

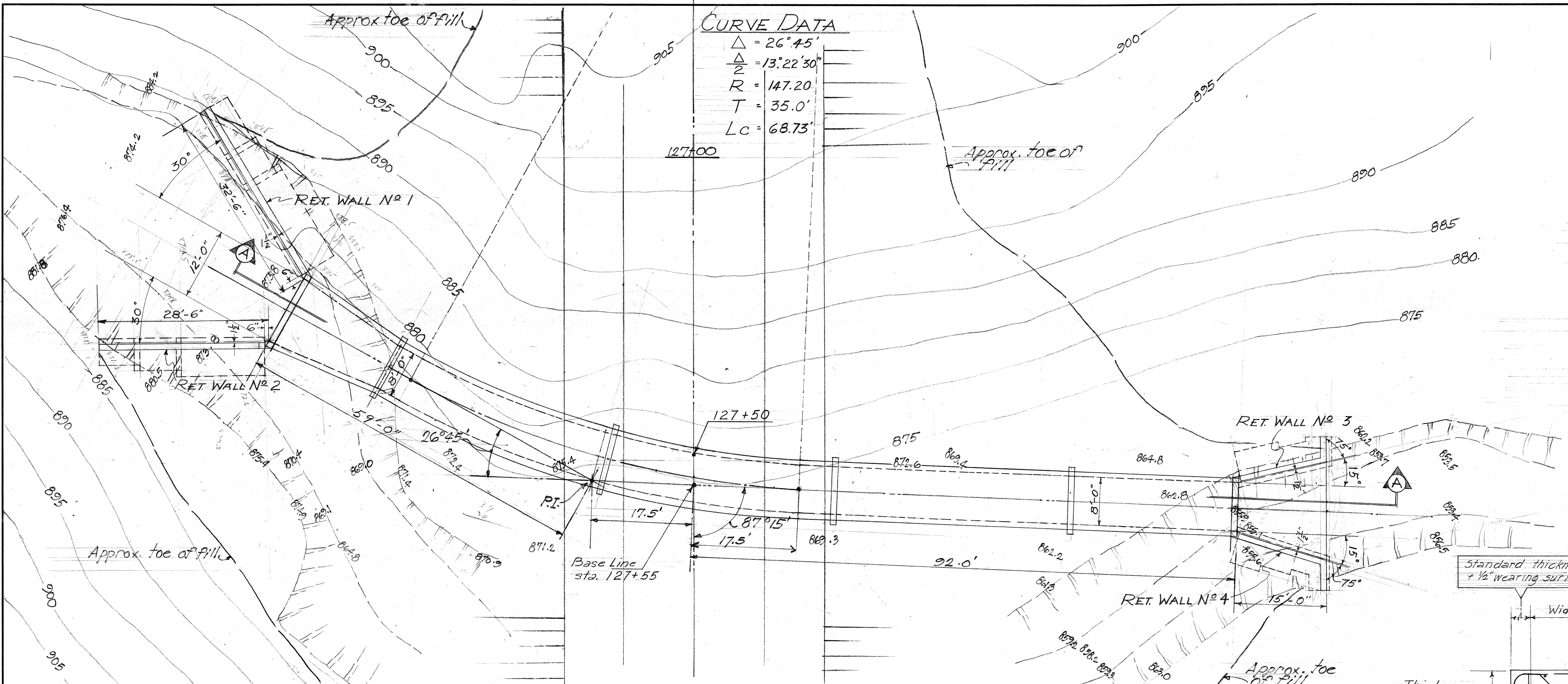
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-019-2(6)	1958	10	69

CURVE DATA
 $\Delta = 26^{\circ}45'$
 $\frac{\Delta}{2} = 13^{\circ}22'30''$
 $R = 147.20$
 $T = 35.0'$
 $Lc = 68.73'$

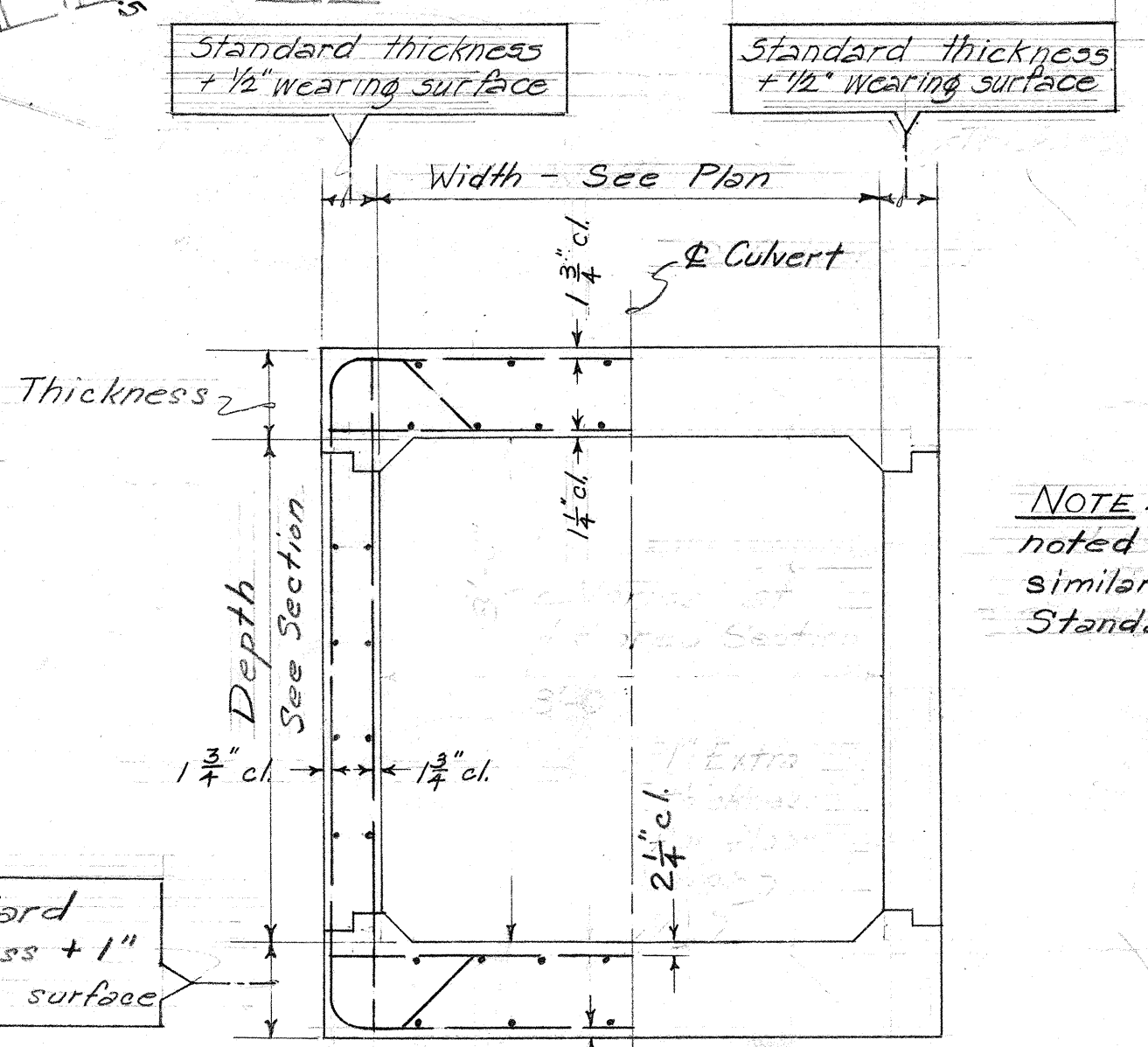
NOTE: Except as otherwise noted detail & reinf. of ret. wall similar to corresponding section as shown on Retaining Wall Standard drawing. Filter material not reqd. behind wingwalls.

ESTIMATED QUANTITIES

CLASS A-1 CONC.	-----	Lump Sum
REINF. STEEL	-----	Lump Sum
STRUCTURAL EXC.	-----	900.00 c.y.
CHANNEL EXC.	-----	60.00 c.y.

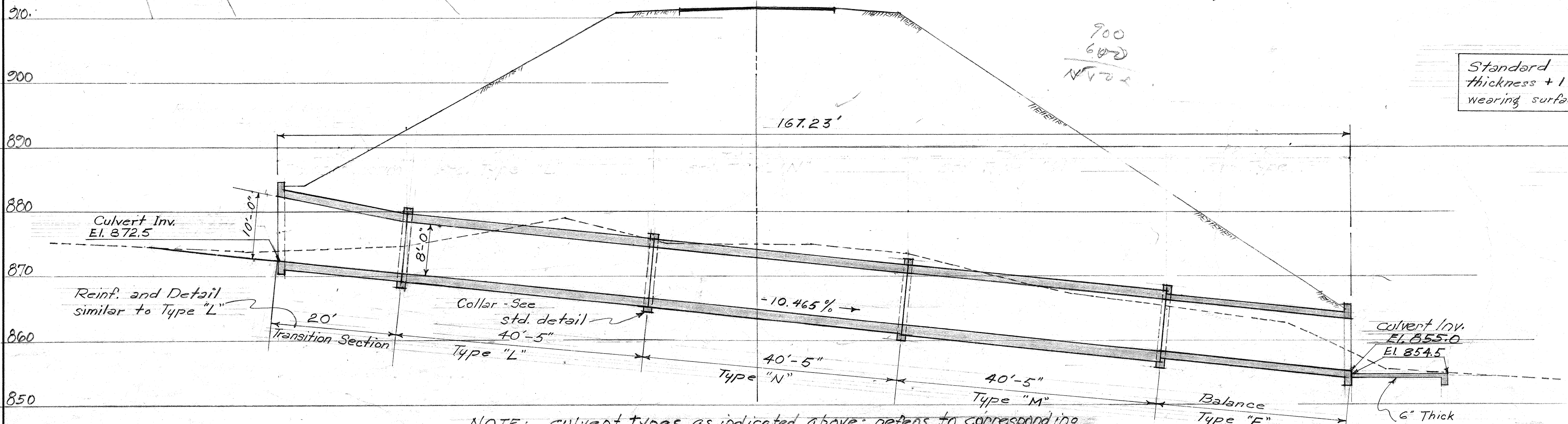


LAYOUT PLAN. SCALE: 1"=10'-0"



NOTE: Except as otherwise noted culvert reinf. and detail similar to corresponding Standard Box Culvert Section.

TYPICAL CULVERT SECTION
 Scale: 3/8"=1'-0"

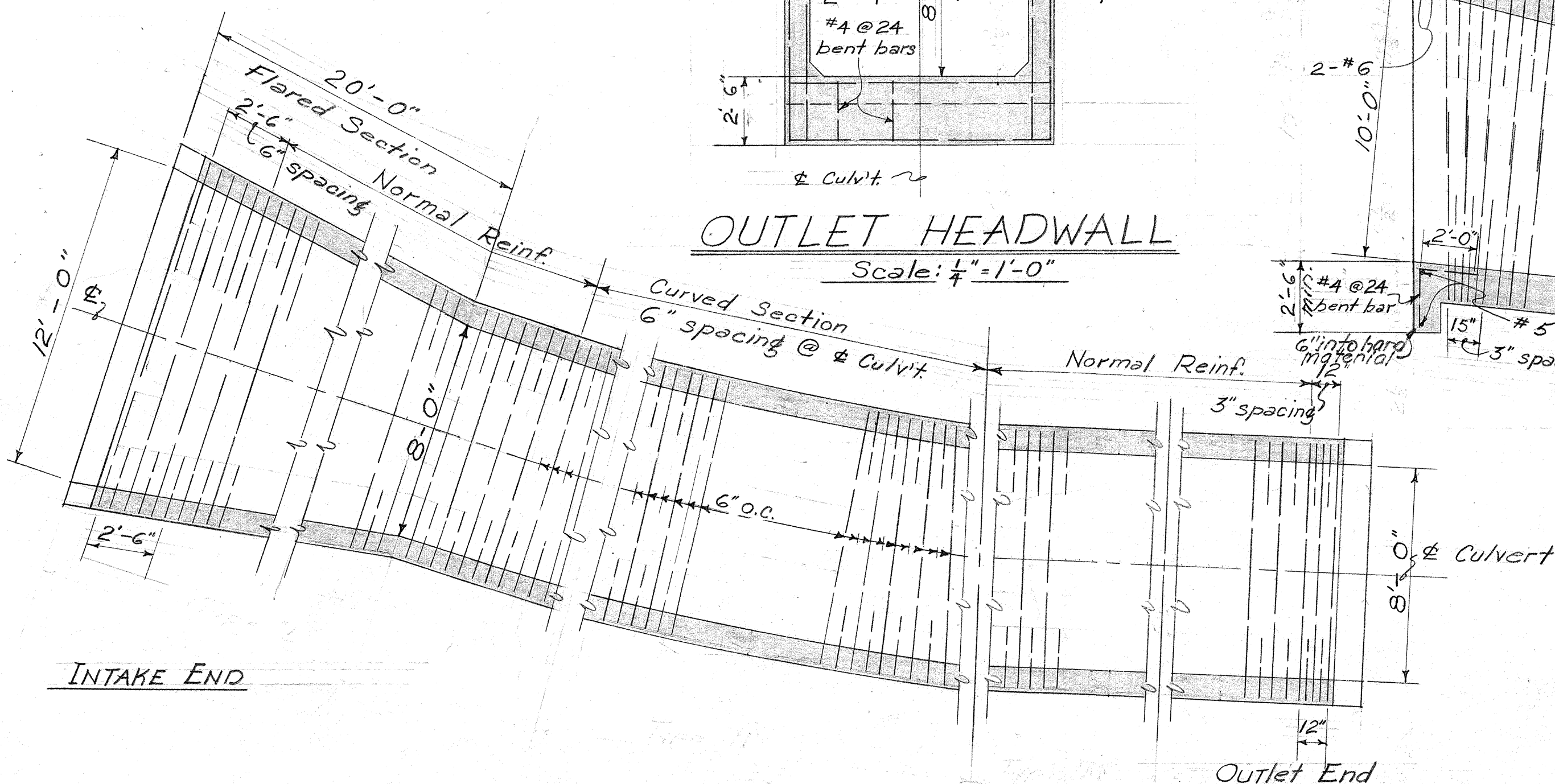
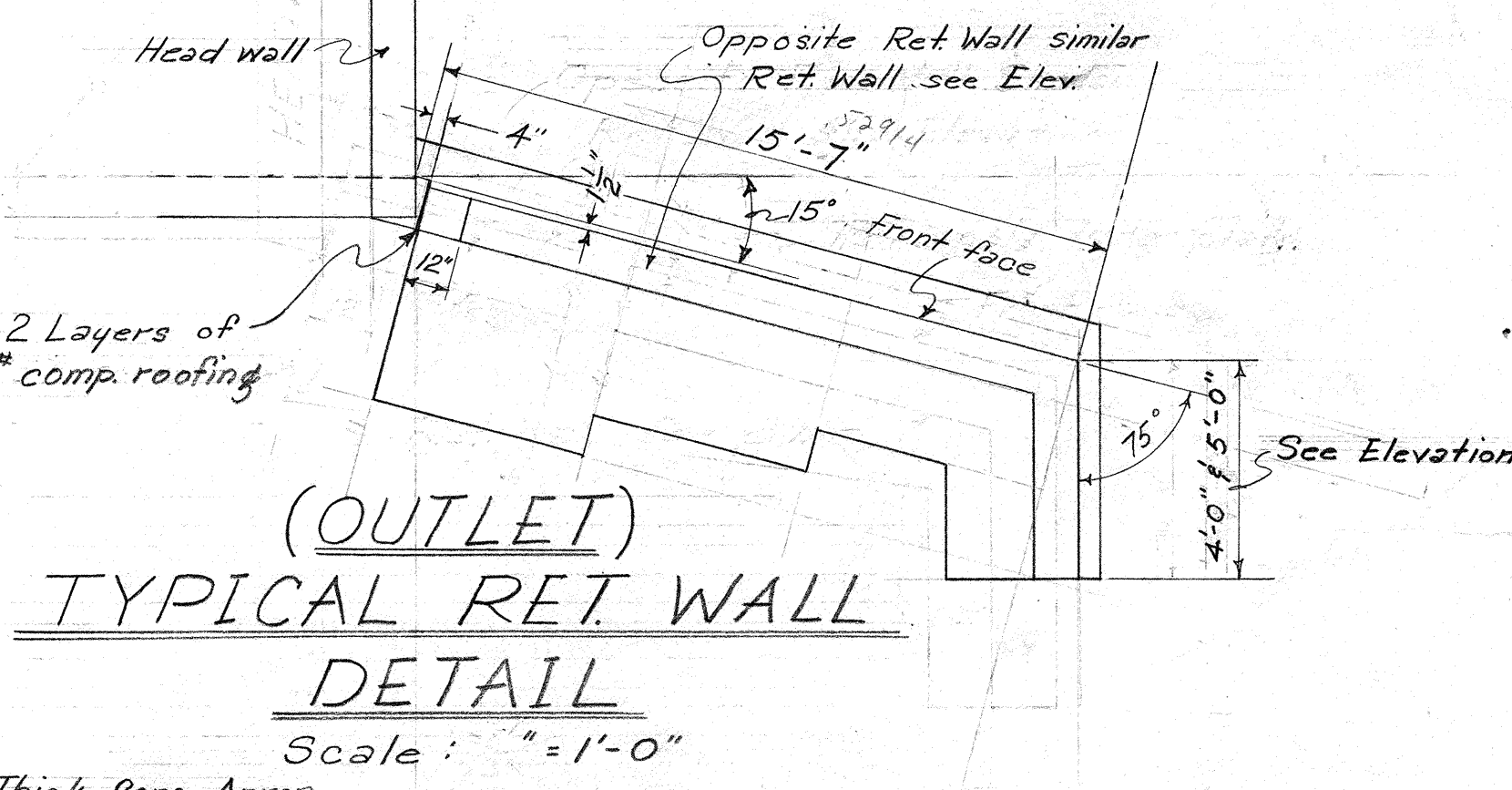
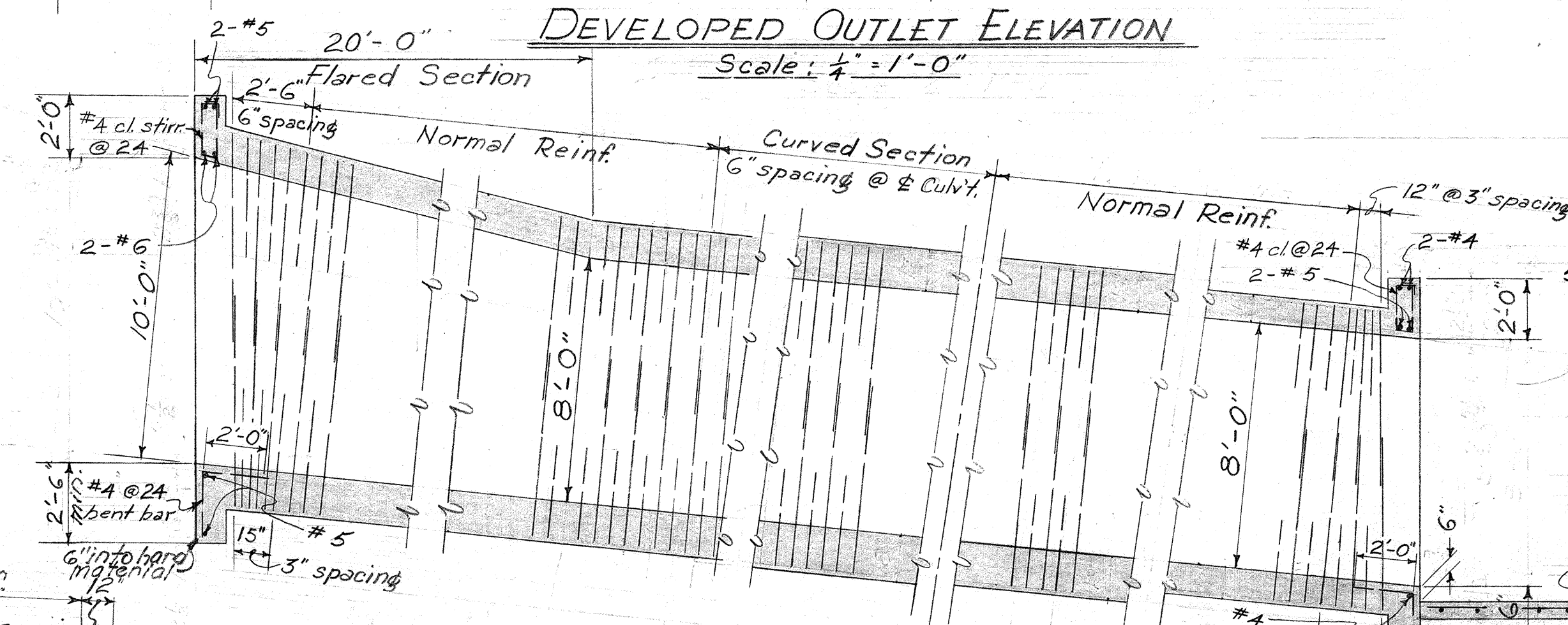
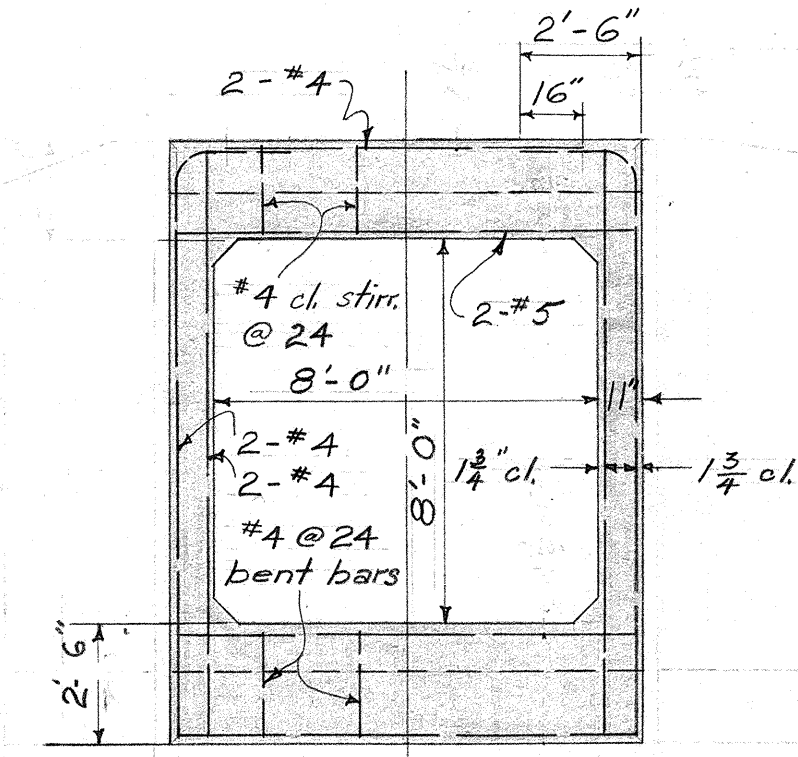
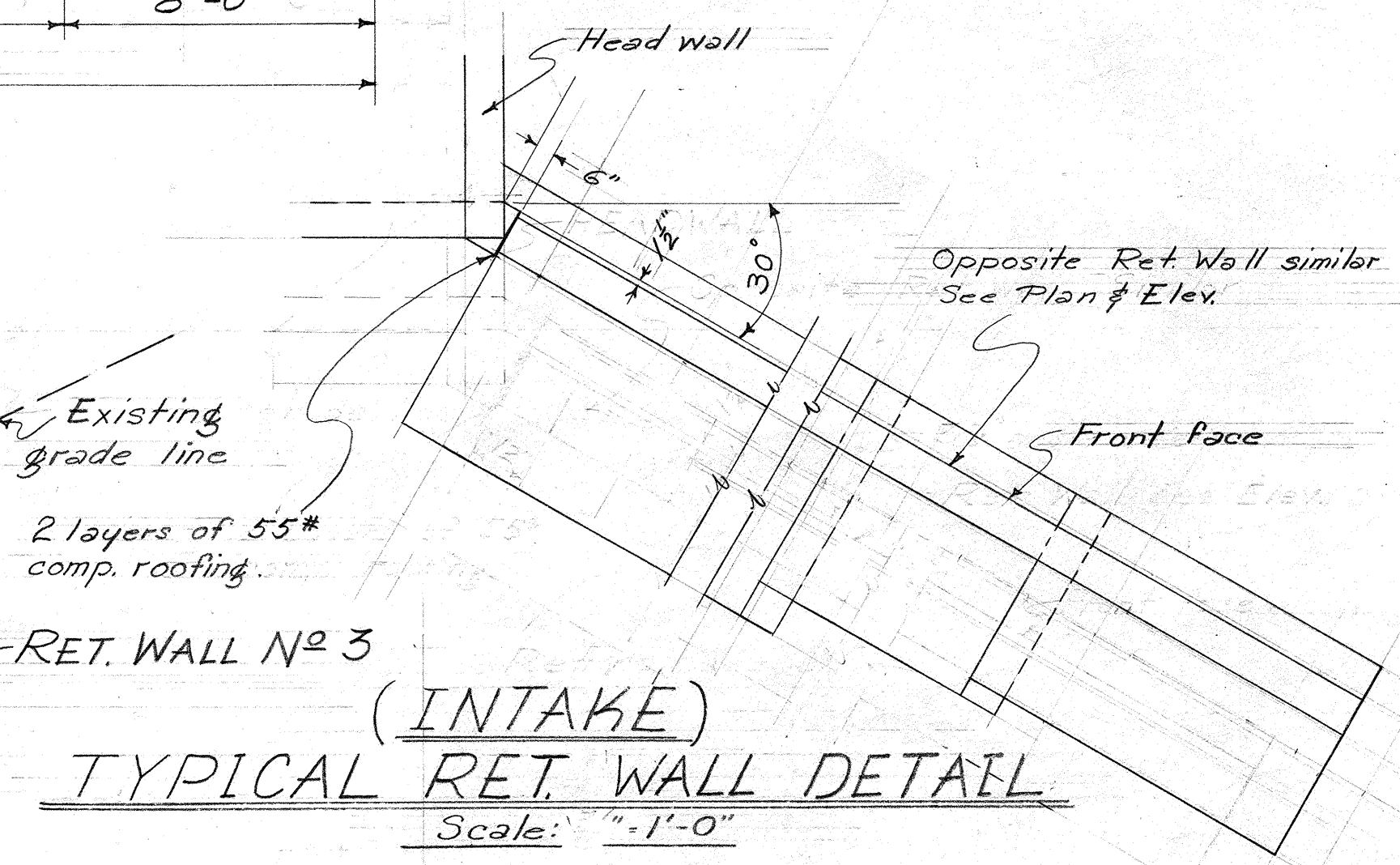
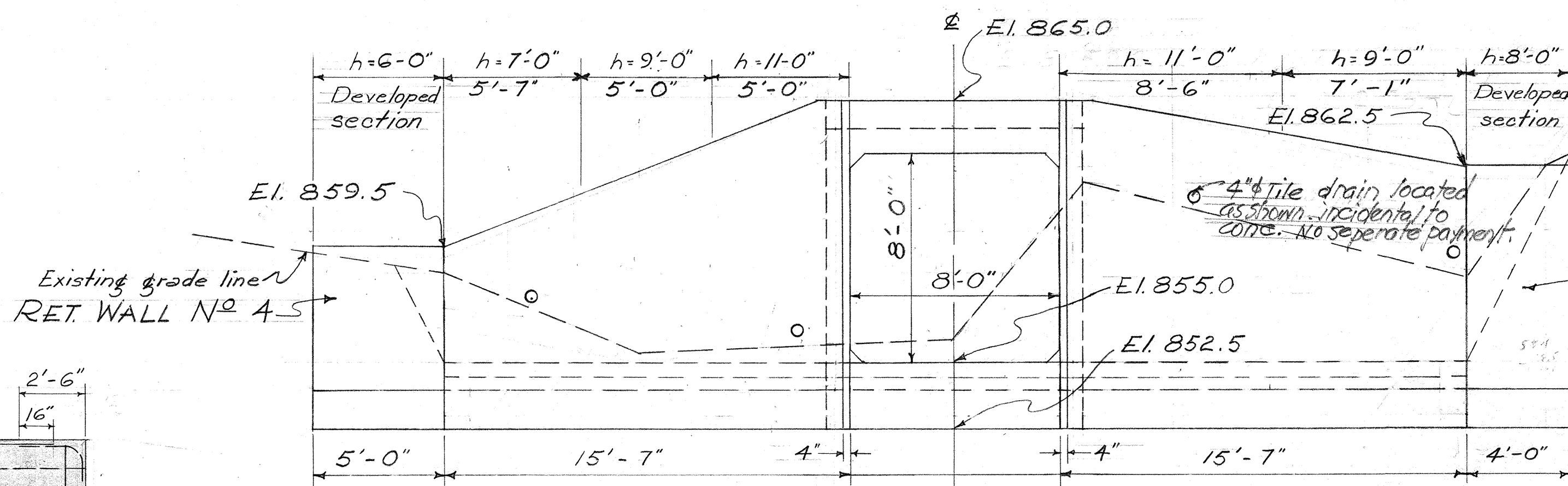
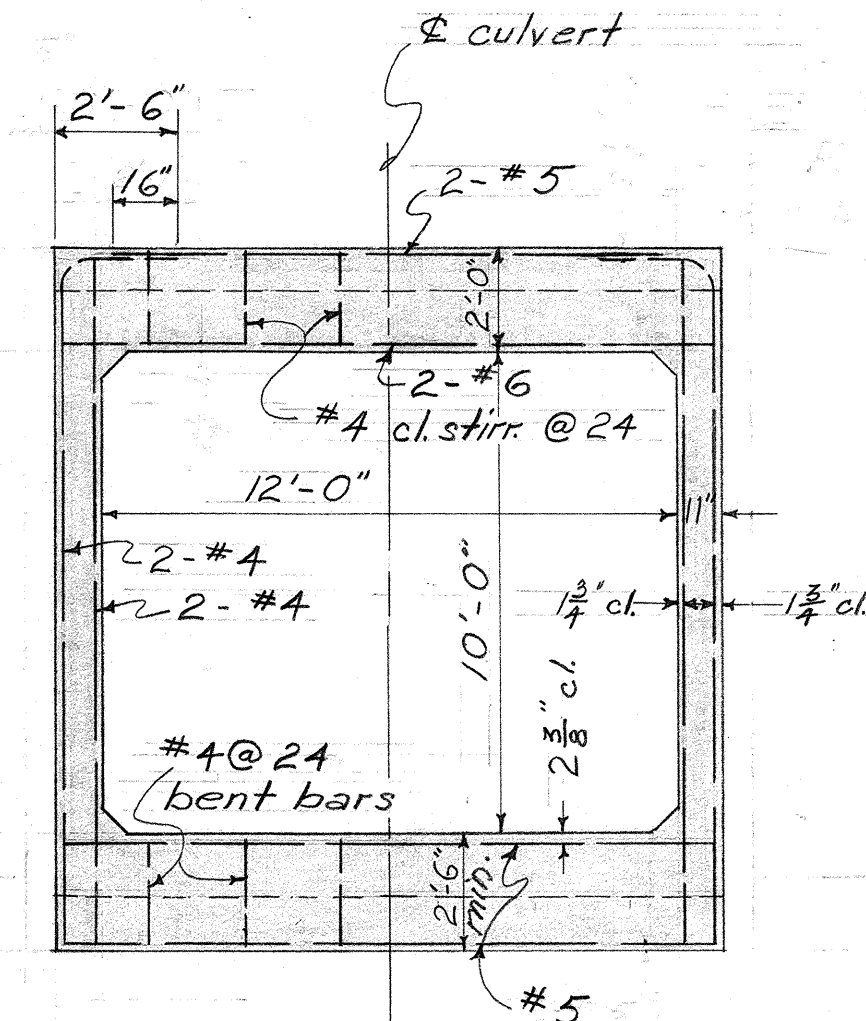
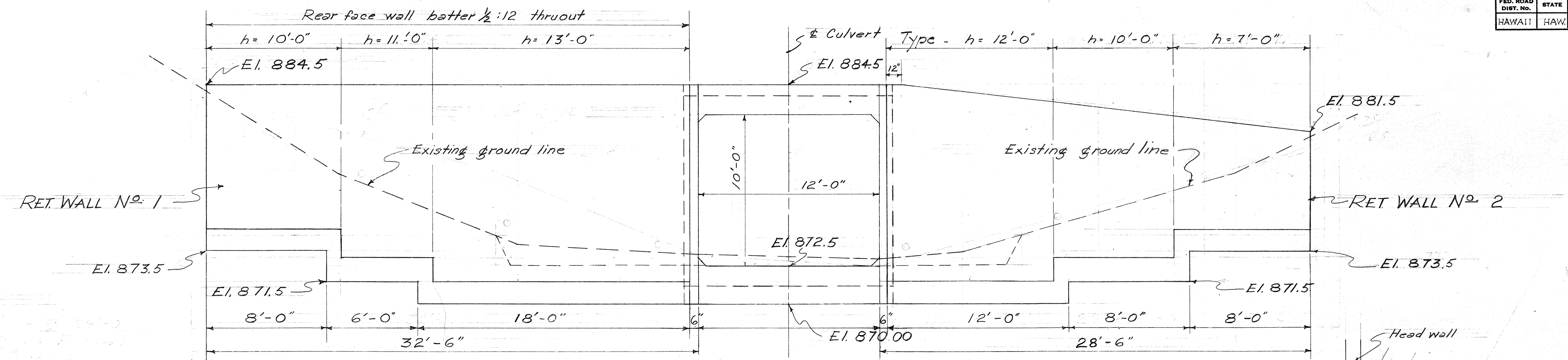


