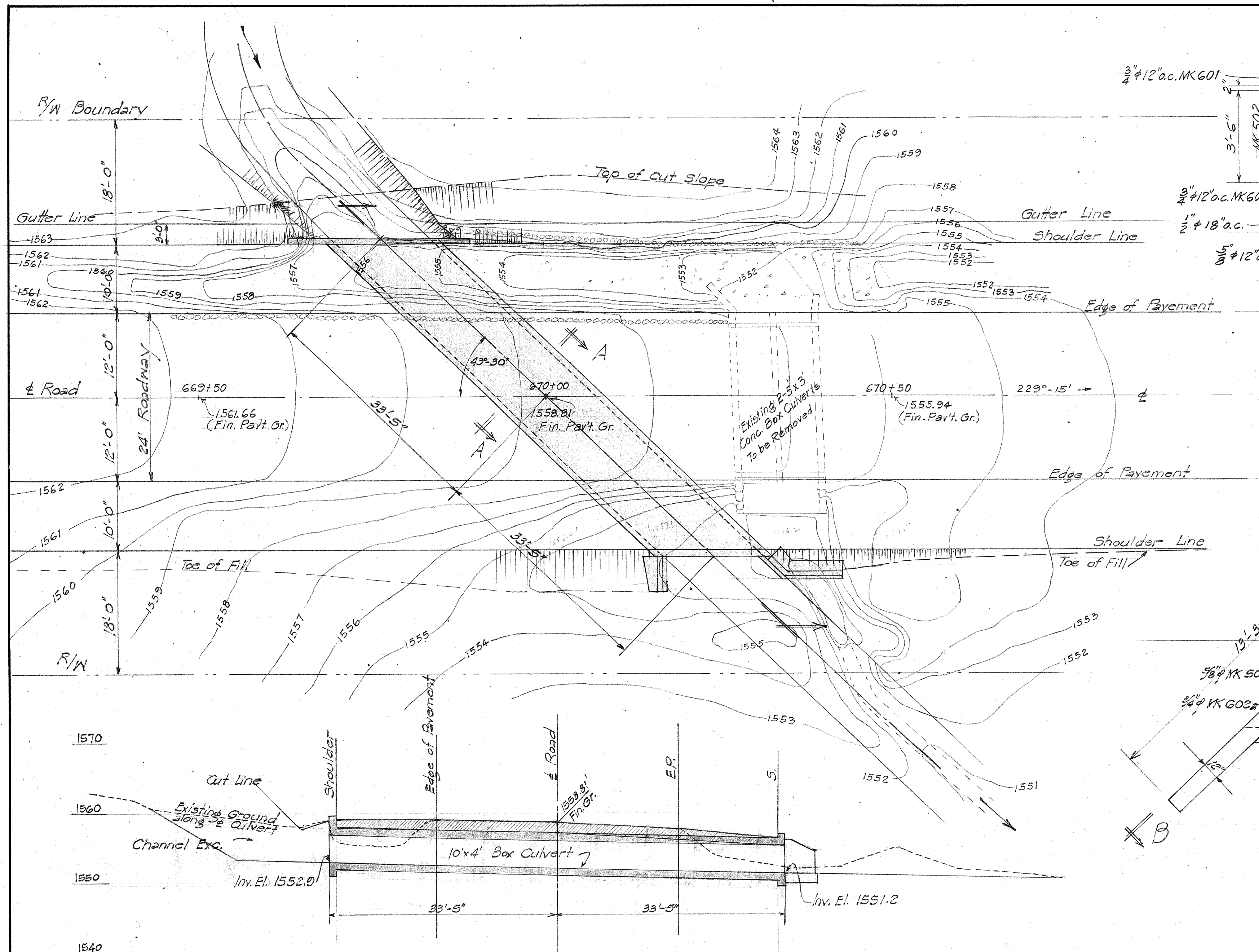
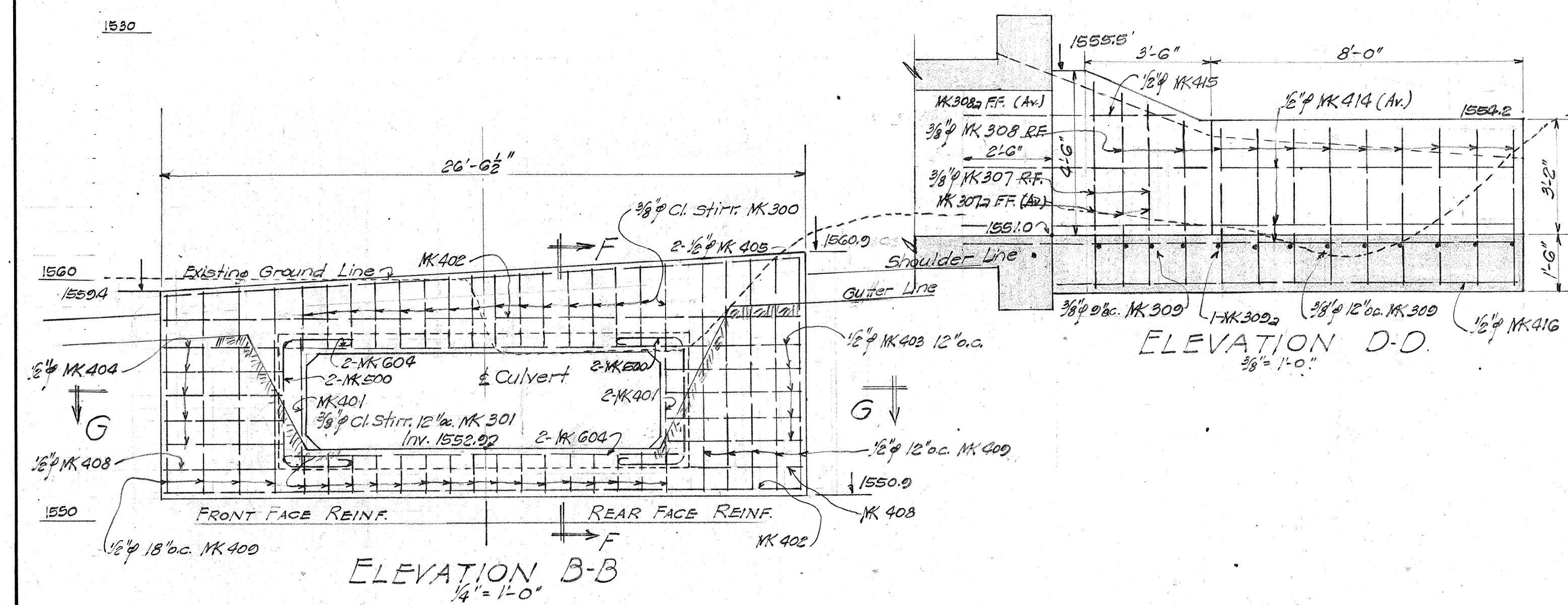


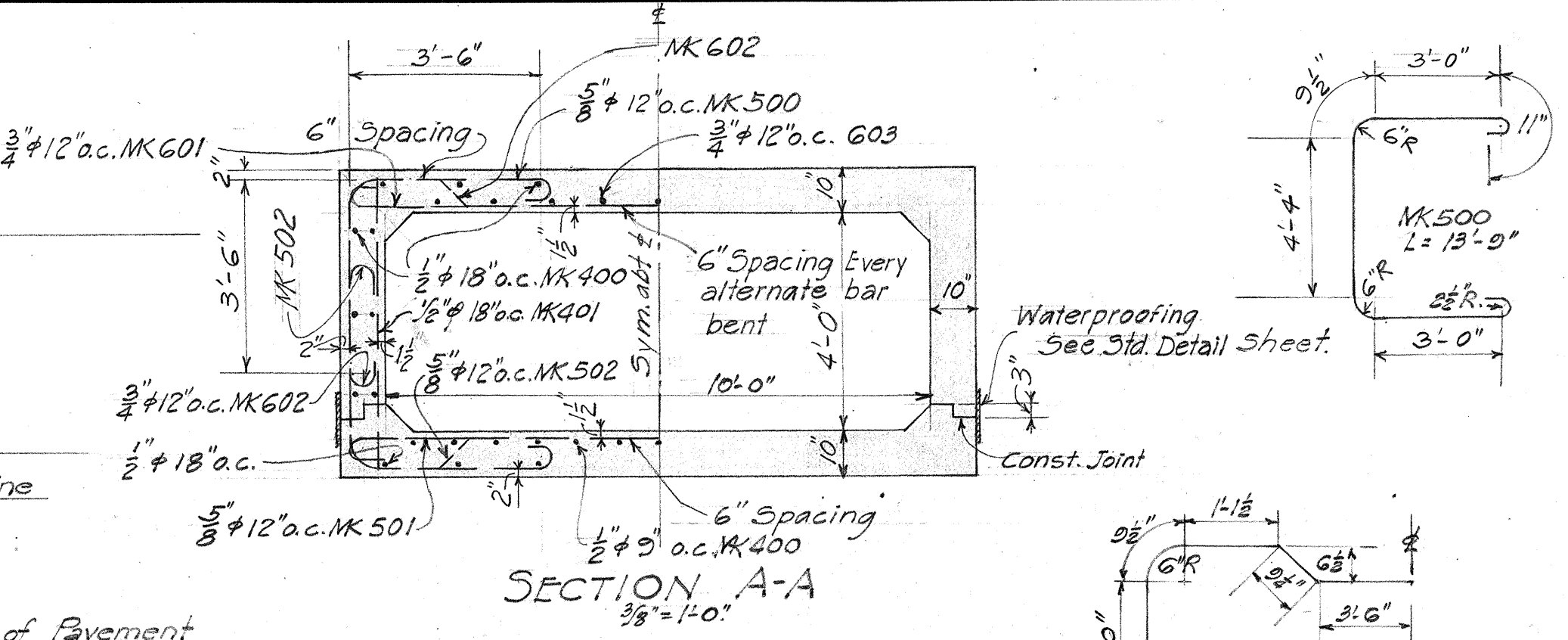
PED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw.	F2(4)	1948	21	66



