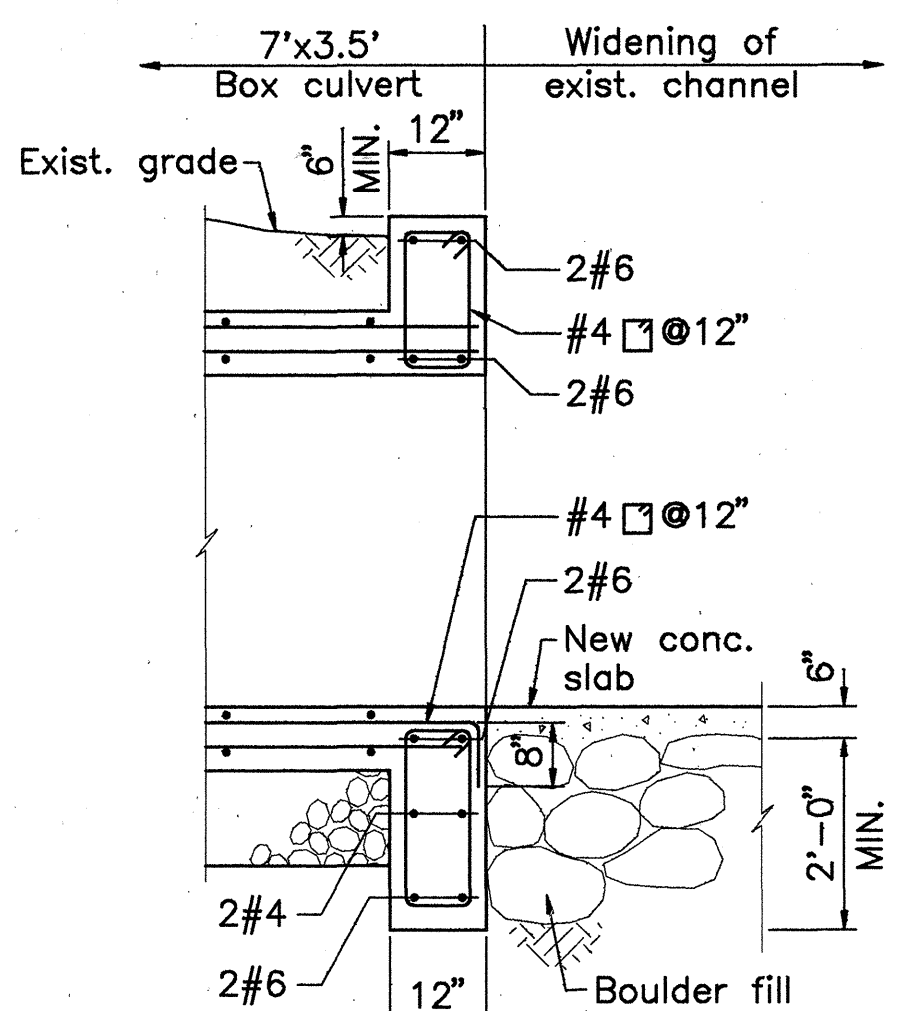
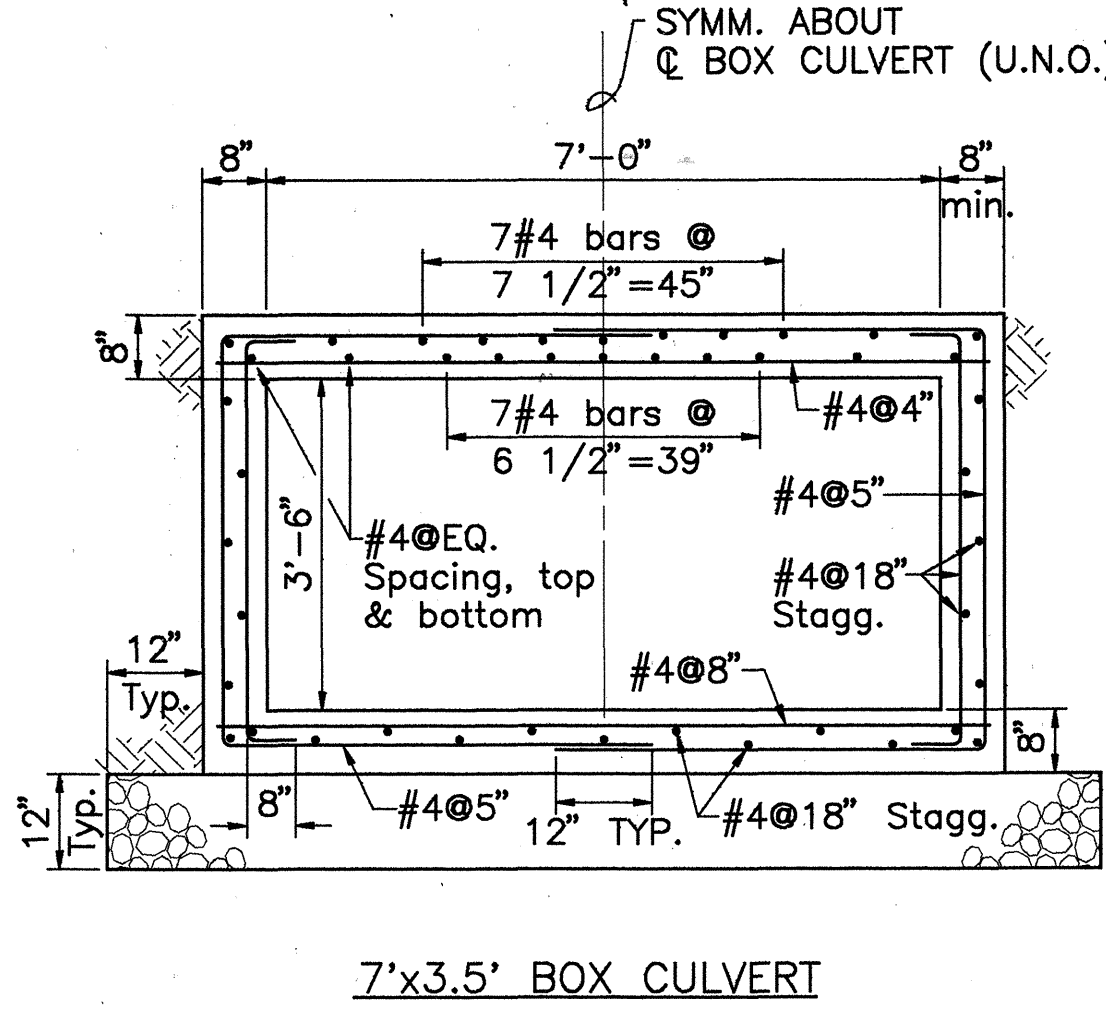
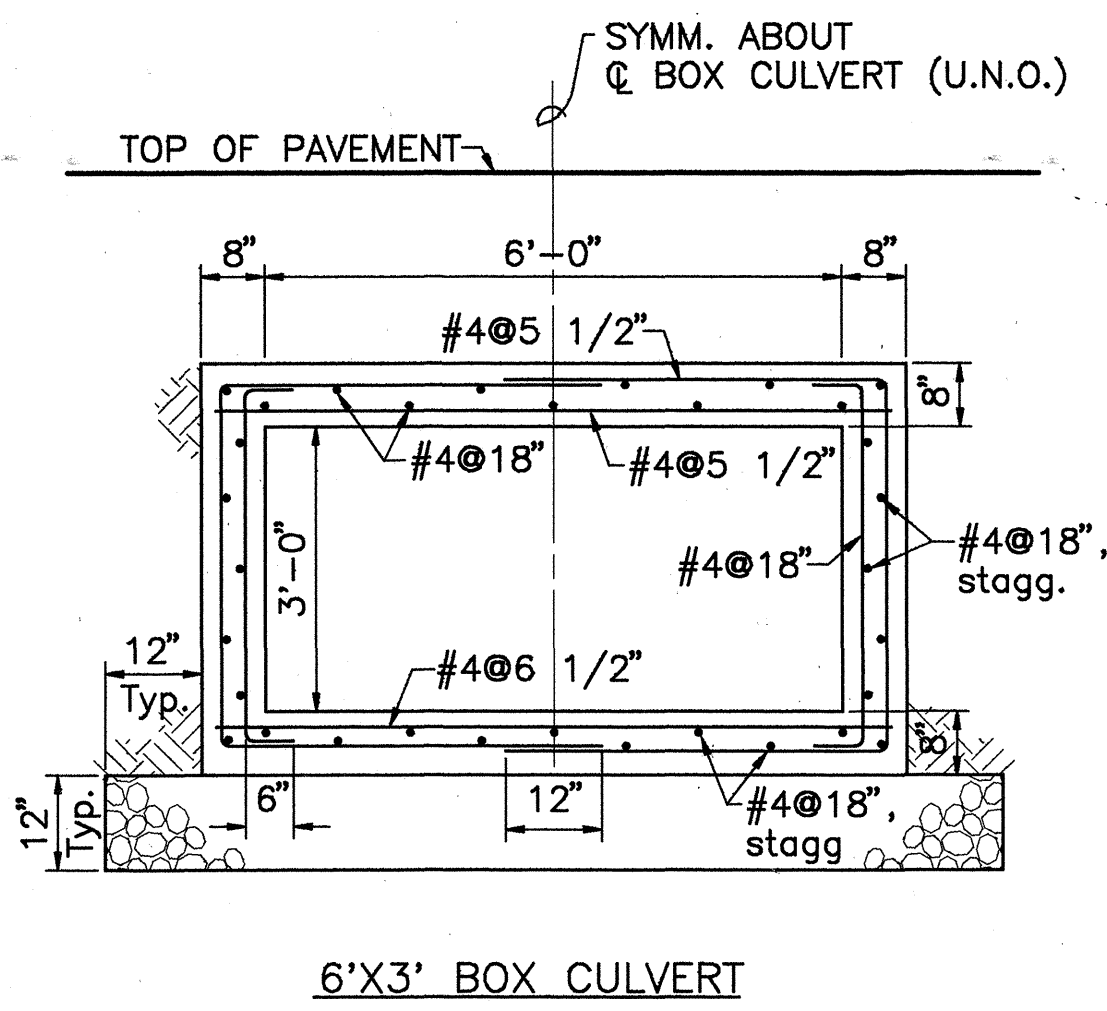
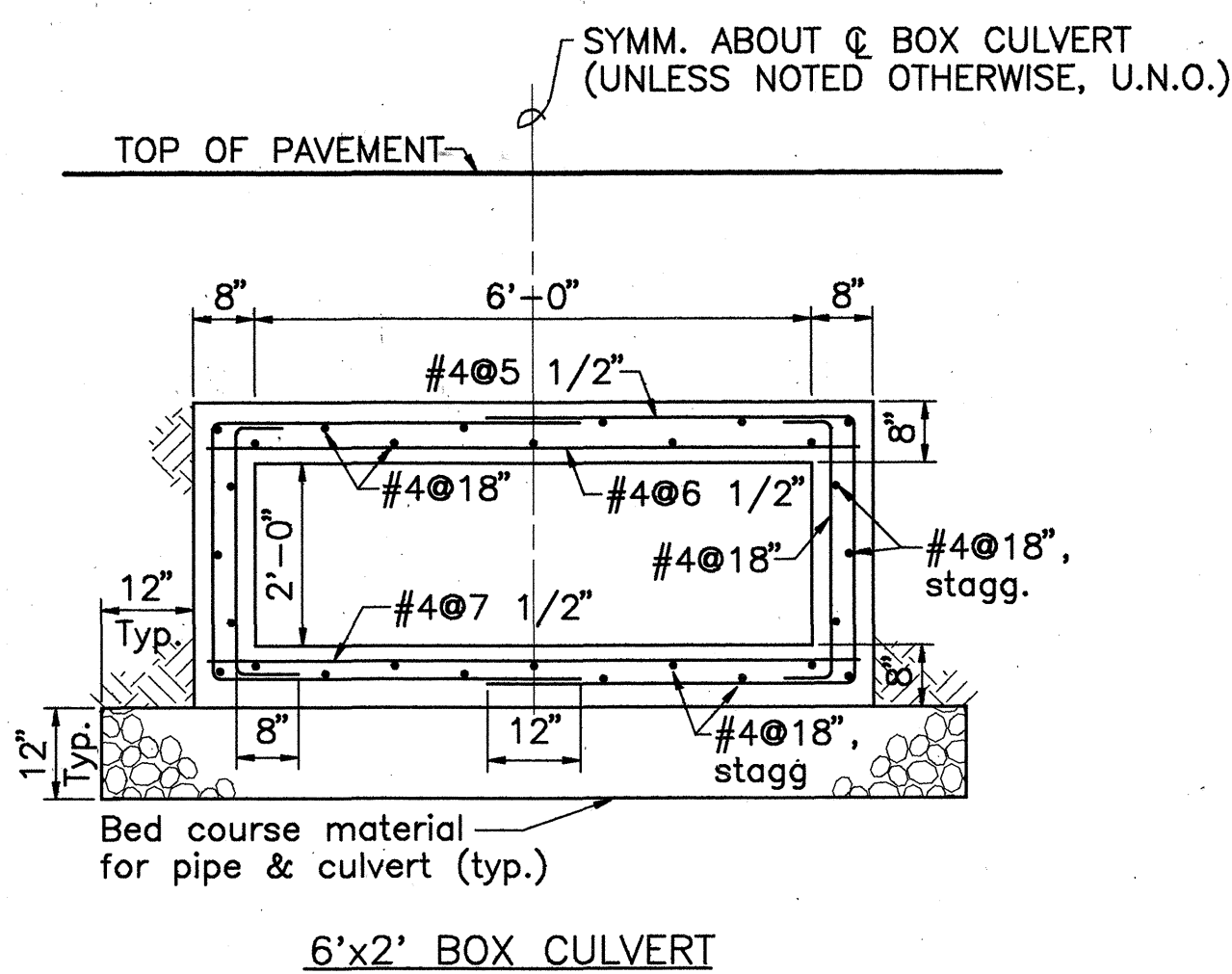


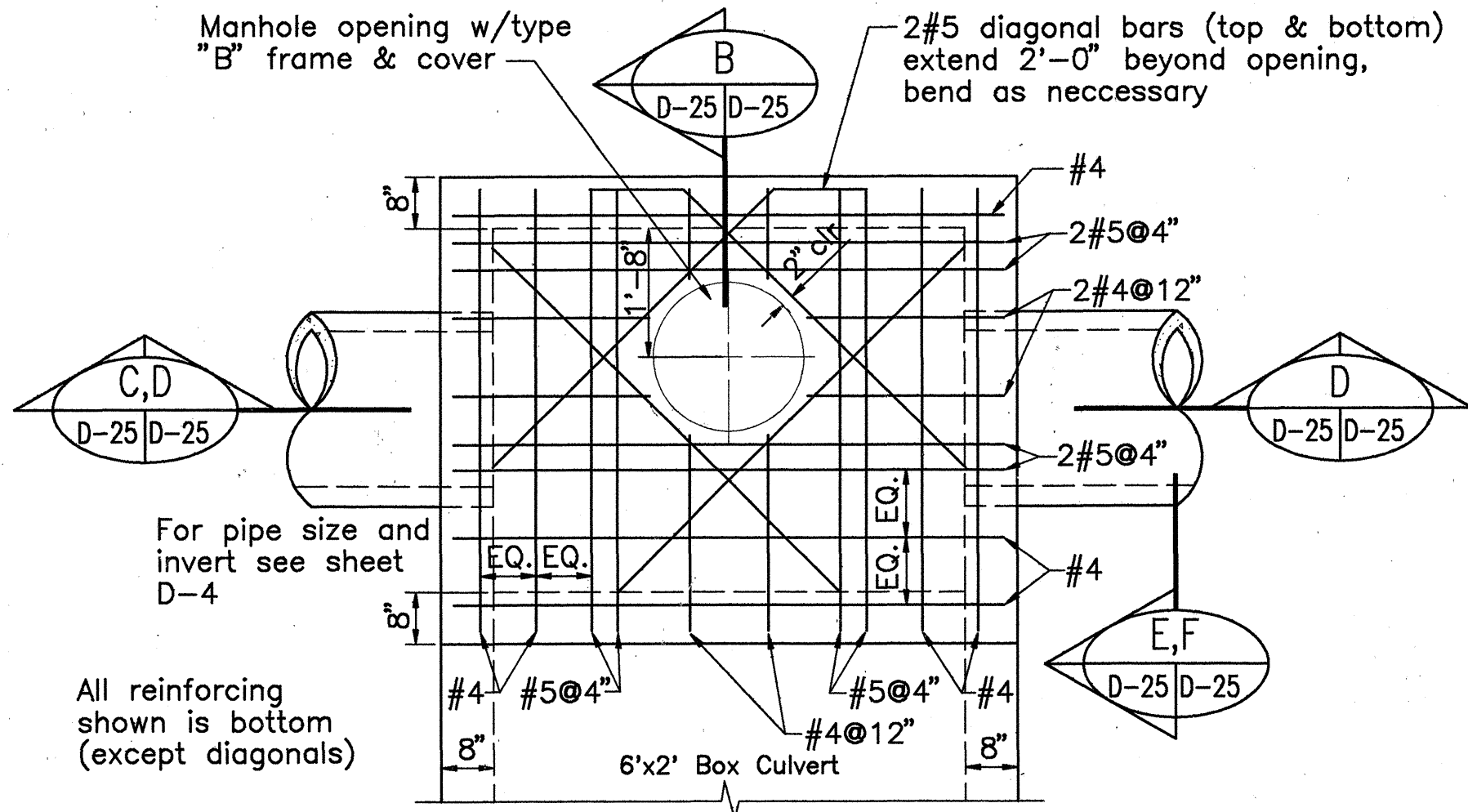
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-STP-072-1(35)	1993	81	340