NOTE: culvert types as indicated above refers to corresponding standard Box culvert sections, except as otherwise shown on adjacent details.

LONGITUDINAL SECTION ALONG & BOX CULVERT SCALE: 1"=10'-0"

TERRITORIAL HIGHWAY DEPARTMENT
 TERRITORY OF HAWAII
8x8 BOX CULVERT
 STA. 127+55
 HAWAII BELT RD. F-019-2(6)
 SEPT. 1957

DATE: Sept. 57
 DESIGNED BY: J. Shizuma
 DRAWN BY: J. Shizuma
 CHECKED BY: J. Shizuma
 NOTE BOOK NO.:



NOTE: Except as otherwise noted detail & reinf. of ret. wall similar as detail shown on Retaining Wall Standards drawing.

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII

8x8 BOX CULVERT

STA. 127 + 55

HAWAII BELT RD. F-019-2(6)

SEPT. 1957

DATE: Sept 57

DESIGNED BY: W.K.C.

TRACED BY: T. S. S. S.

QUANTITIES BY: T. S. S. S.

CHECKED BY: T. S. S. S.

ORIGINAL PLAN

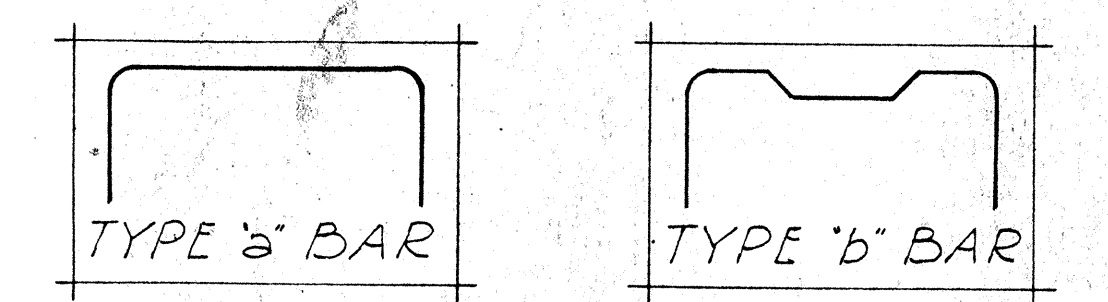
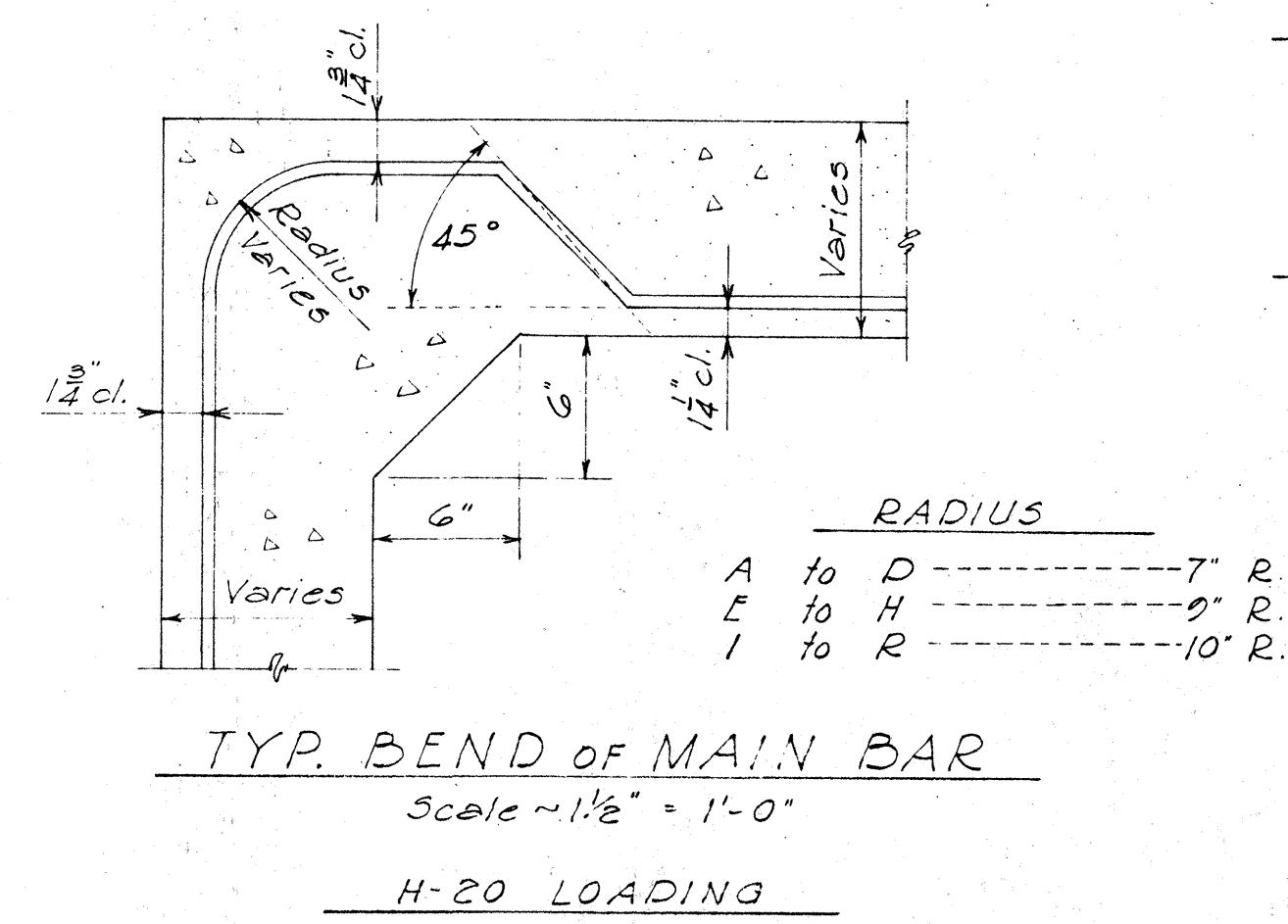
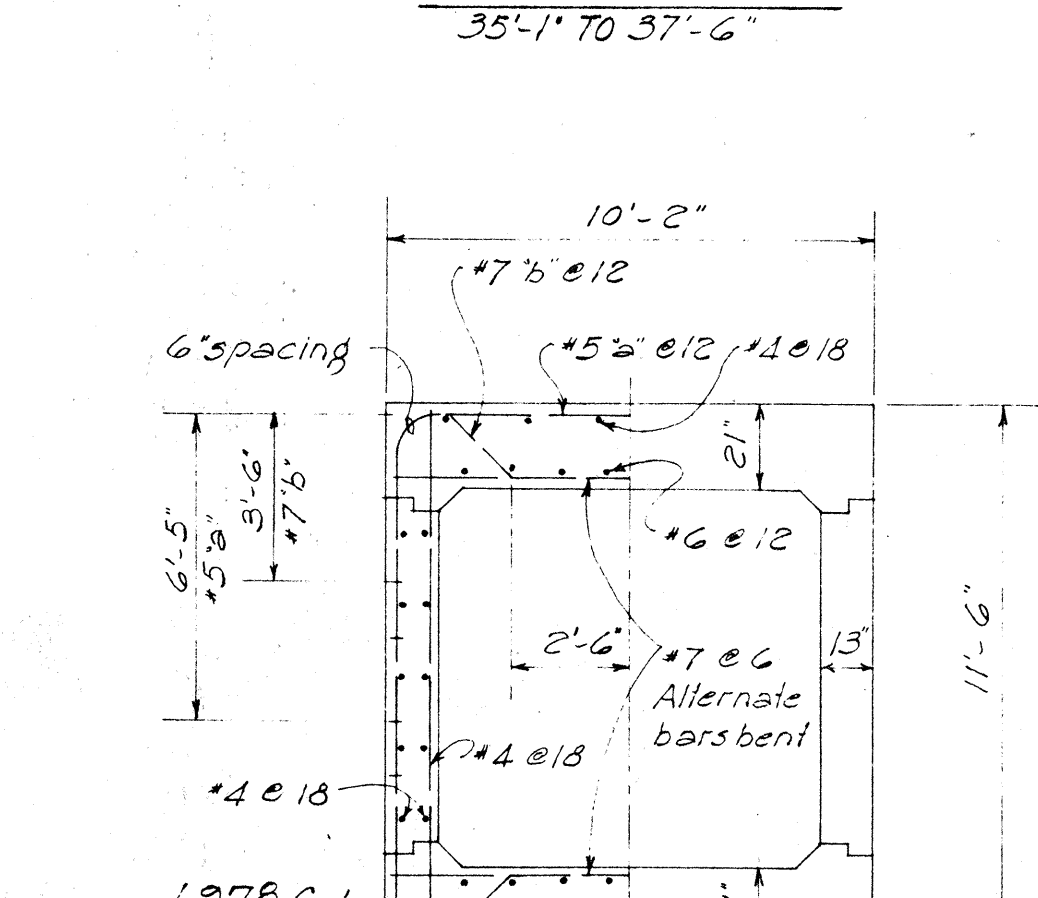
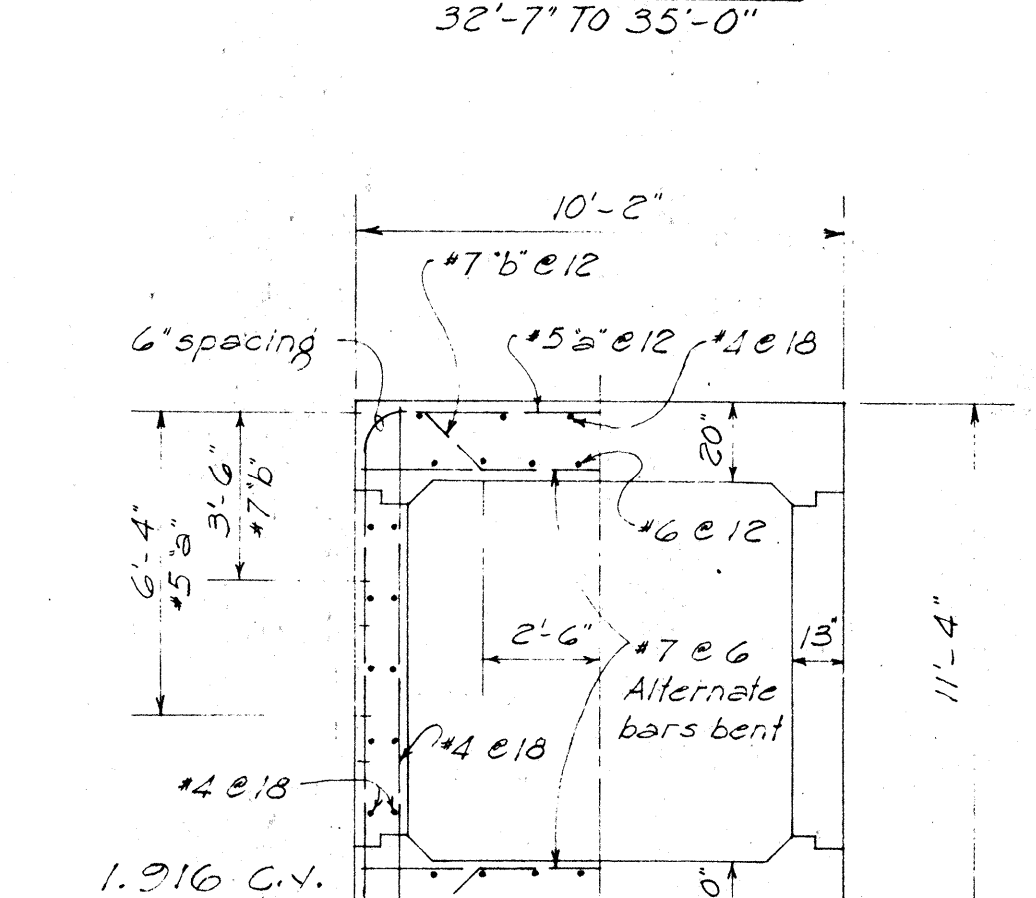
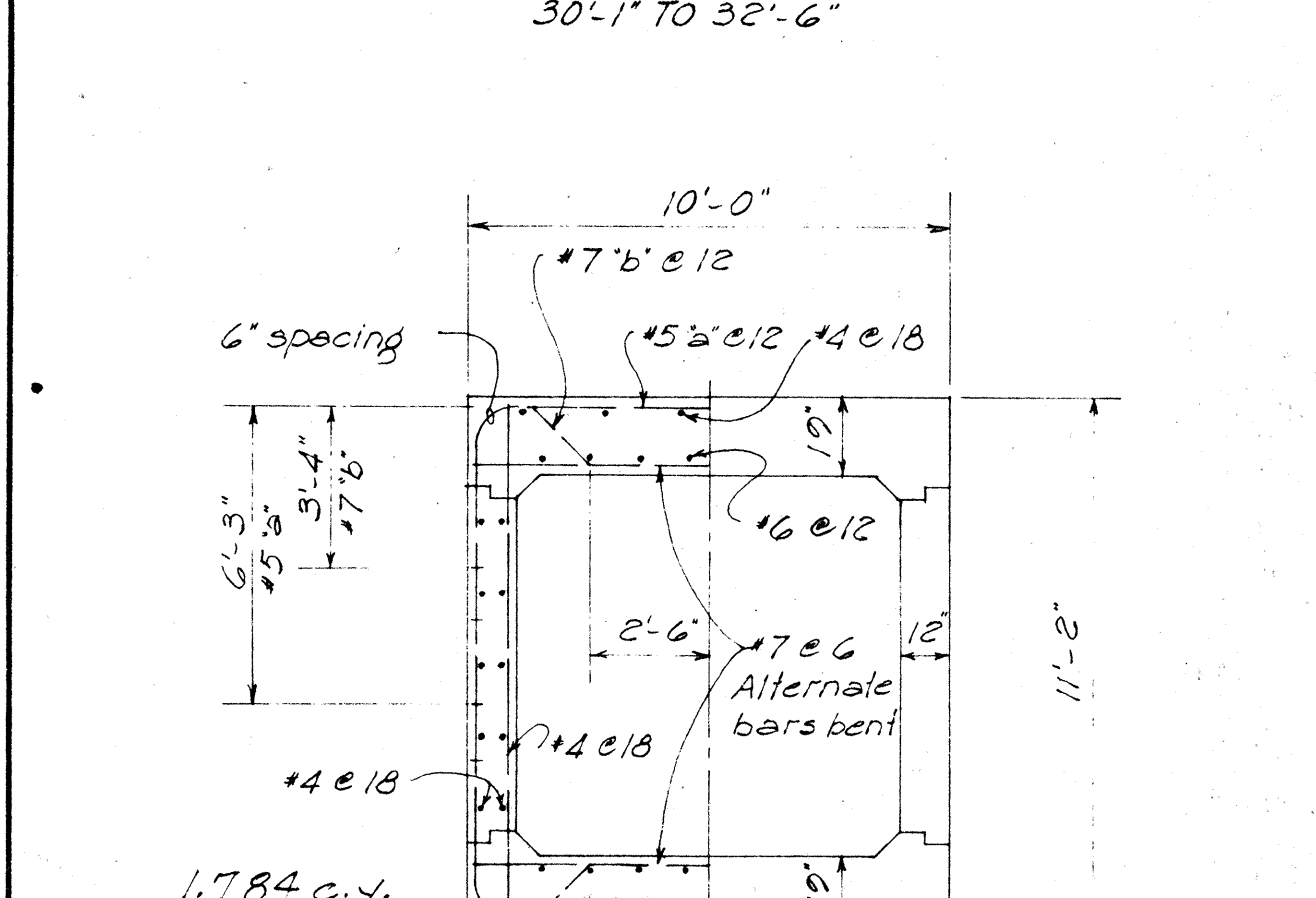
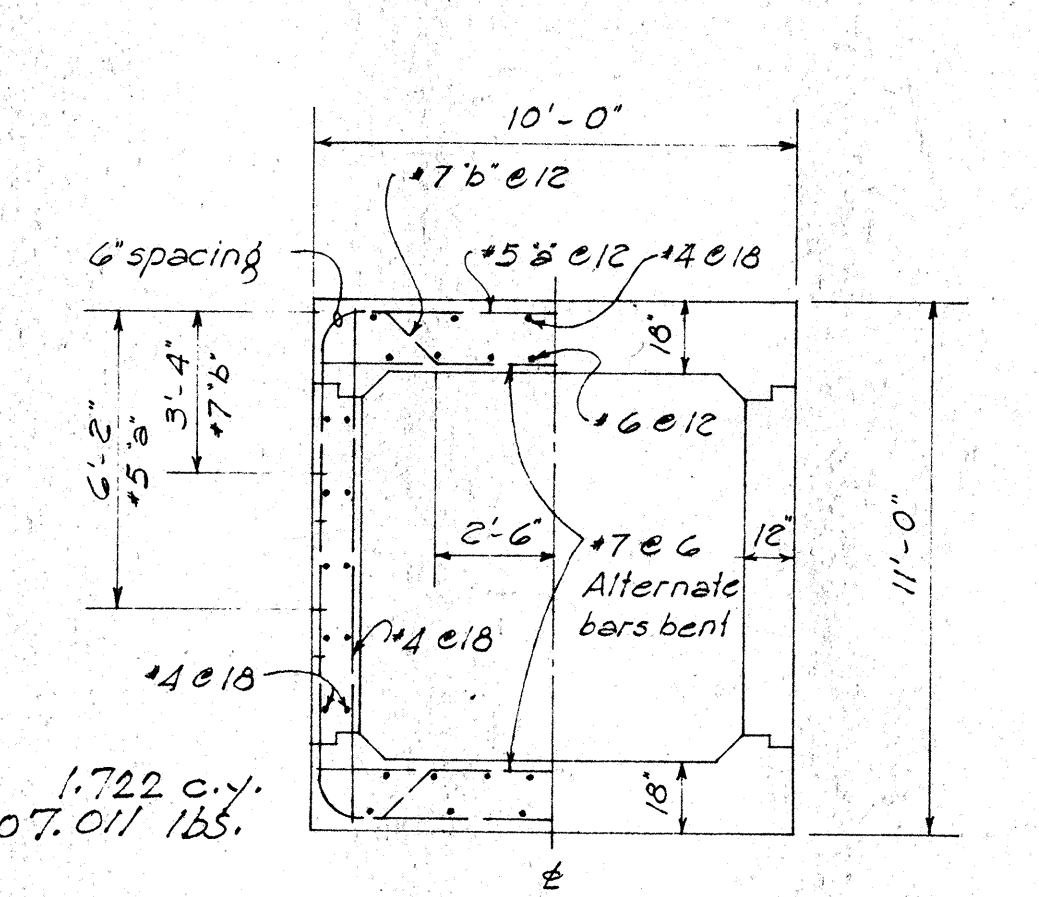
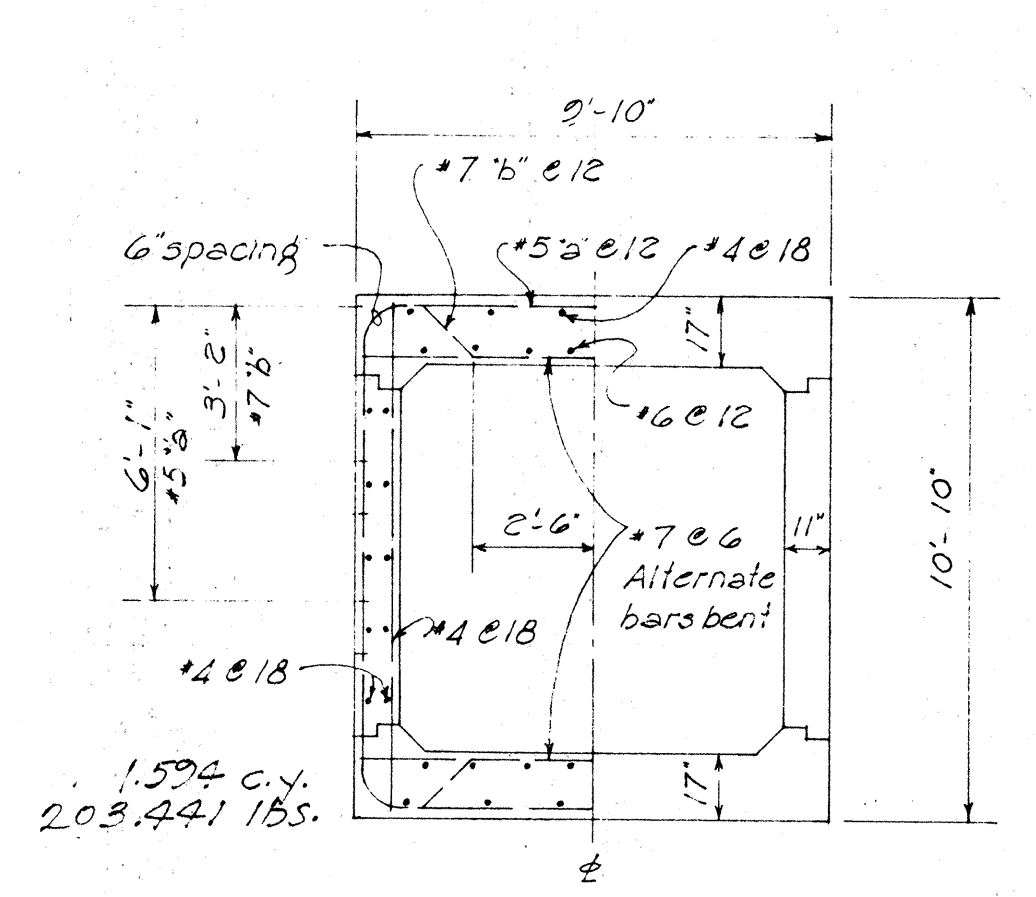
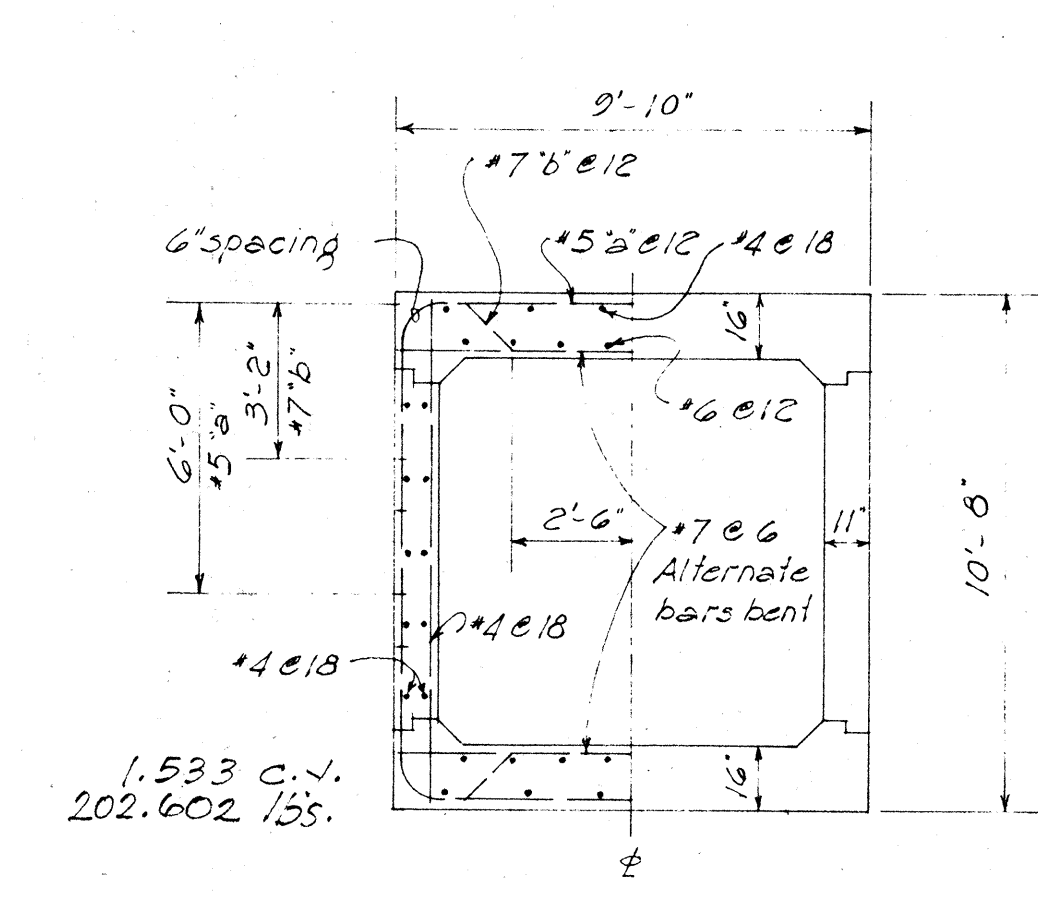
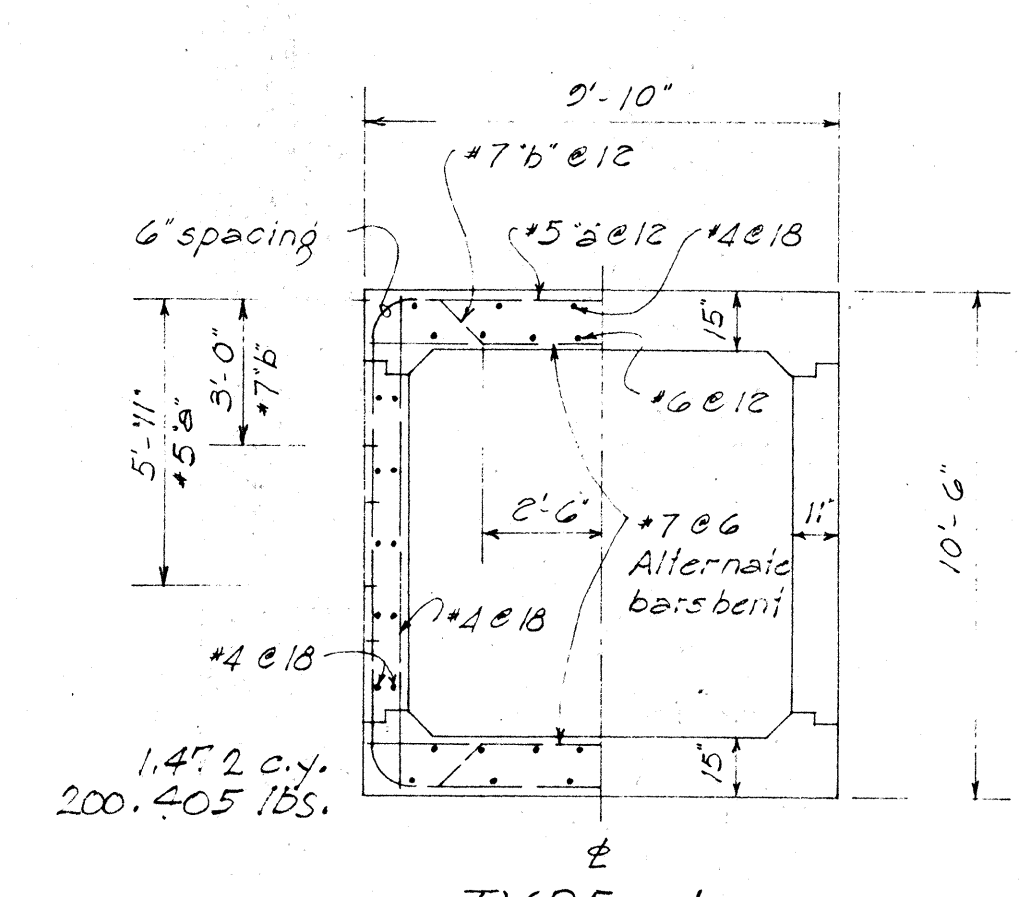
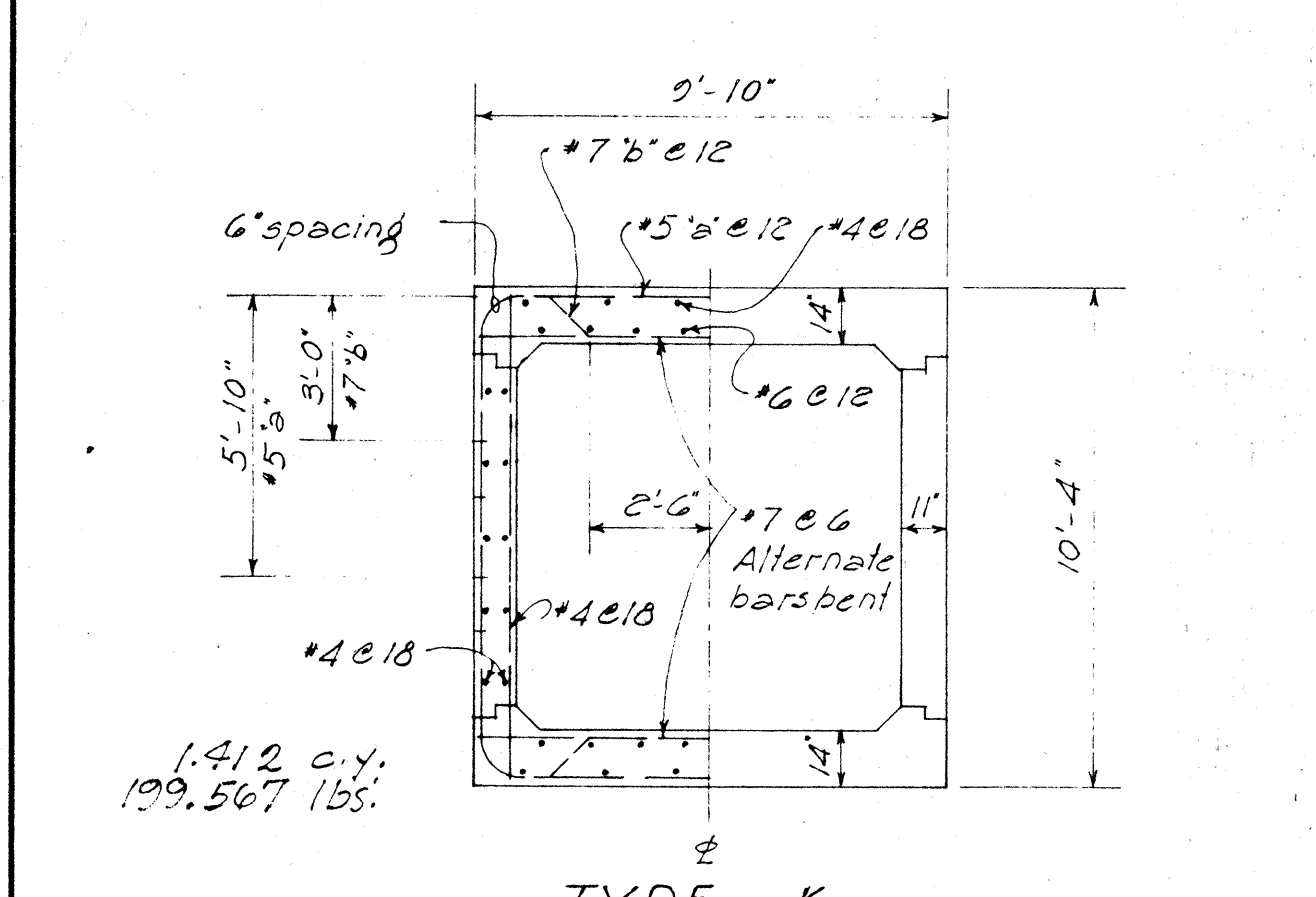
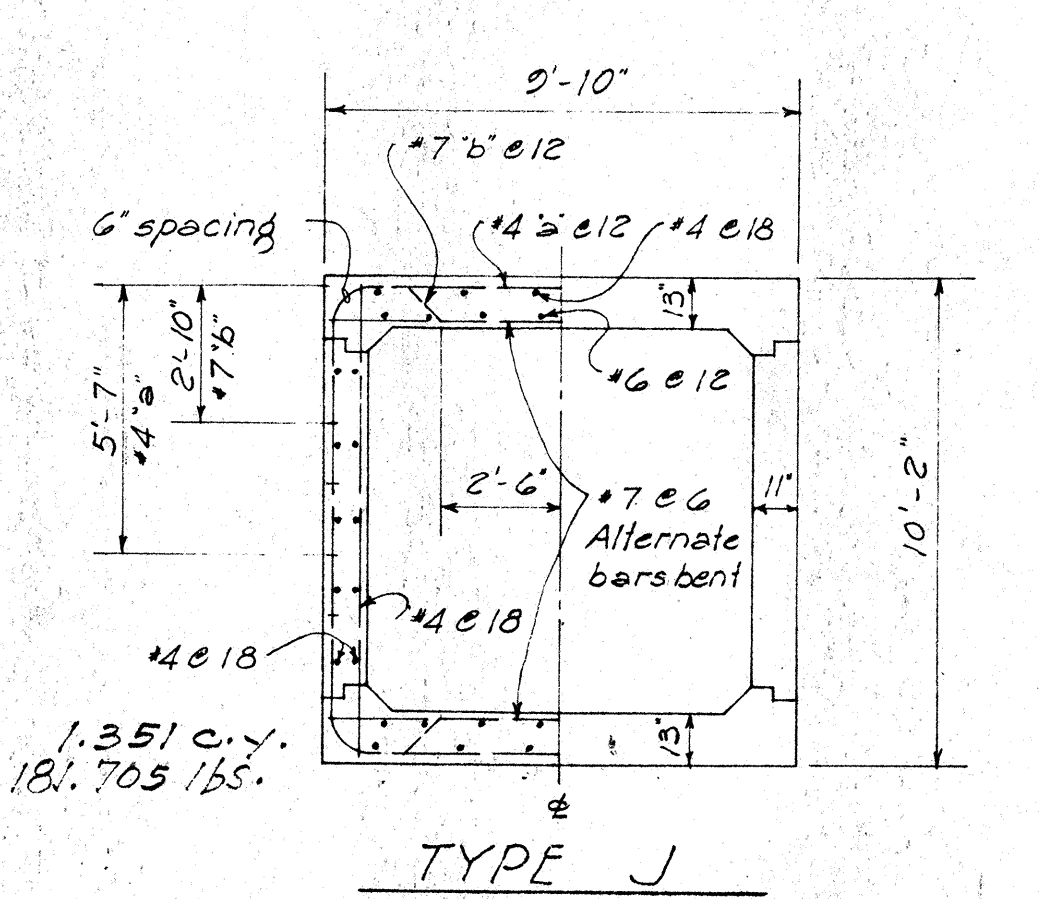
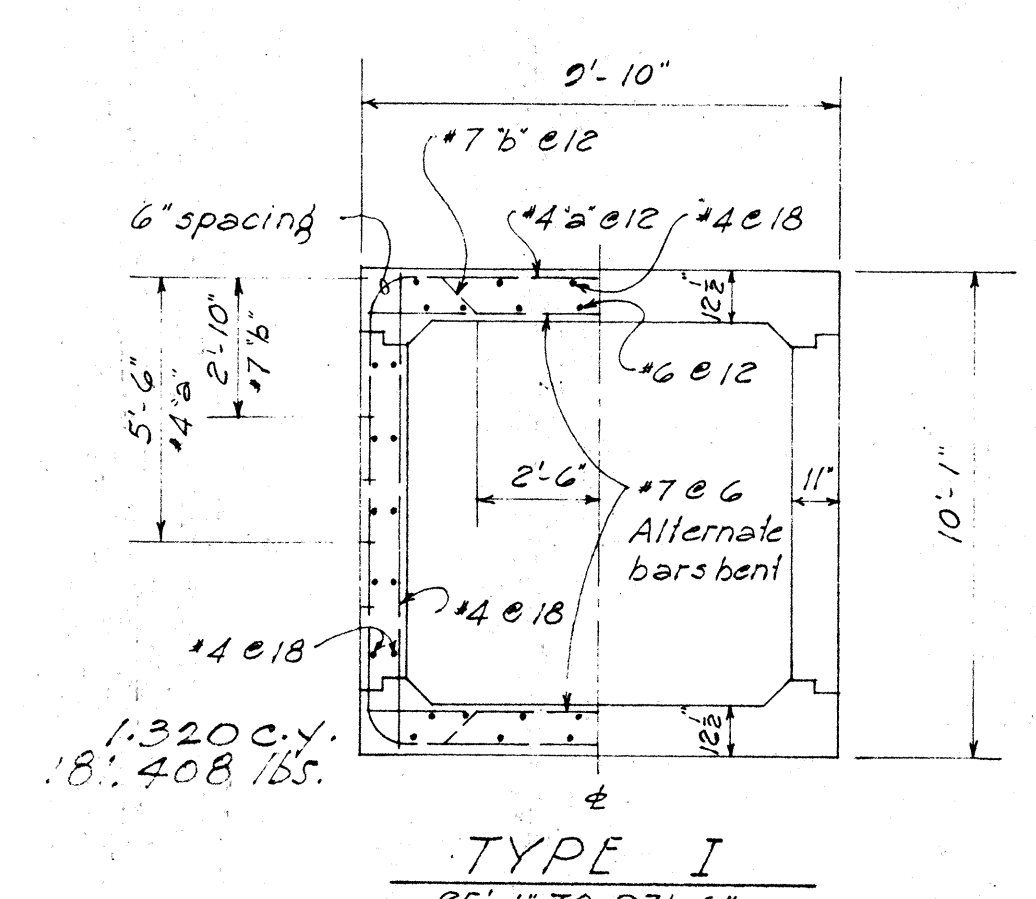
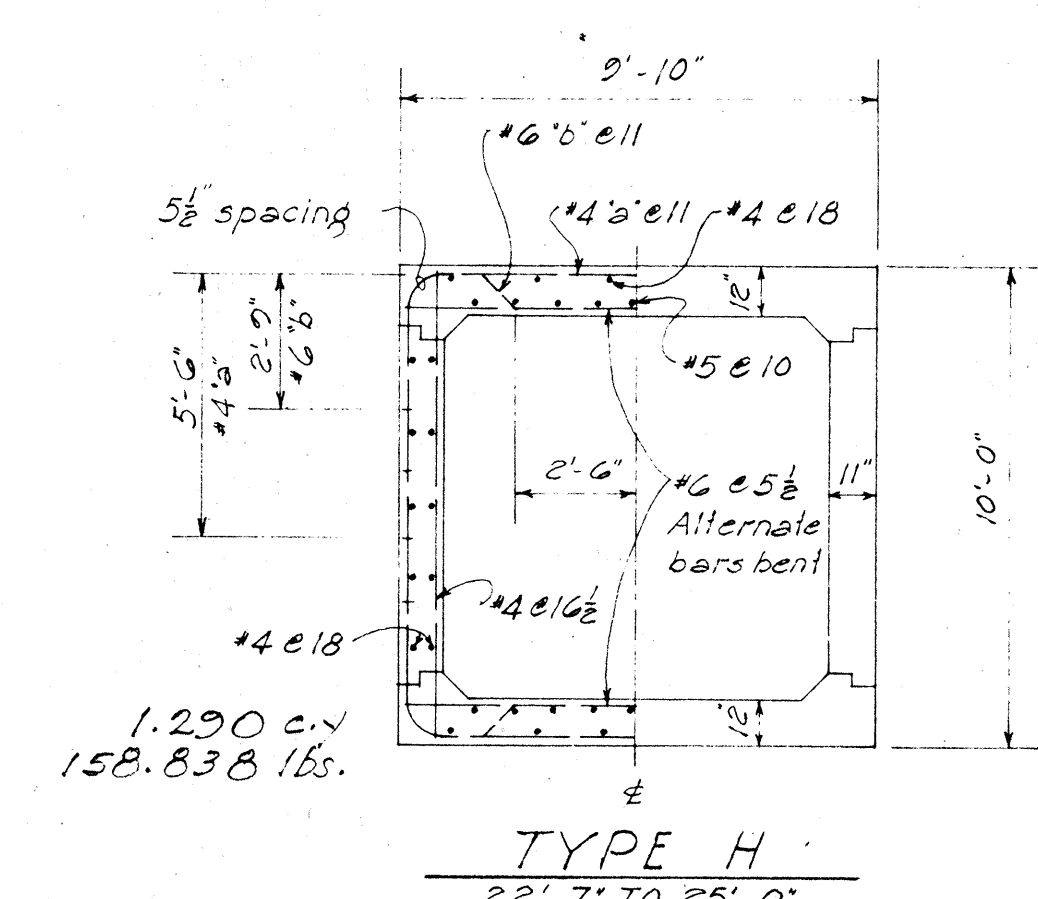
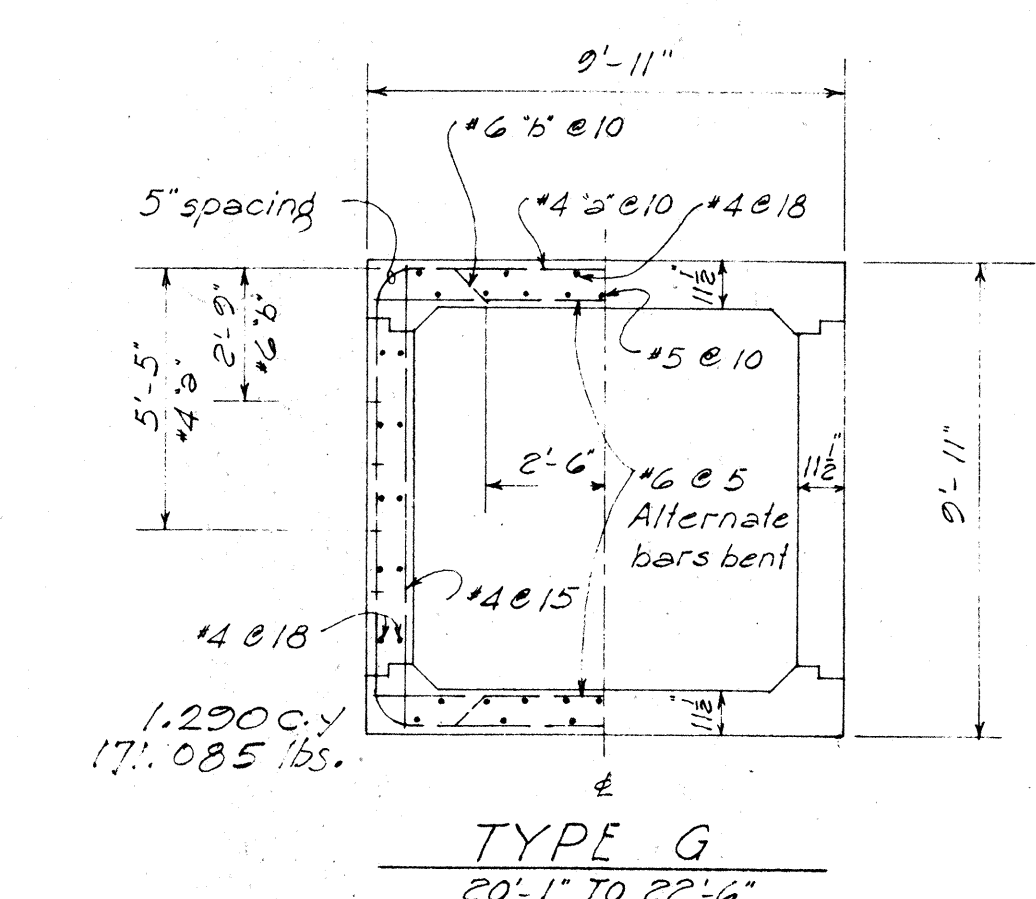
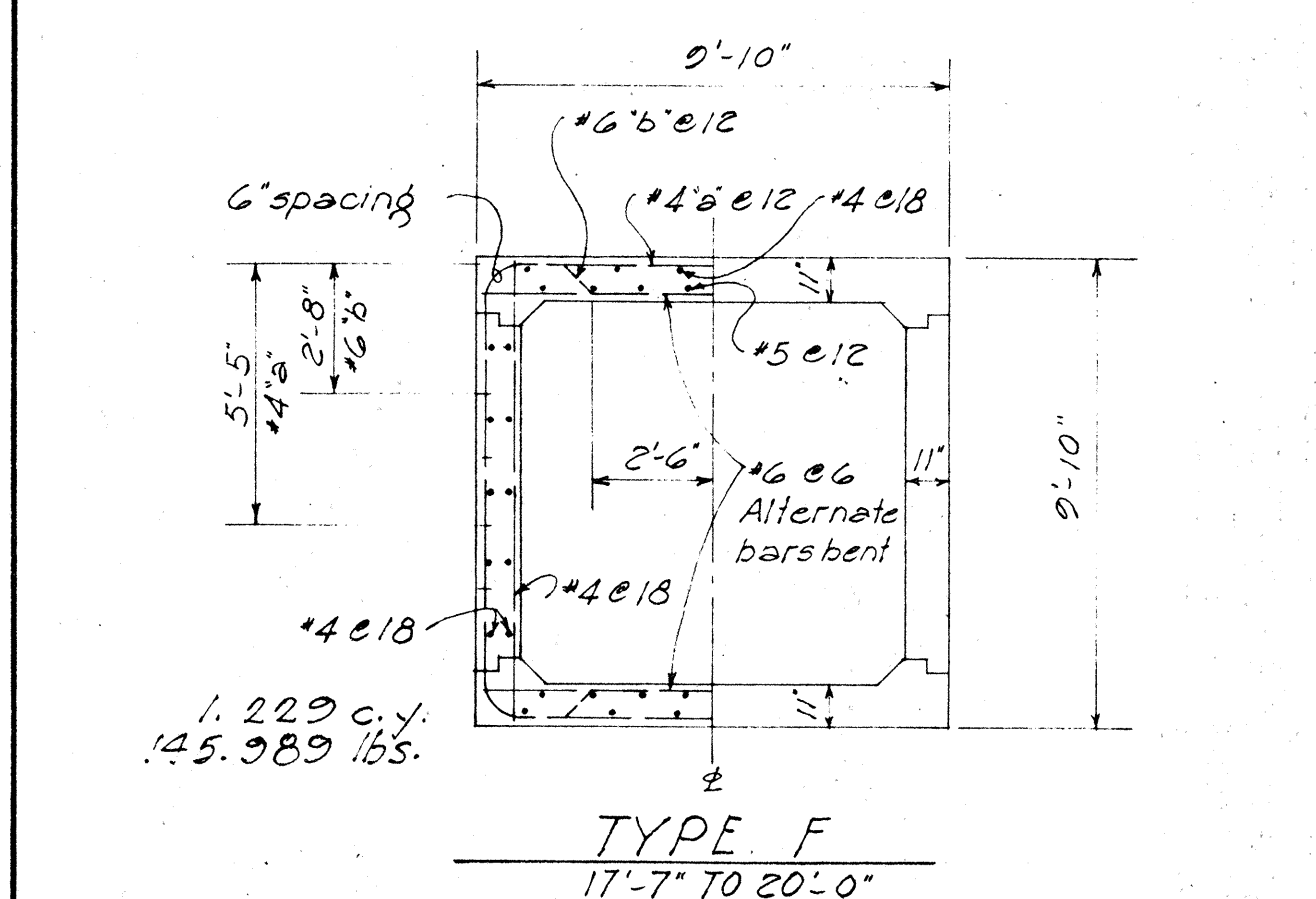
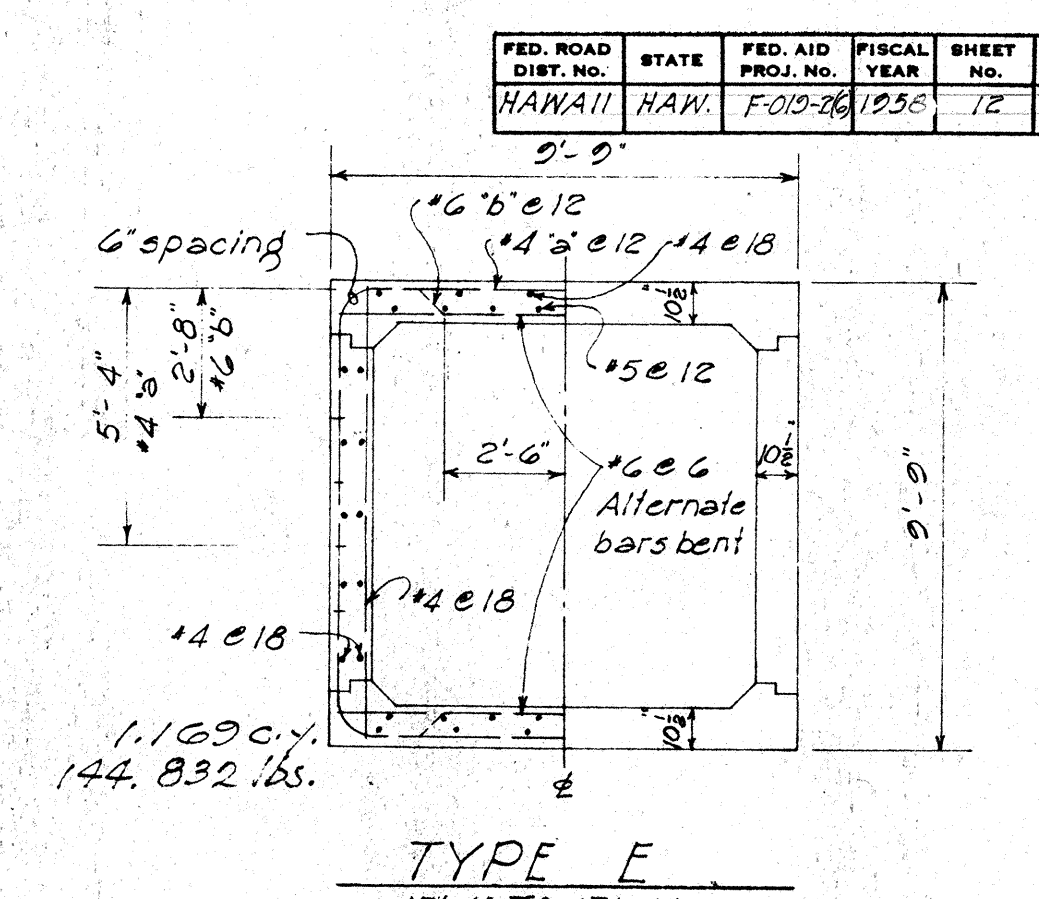
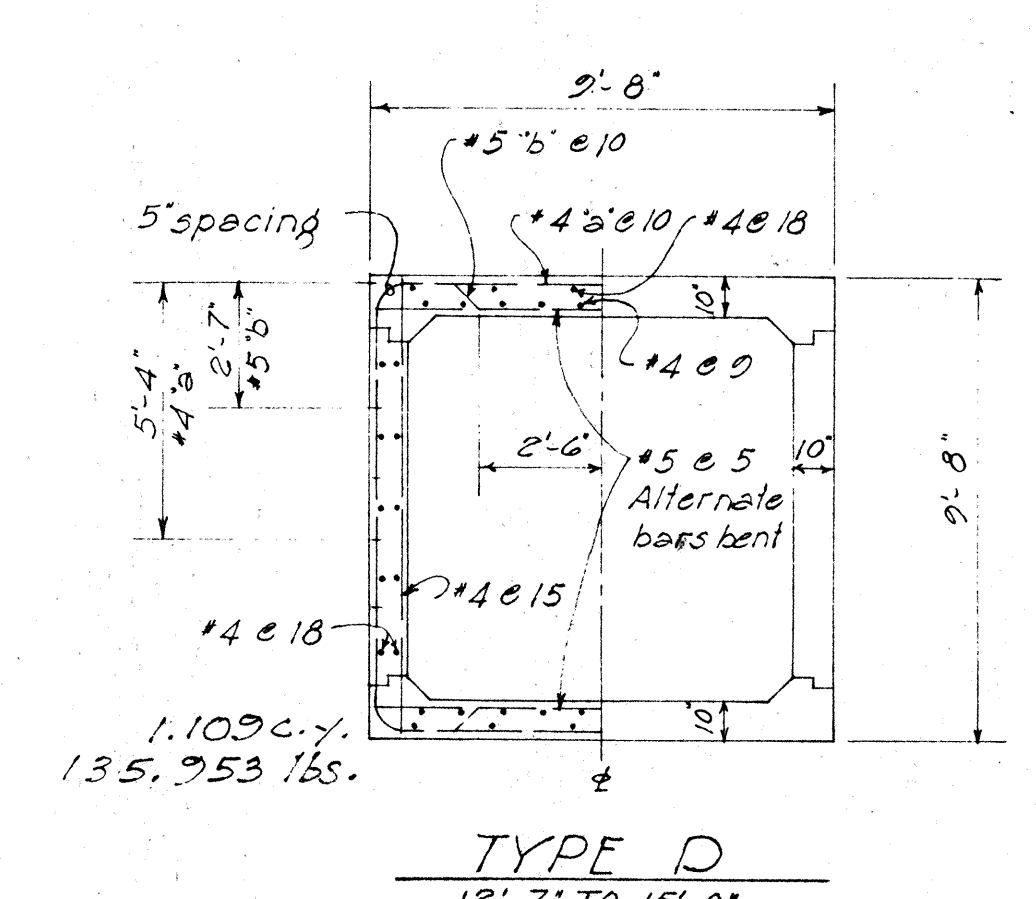
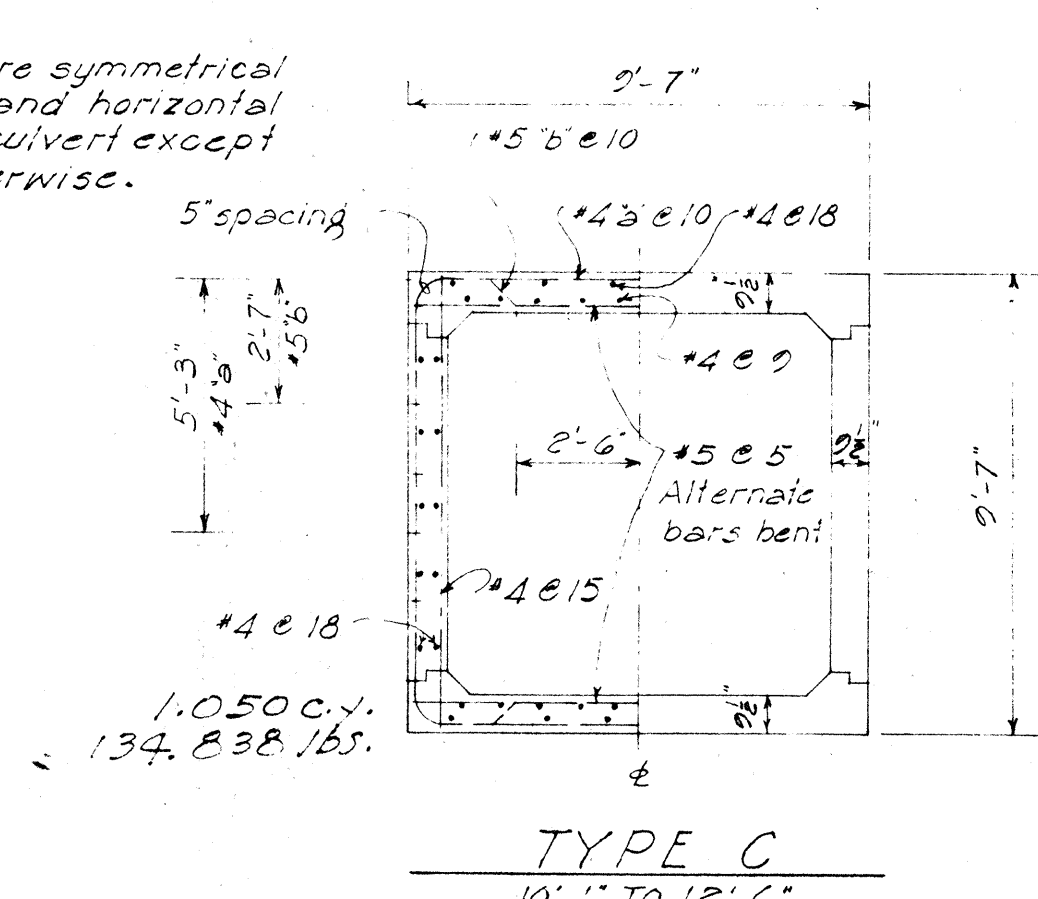
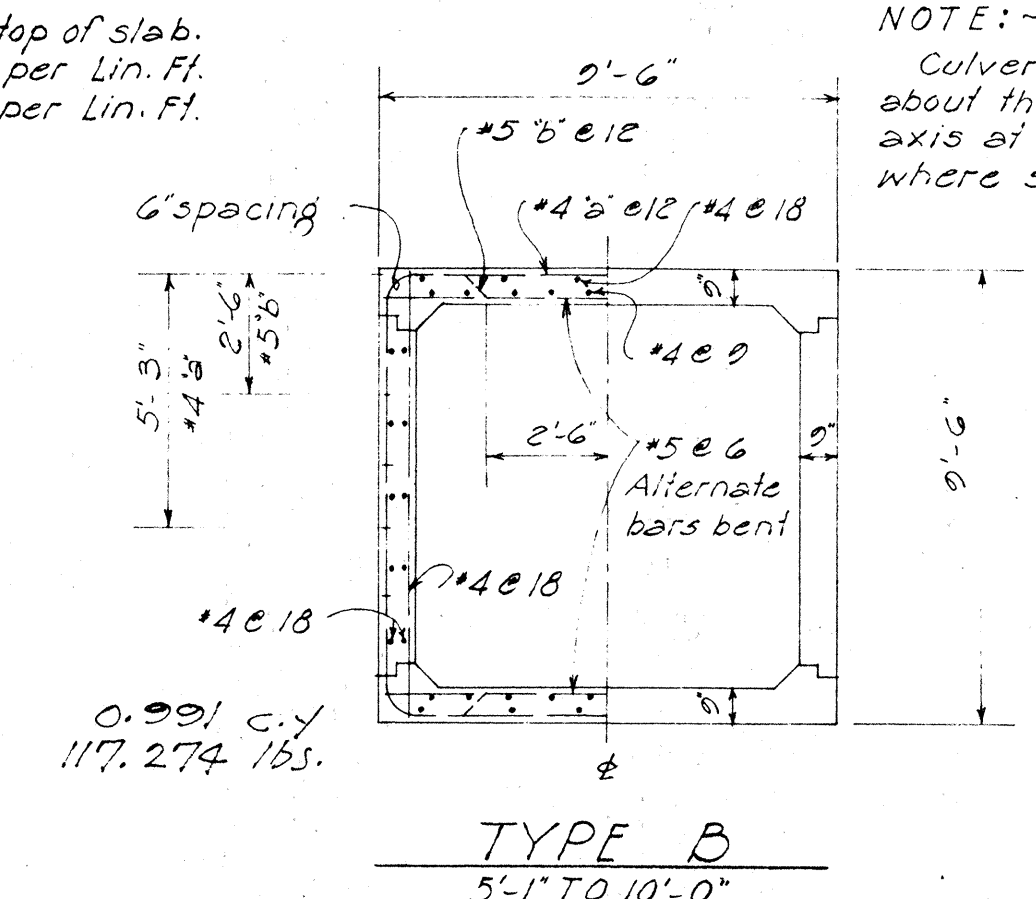
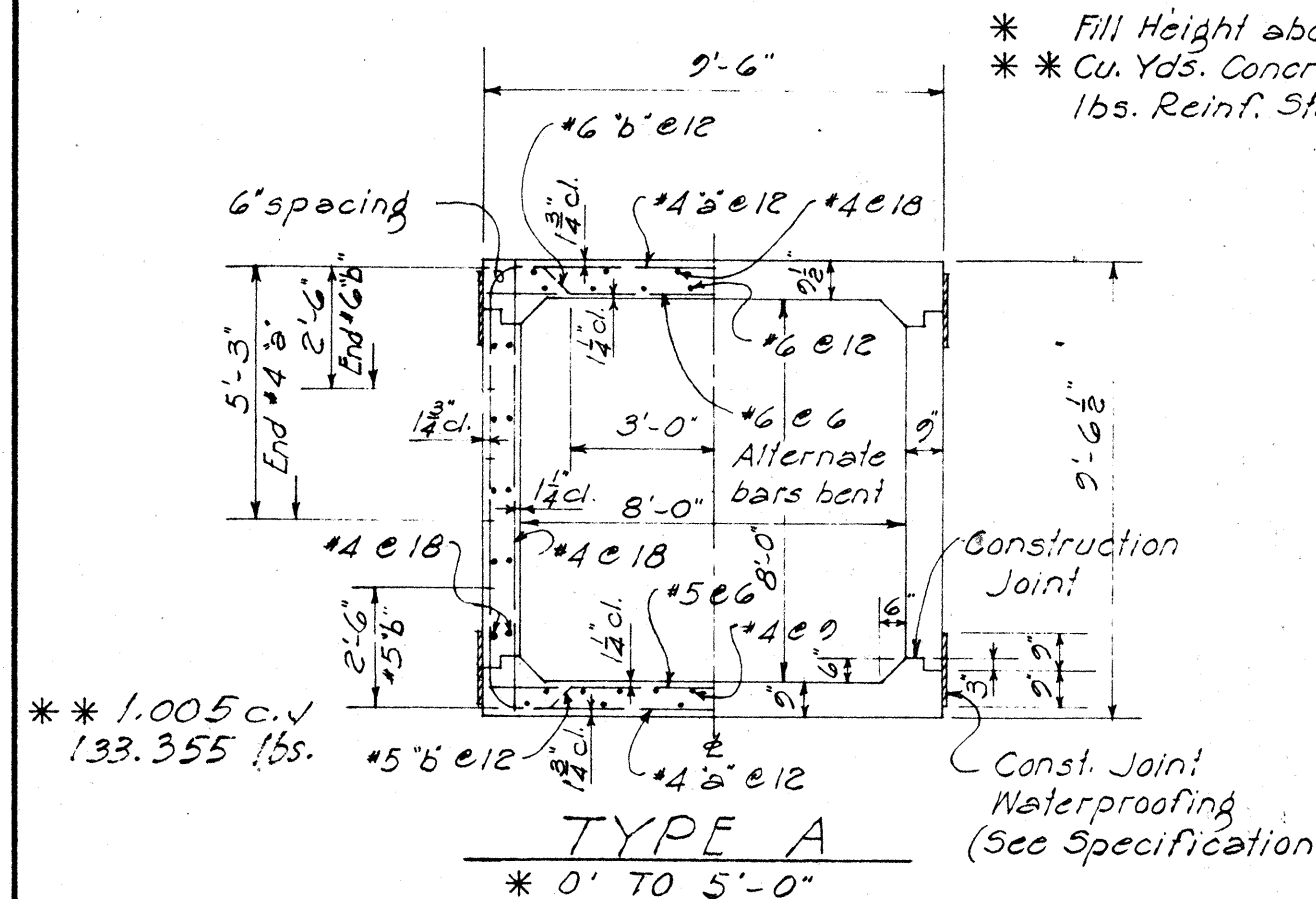
NOTE BOOK

