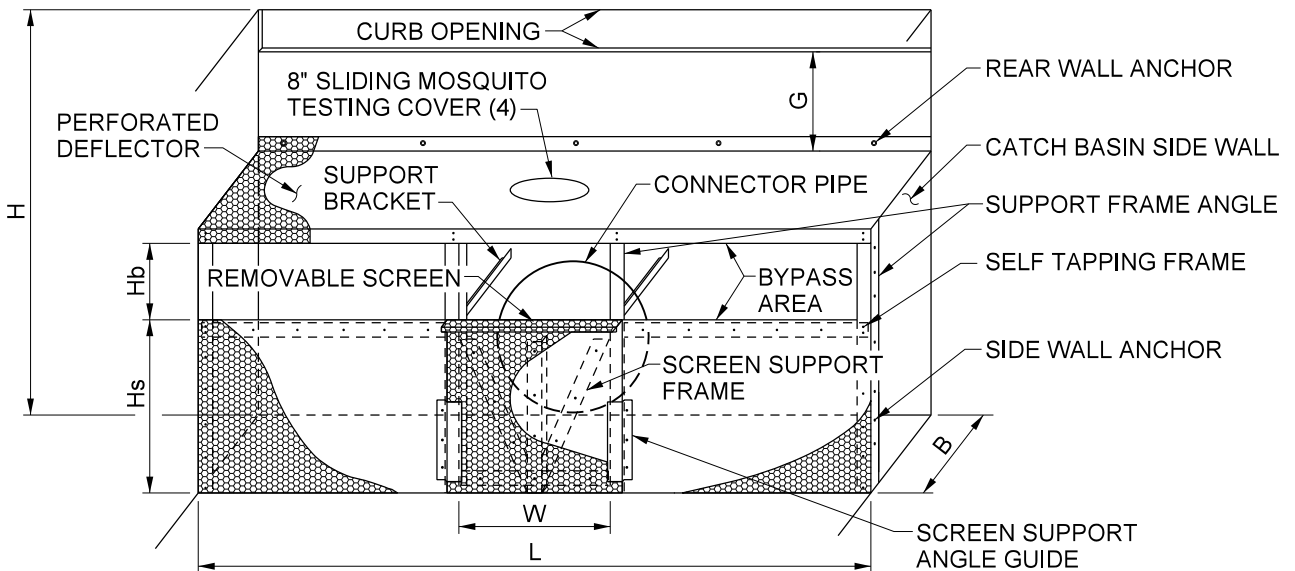


L = A+2B (FOR TYPE A ONLY)

TYPE A (BACK WALL MOUNT)



TYPE B (SIDE WALL MOUNT)

DIMENSIONS:

- | | |
|------------------------------|----------------|
| SCREEN LENGTH (1) | L |
| REMOVABLE SCREEN WIDTH (2) | W (24" TO 36") |
| SCREEN HEIGHT (1) | Hs |
| SCREEN BYPASS HEIGHT (1) | Hb |
| MINIMUM WALL CLEARANCE (2) | C = 12" |
| MINIMUM INTERIOR SPACE (2) | B = 10" |
| DISTANCE BELOW GUTTER FL (1) | G |
| CATCH BASIN HEIGHT (5) | H |

NOTES:

1. SEE TABLES ON PAGES 10-13 FOR VALUES.
2. SEE FTCD GENERAL NOTES ON STANDARD 313-3.
3. SEE FTCD SCREEN TYPE AND LOCATIONS WITHIN CATCH BASINS ON STANDARD 313-4 TO 313-8.
4. MOSQUITO TESTING COVER REQUIRED ONLY FOR STANDARD No. 301 AND 302 APPLICATIONS.
5. CB HEIGHT IS VERTICAL DISTANCE FROM TOP OF CURB TO OUTLET PIPE FLOW LINE.

NOT TO SCALE

PREPARED UNDER THE SUPERVISION OF:

Mark Lancaster

11/30/22
DATE

DIRECTOR OF TRANSPORTATION
MARK LANCASTER, P.E.



COUNTY OF RIVERSIDE

**FULL TRASH CAPTURE
DEVICE (FTCD) -
CONNECTOR
PIPE SCREEN (CPS)**

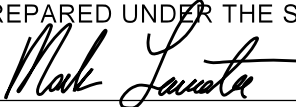
STANDARD No. 313 (1 OF 14)

REVISION	DESCRIPTION	MARK	DATE	APPROVED

FTCD SPECIFICATIONS

1. FULL TRASH CAPTURE DEVICE (FTCD) SHALL BE A UNITED STORM WATER, INC. CONNECTOR PIPE SCREEN (CPS) OR EQUIVALENT. EQUIVALENT SYSTEMS OR ALTERNATIVE DESIGNS SHALL BE ON THE STATE OF CALIFORNIA APPROVED TRASH CAPTURE DEVICE LIST AND REQUIRE APPROVAL OF THE TRANSPORTATION DEPARTMENT.
2. FTCD SHALL HAVE STRUCTURAL FRAME FOR STIFFNESS AND TO ENABLE BOLTING TO CATCH BASIN FLOOR AND WALL. FRAME MEMBERS SHALL BE FABRICATED FROM PERFORATED 14 GAUGE GRADE 304 STAINLESS STEEL HAVING 5 MM DIAMETER HOLES.
3. FTCD SCREENS SHALL BE FABRICATED FROM PERFORATED 14 GAUGE GRADE 304 STAINLESS STEEL HAVING 5 MM DIAMETER HOLES.
4. FTCD SHALL HAVE A PERFORATED DEFLECTOR SCREEN COVERING THE TOP OF THE FTCD TO PROHIBIT DEBRIS FROM FALLING BEHIND THE FRONT AND SIDE SCREENS. THE DEFLECTOR SHALL BE ABLE TO WITHSTAND A VERTICAL LOAD OF 10 LBS PER SQUARE FOOT.
5. FTCD FRAME AND SCREEN SHALL HAVE SUFFICIENT STRUCTURAL INTEGRITY TO WITHSTAND THE FORCE OF STANDING WATER IN THE CATCH BASIN ASSUMING THE SCREEN IS 100% CLOGGED.
6. FTCD SHALL BE FASTENED TO THE CATCH BASIN WALLS AND FLOOR WITH ANCHOR BOLTS. ANCHOR BOLTS SHALL BE SS-304, 3/8" DIAMETER AND 3" LENGTH, AND SHALL BE EPOXY SET INTO CATCH BASIN CONCRETE. IF REINFORCEMENT STEEL IS ENCOUNTERED DURING INSTALLATION, RELOCATE THE ANCHOR HOLE AND FILL VACANT HOLE WITH EPOXY. EPOXY SHALL BE ON THE CURRENT APPROVED LIST OF CHEMICAL ADHESIVES FOR USE IN CALTRANS CONTRACTS. ANCHOR BOLT SPACING TO BE 12" O.C. EXCEPT WHERE FRAME LENGTH WOULD RESULT IN LESS THAN 3 BOLTS PER FRAME MEMBER. IN THIS CASE FASTEN FRAME TO CATCH BASIN WALL USING 3 ANCHOR BOLTS.
7. THE SCREEN SHALL BE SECURED TO THE SUPPORT FRAME, BRACKETS AND SIDE PANEL USING #12 x 0.5" SELF TAPPING SS-304 TECH SCREWS .
8. THE FTCD SHALL BE FABRICATED ON SITE TO BE FLUSH WITH THE INTERIOR SURFACES OF THE CATCH BASIN. THE MAXIMUM ALLOWABLE GAP BETWEEN THE FTCD AND THE CATCH BASIN SURFACES IS 5MM (0.197 INCHES).
9. FOR SCREEN SPANS (DIMENSION "A" FOR TYPE A OR DIMENSION "L" FOR TYPE B PER STANDARD 313-1) GREATER THAN 36" PROVIDE ADDITIONAL SUPPORT BRACKETS AND SUPPORT FRAME ANGLES AT 36" ON CENTER OR LESS. SEE STANDARD 313-1 TYPE B FOR TYPICAL SUPPORT BRACKET AND SUPPORT FRAME ANGLE CONFIGURATION.

