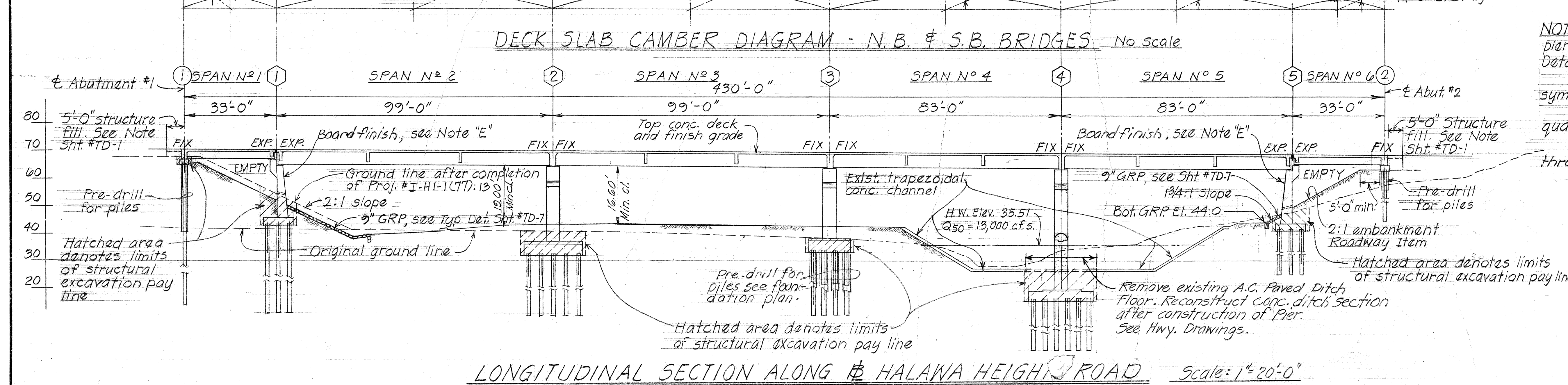
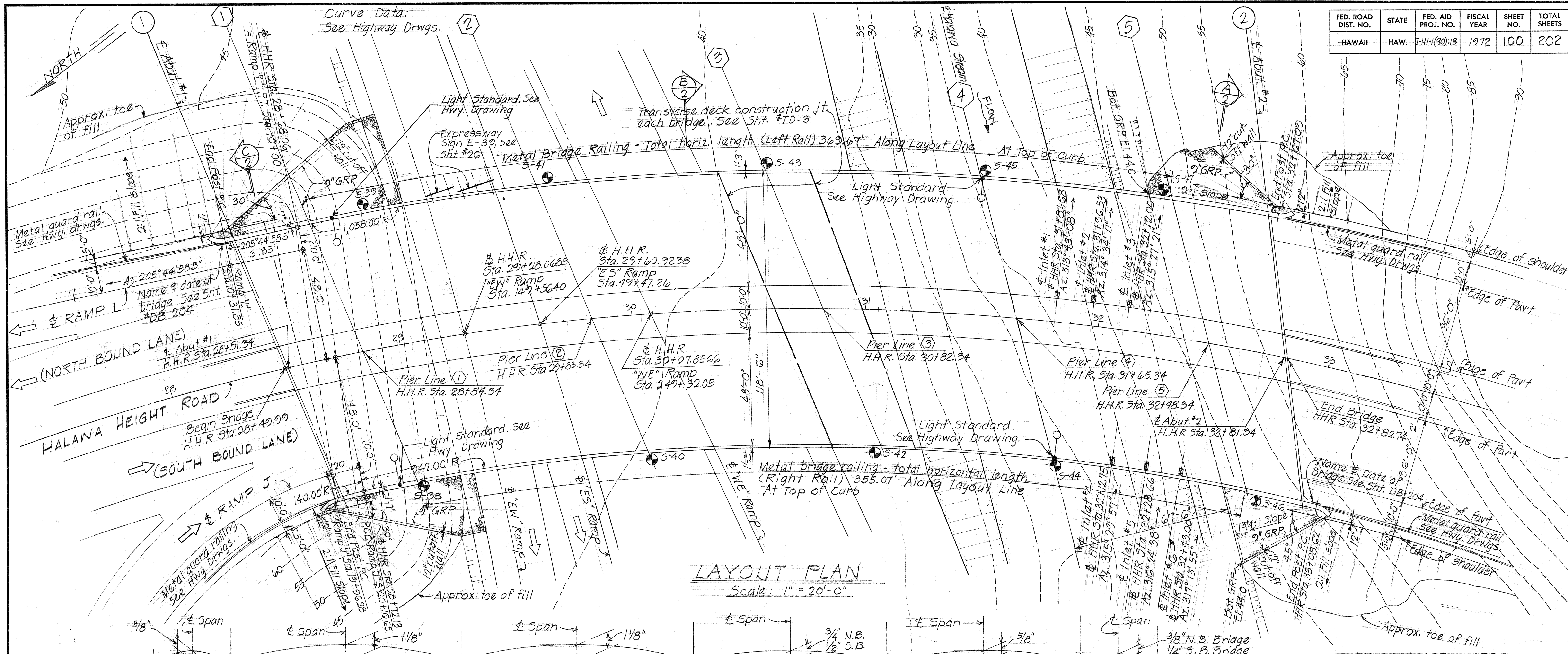


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(90):13	1972	100	202



REFERENCE NOTES

NOTE "E" - Board Finish - front face of pier wall same as curtain wall. See Typical Detail Sht. #15.

For design notes, general notes, symbols & abbreviations, refer to Sht. #TD-1. Refer to Sht. #2 for estimated quantities.

For boring logs, see Shts #1 P thru 8 P.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**HALAWA INTERCHANGE
STRUCTURE NO. 11**

HHR STA. 28+49.99 TO STA. 32+82.74

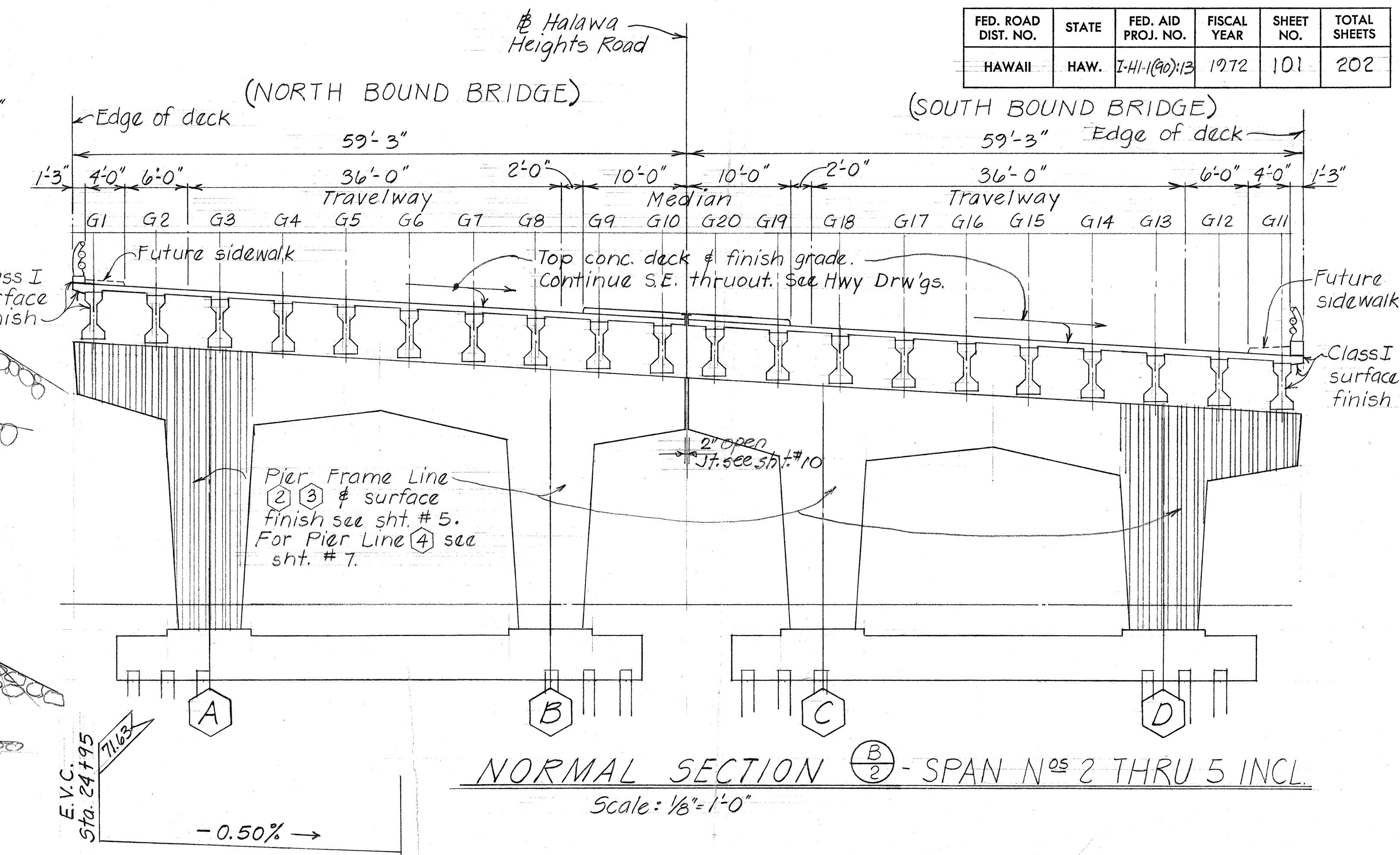
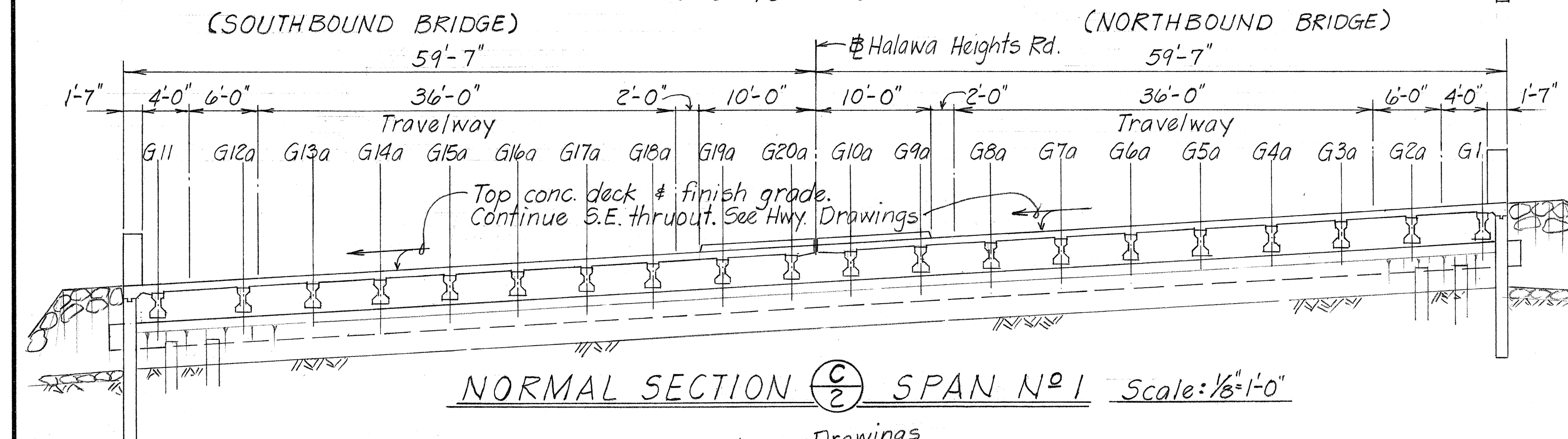
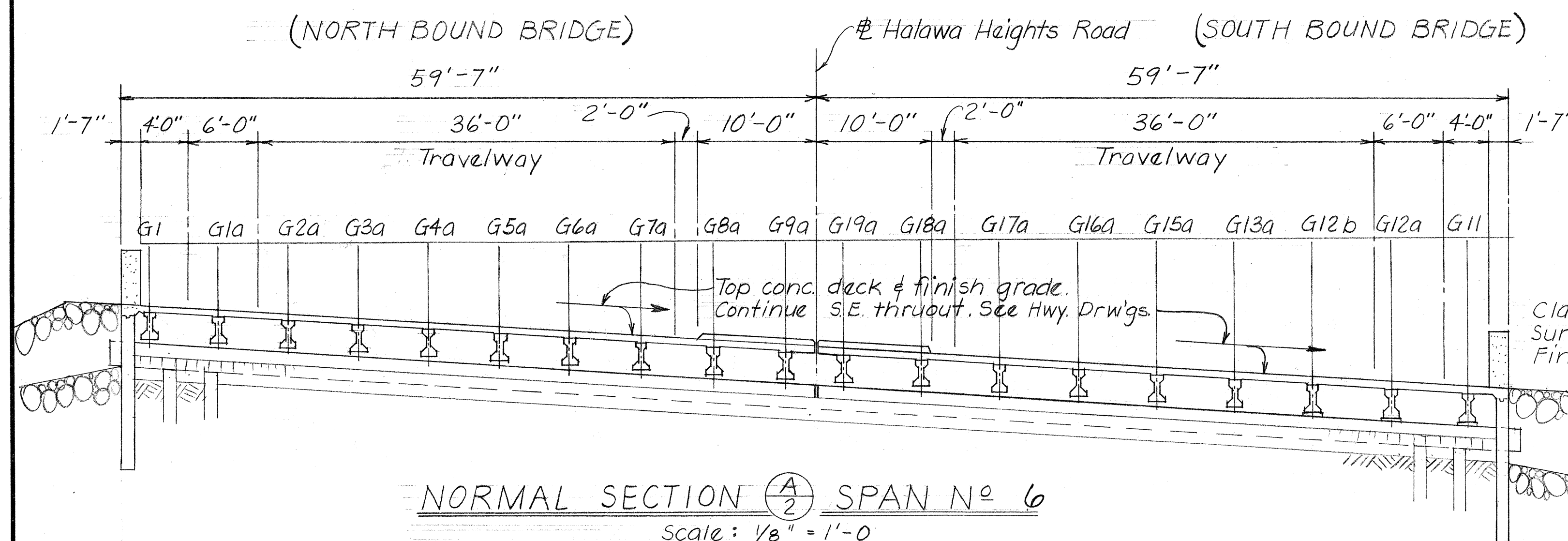
LAYOUT PLAN & DETAILS

Proj. No: I-HI-1(90):13 May 1971

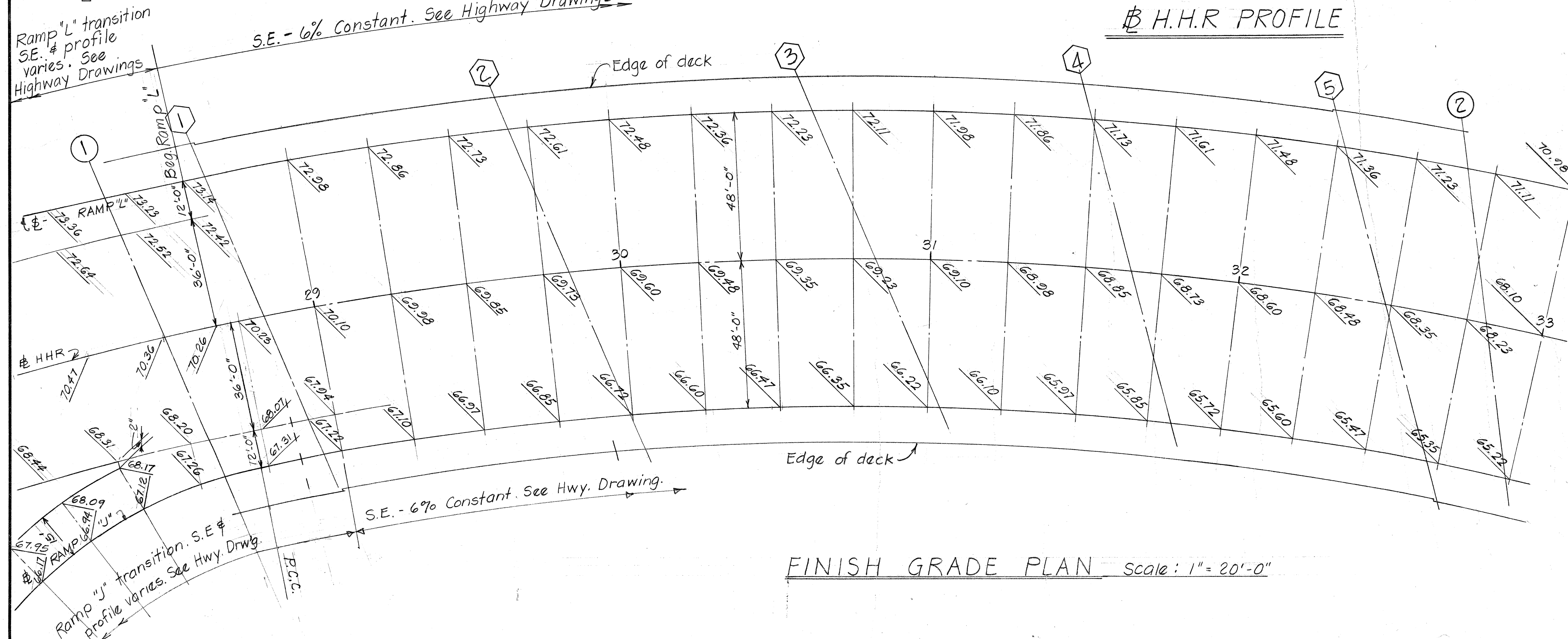
SHEET No. 1 OF 28 SHEETS

DATE	5/6/72
DRAWN BY	ST
CHECKED BY	SA RK-JE
NOTED BY	JO PY
QUANTITIES BY	JO PY
NO.	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-41-1(90)-13	1972	101	202



H.H.R. PROFILE



ESTIMATED QUANTITIES

ITEM NO.	ITEM	UNIT	QUANTITY
503.080	Concrete In Structure No. II Footing	L.S.	1,467 CY
503.070	Concrete In Structure No. II (Except Footing)	L.S.	3,315 CY
602.015	Reinforcing Steel In Structure No. II	L.S.	1,104,962 Lbs
612.01	Grouted Rubble Paving	C.Y.	312
504.11	Type I Prestressed Concrete Girders	L.S.	1,300 L.F.
504.38	Type II Prestressed Conc. Girders in Struct. #II	L.S.	7,200 L.F.
505.040	Precast, Prestressed Conc. Piles, Furnished	L.F.	41,768
505.400	Precast, Prestressed Conc. Piles, Driven	L.F.	36,260
505.800	Driving Test Piles	L.F.	1,636
505.700	Predrilled Holes For Piling	L.F.	1,636
507.25	Metal Bridge Railing - 3 Rail Combination Type	L.F.	725
507.71	Conc. Bridge Parapet, Incl. End Post for Struct. #II	L.F.	186
505.001	Pile Load Test	Each	1
206.60	Structure Excavation For Bridge	C.Y.	3,834
506.03	TFE Structural Bearing Expansion Pad Assemblage In Structure No. II	L.S.	40 sets
505.602	Extension or "Build Ups" For Structure #II Piles	F.A.	
503.080	Concrete In Structure No. II footings	L.S.	16 CY

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

HALAWA INTERCHANGE
STRUCTURE No II

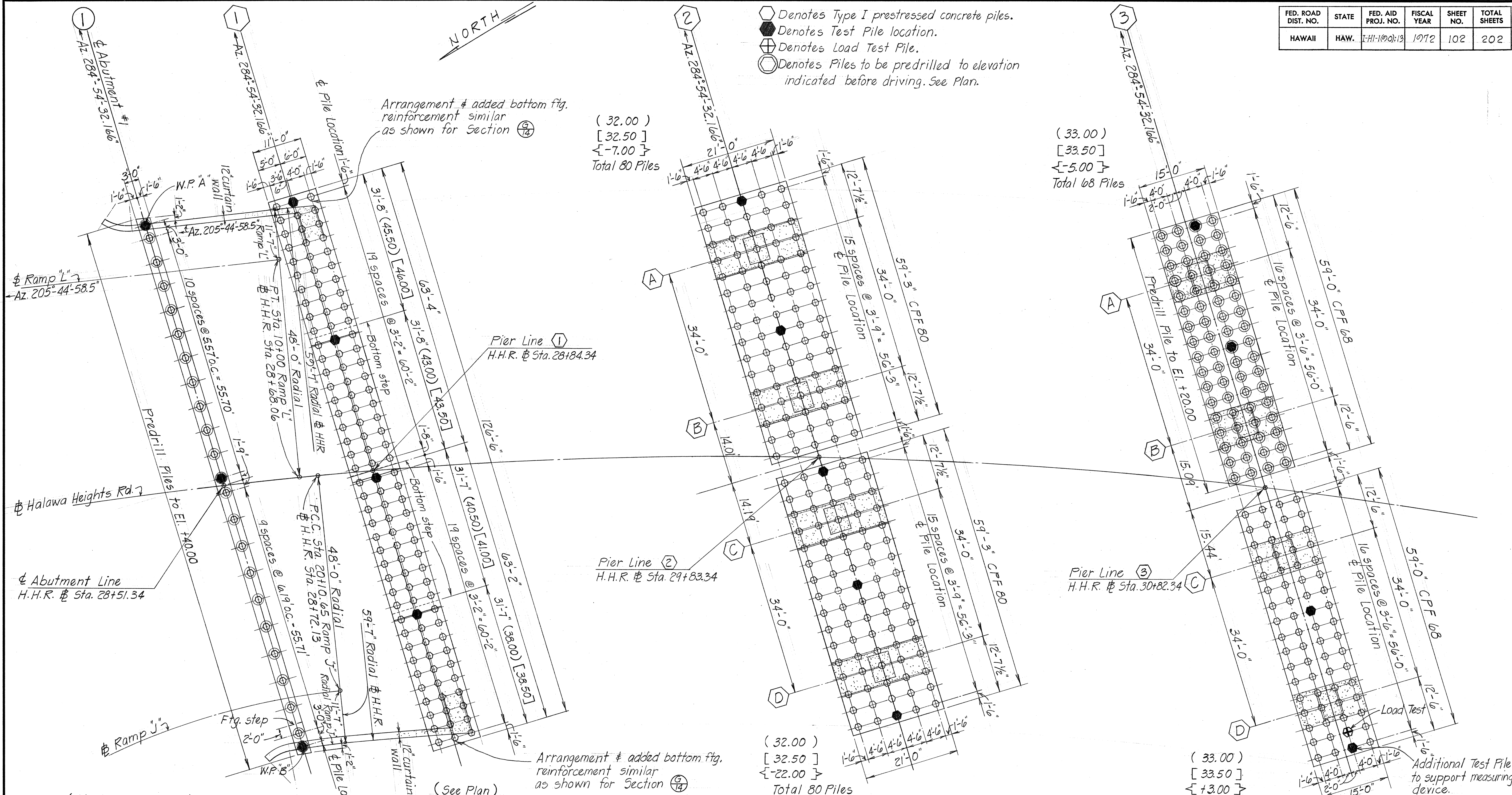
Proj. No.: I-41-1(90)-13 May 1971

SHEET No. 2 OF 28 SHEETS

101

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(90)-13	1992	102	202

- Denotes Type I prestressed concrete piles.
- Denotes Test Pile location.
- ⊕ Denotes Load Test Pile.
- ⊙ Denotes Piles to be predrilled to elevation indicated before driving. See Plan.

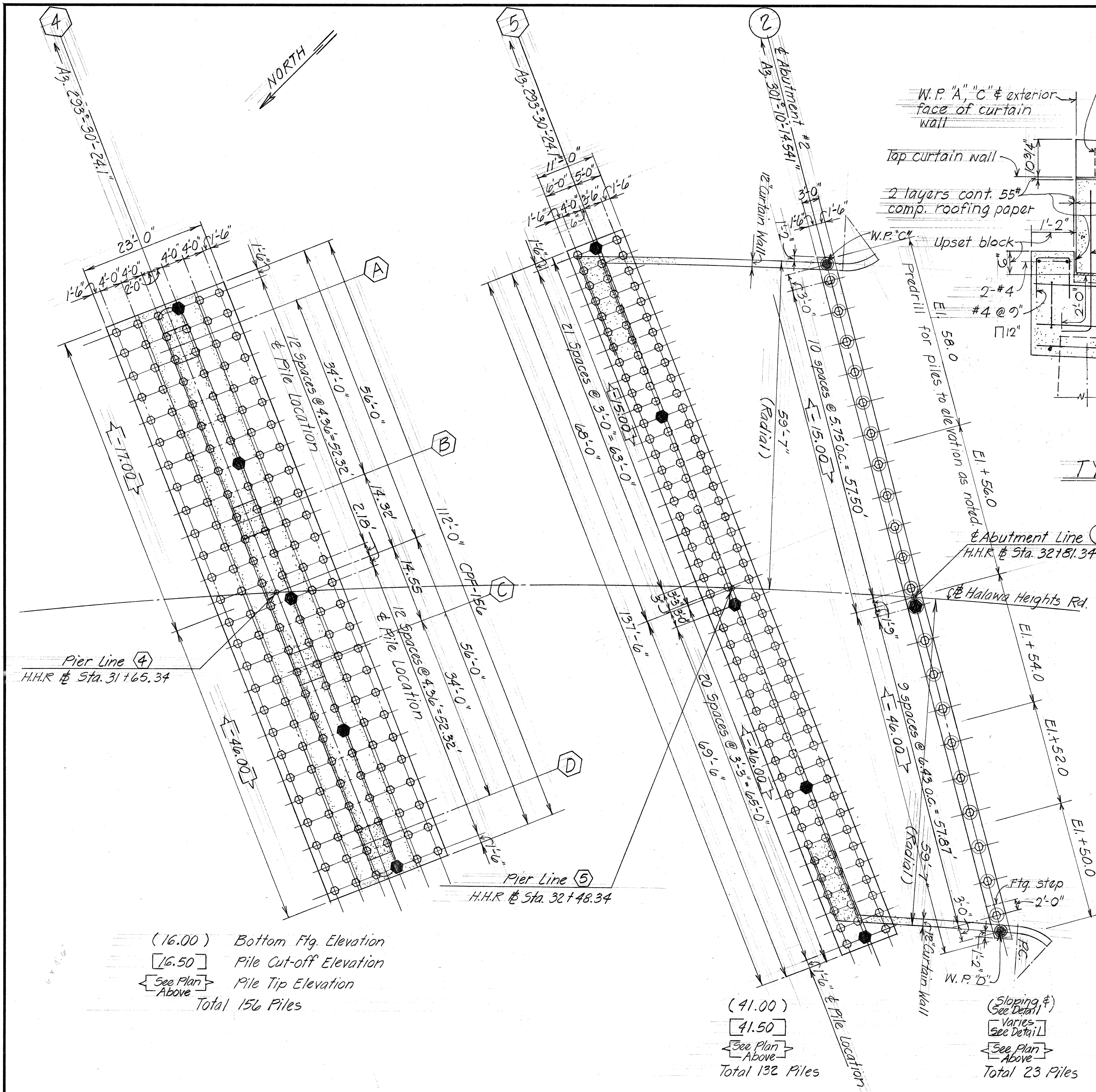


PART FOUNDATION PLAN Scale 1"=10'-0"

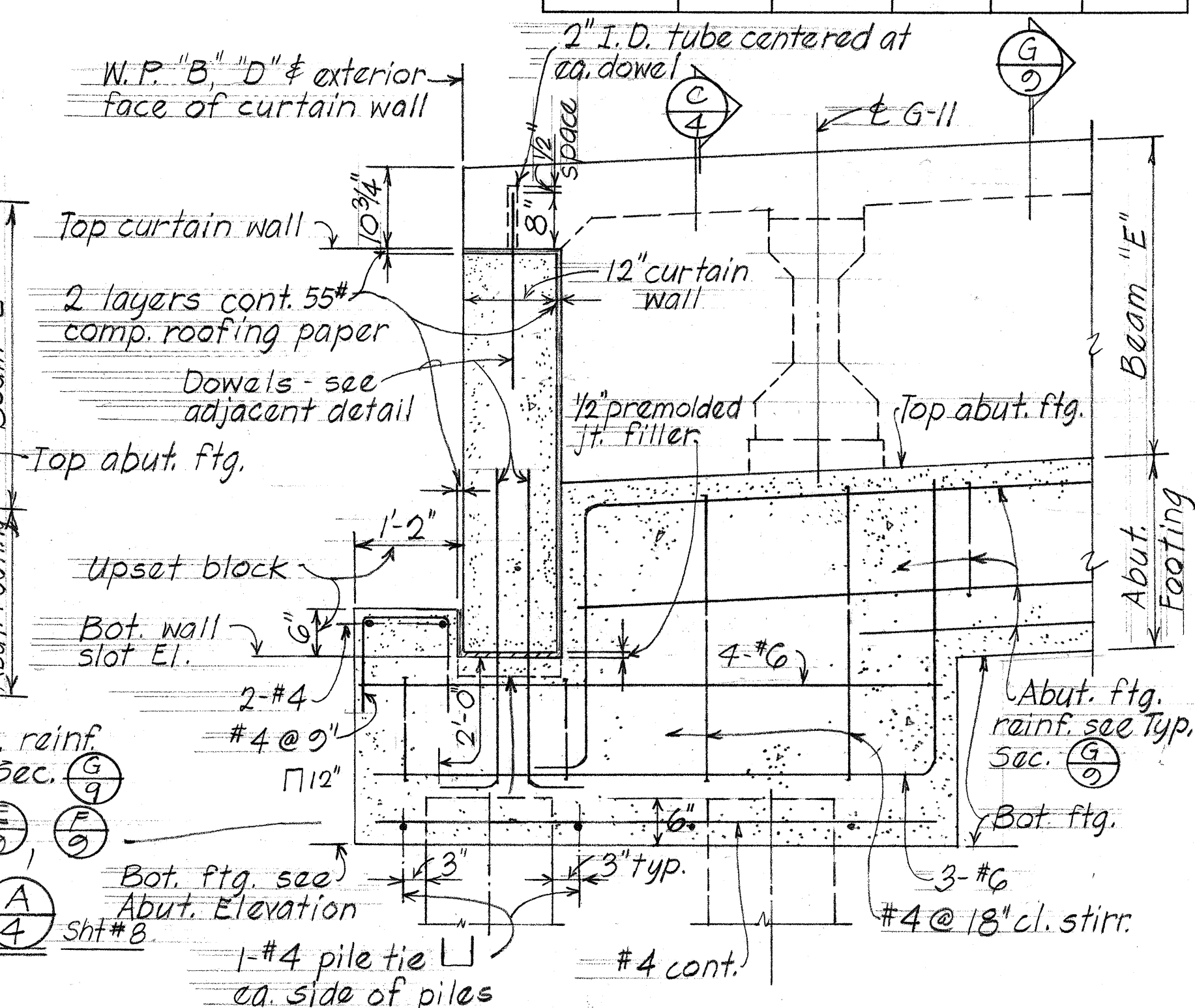
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
HALAWA INTERCHANGE
STRUCTURE NO. 11
PART FOUNDATION PLAN
Proj. No. I-HI-1(90)-13
SHEET NO. 3 OF 28 SHEETS

