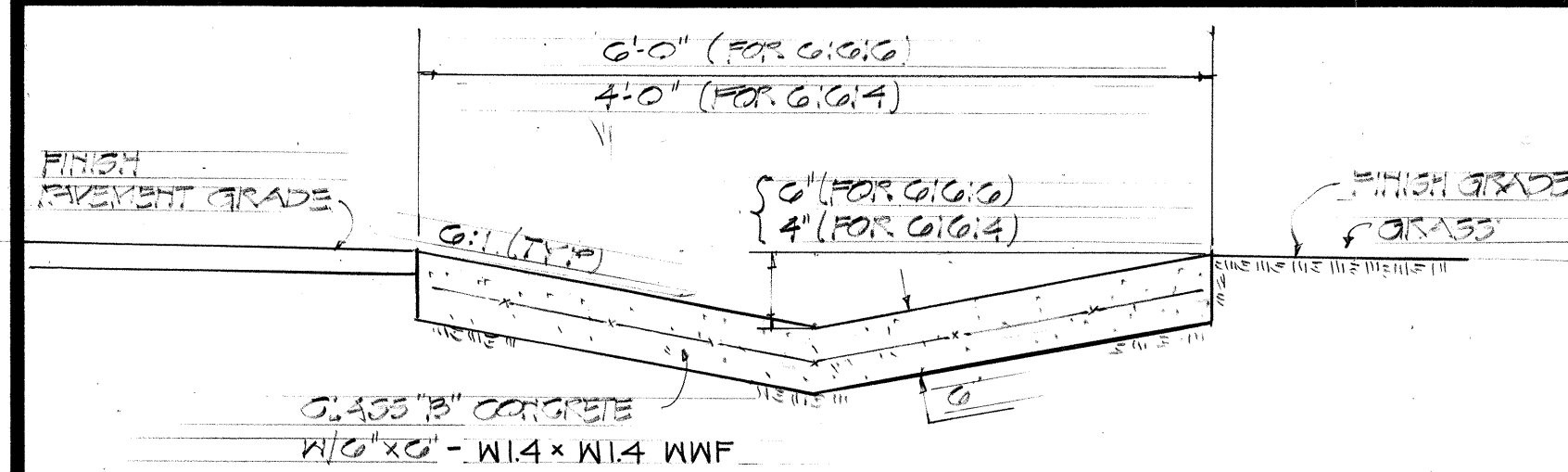
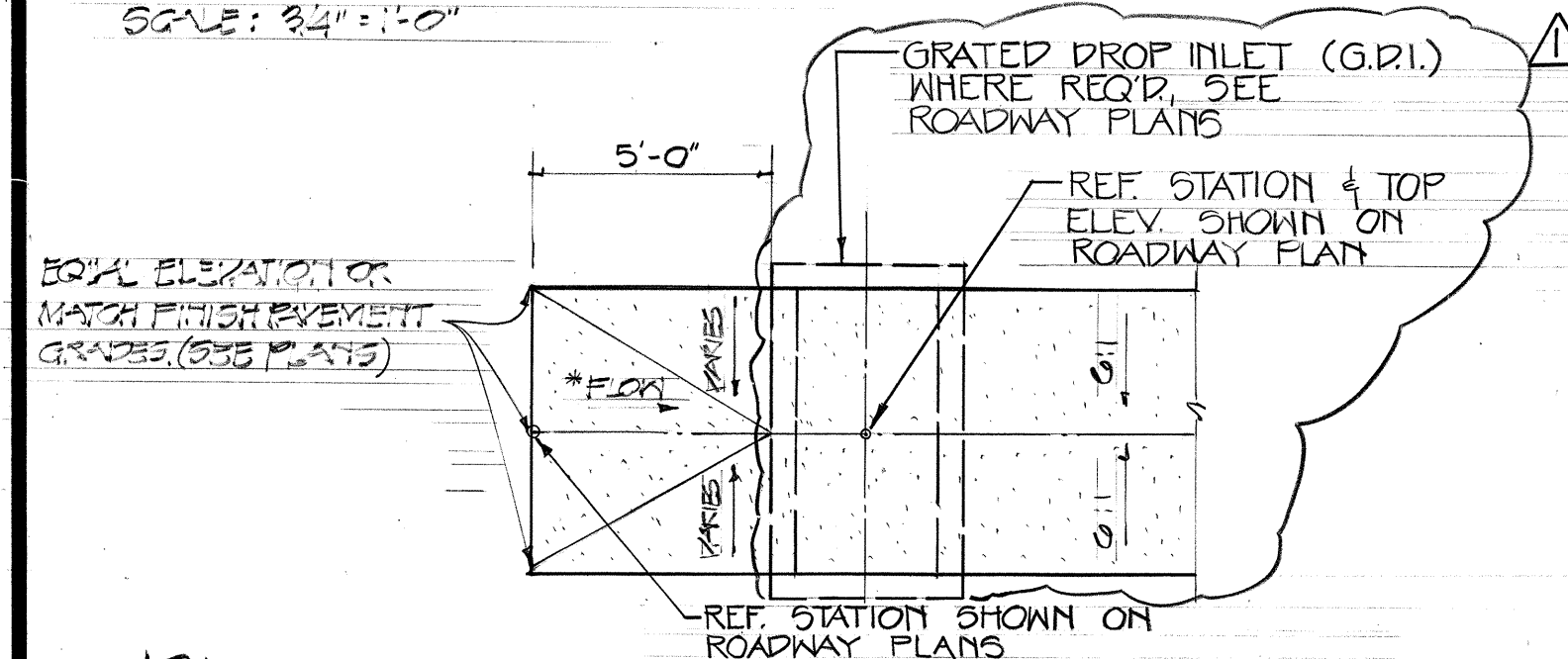