NOT TO SCALE

PREPARED UNDER THE SUPERVISION OF:				
			11/30/22	
DIRECTOR OF TRANSPORTATION			DATE	
MARK LANCASTER, P.E.				
REVISION	DESCRIPTION	MARK	DATE	APPROVED



COUNTY OF RIVERSIDE
FTCD - CPS SPECIFICATIONS
STANDARD No. 313 (2 OF 14)

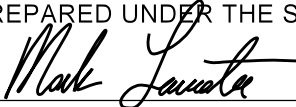
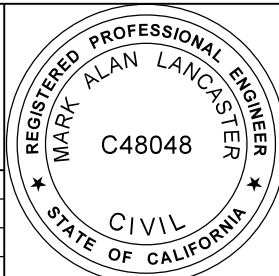
FTCD GENERAL NOTES (NEW CONSTRUCTION)

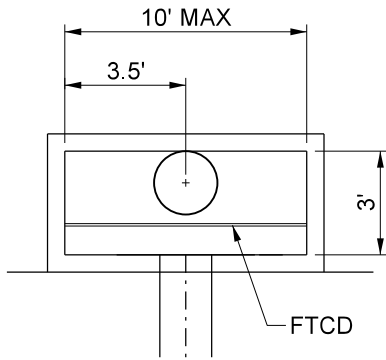
1. FTCD SHALL CONFORM TO THE CONFIGURATIONS SHOWN IN STANDARD 313-4 THROUGH 313-8 AND SHALL BE SIZED ACCORDING TO THE SIZING TABLES SHOWN IN STANDARD 313-10 THROUGH 313-13.
2. THE REMOVABLE SCREEN WIDTH (W) SHALL EQUAL THE CONNECTOR PIPE DIAMETER OR 24", WHICHEVER IS GREATER, BUT SHALL NOT EXCEED 36". WHERE DIMENSION "A" PER STANDARD 313-1 TYPE A (BACK WALL MOUNT) IS LESS THAN OR EQUAL TO 36", THE REMOVABLE SCREEN MAY EXTEND THE FULL WIDTH OF THE FTCD (W = A). IN THIS CASE SUPPORT BRACKETS AND THE ASSOCIATED SUPPORT FRAME ANGLES WILL BE OMITTED.
3. IF THE FTCD CANNOT PROVIDE A SIDE WALL CLEARANCE (C) OF 12", PROVIDE A SIDE WALL MOUNT. AN L-SHAPED FTCD WILL HAVE ONE SIDE WALL AND ONE BACK WALL MOUNT.
4. THE INTERIOR SPACE DIMENSION "B" PER DRAWING 313-1 TYPE A, SHALL BE AT LEAST 10" UNLESS OTHERWISE AUTHORIZED BY THE TRANSPORTATION DEPARTMENT.
5. POSITIVE DRAINAGE TO THE OUTLET PIPE IS REQUIRED FOR THE ENTIRE CATCH BASIN FLOOR.
6. THE CATCH BASIN SHALL INCLUDE MAINTENANCE GAUGE STENCILING ON THE INTERIOR WALL OPPOSITE THE FTCD THAT IDENTIFIES THE ACCUMULATED DEBRIS ELEVATION AT 40% AND 100% OF THE FTCD HEIGHT. SEE STANDARD 313-9 FOR STENCILING REQUIREMENTS.
7. TRANSPORTATION DEPARTMENT APPROVAL REQUIRED WHERE CONNECTOR PIPE SIZE > 42" DIAMETER.
8. CATCH BASINS (NEW OR EXISTING) WITH FOSSIL FILTERS (PER STANDARD 300A OR EQUIVALENT) SHALL REQUIRE SPECIAL CONSIDERATION FOR INCORPORATION OF THE FTCD. A MODIFIED FTCD DESIGN SHALL BE SUBMITTED TO THE TRANSPORTATION DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
9. ENGINEER MAY PREPARE SITE SPECIFIC CPS DESIGN UTILIZING THE CPS FLOW CHART PER STANDARD 313-14 IN LIEU OF SIZING PER STANDARD 313-10 THROUGH 313-13.

FTCD RETROFIT NOTES

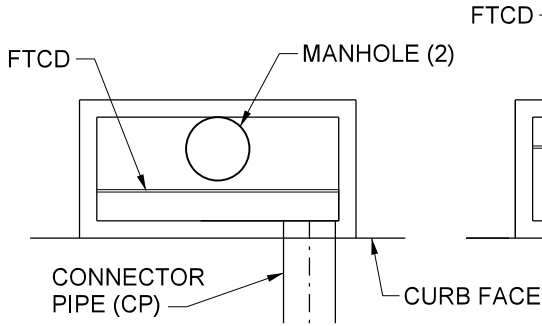
10. WHERE MANHOLE CONFIGURATIONS IN THE EXISTING CATCH BASIN DO NOT CONFORM WITH FTCD LOCATIONS SHOWN IN STANDARD 313-4 THROUGH 313-8, NEW MANHOLES OPENINGS SHALL BE INSTALLED TO CONFORM WITH THESE REQUIREMENTS. RETROFIT DESIGN DRAWINGS MUST BE APPROVED BY THE TRANSPORTATION DEPARTMENT.
11. IF ADEQUATE SPACE IS NOT AVAILABLE FOR RETROFIT OF EXISTING CATCH BASIN WITH FTCD, A MODIFIED FTCD DESIGN SHALL BE SUBMITTED TO THE TRANSPORTATION DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
12. CATCH BASINS THAT DO NOT DRAIN TOWARD THE CONNECTOR PIPE SHALL BE MODIFIED TO DRAIN PROPERLY UTILIZING A POLYESTER POLYMER CONCRETE OVERLAY PRODUCT APPROVED BY THE TRANSPORTATION DEPARTMENT PRIOR TO INSTALLATION OF THE FTCD. THE BASIN FLOOR SHALL BE ROUGHENED TO THE SATISFACTION OF THE TRANSPORTATION DEPARTMENT PRIOR TO APPLICATION OF THE OVERLAY. SURFACE PREPARATION MUST PROVIDE FOR MINIMUM OVERLAY THICKNESS PER OVERLAY PRODUCT MANUFACTURER'S SPECIFICATIONS. PROPER DRAINAGE OF BASIN FLOOR SHALL BE ACHIEVED TO THE SATISFACTION OF THE TRANSPORTATION DEPARTMENT.

