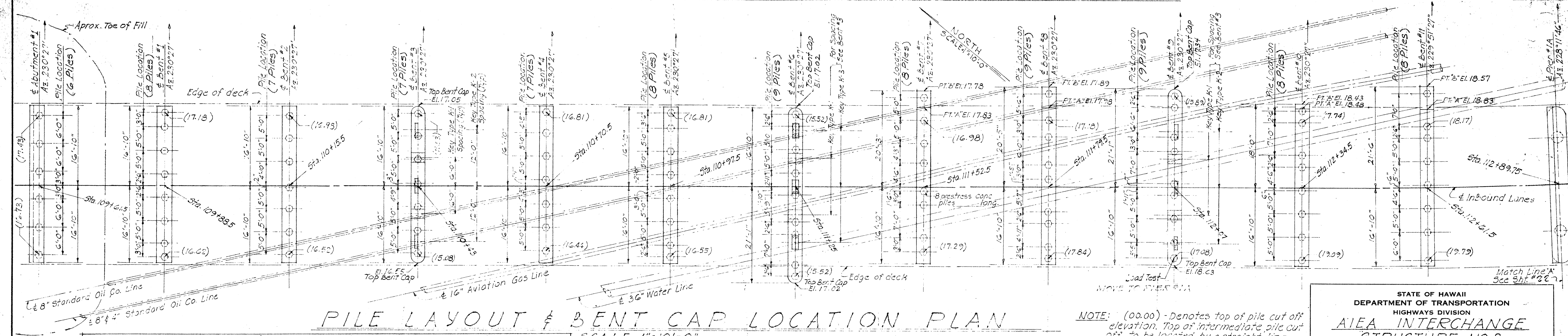
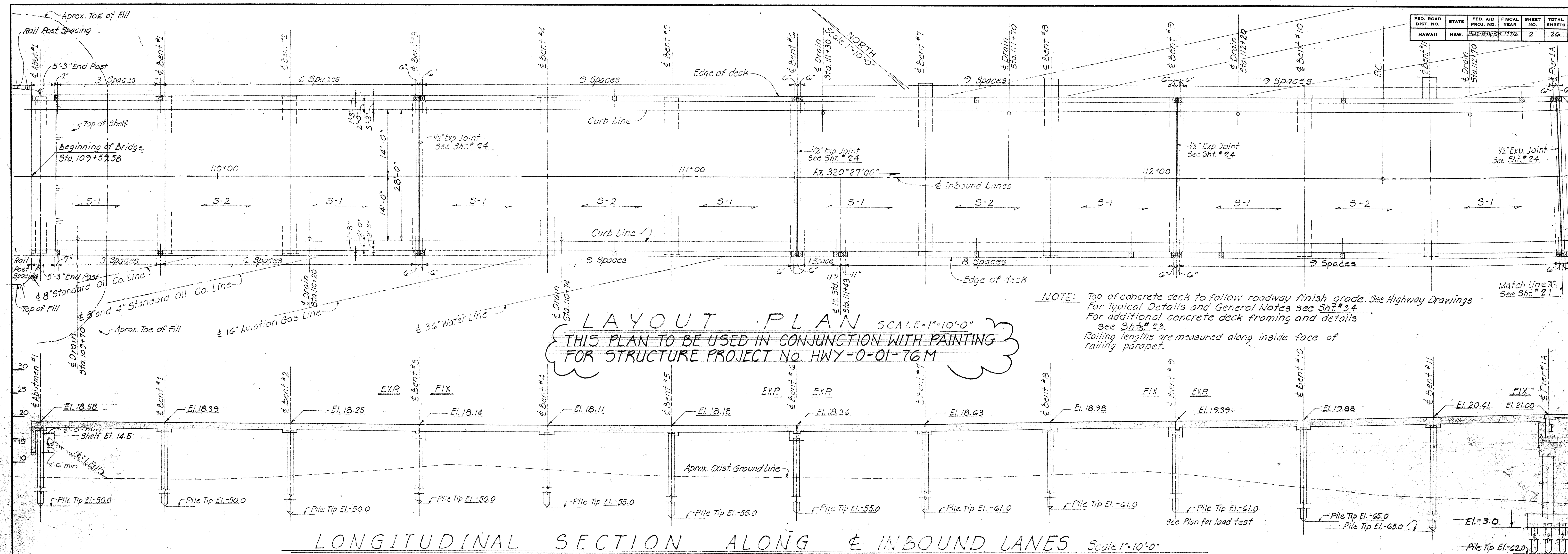




DATE: 6/64
 SURVEY PLANNED BY: K. KASAHARA
 DRAWN BY: K. KASAHARA
 CHECKED BY: L. KASAHARA, J.T.O.
 ORIGINAL PLAN: NO. 1
 NOTE BOOK: NO. 1

ESTIMATED QUANTITIES			
Concrete	---	Lump Sum (2,074 cy)	Structural Excavation----- 955.0 cy.
Reinforcing Steel	---	Lump Sum (381,475 Lbs)	Metal Bridge Railing----- 2,046.00 Lin. Ft.
Structural Steel	---	Lump Sum (567,622 Lbs)	Conc. Railing & End Post----- 2,062.00 Lin. Ft.
Filter Material	---	10.0 cy.	Prestress Conc. Piles----- 18,016.00 Lin. Ft.

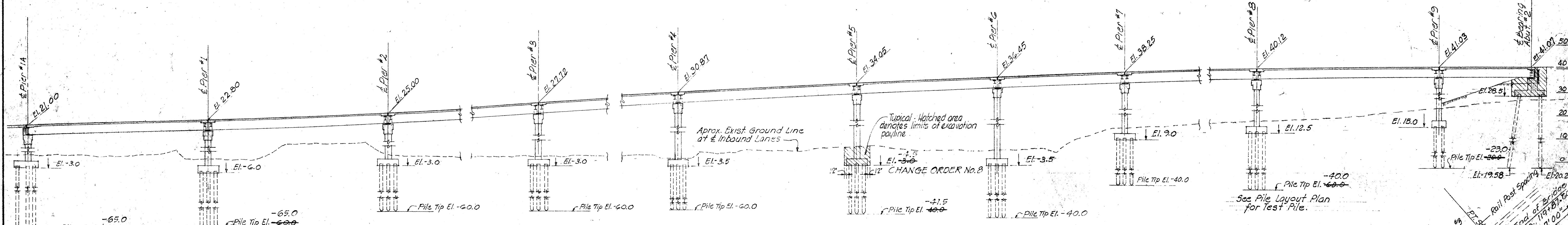
NOTE: All piles to be standard prestress concrete piles type I. See Standard Prestress Concrete Piles Sht. #22.

IMPORTANT!!! Pile Design Load 40 Tons - Abutment #1 thru Bents #11 inclusive.

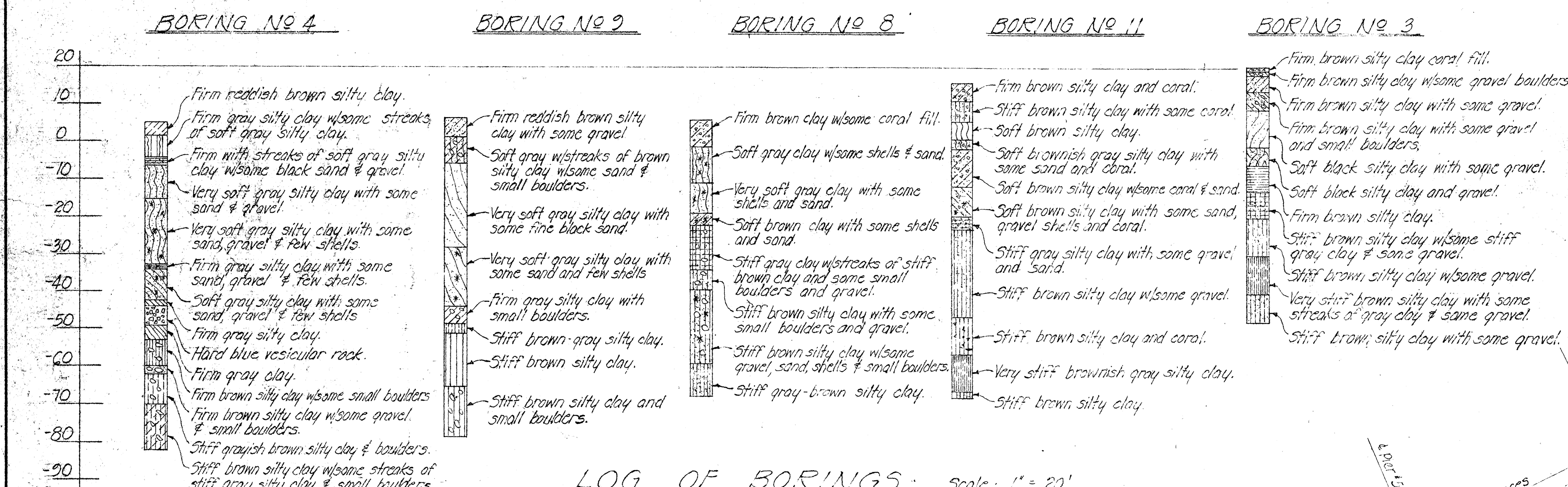
Pile length with in a particular bent shall be of the same length and shall be rounded to the nearest foot. Pile lengths will be furnished by the Engineer after the Load Test is completed for the bents and the test pile is driven for the piers.

NOTE: (00.00) - Denotes top of pile cut off elevation. Top of intermediate pile cut off to be located by a straight line drawn between the two extreme pile elevations as denoted on plan. (For cut off El. for all other piles in pile cap extension. See Typical Detail Sht. #23). For location of corresponding elevations at pt. 'A' and pt. 'B' See Sht. #23.

