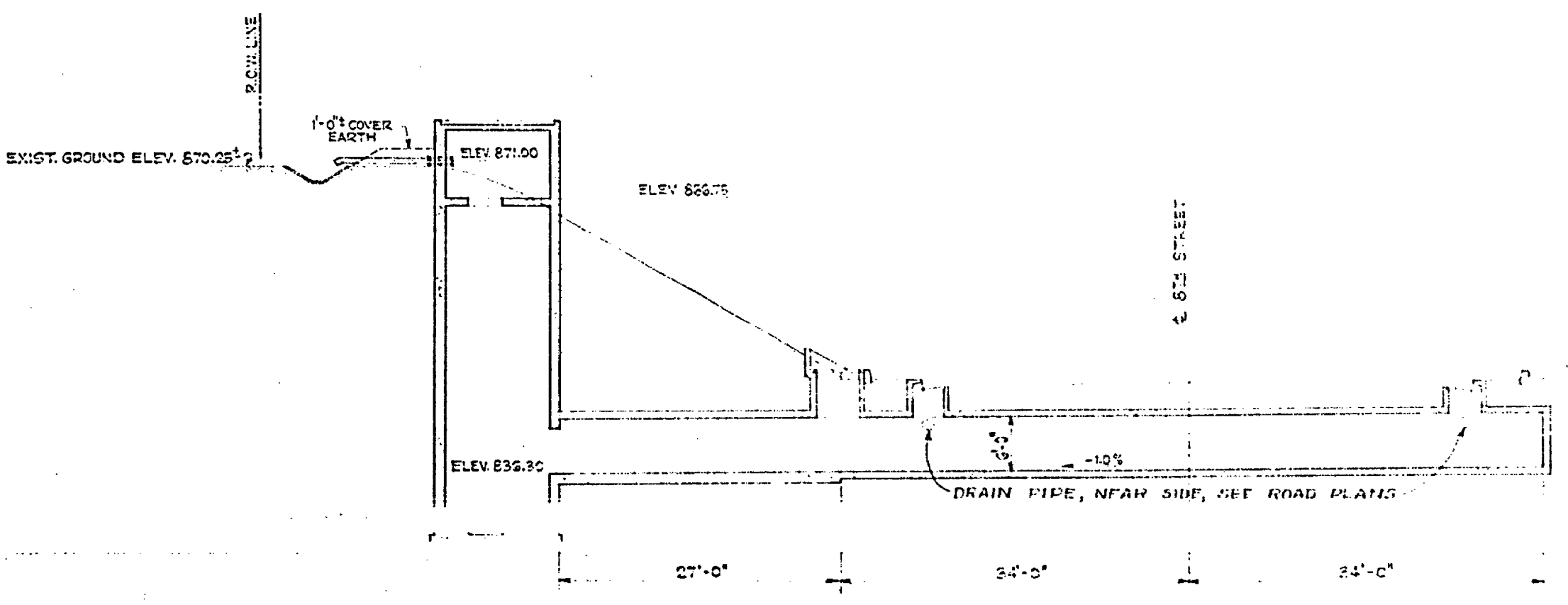
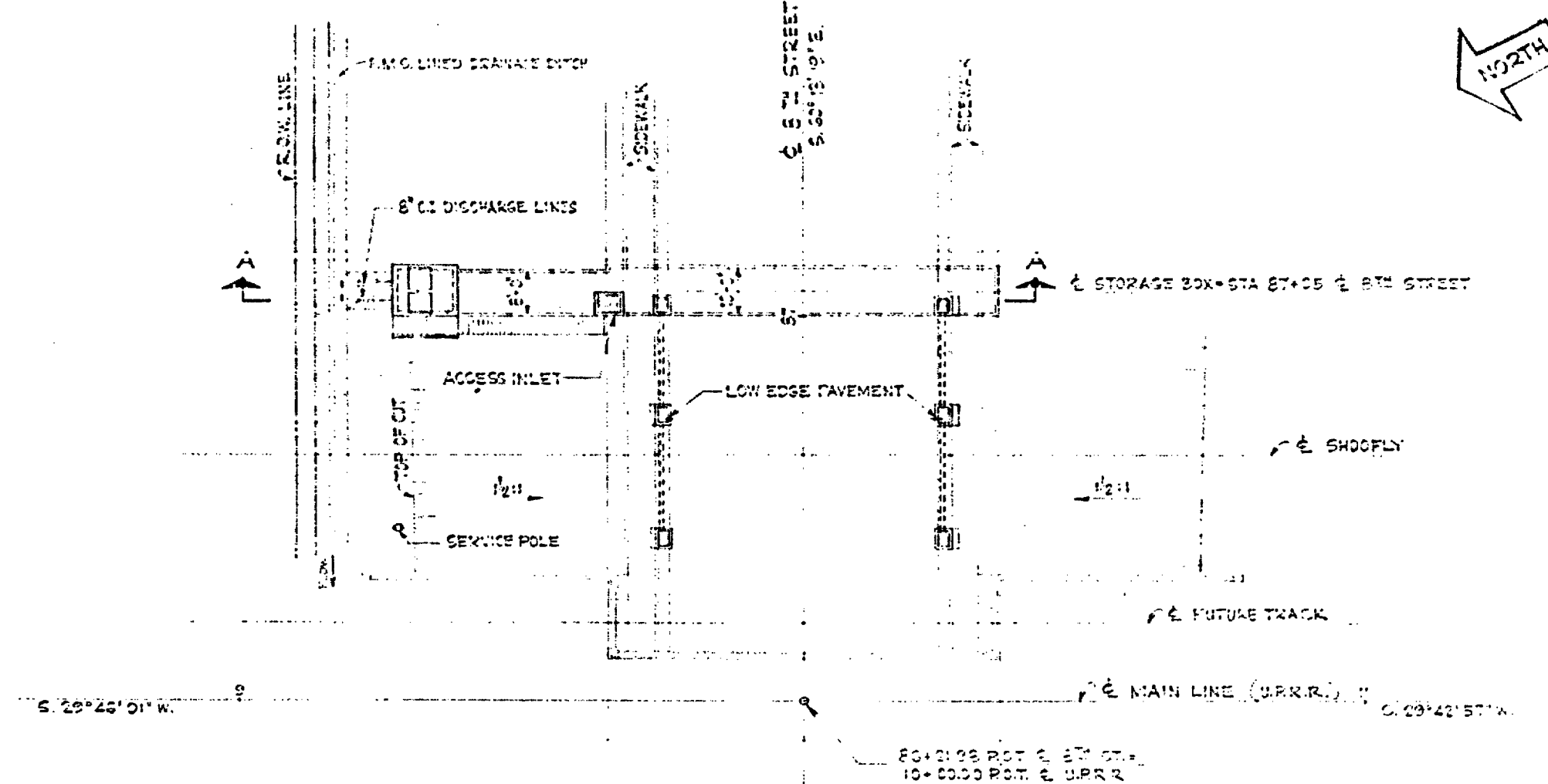


STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
7 CALIF.		10	10

DATE APPROVED	DATE PREPARED
19	19

by *Chas. E. White*
 CIVIL ENGINEER
 1234 5th St., San Francisco, Calif.



INDEX TO PLANS

SHEET NO.	TITLE
1	GENERAL PLAN
2	STORAGE BOX & STANDARD DETAILS
3	STRUCTURE DETAILS
4	STANDARD STEEL DETAILS NO. 1
5	" " " " NO. 2
6	" " " " NO. 3
7	EXHAUST PUMPING EQUIPMENT
8	PUMPING EQUIPMENT DETAILS
9	ELECTRICAL DETAILS
10	METERING ENCLOSURE

APPROXIMATE QUANTITIES

STRUCTURE EXCAVATION	870 C.Y.
STRUCTURE BACKFILL	390 C.Y.
CLASS #4 CONCRETE (BRIDGES) (100 C.Y.)	LUMP SUM
BAR REINFORCING STEEL (BRIDGES) (25,000 LBS.)	LUMP SUM
MISCELLANEOUS IRON AND STEEL	2,100 LBS.
PUMPING PLANT METAL WORK (C. #30 LBS.)	LUMP SUM
DRAINAGE PUMPING EQUIPMENT	LUMP SUM
PUMPHOUSE ELECTRICAL EQUIPMENT	LUMP SUM

* See special provisions for quantities.

GENERAL NOTES

PUMPING RATE: 750 G.P.M. (AT 10' H.P. EACH)
 1000 G.P.M. DUMP WATER ELEV. 842.19 (LOW EDGE PAVEMENT)
 100 G.P.M. AVERAGE DUMP WATER ELEV. 832.30 TO ELEV. 842.19

STORAGE: 6150 CUBIC FEET

FOR DETAILS OF DRAINAGE COLLECTION SYSTEM AND TRAPEZOIDAL DISCHARGE DITCH, SEE ROAD PLANS.

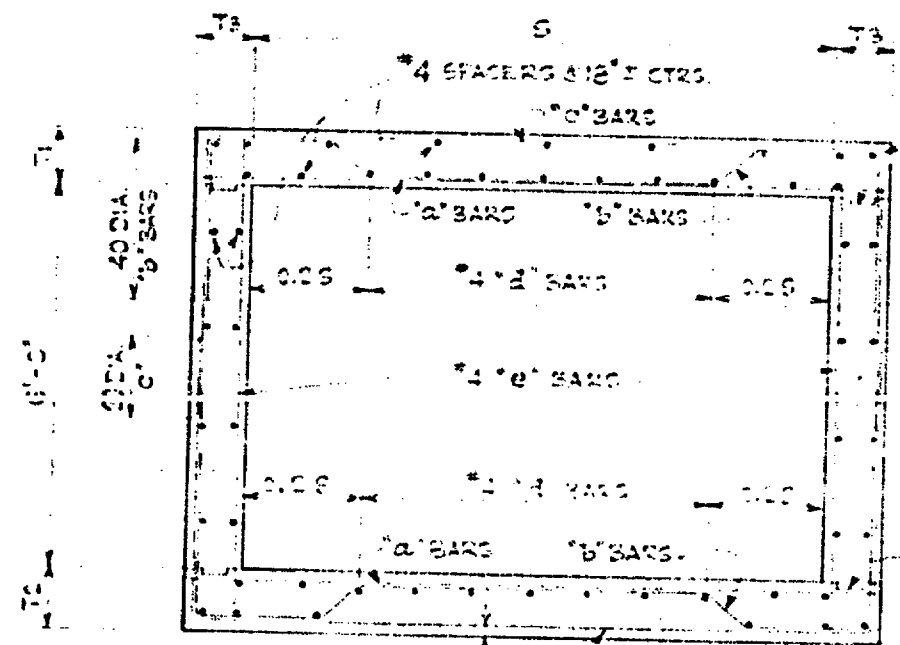
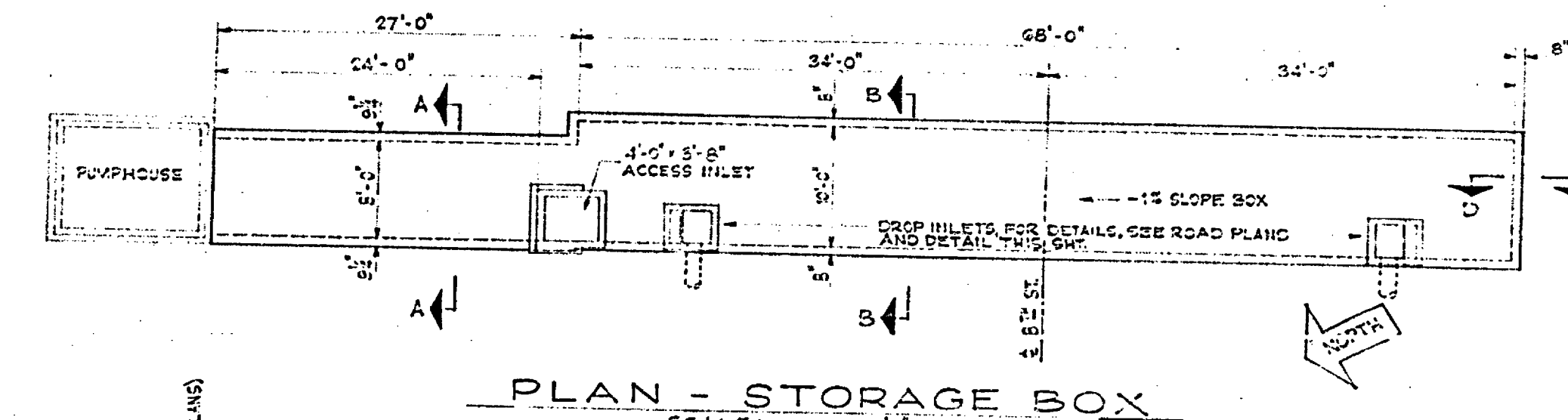
FOR GENERAL NOTES, SEE SHEET NO. 11 "STEEL RAILING" STRUCTURAL PLANS

DESIGN SECTION Project Designer: <i>William H. Rodolph</i> Chief Designer: <i>William H. Rodolph</i>		DIVISION OF HIGHWAYS VINE STREET UNDERPASS PUMPING PLANT	
DESIGN BY: <i>W. H. Rodolph</i> DATE: 6-57	CHECKED BY: <i>W. H. Rodolph</i> DATE: 6-57	566-66 GENERAL PLAN	SCALE: AS SHOWN BRIDGE: 56-333W FILE: DRAWING: 59413-11
QUANTITIES BY: <i>W. H. Rodolph</i> DATE: 6-57	SPECIFICATIONS BY: <i>W. H. Rodolph</i> DATE: 6-57	PREL. DRAWING NO. P-5413-#1	

46

FED. ROAD DIST. NO.	STATE	PROJECT NO.	SECTION	SHEET NO.	TOTAL SHEETS
7	CALIF.				

DATE APPROVED: 11/18/57
 DRAWN BY: [Signature]
 CHECKED BY: [Signature]

