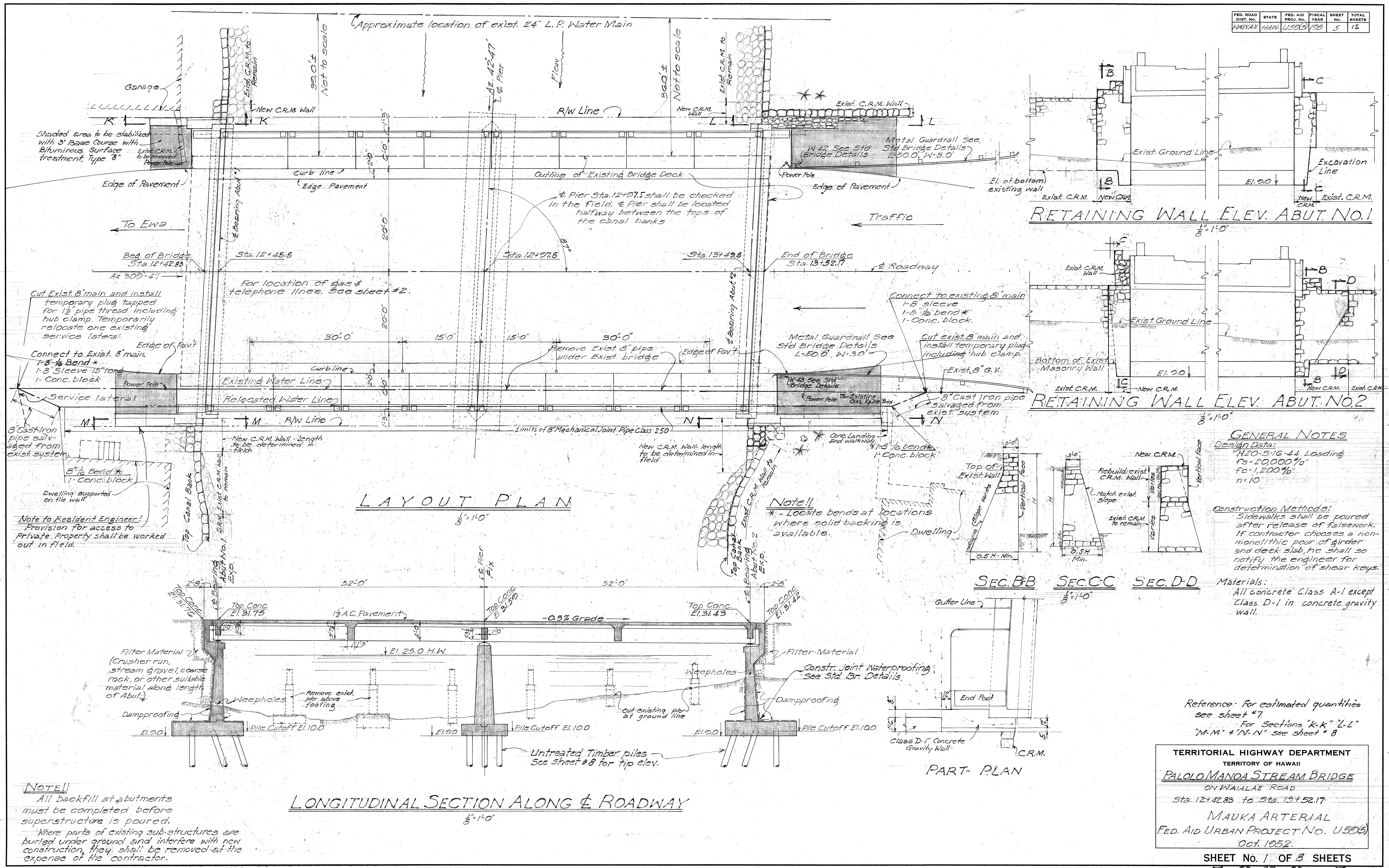
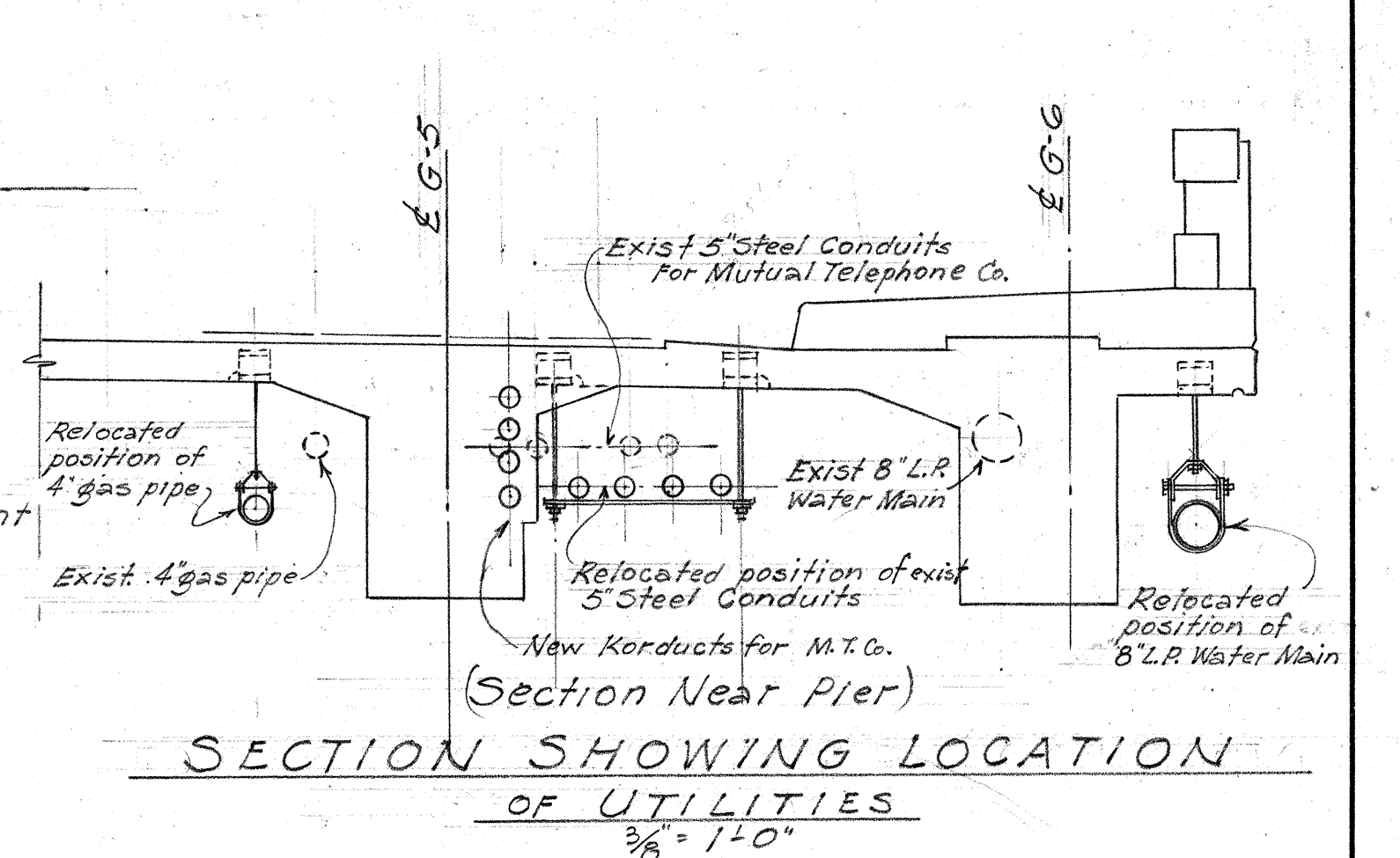
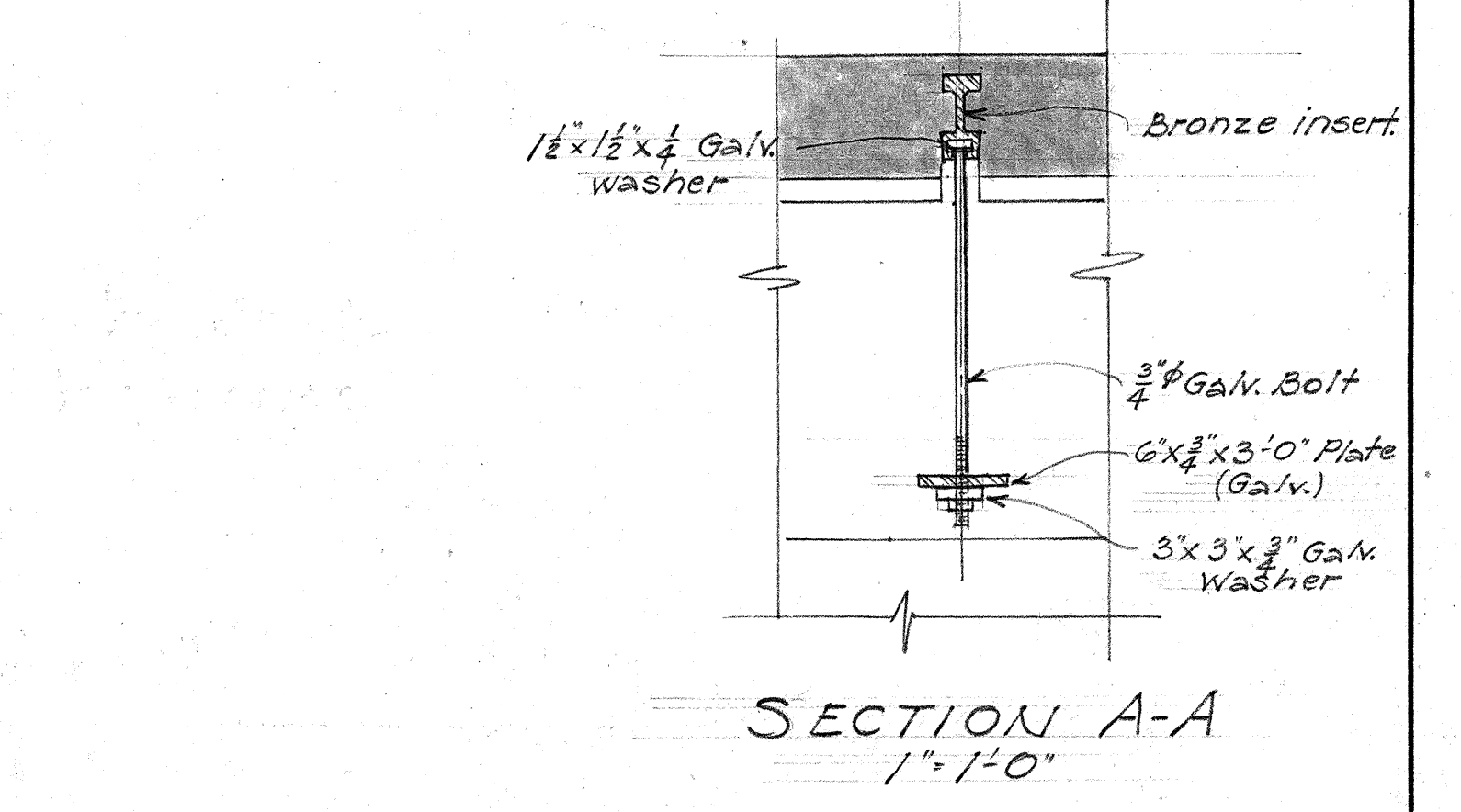
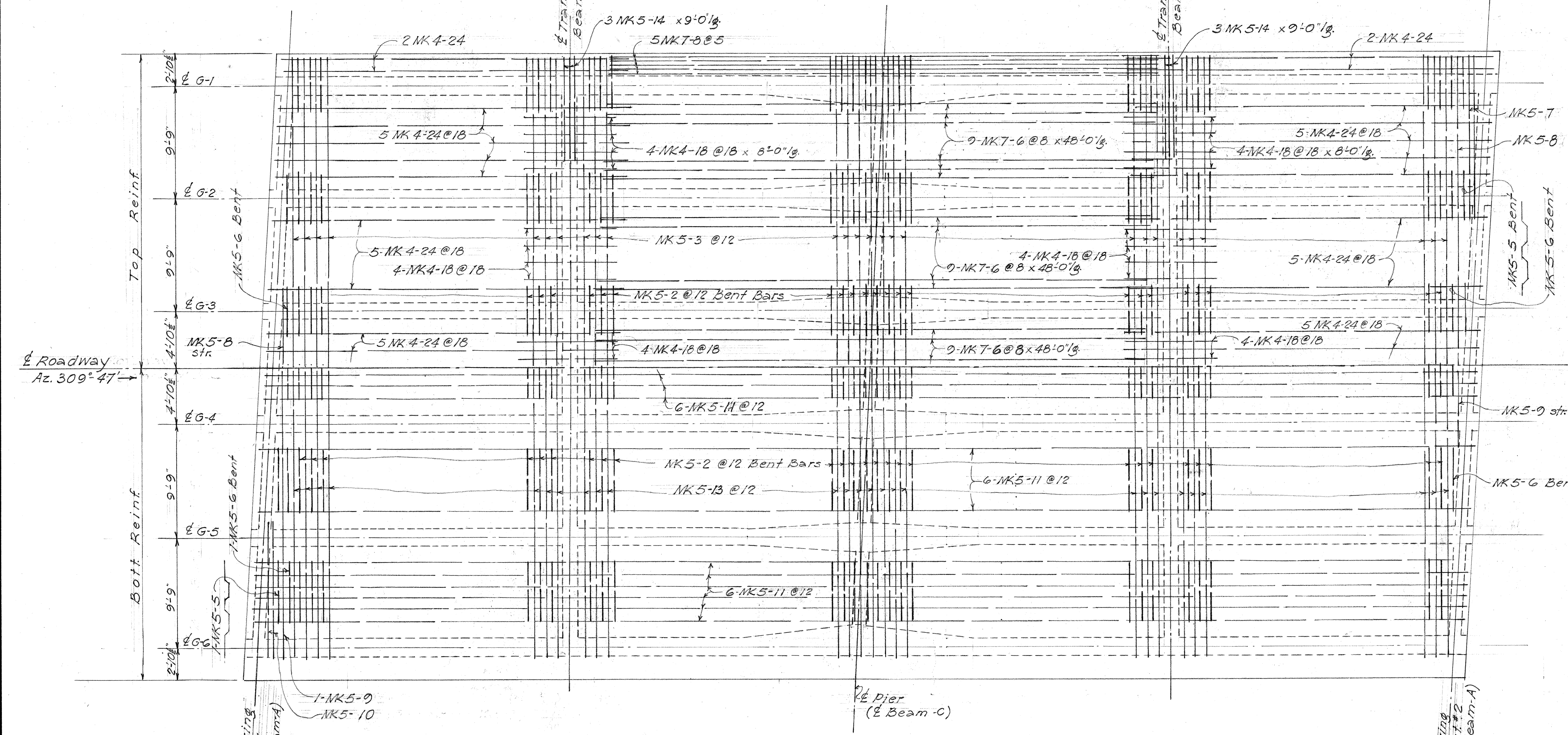
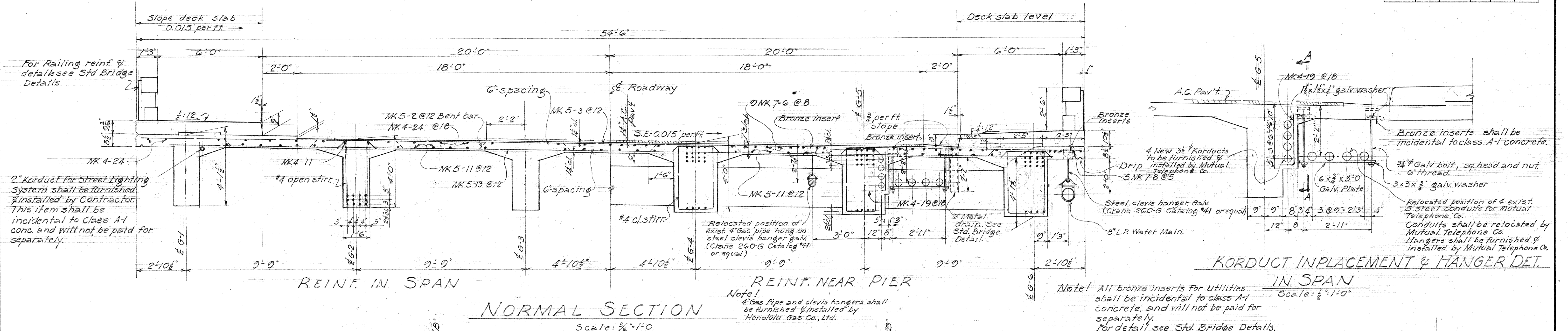




