

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

GENERAL NOTES:

A. Design Data

1. Design Load

H 20 S-16-44

2. Cast in Place Conc.

$f'_c = 20,000$ psi

$f'_c = 12,000$ psi

$n = 10$

3. Prestressed Beam

$f'_c = 6,000$ psi 28 days

$f'_c = 9,700$ psi @ transfer

f'_c of strands -

Tensioning Load = 16,500# per

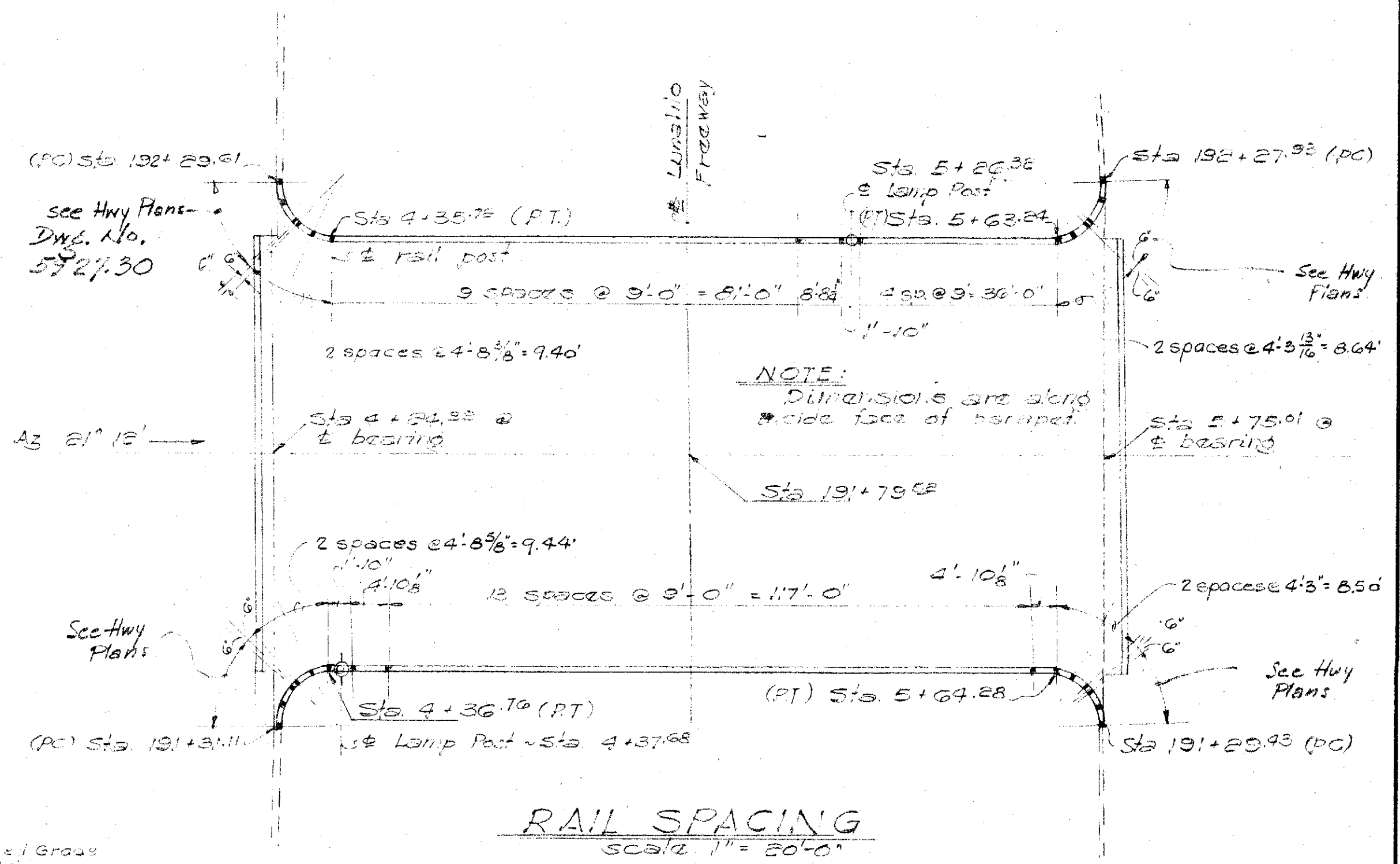
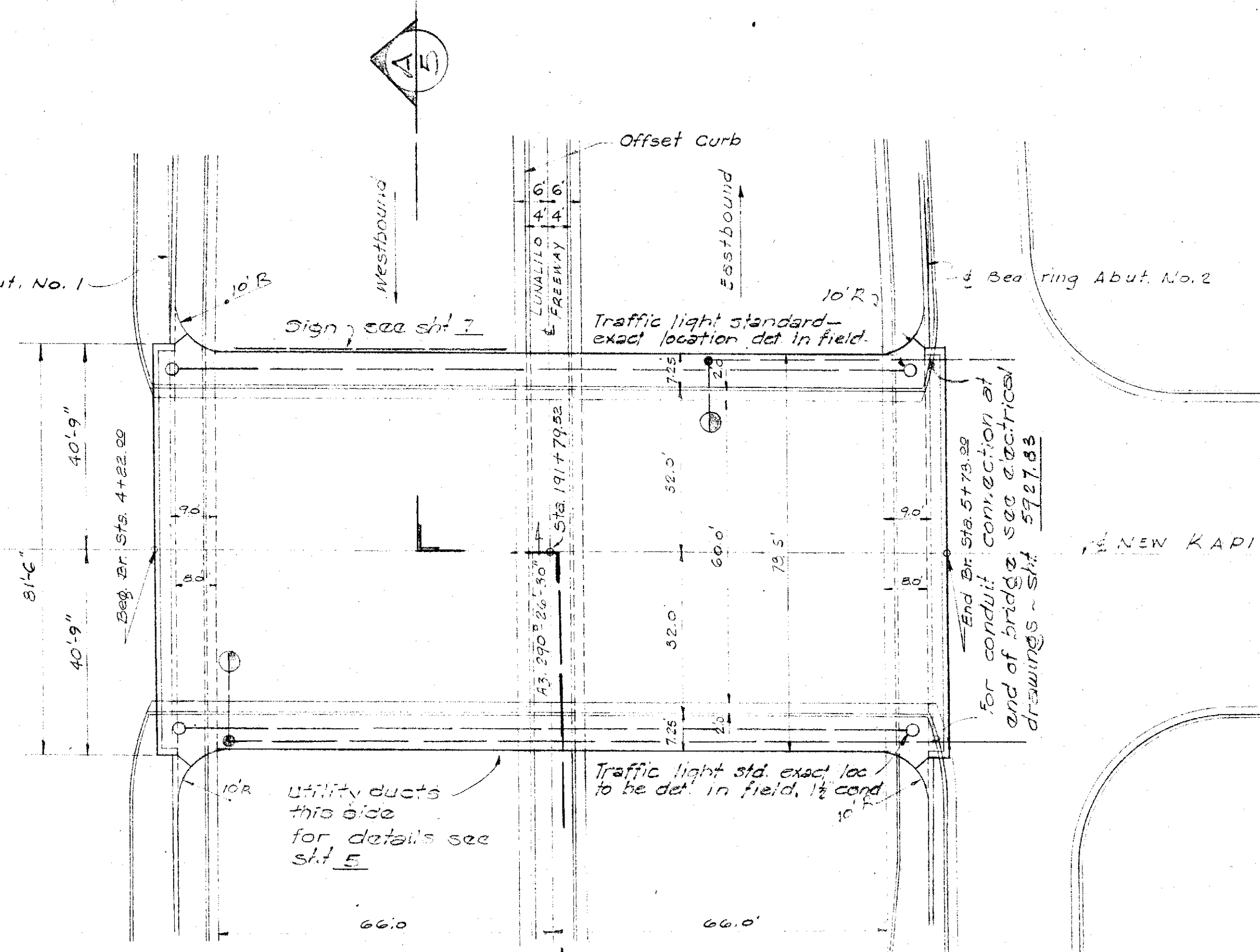
Design Load = 15,120# strand

B. Construction Methods

1. All footings shall be excavated & poured to next line
2. All back-fill behind abutments shall be completed in place before placing prestress beams (see note B-2)
3. Curb & railing shall not be poured until deck slab has gained sufficient strength to be determined by resident engineer
4. Finishes - see standard specifications

ESTIMATED QUANTITIES	
PRESTRESSED CONC. GIRDERS	1,390.9 LINS
CONCRETE INCLUDING PARAPETS	LUMP SUM
REINFORCING STEEL	LUMP SUM
STRUCTURAL EXCAVATION	1,390 CUYDS
A.C. MIX NO. IV	117 TONS
FILTER MATERIAL	347 CUYDS
TACK COAT	253 GALS
ALUMINUM RAIL	290 L.F.

NOTE!
For horizontal control
see Highway Plans
Dwg. No. 5927.30



NOTE: For conduits & R.C. jacket detail see sheet 7

NOTE: Details of construction joint of parapet & sidewalk see Part 5. Also for lamp post, & 2" min. rails.

Soil press. = 6.83 ksf
Group I Loading D+L+I

Soil press. = 6.83 ksf
Group I Loading D+L+I

Soil press. = 6.83 ksf
Group III Loading D+E+EQ

LONGITUDINAL SECTION ALONG ROADWAY

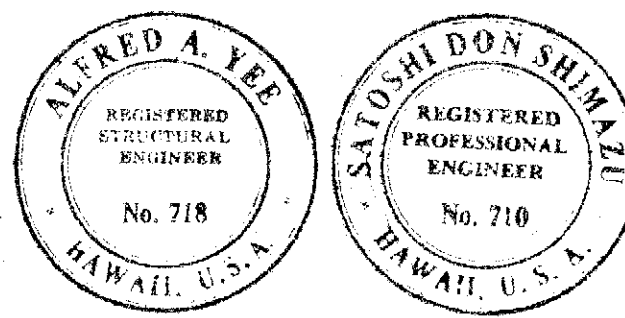
Scale: 1" = 20'-0"

CONSULTANT SUBMISSION

SHEET No. 1 OF 6 SHEETS

5927.181

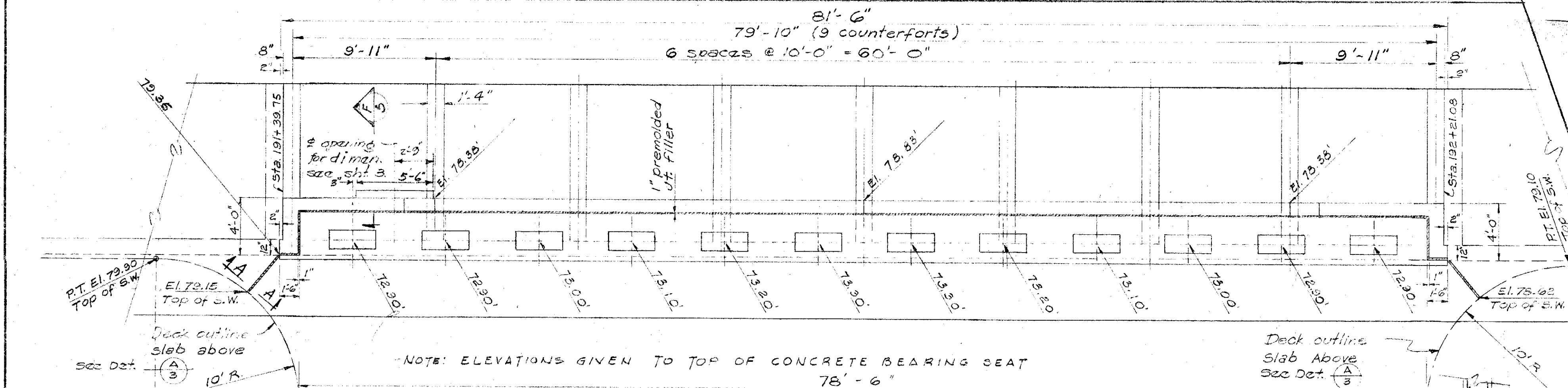
DATE	11/11/11
SURVEY PLOTTED BY	ALFRED A. YEE
ORIGINAL PLAN	NO. 1
TRACED BY	ALFRED A. YEE
QUANTITIES CHECKED BY	ALFRED A. YEE
NOTE BOOK	NO. 1
CHECKED BY	ALFRED A. YEE



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DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
KAPIOLANI STREET CROSSING
STA. 121+70.32
LUNALILO FREEWAY
PROJECT NO. BU-072-1(4)