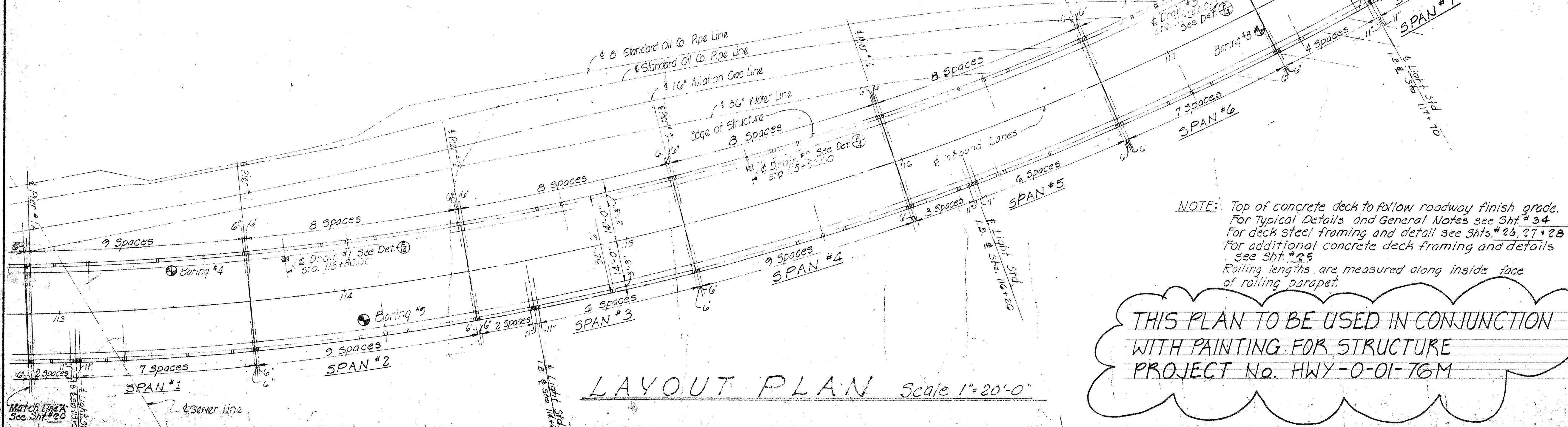
STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
AIEA INTERCHANGE
STRUCTURE NO. 2
PART LAYOUT PLAN and DETAILS
 I.B. Sta. 109+59.58 to I.B. Sta. 112+89.75
 Kamehameha Hwy Proj. No. F-090(110)



LONGITUDINAL SECTION ALONG & INBOUND LANES Scale 1"=20'-0"



LOG OF BORINGS Scale: 1"=20'



LAYOUT PLAN Scale 1"=20'-0"

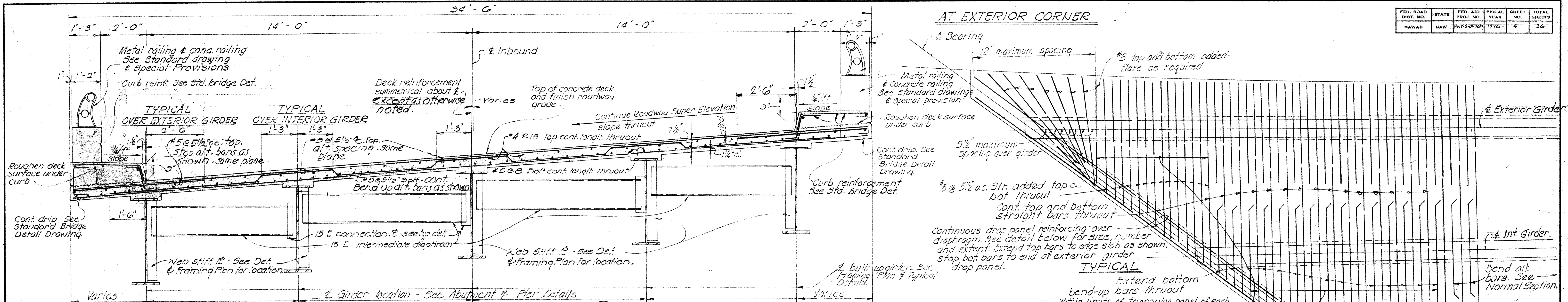
NOTE: Top of concrete deck to follow roadway finish grade. For Typical Details and General Notes see Sht. #34. For deck steel framing and detail see Shts. #26, 27, 28. For additional concrete deck framing and details see Sht. #25. Railing lengths are measured along inside face of railing parapet.

THIS PLAN TO BE USED IN CONJUNCTION WITH PAINTING FOR STRUCTURE PROJECT No. HWY-0-01-76M

NEOPRENE PAD SCHEDULE			
AT EACH END OF GIRDER	DIMENSIONS		
	SIZE	LENGTH	THICKNESS
G-1 thru G-5 INCL.	8"	22'	1"
G-6 thru G-10 INCL.	8"	22'	1"
G-11 thru G-15 INCL.	8"	22'	1"
G-16 thru G-20 INCL.	8"	22'	1"
G-21 thru G-25 INCL.	8"	22'	1"
G-26 thru G-30 INCL.	7"	22'	3/4"
G-31 thru G-33 INCL.	7"	20'	3/4"
G-34	7"	22'	3/4"
G-35	8"	22'	1"
G-36 thru G-40 INCL.	8"	22'	1"
G-41 thru G-45 INCL.	8"	22'	1"
G-46 thru G-50 INCL.	7"	20'	3/4"

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
**AIEA INTERCHANGE
STRUCTURE No. 2**
PART LAYOUT PLAN and DETAILS
I.B. & Sta. 112+89.75 To I.B. & Sta. 119+67.60
Kamehameha Hwy Proj. No. F-090-1(10)

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	144-0-01-76M	1976	4	26



Note:
For steel deck framing plan & details, see
Typical Details, Sht. #2-B thru #2-B inclusive

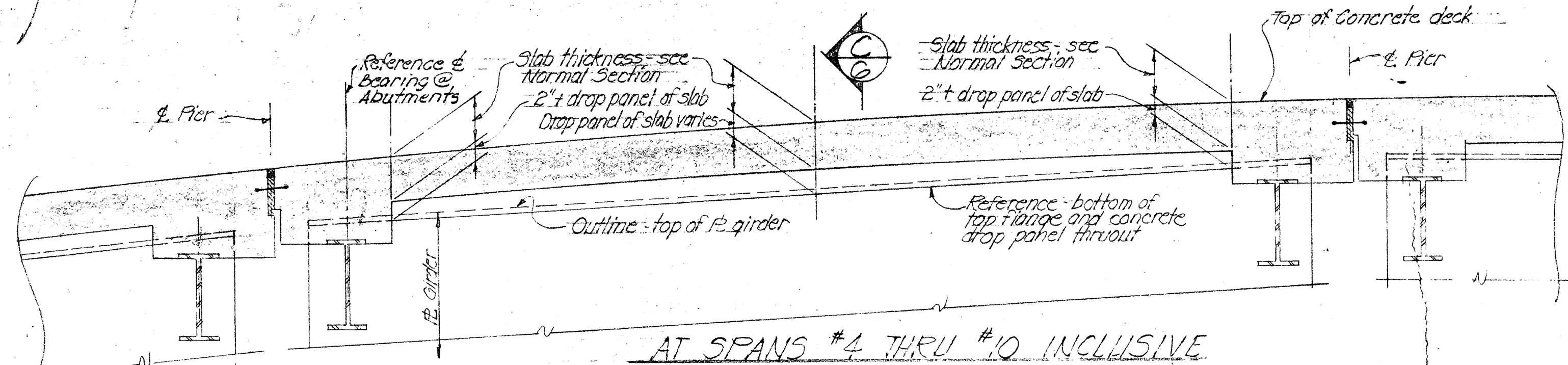
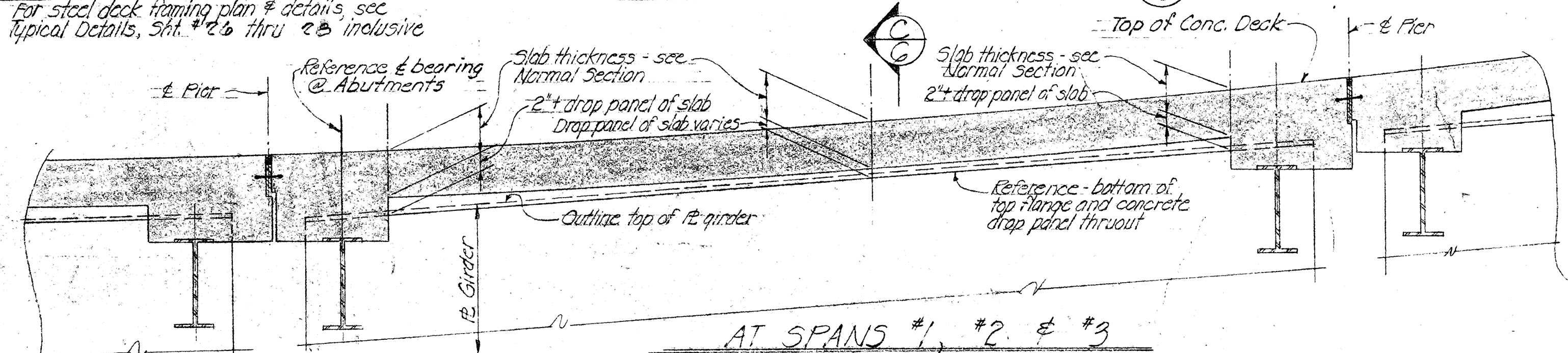