TYPICAL SECTIONS - BOX CULVERTS

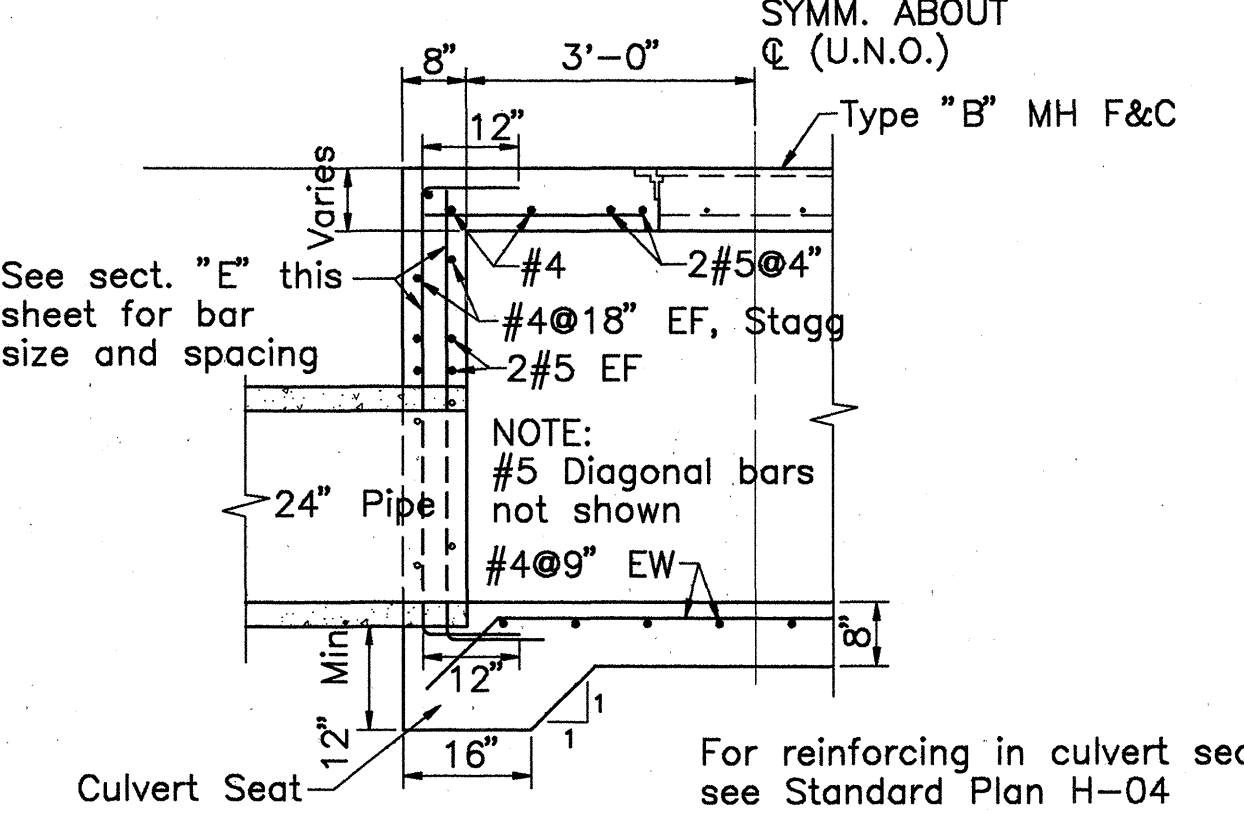
A
D-4 | D-25

SCALE: 1/2" = 1'-0"



TOP PLAN (SDMH C12 & C13)

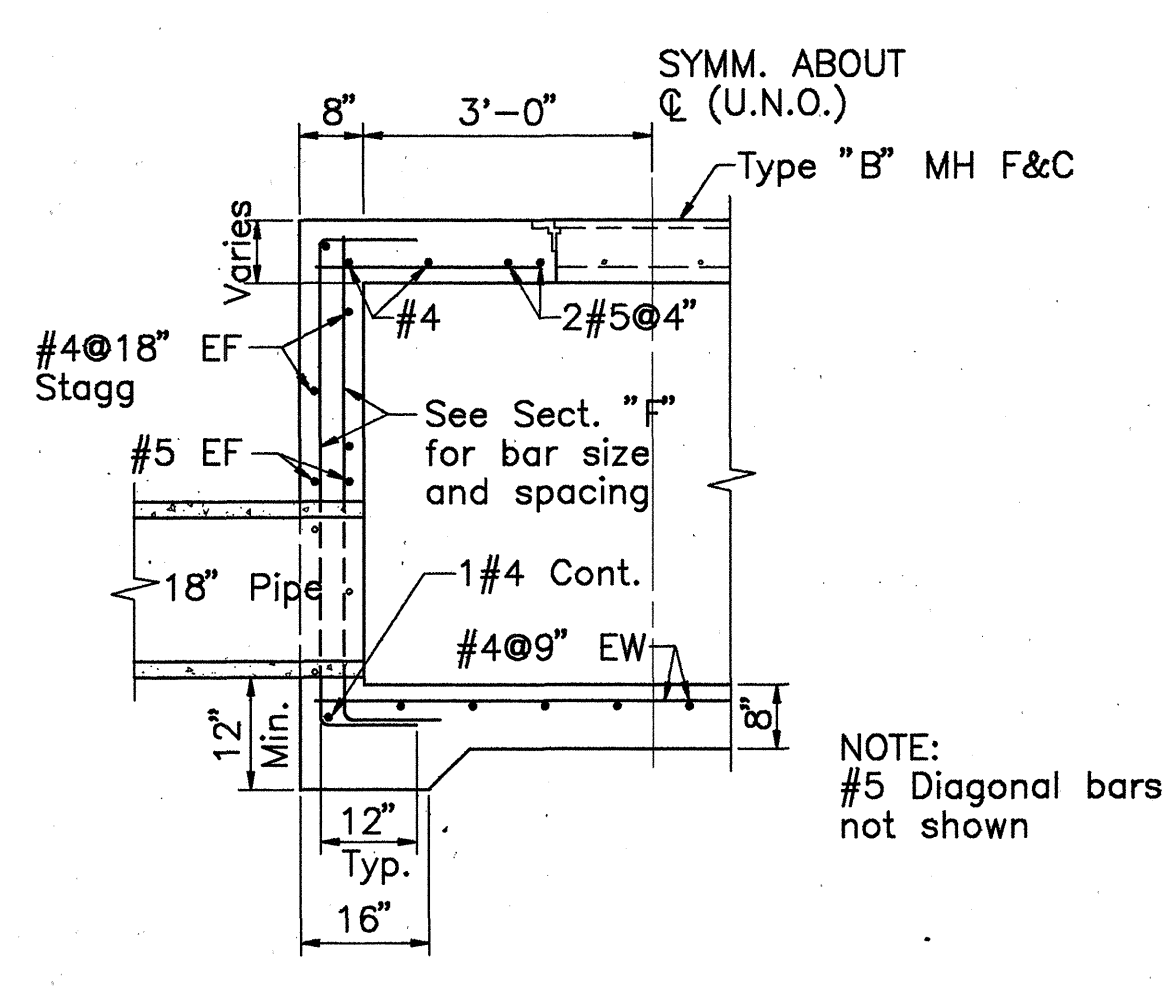
SCALE: 1/2" = 1'-0"



SECTION (SDMH #C12)

C
D-25 | D-25

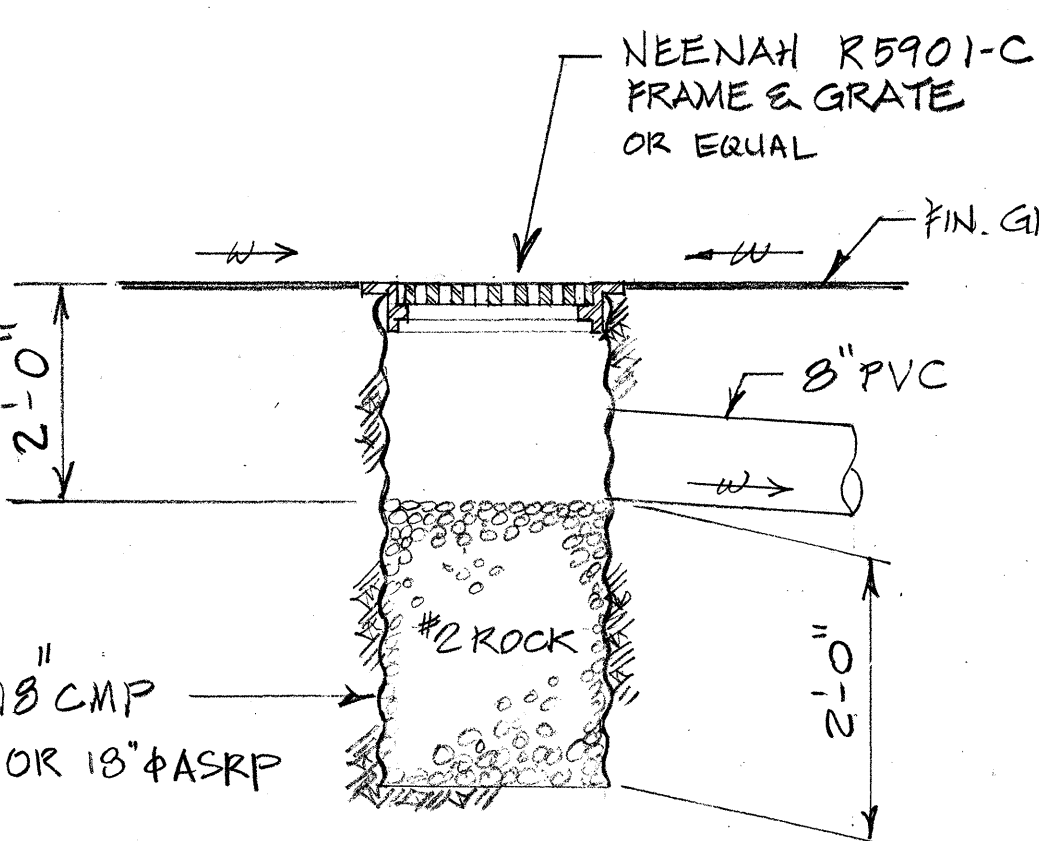
SCALE: 1/2" = 1'-0"



SECTION (SDMH #C13)

D
D-25 | D-25

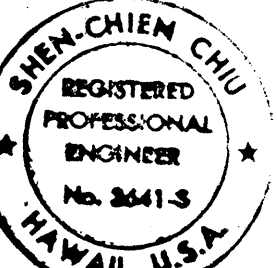
SCALE: 1/2" = 1'-0"



GDI #A17 & #A18
NOT TO SCALE

NOTES:

THE MINIMUM COVERING FOR ALL REINFORCING SHALL BE IN ACCORDANCE WITH NOTE B.1. ON STANDARD PLAN, SHT. B-01.



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

Shen-Chien Chiu

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE DETAILS

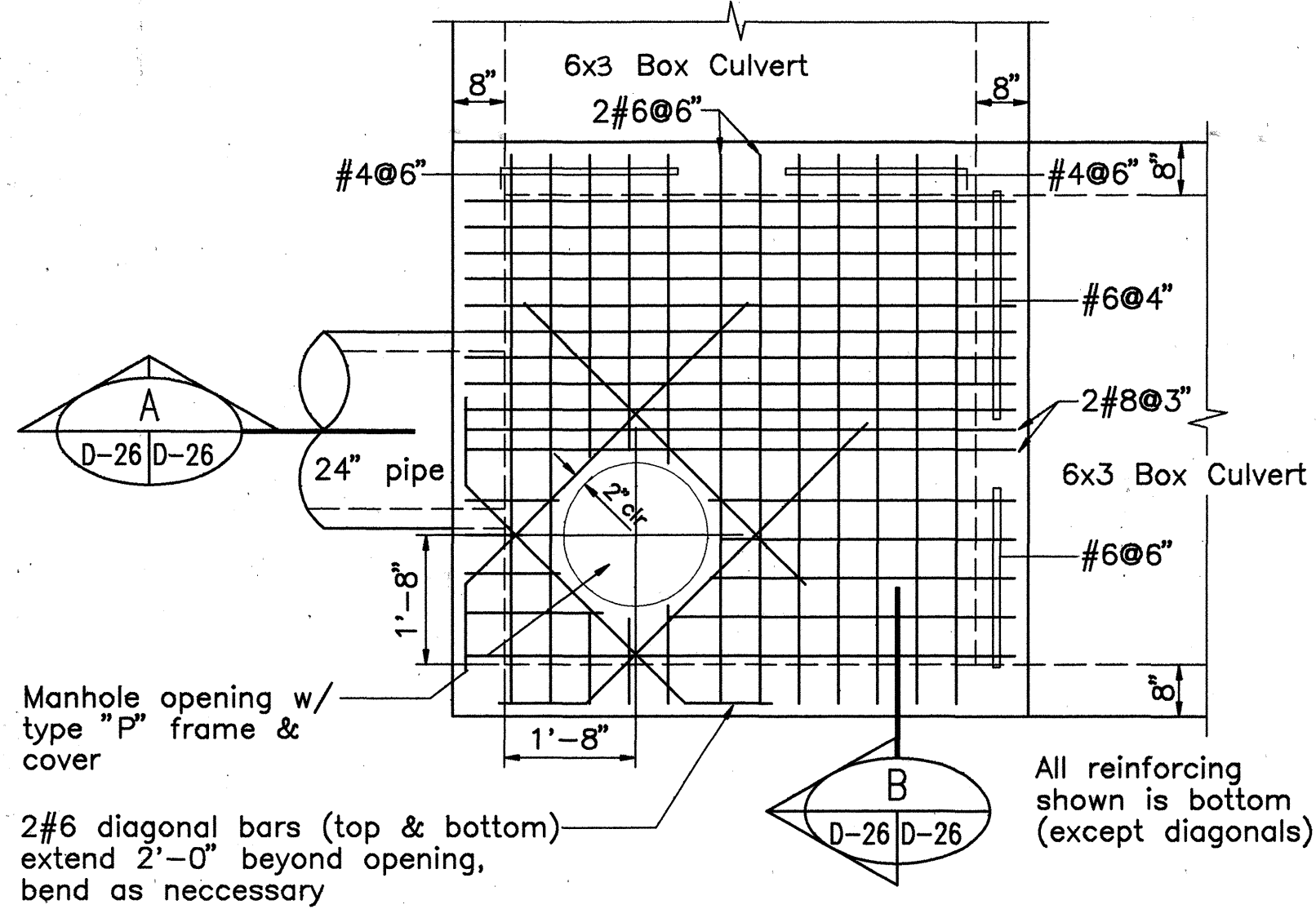
KALANIANA'OLE HIGHWAY WIDENING
EAST HALEMAUMAU ST. TO KEAHOLE ST.
F.A. PROJECT NO. NH-STP-072-1(35)

SCALE: 1" = 20'

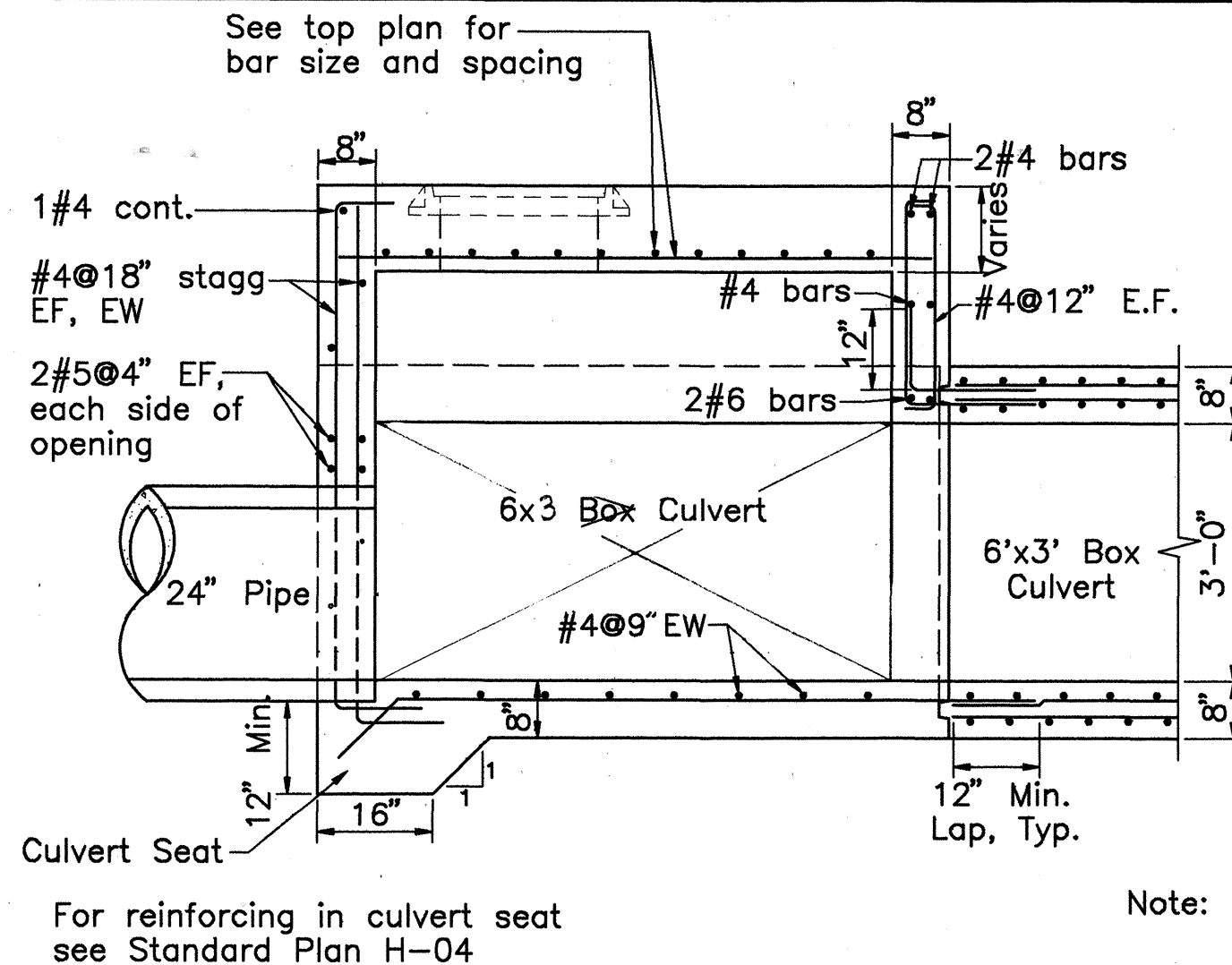
DATE: 10/1/92

SHEET No. D-25 OF 46 SHEETS

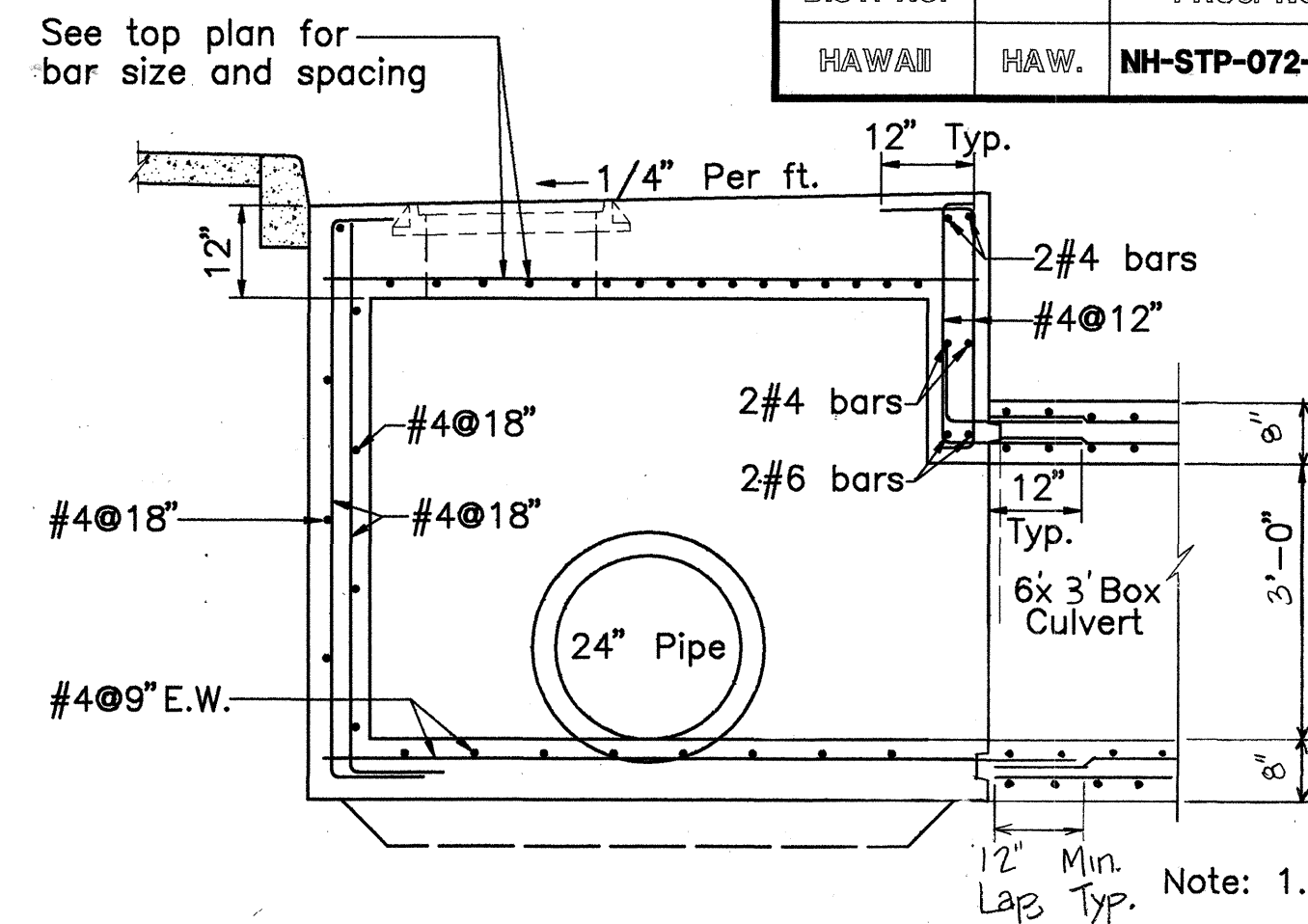
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-STP-072-1(35)	1993	82	340