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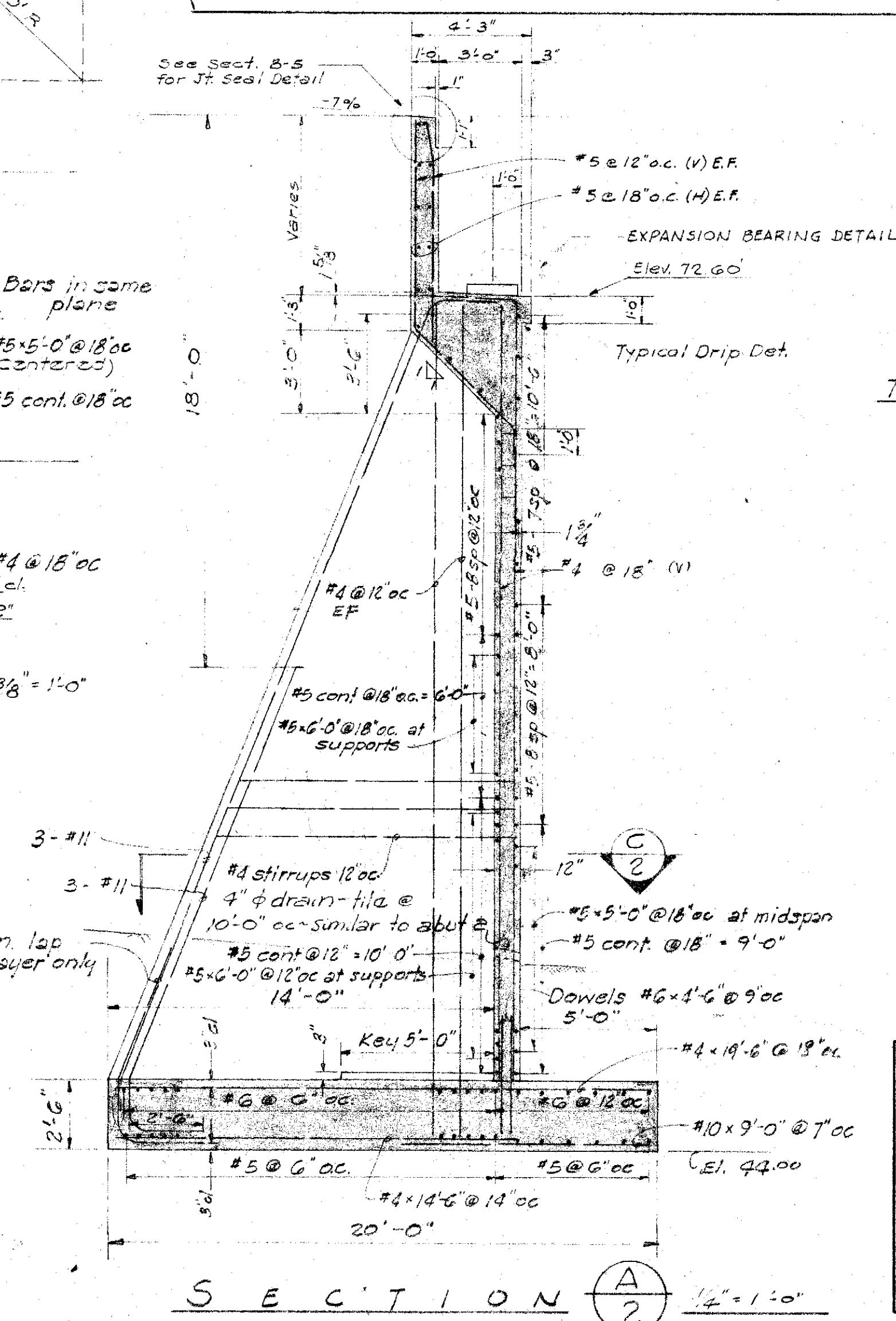
PLAN - MASONRY PLATE



FRONT ELEVATION

[illegible]

EXPAN. BEARING DETAILS



TYPICAL DRIP DETAIL
Scale: 3" = 1'-0"

SECTION $\left(\frac{A}{2} \right)$ $\frac{1}{4}'' = 1'-0''$

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

Abutment no. 1

Abutment no. 2

NOTE: ALL ELEVATIONS GIVEN TO TOP OF CONC. PAD

PLAN - PIER CAP

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

SEE PLAN

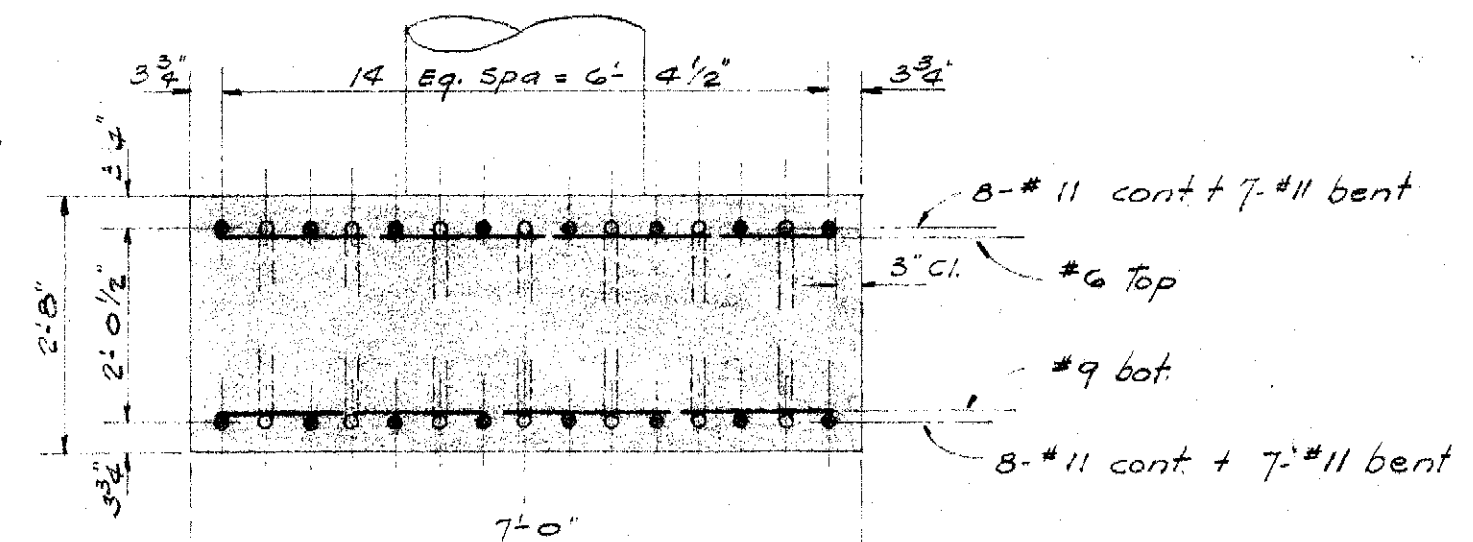
See Sheet No. 3 for bal. of Fixed Bearing Details

DETAIL 1/4 1/2" = 1'-0"

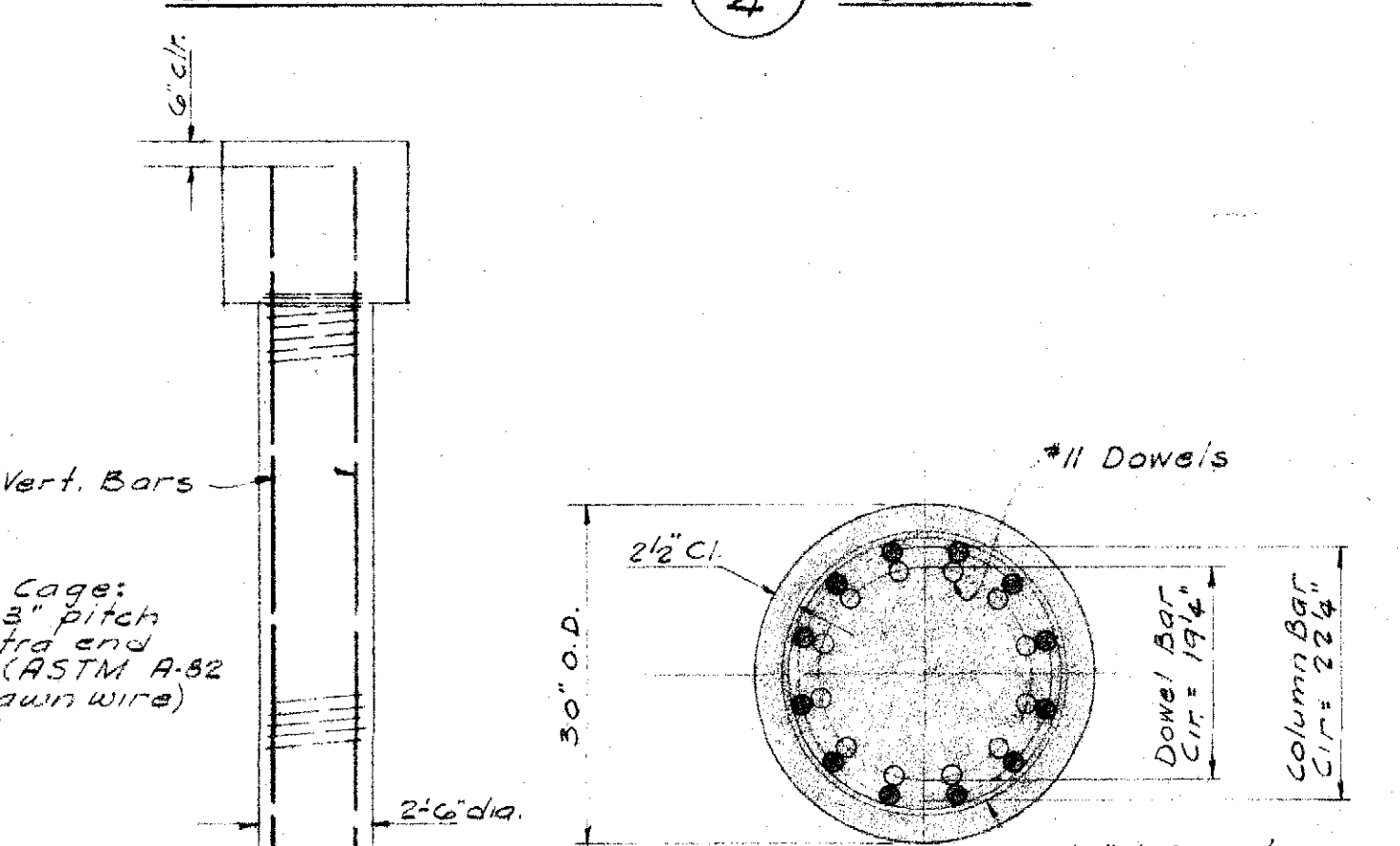
See Detail Typical 1/4

See Plan for Elevation

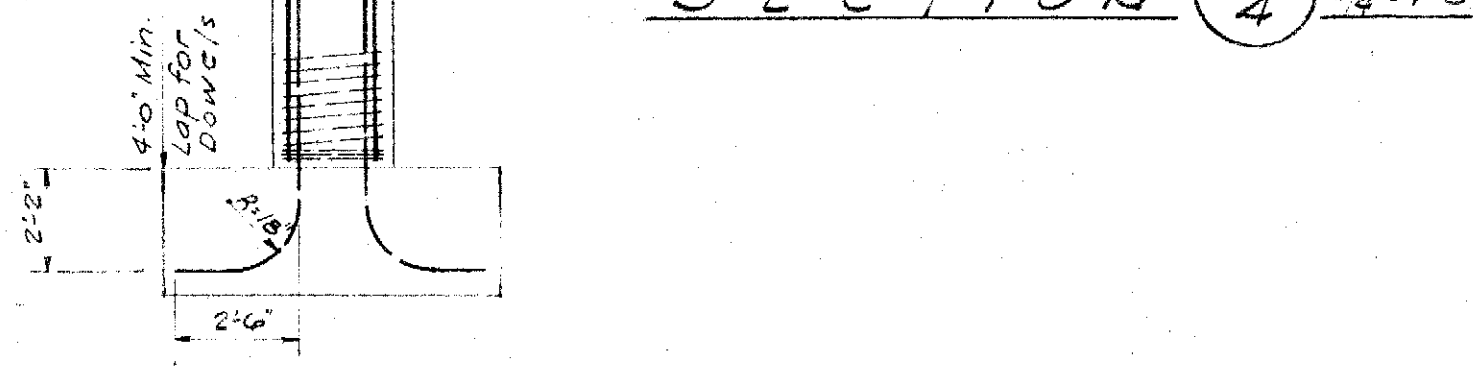
SECTION E 1/2" = 1'-0"



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



SECTION C 3/4" = 1'-0"