NOT TO SCALE

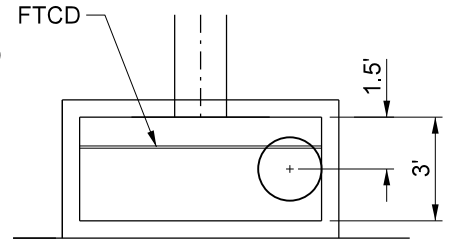
PREPARED UNDER THE SUPERVISION OF:  11/30/22					COUNTY OF RIVERSIDE													
DIRECTOR OF TRANSPORTATION MARK LANCASTER, P.E.		FTCD - CPS GENERAL NOTES AND RETROFIT NOTES																
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%;">REVISION</th> <th style="width: 25%;">DESCRIPTION</th> <th style="width: 10%;">MARK</th> <th style="width: 10%;">DATE</th> <th style="width: 30%;">APPROVED</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		REVISION	DESCRIPTION		MARK	DATE	APPROVED											STANDARD No. 313 (3 OF 14)
REVISION	DESCRIPTION	MARK	DATE	APPROVED														



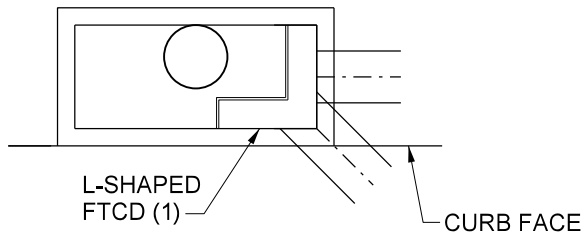
CENTERED CP



OFFSET CP



BACK WALL CP

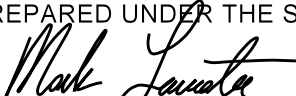


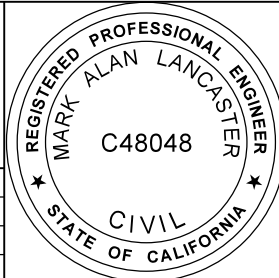
SIDE OR CORNER CP (1)(3)

NOTES:

- (1) FOR CORNER AND SIDE CONNECTOR PIPE (CP) LOCATIONS THE FTCD SHALL BE L-SHAPED TO FULLY COVER THE PIPE OPENING. A SUPPORT FRAME ANGLE SHALL BE PROVIDED IN THE CPS CORNER.
- (2) DETAIL VALID FOR CATCH BASIN WIDTHS LESS THAN OR EQUAL TO 10 FEET. MULTIPLE MANHOLES REQUIRED FOR CATCH BASIN WIDTHS GREATER THAN 10 FEET. SEE STANDARD NO. 313-5 AND 313-6.
- (3) FOR SIDE OR CORNER CP LOCATIONS WHERE REQUIRED SCREEN LENGTH (L) CANNOT BE ACHIEVED SPECIAL DESIGN MUST BE SUBMITTED TO THE TRANSPORTATION DEPARTMENT FOR REVIEW AND APPROVAL.

NOT TO SCALE

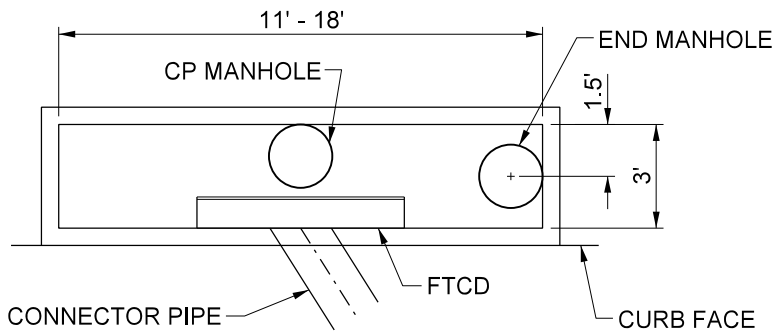
PREPARED UNDER THE SUPERVISION OF:			
			11/30/22
DIRECTOR OF TRANSPORTATION MARK LANCASTER, P.E.			DATE
REVISION	DESCRIPTION	MARK	DATE APPROVED



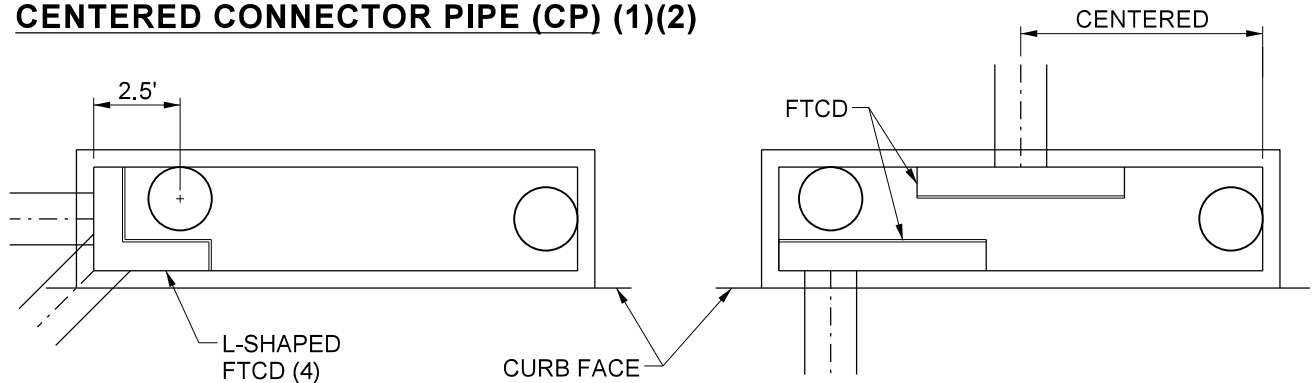
COUNTY OF RIVERSIDE

**FTCD - CPS SCREEN /
MANHOLE LOCATIONS FOR
10' MAX WIDTH STANDARD NO. 300
CURB INLET CATCH BASINS**

STANDARD No. 313 (4 OF 14)



CENTERED CONNECTOR PIPE (CP) (1)(2)



SIDE OR CORNER CP (4)(5)

OFFSET OR BACK WALL CP (1)(3)

NOTES:

- (1) FOR CONNECTOR PIPE EXITING TOWARD STREET CENTERLINE, LOCATE CONNECTOR PIPE (CP) MANHOLE ALONG BACK WALL OPPOSITE OF CP CENTERLINE. LOCATE END MANHOLE AT EITHER END WHEN CP IS CENTERED IN CATCH BASIN, OR ON OPPOSITE SIDE OF CP WHEN CP IS ON EITHER SIDE OF CATCH BASIN CENTERLINE.
- (2) SHALLOW CATCH BASINS WITH A HEIGHT (H) LESS THAN 3.5' SHALL INCLUDE A THIRD MANHOLE ON THE OPPOSITE SIDE OF THE CONNECTOR PIPE FROM THAT SHOWN PLACED AGAINST THE END WALL.
- (3) CONNECTOR PIPE EXITING THROUGH BACK WALL OF CATCH BASIN MUST BE CENTERED IN CATCH BASIN UNLESS APPROVED BY THE TRANSPORTATION DEPARTMENT.
- (4) FOR CORNER AND SIDE CONNECTOR PIPE (CP) LOCATIONS, THE FTCD SHALL BE L-SHAPED TO FULLY COVER THE PIPE OPENING. A SUPPORT FRAME ANGLE SHALL BE PROVIDED IN THE CPS CORNER.
- (5) FOR SIDE OR CORNER CP LOCATIONS WHERE REQUIRED SCREEN LENGTH (L) CANNOT BE ACHIEVED, SPECIAL DESIGN MUST BE SUBMITTED TO THE TRANSPORTATION DEPARTMENT FOR REVIEW AND APPROVAL.

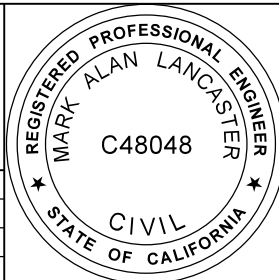
NOT TO SCALE

PREPARED UNDER THE SUPERVISION OF:

Mark Lancaster

11/30/22
DATE

DIRECTOR OF TRANSPORTATION
MARK LANCASTER, P.E.

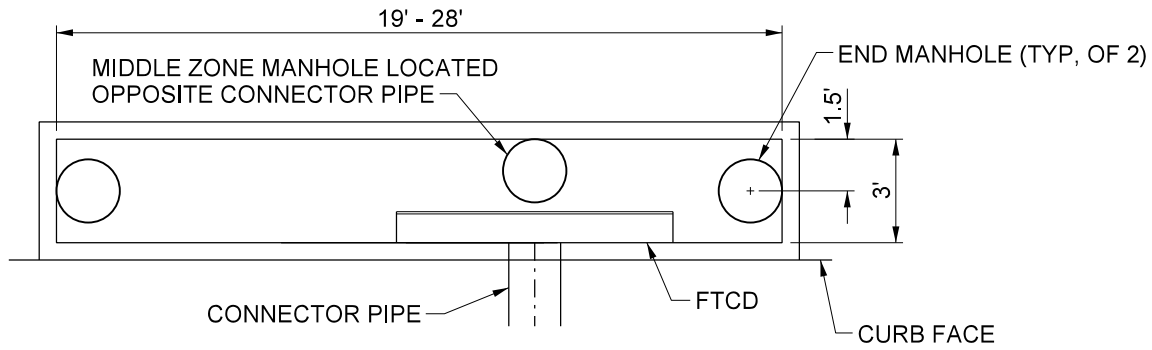


COUNTY OF RIVERSIDE

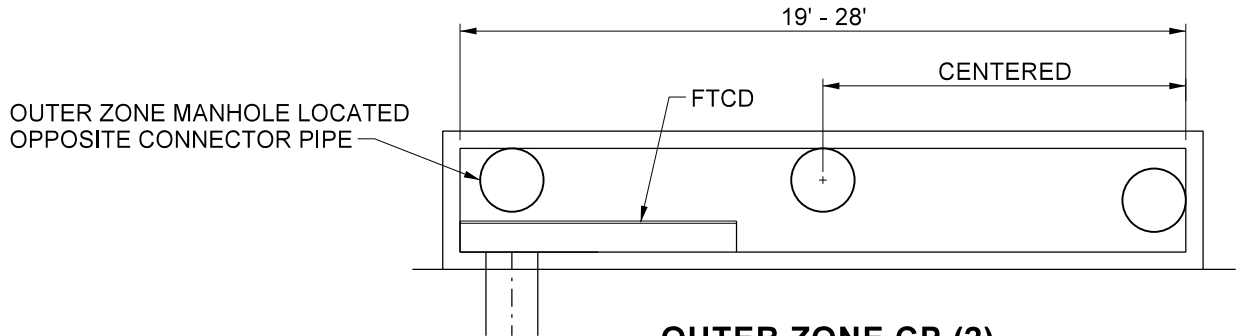
**FTCD - CPS SCREEN /
MANHOLE LOCATIONS FOR
11'-18' WIDTH STANDARD NO. 300
CURB INLET CATCH BASINS**

STANDARD No. 313 (5 OF 14)

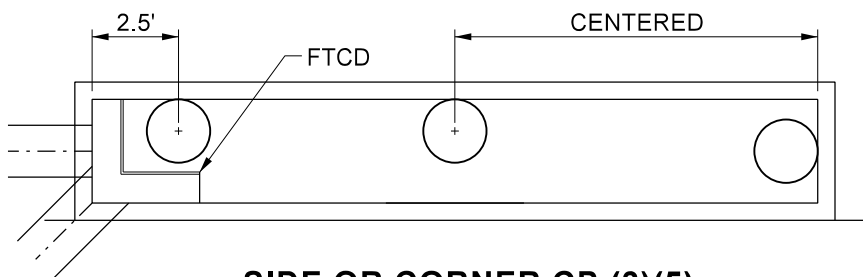
REVISION	DESCRIPTION	MARK	DATE	APPROVED



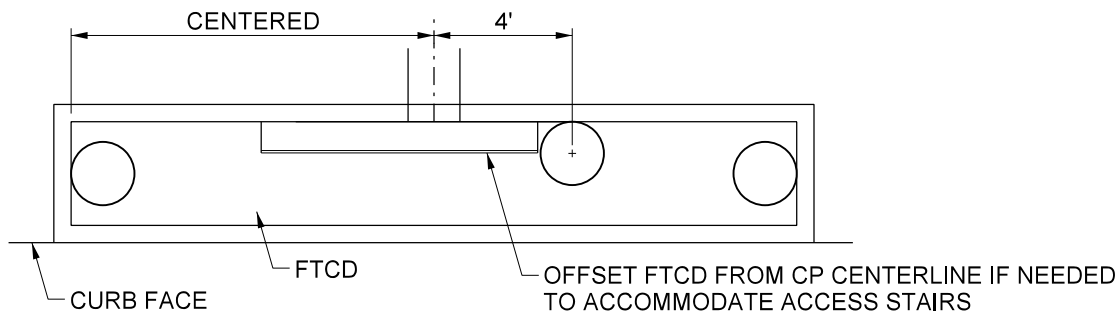
CENTERED OR MIDDLE ZONE CP (1)



OUTER ZONE CP (2)



SIDE OR CORNER CP (3)(5)



BACK WALL CP (4)

NOTE:
SEE STANDARD NO. 313-7
FOR REFERENCED NOTES.