DIAGRAM SHOWING TYPICAL DROP PANEL OF SLAB AT EACH SPAN
No Scale

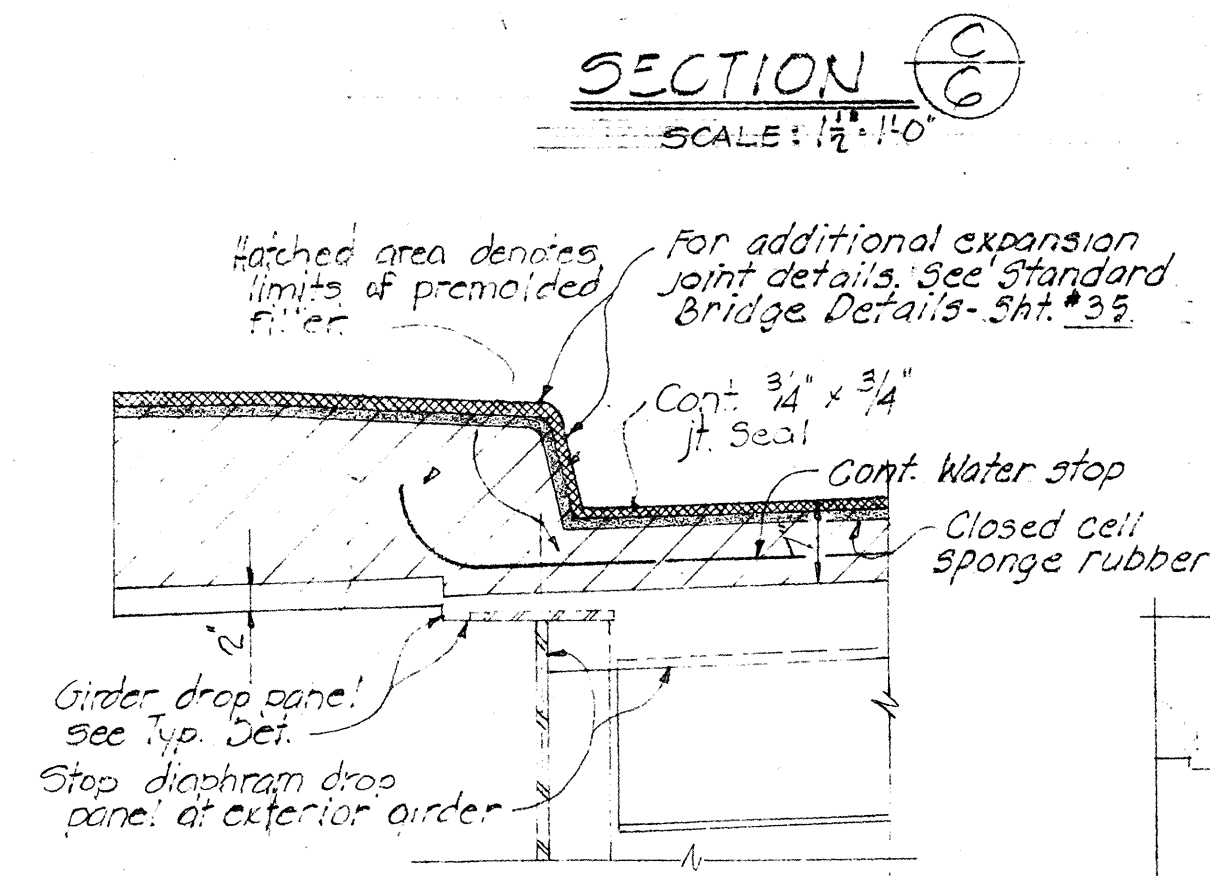
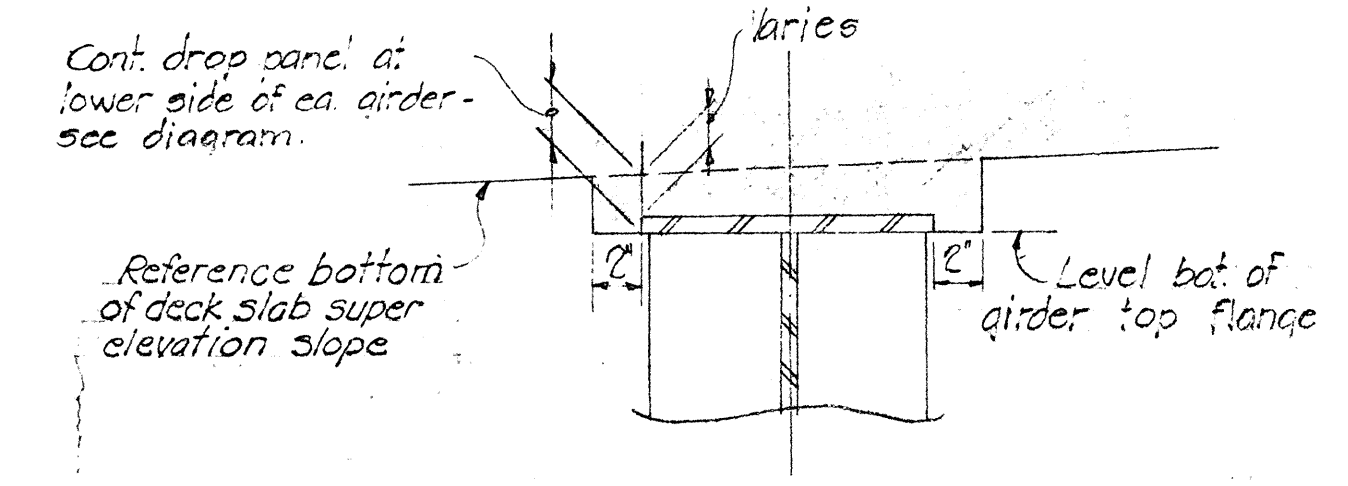
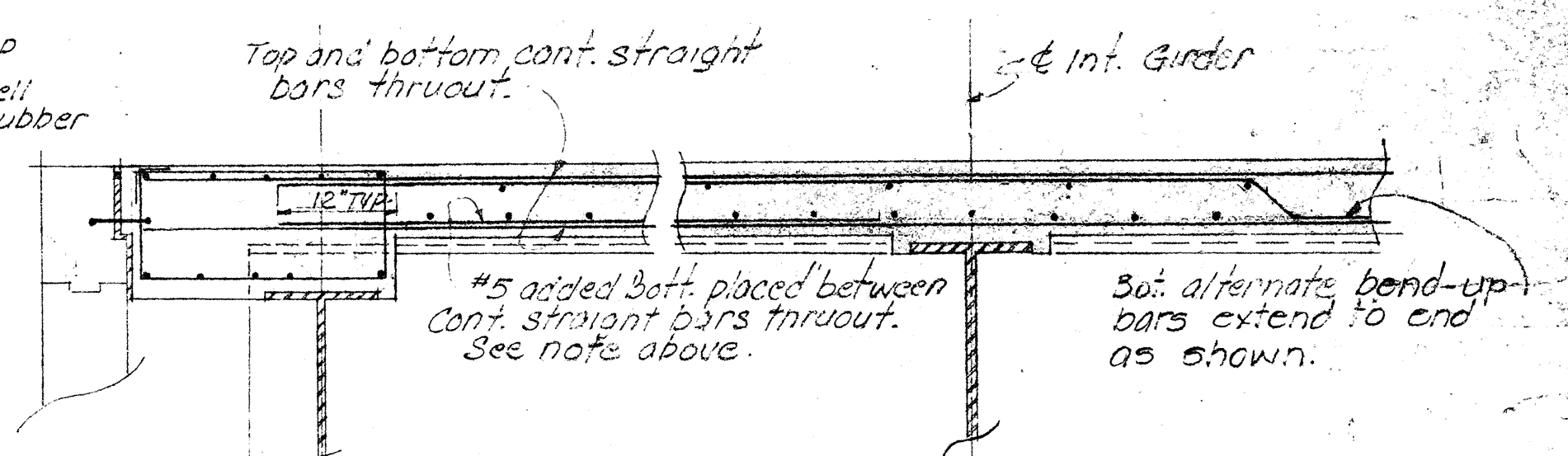
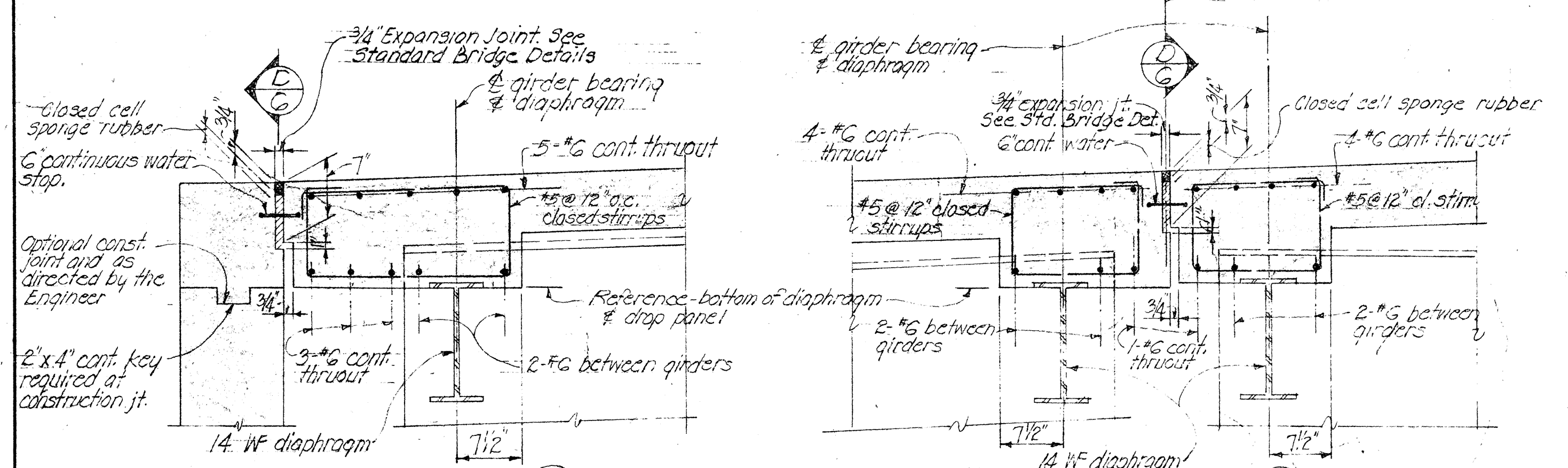


DIAGRAM PLAN SHOWING TYPICAL ARRANGEMENT OF SLAB REINFORCEMENT @ SKEWED ENDS



TYPICAL SECTION B-B



SECTION M-M
Scale: 1" = 1'-0"

SECTION N-N
Scale: 1" = 1'-0"

