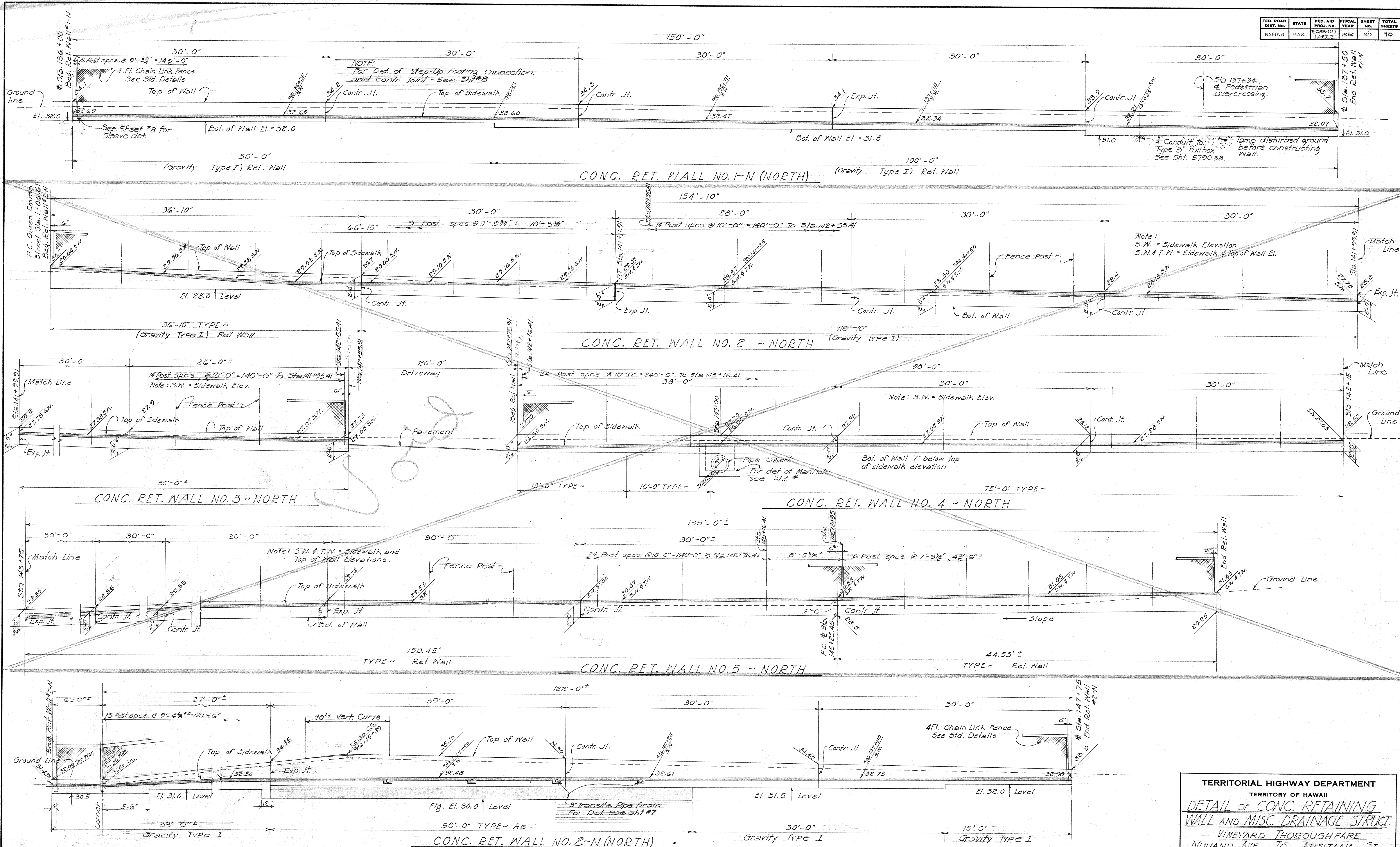


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	005013	1956	39	70



TERRITORIAL HIGHWAY DEPARTMENT
 TERRITORY OF HAWAII
DETAIL OF CONC. RETAINING WALL AND MISC. DRAINAGE STRUCT.
 VINEYARD THOROUGHFARE
 NUUANU AVE TO LUSITANA ST.
 PROJ. NO. F-008-1(1) UNIT 2
 Scale 1" = 5'-0" JUNE 1956

SHEET NO. 1 OF 2 SHEETS

5790.39

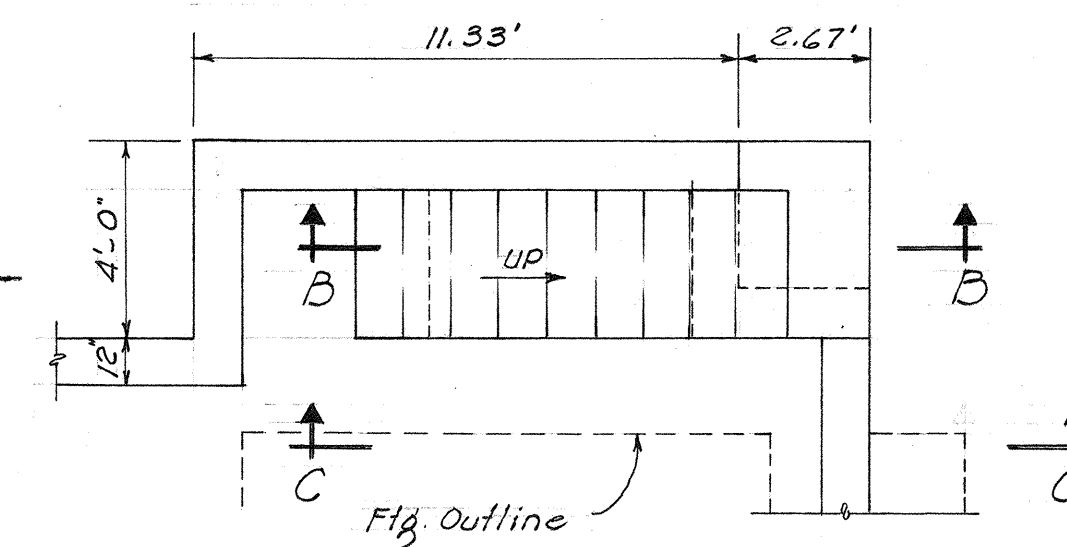
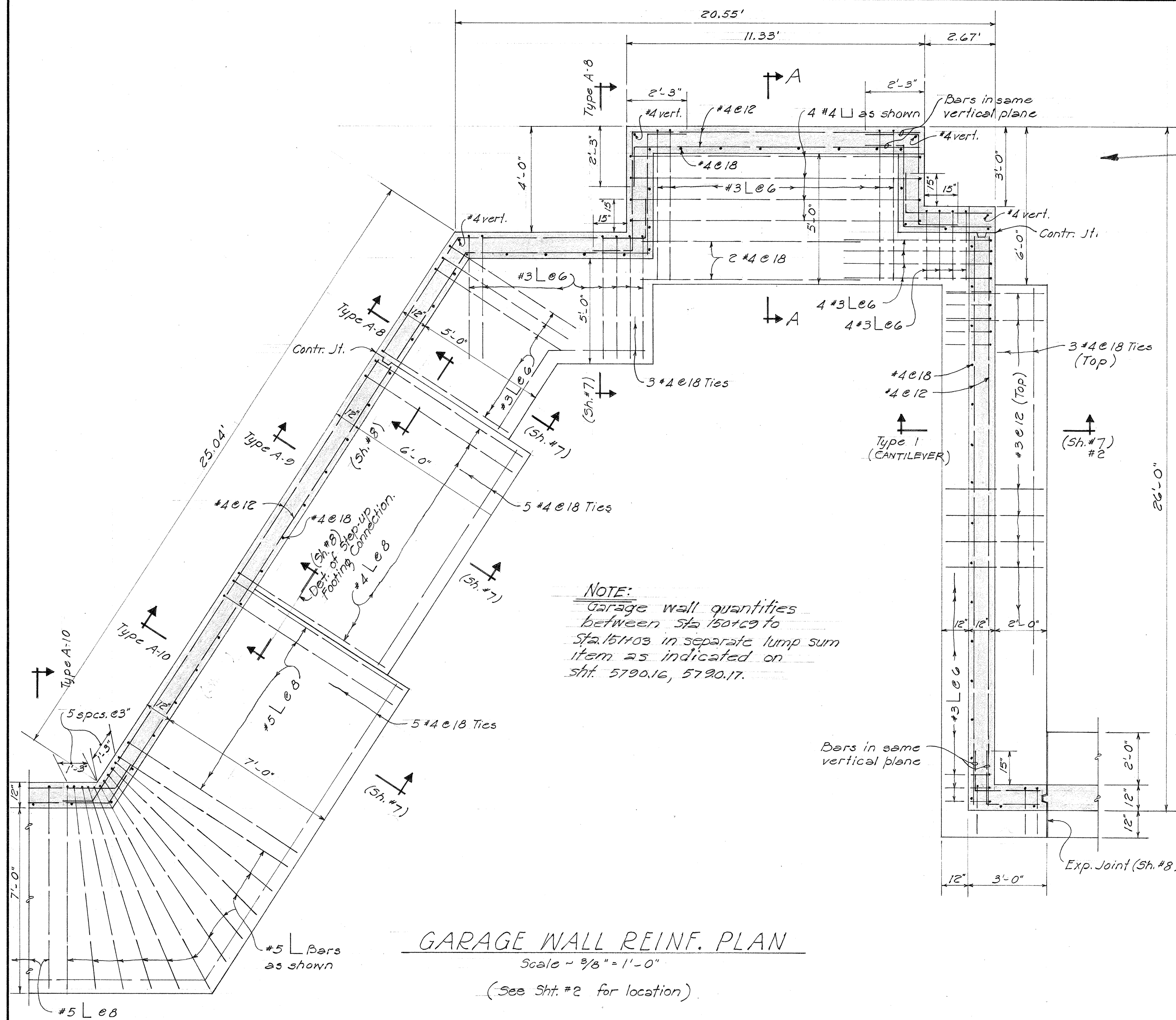
No As-Built Changes on this Sheet.

RETAINING WALL DETAILS
 Scale 1" = 5'-0"

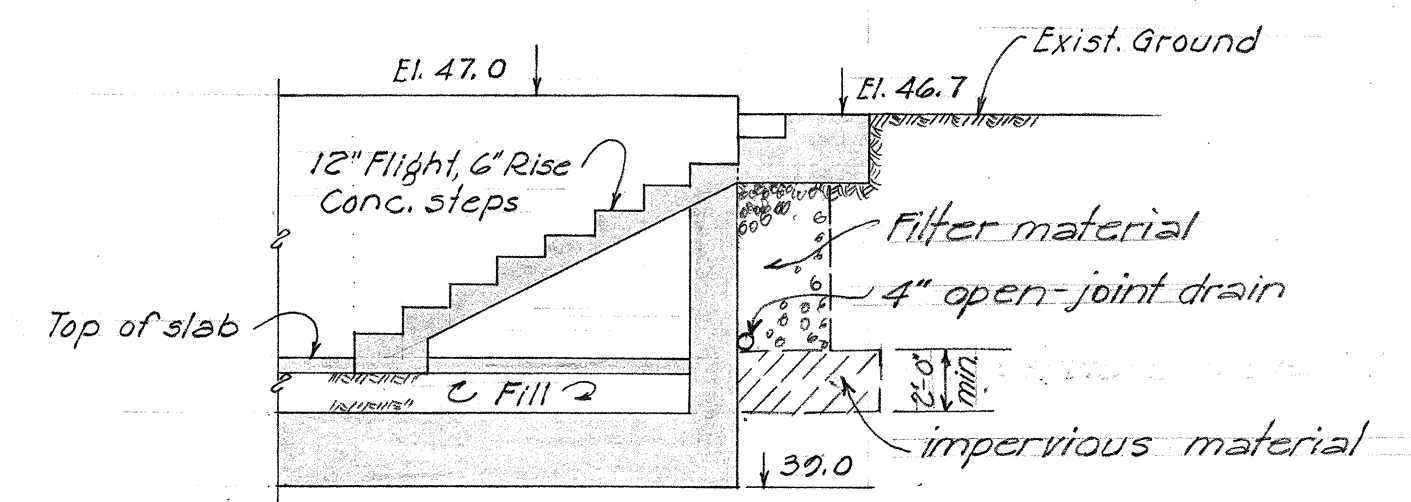
ORIGINAL PLAN	DATE
DESIGNED BY	4-56
DRAWN BY	4-56
CHECKED BY	4-56
NOTED BY	4-56
QUANTITIES CHECKED BY	4-56
CHECKED BY	4-56

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DESIGNED BY <i>P. Genshuta</i>	" <i>4/56</i>
	DRAWN BY <i>S. Isamu</i>	" <i>4/56</i>
	TRACED BY	"
	QUANTITIES BY <i>F. Ching & R.S.</i>	"
	QUANTITIES CHECKED BY <i>M.K.</i>	"
	CHECKED BY	"
NOTE BOOK No.		

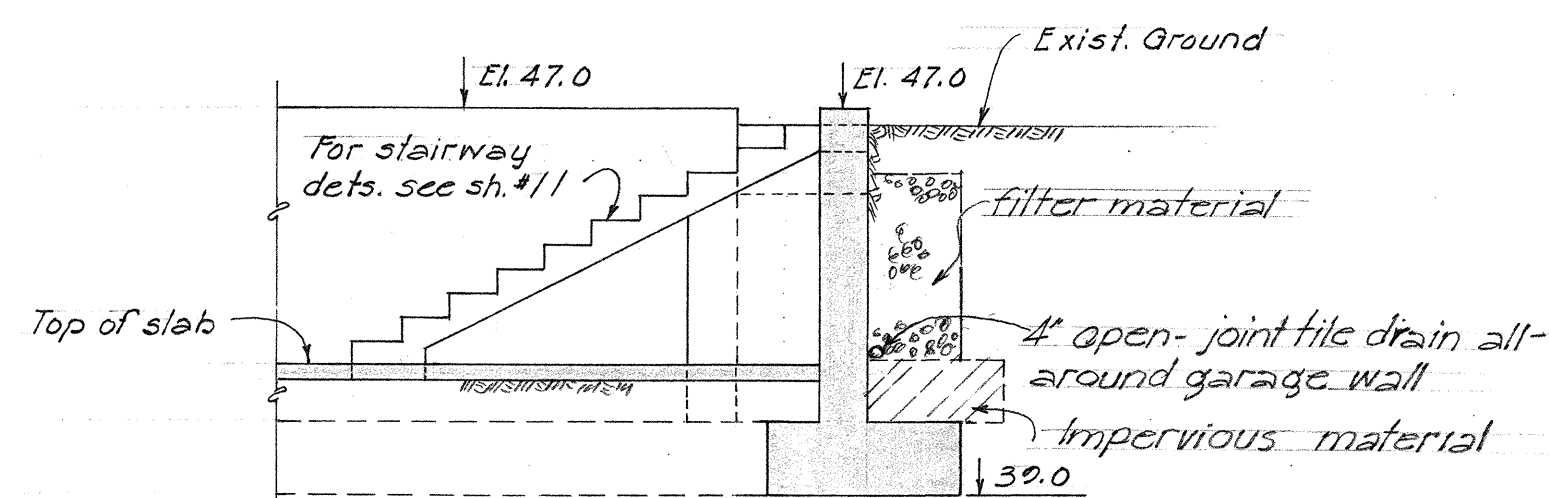
FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
HAWAII	HAW.	F-098-1(1) UNIT 2	1956	41	70



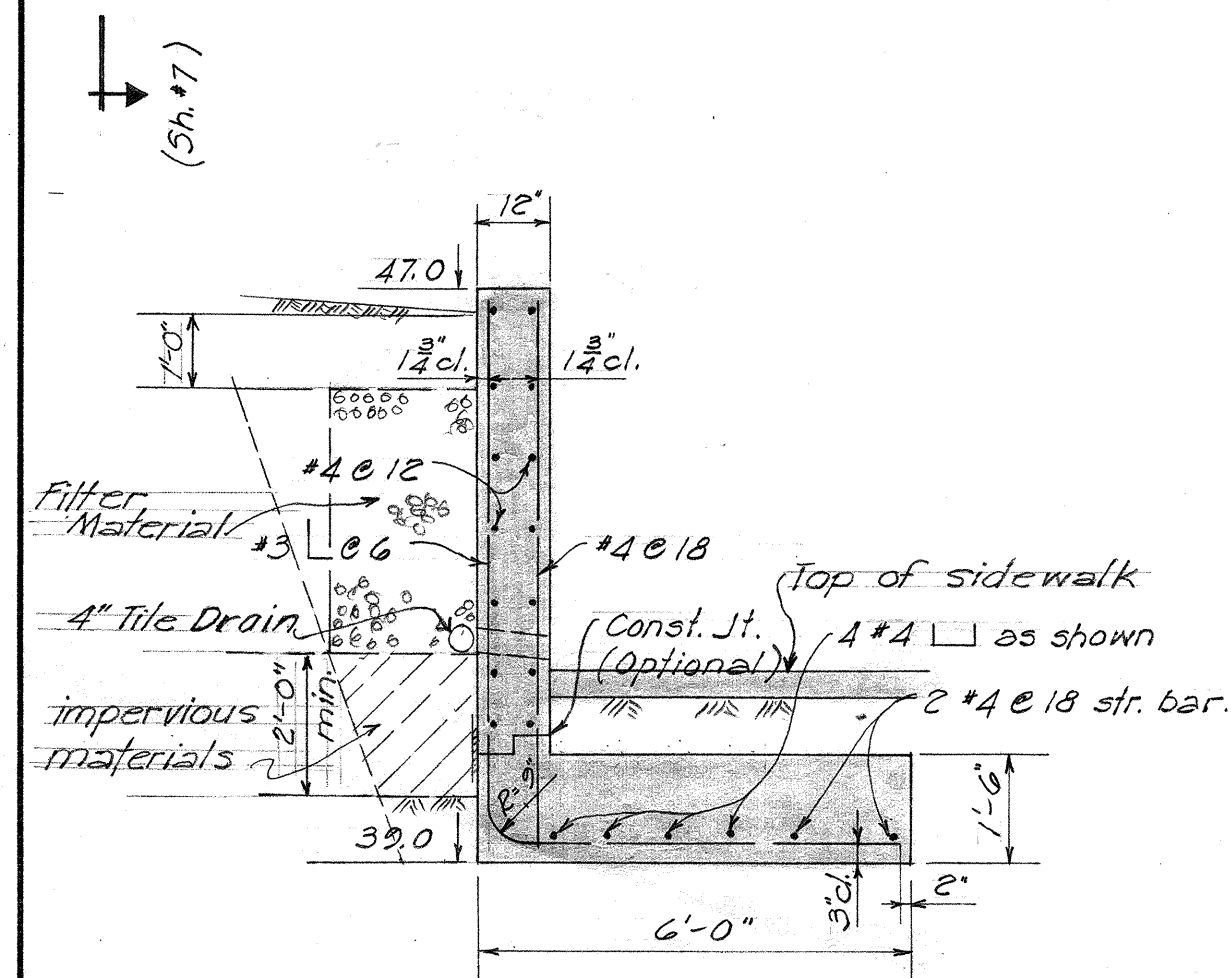
STAIRWAY PLAN
Scale ~ 1/4" = 1'-0"



SECTION B-B
Scale ~ 1/4" = 1'-0"



SECTION C-C
Scale - 1/4" = 1' - 0"



SECTION A-A
Scale ~ $\frac{3}{8}" = 1'-0"$

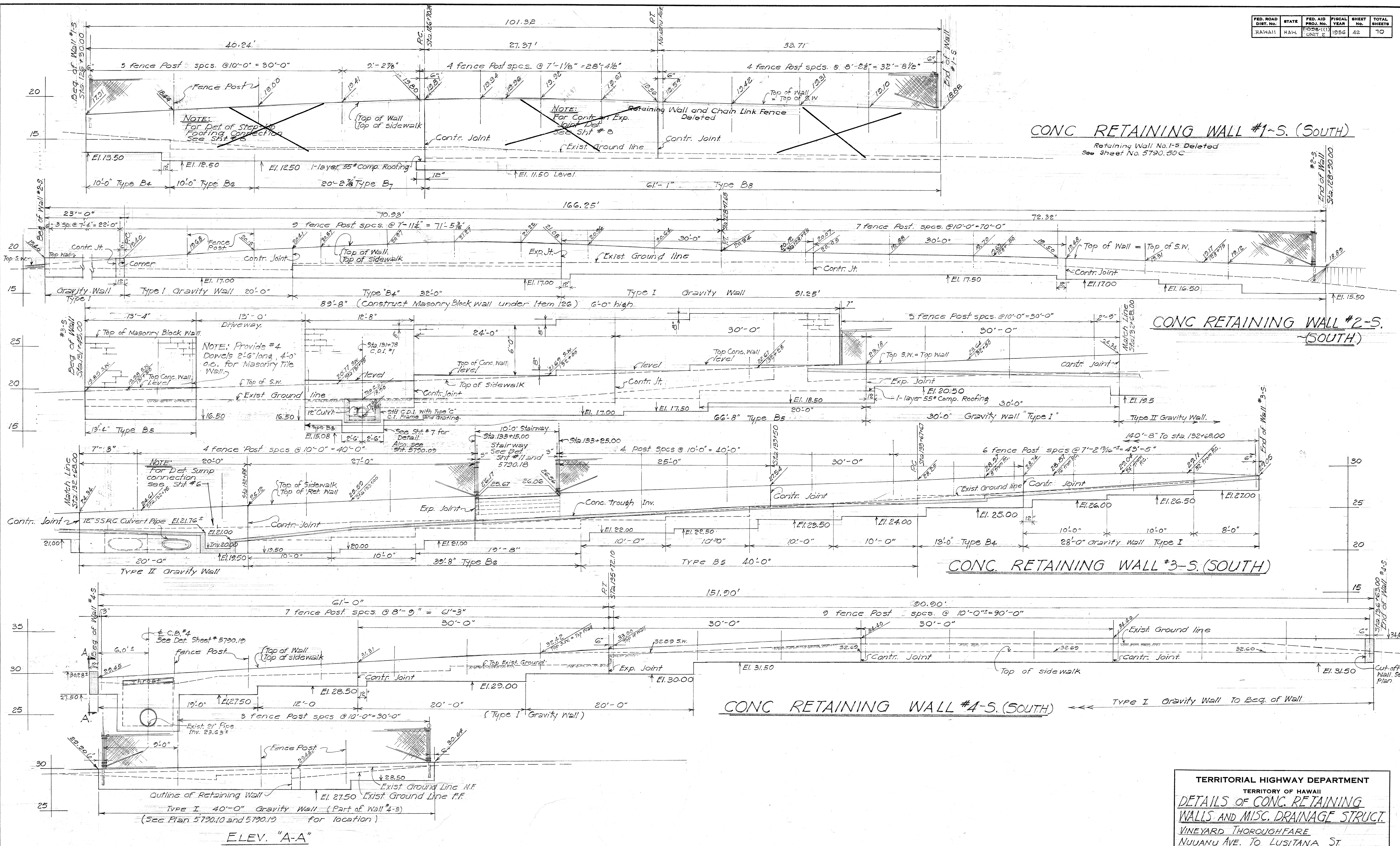
TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
DETAIL OF CONC. RETAINING
WALL AND MISC. DRAINAGE STRUCT.
VINEYARD THOROUGHFARE
NUUANU AVE TO LUSITANA ST.
PROJ NO F-098-1(K) UNIT 2
Scale: AS SHOWN JUNE 1956

SHEET No. 3 OF 12 SHEETS

No As-Built Changes on this Sheet.

