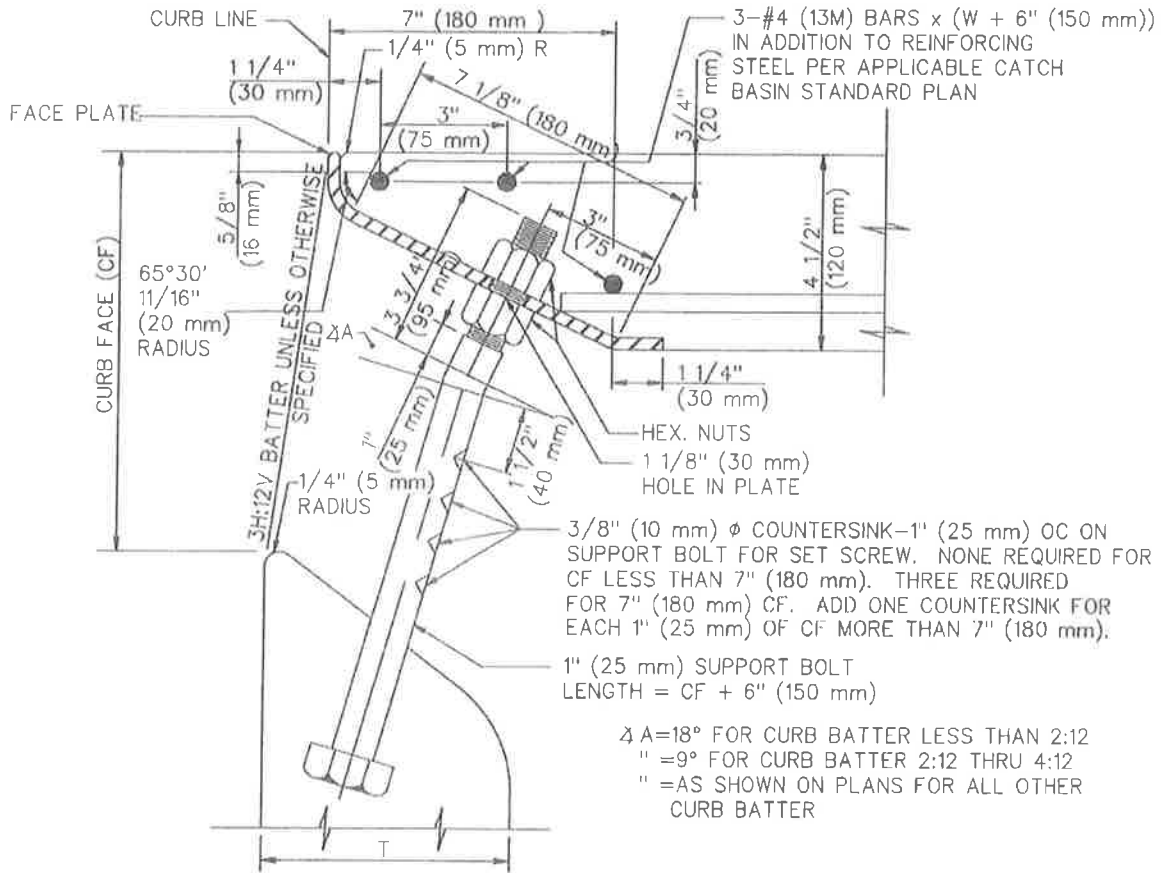
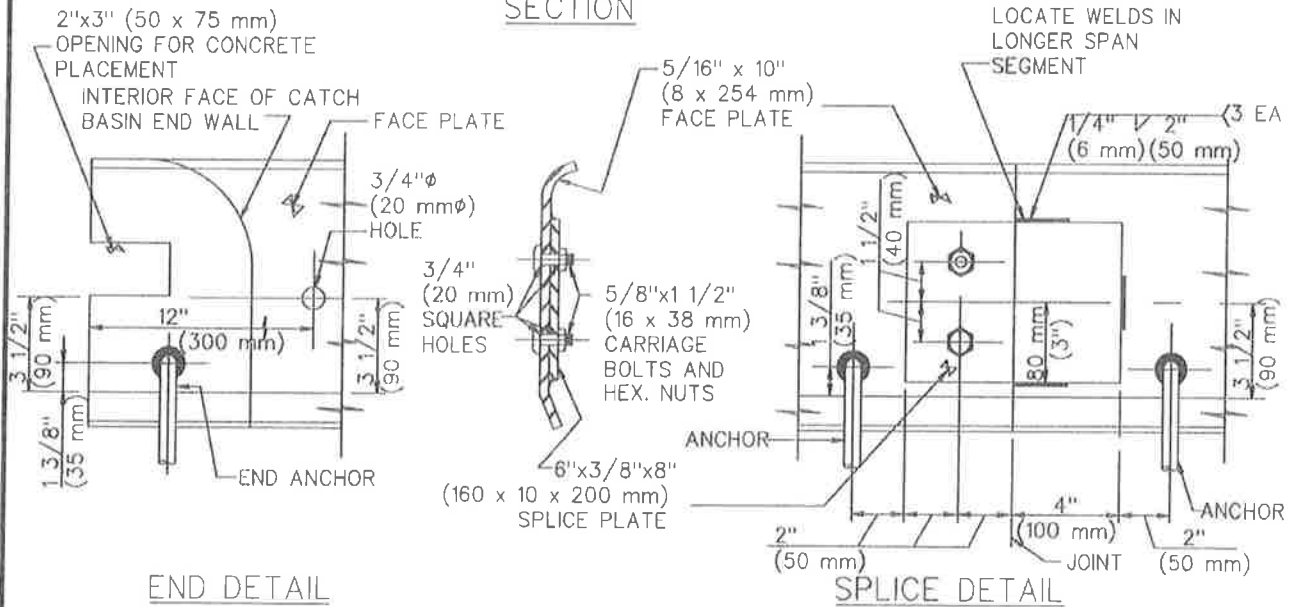