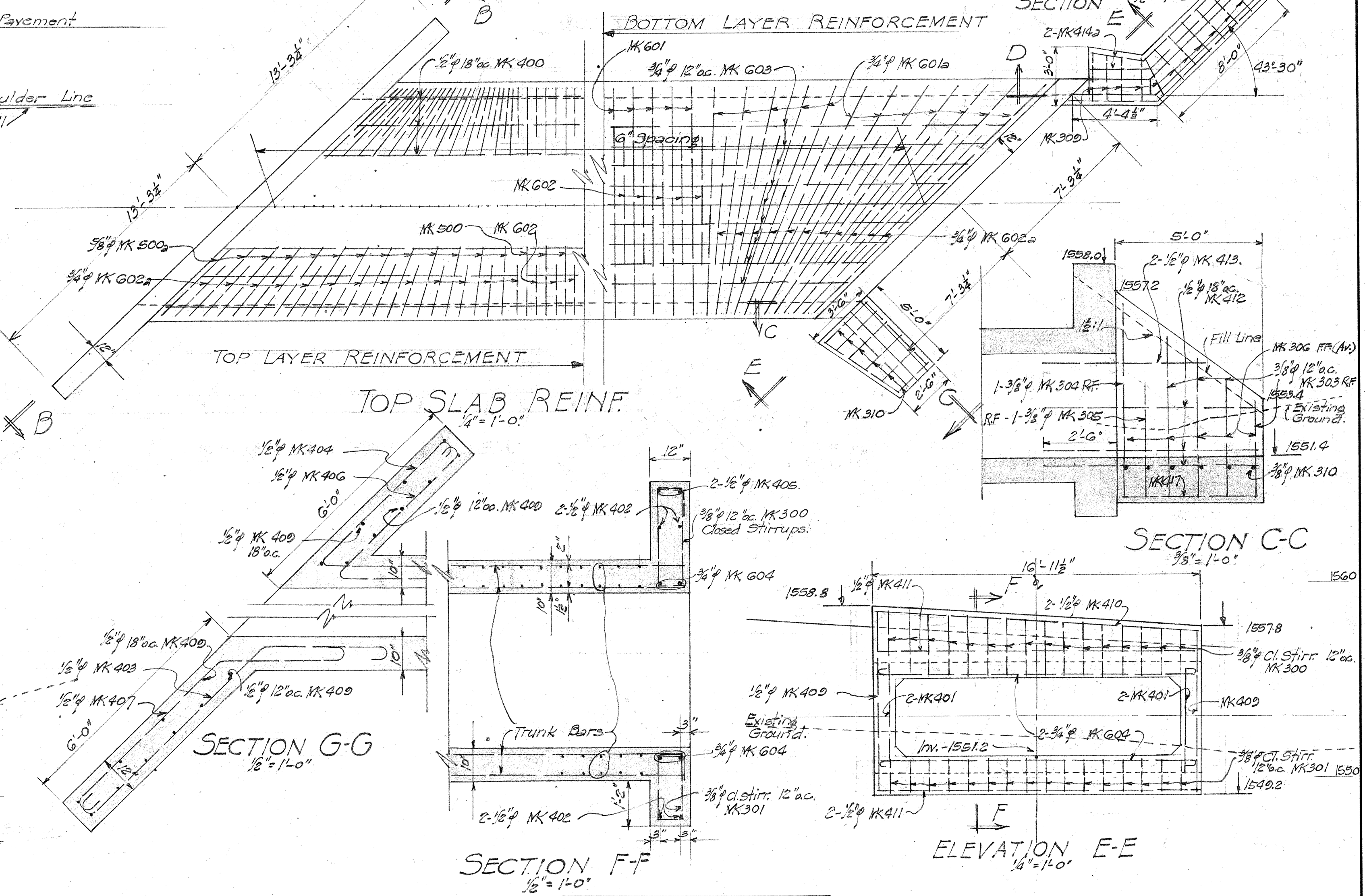
SECTION ALONG & CULVERT H-H
1" = 10'-0"



ELEVATION B-B
1/4" = 1'-0"



Design Data
H-20-44 Loading
 $f_s = 18000 \text{ psi}$
 $f_c = 1000 \text{ psi}$
 $n = 10$
All Concrete - Class "A-1"



SECTION C-C
3/8" = 1'-0"

