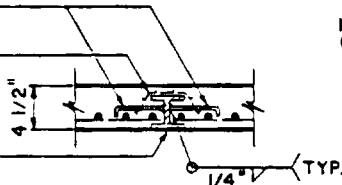


NOTE:
UTILITY LOCATION AND TYPE
SHOWN ON PROJECT DRAWINGS

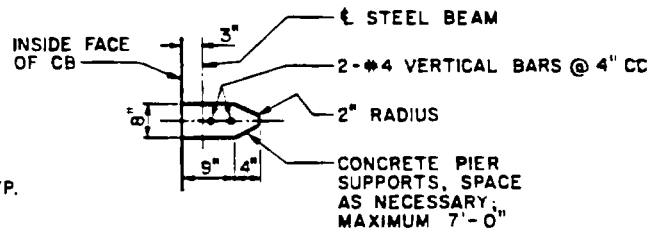
1/2" Ø x 6" ANCHOR AT MIDSPAN AND
@ 2'-0" CENTERS EACH SIDE. ANCHORS
MAY BE SHORTER ON BACKSIDE OF
REAR BEAM. SEE NOTE 7

3x3-12/12 WWF 12" WIDTH

4x4xM13 (GALV.)
LENGTH = WIDTH OF
OPENING PLUS 6"
3" BEARING EACH END

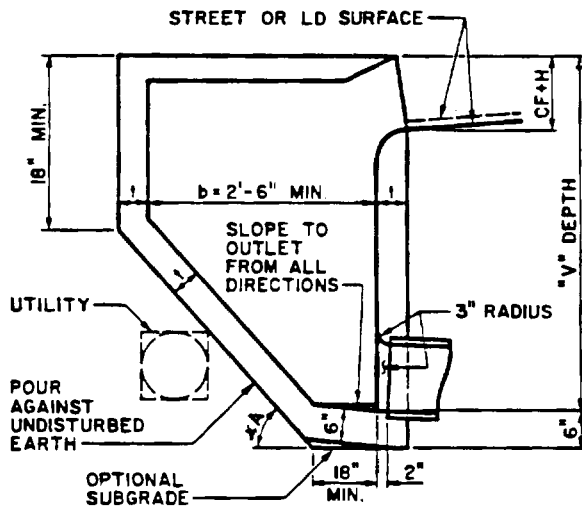


DETAIL "A"

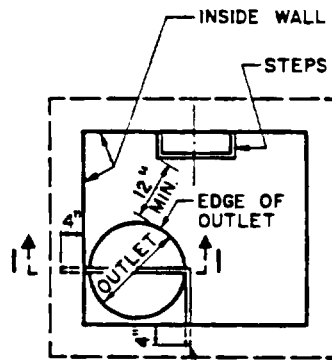


SECTION X-X

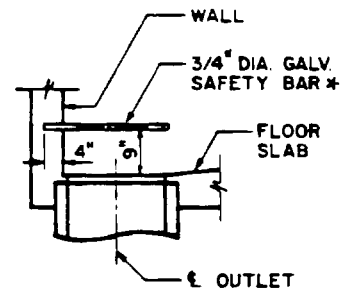
**CASE I
CATCH BASIN MODIFICATION
WITH REAR CULVERT ENTRANCE
AND / OR ENTRANCE PROJECTION**



SECTION



PLAN



SECTION I-I

* NOTE:
SAFETY BAR SHALL BE
3/4" DIA. GALV. HOT-
ROLLED STEEL PER
ASTM DESIGNATION A-36

**CASE II
CATCH BASIN MODIFICATION
TO AVOID EXISTING UTILITY**

**CASE III
SAFETY BAR FOR DROP
OUTLET CATCH BASIN**

CITY OF RANCHO CUCAMONGA, CALIFORNIA

APPROVED BY:

Wm Neil 6/1/92

CITY ENGINEER
R.C.E. 24953

DATE

MODIFICATIONS FOR
SIDE OPENING CATCH BASINS

USE WITH STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION

STANDARD PLAN

309

SHEET 1 OF 2

NOTES:

1. MODIFICATIONS ARE TO BE USED AS REQUIRED BY THE PROJECT DRAWINGS. ANY ADDITIONAL CHANGES ARE SUBJECT TO THE APPROVAL OF THE ENGINEER.
2. DETAILS NOT SHOWN SHALL BE PER THE APPLICABLE CATCH BASIN STANDARD PLANS.
3. REFER TO THE PROJECT DRAWINGS FOR DETAILS OF THE UTILITY AND CULVERT.
4. INTERFERING PORTIONS OF EXISTING CULVERTS SHALL BE REMOVED ON A LINE NORMAL TO THE CULVERT CENTER LINE AND A PORTION OF THE CULVERT RECONSTRUCTED IF REQUIRED. SAW CUTTING SHALL BE USED TO PROVIDE A NEAT JOINT ON THE EXPOSED SURFACE.
5. PLACE STEPS IN END WALL OF CATCH BASIN UNLESS OTHERWISE SHOWN.
6. WHEN REINFORCEMENT IS REQUIRED BY STANDARD PLAN 309. IT SHALL BE PLACED TO THE CONFIGURATION OF THE MODIFIED BASIN. IF ANGLE A EXCEEDS 45 DEGREES THE SLOPING PORTION OF THE INVERT SHALL BE REINFORCED AS THE REAR WALL. LENGTH OF BARS SHALL BE INCREASED AS NECESSARY.
7. ELECTRICALLY WELDED STUDS 1/2" x 8". NELSON H4F OR EQUAL MAY BE USED IN LIEU OF THE DEFORMED BAR ANCHORS. IF THE TOP SLABS OF THE CATCH BASIN AND THE CULVERT ARE NOT IN THE SAME PLANE THE ANCHORS ON THE CULVERT SIDE SHALL BE OMITTED.
8. NO. 4 BARS @ 10" MAY BE USED IN LIEU OF NO. 3 BARS @ 6".

CITY OF RANCHO CUCAMONGA, CALIFORNIA

APPROVED BY:

Wm. J. Zell 6-1-92

CITY ENGINEER
R.C.E. 24953

DATE

**MODIFICATIONS FOR
SIDE OPENING CATCH BASINS**

USE WITH STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION

STANDARD PLAN

309

SHEET 2 OF 2