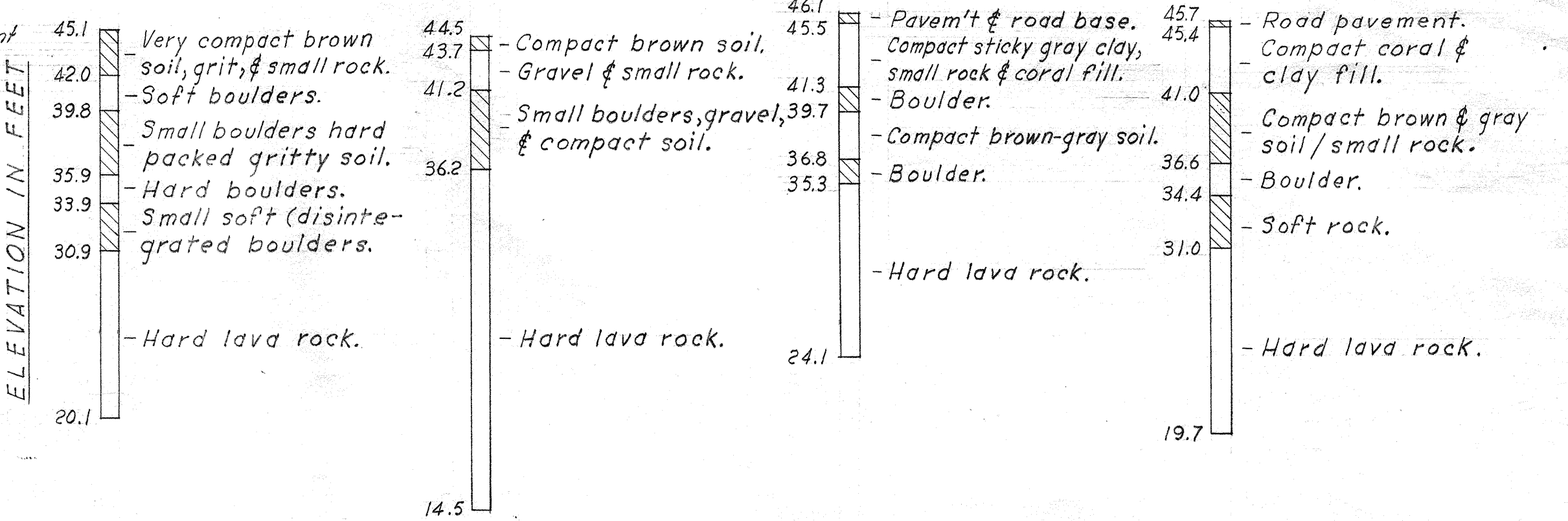
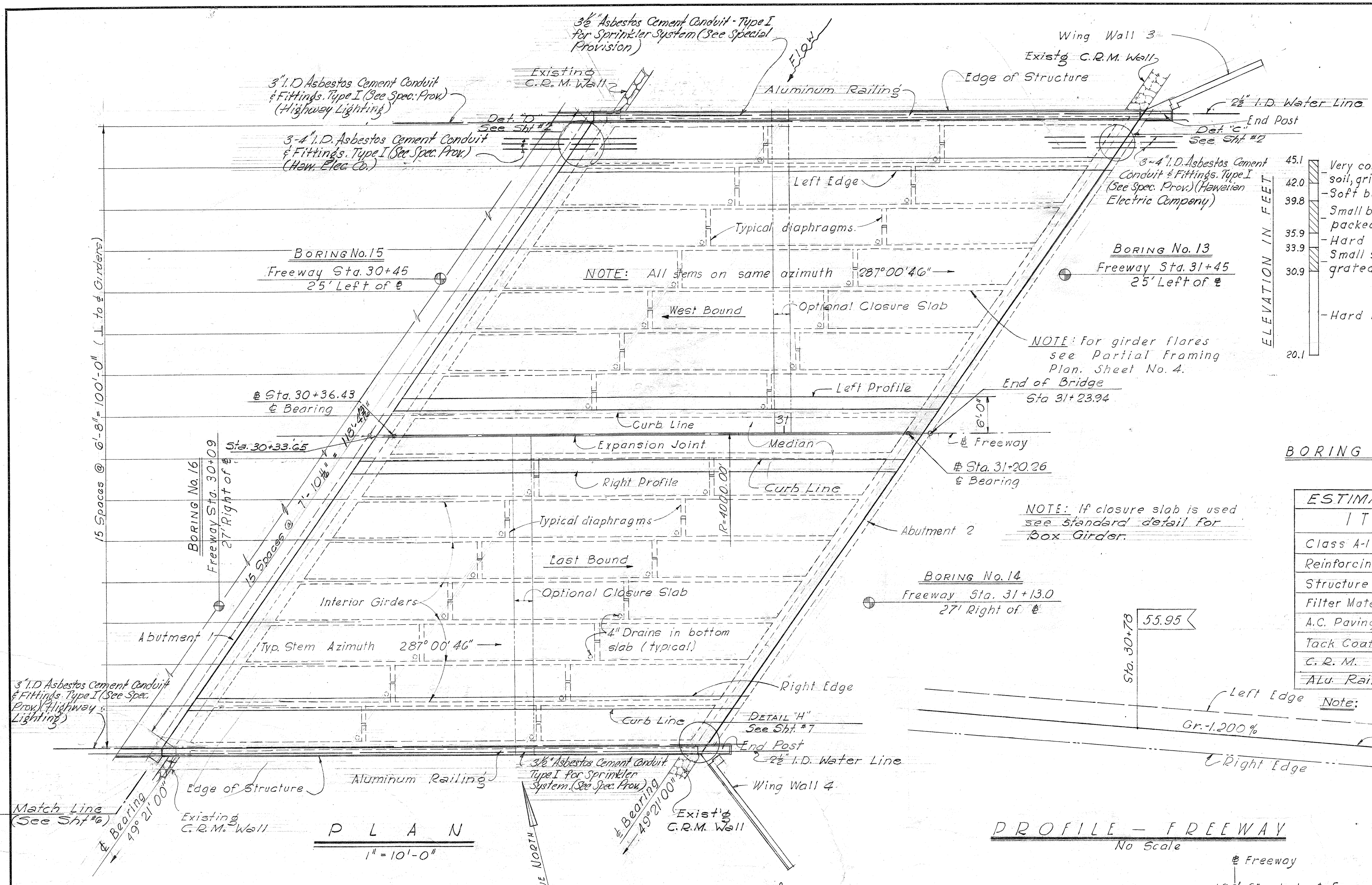
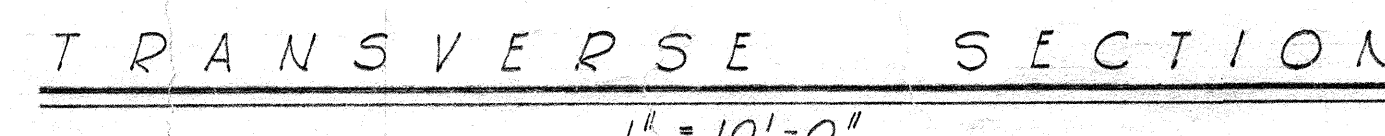
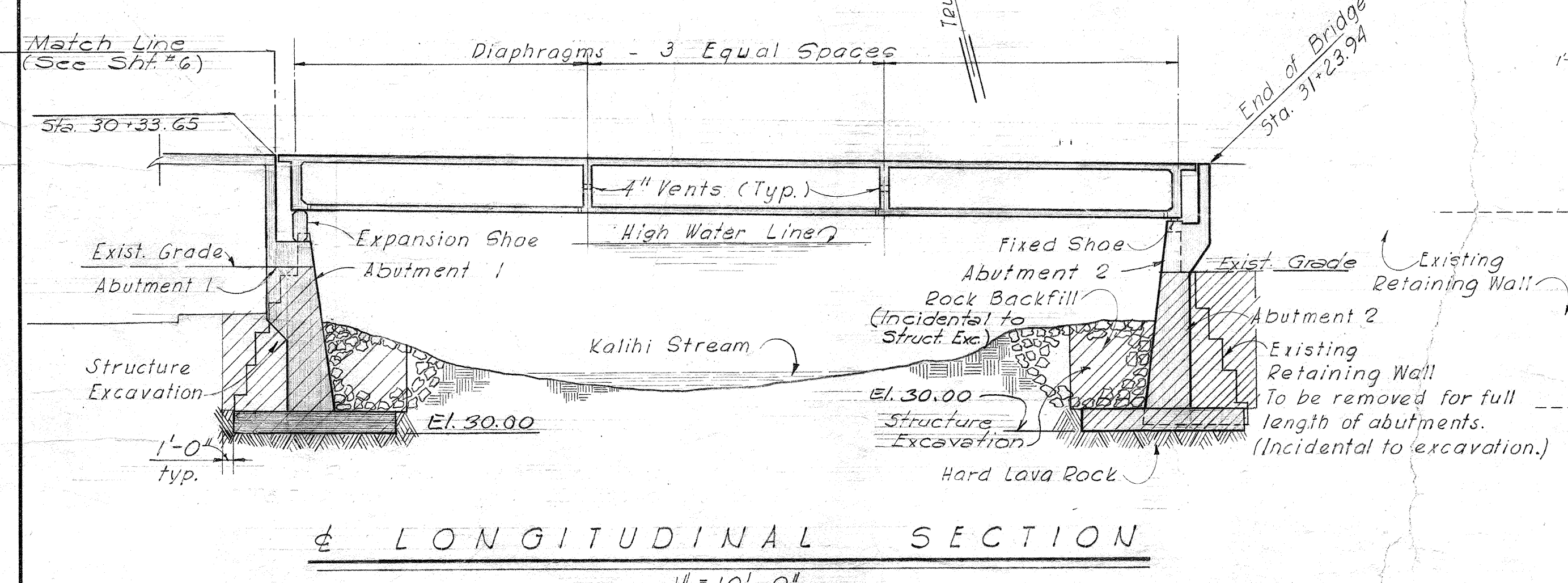
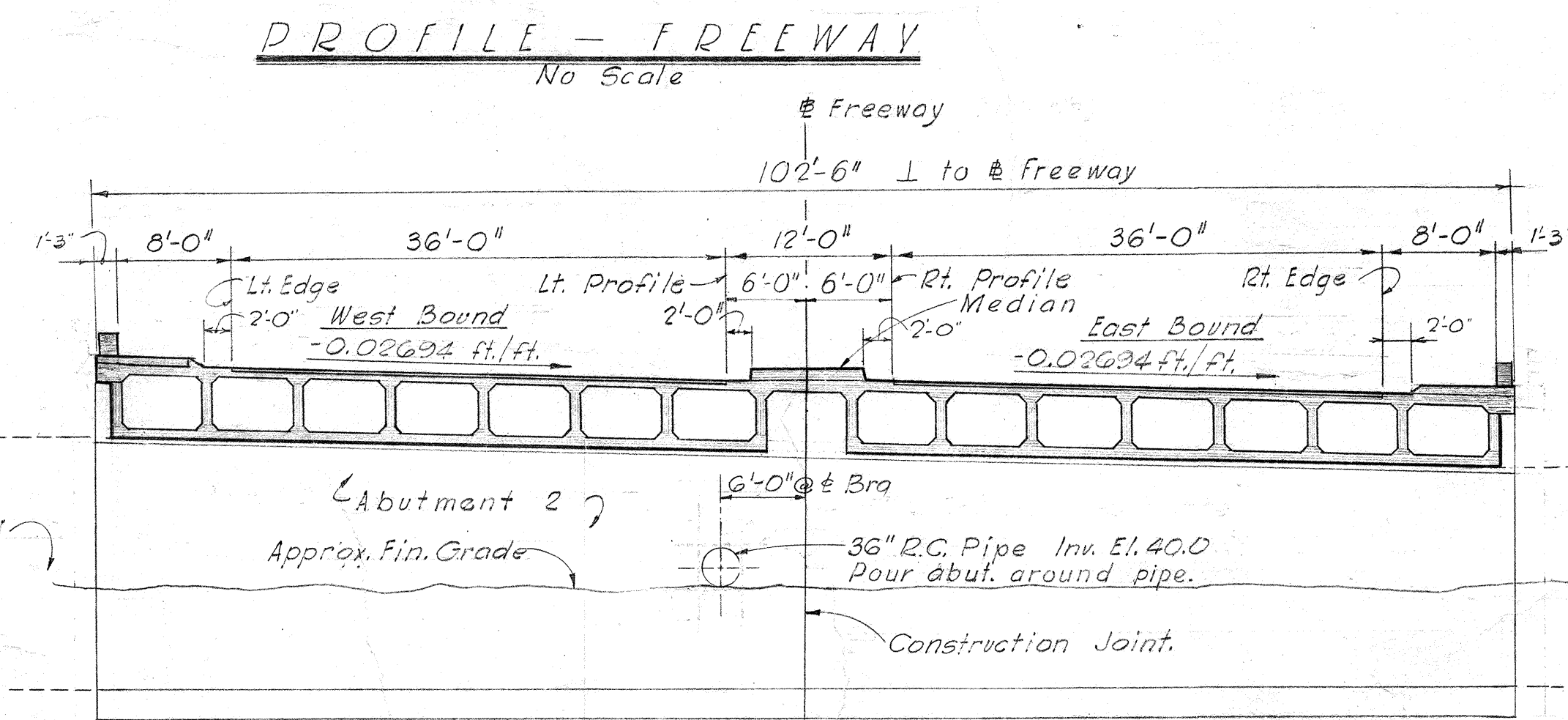
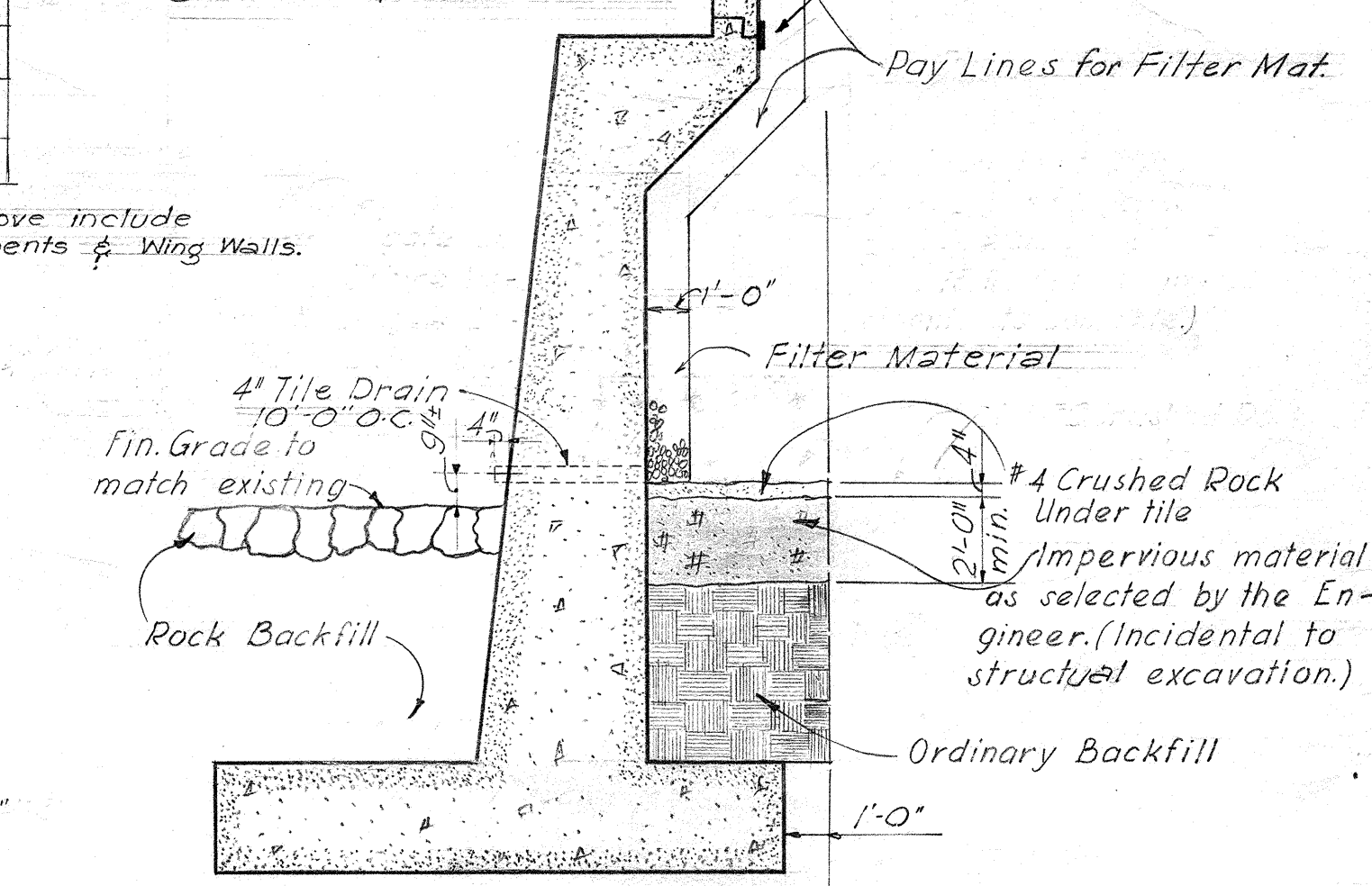


June 1960
8-2-60

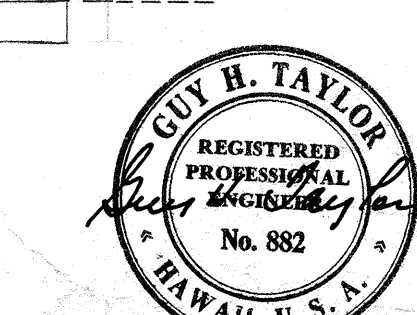


ITEM	QUANTITY
Class A-1 Concrete	Lump Sum (2,235 CY)
Reinforcing Steel	Lump Sum (40,744 lbs.)
Structure Excavation	2,246 Cubic Yds.
Filter Material	156 Cubic Yds.
A.C. Paving Mix V	88 Tons
Tack Coat	265 Gals.
C.R.M.	13 Cubic Yds.
Alu. Railing	263 Lin. Ft.