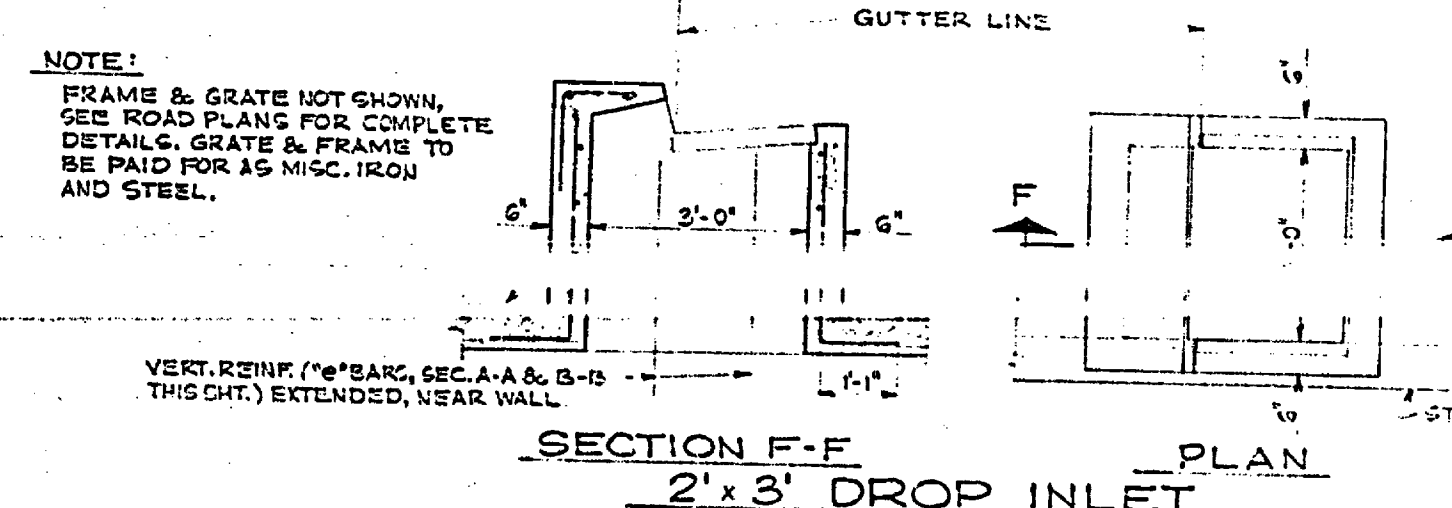
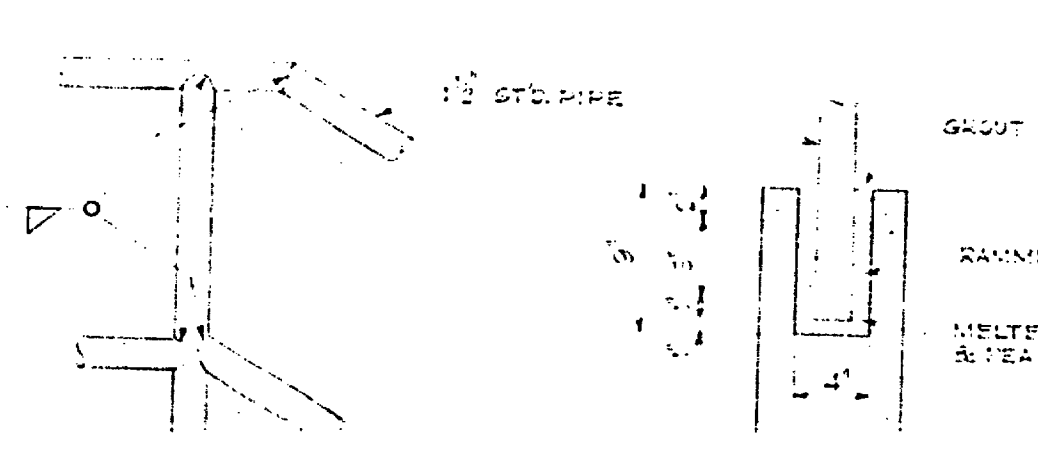
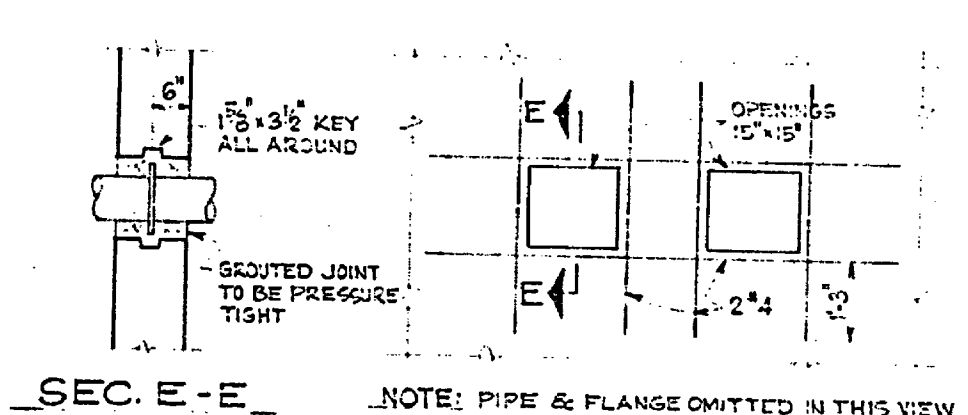
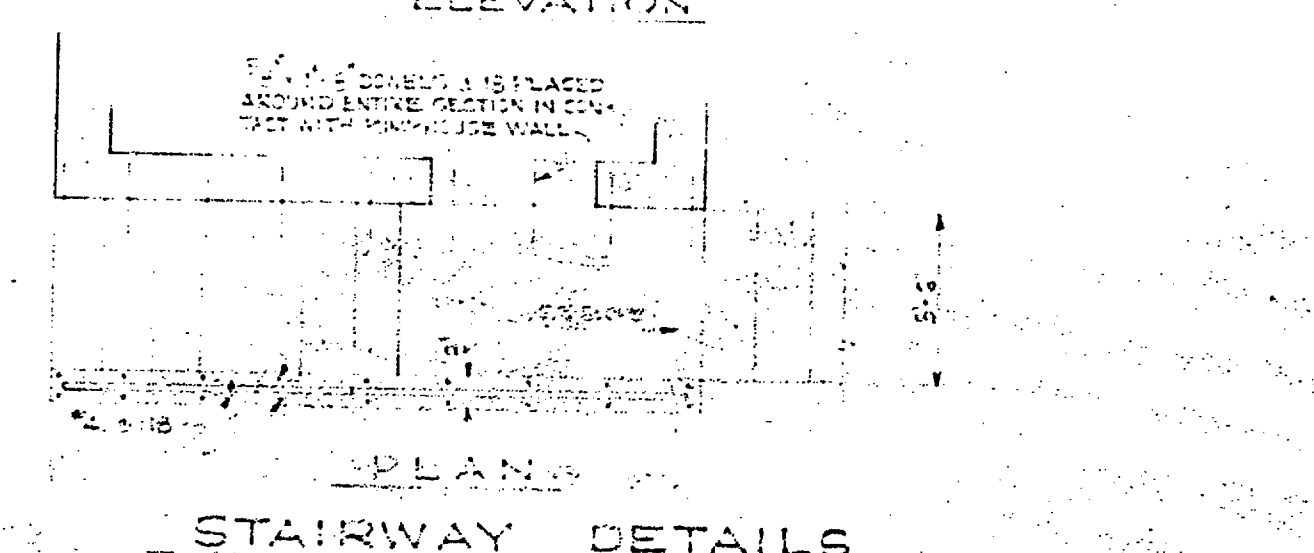
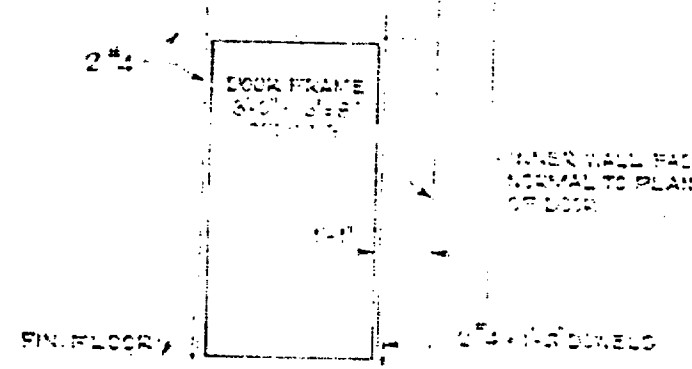
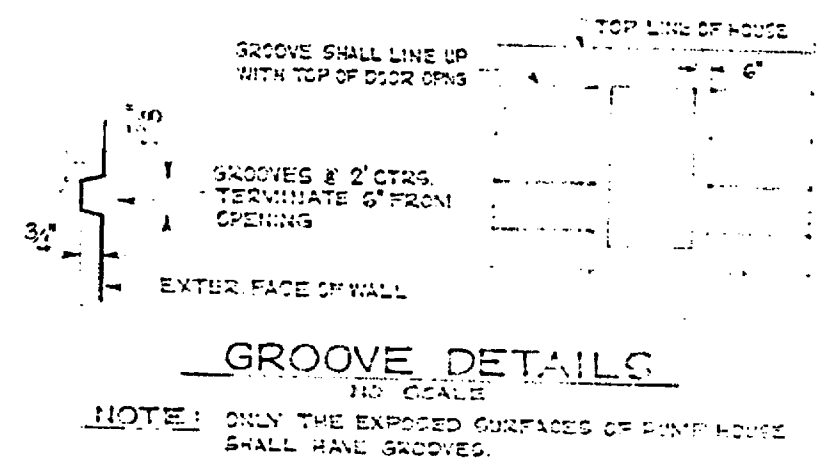
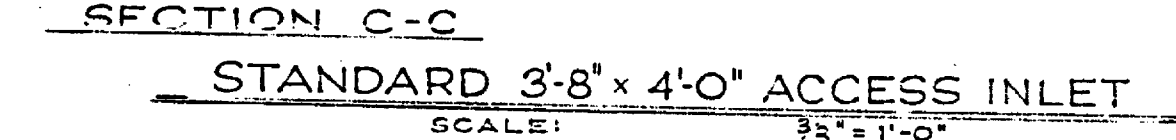
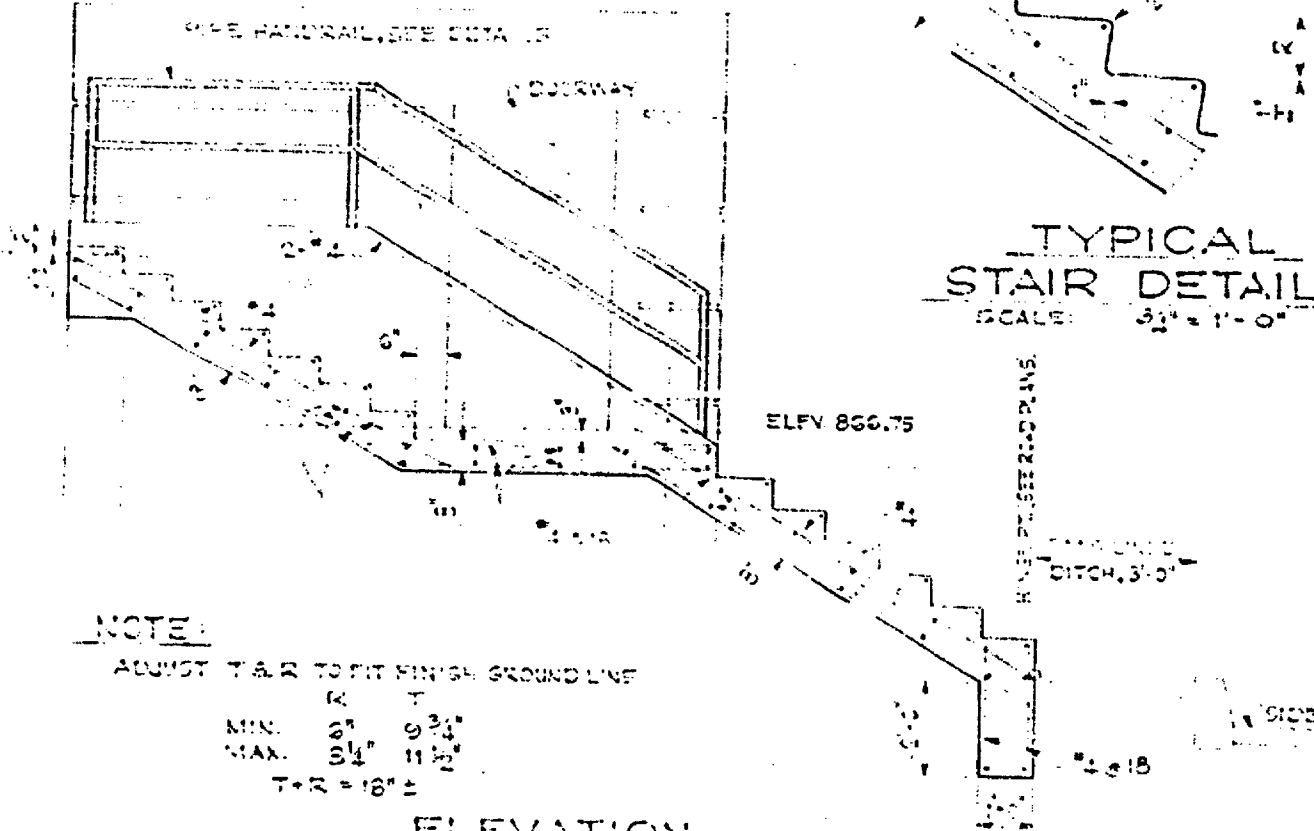
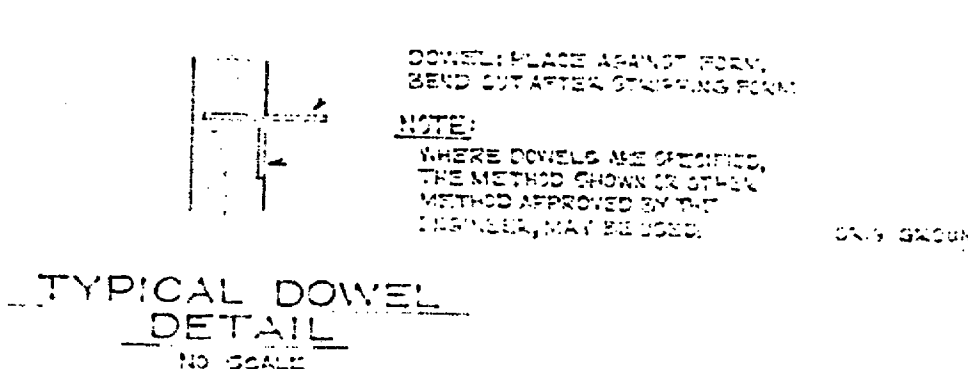
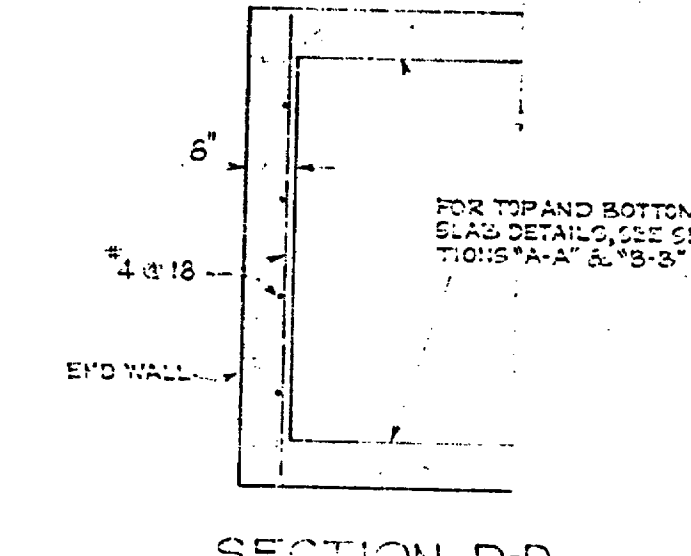
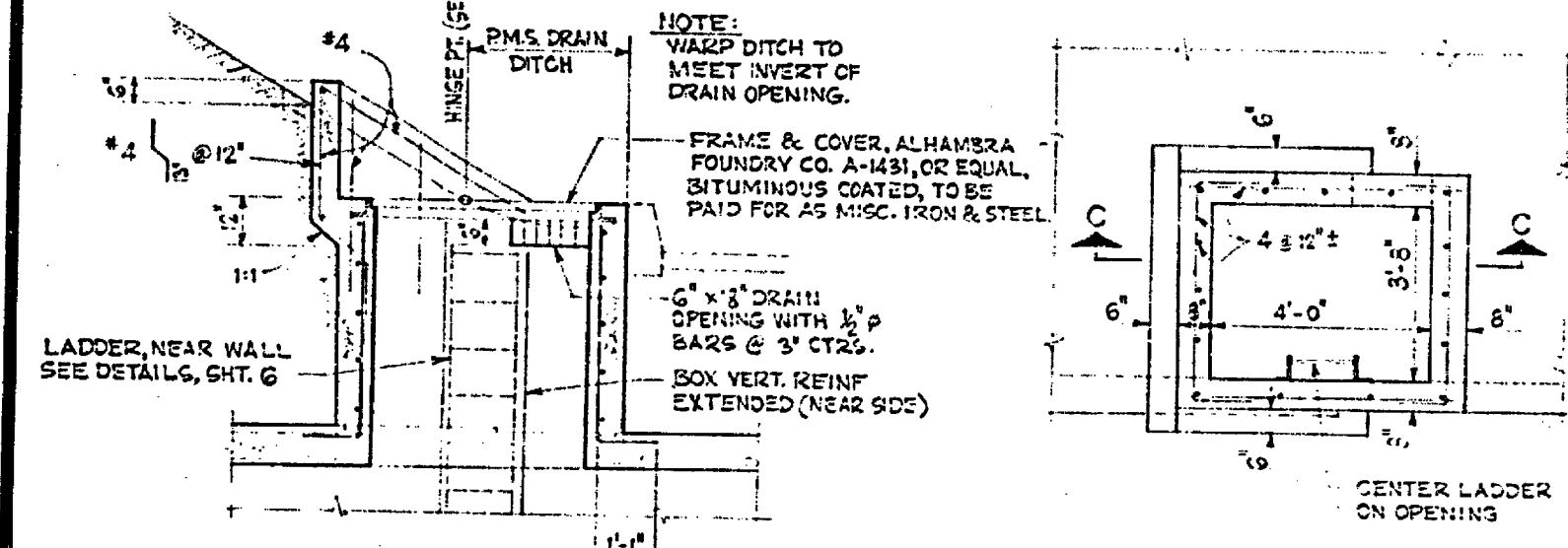


DATA SCHEDULE

CONCRETE	REINFORCING STEEL	
	TOP SIDE	BOT. SIDE
(SPAN)	T1	T2
SEC. A-A	6	10
SEC. B-B	10	8

Labels: DIST. BARS, BARS, SPACERS, TOP SLAB, BOT. SLAB, PACKING NUMBER.