SUPPORT BOLT AND FACE PLATE 4 1/2" (120 mm) TOP SLAB



SECTION



END DETAIL

SPLICE DETAIL

STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION

PROMULGATED BY THE
PUBLIC WORKS STANDARDS INC.
GREENBOOK COMMITTEE
1964
REV. 1998, 2005, 2008, 2021

CATCH BASIN FACE PLATE ASSEMBLY AND PROTECTION BAR

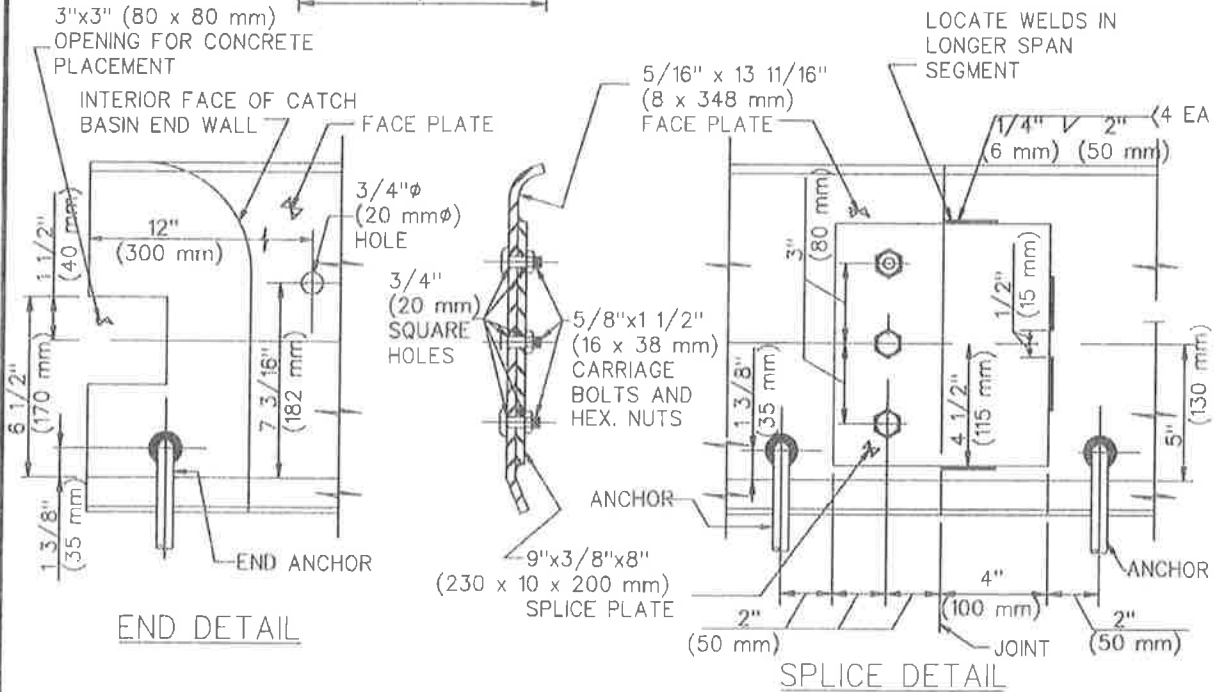
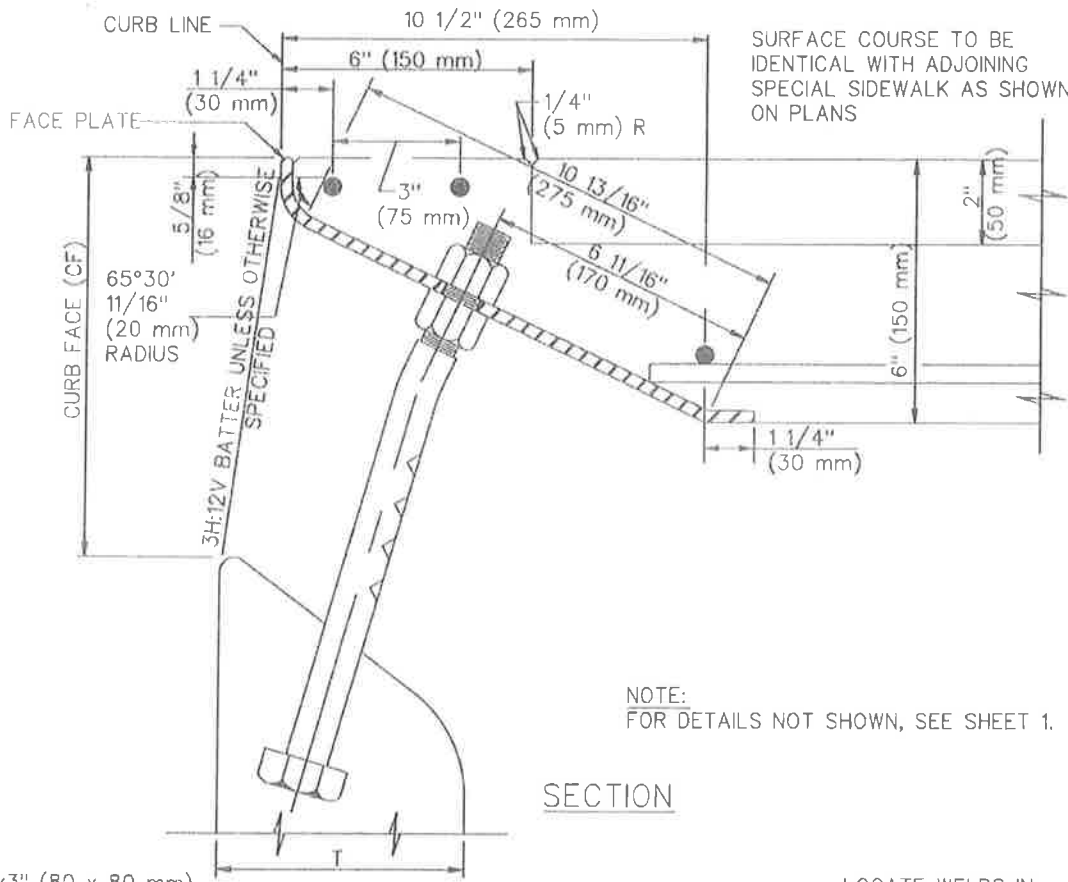
STANDARD PLAN