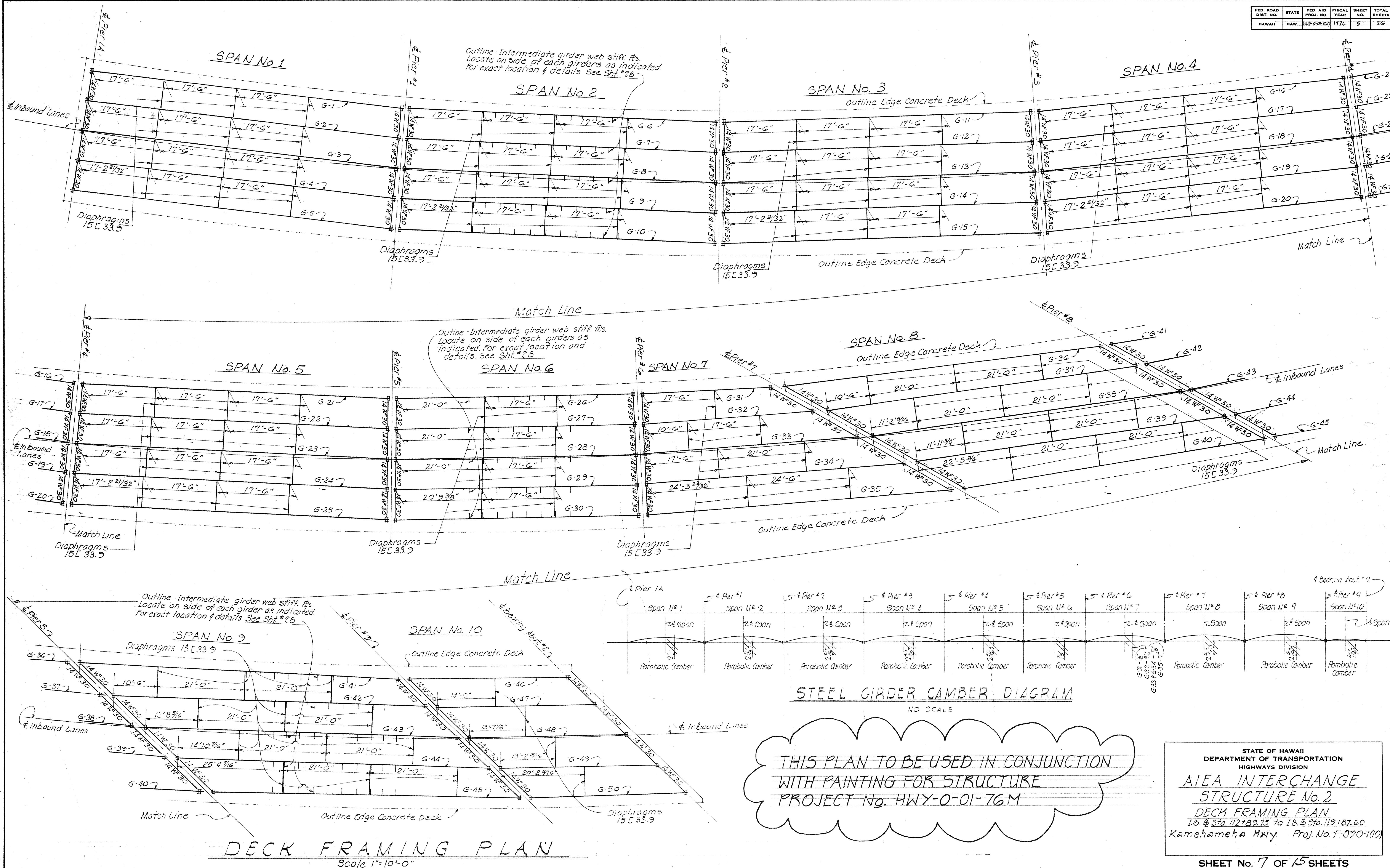
THIS PLAN TO BE USED IN CONJUNCTION
WITH PAINTING FOR STRUCTURE
PROJECT No. HWY-0-01-76M

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

AIEA INTERCHANGE
STRUCTURE No. 2
SECTION and DETAILS
I.B. & Sta. 112+82.75 to I.B. & Sta. 119+87.60
Kamehameha Hwy. Proj. No. F-090-1(10)

SHEET No. 6 OF 15 SHEETS

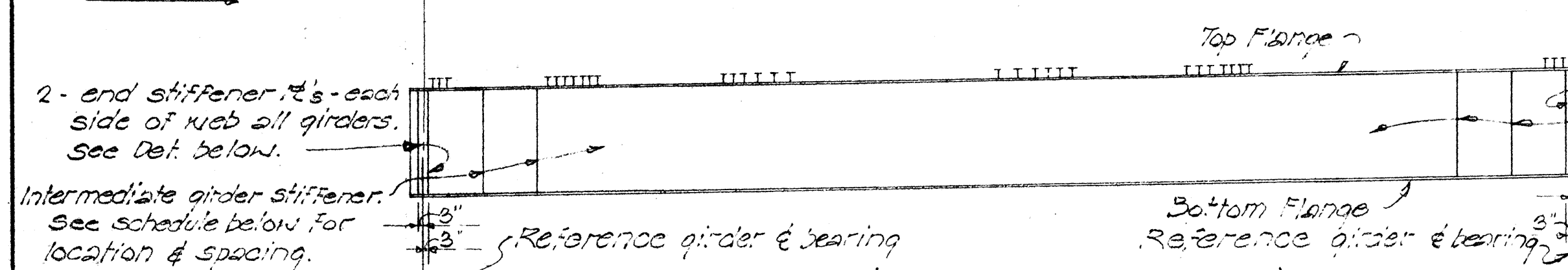
DATE	6/6/74
DESIGNED BY	L. A. G. S. H.
CHECKED BY	L. A. G. S. H.
APPROVED BY	L. A. G. S. H.
ORIGINAL PLAN	
NOTE BOOK	
NO.	



DATE 9/24
DRAWN BY J. OKAMOTO
CHECKED BY J. OKAMOTO
DESIGNED BY J. OKAMOTO
NOTE BOOK No.

Splicing Stud Shear Connectors - 4 each spacing.

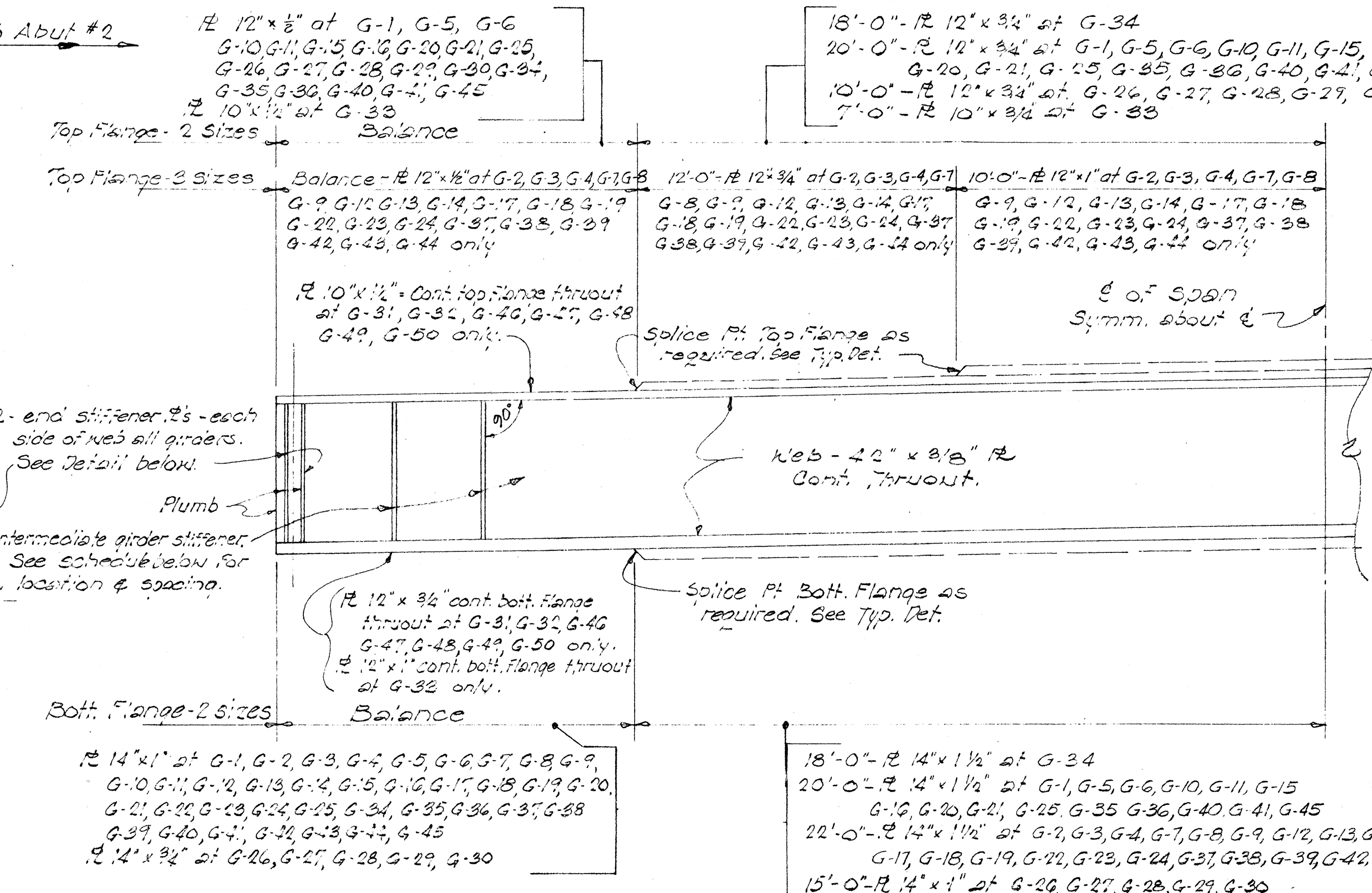
@ G-1 thru G-5 incl.	32 @ 6' - 16' - 0"	15 @ 9' - 11' - 3"	Bal. @ 8' max	15 @ 9' - 11' - 3"	32 @ 6' - 16' - 0"
@ G-6 thru G-25 incl.	32 @ 6' - 16' - 0"	15 @ 9' - 11' - 3"	Bal. @ 8' max	15 @ 9' - 11' - 3"	32 @ 6' - 16' - 0"
@ G-26 thru G-30 incl.	23 @ 6' - 14' - 0"	10 @ 9' - 7' - 0"	Bal. @ 8' max	10 @ 9' - 7' - 0"	23 @ 6' - 14' - 0"
@ G-31 and G-32 incl.	15 @ 6' - 7' - 0"	9 @ 9' - 6' - 9"	Bal. @ 8' max	9 @ 9' - 6' - 9"	15 @ 6' - 7' - 0"
@ G-33 only	17 @ 6' - 8' - 0"	11 @ 9' - 8' - 3"	Bal. @ 8' max	11 @ 9' - 8' - 3"	17 @ 6' - 8' - 0"
@ G-34 only	32 @ 6' - 16' - 0"	16 @ 9' - 12' - 0"	Bal. @ 8' max	16 @ 9' - 12' - 0"	32 @ 6' - 16' - 0"
@ G-35 only	32 @ 6' - 16' - 0"	15 @ 9' - 11' - 3"	Bal. @ 8' max	15 @ 9' - 11' - 3"	32 @ 6' - 16' - 0"
@ G-36 thru G-45 incl.	32 @ 6' - 16' - 0"	15 @ 9' - 11' - 3"	Bal. @ 8' max	15 @ 9' - 11' - 3"	32 @ 6' - 16' - 0"
@ G-46 thru G-50 incl.	15 @ 6' - 7' - 0"	9 @ 9' - 6' - 9"	Bal. @ 8' max	9 @ 9' - 6' - 9"	15 @ 6' - 7' - 0"