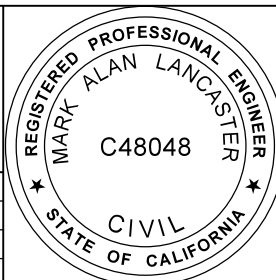
NOT TO SCALE

PREPARED UNDER THE SUPERVISION OF:

Mark Lancaster

11/30/22
DATE

DIRECTOR OF TRANSPORTATION
MARK LANCASTER, P.E.



COUNTY OF RIVERSIDE

**FTCD - CPS SCREEN /
MANHOLE LOCATIONS FOR
19'-28' WIDTH STANDARD NO. 300
CURB INLET CATCH BASINS**

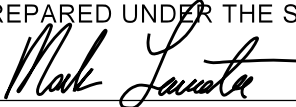
STANDARD No. 313 (6 OF 14)

REVISION	DESCRIPTION	MARK	DATE	APPROVED

NOTES: (FOR STANDARD NO. 313-6)

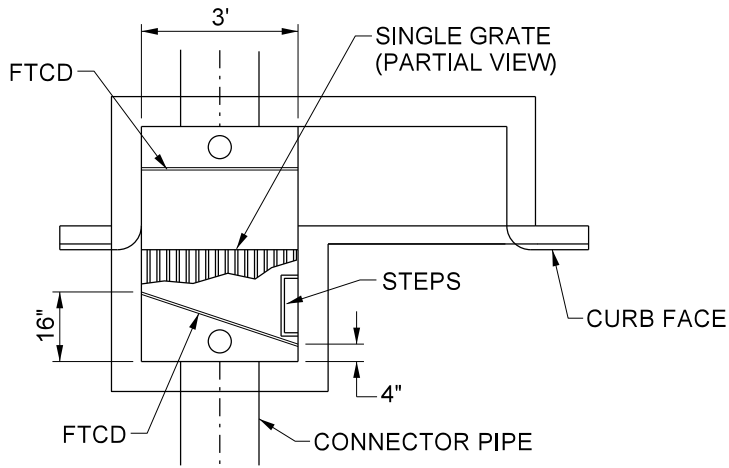
- (1) FOR CONNECTOR PIPE EXITING TOWARD STREET CENTERLINE IN MIDDLE ZONE, LOCATE CONNECTOR PIPE (CP) MANHOLE ALONG BACK WALL OPPOSITE OF CP CENTERLINE. LOCATE END MANHOLES AT EITHER END OF CATCH BASIN AS SHOWN.
- (2) FOR CONNECTOR PIPE EXITING TOWARD STREET CENTERLINE IN OUTER ZONE, LOCATE OUTER ZONE MANHOLE ALONG BACK WALL OPPOSITE OF CP CENTERLINE. LOCATE ONE END MANHOLE ON THE OPPOSITE SIDE OF THE CB CENTERLINE FROM THE CP, AND ONE CENTERED MANHOLE ALONG THE CATCH BASIN BACK WALL.
- (3) FOR CORNER AND SIDE CONNECTOR PIPE (CP) LOCATIONS THE FTCD SHALL BE L-SHAPED TO FULLY COVER THE PIPE OPENING. A SUPPORT FRAME ANGLE SHALL BE PROVIDED IN THE CPS CORNER.
- (4) CONNECTOR PIPE EXITING THROUGH BACK WALL OF CATCH BASIN MUST BE CENTERED IN CATCH BASIN UNLESS APPROVED BY THE TRANSPORTATION DEPARTMENT.
- (5) FOR SIDE OR CORNER CP LOCATIONS WHERE REQUIRED SCREEN LENGTH (L) CANNOT BE ACHIEVED SPECIAL DESIGN MUST BE SUBMITTED TO THE TRANSPORTATION DEPARTMENT FOR REVIEW AND APPROVAL.

NOT TO SCALE

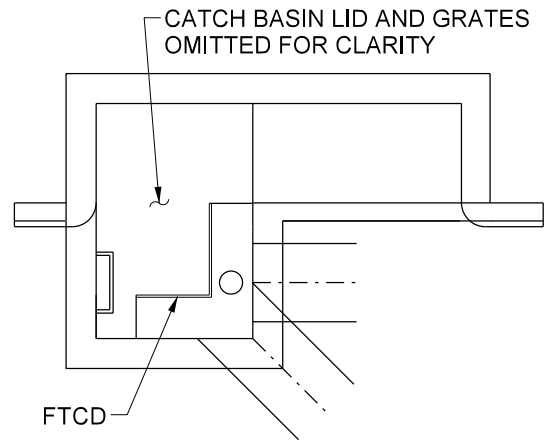
PREPARED UNDER THE SUPERVISION OF:				
			11/30/22	
DIRECTOR OF TRANSPORTATION MARK LANCASTER, P.E.			DATE	
REVISION	DESCRIPTION	MARK	DATE	APPROVED



COUNTY OF RIVERSIDE
FTCD - CPS SCREEN / MANHOLE LOCATIONS FOR 19'-28' WIDTH STANDARD NO. 300 CURB INLET CATCH BASINS
STANDARD No. 313 (7 OF 14)

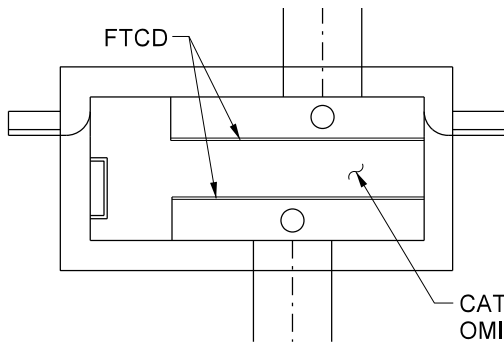


CENTERED OR BACK WALL CP (1)(5)

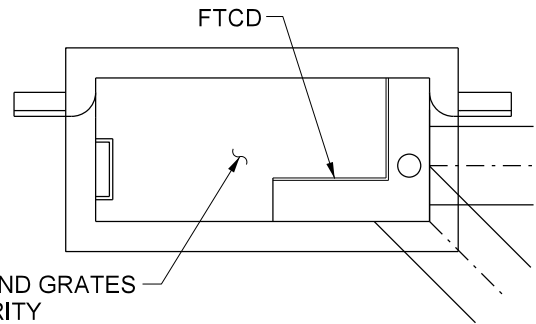


SIDE OR CORNER CP (2)(4)

CATCH BASIN 301



CENTERED OR BACK WALL CP (3)(5)



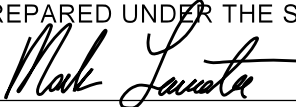
SIDE OR CORNER CP (2)(3)(4)