CONSTRUCTION METHOD
Placing of fill at frame shall not be started until after the concrete in the deck has attained a strength of 3,000 psi. Backfill of frames and abutment No. 2 shall be complete in place before pouring concrete for the Box girder superstructure.



REFERENCE DRAWINGS.
TYPICAL BOX GIRDER DETAILS.
DETAIL ROADWAY PLAN.
STANDARD BRIDGE DETAILS
TYPICAL DETAILS AND GENERAL STRUCTURAL NOTES.
STANDARD DETAIL BOX GIRDER

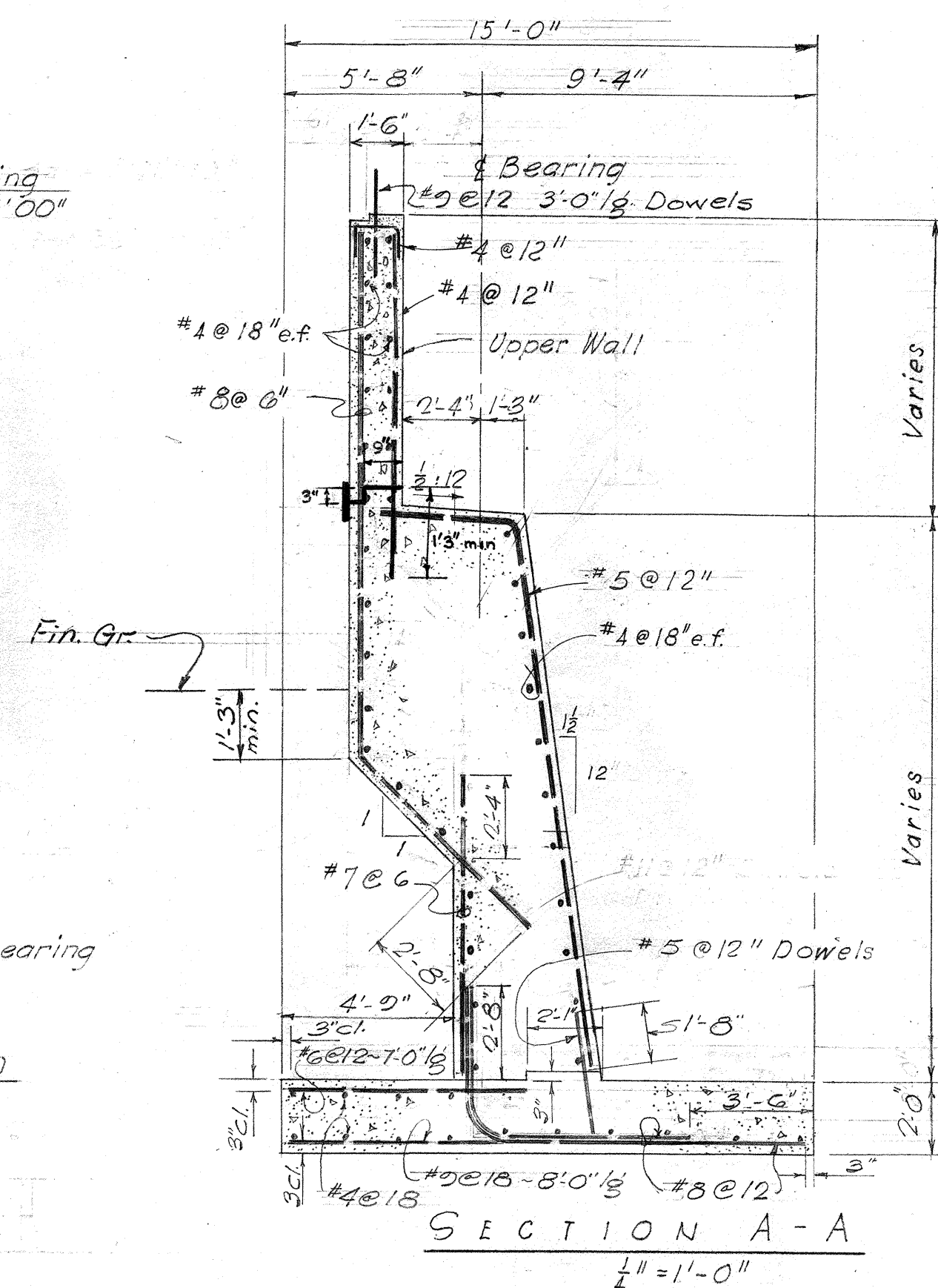
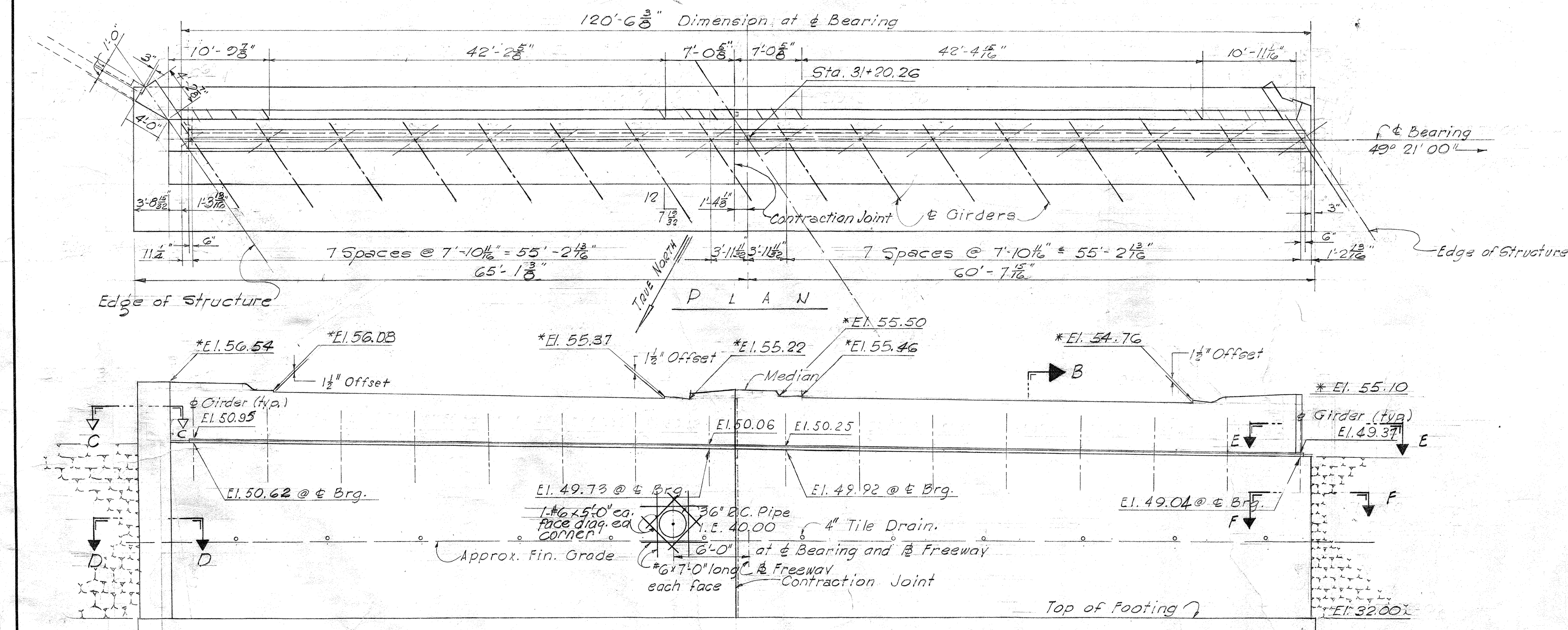
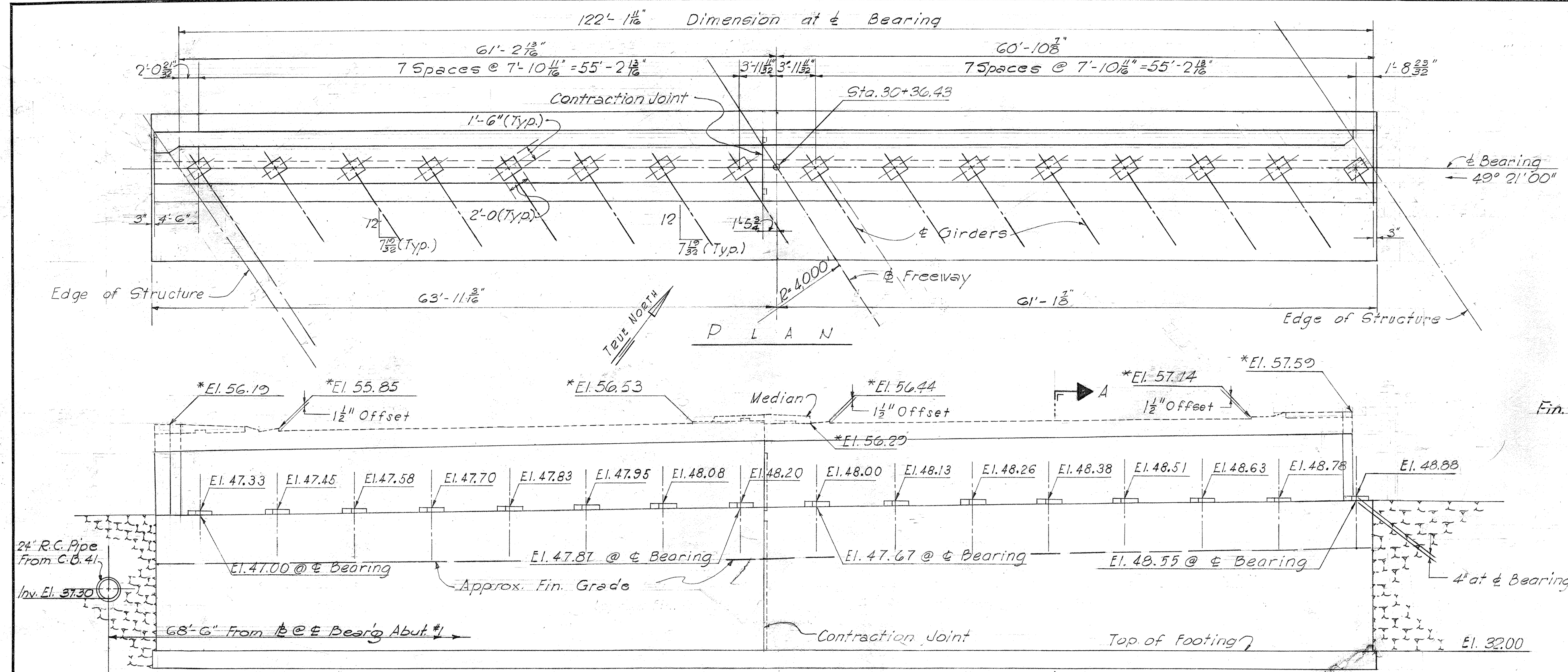


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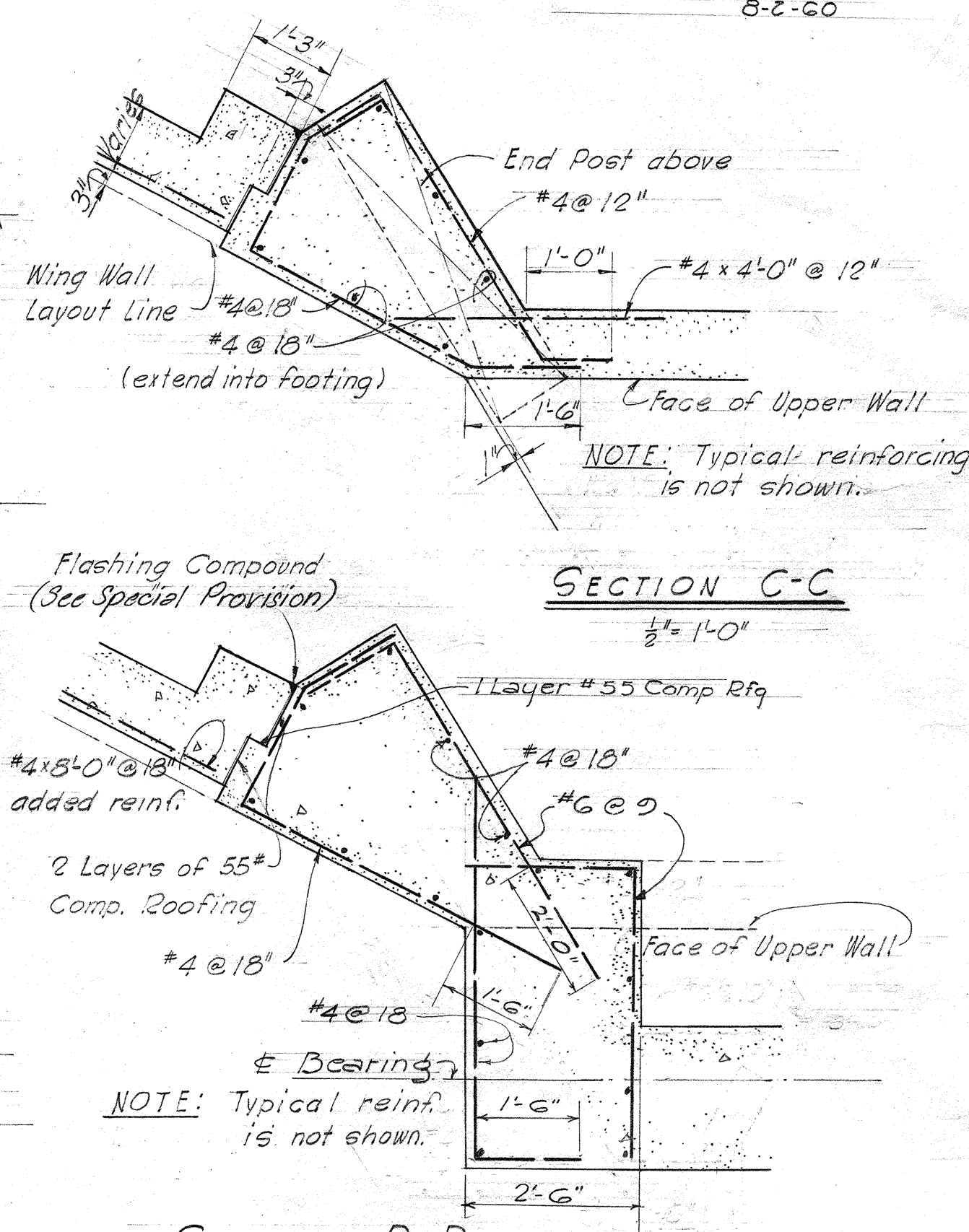
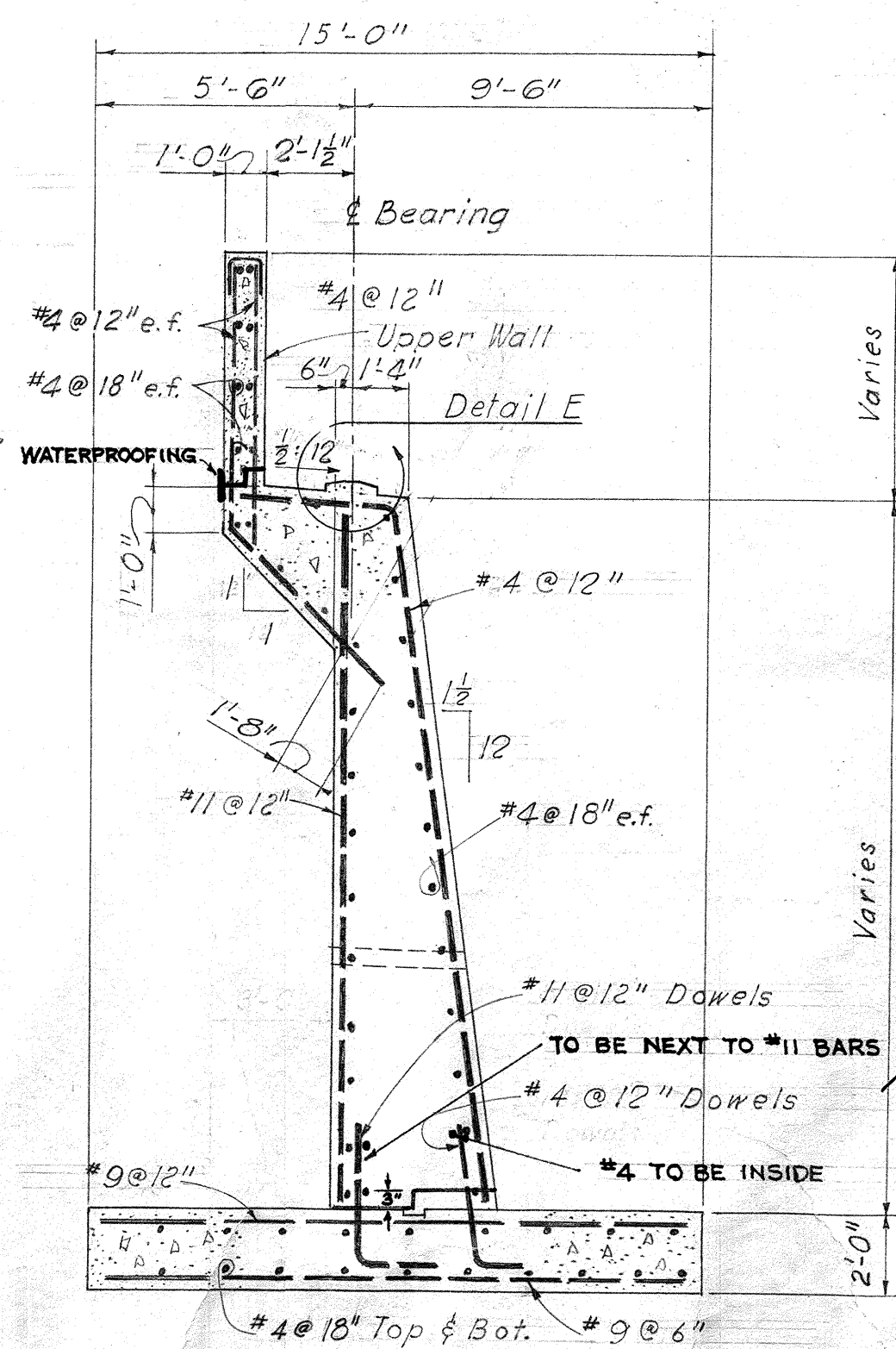
HAWAII STATE HIGHWAY DEPARTMENT
STATE OF HAWAII
KALIHI STREAM BRIDGE
PLAN AND SECTIONS
LUNALILO FREEWAY BU-072-1 (2)
UNIT 4