310-4

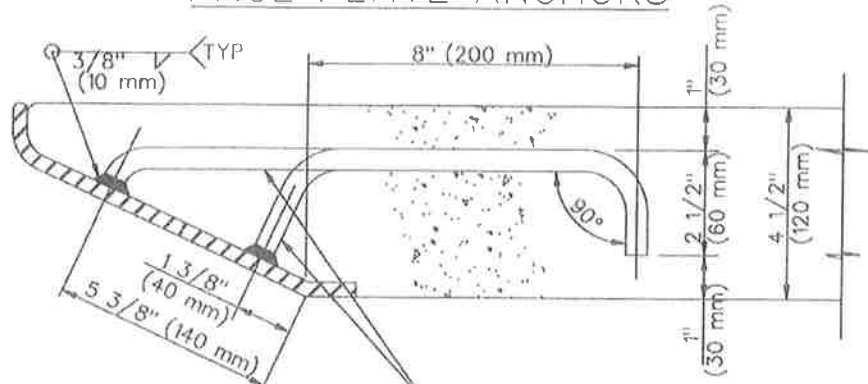
USE WITH STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION

SHEET 1 OF 6

SUPPORT BOLT AND FACE PLATE 150 mm (6") TOP SLAB

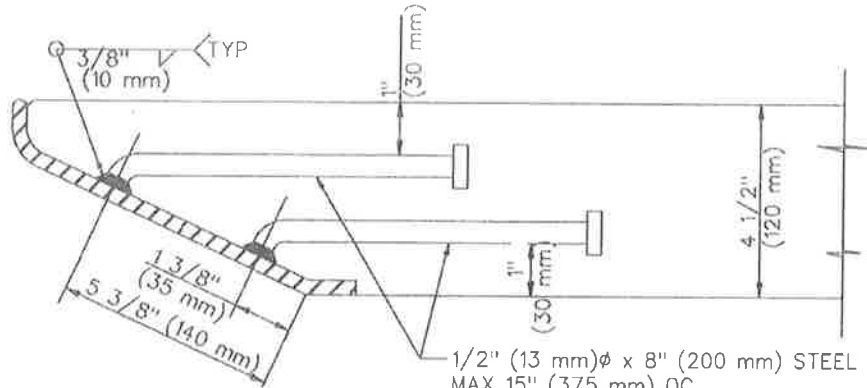


FACE PLATE ANCHORS



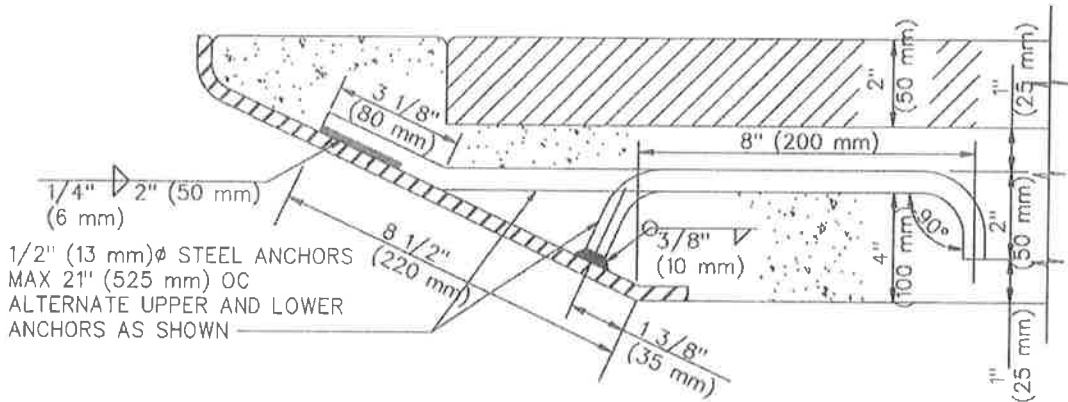
1/2" (13 mm) ϕ STEEL ANCHORS,
 MAX 21" (525 mm) OC
 ALTERNATE UPPER AND LOWER ANCHORS AS SHOWN