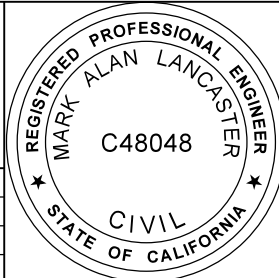
CATCH BASIN 302

NOTES:

- (1) WHEN STEPS OBSTRUCT THE STANDARD FTCD INSTALLATION, ANGLE THE SCREEN IN FRONT OF THE CONNECTOR PIPE TO AVOID THE STEPS AS SHOWN.
- (2) FOR CORNER AND SIDE CONNECTOR PIPE (CP) LOCATIONS, THE FTCD SHALL BE L-SHAPED TO FULLY COVER THE PIPE OPENING.
- (3) MULTIPLE GRATE CATCH BASIN WIDTH SHOWN. FOR SINGLE GRATE APPLICATIONS PLACE FTCD PER CATCH BASIN 301 DETAILS ABOVE.
- (4) FOR SIDE OR CORNER CP LOCATIONS WHERE REQUIRED SCREEN LENGTH (L) CANNOT BE ACHIEVED, SPECIAL DESIGN MUST BE SUBMITTED TO THE TRANSPORTATION DEPARTMENT FOR REVIEW AND APPROVAL.
- (5) INSTALL FTCD, TYPE B (SIDE WALL MOUNT), TO AVOID STEPS AS NECESSARY.

NOT TO SCALE

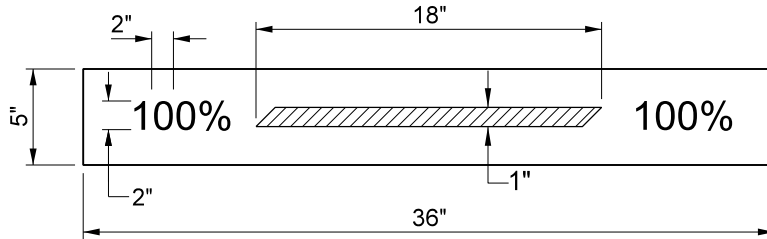
PREPARED UNDER THE SUPERVISION OF:			
			11/30/22
DIRECTOR OF TRANSPORTATION MARK LANCASTER, P.E.			DATE
REVISION	DESCRIPTION	MARK	DATE APPROVED



COUNTY OF RIVERSIDE

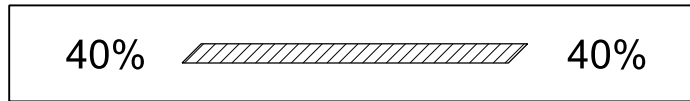
**FTCD - CPS SCREEN
LOCATIONS FOR STANDARD NO.
CB301 AND CB302 COMBINATION
INLET CATCH BASINS**

STANDARD No. 313 (8 OF 14)



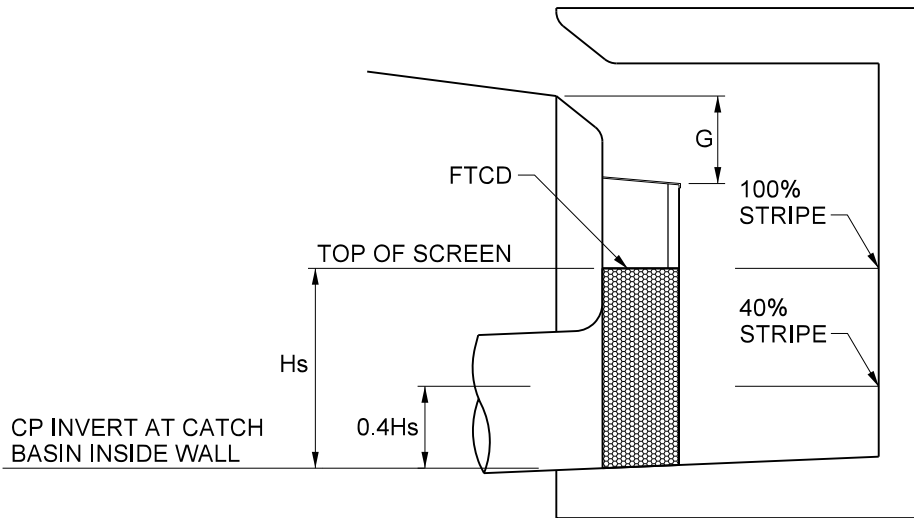
100% STRIPE

(RED STRIPES AND NUMBERS ON WHITE BACKGROUND)



40% STRIPE

(RED STRIPES AND NUMBERS ON WHITE BACKGROUND)

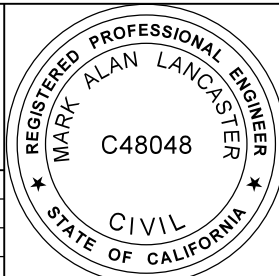


NOTES:

1. PAINT SHALL BE RED STRIPES AND NUMBERS ON WHITE BACKGROUND ON THE BACK WALL OF THE CATCH BASIN, LABELING 40% AND 100% SCREEN HEIGHT AS SHOWN ABOVE. PAINT SHALL BE WATERBORNE ACRYLIC AND REFLECTIVE.
2. SURFACES SHALL BE CLEAN, DRY AND FREE FROM ALL CONTAMINANTS PRIOR TO PAINTING.
3. STENCILING SHALL BE VISIBLE FROM THE STREET THROUGH CATCH BASIN OPENING.

NOT TO SCALE

PREPARED UNDER THE SUPERVISION OF:			
<i>Mark Lancaster</i>		11/30/22	
DIRECTOR OF TRANSPORTATION		DATE	
MARK LANCASTER, P.E.			
REVISION	DESCRIPTION	MARK	DATE



COUNTY OF RIVERSIDE

**FTCD - CPS
MAINTENANCE GAUGE**

STANDARD No. 313 (9 OF 14)

**FTCD SIZING TABLE FOR STANDARD NO. 300 CURB INLET CATCH BASIN
ON GRADE CONDITION**

CATCH BASIN TYPE	H (FT)	CATCH BASIN WIDTH (FT) (1)	NUMBER OF GRATES	BYPASS HEIGHT H _b (IN)	SCREEN HEIGHT H _s (IN)	SCREEN LENGTH L (FT)	G (IN)
300	2.5 (30 inches)	7.0	-	8.0	8.0	7.0	4.0
		10.0				7.0	
		14.0				10.0	
	2.67 (32 inches)	7.0	-	8.0	10.0	7.0	4.0
		10.0				7.0	
		14.0				10.0	
	2.83 (34 inches)	7.0	-	8.0	12.0	7.0	4.0
		10.0				7.0	
		14.0				10.0	
		21.0				11.0	
	3.0	7.0	-	8.0	12.0	4.0	6.0
		10.0		6.0			
		14.0		8.0	14.0	10.0	4.0
		21.0				14.0	
		28.0				18.0	
	3.5	7.0	-	8.0	18.0	4.0	6.0
		10.0		6.0			
		14.0		6.0			
		21.0		10.0	7.0		
		28.0			9.0		
	4.0	7.0	-	12.0	20.0	4.0	6.0
		10.0				6.0	
		14.0				6.0	
		21.0				7.0	
28.0		8.0					
4.5 OR GREATER	7.0	-	12.0	24.0	4.0	8.0	
	10.0				6.0		
	14.0				6.0		
	21.0				7.0		
	28.0				8.0		