SHEET NO. 1 OF 7 SHEETS

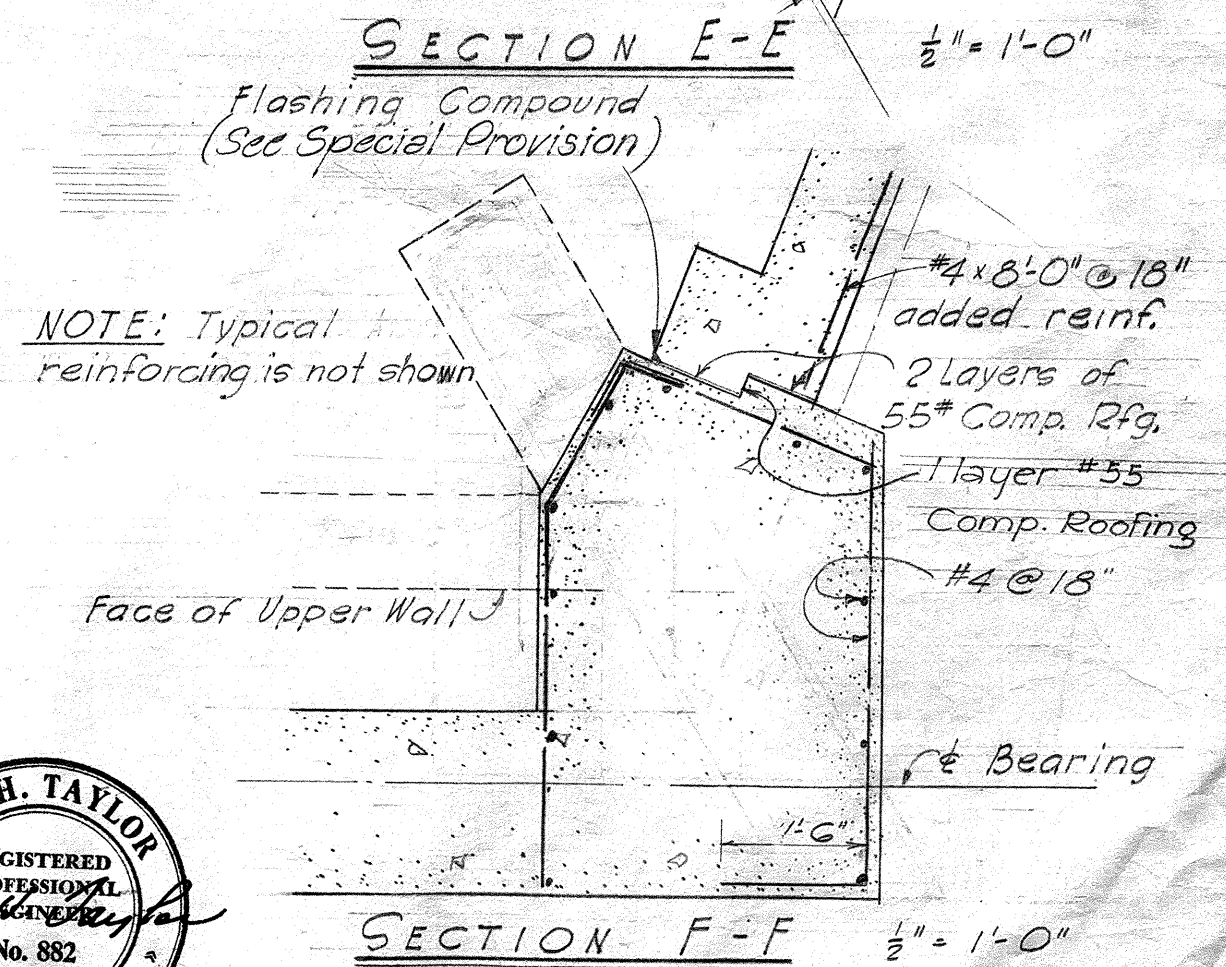
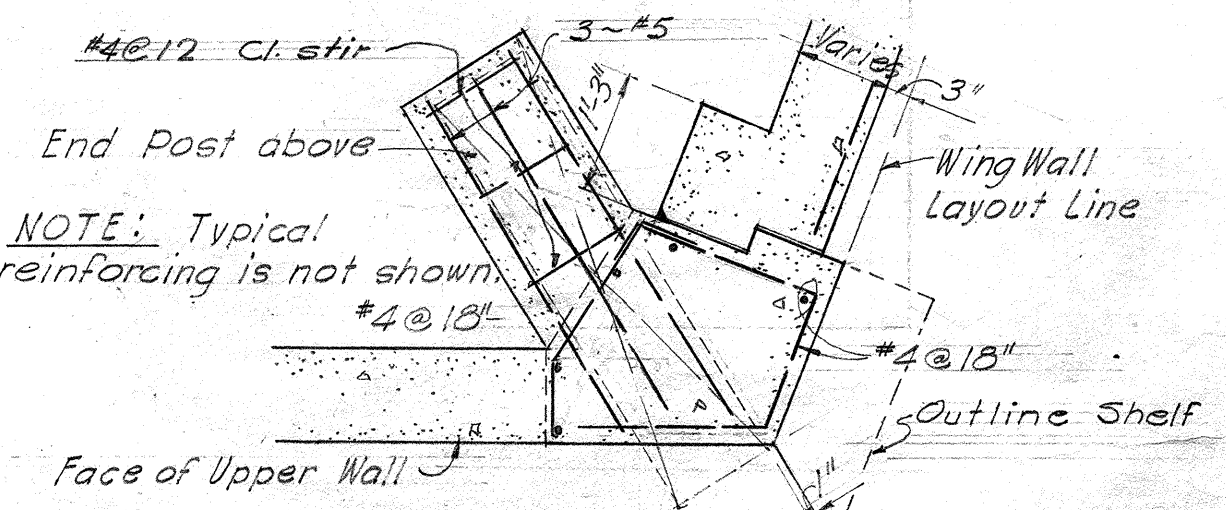
DESIGNED BY: LUTY
CHECKED BY: CRENSHAW
QUANTITIES BY: SWENSON
CHECKED BY: TAYLOR
ORIGINAL PLAN NO.
NOTE BOOK NO.



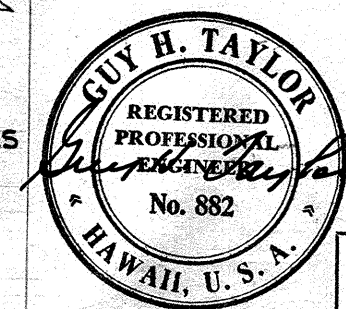
NOTE: During construction contractor shall take necessary precautions to prevent one-sided water pressure on abutments.



NOTE: Typical reinforcing is not shown.



NOTE: Typical reinforcing is not shown.



HAWAII STATE HIGHWAY DEPARTMENT
STATE OF HAWAII

KALIHI STREAM BRIDGE
ABUTMENTS 1 AND 2

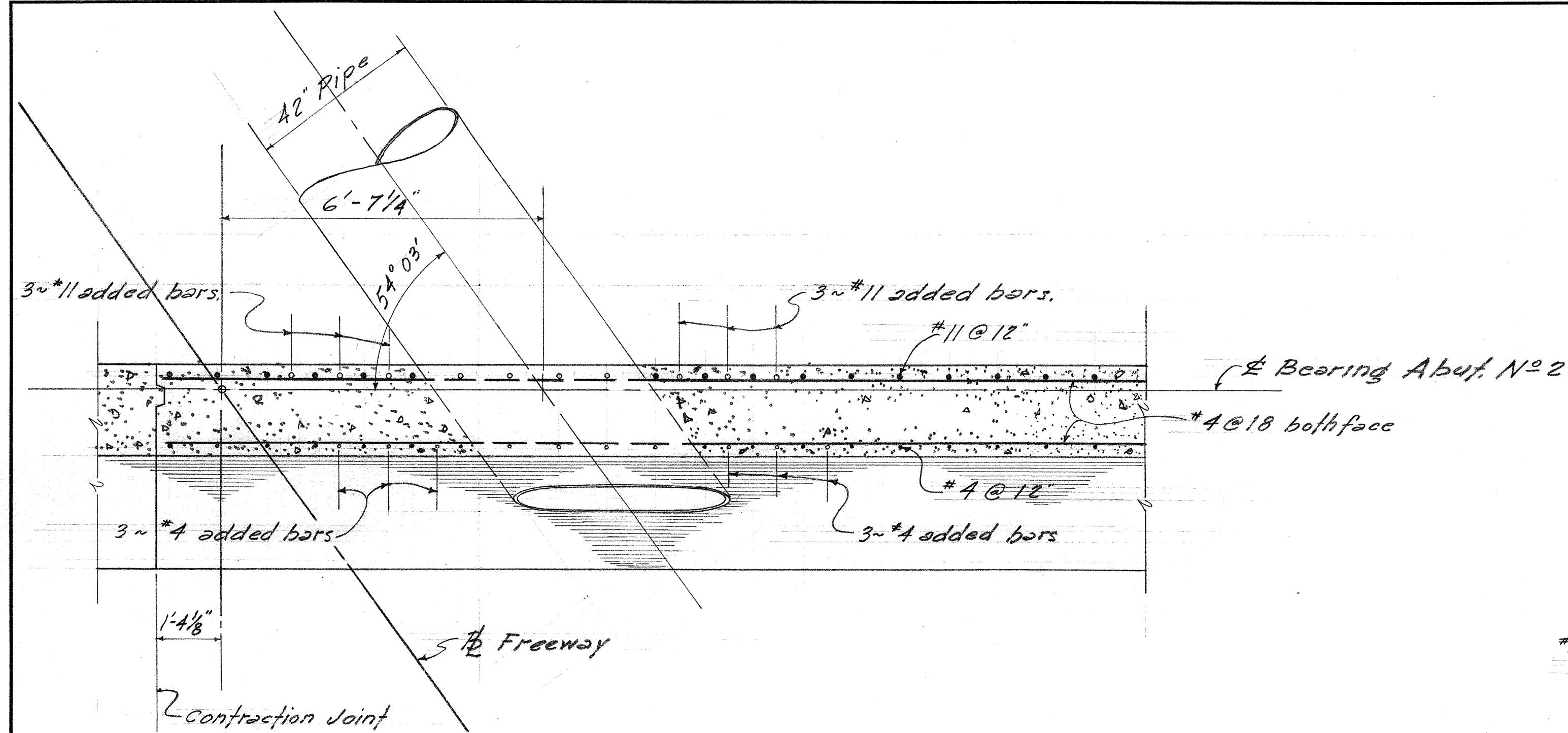
LUNALILO FREEWAY BU-072-1 (2)
UNIT 4

SHEET No. 3 OF 7 SHEETS

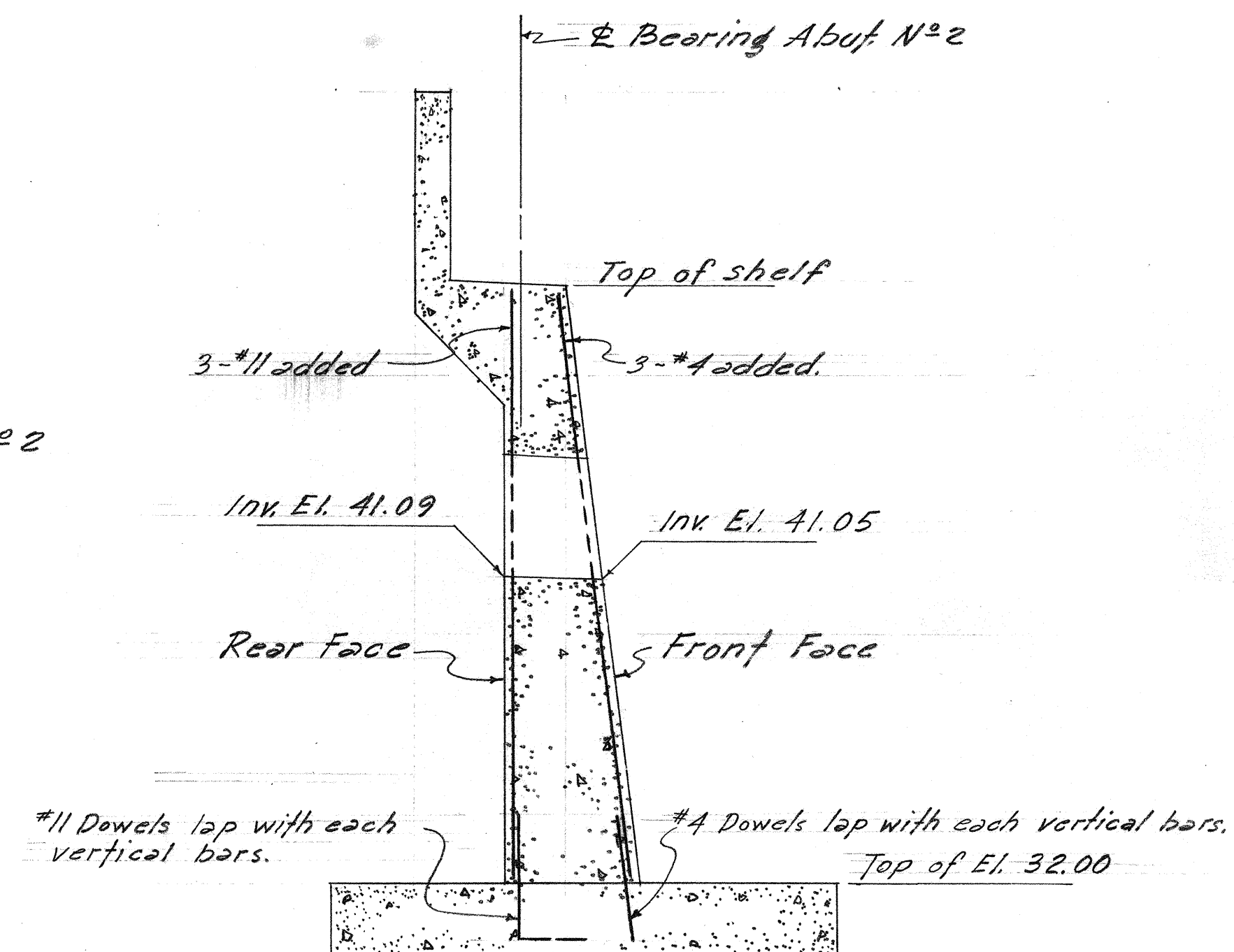
MOFFATT, NICHOL & TAYLOR
Associated with
BELT, COLLINS & ASSOC., LTD.
Civil and Structural Engineers