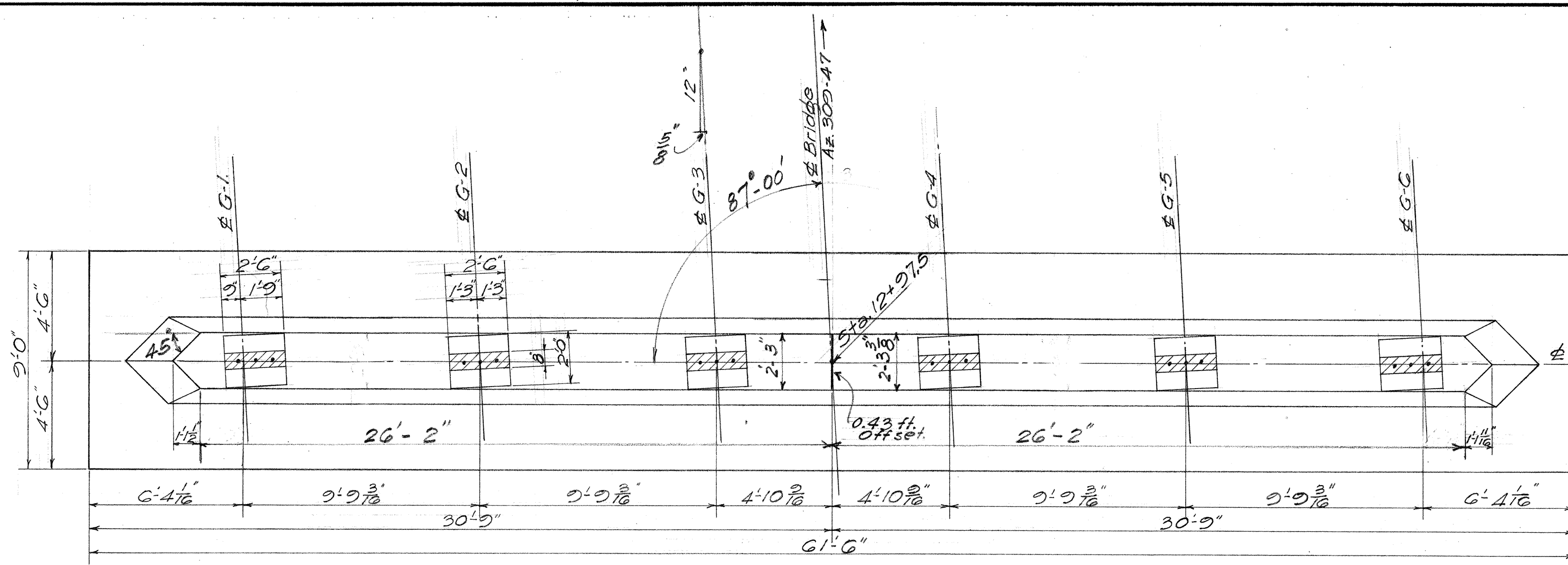
TERRITORIAL HIGHWAY DEPARTMENT
 TERRITORY OF HAWAII
PALOLO MANOA STREAM BRIDGE
 ON WAIALAE ROAD
 Sta. 12+42.83 to Sta. 13+52.17
 MAUKA ARTERIAL
 FED. AID URBAN PROJECT NO. U505
 Oct. 1952



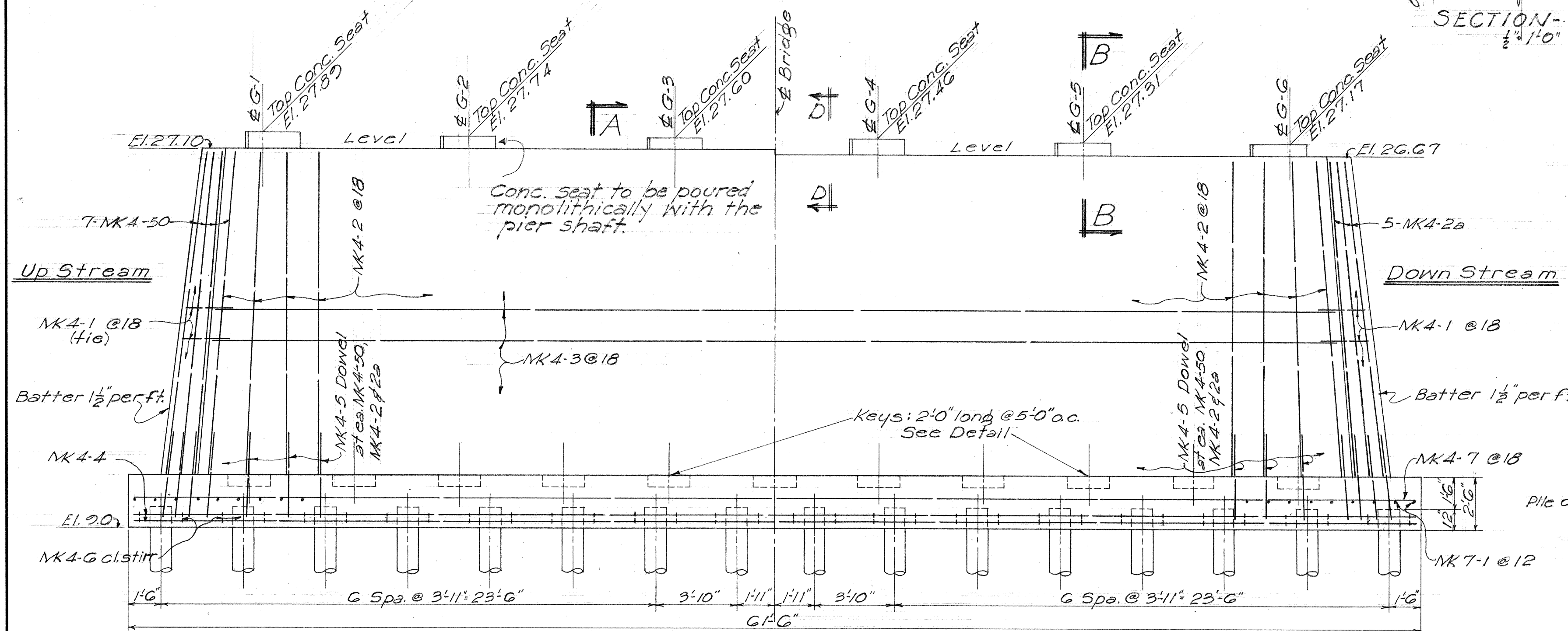
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TERRITORY OF HAWAII
PALOLOMANOA STREAM BRIDGE
ON WAIALAE ROAD
Sta. 12+42.88 to Sta. 13+52.17
MAUKA ARTERIAL
FED. AID URBAN PROJECT NO. 459(5)
Oct. 1952

DATE: Oct. 1952
DESIGNED BY: J. H. HARRIS, S. C. HARRIS
DRAWN BY: J. H. HARRIS
CHECKED BY: J. H. HARRIS
NOTE BOOK NO. 1

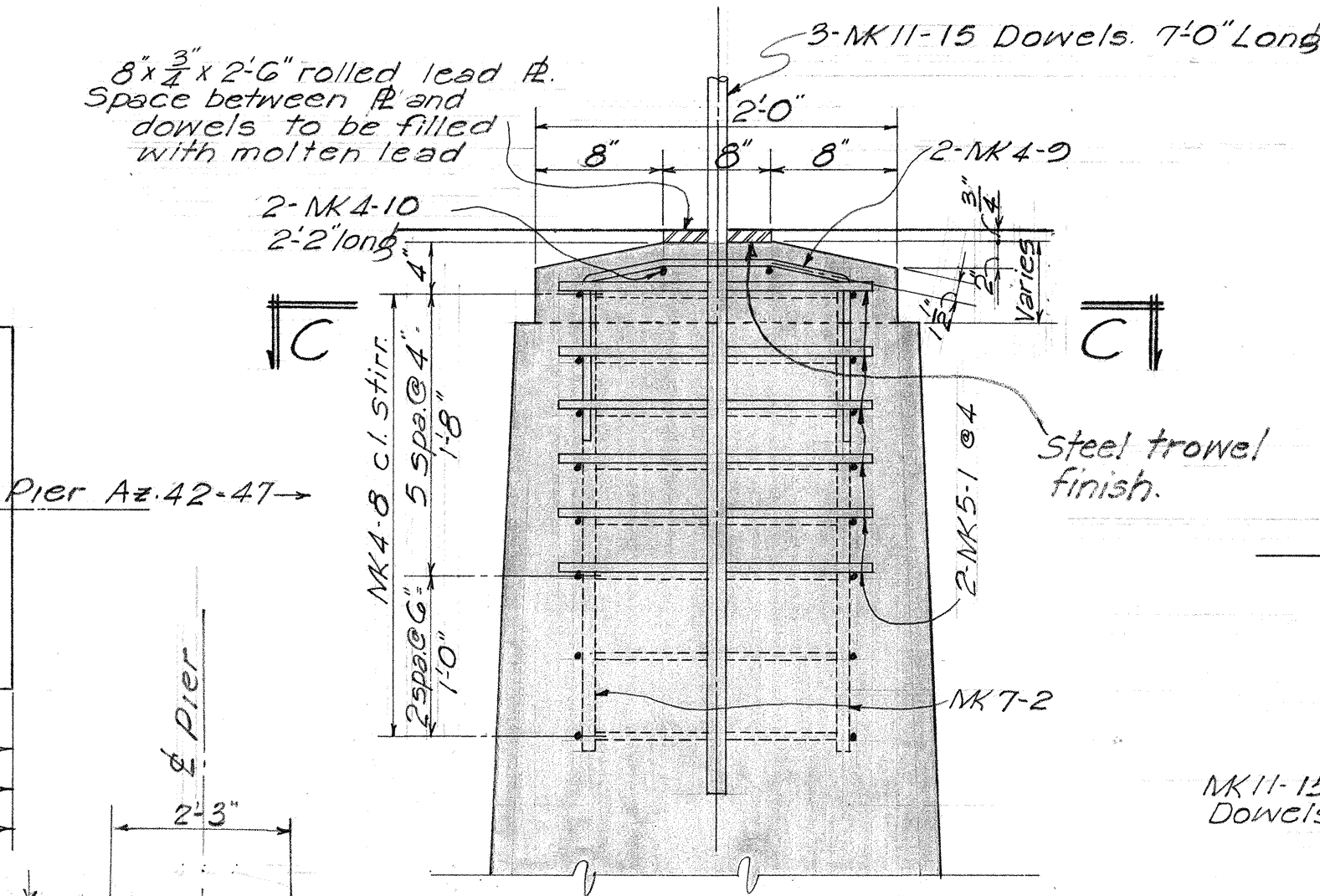
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	U50(5)	1952	8	12



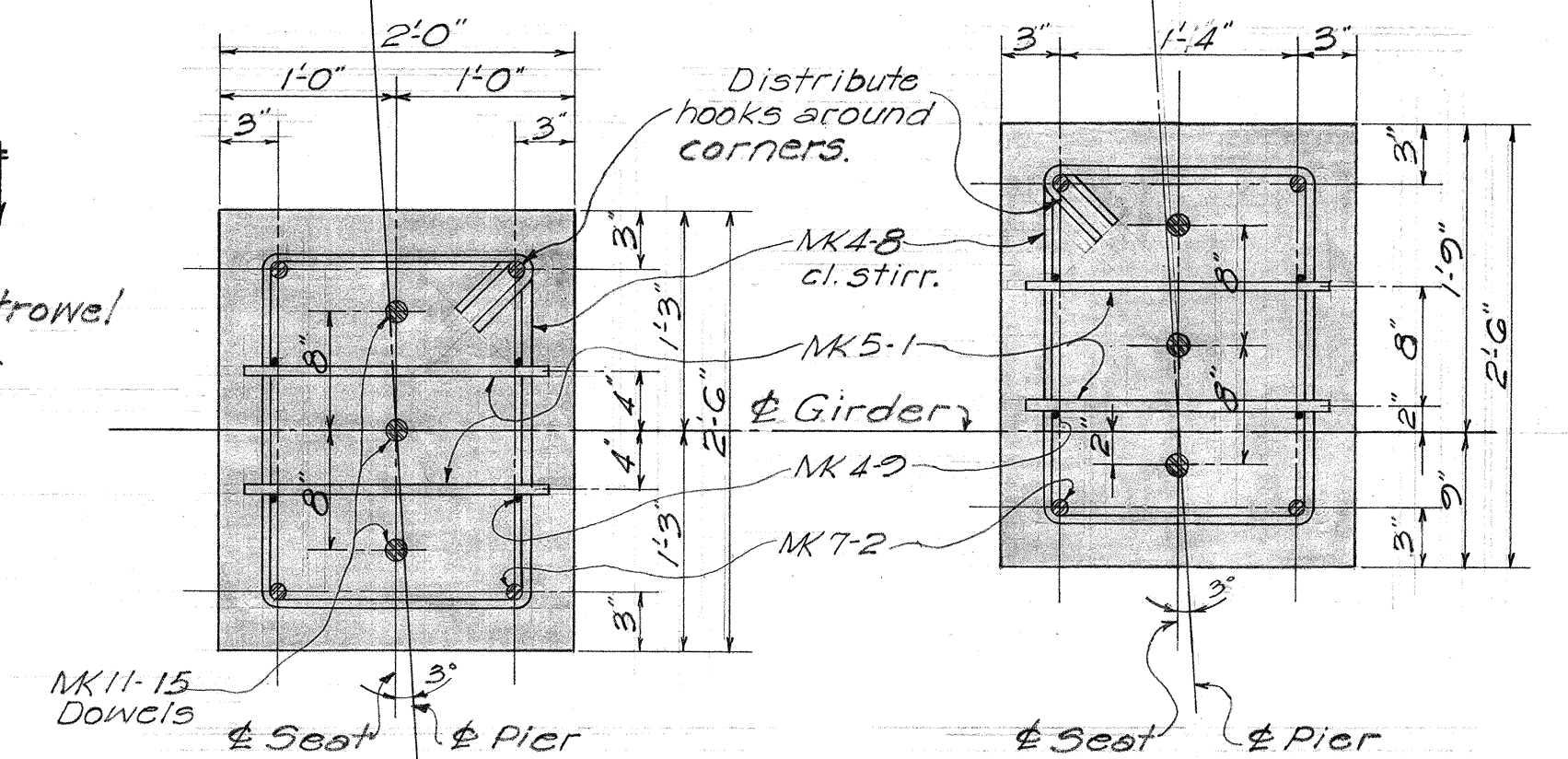
PLAN-PIER NO. 1
1/4" = 1'-0"



ELEVATION-PIER NO. 1
1/4" = 1'-0"



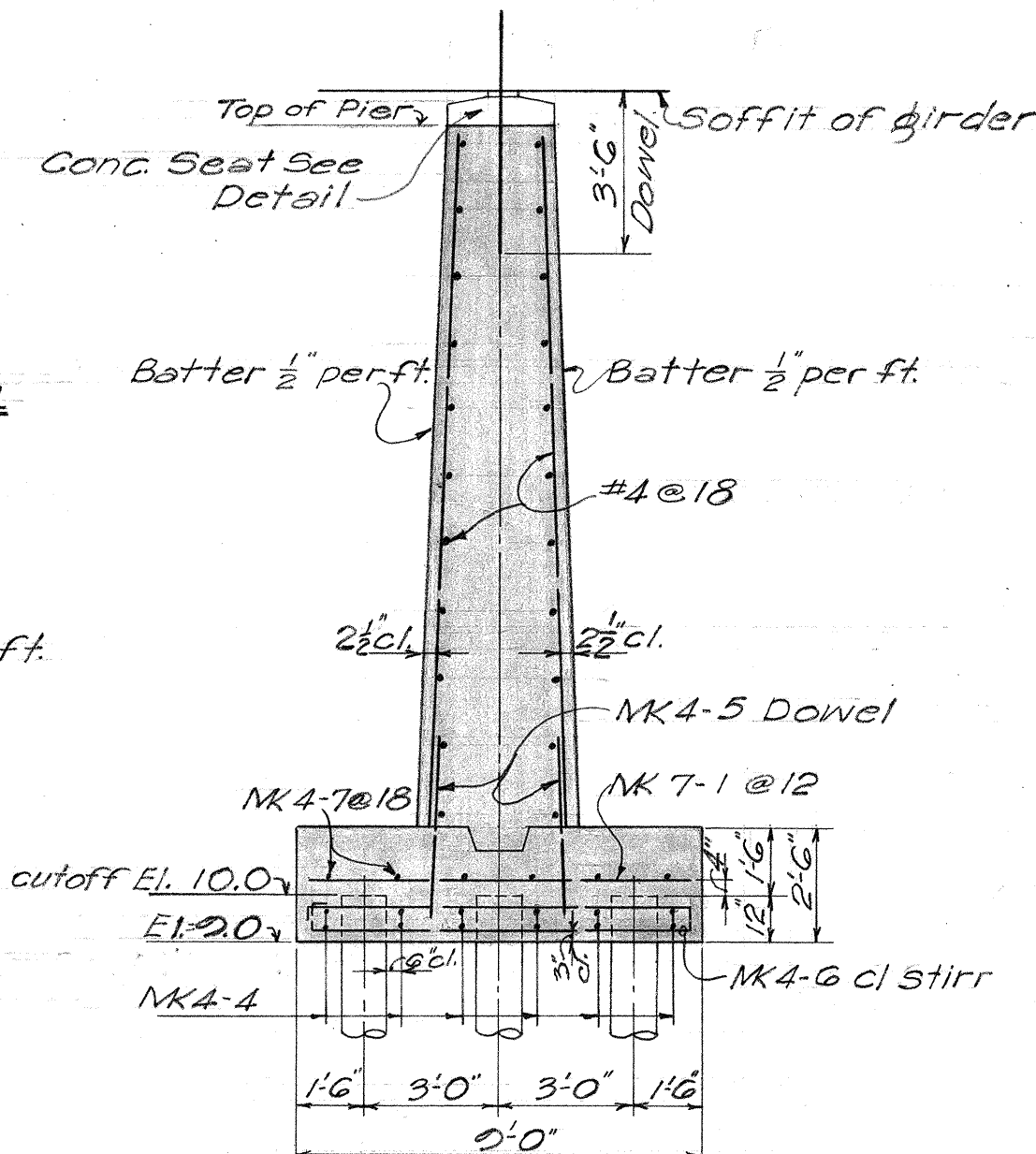
SECTION B-B
1" = 1'-0"