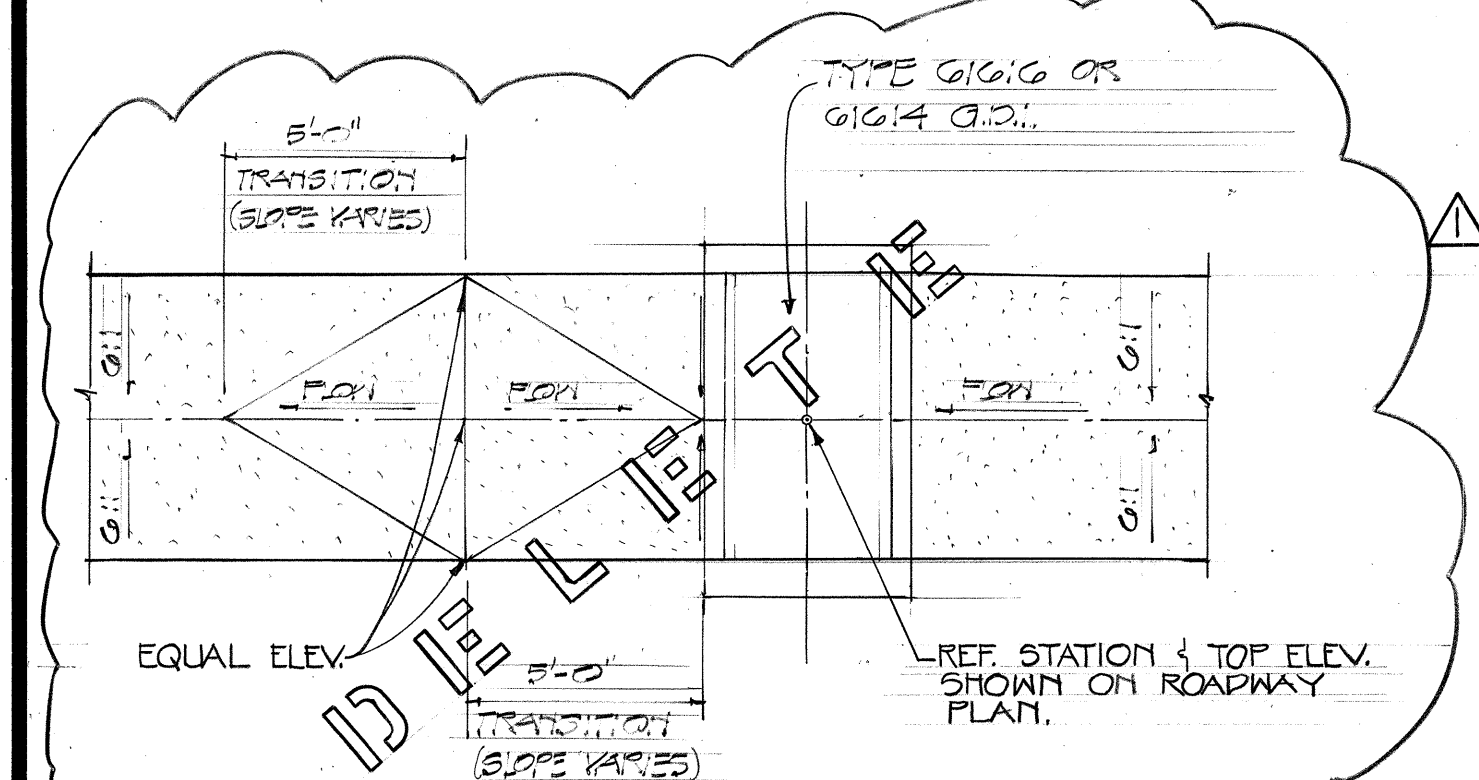