NOTES:

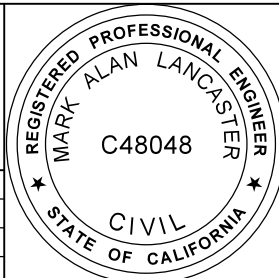
- FOR CATCH BASIN WIDTHS NOT SHOWN USE NEXT HIGHER VALUE.
- WHERE THE SCREEN LENGTH (L) IS EQUAL TO THE CATCH BASIN WIDTH, THE CPS SHALL BE THE FULL WIDTH OF THE CATCH BASIN AND UTILIZE A SIDE WALL MOUNT.

NOT TO SCALE

PREPARED UNDER THE SUPERVISION OF:

Mark Lancaster 11/30/22
 DIRECTOR OF TRANSPORTATION DATE
 MARK LANCASTER, P.E.

REVISION	DESCRIPTION	MARK	DATE	APPROVED



COUNTY OF RIVERSIDE

**FTCD - CPS SIZING TABLE
FOR STANDARD NO. 300 CURB
INLET CATCH BASIN
ON GRADE CONDITION**

STANDARD No. 313 (10 OF 14)


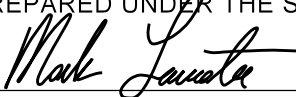
**FTCD SIZING TABLE FOR STANDARD NO. 301 AND 302 COMBINATION
INLET CATCH BASIN ON GRADE CONDITION**

CATCH BASIN TYPE	H (FT)	CATCH BASIN WIDTH (FT) (1)	NUMBER OF GRATES	BYPASS HEIGHT H _b (IN)	SCREEN HEIGHT H _s (IN)	SCREEN LENGTH L (FT)	G (IN)
301	3.0	7.0	1	8.0	10.0	4.0	10.0
		10.0	2			7.0	
		14.0	1			8.0	
		14.0	2			8.0	
	3.5	7.0	1	10.0	12.0	6.0	12.0
		10.0	2			5.0	
		14.0	1			5.0	
		14.0	2			6.0	
	4.0	7.0	1	12.0	15.0	4.0	13.0
		10.0	2			5.0	
		14.0	1			4.0	
		14.0	2			5.0	
	4.5 OR GREATER	7.0	1	12.0	18.0	4.0	16.0
		10.0	2			5.0	
		14.0	1			4.0	
		14.0	2			5.0	
302	3.0	-	1	9.0	9.0	3.0	10.0
		-	2			5.0	
		-	3			6.0	
	3.5	-	1	10.0	12.0	2.5	12.0
		-	2			4.0	
		-	3			5.0	
	4.0 OR GREATER	-	1	10.0	18.0	2.5	12.0
		-	2			4.0	
		-	3			5.0	

NOTES:

- FOR CATCH BASIN WIDTHS NOT SHOWN USE NEXT HIGHER VALUE.

NOT TO SCALE

PREPARED UNDER THE SUPERVISION OF:					COUNTY OF RIVERSIDE
 DIRECTOR OF TRANSPORTATION MARK LANCASTER, P.E.		11/30/22	DATE		FTCD - CPS SIZING TABLE FOR STANDARD NO. 301 AND 302 COMBINATION INLET CATCH BASIN ON GRADE CONDITION
REVISION	DESCRIPTION	MARK	DATE		APPROVED

**FTCD SIZING TABLE FOR STANDARD NO. 300 CURB INLET CATCH BASIN
SUMP CONDITION**

CATCH BASIN TYPE	H (FT)	CATCH BASIN WIDTH (FT) (1)	NUMBER OF GRATES	BYPASS HEIGHT H _b (IN)	SCREEN HEIGHT H _s (IN)	SCREEN LENGTH L (FT)	G (IN)	
300	3.5	7.0	-	12.0	16.0	7.0	4.0	
		10.0		14.0		6.0		
		14.0		7.0				
	4.0	7.0	7.0	-	16.0	18.0	7.0	4.0
			10.0				6.0	
			14.0				6.0	
		21.0	7.0		18.0	16.0	7.0	
			28.0				8.0	
	4.5	7.0	7.0	-	16.0	18.0	7.0	10.0
			10.0				6.0	
			14.0				6.0	
		21.0	7.0		18.0	16.0	7.0	
			28.0				8.0	
	5.0 OR GREATER	7.0	7.0	-	16.0	24.0	7.0	10.0
			10.0				6.0	
			14.0				6.0	
21.0		7.0	18.0		20.0	7.0		
		28.0				8.0		

NOTES:

- FOR CATCH BASIN WIDTHS NOT SHOWN USE NEXT HIGHER VALUE.

NOT TO SCALE

PREPARED UNDER THE SUPERVISION OF:

Mark Lancaster 11/30/22
 DIRECTOR OF TRANSPORTATION DATE
 MARK LANCASTER, P.E.

REVISION	DESCRIPTION	MARK	DATE	APPROVED



COUNTY OF RIVERSIDE

**FTCD - CPS SIZING TABLE
FOR STANDARD NO. 300
CURB INLET CATCH BASIN
SUMP CONDITION**

STANDARD No. 313 (12 OF 14)

**FTCD SIZING TABLE FOR STANDARD NO. 301 AND 302 COMBINATION
INLET CATCH BASIN SUMP CONDITION**

CATCH BASIN TYPE	H (FT)	CATCH BASIN WIDTH (FT) (1)	NUMBER OF GRATES	BYPASS HEIGHT H _b (IN)	SCREEN HEIGHT H _s (IN)	SCREEN LENGTH L (FT)	G (IN)	
301	3.5	7.0	1	14.0	9.0	7.0	11.0	
	4.0	7.0	1	16.0	11.0	5.0	13.0	
		10.0	2			6.0		
	4.5	4.5	7.0	1	18.0	15.0	5.0	13.0
			10.0	2			6.0	
			14.0	1			5.0	
			14.0	2			6.0	
	5.0 OR GREATER	5.0 OR GREATER	7.0	1	18.0	18.0	4.0	16.0
			10.0	2			6.0	
			14.0	1			5.0	
			14.0	2			6.0	
	302	4.0	-	2	14.0	8.0	2.5	18.0
-			3	6.0				
4.5		4.5	-	1	16.0	8.0	2.5	22.0
			-	2	16.0	10.0	5.0	20.0
			-	3		7.0		
5.0 OR GREATER		5.0 OR GREATER	-	1	16.0	12.0	2.5	24.0
			-	2			5.0	
			-	3			7.0	

NOTES:

- FOR CATCH BASIN WIDTHS NOT SHOWN USE NEXT HIGHER VALUE.