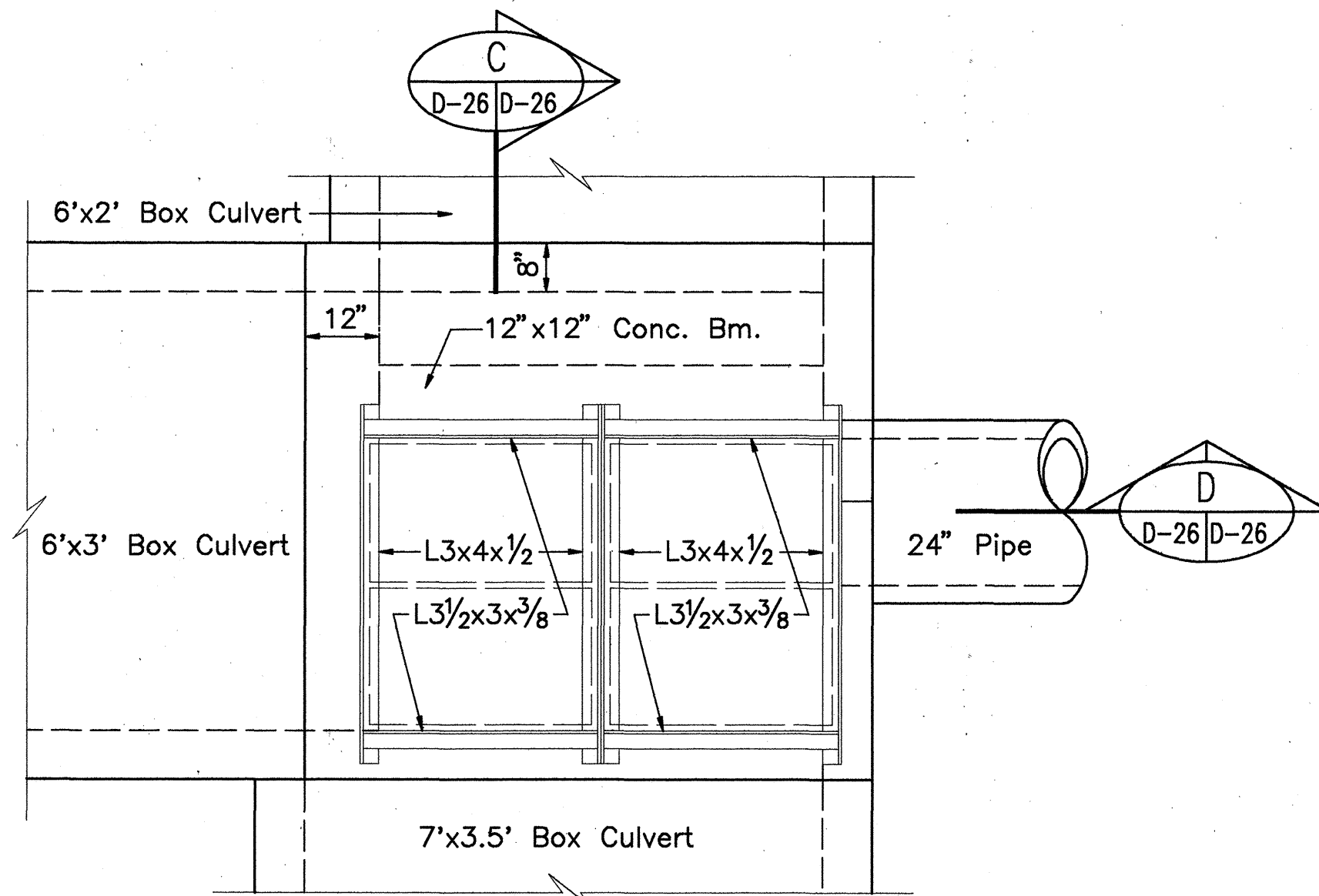
TOP PLAN (SDMH #C14) 1
SCALE: 1/2" = 1'-0"



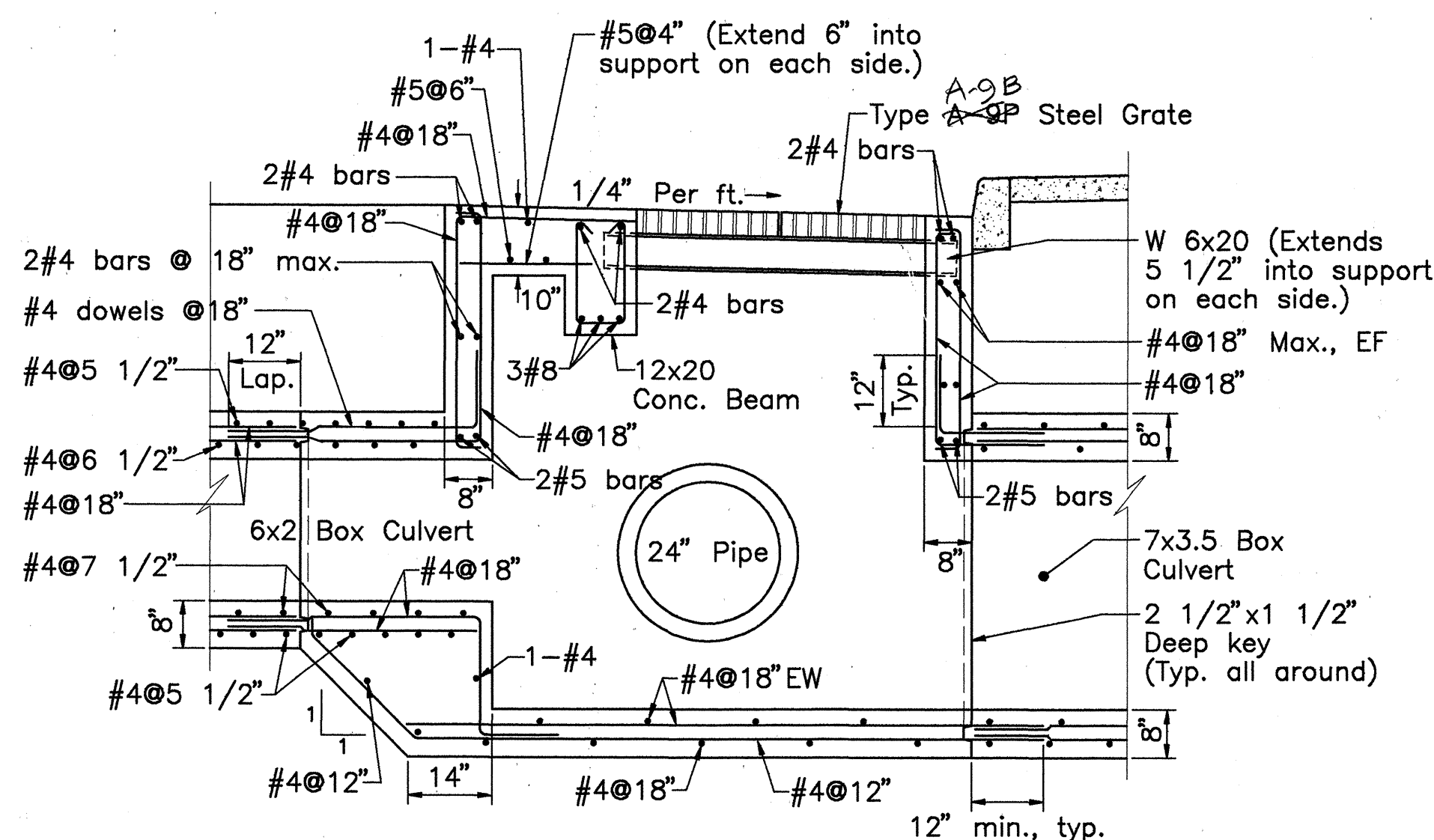
SECTION (SDMH #C14) A
SCALE: 1/2" = 1'-0"



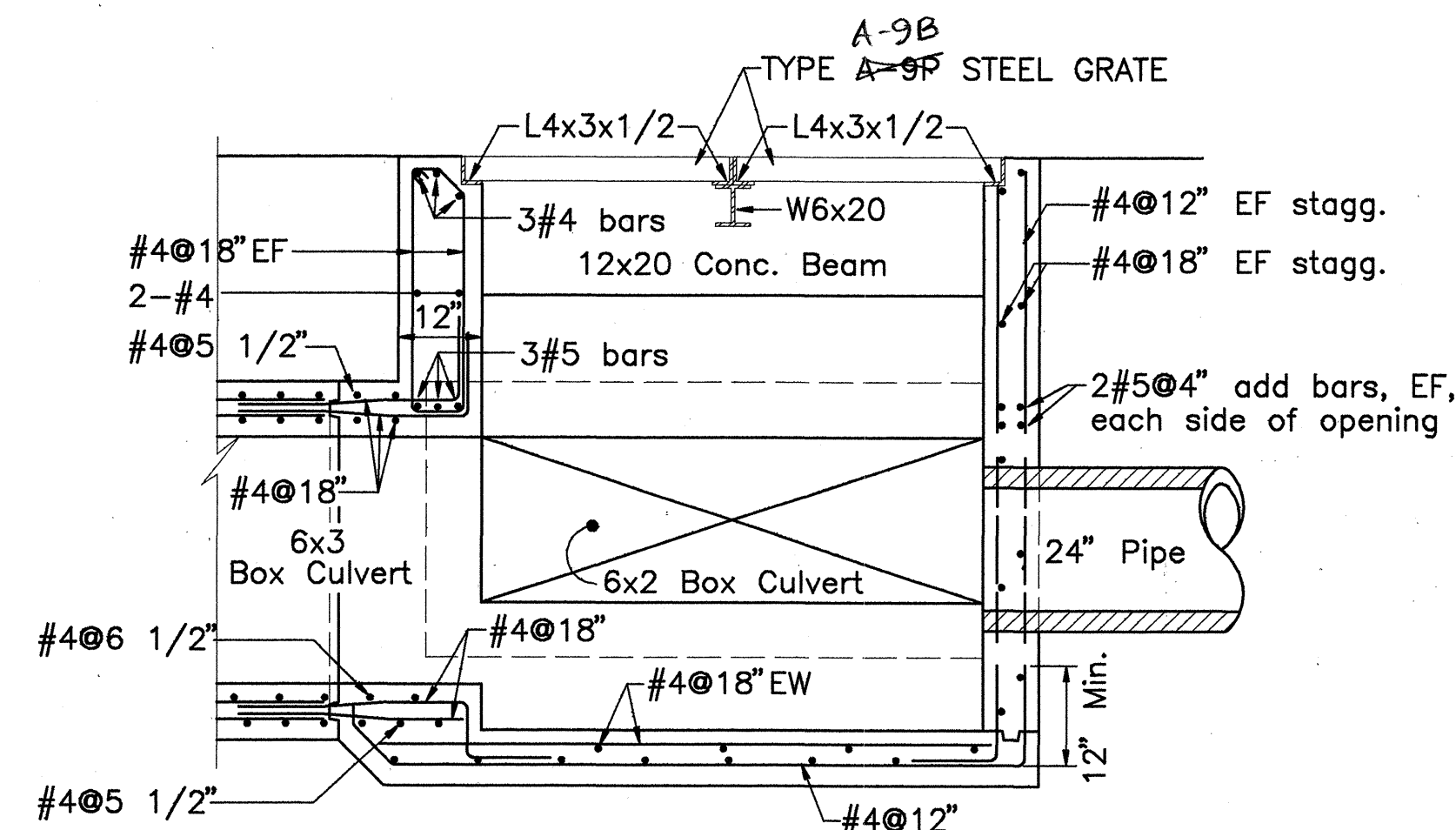
SECTION (SDMH #C14) B
SCALE: 1/2" = 1'-0"



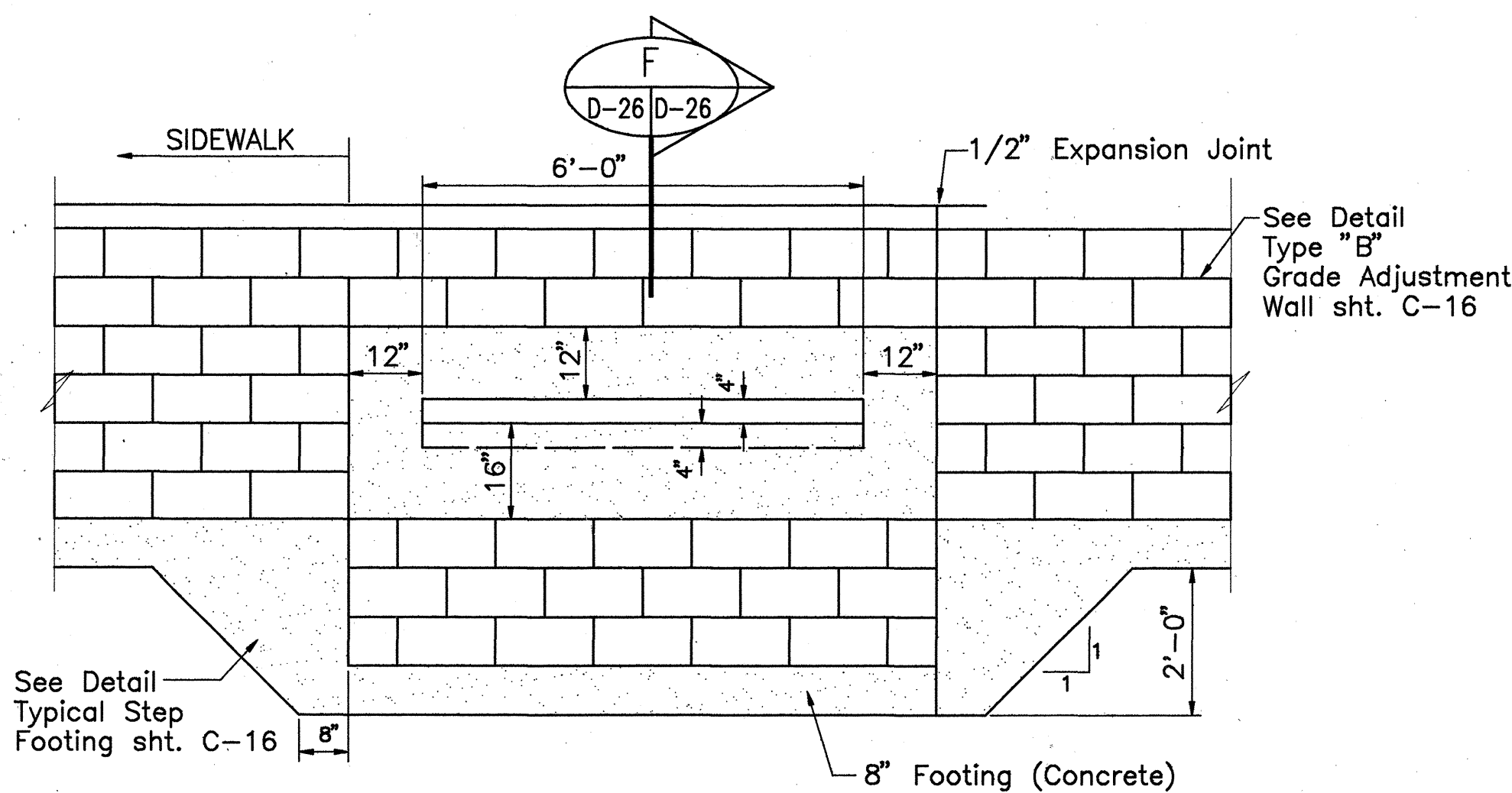
TOP PLAN (CB #C1) 2
SCALE: 1/2" = 1'-0"