DESIGN NOTES:
 SPECIFICATION: A.A.S.H.O. DATED 1953 WITH SUBSEQUENT MODIFICATIONS AND BRIDGE DEPARTMENT SUPPLEMENT DATED 1953.
 LOADS: LIVE LOAD = ONE H20-S16-44 TRUCK WITH 30K IMPACT.
 UNIT STRESSES: $f_c = 20,000$ P.S.I.; $f_s = 1,000$ P.S.I.; $N = 10$. REINFORCEMENT TO BE ROUND DEFORMED BARS. EMBEDMENT IS 1 1/2" DIAMETER CLEAR, MIN. 1" EXCEPT AS NOTED. PACKING FOR HOOKS IS FOUR DIAMETERS.
 CONSTRUCTION: SEE V.M. ST. U.P. STRUCTURAL PLANS, SHEET 11



BRIDGE DEPARTMENT

DESIGN SECTION 11

Project Designer: [Signature]
 Chief Designer: [Signature]

DESIGN: [Signature]
 DETAILS: [Signature]
 QUANTITIES: [Signature]
 SPECIFICATIONS: [Signature]

STATE OF CALIFORNIA
 DEPARTMENT OF PUBLIC WORKS
 DIVISION OF HIGHWAYS

17-1787

VINE STREET UNDERPASS
 PUMPING PLANT
 STORAGE BOX & STANDARD DETAILS

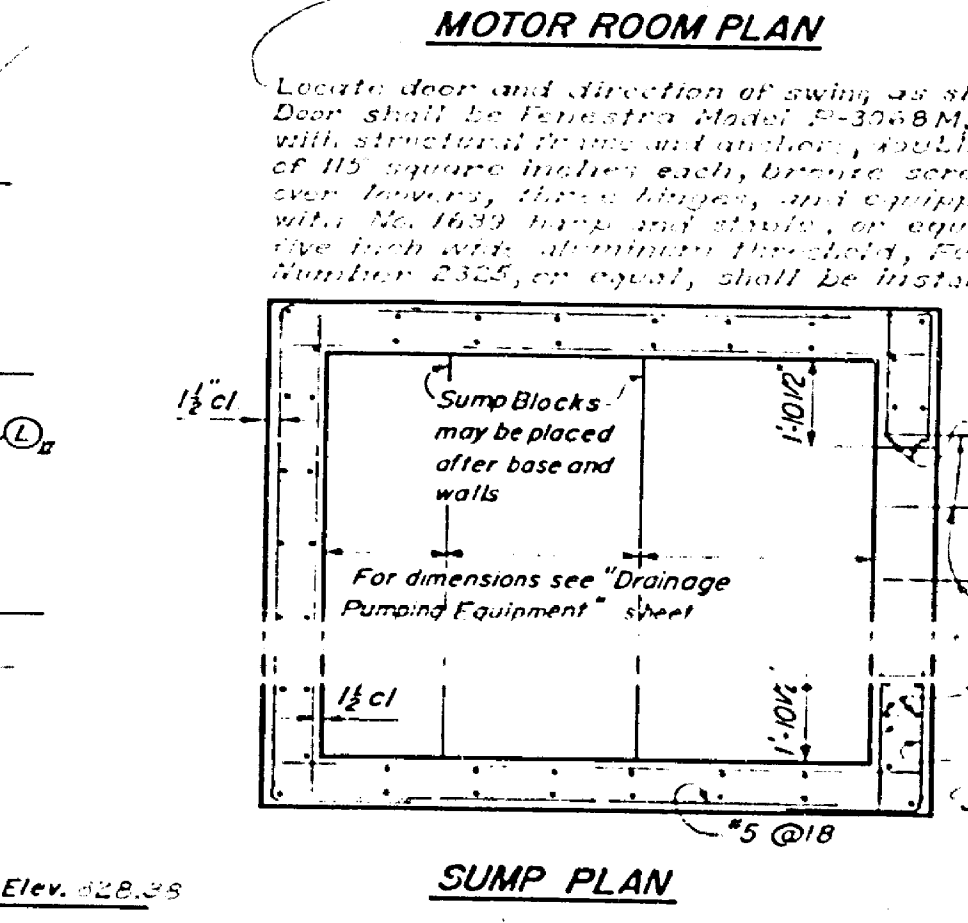
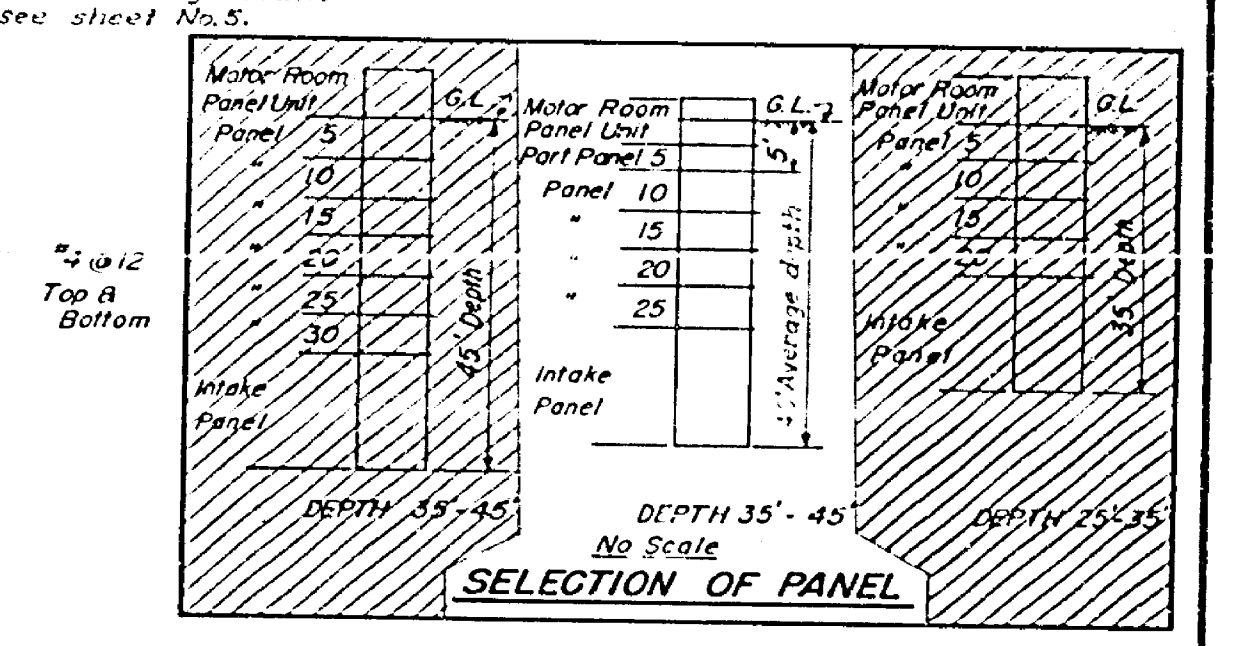
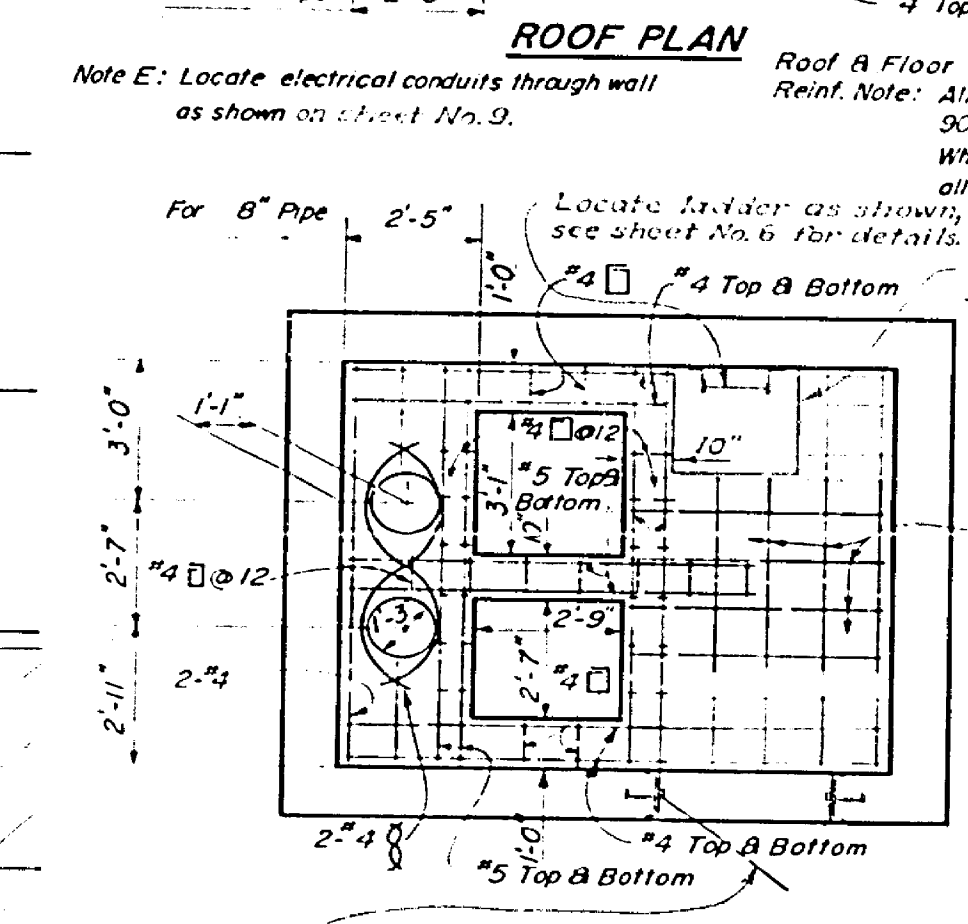
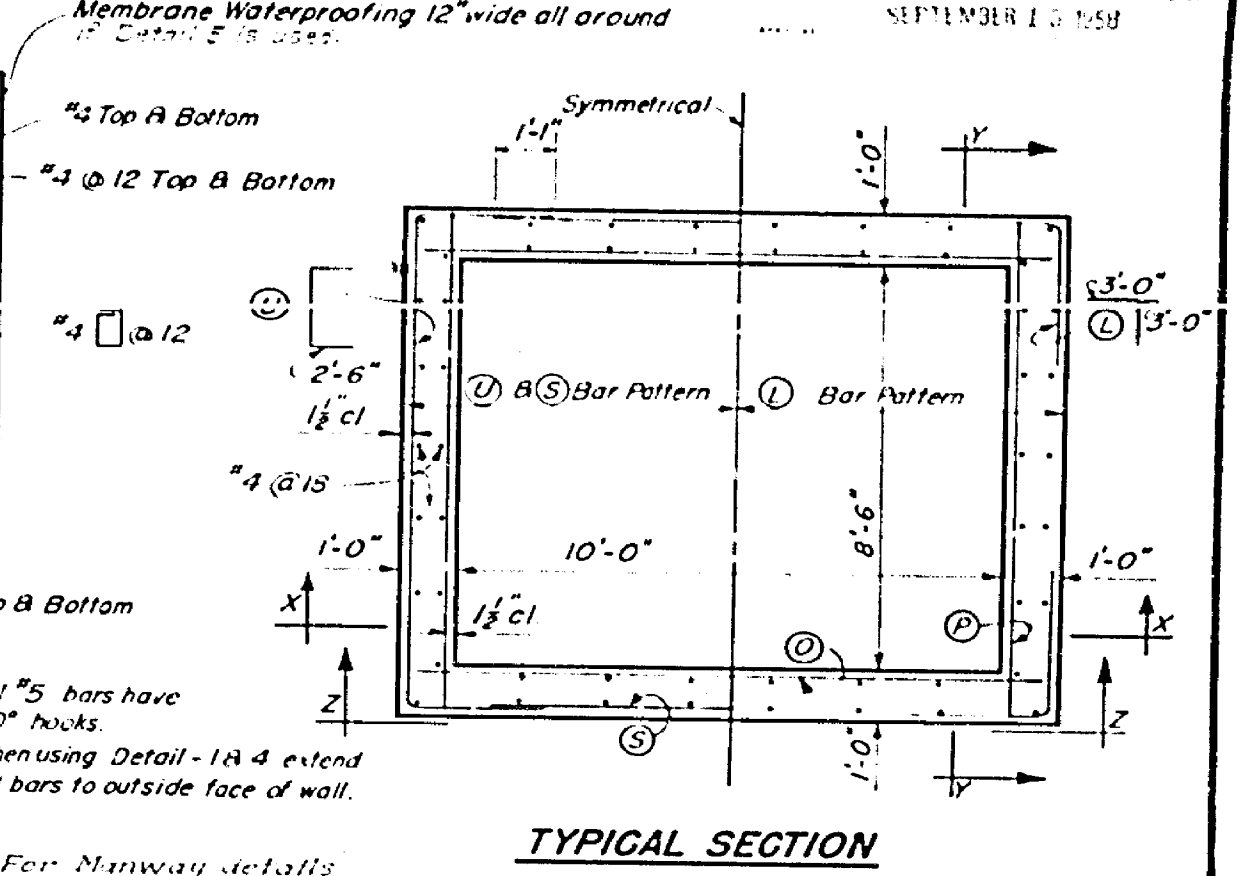
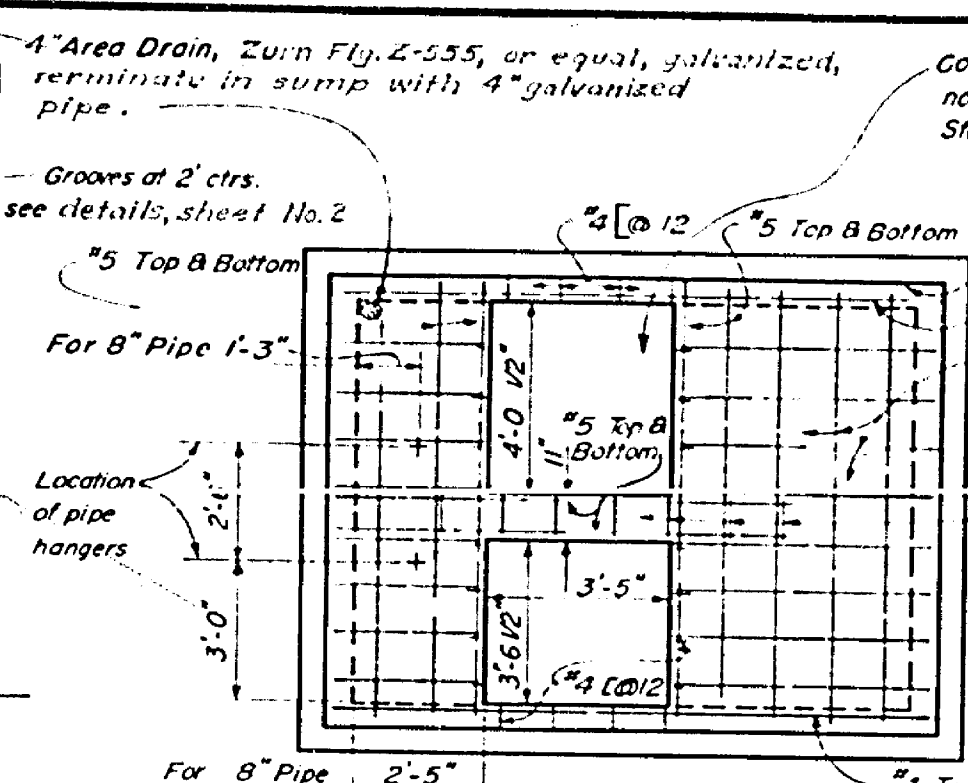
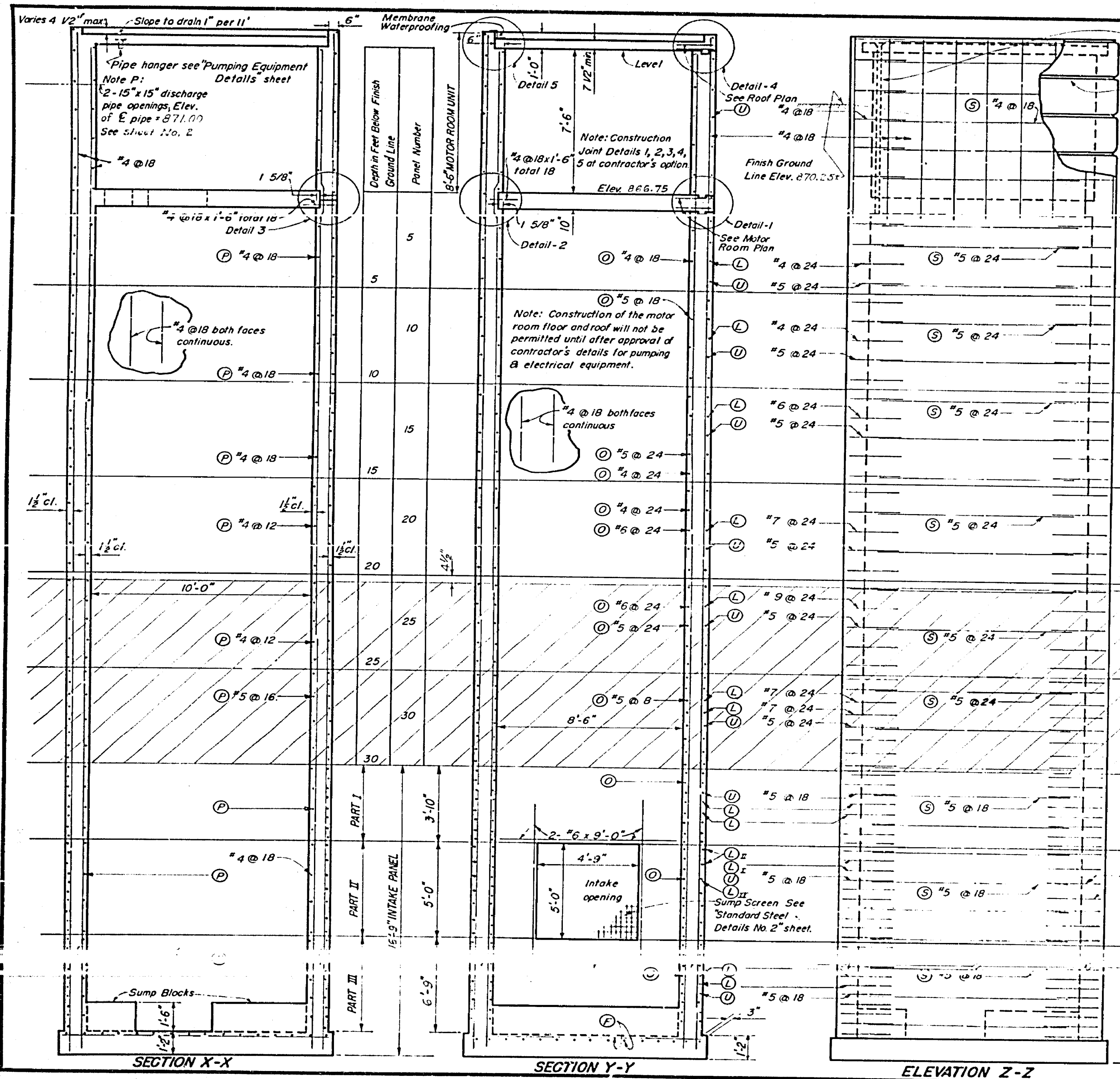
SCALE: AS SHOWN BRIDGE 59-839W FILE DRAWING E-5413-14