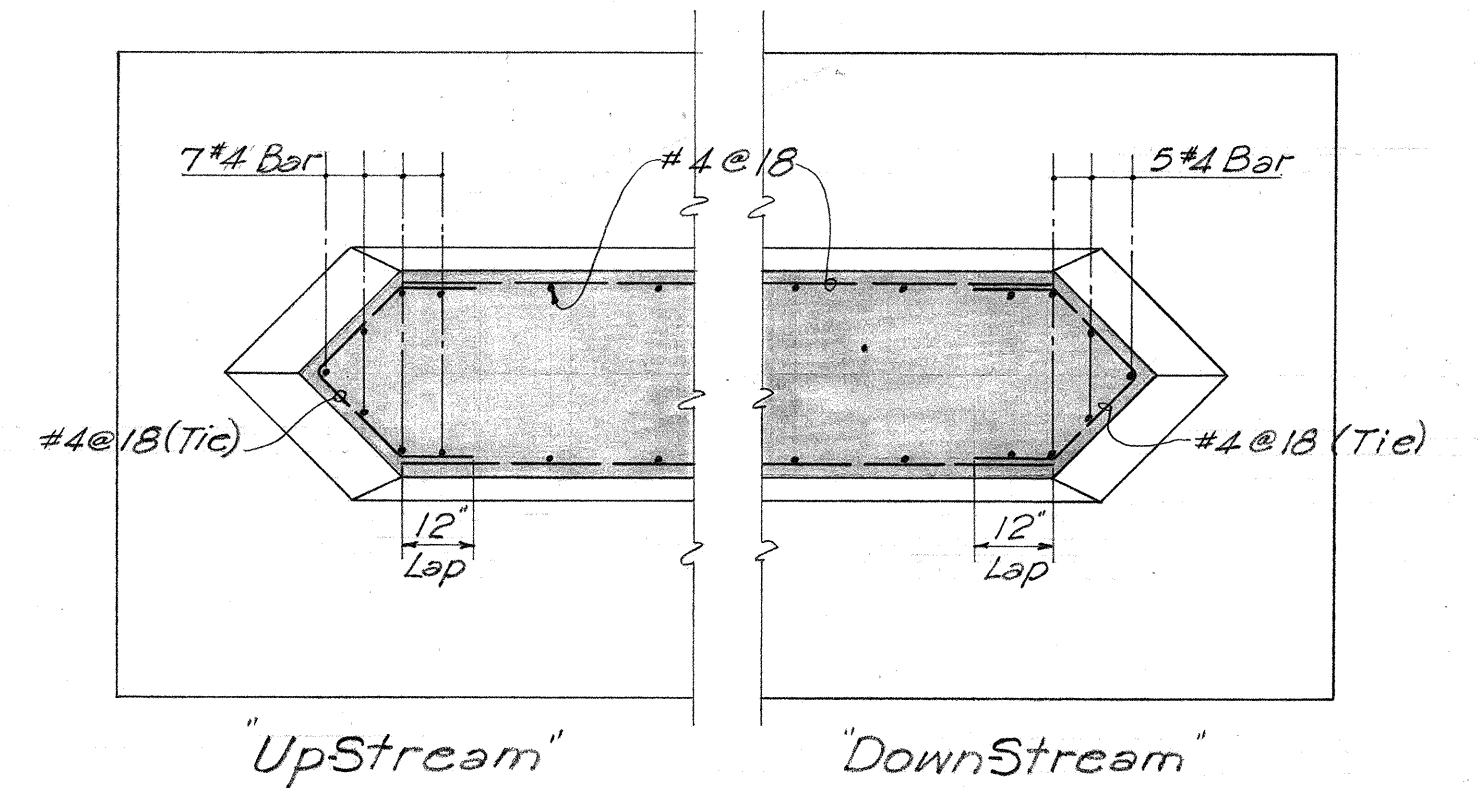
SECTION C-C
AT Gs 2, 3, 4 & 5
1" = 1'-0"

SECTION C-C
AT Gs 1 & 6
1" = 1'-0"

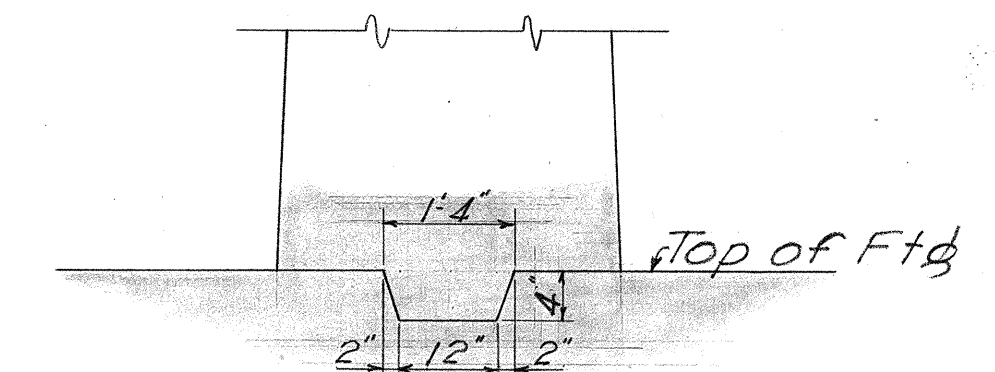
SECTION D-D
1/4" = 1'-0"



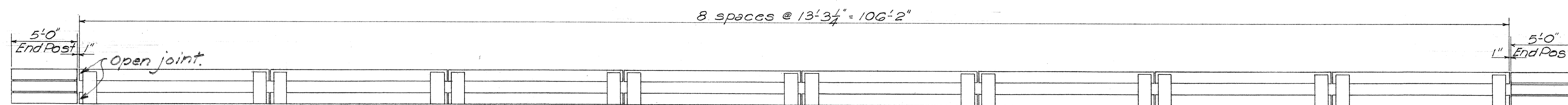
SECTION A-A
1/4" = 1'-0"



PLAN SHOWING
REINF. AT PIER ENDS
3/8" = 1'-0"



TYPICAL KEY DETAIL
1/2" = 1'-0"



RAILING LAYOUT
3/8" = 1'-0"

Note: For Reinf. & Details see
Std. Bridge Details.

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
PALOLO MANOA STREAM BRIDGE
ON WAIALAE ROAD
Sta. 12+42.83 to Sta. 13+52.17
MAUKA ARTERIAL
FED. AID URBAN PROJECT NO. U50(5)
Oct. 1952

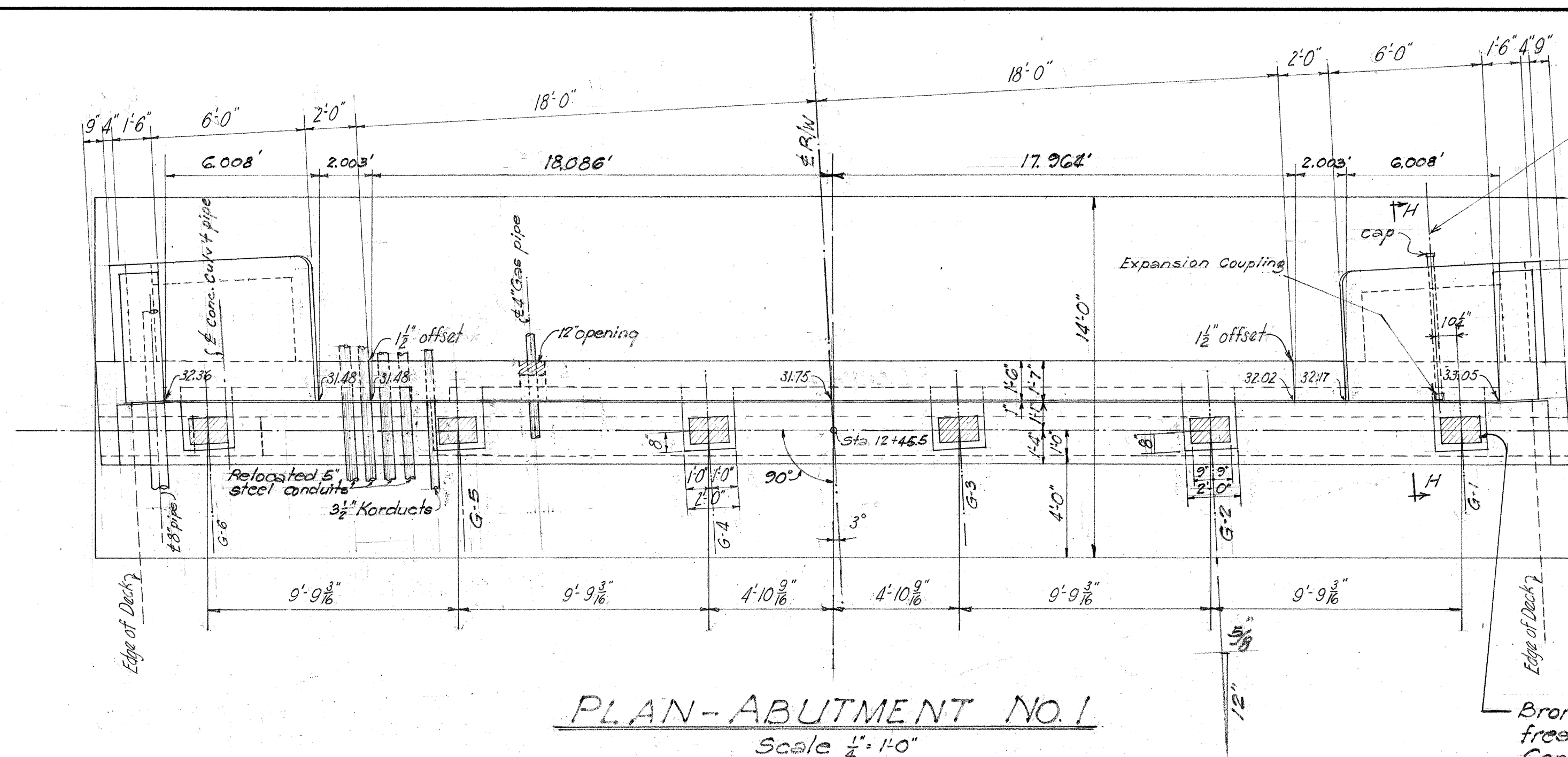
SHEET NO. 4 OF 8 SHEETS

5626.8

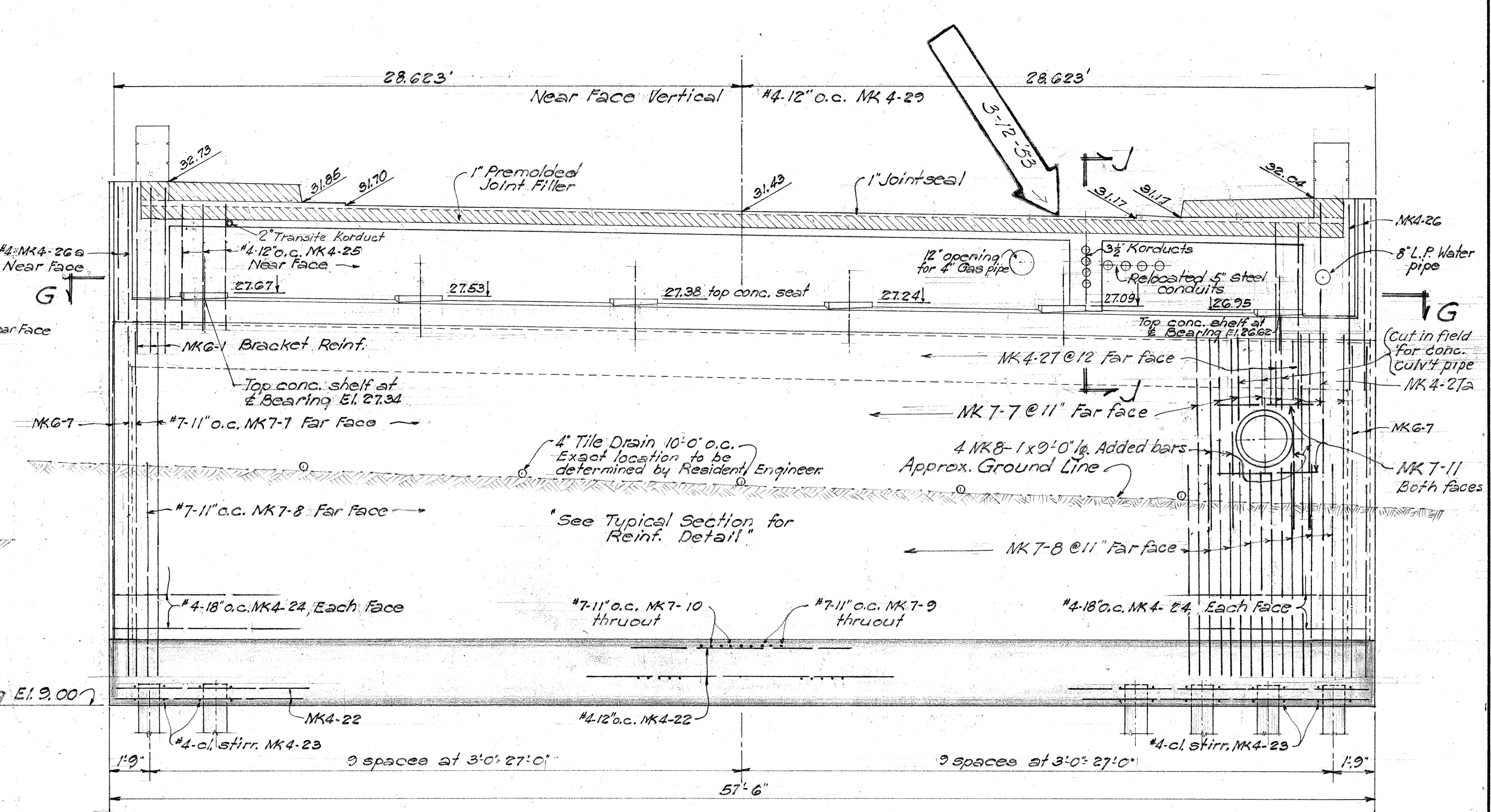
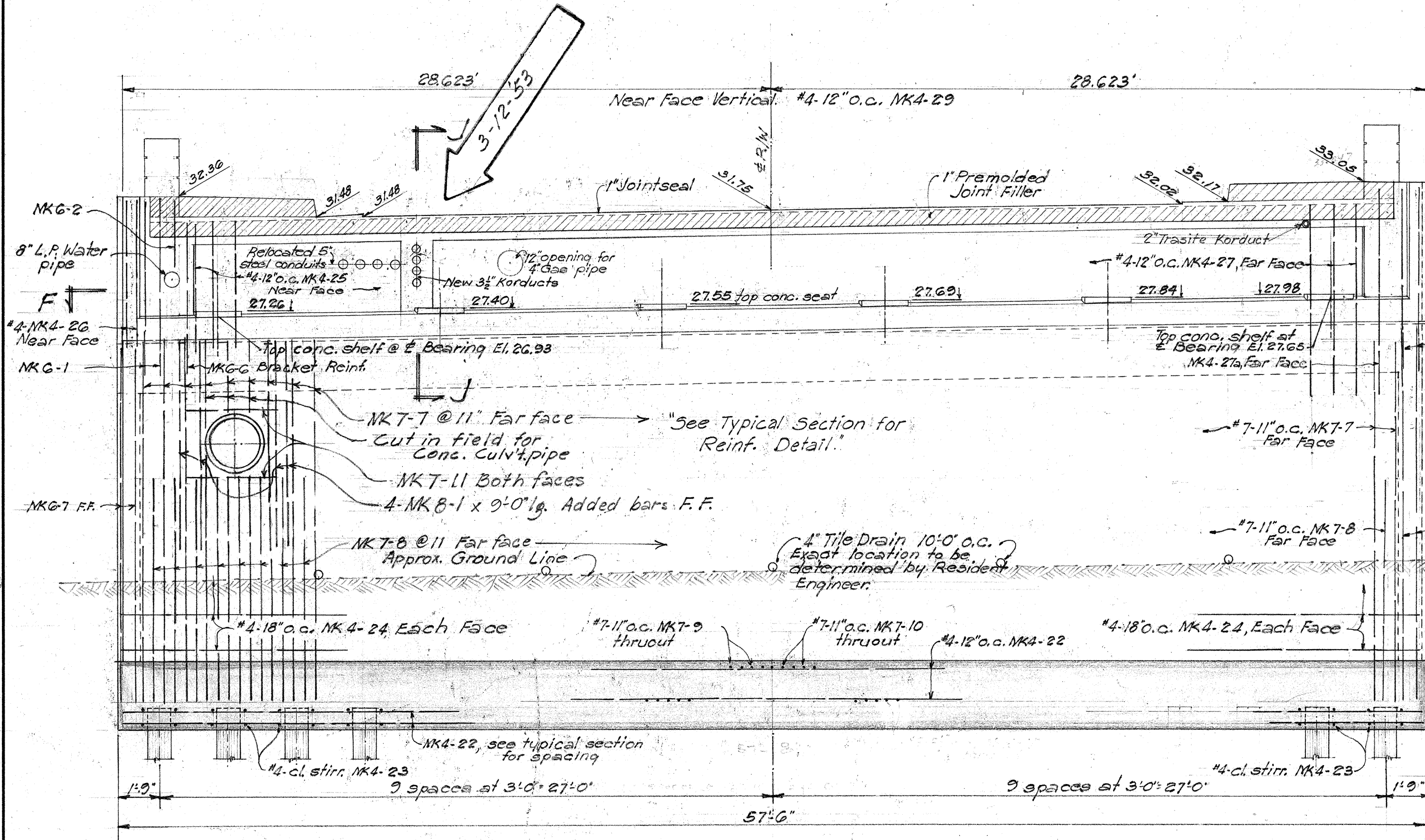
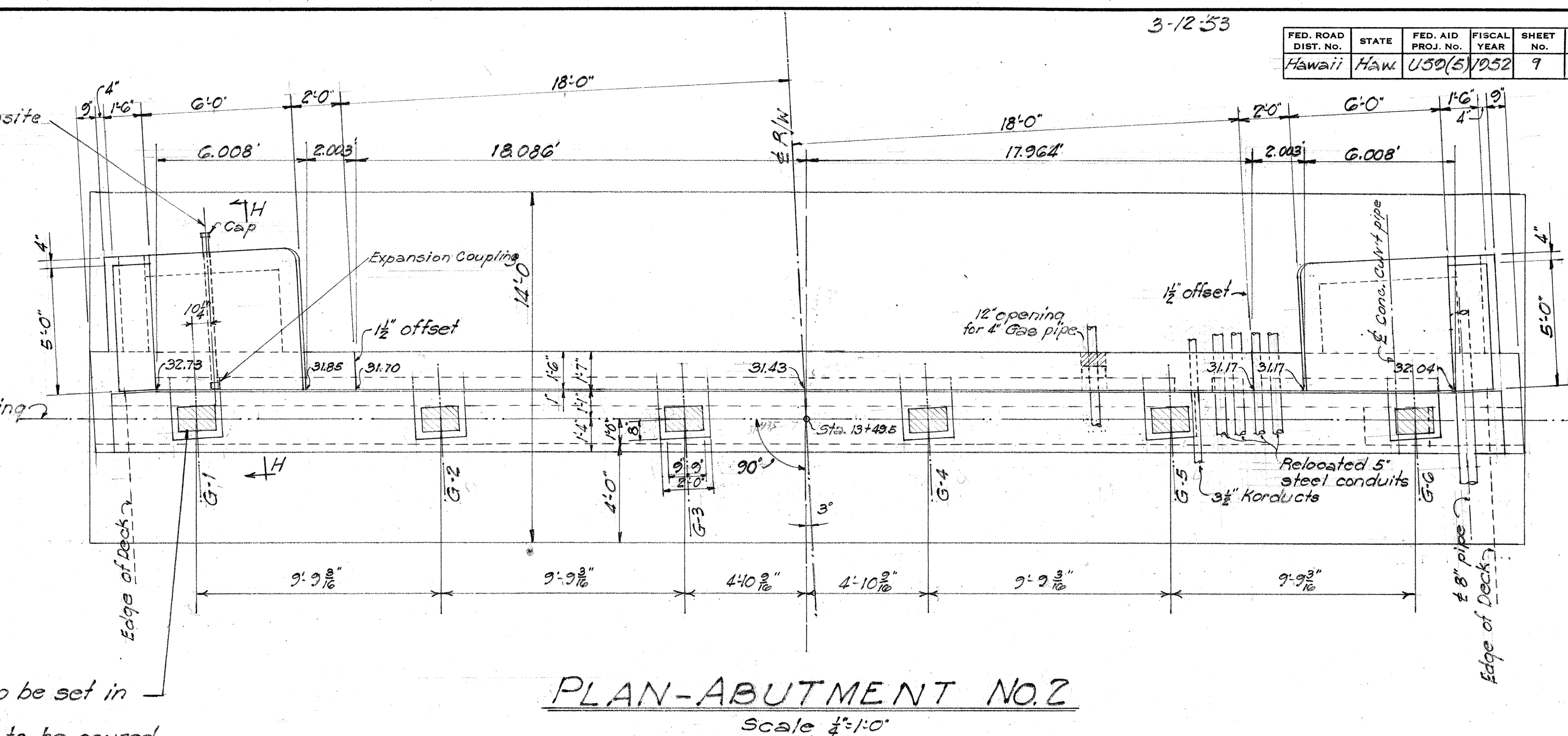
DATE: 10/1/52
DESIGNED BY: J. L. S. S. S.
DRAWN BY: J. L. S. S. S.
CHECKED BY: J. L. S. S. S.
NOTE BOOK
No.

