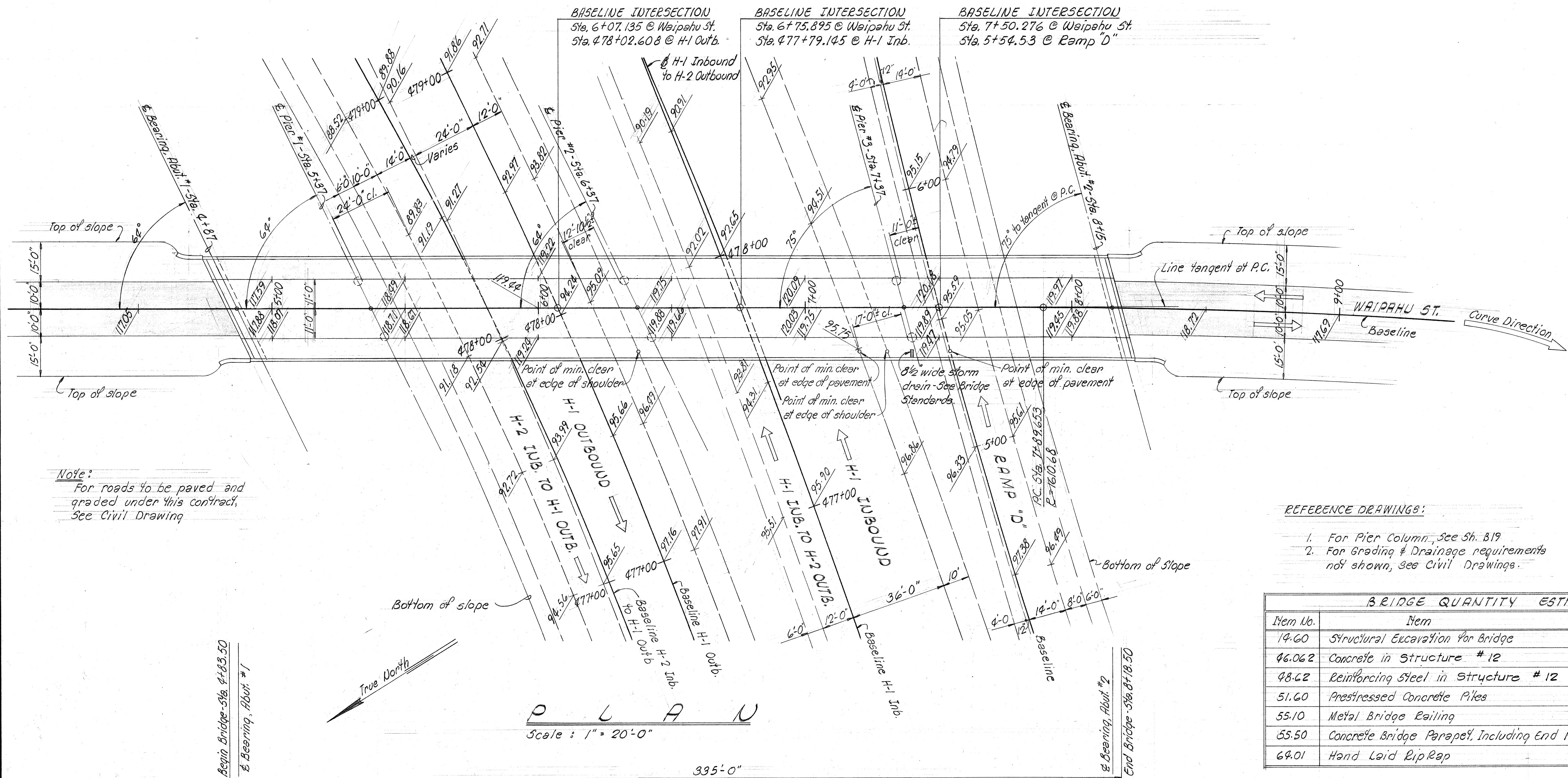
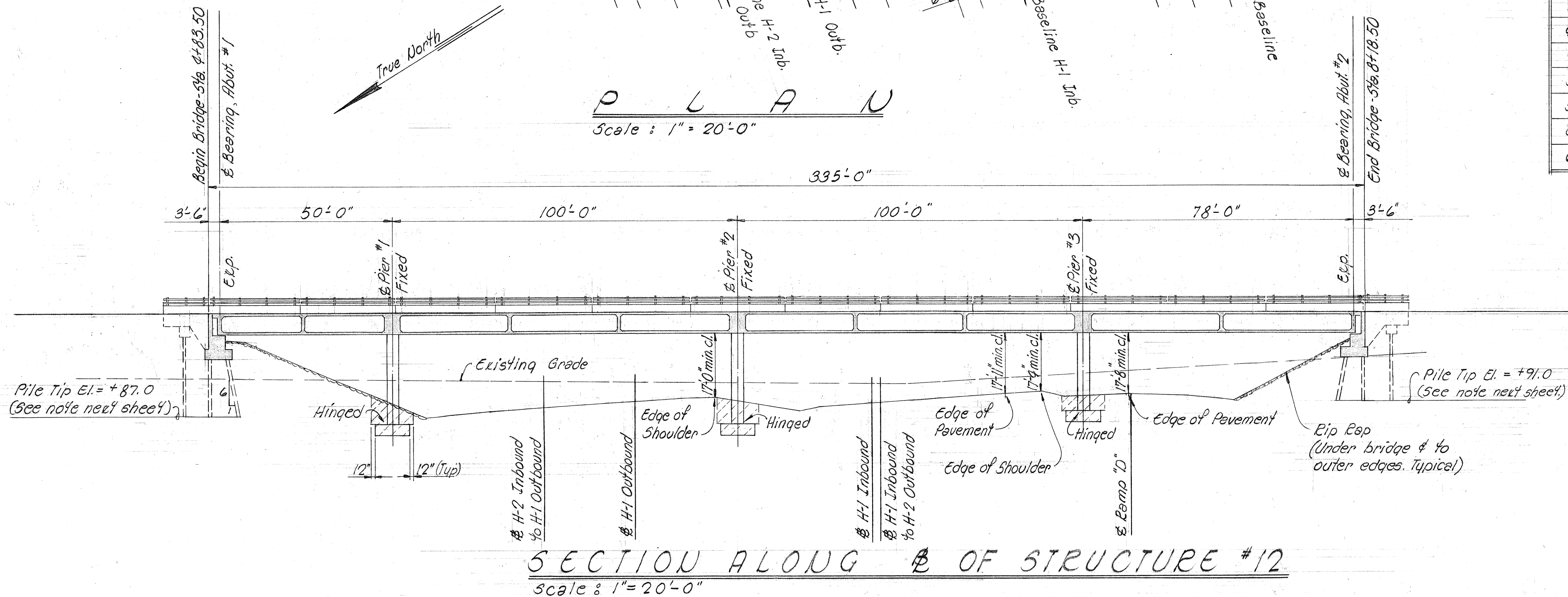
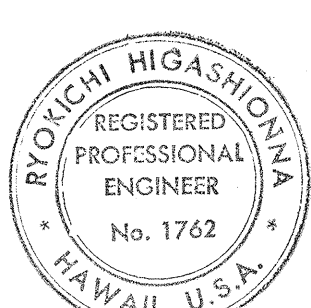
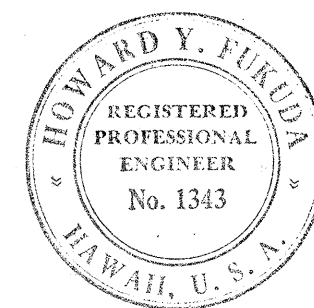




BRIDGE QUANTITY ESTIMATES			
Item No.	Item	Unit	Quantity
14.60	Structural Excavation for Bridge	C.Y.	330
46.062	Concrete in Structure # 12	L.S.	1,270 C.Y.
48.62	Reinforcing Steel in Structure # 12	L.S.	302,640 lbs
51.60	Prestressed Concrete Piles	L.F.	630
55.10	Metal Bridge Railing	L.F.	720
55.50	Concrete Bridge Parapet, Including End Post	L.F.	720
64.01	Hand Laid Riprap	C.Y.	160