SURVEY PLOTTED BY	DATE
DRAWN BY	2/2/72
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(90)-13	1972	103	202



TYPICAL SECTION (A) sht. #8
Scale: 3/4" = 1'-0"



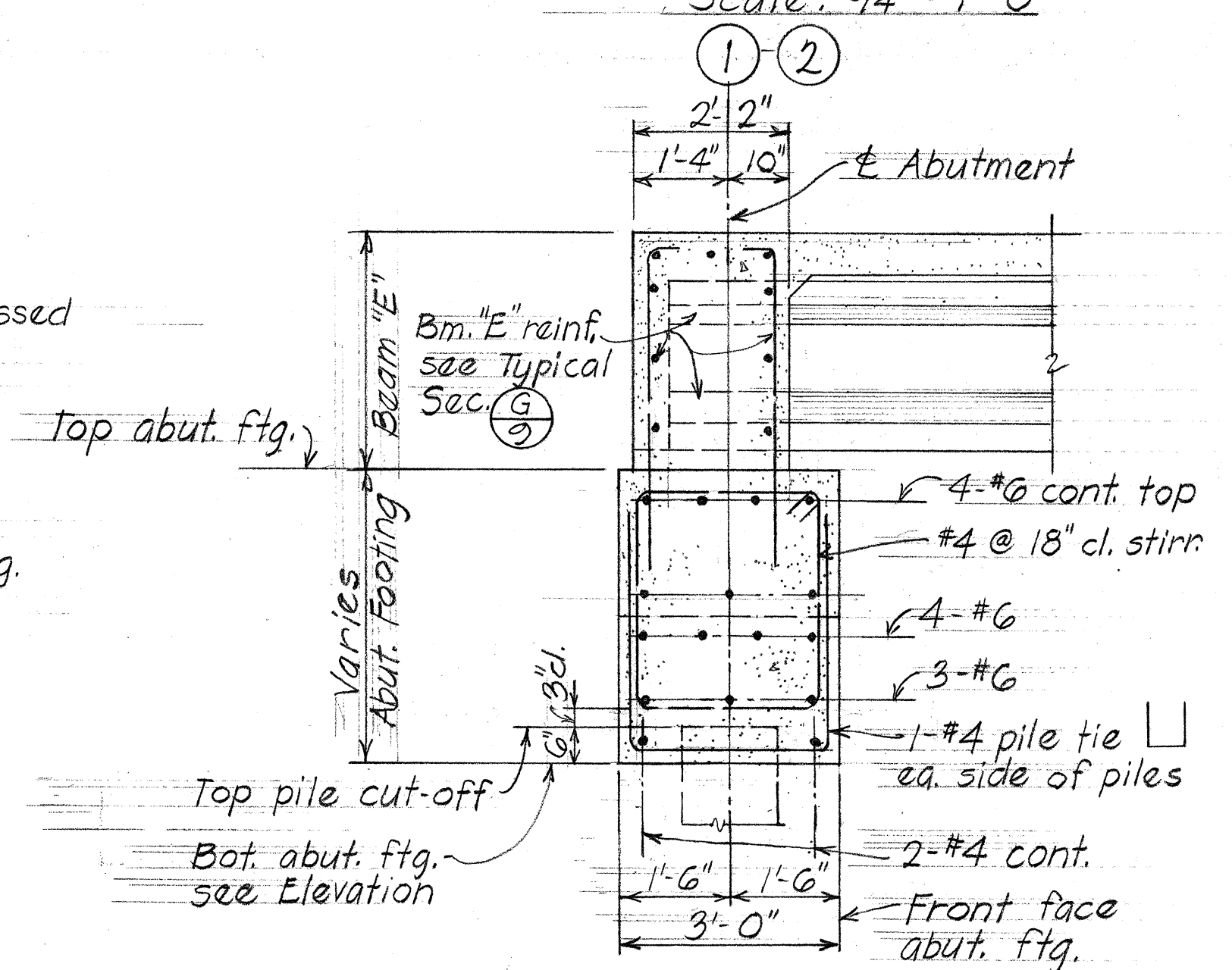
TYPICAL SECTION (B) sht. #8
Scale: 3/4" = 1'-0"

LEGEND:

- - Denotes Type I prestressed concrete piles
- - Denotes Test pile location
- - Denotes piles to be predrilled to elevation indicated before driving. See Plan.

NOTE:

All piles to be Type I prestressed concrete piles
 See Standard Sht. #DB-300-1, 300-2.
 Drive test piles indicated on plan for length determination.
 Test piles shall be driven before casting balance of piles.
 Refer to Shts. #5, #6, #7 & #8 for additional Foundation details.
 Pile capacity 32 Tons.



SECTION (C)
Scale: 1/2" = 1'-0"

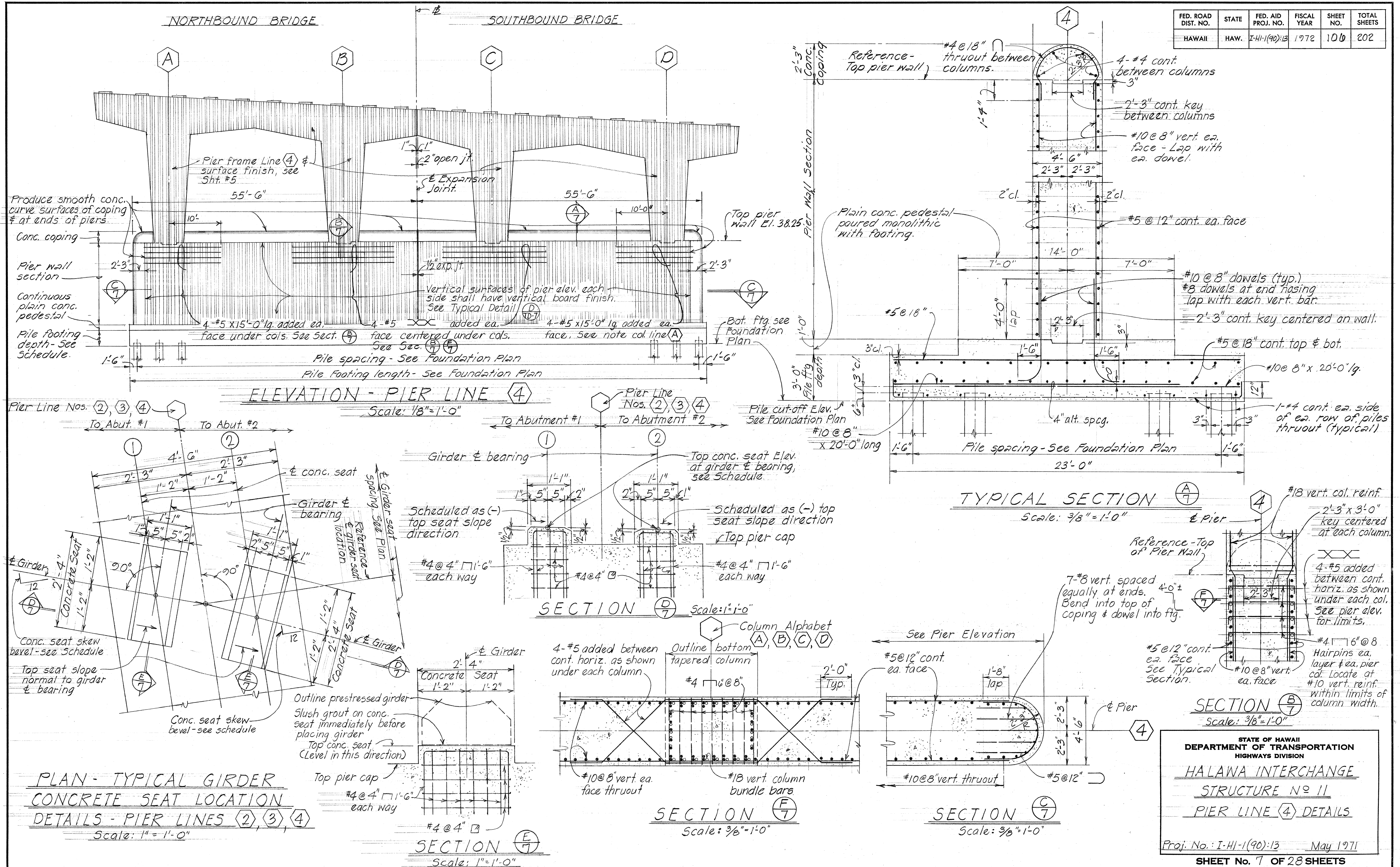
STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
HALAWA INTERCHANGE
STRUCTURE No 11
 PART FOUNDATION PLAN
 Proj. No. I-HI-1(90)-13 May 1971
 SHEET No. 4 OF 28 SHEETS

DATE	2/2/70
DESIGNED BY	TKU
DRAWN BY	TKU
CHECKED BY	TKU
NOTED BY	TKU
NO.	

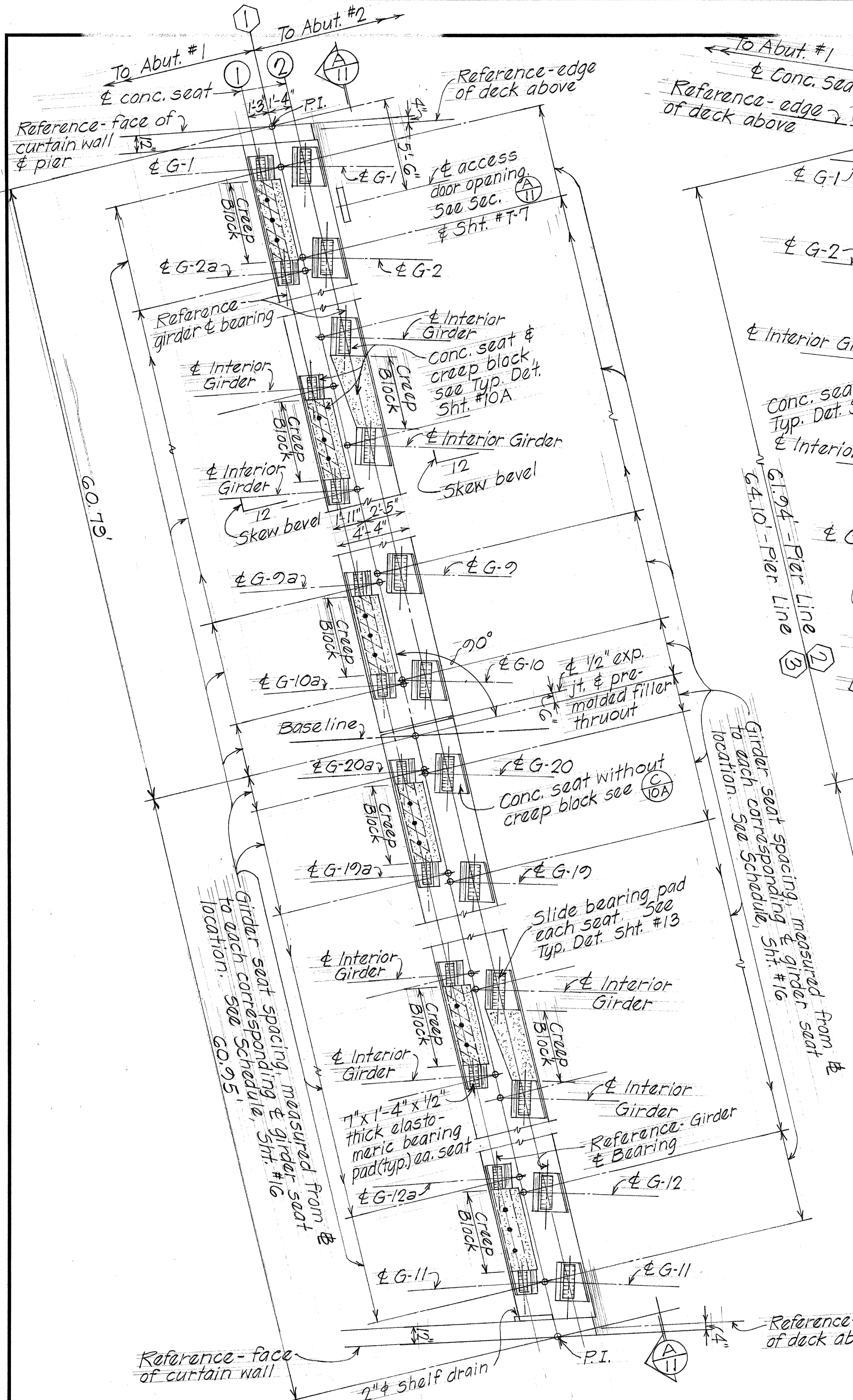
PART FOUNDATION PLAN

Scale: 1"=10'-0"

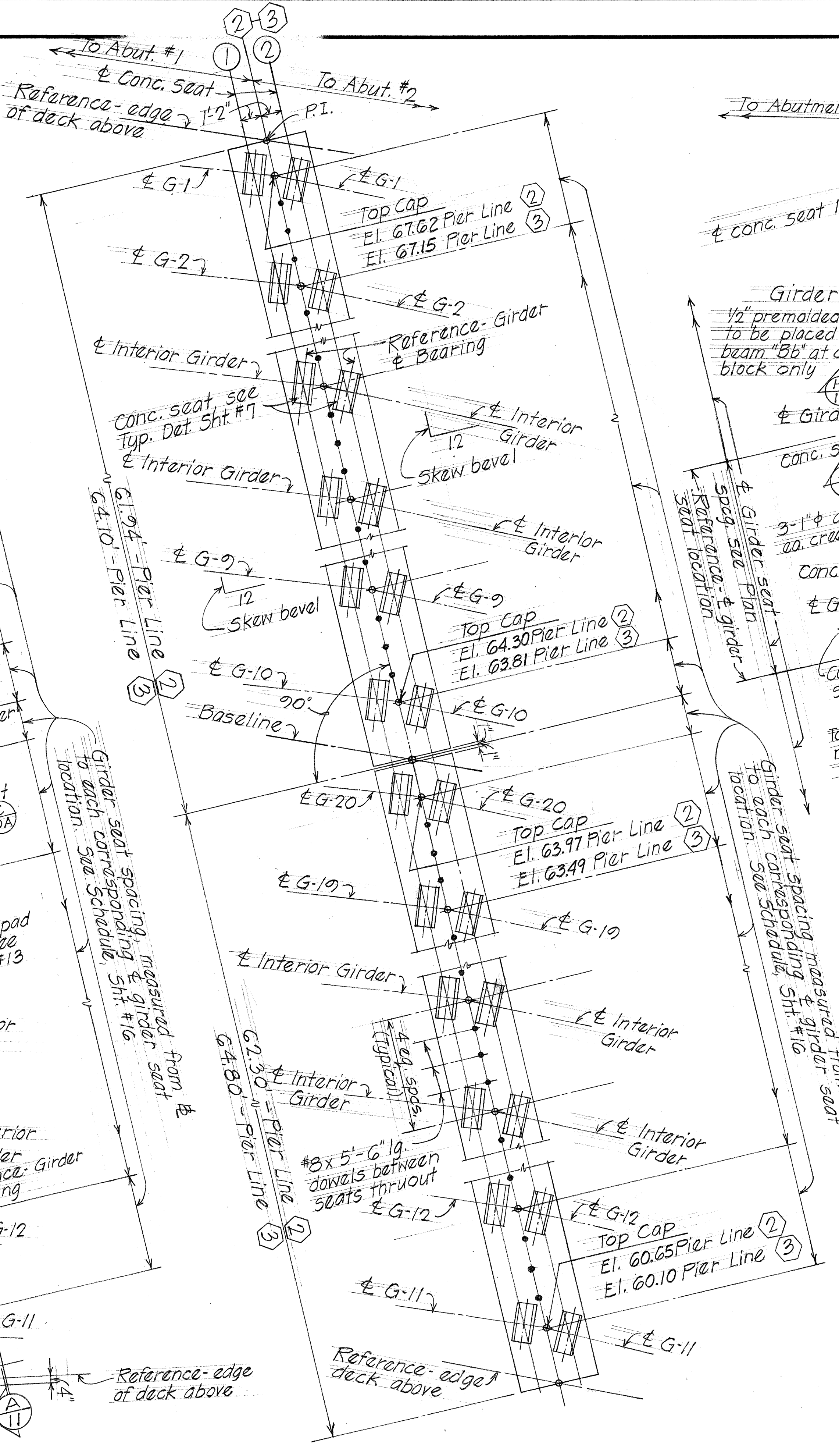
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-41-1(90):13	1972	106	202



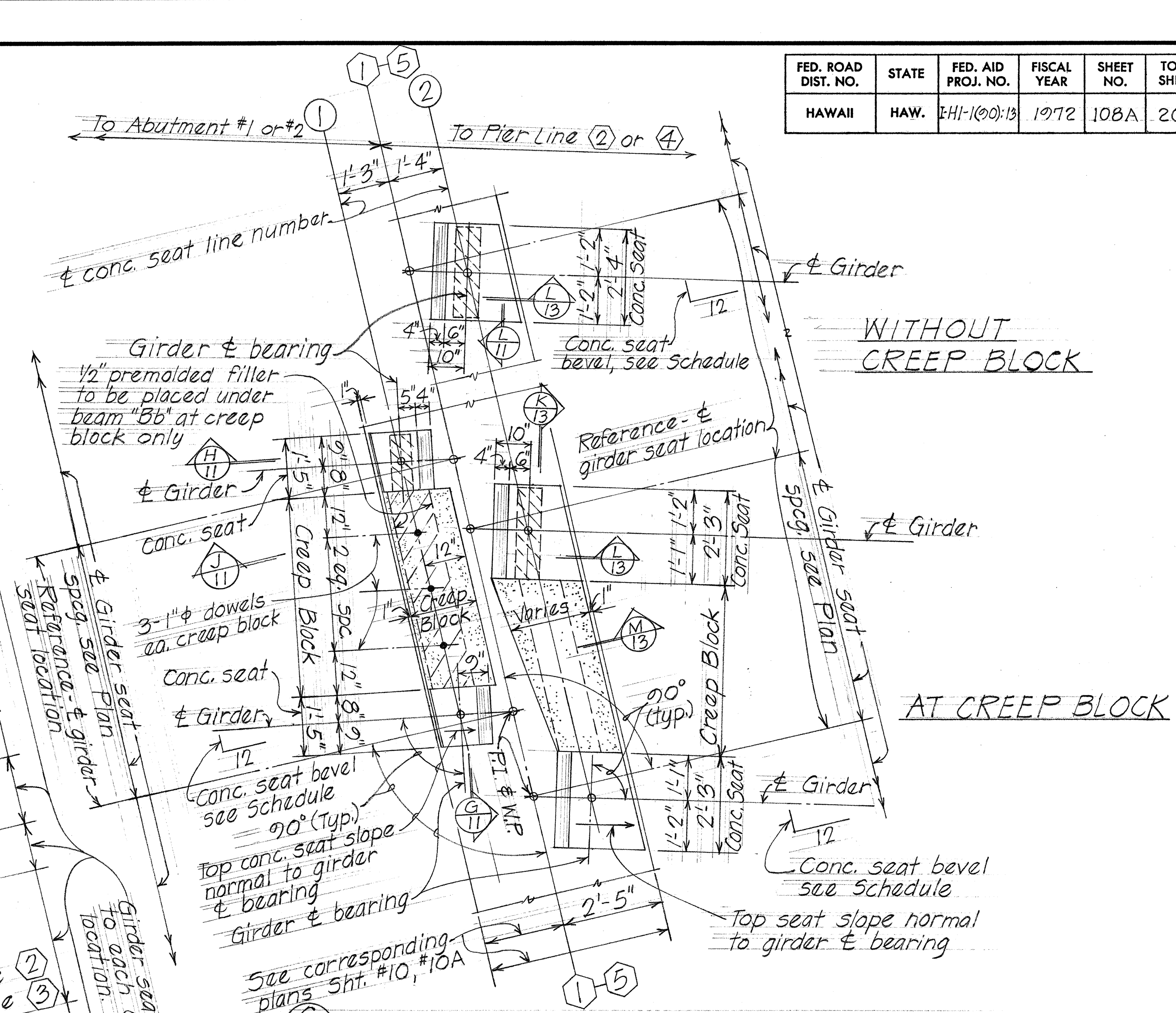
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H-1(90):13	1972	108A	202



PLAN-PIER LINE ① Scale: 1/4" = 1'-0"



PLAN-PIER LINES ②, ③ Scale: 1/4" = 1'-0"



PLAN-TYPICAL GIRDER CONCRETE SEAT LOCATION DETAIL PIER LINES ① & ⑤ Scale: 1/2" = 1'-0"

- NOTES:
- For concrete seat location details, Pier Lines ②, ③ refer to Sht. #7.
 - For typical concrete seat & creep block locations & details Pier Line ① refer to Sht. #11, Elev. A ①.

DATE	10/1/72
SURVEY PLOTTED BY	...
DRAWN BY	...
CHECKED BY	...
ORIGINAL PLAN	...
NOTE BOOK	...

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

HALAWA INTERCHANGE

STRUCTURE NO. 11

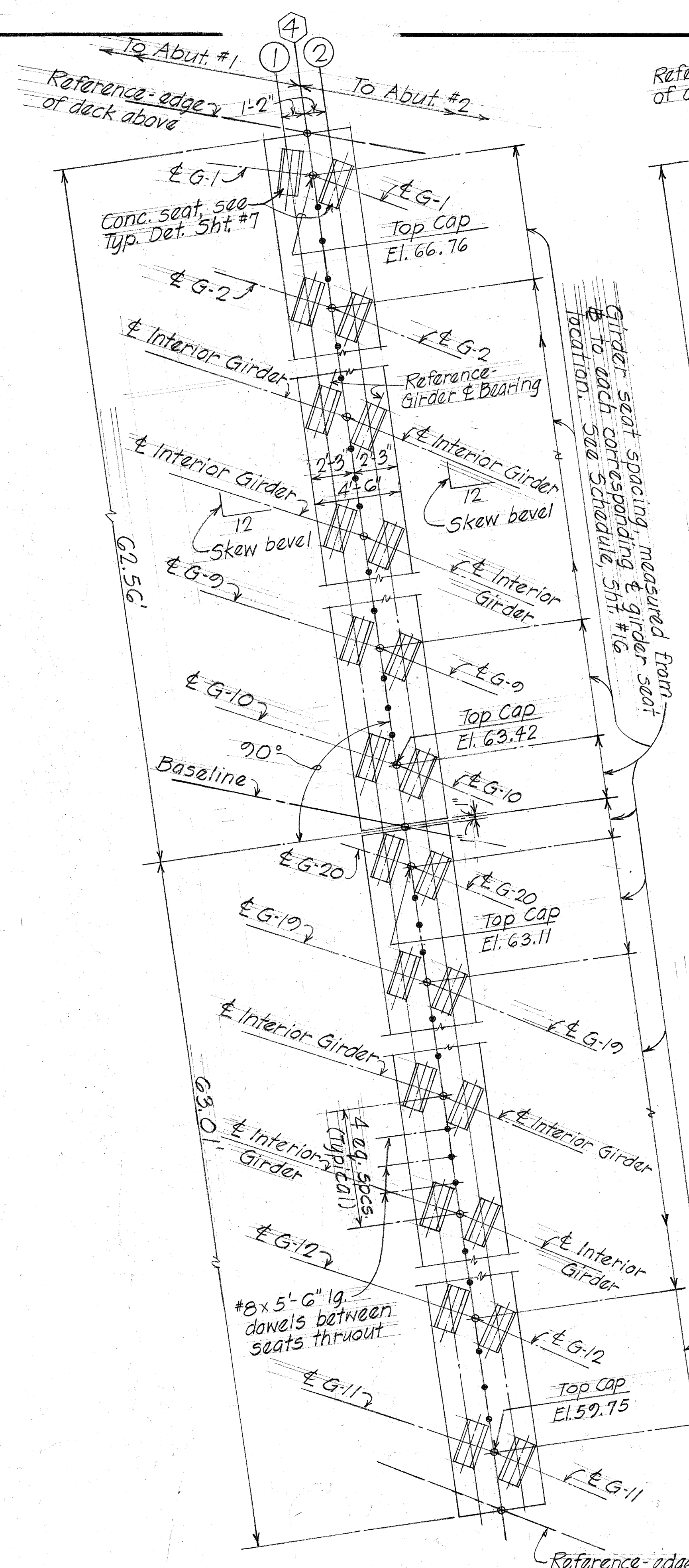
PLANS-PIER LINES ①, ②, ③

Proj. No. I-H-1(90):13

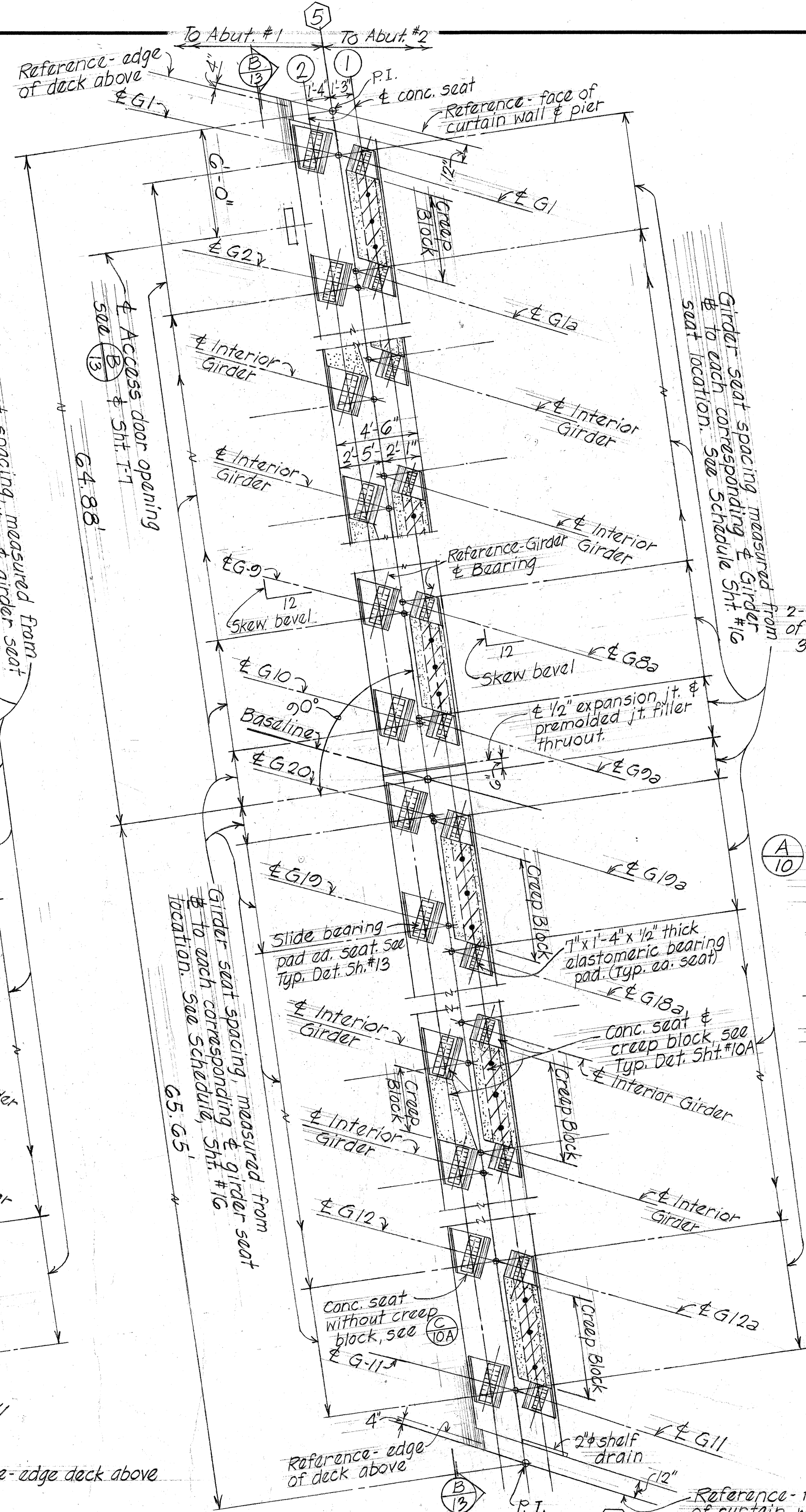
SHEET No. 10A OF 28 SHEETS

108A

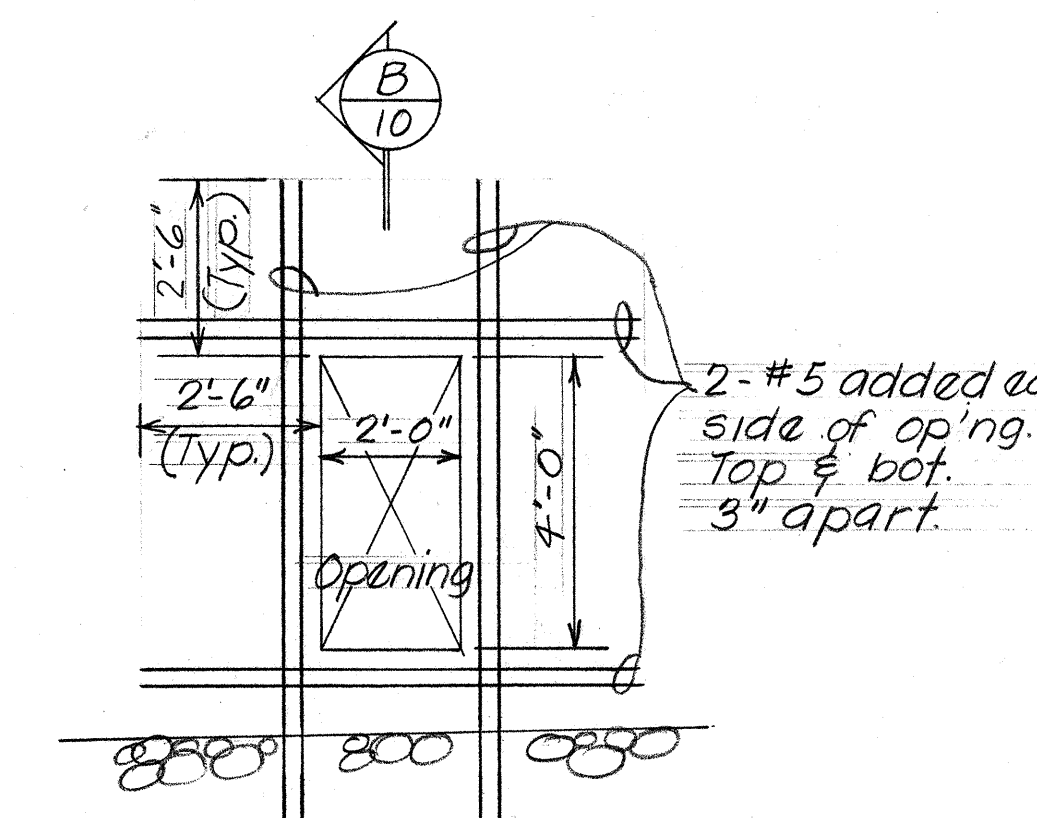
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-41-1(90):13	1972	109	202