3-12-53

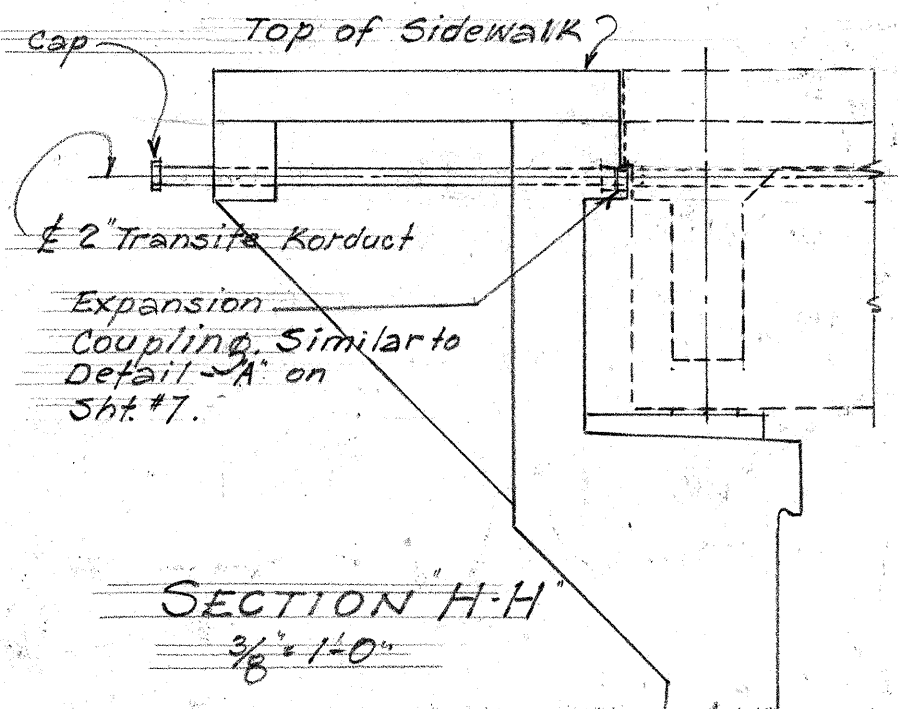
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	US9(5)1052	9	12	



Bronze Plate to be set in fresh concrete.
Concrete seat to be poured monolithically with abutment wall.



DESIGNED BY	DATE
W. R. BARTLETT	Oct. 1952
PLANNED BY	
W. R. BARTLETT	
QUANTITIES CHECKED BY	
W. R. BARTLETT	
CHECKED BY	
W. R. BARTLETT	



Note: For locations of utilities and Sections F-F, G-G, J-J, see sheet "G"

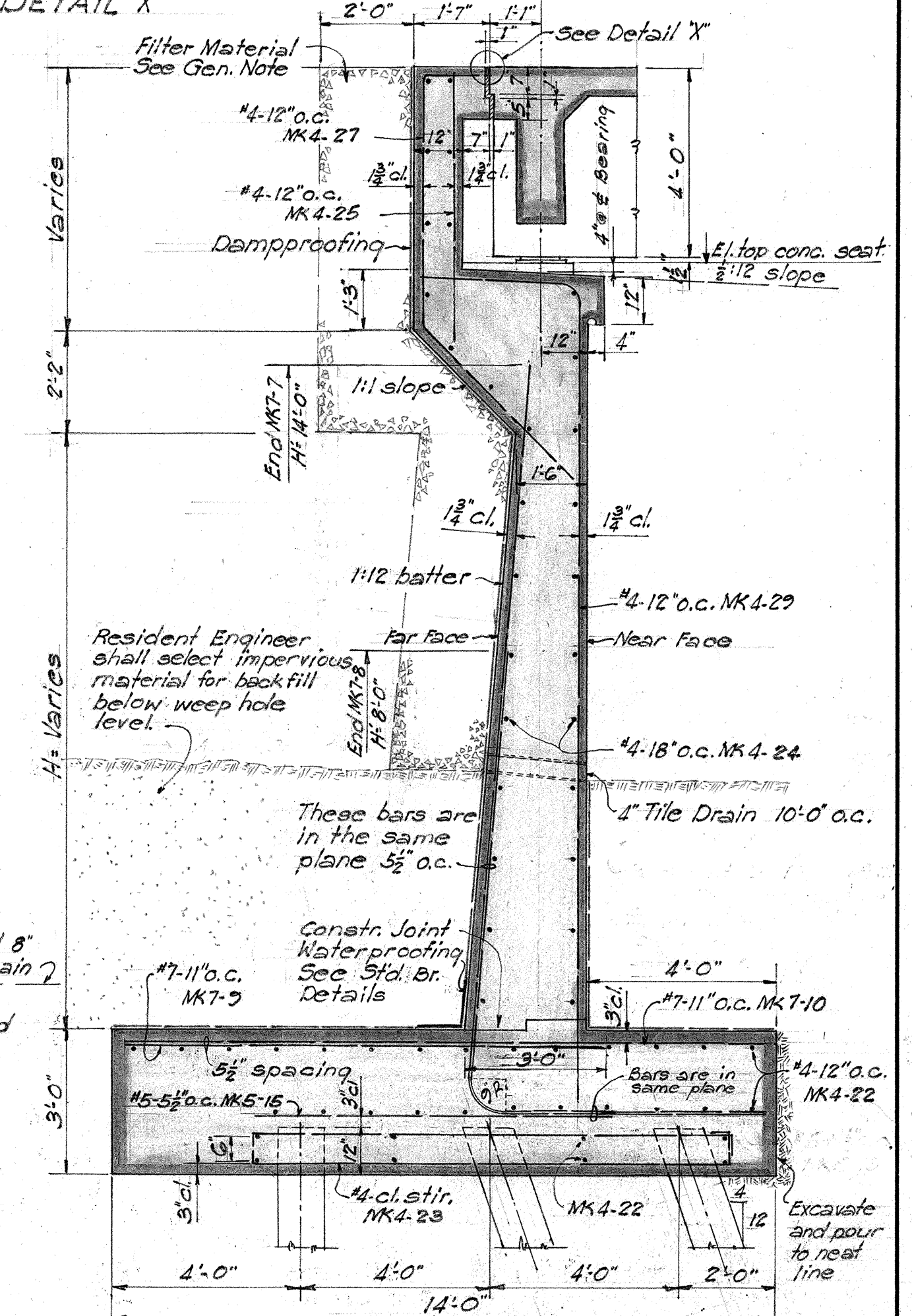
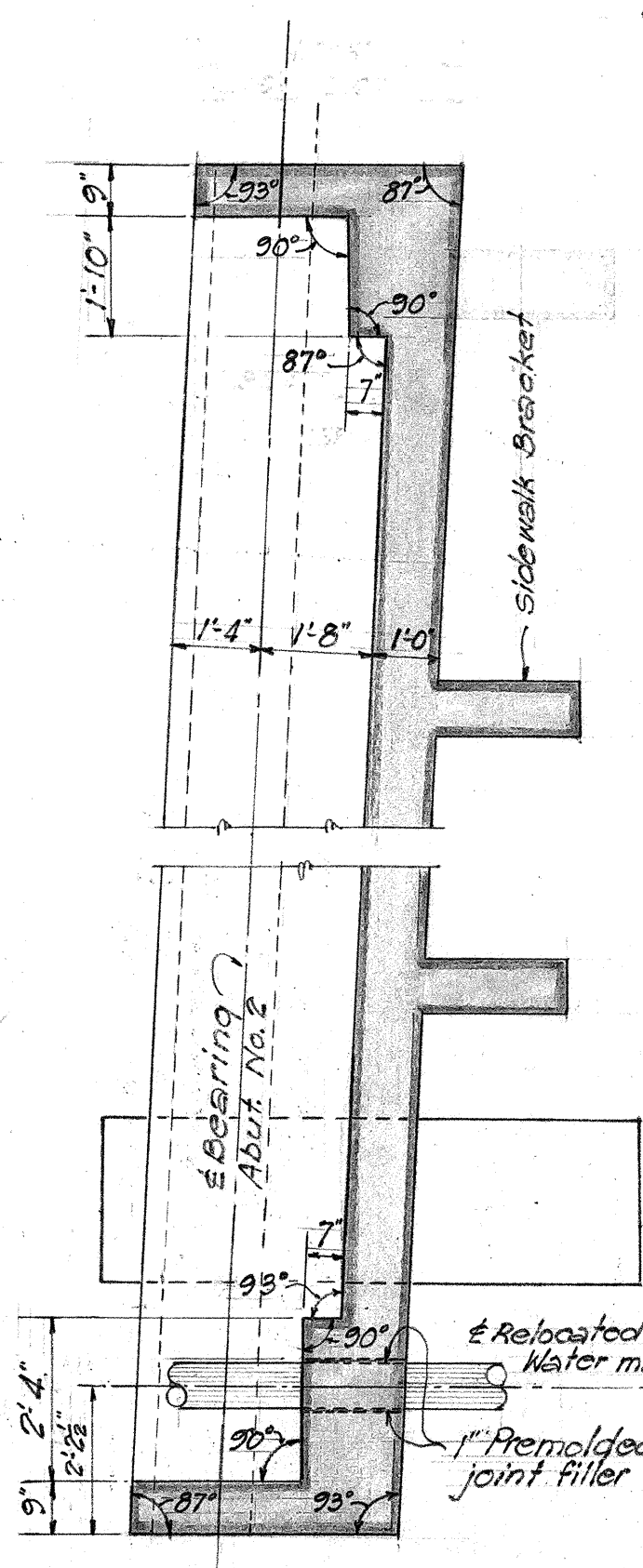
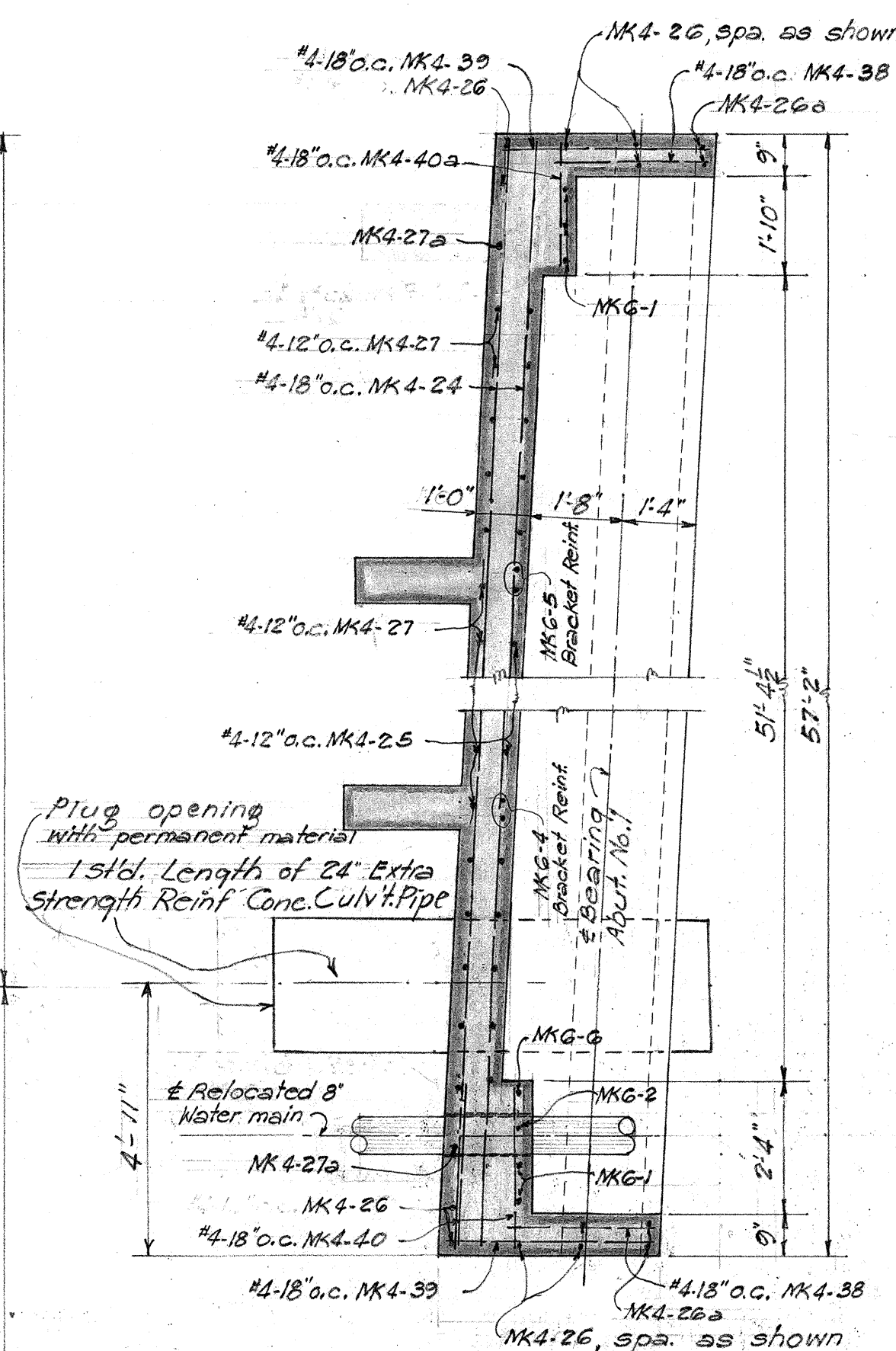
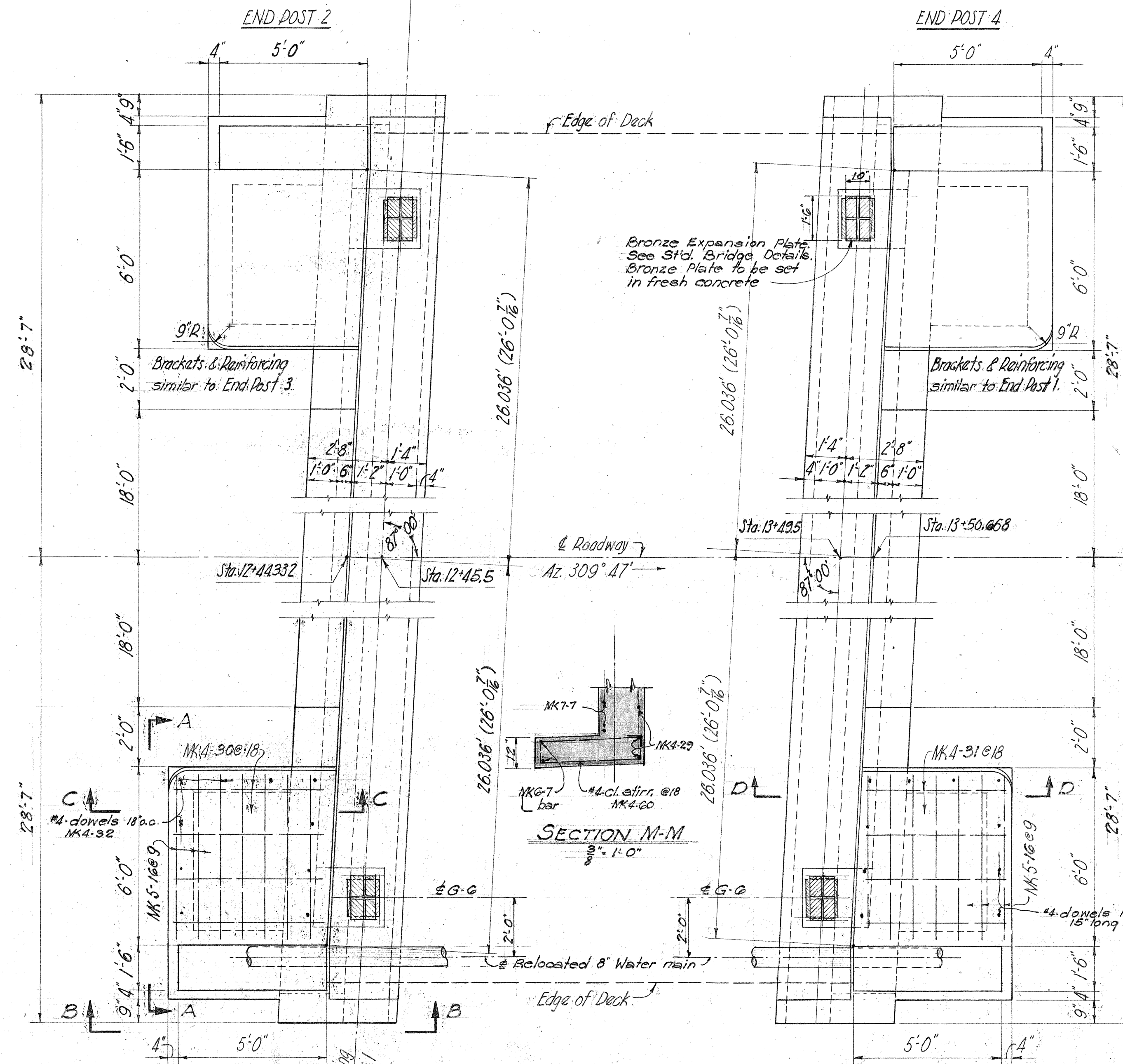
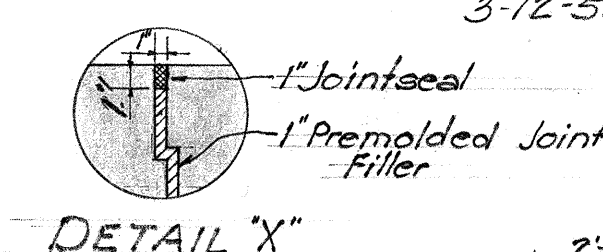
TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
PALOLOMANOA STREAM BRIDGE
ON WAILAE ROAD
Sta. 12+42.83 to Sta. 13+52.17
MAUKA ARTERIAL
FED. AID URBAN PROJECT NO. U-59(5)
Oct. 1952
SHEET NO. 5 OF 8 SHEETS