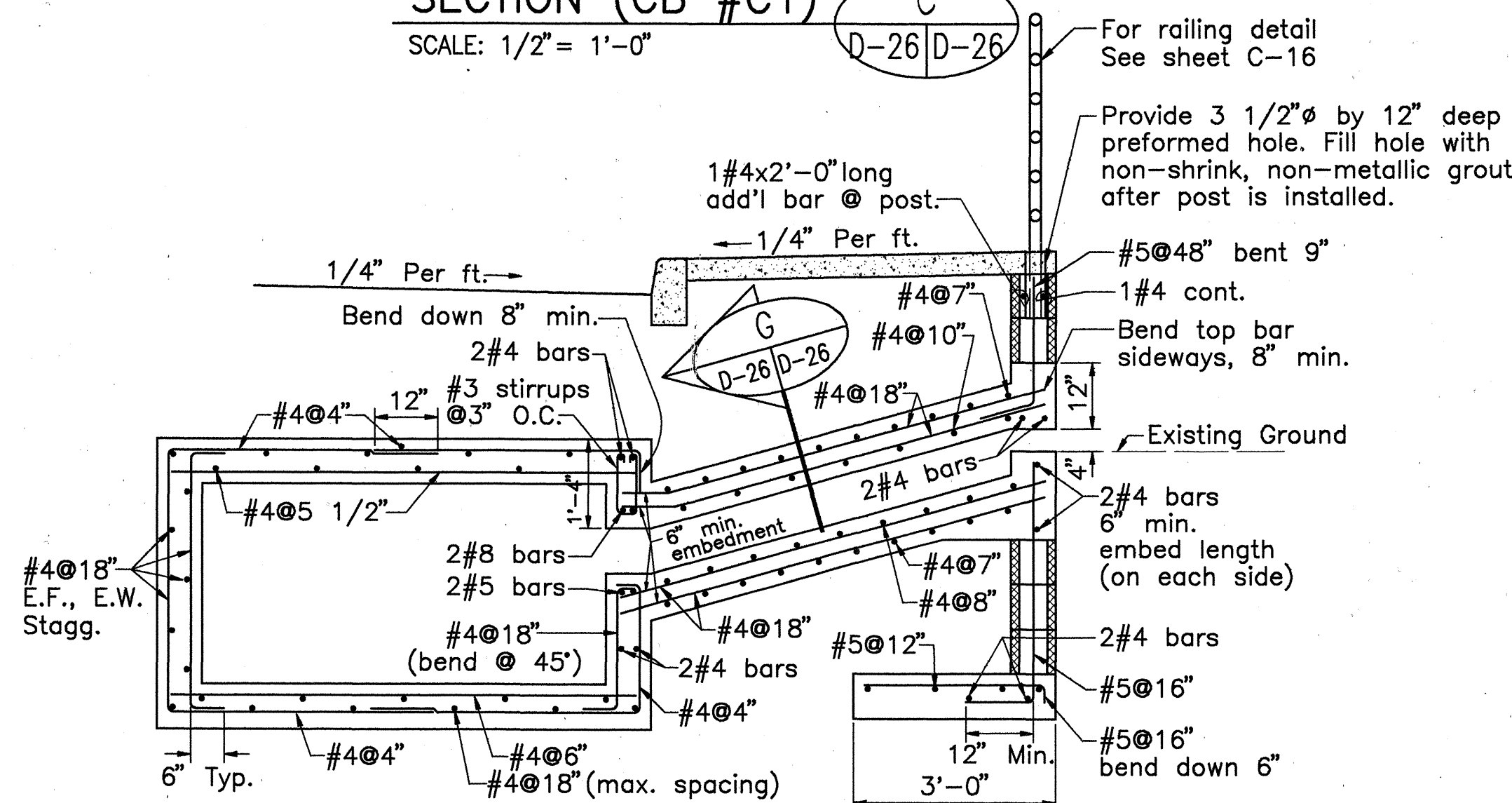
SECTION (CB #C1) C
SCALE: 1/2" = 1'-0"



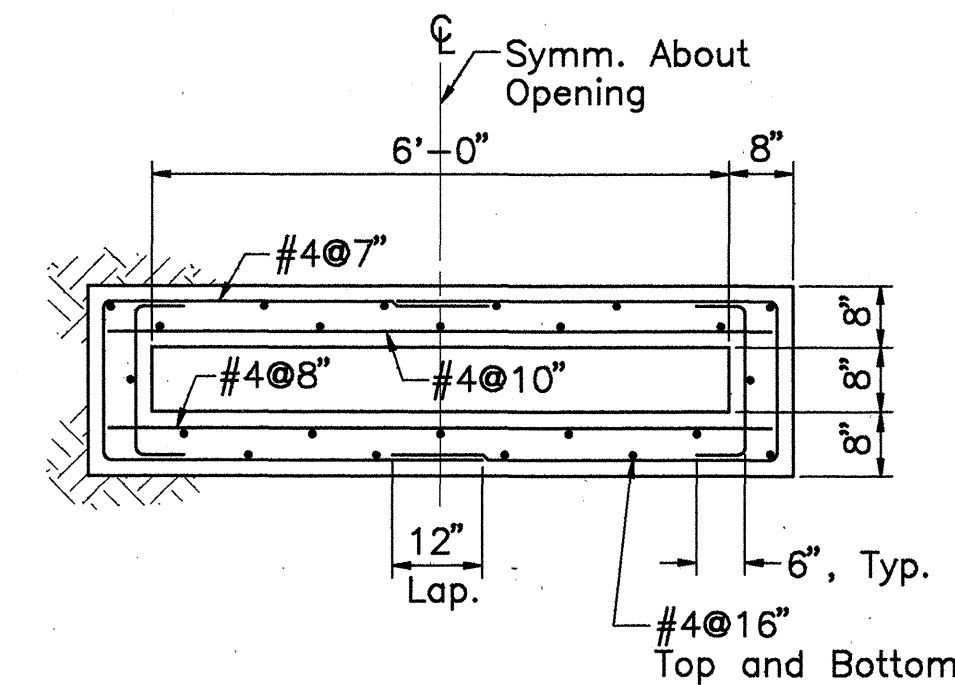
SECTION (CB #C1) D
SCALE: 1/2" = 1'-0"



ELEVATION (INLET #C2) 3
SCALE: 1/2" = 1'-0"



SECTION (INLET #C2) F
SCALE: 1/2" = 1'-0"



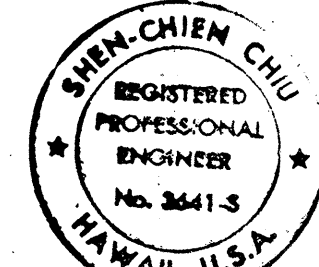
SECTION (INLET #C2) G
SCALE: 1/2" = 1'-0"

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE DETAILS

KALANIANA'OLE HIGHWAY WIDENING
EAST HALEMAUMAU ST. TO KEAHOE ST.
F.A. PROJECT NO. NH-STP-072-1(35)

SCALE: 1"=20' DATE: 10/1/92
SHEET No. D-26 OF 46 SHEETS

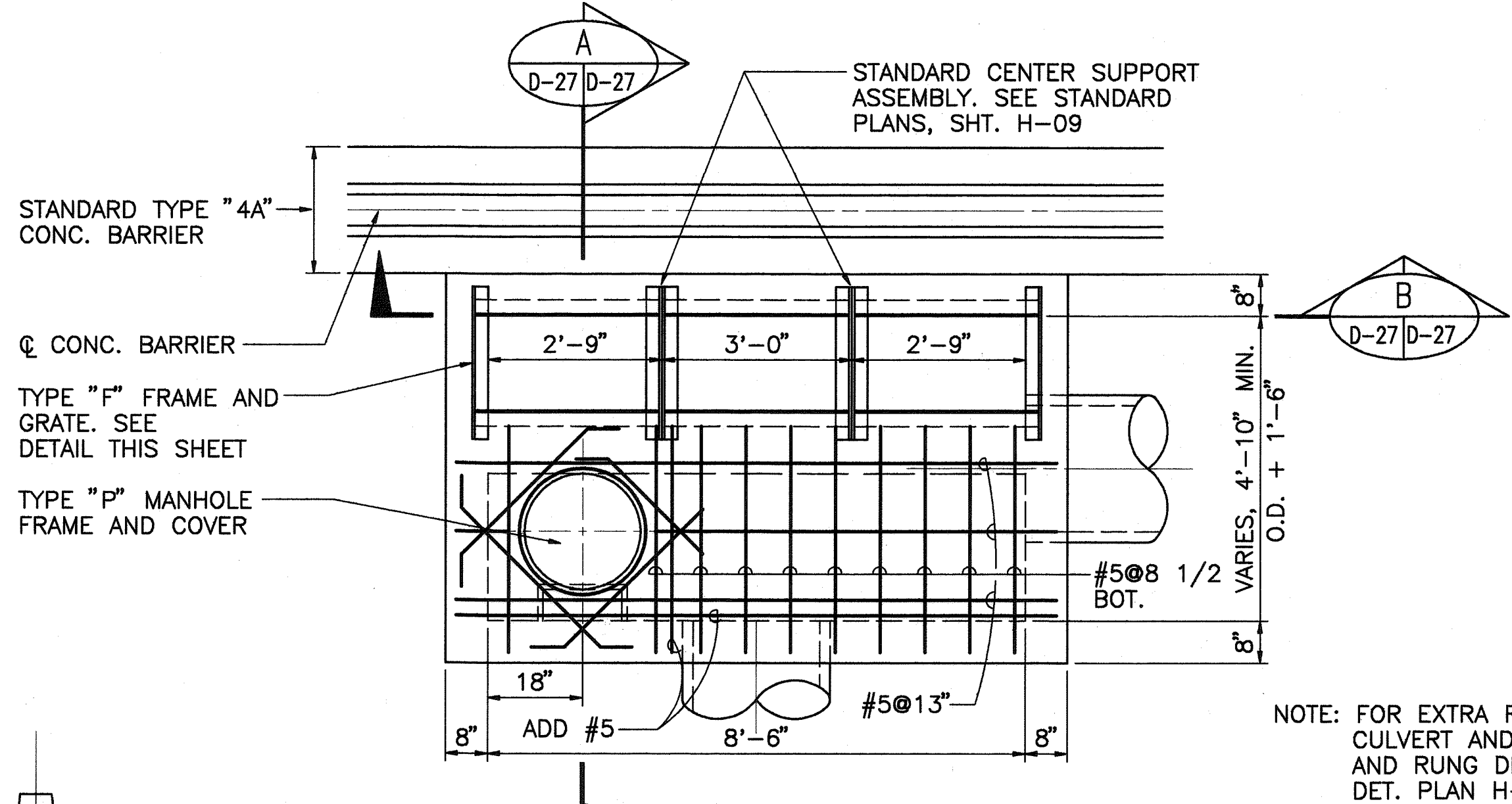
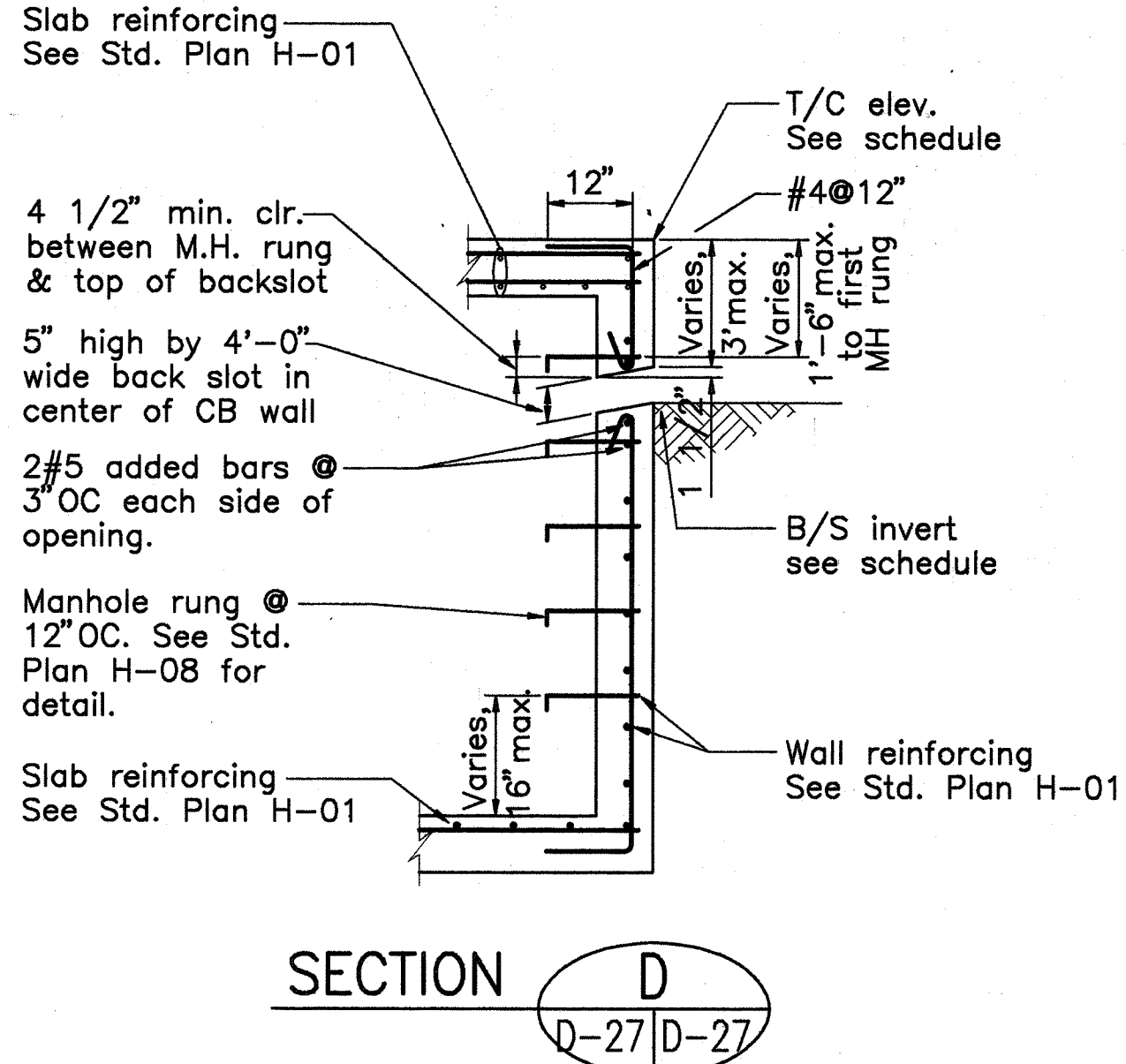
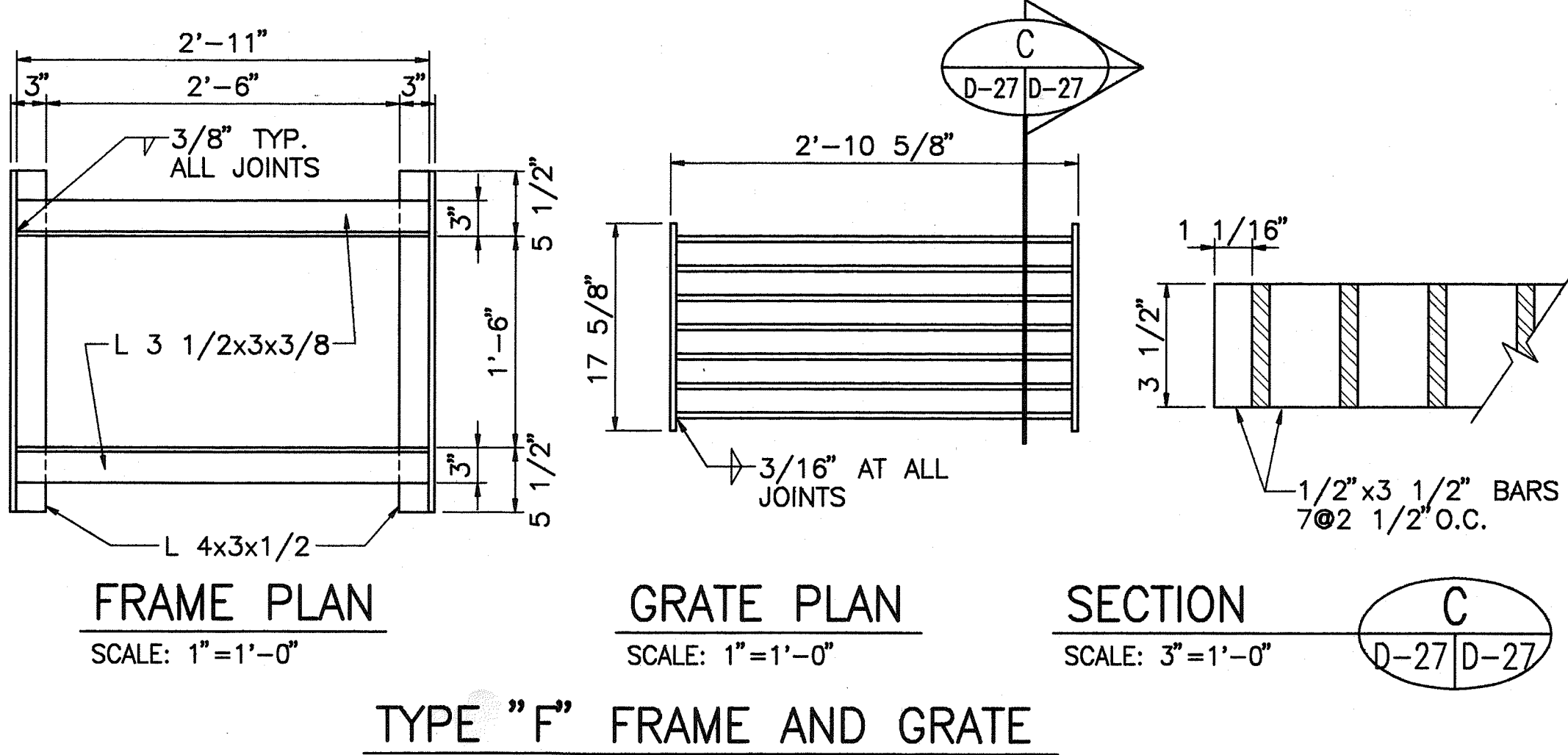


THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

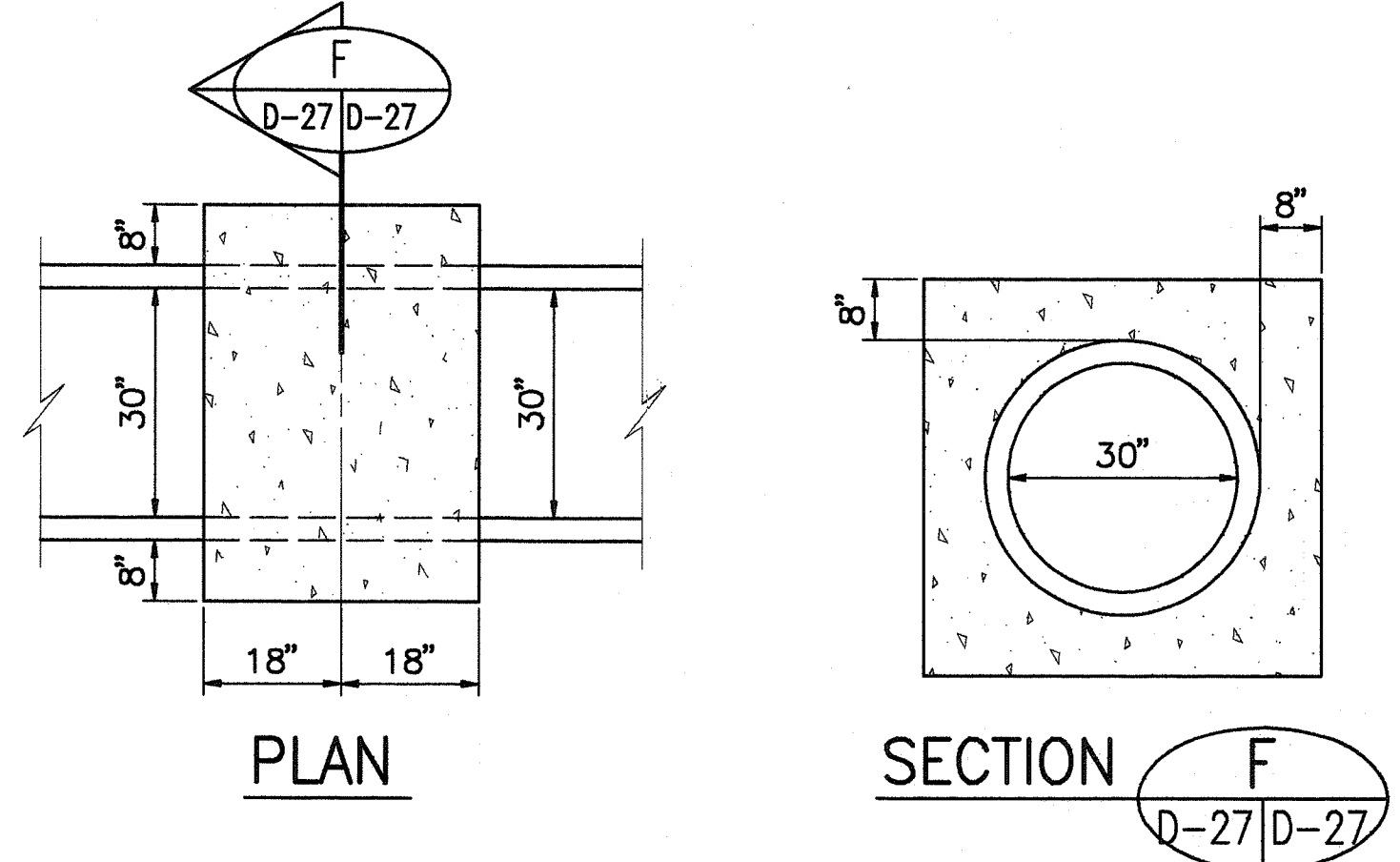
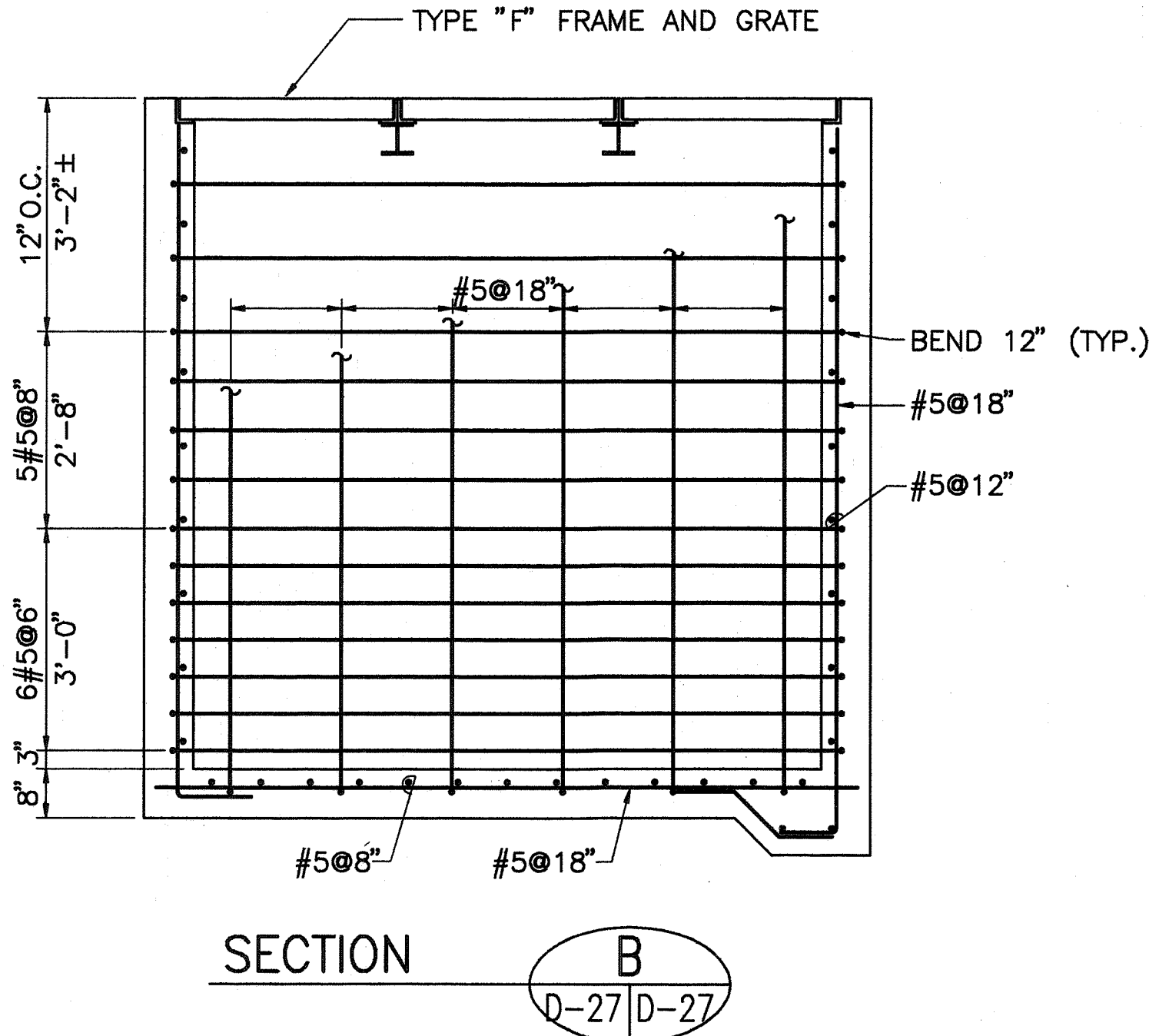
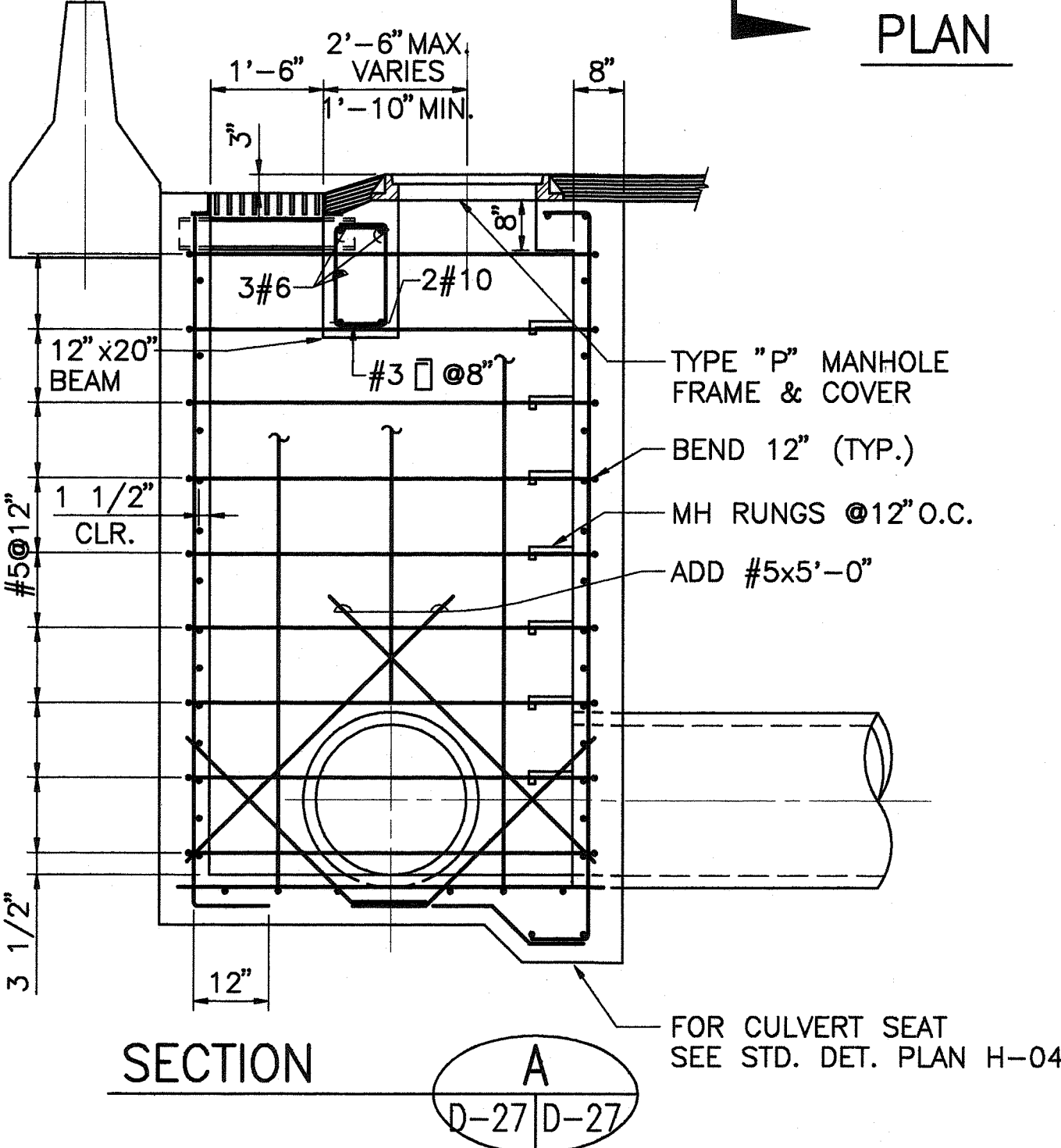
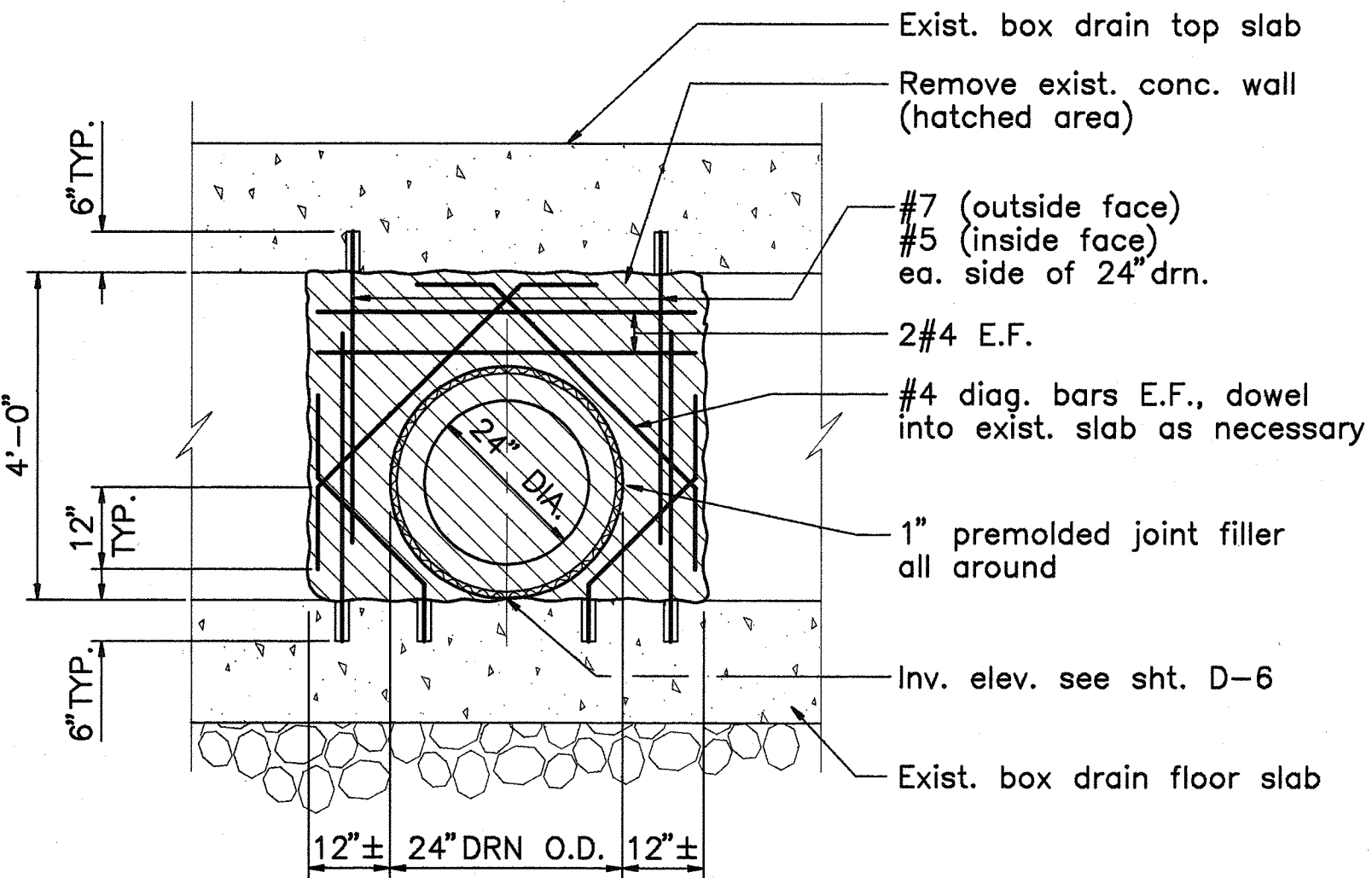
Shen-Chien Chiu

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-STP-072-1(35)	1993	03	340

CB WITH BACKSLOT SCHEDULE				
CATCH BASIN	BACKSLOT INVERT	T/C ELEV.	SECTION THRU BACKSLOT	
A12	5.8±	7.63	D	
A14	6.9±	8.76	D	
C5	7.0±	7.83	E	N.I.C.
D2	10.2±	11.48	D	
E6	4.7±	7.72	D	N.I.C.
E7	6.0±	8.21	D	
E8	6.9±	8.50	D	
E16	3.6±	6.91	D	
E17	3.6±	5.89	D	
E18	3.9±	4.80	E	N.I.C.



DRAINAGE SWALE TO CB-D2
SCALE: NTS



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

Shen-Chien Chiu

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE DETAILS

KALANIANA'OLE HIGHWAY WIDENING
EAST HALEMAUMAU ST. TO KEAHOE ST.
F.A. PROJECT NO. NH-STP-072-1(35)

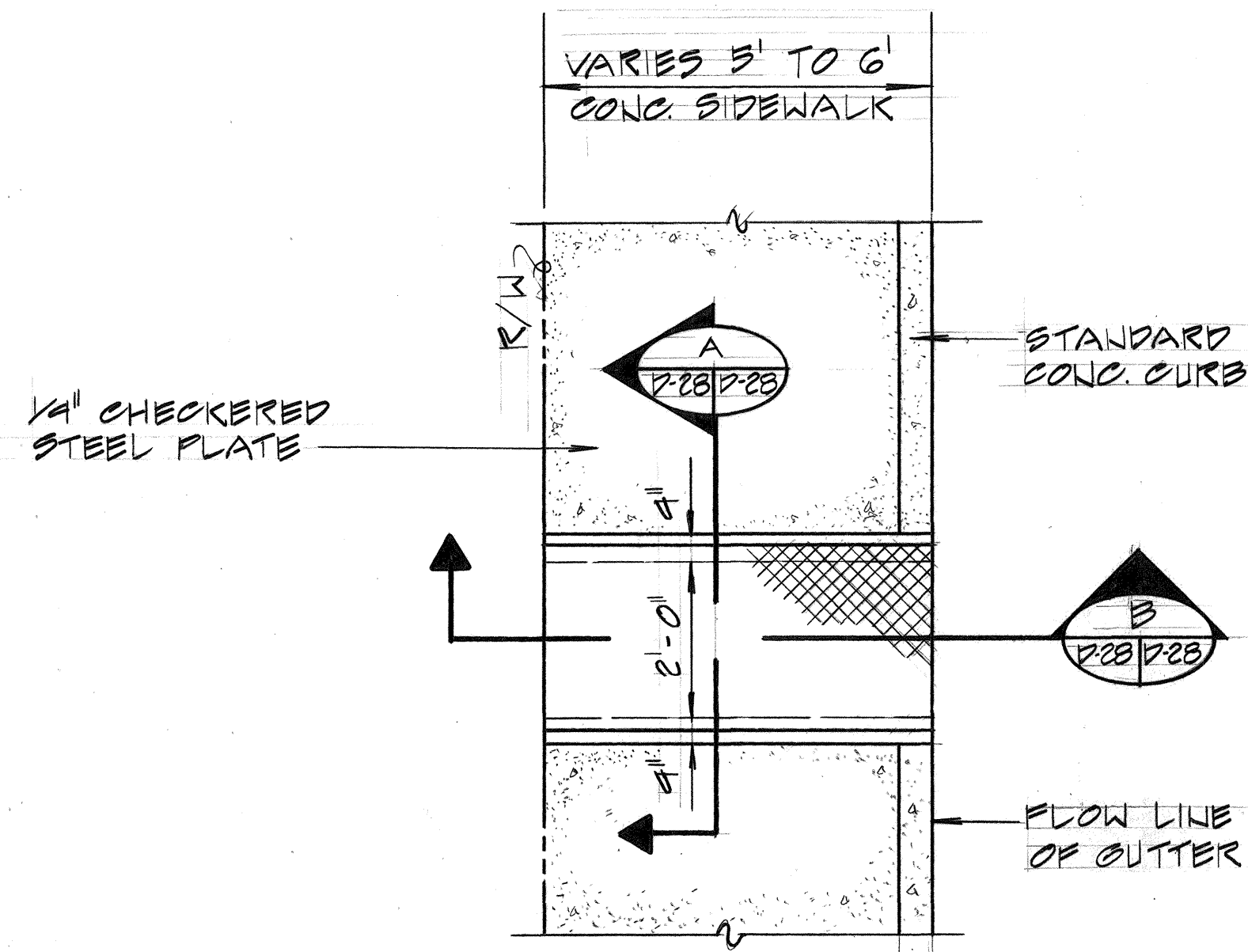
SCALE: AS NOTED DATE: 10/1/92

SHEET No. **D-27** OF 46 SHEETS

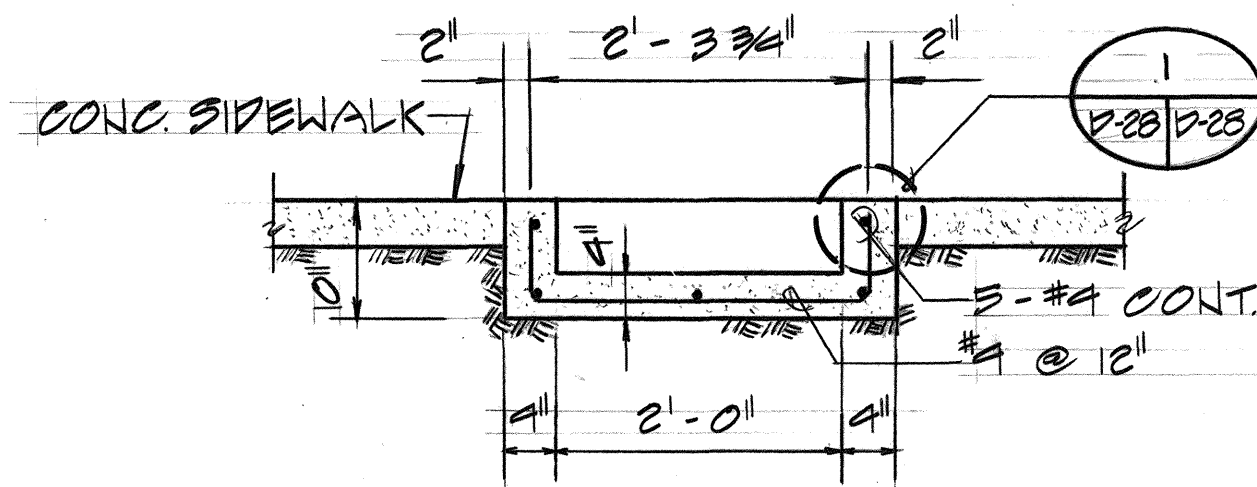
SURVEY PLOTTED BY	DATE
ORIGINAL PLAN	
DRAWN BY	
DESIGNED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	
No.	