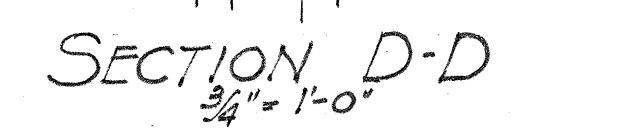
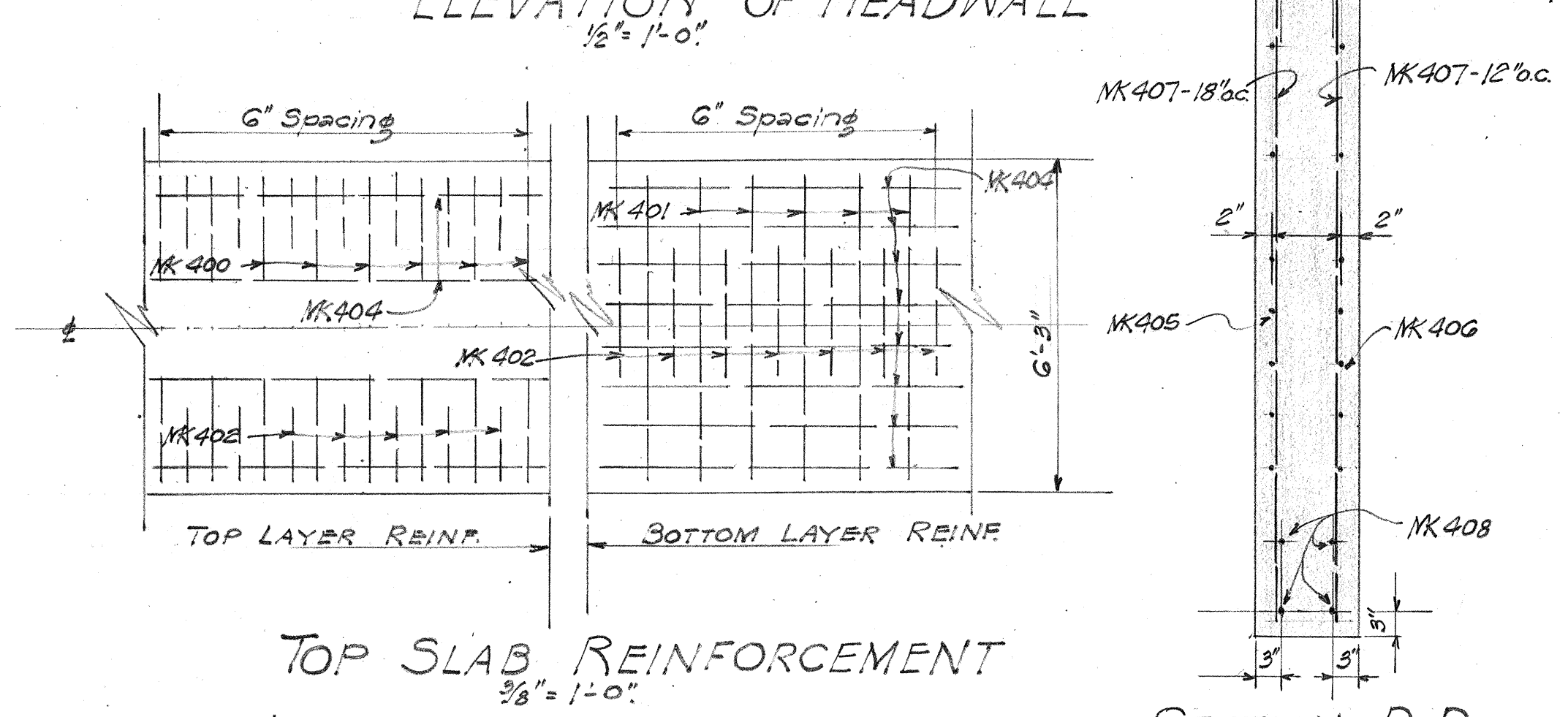
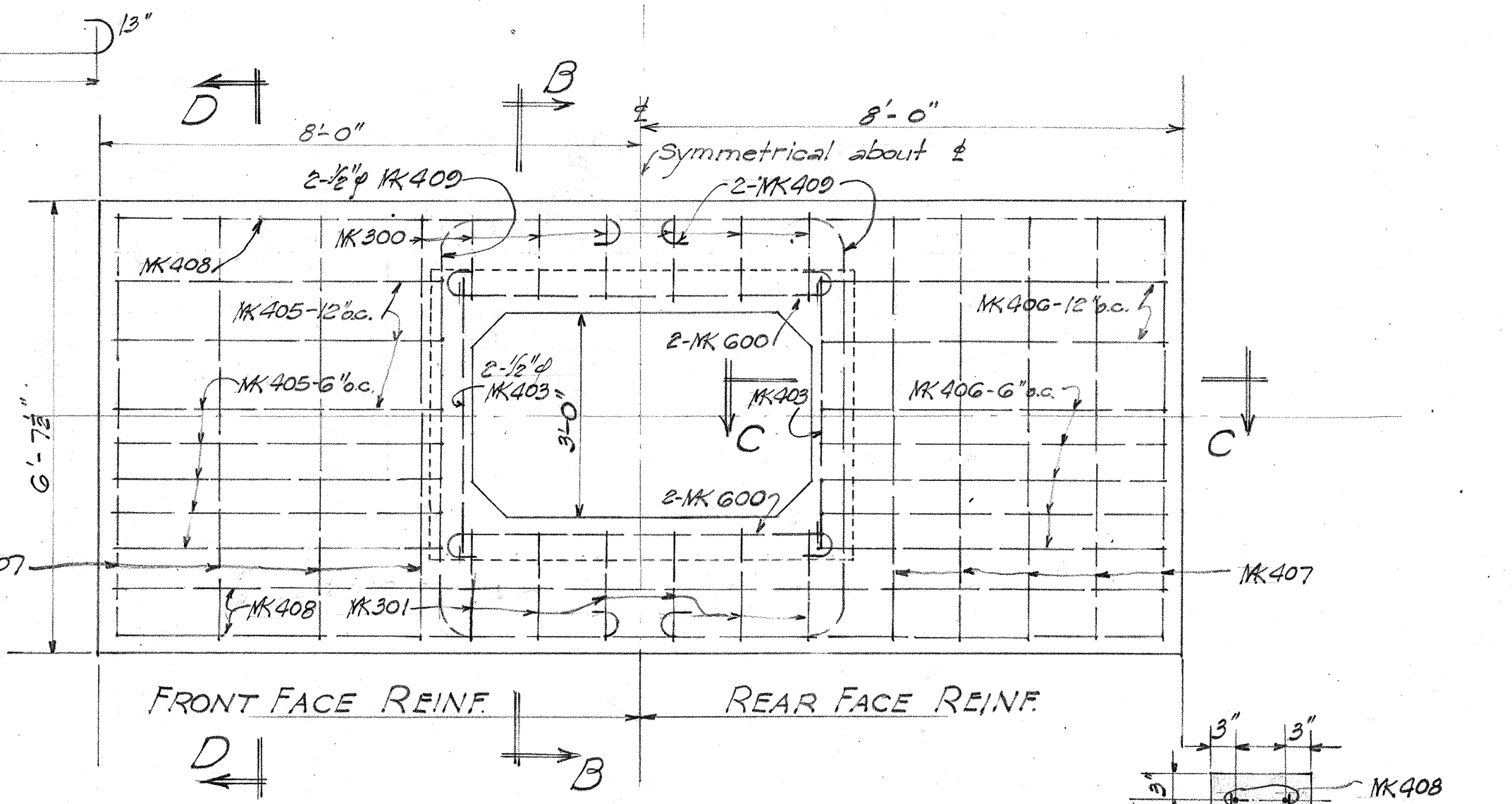
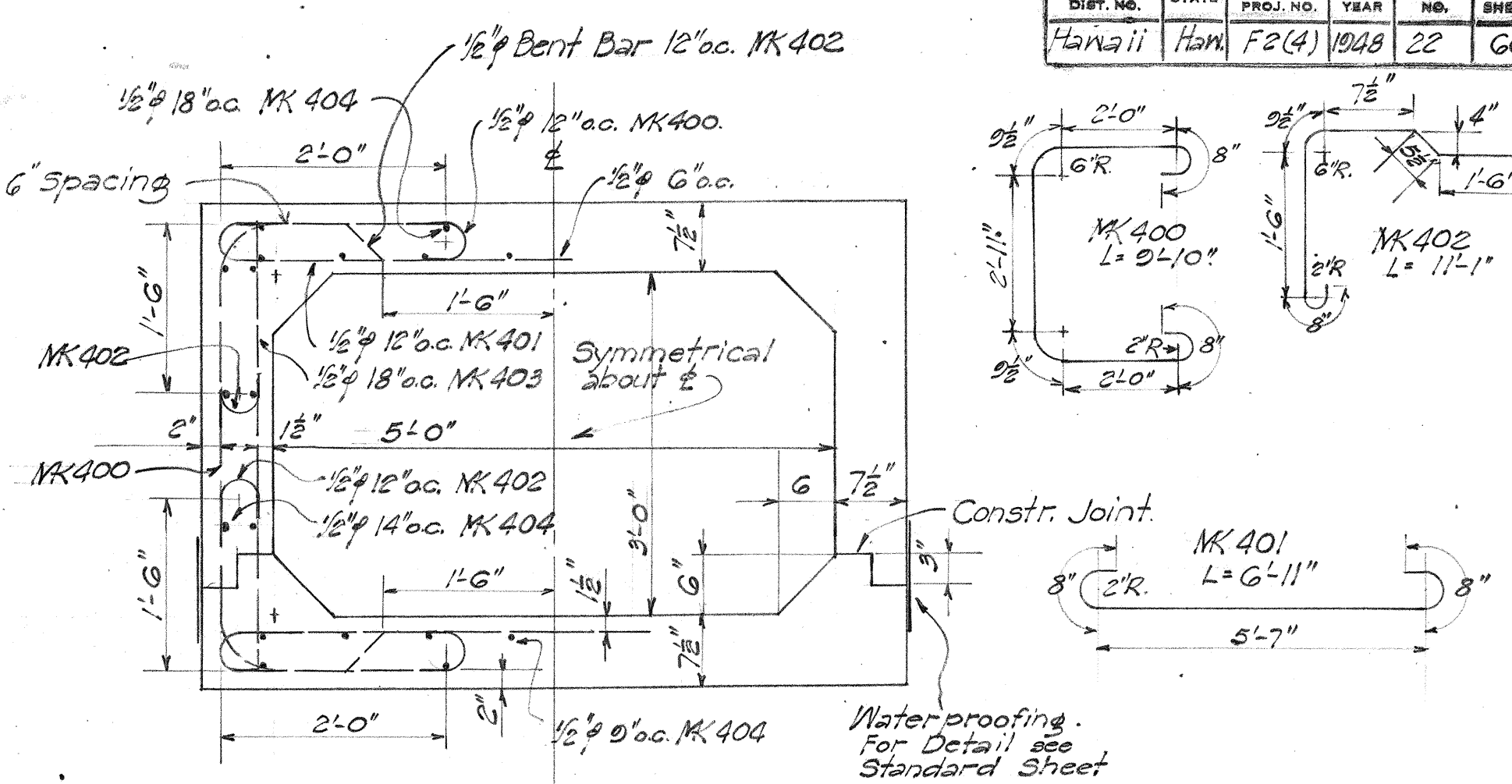
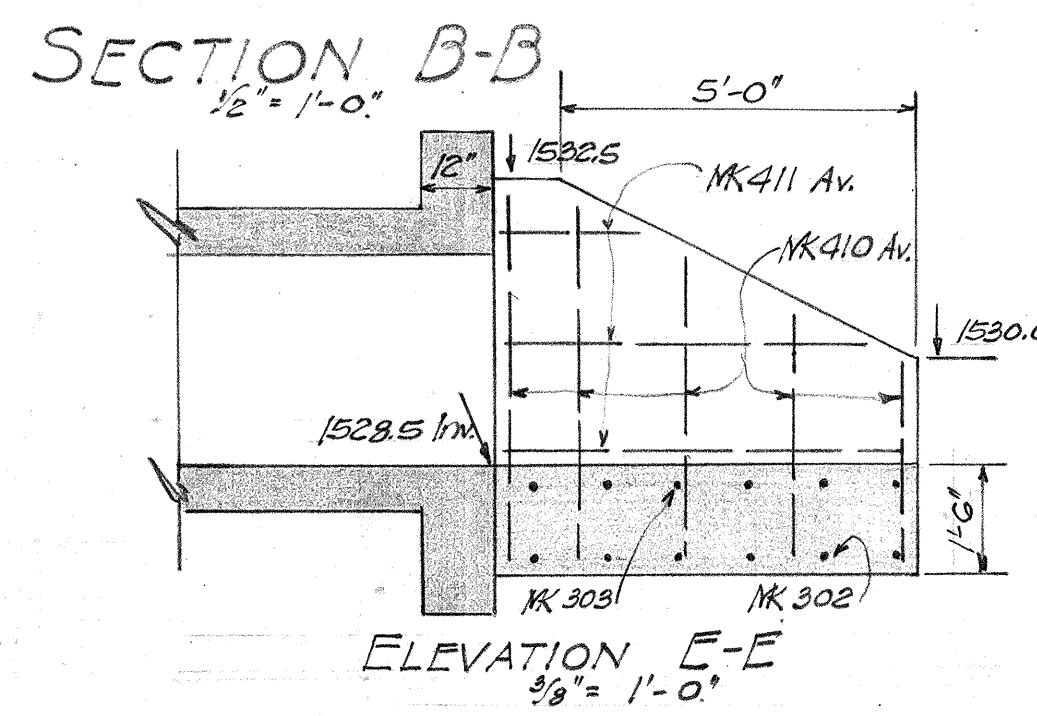
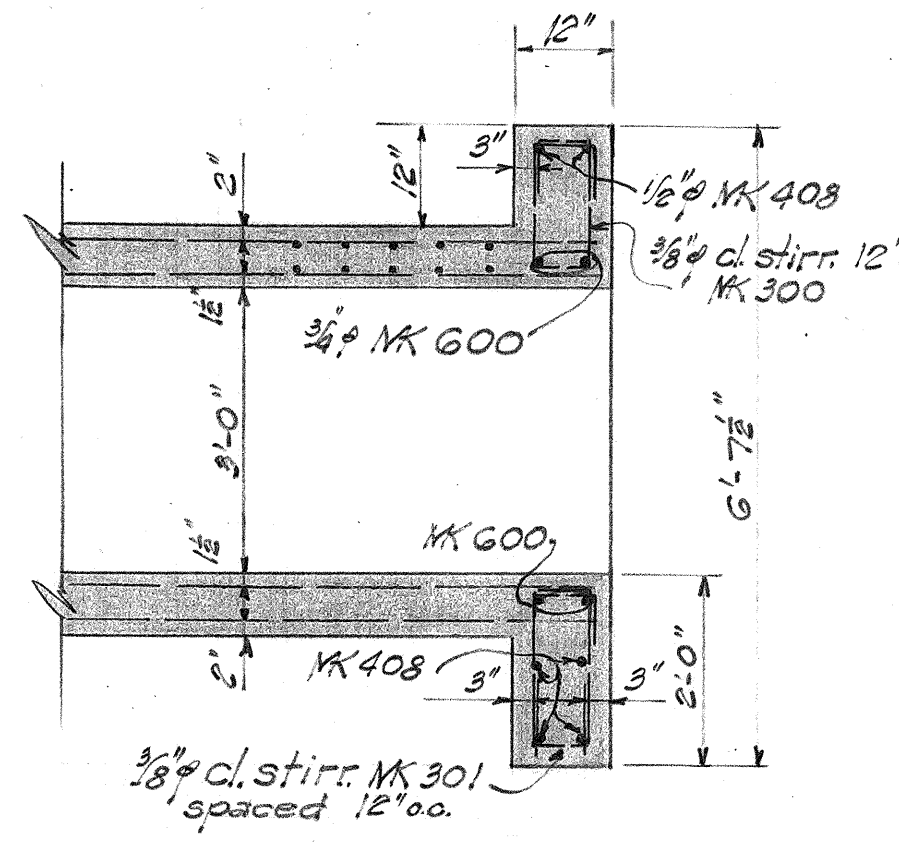
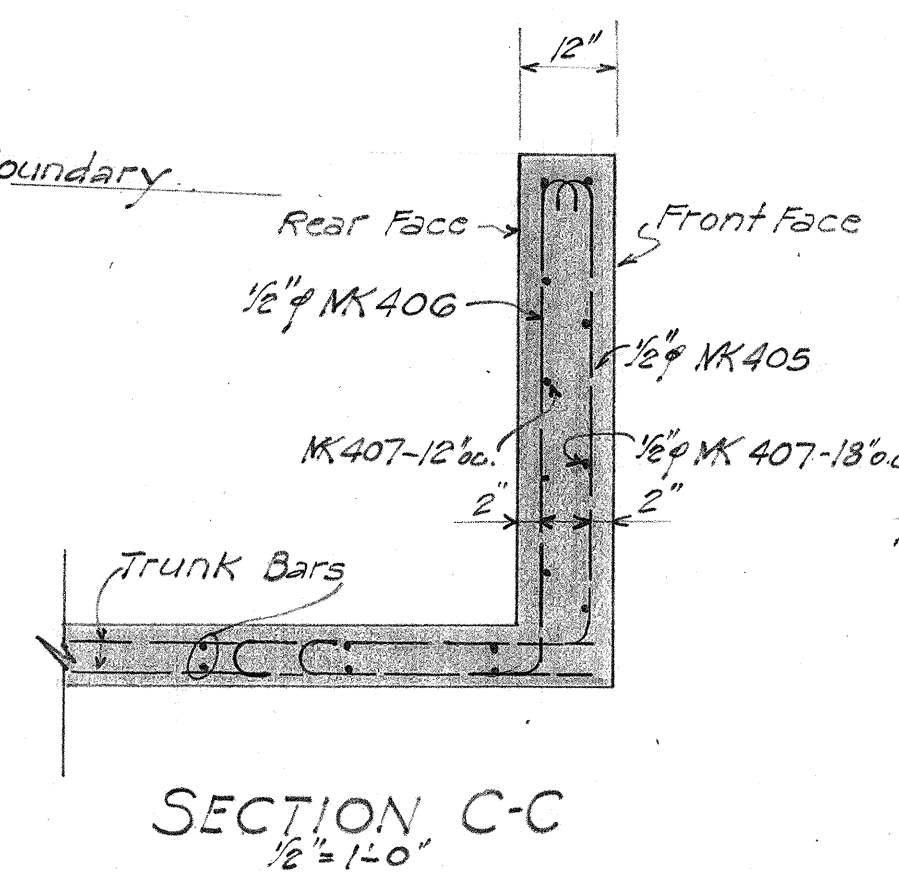