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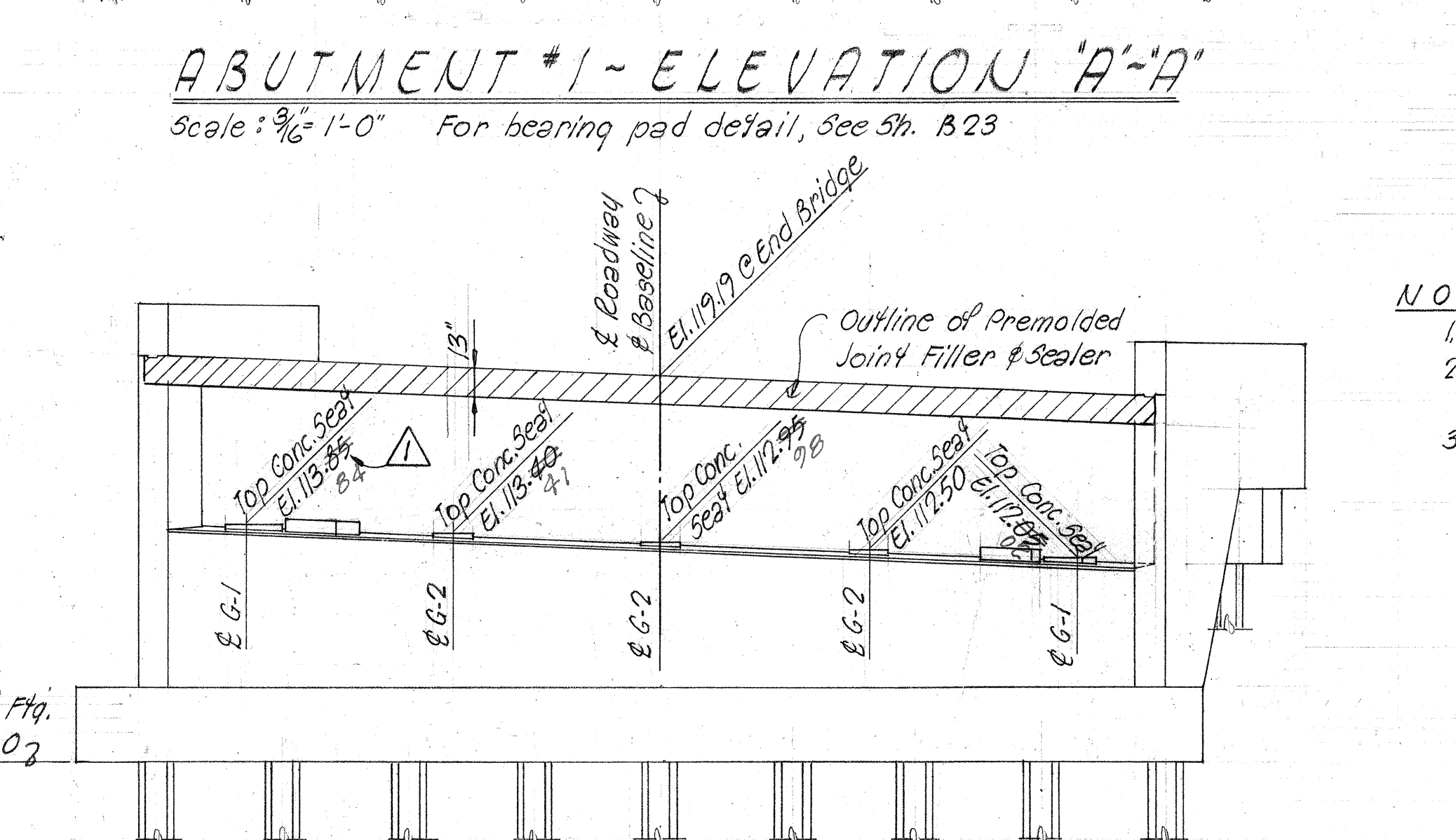
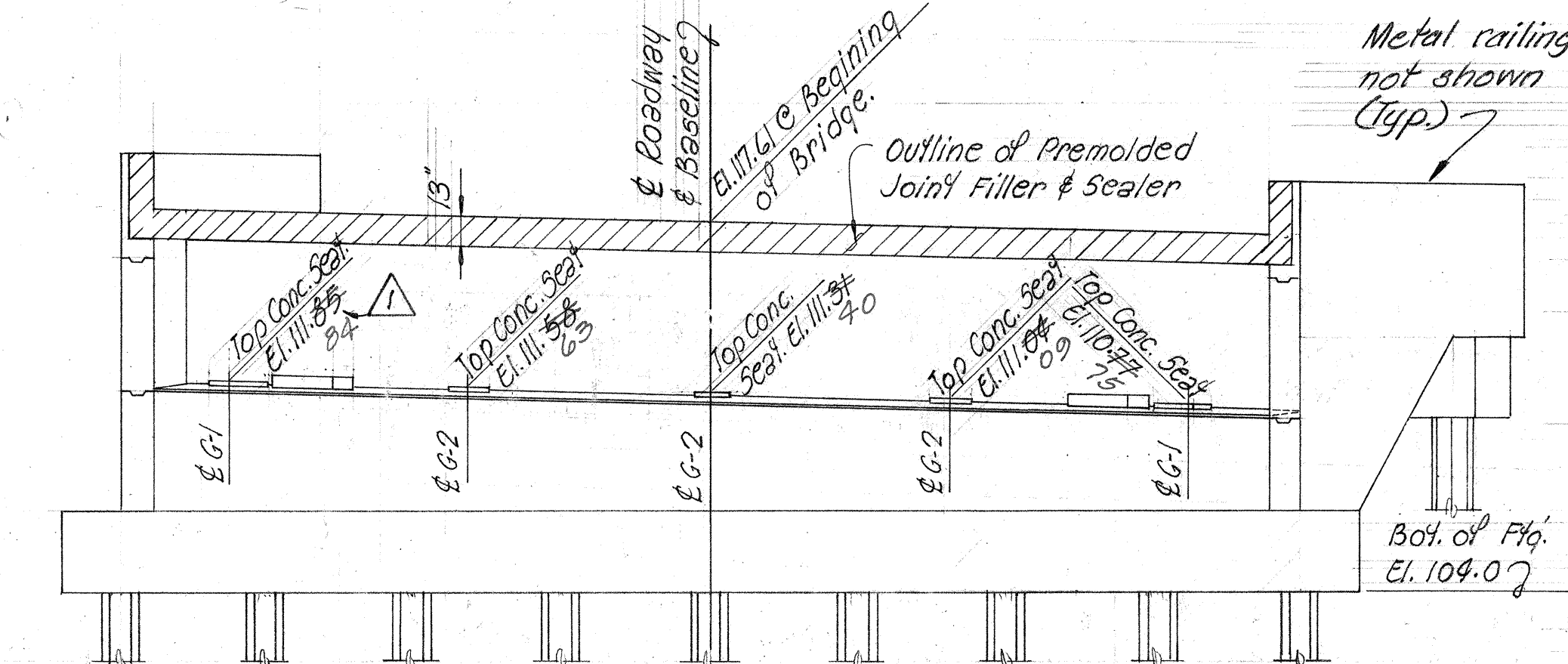
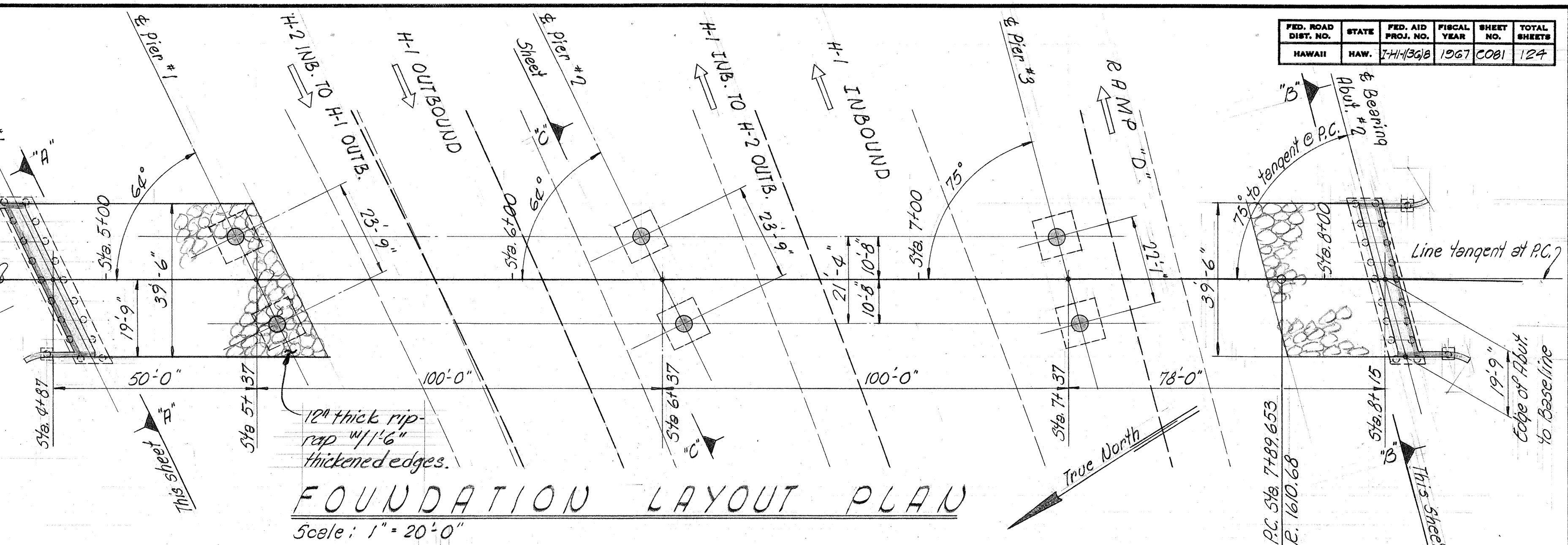
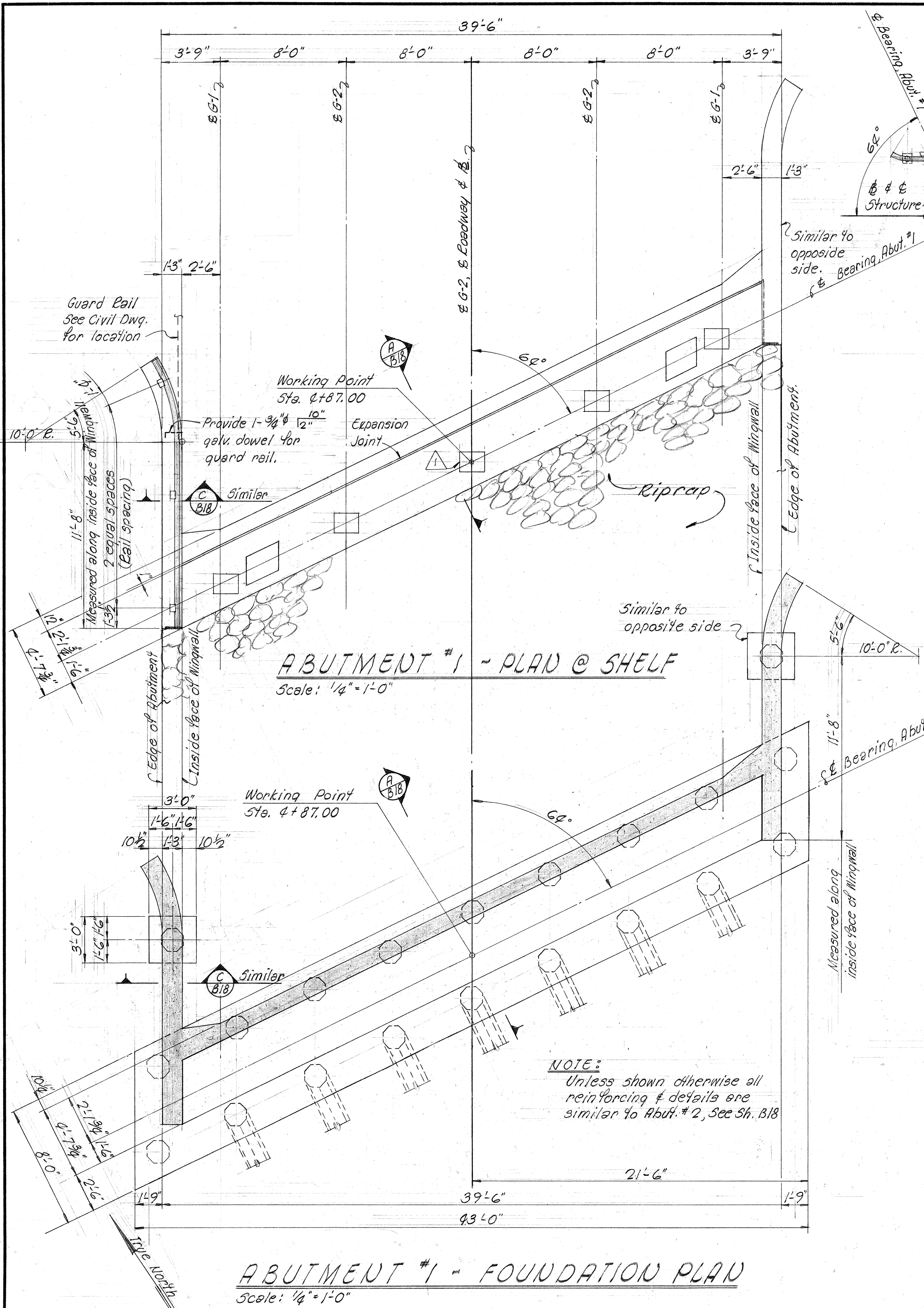
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

WAIKAWA INTERCHANGE
STRUCTURE No. 12

F.A.I. PROJ. No. J-41-1 (39)B

Scale: As Shown Date:

SHEET No. 816 OF 25 SHEETS



- REFERENCE DRAWINGS**
- Abutment #2 Foundation, Sh. B18.
 - Pier Column Foundation, Sh. B19.
 - Gen. Notes Sh. 3-10
- DESIGN CRITERIA**
- Loading = H20-516
Allowable Foundation Pressure
Pier #1 = 10,000 p.s.f. (Group I)
Pier #2 = " " " "
Pier #3 = " " " "
Pile Capacity = 40 Tons
Pile Size = 16" Octagonal
- SEQUENCE OF CONSTRUCTION FOR PILE DRIVING**
- Construct embankment.
 - Pre-drill through embankment down to existing grade. (Hole shall be 6" larger than the diameter of the pile.)
 - Drive piles down to the following minimum depths:
 - Abutment #1 = El. +87.0
 - Abutment #2 = El. +91.0
 - Fill void around piles with loose dry sand meeting the grading requirements of 47.2 (D) FINE AGGREGATE.

- NOTES**
- For General Notes, See Sh. 310.
 - In general, bridge superstructure shall be constructed to follow the finish roadway.
 - Construction methods
 - Sides of footing shall be excavated to nest lines when called for on plans. Over excavation below elevations indicated on the plans for bottom of footings shall be backfilled with a minimum of Class D concrete as directed by the Engineer at the Contractor's expense.
 - Backfill behind abutments of Structure 12 shall be complete in place before pouring of superstructure.
 - Obtain camber by forming & shoring concrete surface above profile grade by amount shown on camber diagram.
 - Backfill against wingwall shall be carried out in such a manner that the differential of soil on each side of the wall shall not exceed 2'-0" at any time.