L = Length of Girder (Horizontal Measurement) - See Schedule

G-1	15 spaces @ 3' - 0" = 52' - 0"	Bal. - 7 eq. spcs.
G-2	16 spaces @ 3' - 0" = 56' - 0"	Bal. - 6 eq. spcs.
G-3	17 spaces @ 3' - 0" = 59' - 0"	Bal. - 5 eq. spcs.
G-4	18 spaces @ 3' - 0" = 63' - 0"	Bal. - 3 eq. spcs.
G-5	19 spaces @ 3' - 0" = 66' - 0"	Bal. - 2 eq. spcs.
G-6, G-11 & G-12	15 spaces @ 3' - 0" = 52' - 0"	Bal. - 7 eq. spcs.
G-7, G-12 & G-17	16 spaces @ 3' - 0" = 56' - 0"	Bal. - 6 eq. spcs.
G-8, G-13 & G-18	17 spaces @ 3' - 0" = 59' - 0"	Bal. - 5 eq. spcs.
G-9, G-14 & G-19	18 spaces @ 3' - 0" = 63' - 0"	Bal. - 3 eq. spcs.
G-10, G-15 & G-20	19 spaces @ 3' - 0" = 66' - 0"	Bal. - 2 eq. spcs.
G-21	15 spaces @ 3' - 0" = 52' - 0"	Bal. - 7 eq. spcs.
G-22	16 spaces @ 3' - 0" = 56' - 0"	Bal. - 6 eq. spcs.
G-23	17 spaces @ 3' - 0" = 59' - 0"	Bal. - 5 eq. spcs.
G-24	18 spaces @ 3' - 0" = 63' - 0"	Bal. - 3 eq. spcs.
G-25	19 spaces @ 3' - 0" = 66' - 0"	Bal. - 2 eq. spcs.
G-26	12 spaces @ 3' - 0" = 42' - 0"	Bal. - 5 eq. spcs.
G-27 & G-28	13 spaces @ 3' - 0" = 45' - 0"	Bal. - 4 eq. spcs.
G-29	13 spaces @ 3' - 0" = 45' - 0"	Bal. - 3 eq. spcs.
G-30	15 spaces @ 3' - 0" = 52' - 0"	Bal. - 2 eq. spcs.
G-31	8 spaces @ 3' - 0" = 28' - 0"	Bal. - 3 eq. spcs.
G-32	9 spaces @ 3' - 0" = 31' - 0"	Bal. - 3 eq. spcs.
G-33	14 spaces @ 3' - 0" = 49' - 0"	Bal. - 5 eq. spcs.
G-34	13 spaces @ 3' - 0" = 45' - 0"	Bal. - 5 eq. spcs.
G-35	20 spaces @ 3' - 0" = 70' - 0"	Bal. - 6 eq. spcs.
G-36	12 spaces @ 3' - 0" = 42' - 0"	Bal. - 5 eq. spcs.
G-37	17 spaces @ 3' - 0" = 59' - 0"	Bal. - 4 eq. spcs.
G-38	15 spaces @ 3' - 0" = 52' - 0"	Bal. - 4 eq. spcs.
G-39	15 spaces @ 3' - 0" = 52' - 0"	Bal. - 4 eq. spcs.
G-40	12 spaces @ 3' - 0" = 42' - 0"	Bal. - 6 eq. spcs.
G-41	12 spaces @ 3' - 0" = 42' - 0"	Bal. - 5 eq. spcs.
G-42	17 spaces @ 3' - 0" = 59' - 0"	Bal. - 4 eq. spcs.
G-43	15 spaces @ 3' - 0" = 52' - 0"	Bal. - 4 eq. spcs.
G-44	15 spaces @ 3' - 0" = 52' - 0"	Bal. - 3 eq. spcs.
G-45	12 spaces @ 3' - 0" = 42' - 0"	Bal. - 5 eq. spcs.
G-46	12 spaces @ 3' - 0" = 42' - 0"	Bal. - 6 eq. spcs.
G-47	12 spaces @ 3' - 0" = 42' - 0"	Bal. - 7 eq. spcs.
G-48	12 spaces @ 3' - 0" = 42' - 0"	Bal. - 7 eq. spcs.
G-49	12 spaces @ 3' - 0" = 42' - 0"	Bal. - 8 eq. spcs.
G-50	12 spaces @ 3' - 0" = 42' - 0"	Bal. - 7 eq. spcs.

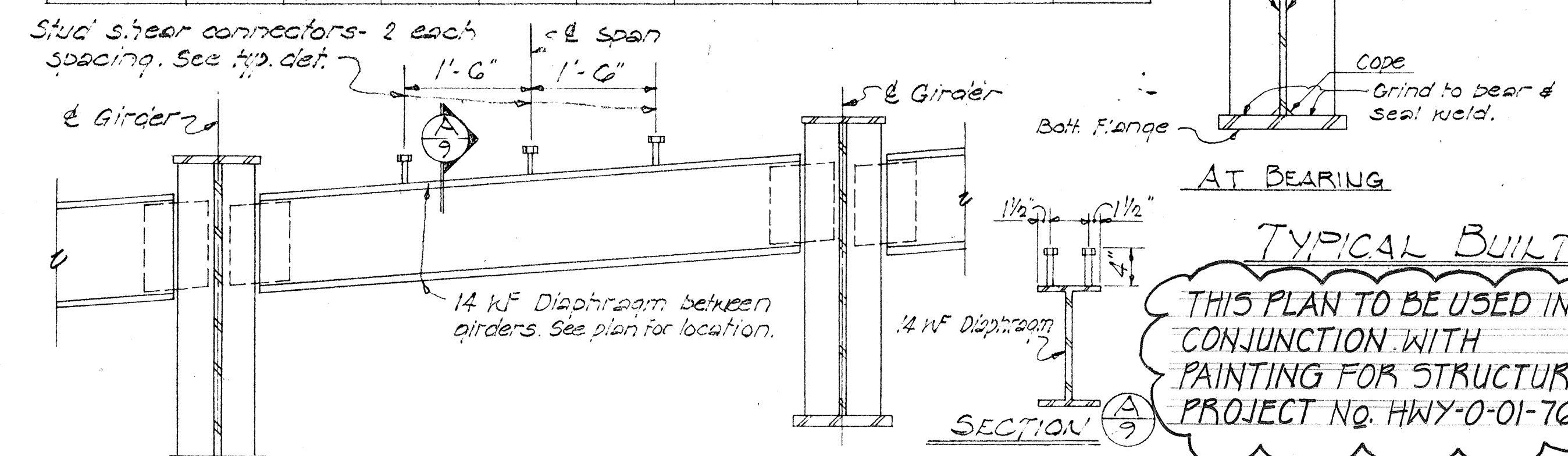
DIAGRAM SHOWING STEEL GIRDER STIFFENER 1/2 AND SHEAR CONNECTOR SPACING



TYPICAL BUILT-UP GIRDER DETAIL - (Girders G-1 thru G-50 inclusive)

* GIRDER LENGTH SCHEDULE

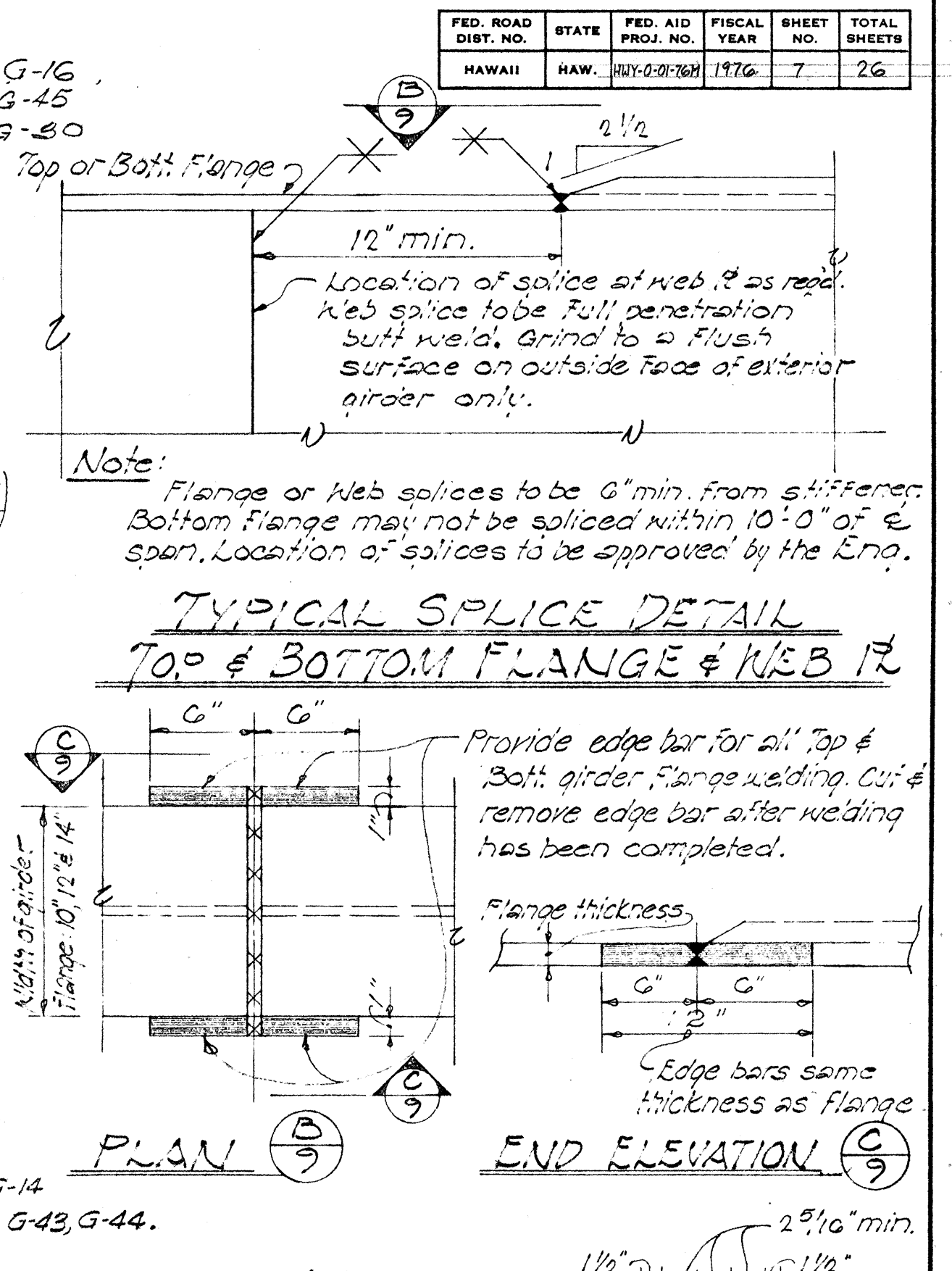
SPAN GIRDER NO.	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
G-1	73.86'	73.86'	73.86'	73.86'	73.86'	57.12'	31.20'	77.06'	77.32'	38.58'
G-2	74.42'	74.42'	74.42'	74.42'	74.42'	57.56'	40.71'	75.74'	75.94'	38.04'
G-3	74.98'	74.98'	74.98'	74.98'	74.98'	57.99'	52.14'	75.74'	75.94'	38.04'
G-4	75.54'	75.54'	75.54'	75.54'	75.54'	58.43'	63.56'	75.74'	75.94'	38.04'
G-5	76.10'	76.10'	76.10'	76.10'	76.10'	58.86'	73.40'	73.95'	74.61'	37.60'



