKFILL

- 1. INTERMEDIATE BACKFILL SHALL BE CLASS II AGGREGATE BASE. SUITABLE NATIVE OR IMPORTED GRANULAR MATERIAL MAY BE USED IF ALLOWED BY AGENCY ENGINEER. RELATIVE COMPACTION SHALL BE AT LEAST 90%.
- 2. CLASS II AGGREGATE BASE SHALL CONFORM TO THE STATE STANDARD SPECIFICATIONS. MINIMUM RELATIVE COMPACTION SHALL BE 95%. IF PAVEMENT HAVING A STRUCTURAL SECTION GREATER THAN 15" IS CUT, ADDITIONAL BASE MATERIAL MAY BE REQUIRED BY THE AGENCY ENGINEER. BASE SHALL BE PLACED AND COMPACTED PRIOR TO PLACING OF TEMPORARY PAVING.
- 3. TESTING OF MATERIALS AND PERFORMANCE SHALL BE IN CONFORMANCE WITH THE METHODS STATED IN THE LATEST EDITION OF THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS, EXCEPT THAT RELATIVE COMPACTION MAY BE TESTED BY AASHTO METHOD T180, ASTM D-1557, OR TEST METHOD CALIF. 231 (NUCLEAR DENSITOMETER).
- 4. PLACE AC IN 3" MAX, LIFTS, EXCEPT FINAL LIFT SHALL BE 2 1/2" MAX. ADDITIONAL THICKNESS AND LIFTS OF ASPHALT CONCRETE MAY BE REQUIRED TO MATCH EXISTING STRUCTURAL SECTION ON MAJOR ROADS, OR PER LOCAL JURISDICTION REQUIREMENTS.
- 5. "JETTING" OF BACKFILL MATERIAL IS NOT PERMITTED.
- 6. THE USE OF PEA GRAVEL (OR SIMILAR ROUNDED AGGREGATE), IS NOT PERMITTED.
- 7. THE USE OF CONTROLLED DENSITY FILL (CDF) SHALL BE APPROVED BY THE AGENCY ENGINEER PRIOR TO PLACEMENT.
- 8. TRENCH EDGES SHALL BE TRIMMED TO A NEAT LINE AS REQUIRED BY THE AGENCY ENGINEER. TRIMMING SHALL BE BY ROTARY GRINDER. TRENCH LINES SHALL HAVE THE LEAST AMOUNT OF JOGS AND REMAIN LINEAR AS MUCH AS POSSIBLE. REFERENCE DRAWING NO. 360, 370 & 380.
- 9. THE SURFACE COURSE OF TRENCH RESTORATION SHALL EXTEND TO THE LIP OF GUTTER IF THE EDGE OF TRENCH IS WITHIN 4' OF THE LIP OF GUTTER, AND TO THE EDGE OF PAVEMENT IF THE EDGE OF TRENCH IS WITHIN 4' OF AN UNPAVED SHOULDER.
- 10. CONTRACTOR MUST SHORE ALL TRENCHES IN CONFORMANCE WITH OSHA AND STATE SAFETY STANDARDS.
- 11. ALL HOT MIX ASPHALT (HMA) MATERIAL, METHODS AND TOLERANCES SHALL BE IN COMPLIANCE WITH THE CURRENT EDITION OF THE CALTRANS STANDARD SPECIFICATIONS.

UNIFORM	STA	NDARDS
ALL CI	TIES	AND
COUNTY	OF	MARIN

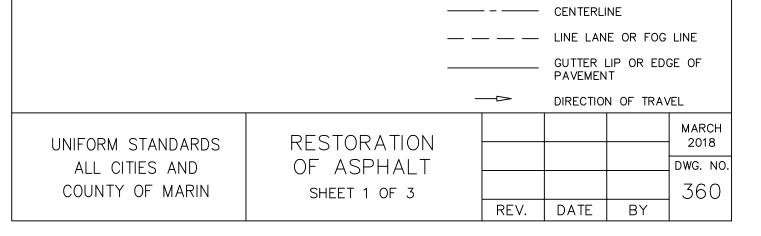
TRENCH NOTES
SHEET 3 OF 3

			MARCH 2018	
			DWG. NO.	
			350	
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- 1 FOR TRENCH REPAIRS IN THE VEHICLE TRAVEL LANE(S), THE RESTORATION SHALL BE EXTENDED TO THE LANE LINE OR CENTER OF LANE WHICHEVER IS CLOSER, IN ACCORDANCE WITH MINIMUM T-CUT DIMENSIONS SHOWN ON DRAWING 330.
- (2) IF THE LIMITS OF RESTORATION ENTER A STRIPED AND/OR SIGNED BIKE LANE, THE RESTORATION SHALL BE EXTENDED TO COVER THE ENTIRE BIKE LANE WIDTH.
- (3) IF THE LIMITS OF EXCAVATION ARE WITHIN 4 FT OF THE GUTTER LIP OR EDGE OF PAVEMENT, THE RESTORATION SHALL BE EXTENDED TO THE GUTTER LIP OR EDGE OF PAVEMENT.