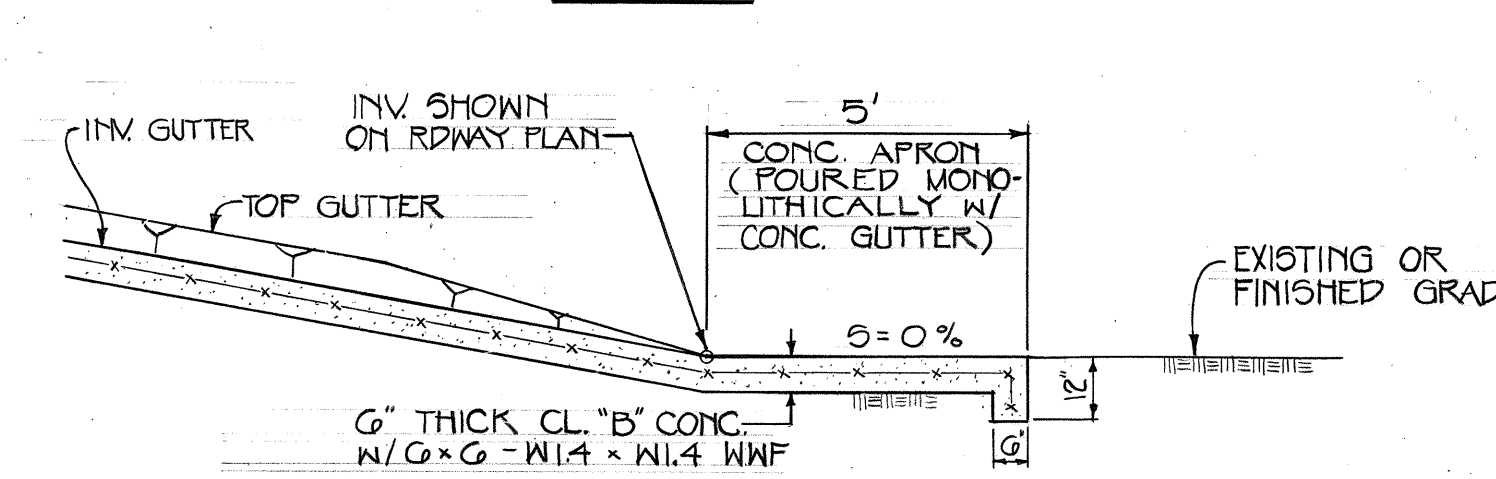
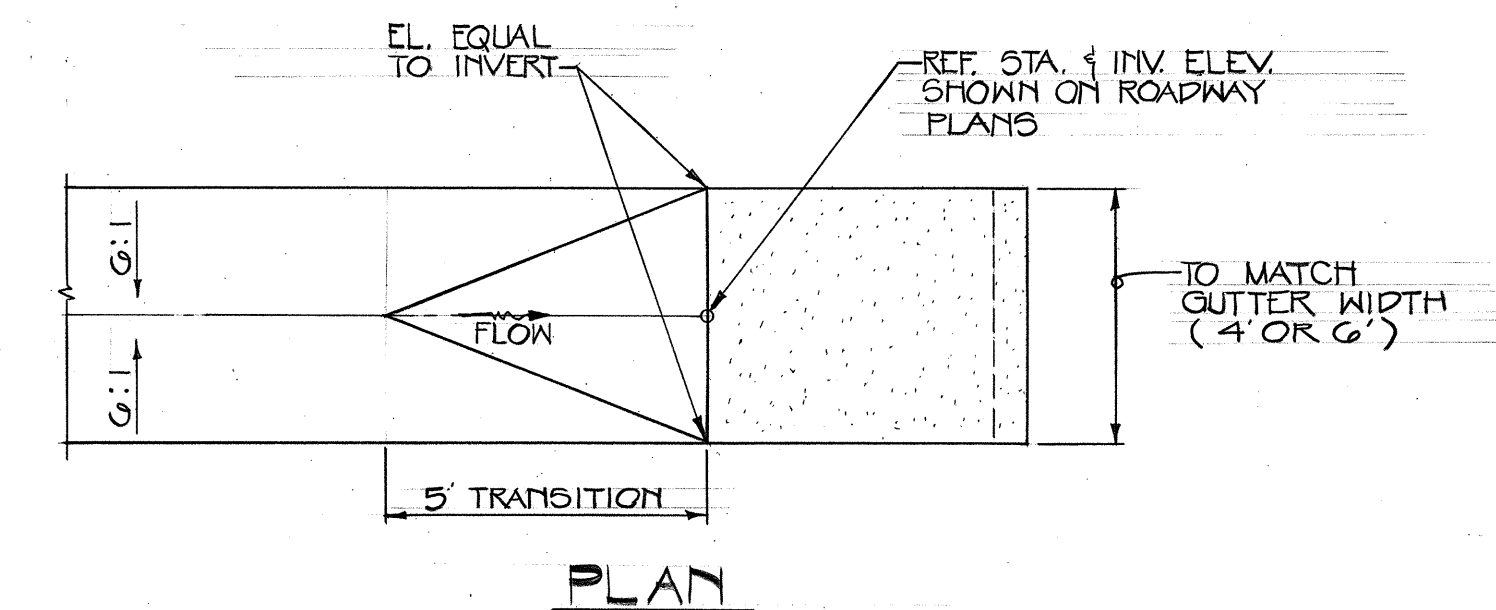
SECTION-CONCRETE GUTTER
SCALE: 3/4"=1'-0"