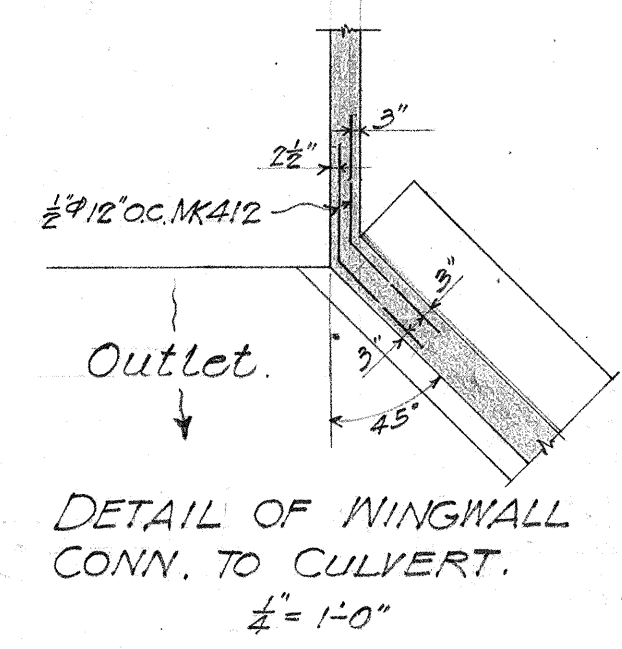
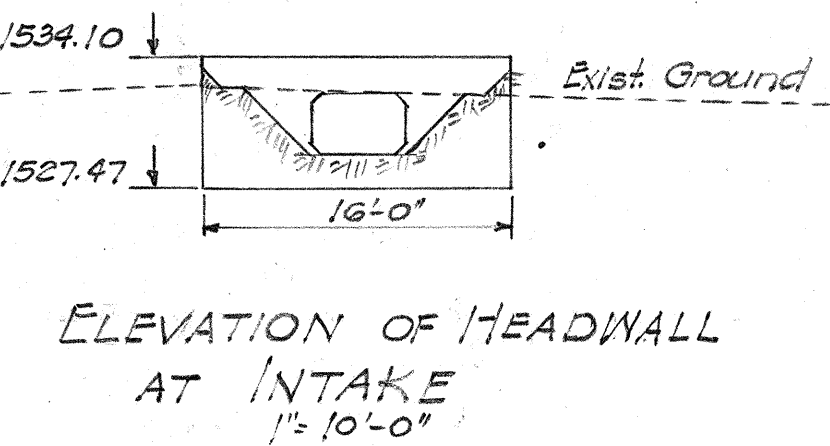
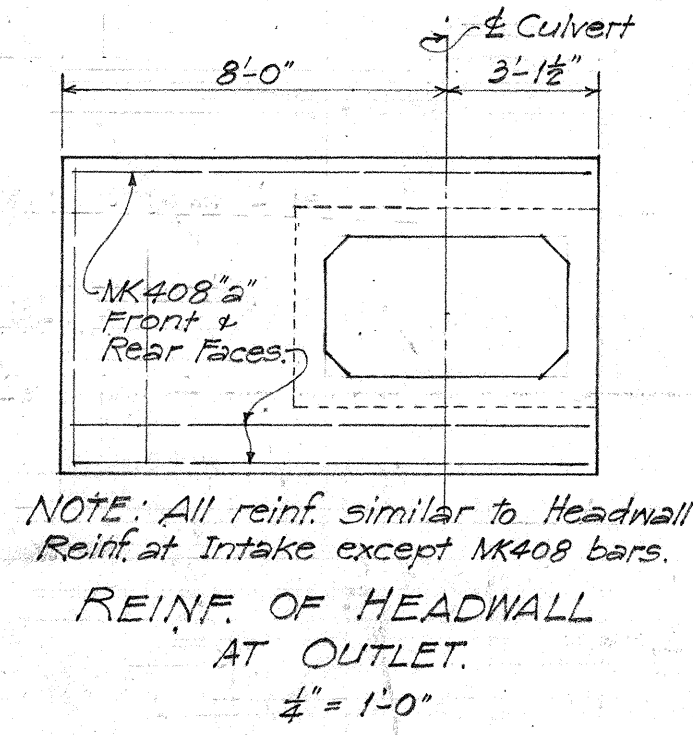
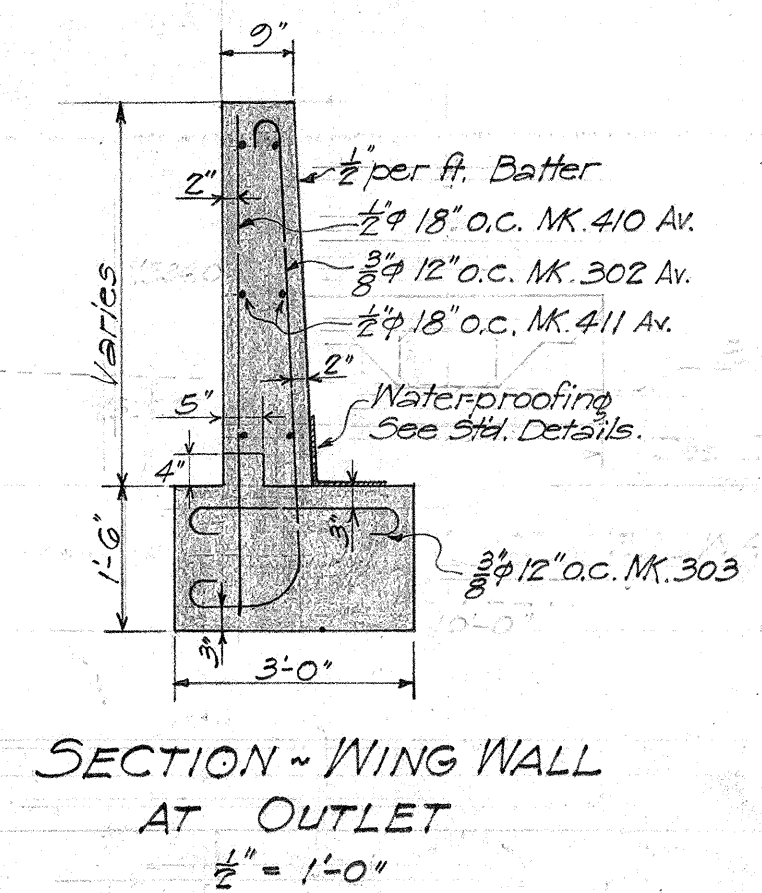
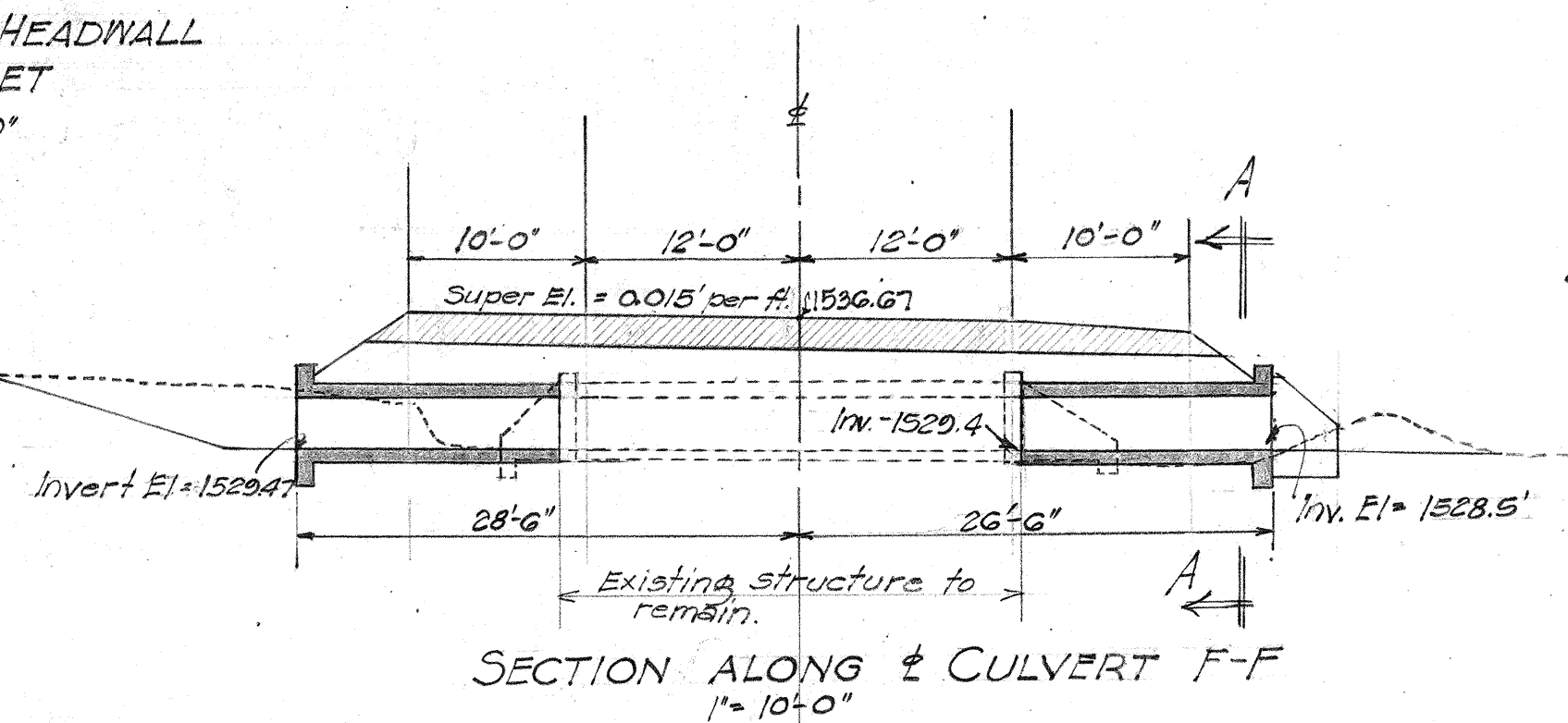
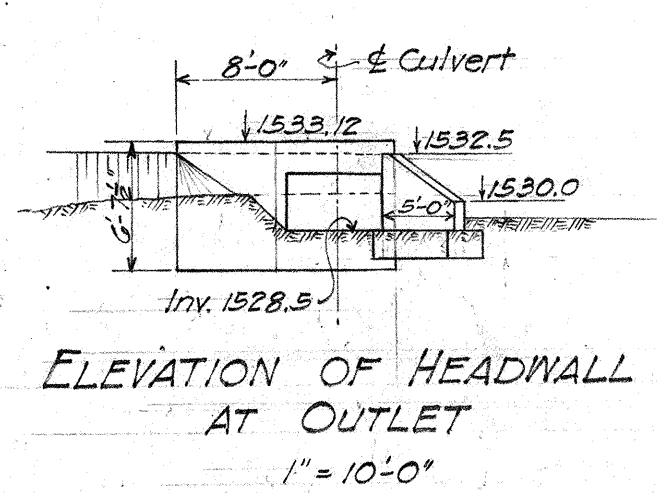
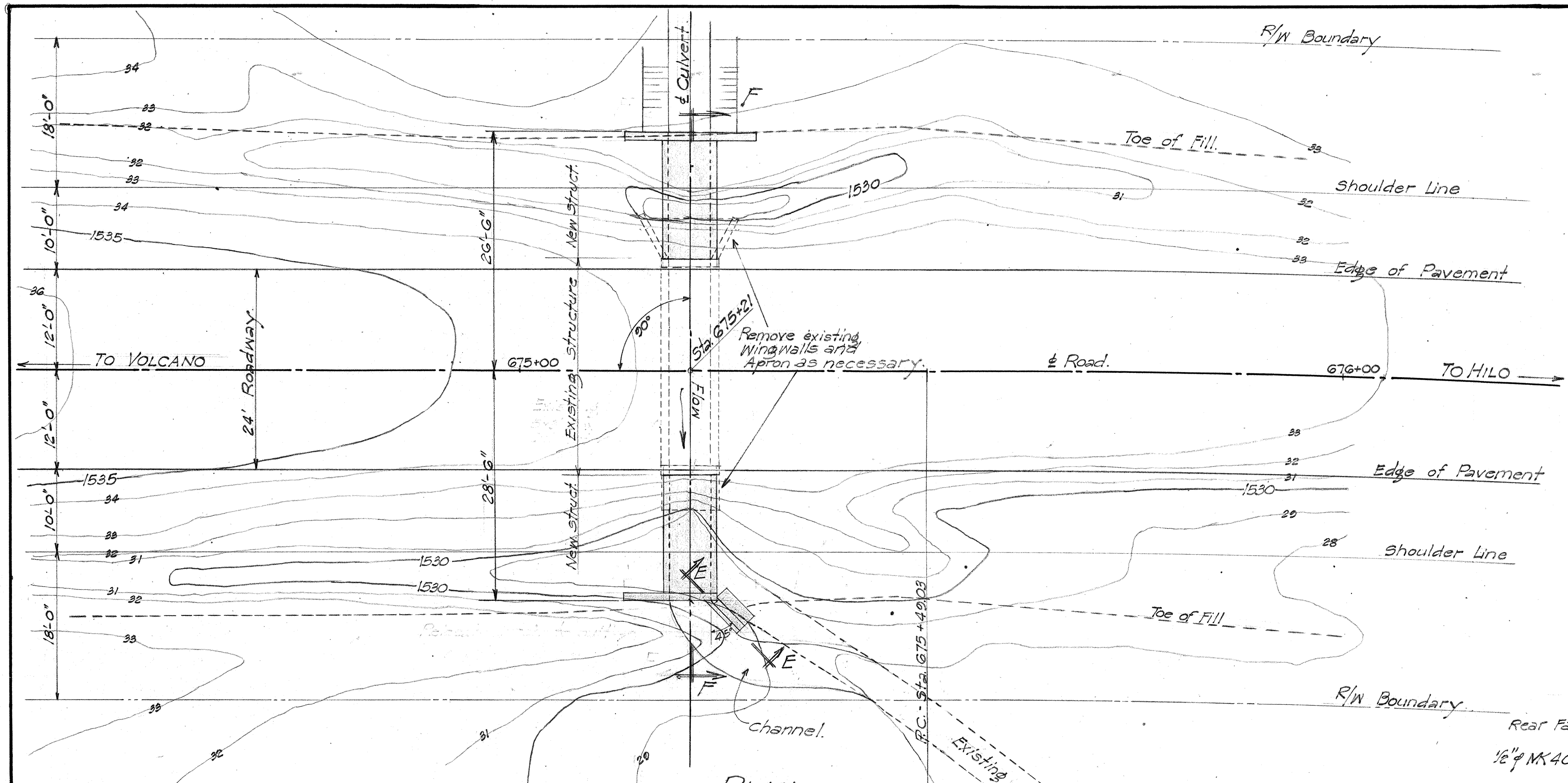
SECTION F-F
1/2" = 1'-0"