DATE: FEB 1961
DESIGNED BY: LUL
DRAWN BY: SWISS
CHECKED BY: LUL
ORIGINAL PLAN NO. 10000
NOTE: QUANTITIES CHECKED BY LUL

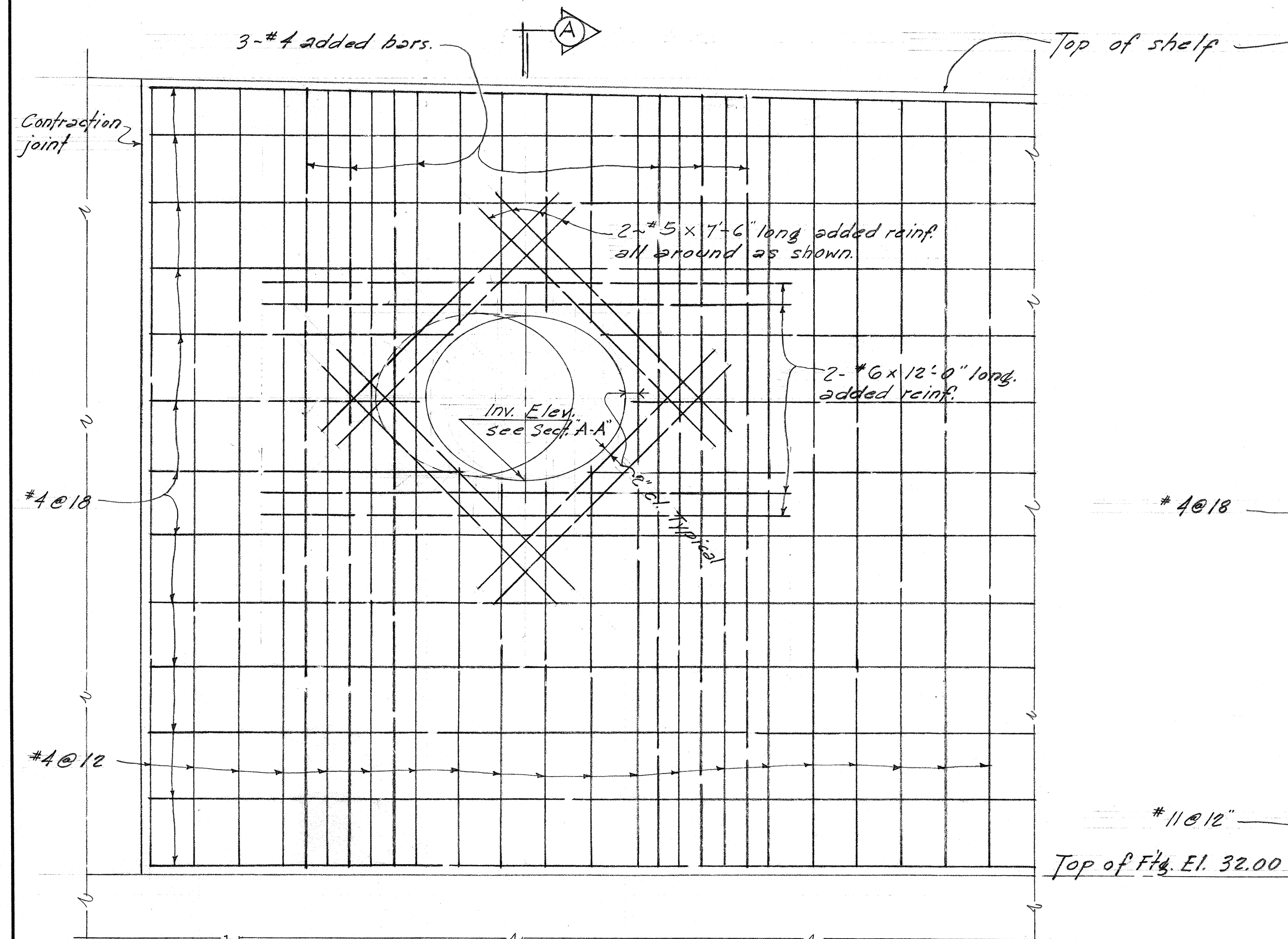
5174.39



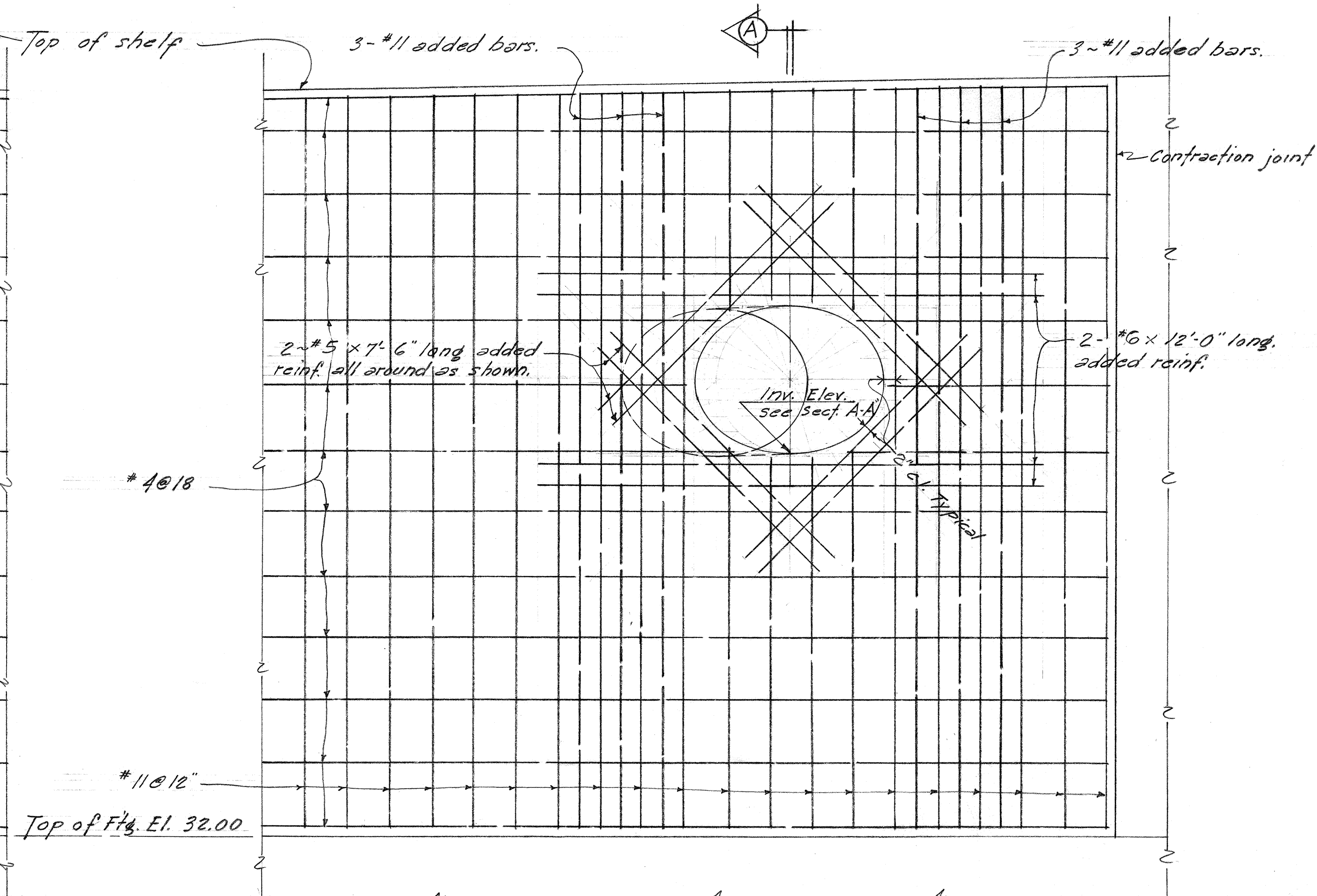
PART PLAN ~ ABUT. N° 2
Scale: 1/2" = 1'-0"



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



FRONT FACE ELEVATION
Scale: 1/2" = 1'-0"



REAR FACE ELEVATION
Scale: 1/2" = 1'-0"

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
KALIHI STREAM BRIDGE
REVISED ABUTMENT N° 2
LUNALILO FREEWAY BU-072-1(2)
UNIT 4

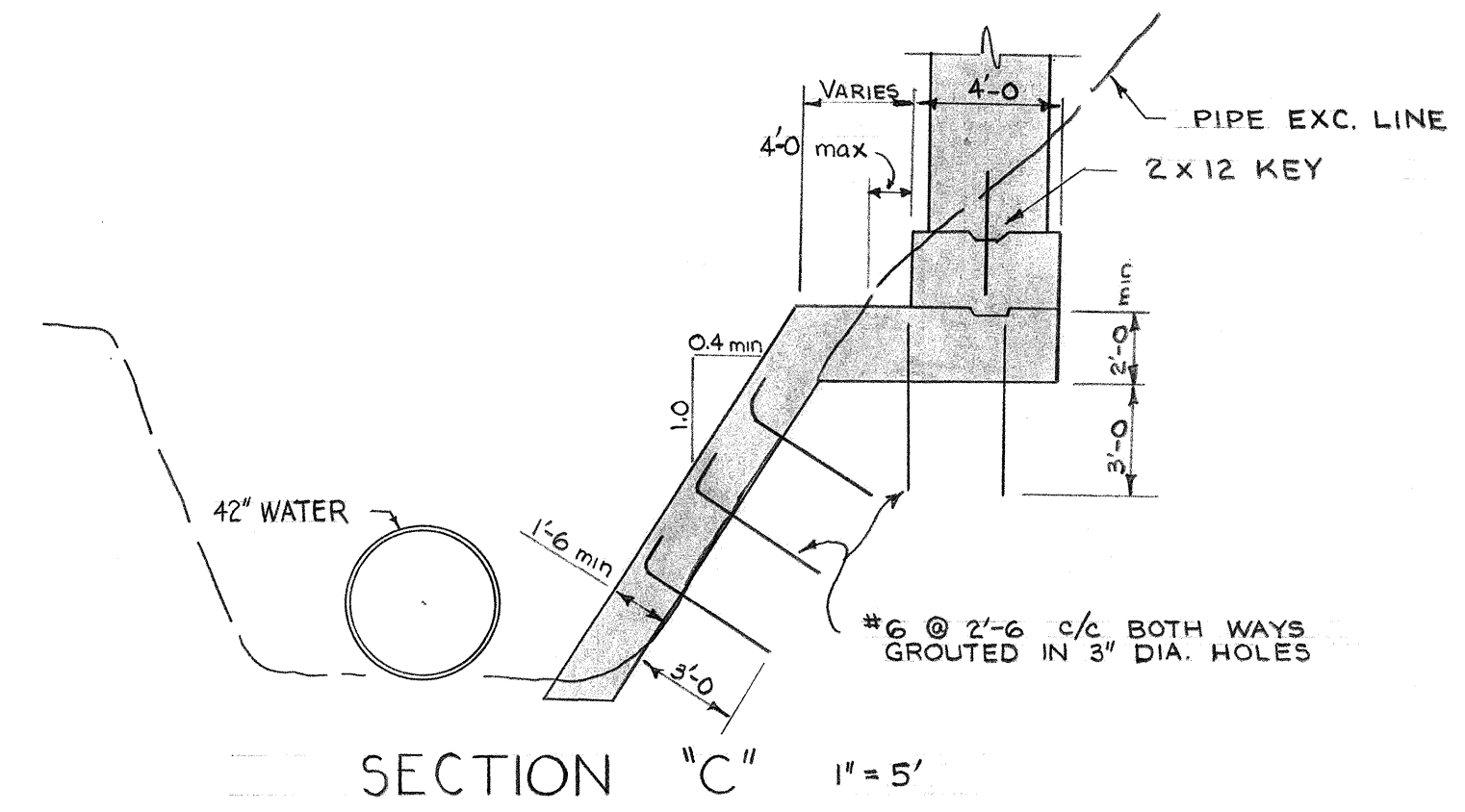
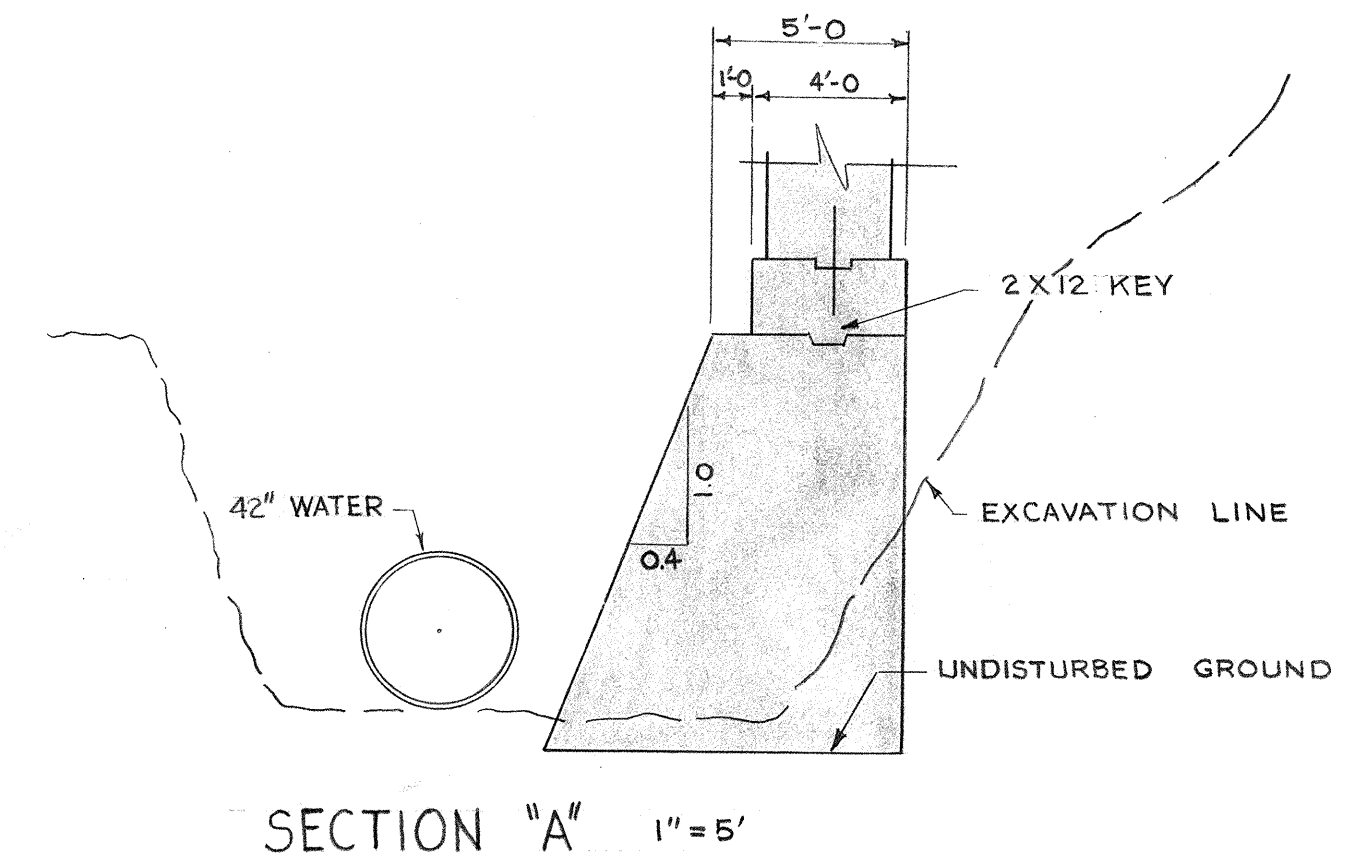
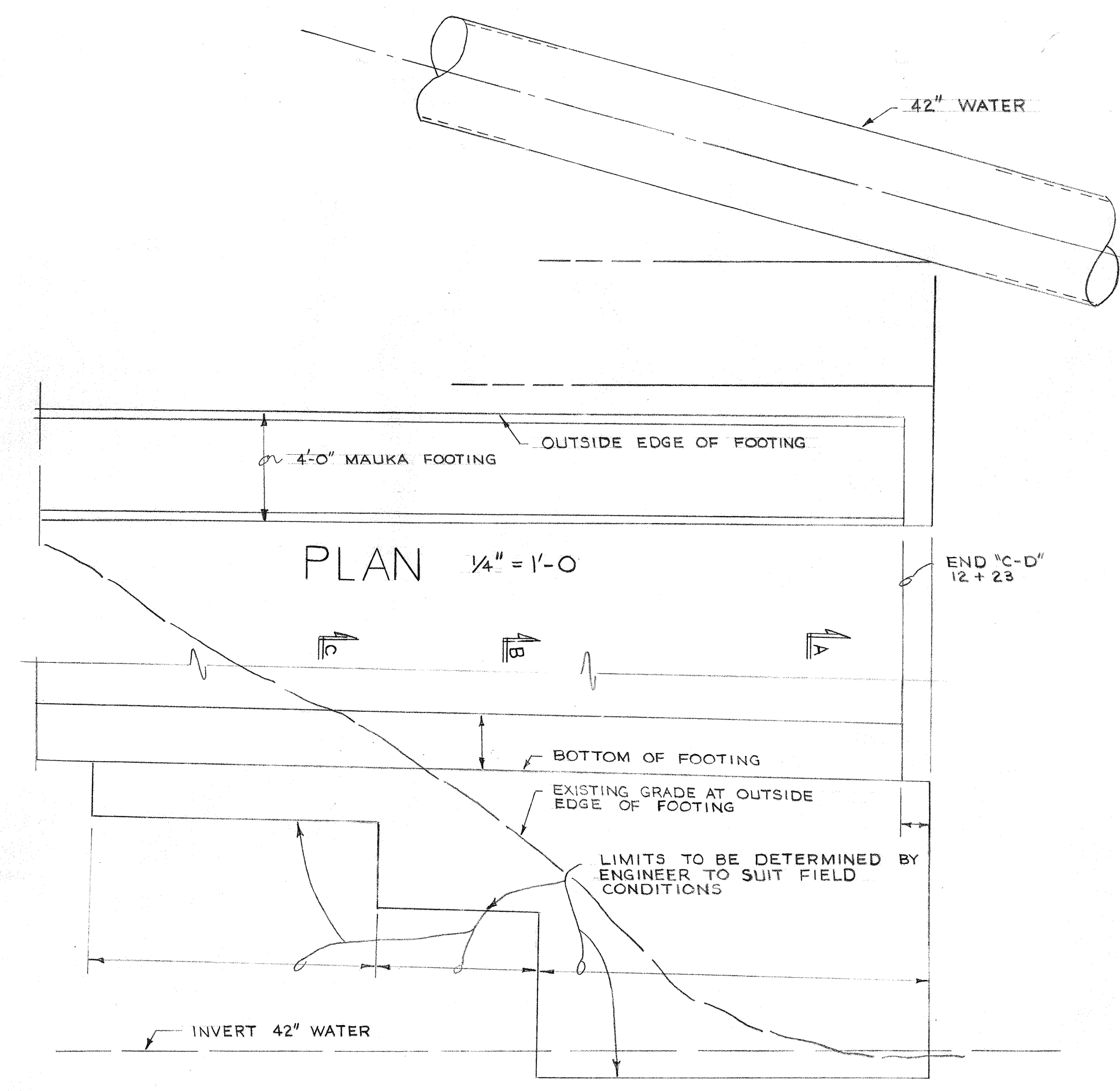
SHEET NO. OF SHEETS