47

STANDARD DRAWING
 DATE: 12/1/54
 DRAWN BY: J. J. WATKINS
 CHECKED BY: J. J. WATKINS
 APPROVED BY: J. J. WATKINS
 BRIDGE DEPARTMENT
 DIVISION OF HIGHWAYS
 STATE OF CALIFORNIA

BRIDGE DEPARTMENT
 DIVISION OF HIGHWAYS
 STATE OF CALIFORNIA

DESIGNED BY: J. J. WATKINS
 CHECKED BY: J. J. WATKINS
 APPROVED BY: J. J. WATKINS
 BRIDGE DEPARTMENT
 DIVISION OF HIGHWAYS
 STATE OF CALIFORNIA



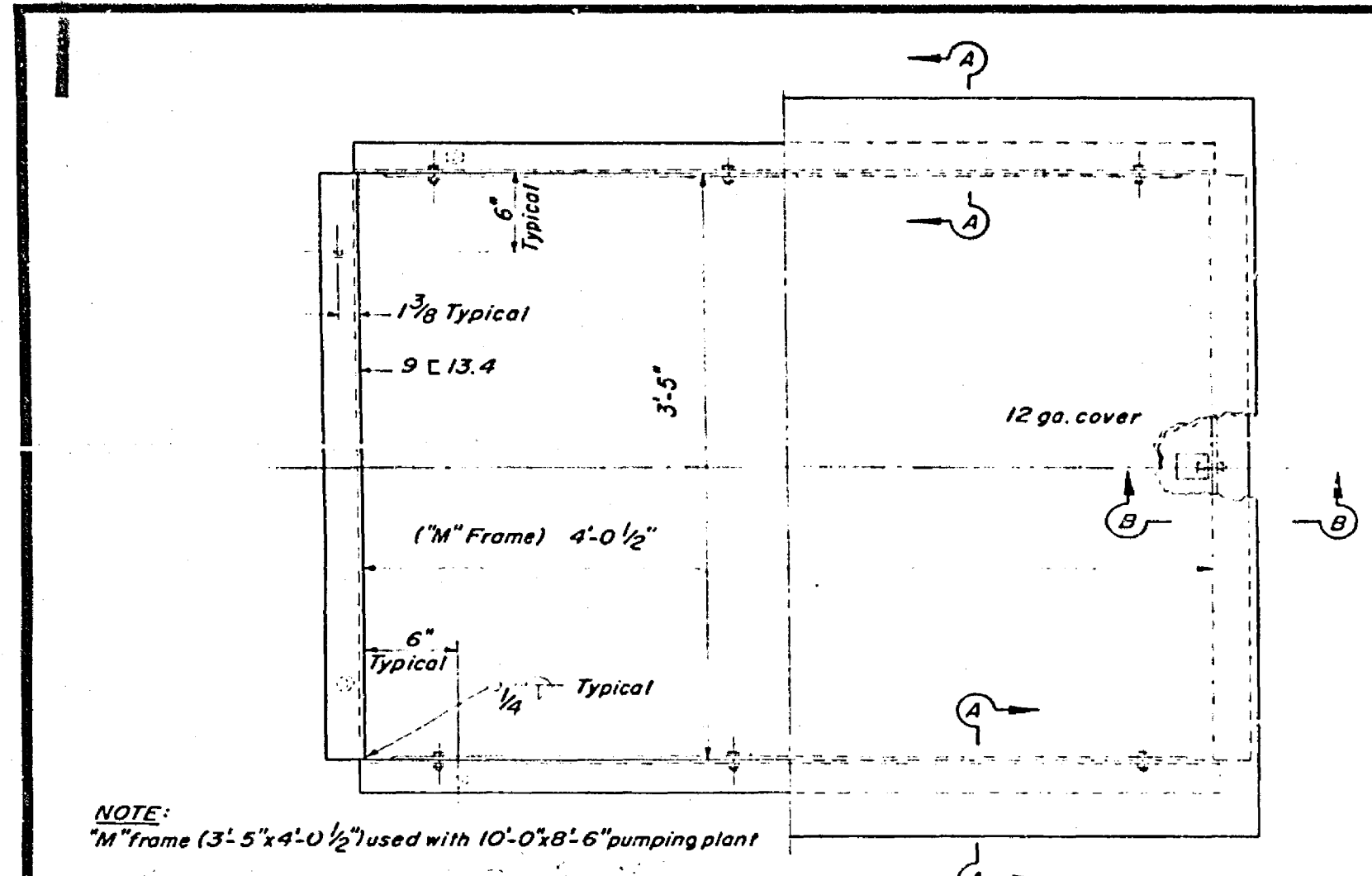
PART	REINFORCEMENT FOR 16" INTAKE PANEL		
	DEPTH FEET BELOW FINISH GROUND	Bar	Spacing
PART I	35'-45'	#7 @ 18"	#6 @ 18"
	25'-35'	#5 @ 6"	#5 @ 6"
	25' or Less	#5 @ 12"	#4 @ 12"
PART II	35'-45'	#9 @ 18"	#7 @ 18"
	25'-35'	#7 @ 9"	#5 @ 9"
	25' or Less	#7 @ 18"	#5 @ 18"
PART III	35'-45'	#9 @ 18"	#7 @ 18"
	25'-35'	#6 @ 6"	#5 @ 6"
	25' or Less	#5 @ 12"	#4 @ 12"
FOOTING		#8 @ 9"	#7 @ 10"

USE AVERAGE ELEVATION OF GROUND LINE WHEN ELEVATIONS VARY.
 VINE STREET UNDERPASS
 PUMPING PLANT
 10'-0" x 8'-6" STRUCTURE DETAILS
 SCALE: 3/8" = 1'-0"
 BRIDGE: 5413
 DRAWING: 5413-15
 PREL. DRAWING NO. P. 5413-15

STATE	COUNTY	CITY	PROJECT	DATE
7 CALIF.				

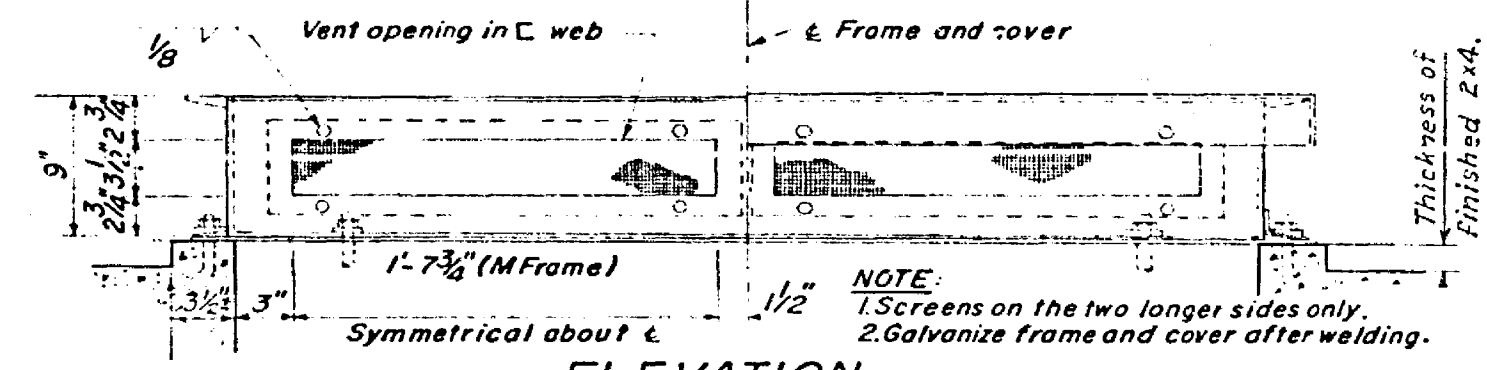
DATE	BY	CHECKED	APPROVED
1/11/30	J.P.		

W. H. ...
 MEMBER 1-1-18

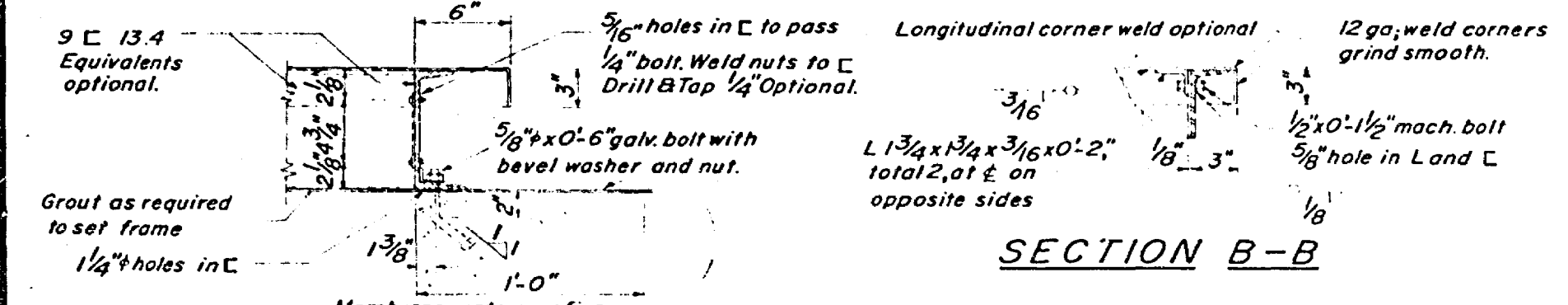


NOTE:
 "M" Frame (3'-5" x 4'-0 1/2") used with 10'-0" x 8'-6" pumping plant

HALF PLAN-FRAME HALF PLAN-COVER

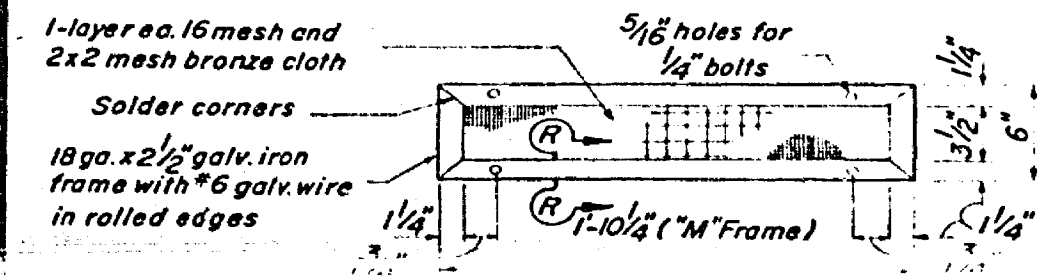


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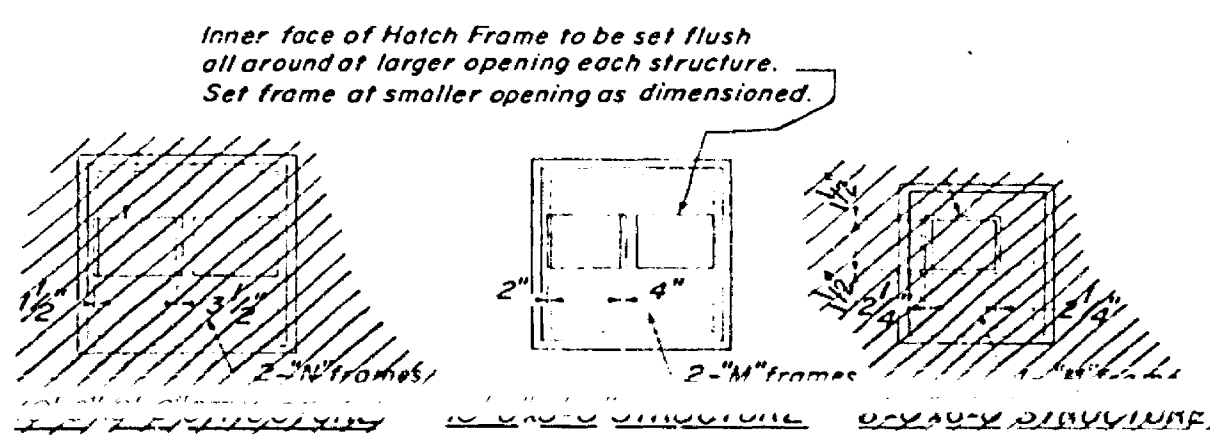


SECTION A-A

SECTION B-B



SCREEN DETAILS
 HATCH FRAME AND COVER
 Scale Except as shown, 1/2" = 1'-0"



ROOF PLANS
 No Scale

BRIDGE DEPARTMENT		VINE STREET UNDERPASS	
DESIGN		PUMPING PLANT	
DETAILS		STANDARD STEEL DETAILS NR1	
QUANTITIES		SCALE 25 SHOWN BRIDGE 50-99W FILE DRAWING C-5413-16	
SPECIFICATIONS		PREL. DRAWING NO. P. 5413-16	