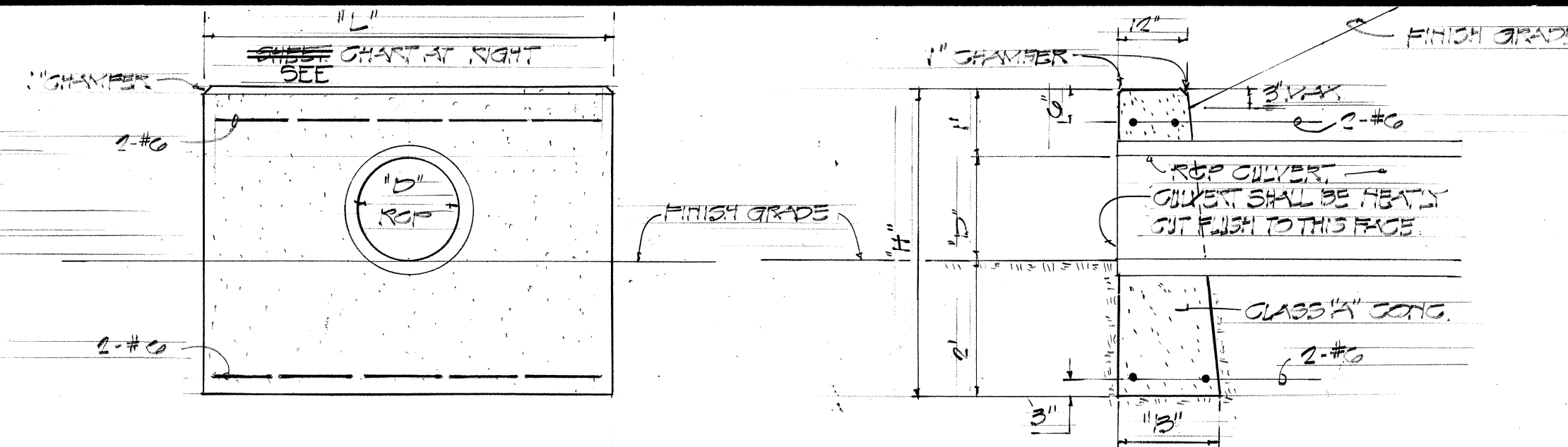
PLAN
TYPICAL GUTTER TRANSITION
AT ENDS OF CONCRETE GUTTER
SCALE: 1"=4'