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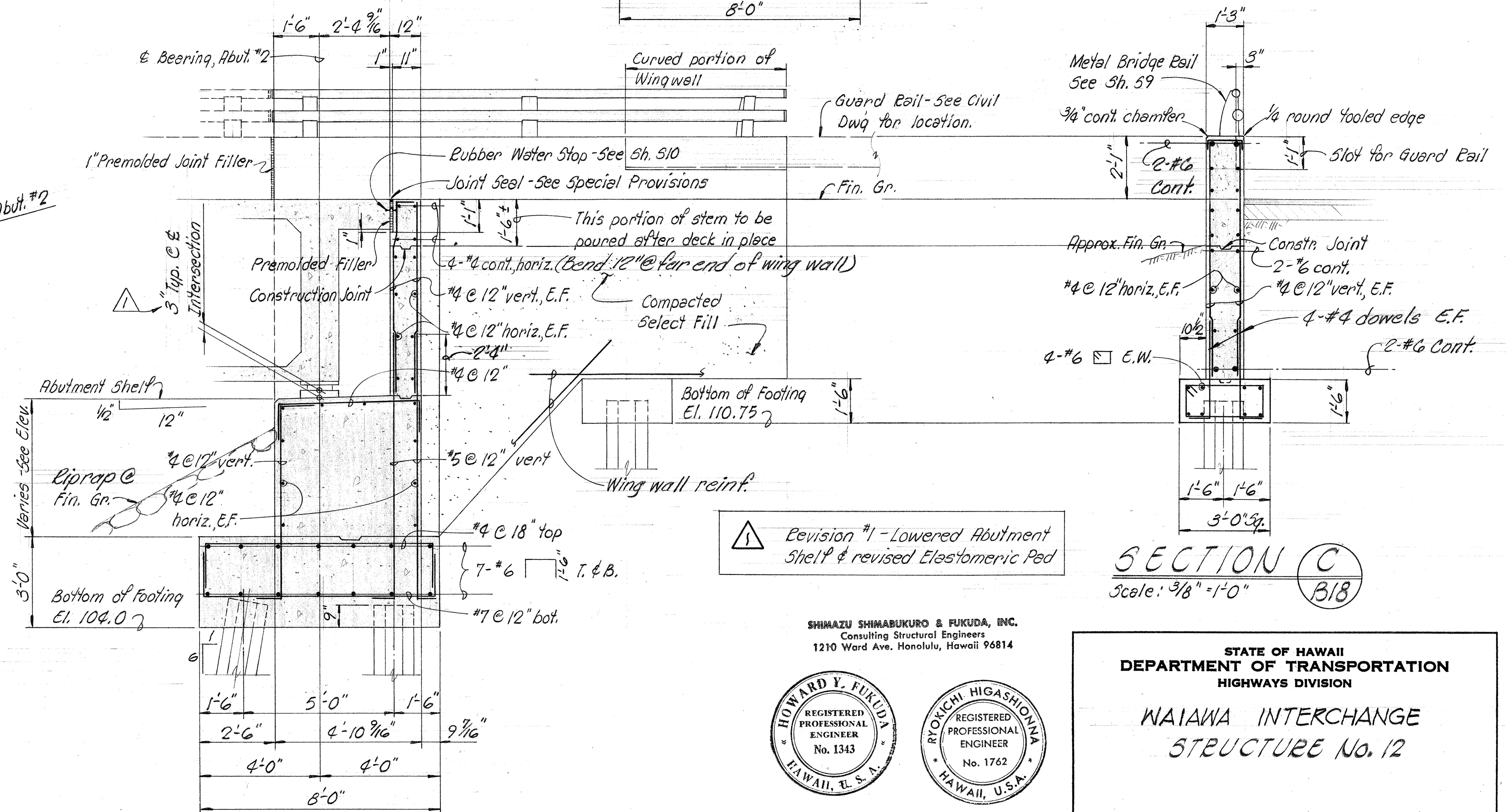
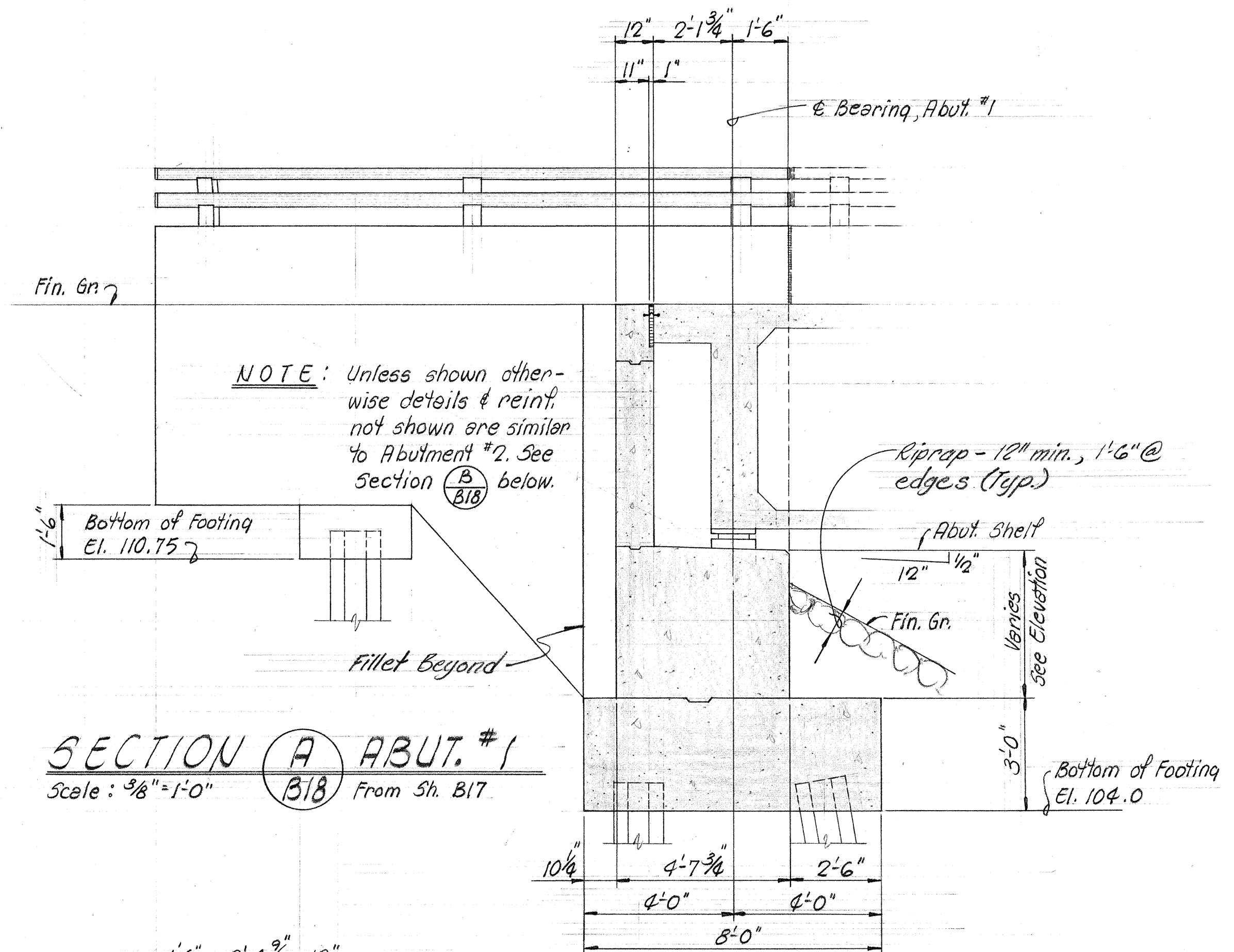
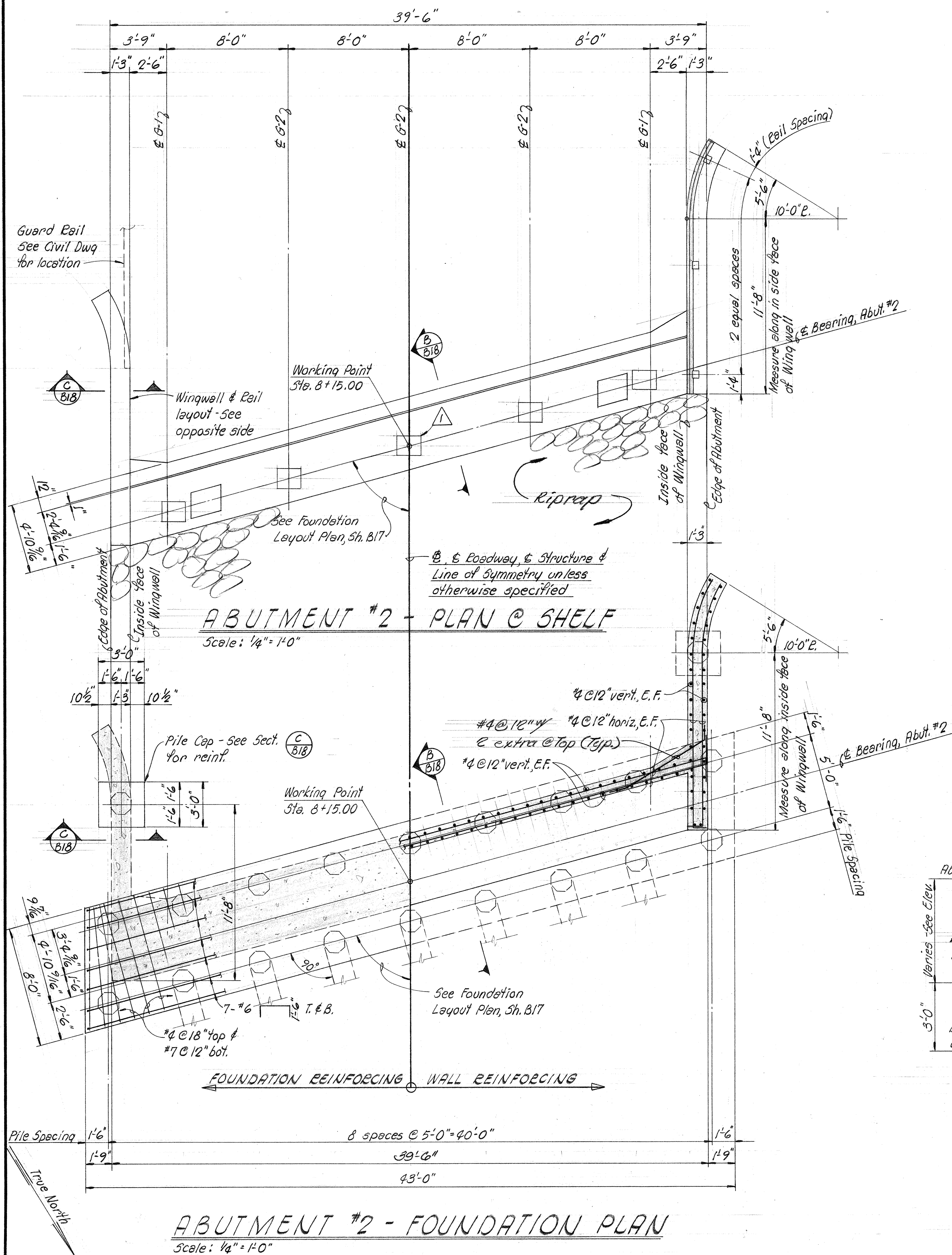
WAIKAWA INTERCHANGE
STRUCTURE No. 12

F.A.I. PROJ. No. 7-41-1 (36)B
Scale: As Shown Date: _____

SHEET No. 817 OF 25 SHEETS

Revision #1 - Lowered Abutment Shelf, revised Elastomeric Pad & changed Top of Concrete Seat elevations.

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SECTION B ABUT. #2
Scale: $3/8" = 1'-0"$ B/B