5790.41

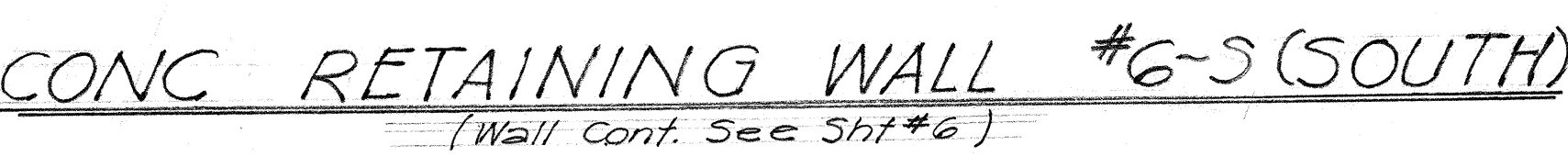
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	100-111	1956	42	10



TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
DETAILS OF CONC. RETAINING WALLS AND MISC. DRAINAGE STRUCT.
VINEYARD THOROUGHFARE
NUUANU AVE. TO LUSITANA ST.
Proj. No. F-098-10(1) UNIT 2
Scale: 1" = 5'-0"
June 1956

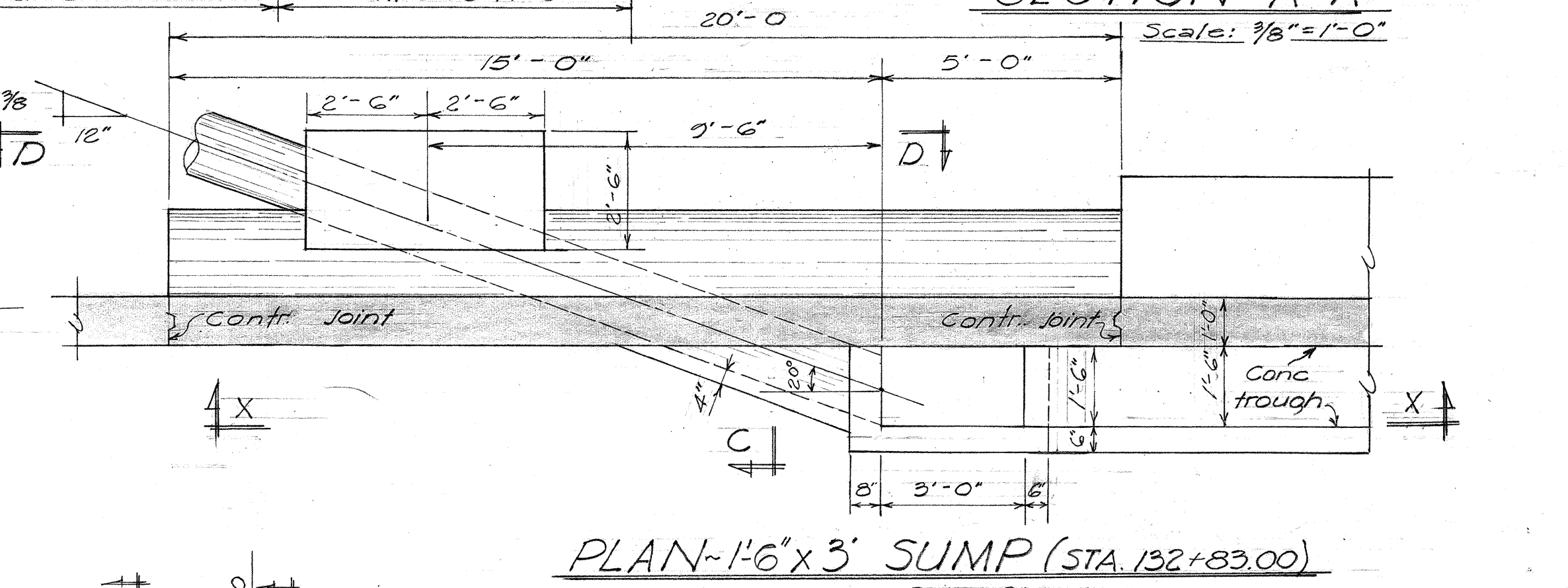
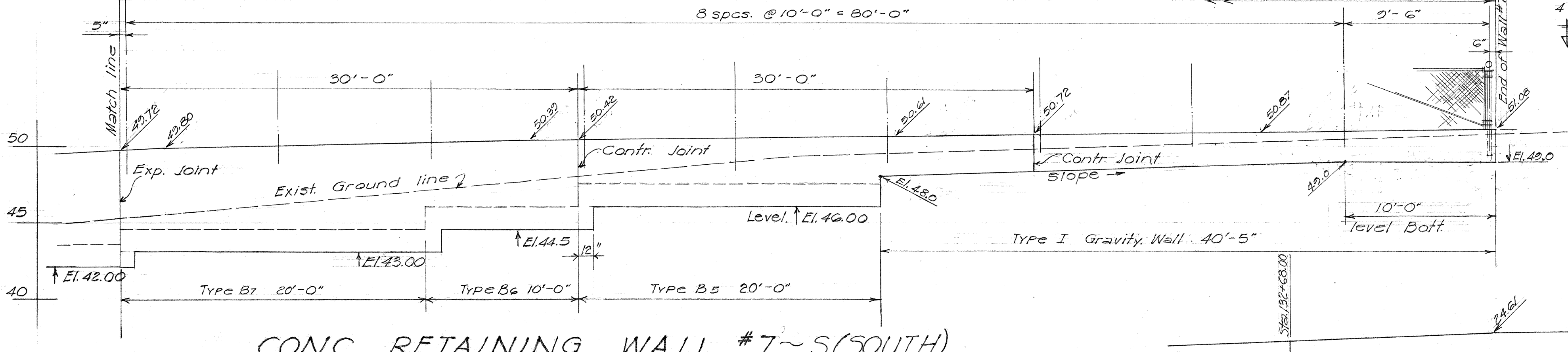
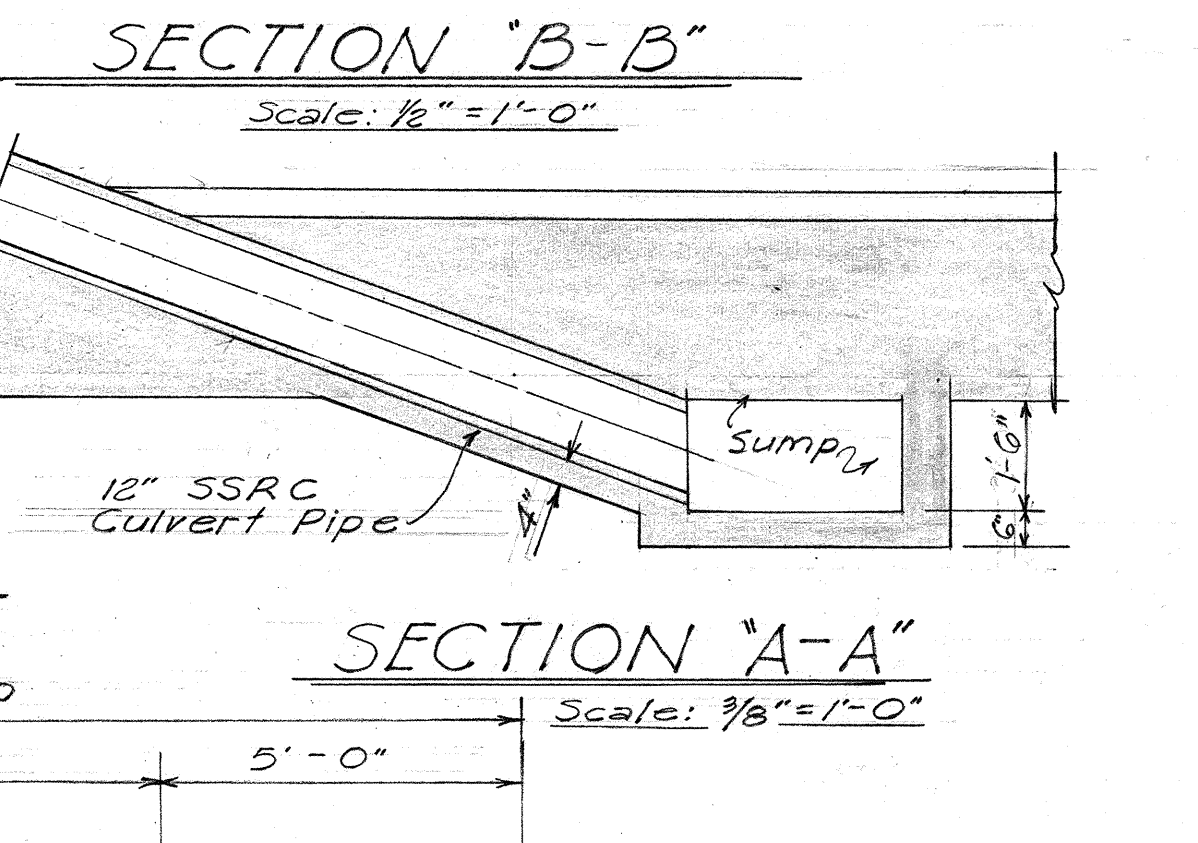
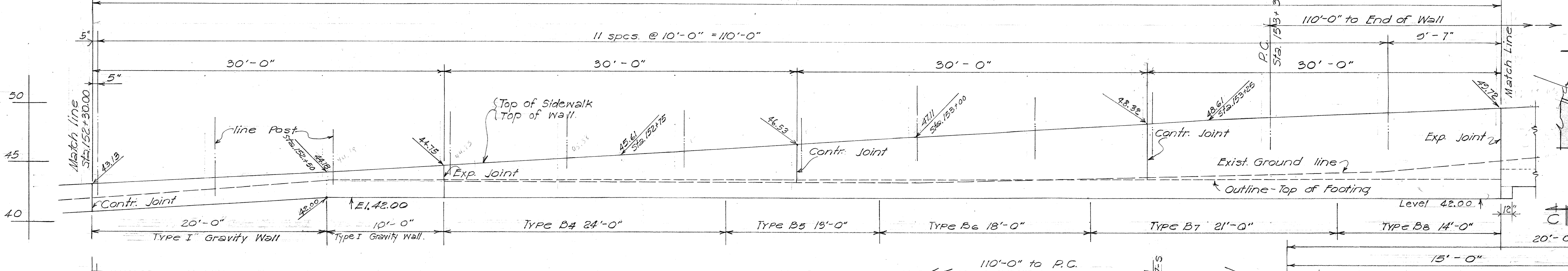
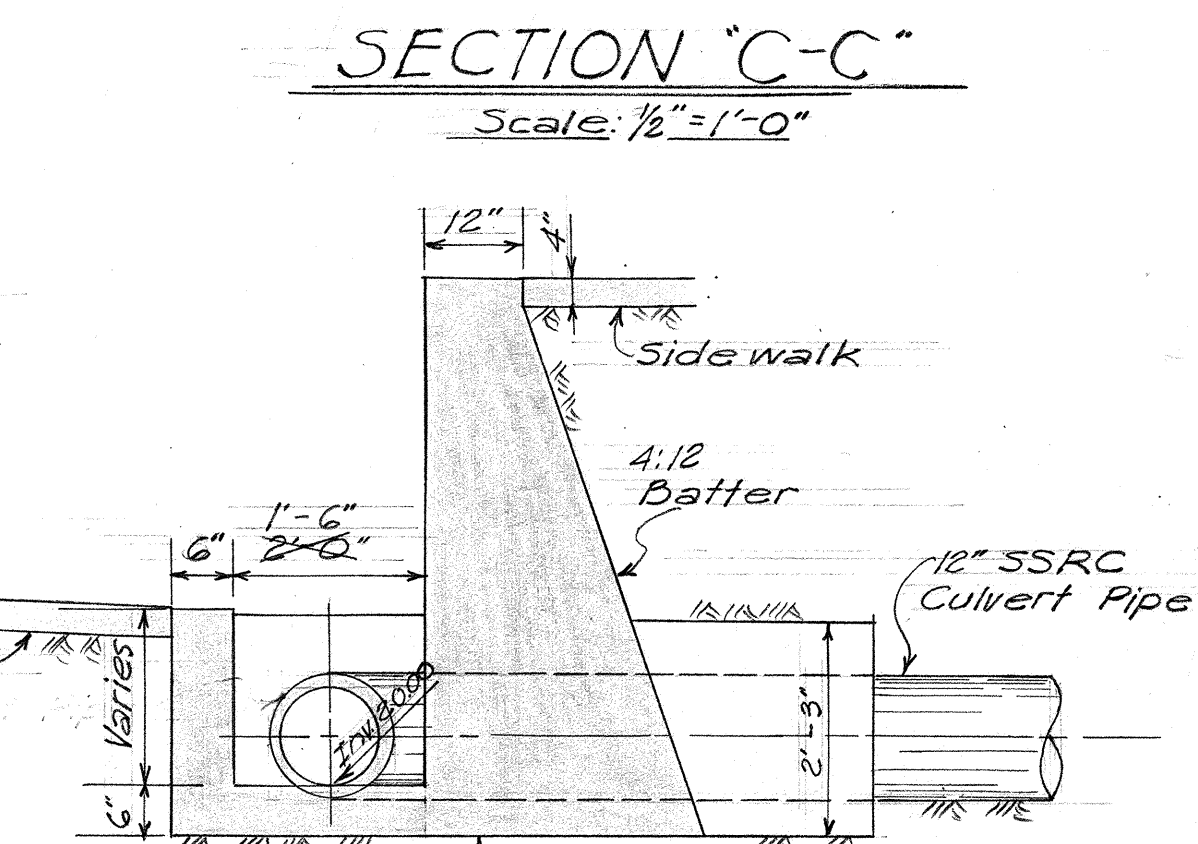
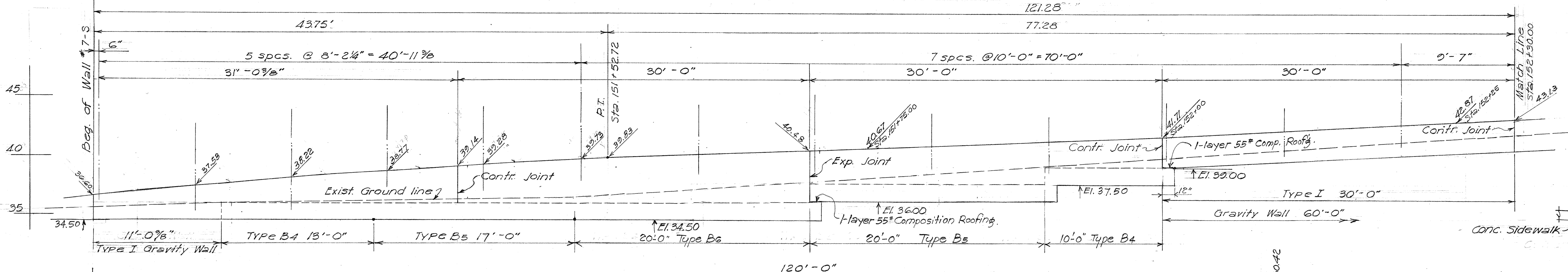
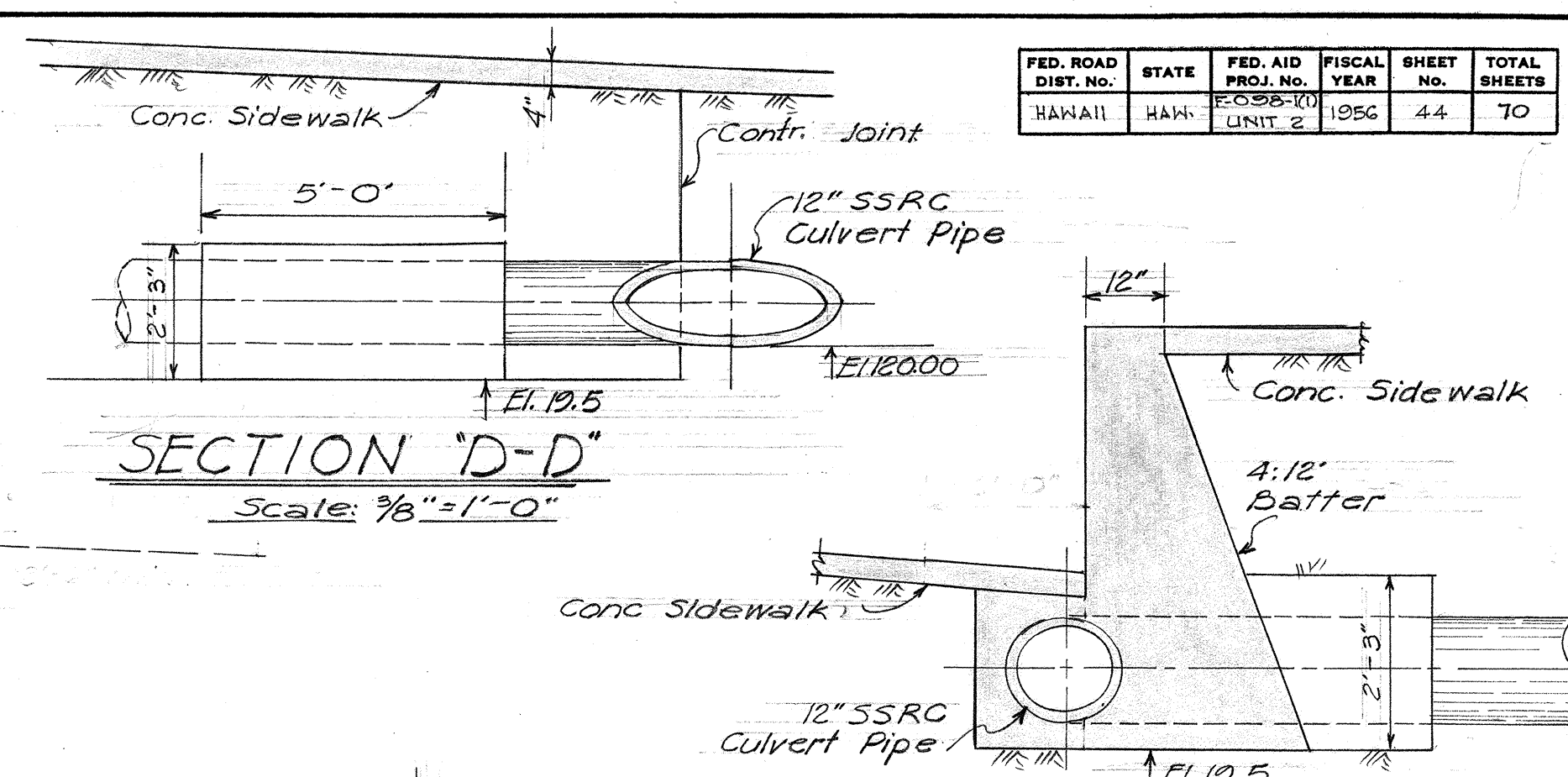
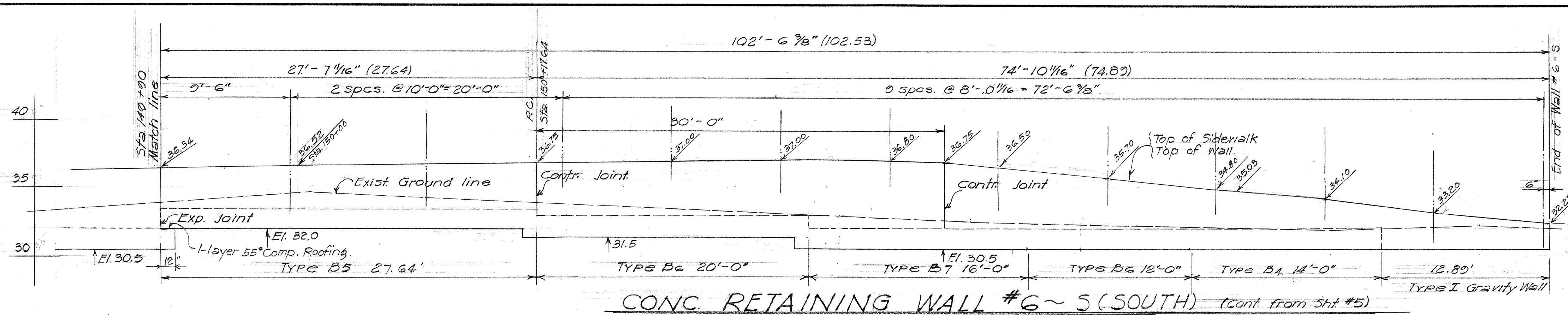
DATE: June 26, 1956
DESIGNED BY: S. M. KAWA
DRAWN BY: G. M. KAWA
QUANTITIES BY: F. C. K.
CHECKED BY: M. K.
ORIGINAL PLAN NO.
NOTE BOOK NO.

ORIGINAL PLAN	SURVEY PLOTTED BY DESIGNED BY <u>P. KAWAMURA</u> DRAWN BY <u>G. TAKAHASHI-SHIRO</u> TRADED BY QUANTITIES BY QUANTITIES CHECKED BY CHECKED BY	DATE " <u>JUNE 56</u> " <u>JUNE 56</u> " " " " "
NOTE BOOK No.		