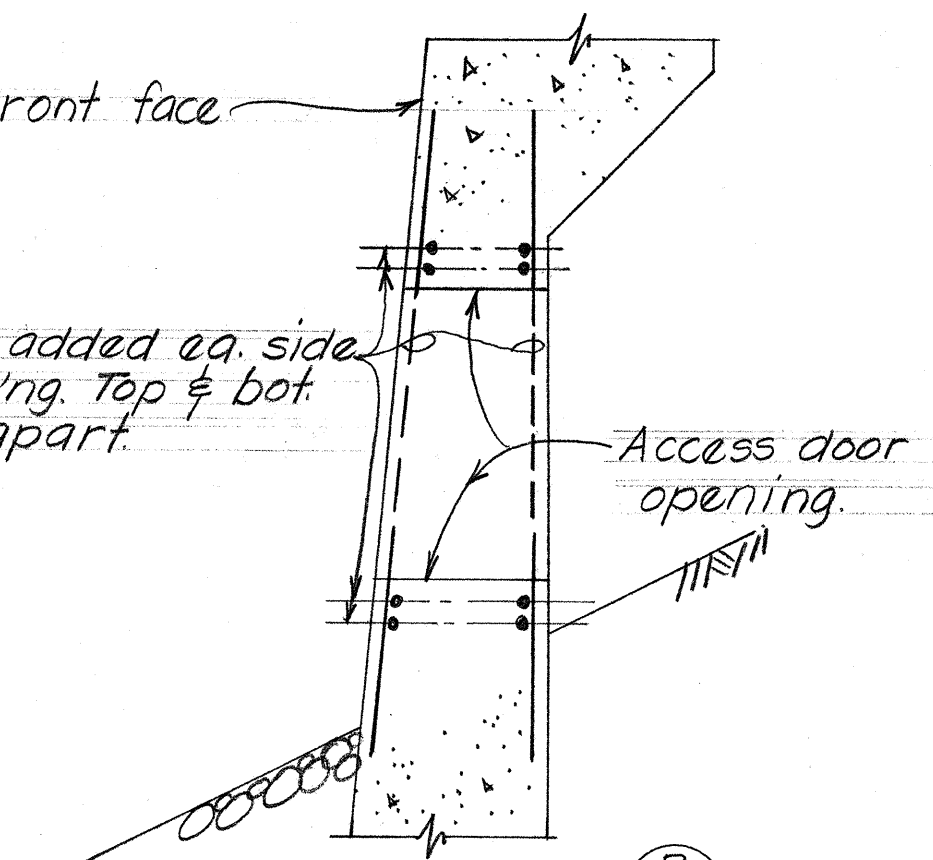
PLAN-PIER LINE ④ Scale: 1/4"=1'-0"



PLAN-PIER LINE ⑤ Scale: 1/4"=1'-0"



ELEVATION



SECTION ⑩ Scale: 3/8"=1'-0"

⑩ TYPICAL ADDED REINFORCEMENT ACCESS DOOR D-1 OPENING

- NOTES:**
- For conc. seat location detail Pier Line ④ refer to Sht. #7.
 - For typical conc. seat & creep block locations & details Pier Line ⑤ refer to Sht. #11, Elevation ⑩.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

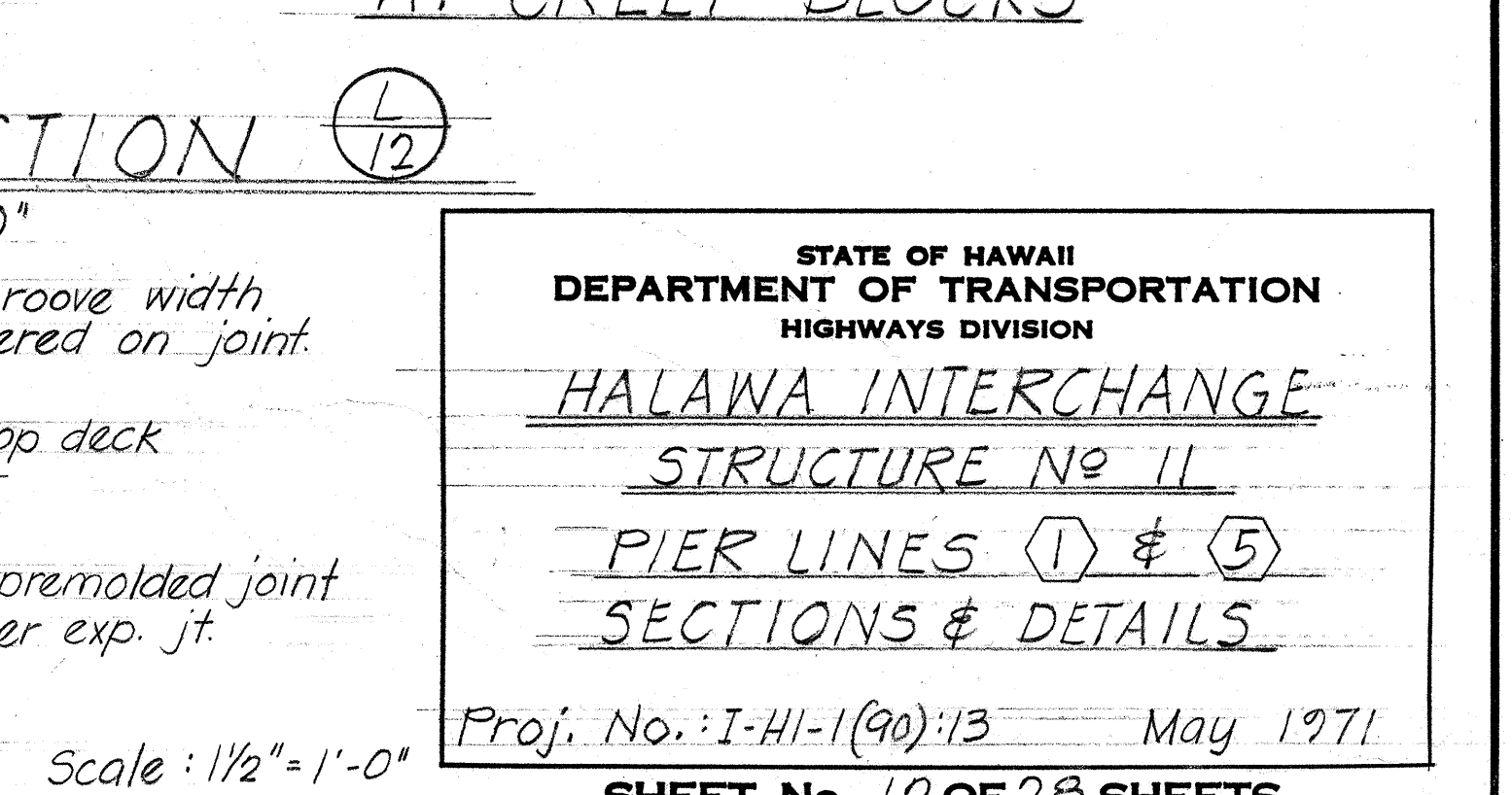
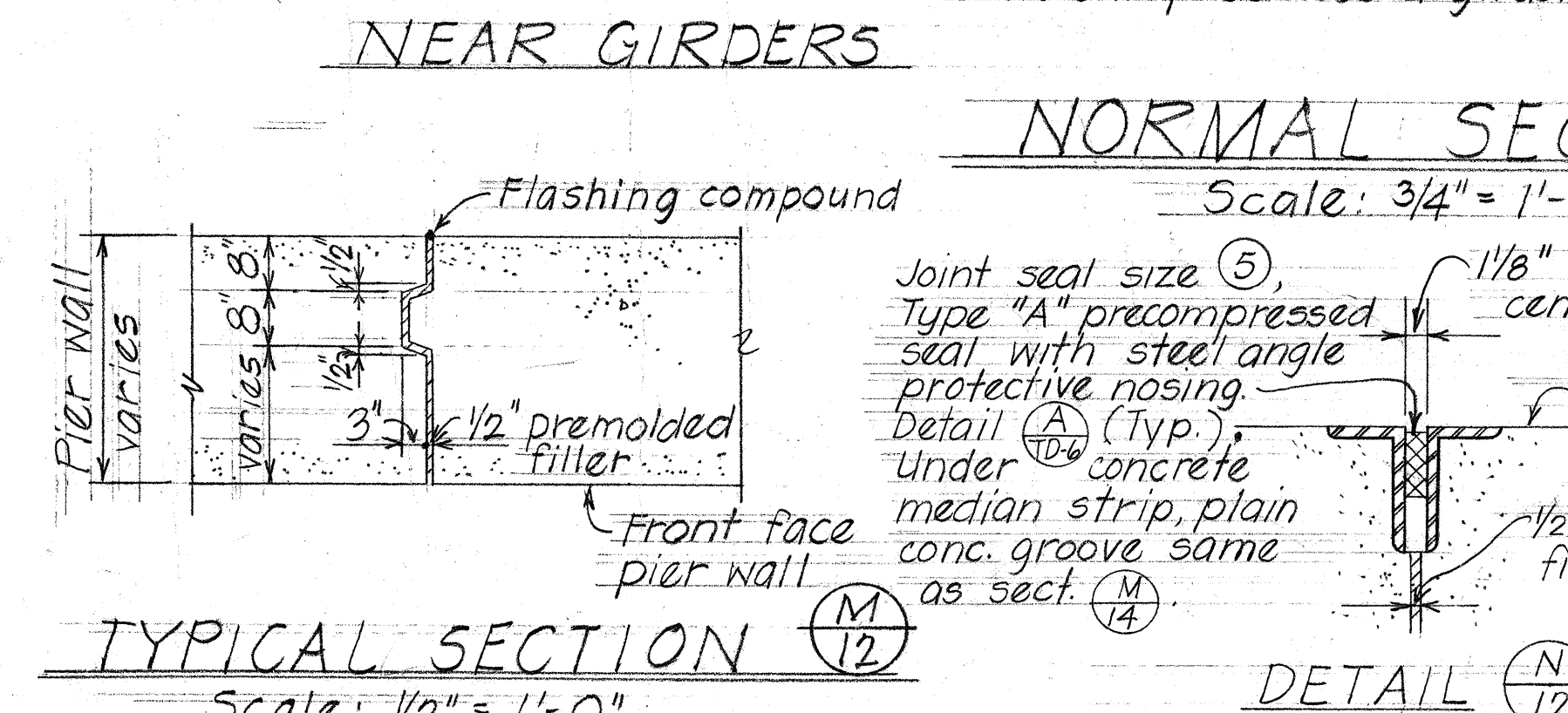
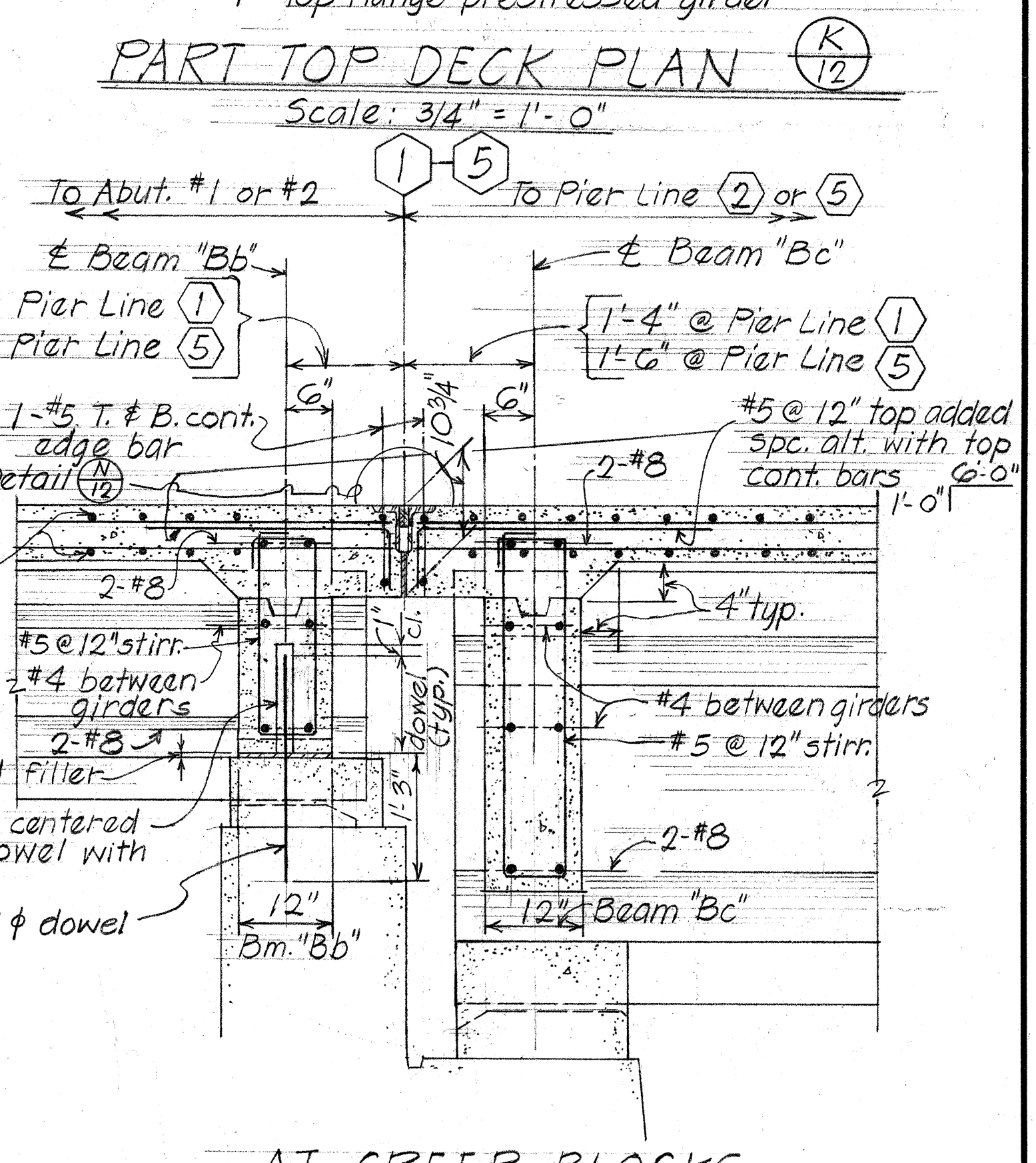
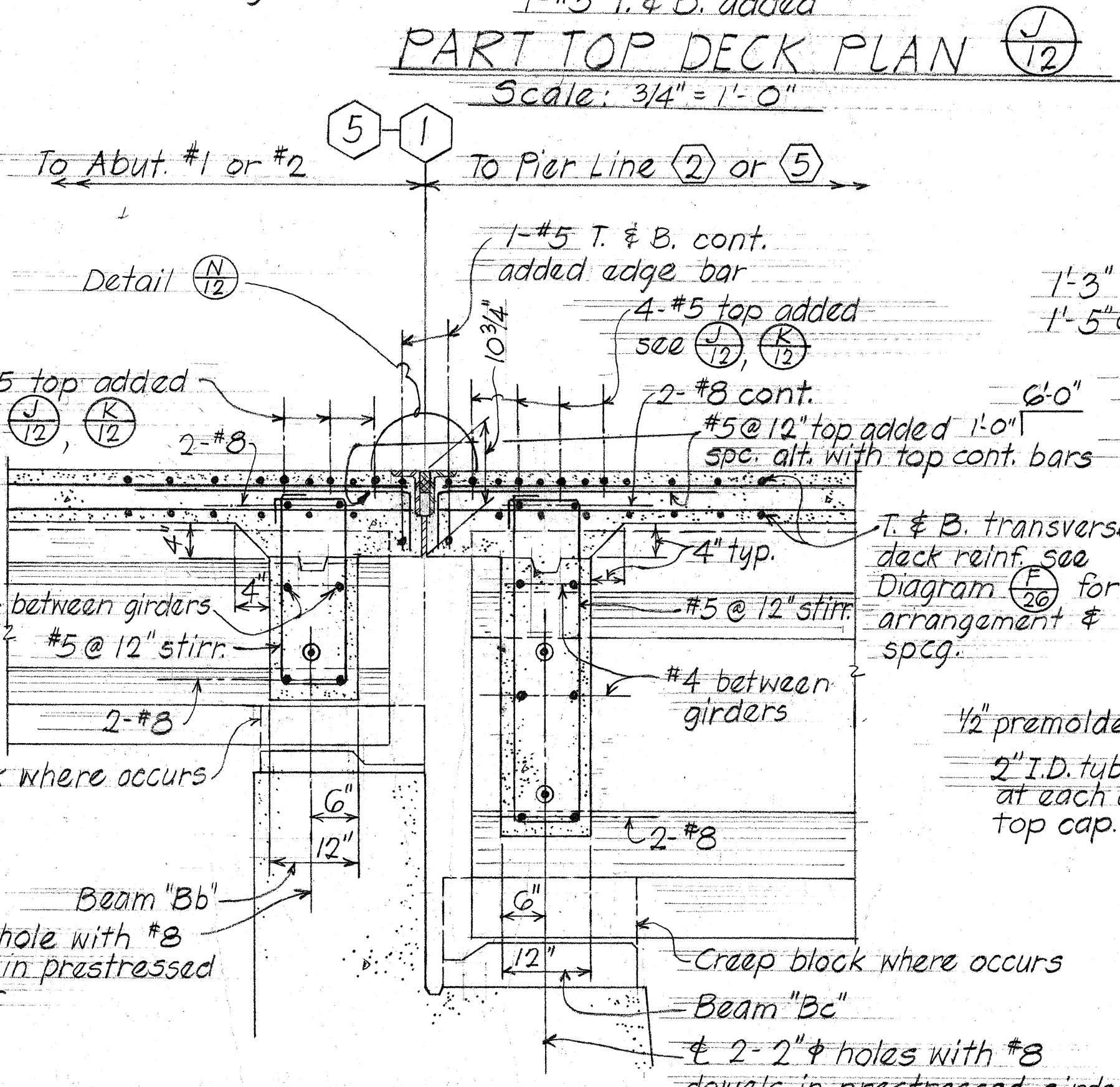
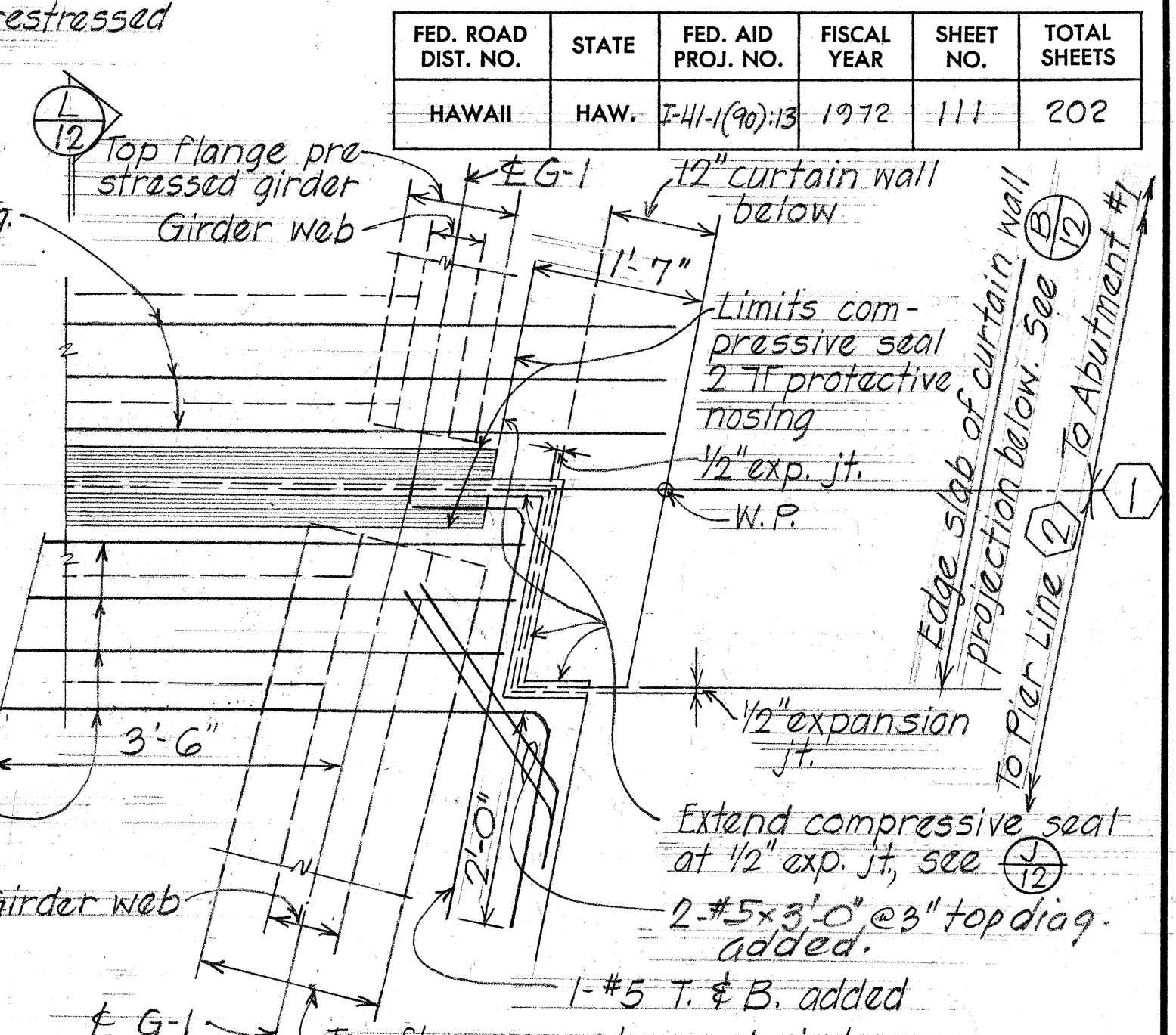
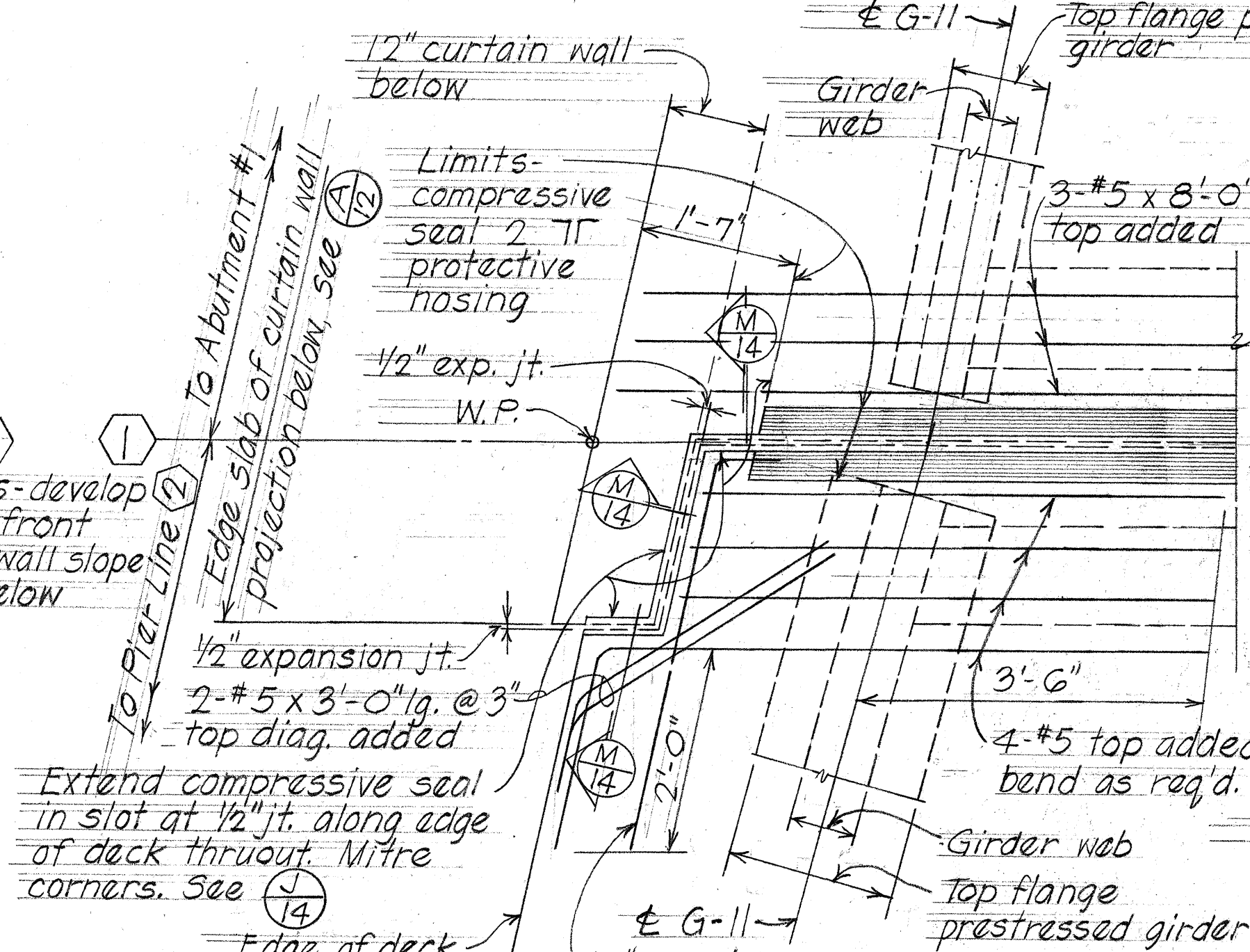
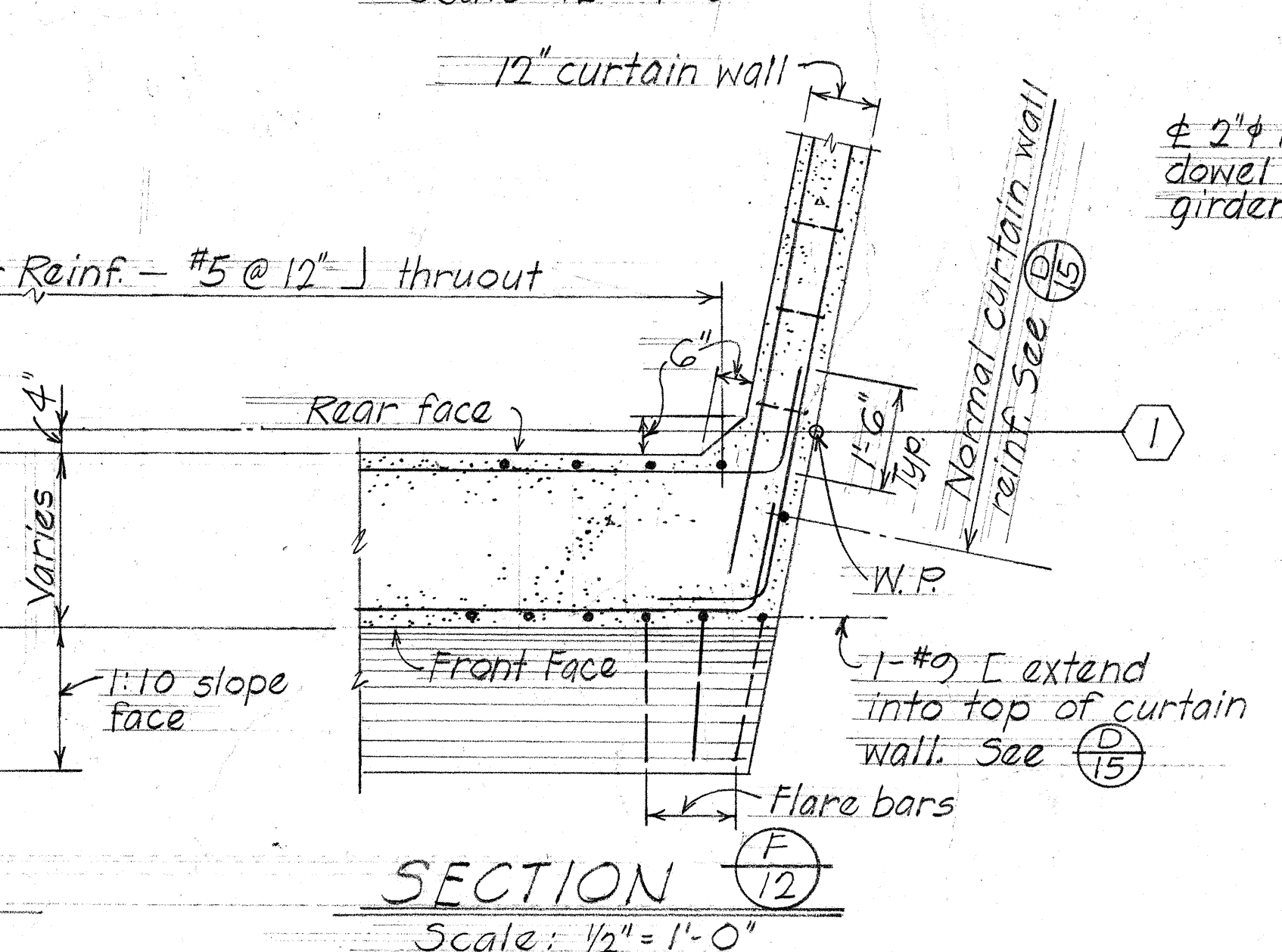
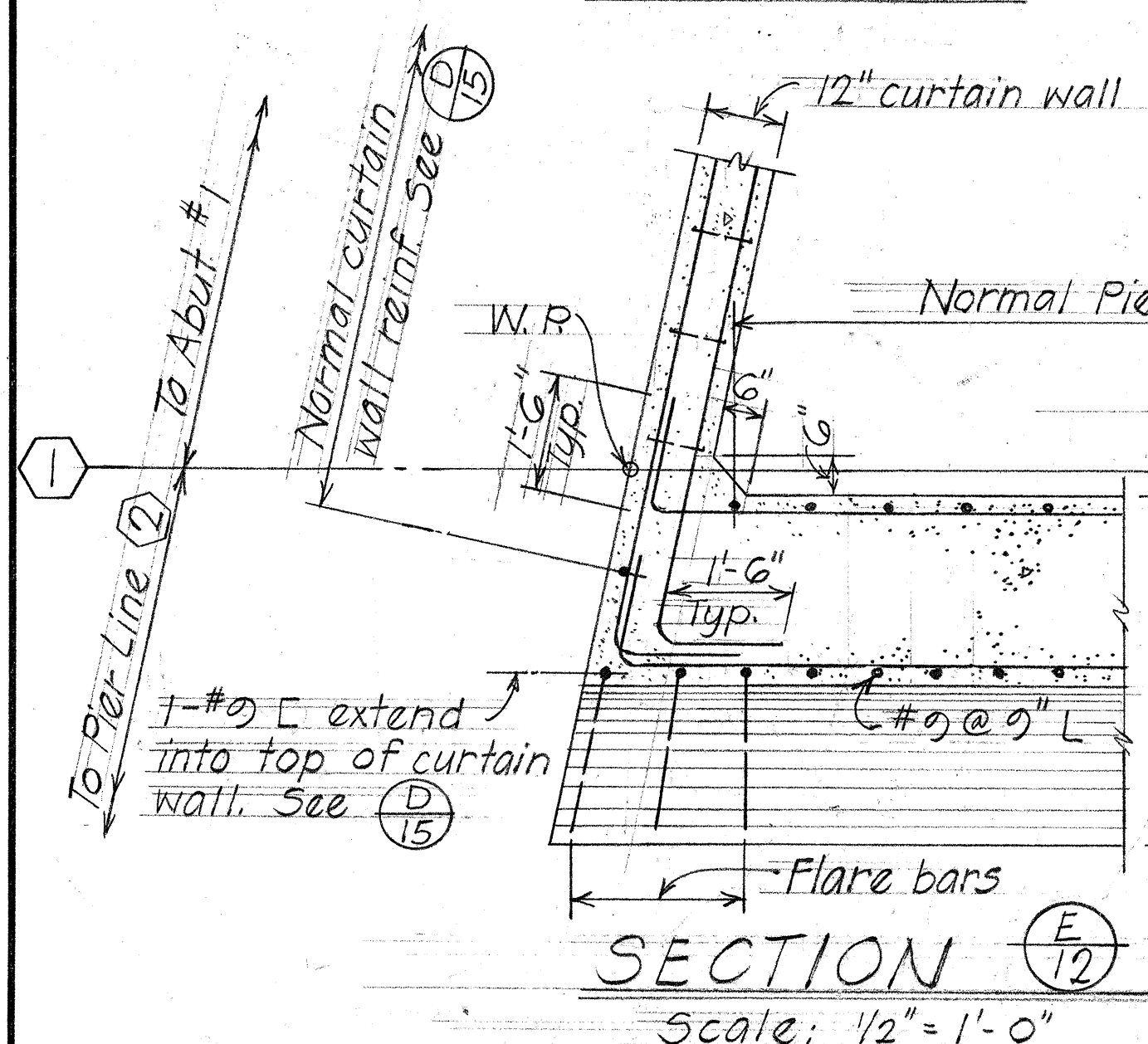
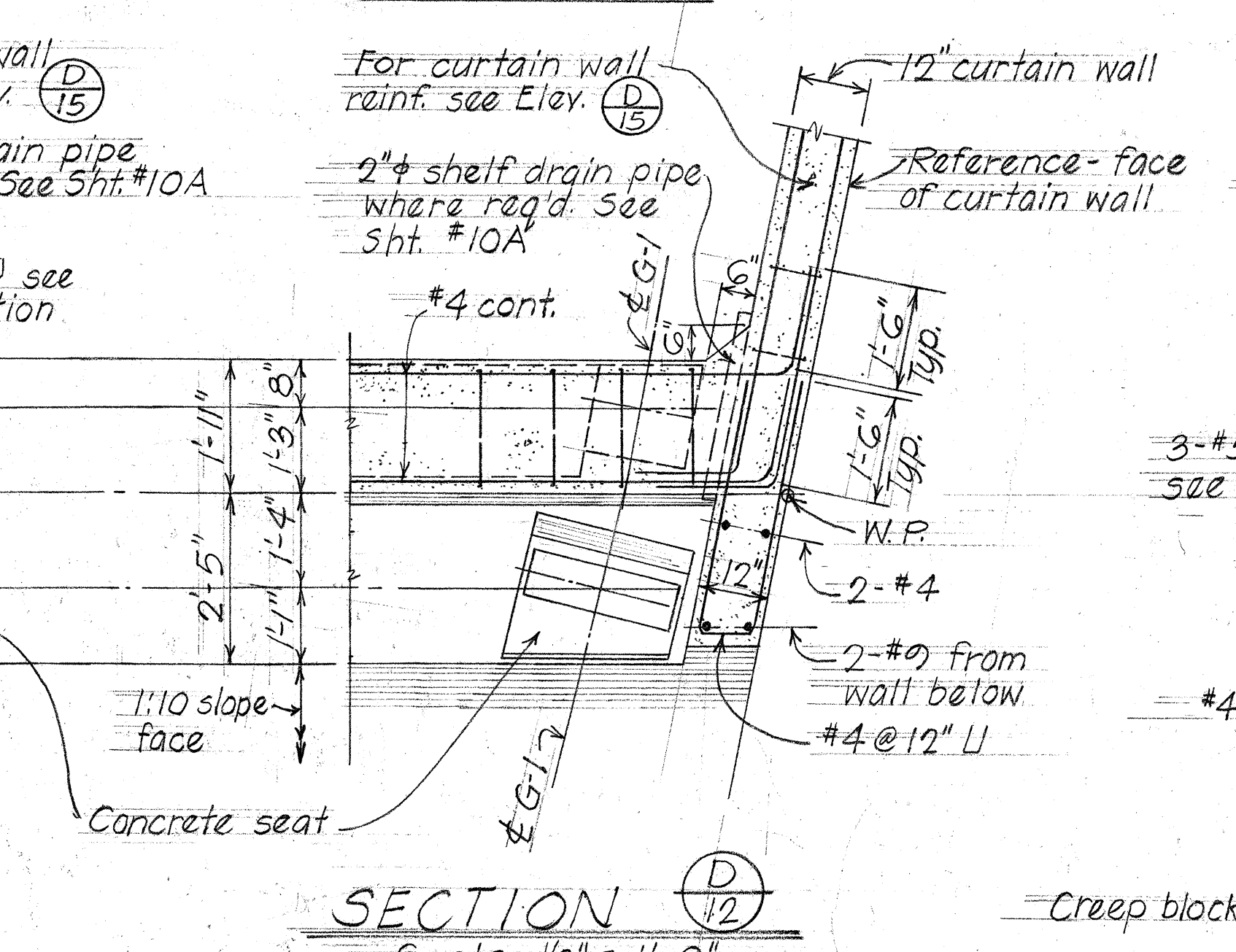
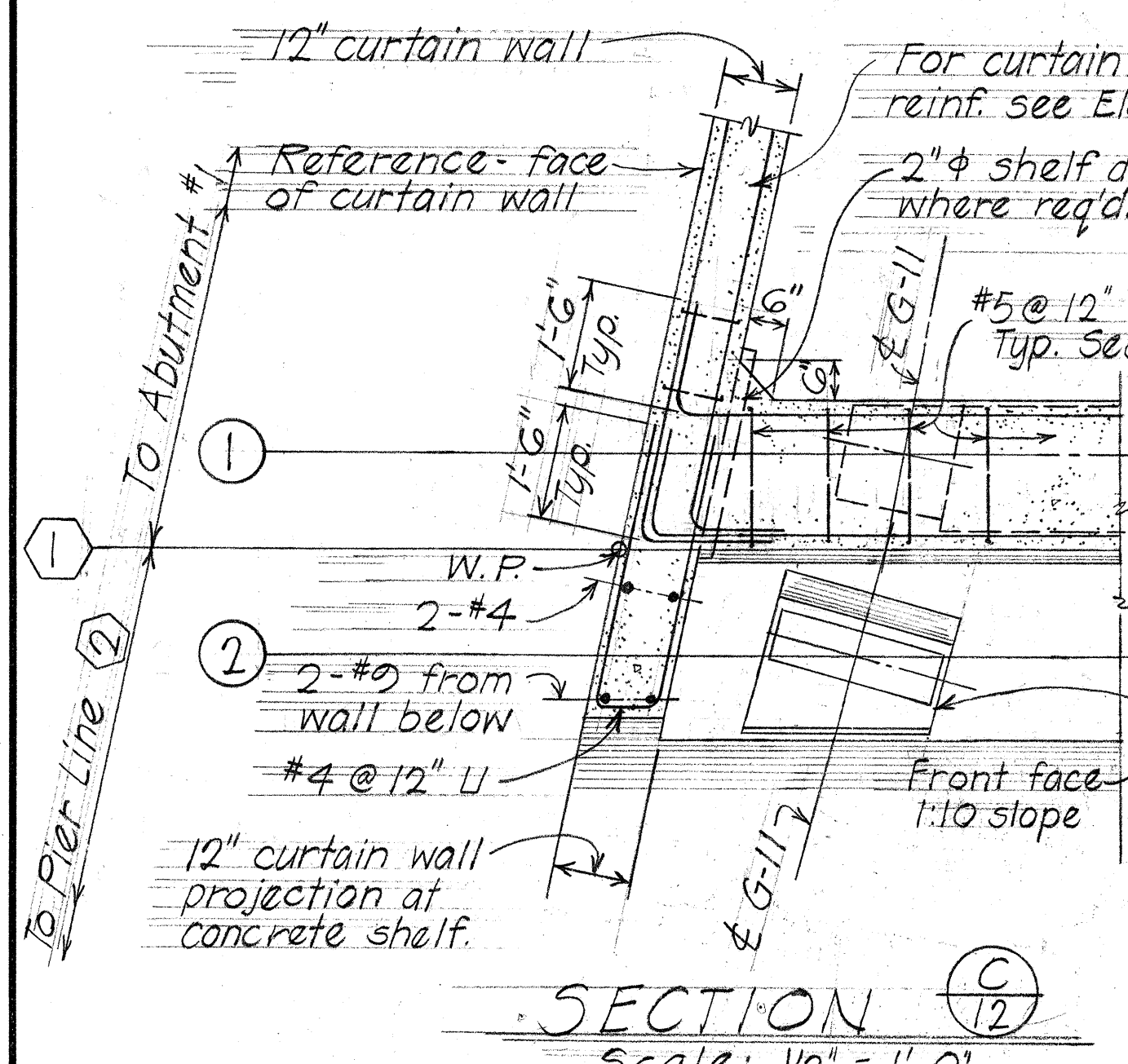
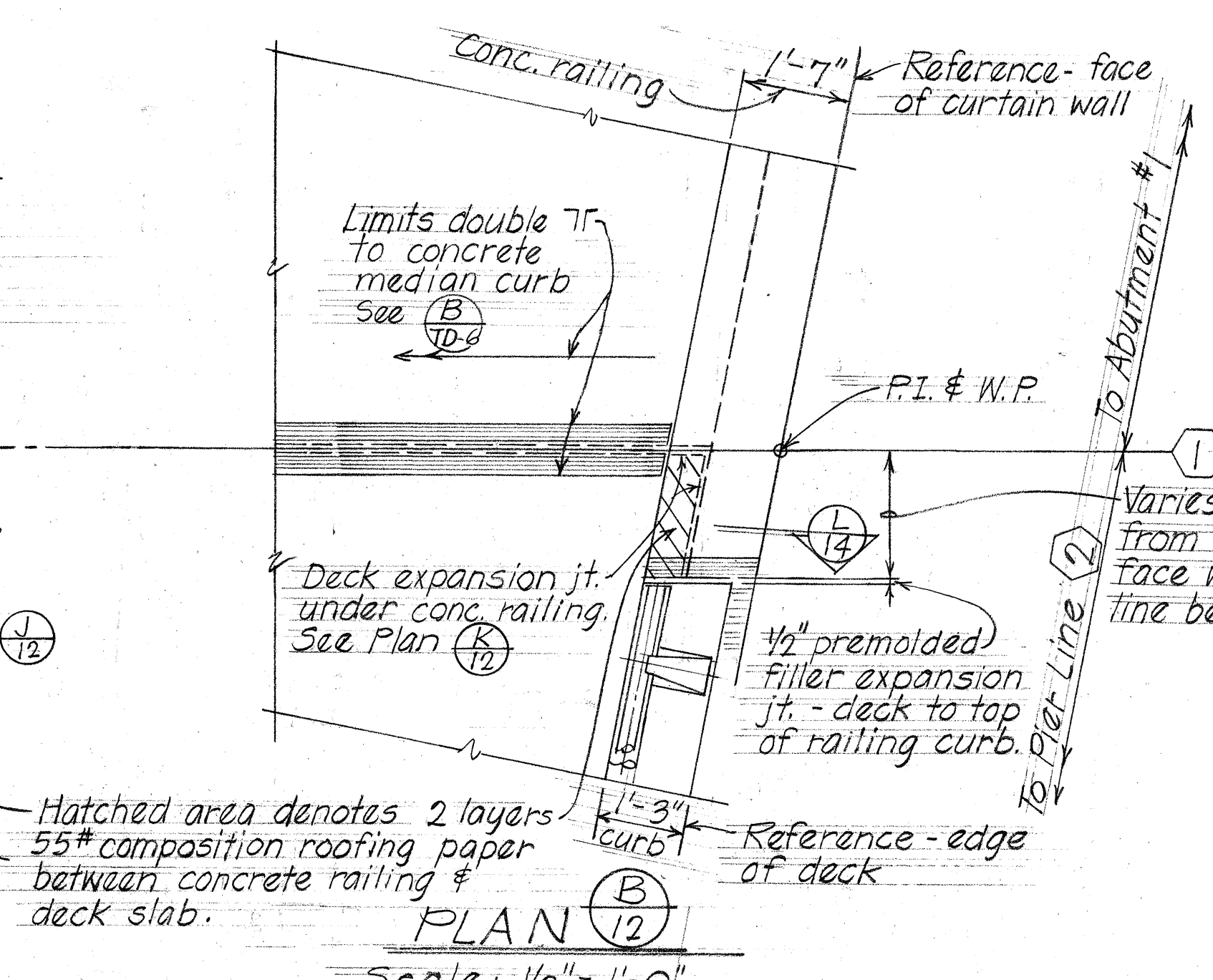
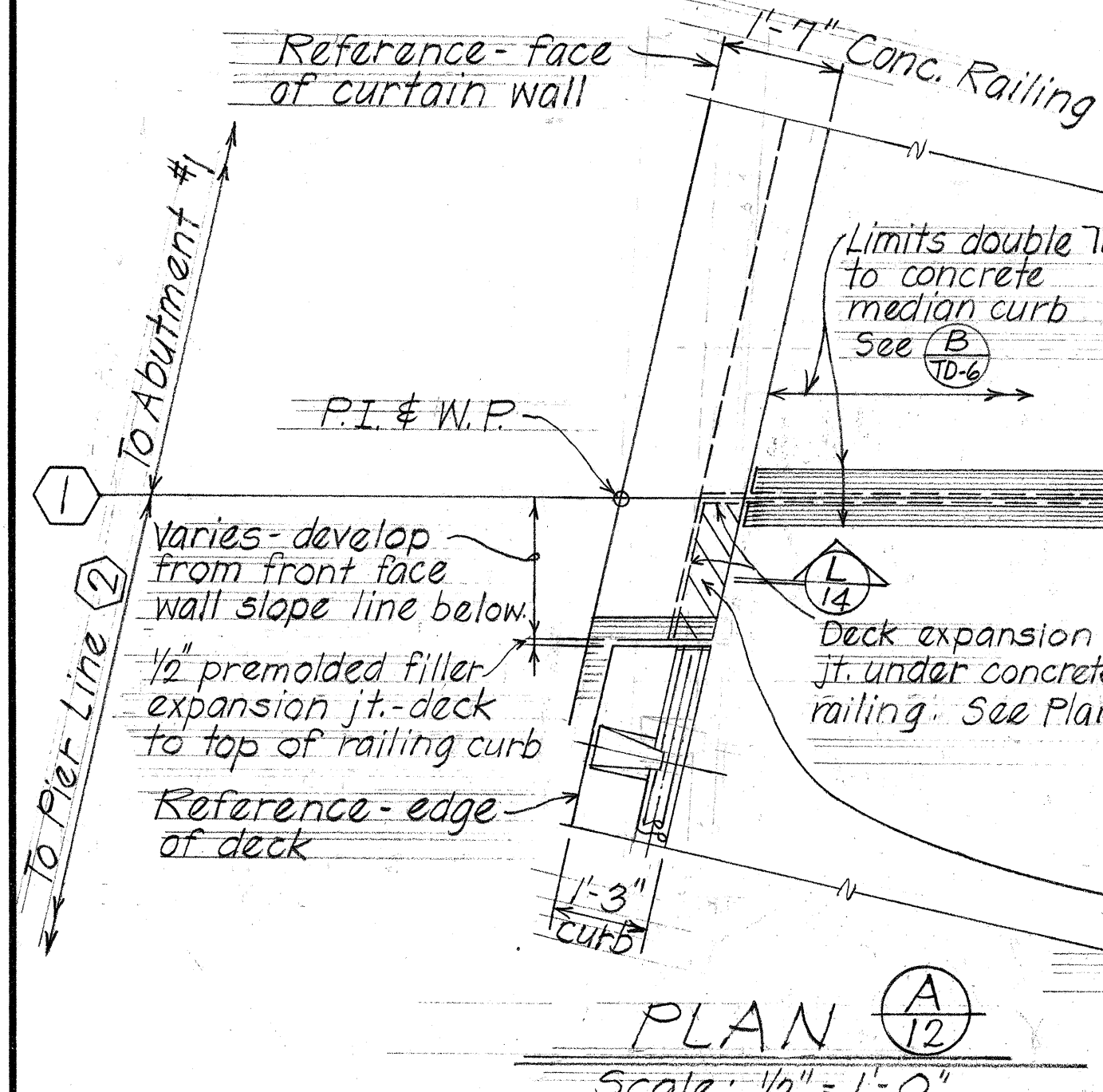
HALAWA INTERCHANGE
STRUCTURE NO. 11