STANDARD DRAWING
 DIVISION OF HIGHWAYS
 BRIDGE & TUNNEL DIVISION
 DRAWING NO. 1000-10-1000
 DATE 10/1/50

STATE OF CALIFORNIA
 DEPARTMENT OF PUBLIC WORKS
 DIVISION OF HIGHWAYS
 BRIDGE & TUNNEL DIVISION
 BRIL-LE DEPARTMENT

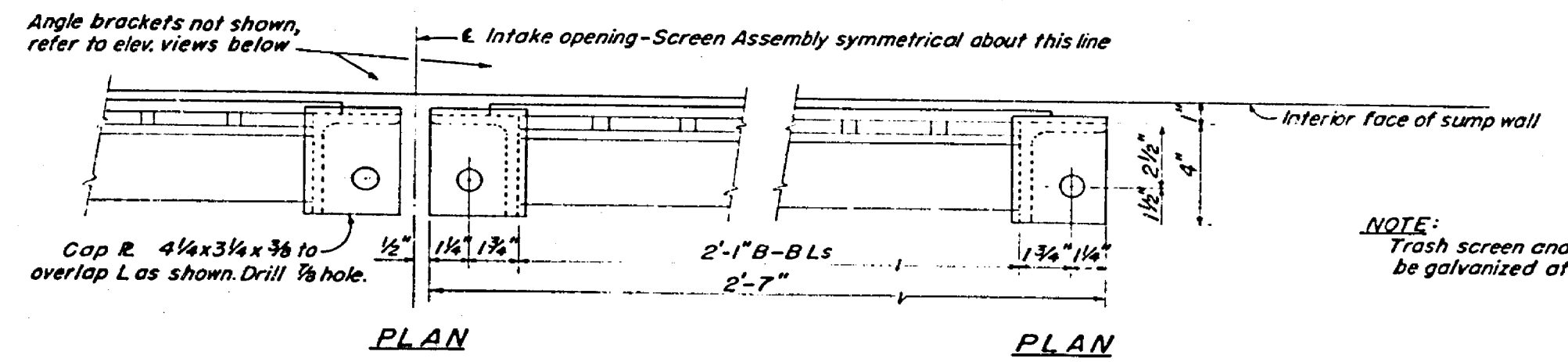
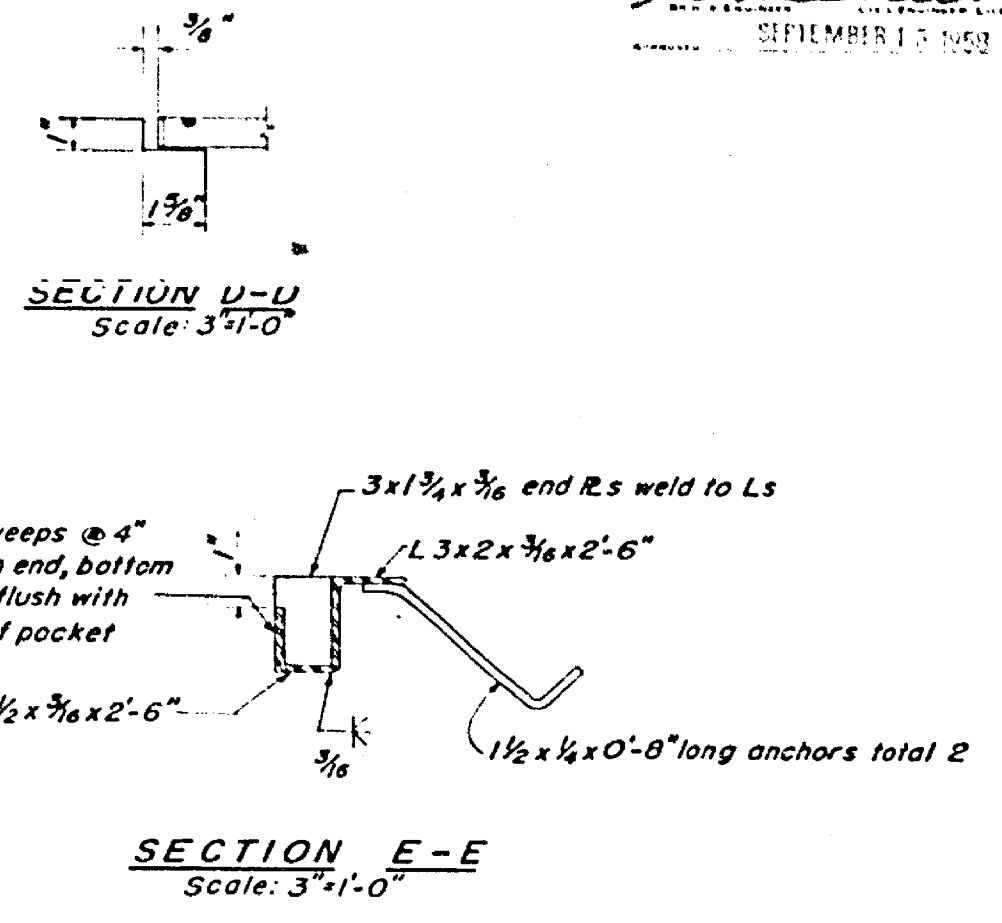
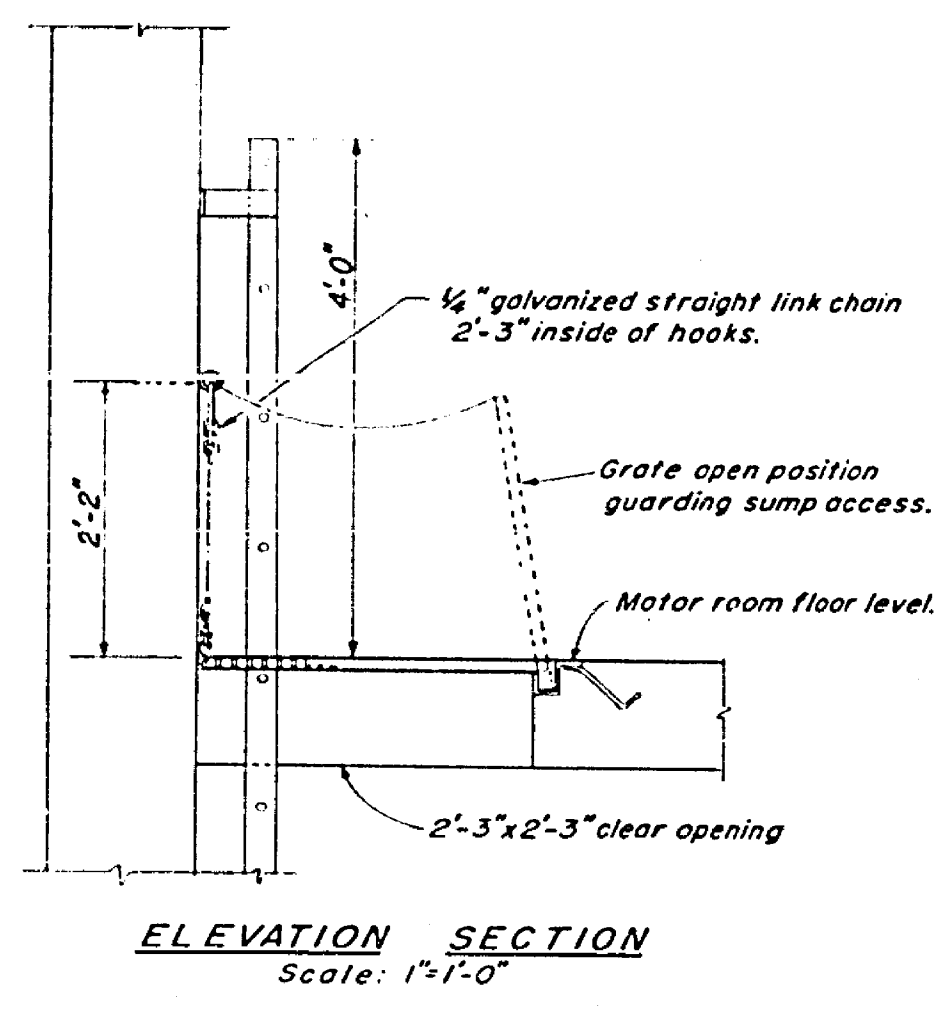
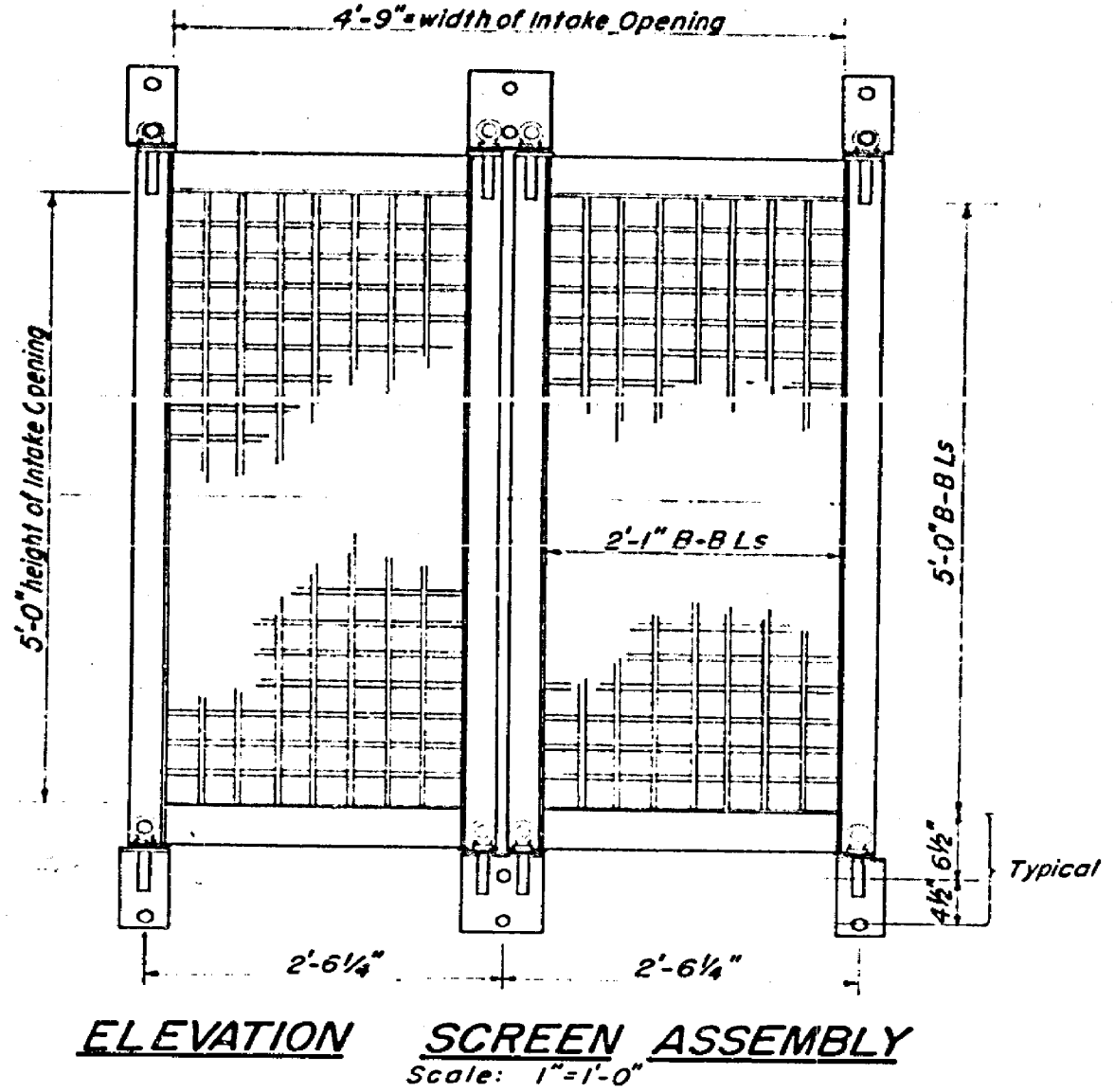
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 DRAWING NO. 1000-10-1000
 DATE 10/1/50

50

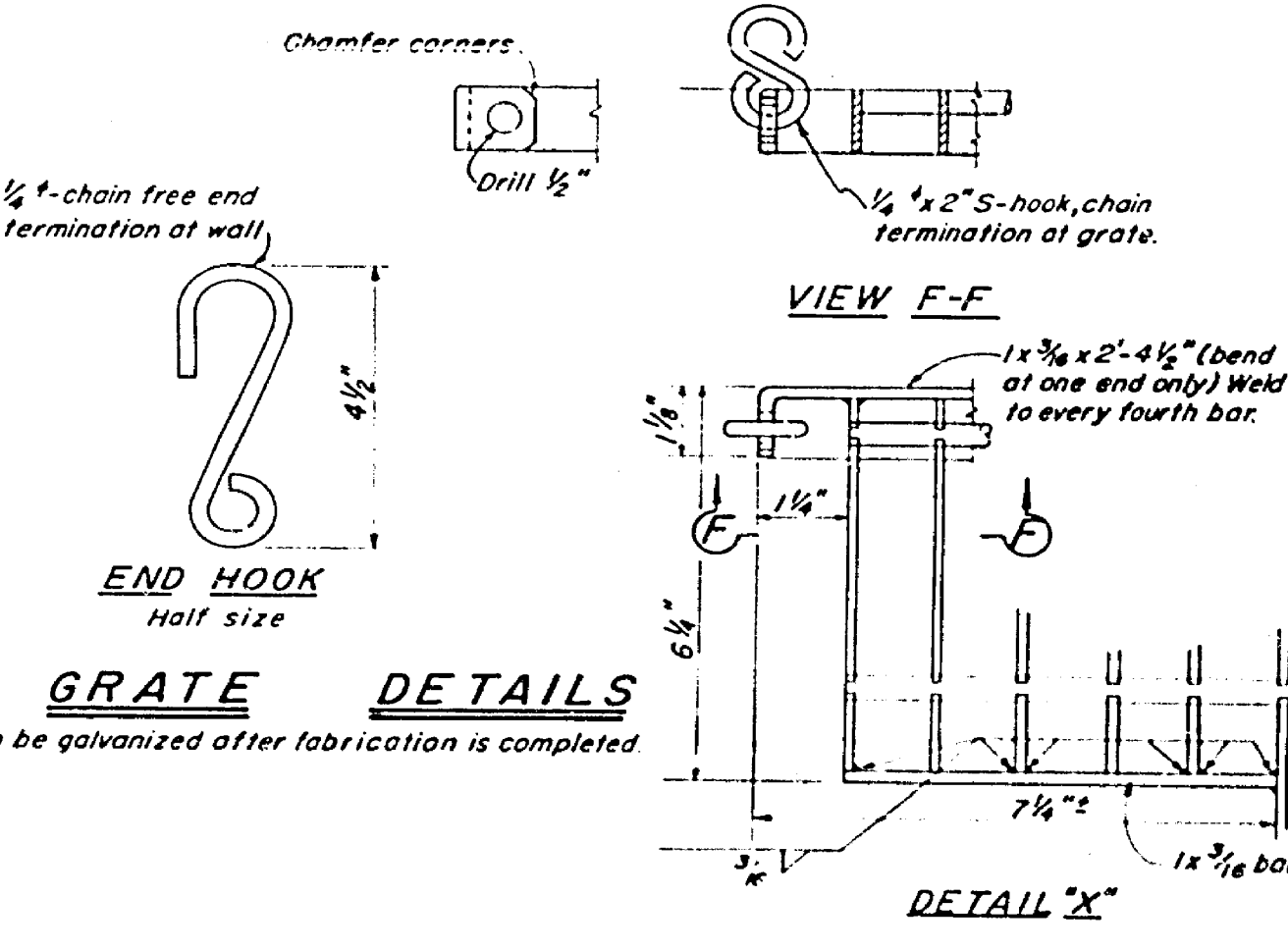
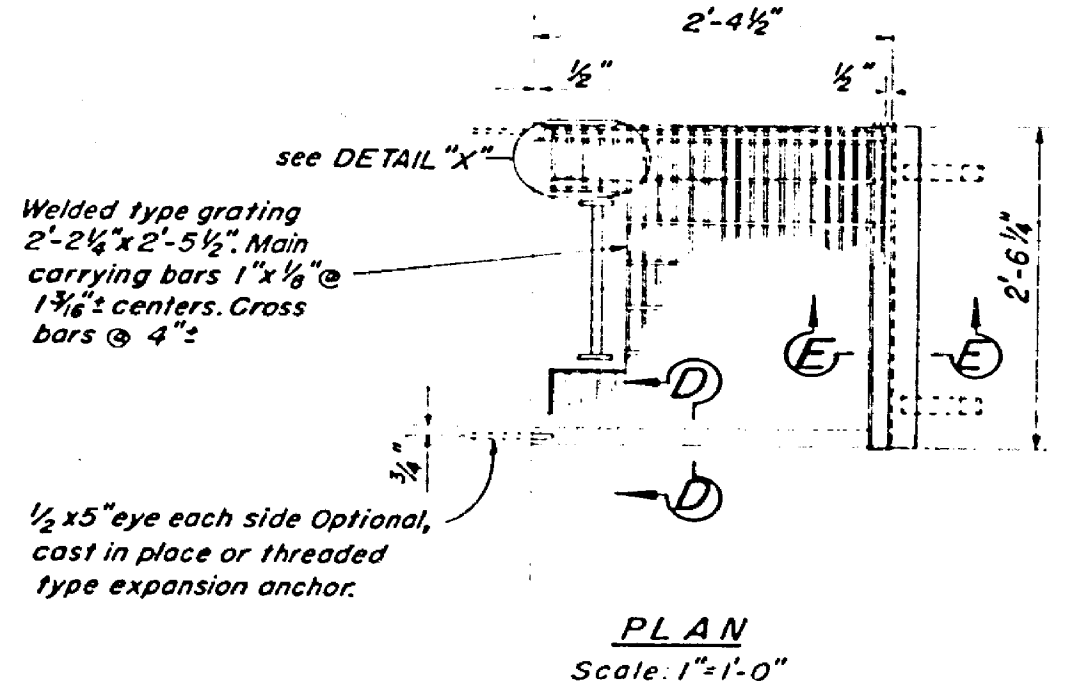
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DATE	BY	CHKD.	APP'D.	SCALE
10/1/50	R/W			3"