Note! Premolded Joint Filler and Joint Seal are incidental to Class A-1 Conc.

5626.9

3-12-53

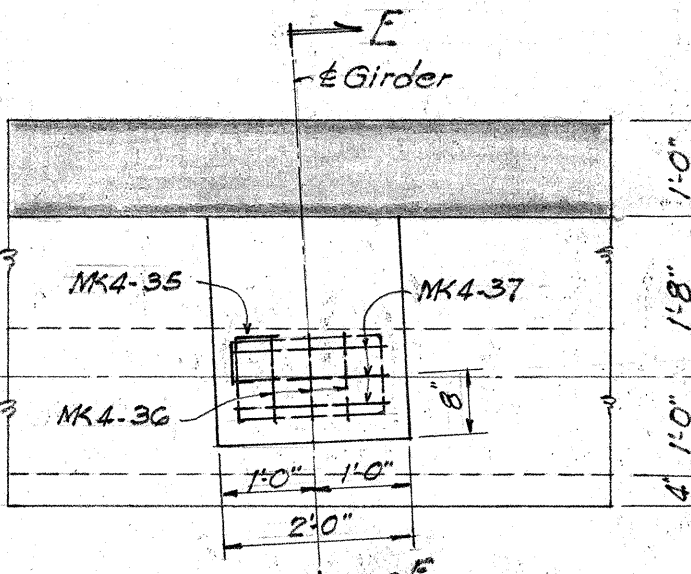
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Hawaii	Haw.	U50(5)	1952	10	12



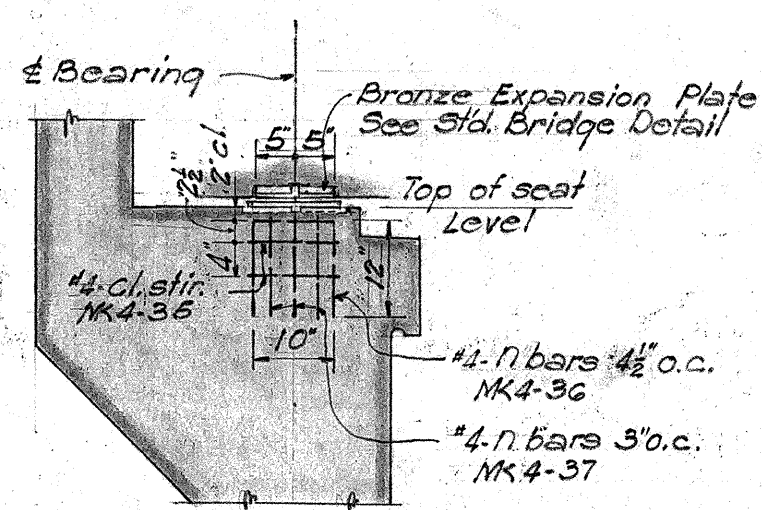
SECTION F-F
Scale 3/8\"/>

SECTION G-G
Scale 3/8\"/>

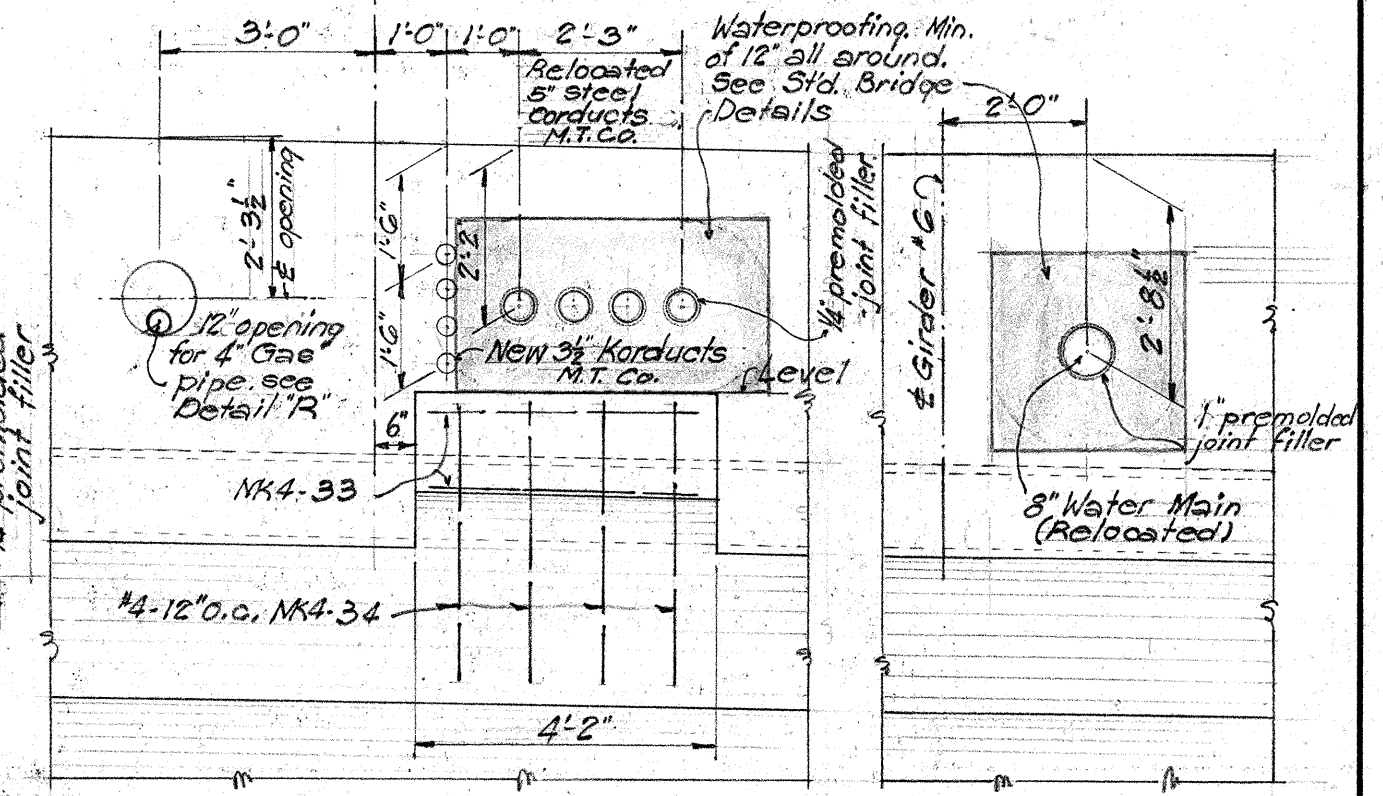
TYPICAL SECTION
Abutment No. 1 & No. 2
Scale 3/8\"/>



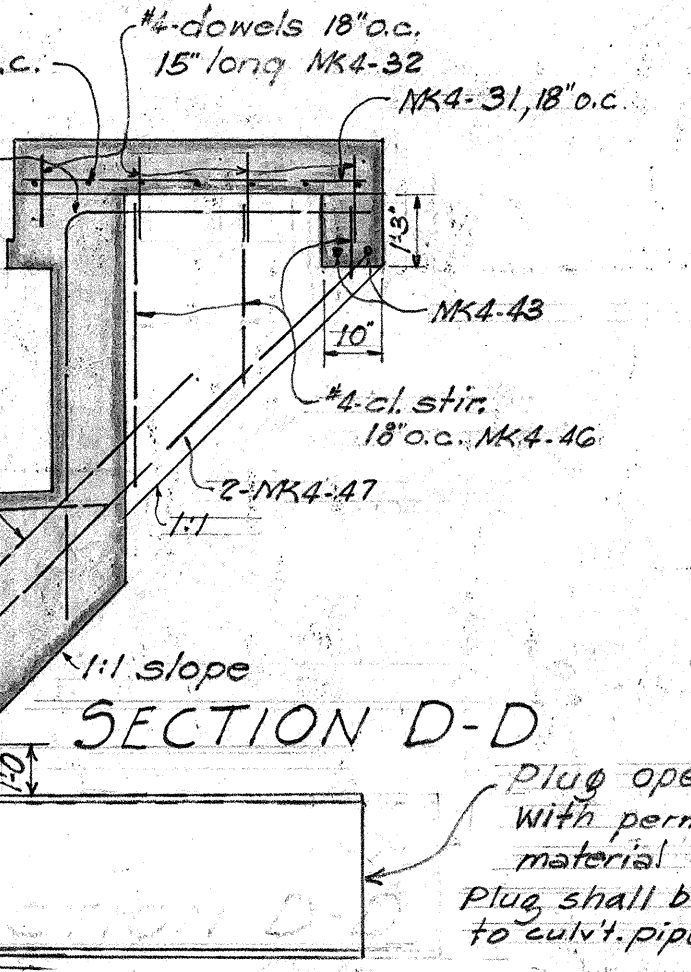
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Scale 1/2\"/>



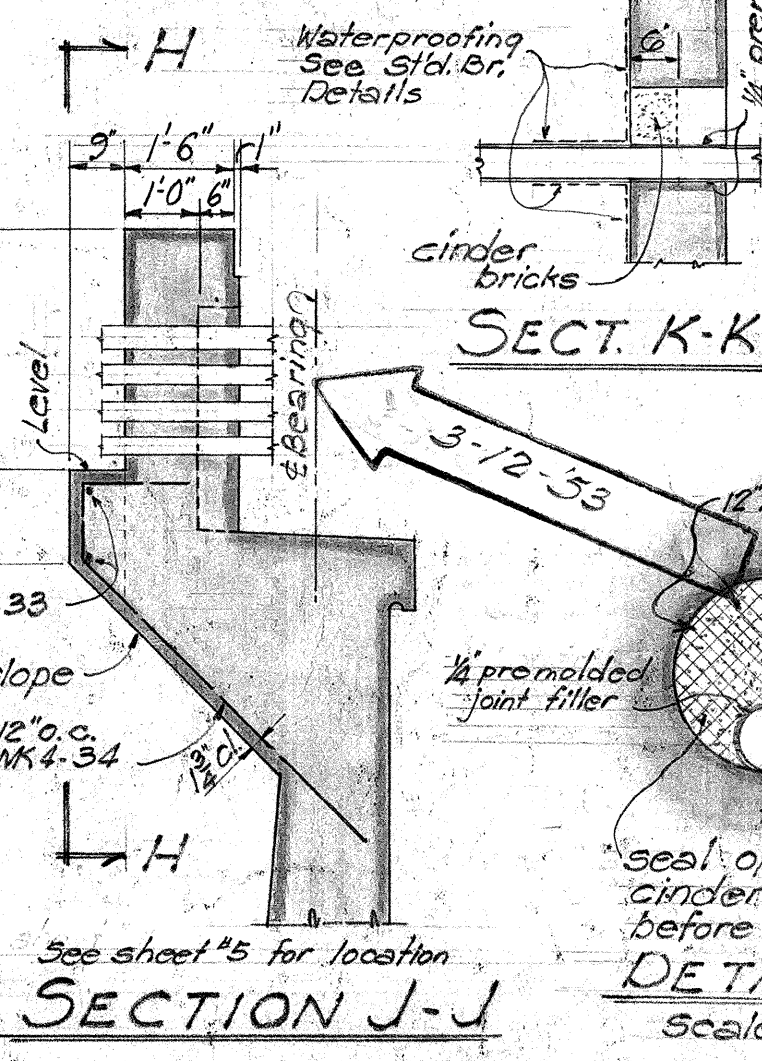
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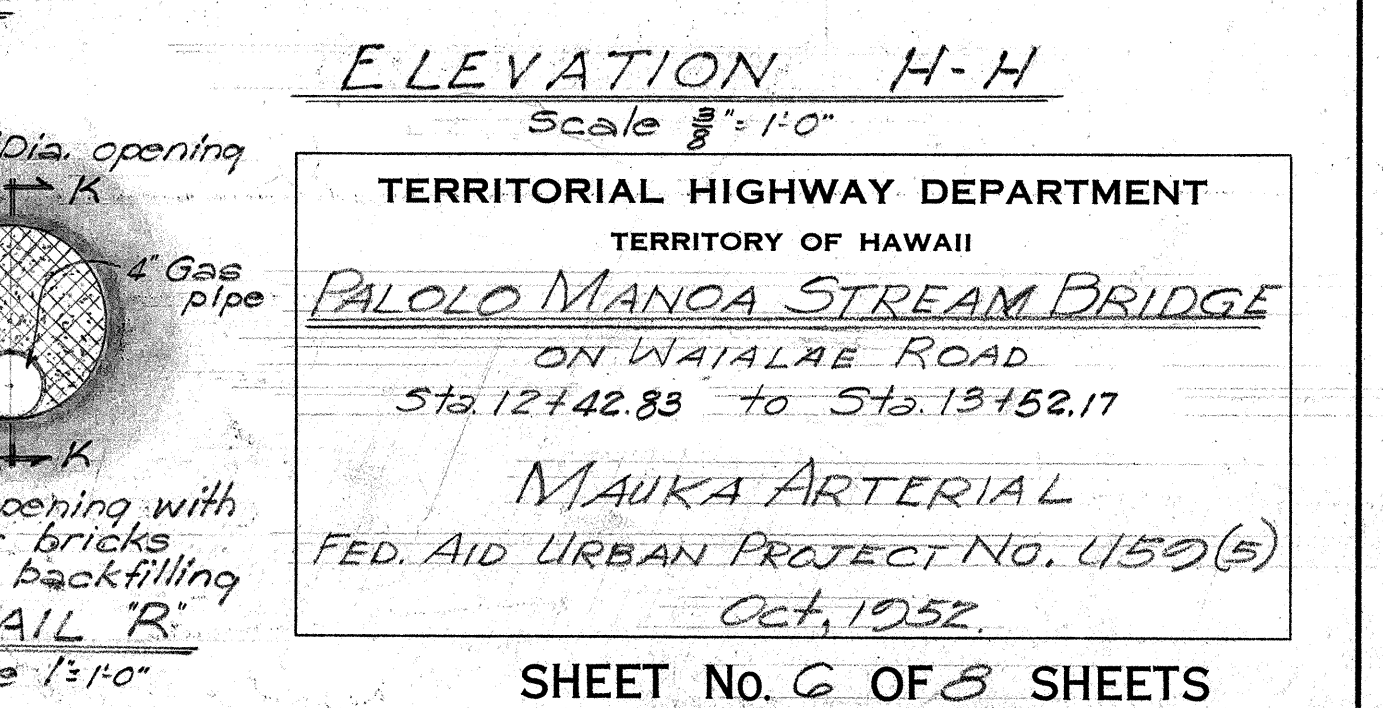
ELEVATION H-H
Scale 3/8\"/>