No.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F010-26	1956	12	60

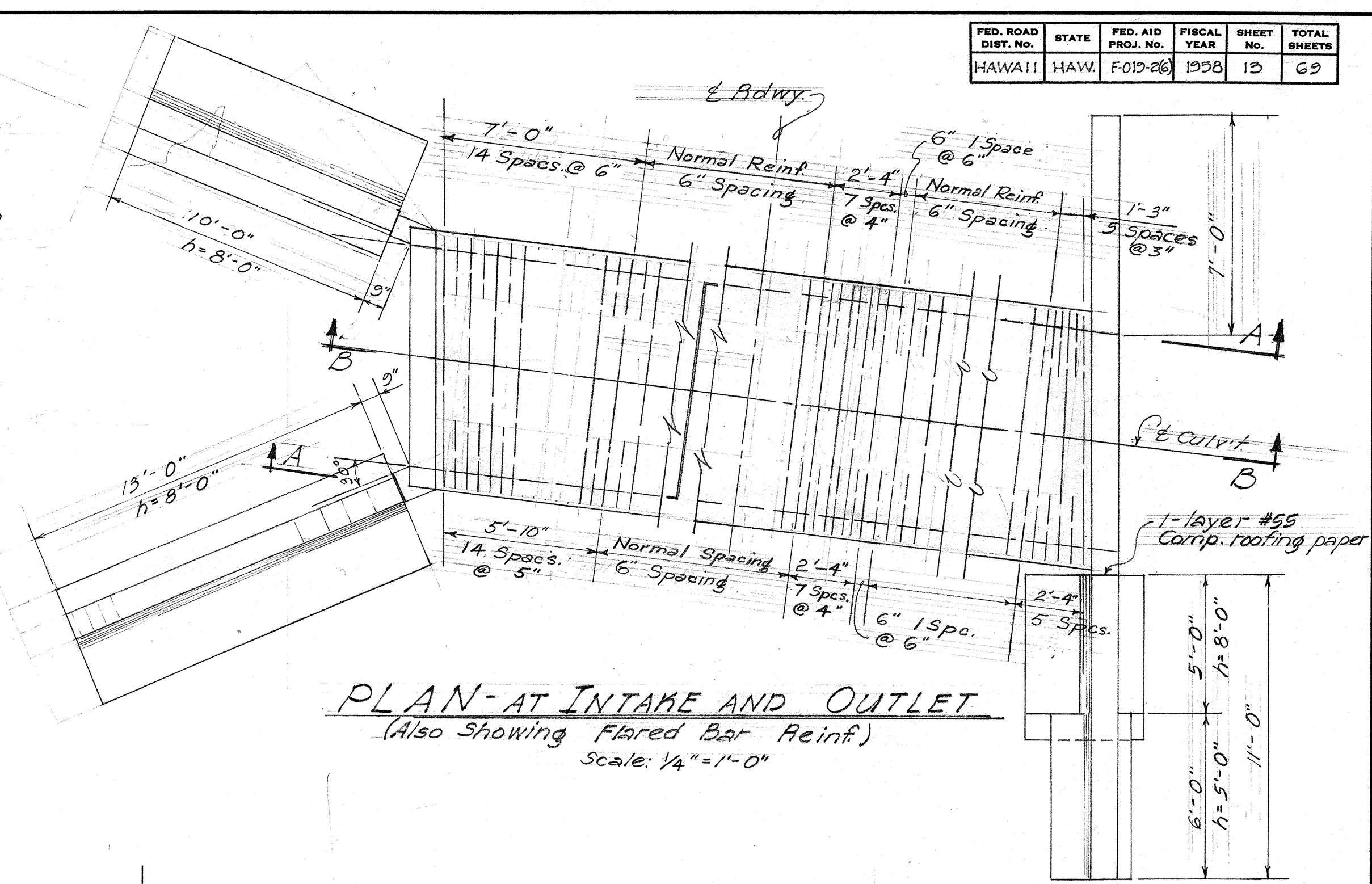
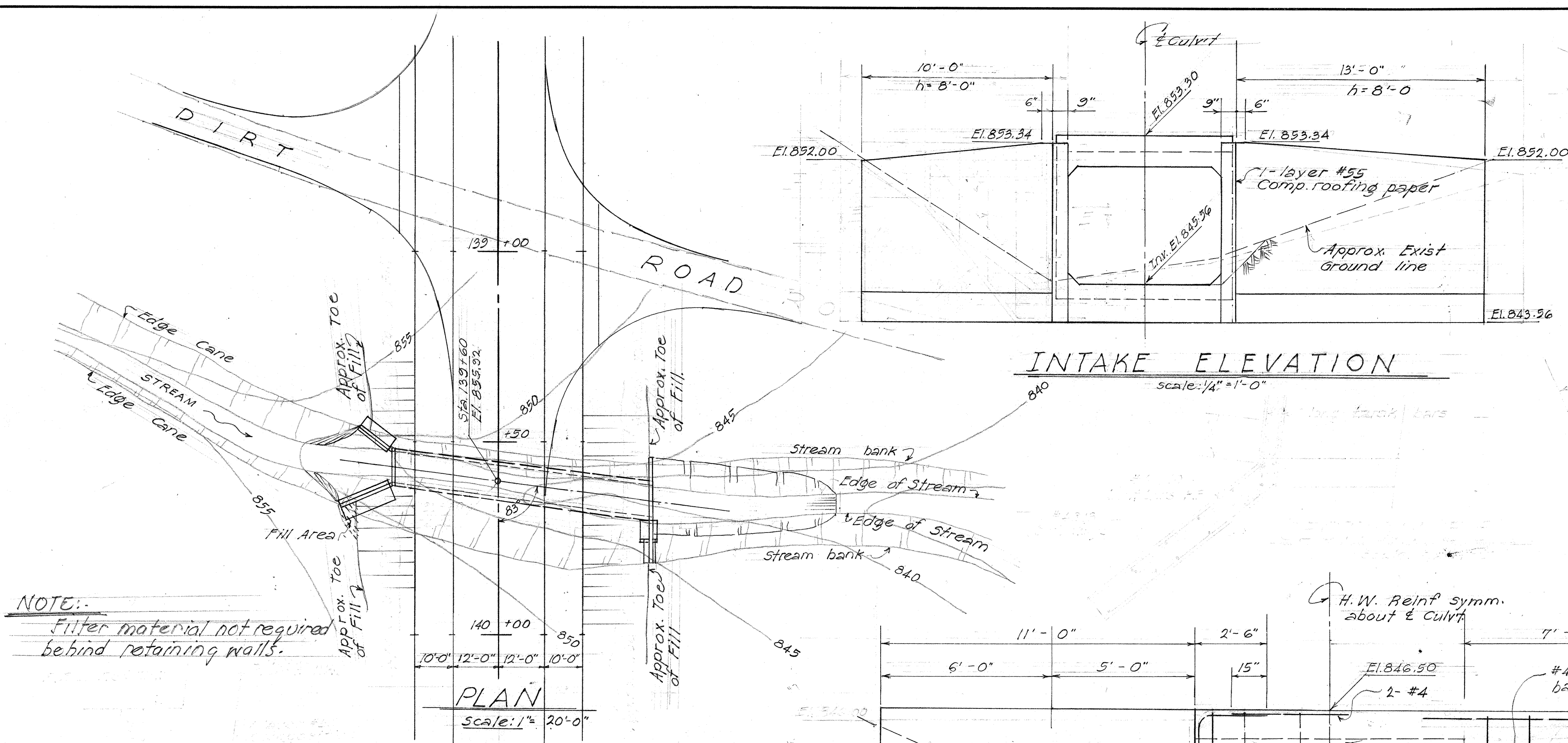
* Fill Height above top of slab.
* Cu. Yds. Concrete per Lin. Ft.
lbs. Reinf. Steel per Lin. Ft.

NOTE:-
Culvert details are symmetrical about the vertical and horizontal axis at center of culvert except where shown otherwise.