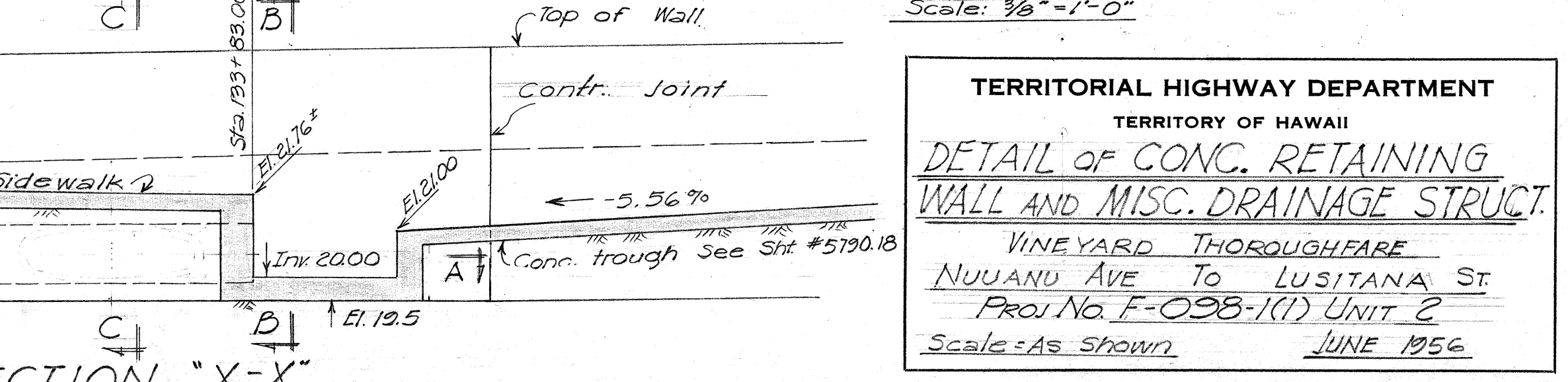
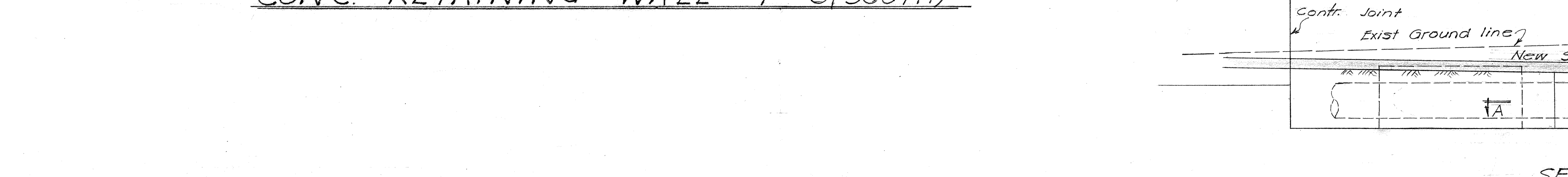


SHEET No. 5 OF 12 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-098-1(1)	1956	44	70



CONC. RETAINING WALL #7~S(SOUTH)



PLAN-1'6\"/>

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
DETAIL OF CONC. RETAINING WALL AND MISC. DRAINAGE STRUCT.
VINEYARD THOROUGHFARE
NUUANU AVE TO LUSITANA ST.
PROJ. NO. F-098-1(1) UNIT 2
Scale: As Shown JUNE 1956

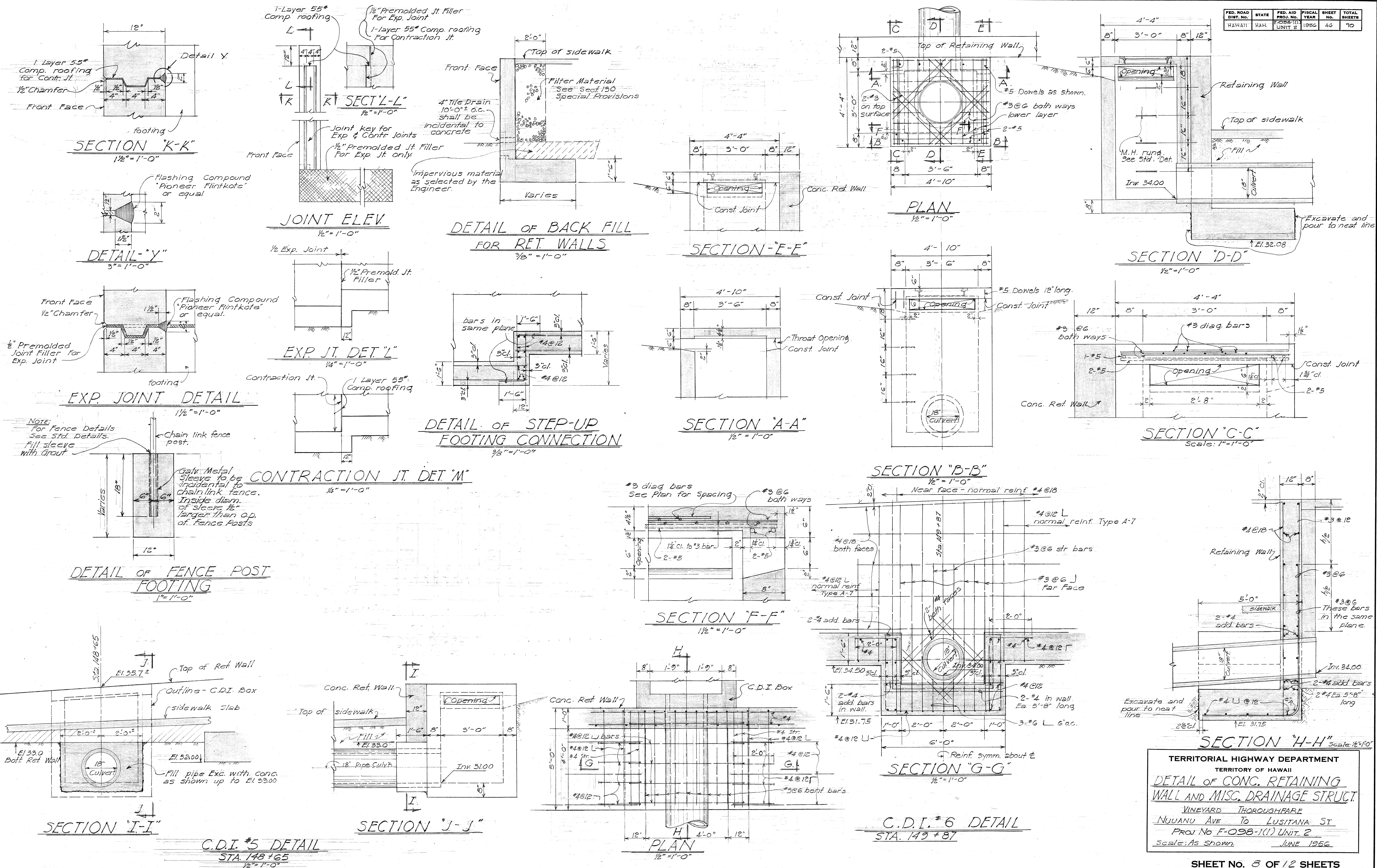
SHEET NO. 6 OF 12 SHEETS

No As-Built Changes on this Sheet

5790.44

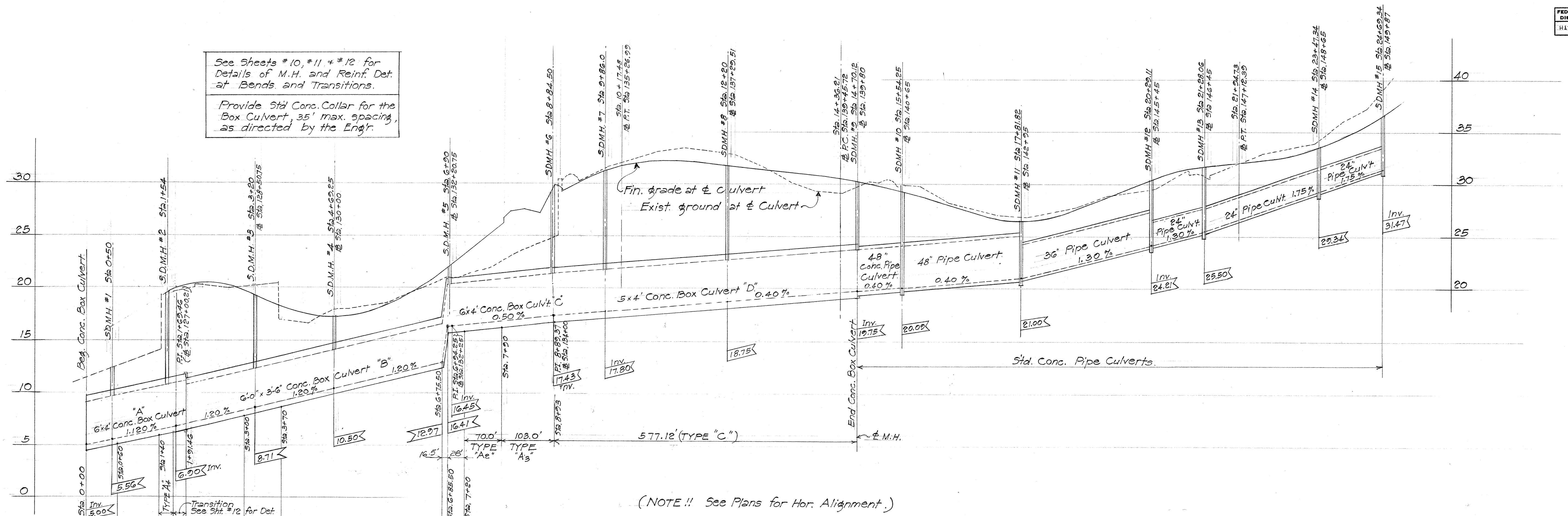
SURVEY PLOTTED BY: [Name]
DESIGNED BY: [Name]
DRAWN BY: [Name]
CHECKED BY: [Name]
DATE: [Date]

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
HAWAII	HAW.	E-098-1(1) UNIT 2	1956	46	70



See Sheets #10, #11 & #12 for Details of M.H. and Reinf. Det. at Bends and Transitions.

Provide Std. Conc. Collar for the Box Culvert, 35' max. spacing, as directed by the Engr.



(NOTE!! See Plans for Hor. Alignment.)

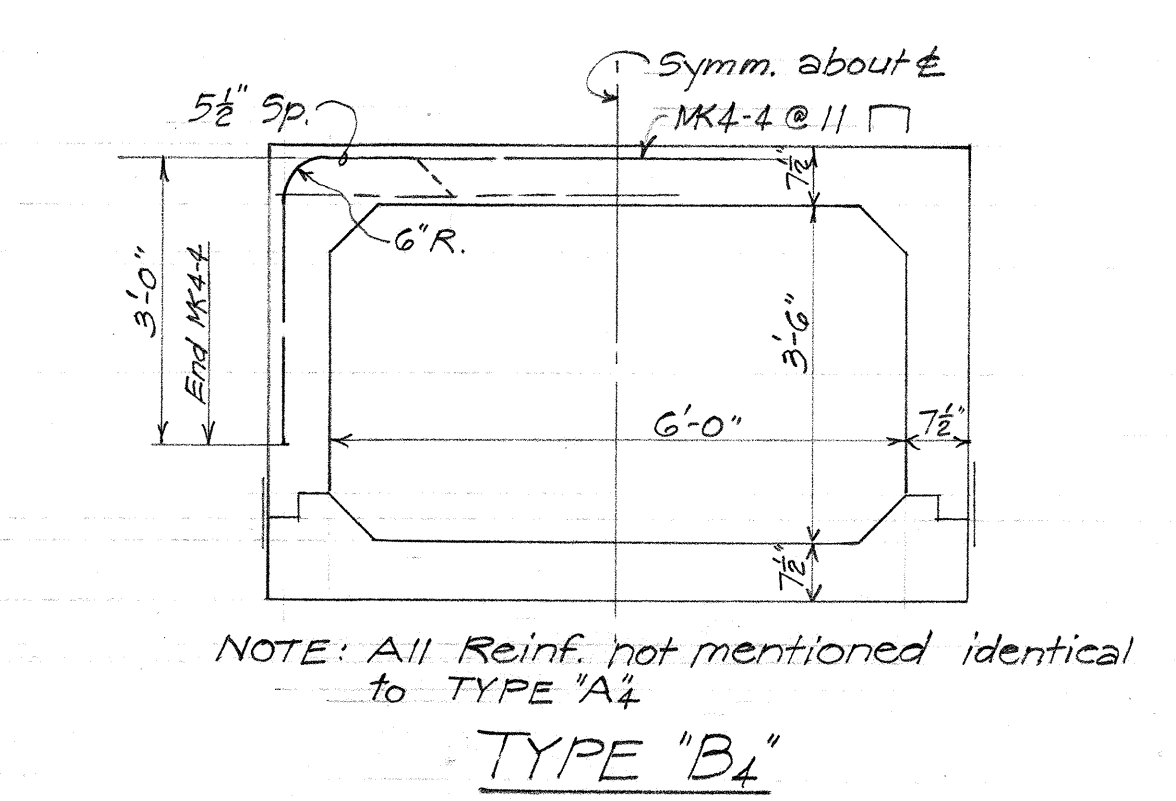
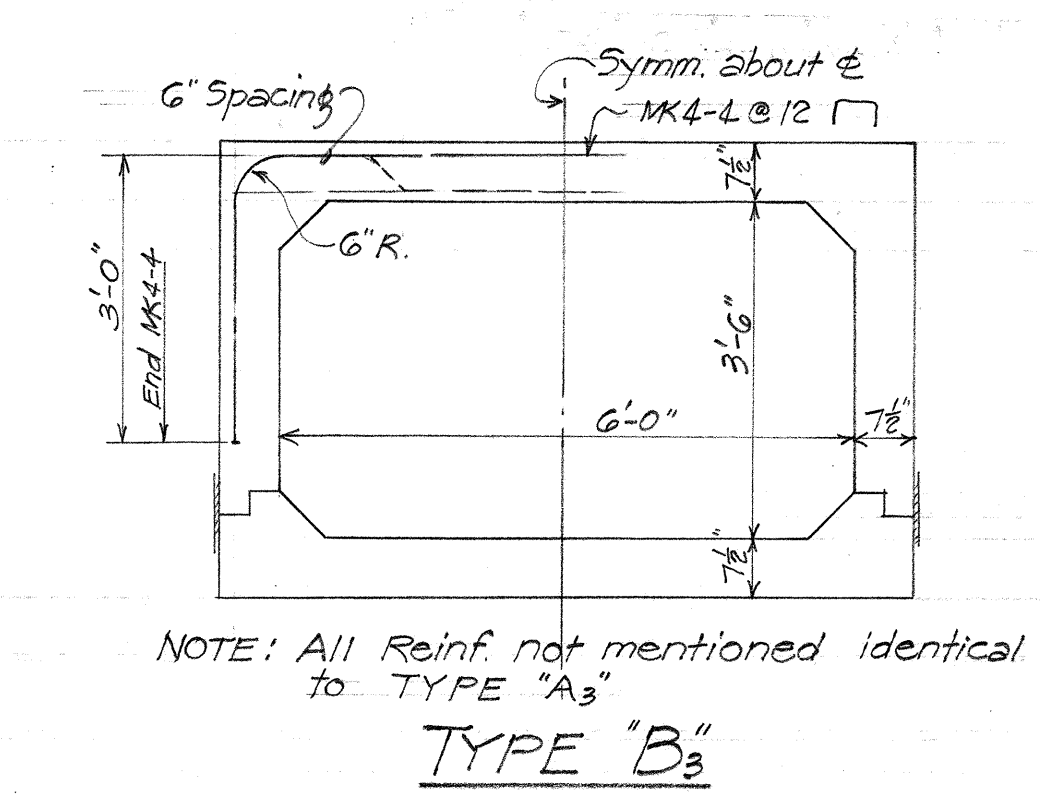
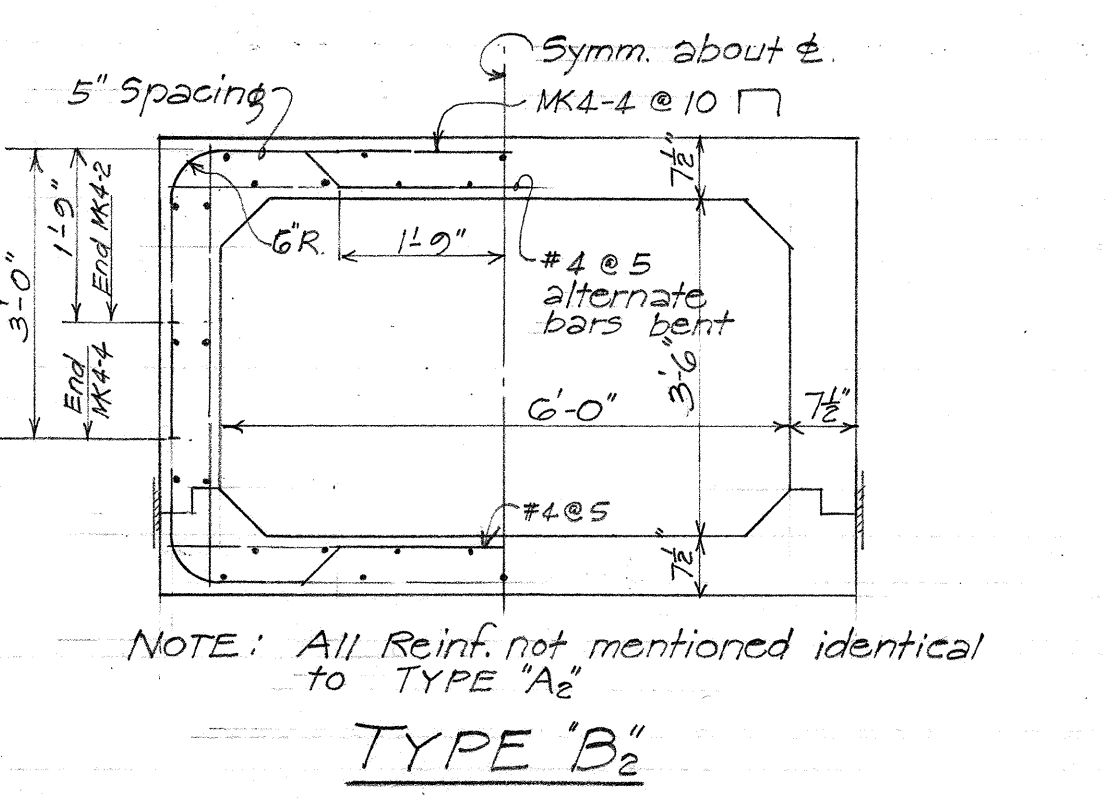
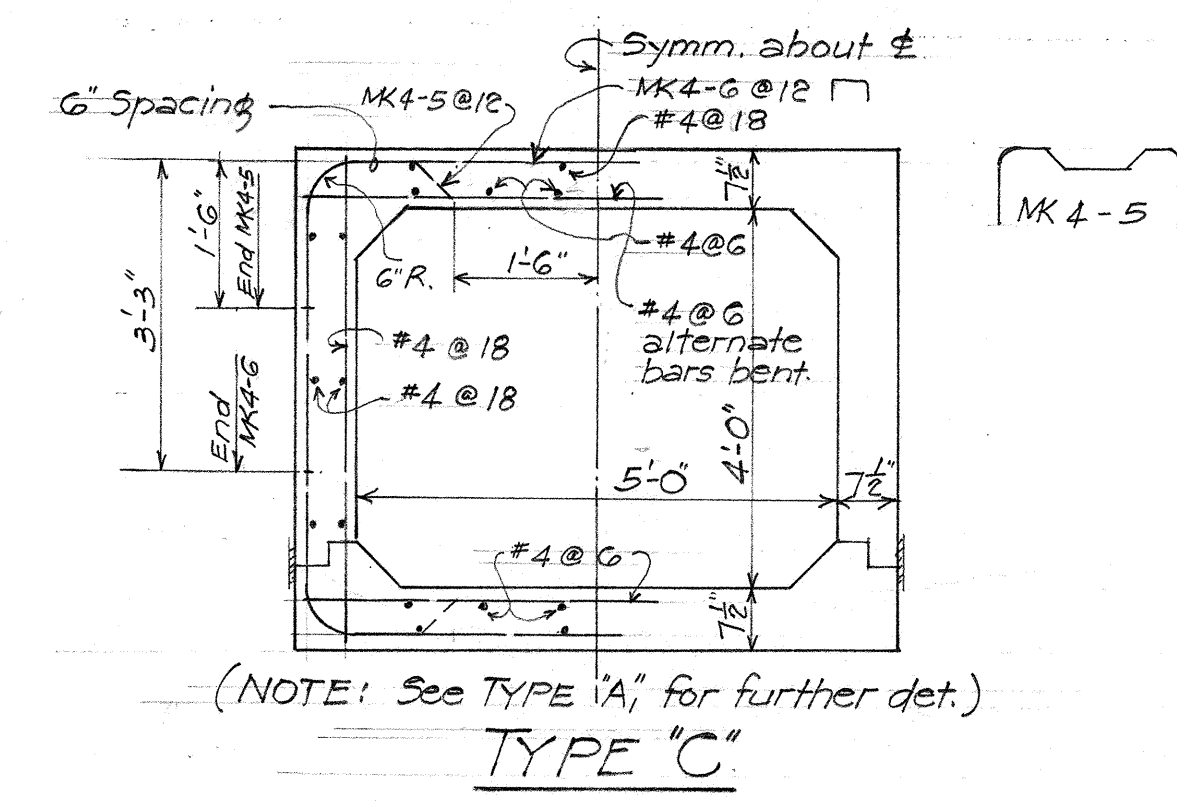
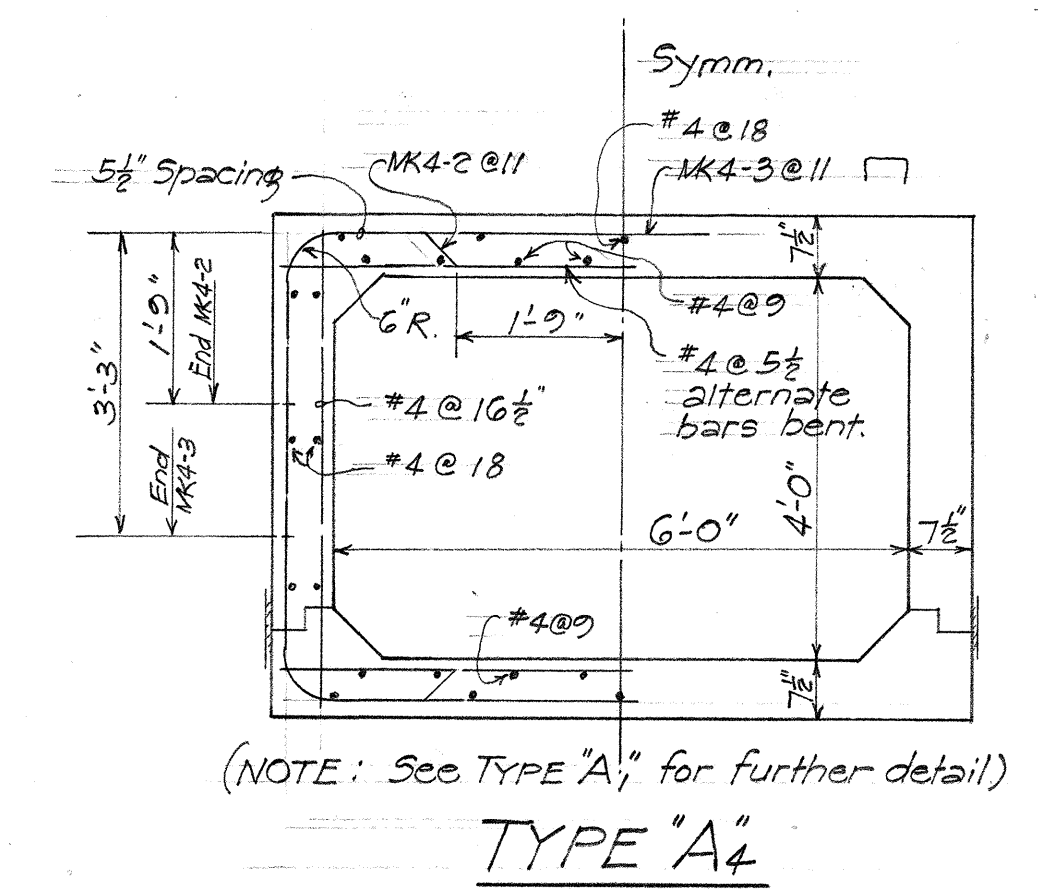
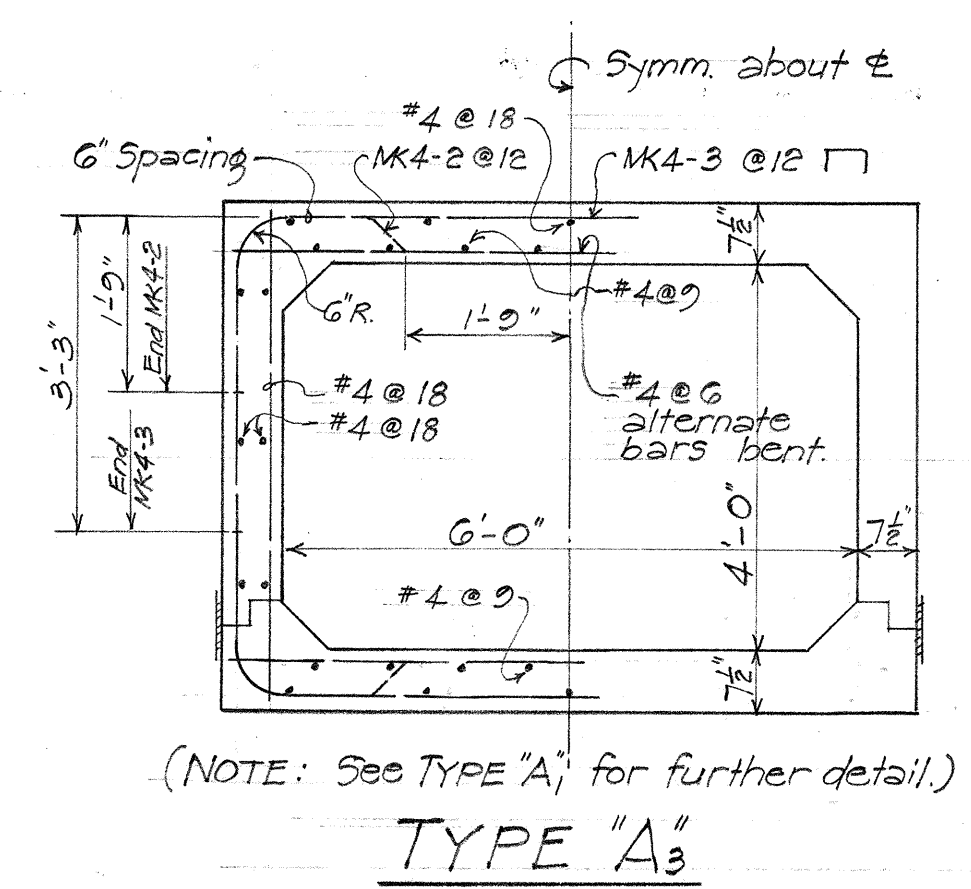
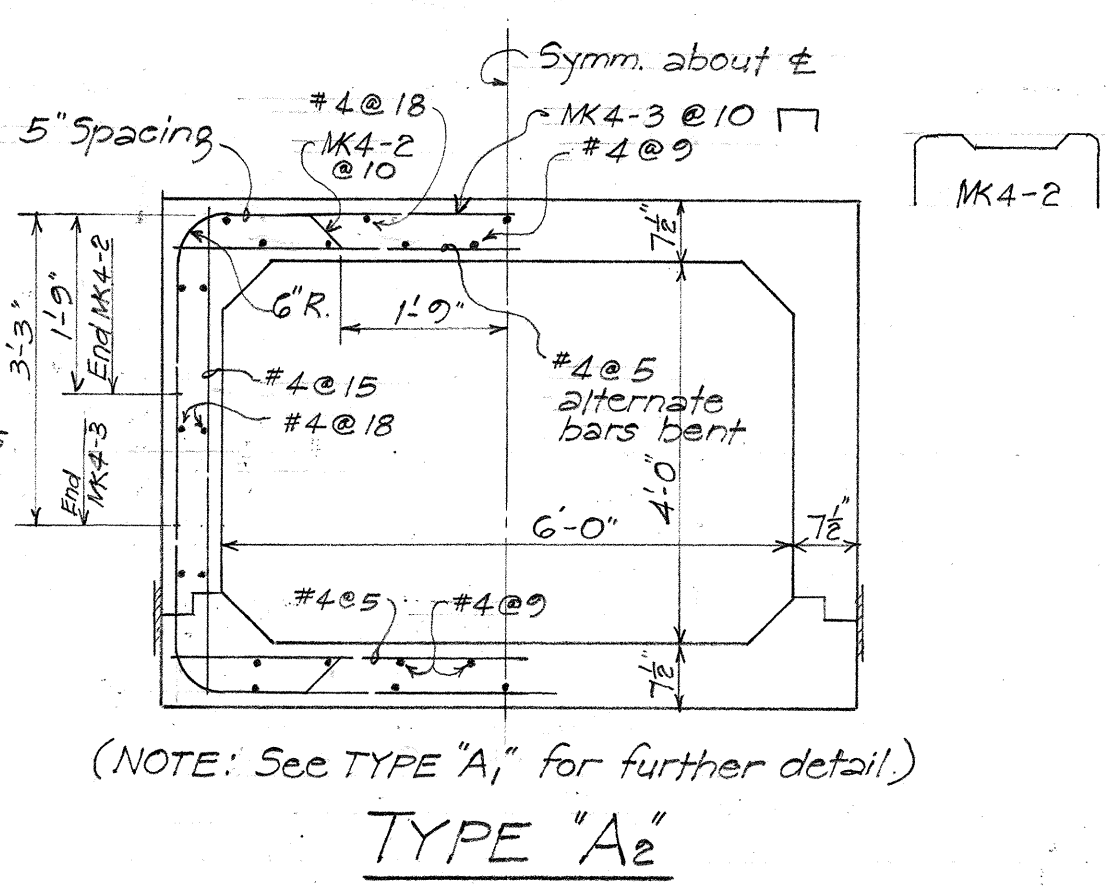
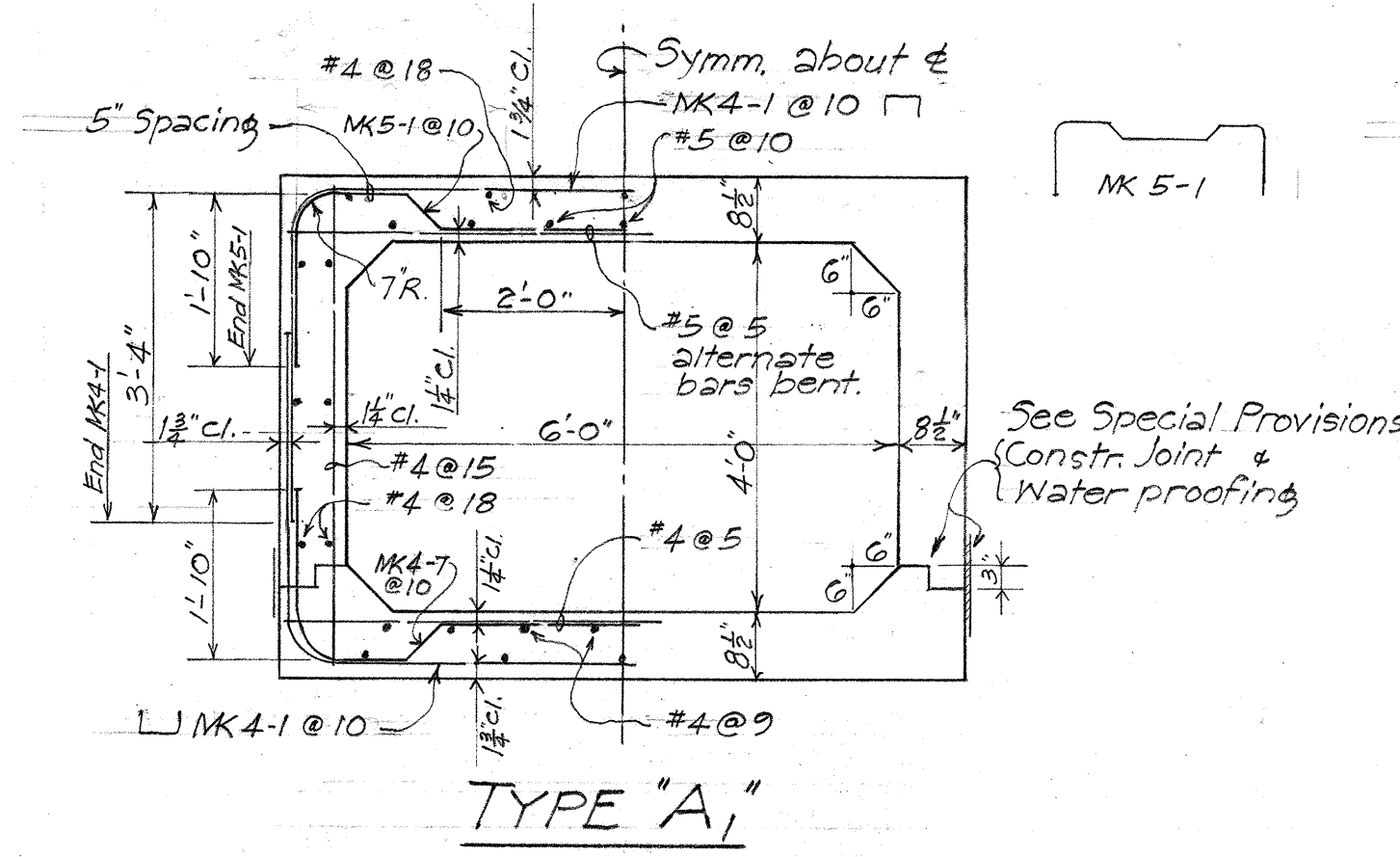
LONG. SECTION AT & CULVERT