§174.39A

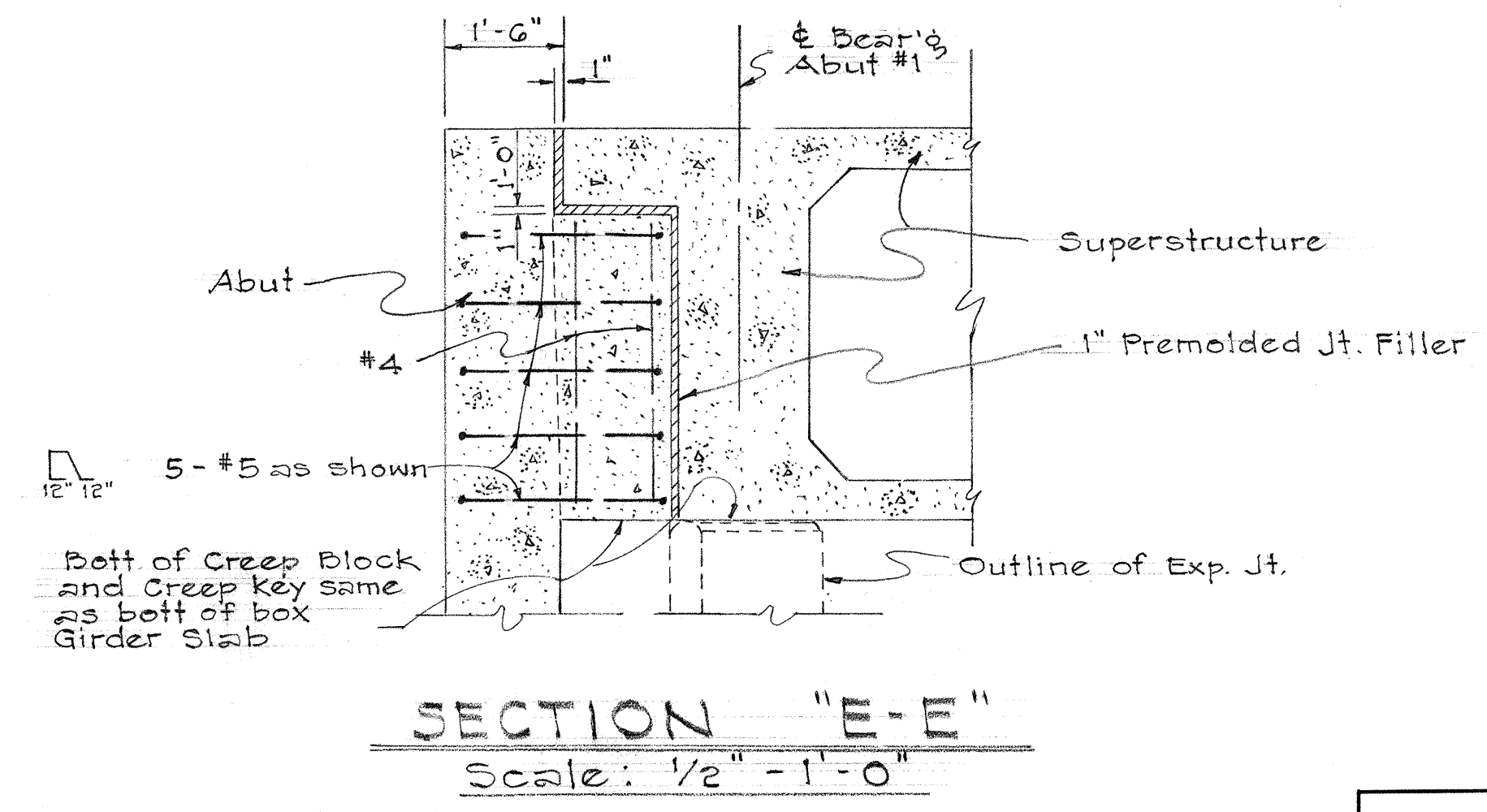
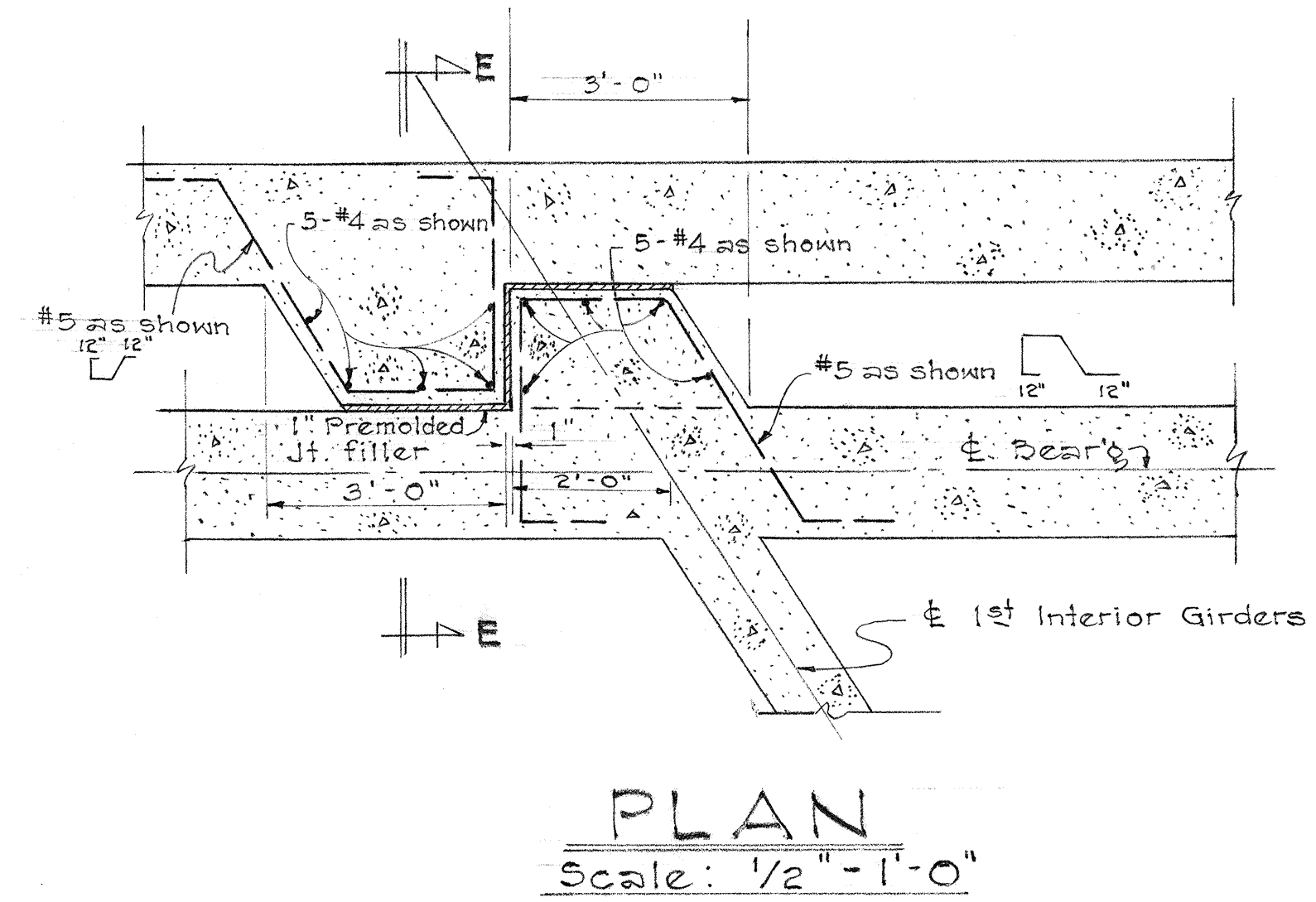
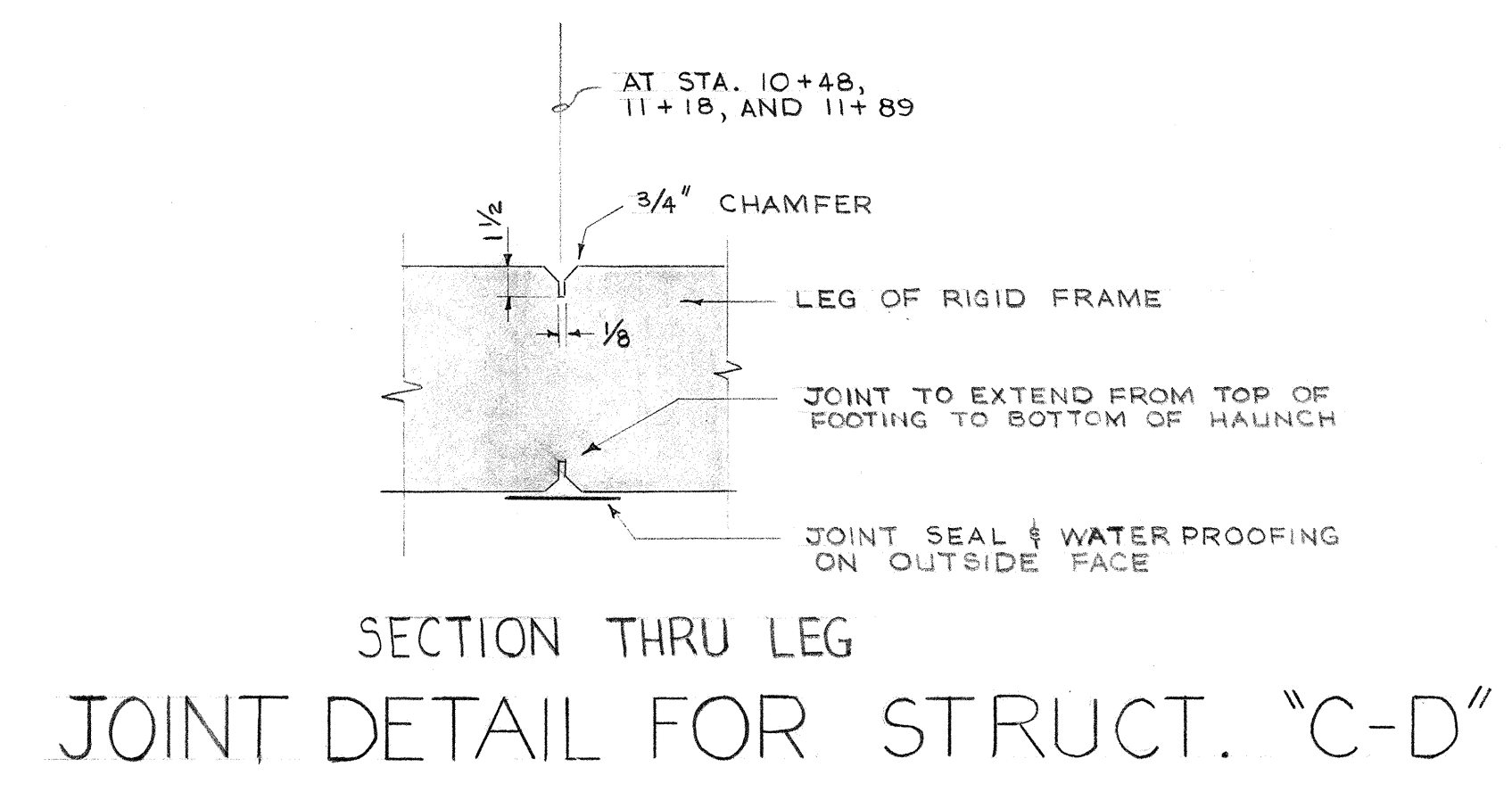
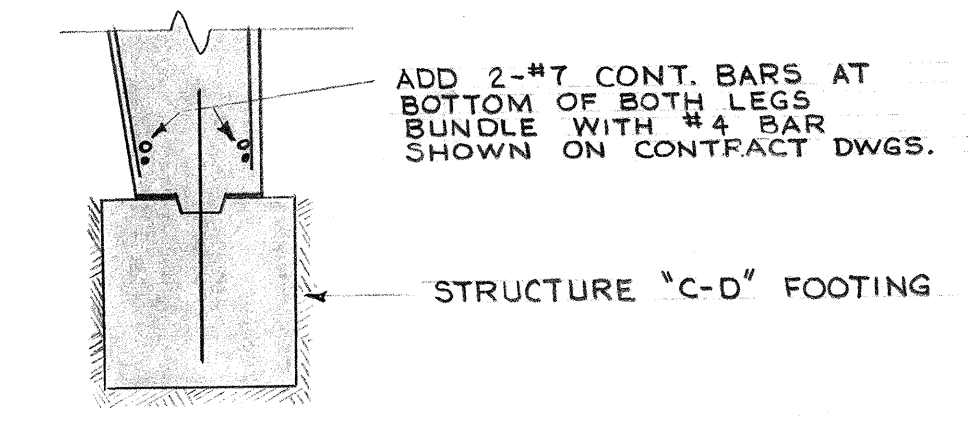
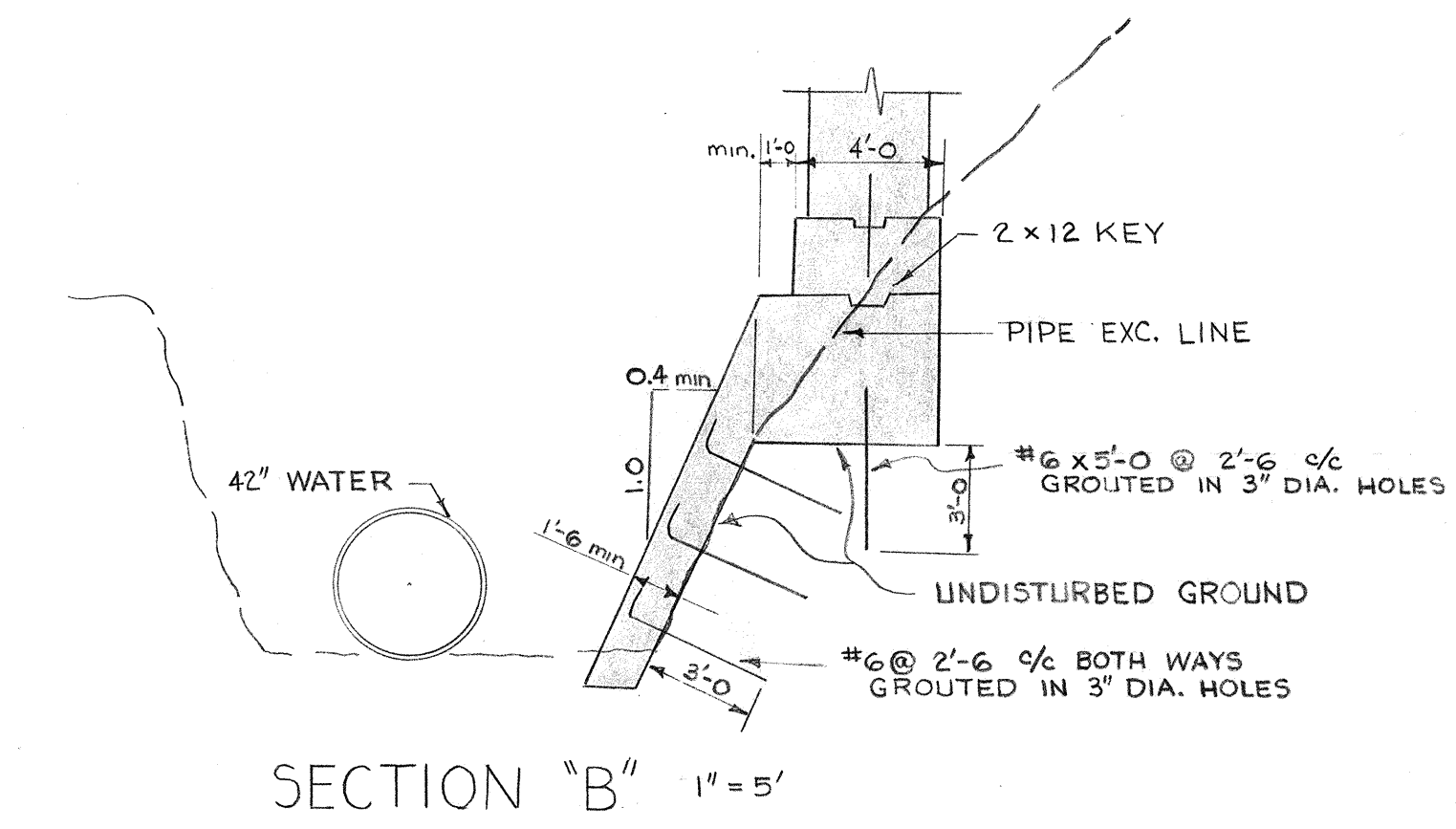
69A

DATE 3-6-61
DRAWN BY J. Shindana
CHECKED BY
NOTE BOOK NO.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.				



NOTE: ALL ADDITIONAL CONC. SHALL BE CLASS "C"

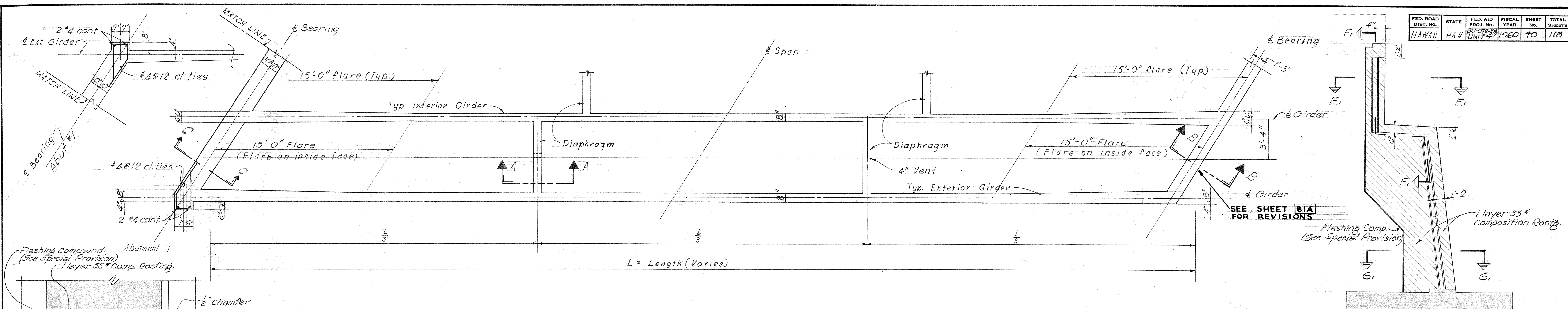


CREEP BLOCK DETAIL KALIHI STREAM BRIDGE

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
REVISIONS FOR STRUCTURE "C-D"	
AND KALIHI STREAM BRIDGE	
LUNALILO FREEWAY	BU-072-1(2) UNIT-4
MIDDLE STREET	BU-065-1(1) UNIT-3
SHEET No. 2A OF 4 SHEETS	