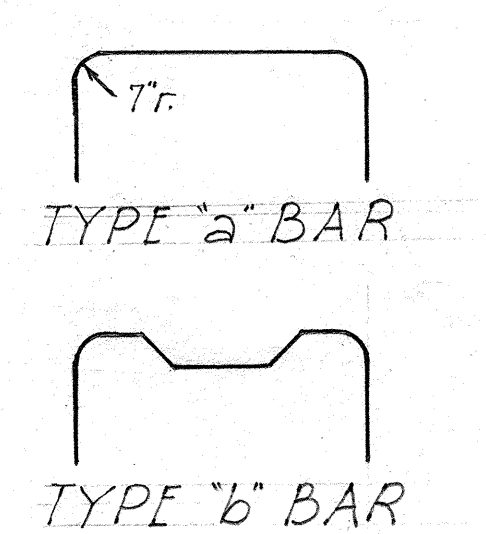
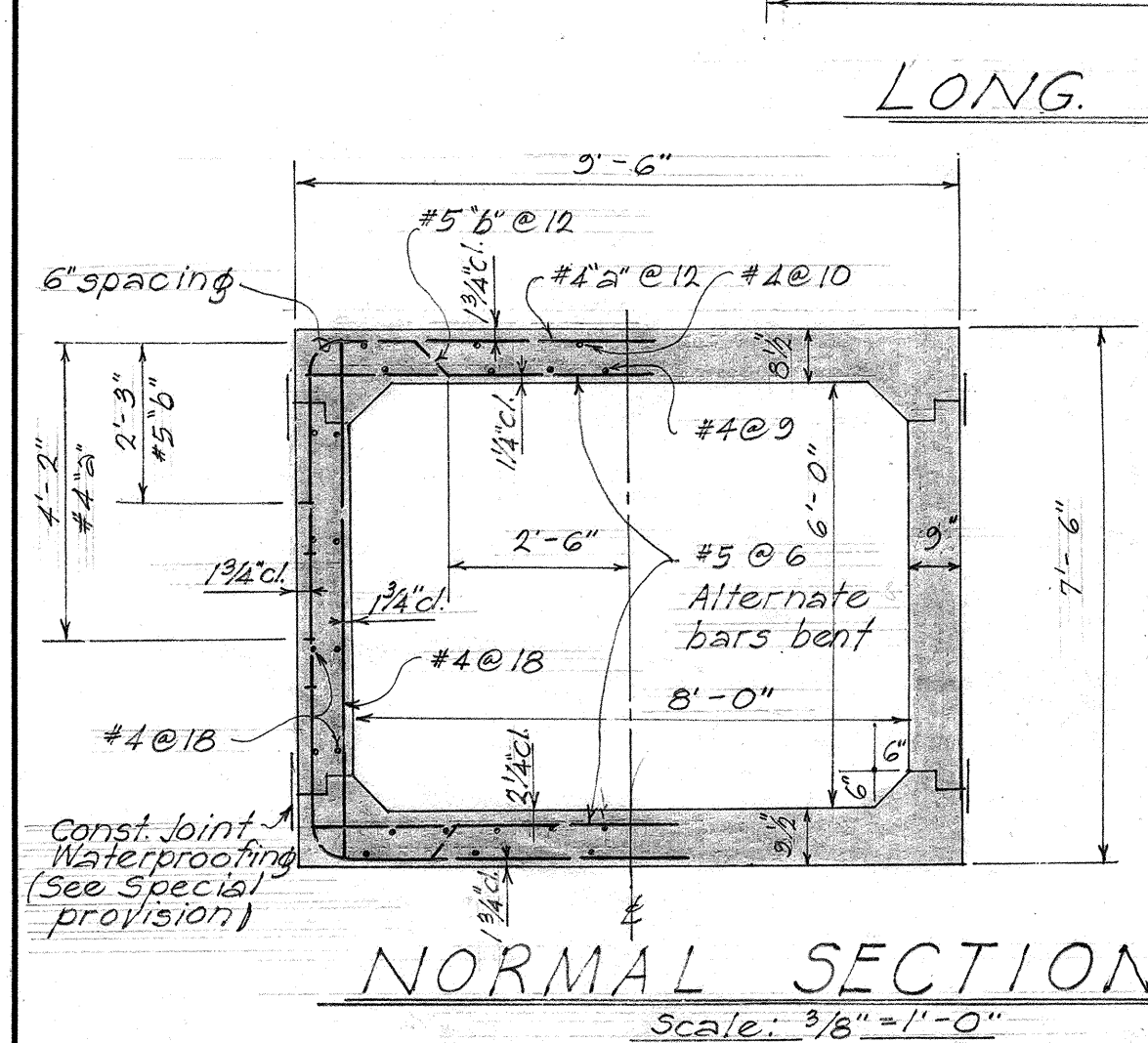
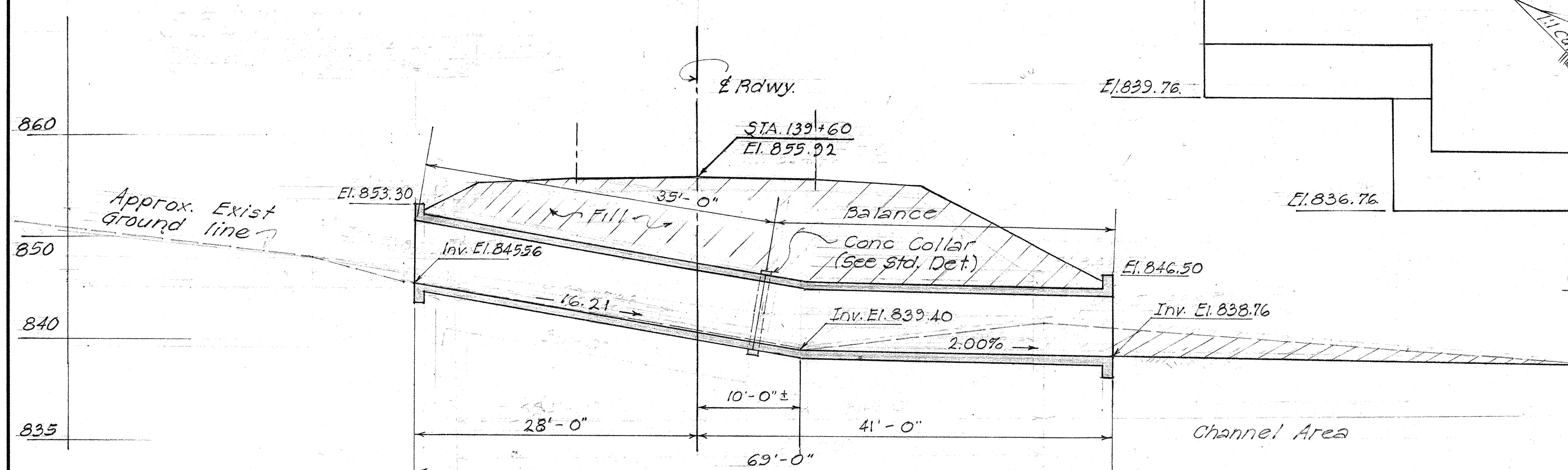
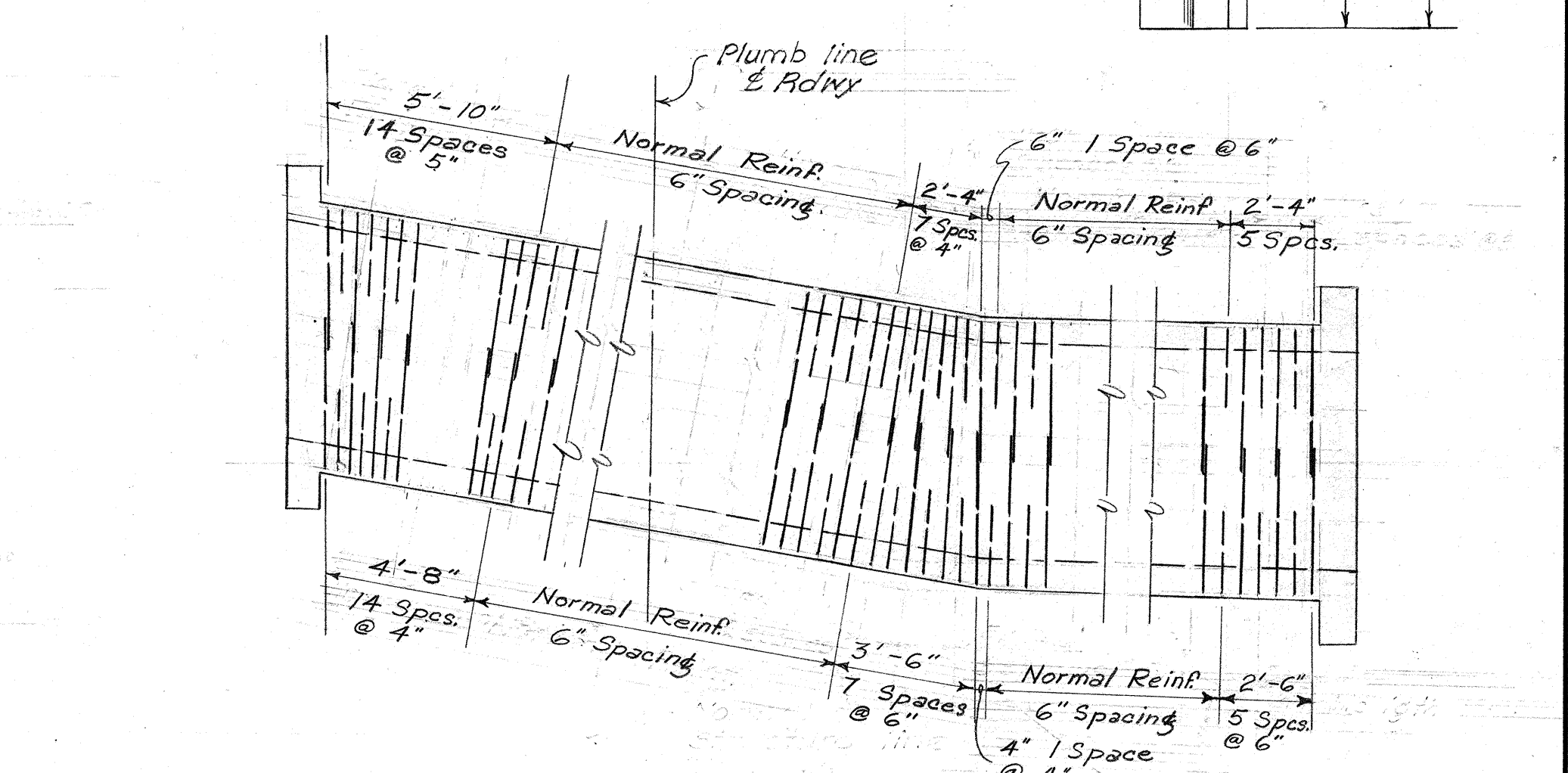
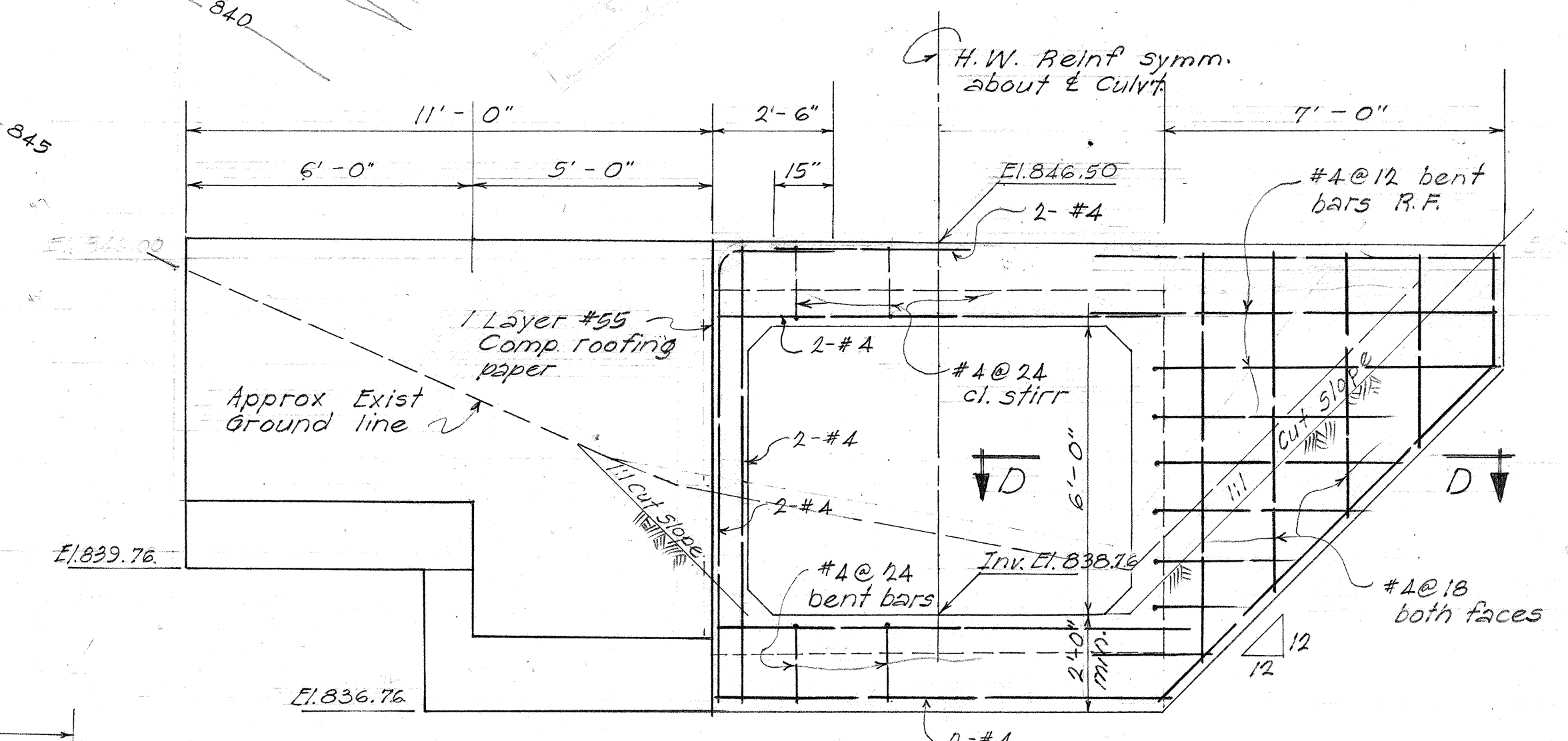
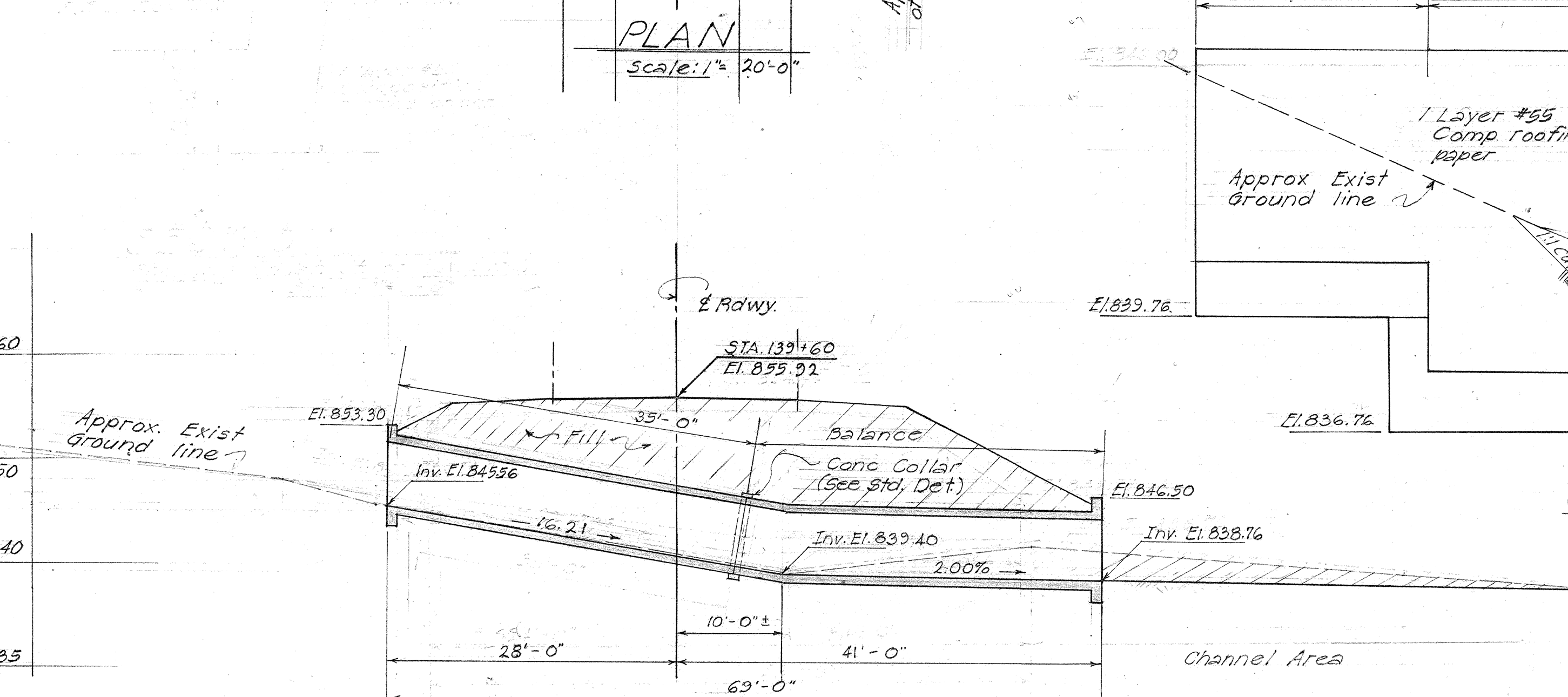


TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
8'-0" X 8'-0"
STANDARD BOX CULVERT
Scale - 1/4" = 1'-0"
SHEET NO. 3 OF 3 SHEETS

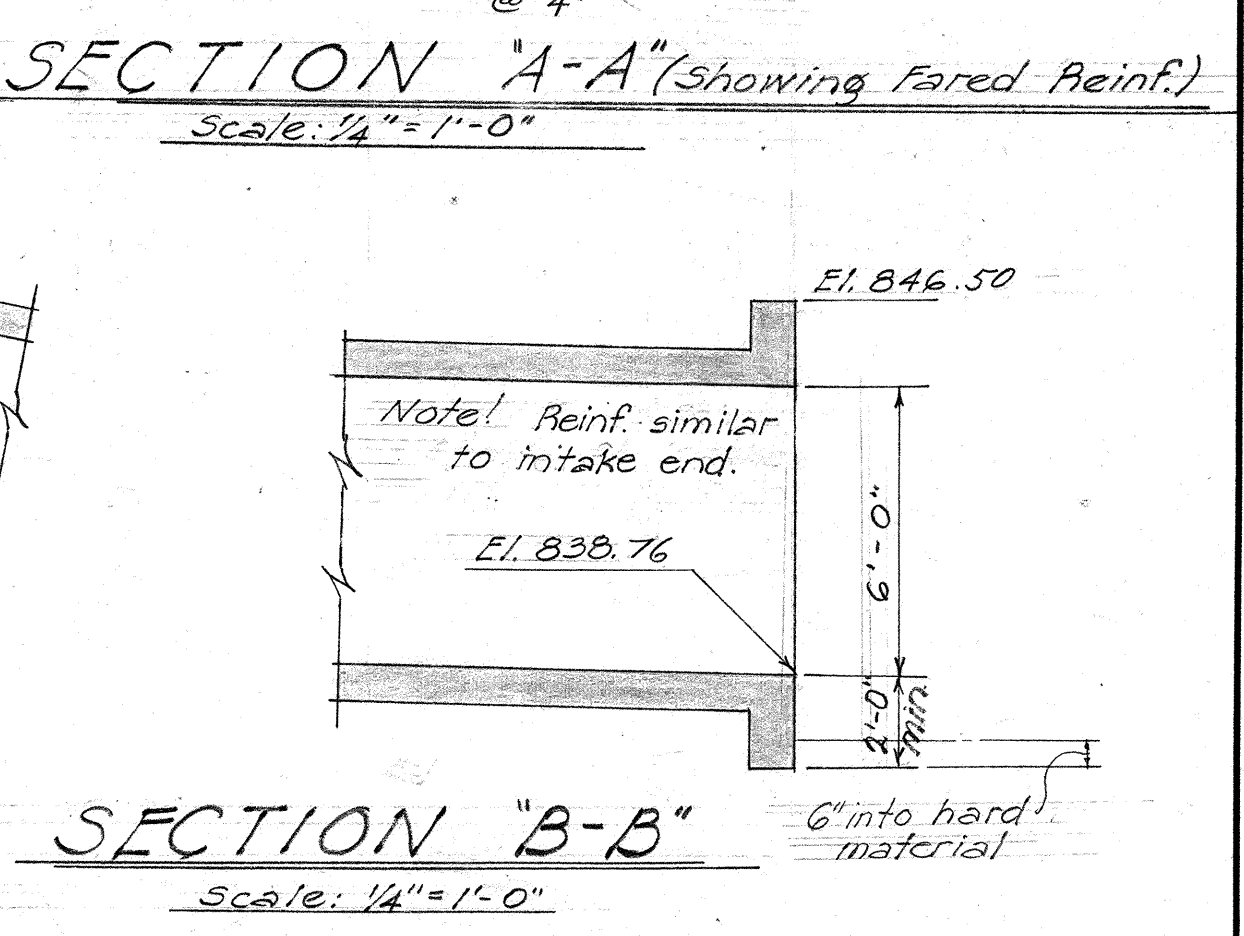
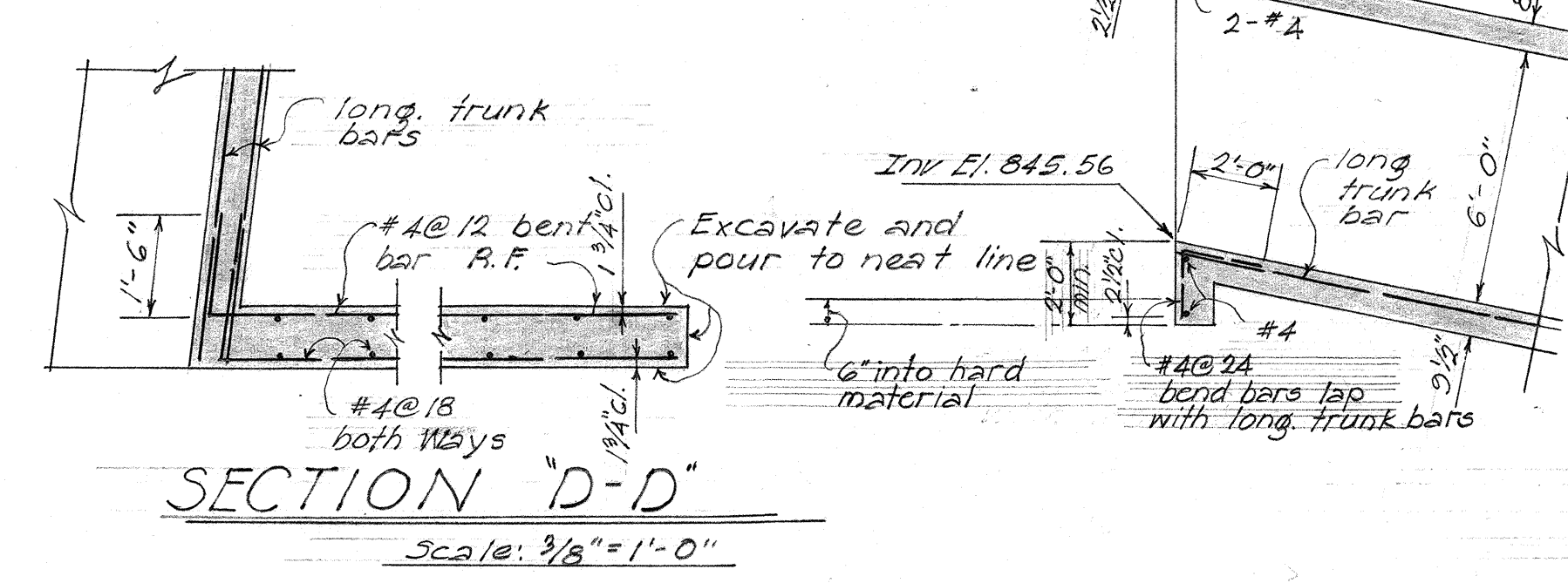
DATE: 5-4-56
DRAWN BY: J. J. J. J.
CHECKED BY: J. J. J. J.
NOTE: BOOK NO. 12



NOTE:
Filter material not required behind retaining walls.



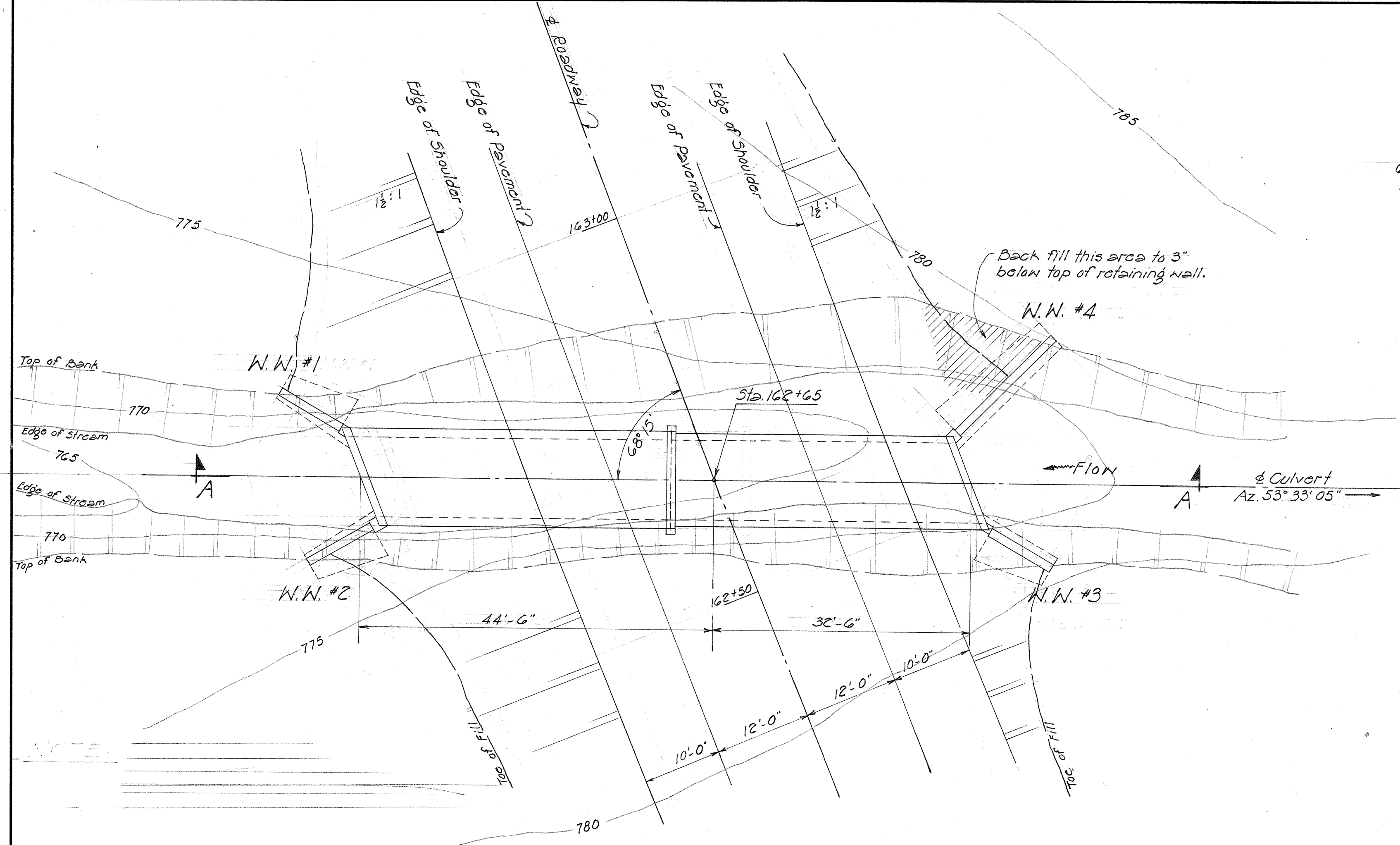
ESTIMATED QUANTITIES	
Class A-1 Conc.	Lump Sum
Reinf. Steel	Lump Sum
Structural Exc.	73.0 c.y.
Channel Exc.	60.0 c.y.



TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
8'x6' CONC BOX CULV'T.
STA. 139+60
HAWAII BELT P.D. Proj. F-019-2(6)
July 1957

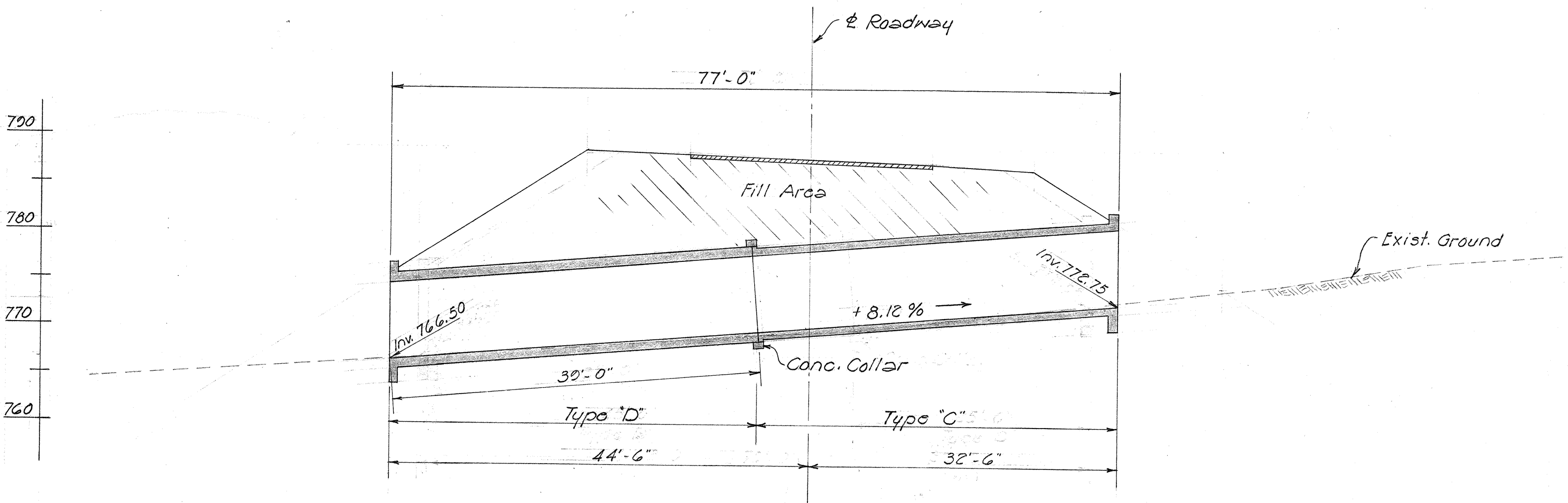
SURVEY PLOTTED BY DATE
PLAN
DRAWN BY
CHECKED BY
NOTE BOOK
No.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAWAII	F-010-2(6)	1958	14	69



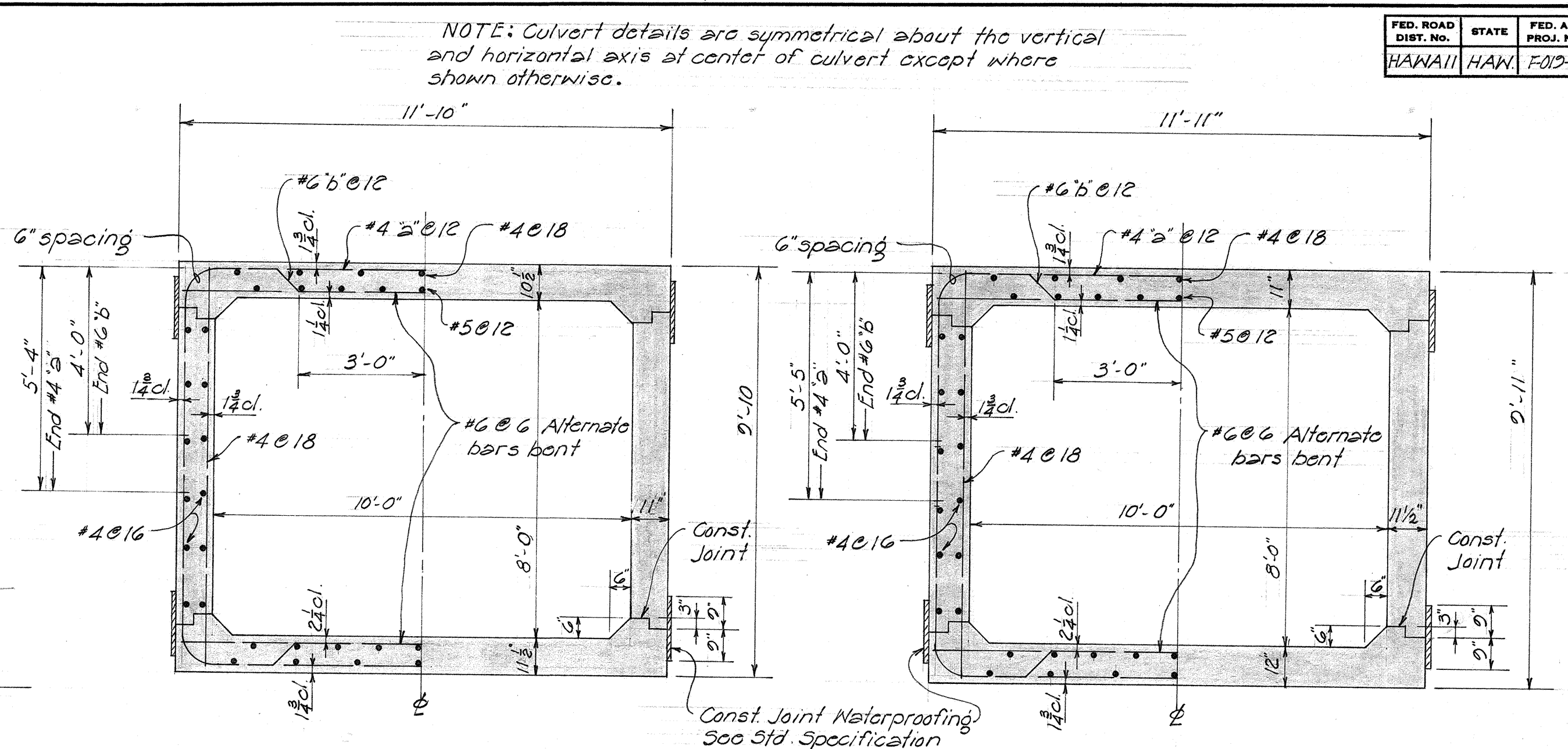
PLAN

Scale - 1" = 10'-0"



LONG. SECTION - A-A

Scale - 1" = 10'-0"