Scale { Hor. 1"=100'-0"
Vert. 1"=5'-0"

ESTIMATED QUANTITIES
REINF. CONCRETE BOX CULVERT & S.D.M.H.

CLASS AT CONCRETE — 834.0 c.yds.
REINFORCING STEEL — 107,500 lbs.
STRUCTURAL EXCAVATION — 4,265.0 c.yds.
TYPE "A" MANHOLE FRAME & COVER — 9 each

NOTE: Above quantities include all box culverts plus S.D.M.H. #1 to #2 inclusive only.
All pipe culverts, including laterals and N.H. #10 to #15 incl. not included in above quants.

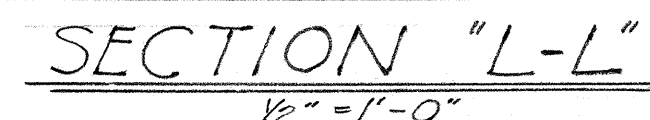
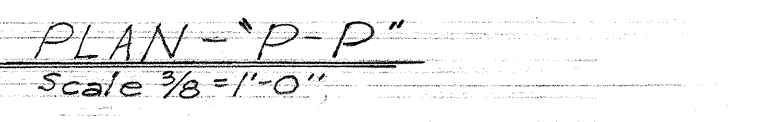
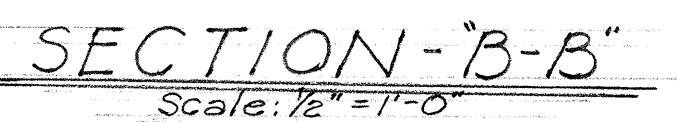
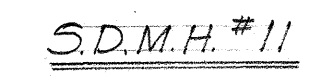
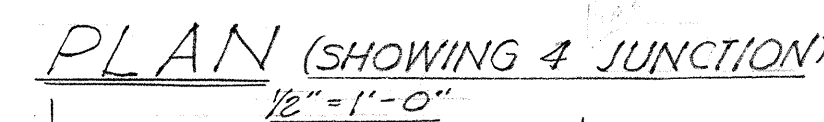
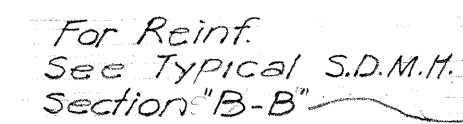
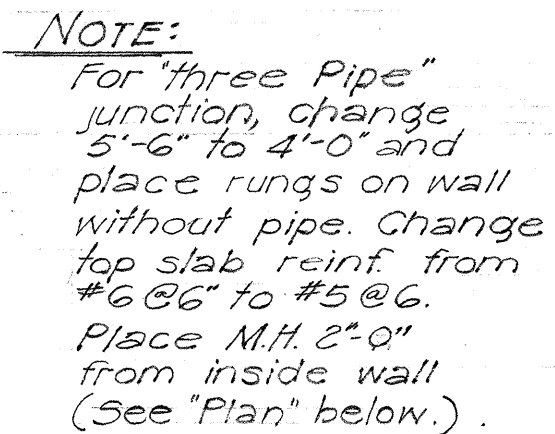
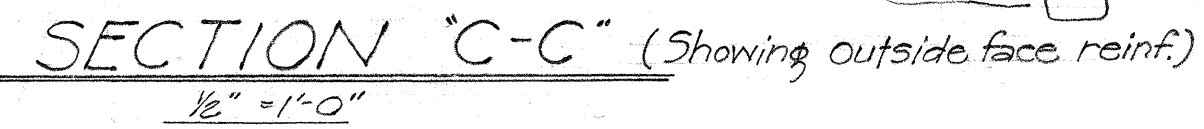
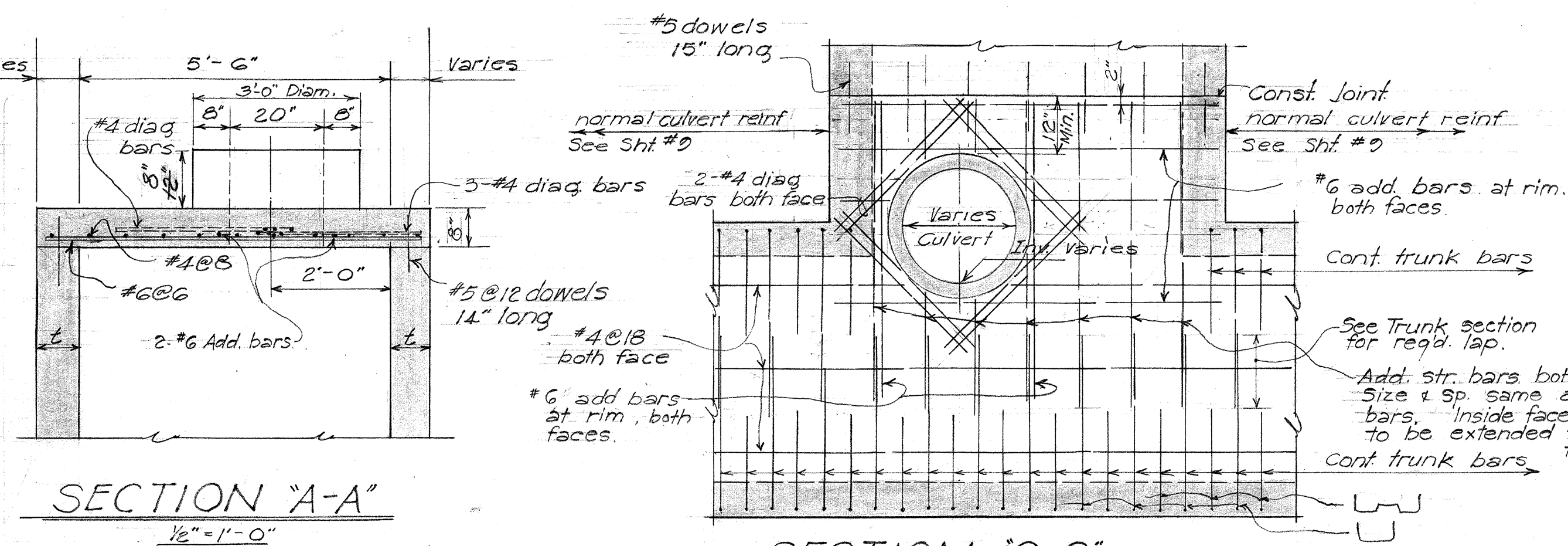


BOX CULVERT SECTIONS
1/2" = 1'-0"

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
DETAIL OF CONC. RETAINING WALL AND MISC DRAINAGE STRUCT.
VINEYARD THOROUGHFARE
NUUANU AVE To LUSITANA ST.
Proj No F-098-1(1) UNIT 2
Scale: As Shown. JUNE 1956

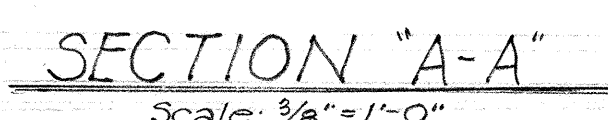
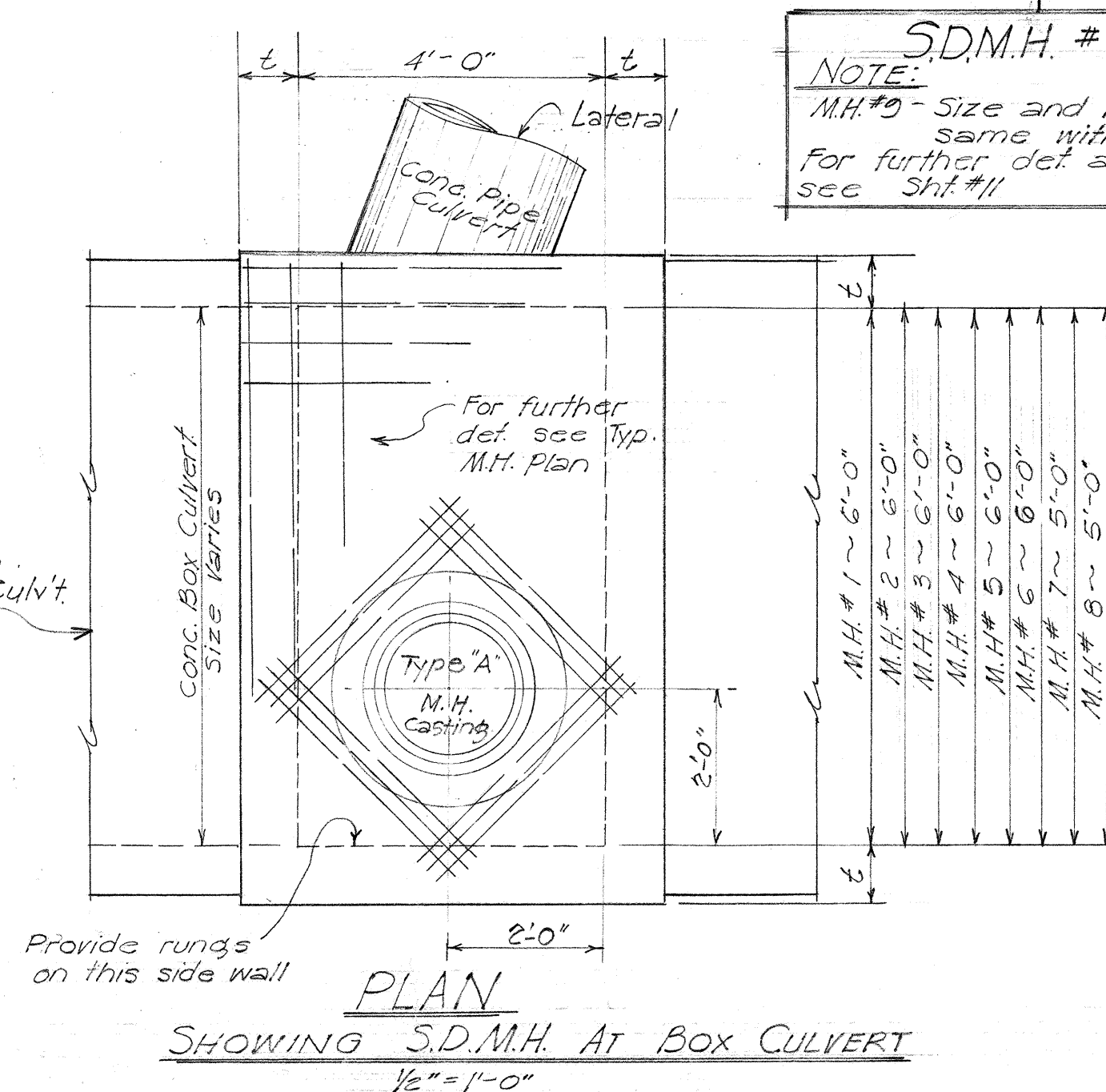
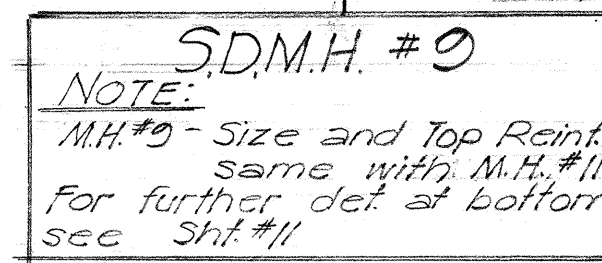
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-008-1(1) UNIT 2	1956	48	70

SDMH	t
#1	8"
#2	9"
#3	9"
#4	8"
#5	8"
#6	9"
#7	9"
#8	9"
#9	9"
#10	9"
#11	9"
#12	9"
#13	9"
#14	8"
#15	9"



DETAIL OF S.D. MANHOLE #11

REPRESENTS TYPICAL MANHOLE for
4-PIPE JUNCTION:



DETAIL OF S.D.M.H #5

STA. 132 + 20.75

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII

DETAIL OF CONC. RETAINING
WALL AND MISC. DRAINAGE STRUCT.

VINEYARD THOROUGHFARE
NUUANU AVE To LUSITANA ST
PROJ No F-098-1(1) UNIT 2
Scale: 1/2"=1'-0" JUNE 1956

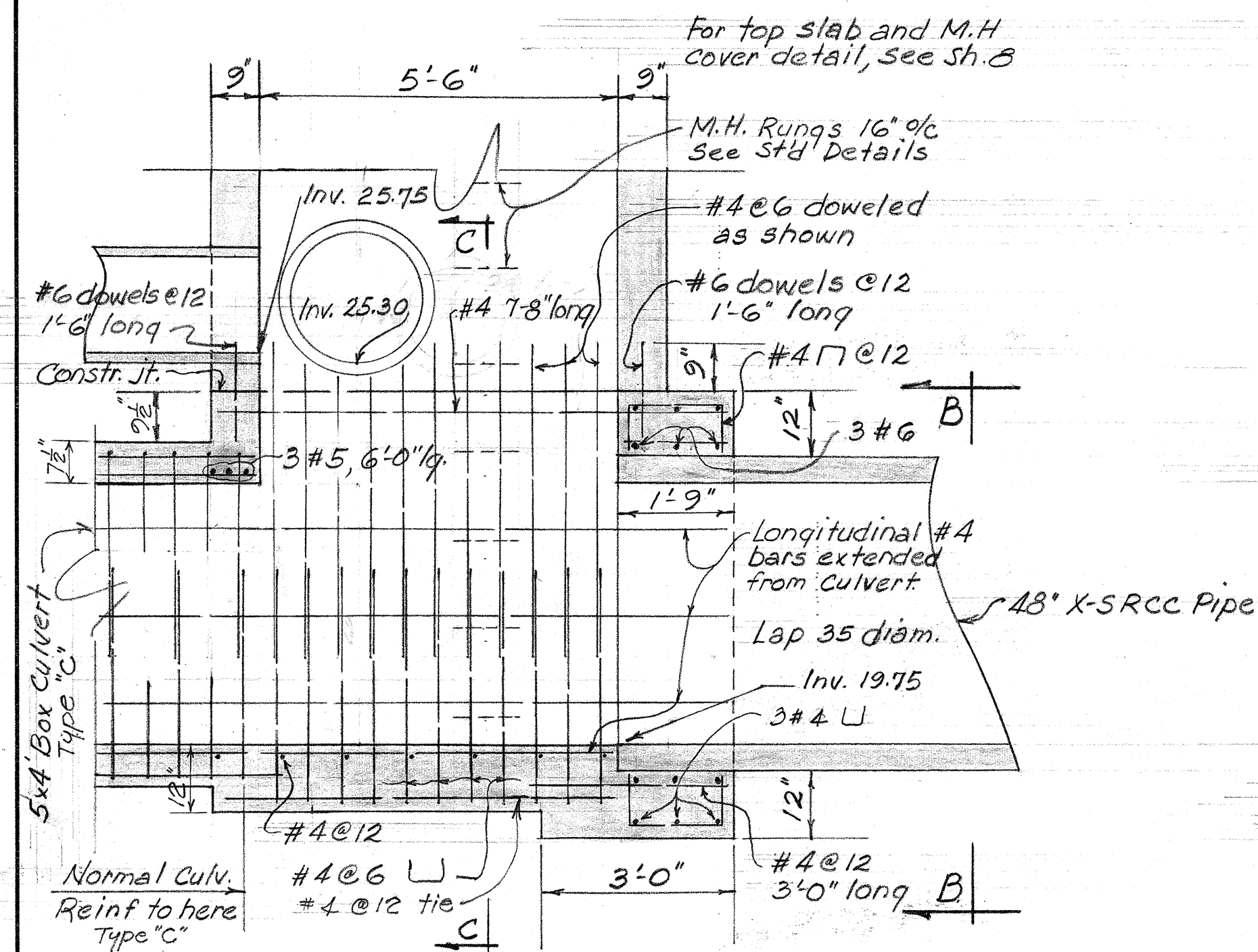
SHEET No. 10 OF 12 SHEETS

No As-Built Changes on this Sheet.