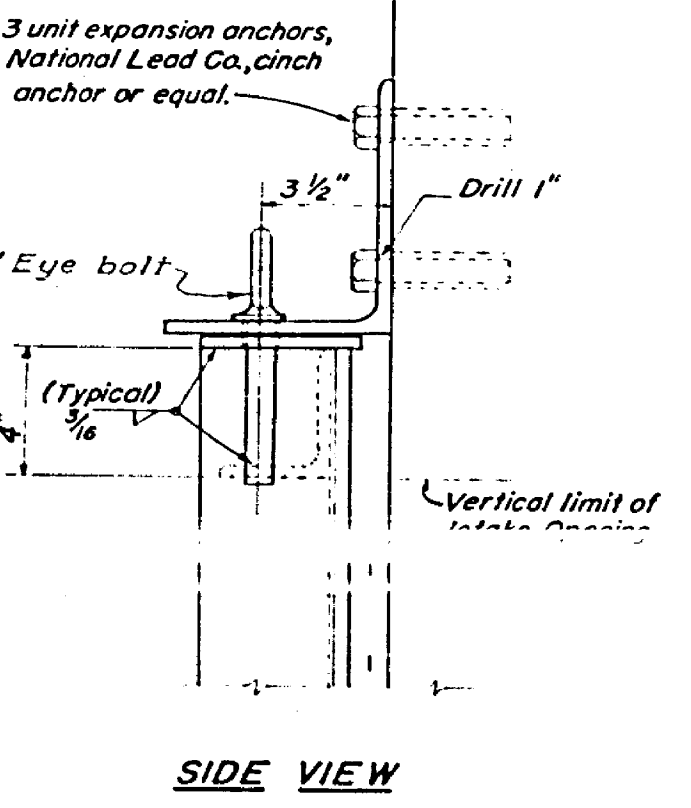
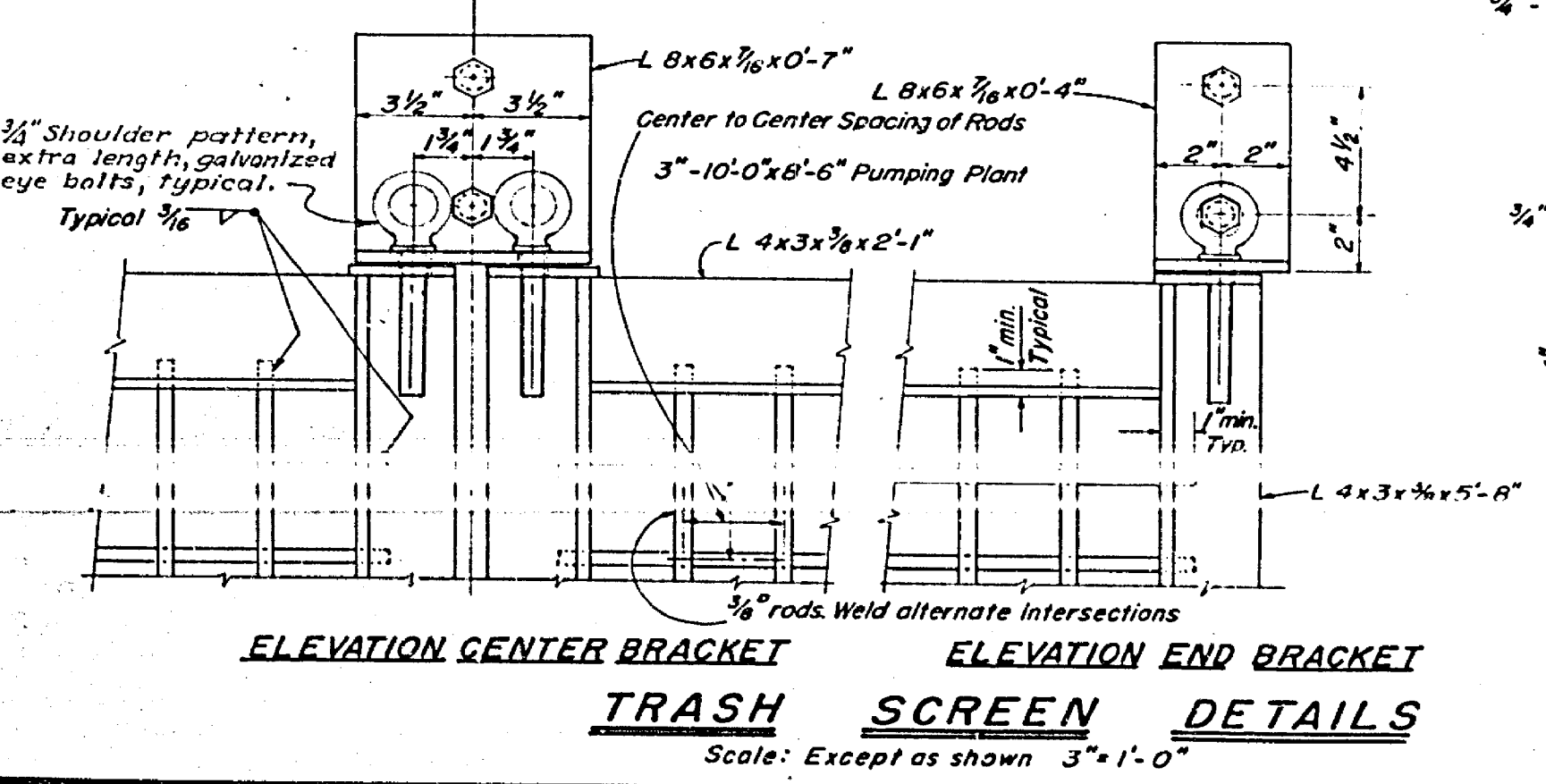
SEPTEMBER 13 1950



NOTE:
 Trash screen and angle brackets to be galvanized after fabrication.



FLOOR GRATE DETAILS
 NOTE: All components to be galvanized after fabrication is completed

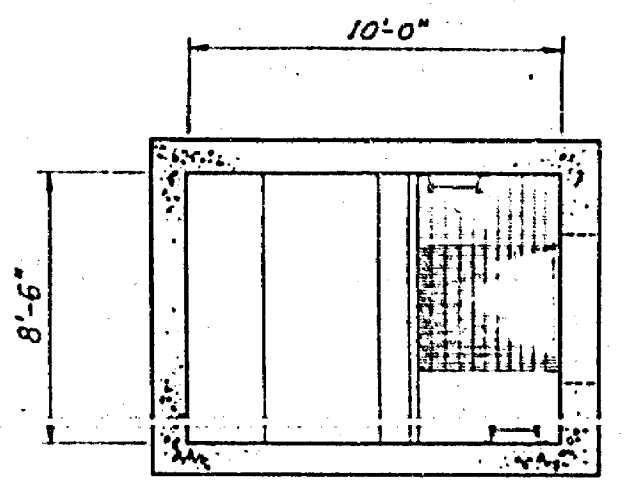


STATE OF CALIFORNIA DEPARTMENT OF PUBLIC WORKS DIVISION OF HIGHWAYS		R-1797
VINE STREET UNDERPASS 500-60 PUMPING PLANT STANDARD STEEL DETAILS No. 2		
SCALE AS SHOWN	BRIDGE & TUNNEL DIVISION	DRAWING E-5413-17

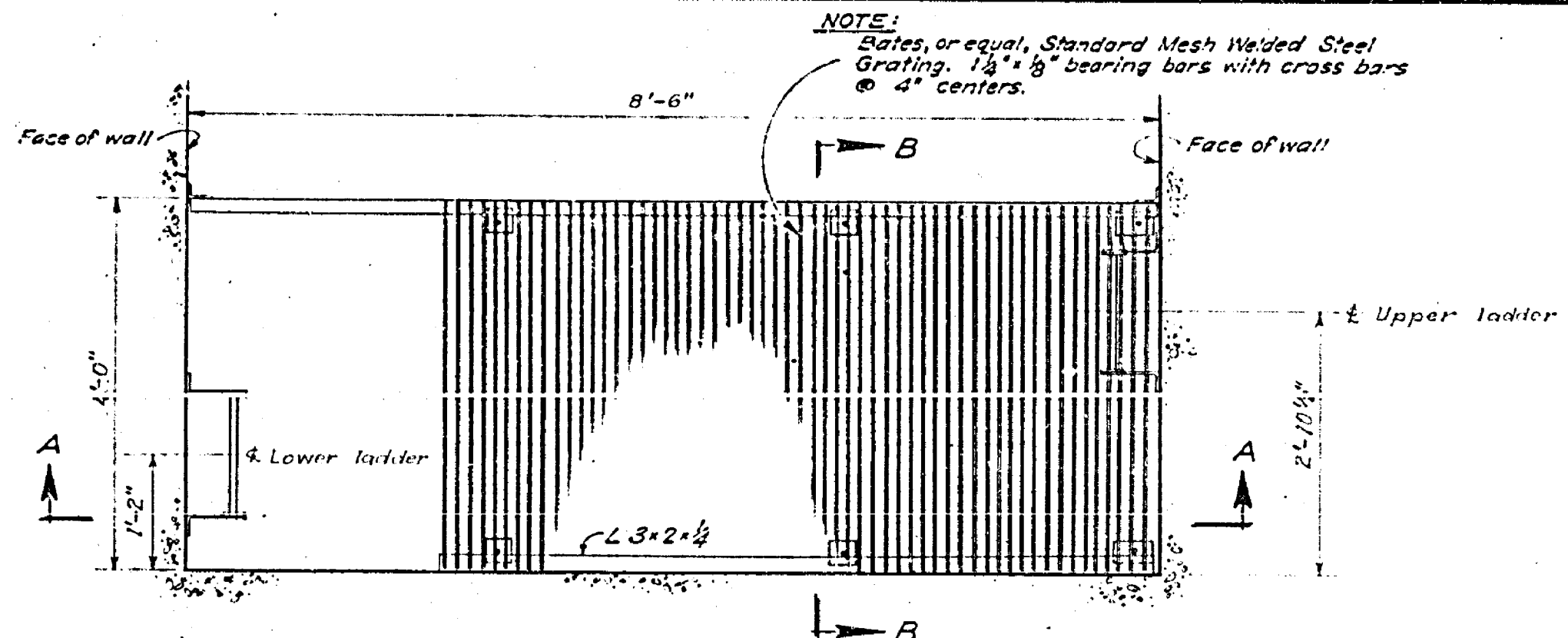
PREL. DRAWING NO. P. 5413 10X

FILE NO.	STATE	PROJECT NO.	PROJECT TITLE	DATE
7	CALIF.			

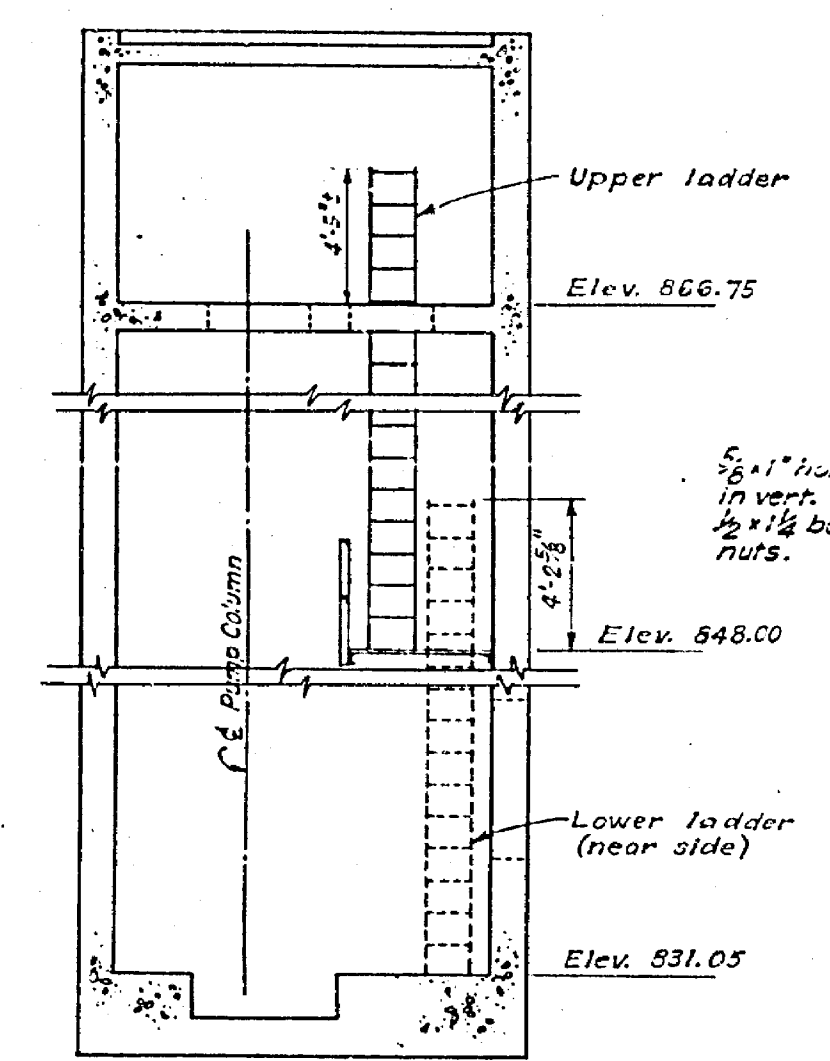
DATE	APPROVED	DESIGNED	CHECKED	SCALE
10/10/38				