PLANS-PIER LINES ④, ⑤

Proj. No.: I-41-1(90):13 May 1971
SHEET No. 10 OF 28 SHEETS

DATE	5/27/72
SURVEY PLOTTED BY	NY
DRAWN BY	SK
TRACED BY	SK
QUANTITIES BY	SK
CHECKED BY	JO
ORIGINAL PLAN	
NOTE BOOK	
No.	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-41-1(90)-13	1972	111	202



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

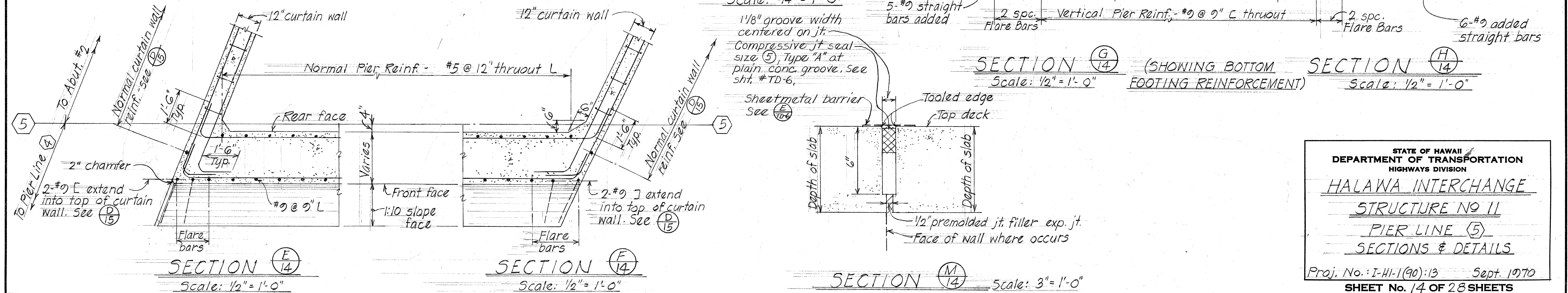
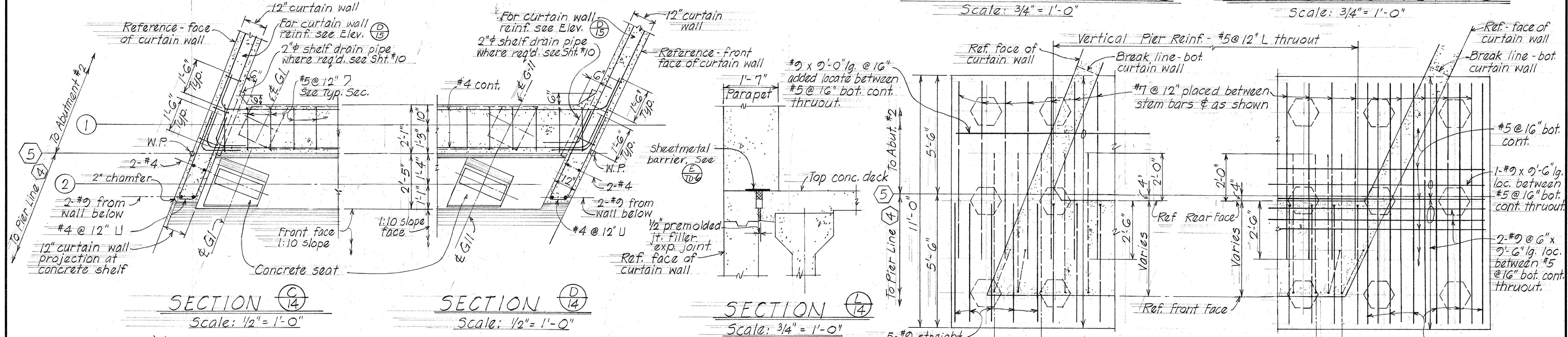
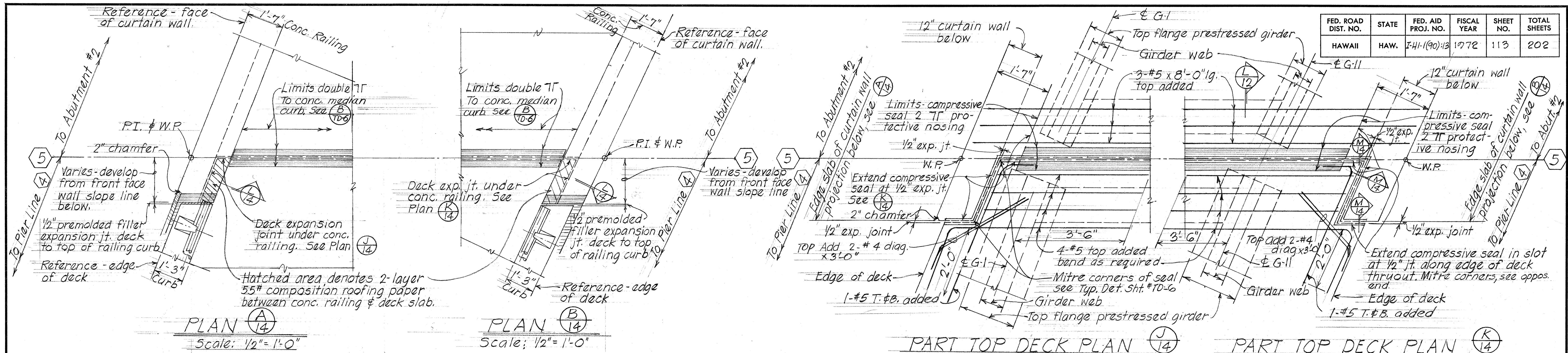
HALAWA INTERCHANGE
STRUCTURE NO. 11
PIER LINES (1) & (5)
SECTIONS & DETAILS