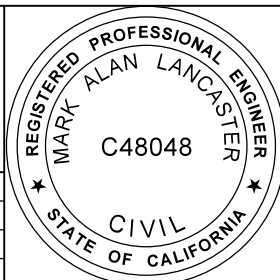
NOT TO SCALE

PREPARED UNDER THE SUPERVISION OF:

Mark Lancaster

11/30/22
DATE

DIRECTOR OF TRANSPORTATION
MARK LANCASTER, P.E.

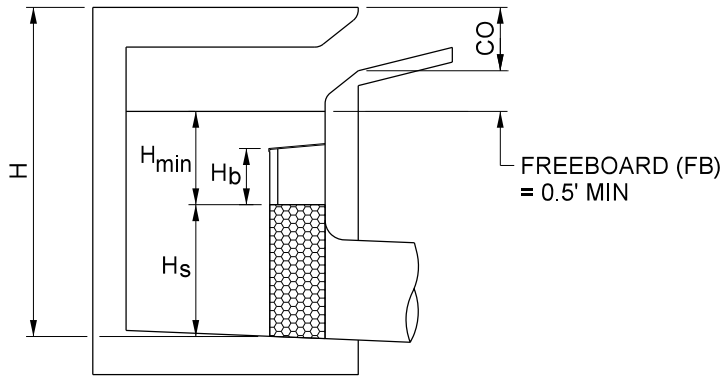


COUNTY OF RIVERSIDE

**FTCD - CPS SIZING TABLE FOR
STANDARD NO. 301 AND 302
COMBINATION INLET
CATCH BASIN
SUMP CONDITION**

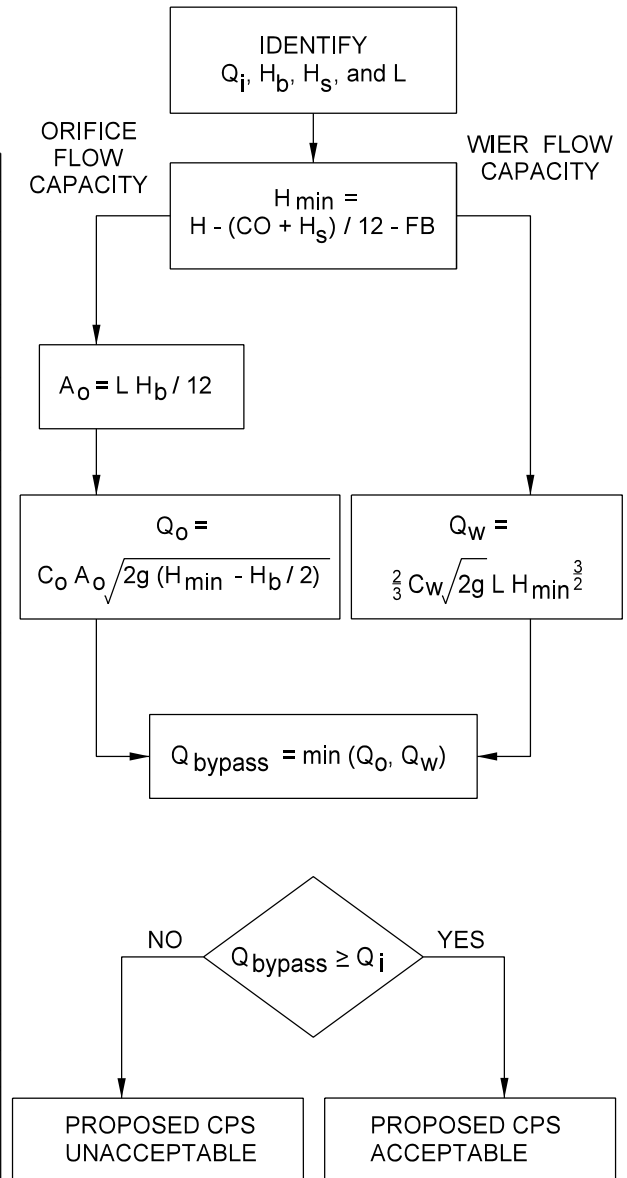
STANDARD No. 313 (13 OF 14)

REVISION DESCRIPTION	MARK	DATE	APPROVED



NOTE:
THE BELOW ANALYSIS ASSUMES THAT THE CONNECTOR PIPE SCREEN IS COMPLETELY CLOGGED AND ALL FLOW IS CONVEYED THROUGH THE BYPASS

VALUE	UNITS	DESCRIPTION
H	FT	HEIGHT OF CATCH BASIN, AS DEFINED IN STANDARDS NO. 300, 301 AND 302
H _{min}	FT	DEPTH FROM TOP OF SCREEN TO FREEBOARD
H _b	IN	BYPASS OPENING HEIGHT
H _s	IN	SCREEN HEIGHT
L	FT	BYPASS OPENING LENGTH
FREEBOARD (FB)	FT	MINIMUM ALLOWABLE FREEBOARD (FB) IS 0.5' TO ENSURE THAT WATER LEVELS INSIDE THE CATCH BASIN DO NOT IMPAIR THE CATCH BASIN STREET INTERCEPTION CAPACITY
CO	IN	CURB OPENING HEIGHT (CO) IS DEFINED HERE AS THE HEIGHT FROM THE TOP OF CURB TO THE FLOW LINE OF THE INLET AT THE LOCAL DEPRESSION
Q _i	CFS	FLOW RATE INTERCEPTED BY THE INLET AS DETERMINED BY THE ENGINEER FOR SITE-SPECIFIC CONDITIONS
Q _o	CFS	BYPASS FLOW RATE UNDER ORIFICE FLOW CONDITION, ASSUMES THAT ENTIRE BYPASS OPENING FUNCTIONS AS A RECTANGULAR ORIFICE
Q _w	CFS	BYPASS FLOW RATE UNDER WEIR FLOW CONDITION
C _o	-	ORIFICE FLOW COEFFICIENT = 0.61
C _w	-	WEIR FLOW COEFFICIENT = 0.61
A _o	FT ²	BYPASS OPENING AREA FOR ORIFICE FLOW, ASSUMES THAT THE ENTIRE BYPASS OPENING FUNCTIONS AS A RECTANGULAR ORIFICE

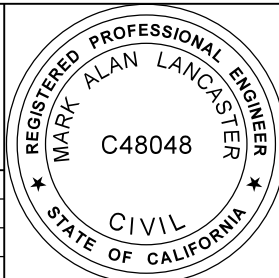


NOT TO SCALE

PREPARED UNDER THE SUPERVISION OF:

Mark Lancaster 11/30/22
 DIRECTOR OF TRANSPORTATION DATE
 MARK LANCASTER, P.E.

REVISION	DESCRIPTION	MARK	DATE	APPROVED



COUNTY OF RIVERSIDE

FTCD - CPS BYPASS CHECK FLOW CHART

STANDARD No. 313 (14 OF 14)