"AS-BUILT"

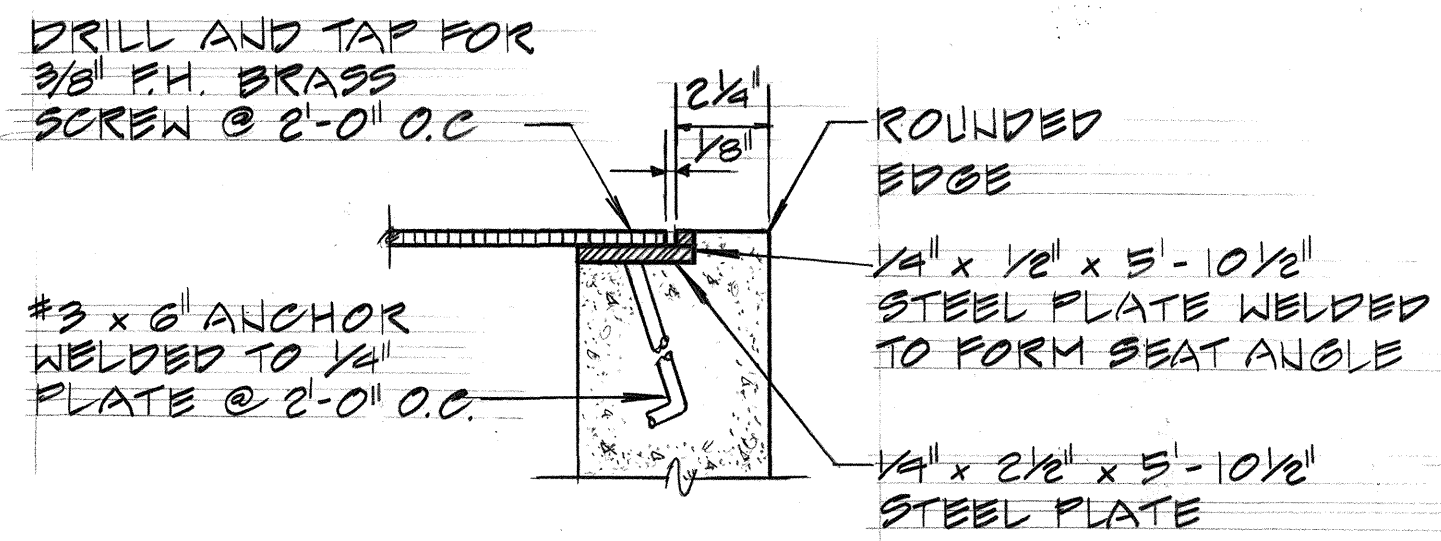
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-STP-072-1(35)	1993	84	340



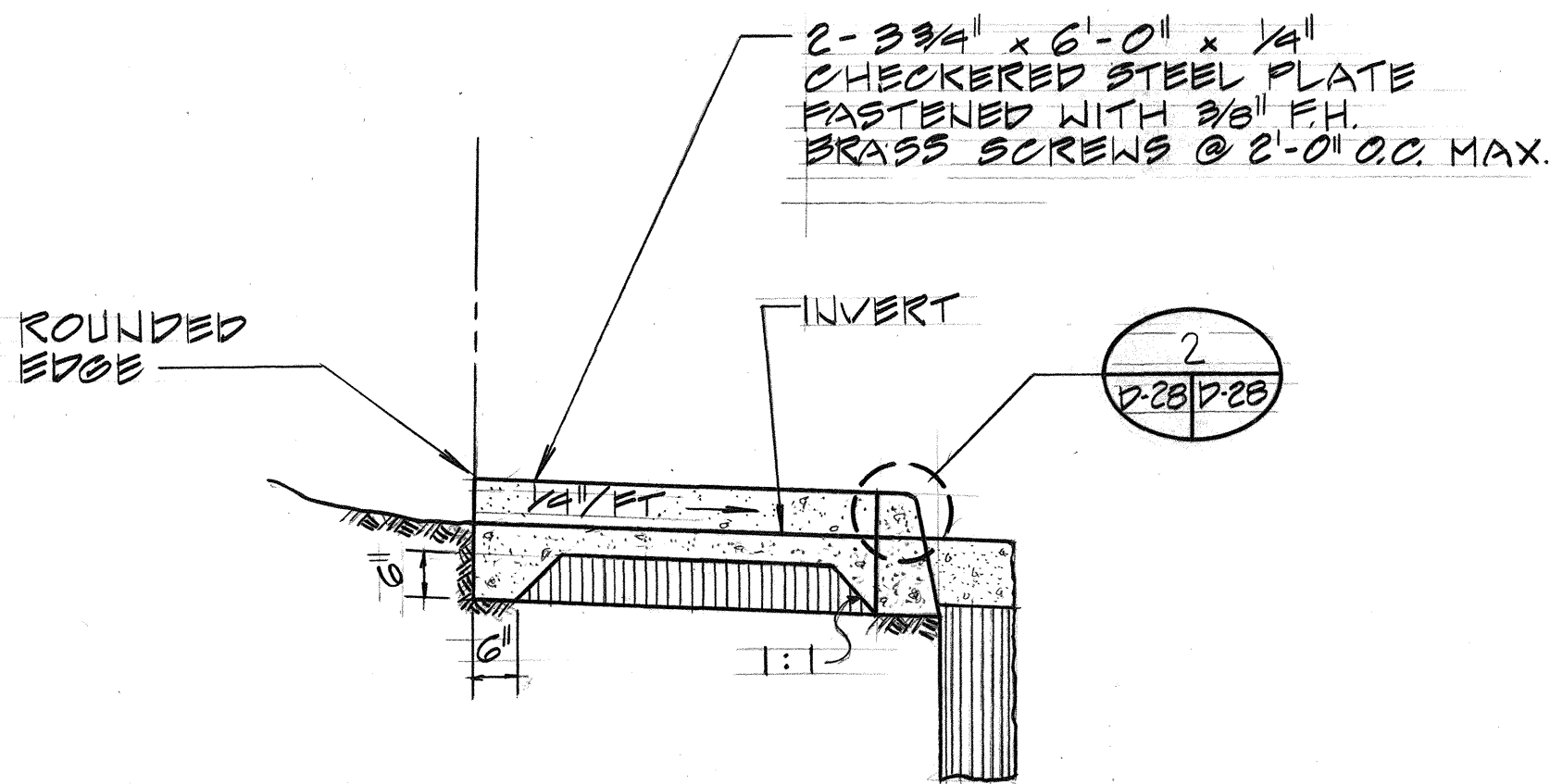
PLAN
SCALE: 1/2" = 1'-0"



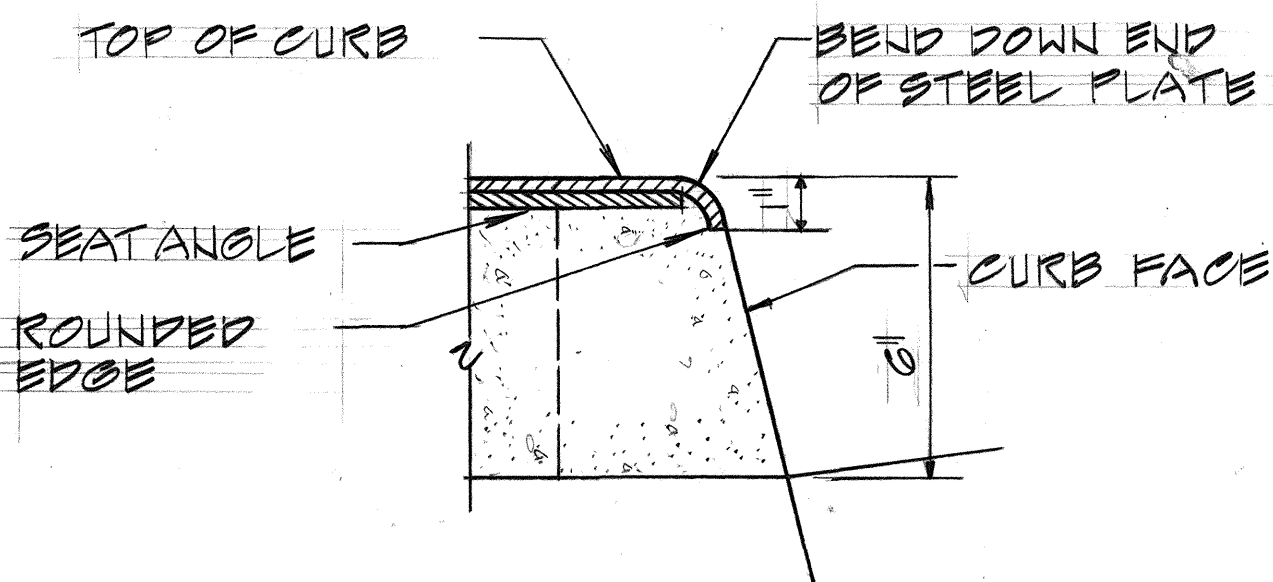
SECTION A
SCALE: 3/4" = 1'-0"



SEAT DETAIL
SCALE: 3" = 1'-0"



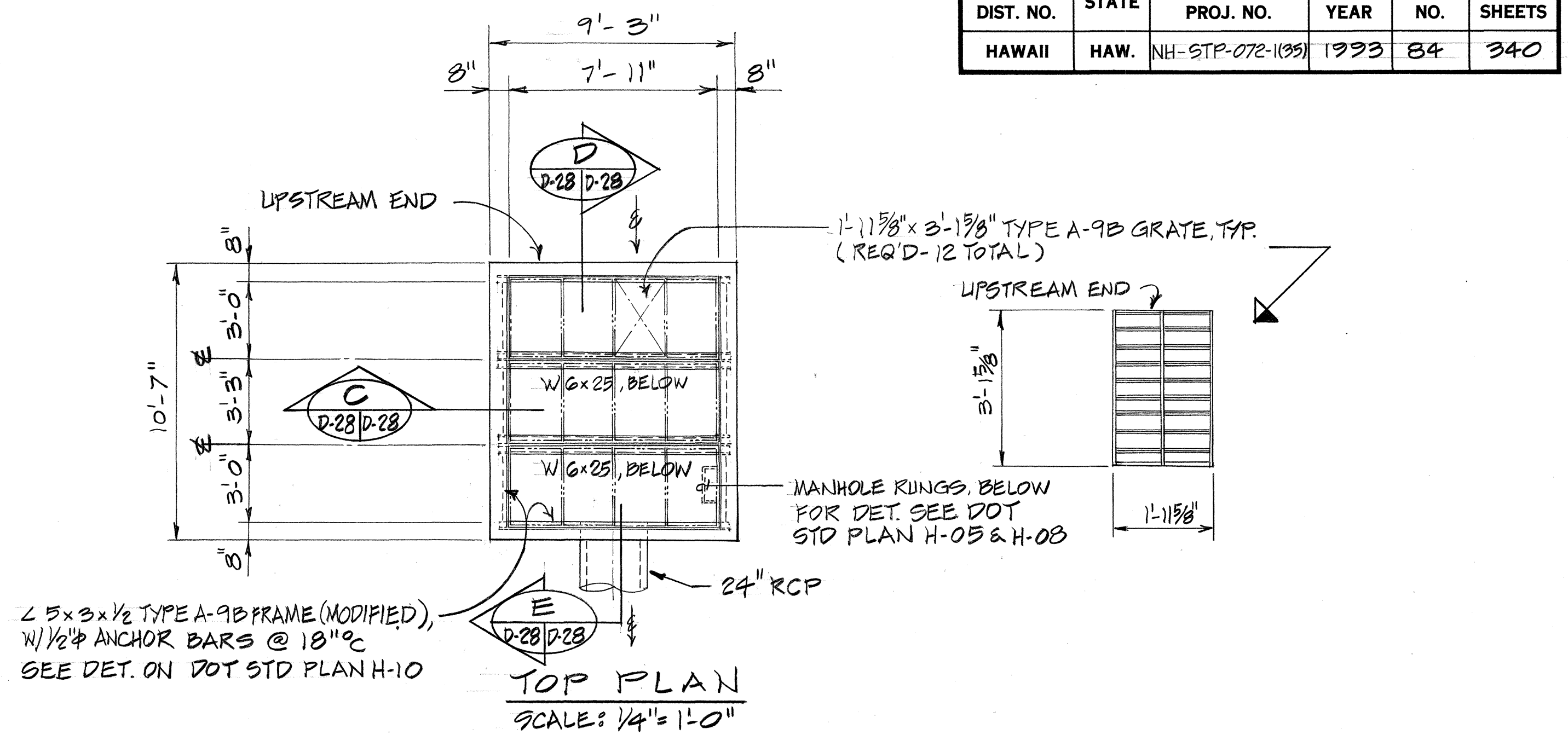
ELEVATION
SCALE: 1/2" = 1'-0"



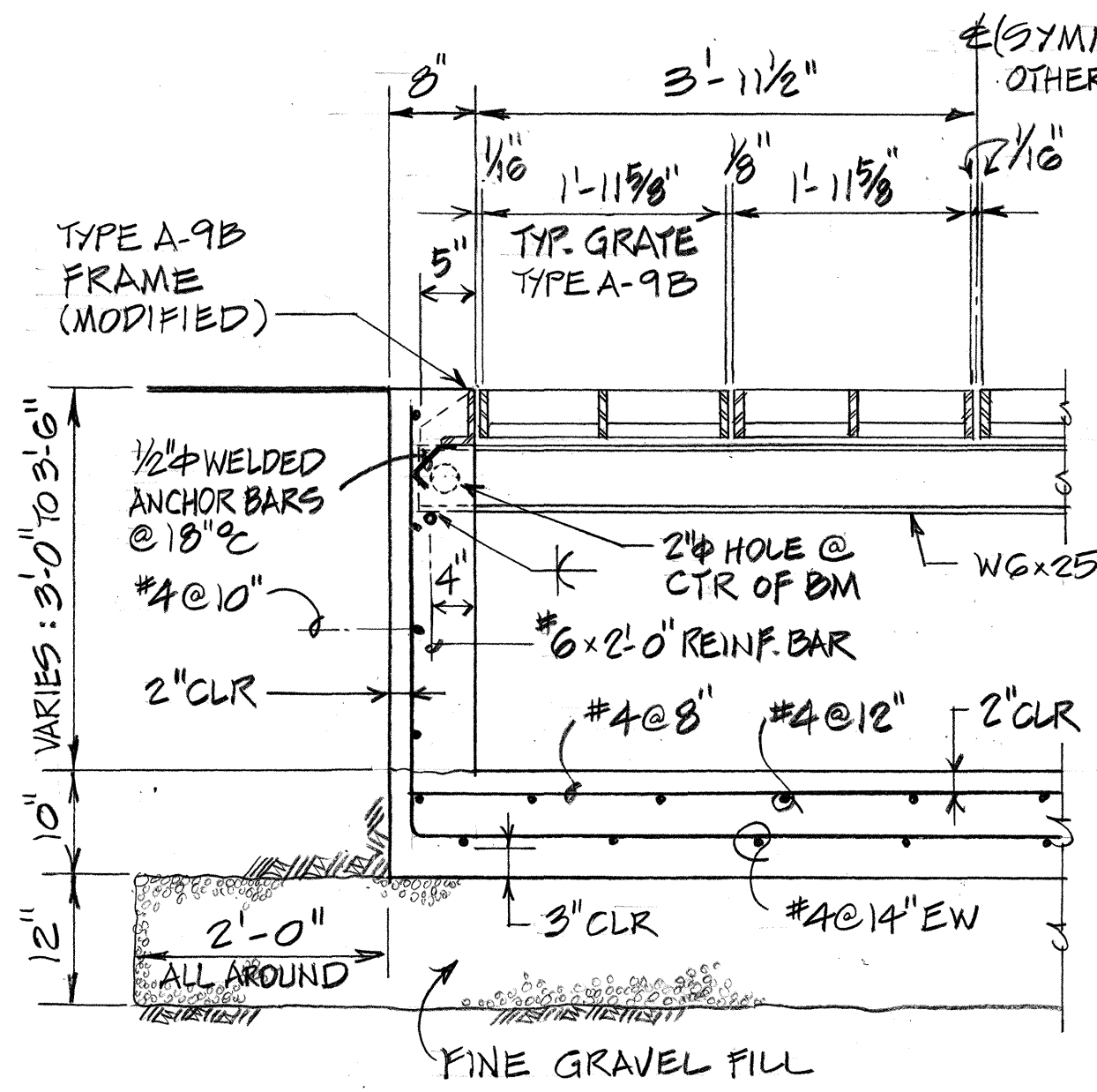
EDGE DETAIL
SCALE: 3" = 1'-0"