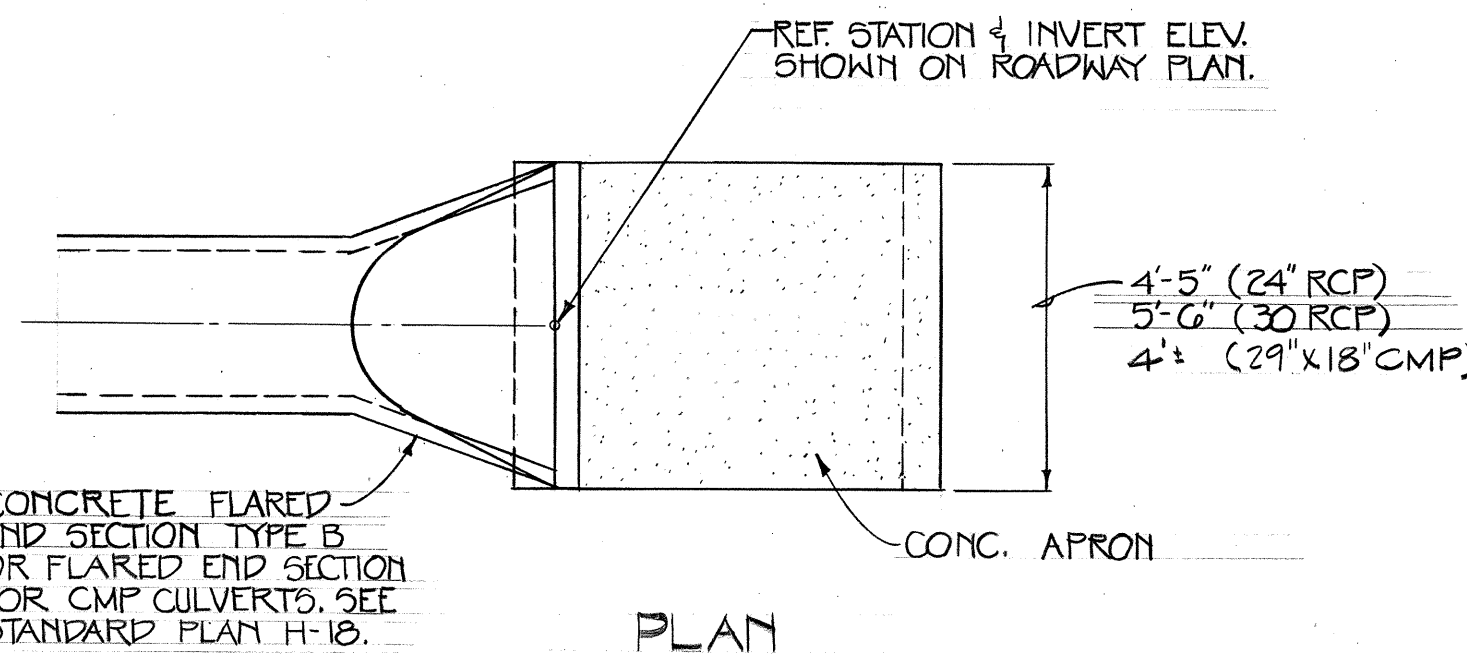
PLAN
TYPICAL GUTTER TRANSITION
AT GRATED DROP INLET (G.D.I.)
SCALE: 1"=4'