Proj. No.: I-H-1(90)-13 May 1971

SHEET NO. 12 OF 28 SHEETS

DESIGNED BY	DATE
TRACED BY	10/1/70
NOTED BY	10/1/70
CHECKED BY	10/1/70
APPROVED BY	10/1/70

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-41-(90)-13	1972	113	202



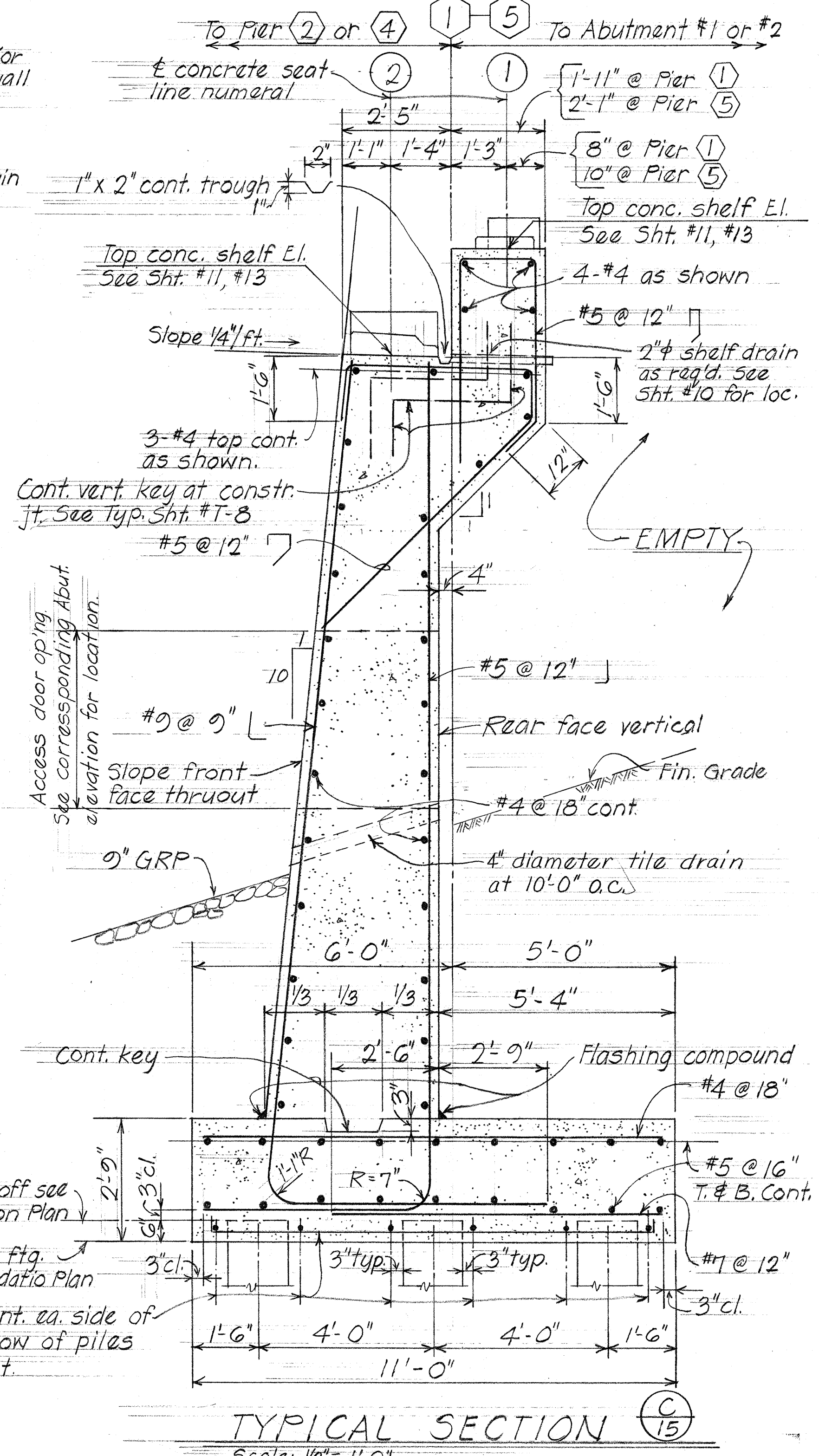
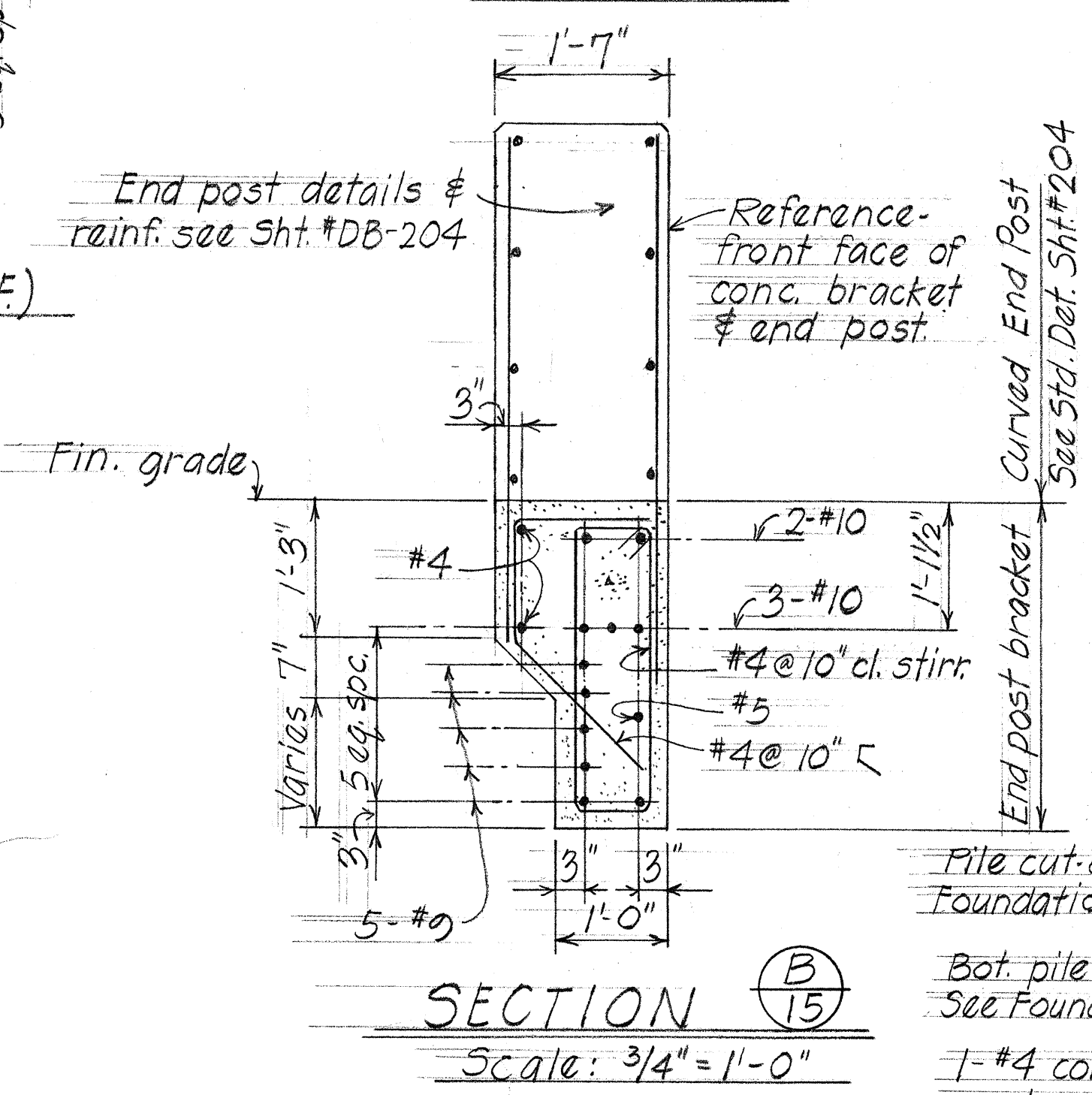
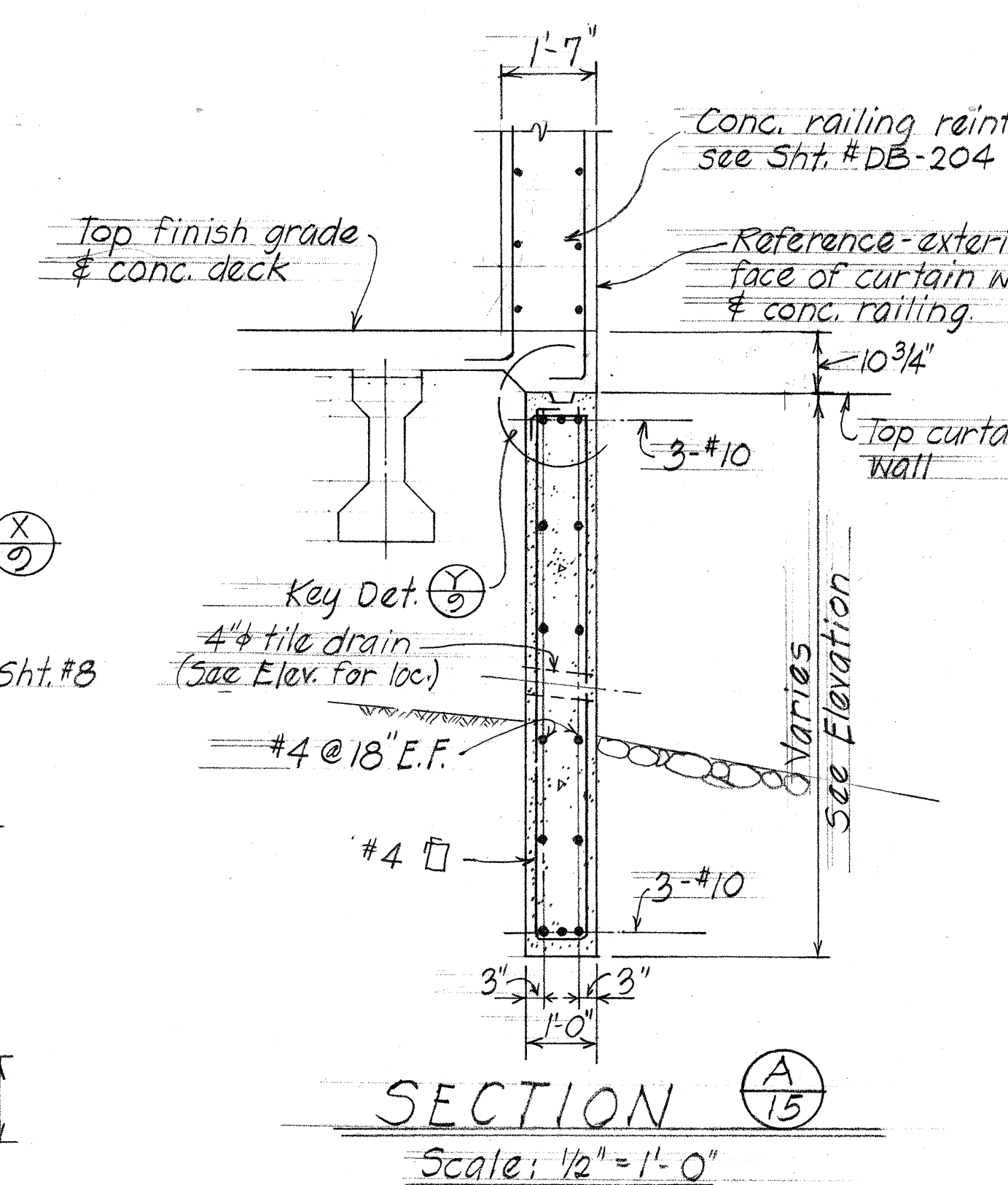
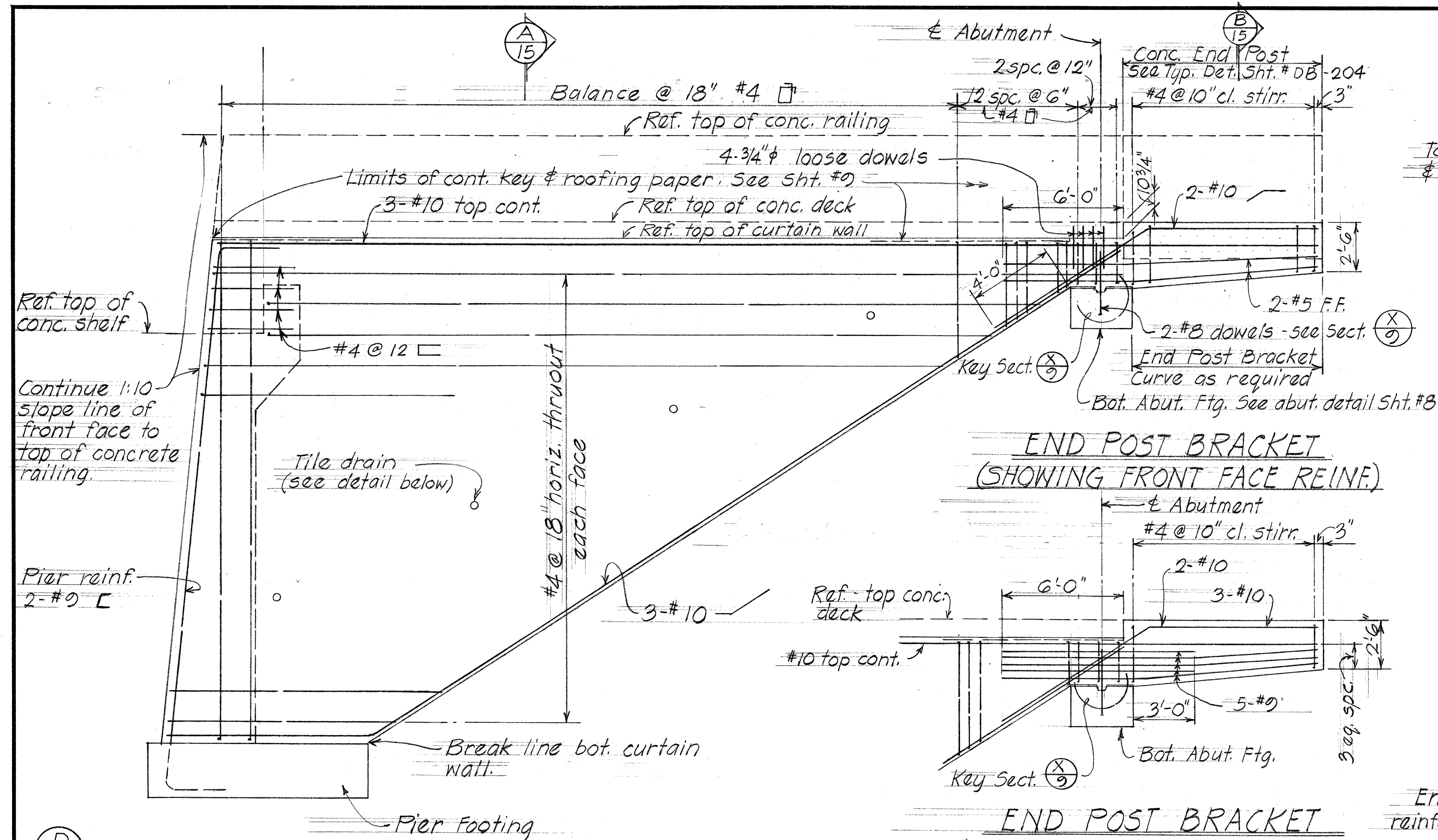
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

HALAWA INTERCHANGE
STRUCTURE NO 11
PIER LINE (5)
SECTIONS & DETAILS

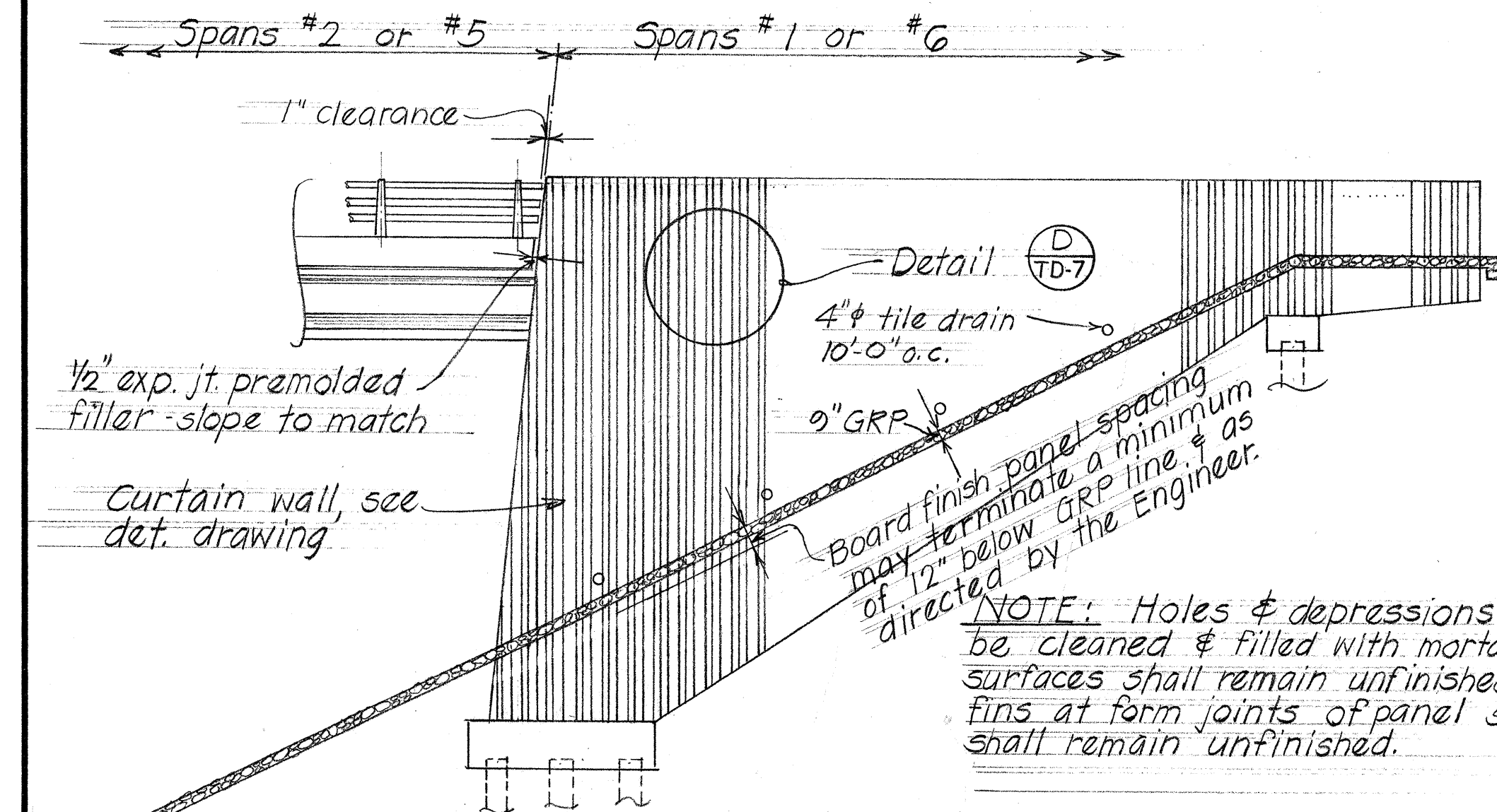
Proj. No.: I-HI-1(90):13 Sept. 1970

SHEET No. 14 OF 28 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(90)-13	1972	114	202



(D 15) TYPICAL CURTAIN WALL ELEVATION
Scale: 1/4" = 1'-0"



NOTE: Holes & depressions shall be cleaned & filled with mortar and surfaces shall remain unfinished. All fins at form joints of panel spacing shall remain unfinished.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

HALAWA INTERCHANGE
STRUCTURE NO. 11
PIER LINES (1) & (5)
SECTIONS & DETAILS

Proj. No. I-HI-1(90)-13 May 1971
SHEET NO. 15 OF 28 SHEETS

CONCRETE SEAT SKEW BEVEL SCHEDULE (MEASURED FROM WORKING LINE)

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(90):13	1972	116	202

NORTH BOUND BRIDGE

	1	2	3	4	5
G-1	$2\frac{3}{32}:12$	$2\frac{3}{32}:12$	$2\frac{15}{16}:12$	$2\frac{15}{16}:12$	$4\frac{5}{32}:12$
G-1a	$2\frac{3}{32}:12$	$2\frac{3}{32}:12$	$2\frac{15}{16}:12$	$2\frac{15}{16}:12$	$4\frac{5}{32}:12$
G-2	$2\frac{3}{32}:12$	$2\frac{3}{32}:12$	$2\frac{15}{16}:12$	$2\frac{15}{16}:12$	$4\frac{5}{32}:12$
G-2a	$2\frac{3}{32}:12$	$2\frac{3}{32}:12$	$2\frac{15}{16}:12$	$2\frac{15}{16}:12$	$4\frac{5}{32}:12$
G-3	$2\frac{3}{32}:12$	$2\frac{3}{32}:12$	$2\frac{15}{16}:12$	$2\frac{15}{16}:12$	$4\frac{5}{32}:12$
G-3a	$2\frac{3}{32}:12$	$2\frac{3}{32}:12$	$2\frac{15}{16}:12$	$2\frac{15}{16}:12$	$4\frac{5}{32}:12$
G-4	$2\frac{3}{32}:12$	$2\frac{3}{32}:12$	$2\frac{15}{16}:12$	$2\frac{15}{16}:12$	$4\frac{5}{32}:12$
G-4a	$2\frac{3}{32}:12$	$2\frac{3}{32}:12$	$2\frac{15}{16}:12$	$2\frac{15}{16}:12$	$4\frac{5}{32}:12$
G-5	$2\frac{3}{32}:12$	$2\frac{3}{32}:12$	$2\frac{15}{16}:12$	$2\frac{15}{16}:12$	$4\frac{5}{32}:12$
G-5a	$2\frac{3}{32}:12$	$2\frac{3}{32}:12$	$2\frac{15}{16}:12$	$2\frac{15}{16}:12$	$4\frac{5}{32}:12$
G-6	$2\frac{3}{32}:12$	$2\frac{3}{32}:12$	$2\frac{15}{16}:12$	$2\frac{15}{16}:12$	$4\frac{5}{32}:12$
G-6a	$2\frac{3}{32}:12$	$2\frac{3}{32}:12$	$2\frac{15}{16}:12$	$2\frac{15}{16}:12$	$4\frac{5}{32}:12$
G-7	$2\frac{3}{32}:12$	$2\frac{3}{32}:12$	$2\frac{15}{16}:12$	$2\frac{15}{16}:12$	$4\frac{5}{32}:12$
G-7a	$2\frac{3}{32}:12$	$2\frac{3}{32}:12$	$2\frac{15}{16}:12$	$2\frac{15}{16}:12$	$4\frac{5}{32}:12$
G-8	$2\frac{3}{32}:12$	$2\frac{3}{32}:12$	$2\frac{15}{16}:12$	$2\frac{15}{16}:12$	$4\frac{5}{32}:12$
G-8a	$2\frac{3}{32}:12$	$2\frac{3}{32}:12$	$2\frac{15}{16}:12$	$2\frac{15}{16}:12$	$4\frac{5}{32}:12$
G-9	$2\frac{3}{32}:12$	$2\frac{3}{32}:12$	$2\frac{15}{16}:12$	$2\frac{15}{16}:12$	$4\frac{5}{32}:12$
G-9a	$2\frac{3}{32}:12$	$2\frac{3}{32}:12$	$2\frac{15}{16}:12$	$2\frac{15}{16}:12$	$4\frac{5}{32}:12$
G-10	$2\frac{3}{32}:12$	$2\frac{3}{32}:12$	$2\frac{15}{16}:12$	$2\frac{15}{16}:12$	$4\frac{5}{32}:12$
G-10a	$2\frac{3}{32}:12$	$2\frac{3}{32}:12$	$2\frac{15}{16}:12$	$2\frac{15}{16}:12$	$4\frac{5}{32}:12$

SOUTH BOUND BRIDGE

G-20a	$2\frac{3}{32}:12$	$2\frac{3}{32}:12$	$2\frac{15}{16}:12$	$2\frac{15}{16}:12$	$4\frac{5}{32}:12$
G-20	$2\frac{3}{32}:12$	$2\frac{3}{32}:12$	$2\frac{15}{16}:12$	$2\frac{15}{16}:12$	$4\frac{5}{32}:12$
G-19a	$2\frac{3}{32}:12$	$2\frac{3}{32}:12$	$2\frac{15}{16}:12$	$2\frac{15}{16}:12$	$4\frac{5}{32}:12$
G-19	$2\frac{3}{32}:12$	$2\frac{3}{32}:12$	$2\frac{15}{16}:12$	$2\frac{15}{16}:12$	$4\frac{5}{32}:12$
G-18a	$2\frac{3}{32}:12$	$2\frac{3}{32}:12$	$2\frac{15}{16}:12$	$2\frac{15}{16}:12$	$4\frac{5}{32}:12$
G-18	$2\frac{3}{32}:12$	$2\frac{3}{32}:12$	$2\frac{15}{16}:12$	$2\frac{15}{16}:12$	$4\frac{5}{32}:12$
G-17a	$2\frac{3}{32}:12$	$2\frac{3}{32}:12$	$2\frac{15}{16}:12$	$2\frac{15}{16}:12$	$4\frac{5}{32}:12$
G-17	$2\frac{3}{32}:12$	$2\frac{3}{32}:12$	$2\frac{15}{16}:12$	$2\frac{15}{16}:12$	$4\frac{5}{32}:12$
G-16a	$2\frac{3}{32}:12$	$2\frac{3}{32}:12$	$2\frac{15}{16}:12$	$2\frac{15}{16}:12$	$4\frac{5}{32}:12$
G-16	$2\frac{3}{32}:12$	$2\frac{3}{32}:12$	$2\frac{15}{16}:12$	$2\frac{15}{16}:12$	$4\frac{5}{32}:12$
G-15a	$2\frac{3}{32}:12$	$2\frac{3}{32}:12$	$2\frac{15}{16}:12$	$2\frac{15}{16}:12$	$4\frac{5}{32}:12$
G-15	$2\frac{3}{32}:12$	$2\frac{3}{32}:12$	$2\frac{15}{16}:12$	$2\frac{15}{16}:12$	$4\frac{5}{32}:12$
G-14a	$2\frac{3}{32}:12$	$2\frac{3}{32}:12$	$2\frac{15}{16}:12$	$2\frac{15}{16}:12$	$4\frac{5}{32}:12$
G-14	$2\frac{3}{32}:12$	$2\frac{3}{32}:12$	$2\frac{15}{16}:12$	$2\frac{15}{16}:12$	$4\frac{5}{32}:12$
G-13a	$2\frac{3}{32}:12$	$2\frac{3}{32}:12$	$2\frac{15}{16}:12$	$2\frac{15}{16}:12$	$4\frac{5}{32}:12$
G-13	$2\frac{3}{32}:12$	$2\frac{3}{32}:12$	$2\frac{15}{16}:12$	$2\frac{15}{16}:12$	$4\frac{5}{32}:12$
G-12b	$2\frac{3}{32}:12$	$2\frac{3}{32}:12$	$2\frac{15}{16}:12$	$2\frac{15}{16}:12$	$4\frac{5}{32}:12$
G-12a	$2\frac{3}{32}:12$	$2\frac{3}{32}:12$	$2\frac{15}{16}:12$	$2\frac{15}{16}:12$	$4\frac{5}{32}:12$
G-12	$2\frac{3}{32}:12$	$2\frac{3}{32}:12$	$2\frac{15}{16}:12$	$2\frac{15}{16}:12$	$4\frac{5}{32}:12$
G-11	$2\frac{3}{32}:12$	$2\frac{3}{32}:12$	$2\frac{15}{16}:12$	$2\frac{15}{16}:12$	$4\frac{5}{32}:12$

⊗ Skew direction measured from working line concrete seat bevel. Refer to sht. #7, #8, #11 for skew bevel designation & diagram.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

HALAWA INTERCHANGE
STRUCTURE NO. 11
CONCRETE SEAT SKEW BEVEL SCHEDULE

Proj. No. : I-HI-1(90):13
SHEET No. 17 OF 28 SHEETS

TOP CONCRETE SEAT ELEVATION AND SLOPE SCHEDULE (AT GIRDER & BEARING)

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(90)-13	1972	117	202

		ABUT. #1		DIRECTION		①		DIRECTION		②		DIRECTION		③		DIRECTION		④		DIRECTION		⑤		DIRECTION		ABUT. #2					
		①	TOP SEAT SLOPE	①	②	①	②	①	②	①	②	①	②	①	②	①	②	①	②	①	②	①	②	①	②						
NORTH BOUND BRIDGE	G1	70.76	(-)	1/16 : 12	(-)	70.61	68.21	(-)	1/16 : 12	(-)	67.87	67.86	(-)	1/16 : 12	(-)	67.40	67.43	(-)	1/16 : 12	(-)	67.01	67.02	(-)	1/16 : 12	(-)	66.53	68.83	(-)	1/16 : 12	(-)	68.64
	G1a																									68.46	(-)	1/16 : 12	(-)	68.27	
	G2						67.88	(-)	1/16 : 12	(-)	67.49	67.47	(-)	1/16 : 12	(-)	67.04	67.07	(-)	1/16 : 12	(-)	66.60	66.61	(-)	1/16 : 12	(-)	66.11					
	G2a	70.42	(-)	1/16 : 12	(-)	70.24																				68.09	(-)	1/16 : 12	(-)	67.91	
	G3						67.65	(-)	1/16 : 12	(-)	67.23	67.22	(-)	1/16 : 12	(-)	66.66	66.69	(-)	1/16 : 12	(-)	66.18	66.19	(-)	1/16 : 12	(-)	65.68					
	G3a	70.07	(-)	1/16 : 12	(-)	69.87																					67.71	(-)	1/16 : 12	(-)	67.54
	G4						67.26	(-)	1/16 : 12	(-)	66.85	66.83	(-)	1/16 : 12	(-)	66.29	66.32	(-)	1/16 : 12	(-)	65.82	65.83	(-)	1/16 : 12	(-)	65.26					
	G4a	69.72	(-)	1/16 : 12	(-)	69.50																					67.34	(-)	1/16 : 12	(-)	67.18
	G5						66.87	(-)	1/16 : 12	(-)	66.46	66.45	(-)	1/16 : 12	(-)	65.91	65.94	(-)	1/16 : 12	(-)	65.46	65.47	(-)	1/16 : 12	(-)	64.91					
	G5a	69.35	(-)	1/16 : 12	(-)	69.14																					66.96	(-)	1/16 : 12	(-)	66.81
	G6						66.48	(-)	1/16 : 12	(-)	66.08	66.07	(-)	1/16 : 12	(-)	65.54	65.57	(-)	1/16 : 12	(-)	65.10	65.11	(-)	1/16 : 12	(-)	64.56					
	G6a	68.98	(-)	1/16 : 12	(-)	68.77																					66.59	(-)	1/16 : 12	(-)	66.44
	G7						66.09	(-)	1/16 : 12	(-)	65.69	65.68	(-)	1/16 : 12	(-)	65.16	65.19	(-)	1/16 : 12	(-)	64.74	64.75	(-)	1/16 : 12	(-)	64.21					
	G7a	68.61	(-)	1/16 : 12	(-)	68.40																					66.21	(-)	1/16 : 12	(-)	66.08
	G8						65.70	(-)	1/16 : 12	(-)	65.31	65.30	(-)	1/16 : 12	(-)	64.79	64.82	(-)	1/16 : 12	(-)	64.38	64.39	(-)	1/16 : 12	(-)	63.85					
G8a	68.24	(-)	1/16 : 12	(-)	68.04																					65.84	(-)	1/16 : 12	(-)	65.71	
G9						65.31	(-)	1/16 : 12	(-)	64.93	64.91	(-)	1/16 : 12	(-)	64.42	64.45	(-)	1/16 : 12	(-)	64.02	64.03	(-)	1/16 : 12	(-)	63.50						
G9a	67.88	(-)	1/16 : 12	(-)	67.67																					65.47	(-)	1/16 : 12	(-)	65.35	
G10						64.91	(-)	1/16 : 12	(-)	64.54	64.53	(-)	1/16 : 12	(-)	64.04	64.07	(-)	1/16 : 12	(-)	63.66	63.67	(-)	1/16 : 12	(-)	63.15						
G10a	67.51	(-)	1/16 : 12	(-)	67.31																										