HOOK ANCHOR - 4 1/2" (120 mm) TOP SLAB



1/2" (13 mm) ϕ x 8" (200 mm) STEEL ANCHORS
 MAX 15" (375 mm) OC
 ALTERNATE UPPER AND LOWER ANCHORS AS SHOWN

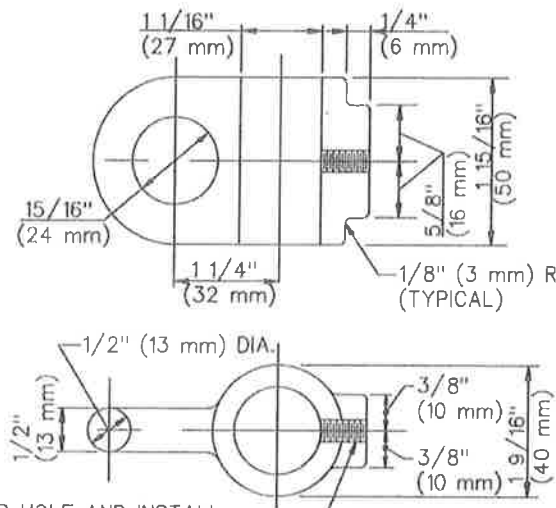
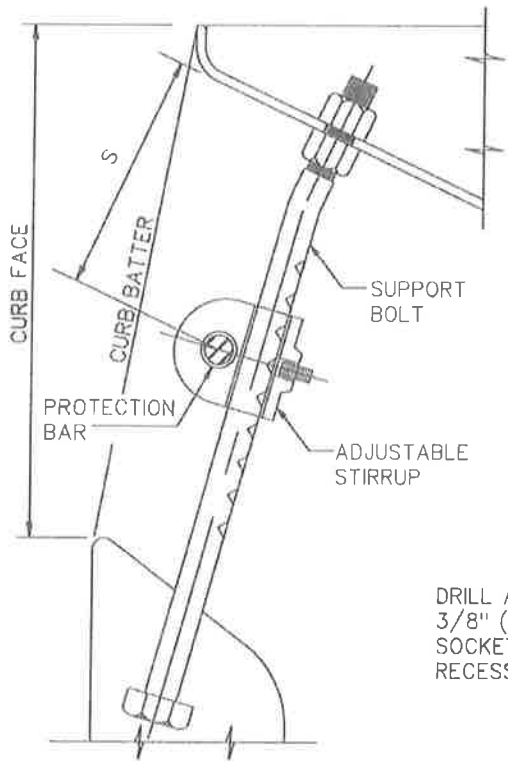
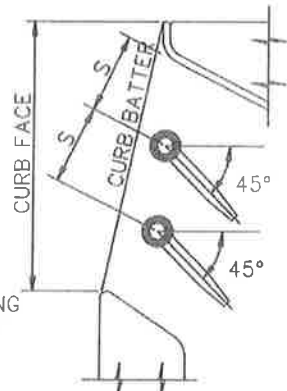
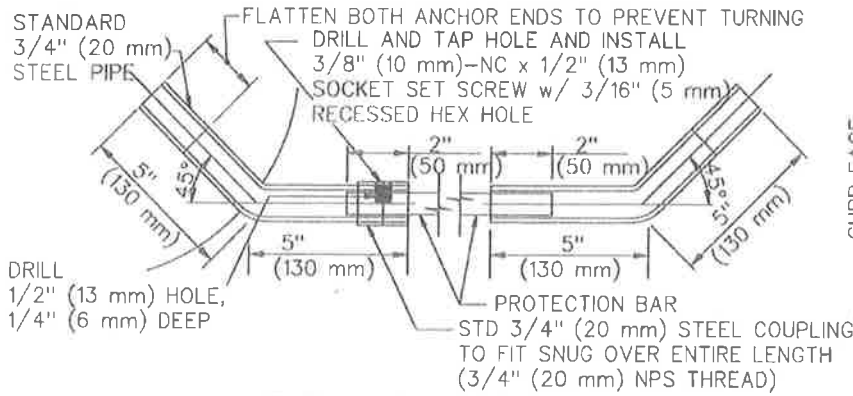
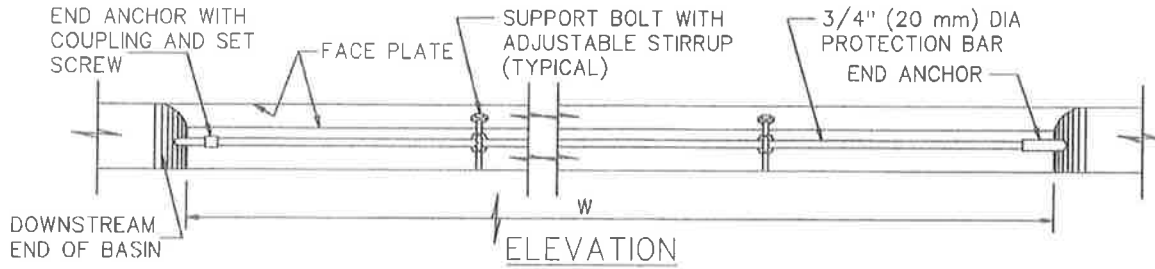
ROUND HEAD ANCHOR - 4 1/2" (120 mm) TOP SLAB