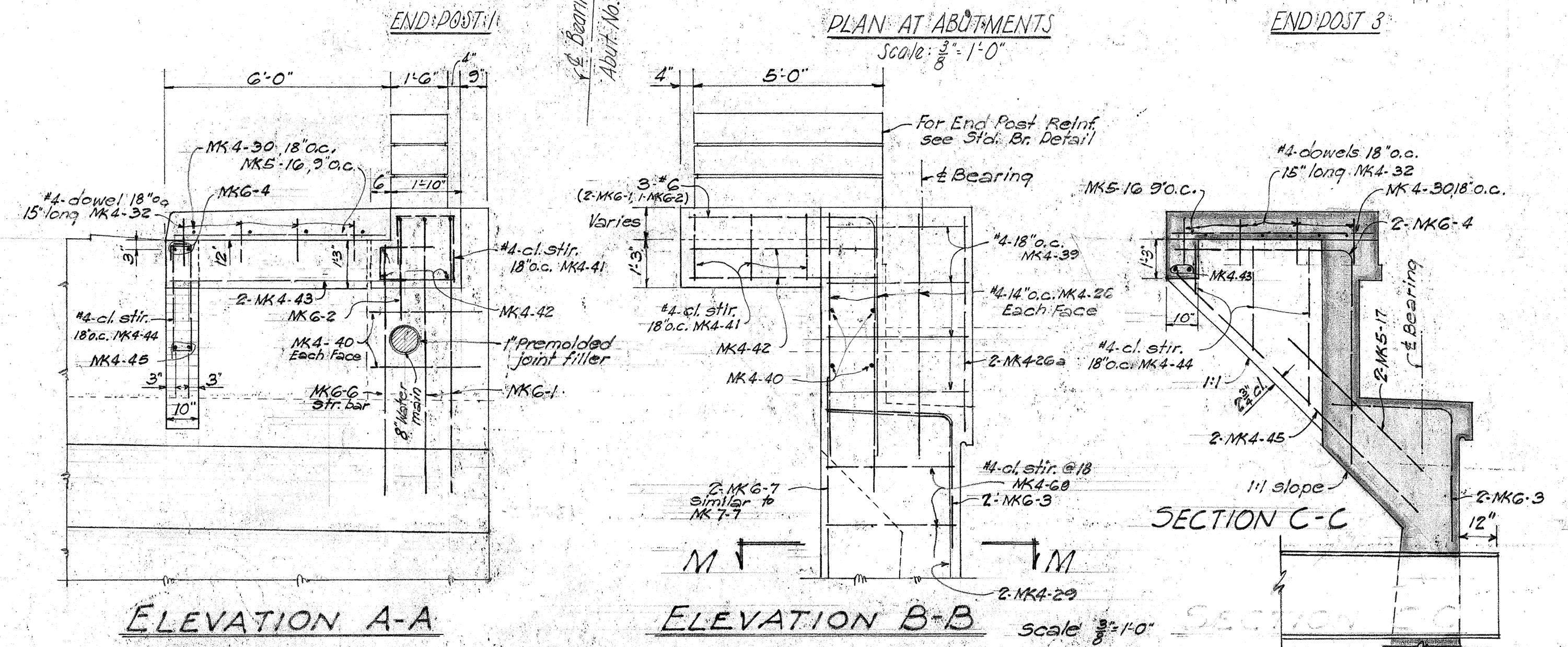
SECTION D-D



SECTION J-J
Scale 1\"/>



SECT. K-K



ELEVATION A-A

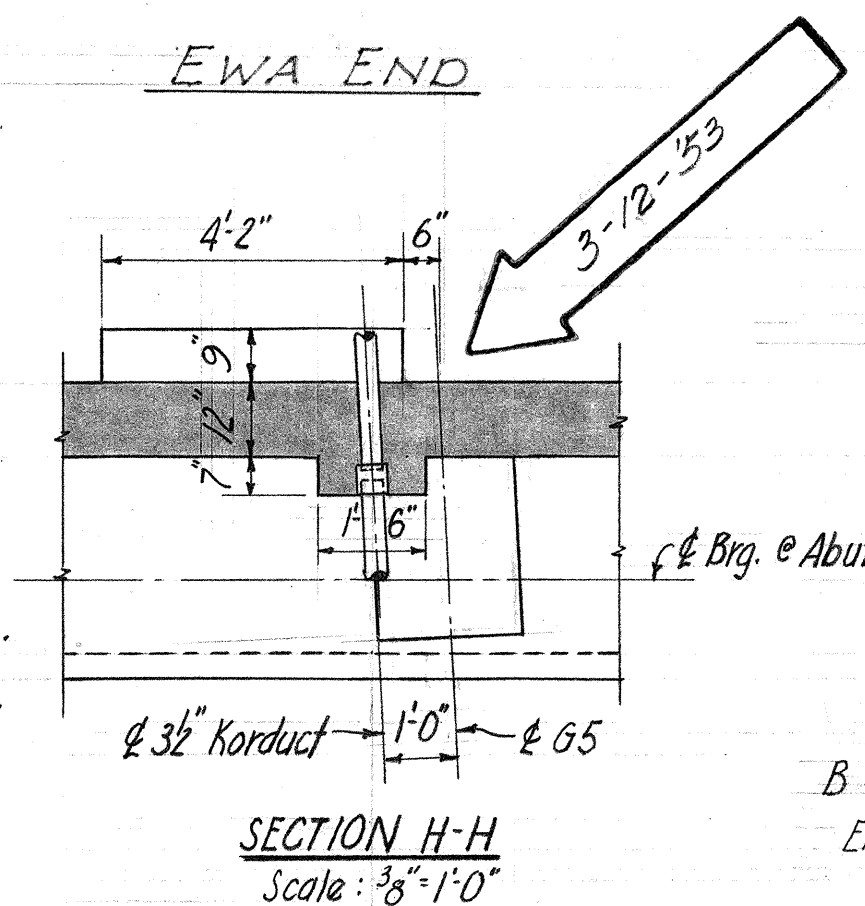
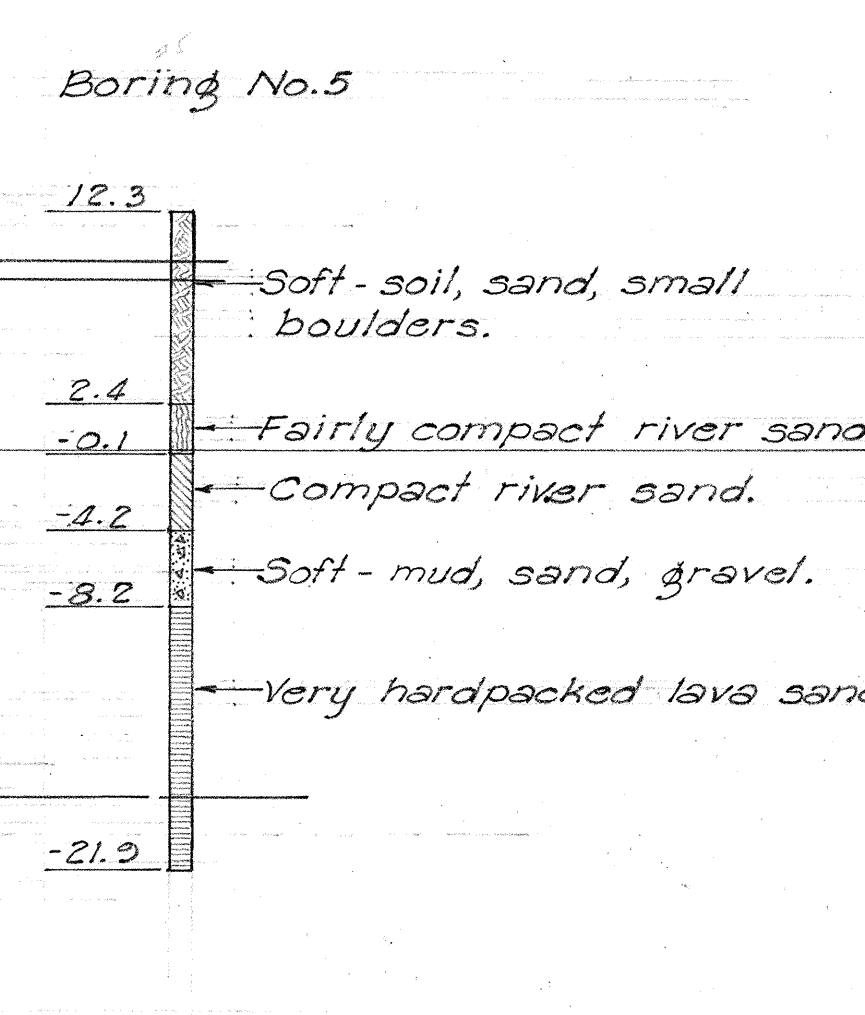
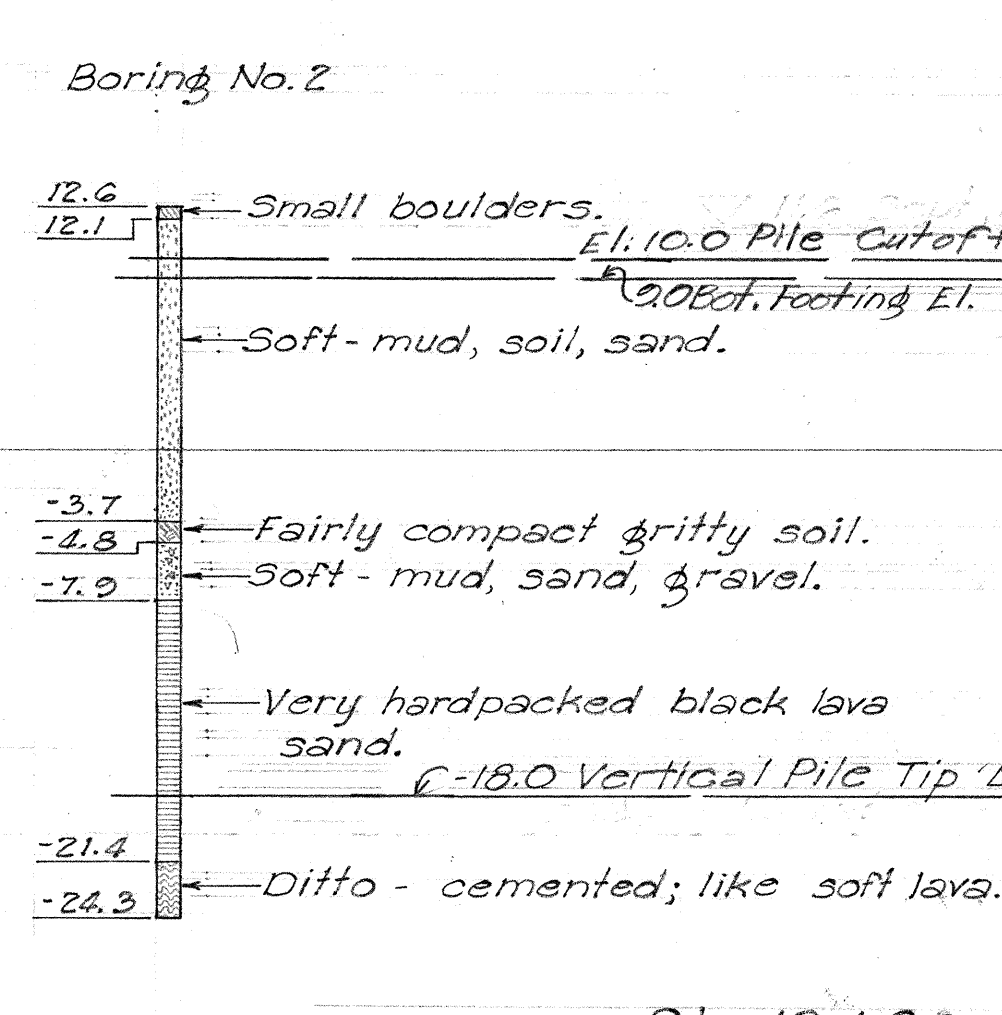
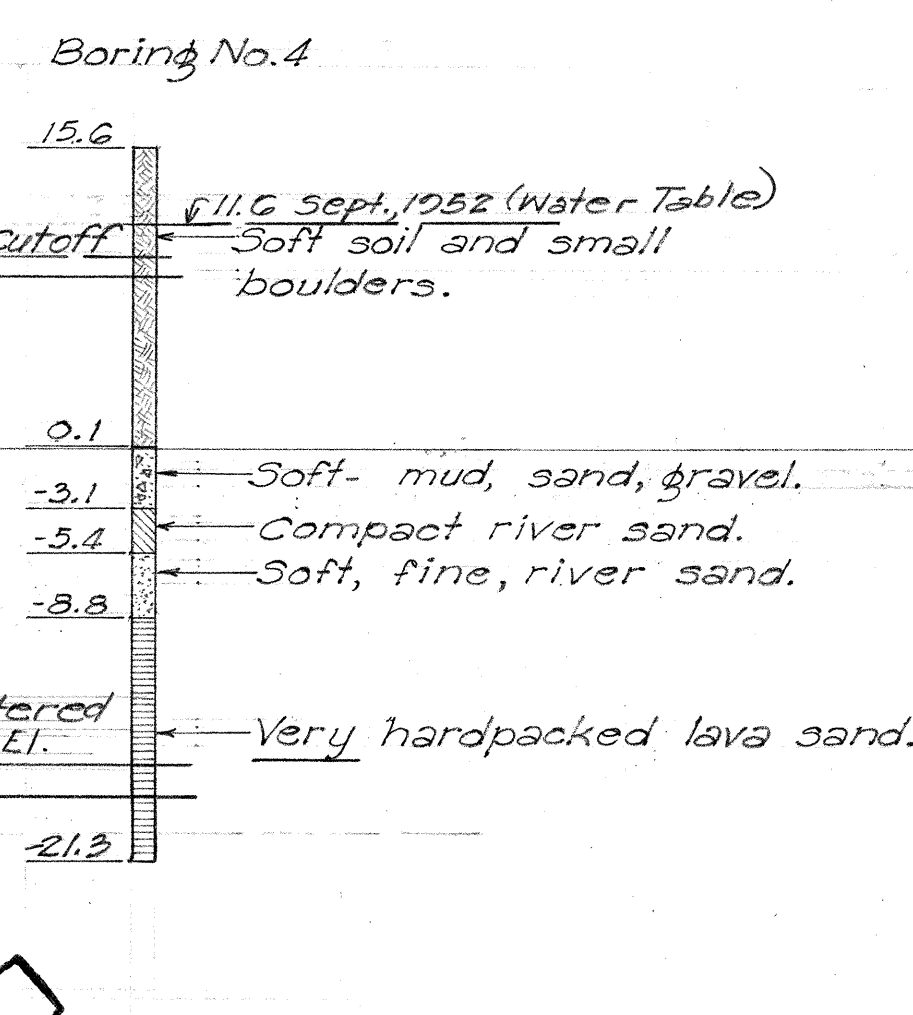
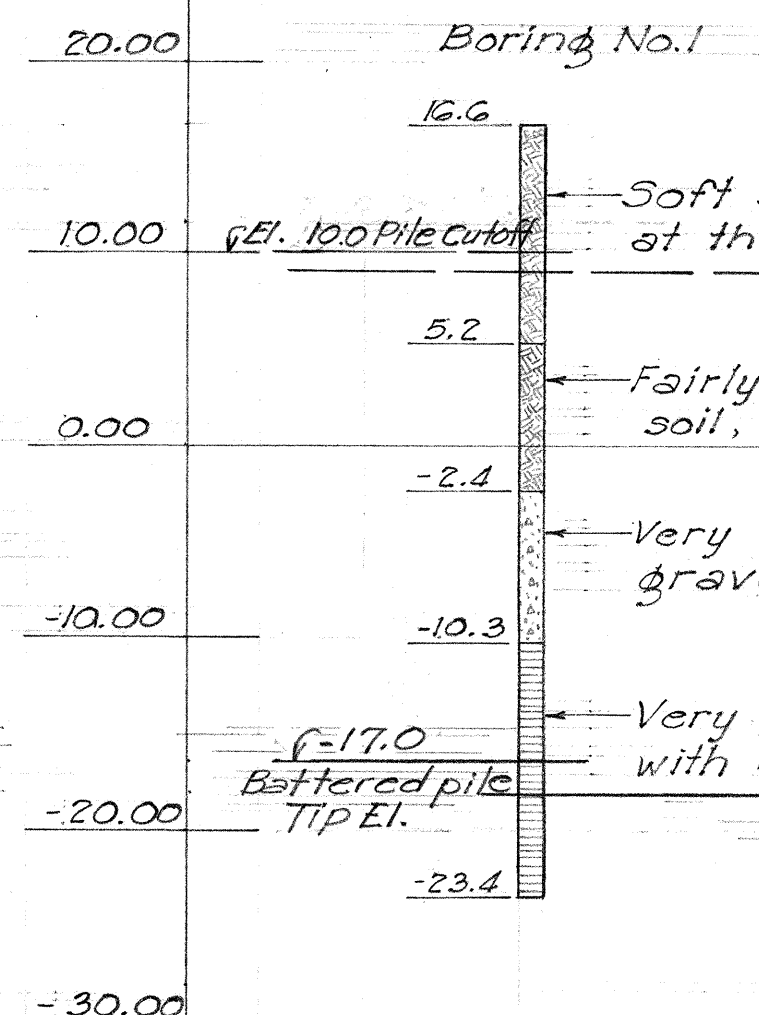
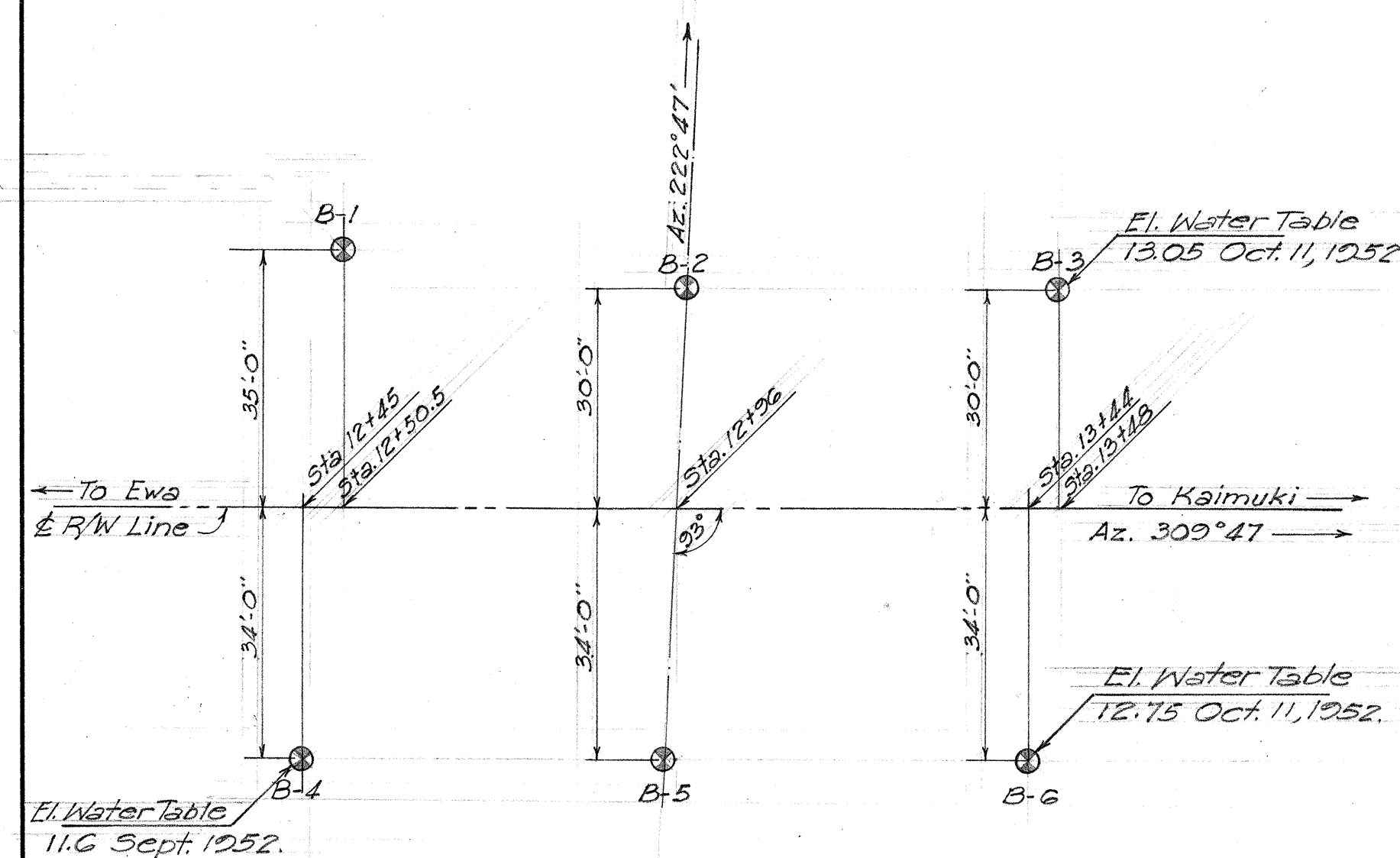
ELEVATION B-B
Scale 3/8\"/>