SOUTH BOUND BRIDGE

G20a	67.19	(-)	16:12	(-)	66.99																									
G20						64.59	(-)	16:12	(-)	64.22	64.21	(-)	16:12	(-)	63.73	63.76	(-)	16:12	(-)	63.36	63.37	(-)	16:12	(-)	62.86					
G19a	66.82	(-)	16:12	(-)	66.62																				65.16	(-)	16:12	(-)	65.05	
G19						64.19	(-)	16:12	(-)	63.83	63.82	(-)	16:12	(-)	63.35	63.38	(-)	16:12	(-)	63.00	63.01	(-)	16:12	(-)	62.51					
G18a	66.45	(-)	16:12	(-)	66.26																				64.74	(-)	16:12	(-)	64.64	
G18						63.80	(-)	16:12	(-)	63.45	63.44	(-)	16:12	(-)	62.98	63.01	(-)	16:12	(-)	62.64	62.65	(-)	16:12	(-)	62.16					
G17a	66.09	(-)	16:12	(-)	65.89																				64.32	(-)	16:12	(-)	64.23	
G17						63.41	(-)	16:12	(-)	63.07	63.05	(-)	16:12	(-)	62.61	62.64	(-)	16:12	(-)	62.28	62.29	(-)	16:12	(-)	61.81					
G16a	65.72	(-)	16:12	(-)	65.52																				63.90	(-)	16:12	(-)	63.82	
G16						63.02	(-)	16:12	(-)	62.68	62.67	(-)	16:12	(-)	62.23	62.27	(-)	16:12	(-)	61.92	61.93	(-)	16:12	(-)	61.46					
G15a	65.35	(-)	16:12	(-)	65.16																				63.49	(-)	16:12	(-)	63.41	
G15						62.63	(-)	16:12	(-)	62.30	62.29	(-)	16:12	(-)	61.86	61.89	(-)	16:12	(-)	61.56	61.57	(-)	16:12	(-)	61.11					
G14a	64.95	(-)	16:12	(-)	64.79																									
G14						62.24	(-)	16:12	(-)	61.92	61.90	(-)	16:12	(-)	61.49	61.52	(-)	16:12	(-)	61.20	61.21	(-)	16:12	(-)	60.76					
G13a	64.55	(-)	16:12	(-)	64.42																				63.07	(-)	16:12	(-)	63.00	
G13						61.85	(-)	16:12	(-)	61.53	61.52	(-)	16:12	(-)	61.12	61.15	(-)	16:12	(-)	60.85	60.85	(-)	16:12	(-)	60.34					
G12b																									62.65	(-)	16:12	(-)	62.59	
G12a	64.13	(-)	32:12	(-)	64.06																				62.23	(-)	16:12	(-)	62.18	
G12						61.01	(-)	16:12	(-)	61.26	61.25	(-)	16:12	(-)	60.75	60.78	(-)	16:12	(-)	60.42	60.43	(-)	16:12	(-)	59.91					
G11	63.70	Level			63.68	61.28	(-)	16:12	(-)	60.90	60.89	(-)	16:12	(-)	60.35	60.38	(-)	16:12	(-)	60.00	60.01	(-)	16:12	(-)	59.49	61.81	(-)	16:12	(-)	61.74

Reference Note: Refer to shts. #7, #8, #11 for seat details & schedule designations.

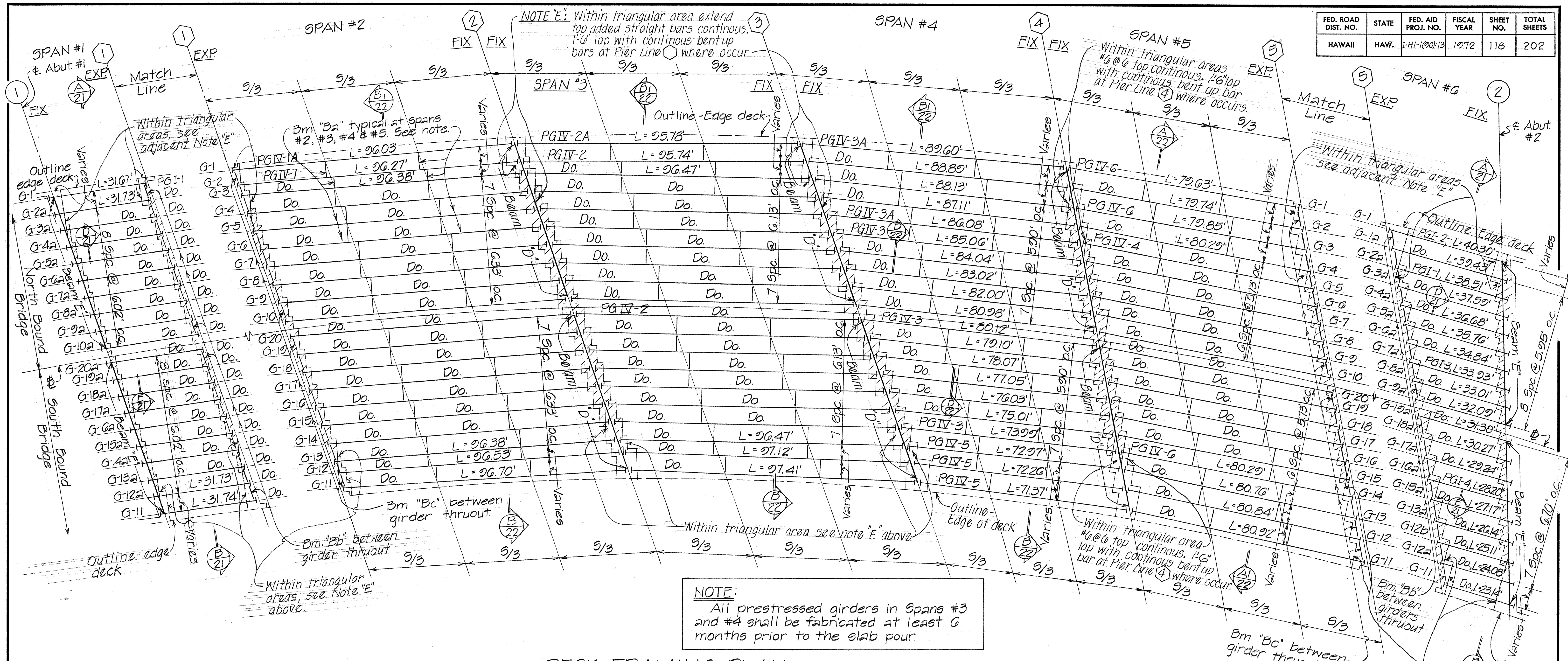
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

HALAWA INTERCHANGE
STRUCTURE No. 11

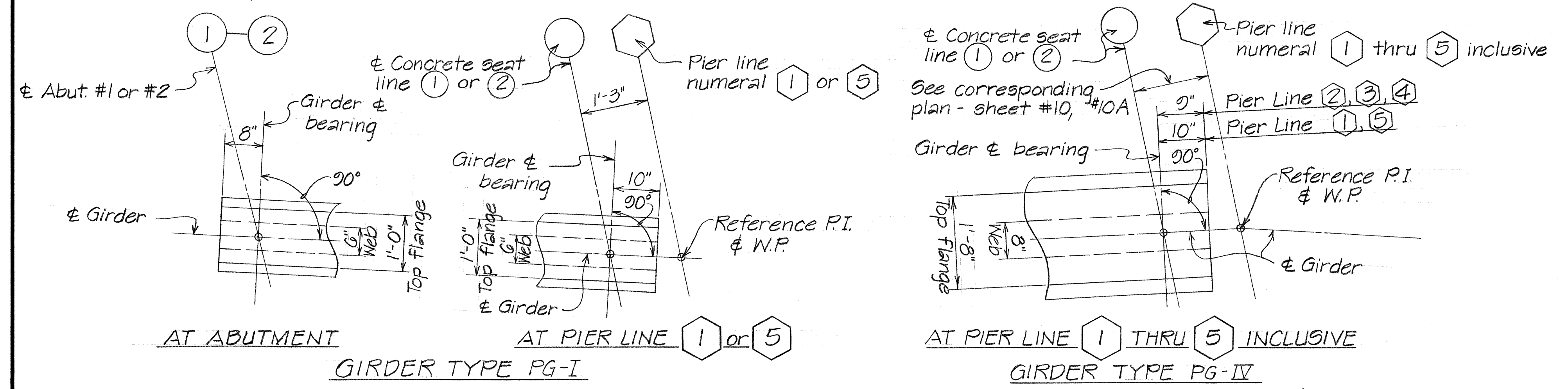
CONCRETE SEAT ELEVATION
AND SEAT SLOPE SCHEDULE

Proj. No. I-HI-1(90)-13 May 1971
SHEET No. 18 OF 28 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(90):13	1972	118	202



DATE	12/1/72
SURVEY PLOTTED BY	...
DRAWN BY	...
DESIGNED BY	...
CHECKED BY	...
ORIGINAL PLAN	...
NOTE BOOK	...
No.	...



TYPICAL DETAIL - ENDS OF GIRDER AT VARIOUS LOCATIONS Scale: 3/4" = 1'-0"

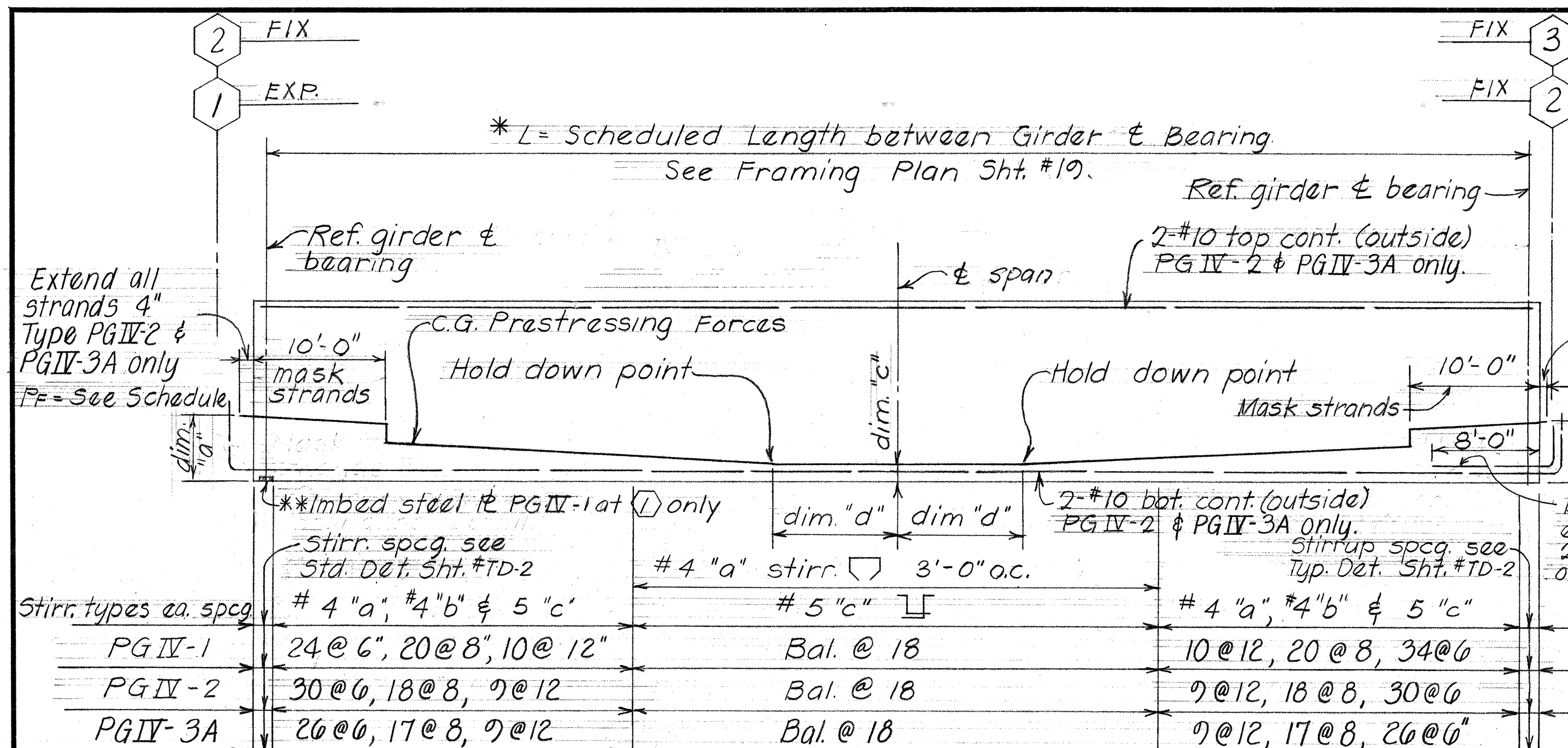
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**HALAWA INTERCHANGE
STRUCTURE No. 11**

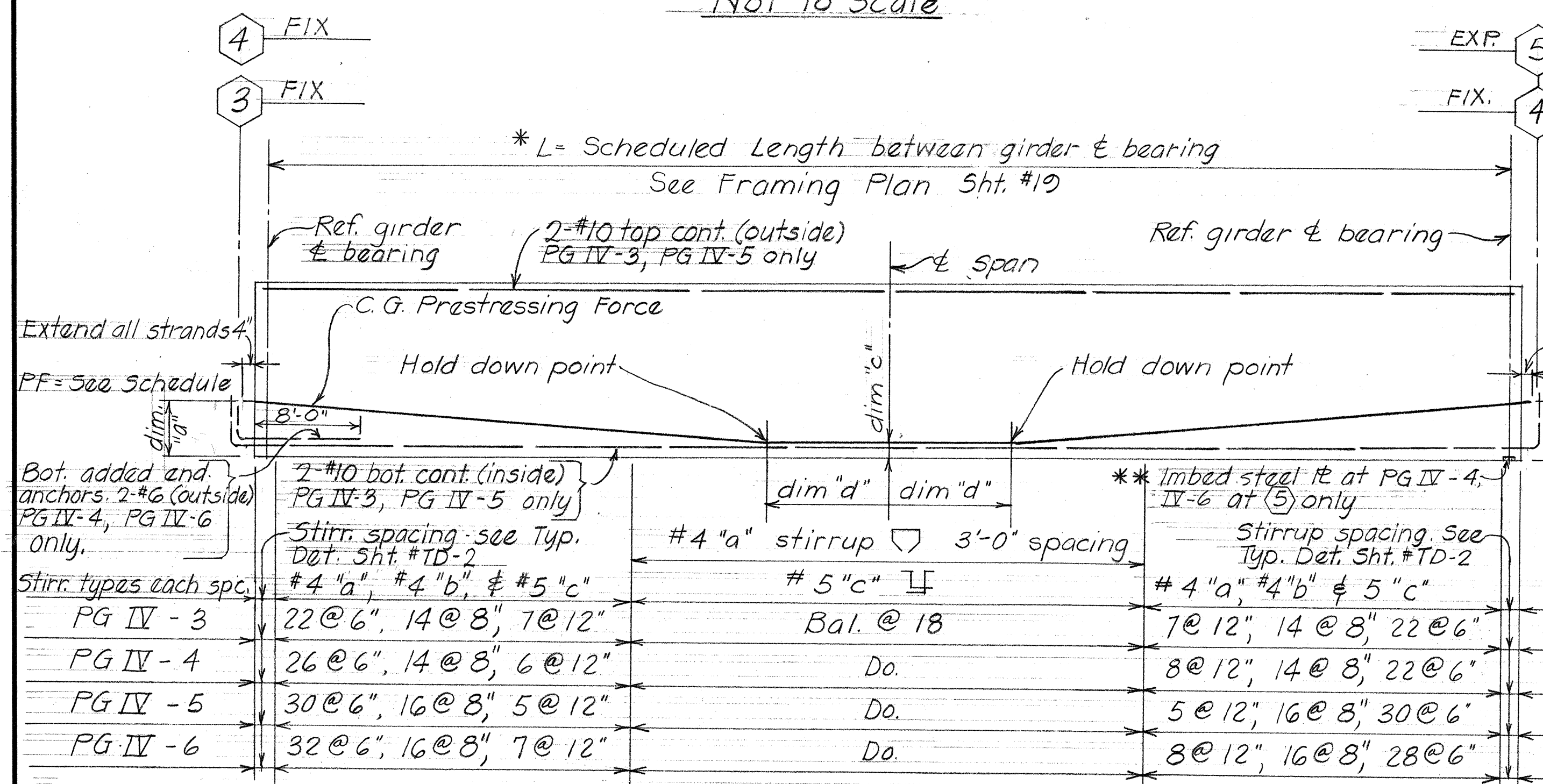
DECK FRAMING PLAN AND DETAILS

Proj. No. I-HI-1(90):13
SHEET No. 118 OF 28 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-41-1(90):15	1972	117	202

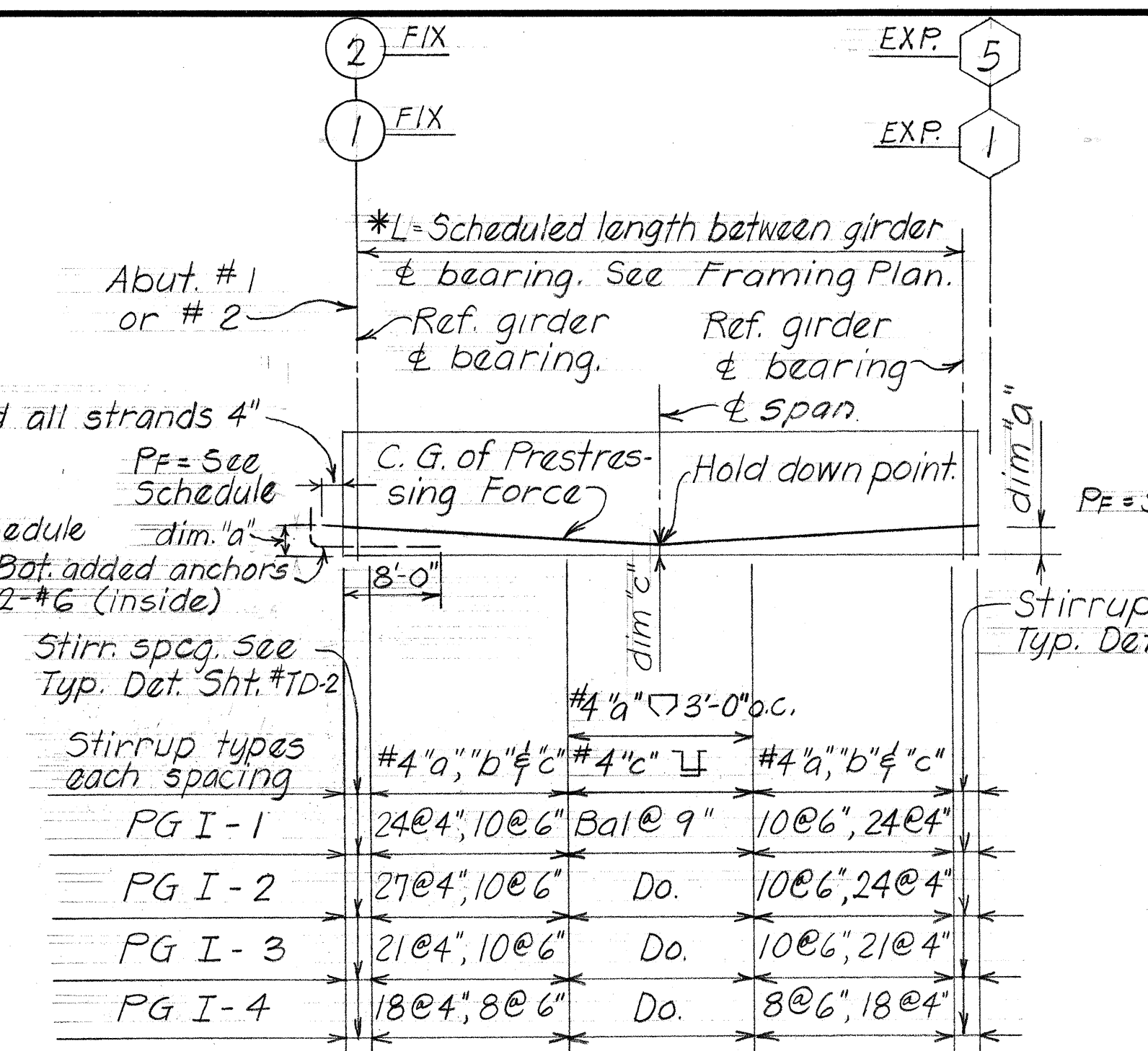


TYPICAL TYPE PG IV-1, PG IV-2 & PG IV-3A GIRDER DETAILS
Not to Scale

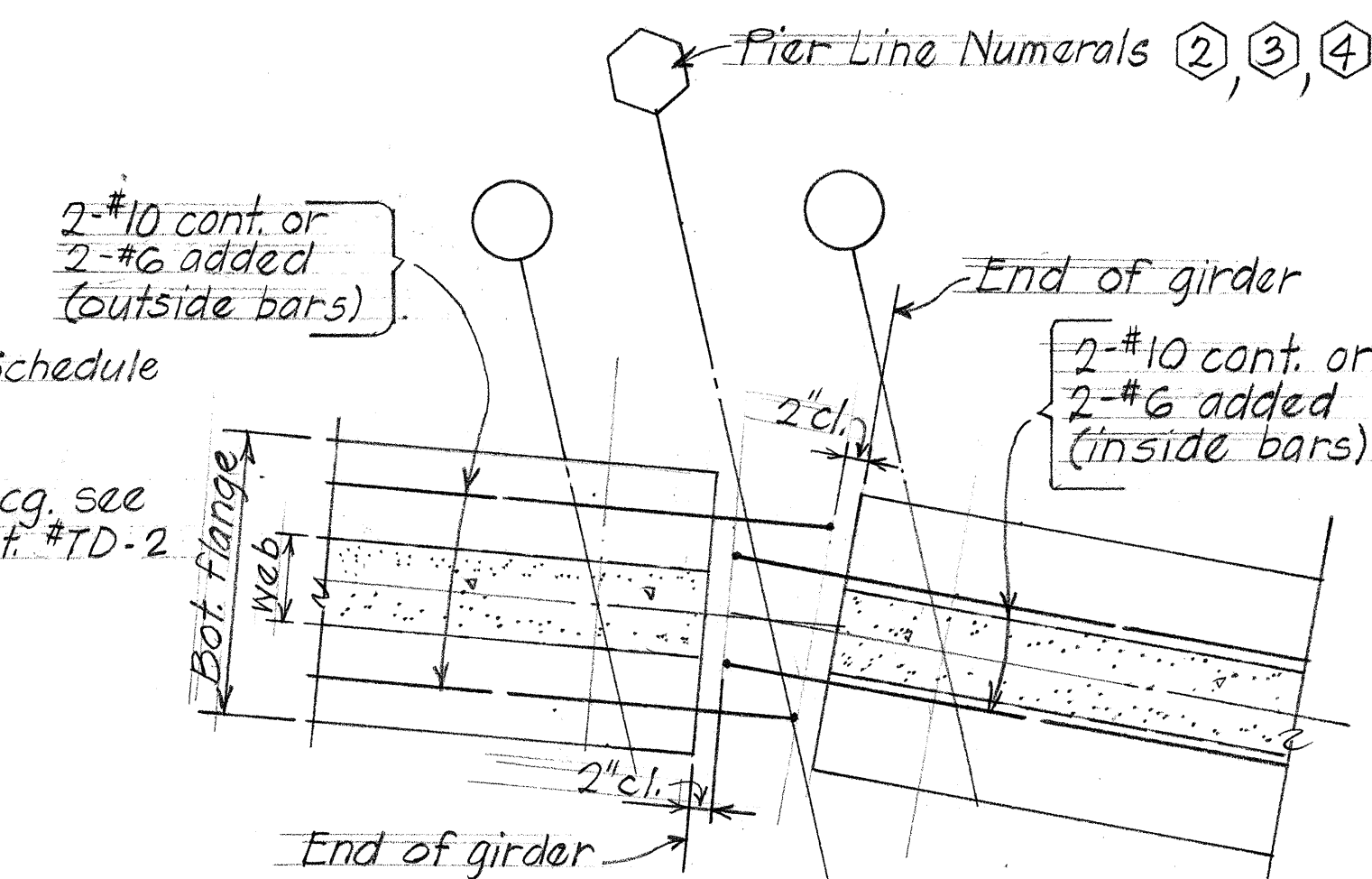


TYPICAL TYPE PG IV-3 THRU PG IV-6 INCL. GIRDER DETAILS Not to scale

NOTE: Prestressed Girder
Refer to Standard Prestressed Girder Detail sht. # TD-2 for additional details & reinforcements not covered by these drw'gs.
* The contractor shall determine the total length of each girder. For additional anchor & holes in prestressed girder for beam connections, see Sht. # TD-4, # 24
** Sole fl. for slide bearing. See Detail sht. # 13.