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

TYPICAL

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STUDY DON SHIMAZU
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No. 710
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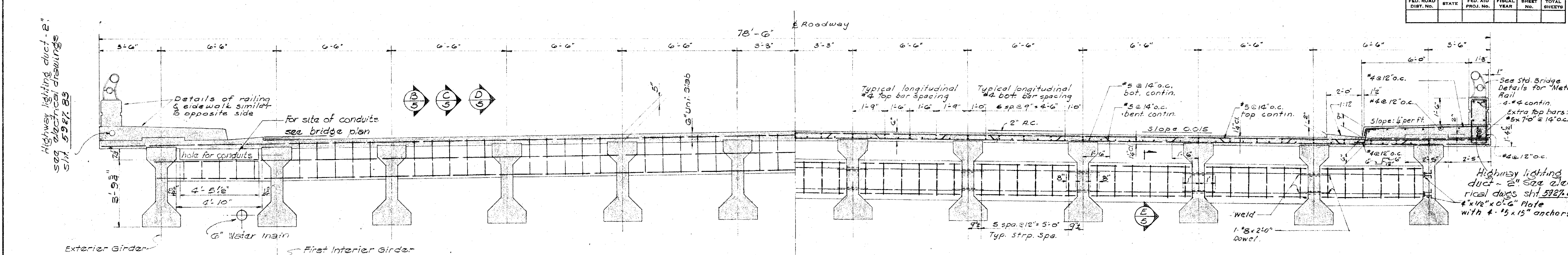
SHEET NO. 4 OF 6 SHEETS

CONSULTANT SUBMISSION

5927.184(179)

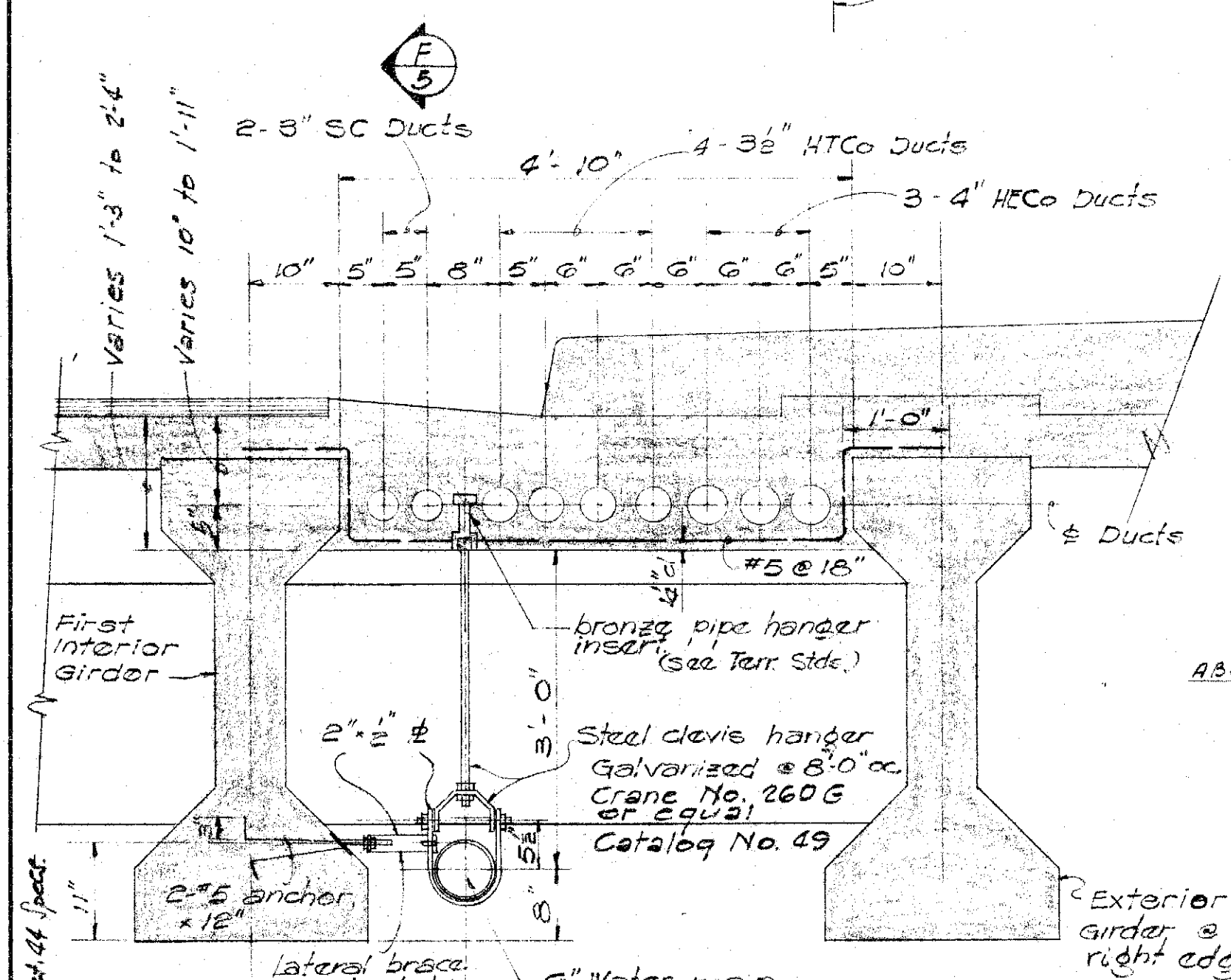
DATE: _____
SURVEY PLOTTED BY: _____
ORIGINAL PLAN: _____
TRACED BY: _____
NOTE BOOK: _____
QUANTITIES CHECKED BY: _____
NO. _____

PRINTED ON DIEFOL 1000M CLEARPRINT

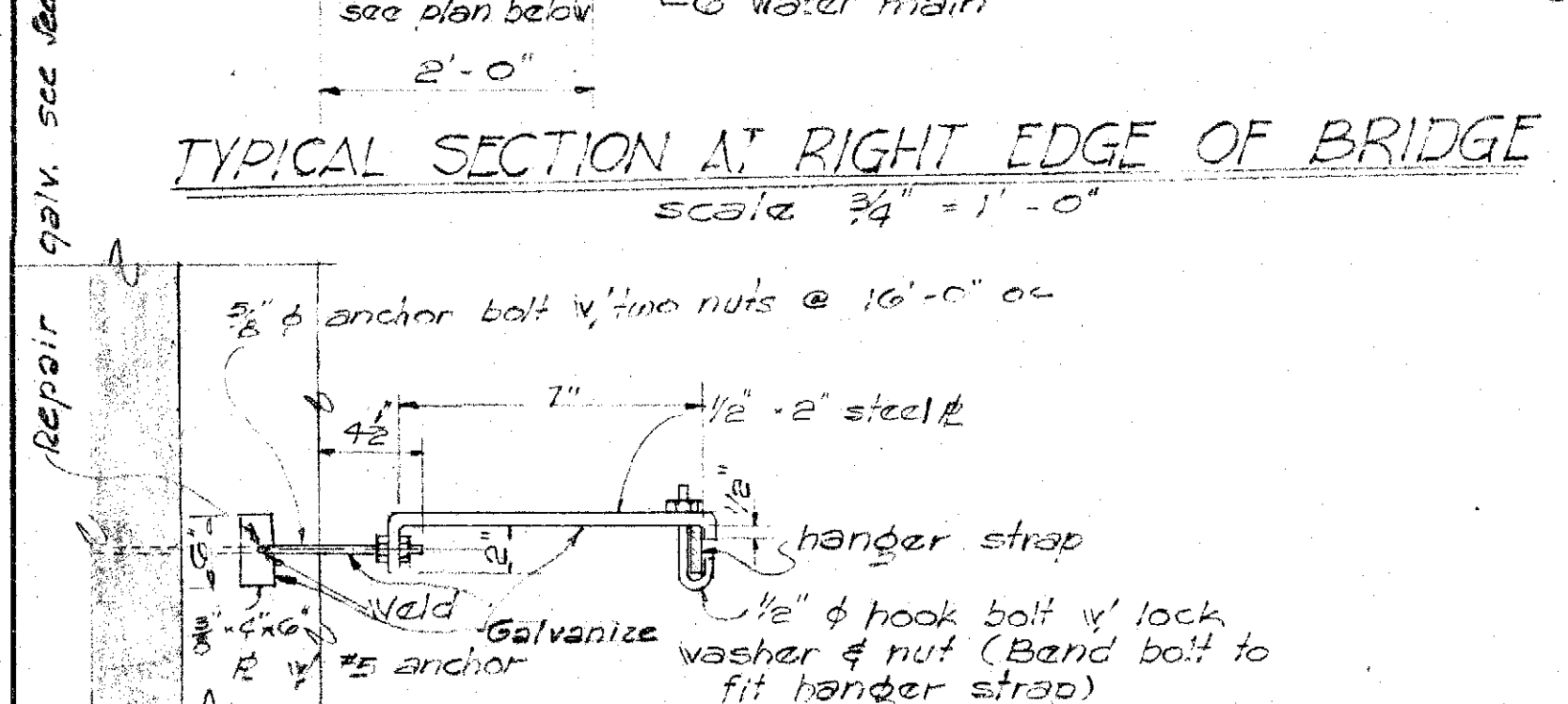
[illegible]

NORMAL SECTION $\left(\frac{A}{5} \right)$ $\frac{3}{8}'' = 1'-0''$ See sh.

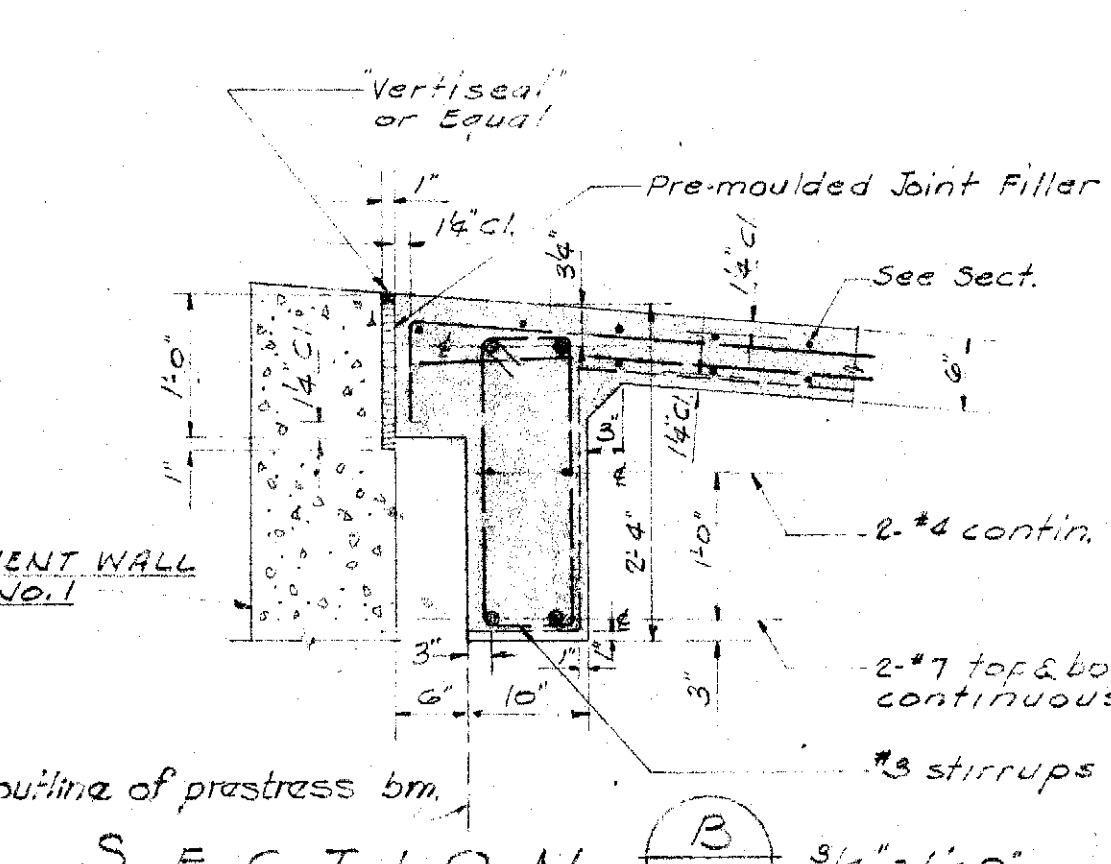
NOTE: All top strands in prestressed beam shall extend 6" from face of abut. bottom strands & bridge to be cutoff flush to beam & painted w/ asphalt base paint. --- 1" / 1/4"