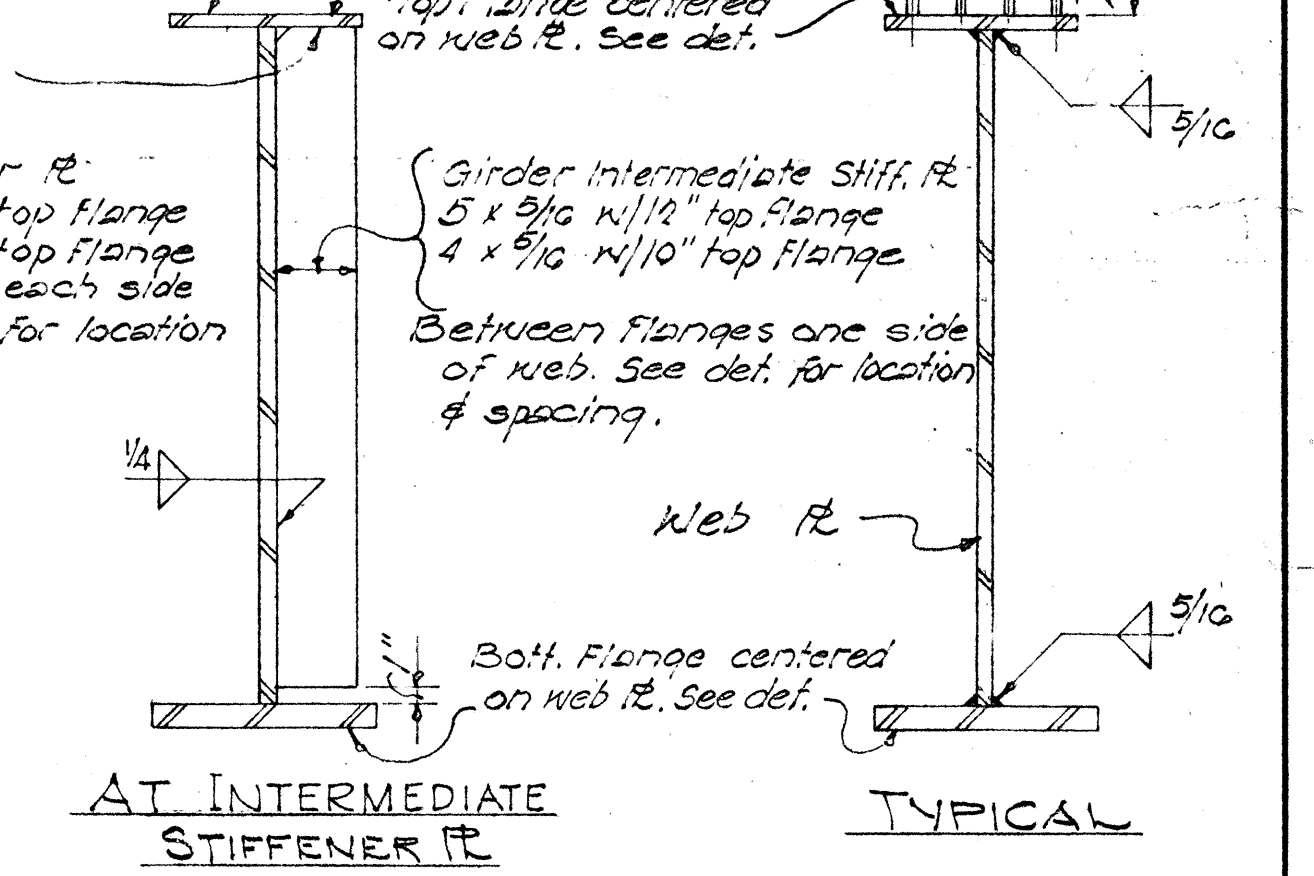
TYPICAL LOCATION STUD SHEAR CONNECTORS AT EACH 14" DIAPHRAGM

BUILT-UP GIRDER MATERIAL SPECIFICATION SCHEDULE

GIRDER NO.	LOCATION	Top Flange	Bottom Flange	Web	Remarks
G-24, G-27, G-28, G-29, G-30, G-31, G-32		ASTM 36	ASTM 36	ASTM 36	
G-1, G-2, G-3, G-4, G-5, G-6, G-7, G-8		ASTM 44	ASTM 44	ASTM 44	See Note 3
G-9, G-10, G-11, G-12, G-13, G-14, G-15, G-16		ASTM 44	ASTM 44	ASTM 44	See Note 3
G-17, G-18, G-19, G-20, G-21, G-22, G-23, G-24		ASTM 44	ASTM 44	ASTM 44	See Note 3
G-25, G-26, G-27, G-28, G-29, G-30, G-31, G-32		ASTM 44	ASTM 44	ASTM 44	See Note 3
G-33, G-34, G-35, G-36, G-37, G-38, G-39, G-40		ASTM 44	ASTM 44	ASTM 44	See Note 3
G-41, G-42, G-43, G-44, G-45		ASTM 44	ASTM 44	ASTM 44	See Note 3



TYPICAL SPLICE DETAIL TOP & BOTTOM FLANGE & WEB 1/2



TYPICAL BUILT-UP GIRDER DETAIL

GENERAL NOTES

All bearing stiffener 1/2s shall be located plumb.

All girder & stiffener 1/2s are horizontal; measurement & shall be adjusted to sloping lengths as required.

The relation between fillet weld size & the max. thickness of material on which various sizes of fillet weld may be used shall be in accordance with Article 217. (3) of the 1963 AISC Specifications, unless otherwise noted.

Reference Note 1.

For additional structural steel & connection details, see Shi. #21.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

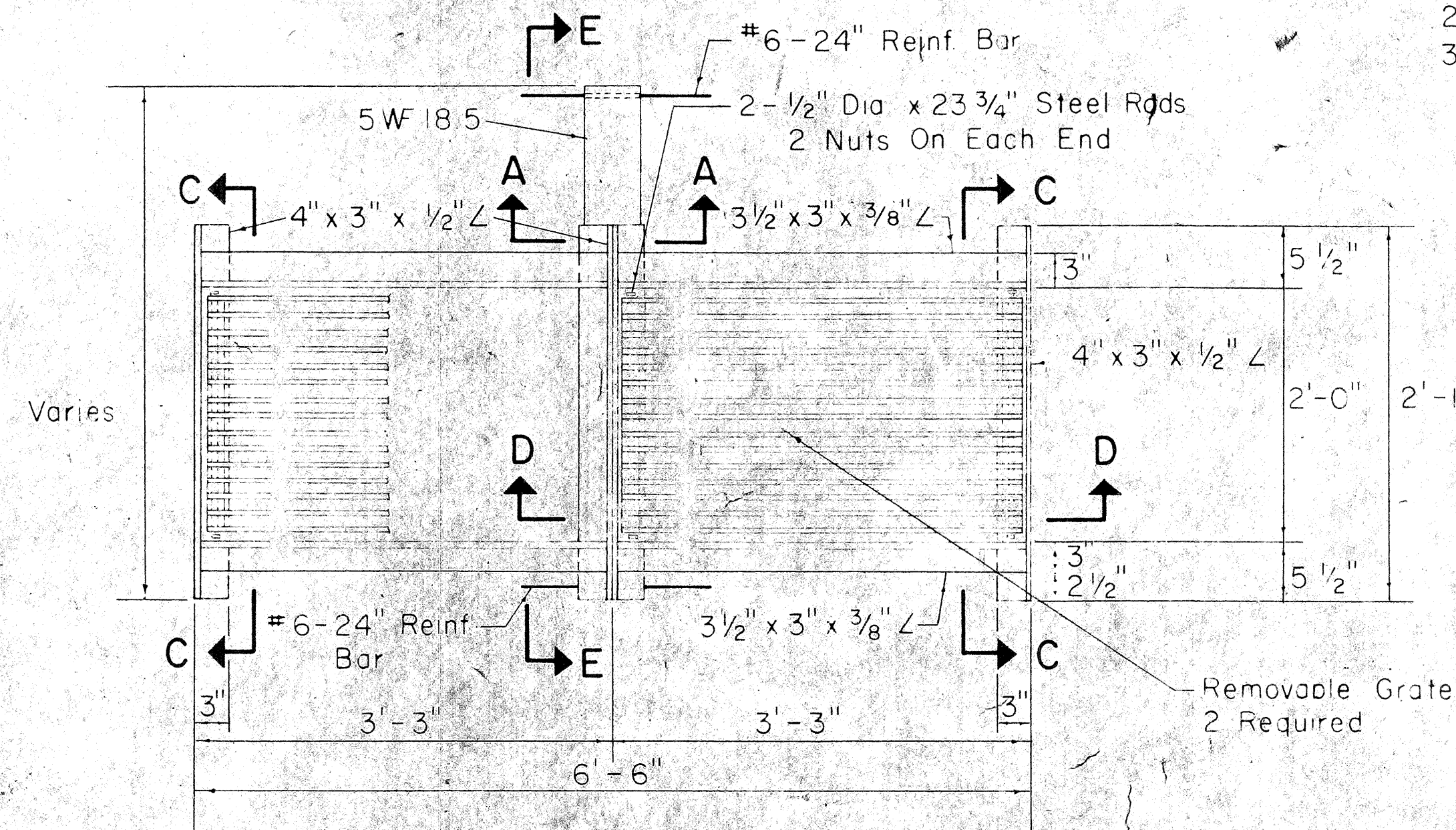
AIEA INTERCHANGE
STRUCTURE No. 2
STRUCTURAL STEEL FRAMING DETAILS
13 & Sta. 112+82.75 to I.B. & Sta. 112+87.60
Kamehameha Hwy. Proj. No. F-090-1(10)