1/2" (13 mm) ϕ STEEL ANCHORS
 MAX 21" (525 mm) OC
 ALTERNATE UPPER AND LOWER
 ANCHORS AS SHOWN

HOOK ANCHOR - 6" (150 mm) TOP SLAB

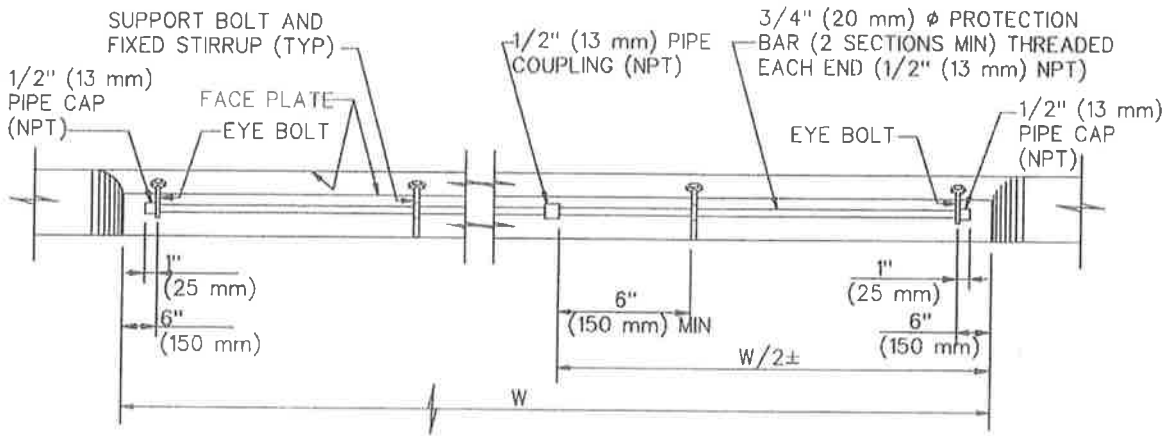
PROTECTION BAR AND SUPPORT BOLT(S) WITH ADJUSTABLE STIRRUP(S) - (TYPE A)



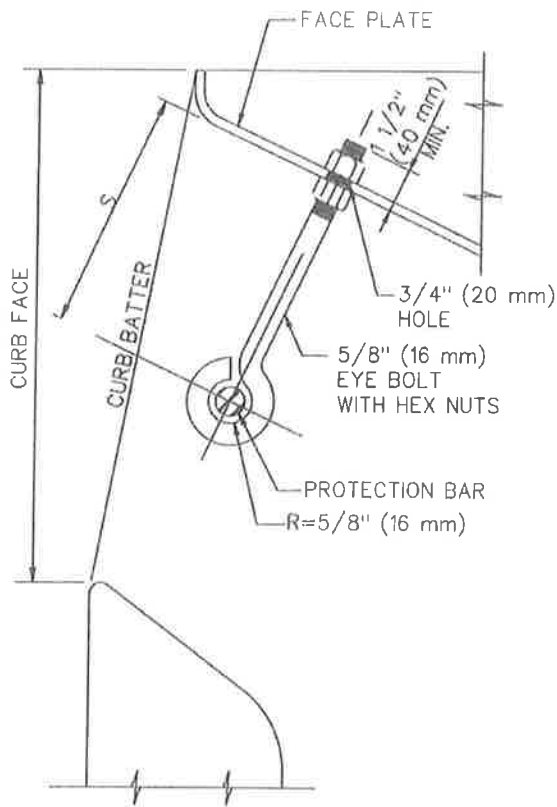
DRILL AND TAP HOLE AND INSTALL
3/8" (10 mm)-NC x 1/2" (13 mm)
SOCKET SET SCREW WITH 3/16" (5 mm)
RECESSED HEX HOLE