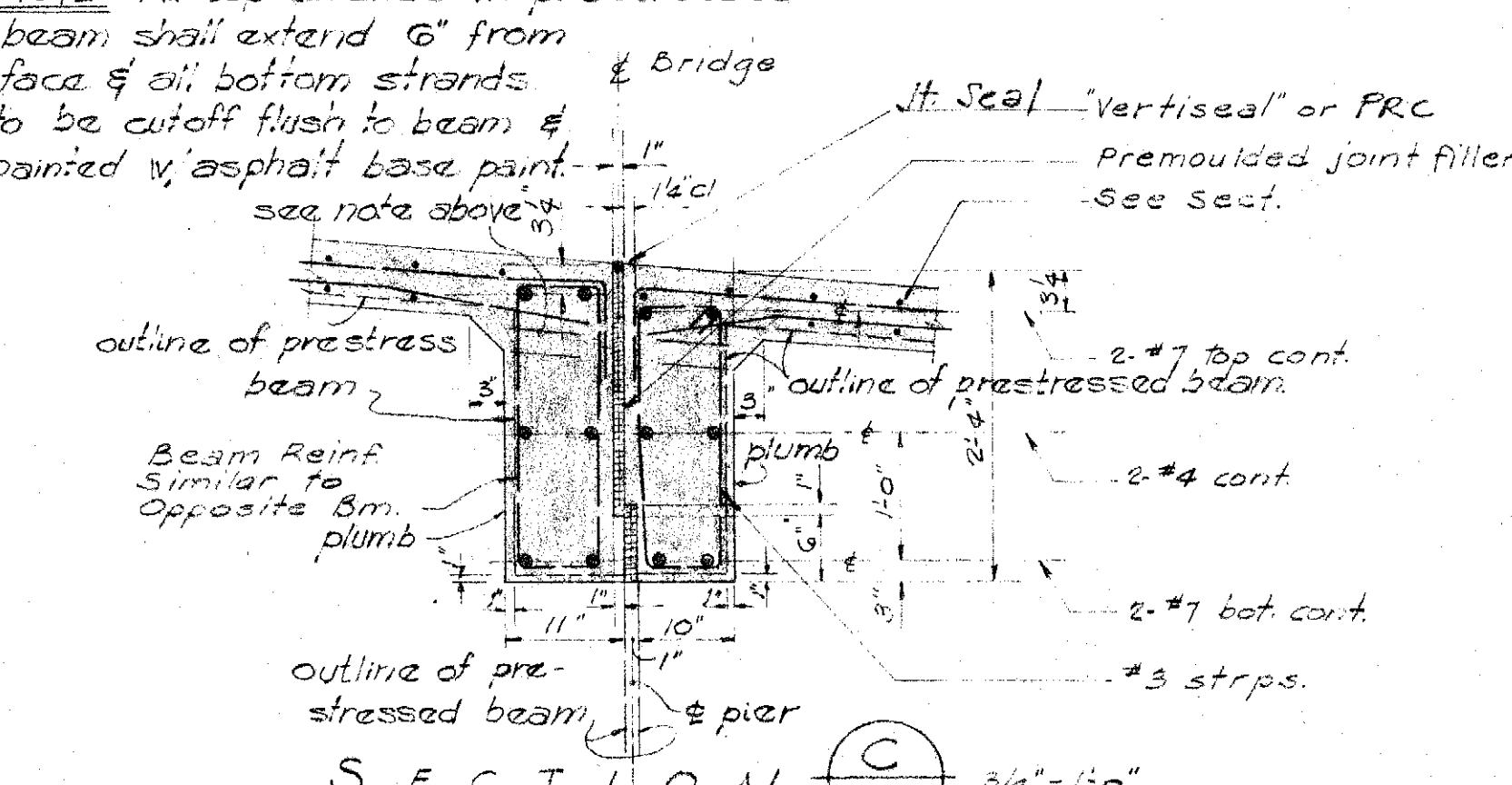
TYPICAL SECTION AT RIGHT EDGE OF BRIDGE



LATERAL BRACE PLAN
scale 1/4" = 1'-0"

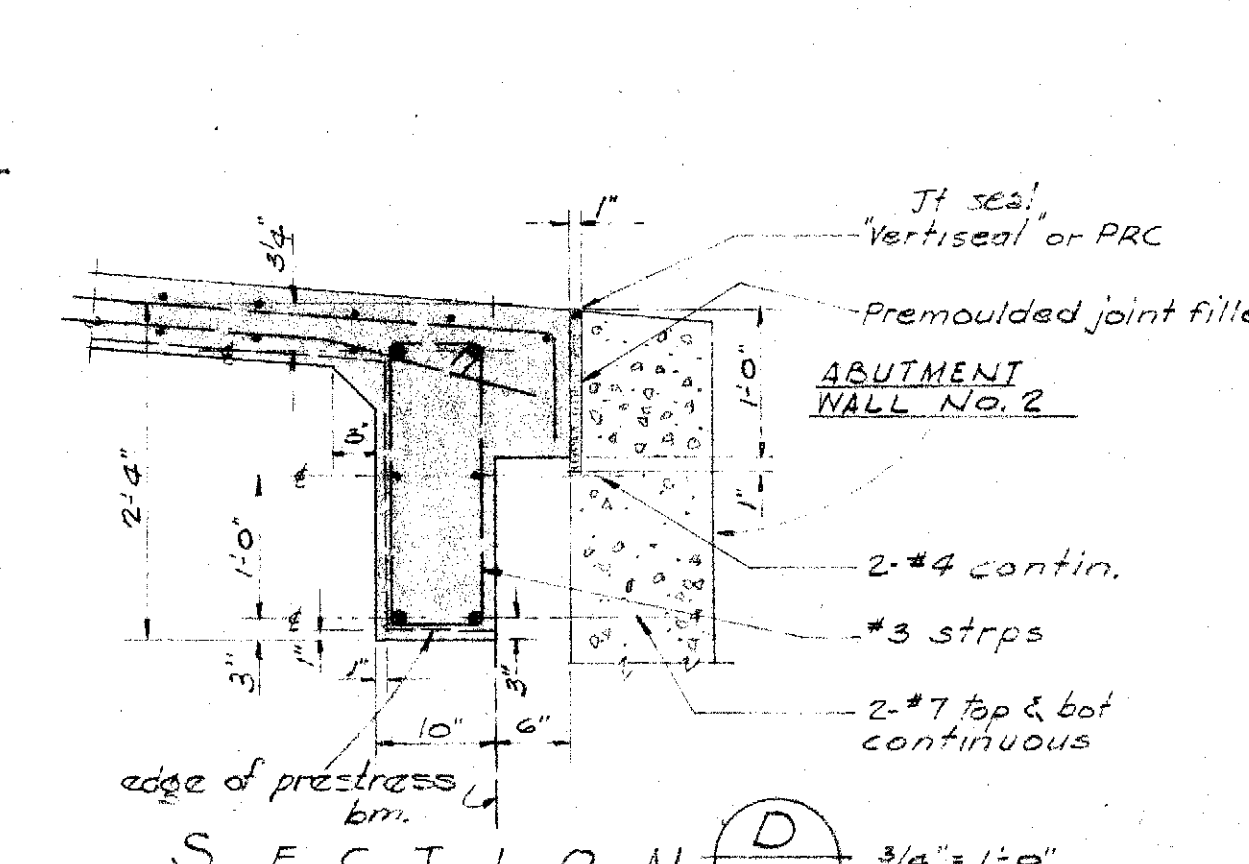


outline of prestress br. 3 stirr.
SECTION $\frac{B}{5}$ $\frac{3}{4}'' = 1'-0''$



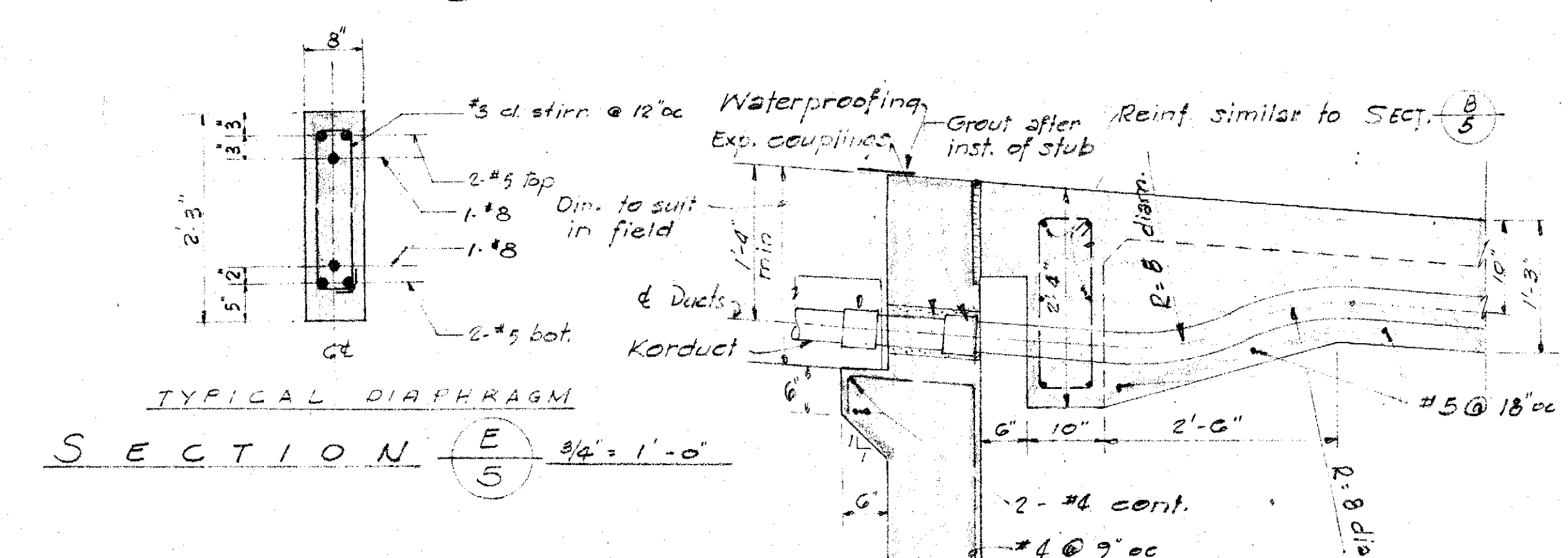
stressed beam pier

SECTION  $\frac{3}{4}'' = 1.0'$



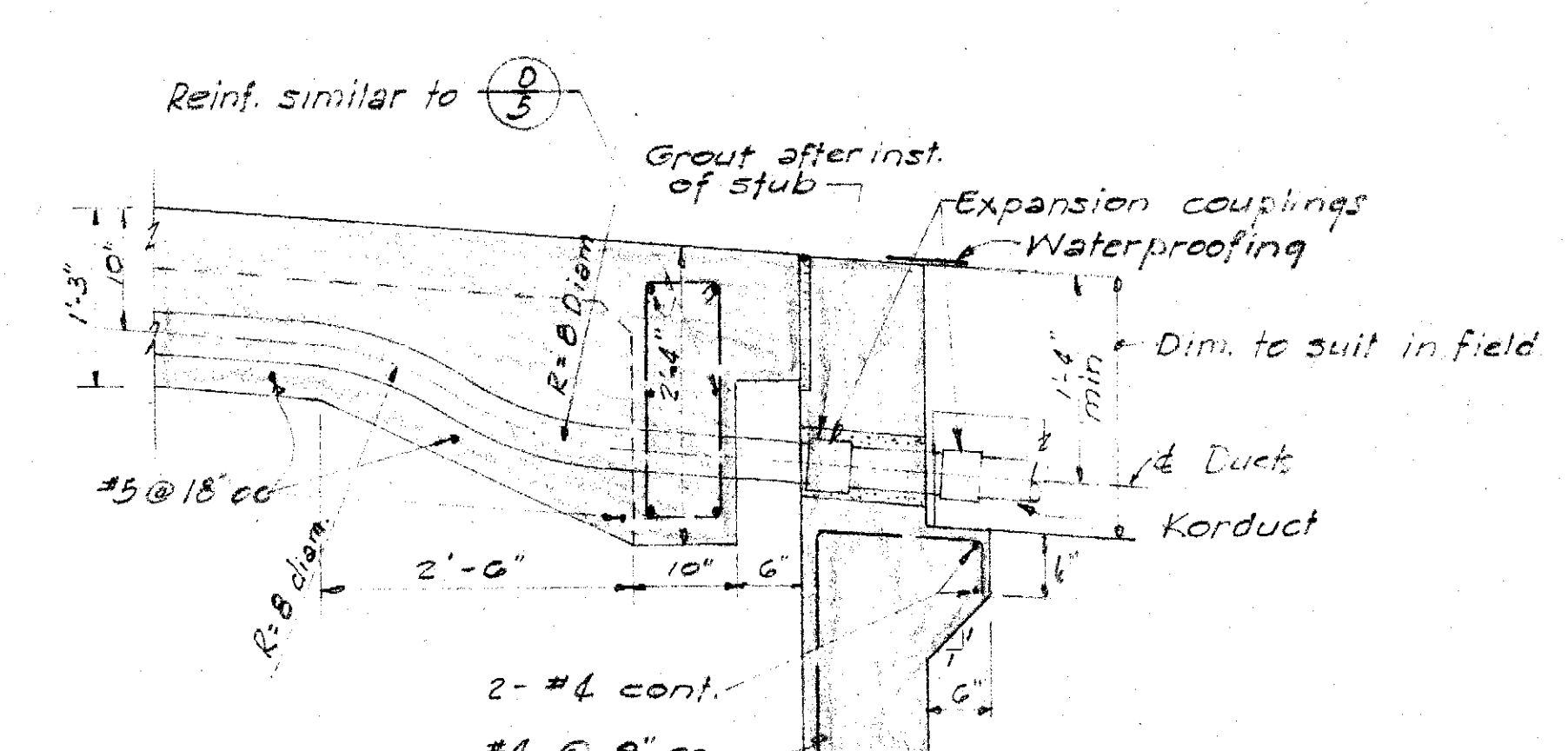
edge of prestress
b.m. $\frac{1}{4}$

SECTION $\frac{D}{5}$ $\frac{3/4" = 1.20$



TYPICAL DIAPHRAGM

SECTION $\frac{E}{5}$ $\frac{3}{4} = 1' - 0"$



SECTION $\frac{F}{5}$ $\frac{3}{4}" = 1' - 0"$

SECTION $\frac{F}{5}$ $\frac{3}{4}'' = 1'-0''$
ABT. #1
Work this sect. with $\frac{B}{5}$