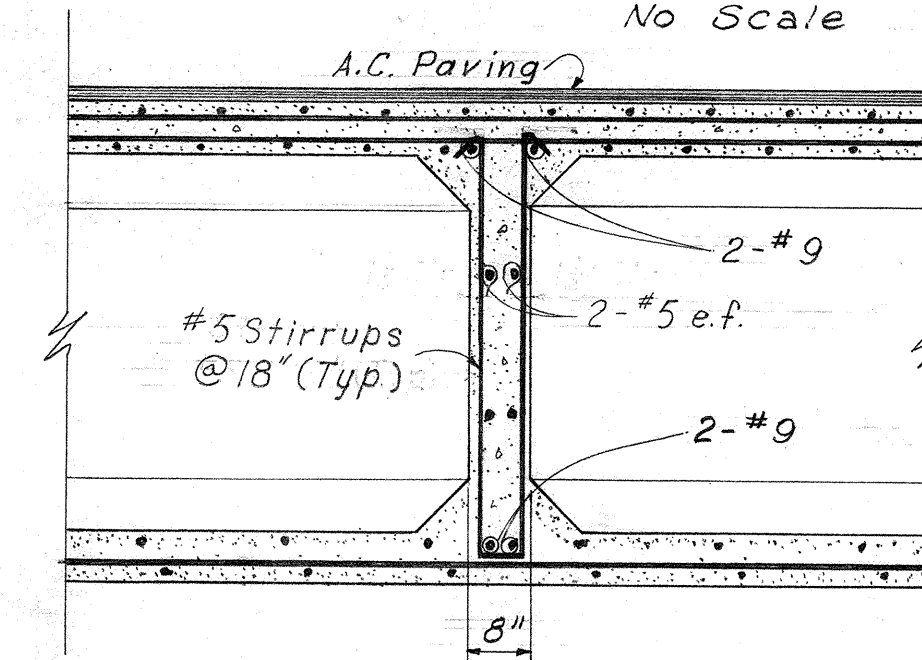
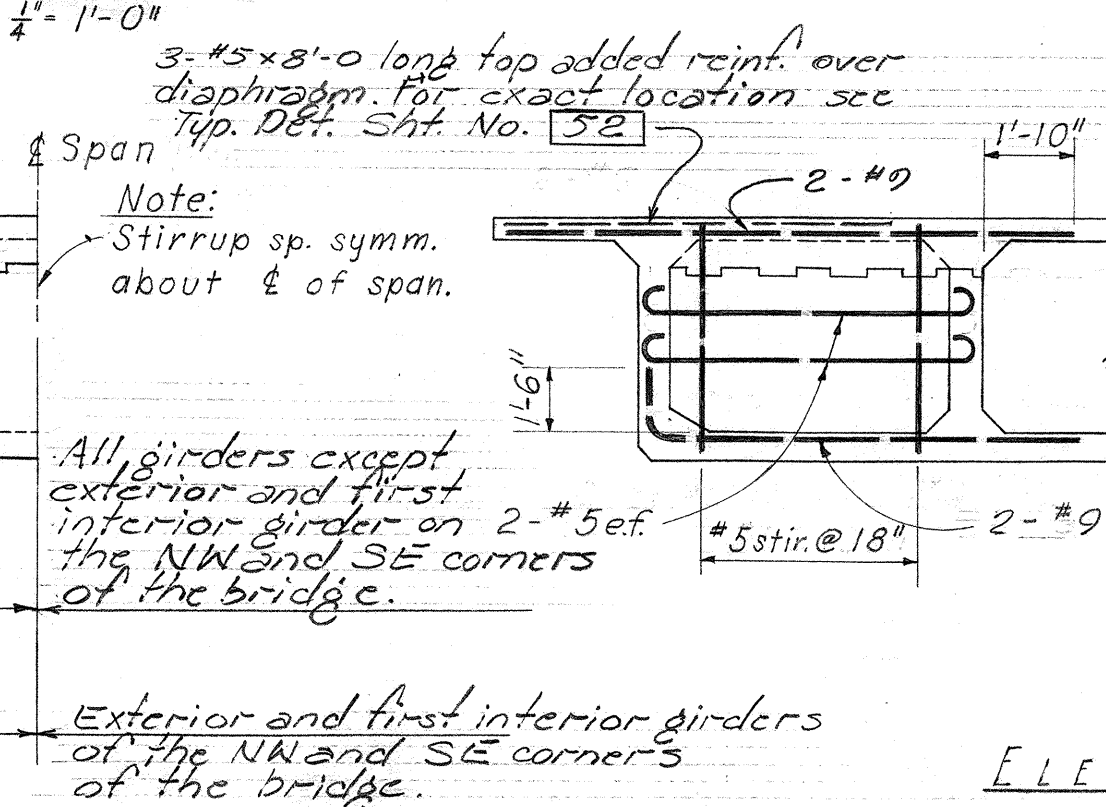
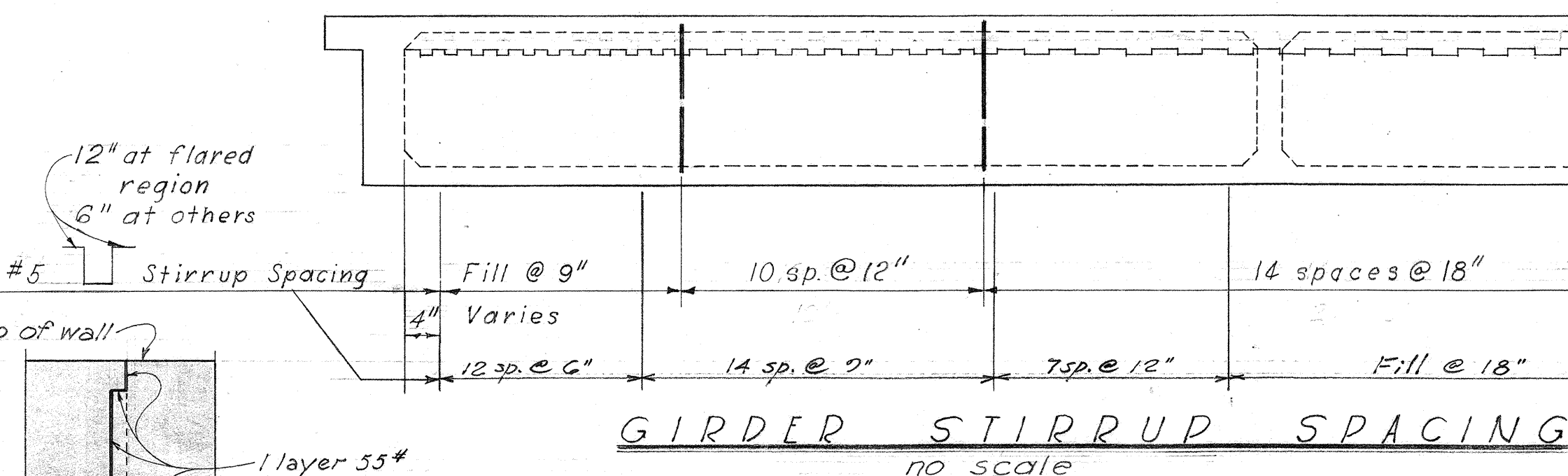
8174.39 A

8161.39 A

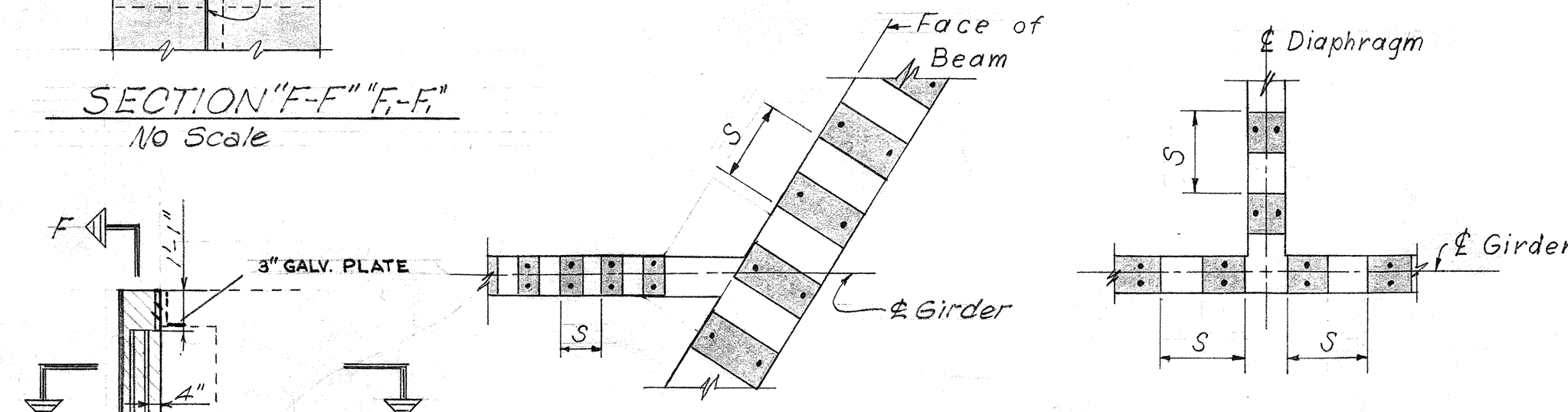
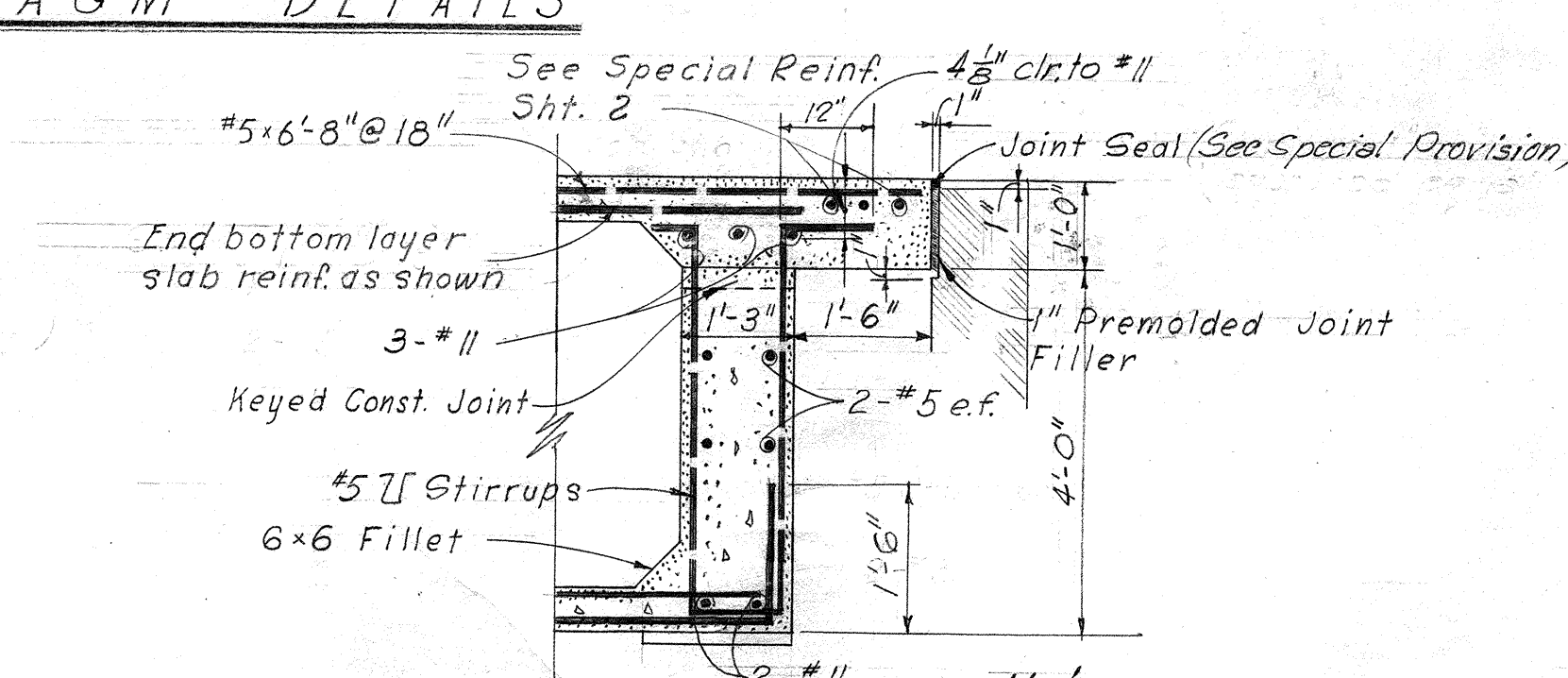
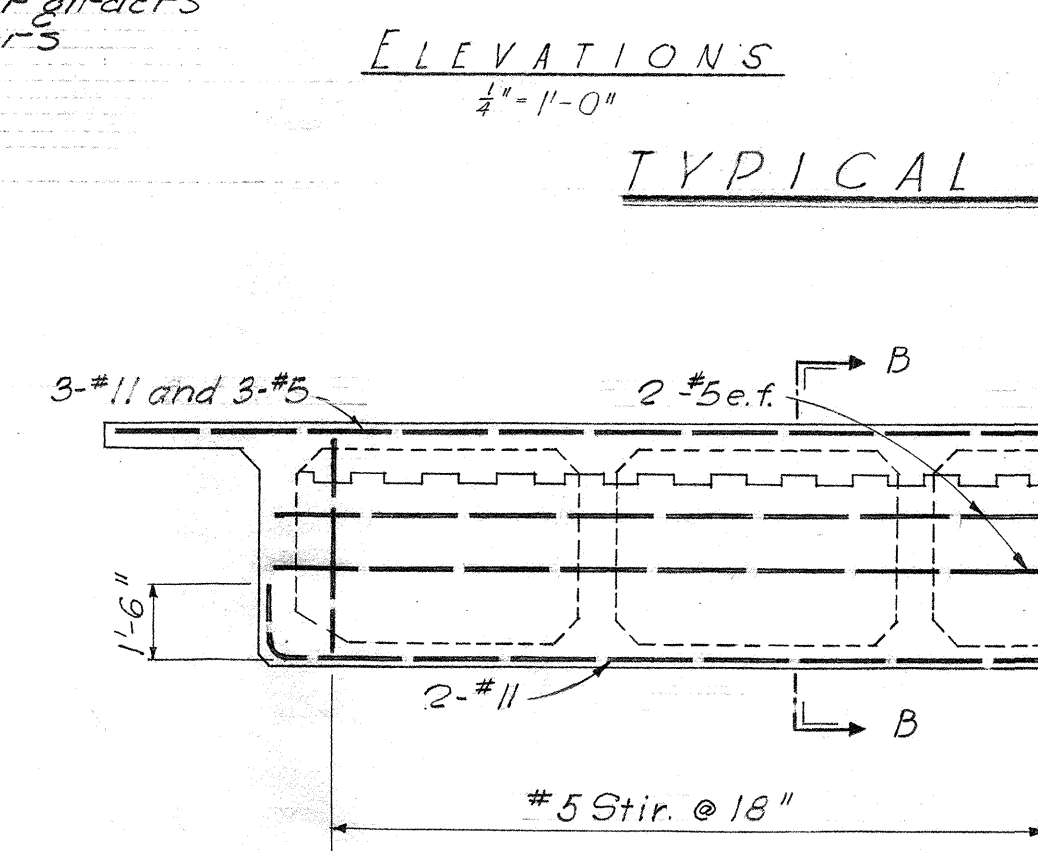


SECTION "G-G" "G-G"
 No Scale

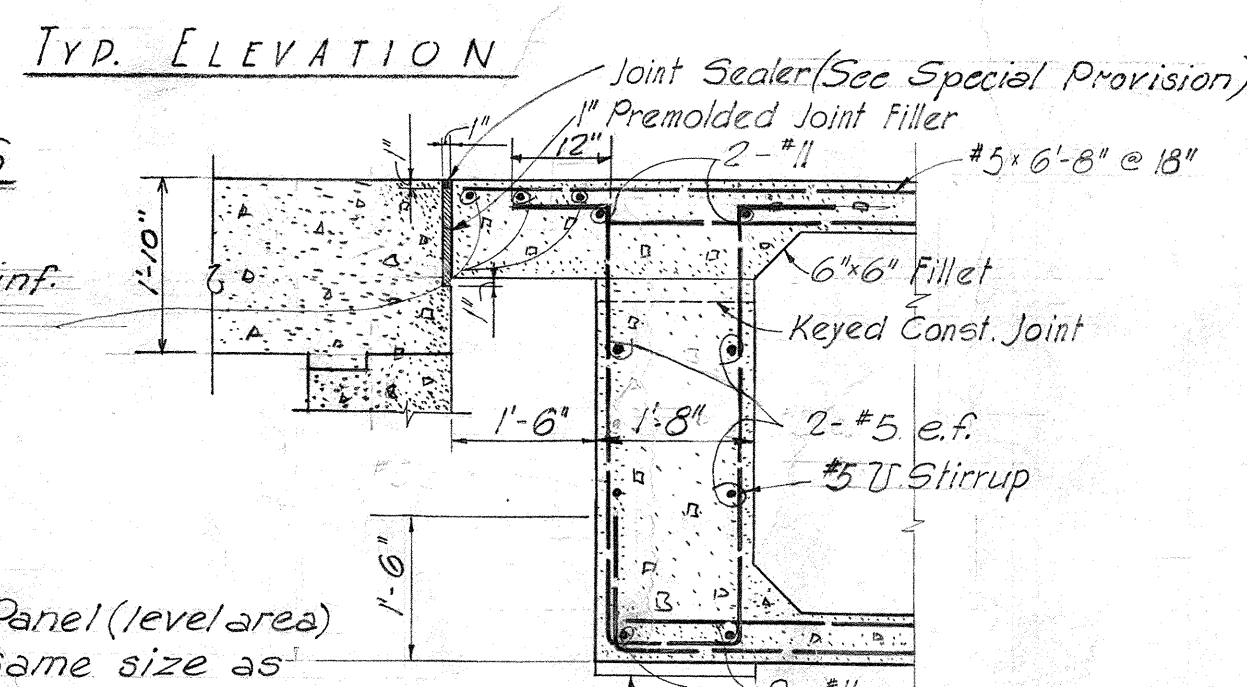
CONTRACTION JOINT DETAIL ABUTMENT NO. 1
 No Scale