PROTECTION BAR & STIRRUP LOCATION

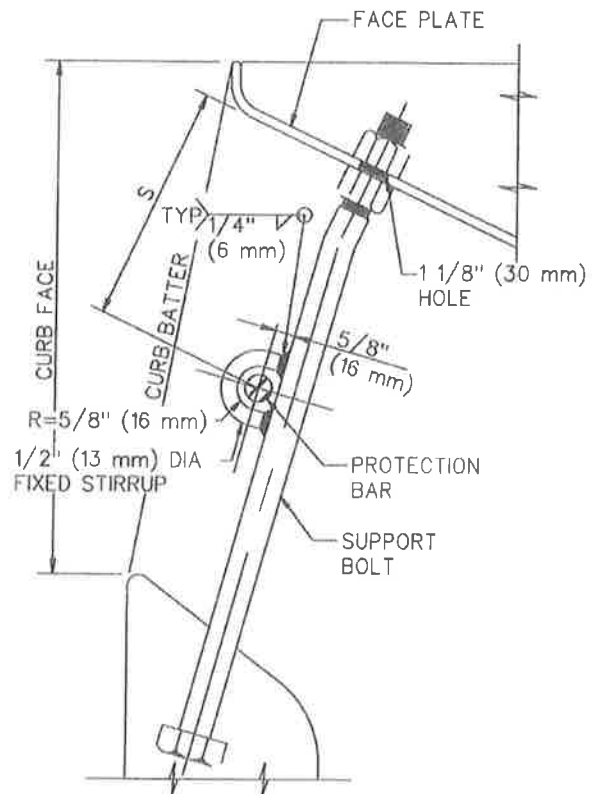
PROTECTION BAR AND SUPPORT BOLT(S) WITH FIXED STIRRUP(S) - (TYPE B)



ELEVATION



EYE BOLT DETAIL



STIRRUP DETAIL

STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION

CATCH BASIN FACE PLATE ASSEMBLY AND PROTECTION BAR

STANDARD PLAN

310-4

SHEET 5 OF 8

NOTES:

GENERAL

1. ALL PARTS SHALL BE STEEL, EXCEPT SET SCREWS, WHICH SHALL BE STAINLESS STEEL OR BRASS.
2. EXCLUDING SET SCREWS, ALL EXPOSED METAL PARTS SHALL BE GALVANIZED AFTER FABRICATION.
3. CURB FACE SHALL BE AS NOTED ON THE PLANS.
4. CURB BATTER SHALL BE 3:12 UNLESS OTHERWISE SPECIFIED.

FACE PLATE

5. FACE PLATE LENGTHS SHALL BE CATCH BASIN W PLUS 12" (300 mm) EXCEPT AS MODIFIED FOR A "CURB OPENING CATCH BASIN AT DRIVEWAY".
6. WHEN THE LENGTH OF THE FACE PLATE IS BETWEEN 22' (6.5 m) AND 43' (13 m), TWO SECTIONS MAY BE USED. WHEN THE LENGTH EXCEEDS 43' (13 m), THREE SECTIONS MAY BE USED. SECTIONS SHALL BE SPLICED ACCORDING TO THE APPLICABLE SPLICE DETAIL. SPLICE SHALL BE PLACED 1' (300 mm) FROM A SUPPORT BOLT.
7. WHERE CATCH BASINS ARE TO BE CONSTRUCTED ON CURVES, THE MAXIMUM CHORD LENGTH FOR THE FACE PLATE SHALL BE SUCH THAT THE MAXIMUM PERPENDICULAR DISTANCE TO THE TRUE CURVE SHALL NOT EXCEED 1" (25 mm). WHERE MORE THAN ONE CHORD IS REQUIRED, CHORD LENGTHS SHALL BE EQUAL. CHORD SECTIONS SHALL BE SPLICED ACCORDING TO THE APPLICABLE SPLICE DETAIL (MODIFIED TO FIT THE CHORD DEFLECTION) AND A SUPPORT BOLT SHALL BE PLACED 1' (300 mm) FROM THE SPLICE.
8. ROUND HEAD ANCHORS FOR THE FACE PLATE SHALL BE NELSON H-4F SHEAR CONNECTOR, KSN WELDING SYSTEMS DIVISION SHEAR CONNECTOR OR EQUAL.