ELEVATION E-E
1/4" = 1'-0"

ESTIMATE OF QUANTITIES	
Class A-1 Concrete	80,000 cu. yd.
Structure Excavation	250 cu. yd.
Channel Excavation	105 cu. yd.
Reinforcing Steel	11,894 lbs.

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
10' x 4' BOX CULVERT
Sta. 670+00
Volcano Road
F2(4)
May 1948

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Hawaii	F2(4)	1948	22	66



ESTIMATE OF QUANTITIES	
Class A-1 Concrete	19.75 cu. y.
Reinforcing Steel	2708 lbs.
Structure Exc.	34 cu. y.
Channel Exc.	16 cu. y.

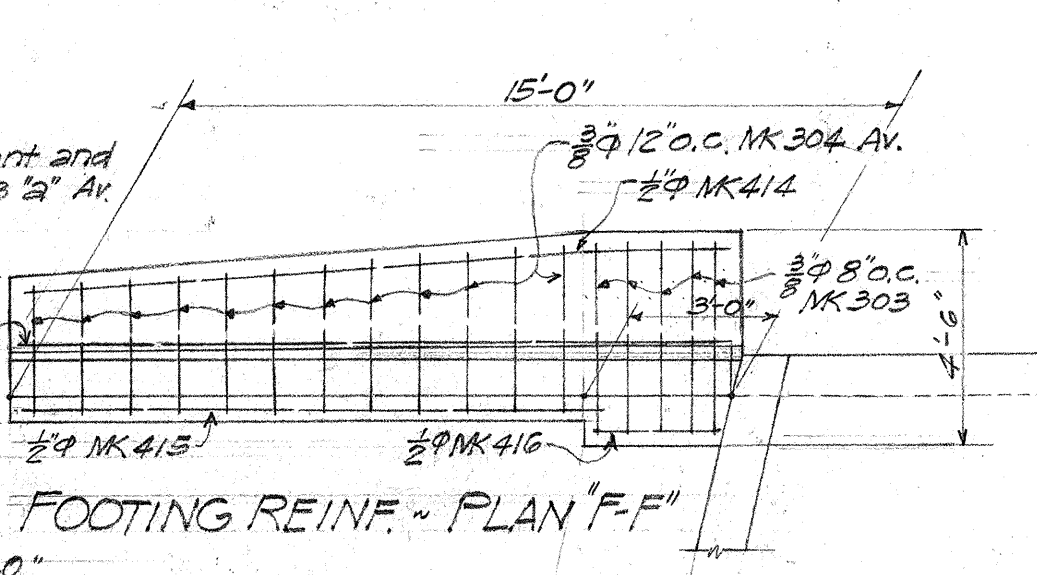
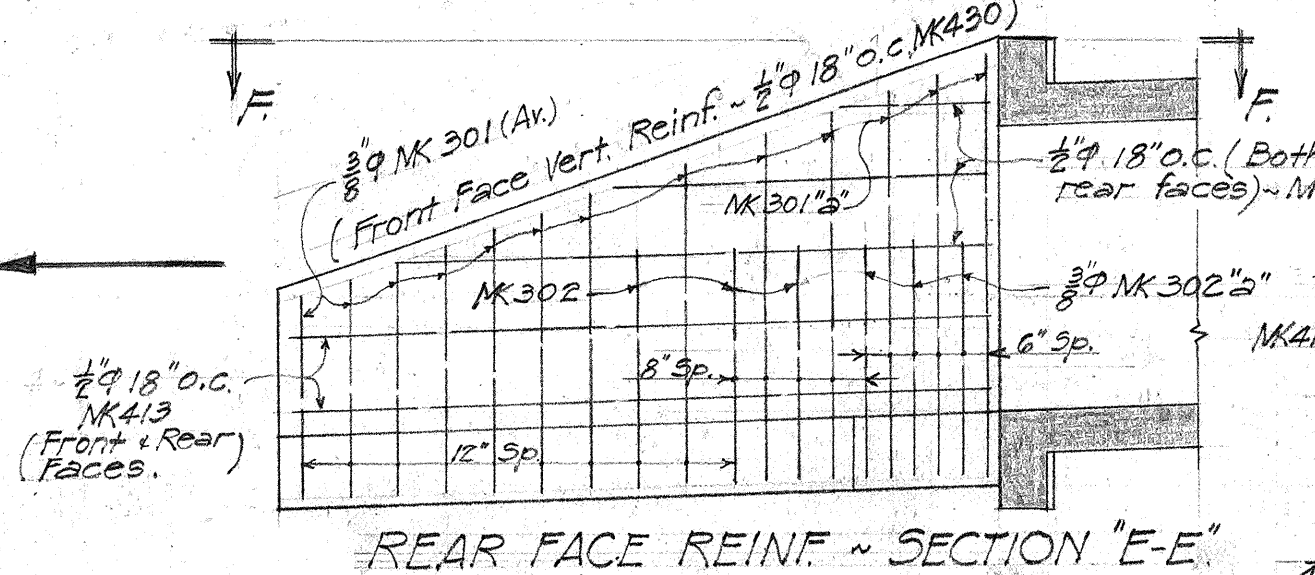
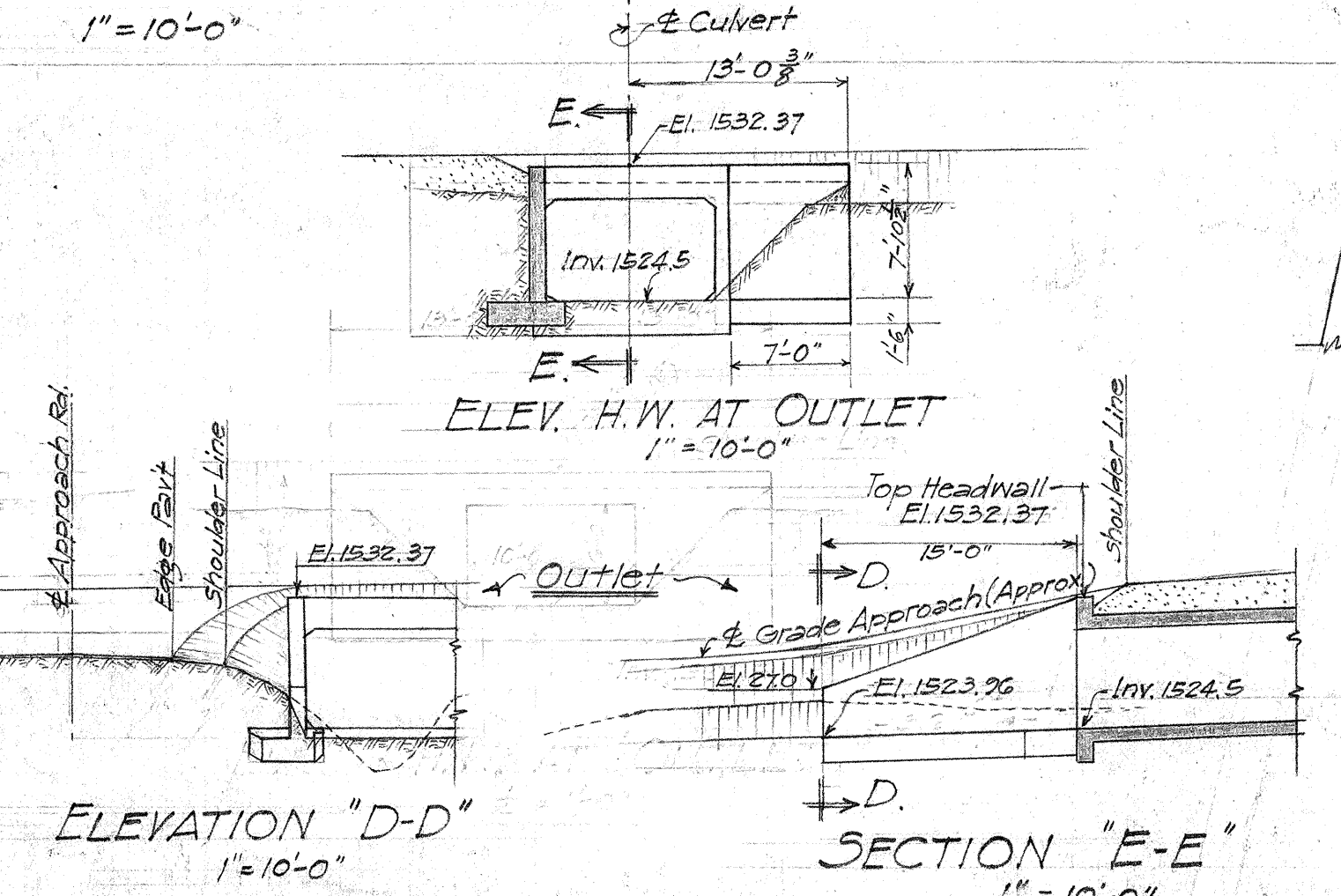
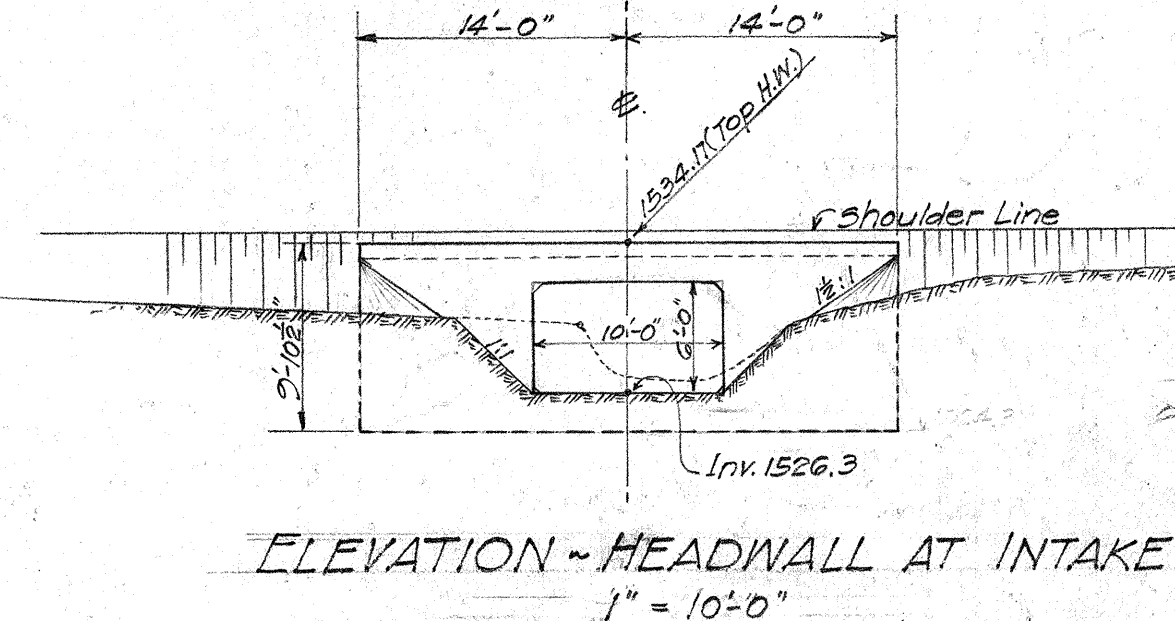
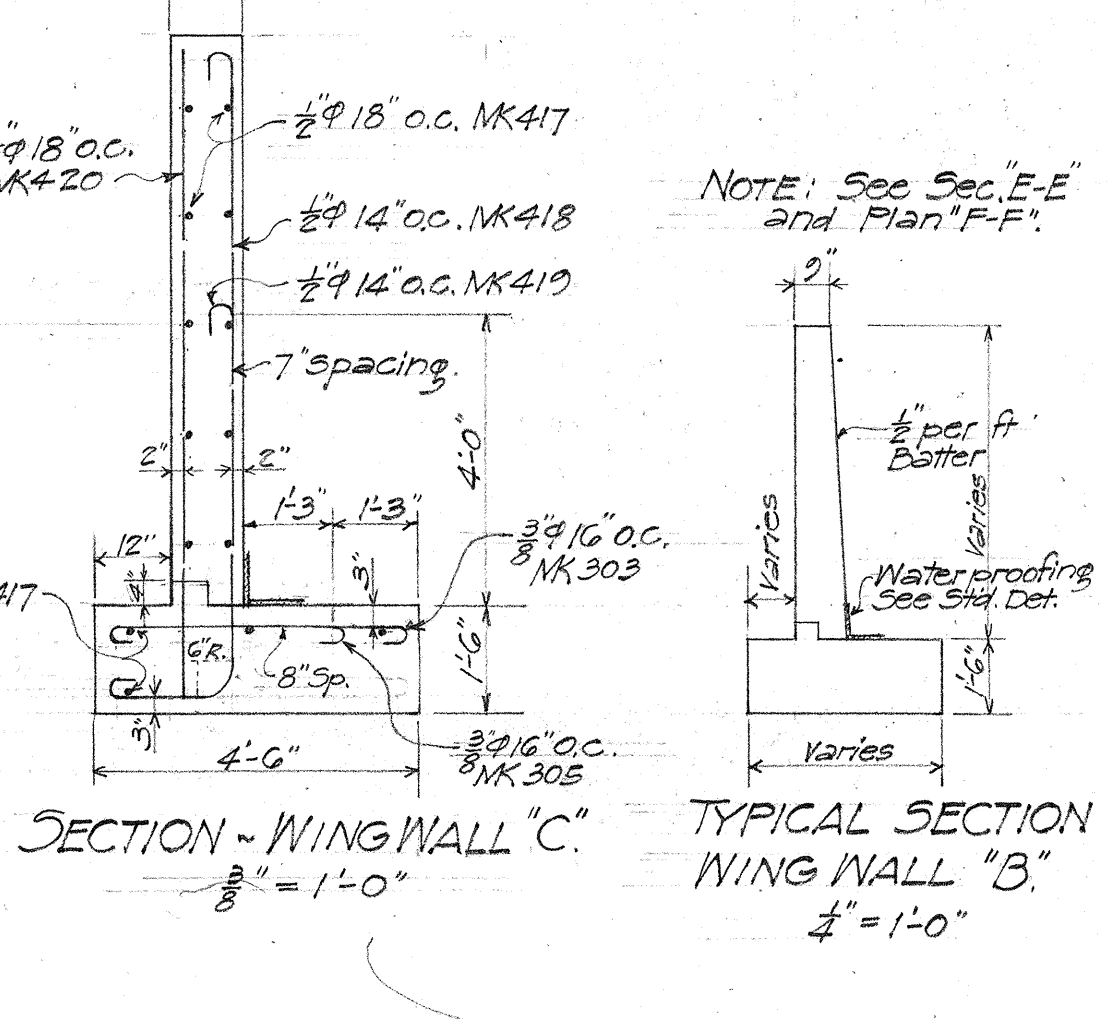
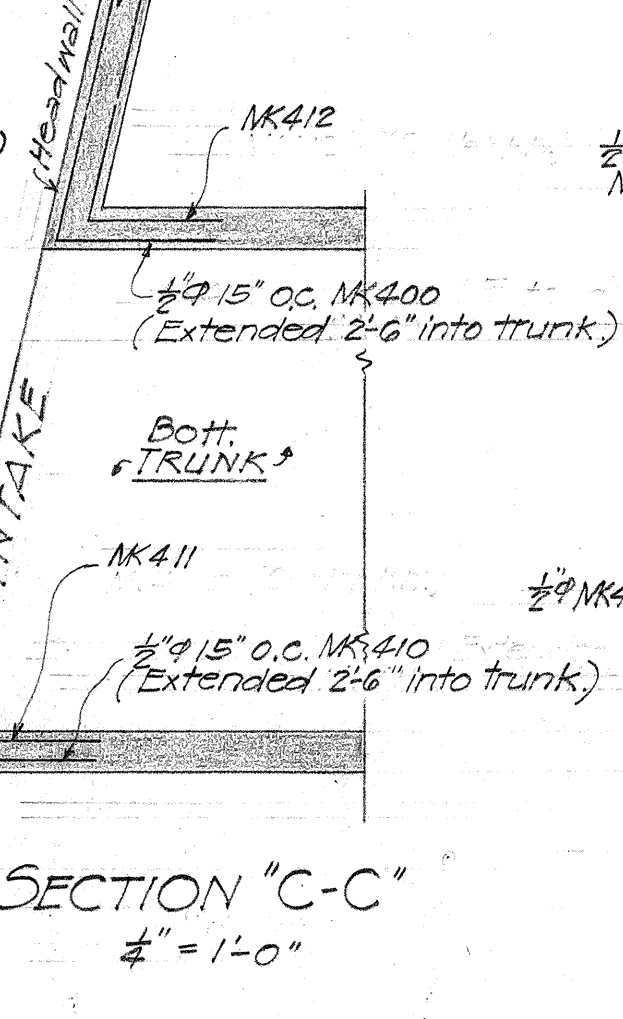
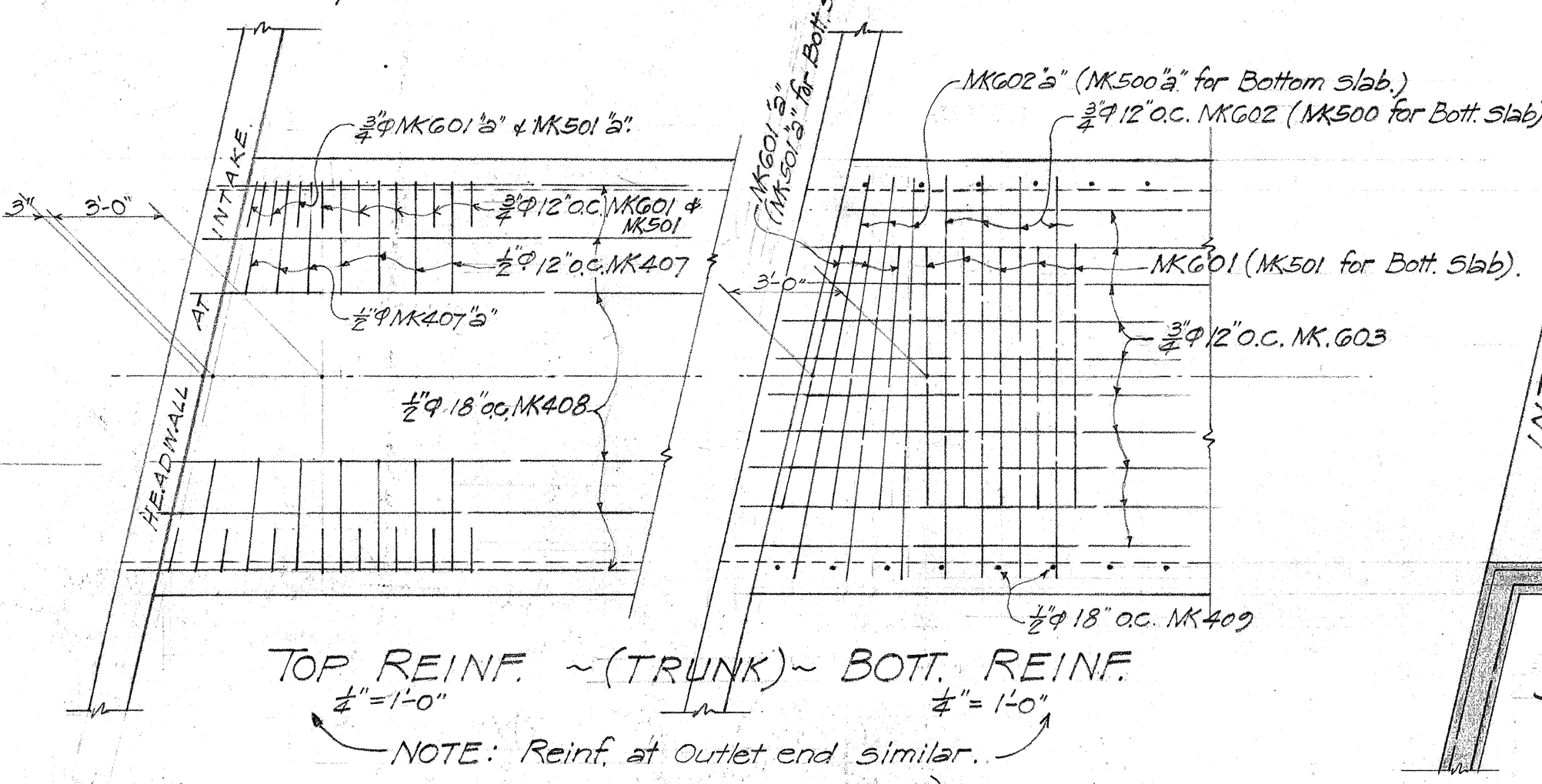
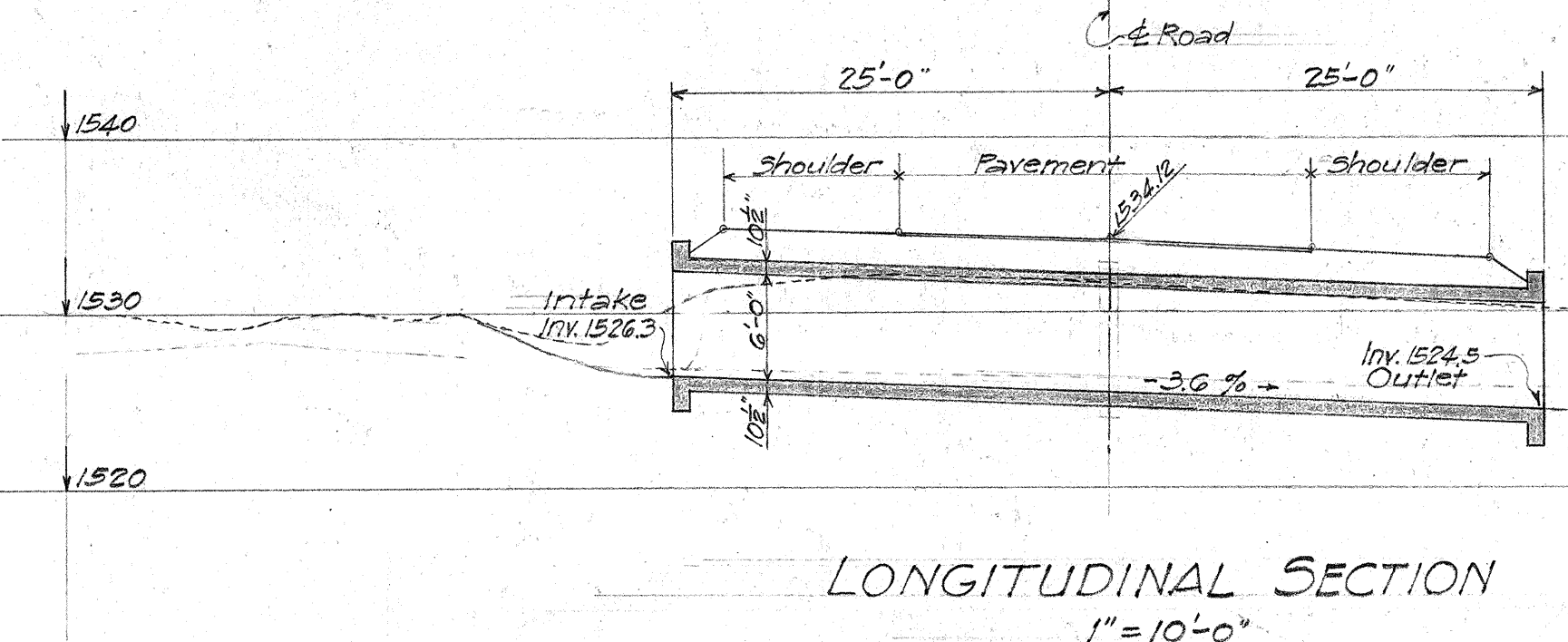
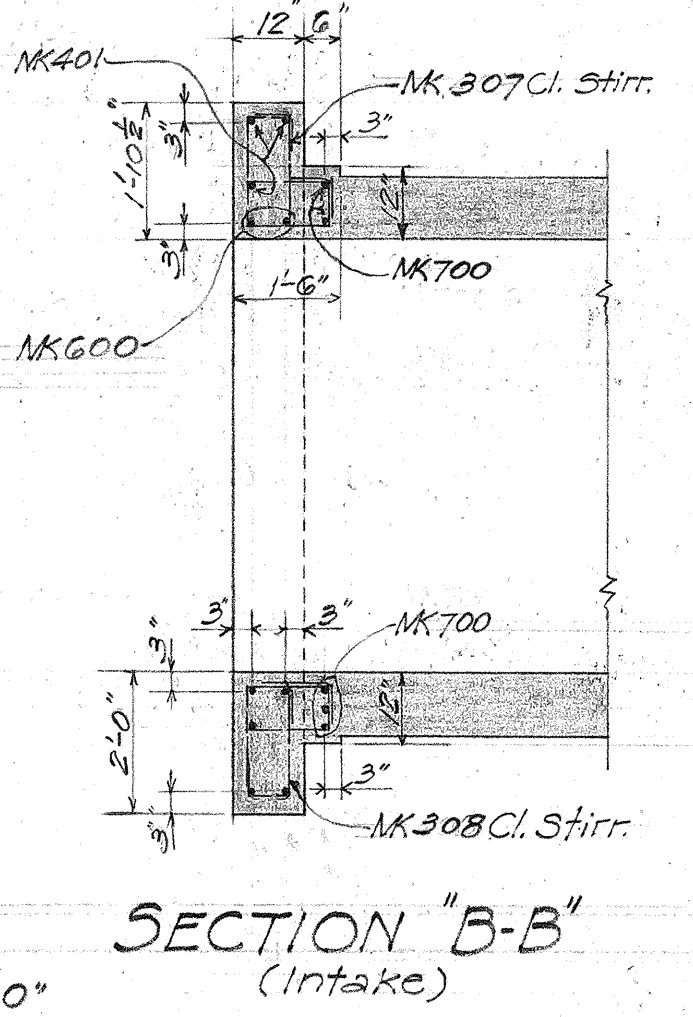