TYPICAL TYPE PG I-1 THRU PG I-4 INCL. GIRDER DETAILS
Not to scale

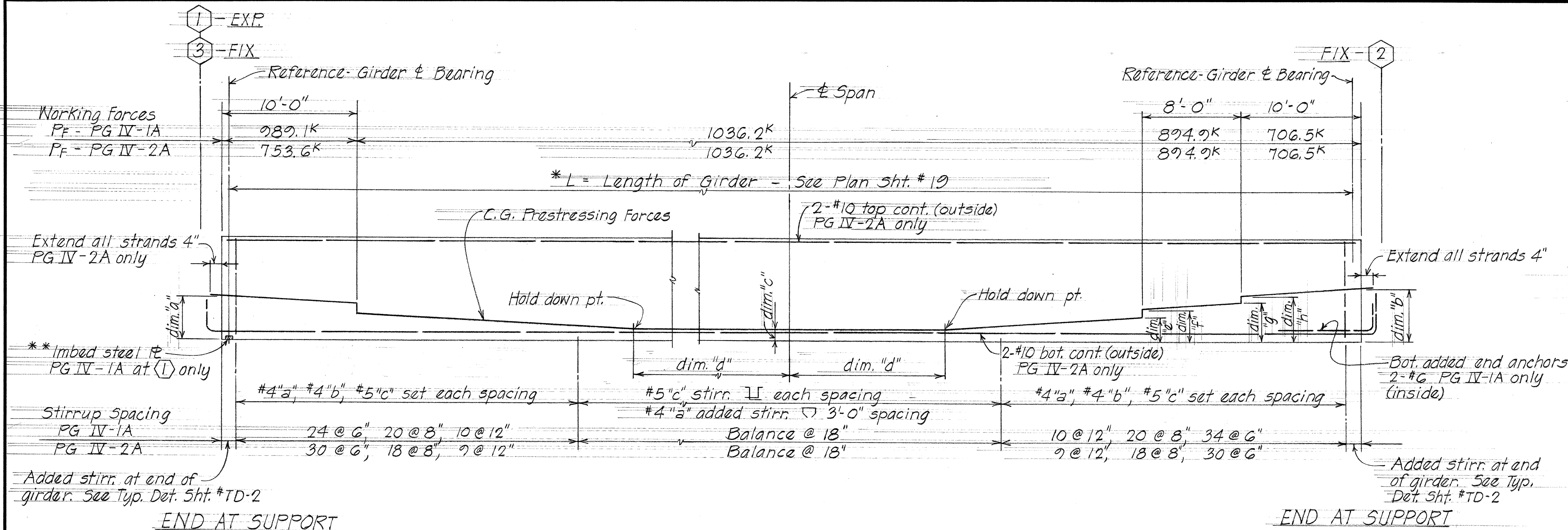


TYPICAL ARRANGEMENT OF #10 CONT. OR #6 ADDED BOTTOM GIRDER BARS AT PIER LINES 2 3 4
Scale: 3/4" = 1'-0"

PRESTRESSED GIRDER SCHEDULE									
Girder Types	dim. "a"	dim. "b"	dim. "c"	dim. "d"	dim. "e"	dim. "f"	dim. "g"	dim. "h"	Working Forces in kips
									P _f P _f at mask end
PG I-1	9"		5 3/4"						329.7
PG I-2	9"		5 3/4"						329.7
PG I-3	8 1/2"		4 3/4"						235.5
PG I-4	8 1/2"		4 3/4"						188.4
PG IV-1	15 1/2"	19 7/8"	5 1/4"	0.1L					1,036.2
PG IV-1A	15 1/2"	20 7/8"	5 1/4"	Do	10 5/8"	11 1/16"	14 1/16"	17 3/16"	See Details - Sht. # 20A
PG IV-2	19 7/8"	19 7/8"	5 1/4"	Do					1,036.2 753.6
PG IV-2A	19 7/8"	20 7/8"	5 1/4"	Do	10 5/8"	11 1/16"	14 1/16"	17 3/16"	See Details - Sht. # 20A
PG IV-3	17 7/8"		4 1/4"	Do					753.6
PG IV-3A	18 3/4"	18 3/4"	4 5/8"	Do					847.8 706.5
PG IV-4	17 7/8"		4 1/4"	Do					753.6
PG IV-5	Do		Do	Do					Do
PG IV-6	Do		Do	Do					Do

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
HALAWA INTERCHANGE
STRUCTURE NO. 11
PRESTRESSED GIRDER DETAILS
Proj. No.: I-41-1(90):13 May 1971
SHEET No. 20 OF 28 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(90)13	1972	119A	202



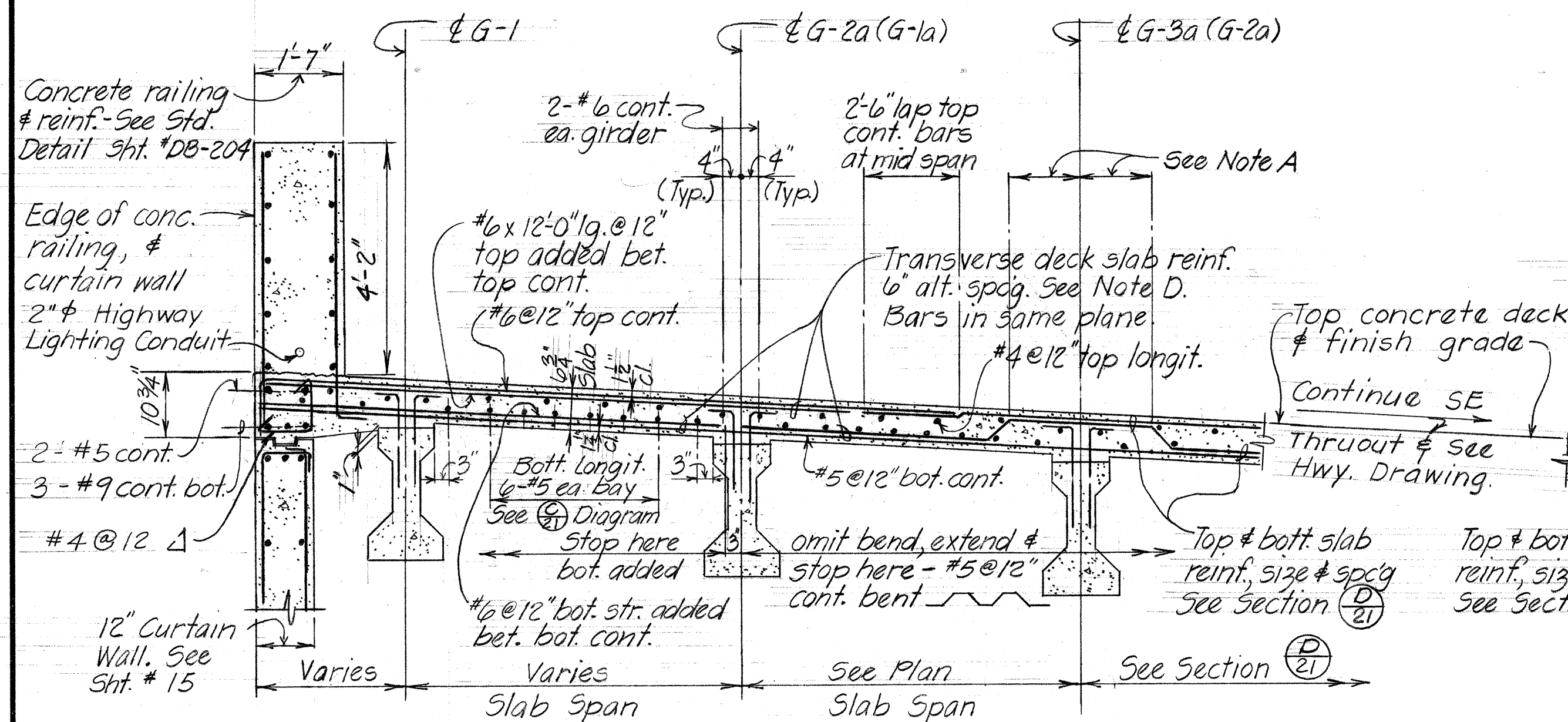
ORIGINAL PLAN	DATE
NOTED BY	
CHECKED BY	
QUANTITIES BY	
DESIGNED BY	
DRAWN BY	
SURVEY PLOTTED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

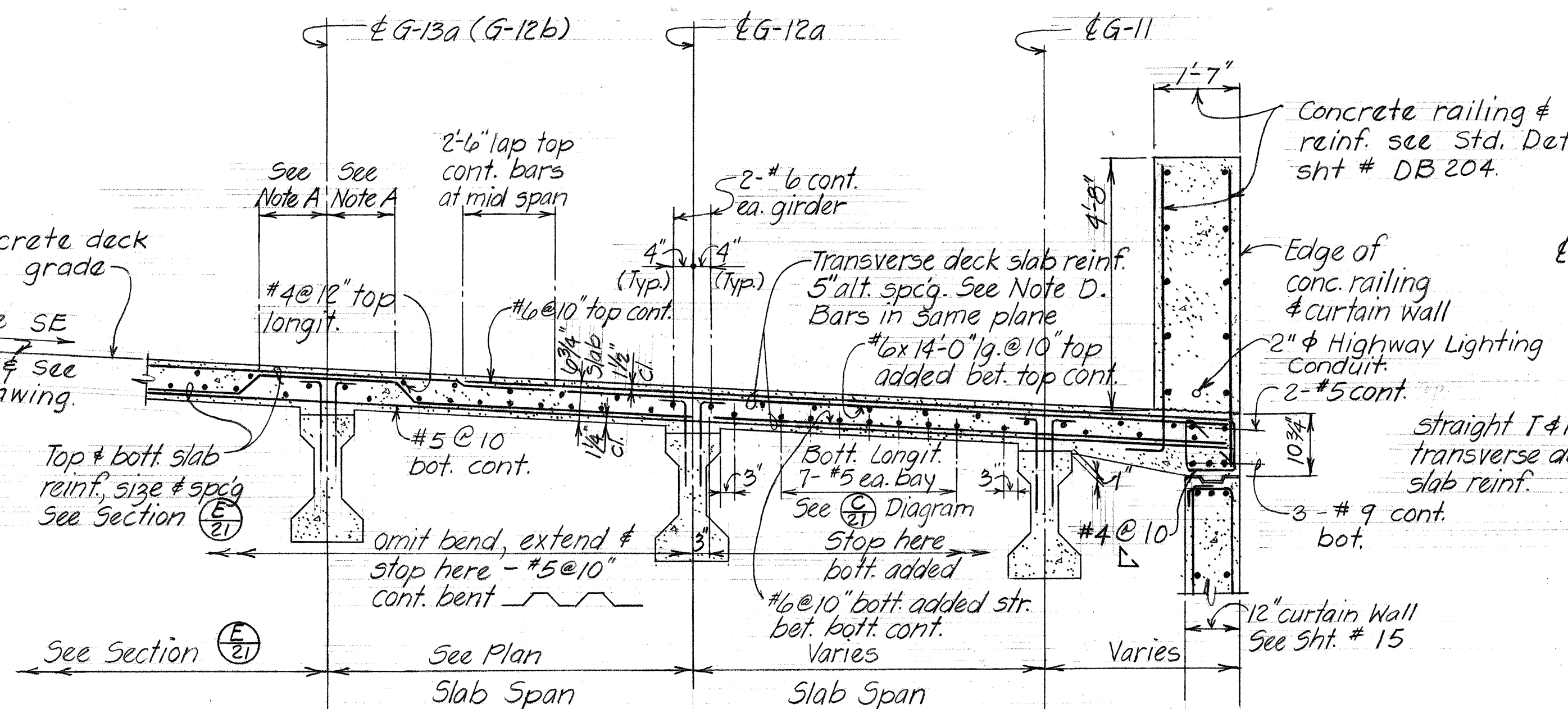
HALAWA INTERCHANGE
STRUCTURE No 11
PRESTRESSED GIRDER DETAILS

Proj. No. I-HI-1(90)13
SHEET No. 20 A OF 28 SHEETS

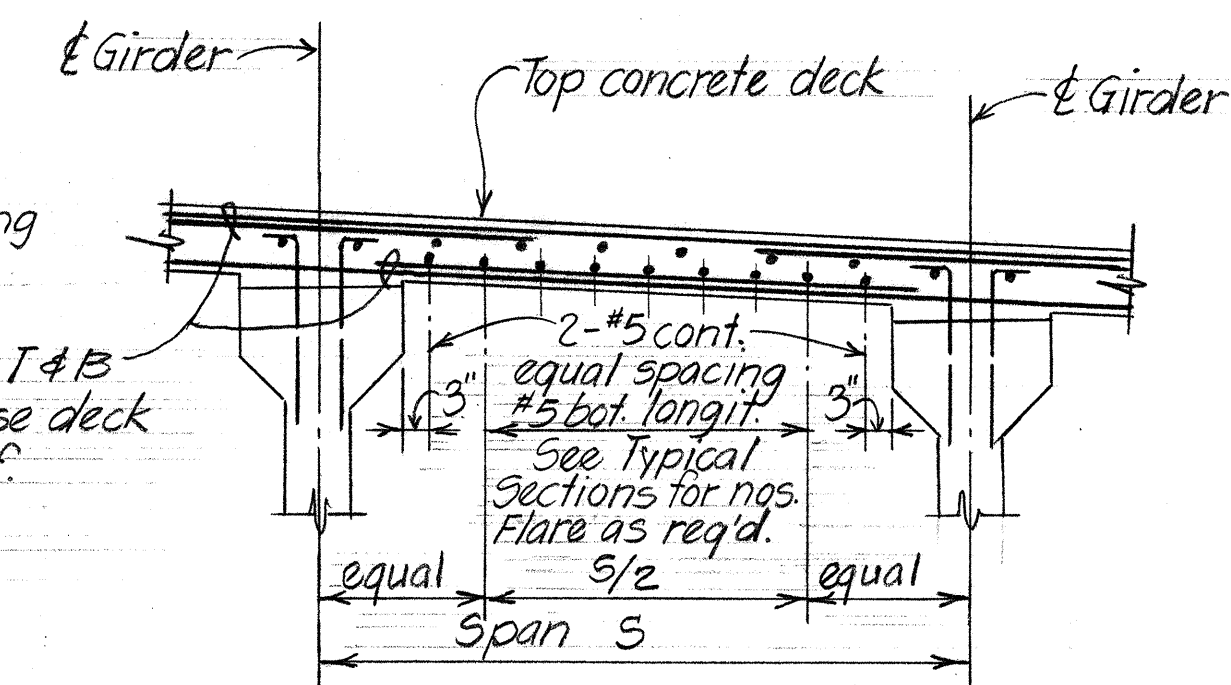
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-41-1(90)-13	1972	120	202



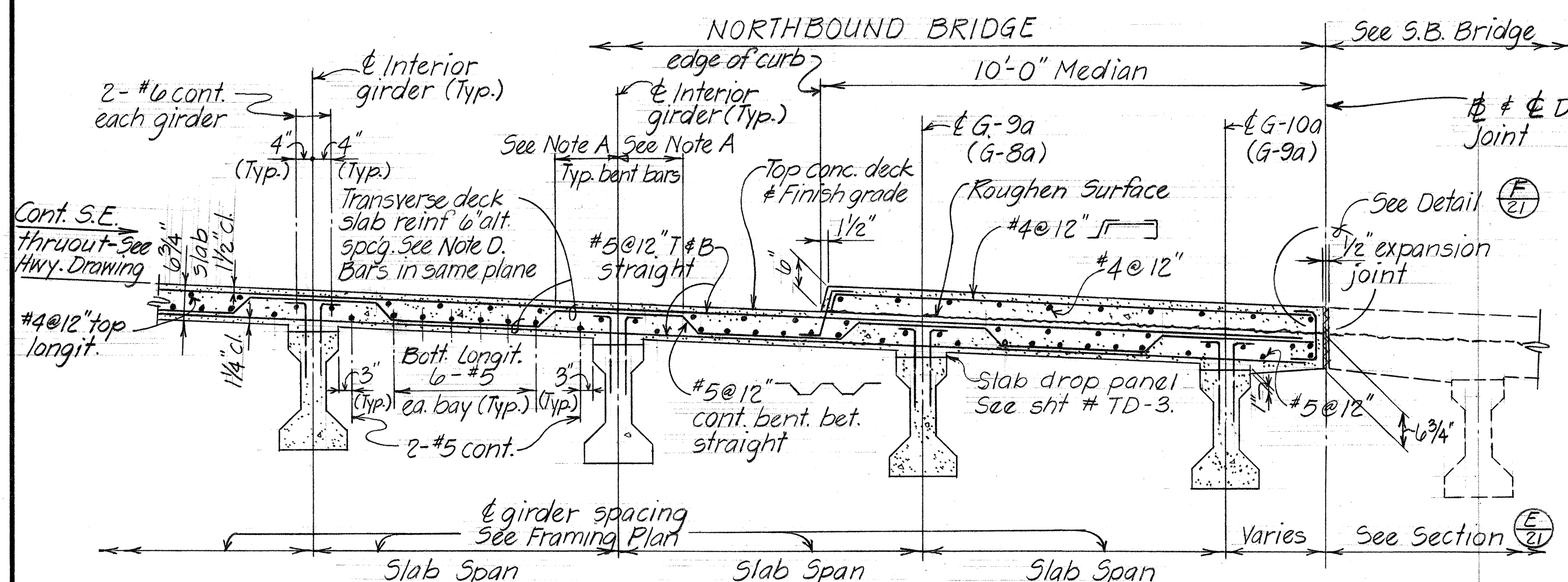
TYPICAL NORMAL SECTION (A-21) Scale: 1/2"=1'-0"
(PART SPAN N^o 1 AND SPAN N^o 6 ONLY)



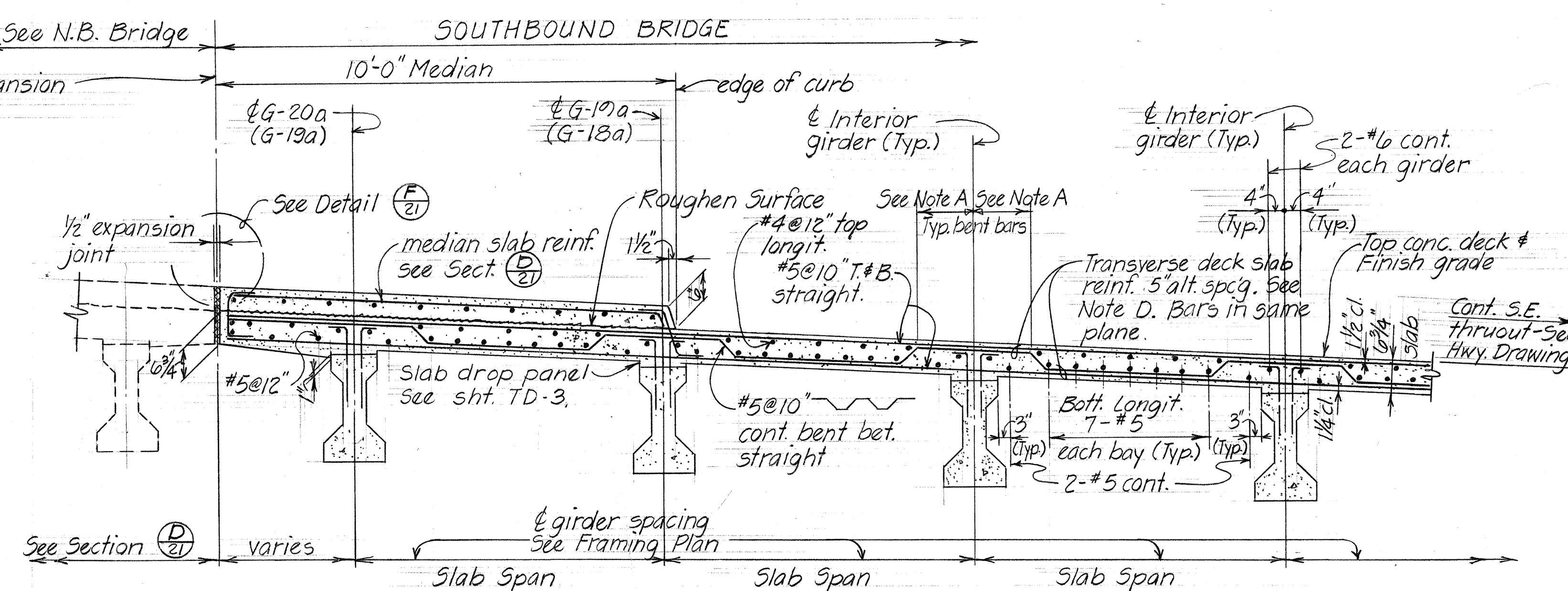
TYPICAL NORMAL SECTION (B-21) Scale: 1/2"=1'-0"
(PART SPAN N^o 1 AND SPAN N^o 6 ONLY)



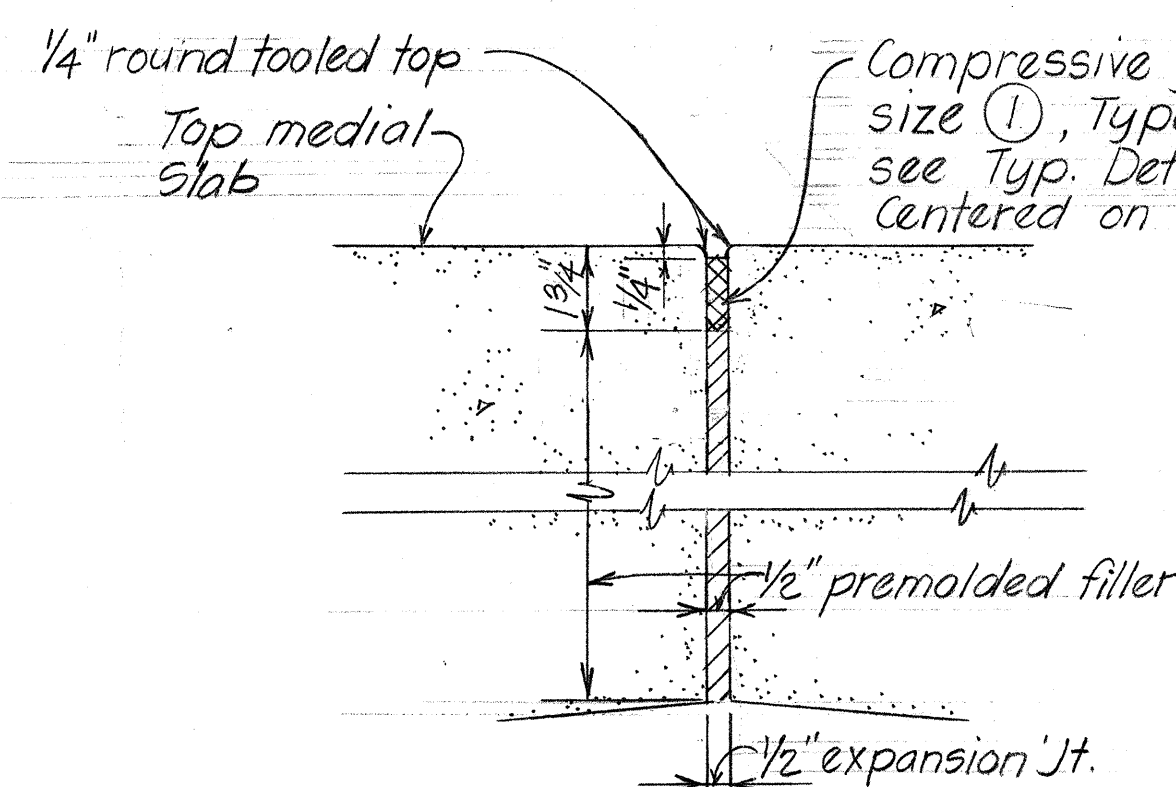
(C-21) BOTTOM LONGITUDINAL BAR PLACEMENT DIAGRAM
Not to scale



TYPICAL NORMAL SECTION (D-21) (PART SPAN N^o 1 AND 6) Scale: 1/2"=1'-0"
BETWEEN: GIRDERS G-3a thru G-10a inclusive - Span #1
GIRDERS G-2a thru G-9a inclusive - Span #6



TYPICAL NORMAL SECTION (E-21) (PART SPAN N^o 1 AND 6) Scale: 1/2"=1'-0"
BETWEEN: GIRDERS G-13a thru G-20a inclusive - Span #1
GIRDERS G-12b thru G-19a inclusive - Span #6



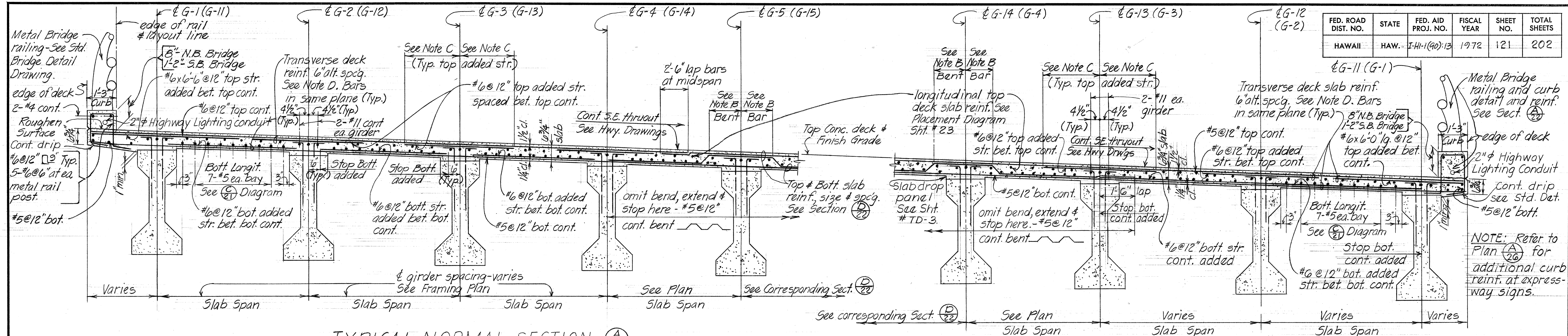
DETAIL (F-21)
Scale: 3/4"=1'-0"

NOTE "A": This dimension is equal to 0.175 times the slab span.

NOTE "D": Place transverse deck slab reinforcement perpendicular to the Baseline Chord of each corresponding Span N^o 1 thru 6 inclusive.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
HALAWA INTERCHANGE
STRUCTURE N^o 11
TYPICAL NORMAL DECK SECTIONS
SPAN N^o 1, 6
Proj. No.: I-41-1(90)-13 May 1971
SHEET No. 21 OF 28 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(90)-13	1972	121	202



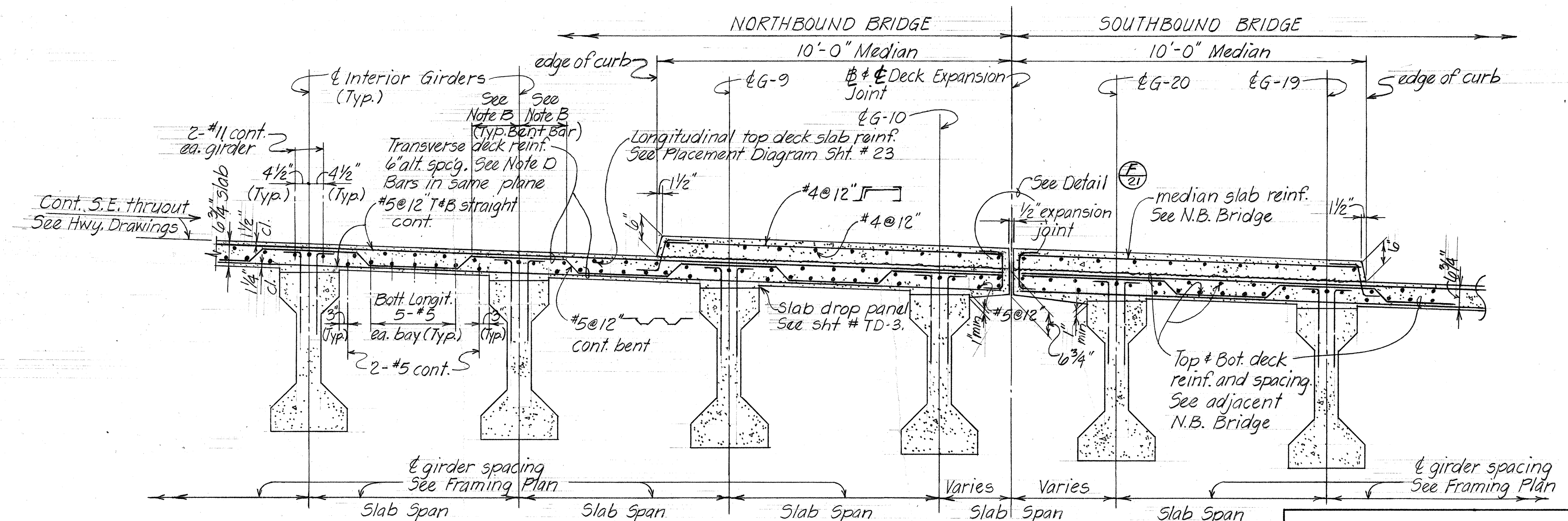
NOTE "B": This dimension is equal to 0.215 times the slab span.

NOTE "C": This dimension is equal to 0.380 times the greater of the two adjacent slab span.

NOTE "D": Place transverse deck slab reinforcement perpendicular to the Baseline Chord of each corresponding span Nos 1 thru 6 inclusive.