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
PALO MANOA STREAM BRIDGE
ON WAIALAE ROAD
Sta. 12+42.83 to Sta. 13+52.17
MAUKA ARTERIAL
FED. AID URBAN PROJECT NO. U50(5)
Oct. 1952
SHEET No. 6 OF 8 SHEETS

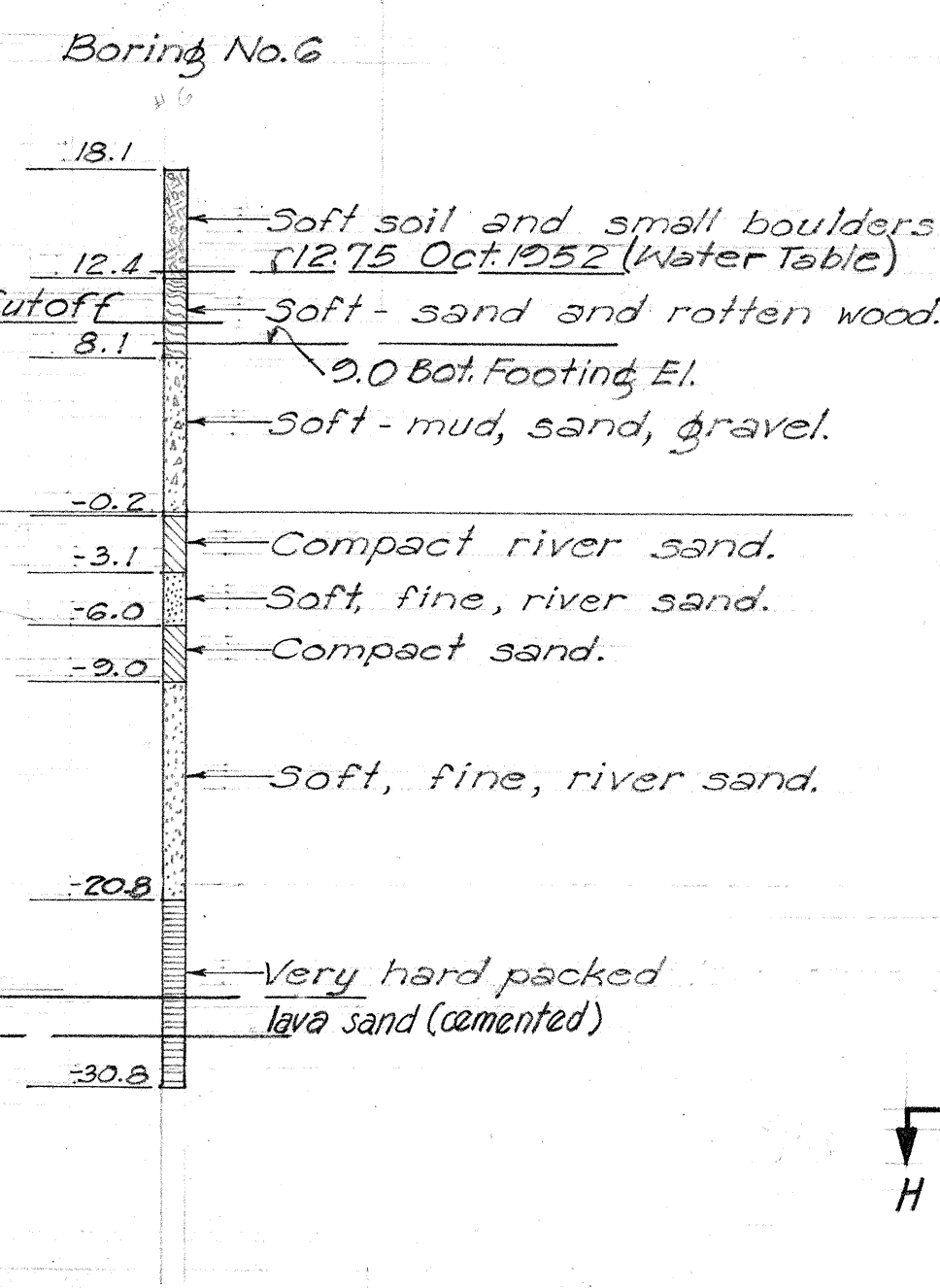
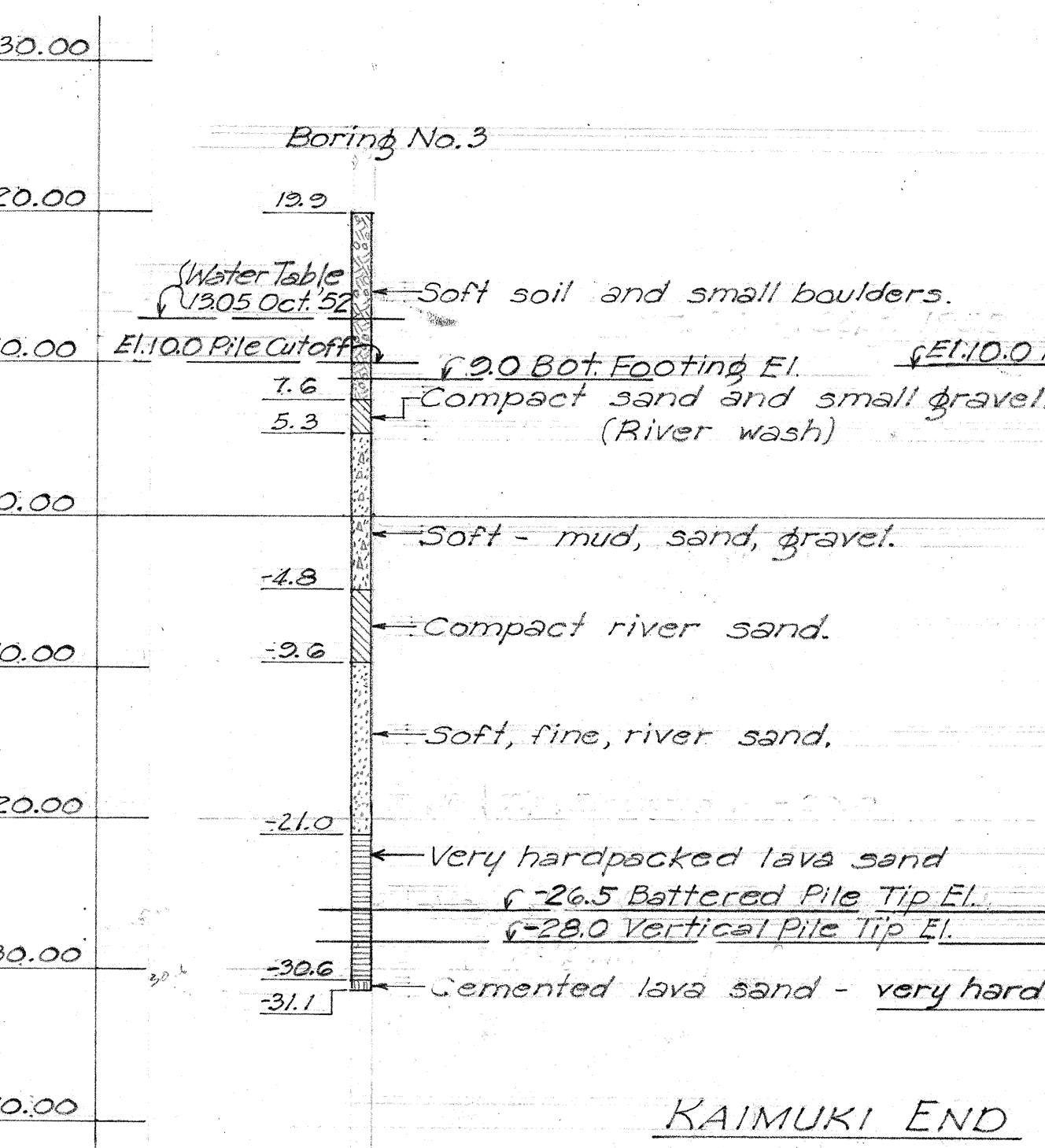
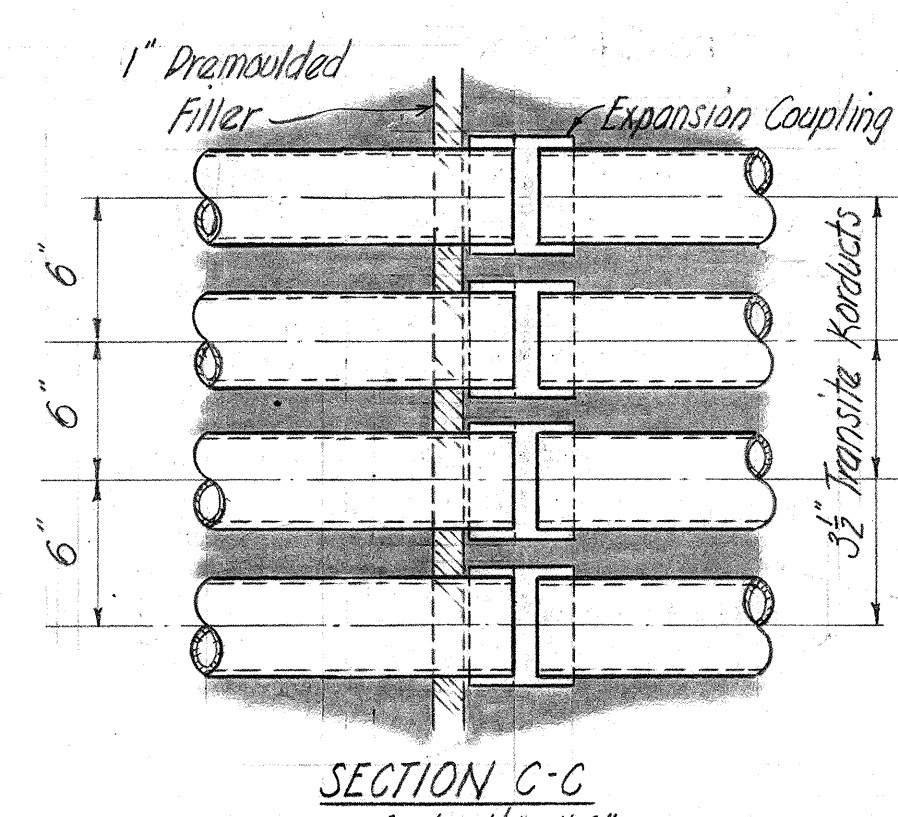
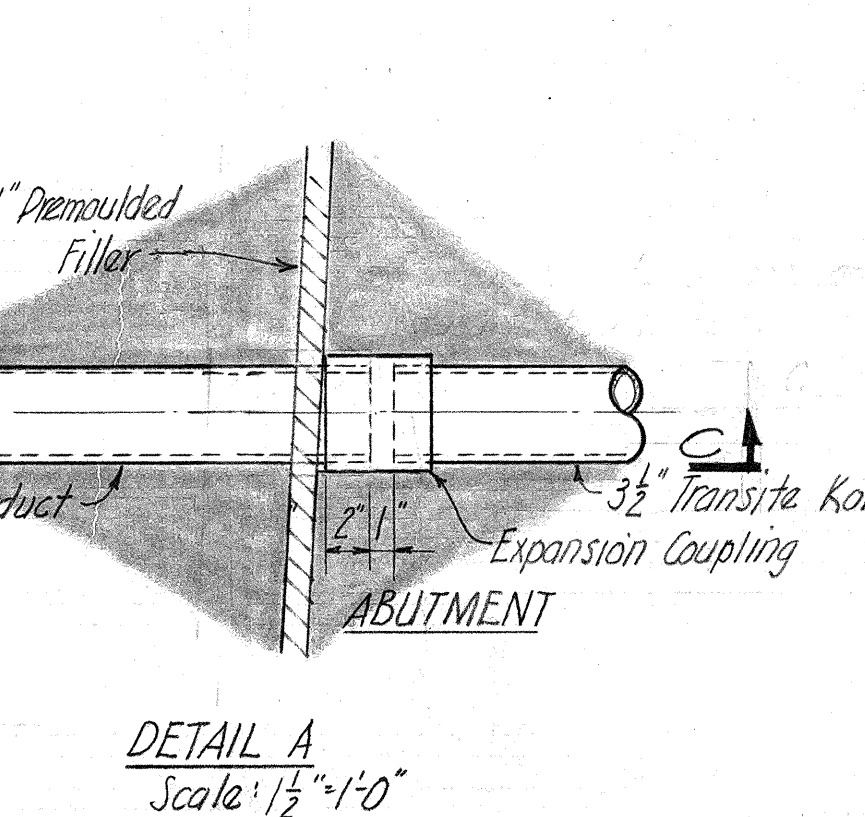
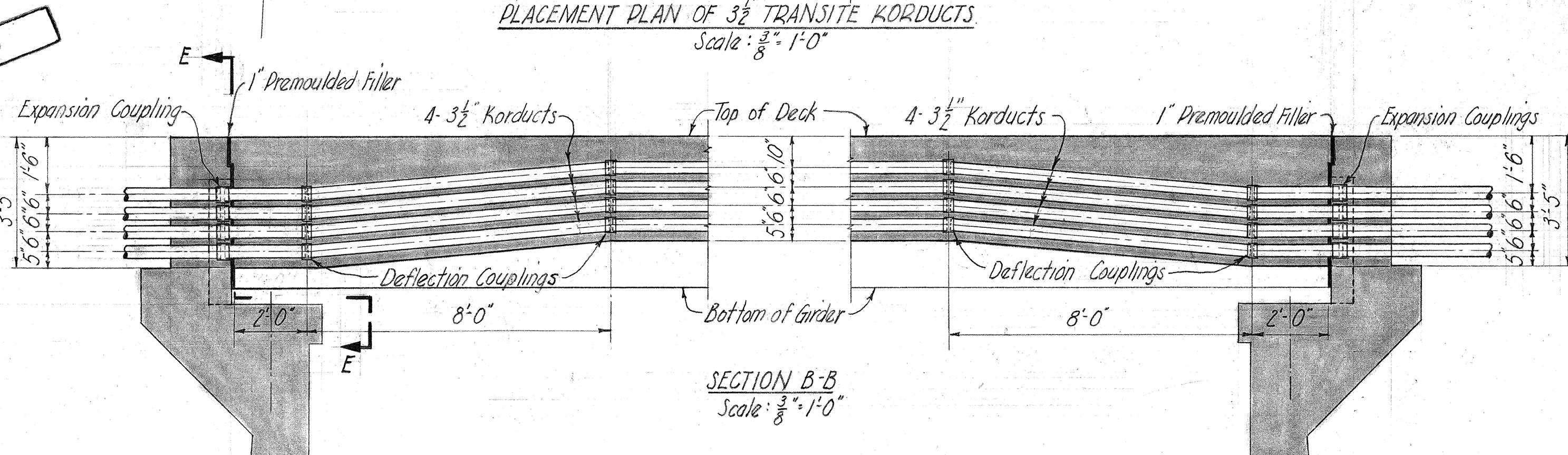
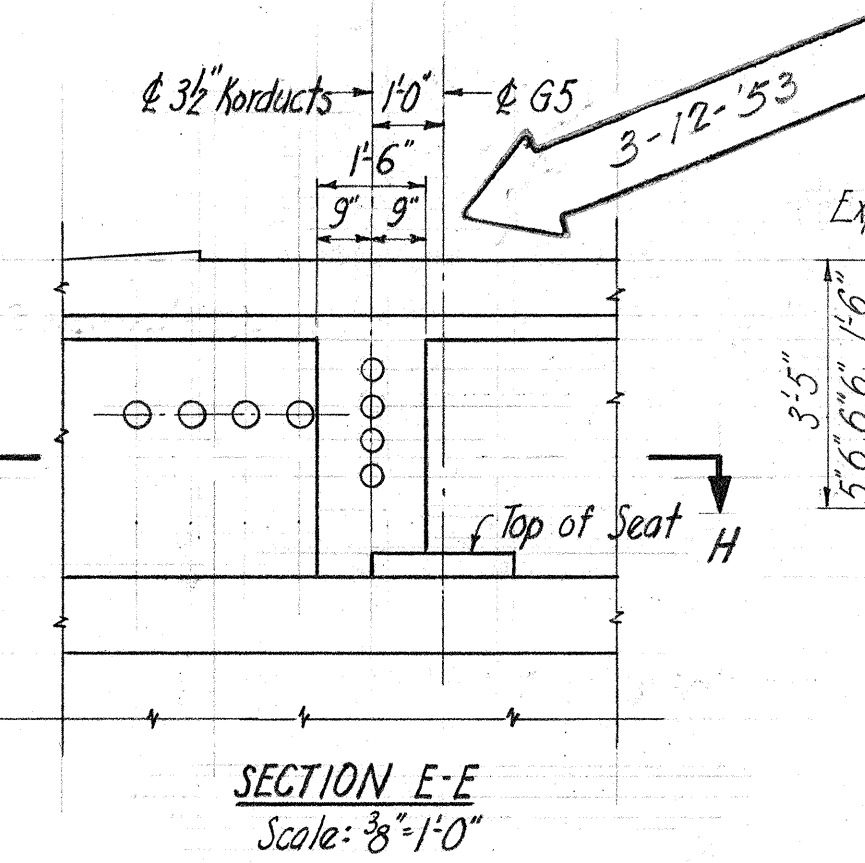
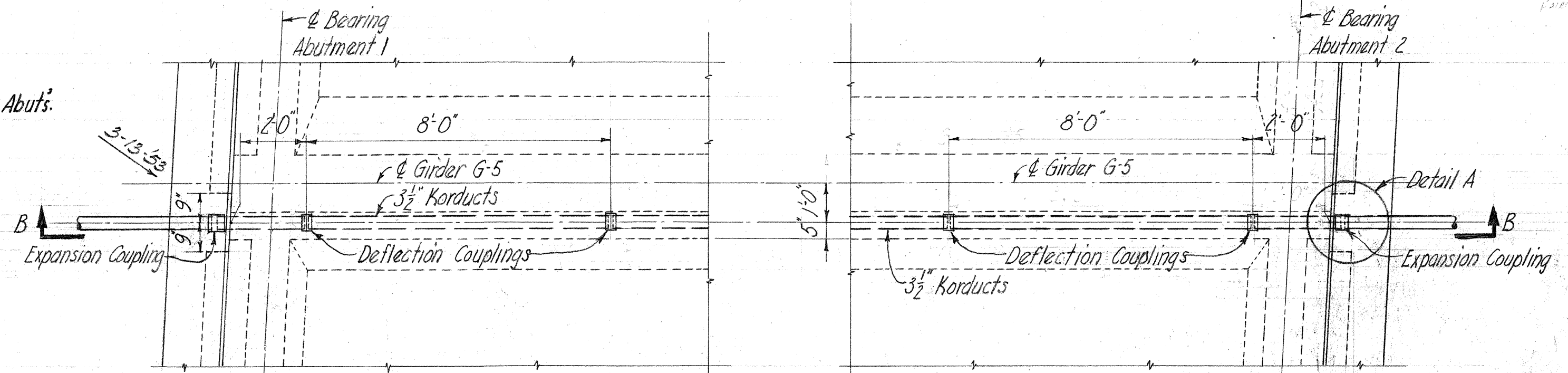
5626.10