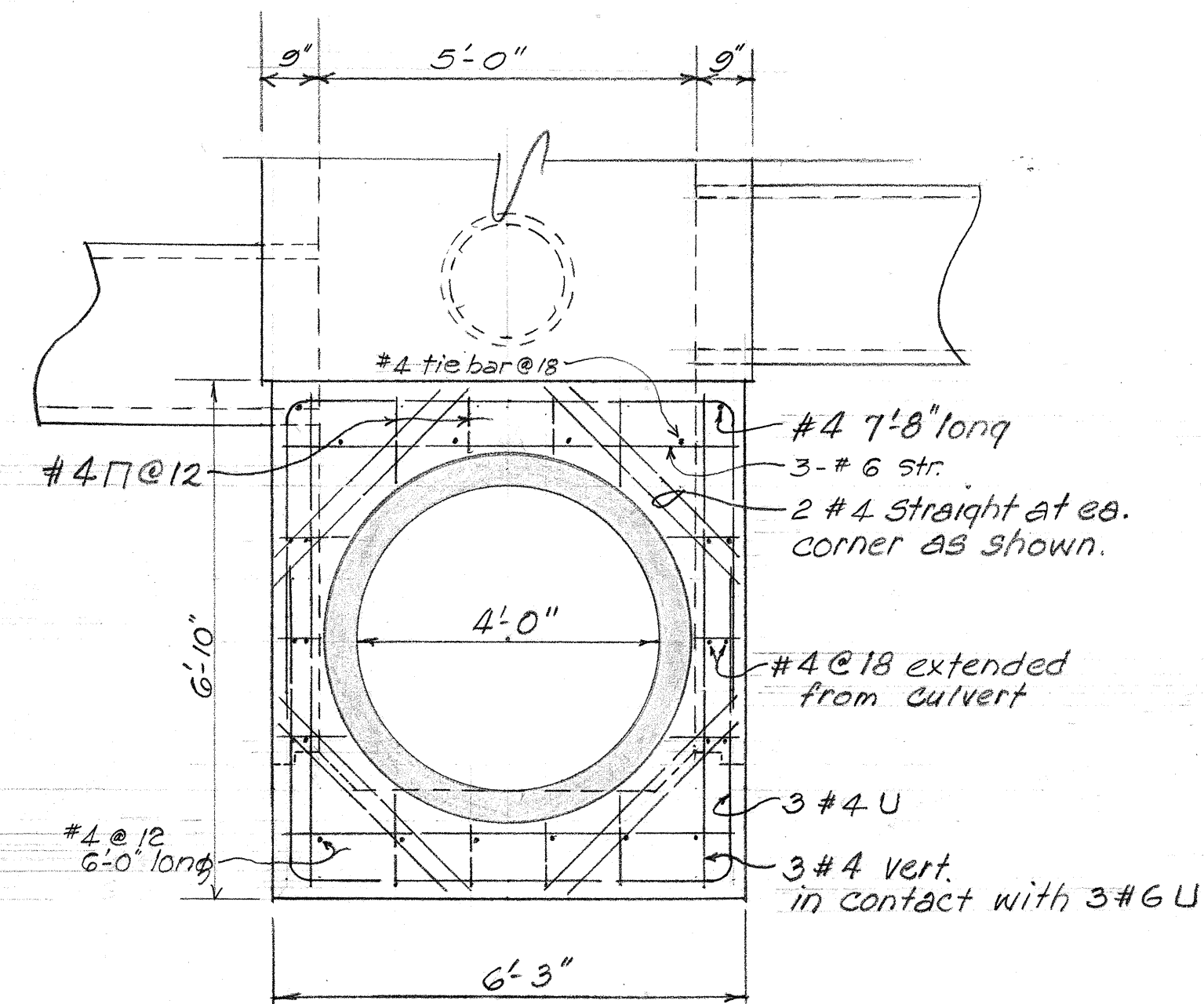
5790.48

PRINTED ON DIEPO 1000H CLEARPRINT

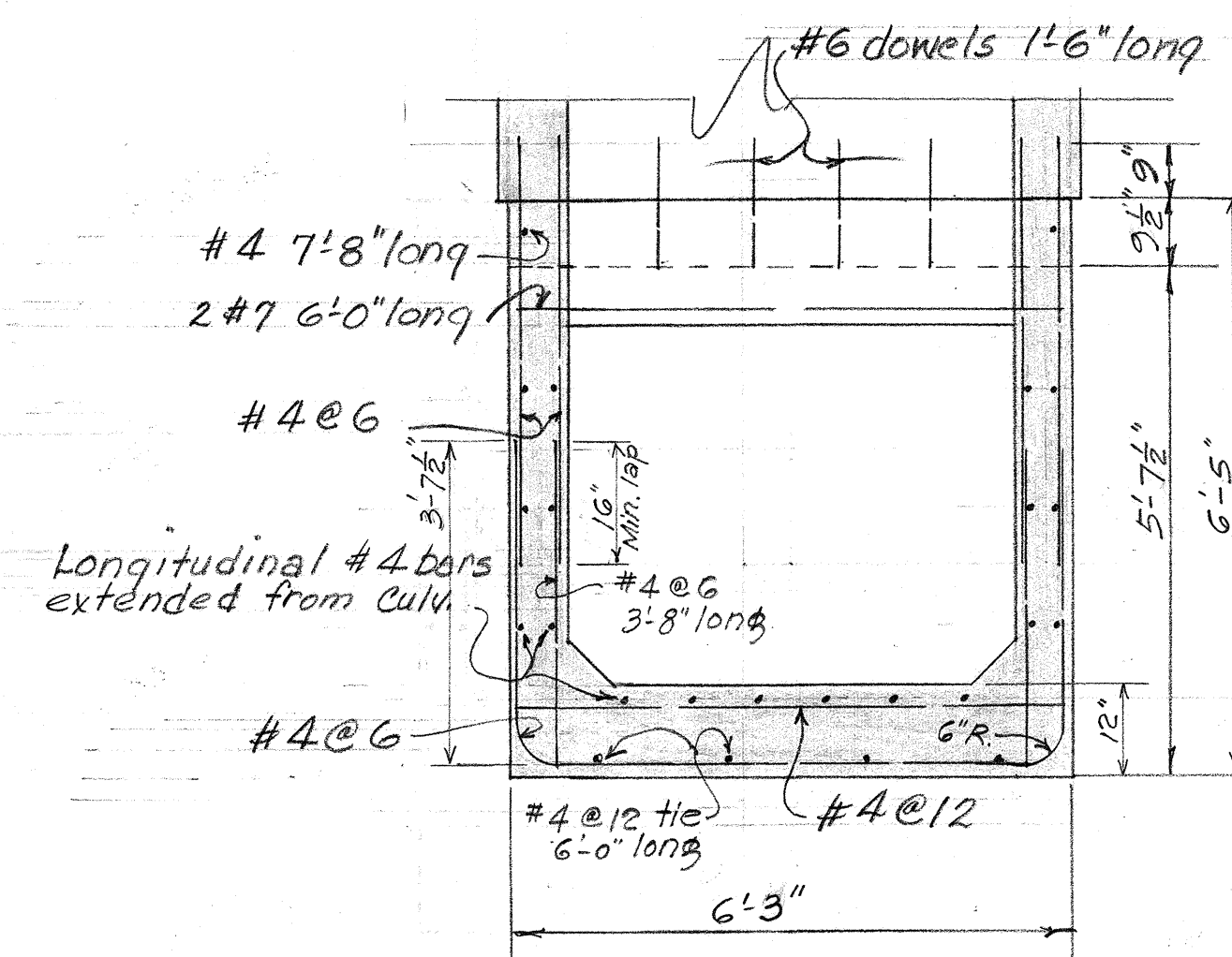
FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
HAWAII	HAW.	F-008-1(1) UNIT 2	1956	49	70



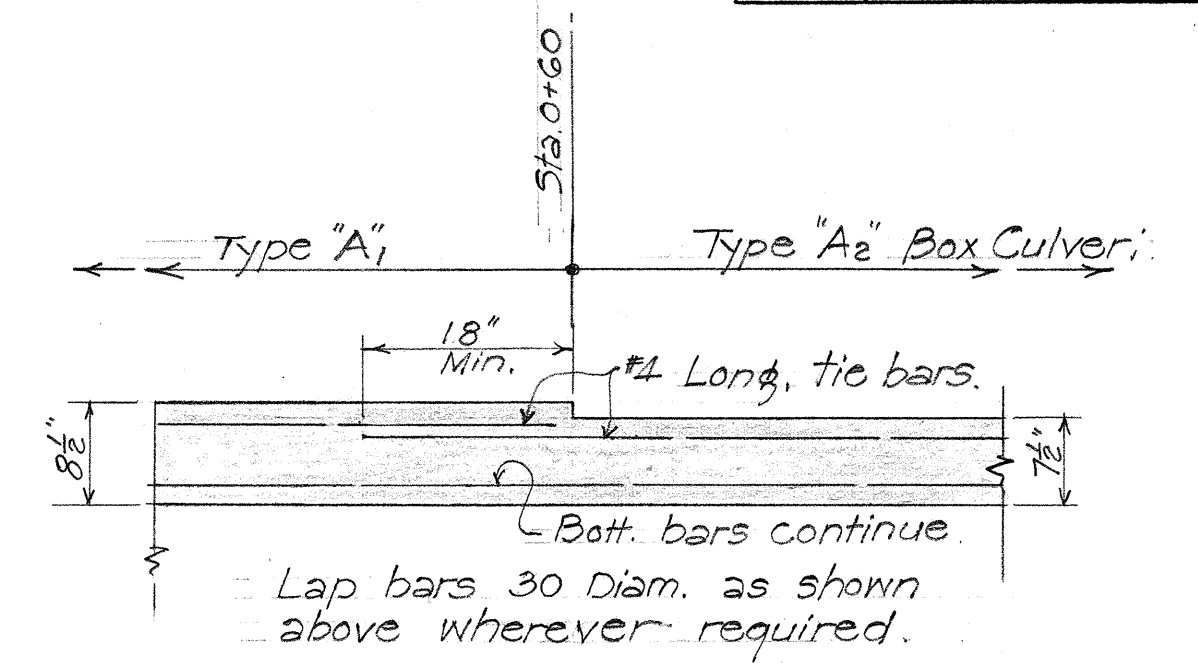
LONGITUDINAL SECTION "AA" (M.H. #9)
Scale: $\frac{1}{2}" = 1'-0"$



SECTION-"BB"
 $\frac{1}{2}" = 1'-0"$

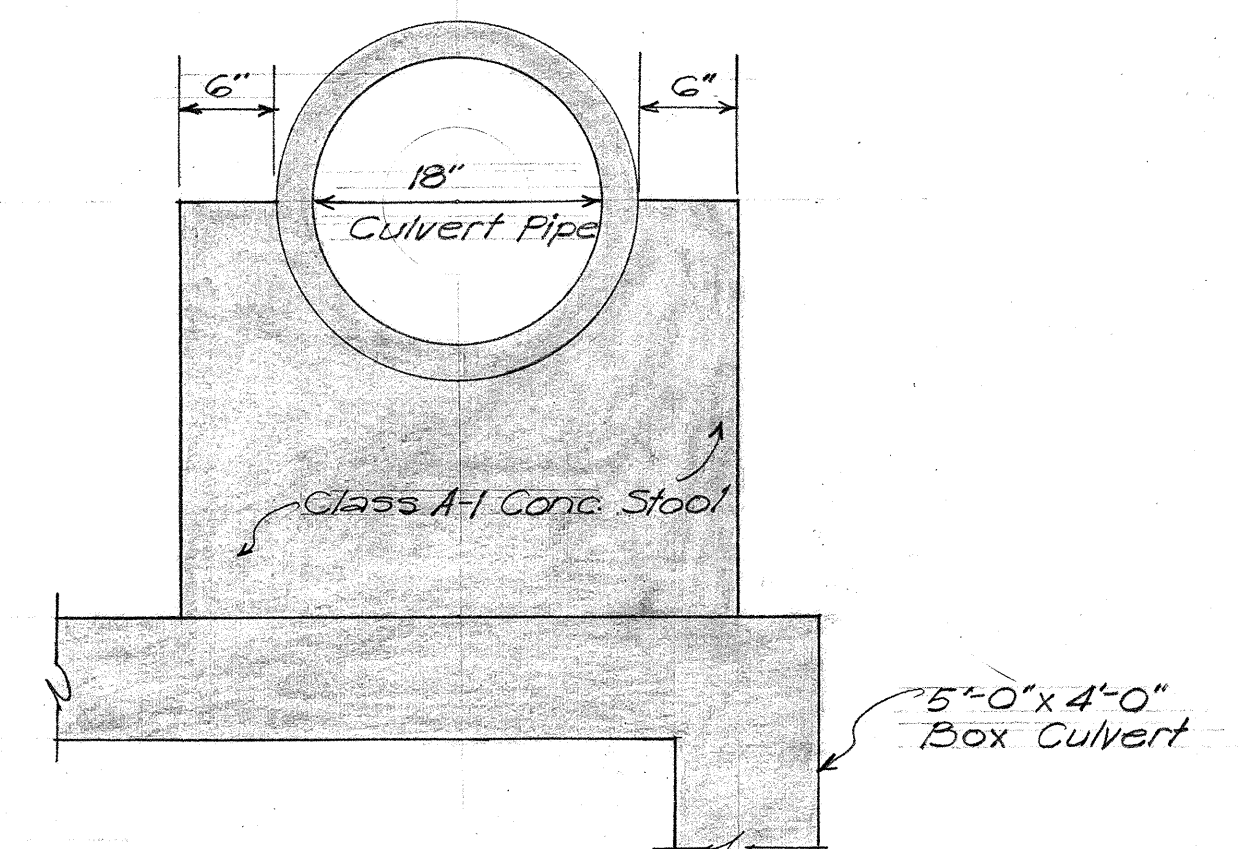


SECTION-CC
 $\frac{1}{2}" = 1'-0"$

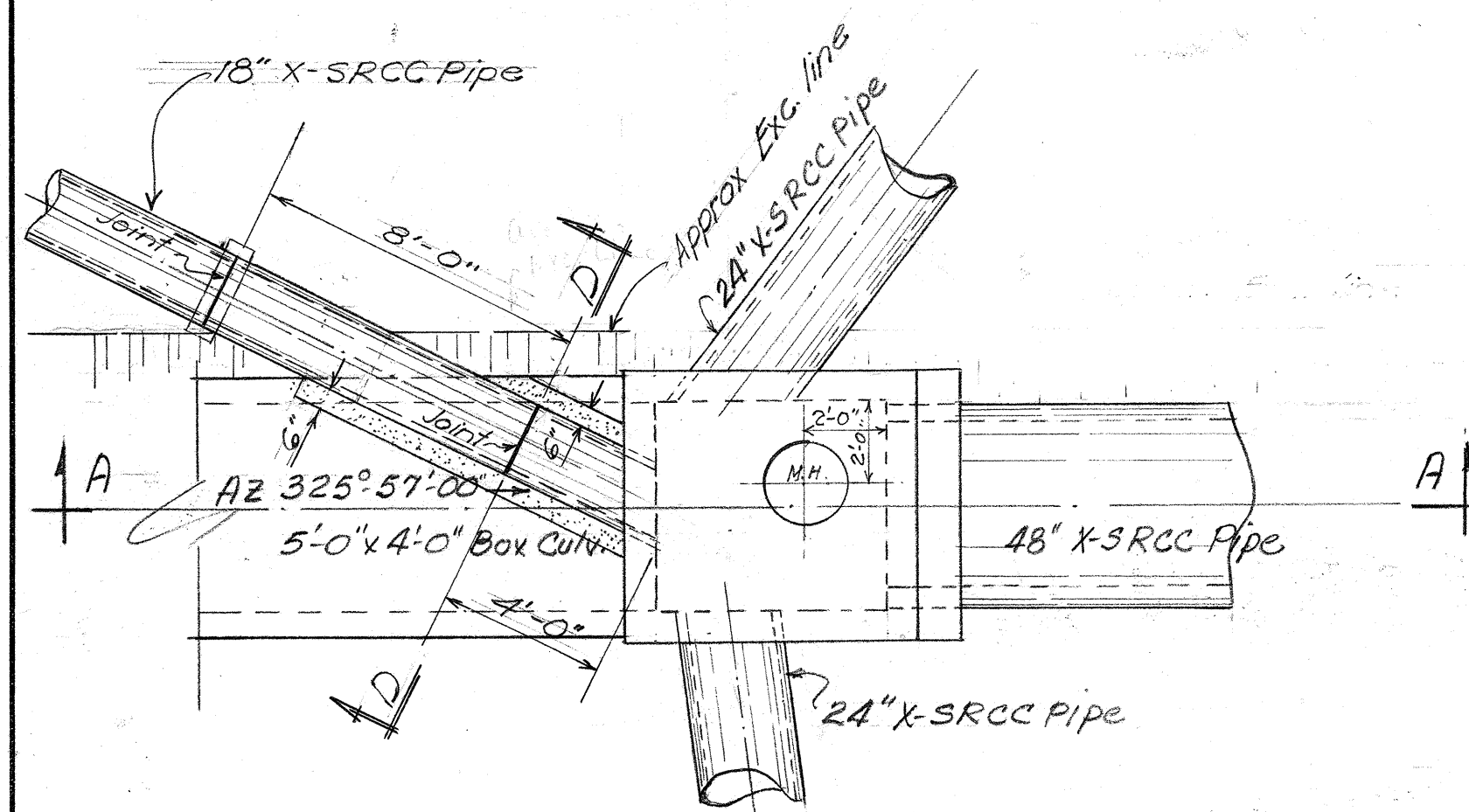


LAP DET. AT OFFSET

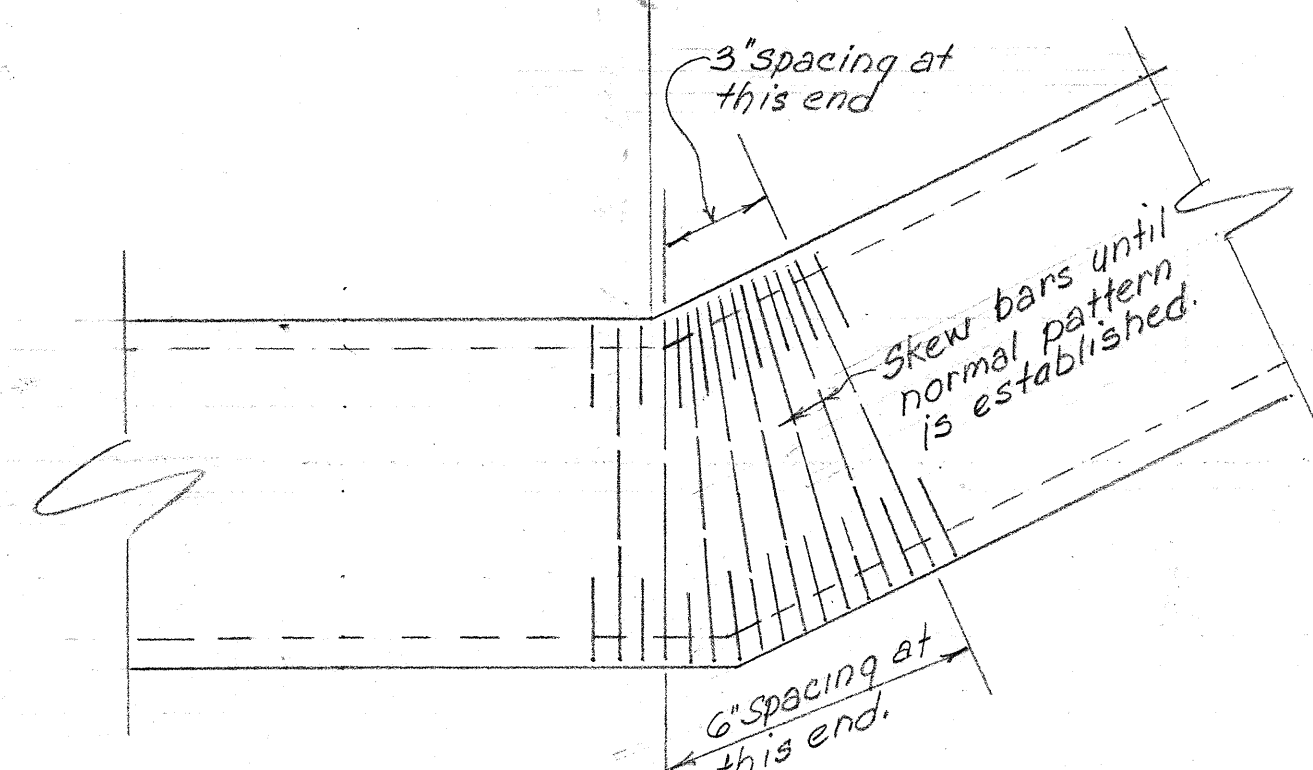
$\frac{3}{4} = 1'-0''$



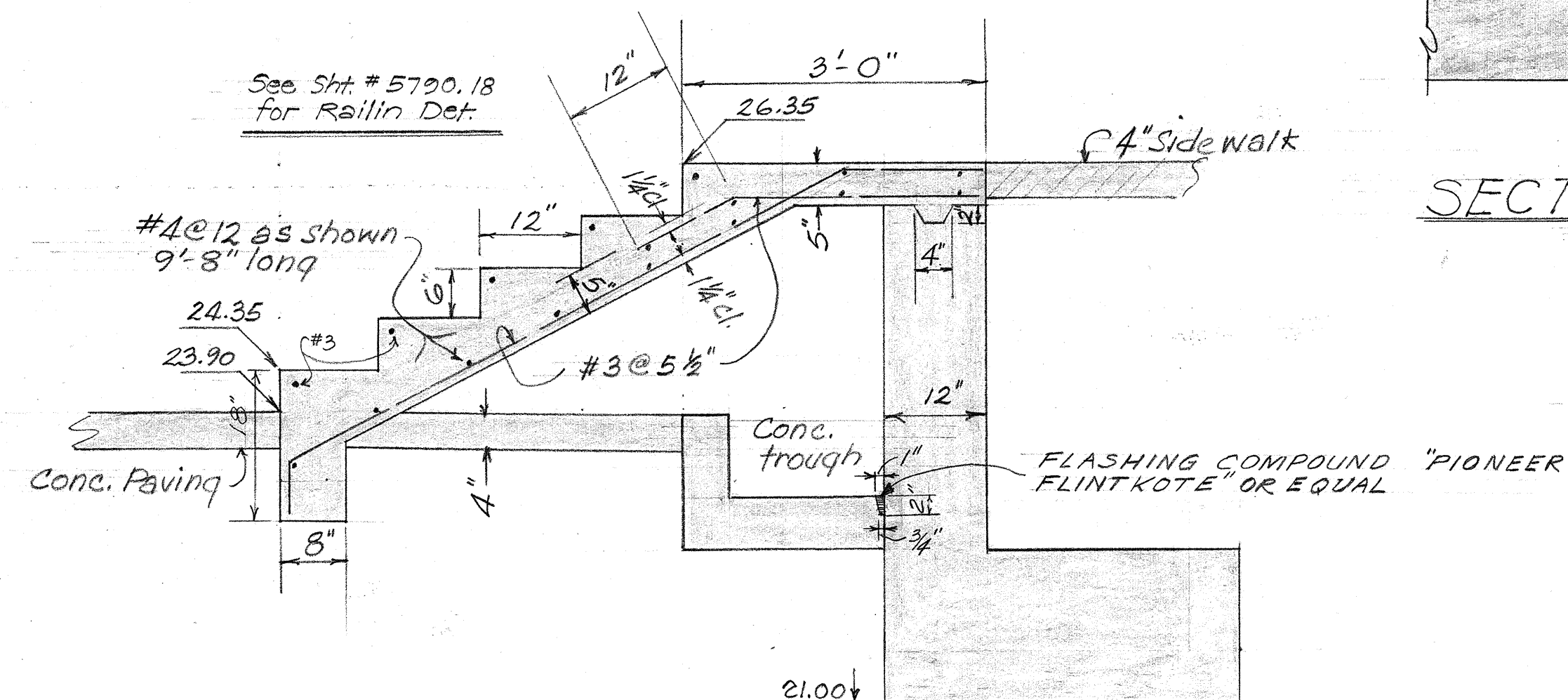
SECTION "D-D"
1"=1'-0"