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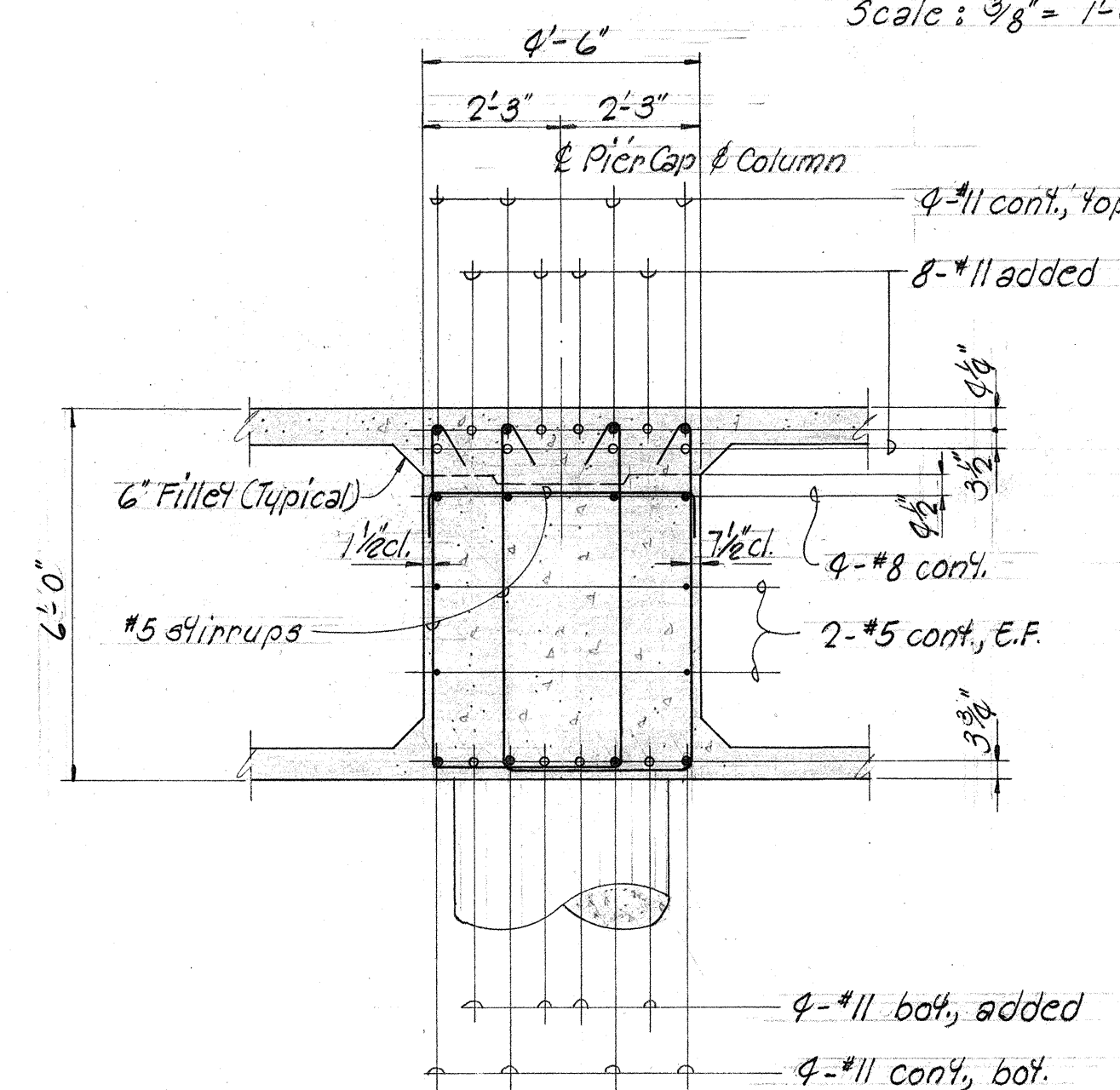
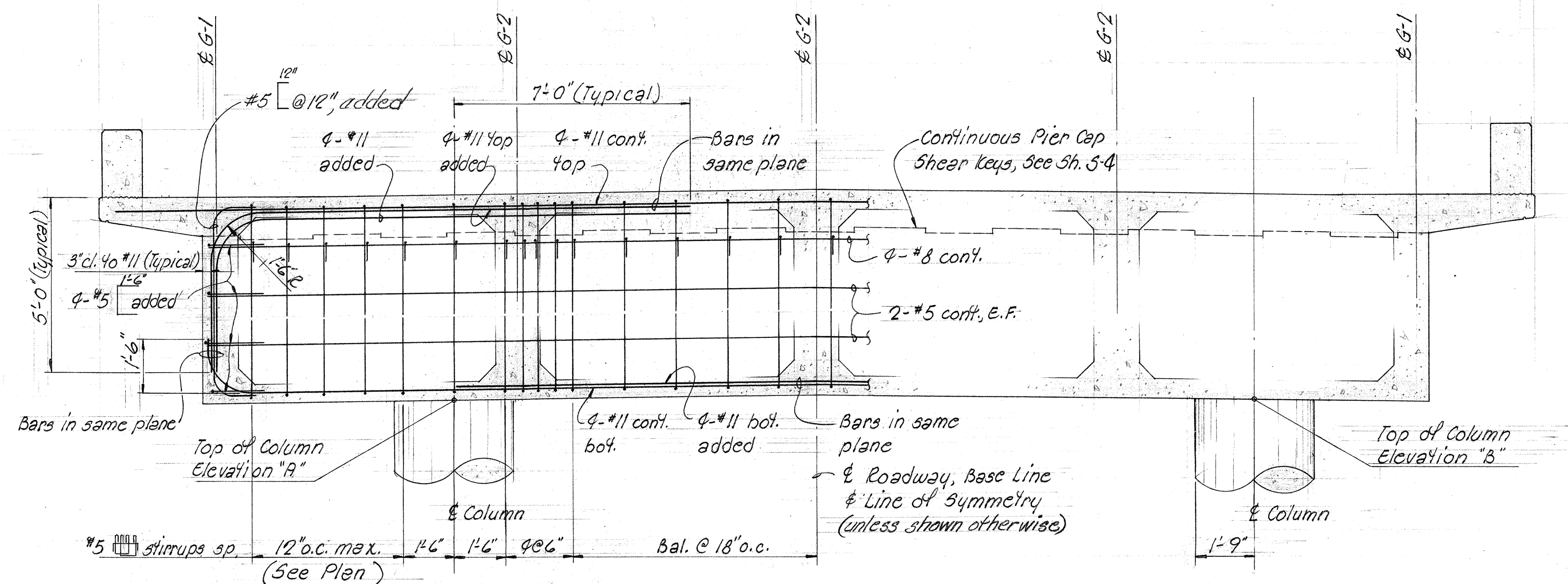
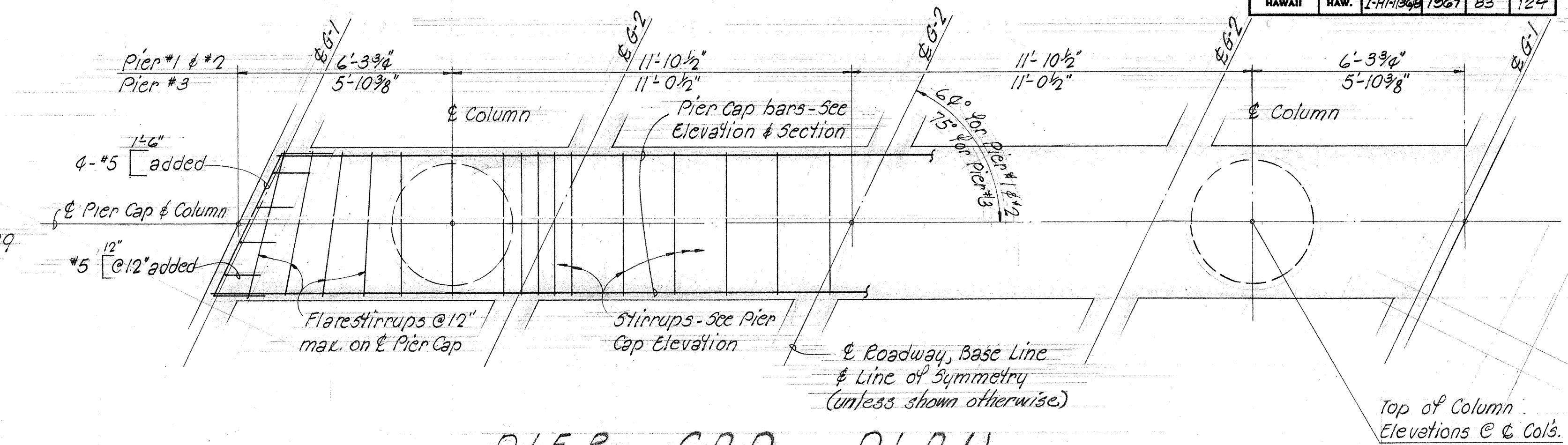
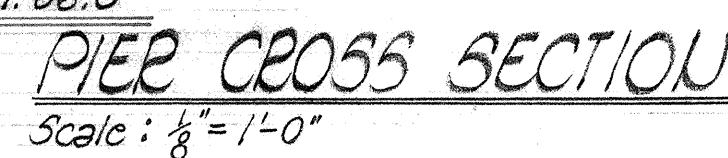
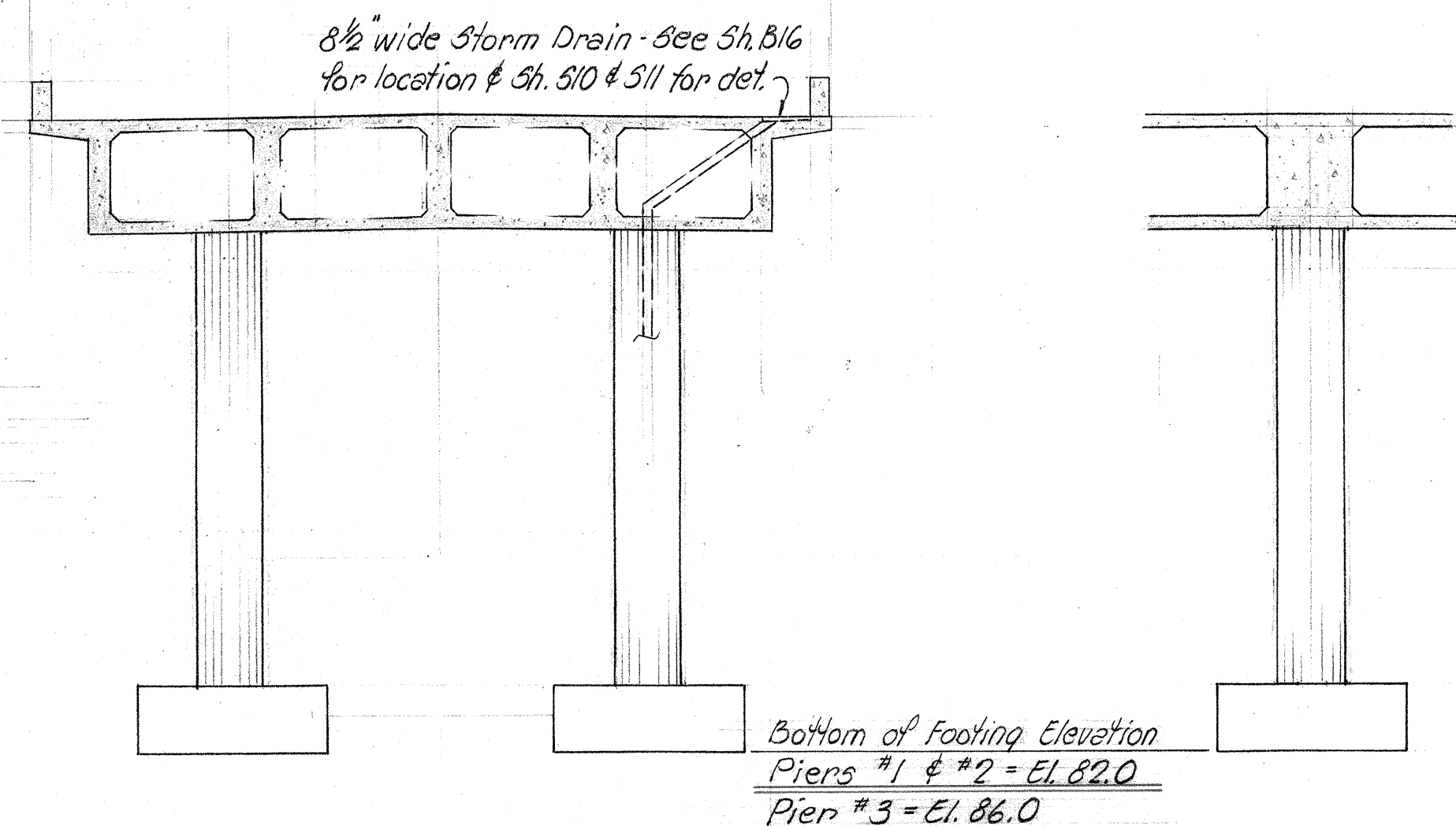
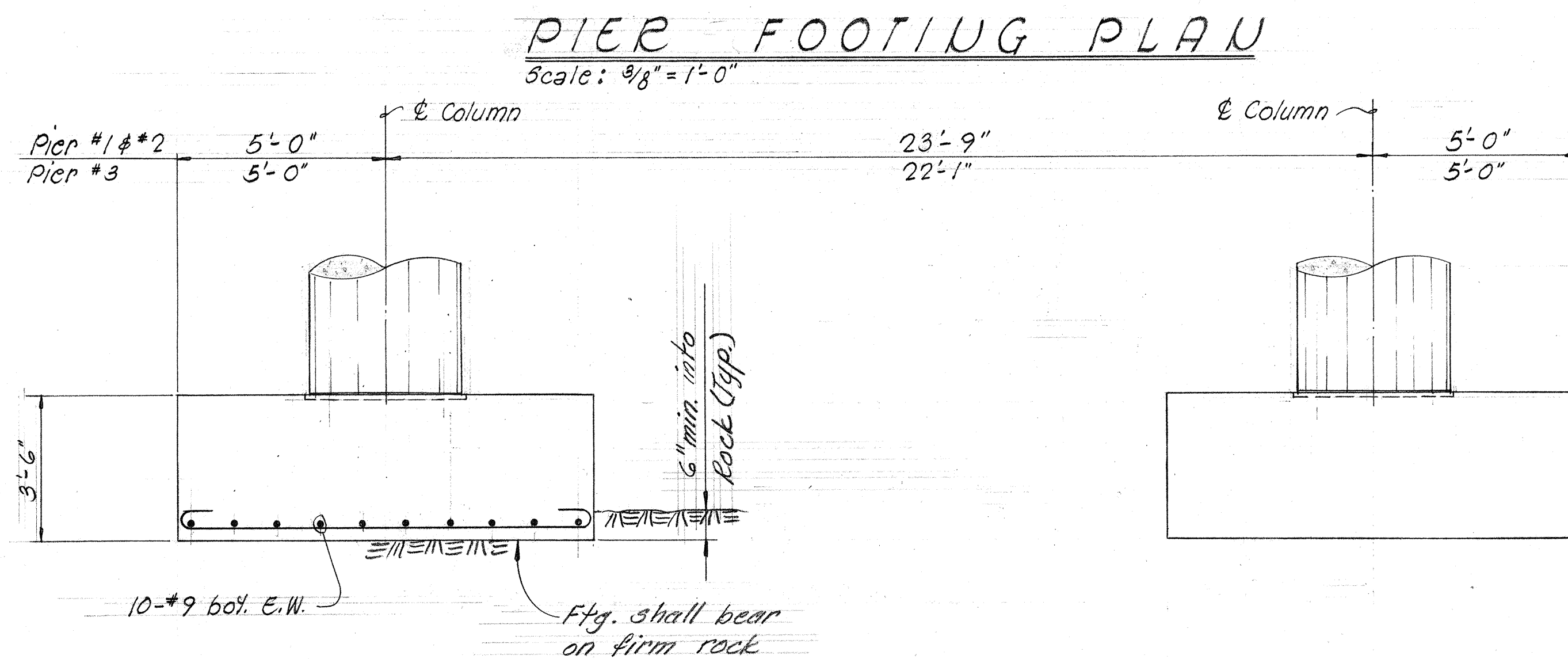
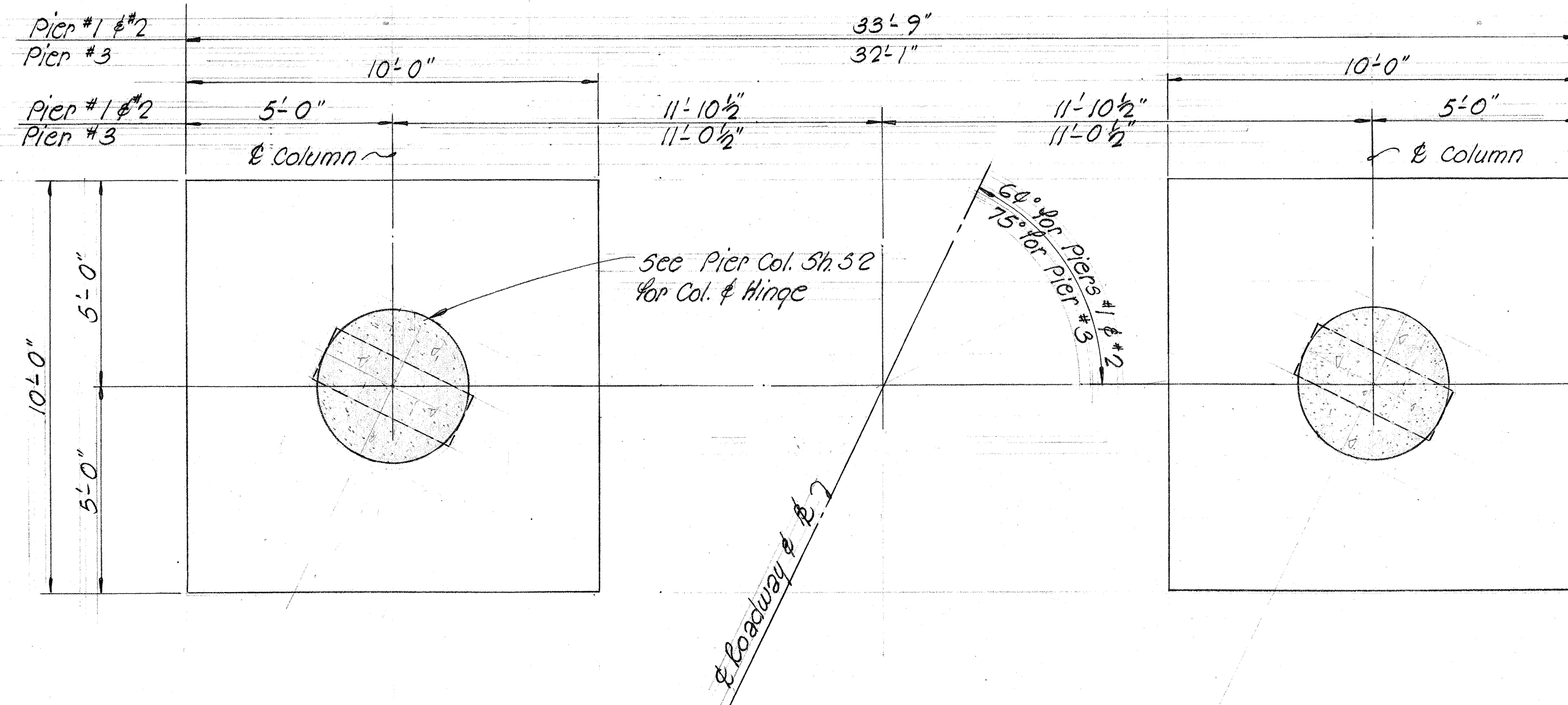
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