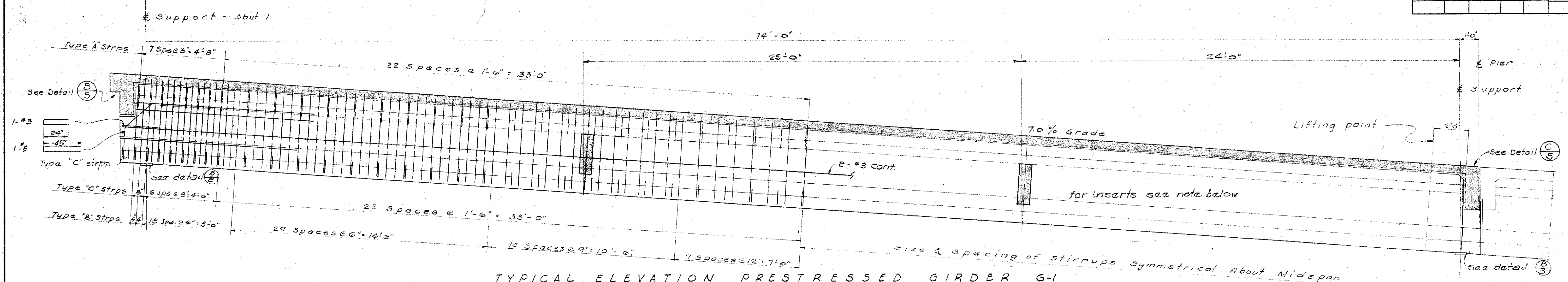
SECTION $\frac{F}{5}$ $\frac{3}{4}" = 1' - 0"$
 A.B.T. #2
 Work this sect with $\frac{D}{B}$

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PROJECT NO. 34-072-1(4)

SHEET No. 5 OF 8 SHEETS

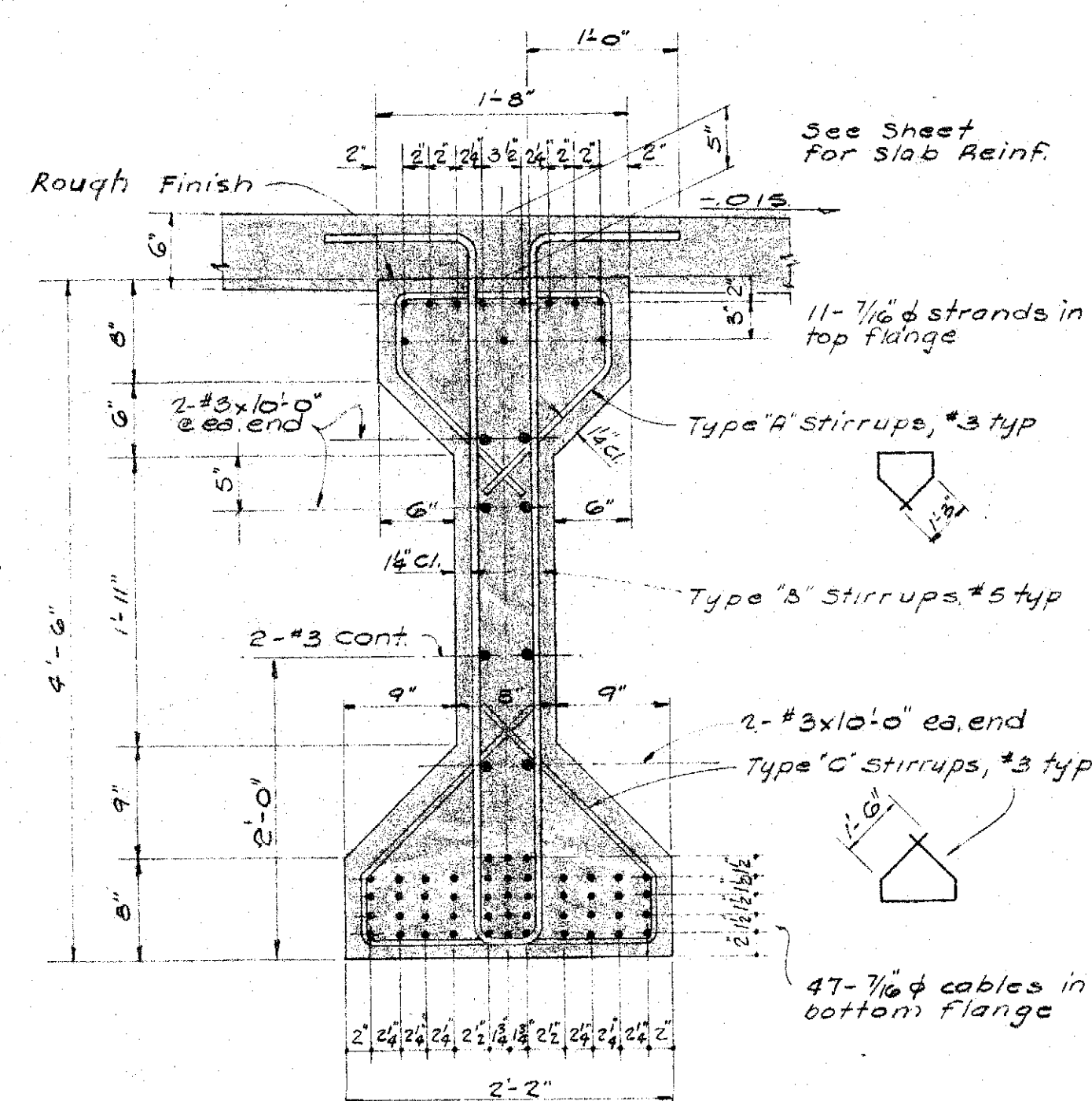
CONSULTANT SUBMISSION **5927.185** 180

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



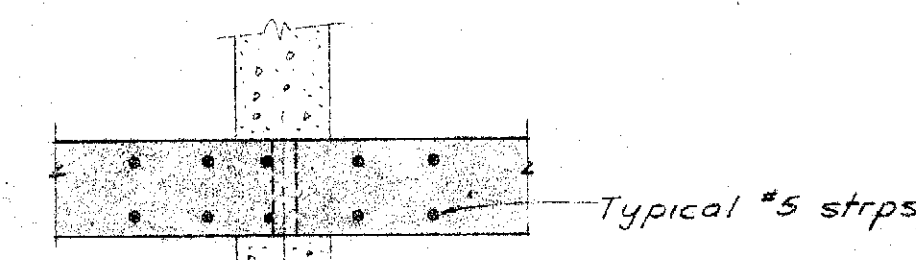
TYPICAL ELEVATION PRESTRESSED GIRDER G-1

DETAIL (A) 6 3'-0" x 1'-0"

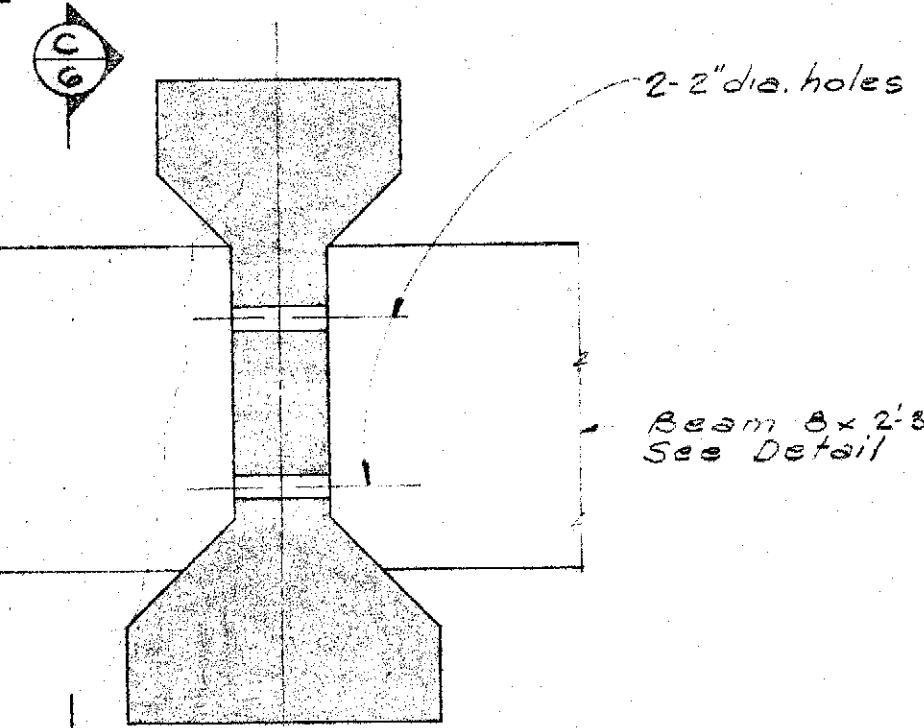


TYPICAL PRESTRESSED GIRDER SECTION

DETAIL (B) 6 1'-1'-0" (Except 1st interior girder-right side - see below)

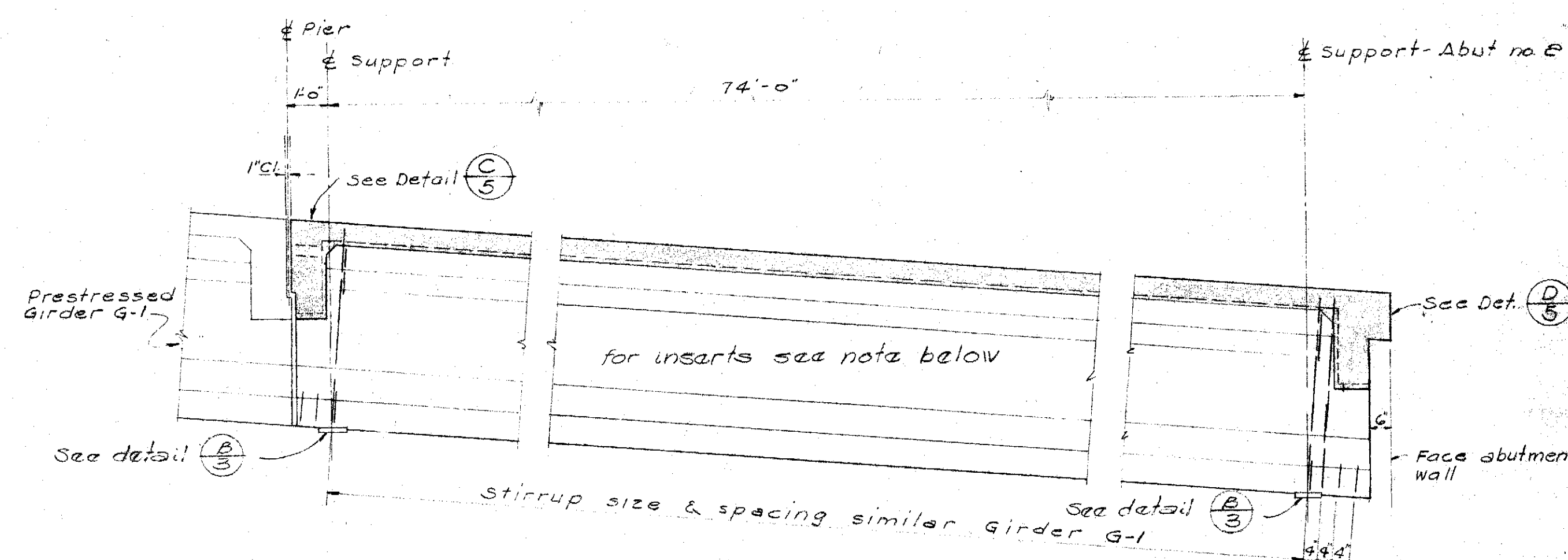


PLAN SECTION C-1 3'-0" x 1'-0"