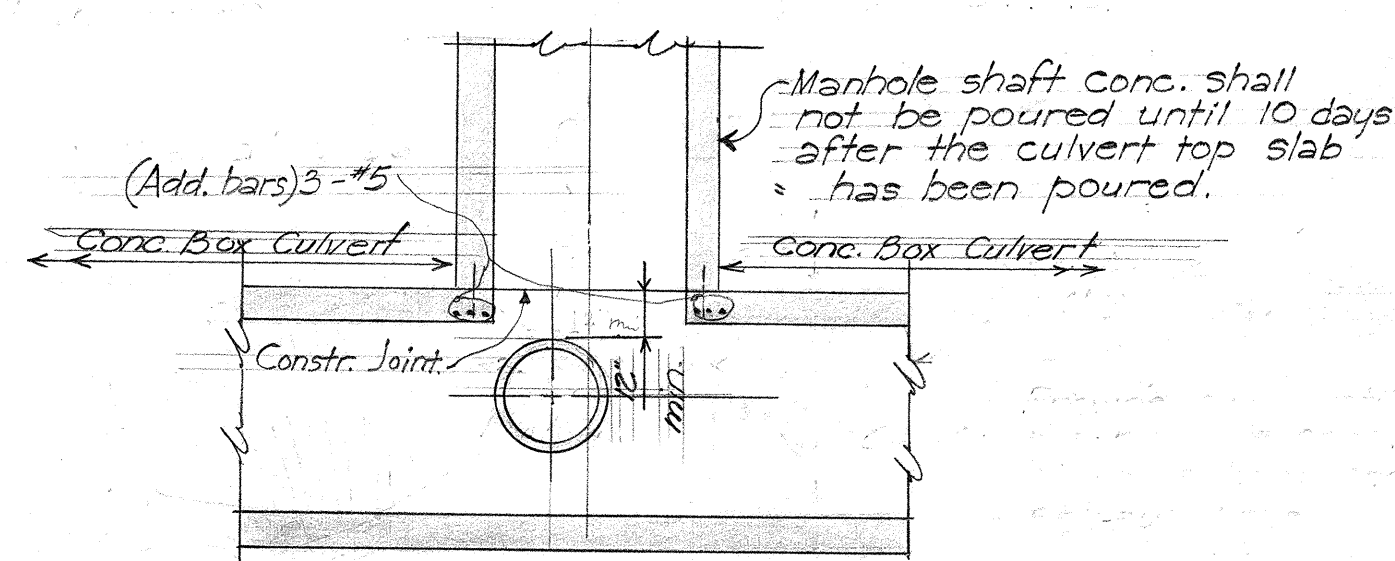
PLAN SDMH #9
 $\frac{1}{4}'' = 1'-0''$



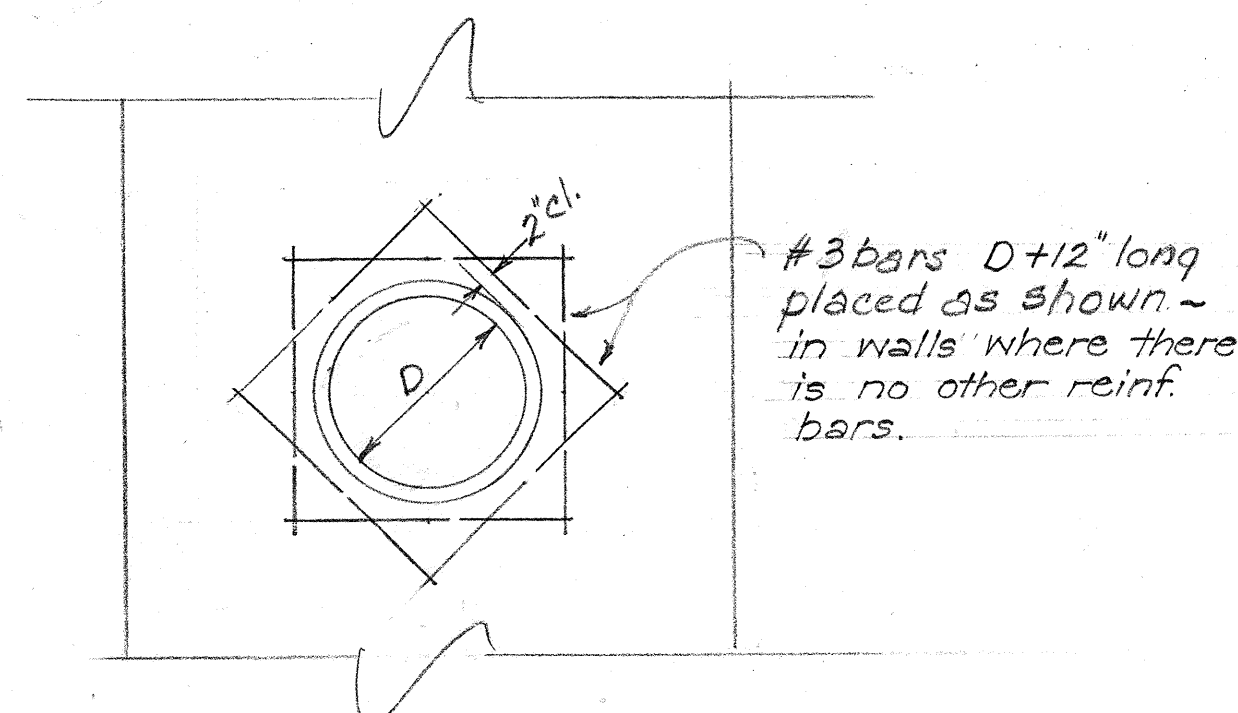
PLAN
TYPICAL REINF FOR HORIZONTAL BEND
 $\frac{1}{2}" = 1'-0"$



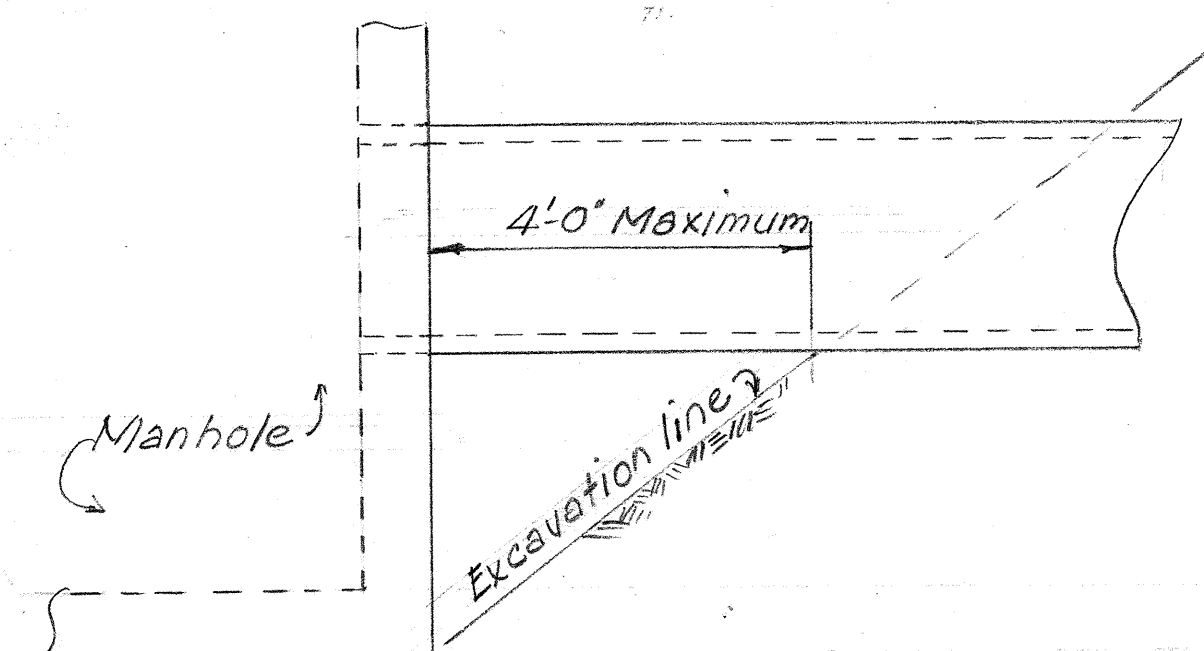
SECTION THRU CONC. STEPS @ STA 133+15.00
 $\frac{3}{4}" = 1'-0"$



TYPICAL M.H. SECTION



TYPICAL REINF. AROUND PIPE
WHERE PIPE ENTERS WALL OF M.H.



LIMITS OF EXCAVATION FOR PIPES ENTERING M.H.

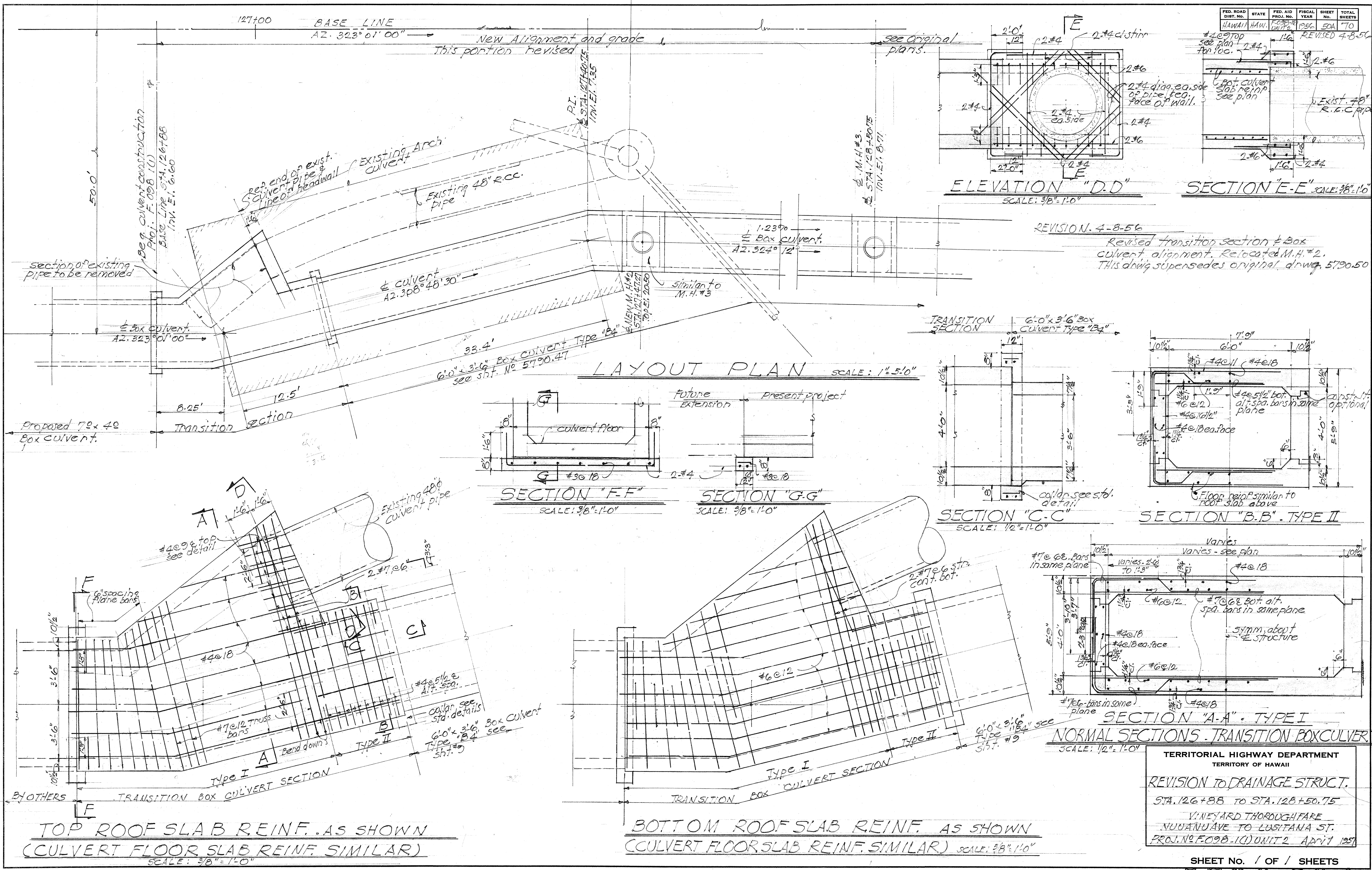
TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
DETAIL OF CONC. RETAINING
WALL AND MISC. DRAINAGE STRUCT
VINEYARD THOROUGHFARE
NUUANU AVE TO LUSITANA ST.
PROJ NO. F-098-(K1) UNIT 2
Scale: As Shown. JUNE 1956

SHEET No. 11 OF 12 SHEETS

No As-Built Changes on this Sheet.

5790.49

FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
HAWAII	HAW.	F-098-10 UNIT 2	1956	50A	70



REVISION. 4-8-56
Revised transition section & Box
culvert, alignment. Relocated M.H. #2.
This drawing supersedes original drawing, 5790-50