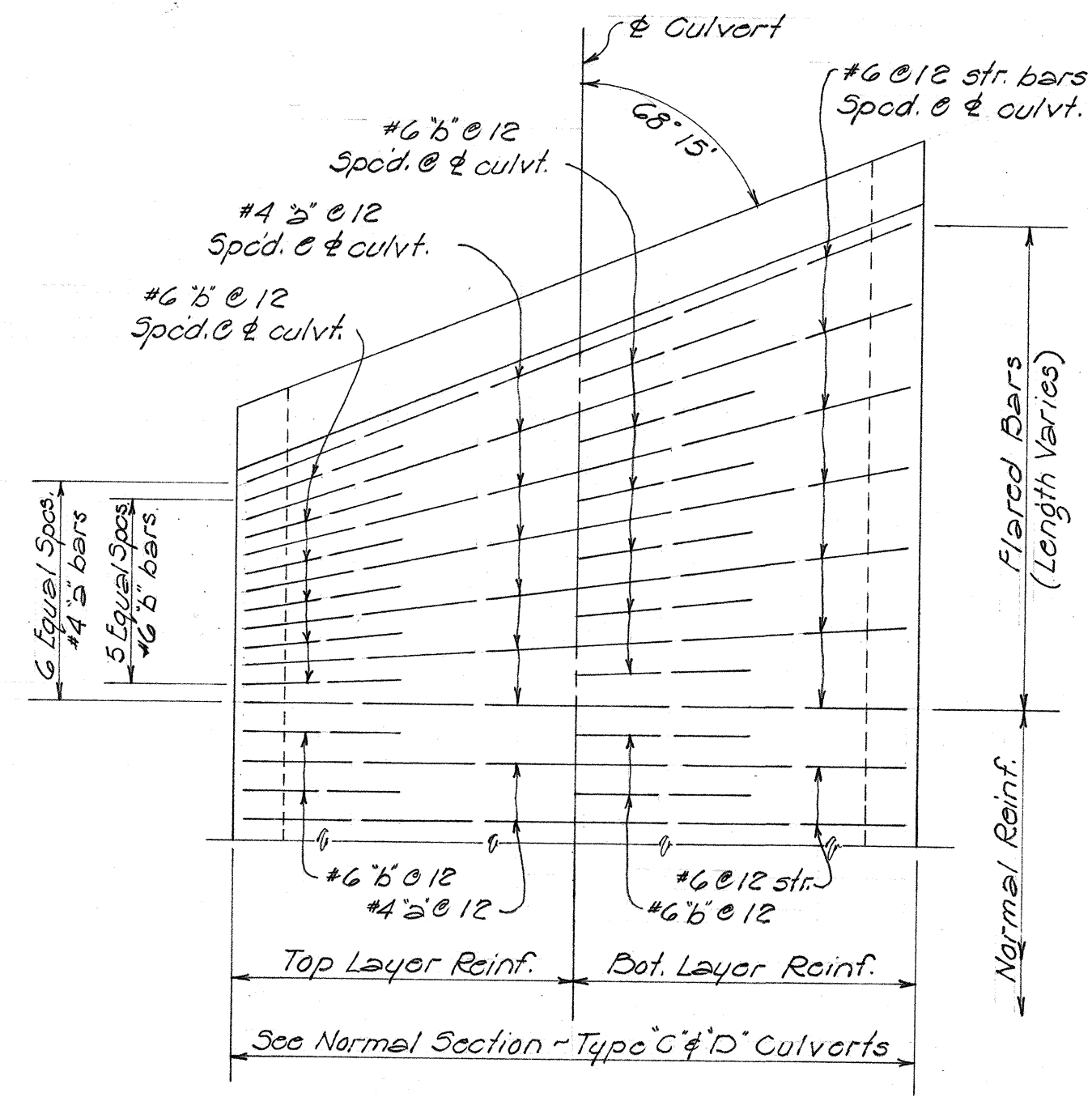


NORMAL SECTION
TYPE "C"

Scale - 3/8" = 1'-0"

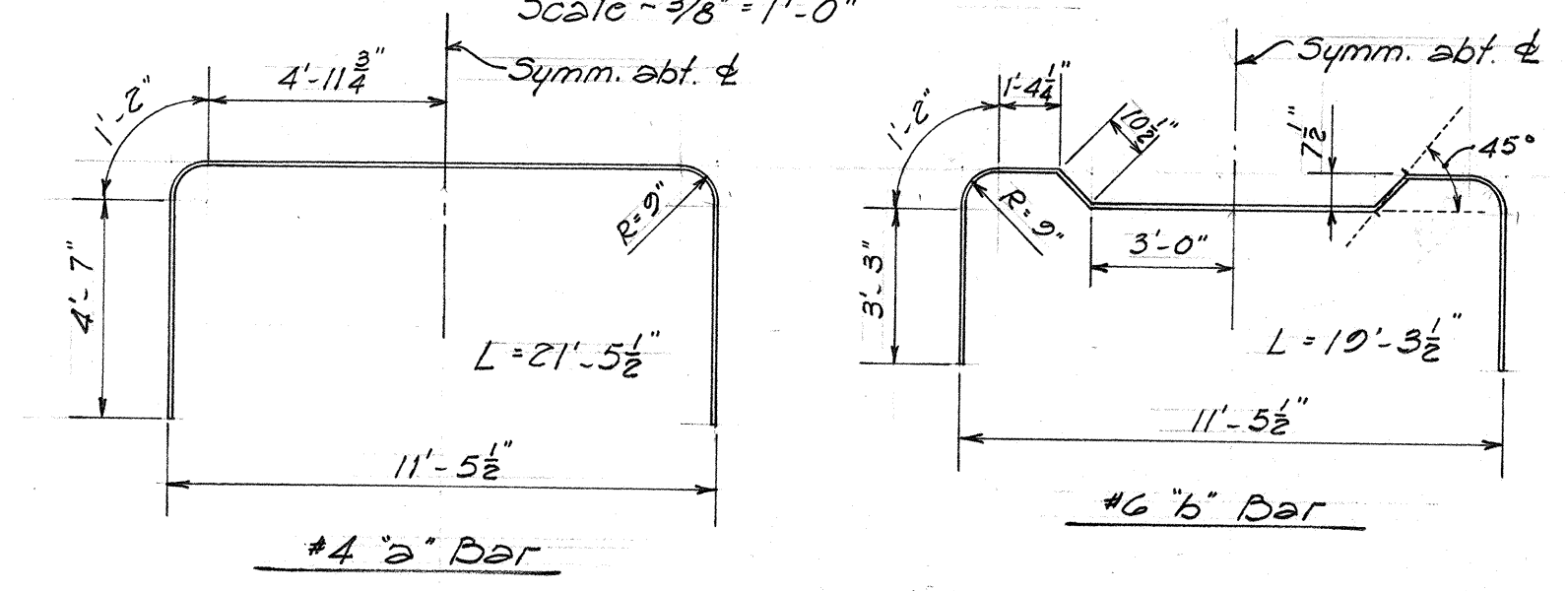
NORMAL SECTION
TYPE "D"

Scale - 3/8" = 1'-0"

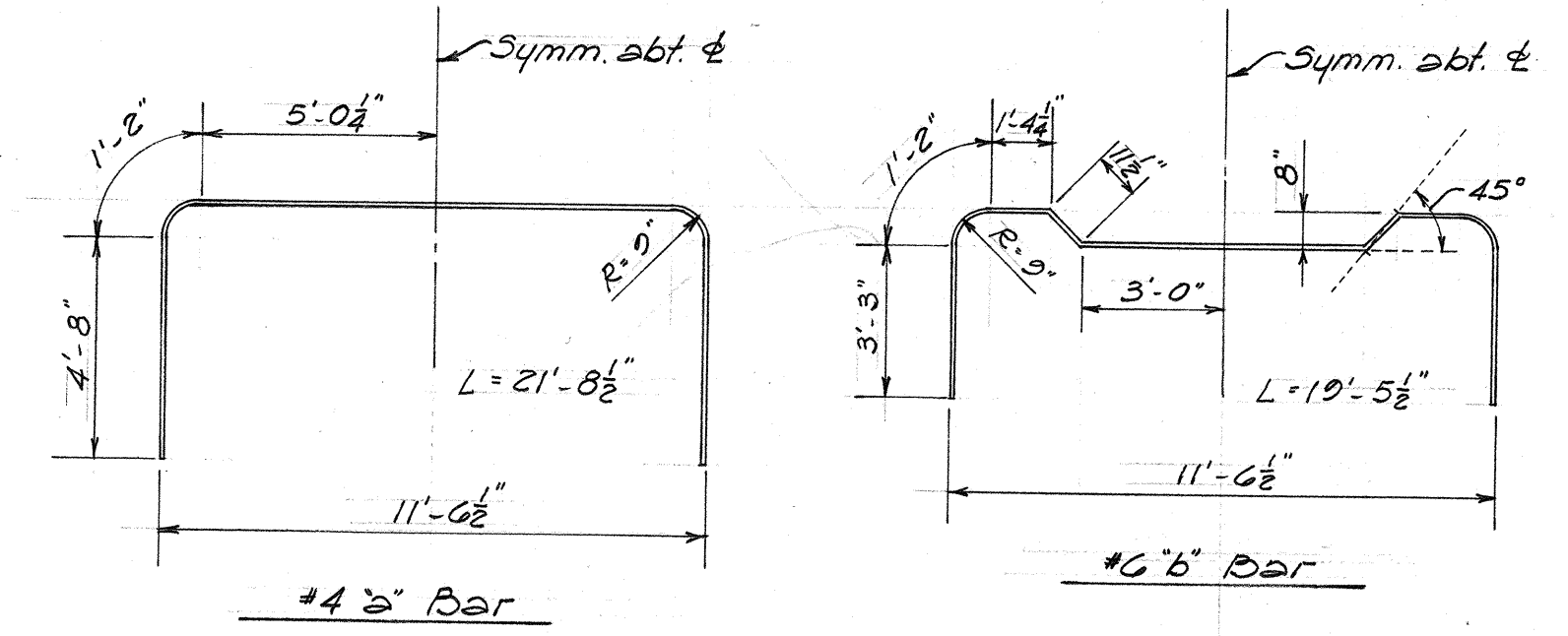


TOP SLAB REINF. PLAN

Scale - 3/8" = 1'-0"



TYPE "C" CULV. REINF.



TYPE "D" CULV. REINF.

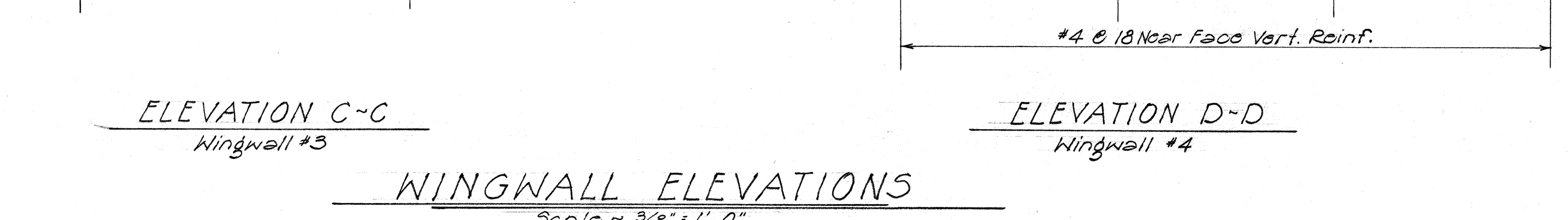
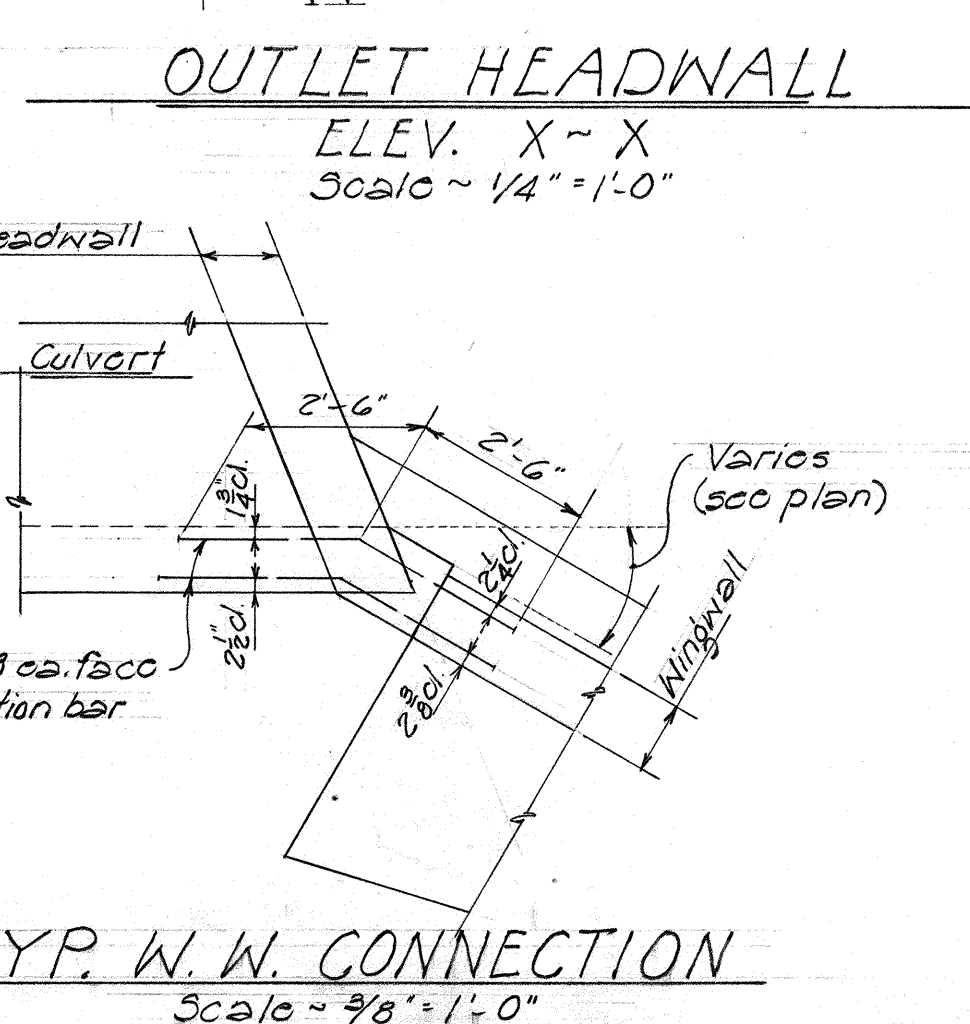
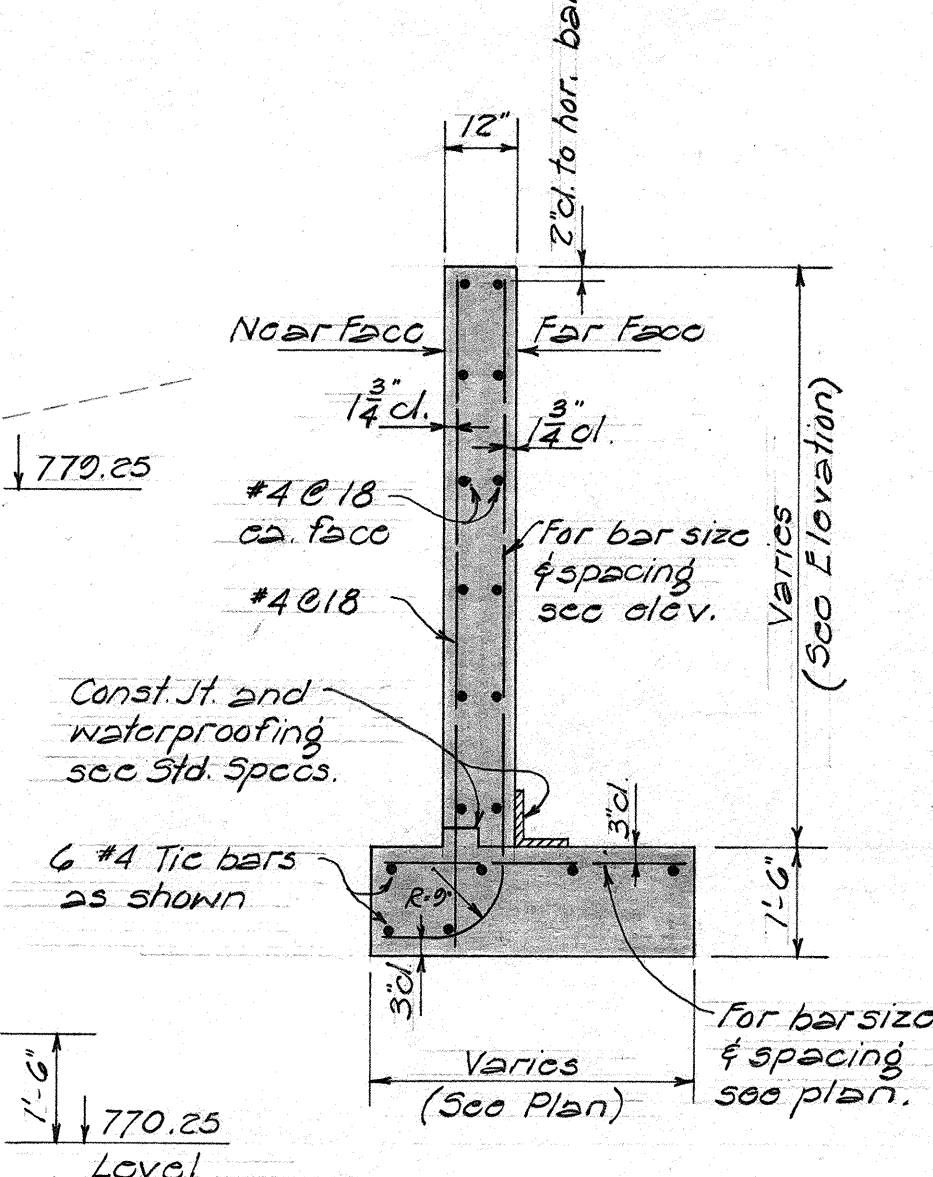
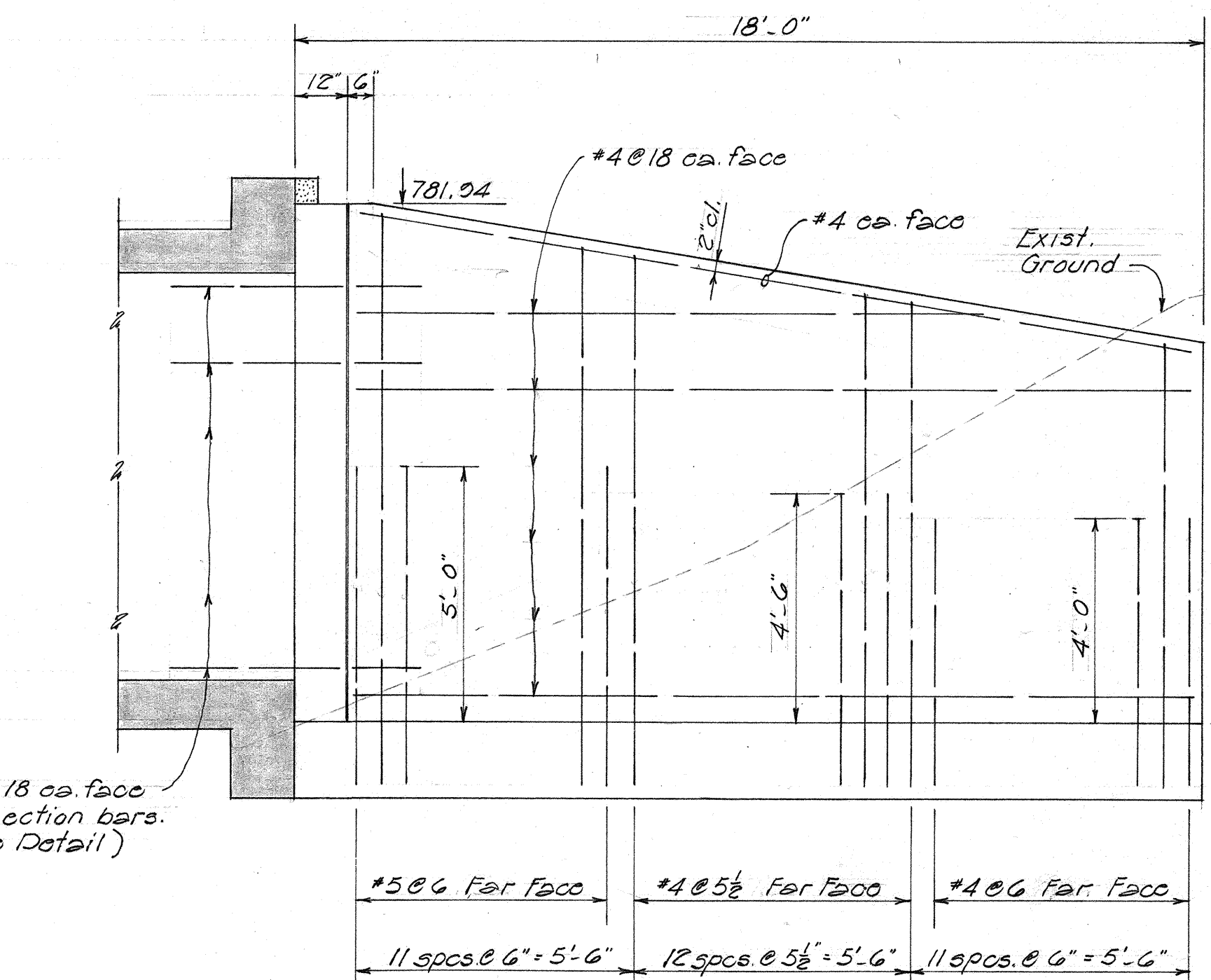
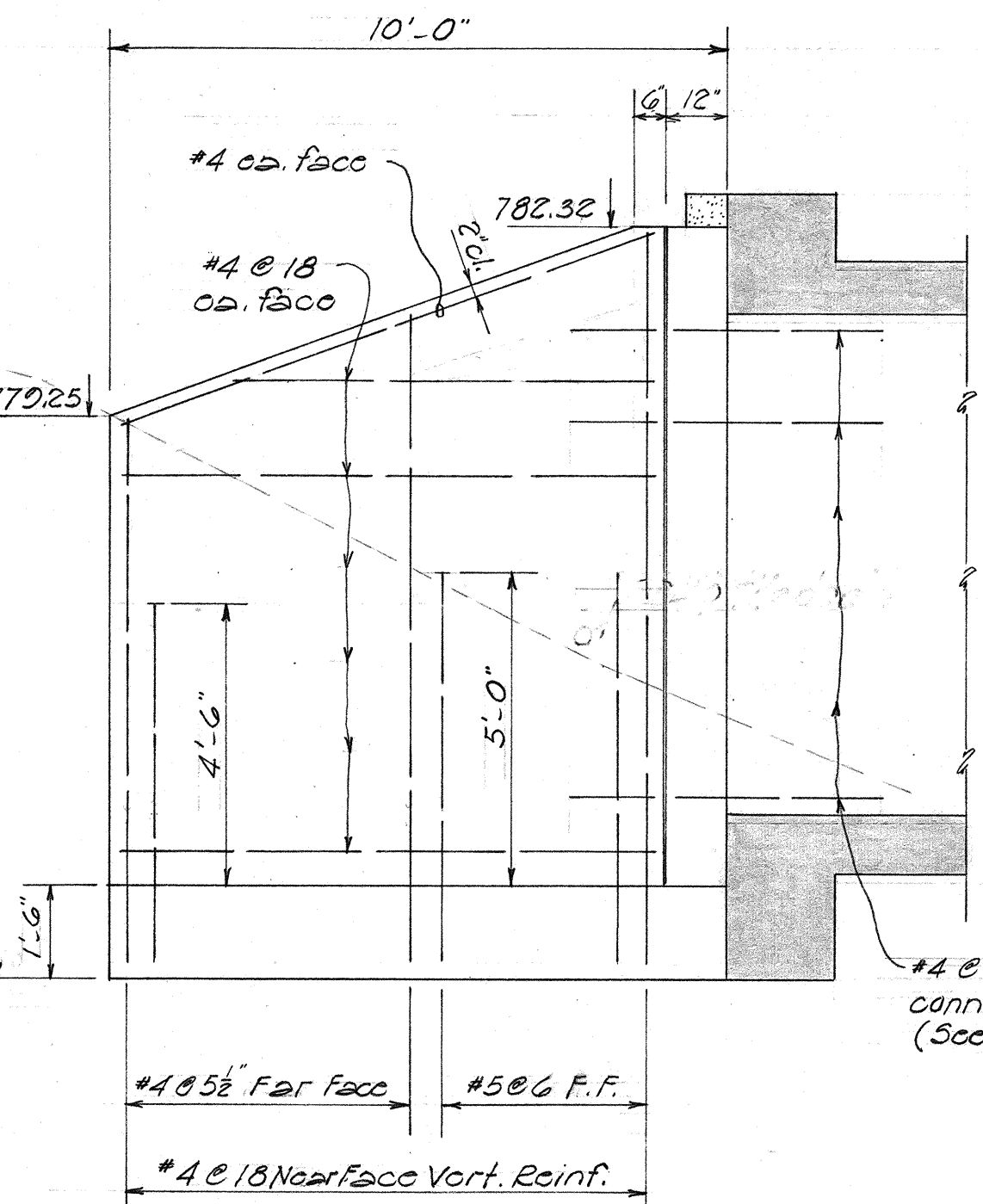
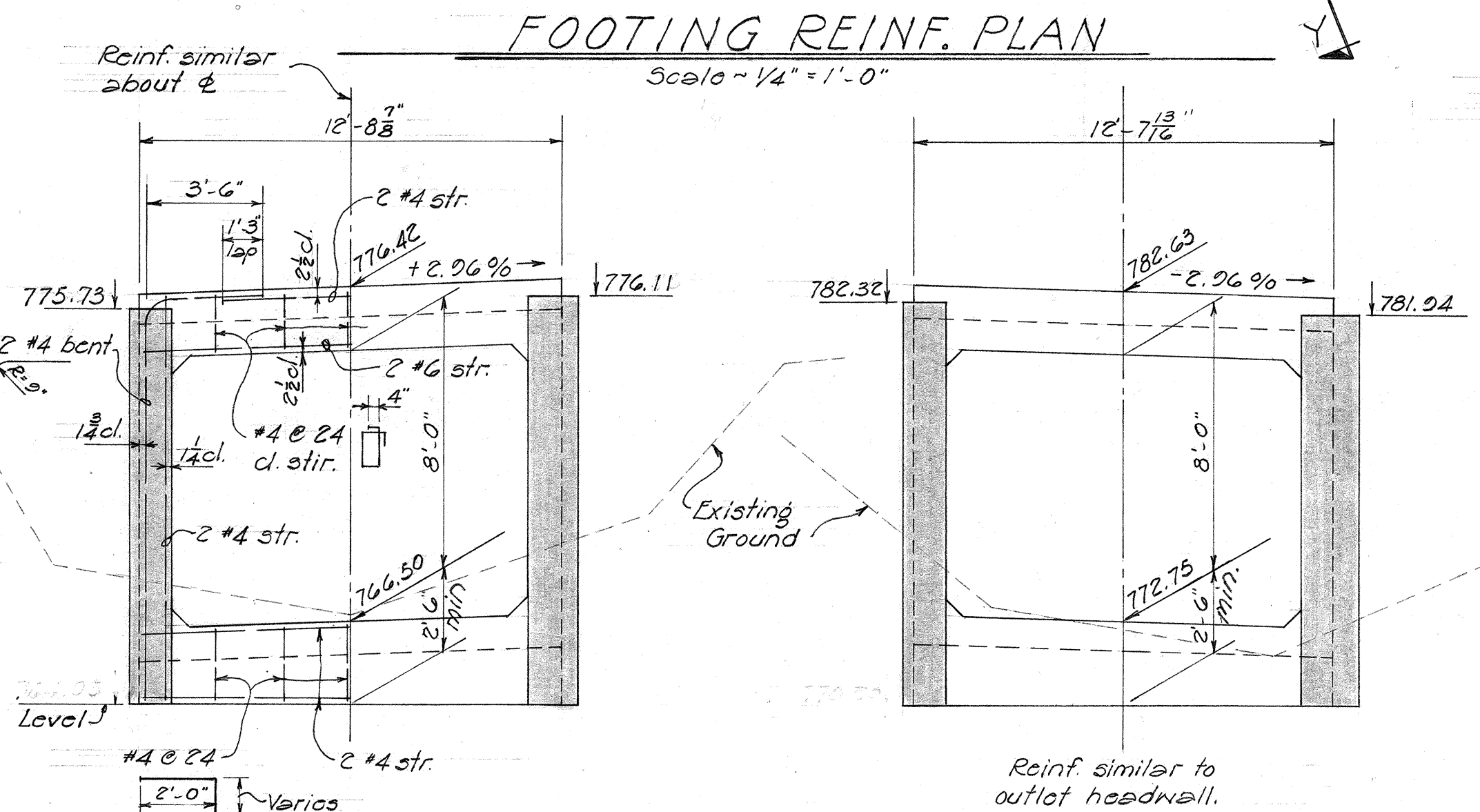
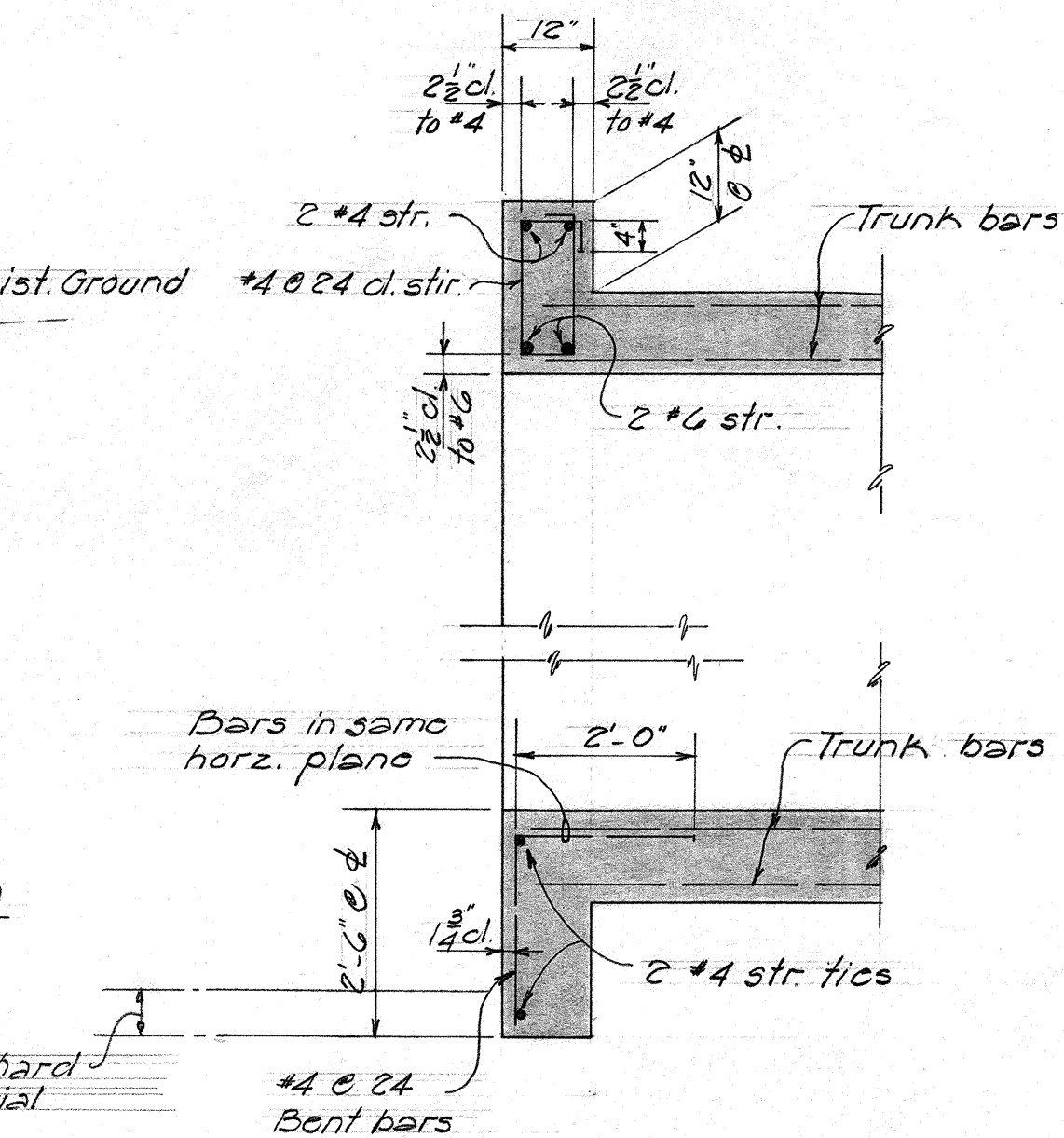
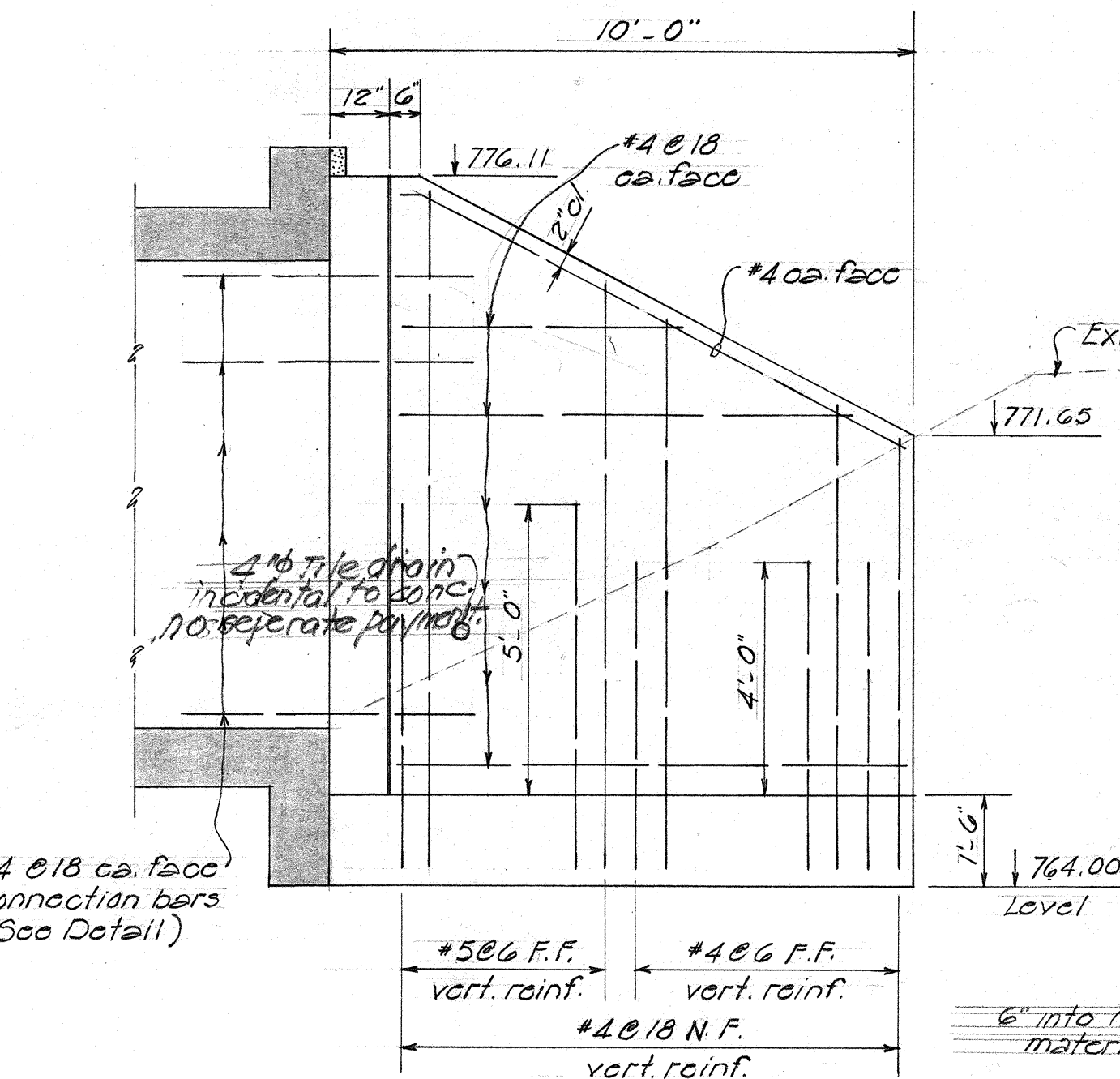
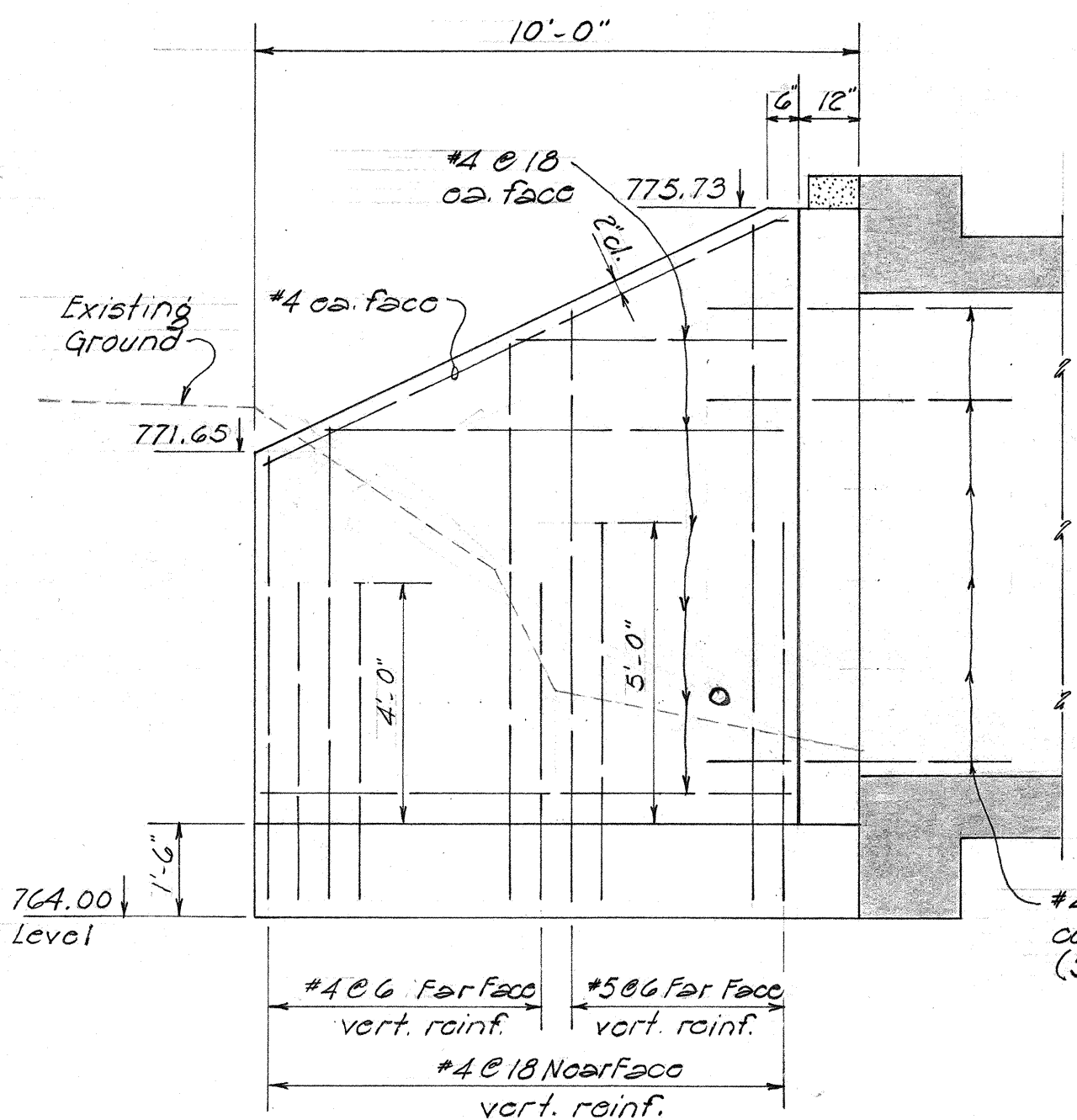
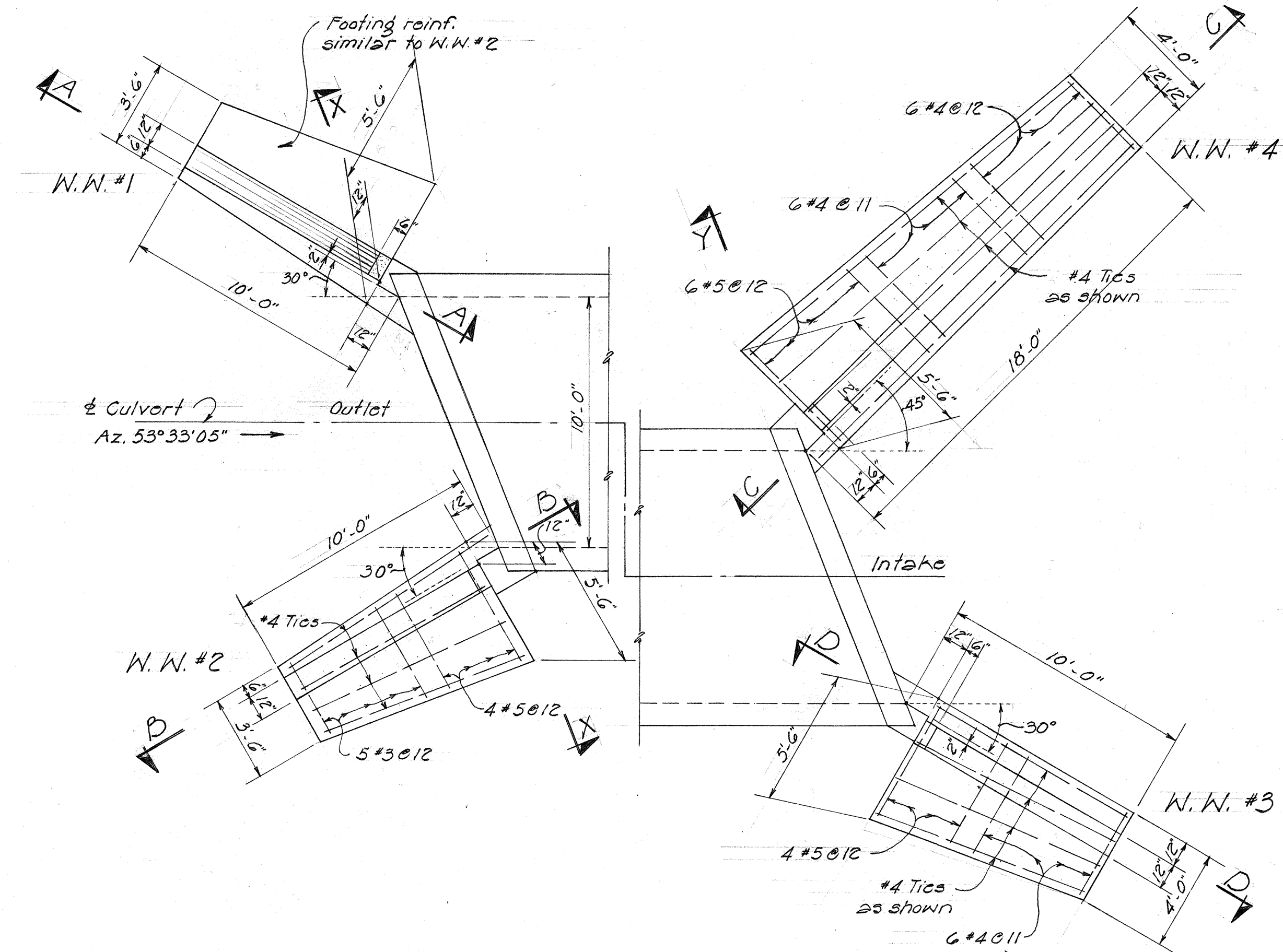
ESTIMATED QUANTITIES