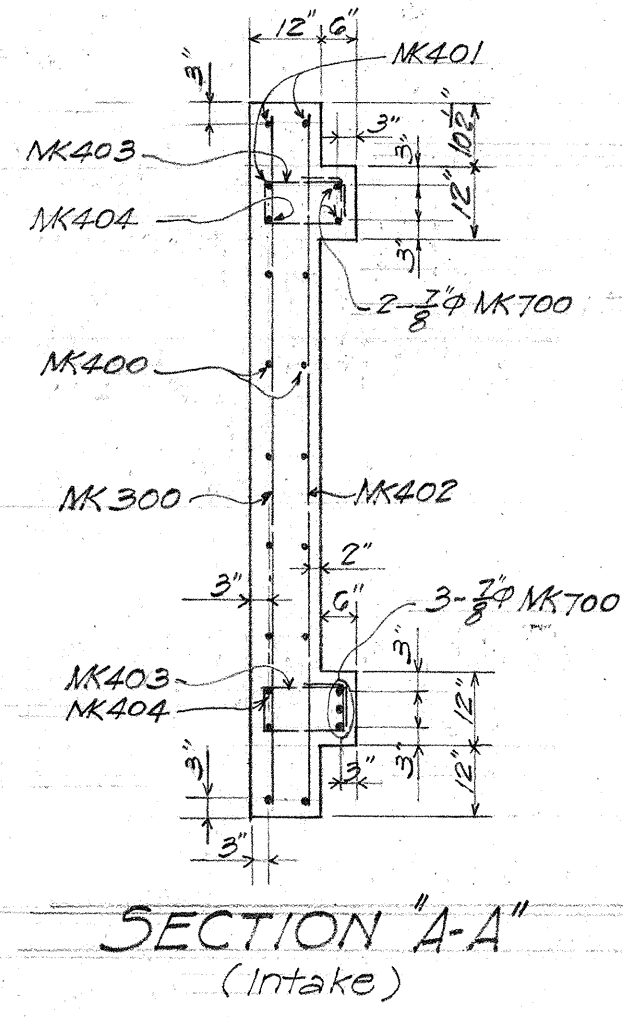
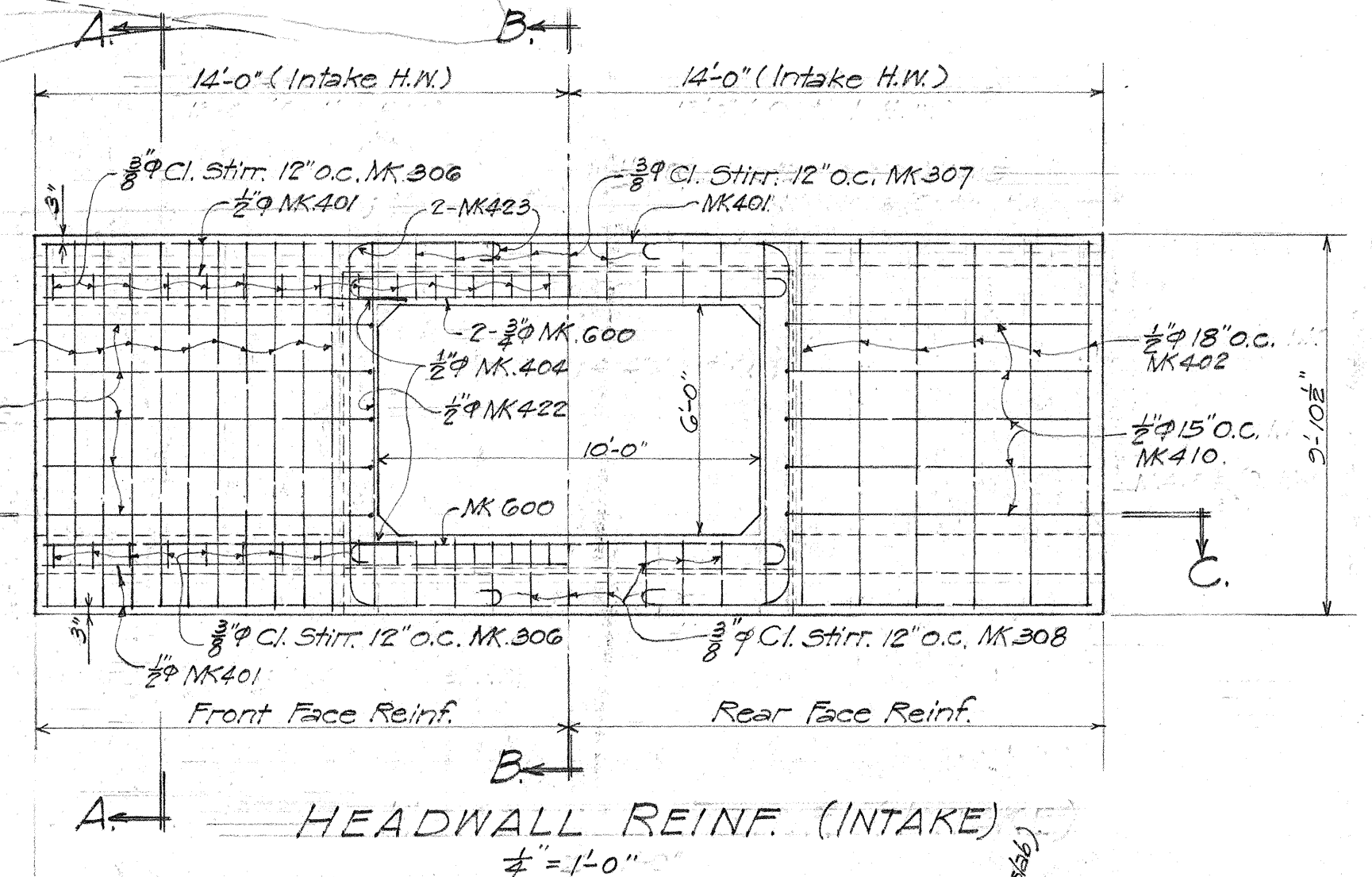
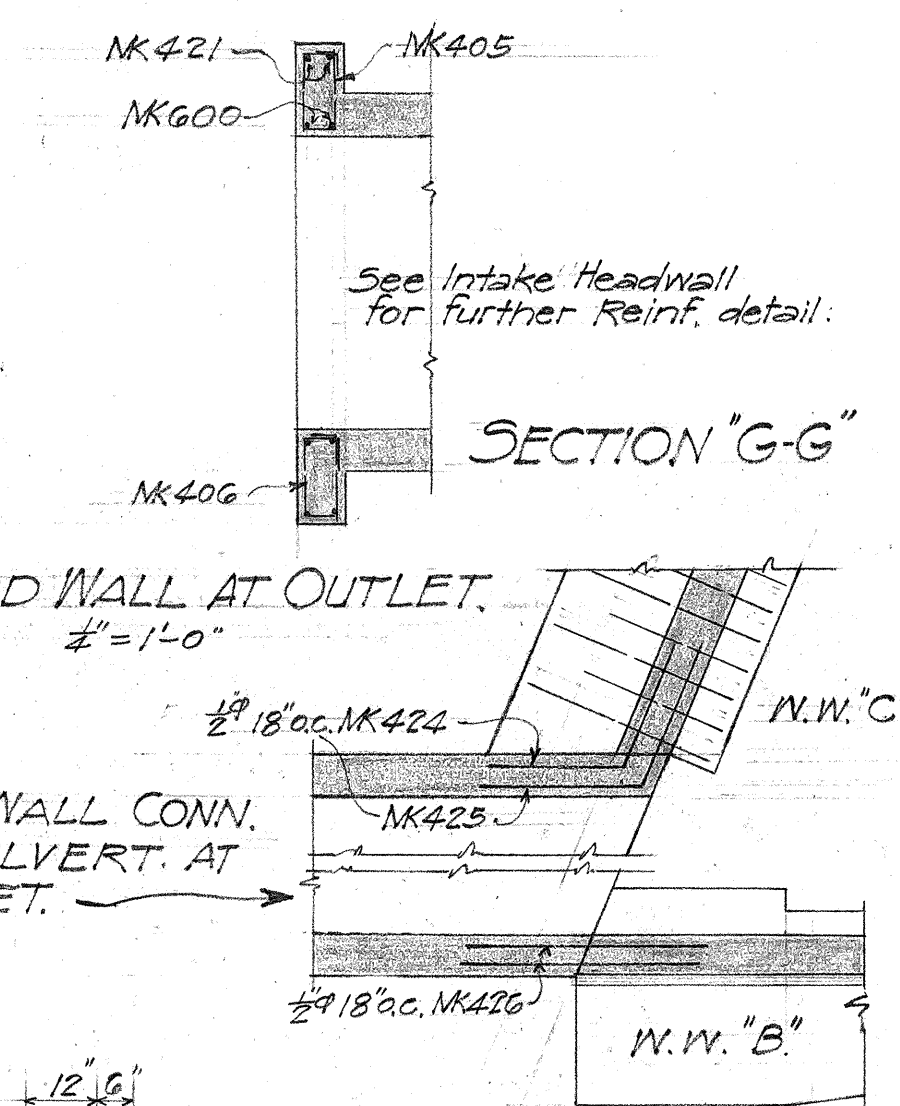
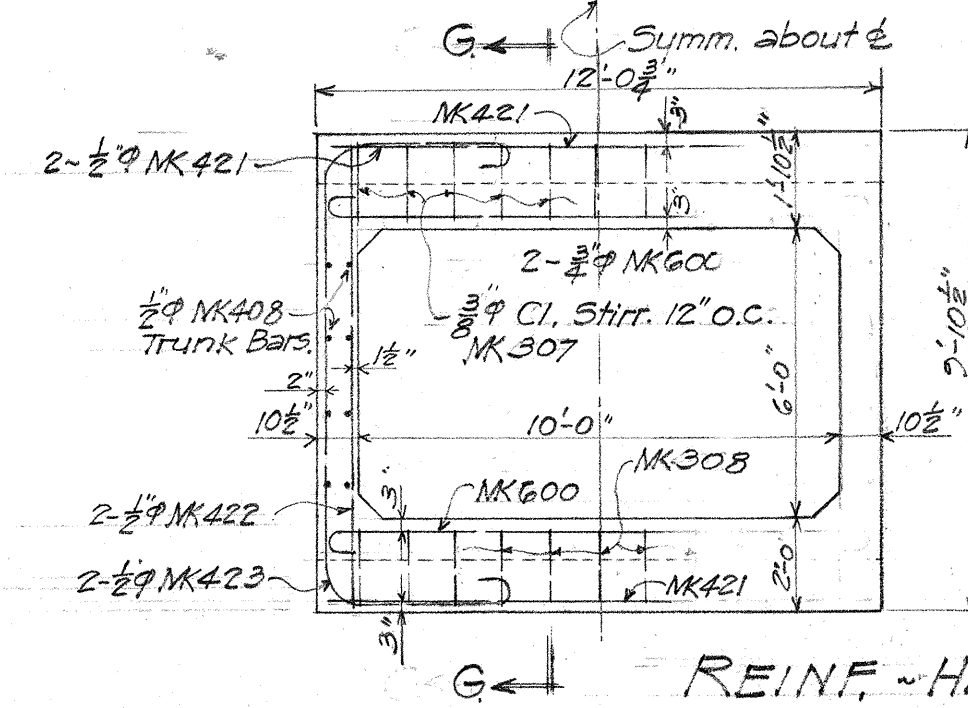
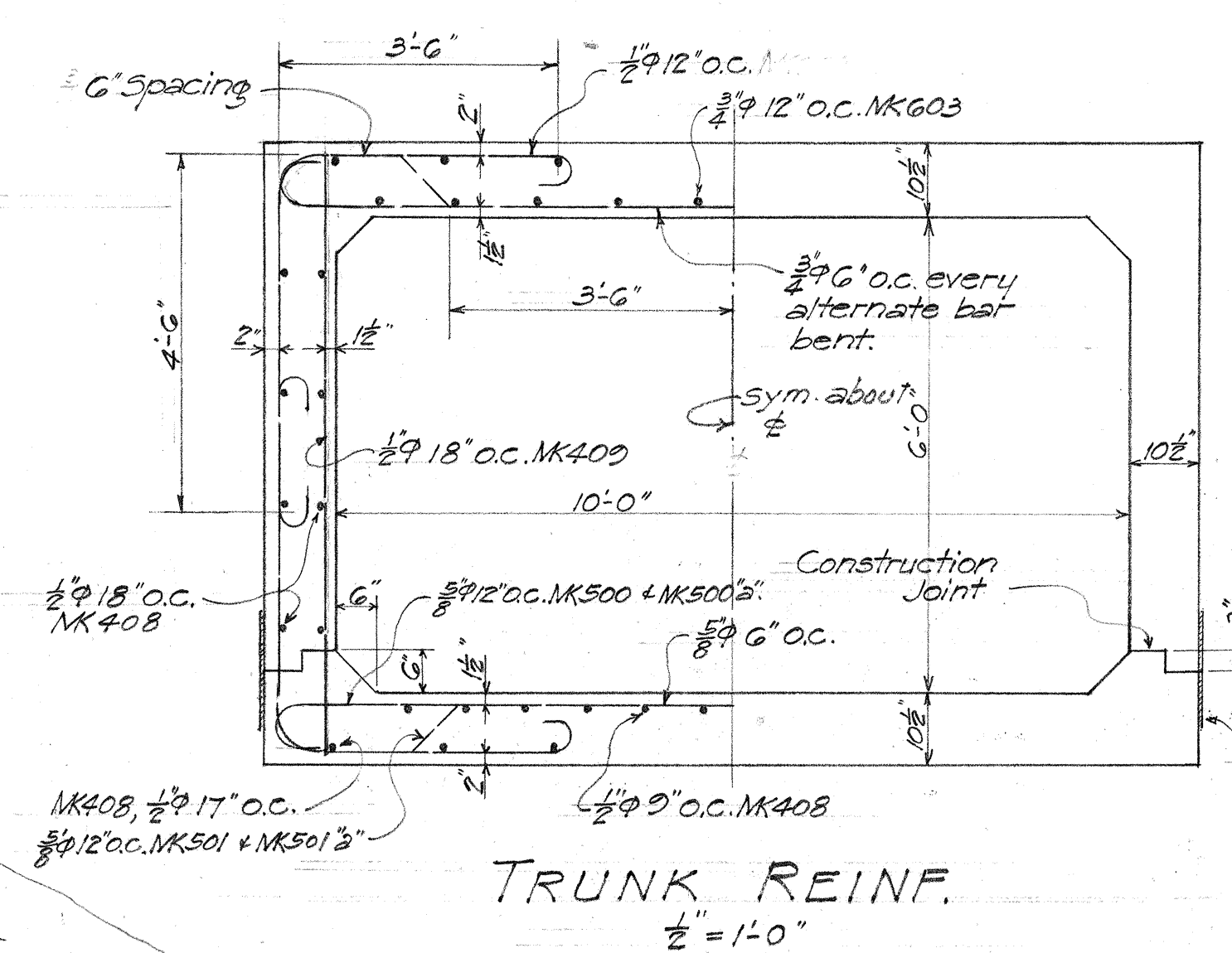
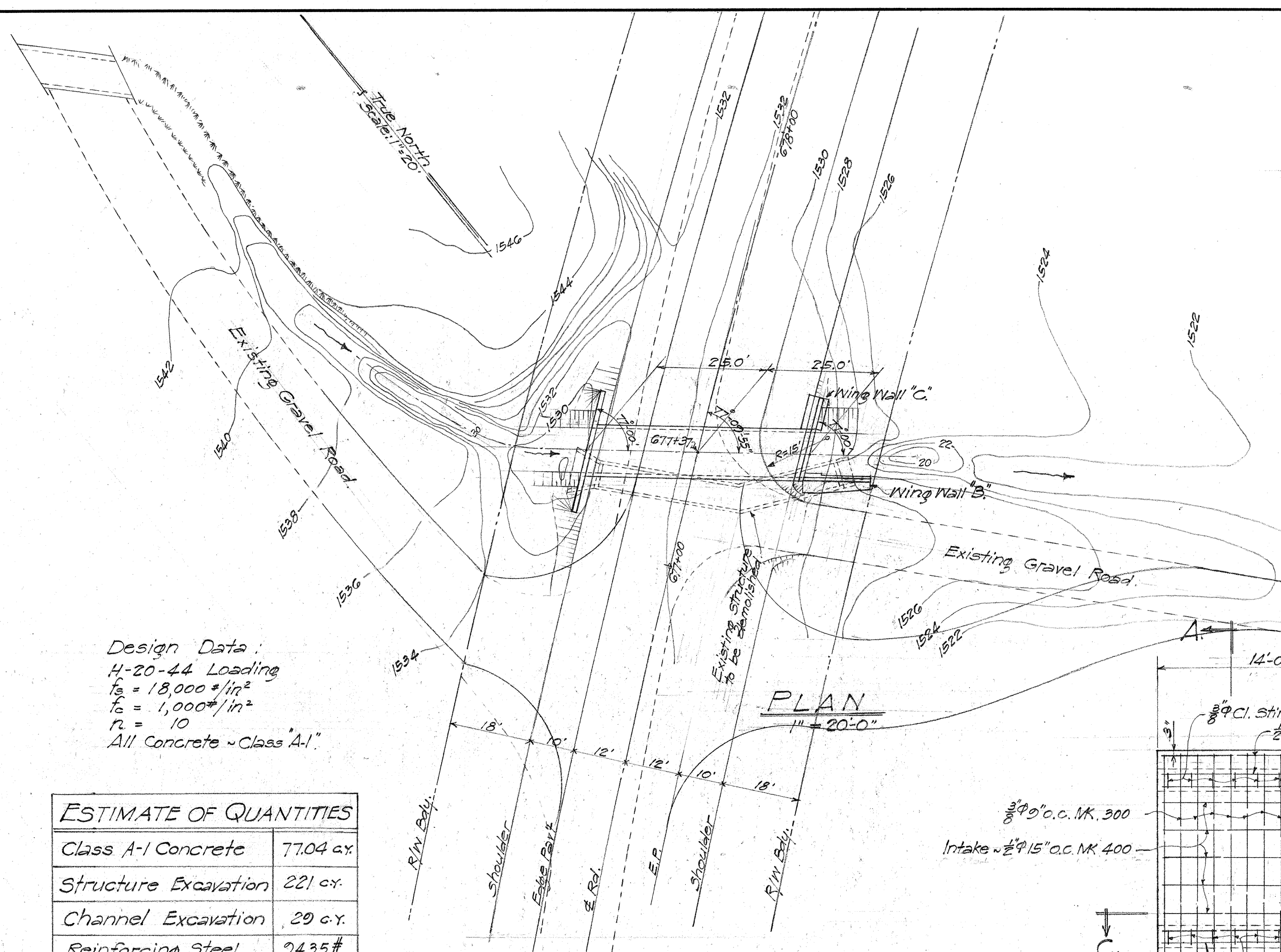
TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
**EXTENSION OF
5'-0" x 3'-0" BOX CULVERT**
STA. 675+21
VOLCANO RD.
May 1948

ORIGINAL PLotted BY: DATE: 1/10/48
CHECKED BY: NO. 1
QUANTITIES BY: NO. 1
NOTED BY: NO. 1

5332.22

Design Data:
 H-20-44 Loading
 $f_c = 18,000 \text{ psi}$
 $f_s = 1,000 \text{ psi}$
 $n = 10$
 All Concrete - Class "A-1"

ESTIMATE OF QUANTITIES	
Class A-1 Concrete	77.04 cu.
Structure Excavation	221 cu.
Channel Excavation	29 cu.
Reinforcing Steel	2,435 #



TERRITORIAL HIGHWAY DEPARTMENT
 TERRITORY OF HAWAII
 10'x6' BOX CULVERT
 Sta. 677+37
 VOLCANO RD.
 May, 1948
 F 2 (4)