LEGEND:



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- 1 EXISTING PAVEMENTS SHALL BE REMOVED TO CLEAN, STRAIGHT LINES PARALLEL AND PERPENDICULAR TO THE FLOW OF TRAFFIC. DO NOT CONSTRUCT FINAL RESTORATION PATCHES WITH ANGLED SIDES AND IRREGULAR SHAPES.
- ② IF A PROPOSED CUT IS WITHIN 10 FT OF AN EXISTING PATCH ORIGINALLY PERFORMED BY THE SAME AGENCY, EXTEND THE FINAL RESTORATION TO THE EXISTING PATCH (FOR BELL HOLE OR TRENCH NO GREATER THAN 10 FT LONGITUDINAL).
- (3) IF A NEW PATCH IS DONE WITHIN AN EXISTING PATCH, THE BOUNDARIES OF THE FINAL RESTORATION FOR THE PATCHES SHALL COINCIDE.
- F A SECTION OF PAVEMENT IS DAMAGED DURING CONSTRUCTION, THE FAILED AREA SHALL BE REMOVED TO SOUND PAVEMENT AND PATCHED. IF THE DAMAGED AREA IS WITHIN 10 FT OF THE NEW PATCH, THE FINAL RESTORATION OF THE PATCHES SHALL COINCIDE.
- 5 LIMITS OF FINAL PAVEMENT RESTORATION TO STOP AT ONE OF THE FOLLOWING LOCATIONS: CENTER OF LANE, TRAVEL LANE LINE, BIKE LANE LINE, ISLAND CURB/GUTTER, EDGE OF ROADWAY PAVEMENT CURB/GUTTER. NO PAVING JOINTS SHALL BE ALLOWED IN A VEHICULAR WHEEL PATH.
- STEEL PLATES USED FOR BRIDGING SHALL EXTEND A MINIMUM OF 1 FT BEYOND THE EDGE OF TRENCH. PLATES SHALL HAVE NONSKID ABRASIVE SURFACE PER CALTRANS SPECIFICATIONS 75-1.03F, AND COUNTER-SINKING MAY BE REQUIRED WHEN DEEMED NECESSARY BY AGENCY ENGINEER.
- O CUTBACK SHALL NOT BE USED EXCEPT WHEN PRE-APPROVED BY THE AGENCY ENGINEER OR WHEN TRIMMING TRENCH PLATES.
- (8) ROADWAY RESTORATION WIDTH, BEYOND THE TRENCH EDGES, VARIES FROM 0"-24". DURING THE PERMIT PROCESS, THE AGENCY WILL REVIEW GEOTECHNICAL AND HISTORICAL INFORMATION OF THE TRENCHING LOCATION, AS PRESENTED BY THE UTILITY OWNER, AND CONSIDER EXISTING PAVEMENT CONDITION, SUITABLE SUBGRADE AND THE PROPOSED SCOPE OF WORK TO DETERMINE RESTORATION WIDTH. THE PERMITTING AGENCY RESERVES THE RIGHT TO ADJUST THE RESTORATION WIDTH DUE TO FIELD OBSERVATIONS DURING CONSTRUCTION SUCH AS, BUT NOT LIMITED TO, OBSERVING BREAKOUT, UNDERMINING OF ADJACENT PAVEMENT, UNSTABLE WALLS OF TRENCH, DAMAGE TO SURROUNDING UNDISTURBED PAVEMENT, AND/OR PAVEMENT OR SUBGRADE DAMAGE FROM CONTRACTOR OPERATIONS.

Table A

Road Type	Traffic Index**	Min. AC*** (TOTAL)	Final Surface AC, Min.	Pavement Repair Structural Section			
				Assumes R Value = 10*			
				AC Thickness	AB Thickness	Alternate Deep Lift A.C.	
Local	5.0	4"	2.0"	4.0"	7.0"	7.0"	
Collector	6.5	5"	2.0"	5.0"	11.0"	11.0"	
Arterial**	8.0	6"	3.0"	6.0"	14.0"	14.0"	
	OTES: *Unless applicant provides actual R-Value test results and pavement section design						

**Or as approved by City/County Engineer based on actual traffic loading
***Minimum AC thickness shall math existing or as shown in Table A, whichever is greater

UNIFORM STANDARDS
ALL CITIES AND
COUNTY OF MARIN

RESTORATION
OF ASPHALT
SHEET 3 OF 3

MARCH 2018

DWG. NO.

REV. DATE BY