NOTE: ALL PARTS SHALL BE GALVANIZED

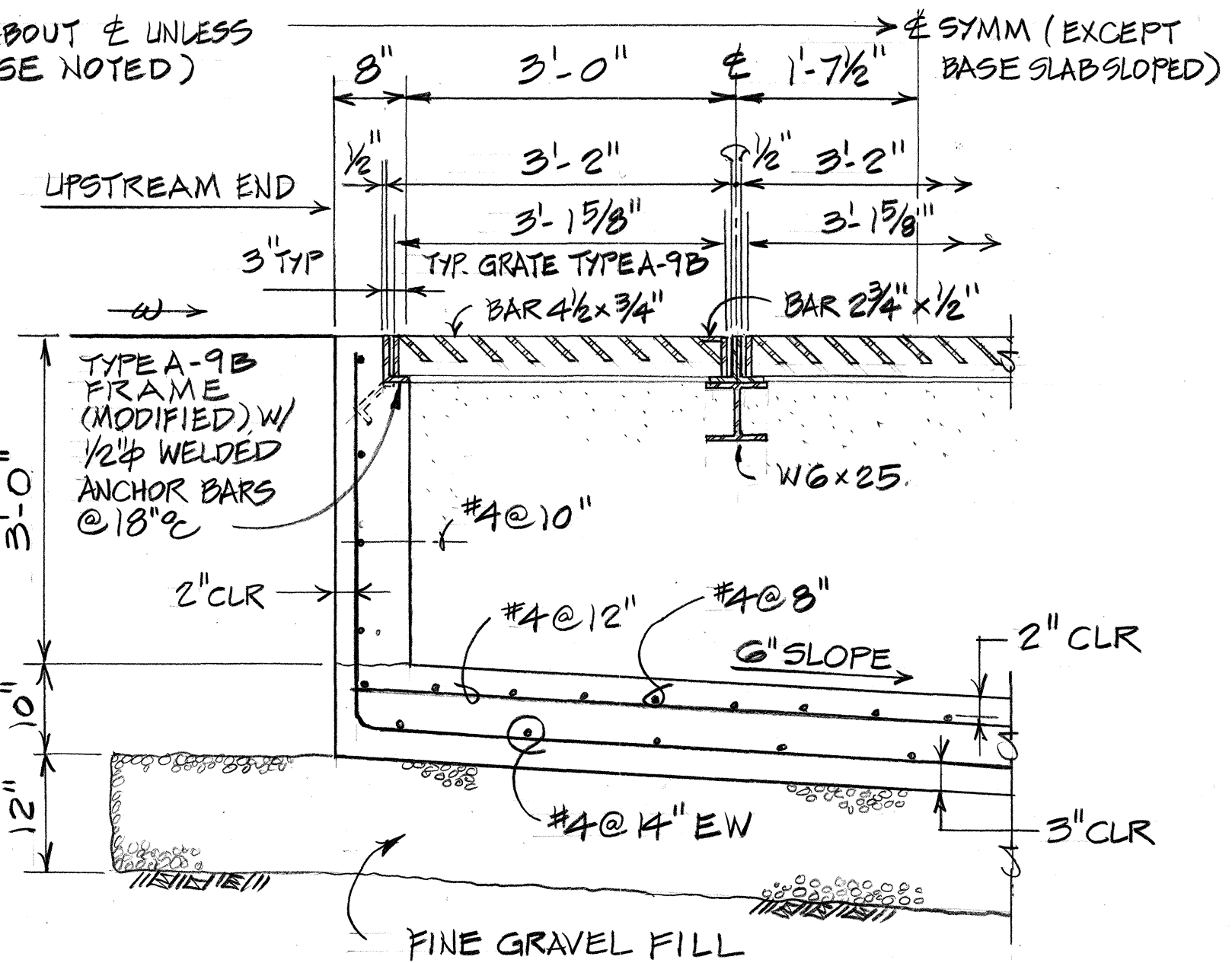
INDIVIDUAL SIDEWALK CULVERT



TOP PLAN
SCALE: 1/4" = 1'-0"

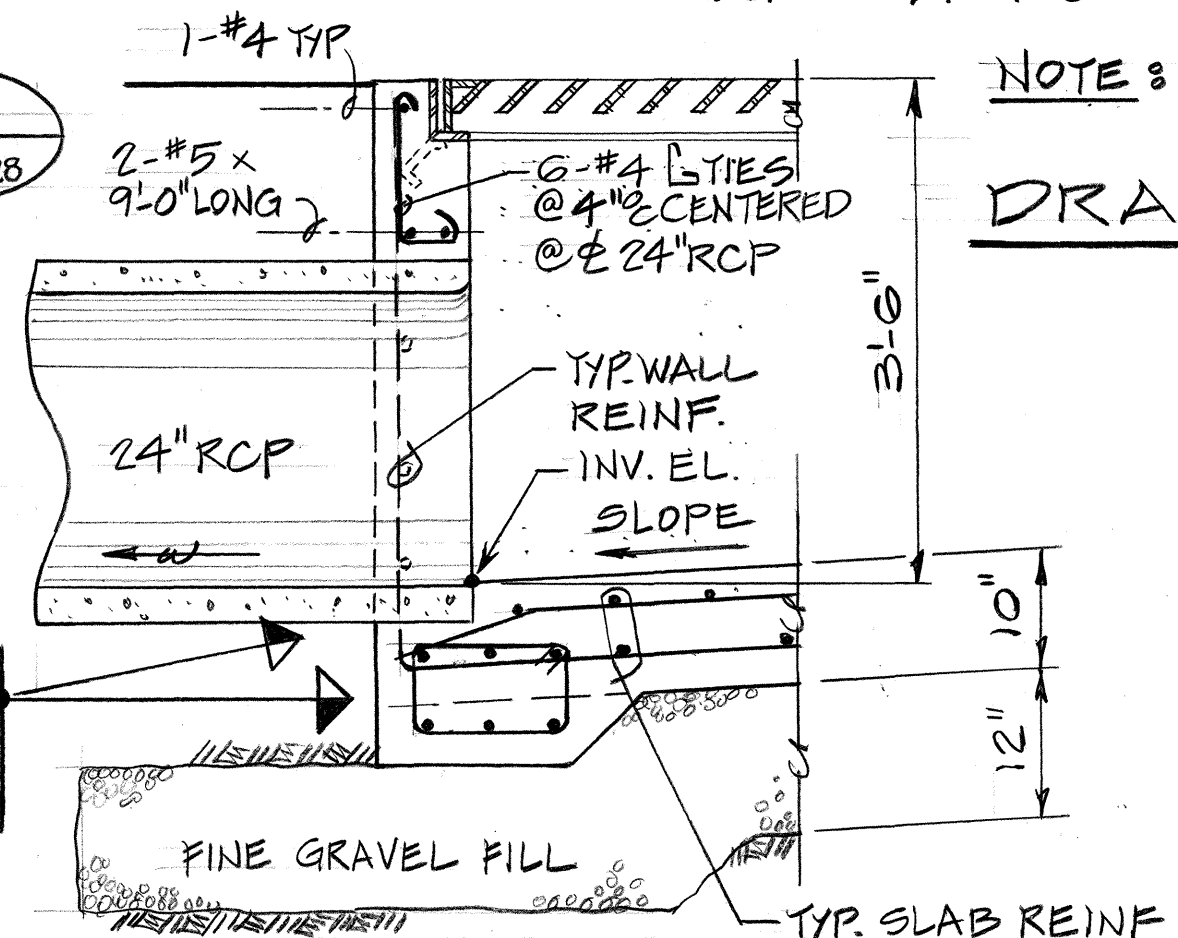


SECTION C
SCALE: 3/4" = 1'-0"



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

NOTE: FOR DETAILS OF TYPE A-9B GRATE AND FRAME (MODIFIED), SEE DOT STANDARD PLAN H-10 UNLESS OTHERWISE SHOWN
DRAIN BOX DETAILS (GDI # C16 & # C17)



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

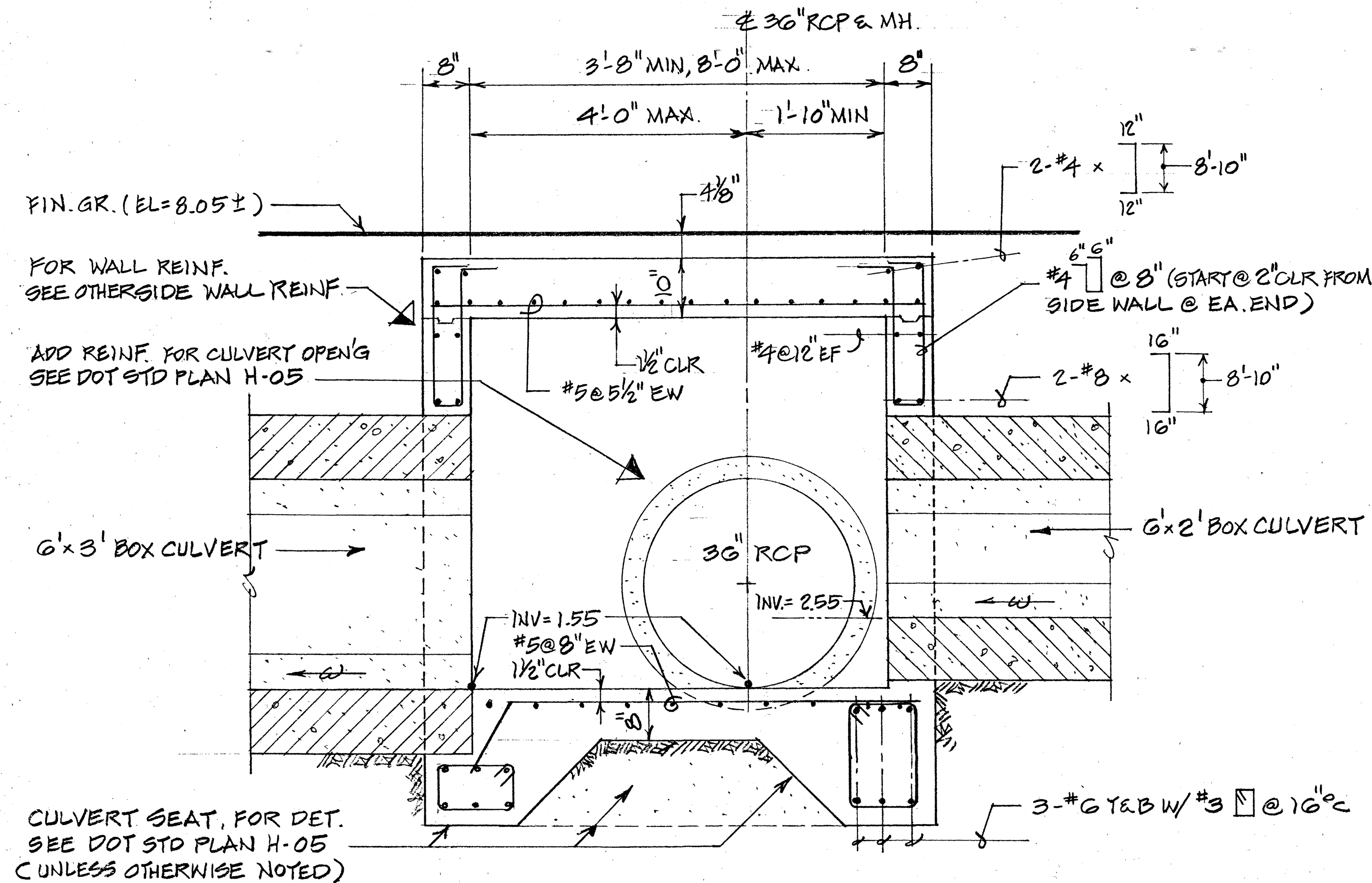
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
Sheen-Chien Chin
REGISTERED PROFESSIONAL ENGINEER
No. 3641-3
HAWAII, U.S.A.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

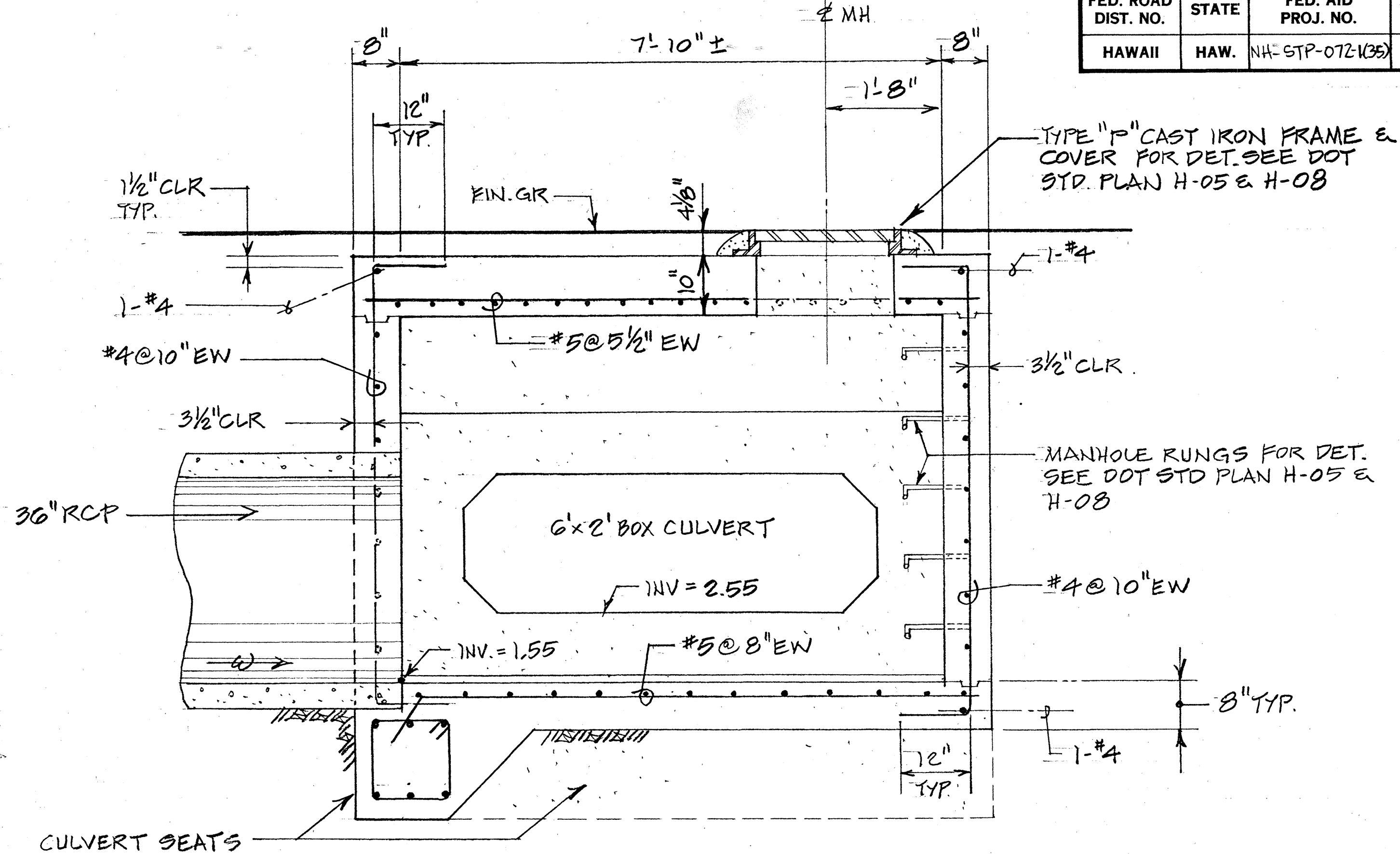
DRAINAGE DETAILS

KALANIANA'OLE HIGHWAY
E. HALEMAUMAU ST. TO KEAHOE ST.
F.A. PROJECT NO. NH-STP-072-1(35)
Date: 10/1/92
SHEET NO. D28 OF 46 SHEETS

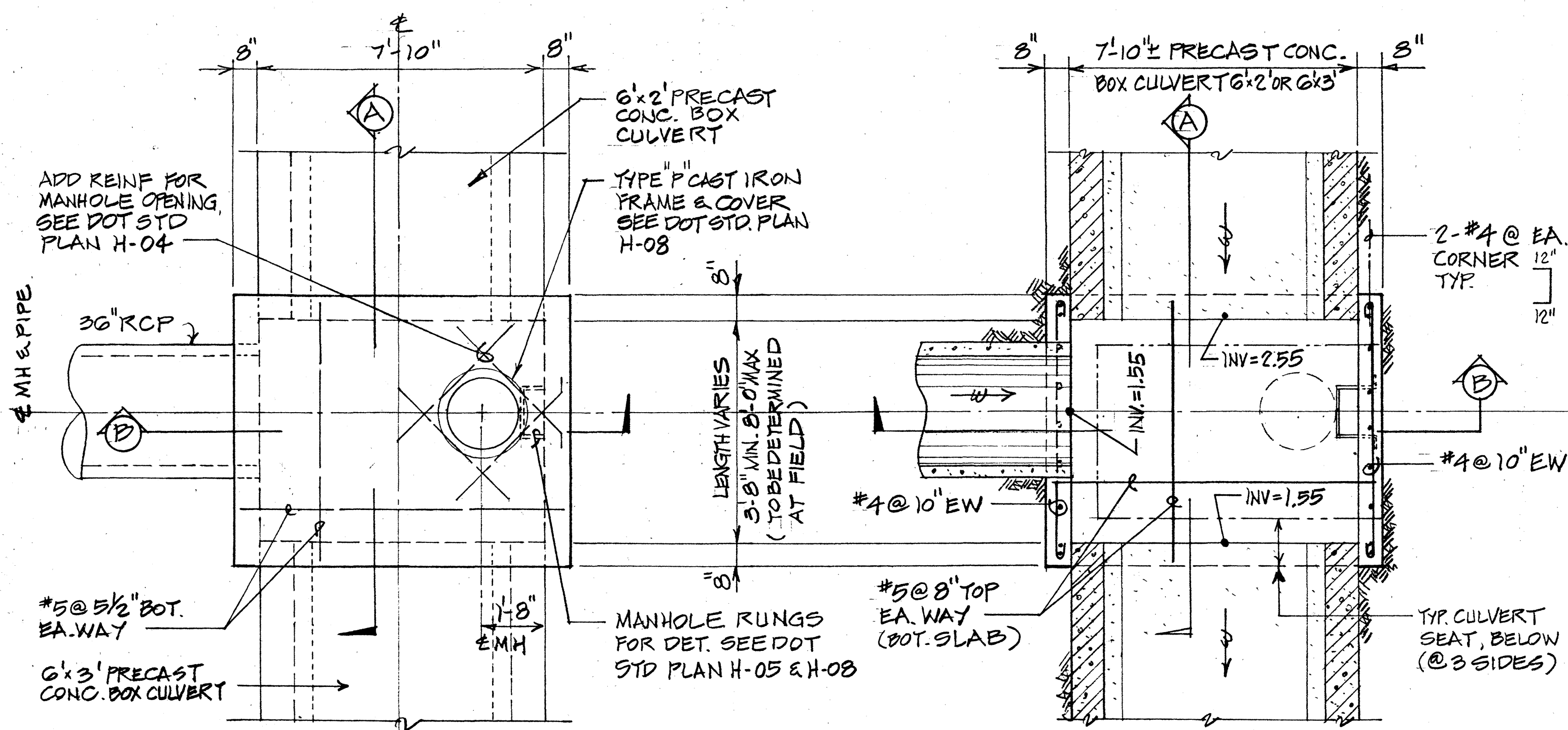
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-STP-072-1(35)	1993		340



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



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



TOP PLAN
SCALE: 3/8" = 1'-0"

SECTION/PLAN
SCALE: 3/8" = 1'-0"

DRAIN BOX DET. - SDMH #15

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE DETAILS

KALANIANA'OLE HIGHWAY
E. HALEMAUMAU ST. TO KEAHOE ST.
F.A. PROJECT NO. NH-STP-072-1(35)