STATION - TRANSITION PARCELS

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII

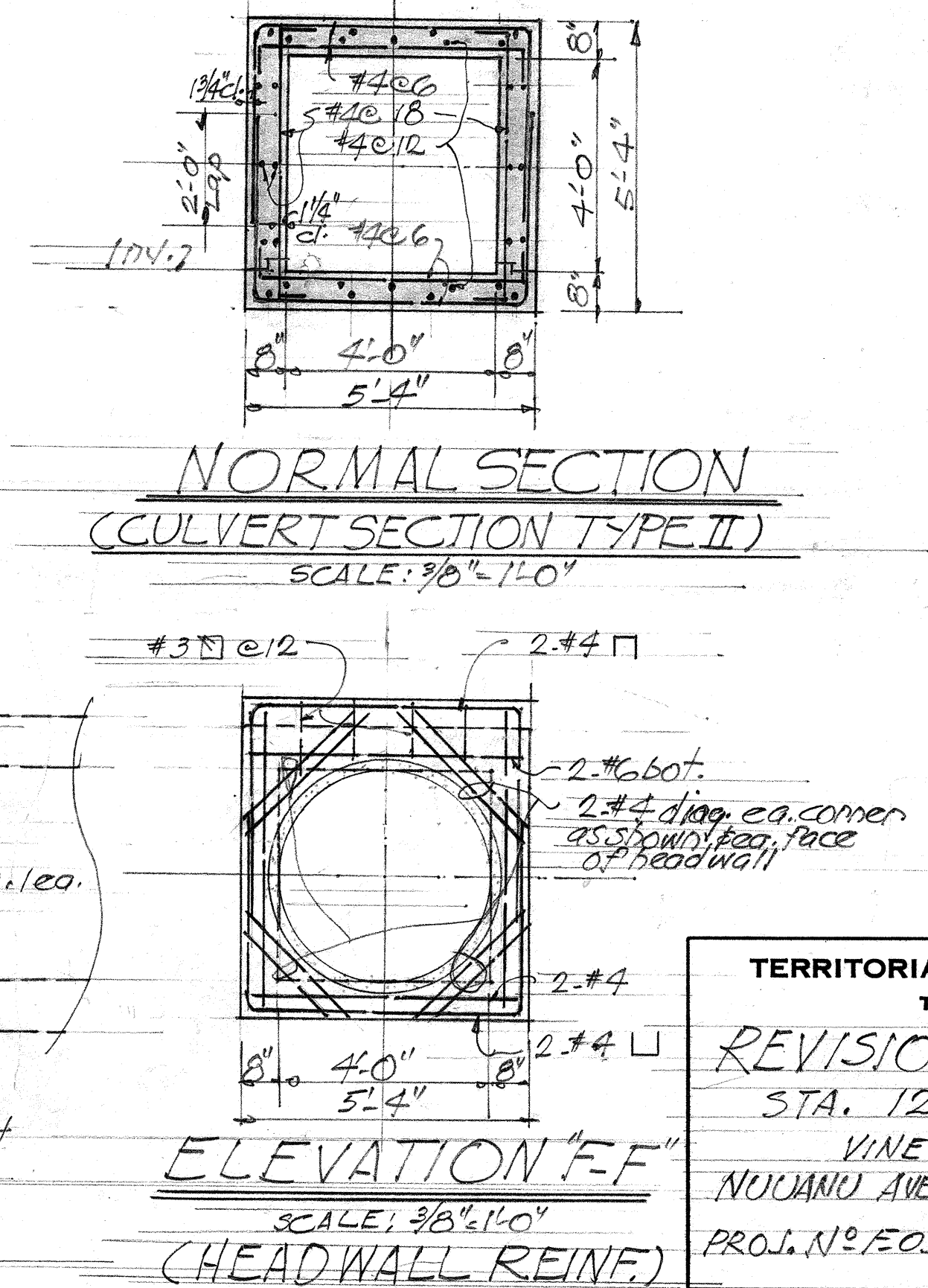
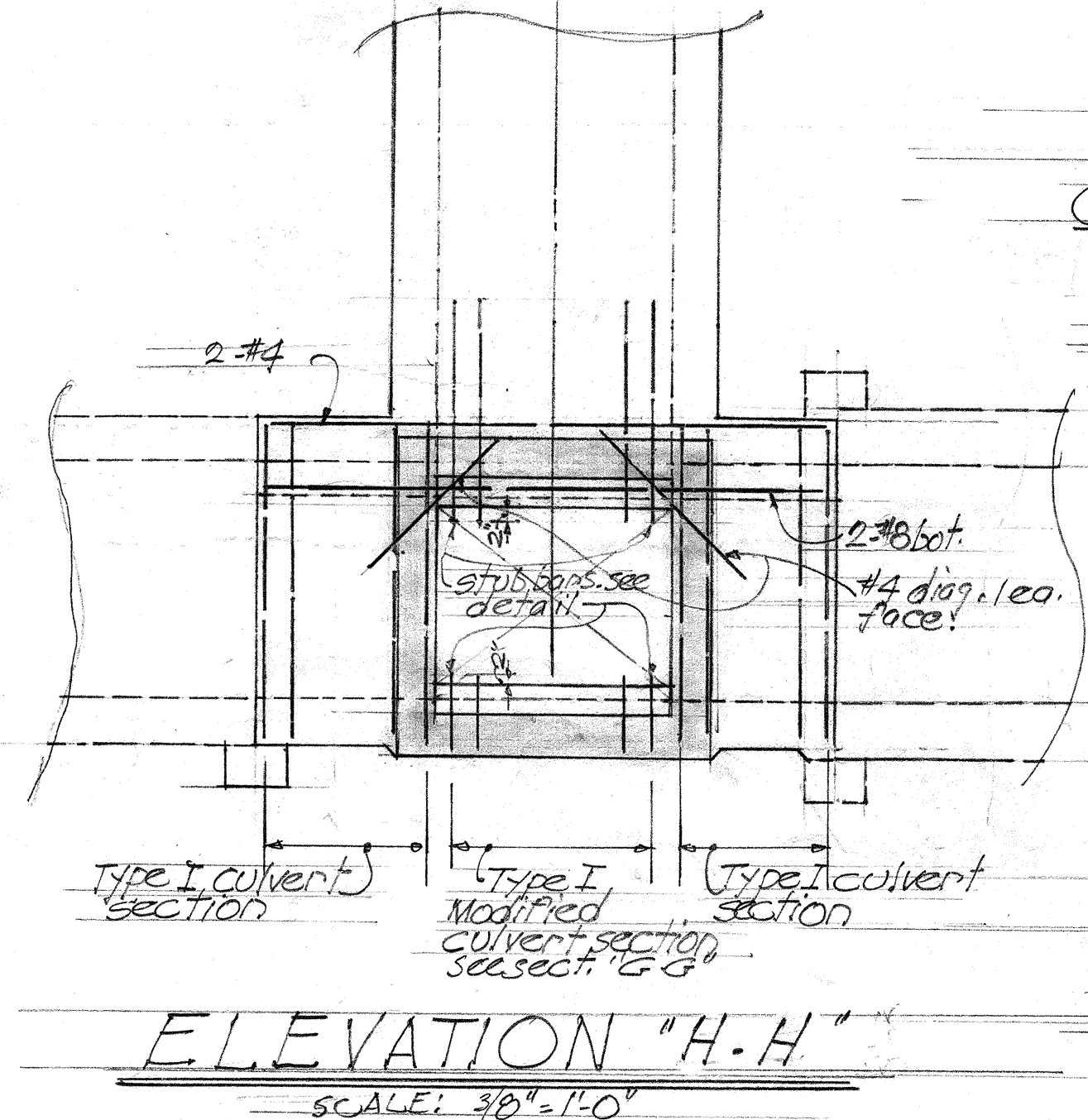
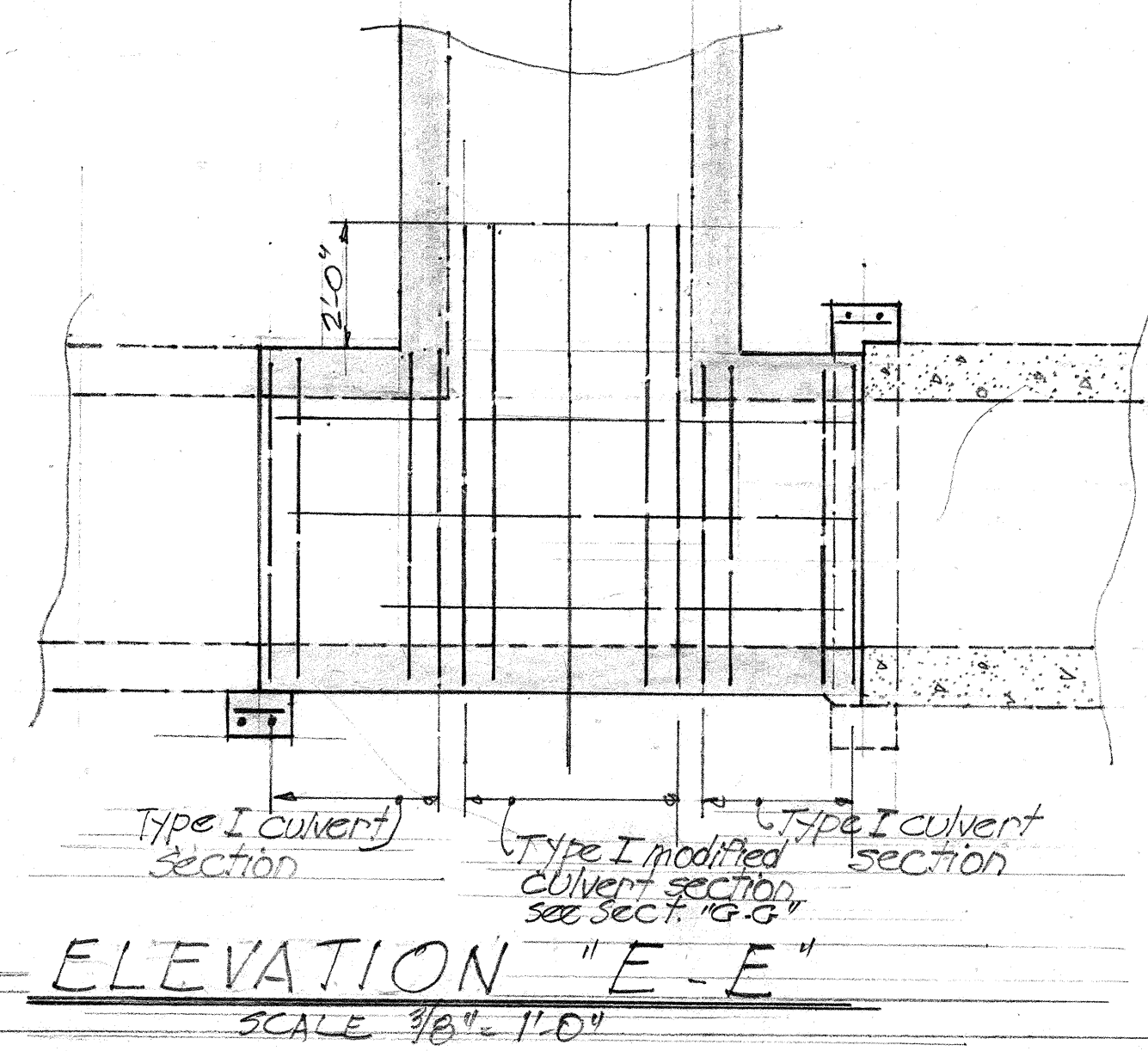
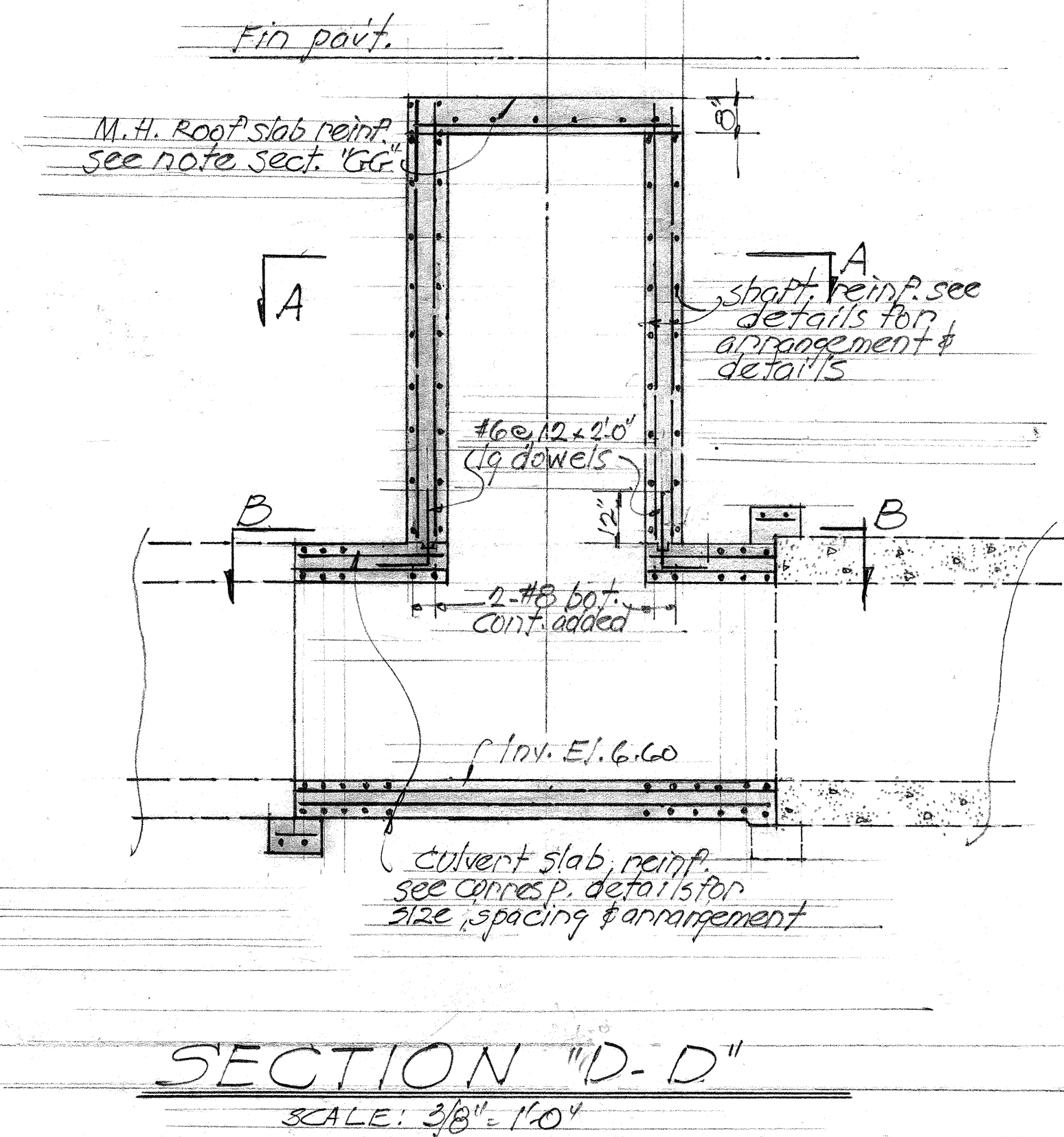
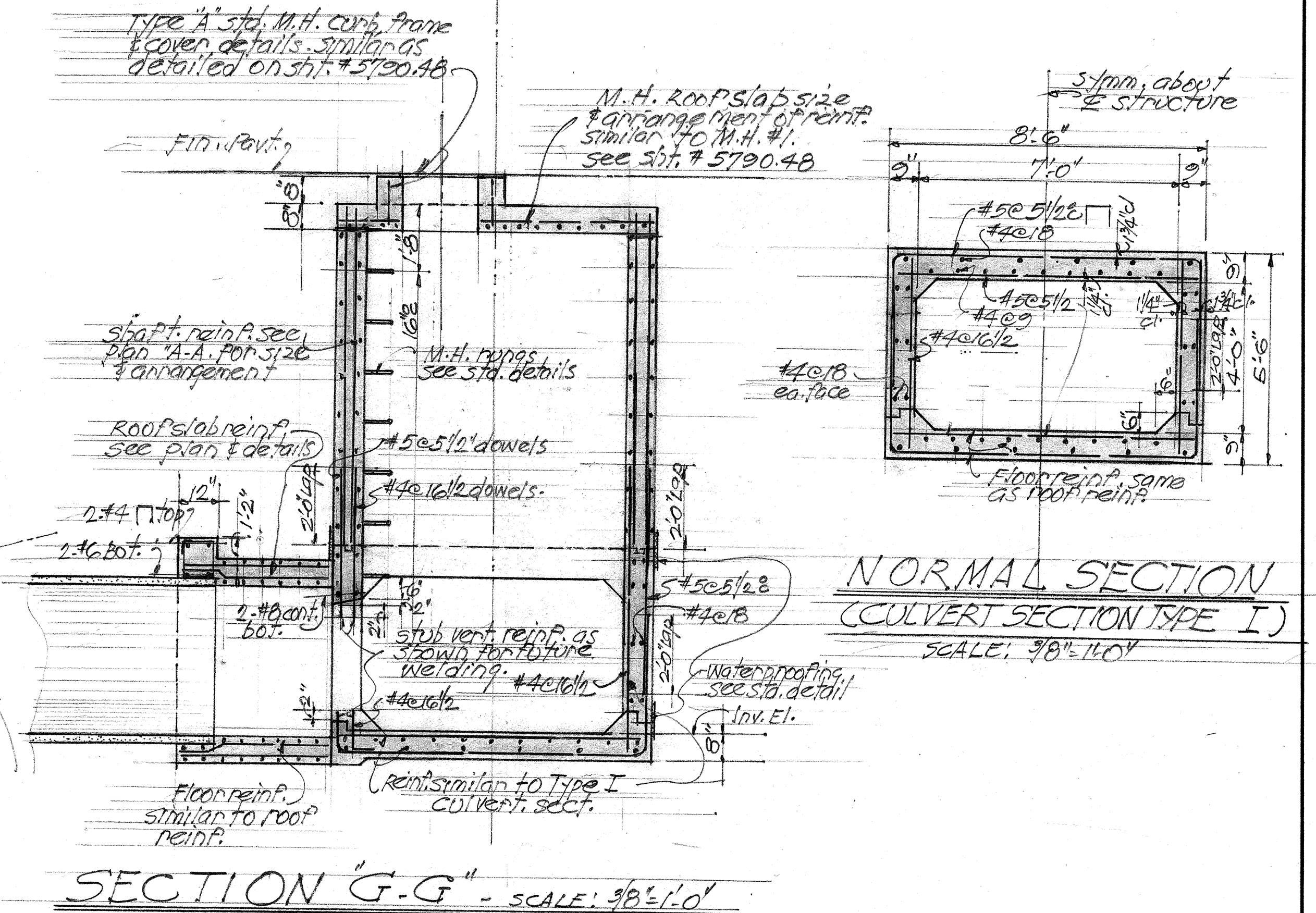
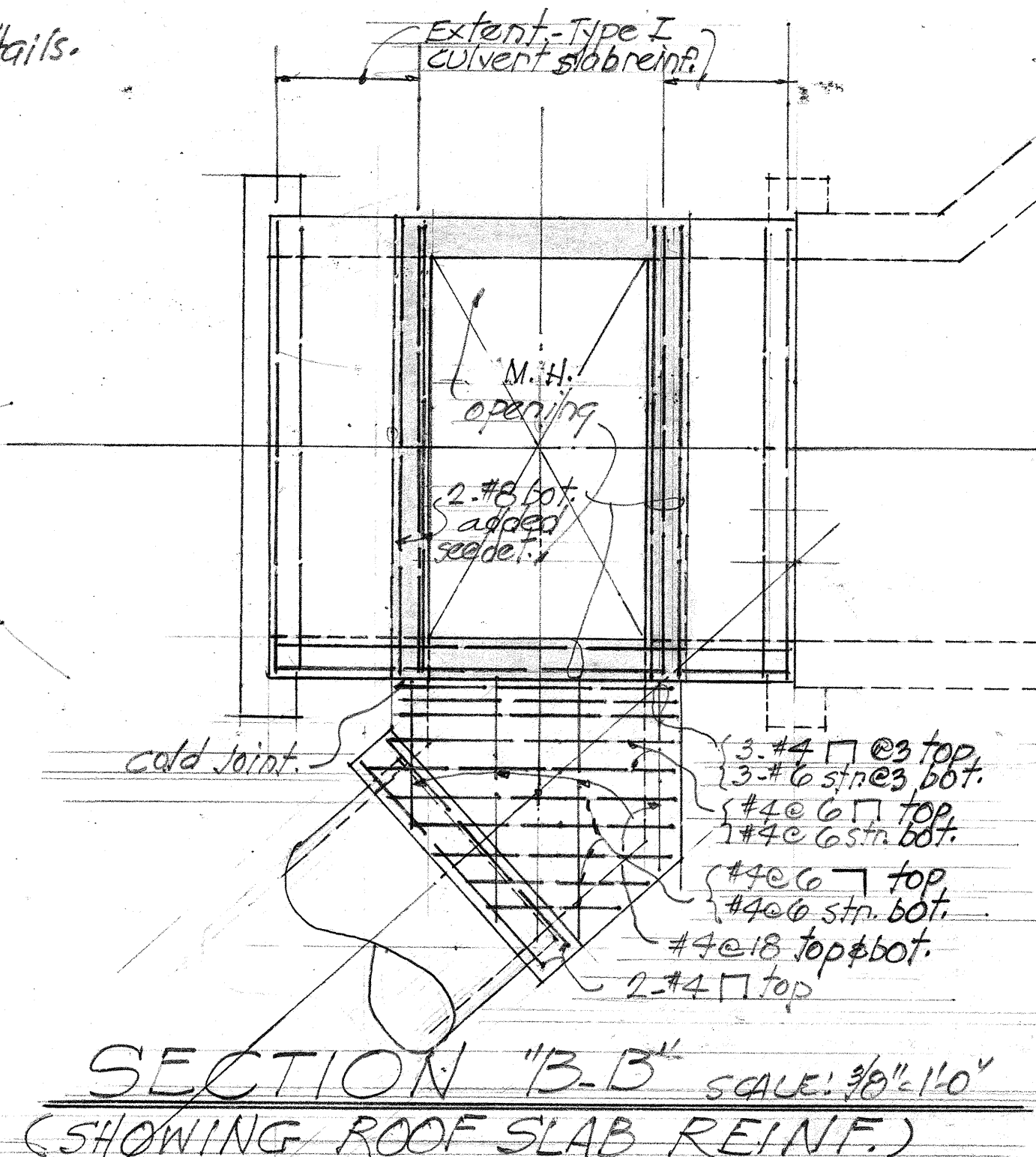
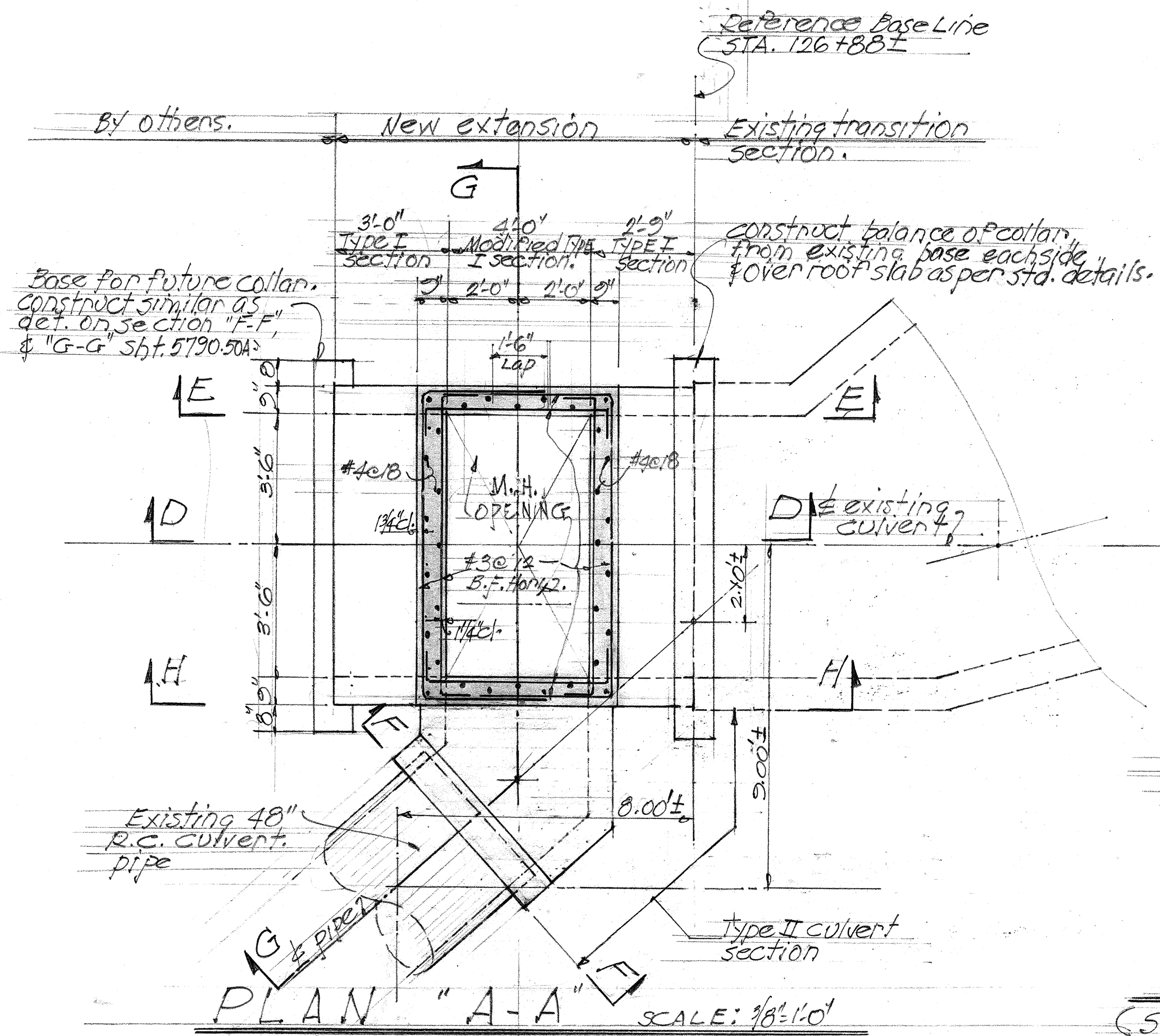
REVISION TO DRAINAGE STRUCT.

STA. 126+88 TO STA. 128+50.75

VINEYARD THOROUGHFARE
NUUANUAVE TO LUSITANA ST.

PROJ. NO. F098-1(C) UNIT 2 April 1957

No As-Built Changes on this Sheet.



TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII

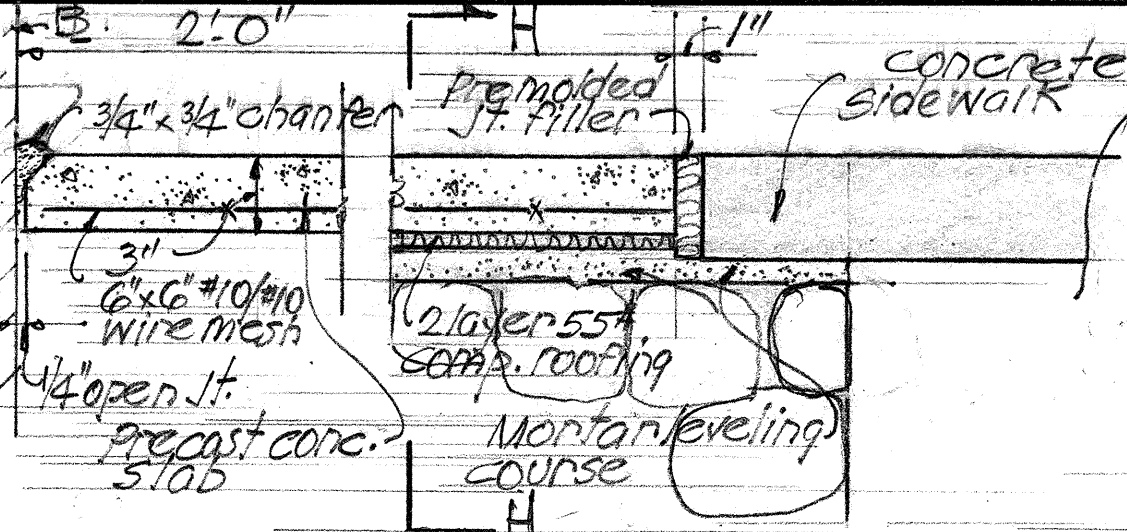
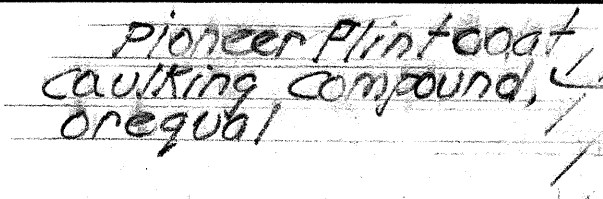
REVISION TO DRAINAGE STRUCT.
STA. 126+88±

VINEYARD THOROUGHFARE
NUUANU AVE TO LUSITANA STREET
PROJ. NO. F-098-101 UNIT 2 JUNE 1957

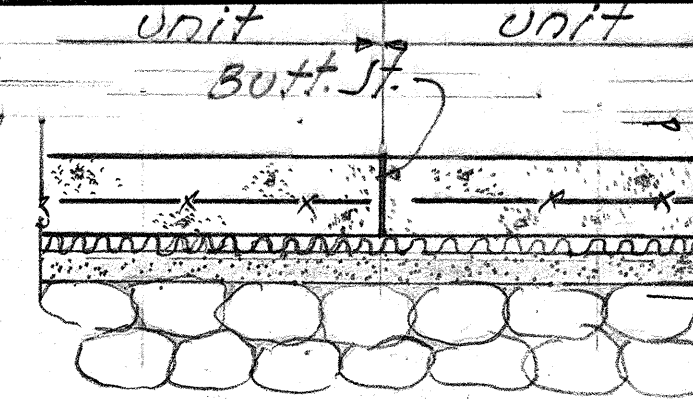
Changed Gravity Wall &
Type III Box culvert section

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
HAWAII	HAWAII	F-05810 UNIT 2	1956	500	70

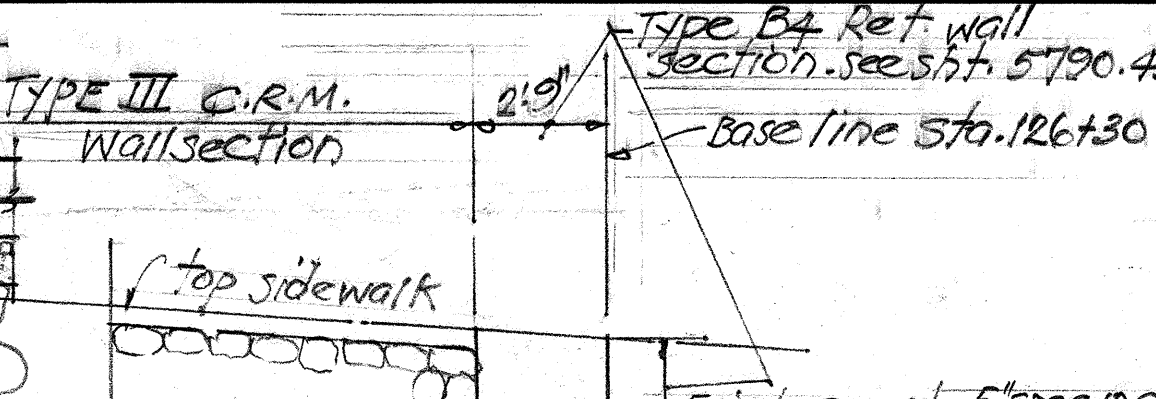
8'4" REV. 7-19-57
7'0" REV. 8-8-57
REV. 8-19-57



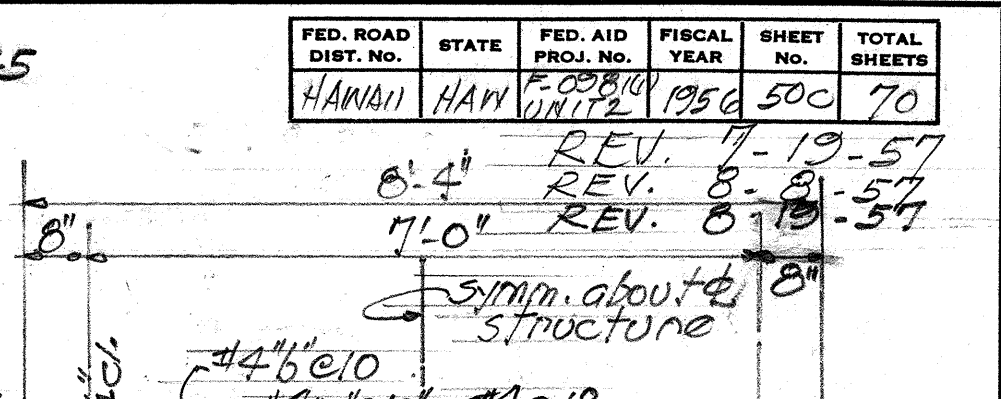
DETAIL "X"