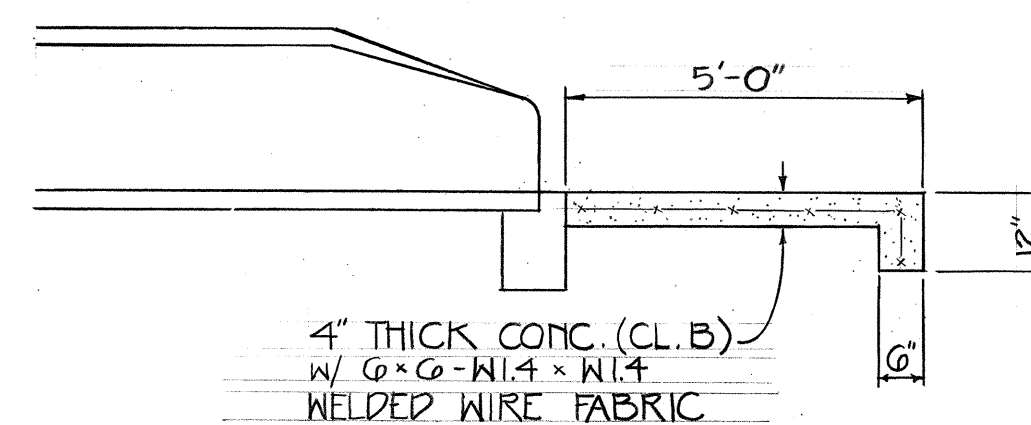
SECTION
TYPICAL GUTTER SPILLWAY
SCALE: 1"=3'



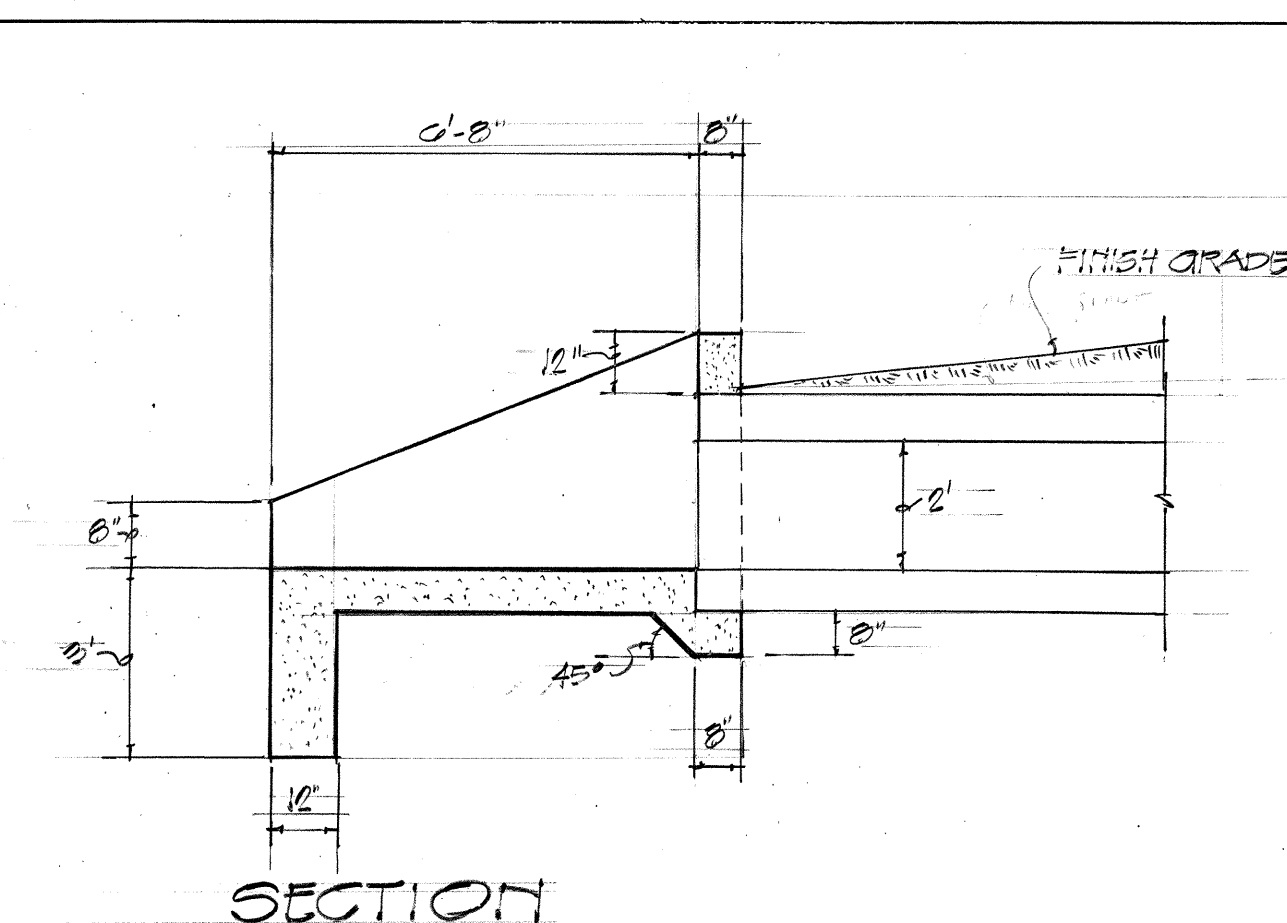
ELEVATION
TYPE 'A' CONCRETE HEADWALL
SCALE: 1"=2'