Glass A-1 Concrete -	Lump Sum
Reinf. steel	Lump Sum
Structural Exc.	137.0 c.y.

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII

10'-0" X 8'-0" BOX CULVERT
5/2. 162+65

HAWAII BELT RD. F-010-2(6)
May 1957

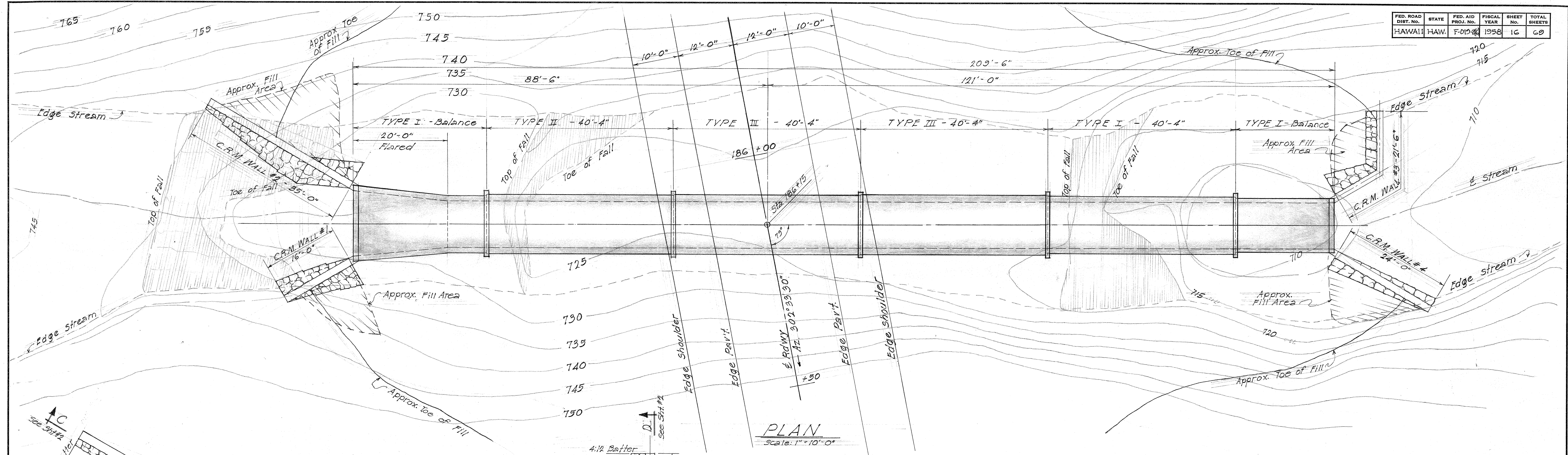


NOTE: For additional retaining wall detail see standard drawing.
Filter material not req'd. behind retaining walls.

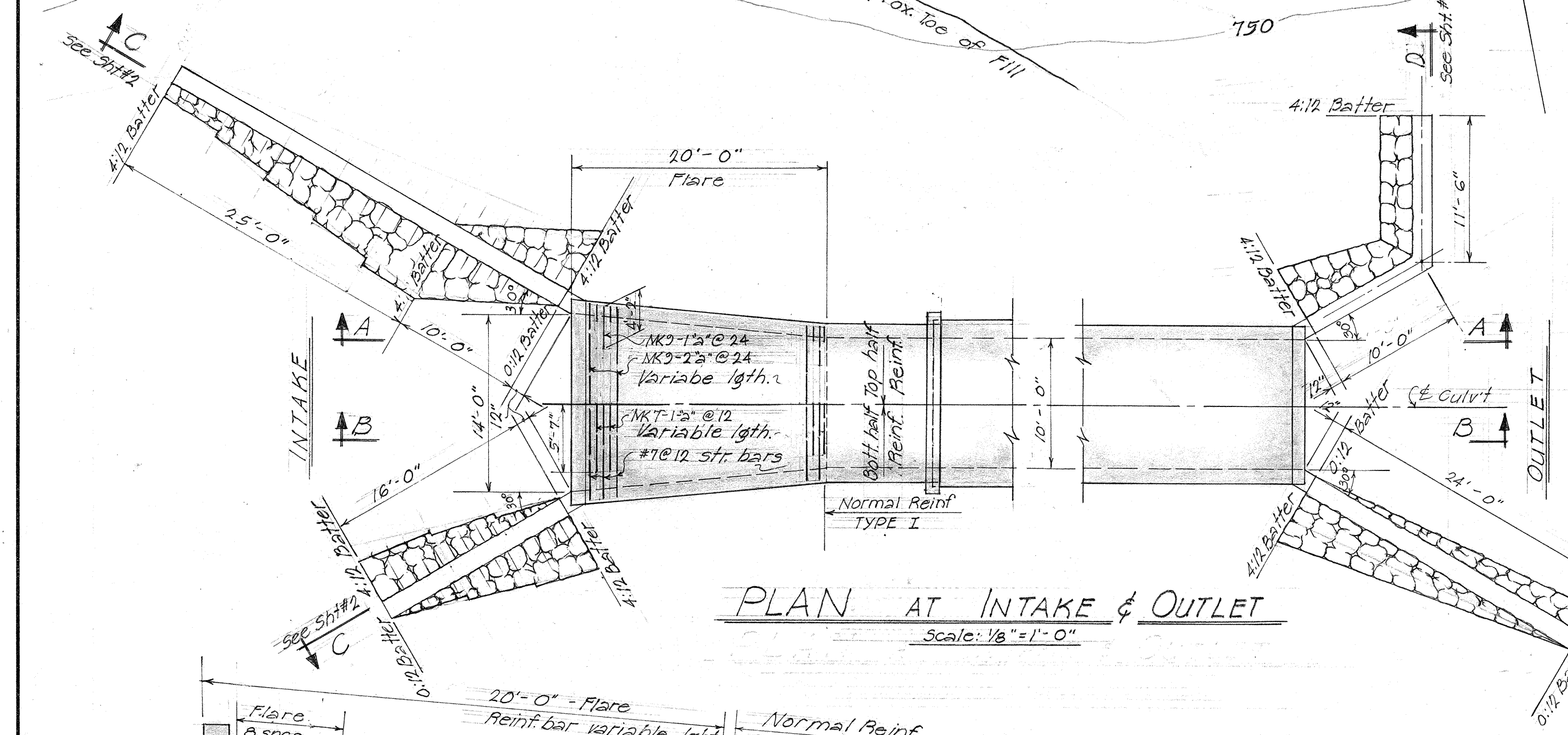
TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
10'-0" X 8'-0" BOX CULVERT
Sta. 162 + 65
HAWAII BELT RD. F-010-2 (6)
May 1957

DESIGNED BY: J. E. D. 10/16/57
CHECKED BY: J. E. D. 10/16/57
DATE: 10/16/57
ORIGINAL PLAN NO. 10/16/57
NOTE BOOK NO. 10/16/57

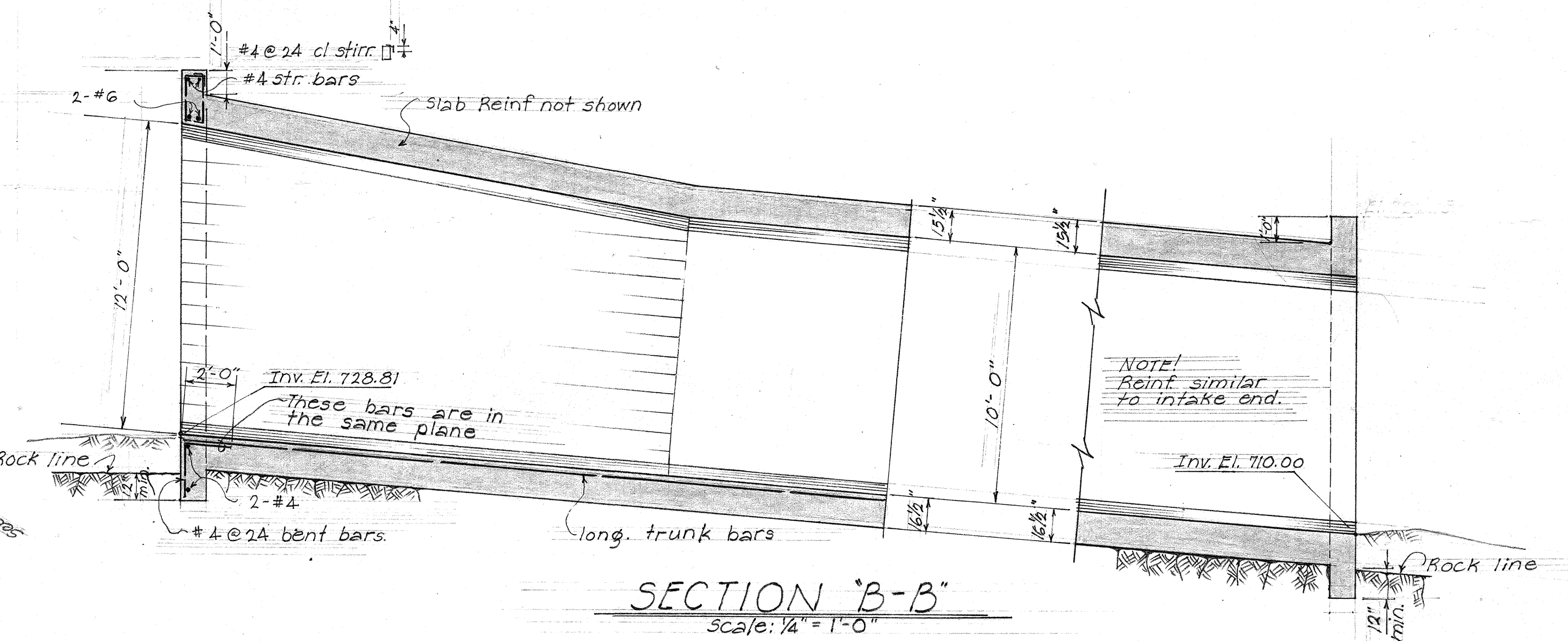
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-019-2	1958	16	69



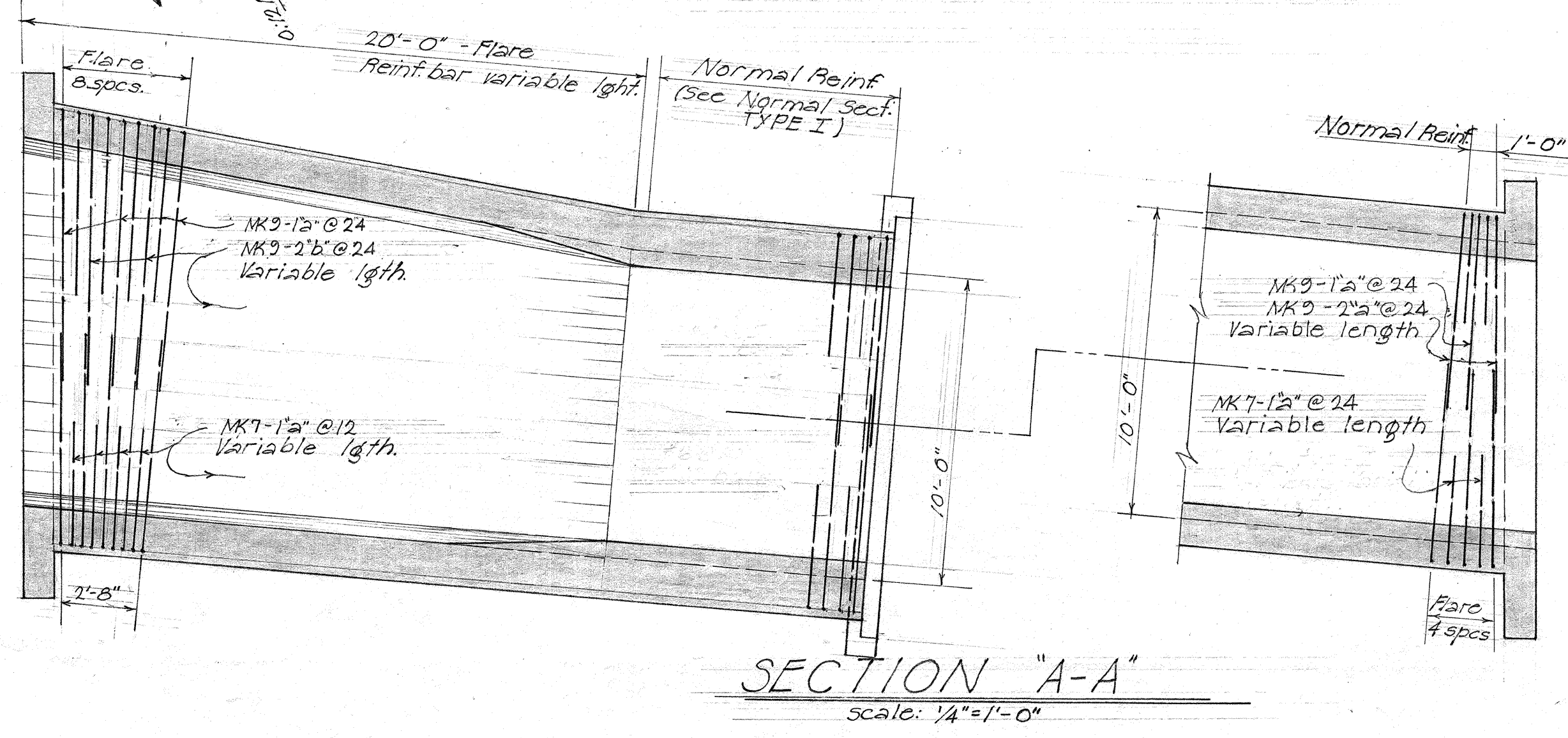
PLAN
Scale: 1" = 10'-0"



PLAN AT INTAKE & OUTLET
Scale: 1/8" = 1'-0"



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



SECTION 'A-A'
Scale: 1/4" = 1'-0"

ESTIMATED QUANTITIES

Class A-1 Conc.	Lump Sum
Reinf. Steel	Lump Sum
Structural Exc.	460.00 c.y.
C.R.M.	127.00 c.y.