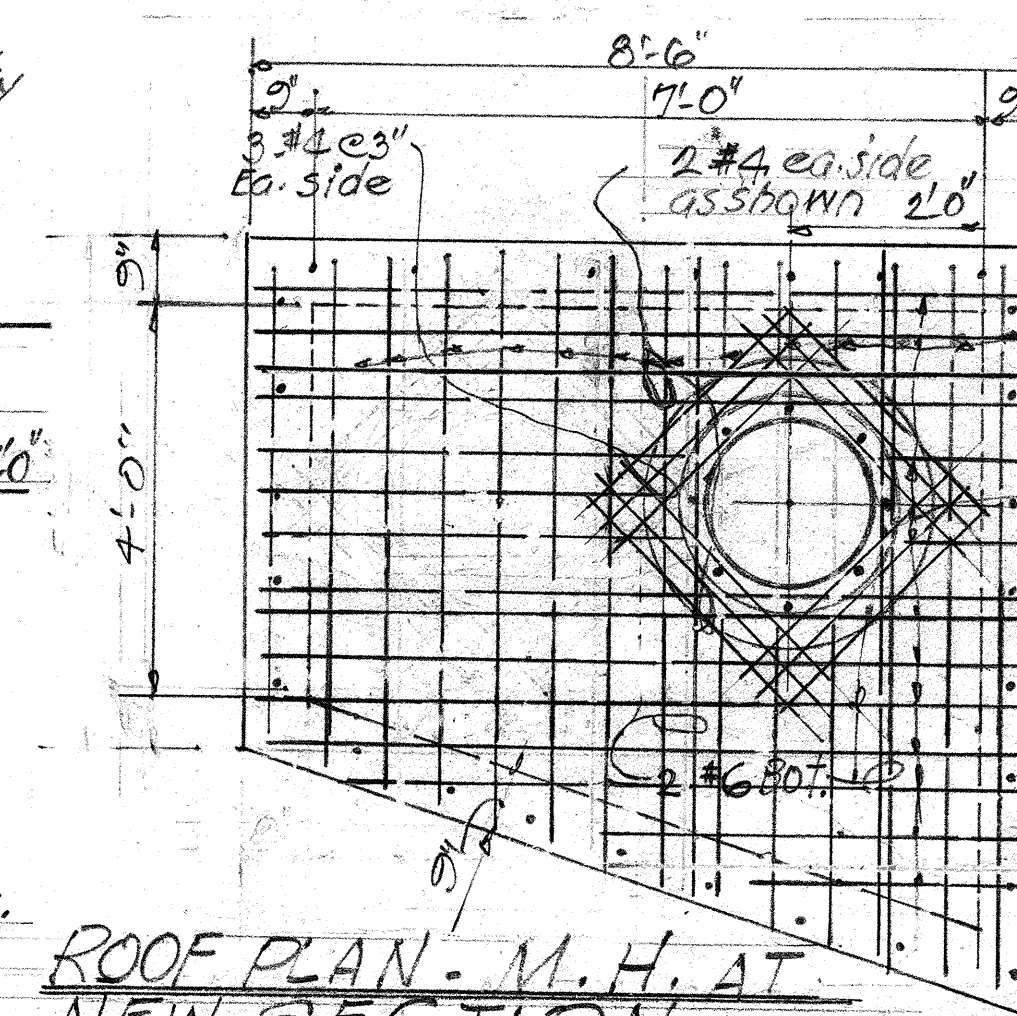
SECTION "H-A"



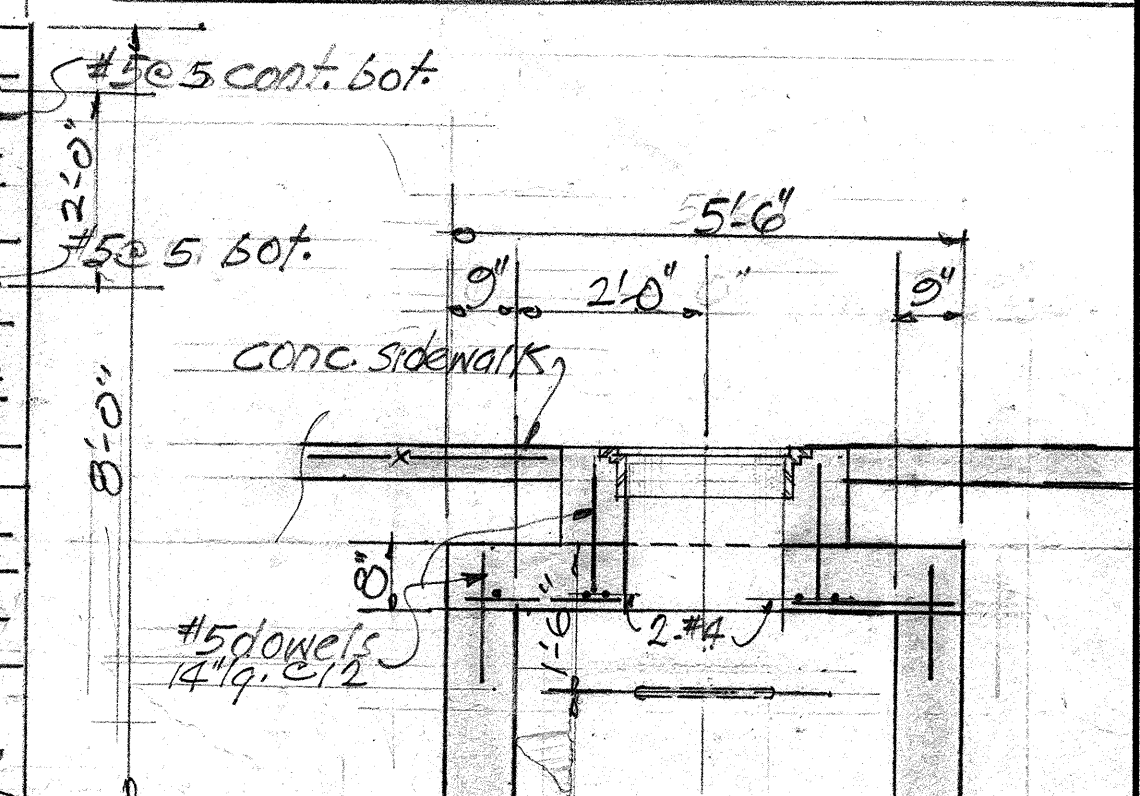
ELEVATION "G-G"



TYPE III BOX CULVERT
SECTION SCALE: 1/2" = 1'0"



ROOF PLAN - M. H. AT
NEW SECTION



Type III
Box culvert

Manhole

Future
Extension

Base for future collar
construct similar as detailed
on sections "FF" & "G-G" at 5720-50A

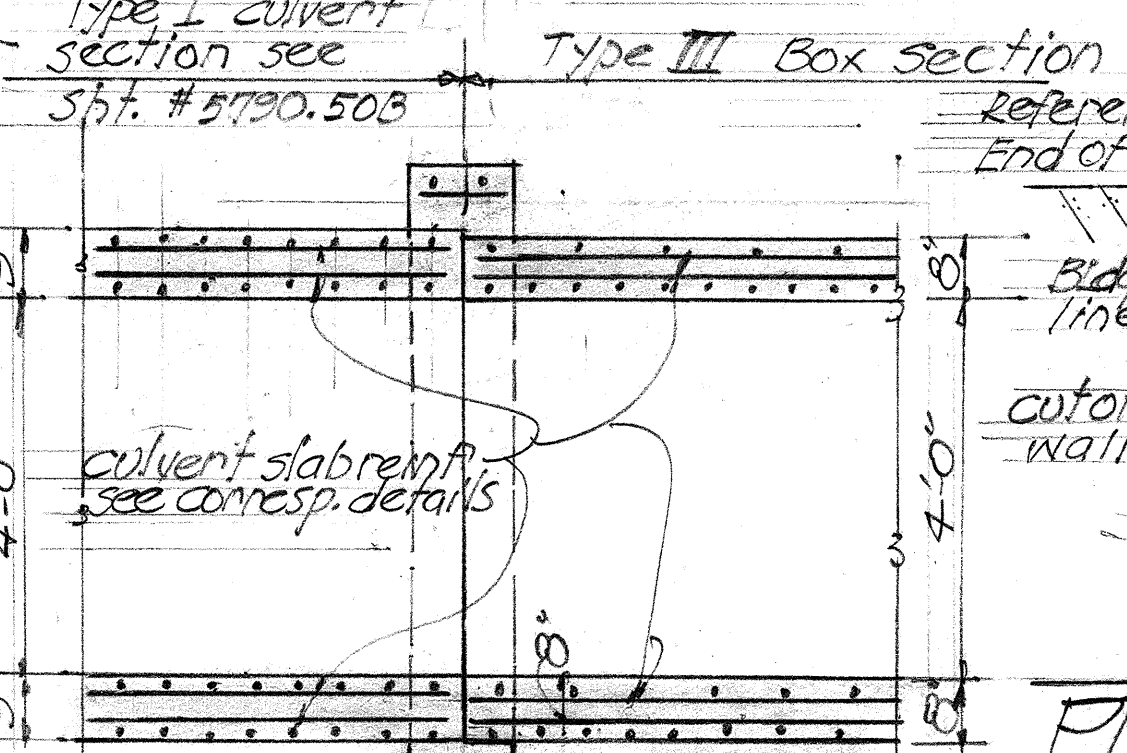
SECTION "D-D"
SCALE: 1/2"=1'-0"

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
REVISION TO DRAINAGE STRUCTURE
STA. 126+26.83 TO STA. 126+78.84
VINEYARD THOROUGHFARE
NUUANU AVE. TO LUSITANA STREET
PROJ. NO. F09A-1(C) UNIT 2 JULY 1957

SHEET No. OF SHEETS

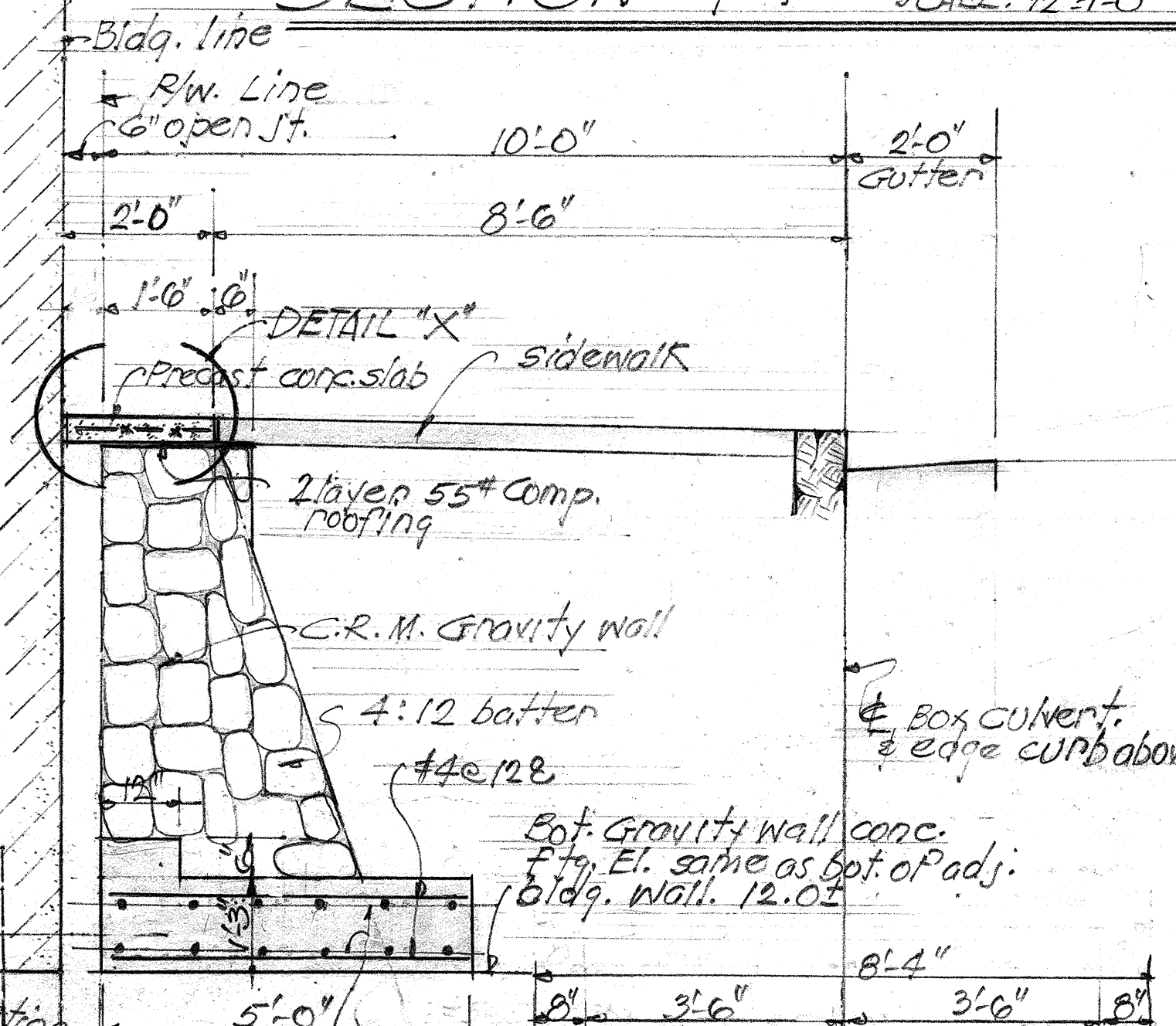
5590.50C

This Sheet Includes As-Built Changes.

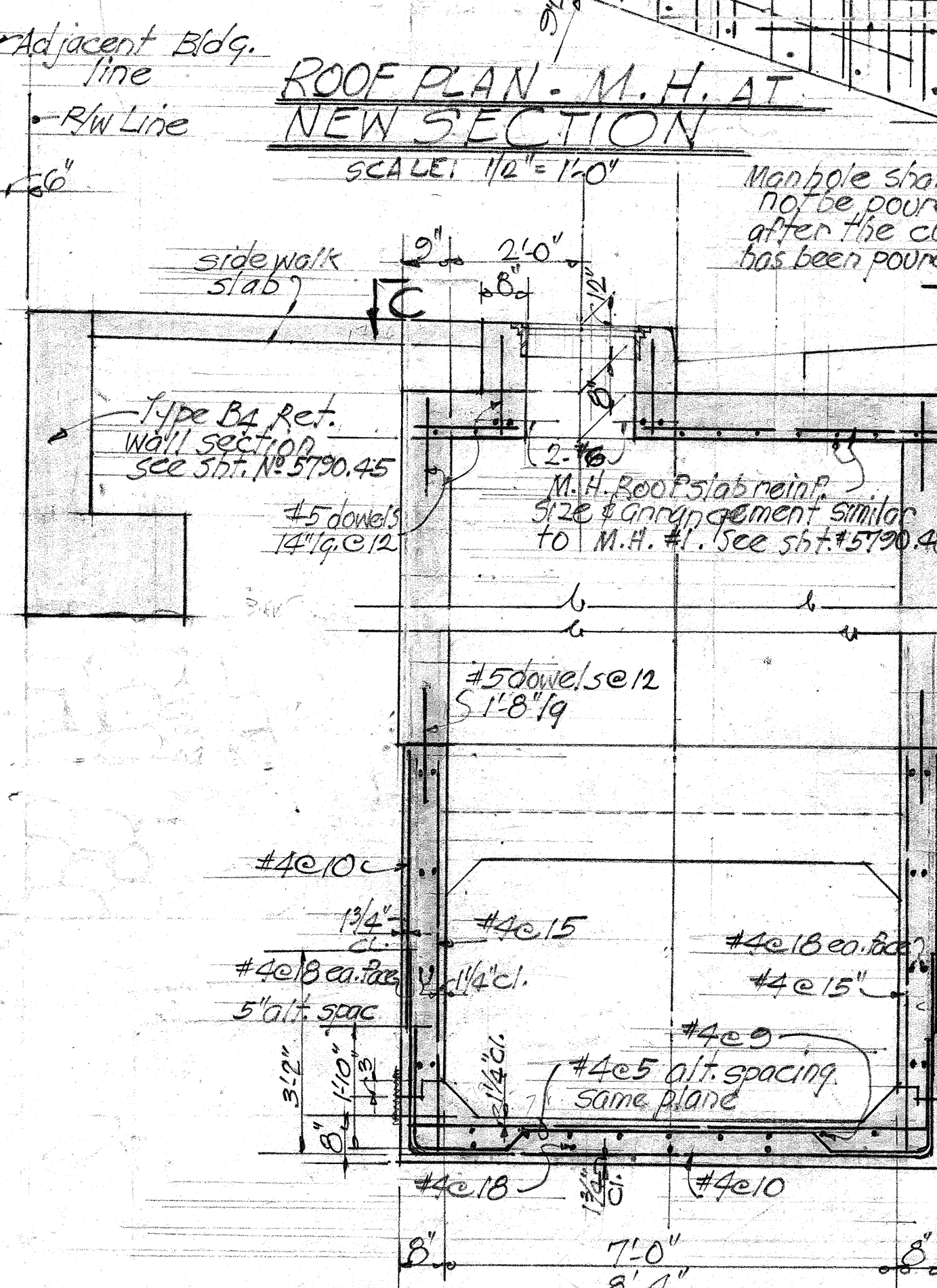


PLAN-TYP. CUTOFF
WALL DETAIL. SCALE: 3/4"=1'-0"

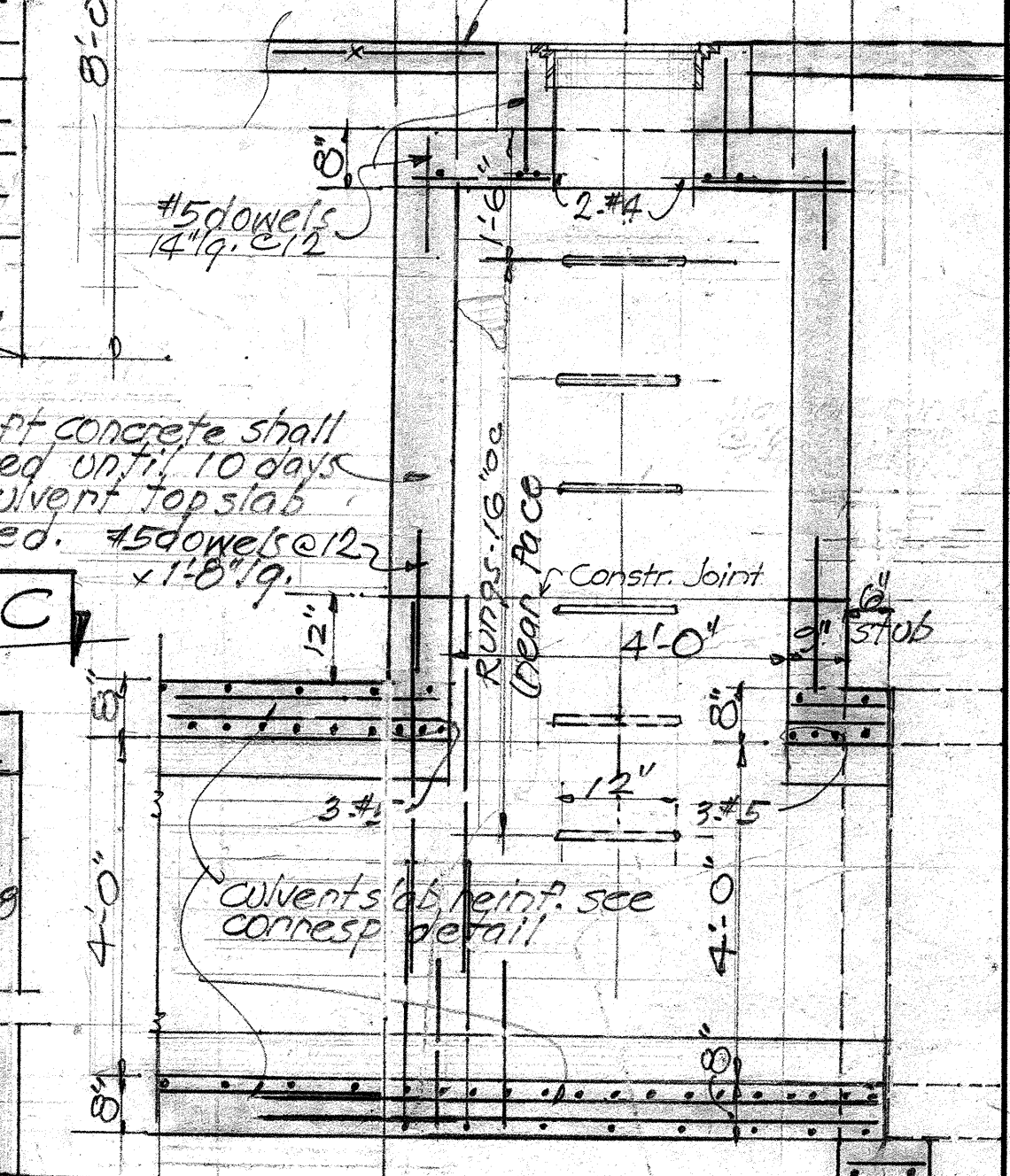
SECTION "F-F" SCALE: 1/2"=1'-0"



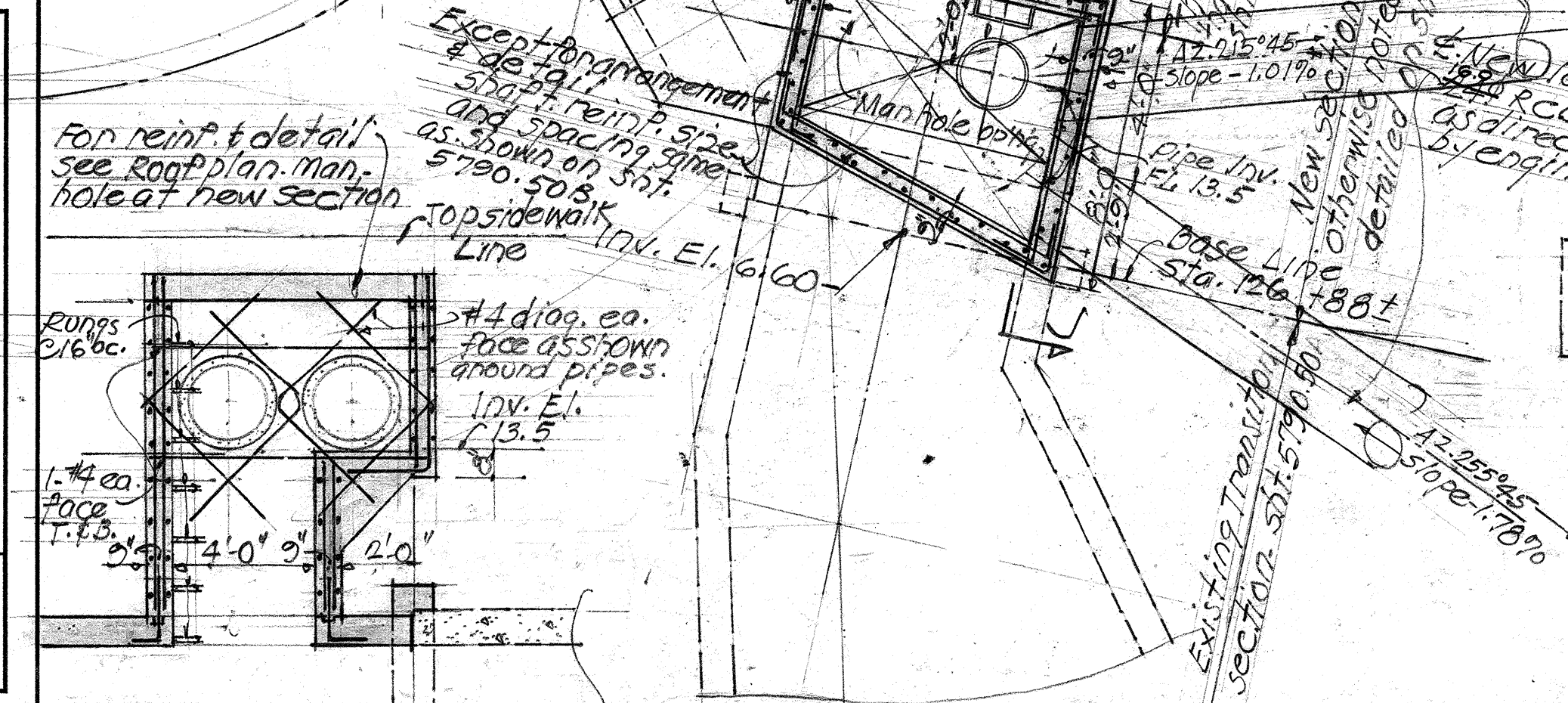
SECTION "A-A" SCALE: 1/2" = 1'-0"



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



SECTION "D-D"



SECTION "J-J"

LAYOUT PLAN

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