SECTION "F-F" "F-F"
 No Scale

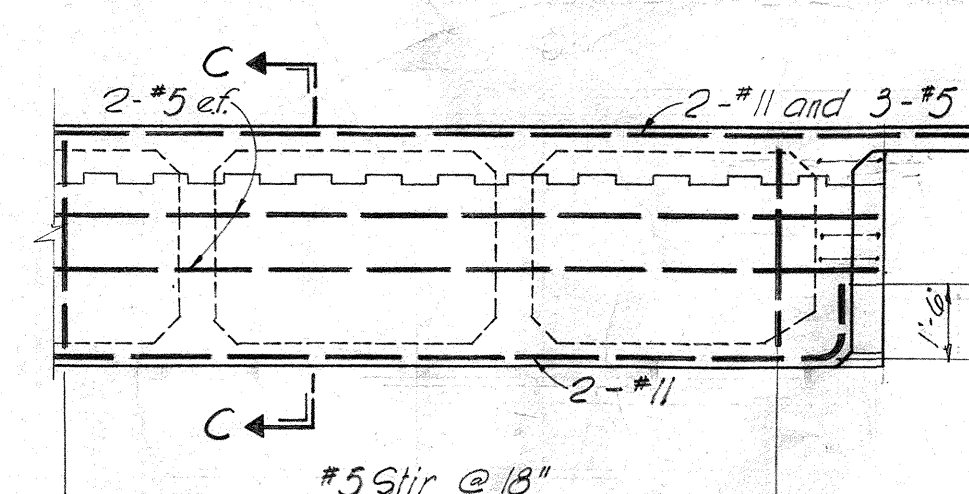


SHEAR KEY DETAILS
 $\frac{3}{8}'' = 1'-0''$



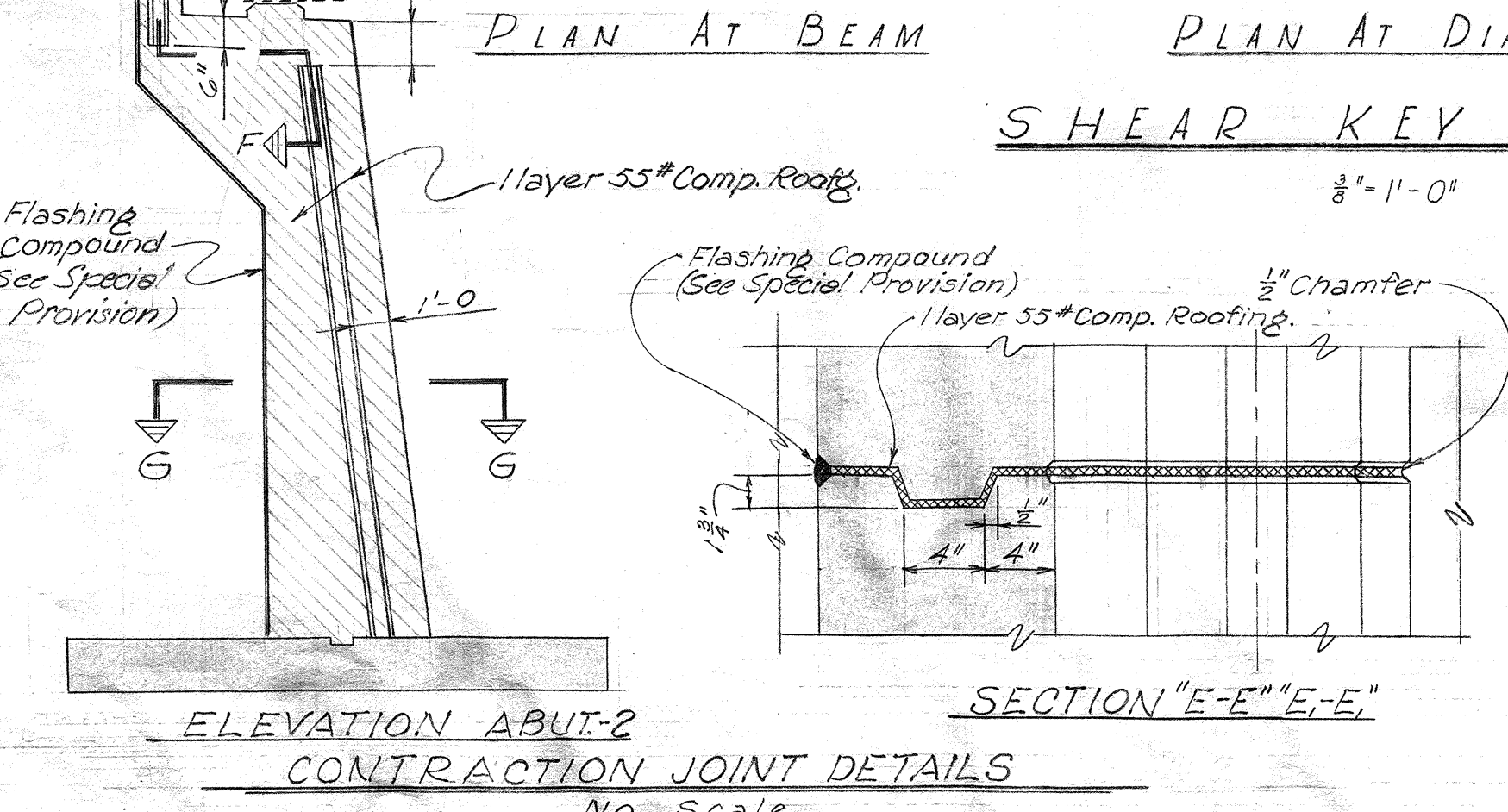
ELEVATION
 $\frac{1}{4}'' = 1'-0''$

BEAM "A"

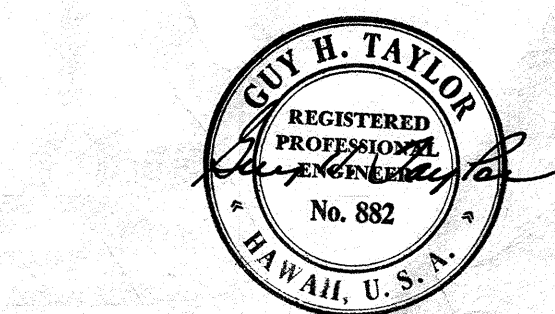


SECTION C-C
 $\frac{1}{2}'' = 1'-0''$

BEAM "B"



SECTION "E-E" "E-E"