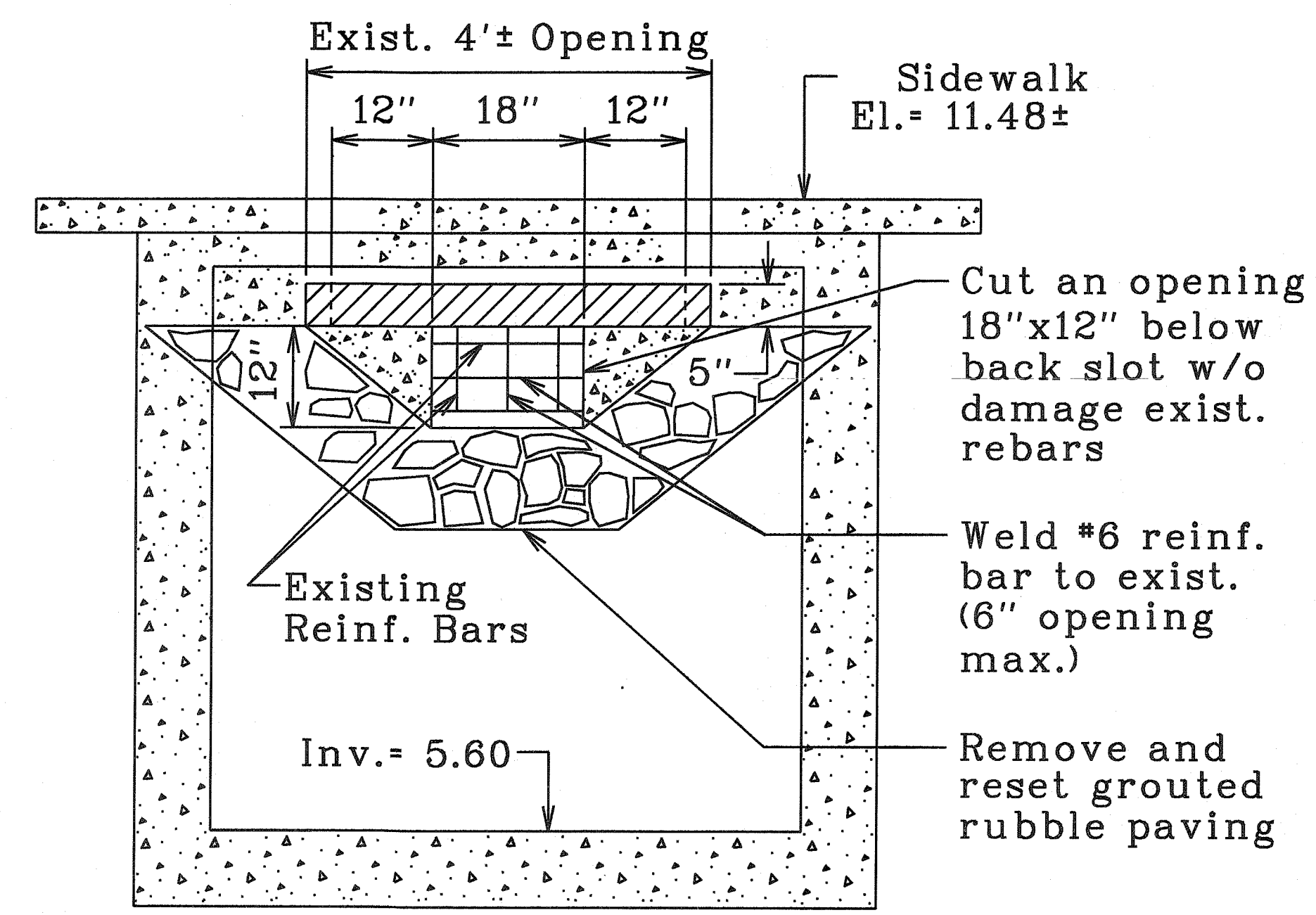
Scale: AS NOTED Date:

SHEET NO. OF SHEETS

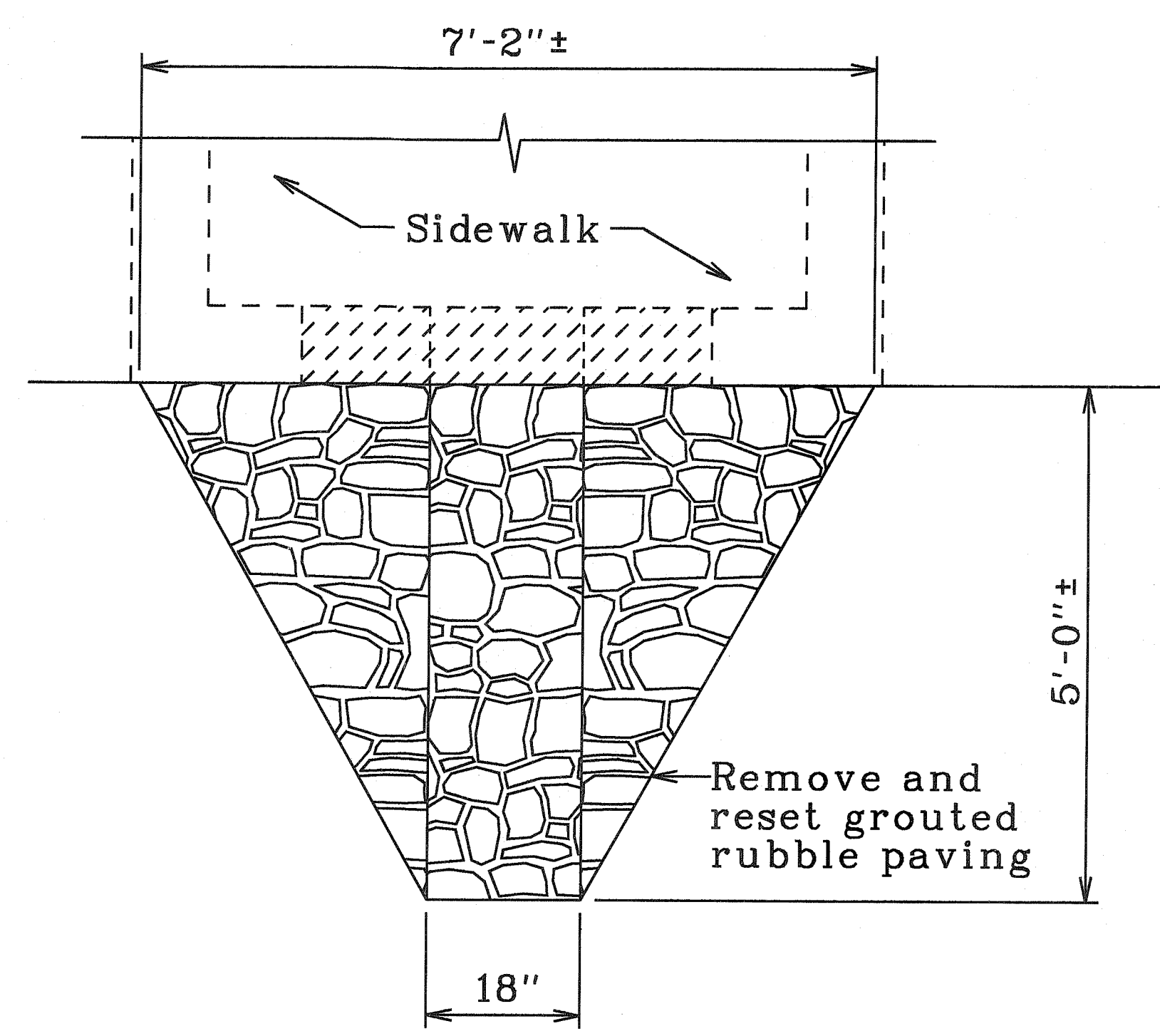
C.O. 84 S-1

DATE	
SURVEY PLOTTED BY	
DRAWN BY	
DESIGNED BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-072-1(35)	2001	0	0

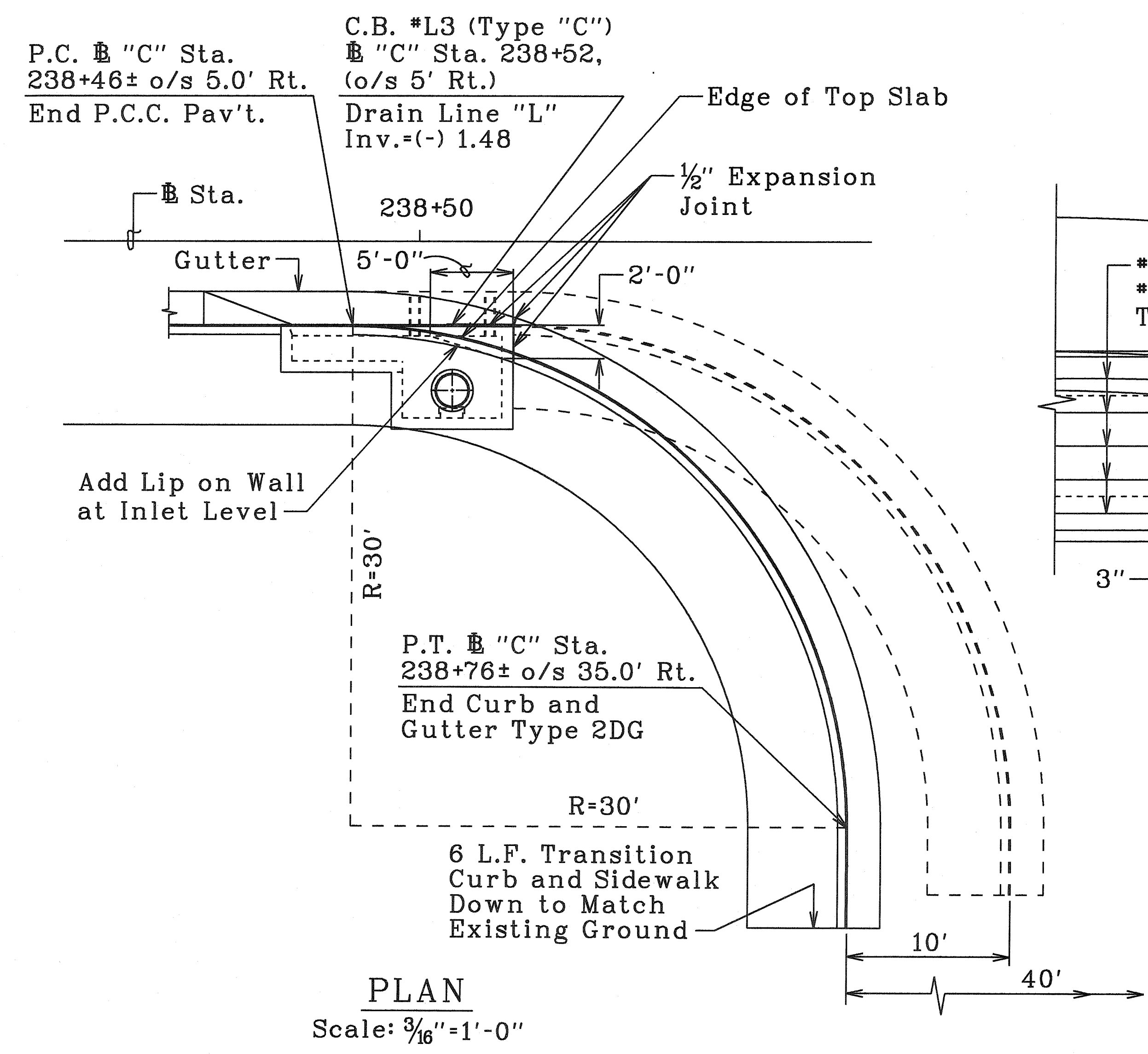


SECTION-ELEVATION



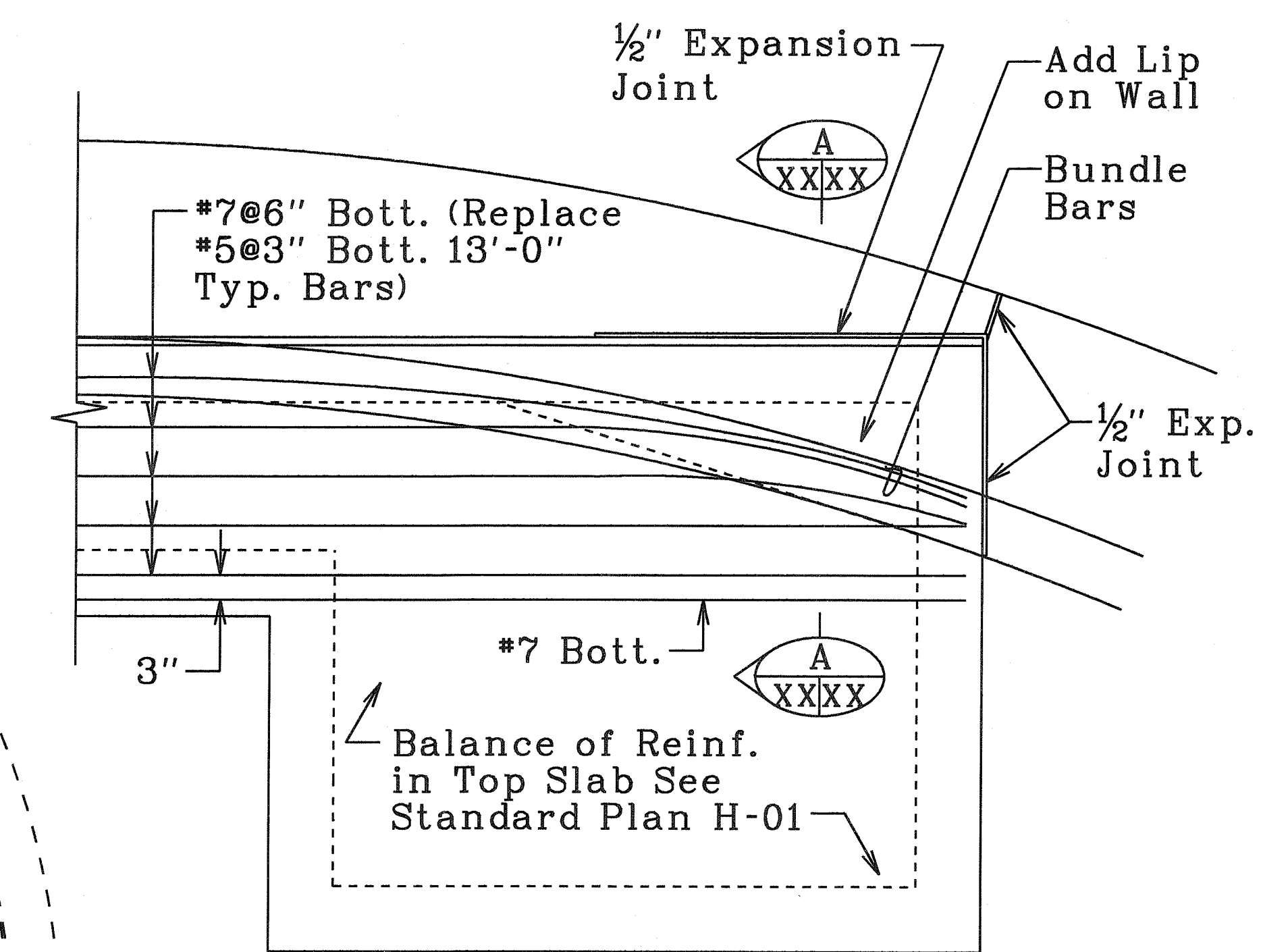
PLAN

C.B. #D2 MODIFICATION
Scale: 3/4"=1'-0"

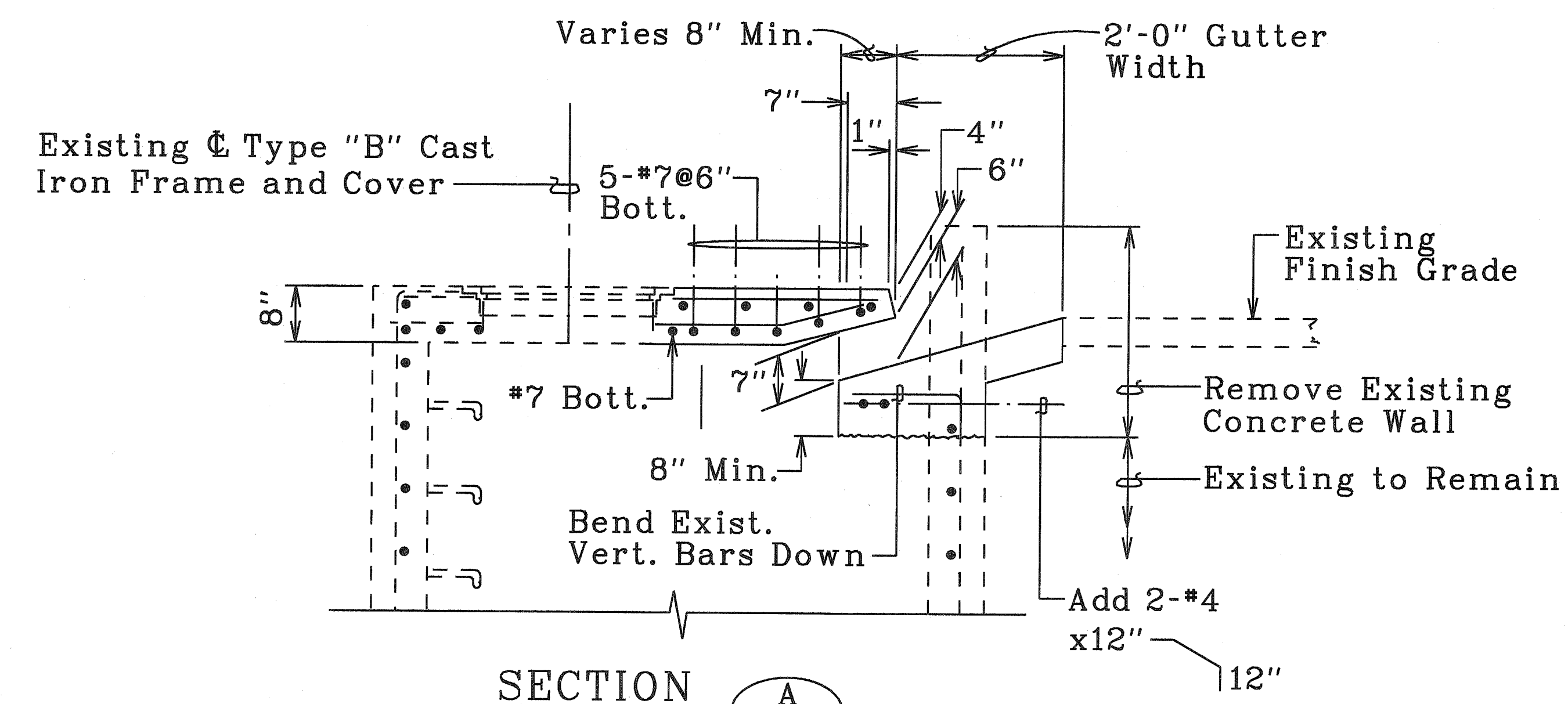


PLAN

Scale: 3/16"=1'-0"



ENLARGED CORNER PLAN
Scale: 3/4"=1'-0"



SECTION

Scale: 3/4"=1'-0"

MODIFIED C.B. #L3 DETAILS
Scale: As Shown

ORIGINAL PLAN	DATE
NOTED BY	DATE
DESIGNED BY	DATE
CHECKED BY	DATE
QUANTITIES BY	DATE
BY	DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE DETAILS

KALANIANA'OLE HWY. WIDENING
EAST HALEMAUMAU ST.
TO KEAHOLE ST.
F.A. PROJ. NO. STP-072-1(35)
Scale: As Shown Date: Mar. 2001

SHEET No. OF SHEETS