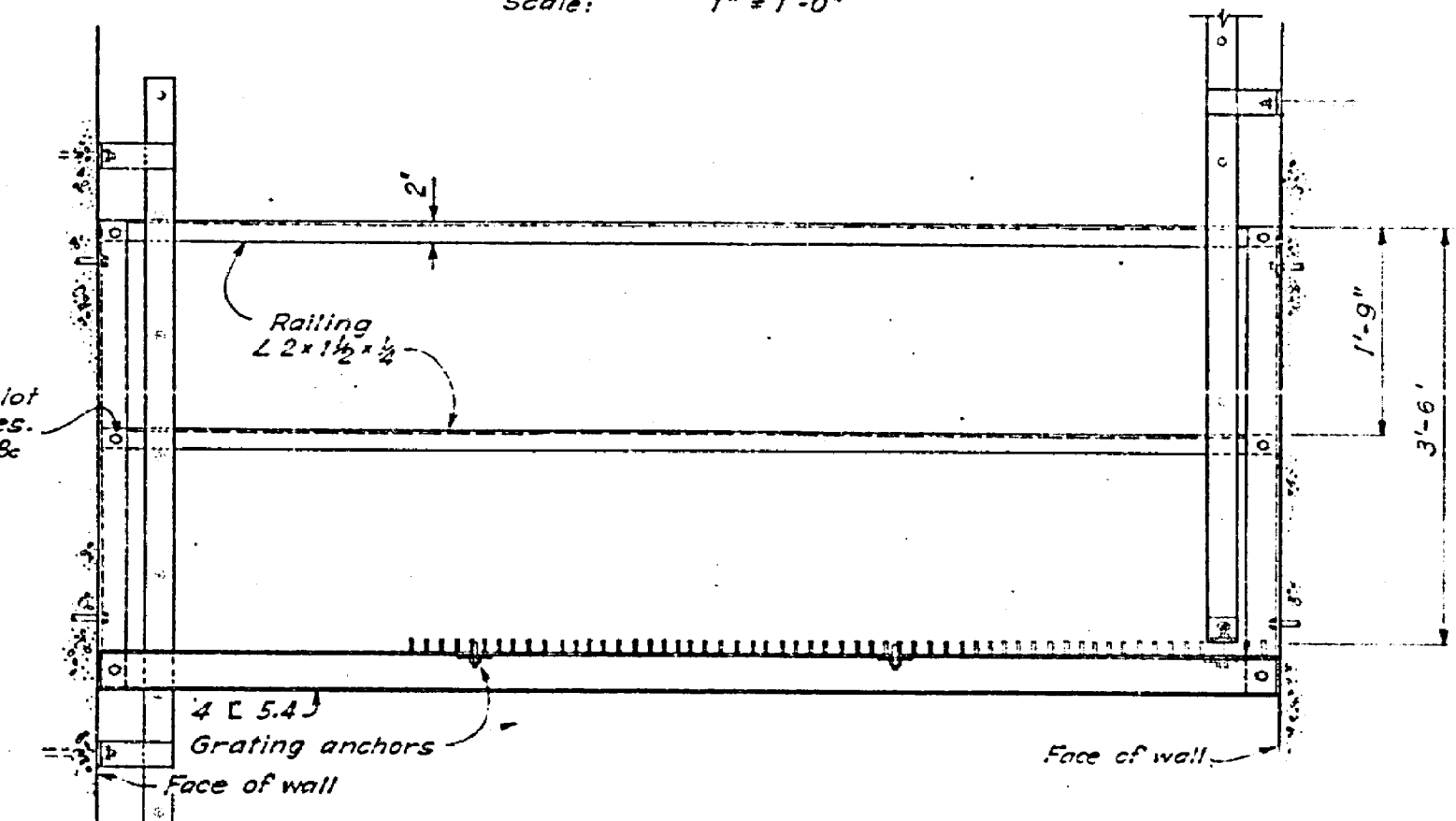
PLAN AT LANDING



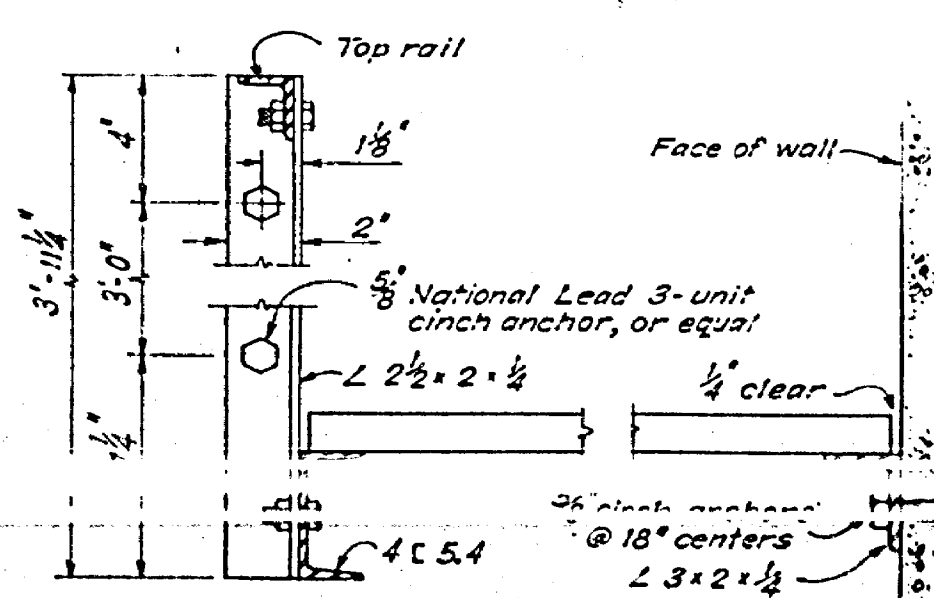
PLAN OF LANDING
Scale: 1" = 1'-0"



ELEVATION SECTION
No Scale

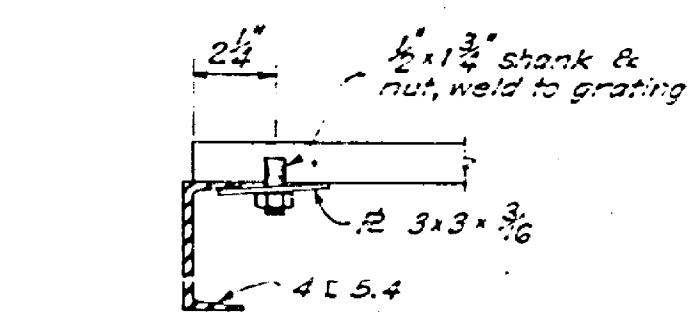


SECTION A-A
Scale: 1" = 1'-0"

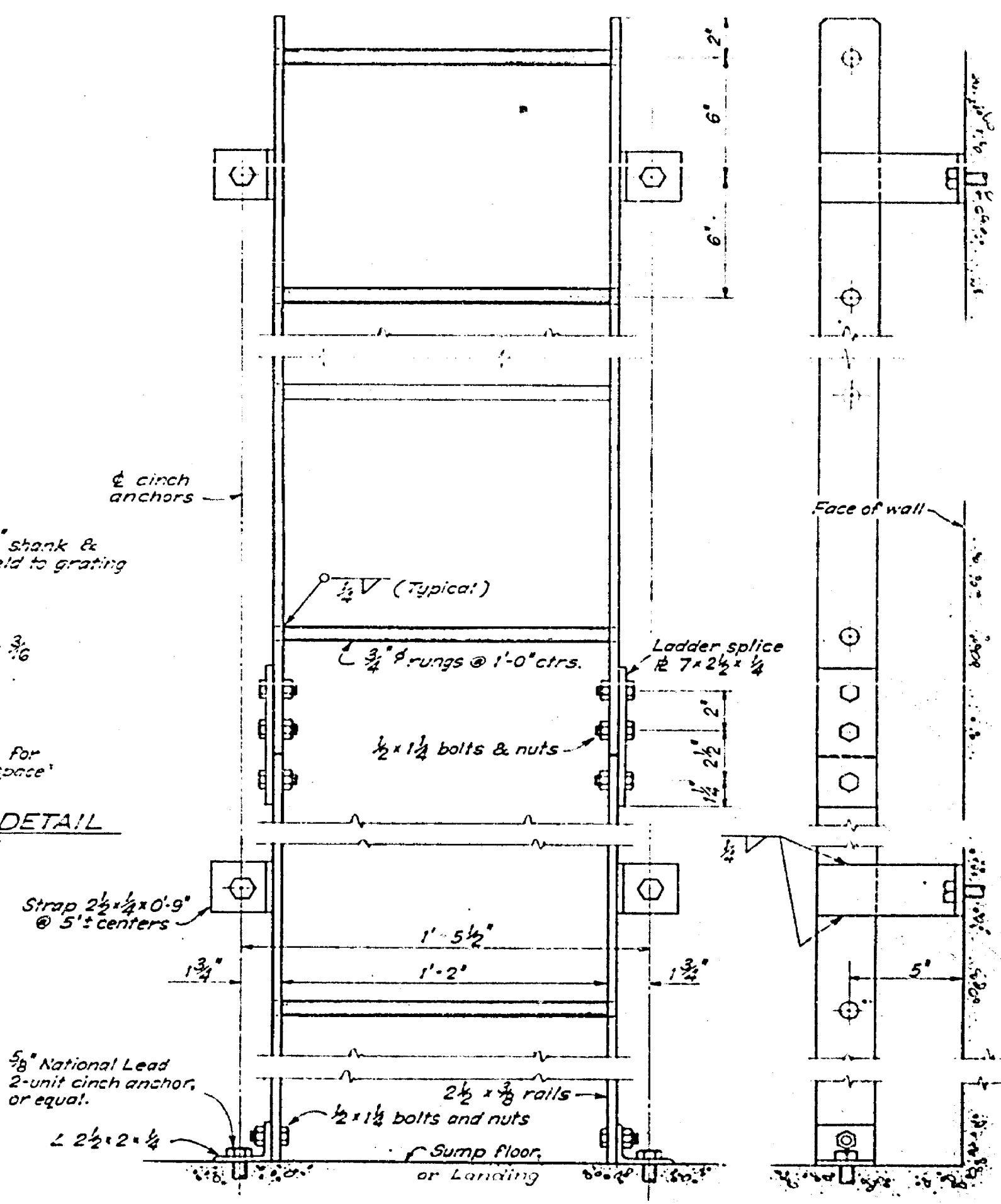


SECTION B-B
Scale: 3" = 1'-0"

NOTE:
Gates, or equal, Standard Mesh Welded Steel Grating. 1 1/2" x 3" bearing bars with cross bars @ 4" centers.



NOTE:
Minimum of 4 required for each section of grating, space @ 3' max. centers.
GRATING ANCHOR DETAIL
Scale: 3" = 1'-0"



TYPICAL LADDER DETAILS
Scale: 3" = 1'-0"

NOTES:
Railing and ladder rails to have smooth edges. Hot dipped galvanize all material after fabrication.

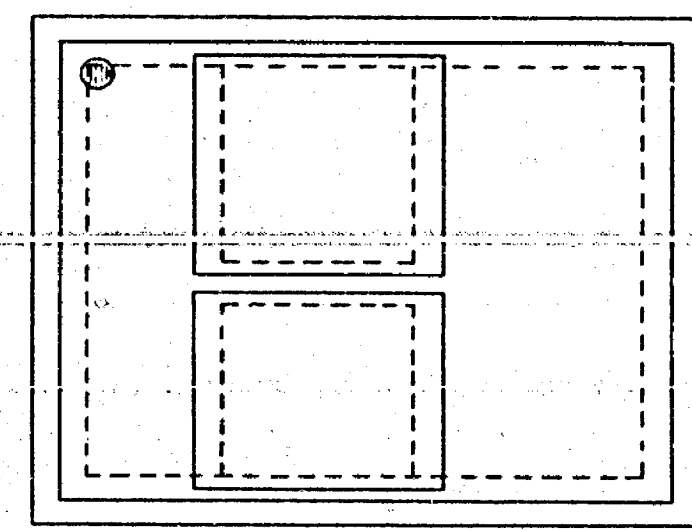
DESIGN	BY	CHECKED
DETAILS	BY	CHECKED
QUANTITIES	BY	CHECKED
SPECIFICATIONS	BY	CHECKED

BRIDGE DEPARTMENT	STATE OF CALIFORNIA
DESIGNER	SECTION
Chief Designer: William H. Hadjapetis	
VINE STREET UNDERPASS	
STAC-6.0 PUMPING PLANT	
STANDARD STEEL DETAILS NO 3	
SCALE As shown	BRIDGE 50-339-4V
FILE	DRAWING C-5413-18