WAIAWA INTERCHANGE
STRUCTURE No. 12

F.A.I. PROJ. No. I-HI-1 (36)8

Scale: As Shown Date: _____
SHEET No. B18 OF 25 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H-1(36)B	1967	83	127



TOP OF COLUMN ELEVATIONS		
Pier No.	Elevation "A" (East)	Elevation "B" (West)
1	112.17	112.57
2	113.56	113.60
3	114.15	113.54

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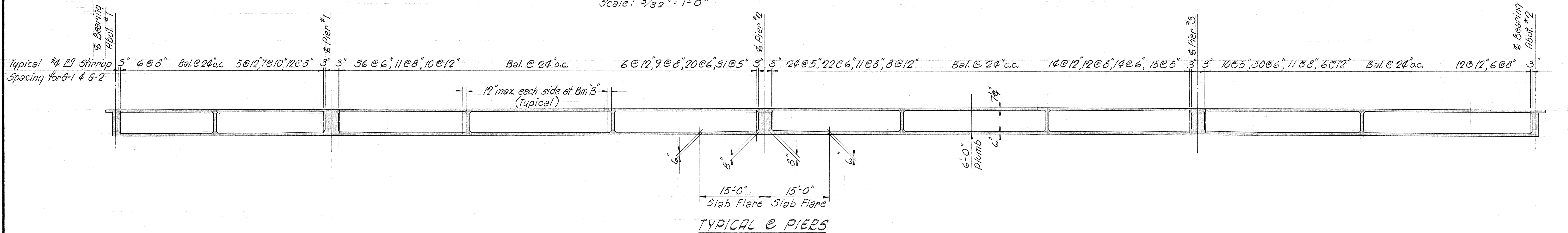
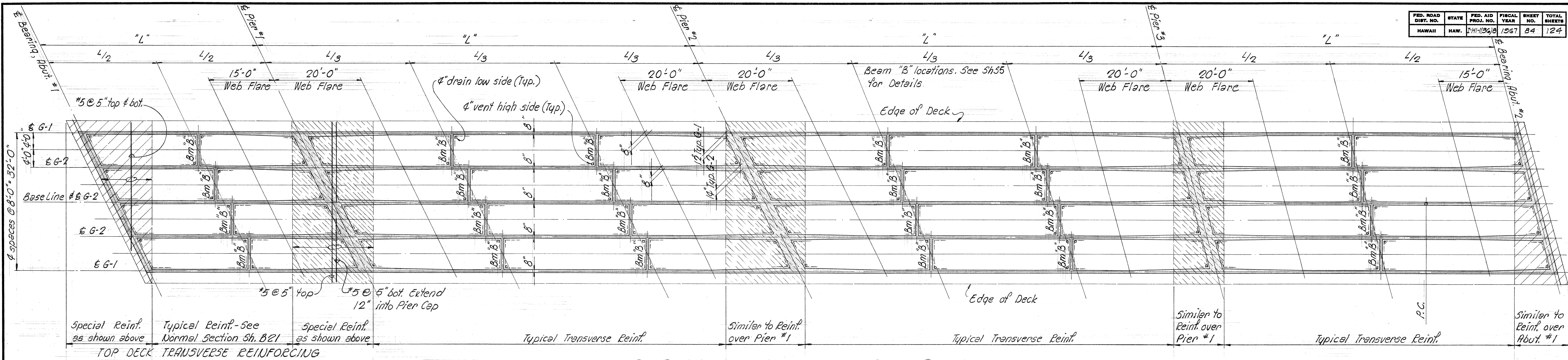
WAIANA INTERCHANGE
STRUCTURE No. 12

F.A.I. PROJ. No. I-H-1(36)B

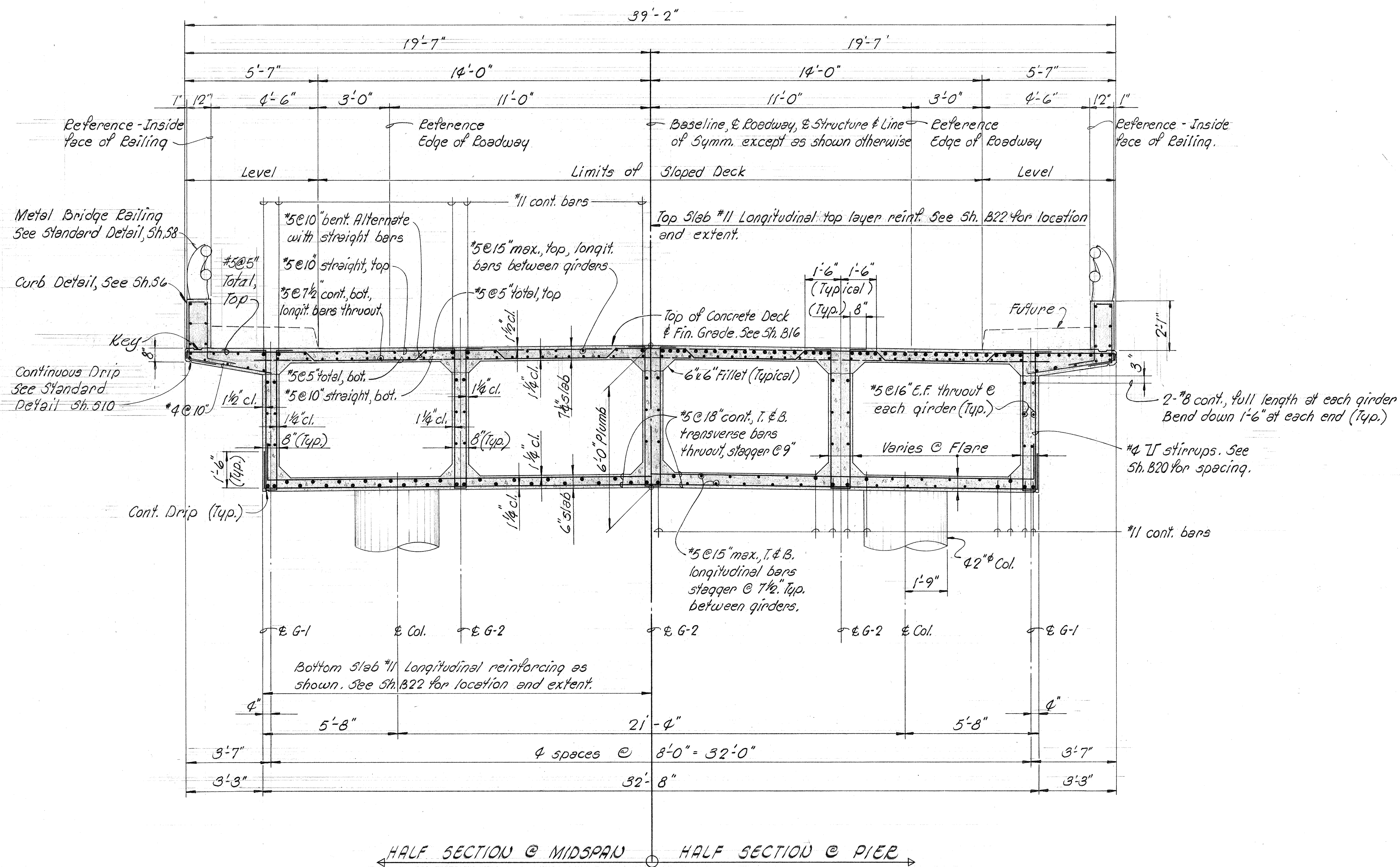
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SHEET No. 83 OF 127 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IHI-1(36)8	1967	84	124



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(36)8	1967	85	124

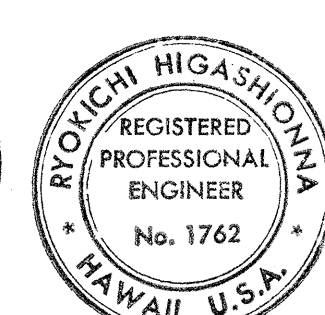
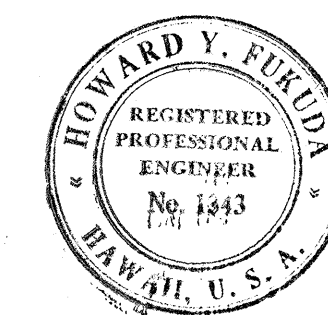


TYPICAL NORMAL DECK SECTION

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

NOTE: For Super Elevations required see Sh. B16

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WAIAWA INTERCHANGE
STRUCTURE No. 12