SHEET No. 9 OF 15 SHEETS

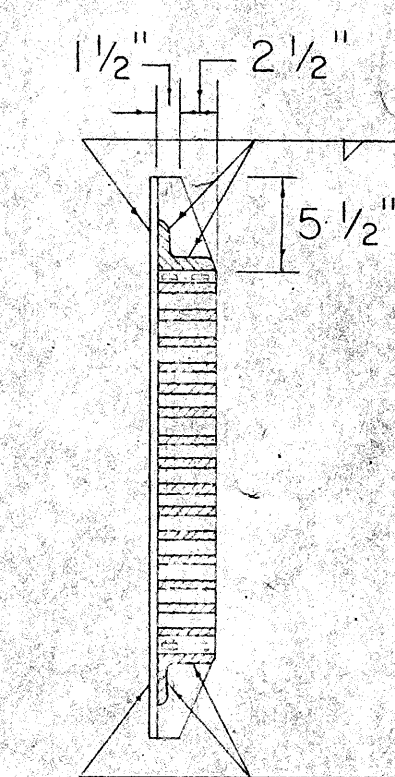
DATE 4/4/76
DESIGNED BY S. L. HANSEN
CHECKED BY J. L. HANSEN
NOTE BOOK
NO.

NOTE

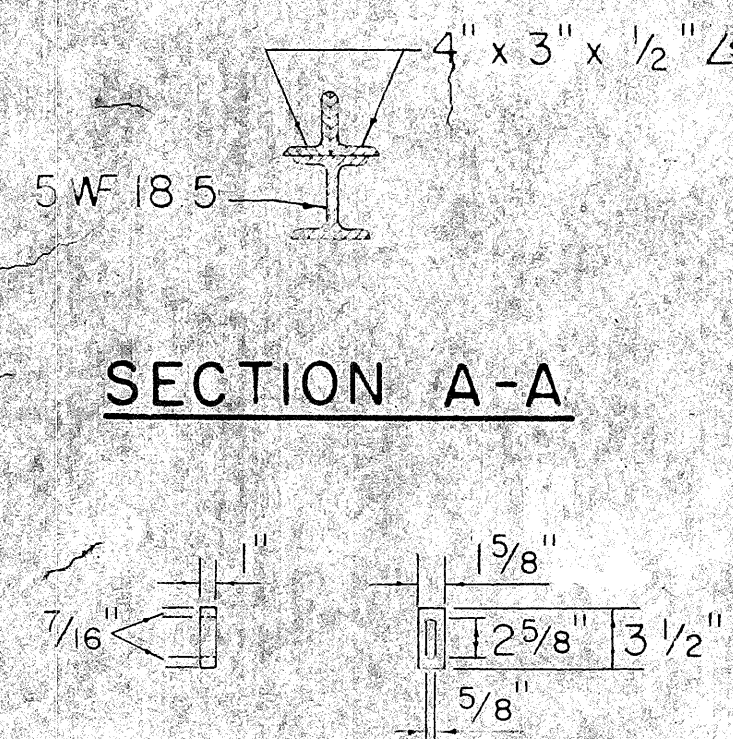
1. All welds $\frac{3}{8}$ " unless otherwise noted.
2. All steel shall be structural grade
3. Grates and Frame shall be hot dip galvanized after fabrication in accordance with Section 44(H) of the Standard Specifications