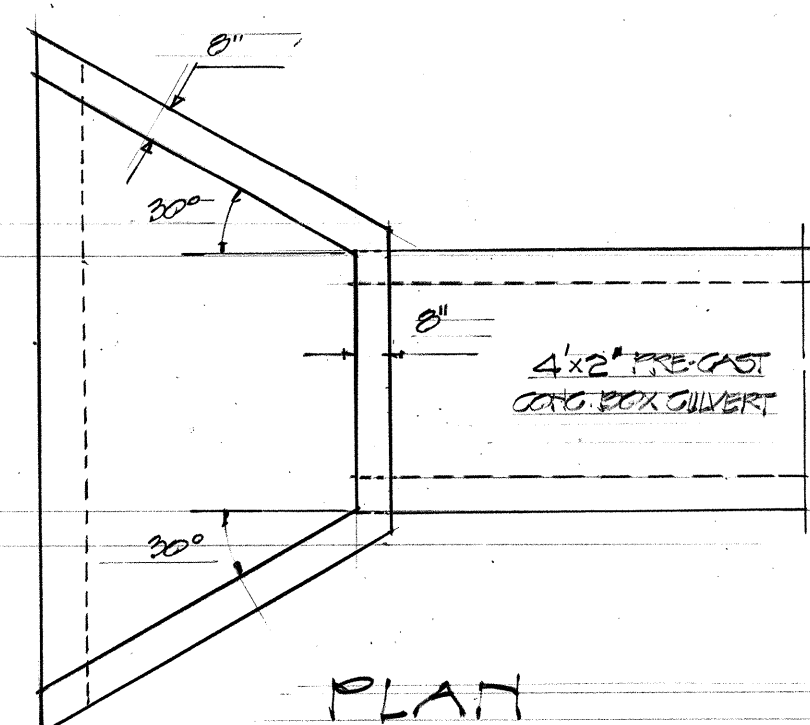
PLAN



SECTION
DETAILS - TYPICAL OUTLET W/ CONC. FLARED
END SECTION
NOT TO SCALE

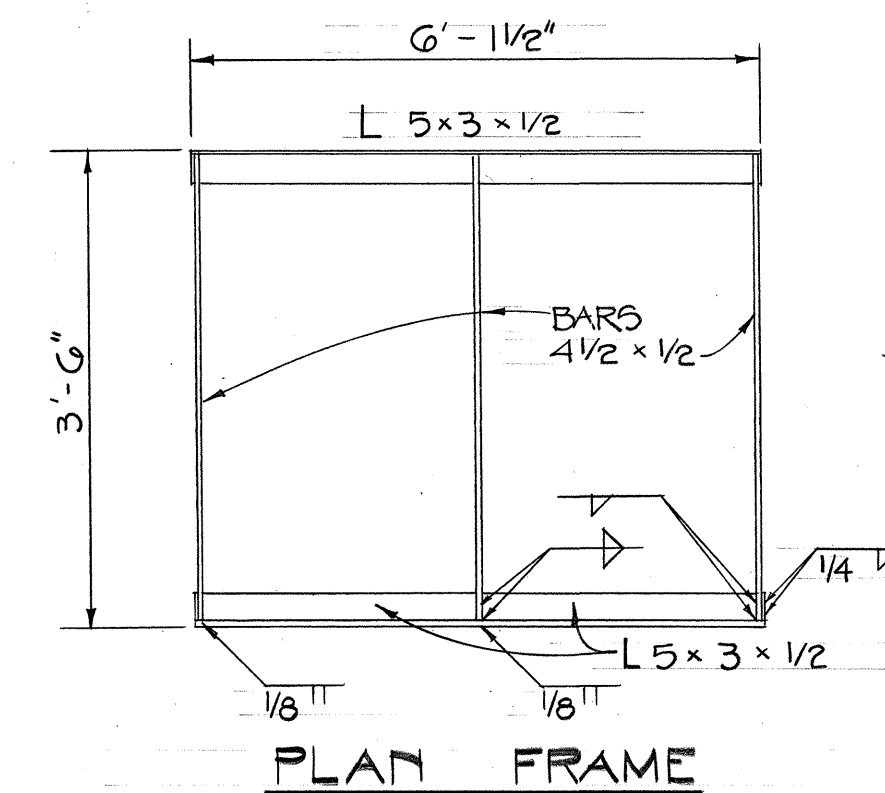


SECTION

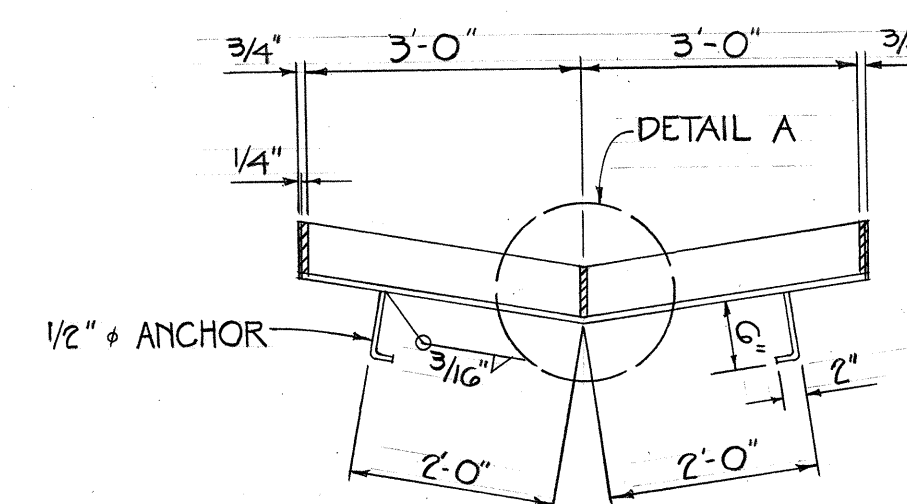


PLAN

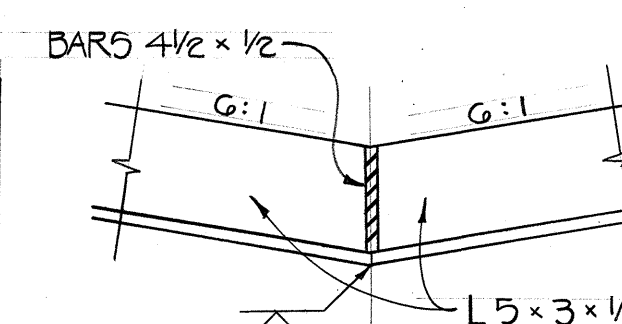
DATA FOR CONCRETE HEADWALL			
D	B	L	H
18"	1'-6"	6'-0"	4'-6"
24"	1'-6"	7'-6"	5'-0"
30"	2'-0"	9'-0"	5'-6"
36"	2'-0"	10'-6"	6'-0"