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
10'x10' BOX CULVERT
STA. 186+15
HAWAII BELT ROAD Proj F-019-2(6)
Aug 1957

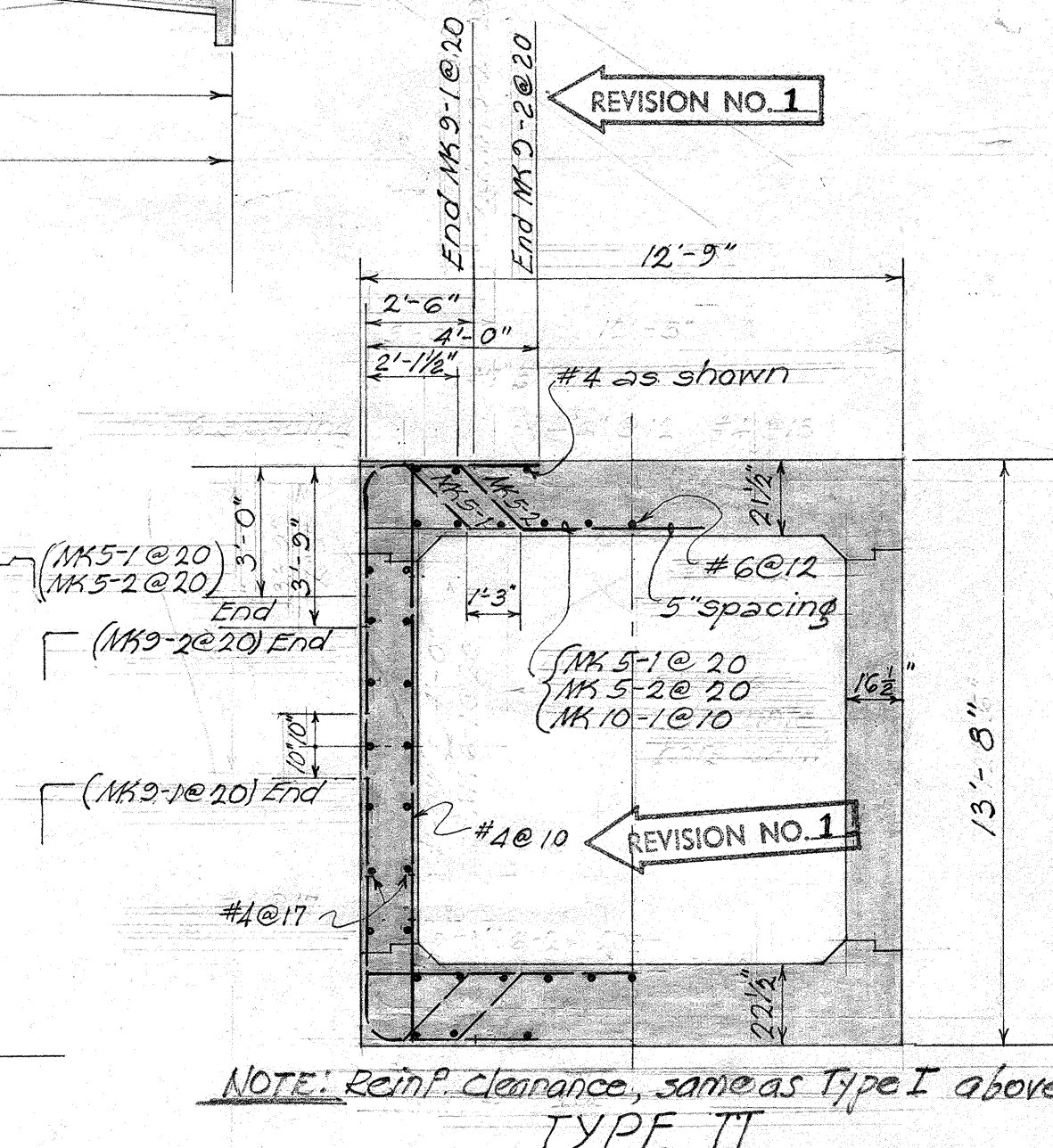
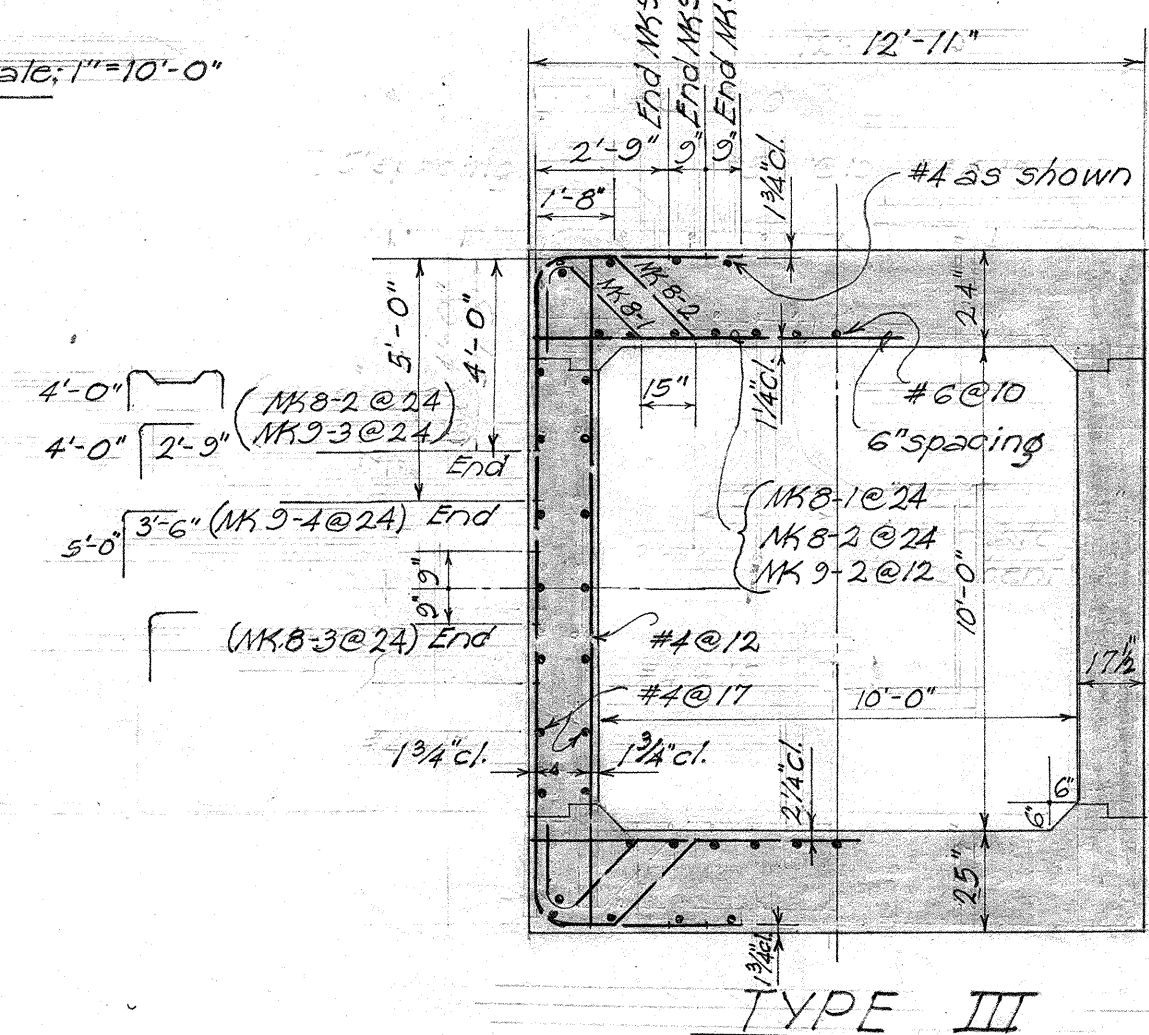
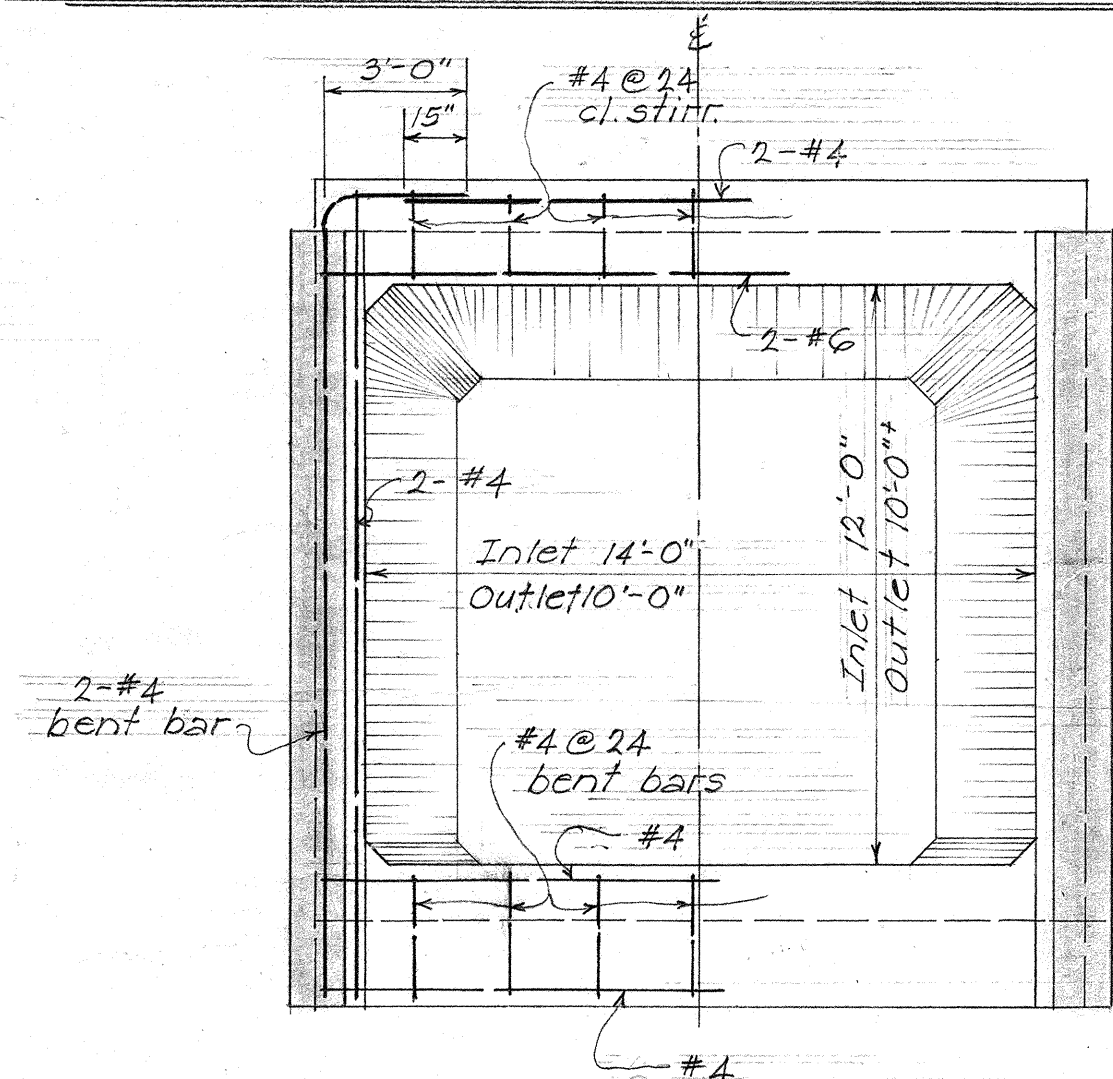
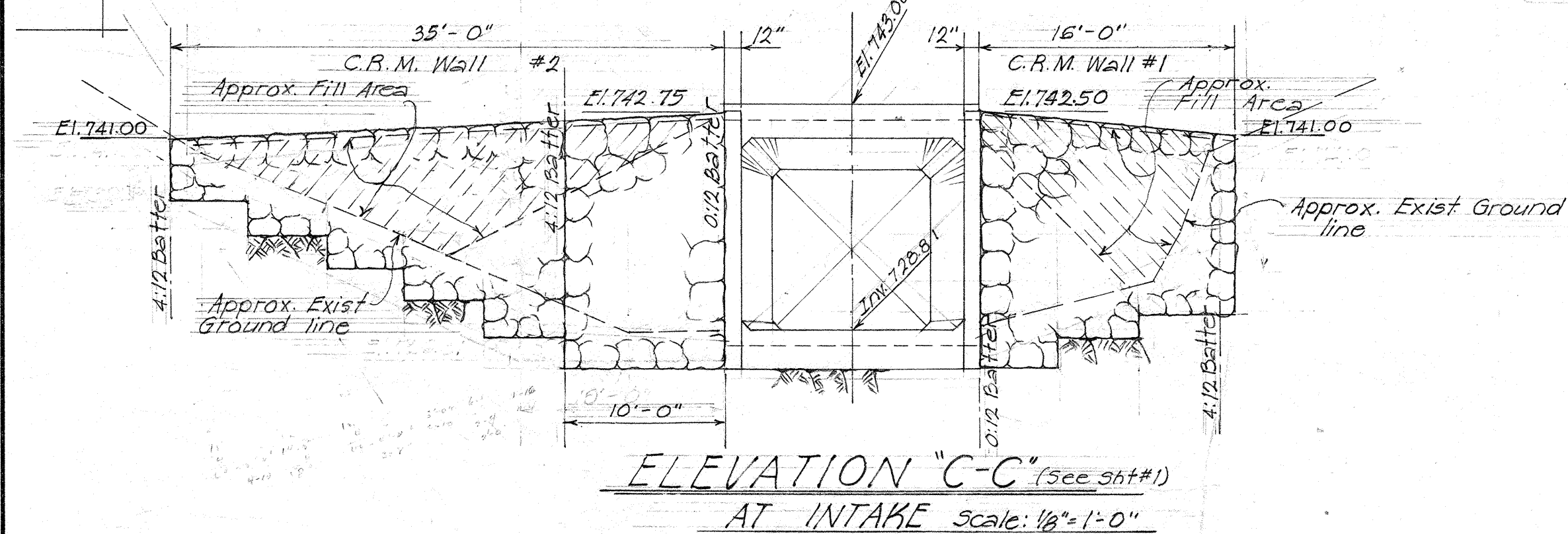
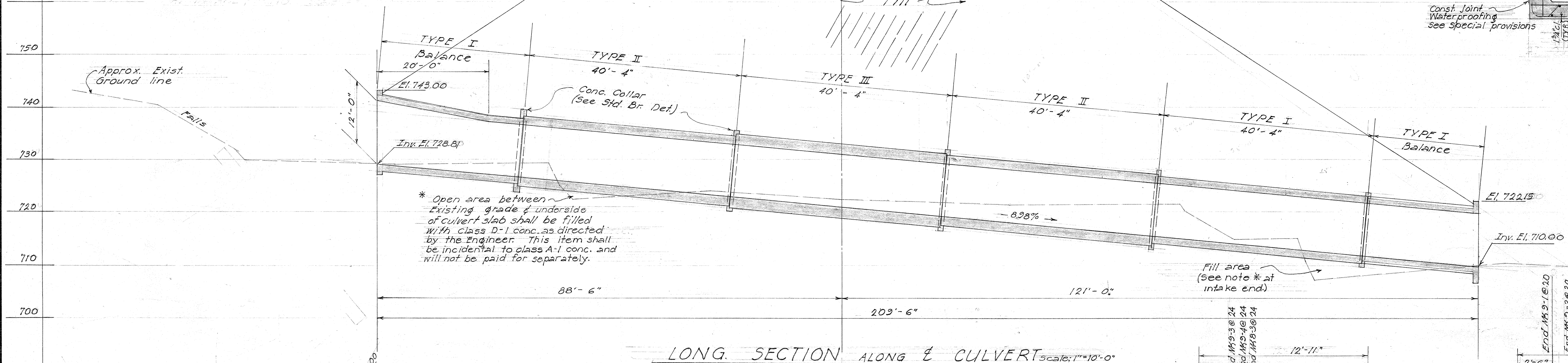
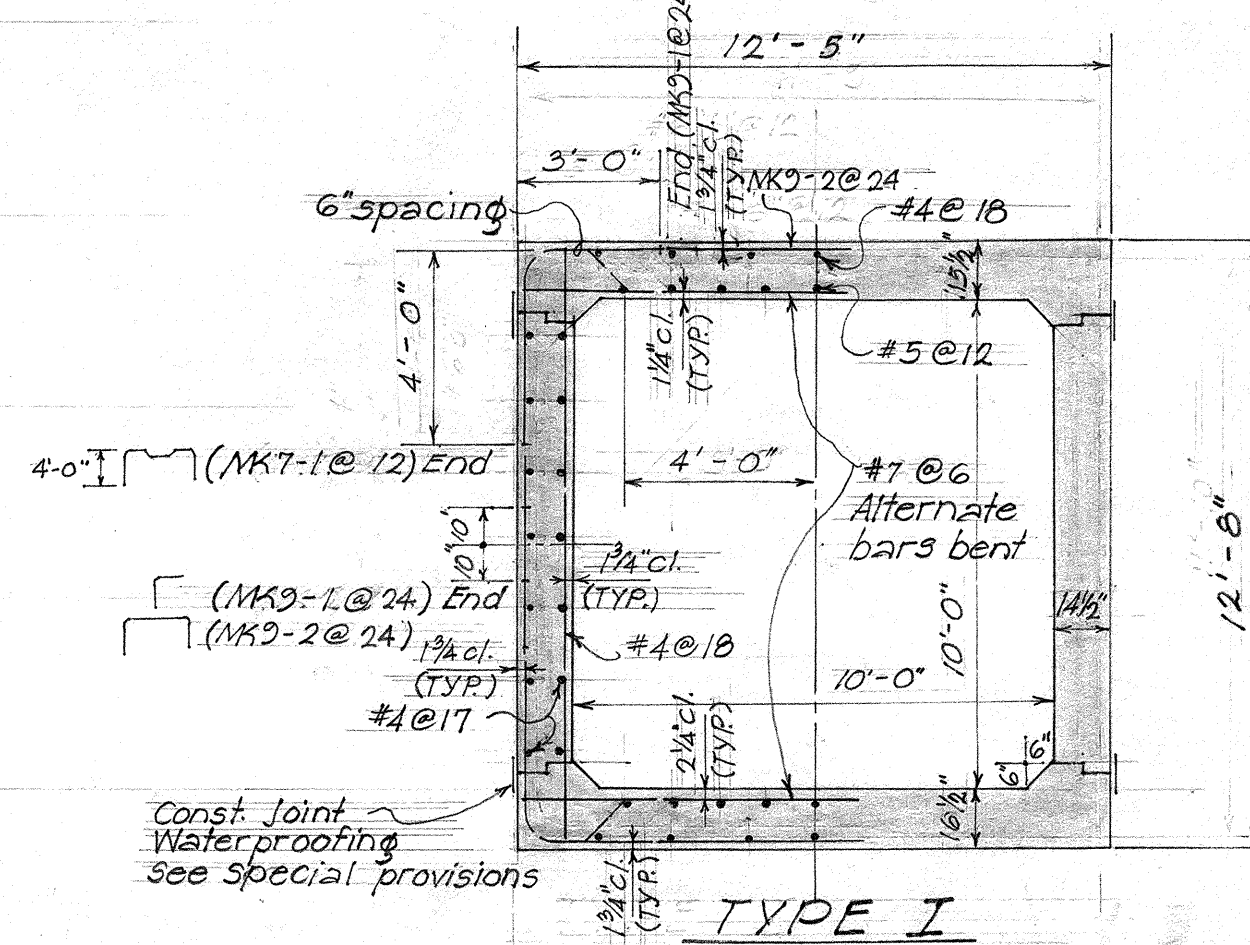
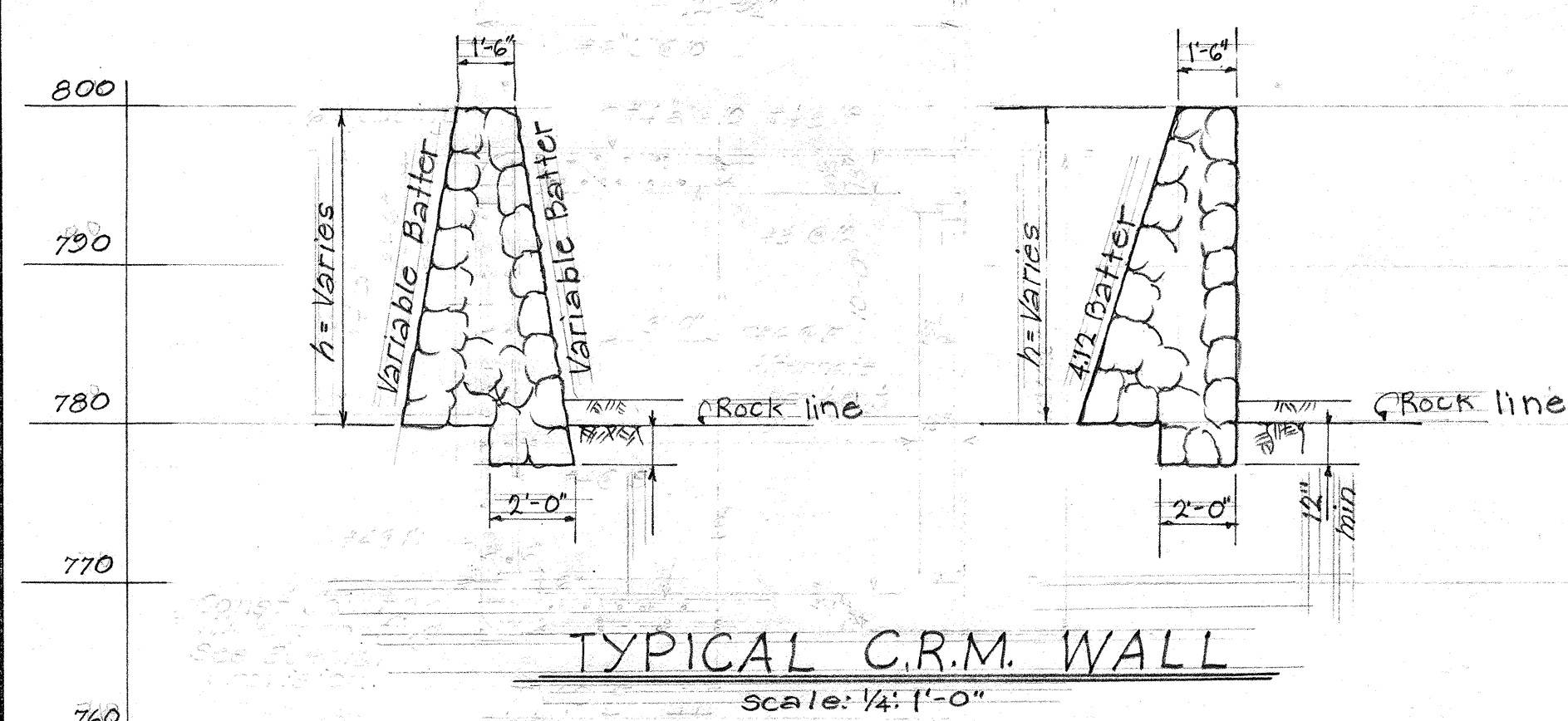
SHEET NO. 1 OF 2 SHEETS

5955.16

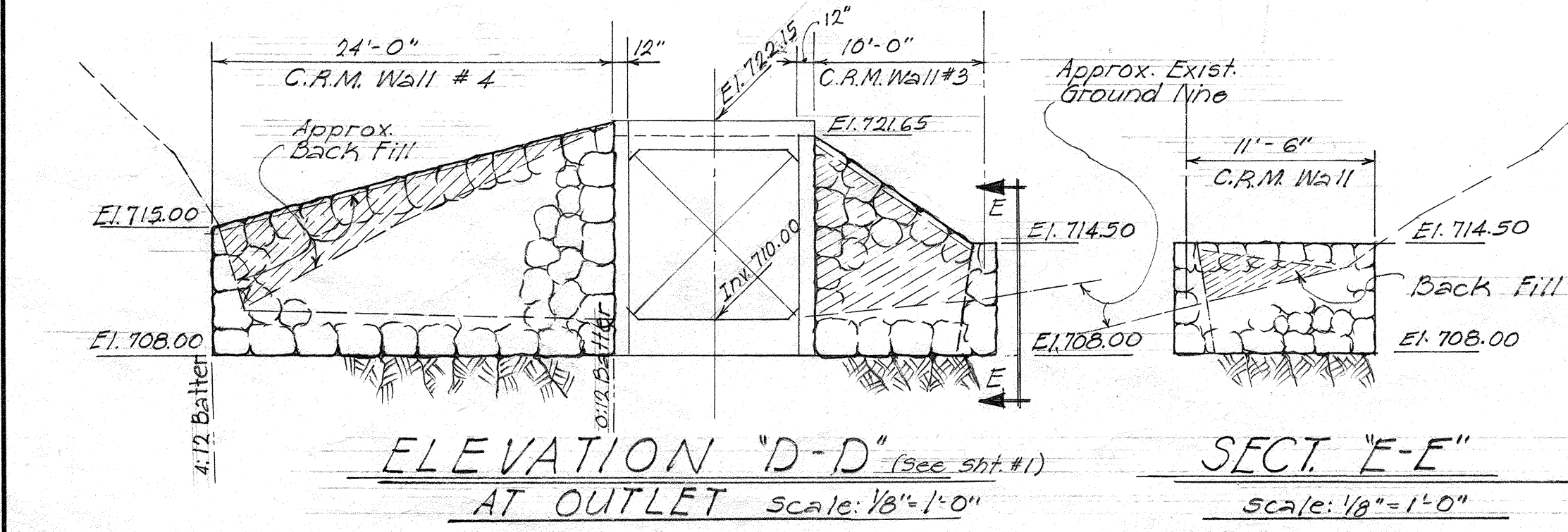
SURVEY PLOTTED BY	DATE
DESIGNED BY	
TRACED BY	
QUANTITIES BY	
NOTE BOOK	
CHECKED BY	
CHECKED BY	

REVISIONS
No. 1 Jan. 20, 1957 Reinf. in Type II Normal Section.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-012-2	1956	17	60



NORMAL SECTION
Scale: 1/4" = 1'-0"



TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
10'x10' BOX CULVERT
STA. 186+15
HAWAII BELT ROAD Proj. F-012-2(6)
Aug. 1957