3-12-53

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAWAII	U59(6)	1952	11	12



BORING DATA
Scale: 1"=10'-0"



ESTIMATED QUANTITIES

Location	Super. Structure	Sidewalk	Abutment #1	Abutment #2	Pier	Total
Class "A-1" Conc.	304 cu.yd.	51 cu.yd.	176 cu.yd.	175 cu.yd.	143 cu.yd.	849 cu.yd.
Reinf. Steel	8,182 lbs.	217 lbs.	12,054 lbs.	14,054 lbs.	5,322 lbs.	115,603 lbs.
Struct. Exc.			480 cu.yd.	685 cu.yd.	95 cu.yd.	1,260 cu.yd.
Dampproofing			245 sq.yd.	265 sq.yd.		510 sq.yd.
Filter Material			77 cu.yd.	61 cu.yd.		138 cu.yd.
C.R.M.						12.5 cu.yd.
Untreated Timber Piles						5430 lin. ft.
Conc. Railing (End Post included)						232.3 lin. ft.
1/2" A.C. Pav't						38.1 tons
Emulsified Tack Asphalt (Cost)						110 gal.
Bronze Bearing & Expansion Plates						1,260 lbs.
Class "D-1" Conc.						32 cu.yd.

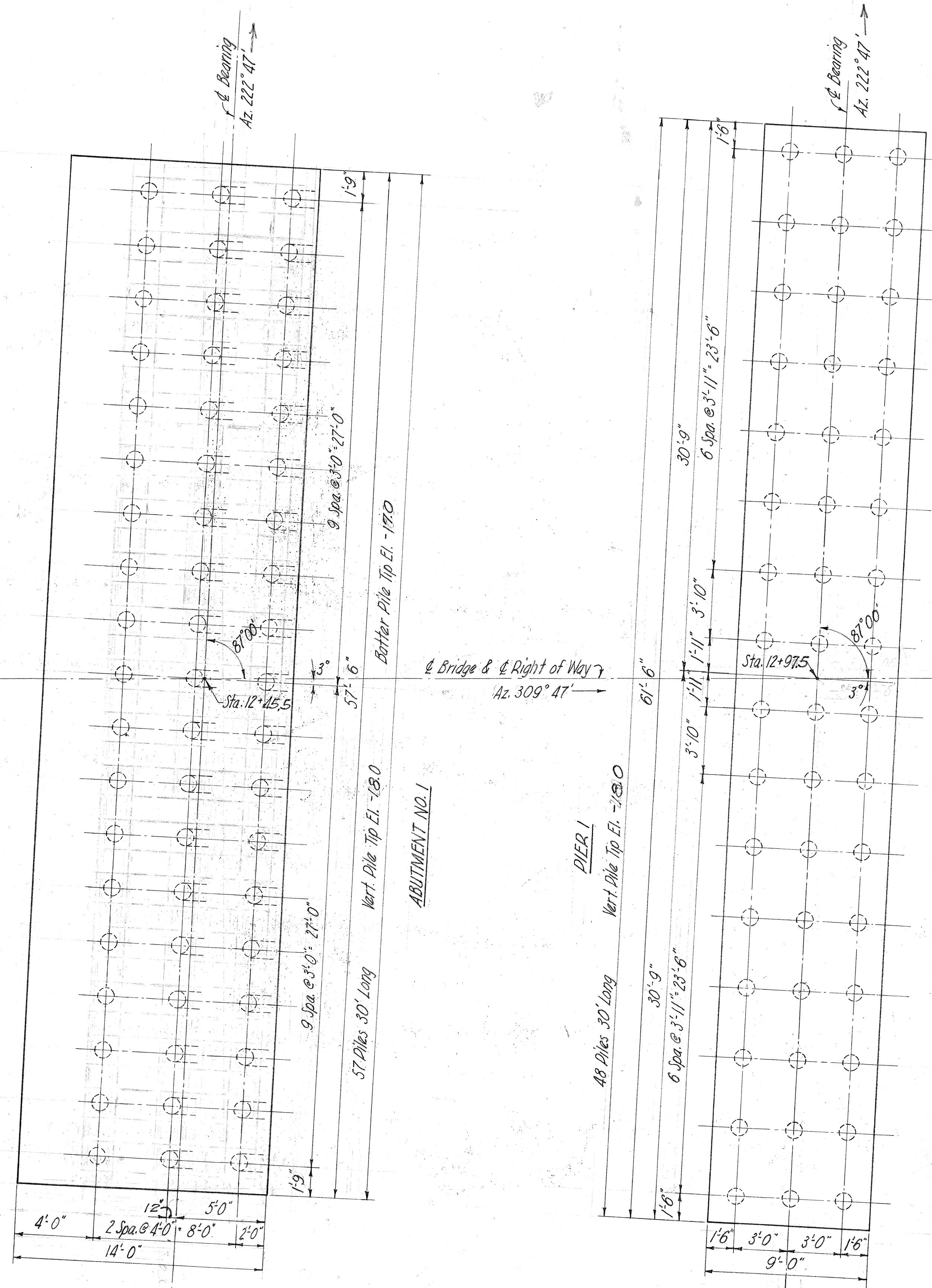
TERRITORIAL HIGHWAY DEPARTMENT
 TERRITORY OF HAWAII
PALOLO MANOA STREAM BRIDGE
 ON WAIALAE ROAD
 Sta. 12+42.83 to Sta. 12+52.17
MAUKA ARTERIAL
 FED AID URBAN PROJECT NO U59(6)
 Oct. 1952.

SHEET No. 7 OF 8 SHEETS

3626.11

SURVEY PLOTTED BY: [Name]
 DRAWN BY: [Name]
 CHECKED BY: [Name]
 DATE: [Date]
 ORIGINAL PLAN NO. [Number]
 NOTE BOOK NO. [Number]

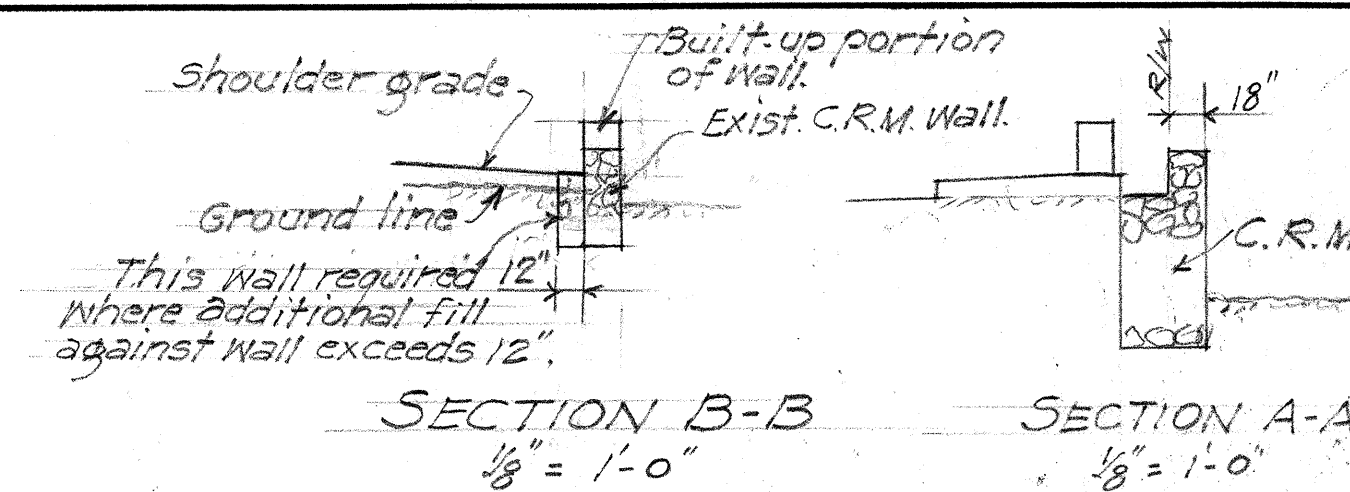
SURVEY PLANNED BY	DATE
DESIGNED BY	10/12/52
DRAWN BY	10/12/52
CHECKED BY	10/12/52
NOTE BOOK	
QUANTITIES CHECKED BY	
CHECKED BY	
NO.	



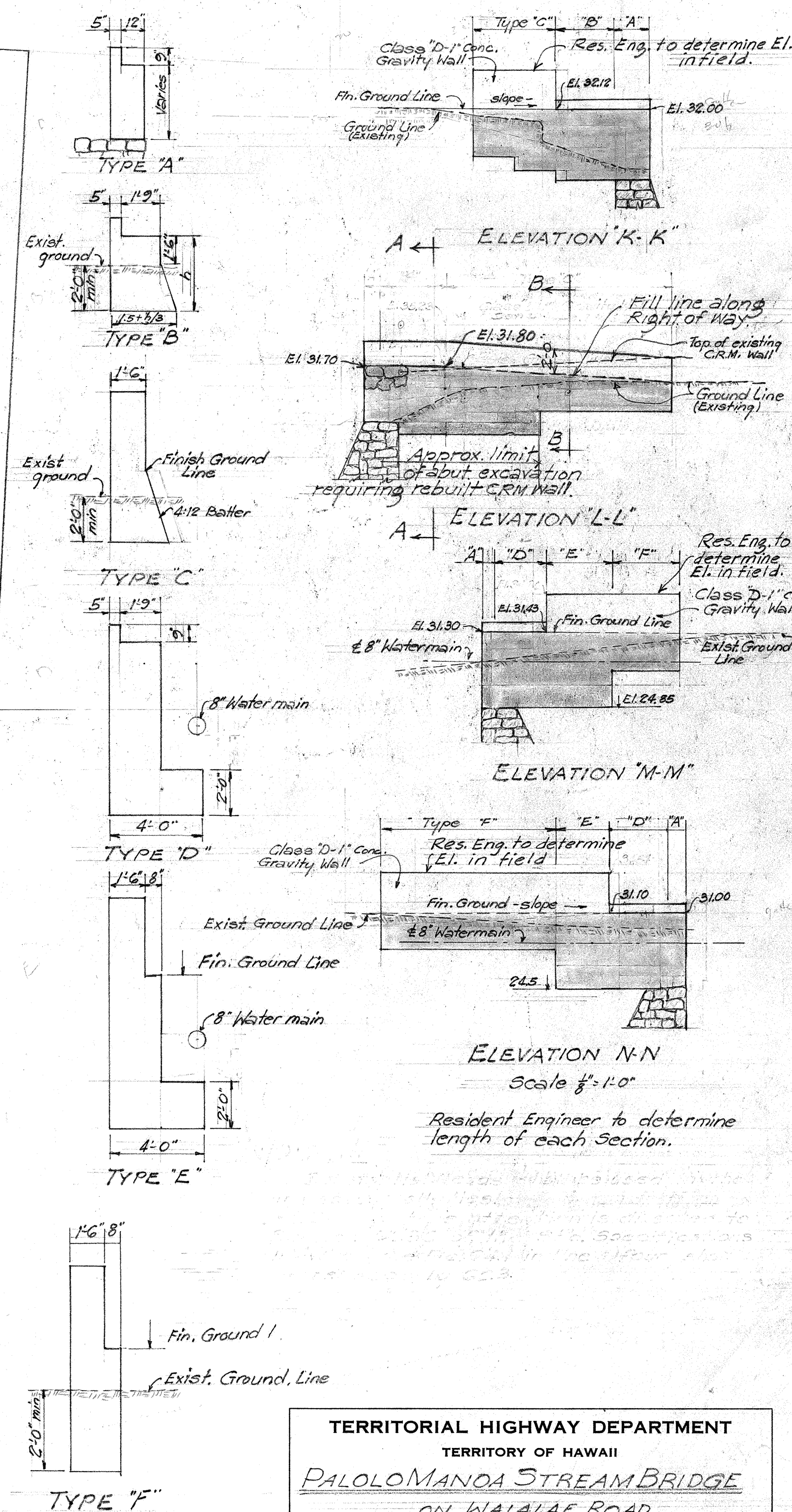
PILE AND FOOTING PLAN
Scale: 1/4" = 1'-0"

NOTE: Footing dimensions shown above are measured at pile cutoff.

Note: Substantial leads shall be used in the driving of all piles.
Contractor's attention is directed to Section 62.3C on page 278 of the Std. Specifications in which the Figure 641 in the four (4) must be replaced by 62.3.
All piles shown are untreated timber piles.



PILE SCHEDULE	
Number	Length
105	30'
57	40'



TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
PALOLOMANOA STREAM BRIDGE
ON WAIALAE ROAD
Sta. 12+42.83 to Sta. 13+52.17
MAUKA ARTERIAL
FED. AID URBAN PROJECT NO. U59(5)
Oct. 1952

SHEET No. 8 OF 8 SHEETS

5626.12