PLAN FRAME

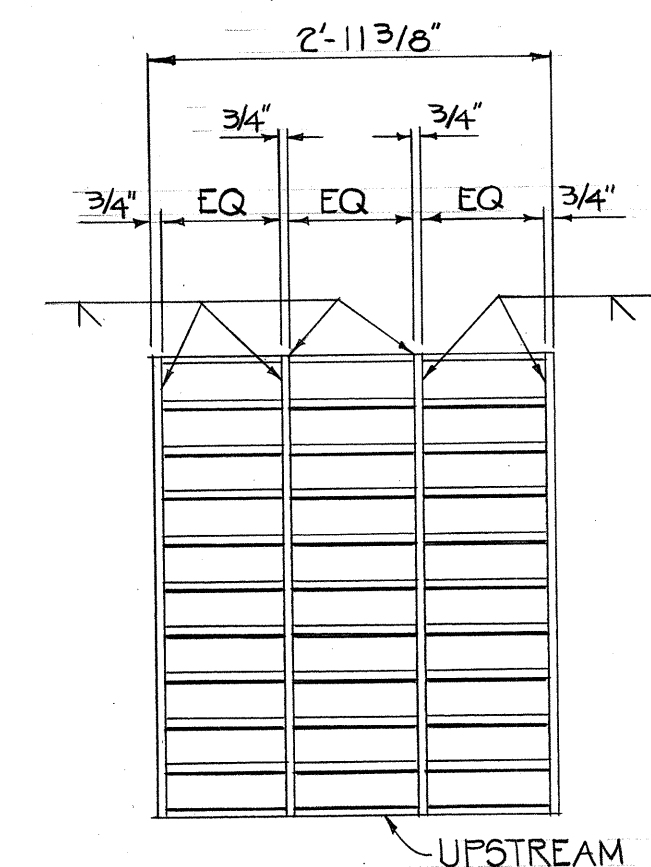


CROSS SECTION

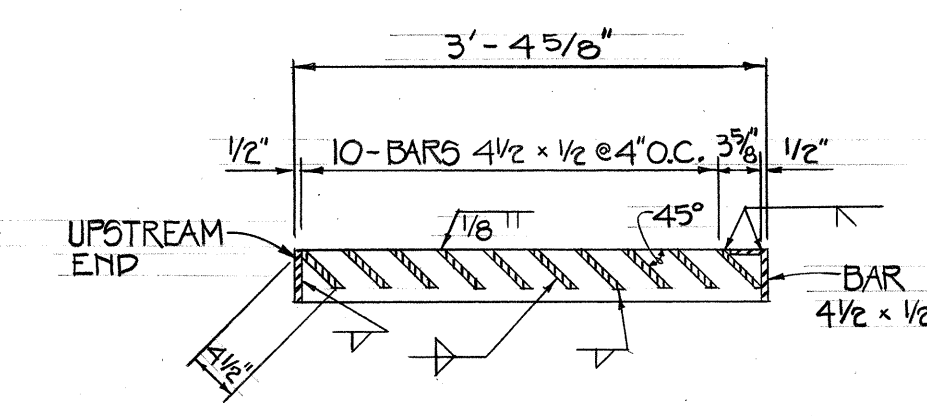


DETAIL A

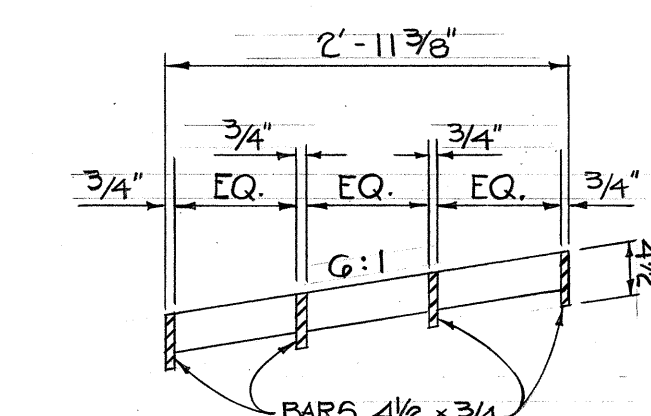
GIGIG FRAME AND GRATE (BICYCLE)
NOT TO SCALE



PLAN GRATE



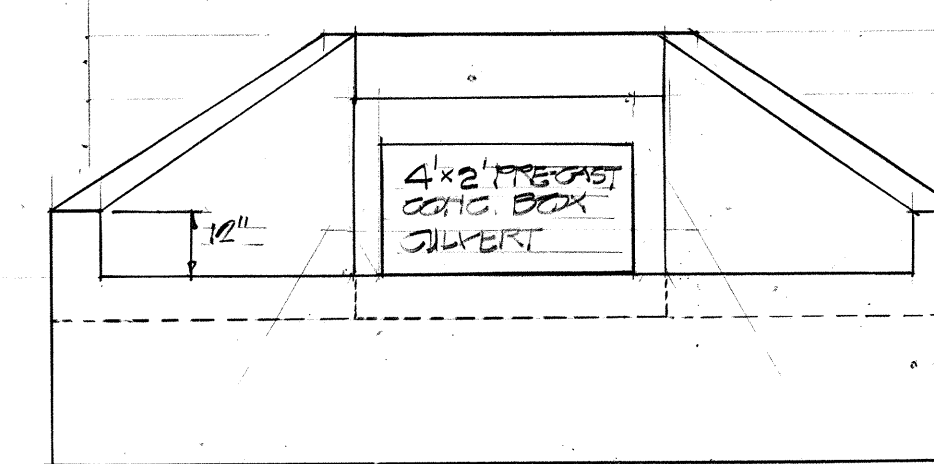
LONGITUDINAL SECTION



CROSS SECTION

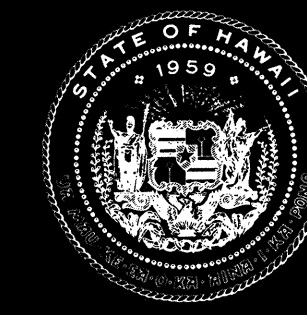
NOTES:

- SEE STANDARD PLAN H-11 FOR OTHER DETAILS AND REINFORCEMENT OF INLET STRUCTURE.
- PRECAST REINFORCED CONG. BOX CULVERT IN ACCORDANCE WITH ASTM C850-05a.
2.1 DESIGN LOADING: 1000 LB/FT² WITH COVER FROM 0 TO 2'-4"
- CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE DIRECTOR FOR APPROVAL PRIOR TO PRECASTING BOX CULVERT.



ELEVATION

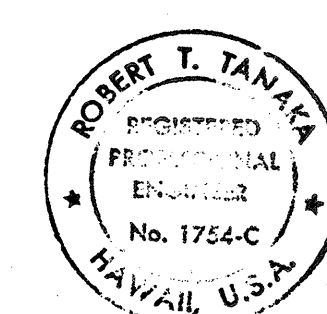
DETAILS - INLET STRUCTURE @
PRECAST BOX CULVERT (# 37A.46+50)
NOT TO SCALE



Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

THIS WORK WAS PREPARED BY
ME OR UNDER MY SUPERVISION.

Robert T. Tanaka
10/3/99



R. T. TANAKA ENGINEERS, INC.
871 KOLU STREET, SUITE 201
WAILUKU, MAUI, HAWAII 96793

DSGN. DRWN. CHKD. APPD.

R.H. M.K./C.N. R.T.T.

KEY PLAN / NOTES :

DELETED GRI. GUTTER
TRANSITION DETAIL & ADDED
GRI. ON DETAIL OF END
GUTTER TRANSITION.

NO. DATE REVISIONS

AS-BUILT (Record Drawing)
DATE 7/12/91

This Drawing has been prepared, in part, based upon information furnished by others. While this information is believed to be reliable, the Design Professional cannot assume accuracy of this As-Built drawing or for any errors or omissions which may have been incorporated into it as a result.

PROJECT TITLE :

**HANA HIGHWAY
IMPROVEMENTS**

PROJECT NO. :

STATE NO. AM-1061-12
AIP NO. 3-15-0006-

SHEET TITLE :

DRAINAGE DETAILS

DATE :

10-3-89

DWG. NO. :

C-36