TYPICAL NORMAL SECTION A-22 AS SHOWN
SECTION A-22 SIMILAR EXCEPT REVERSE SLOPE
 (PART SPAN NO 5 ONLY)
 Scale: 1/2" = 1'-0"

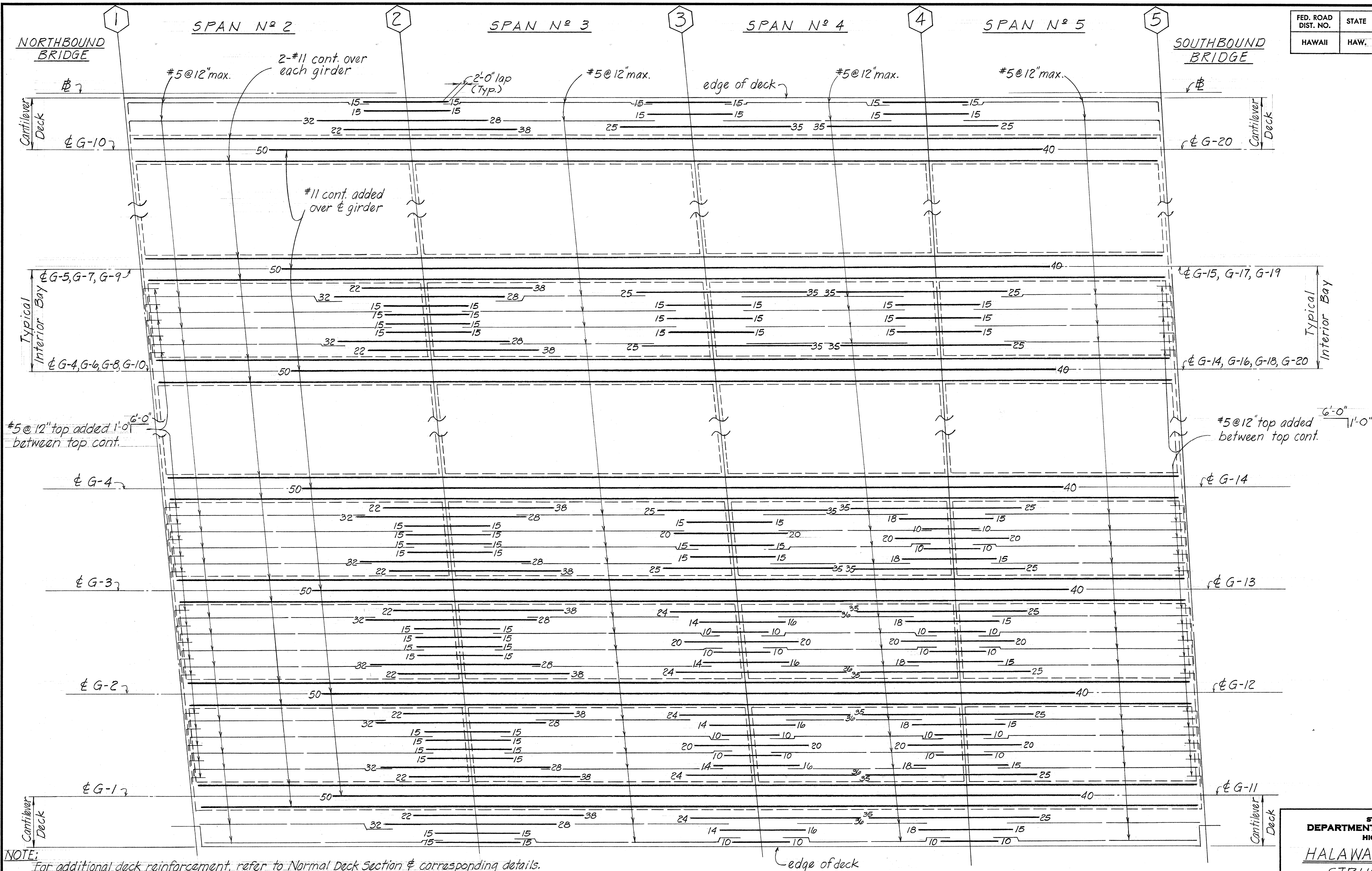
TYPICAL NORMAL SECTION B-22 AS SHOWN Scale: 1/2" = 1'-0"
SECTION B-22 SIMILAR EXCEPT REVERSE SLOPE
 (PART SPAN NOS. 2, 3 & 4 ONLY)



TYPICAL NORMAL SECTION D-22 (PART SPAN NOS 2, 3, 4, 5)
 Scale: 1/2" = 1'-0"
 BETWEEN: GIRDERS G-4 thru G-10; G-14 thru G-20 inclusive-Span #2, #3, #4
 GIRDERS G-5 thru G-10; G-15 thru G-20 inclusive-Span #5

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
HALAWA INTERCHANGE
STRUCTURE NO 11
 TYPICAL NORMAL DECK SECTIONS
 SPAN NOS 2, 3, 4, 5
 Proj. No.: I-HI-1(90)-13 May 1971
SHEET No. 22 OF 28 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(90):13	1972	122	202

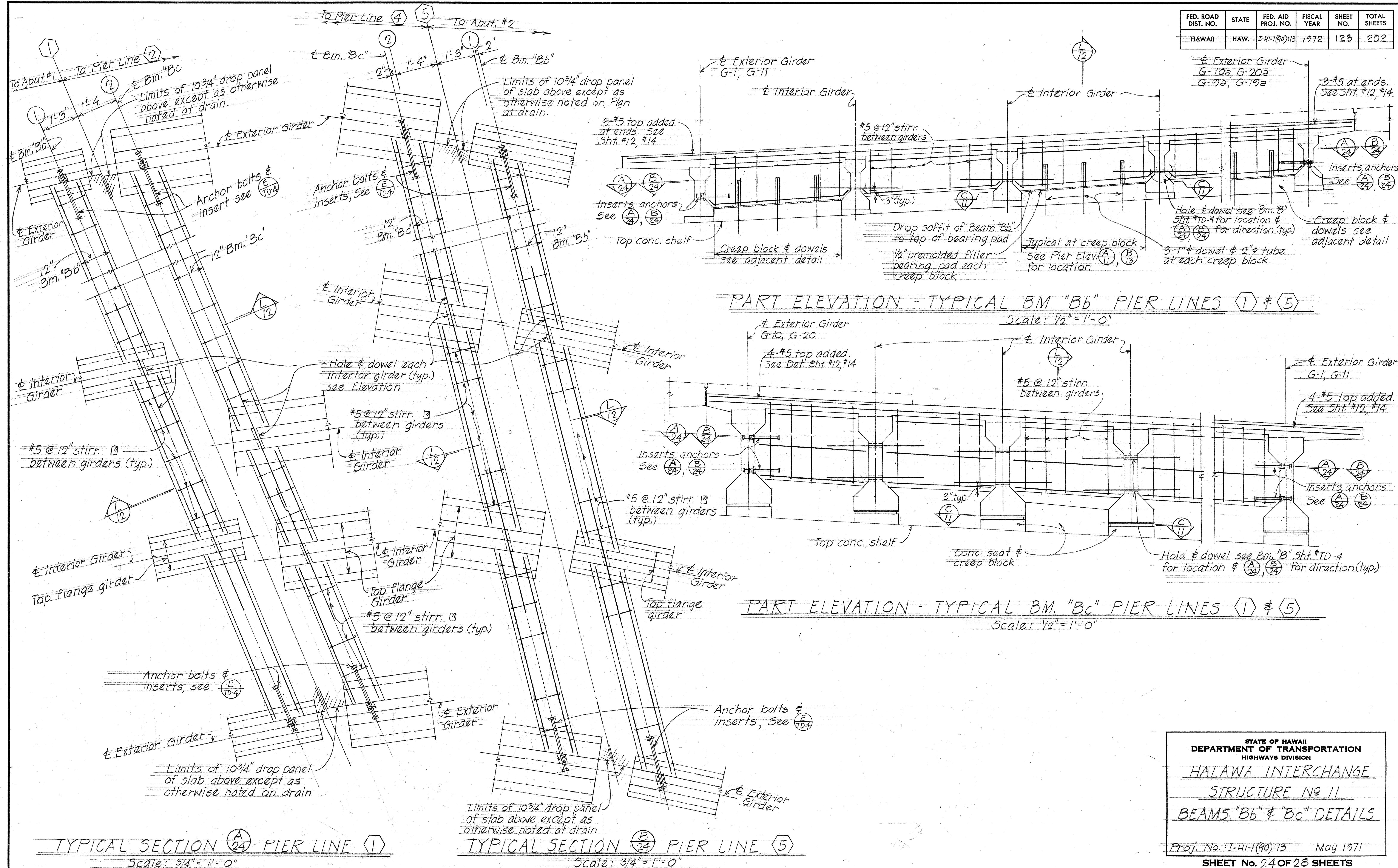


NOTE:
 For additional deck reinforcement, refer to Normal Deck Section & corresponding details.
 All reinforcements #11 except as otherwise noted.
 Number at ends of bars denotes dimension in feet from the adjacent pier line numeral.
 For additional slab reinforcement see Normal Section & corresponding details.
 All #5@12"max. bars shall be extended & lapped 2'-0" min. with the adjacent #11 bars as shown.
 Continuous added are cont. bars over interior spans extended partially into the adjacent span at ends.

PLACEMENT DIAGRAM - DECK SLAB TOP LONGITUDINAL REINFORCEMENT
 NORTHBOUND AND SOUTHBOUND BRIDGES Scale: Longit. 1/4"=1'-0" Transv. 3/8"=1'-0"

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
HALAWA INTERCHANGE
STRUCTURE NO. 11
TOP DECK LONGIT. REINF.
 Proj. No. I-HI-1(90):13
SHEET No. 23 OF 28 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(90):13	1972	123	202

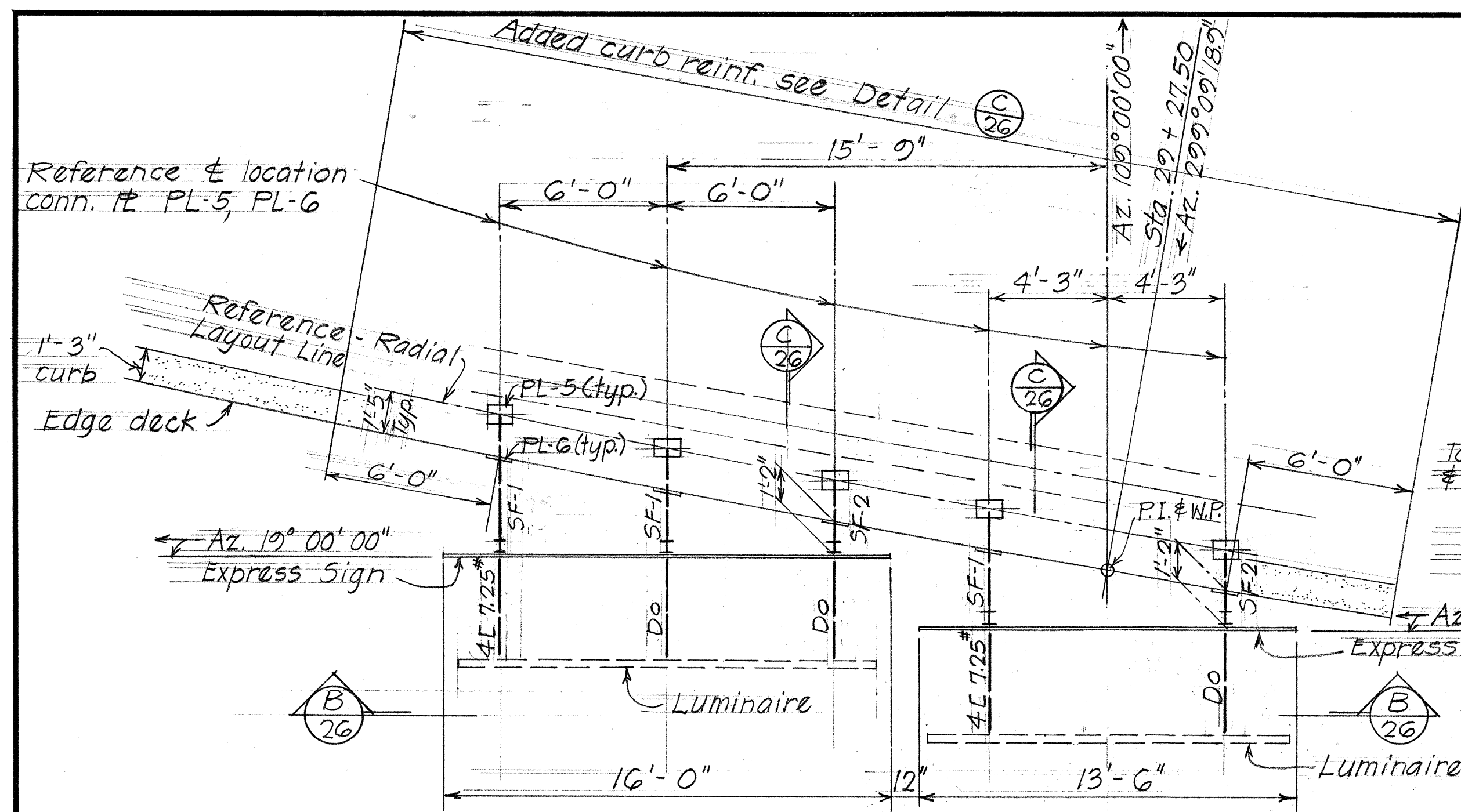


STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

HALAWA INTERCHANGE
STRUCTURE NO 11
BEAMS "Bb" & "Bc" DETAILS

Proj. No.: I-HI-1(90):13 May 1971
SHEET No. 24 OF 28 SHEETS

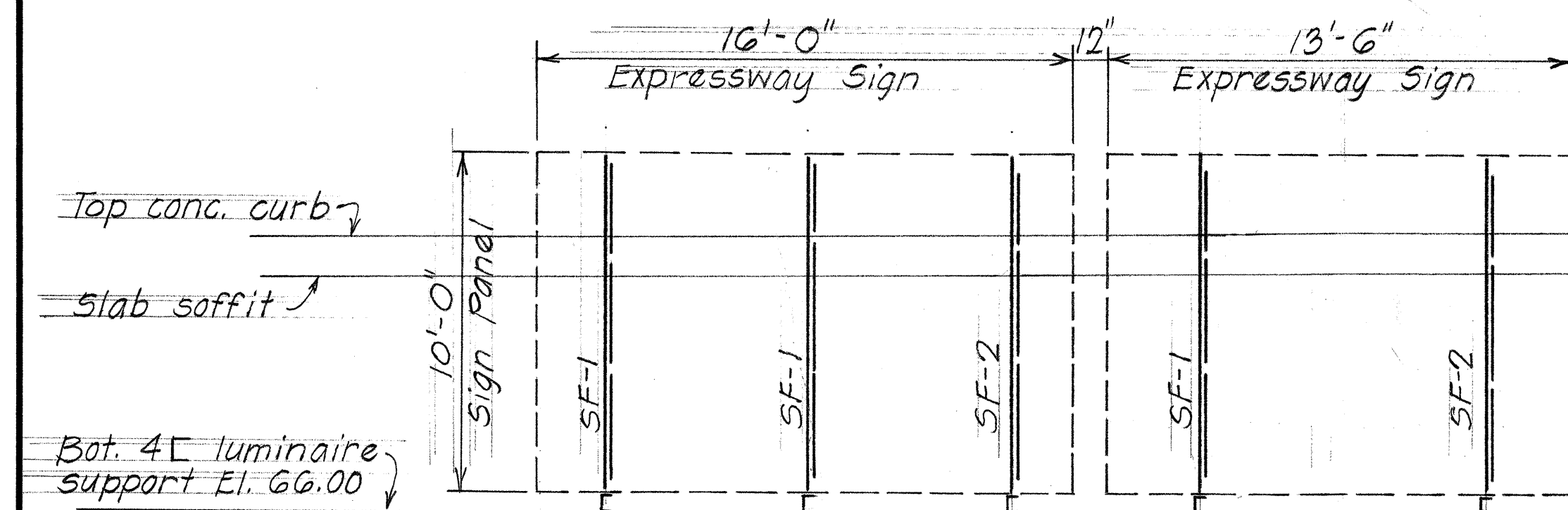
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(90)13	1972	125	202



FRAMING PLAN

Scale: $\frac{1}{4}" = 1'-0$

NOTE: Locate all sign and luminaire frame plumb

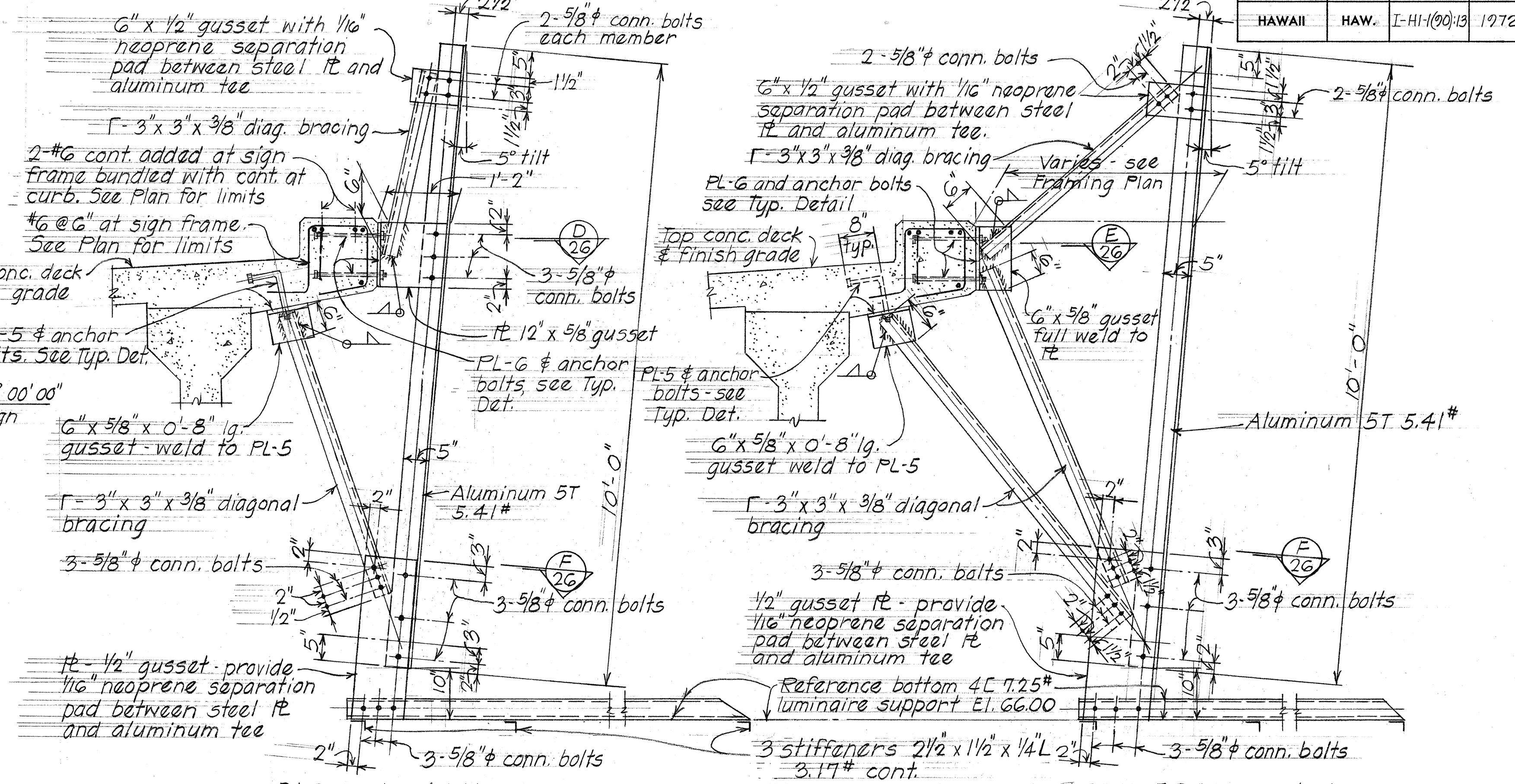


ELEVATION $\left(\frac{B}{26}\right)$ EXPRESSWAY SIGN

Scale: $\frac{1}{4}'' = 1' - 0''$

NOTES:

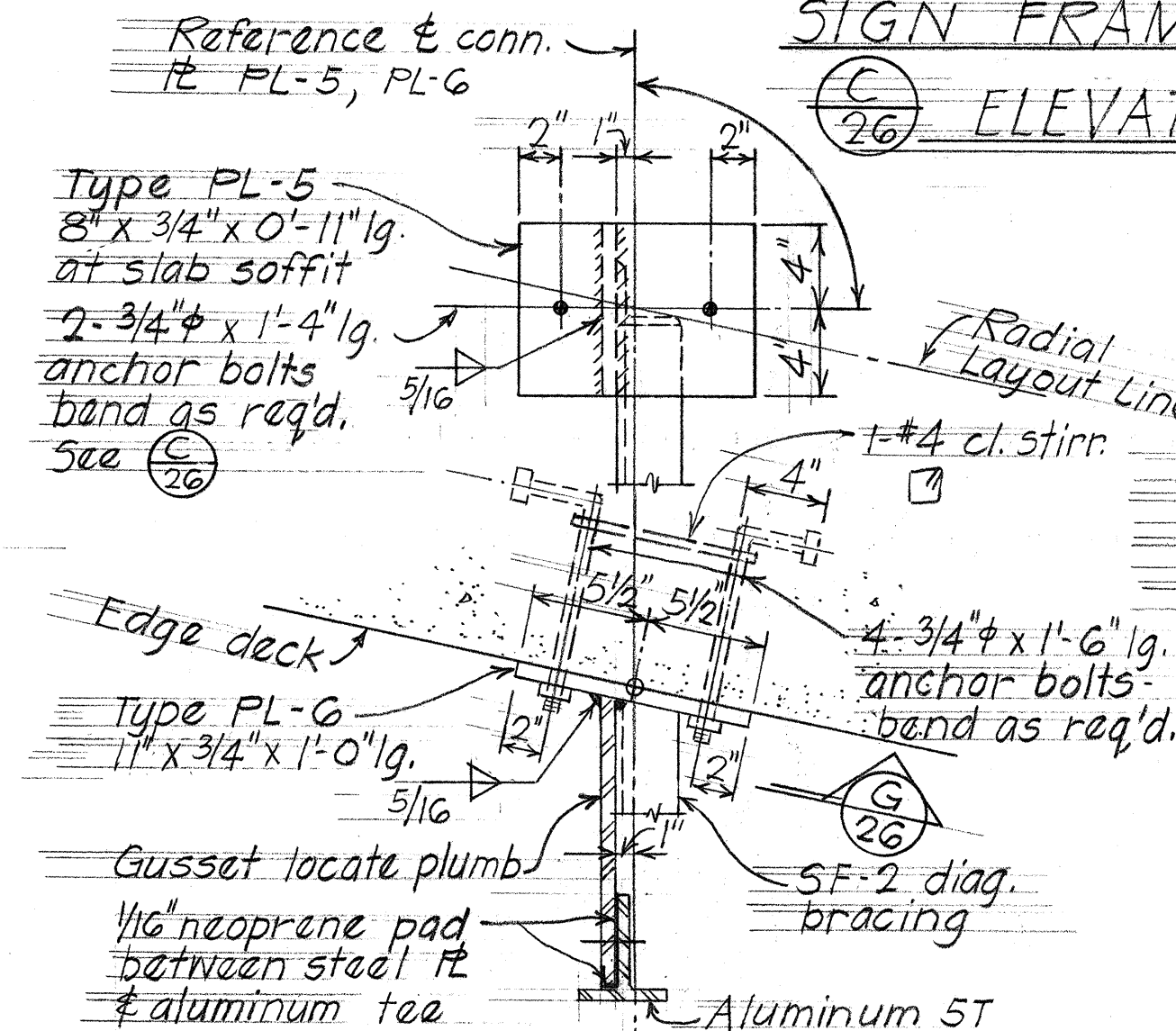
All welds to be 5/16".
All connections & anchor bolts, nuts & washers to be ASTM A325
Sign support steel frames and assemblage shall be paid for
under Item No. G21.27, "Support Frame on Structure No 11 for Expressway Sign."
Provide cut washers with all connection bolts.
All structural steel members, bolts, nuts and miscellaneous hardware
to be hot dipped galvanized.
See sign drawings and standards for additional details not covered
by these drawings.



SIGN FRAME SF-2

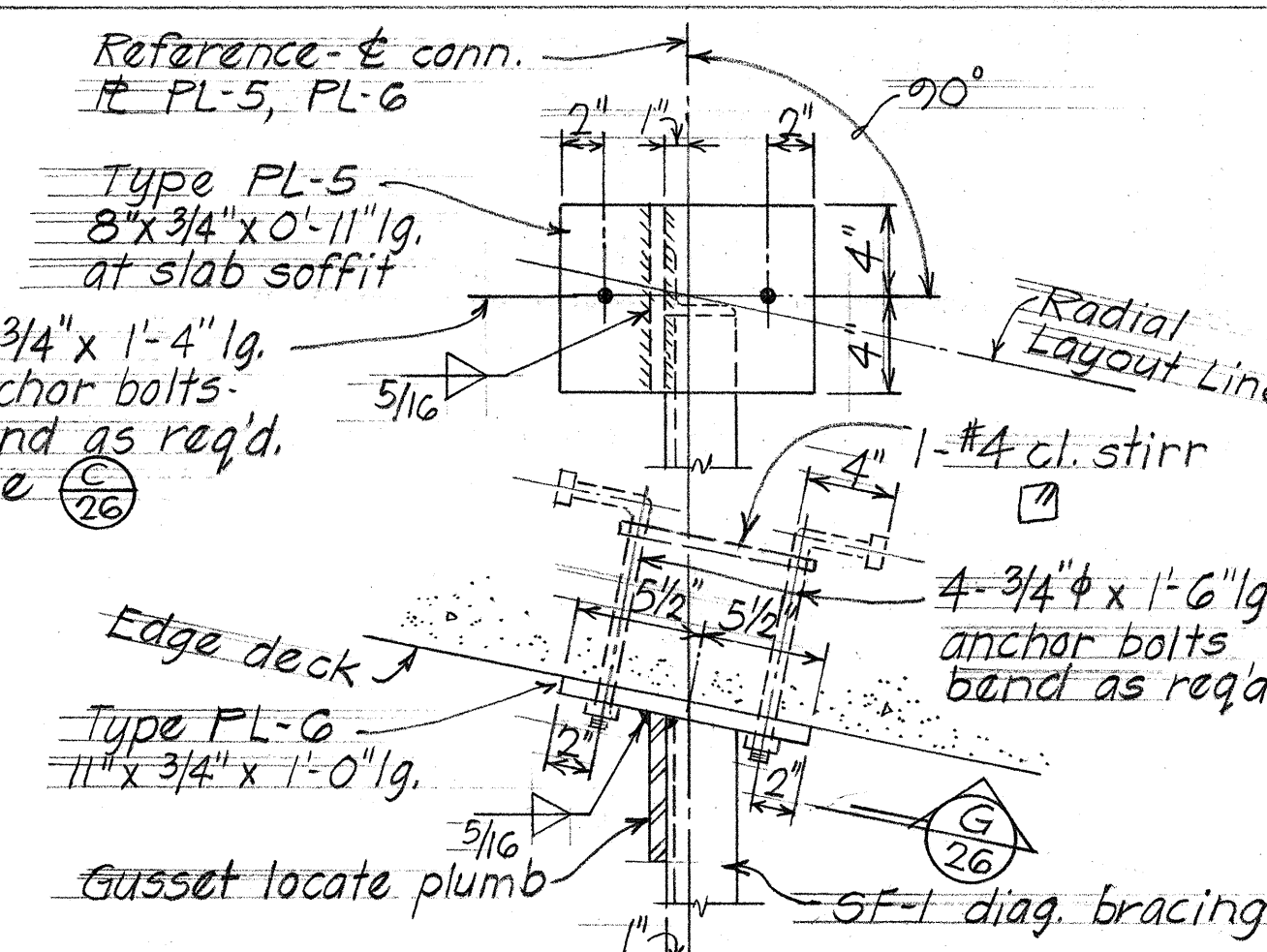
SIGN FRAME SF-1

(C
26) ELEVATION - EXPRESSWAY SIGN MOUNTING BRACKET ASSEMBLY Scale: $\frac{3}{4}" = 1'-0"$



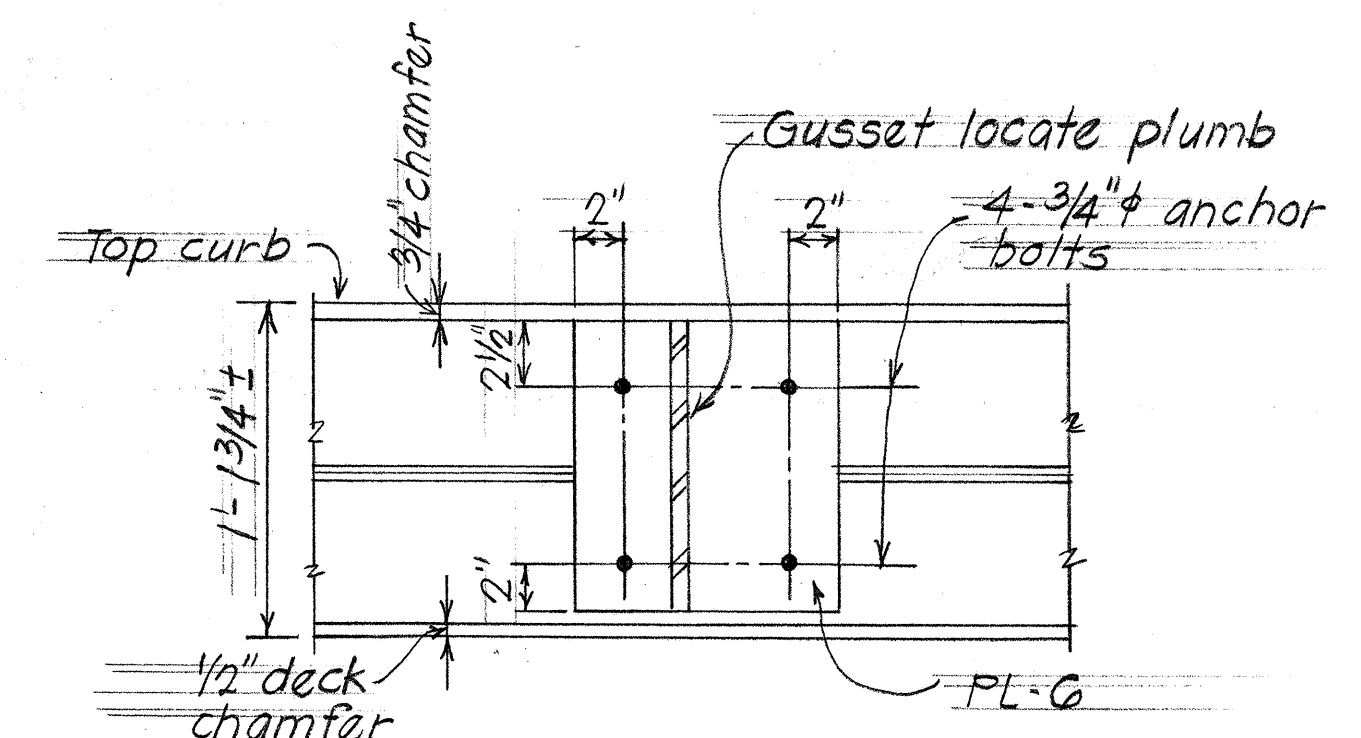
SECTION

Scale: $1\frac{1}{2}'' = 1'-0''$



TYPICAL SECTION

Scale: $1\frac{1}{2}" = 1'-0"$

ELEVATION $\frac{G}{26}$

Scale: $1\frac{1}{2}" = 1'-0"$

**STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION**

HALAWA INTERCHANGE

STRUCTURE NO 11

SIGN & LUMINAIRE SUPPORT FRAME
EXPRESSWAY SIGN E-39

Proj. No I-HI-1(00):13 May 1971

SHEET No. 26 OF 28 SHEETS