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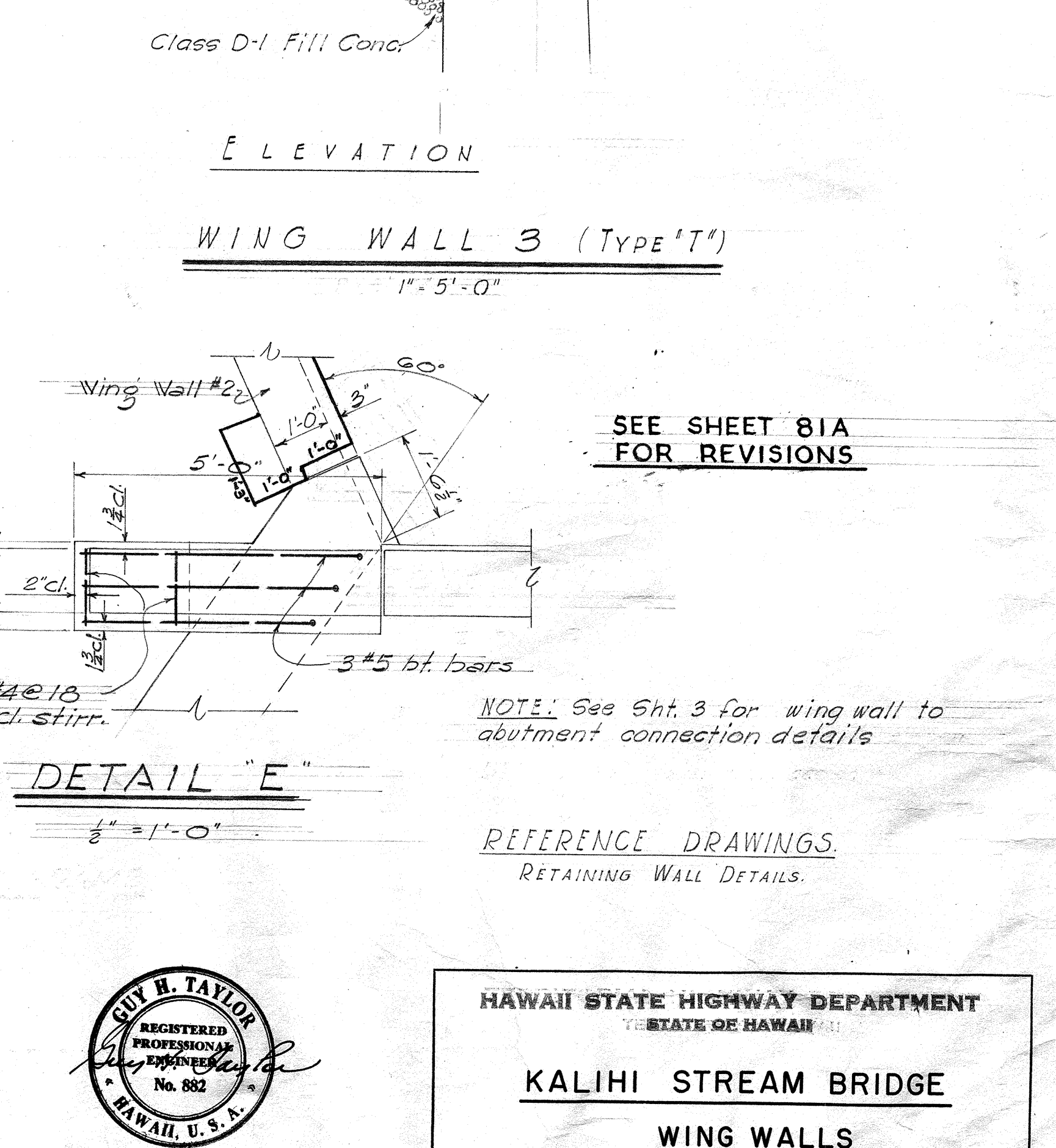
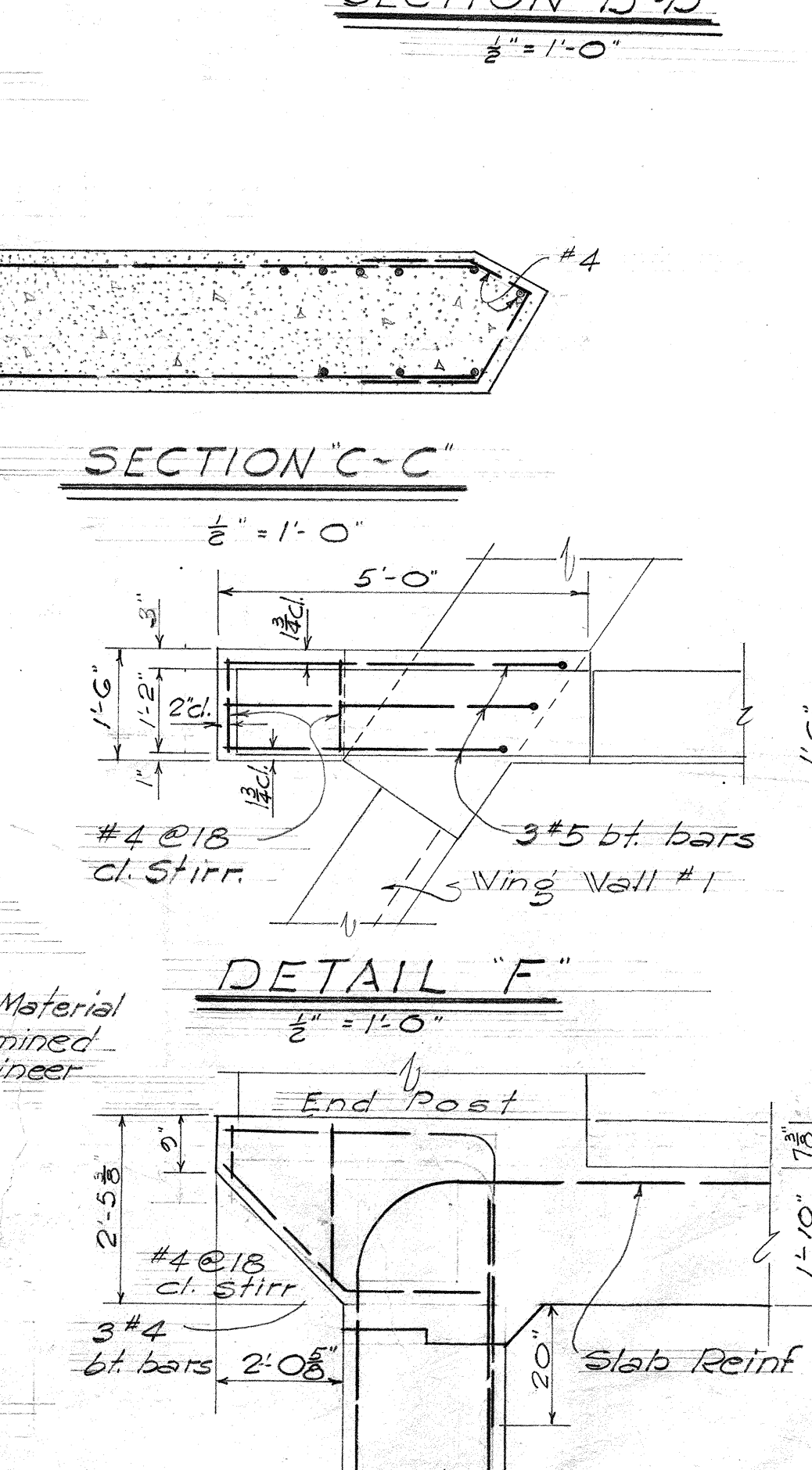
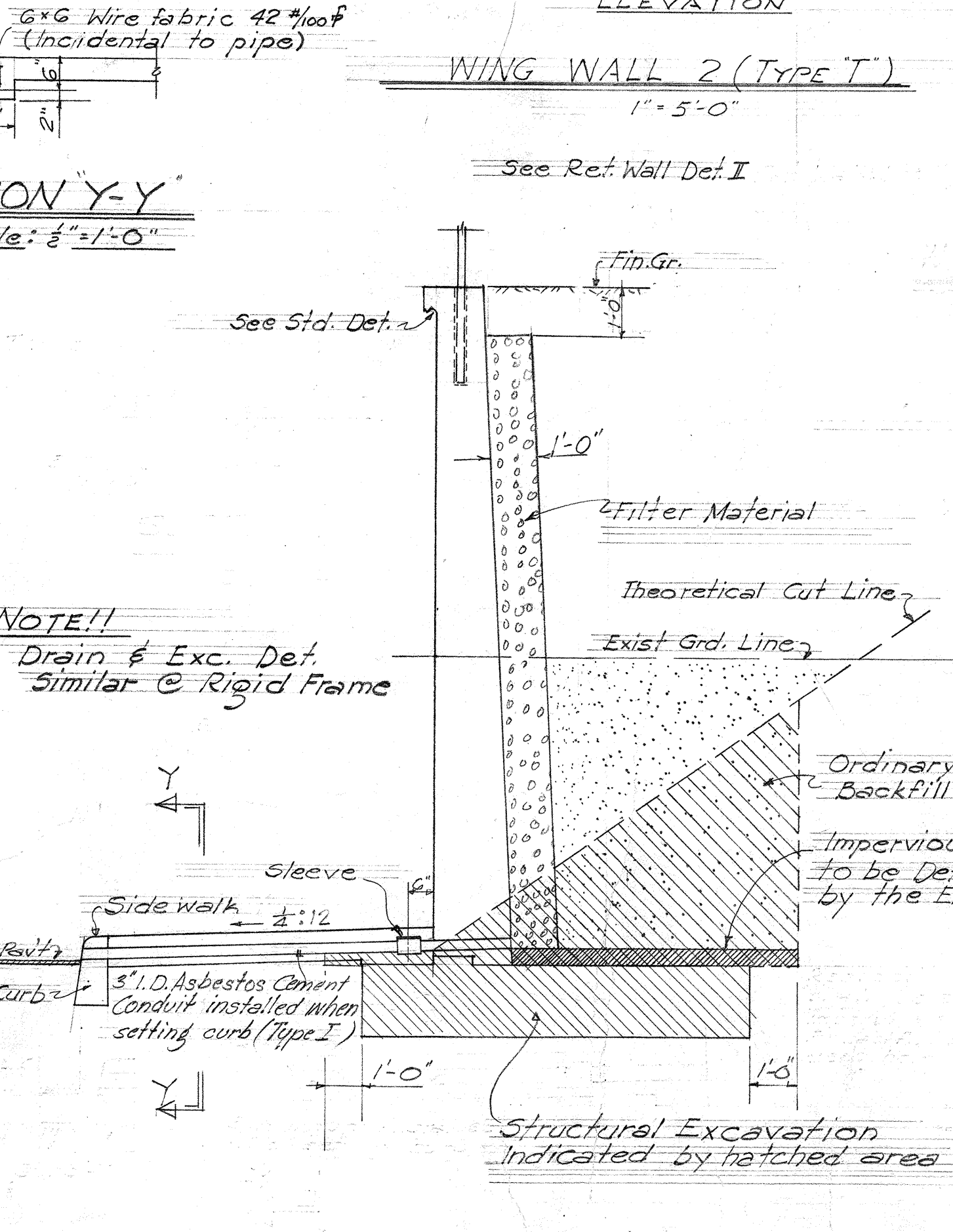
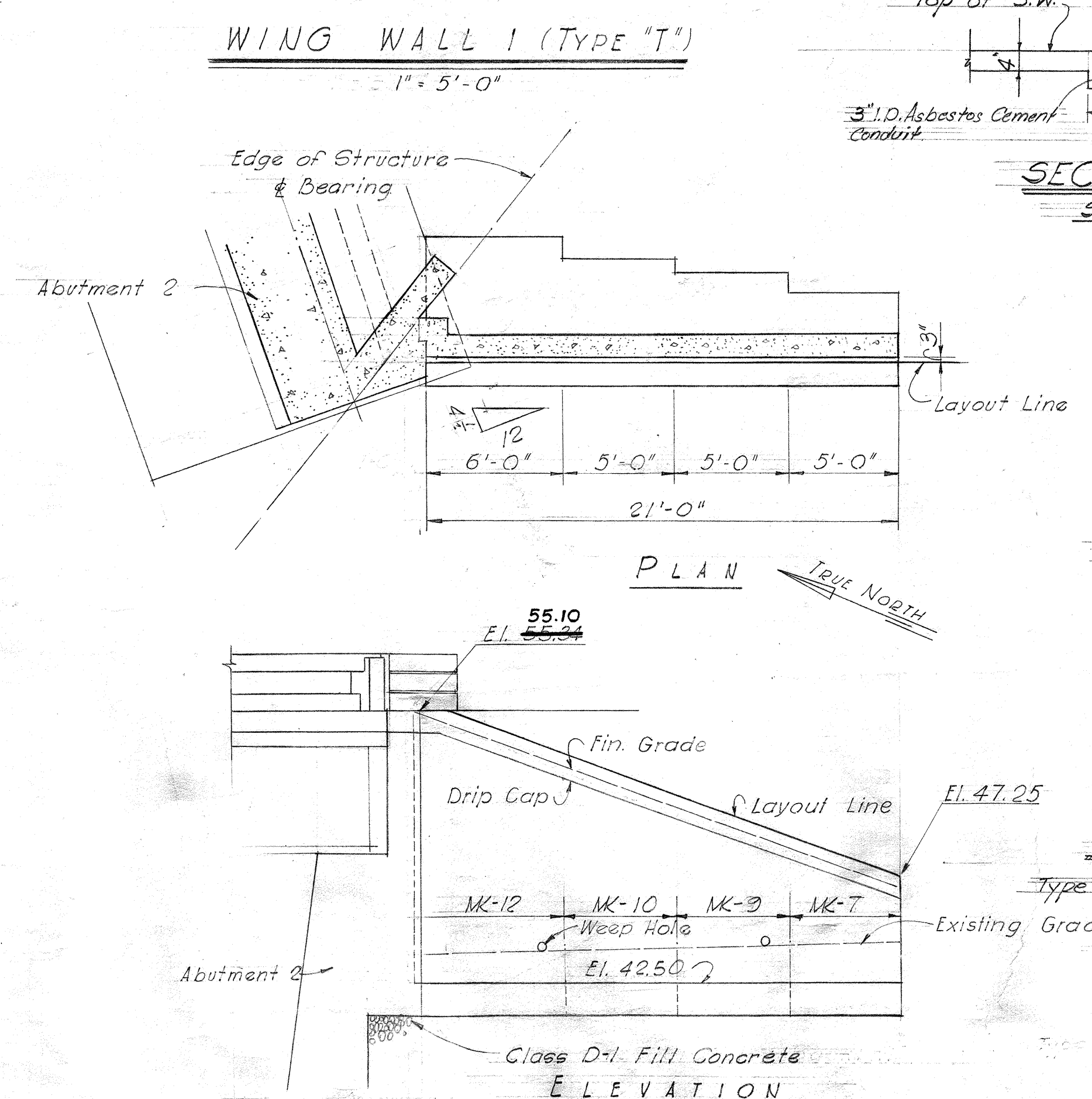
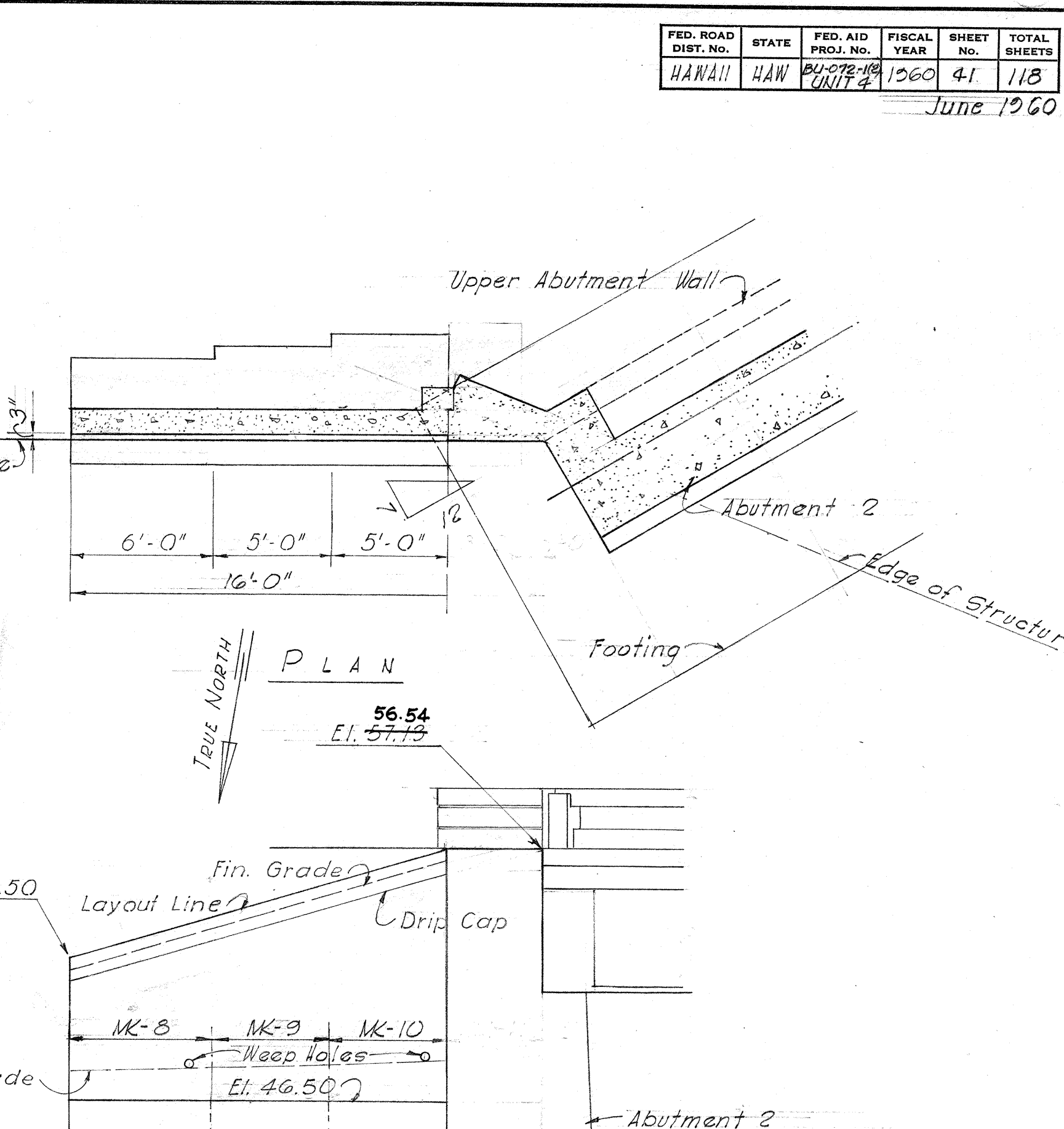
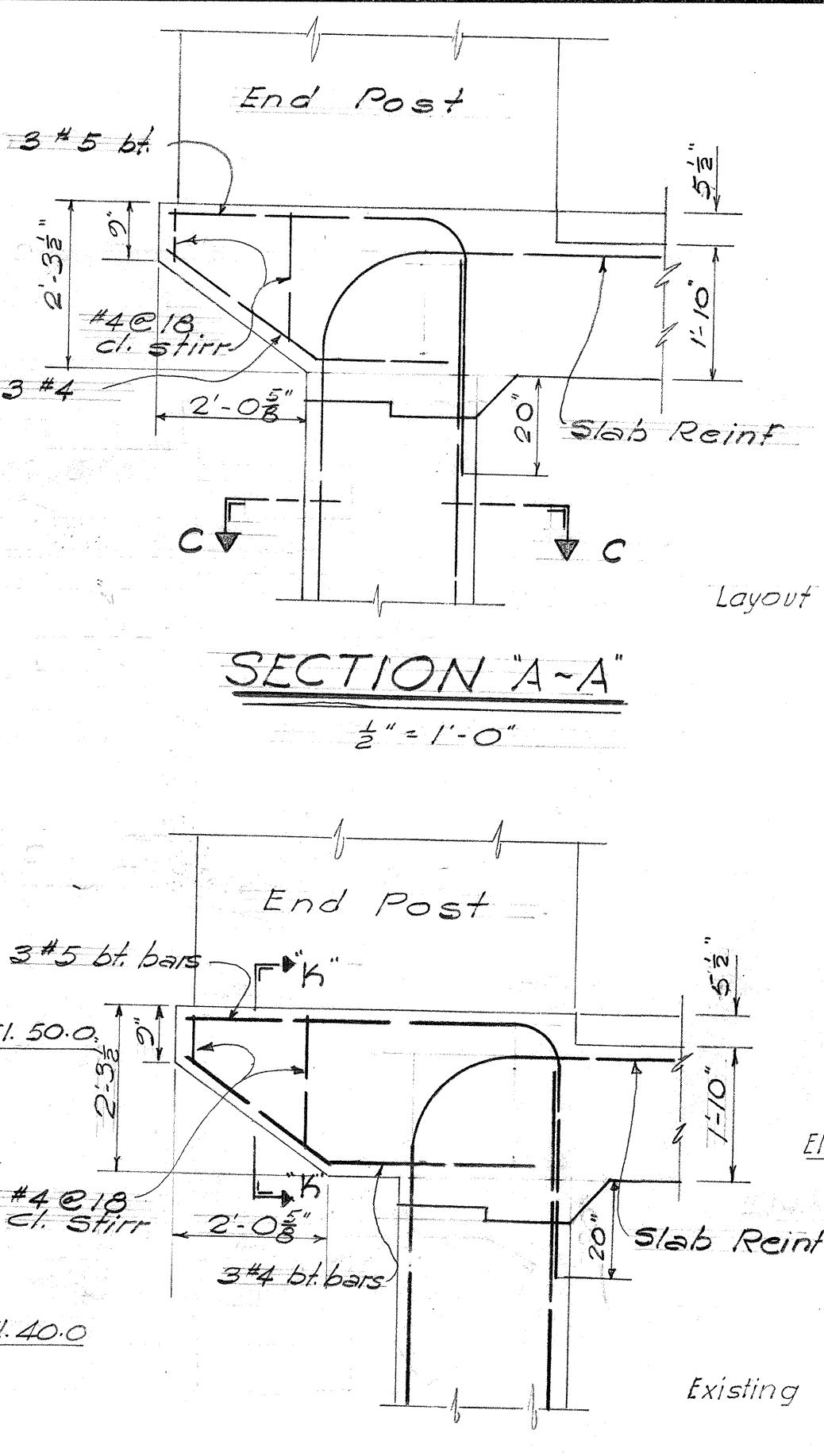
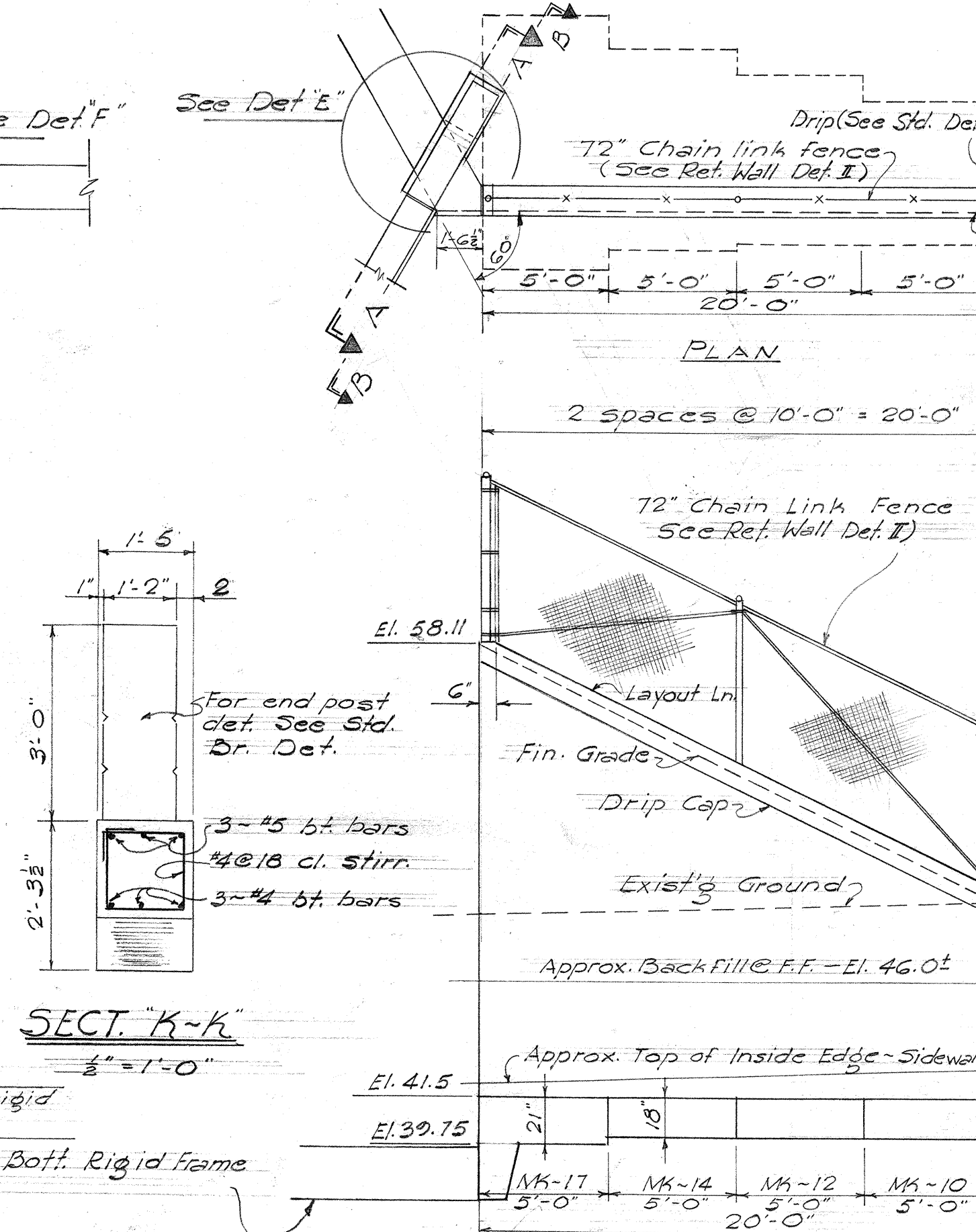
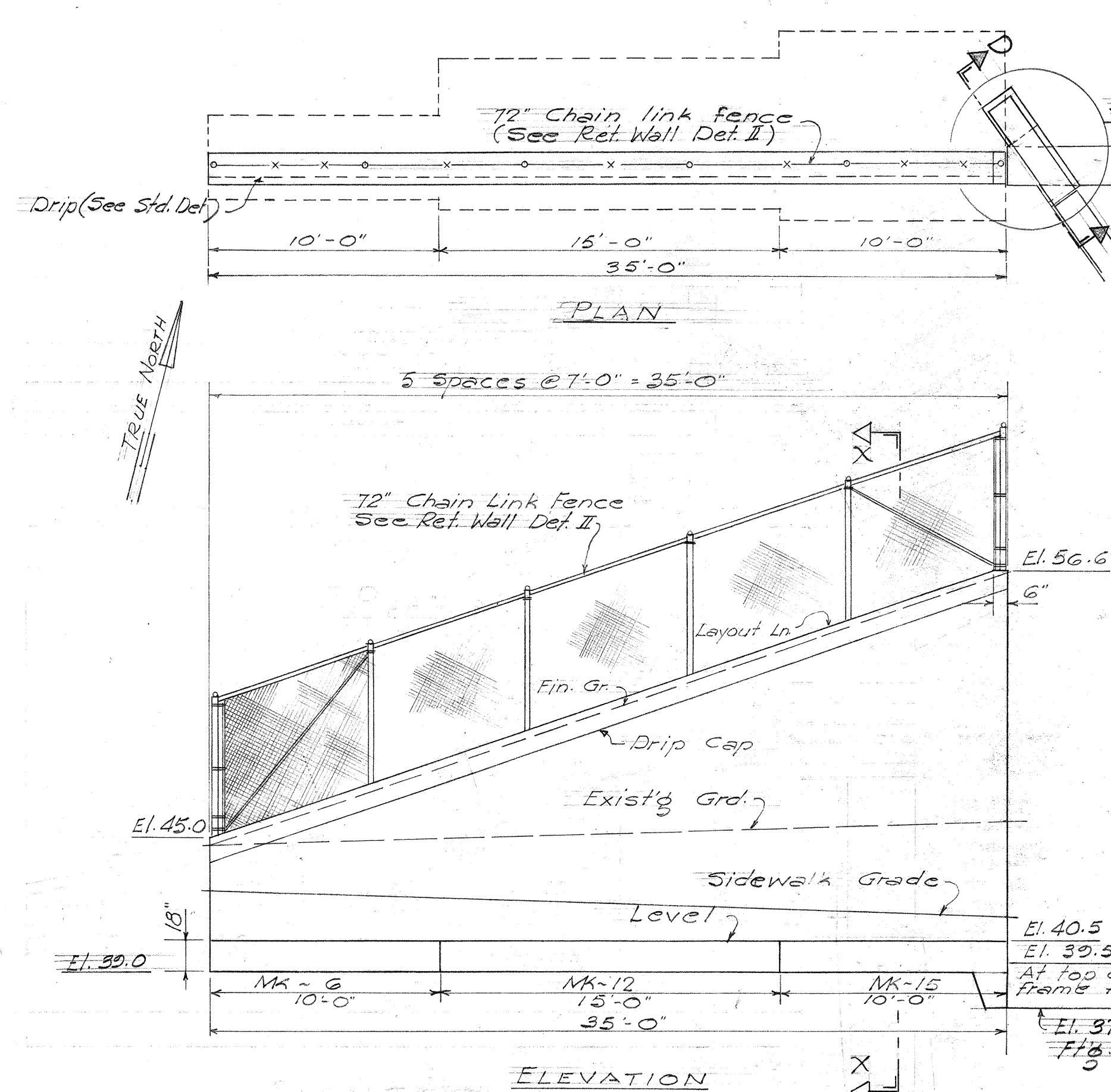
HAWAII STATE HIGHWAY DEPARTMENT
 STATE OF HAWAII

KALIHI STREAM BRIDGE
FRAMING DETAILS

LUNALILO FREEWAY
 BU-072-1 (2)
 UNIT 4

SHEET NO. 4 OF 7 SHEETS

\$174.40

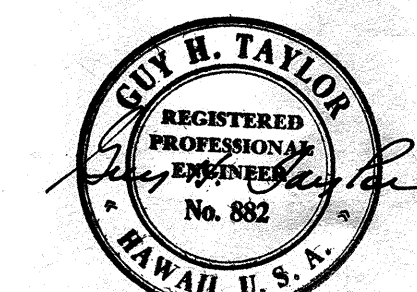


NOTE!!
Drain & Exc. Det. Similar to Rigid Frame

SEE SHEET 81A FOR REVISIONS

NOTE: See Sht. 3 for wing wall to abutment connection details

REFERENCE DRAWINGS:
RETAINING WALL DETAILS.



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HAWAII STATE HIGHWAY DEPARTMENT
STATE OF HAWAII

KALIHI STREAM BRIDGE
WING WALLS

LUNALILO FREEWAY BU-072-1 (2)
UNIT 4

81-2-60

FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	BU-072-1(2) UNIT 4	1960	43	118

June 1960