PLAN

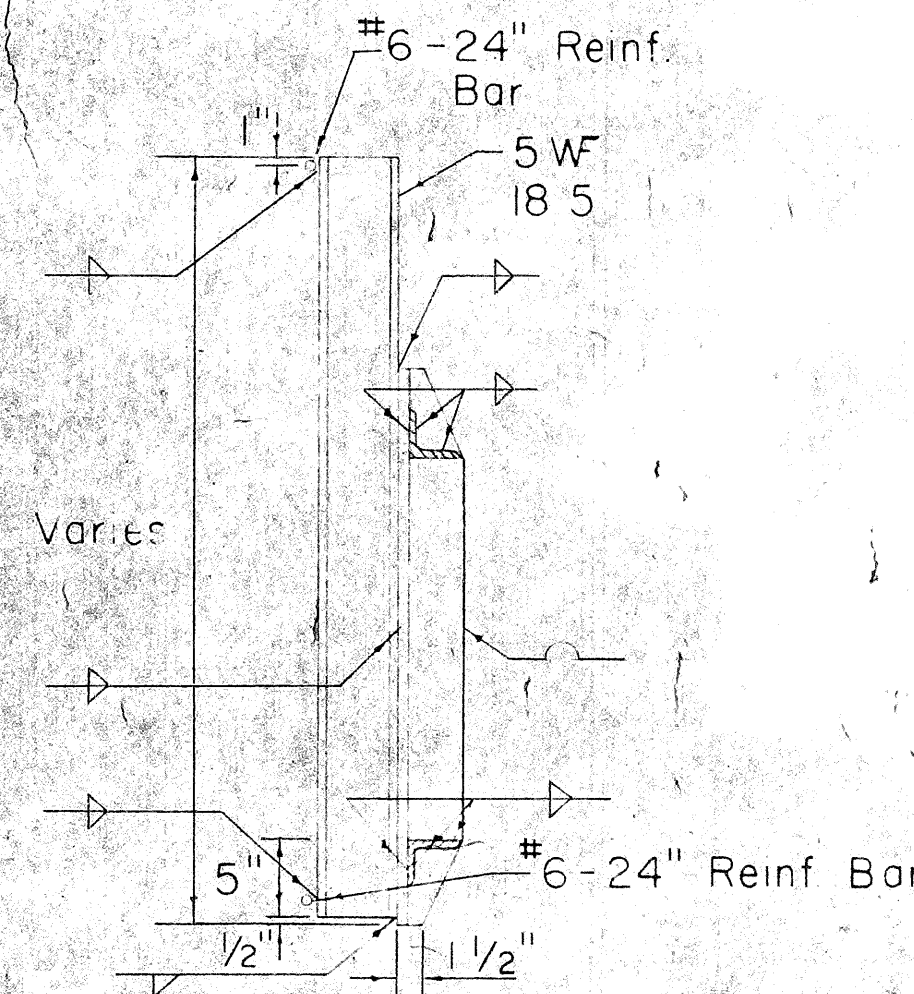


SECTION C-C

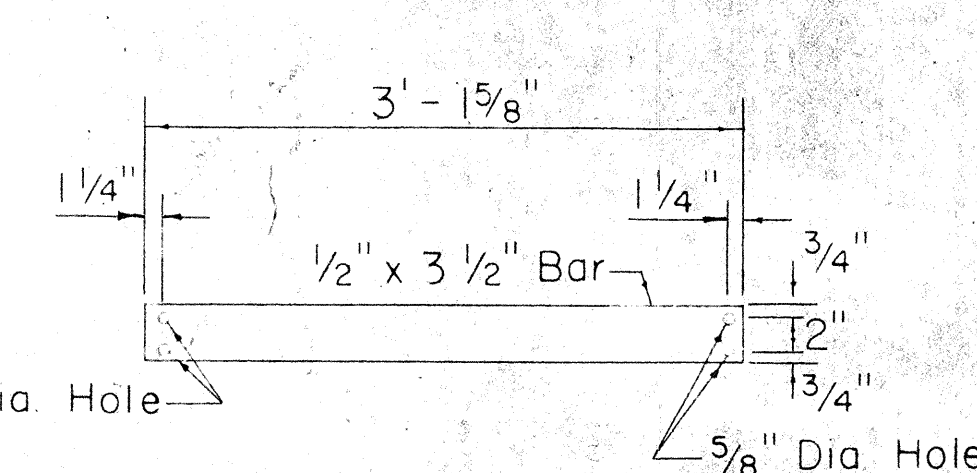


SECTION A-A

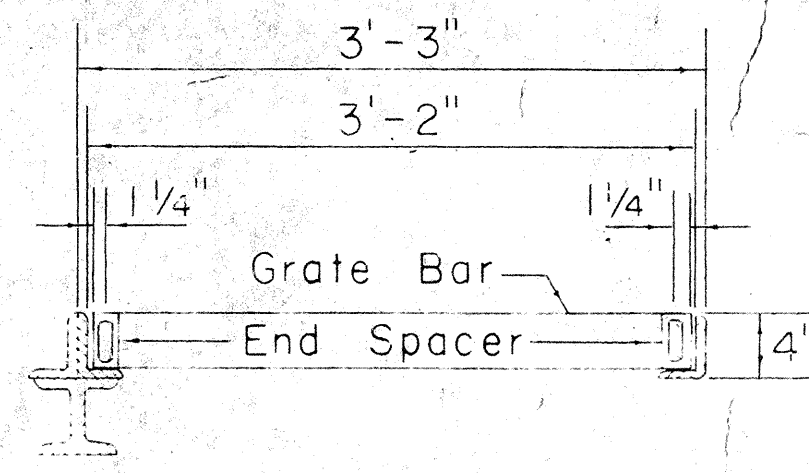
END SPACER



SECTION E-E



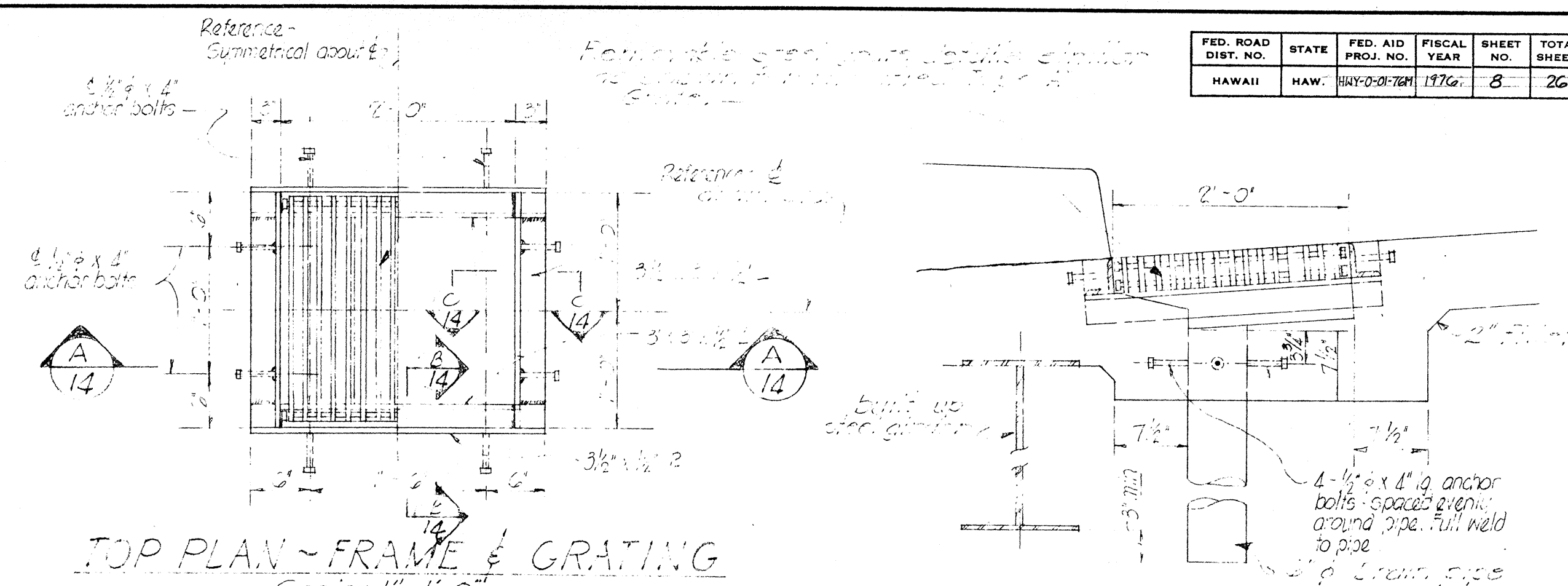
GRATE BARS



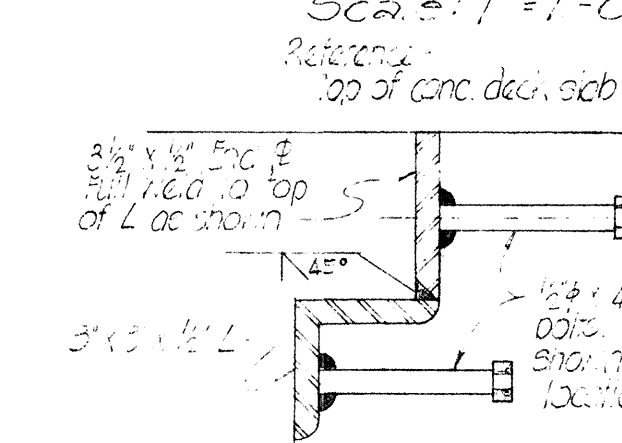
SECTION D-D

DETAIL OF TYPE "A" STEEL FRAME AND GRATES

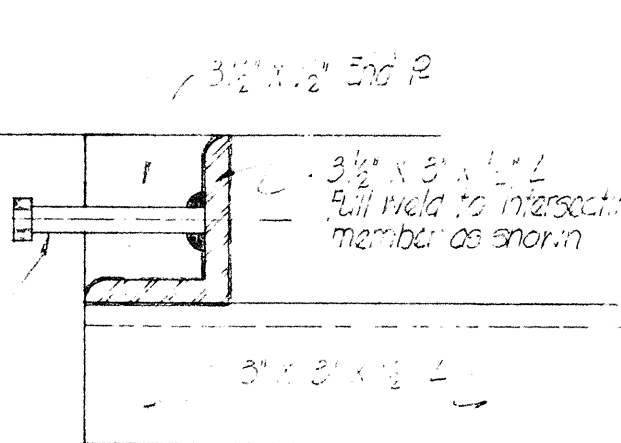
Scale: 1"=1'-0"



TOP PLAN - FRAME & GRATING

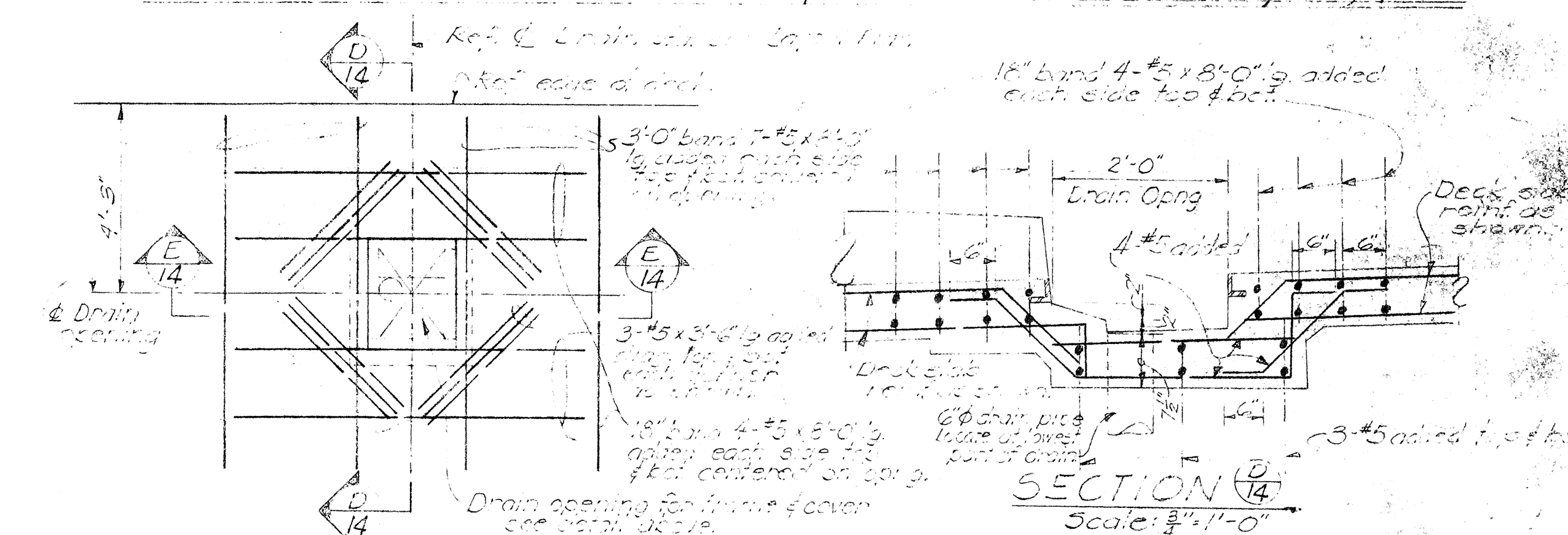


SECTION 1

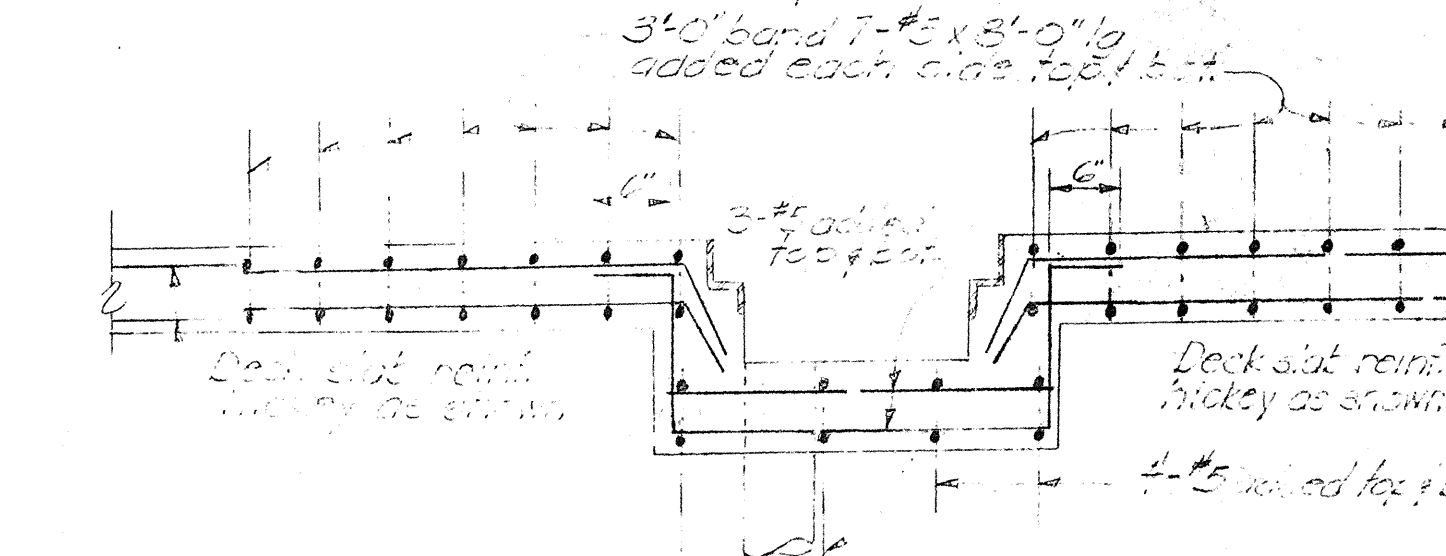


SECTION 2

TYPICAL DETAIL - FRAME / COVER - DRAIN #1, #2, #3



PLAN - ADDED REINFORCEMENT AT DRAIN OPENING



SECTION

THIS PLAN TO BE USED IN CONJUNCTION WITH PAINTING FOR STRUCTURE PROJECT No. HWY-O-01-76M

STATE OF HAWAII	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
DEPARTMENT OF TRANSPORTATION	HAW: HWY-O-01-76M	1976	8	26
HIGHWAYS DIVISION				
AIEA INTERCHANGE				
STRUCTURE No. 2				
MISCELLANEOUS DETAILS				
I.B. & S. Sta. 109+59.58 to I.B. & S. Sta. 112+87.60				
Kaunakakai Hwy.	Proj. No. F-020-1(10)			

SHEET No. 14 OF 15 SHEETS