SECTION C-2 3'-0" x 1'-0"

DETAIL (C) 6 3'-0" x 1'-0" SECTIONS THRU DIAPHRAGM STIFFENER



TYPICAL ELEVATION PRESTRESSED GIRDER G-2

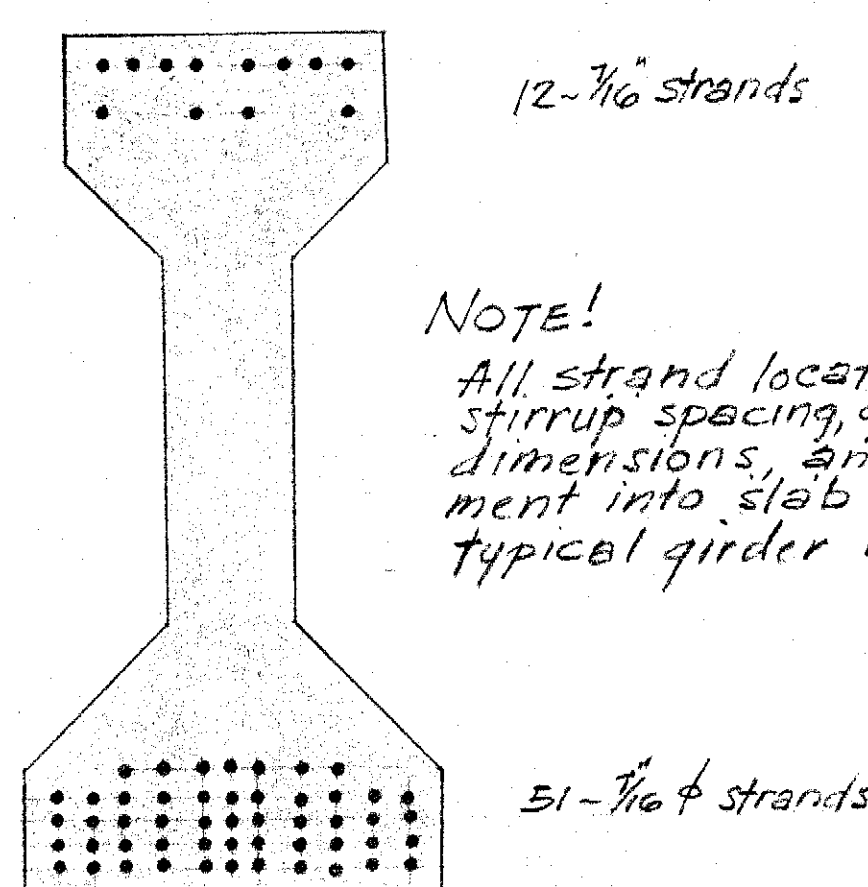
DETAIL (D) 6 3'-0" x 1'-0"

NOTE:

For precast prestressed girders, an equivalent post-tensioning arrangement or a combination of pretensioning and post-tensioning will be allowed subject to approval of the Engineer. If post-tensioning is used, all holes shall be pressure-grouted solid with 4,000 P.S.I. expansion grout.

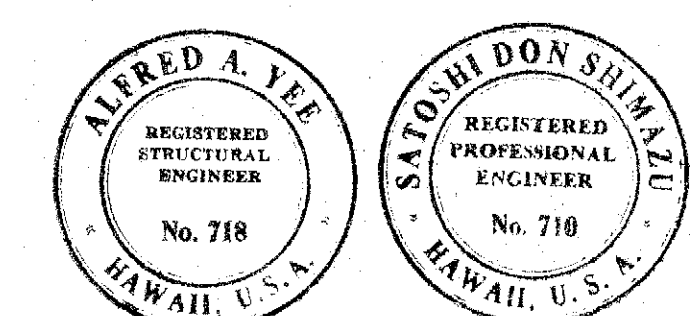
INSERTS REQUIRED FOR PRESTRESSED GIRDERS:

SIGN INSERTS: See sht. 7 for details.
PIPE HANGER INSERTS: See sht. 8 for details.



1ST INTERIOR GIRDER - RIGHT SIDE 1'-1'-0"

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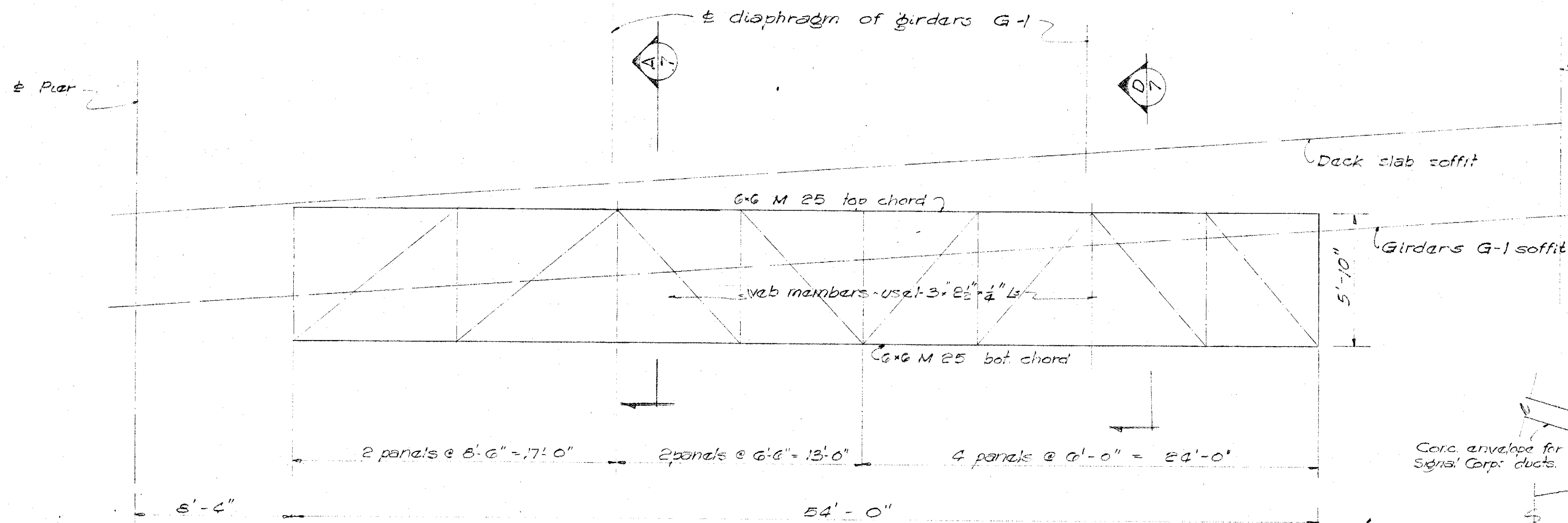
SHEET NO. 6 OF 8 SHEETS

CONSULTANT SUBMISSION

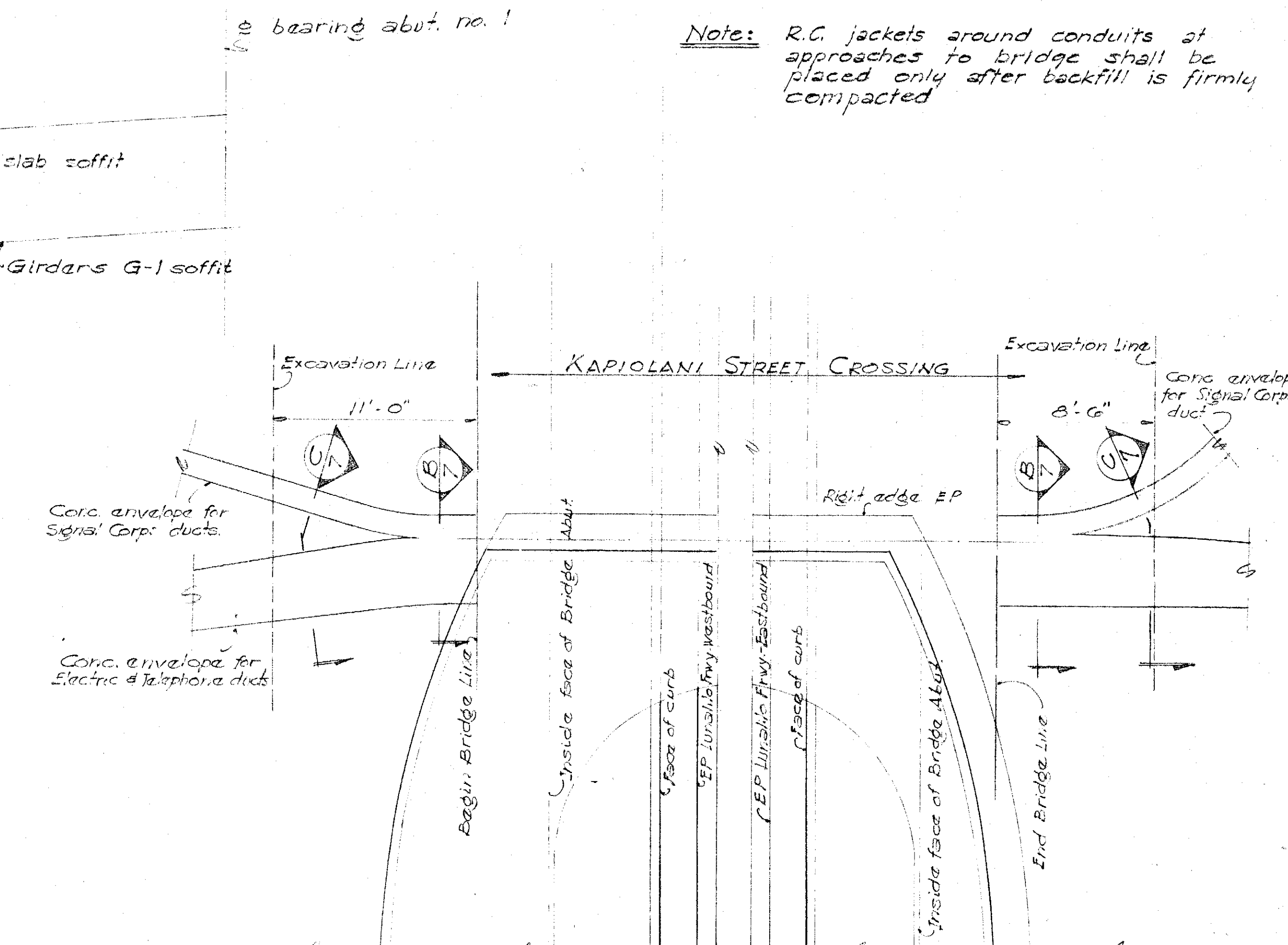
5927.186 (B1)

SURVEY PLOTTED BY	DATE
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QUANTITIES CHECKED BY	
NOTE BOOK	
NO.	