F.A.I. PROJ. No. I-HI-1 (36)8

Scale: As Shown Date:

SHEET No. B21 OF 25 SHEETS

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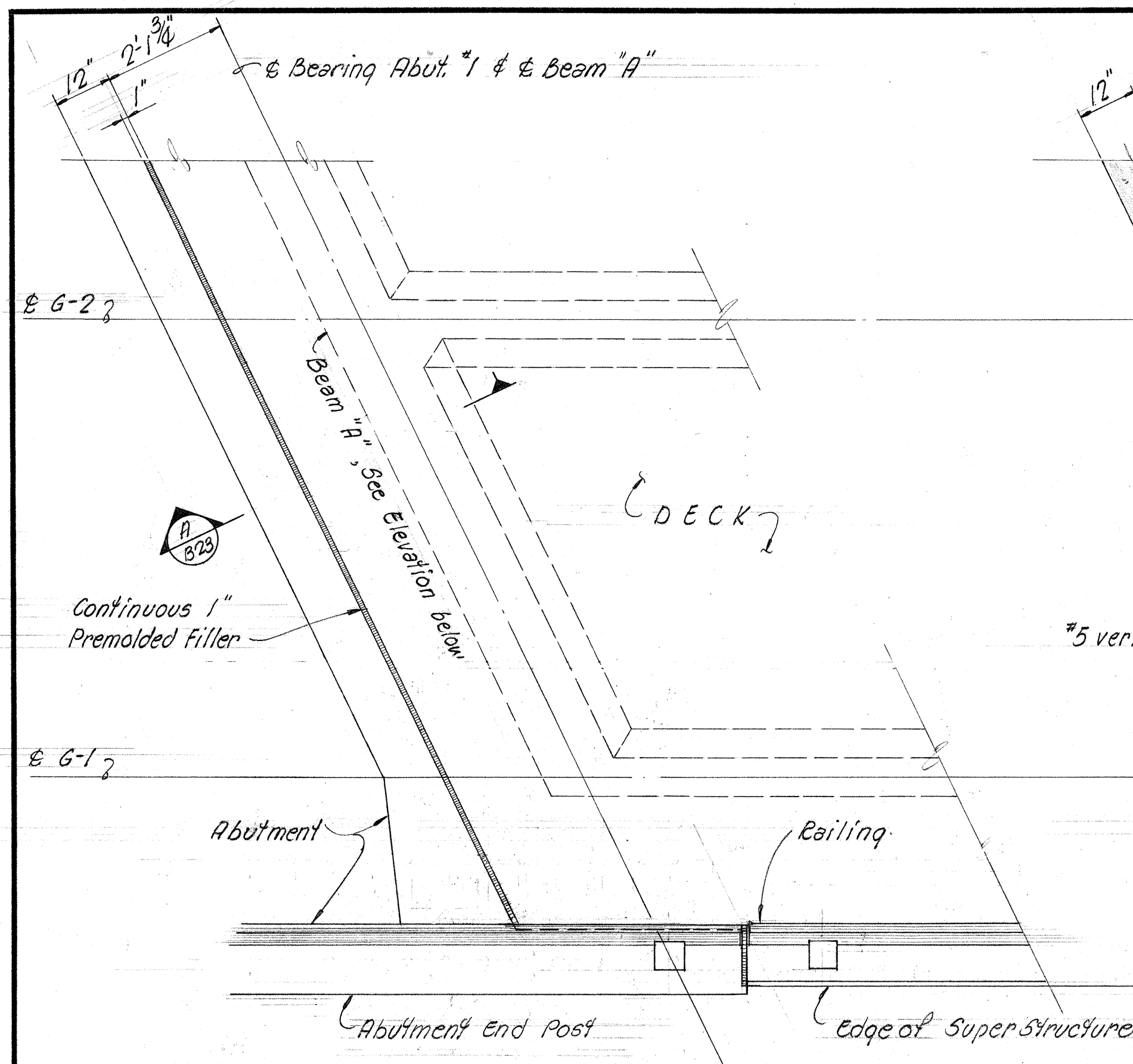
Scale: Horiz. $\frac{3}{32}'' = 1'-0''$ Vert. $\frac{3}{16}'' = 1'-0''$

1. Except as otherwise noted all slab bars to be #11 bars.
2. All #5 bars at 15" maximum spacing shall be extended & lapped a minimum of 2'-6" with adjacent #11 bars as shown.
3. Longitudinal deck reinforcing to follow curvature of girder & deck slab where curvature occurs.
4. For longitudinal & transverse deck reinforcing not shown, See Normal Section Sh. B21
5. For special deck reinforcement, See Sh. B20
6. All vertical dimensions are measured plumb.

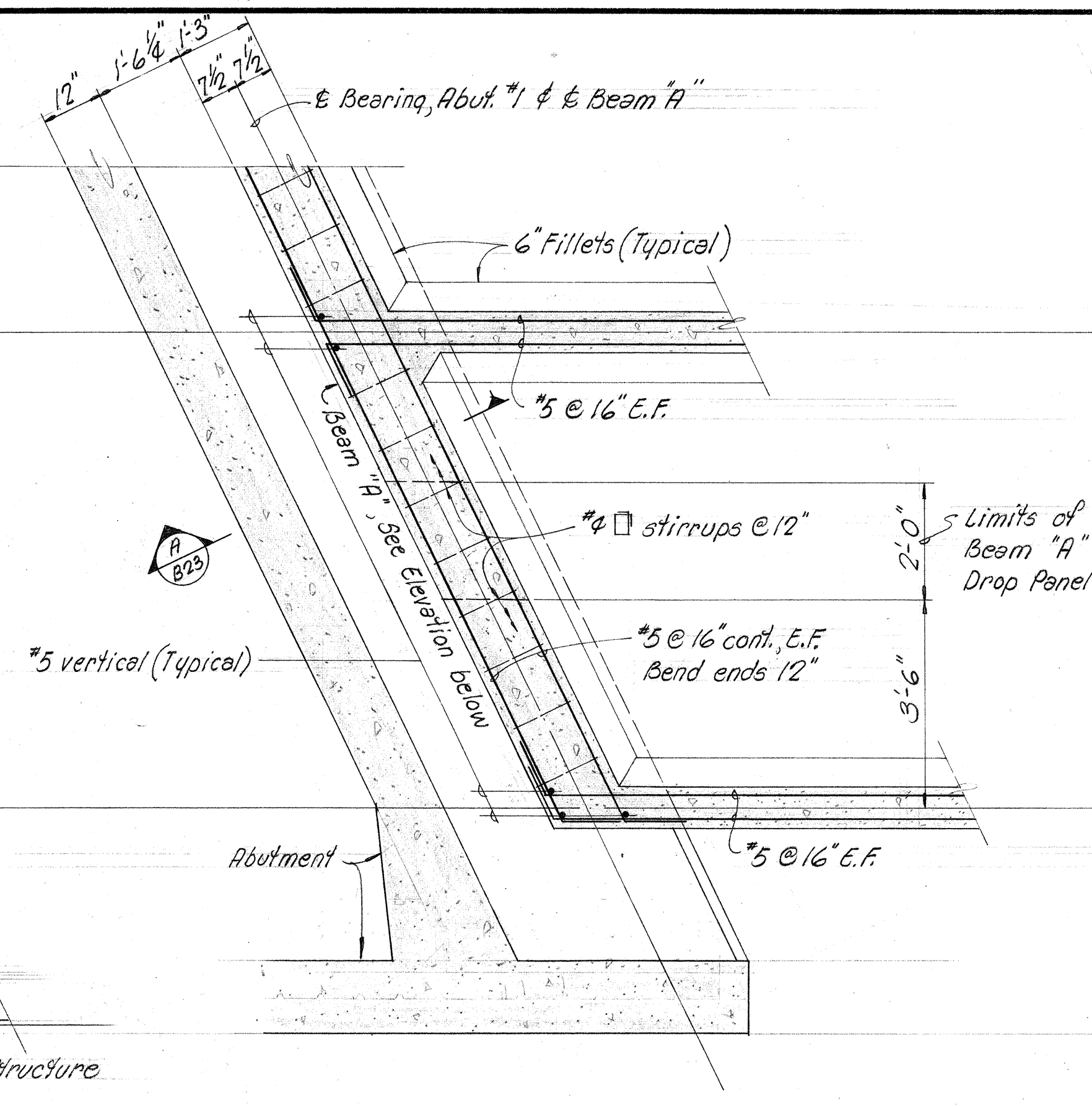


SHEET No. 822 OF 25 SHEETS

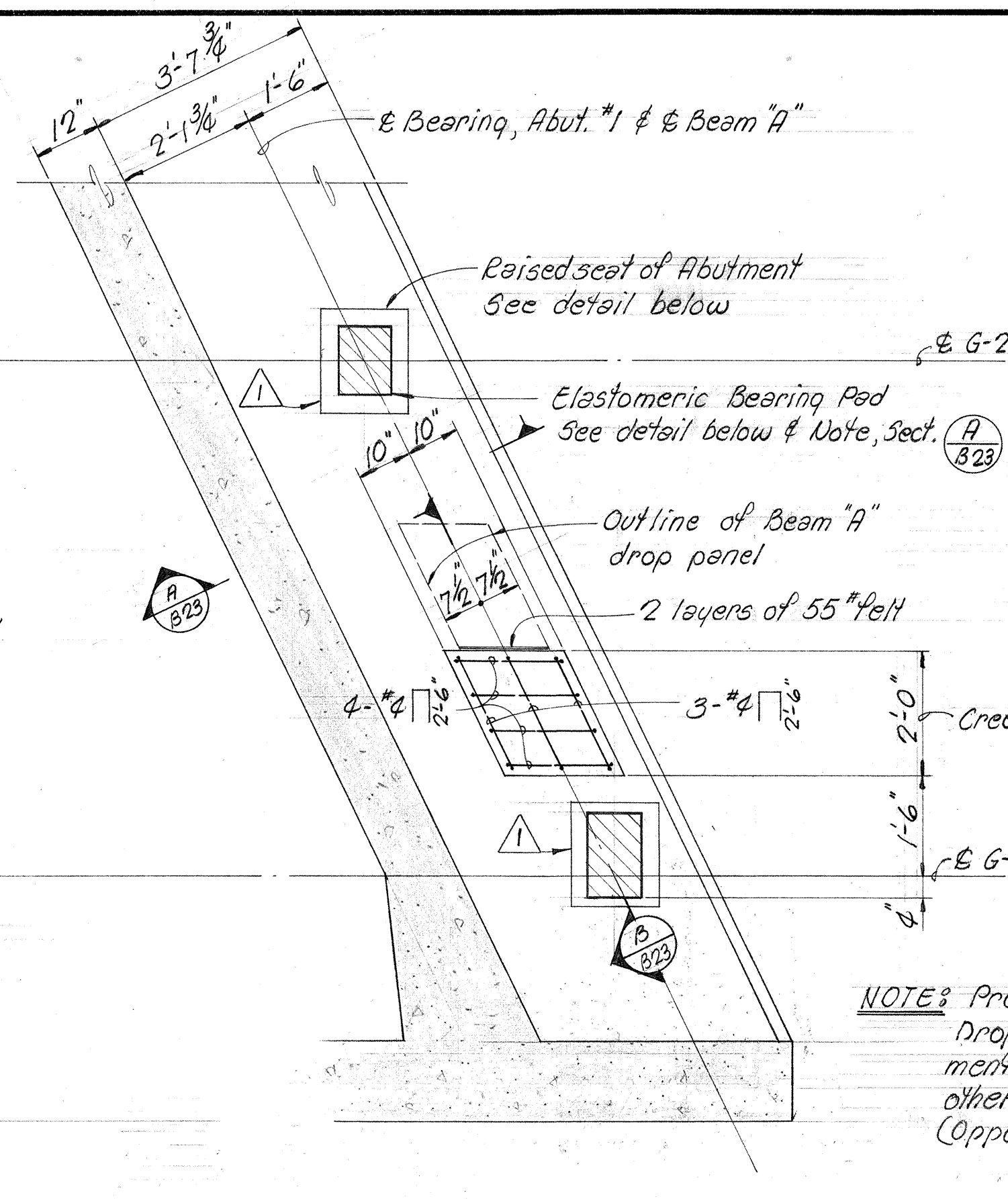
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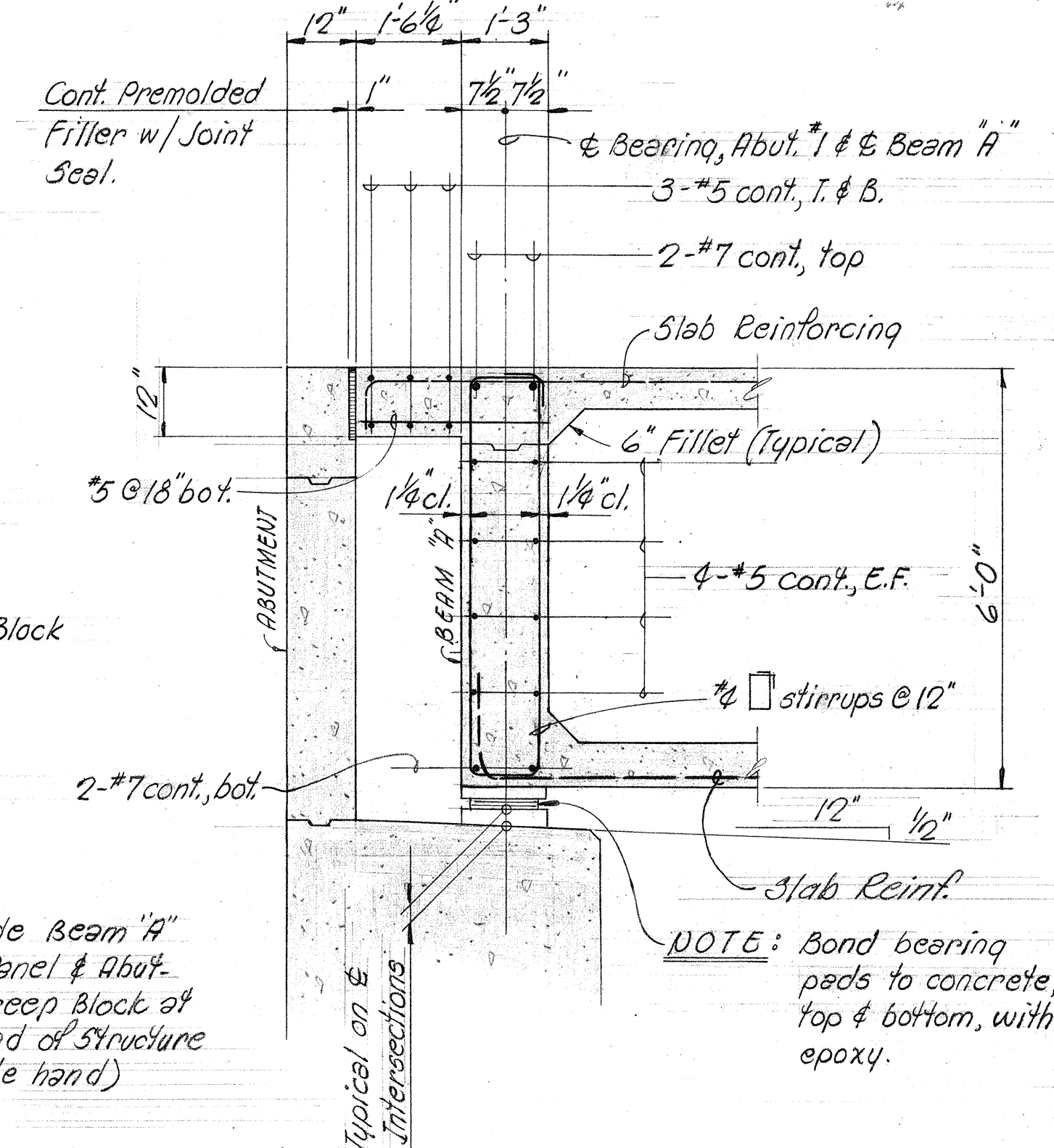
DECK PLAN - ABUTMENT #1
Scale: 1/2" = 1'-0"