SUPPORT BOLT

9. SUPPORT BOLTS ARE REQUIRED WHEN THE LENGTH OF THE CATCH BASIN OPENING IS 7' (2 m) OR GREATER, AND SHALL BE EVENLY SPACED ACROSS THE OPENING. SPACING SHALL NOT BE LESS THAN 3'-6" (1 m) ON CENTER NOR GREATER THAN 5' (1.5 m) ON CENTER.

STIRRUP

10. FOR TYPE A, MATERIAL SHALL BE CAST STEEL.

PROTECTION BAR

11. TYPE A SHALL BE USED UNLESS OTHERWISE SPECIFIED.
12. FOR TYPE A, THE BAR SHALL BE CUT TO FIT IN THE FIELD. WHEN "W" IS OVER 21' (6 m), THE PROTECTION BAR SHALL CONSIST OF 2 OR MORE SECTIONS. A SPECIAL CONNECTOR BETWEEN THE PROTECTION BAR PIECES SHALL CONSIST OF A 5" (125 mm) LENGTH OF STANDARD 3/4" (20 mm) PIPE WITH STANDARD COUPLINGS FULLY THREADED ONTO EACH END DRILLED AND TAPPED FOR A SOCKET SET SCREW AS DETAILED FOR THE DOWNSTREAM END ANCHOR.
13. FOR TYPE B, THE BAR SHALL BE TWO PIECES. TWO EYE BOLTS AND A WELDED STIRRUP ON EACH SUPPORT BOLT ARE REQUIRED.
14. NUMBER OF PROTECTION BARS AND LOCATIONS ARE AS FOLLOWS:

		MAXIMUM CURB FACE, INCHES (mm)													
		6" (150)	7" (175)	8" (200)	9" (225)	10" (250)	11" (275)	12" (300)	13" (325)	14" (350)	15" (375)	16" (400)	17" (425)	18" (450)	
CURB BATTER	0:12	0	0	3.5" (90)	3.5" (90)	4.5" (115)	4.5" (115)	4.5" (115)	5.5" (140)	3.5" (90)	3.5" (90)	4.5" (115)	4.5" (115)	4.5" (115)	
	1:12	0	0	3.5" (90)	3.5" (90)	4.5" (115)	4.5" (115)	4.5" (115)	5.5" (140)	3.5" (90)	3.5" (90)	4.5" (115)	4.5" (115)	5.5" (140)	
	2:12	0	0	3.5" (90)	3.5" (90)	4.5" (115)	4.5" (115)	5.5" (140)	3.5" (90)	3.5" (90)	4.5" (115)	4.5" (115)	5.5" (140)	5.5" (140)	
	3:12	0	0	3.5" (90)	3.5" (90)	4.5" (115)	4.5" (115)	5.5" (140)	3.5" (90)	4.5" (115)	4.5" (115)	5.5" (140)	5.5" (140)	4.5" (115)	
	4:12	0	3.5" (90)	3.5" (90)	4.5" (115)	4.5" (115)	5.5" (140)	3.5" (90)	3.5" (90)	4.5" (115)	4.5" (115)	5.5" (140)	4.5" (115)	4.5" (115)	
		0	1				2*				3*				
		NUMBER OF PROTECTION BARS													

FOR OTHER CURB FACE OR BATTER SEE PLANS
 * TYPE A PROTECTION BAR ONLY