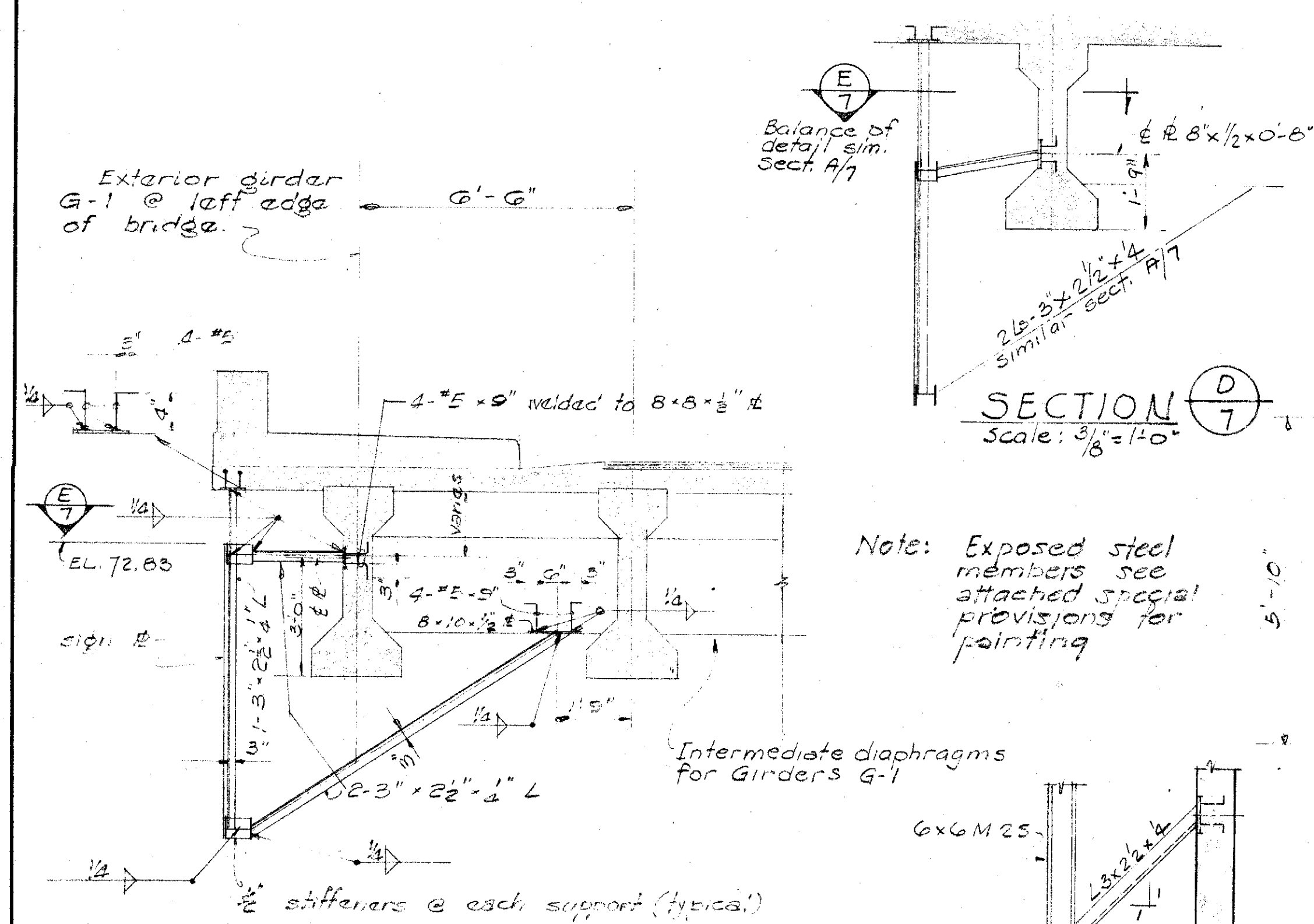
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
				7	8



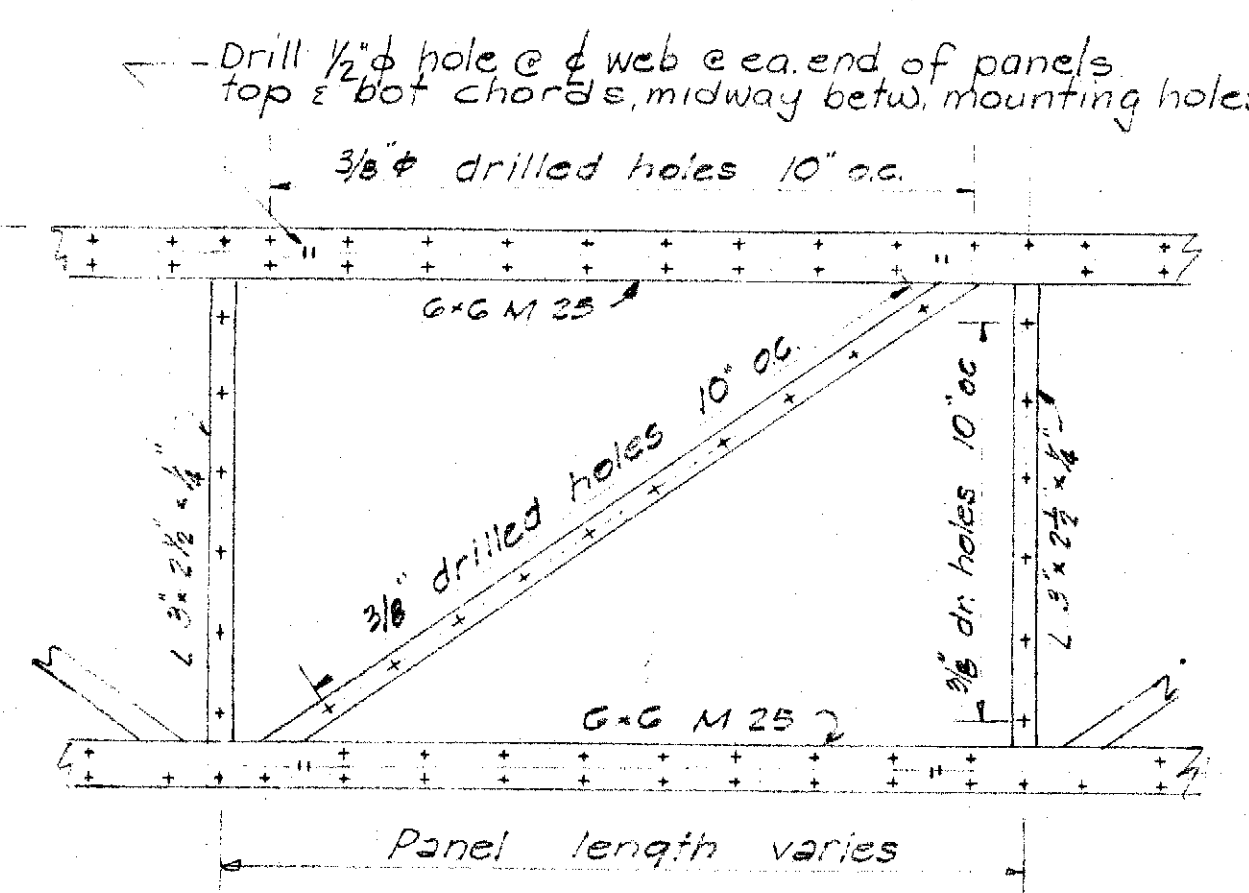
ELEVATION - SIGN FRAME
Scale: 1/4" = 1'-0"



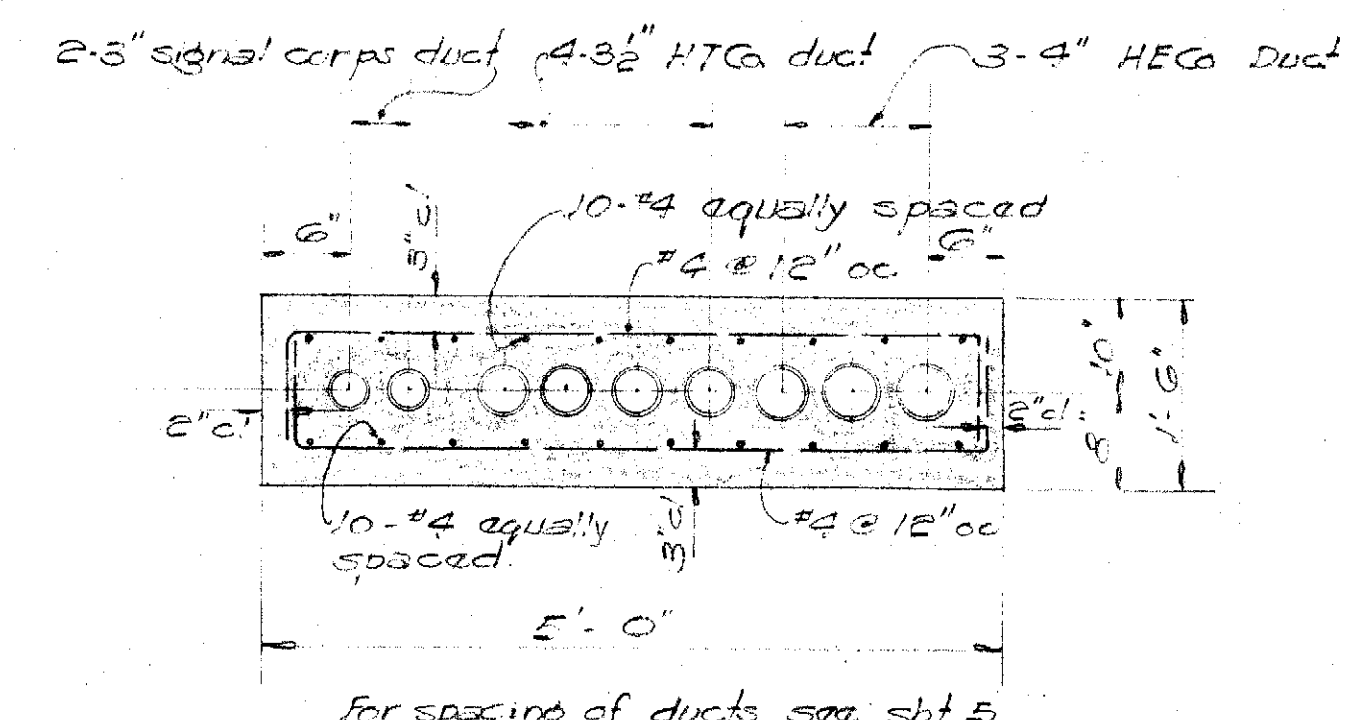
PARTIAL PLAN OF UTILITIES CROSSING AT KAPIOLANI STREET CROSSING
Scale: 1" = 5'-0"



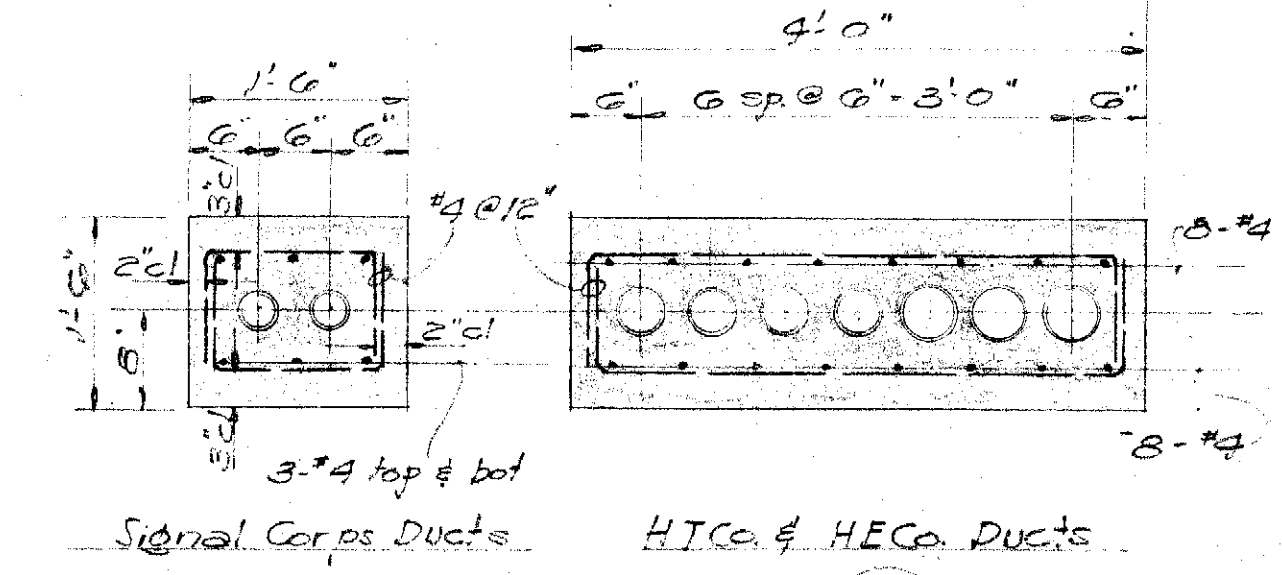
SECTION A-A
Scale: 3/8" = 1'-0"



PANEL MOUNTING HOLE SPACING TYPICAL
Scale: 1/2" = 1'-0"



SECTION B-B
Scale: 3/4" = 1'-0"

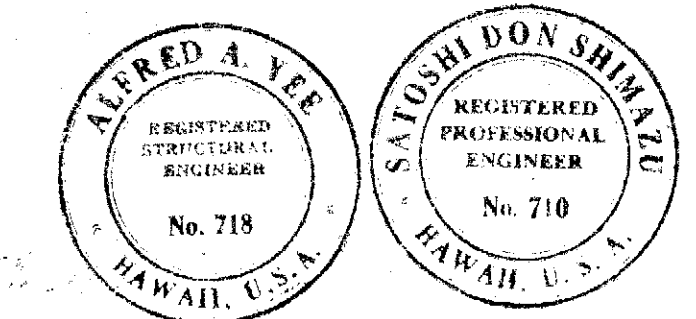


SECTION C-C
Scale: 3/4" = 1'-0"

DESIGNED BY	DATE
DRAWN BY	
CHECKED BY	
NOTED BY	
ORIGINAL	
PLAN	
NOTE BOOK	
CHECKED BY	
NO.	