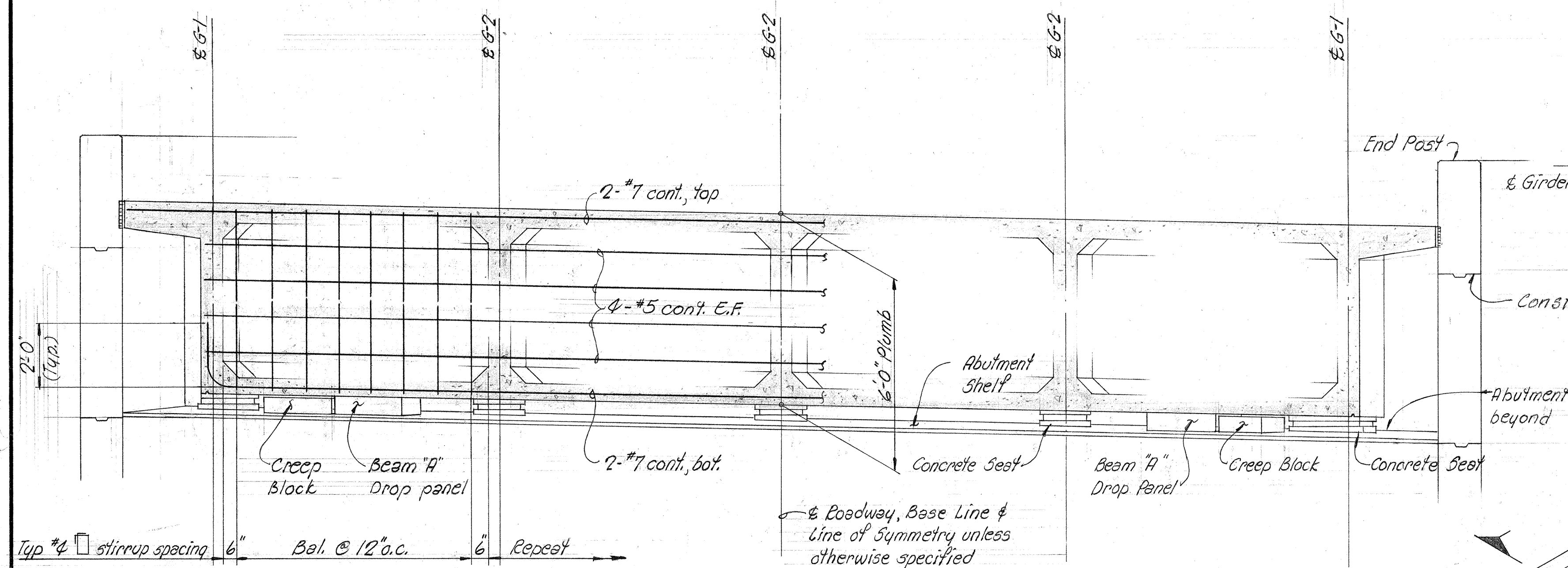
MID-DEPTH PLAN SECTION OF DECK - ABUTMENT #1
Scale: 1/2" = 1'-0"



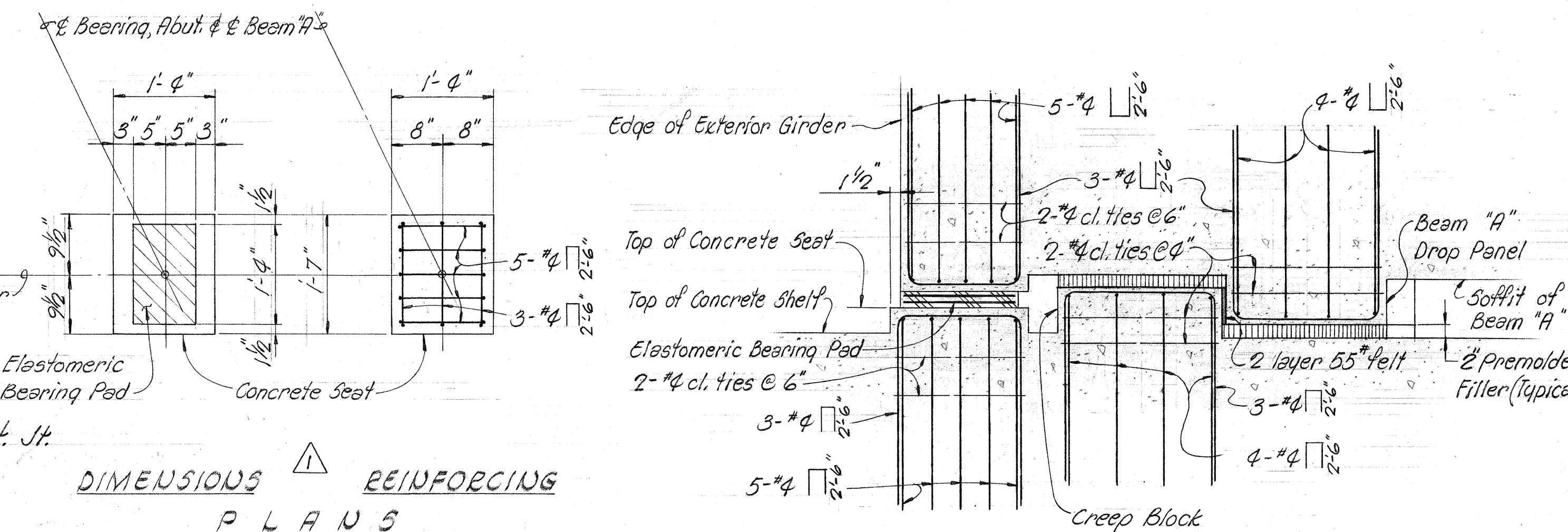
PLAN - ABUTMENT #1 SHELF SHOWING BEARING DETAILS
Scale: 1/2" = 1'-0"



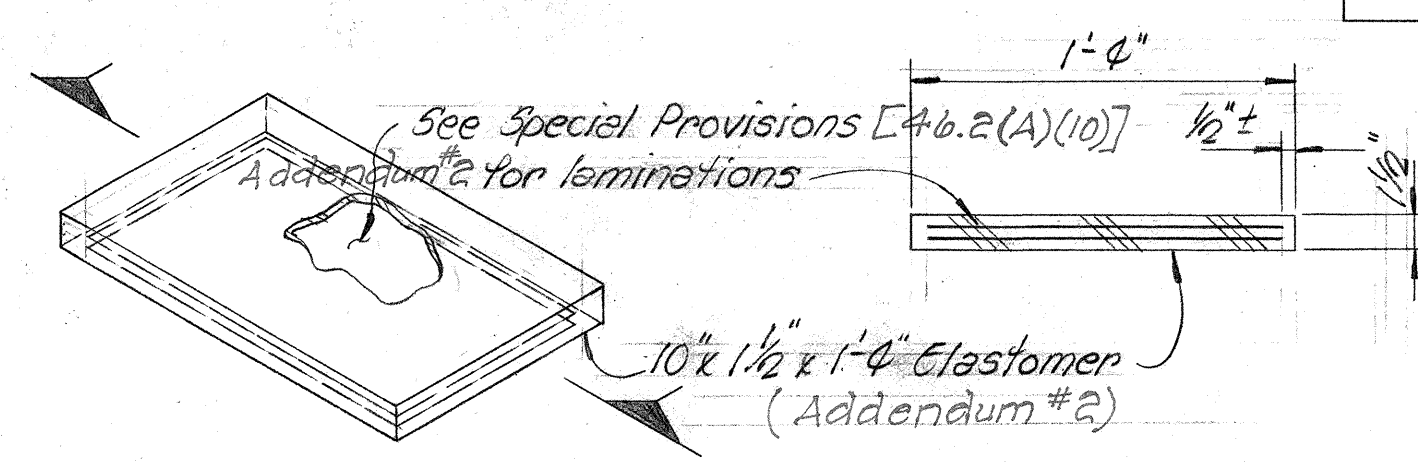
SECTION A
Scale: 1/2" = 1'-0"



BEAM "A" ELEVATION - ABUTMENT #1
Scale: 3/8" = 1'-0"



TYPICAL CONCRETE SEAT DETAILS ABUTMENTS 1 & 2
Scale: 3/4" = 1'-0"



ISOMETRIC SECTION ELASTOMERIC BEARING PAD DETAIL
Scale: 1 1/2" = 1'-0"

Revision #1 - Lowered Abutment Shelf & revised Elastomeric Pad

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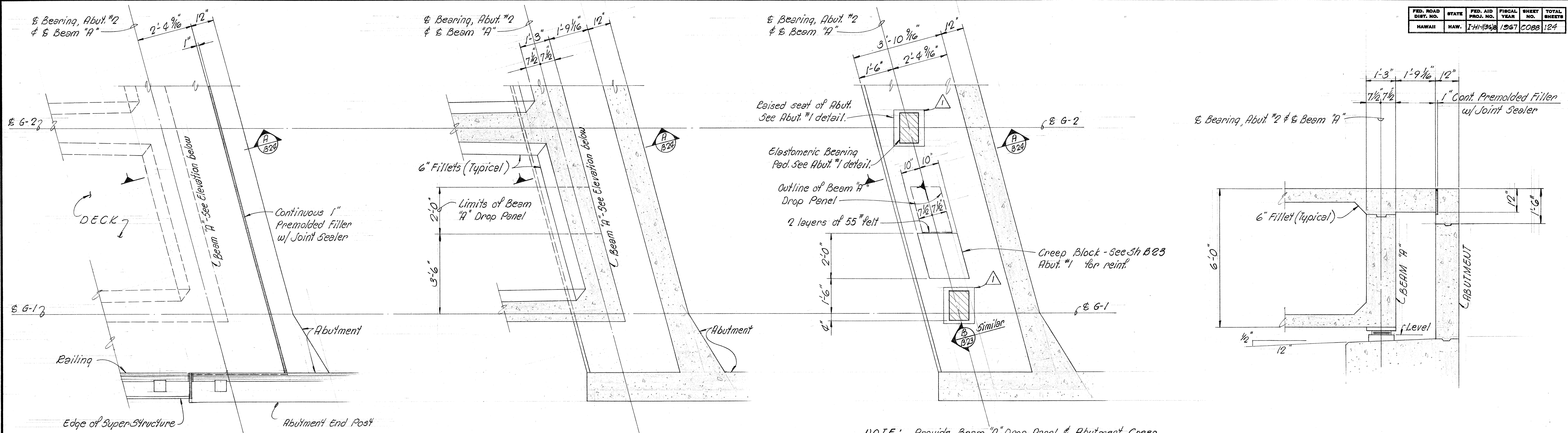
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DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

WAIANA INTERCHANGE
STRUCTURE No. 12

F.A.T. PROJ. No. I-41-1(36)B
Scale: As Shown Date: _____
SHEET No. B23 OF 25 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-41-136B	1967	COB8 124	



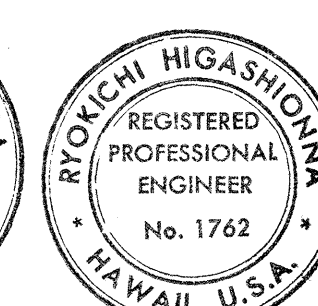
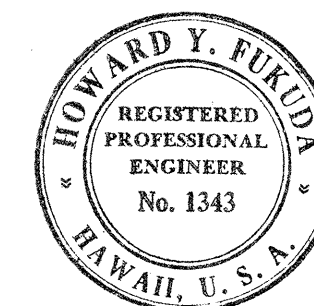
NOTE: Provide Beam "A" Drop Panel & Abutment Creep Block at other end of Structure (Opposite hand)

SECTION A
Scale: 1/2" = 1'-0"

NOTE: Unless otherwise shown, Beam "A" & Abutment Shelf bearing details same as Abutment #1.

Revision #1 - Lowered Abutment Shelf & revised Elastomeric Pad

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STATE OF HAWAII
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WAIANA INTERCHANGE
STRUCTURE No. 12

F.A.I. PROJ. No. I-41-1(36)B

Scale: As Shown Date:

SHEET No. 824 OF 25 SHEETS

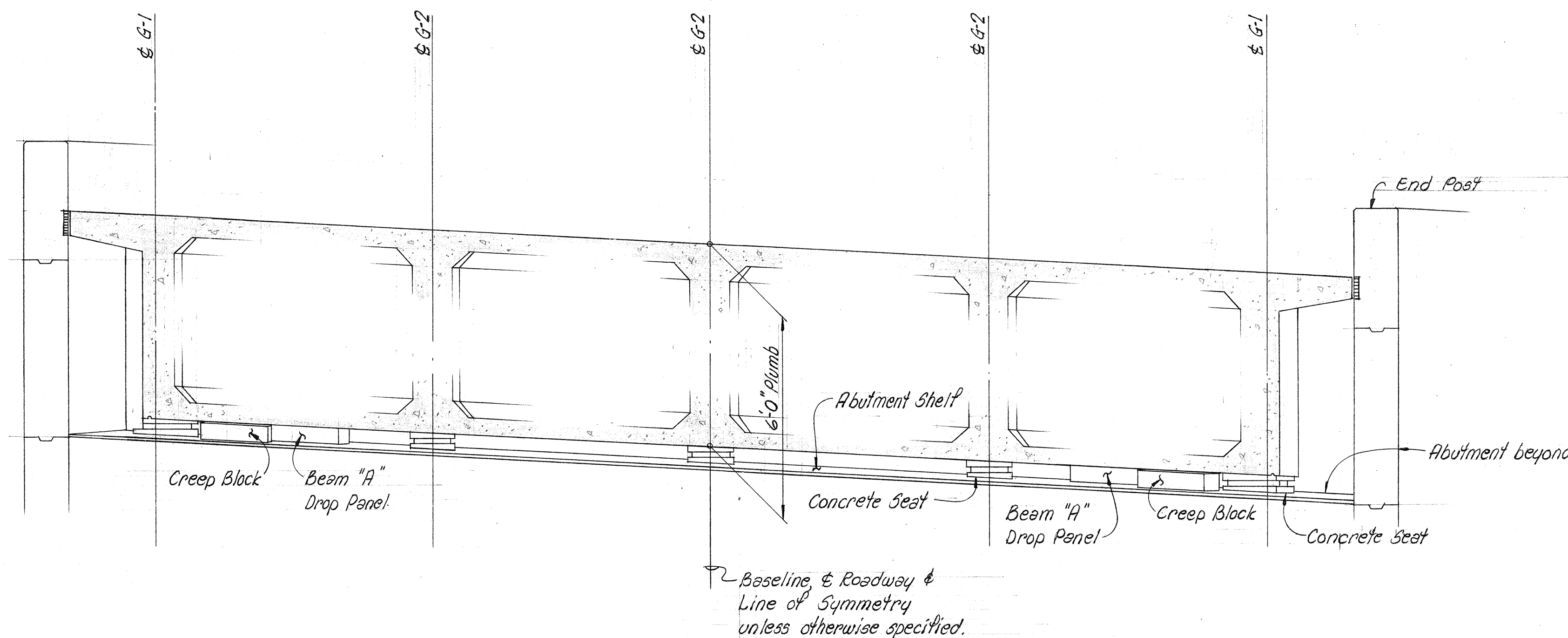
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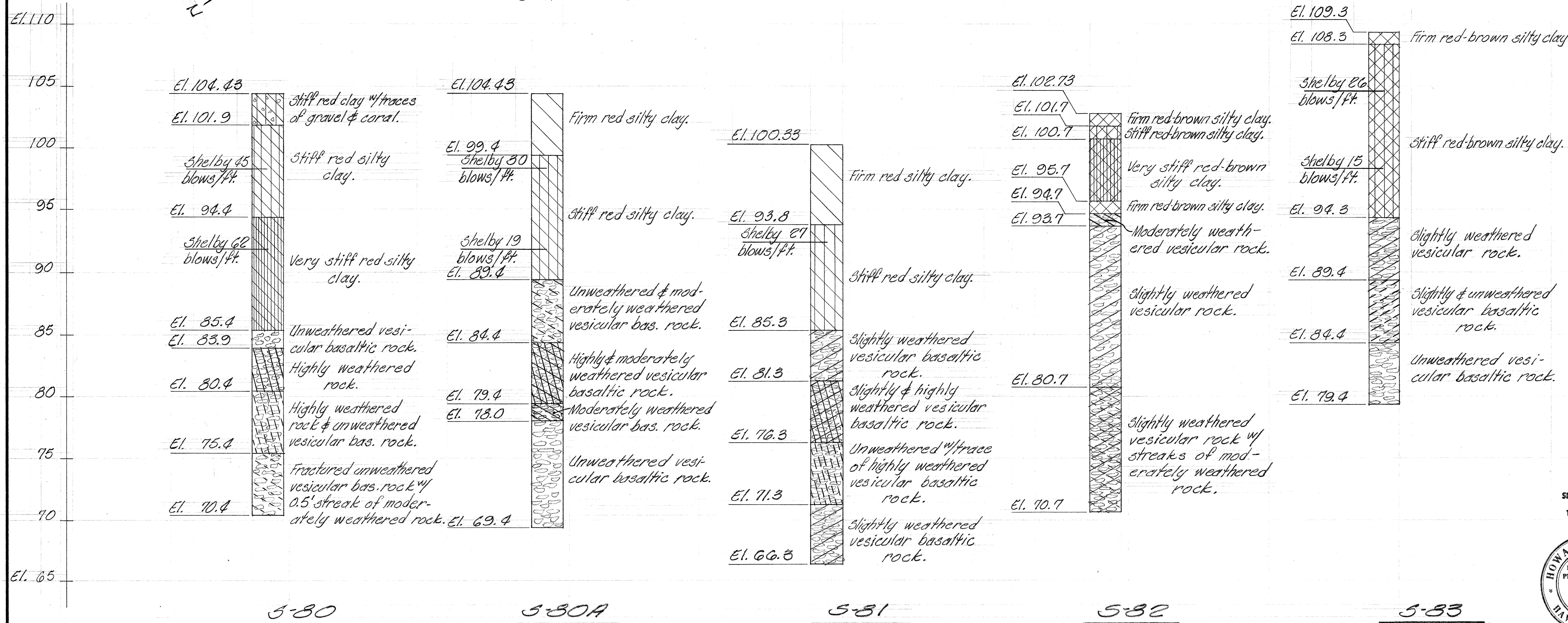
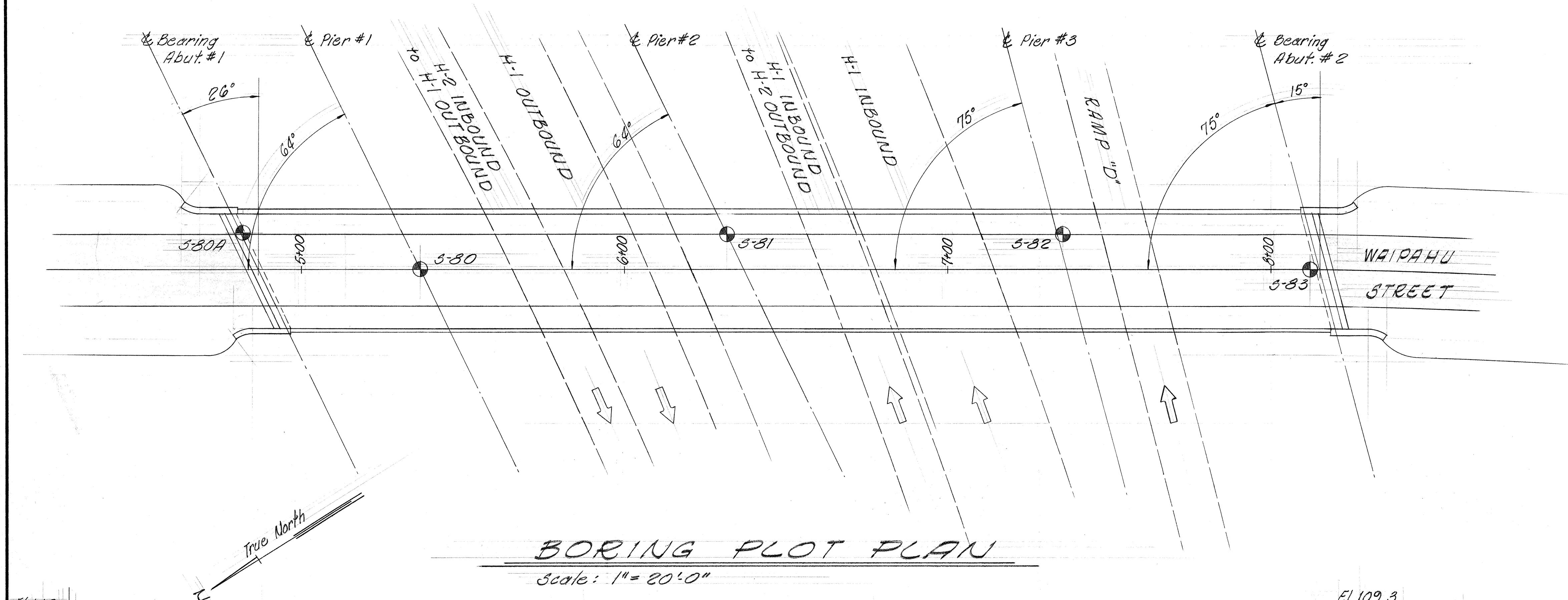
Howard Y. Fukuda

COB8 124

DATE	_____
SURVEY PLOTTED BY	_____
DRAWN BY	_____
CHECKED BY	_____
NOTED BY	_____
ORIGINAL PLAN	_____
NOTE BOOK	_____
No.	_____

BEAM "A" ELEVATION - ABUTMENT #2
Scale: 3/8" = 1'-0"





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**WAIANA INTERCHANGE
STRUCTURE No. 12**

F.A.I. PROJ. No. I-H-1 (36)B
Scale: As Shown Date: _____

SHEET No. 825 OF 25 SHEETS