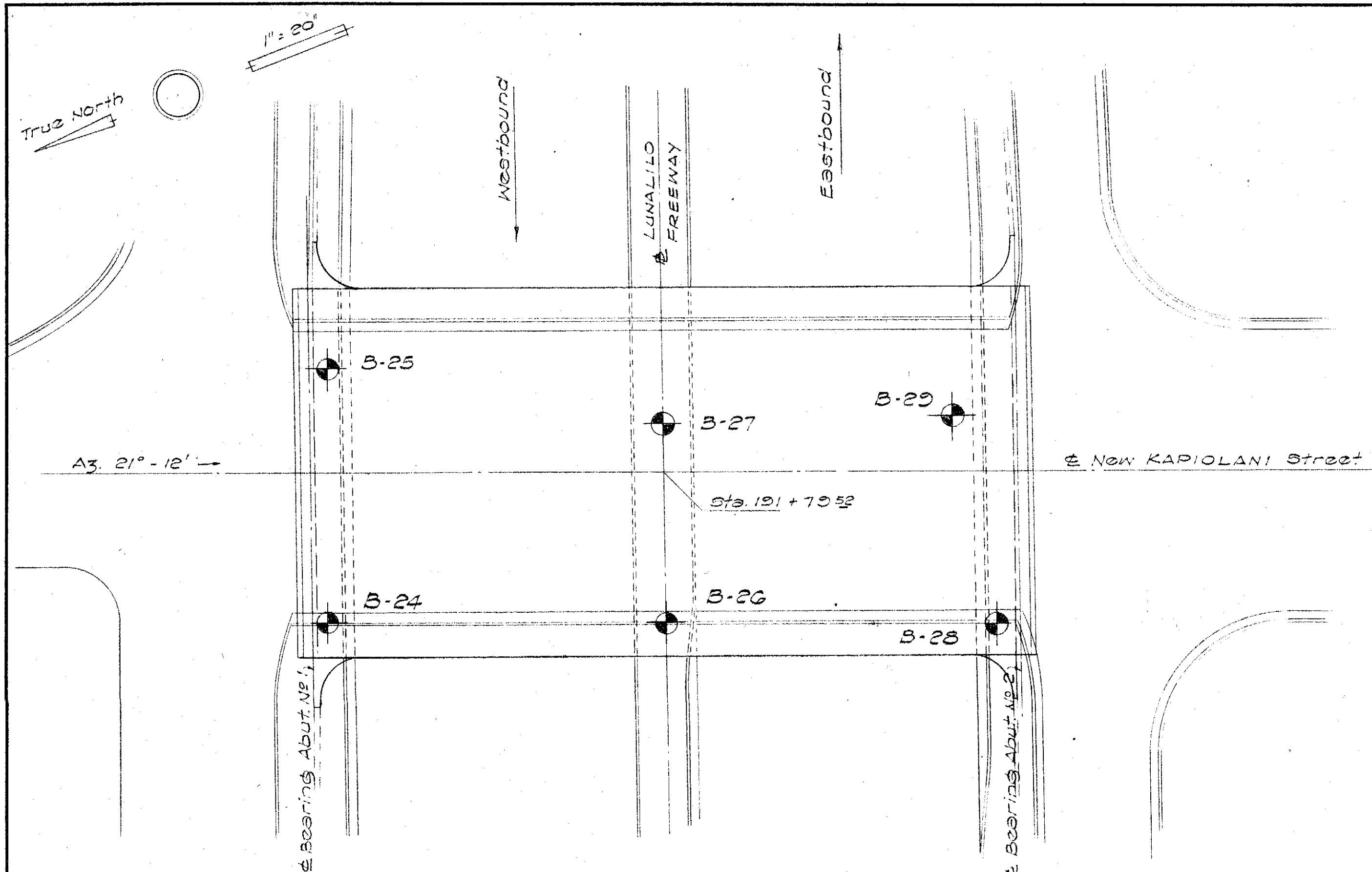
PRINTED ON DIEPLOT 1000W CLEARPRINT

Note: Each group of holes to be centered in panel length of member.
All bolts 1/2" Min. length 1 1/2" for 6x6 M 25
Min. length 3/4" for 12x2 1/2" L

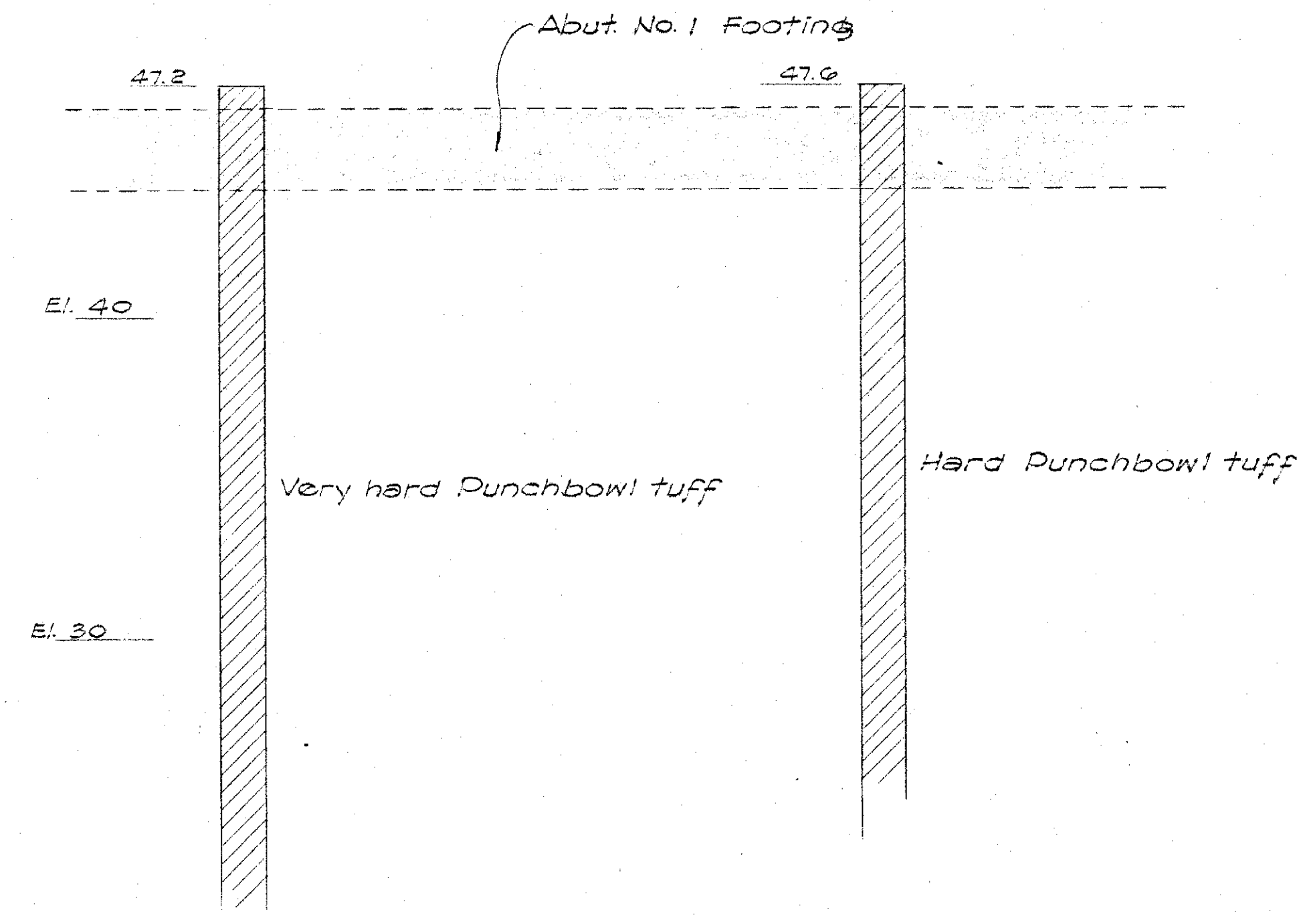


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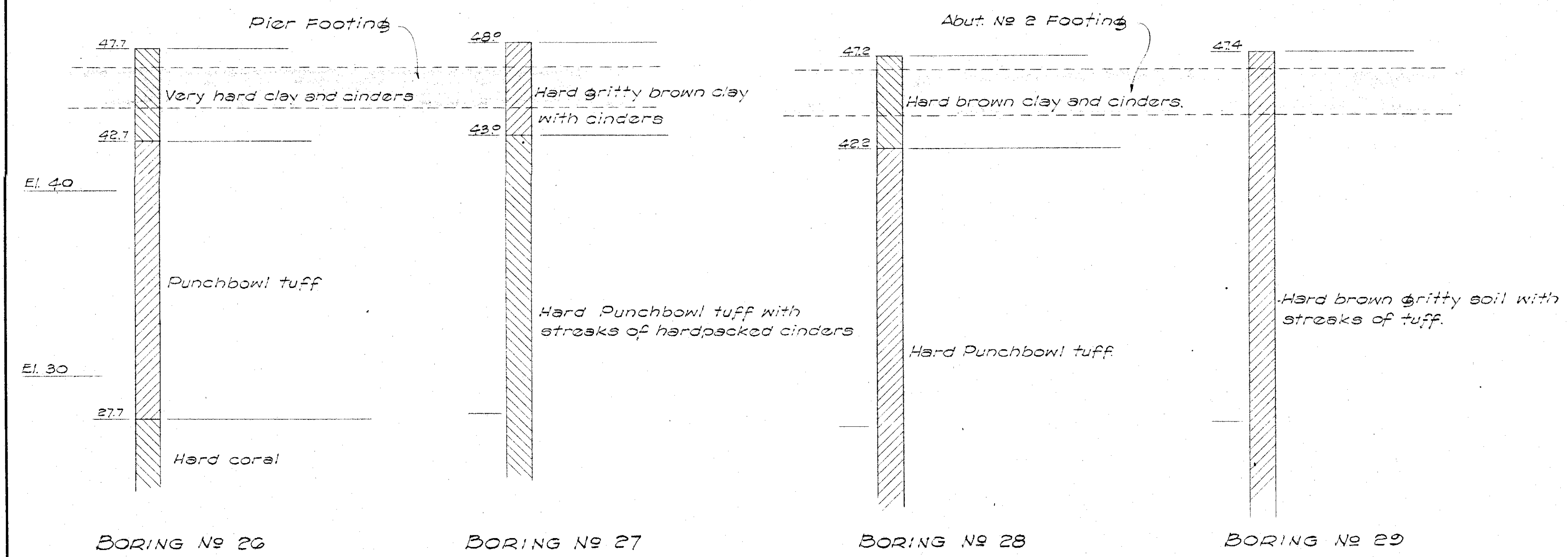
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS



BORING LOCATION PLAN
Scale: 1" = 20'



BORING No 24 **BORING No 25**

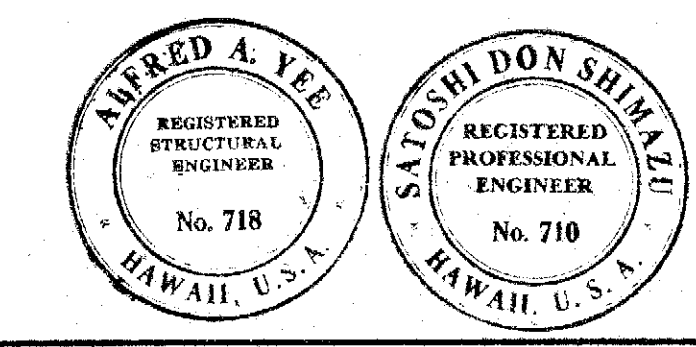


BORING No 26 **BORING No 27** **BORING No 28** **BORING No 29**

BORING DATA
Scale: 1" = 4'

Note:
"Punchbowl tuff" as used here stands for "cemented volcanic ejecta" containing fines and boulders.

DESIGNED BY	DATE
DRAWN BY	
CHECKED BY	
NOTED BY	
REVIEWED BY	
APPROVED BY	



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KAPIOLANI ST. CROSSING
STA. 191 + 79.52
LUNALILO FREEWAY
PROJECT No. 84-072-1(4)

SHEET No. 3 OF 3 SHEETS

CONSULTANT SUBMISSION

5927.188 (133)