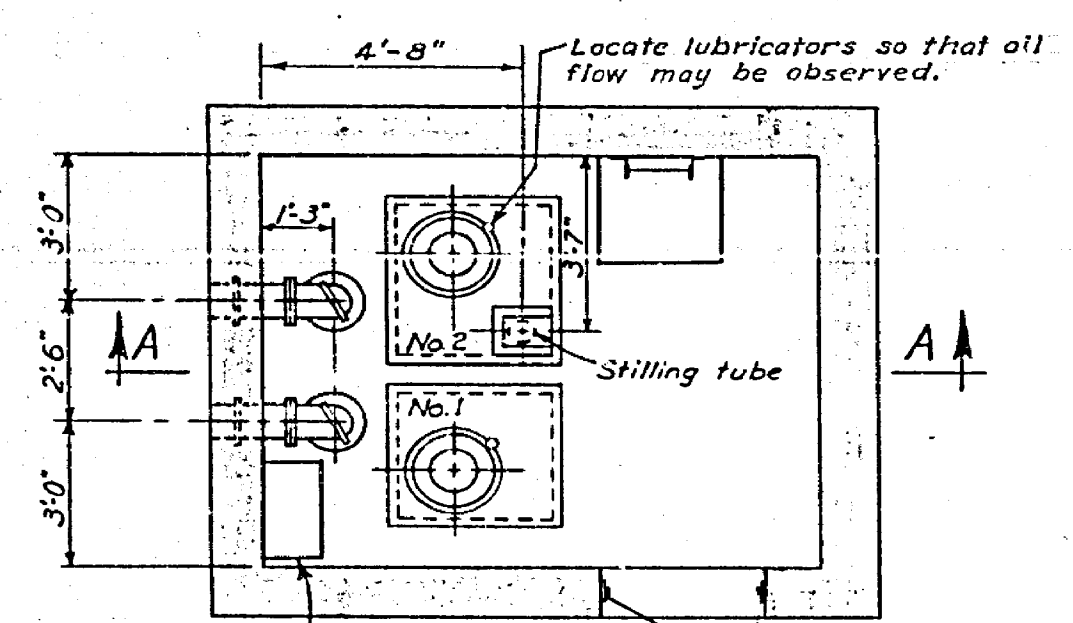
51

DES. NO.	STATE	PROJ. NO.	FEEL	POST	DATE
7	CALIF.				
NO.	COUNTY	SECTION	SHEET	TOTAL SHEETS	
VIII	Riv	19	Riv	7	10

SEPTEMBER 15 1959

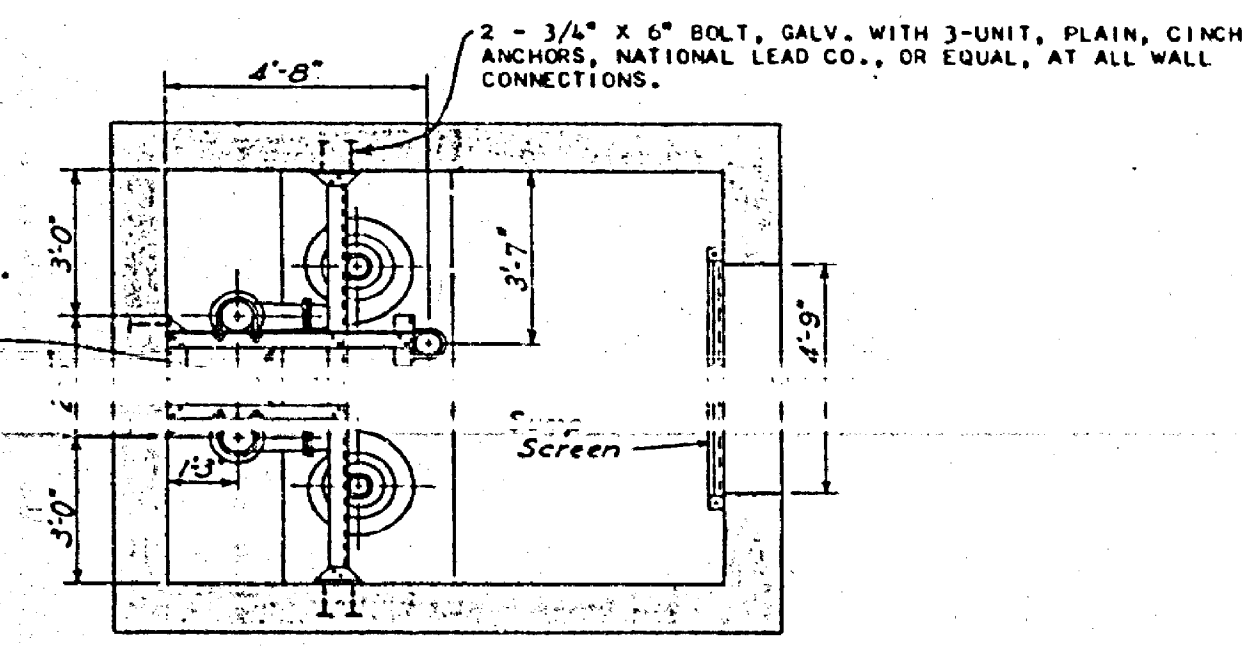


ROOF PLAN



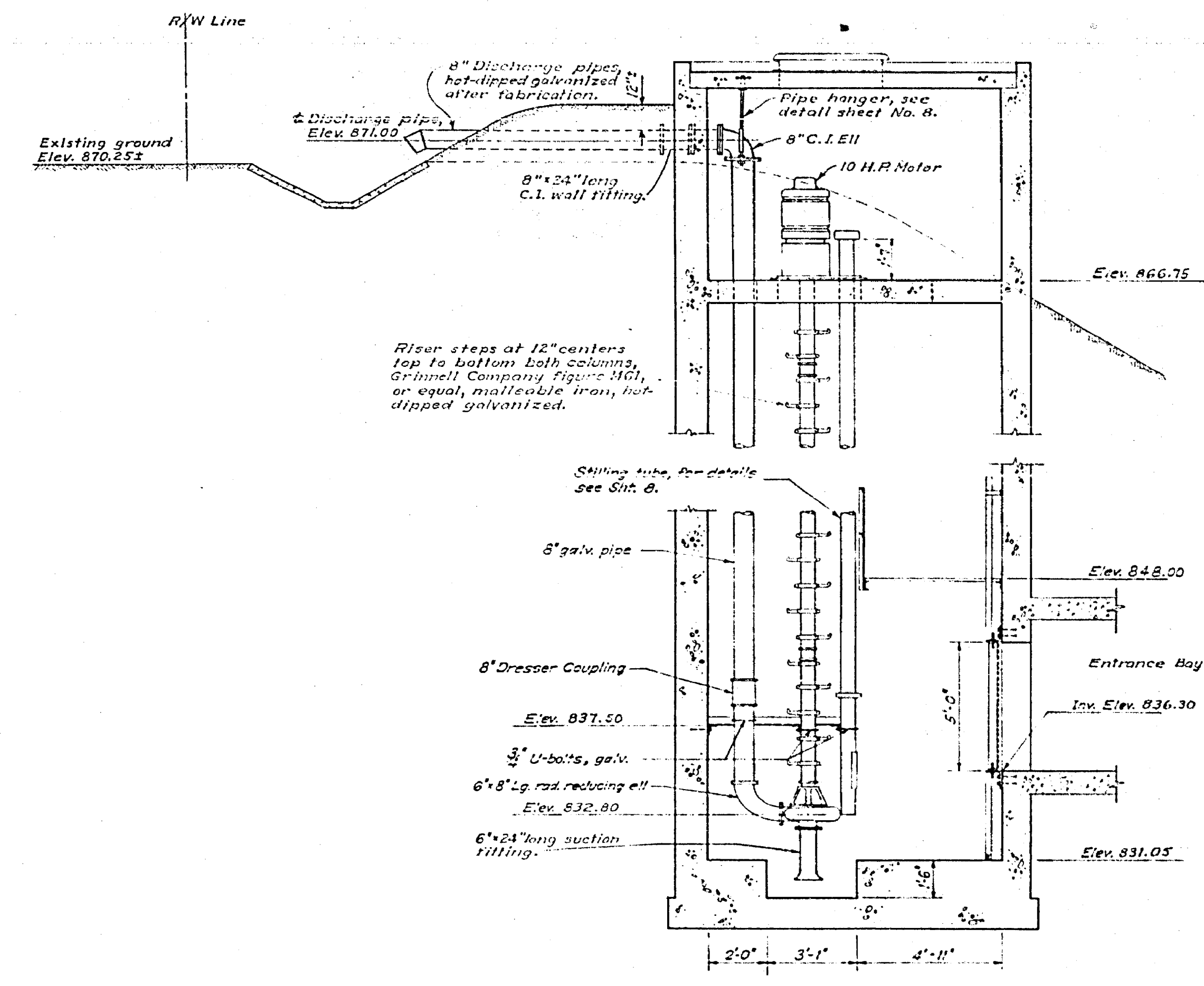
MOTOR ROOM PLAN

Wall cabinet, mounted 3'-0" above floor with 4 - 1/2" bolts, galvanized, with two unit plain cinch anchors, National Lead Company, or equal.



SUMP PLAN

4" x 3" x 5/16" L-FRAMES, GALV. BOLT TOGETHER WITH 2 - 3/4" GALV. MACH BOLTS WITH WASHERS EA. CONNECTION. SLOT BOLT HOLES, SEE SPECIAL PROVISIONS.



SECTION 'A-A'

DESIGNED BY	CHECKED BY
DRAWN BY	APPROVED BY
DATE	

DESIGN SECTION 11

56C-60	STATE OF CALIFORNIA DEPARTMENT OF PUBLIC WORKS DIVISION OF HIGHWAYS	R-1787
VINE STREET UNDERPASS PUMPING PLANT		
DRAINAGE PUMPING EQUIPMENT		
SCALE 3/8" = 1'-0"	BRIDGE 66-232W	FILE DRAWING C-5413-19
PREL. DRAWING NO. P. 5113 18 37		

34.

55.

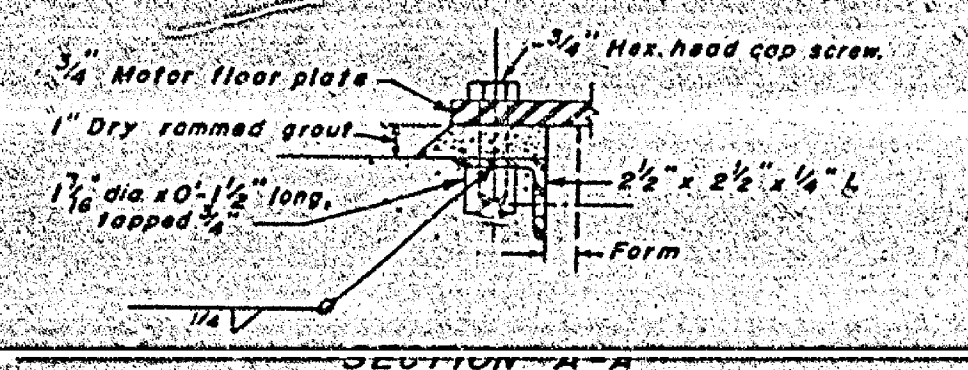
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11.

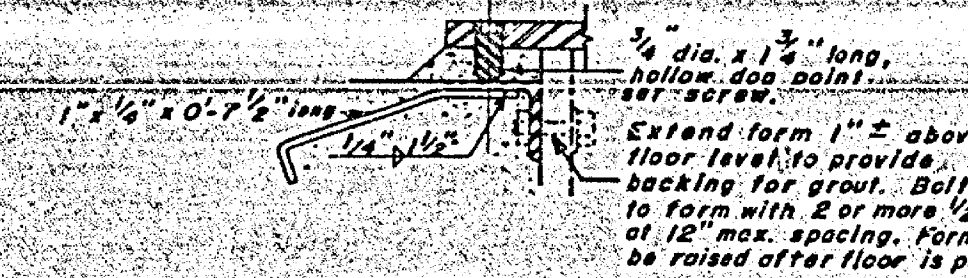
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REG. PLAN	STATE	FILE NO.	POST	DATE
2	CAL.			

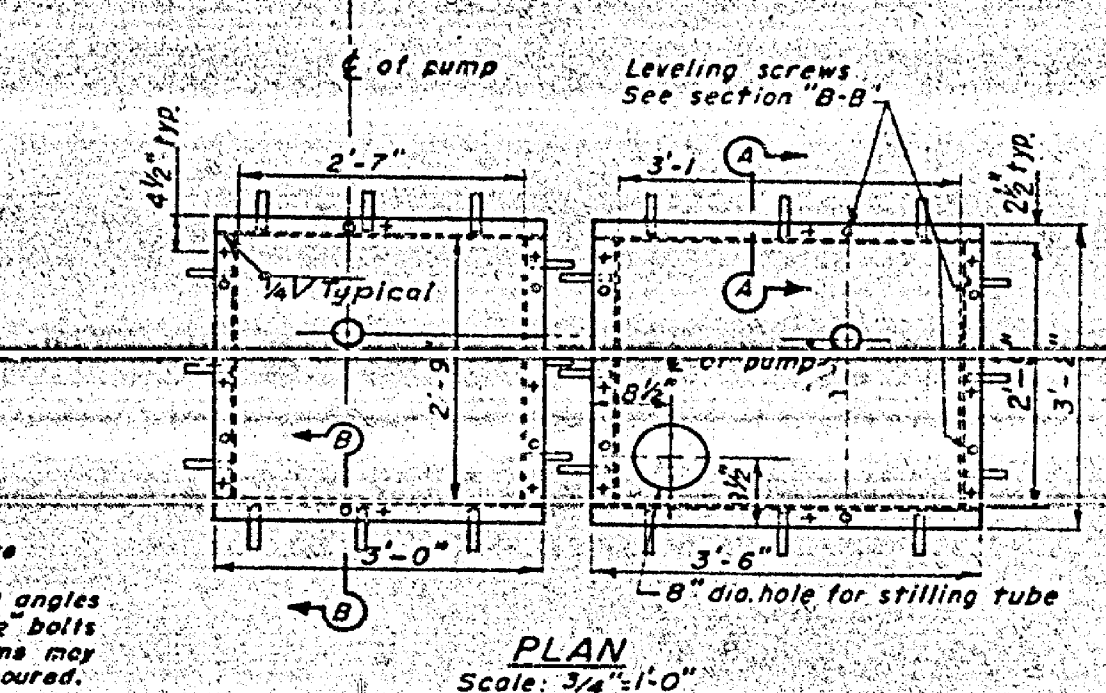
DESIGN	DATE	REVISION	DATE
W. J.
REV. 19			
REV. 8			
REV. 10			
SEPTEMBER 15 1950			



SECTION A-A
SCALE: 3/4\"/>1-0"

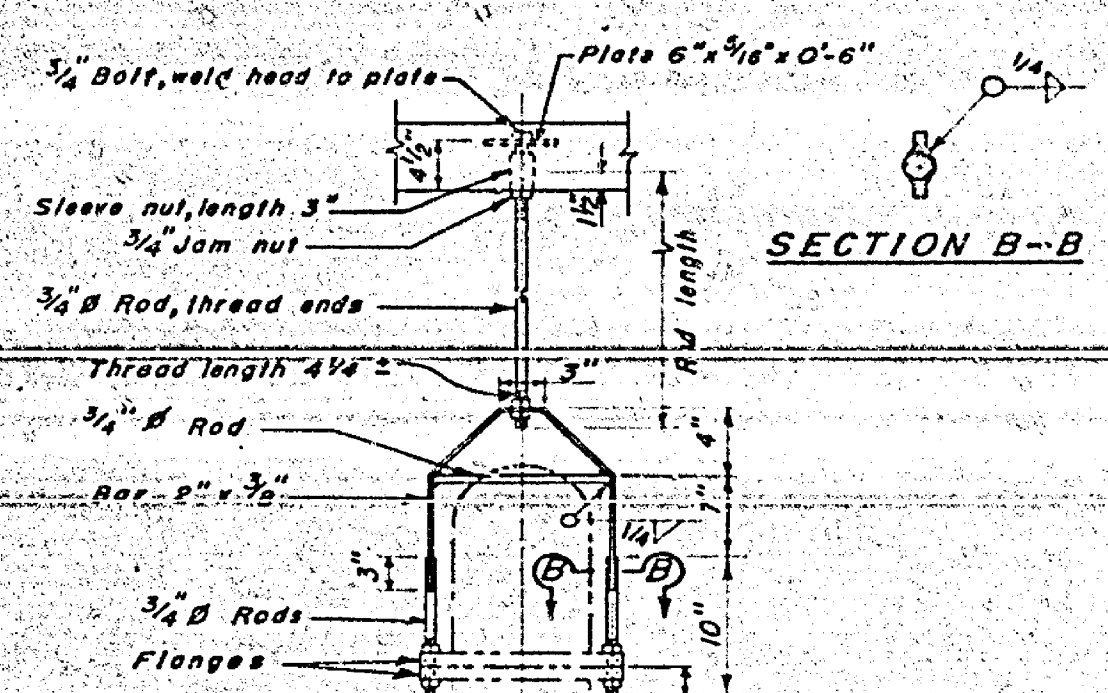


SECTION B-B
SCALE: 3/4\"/>1-0"



PLAN
Scale: 3/4\"/>1-0"

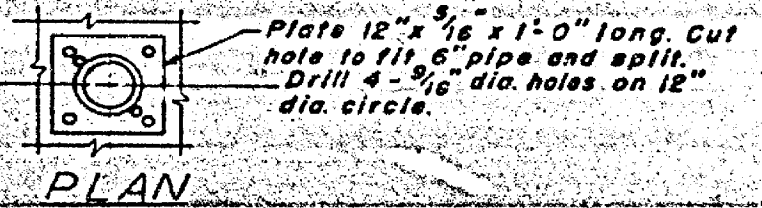
MOTOR FLOOR PLATES AND FRAMES.
SCALE: AS NOTED



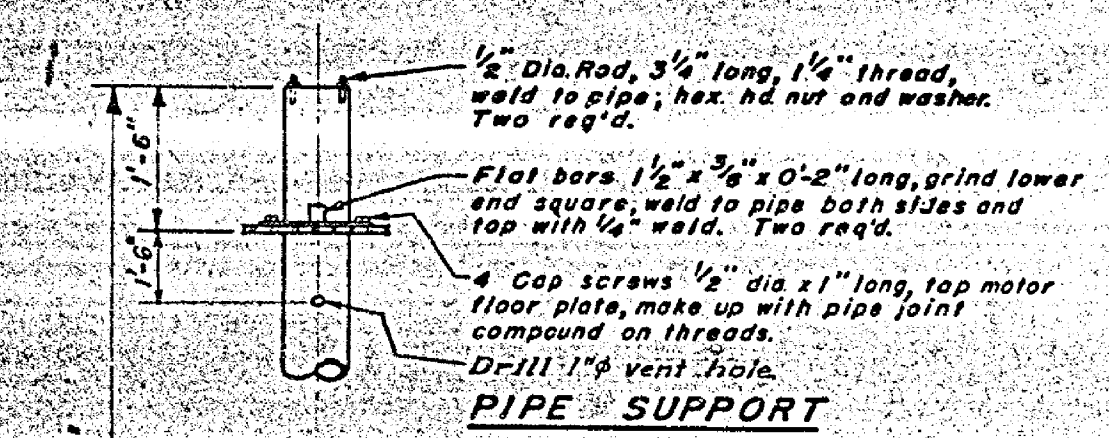
SECTION B-B

ELEVATION

PIPE HANGER
NO SCALE



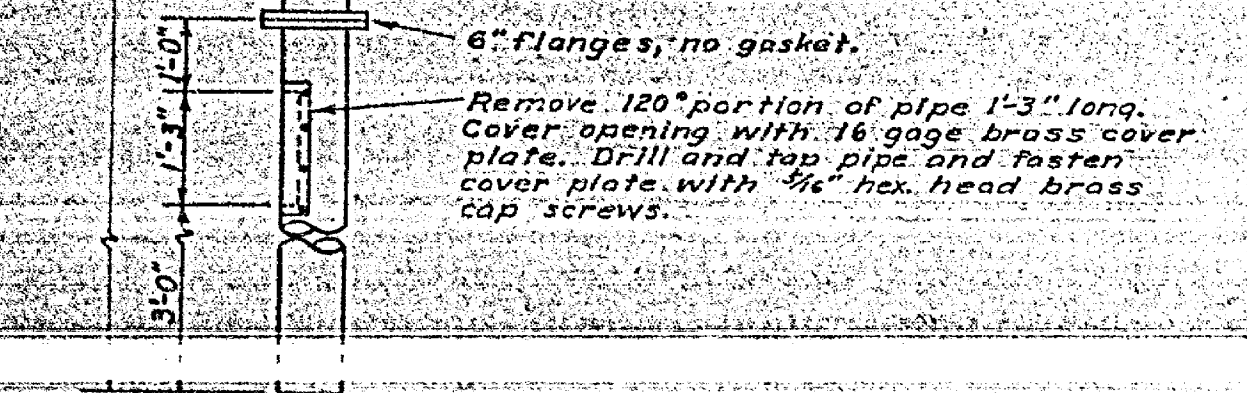
PLAN



PIPE SUPPORT



PIPE ANCHOR



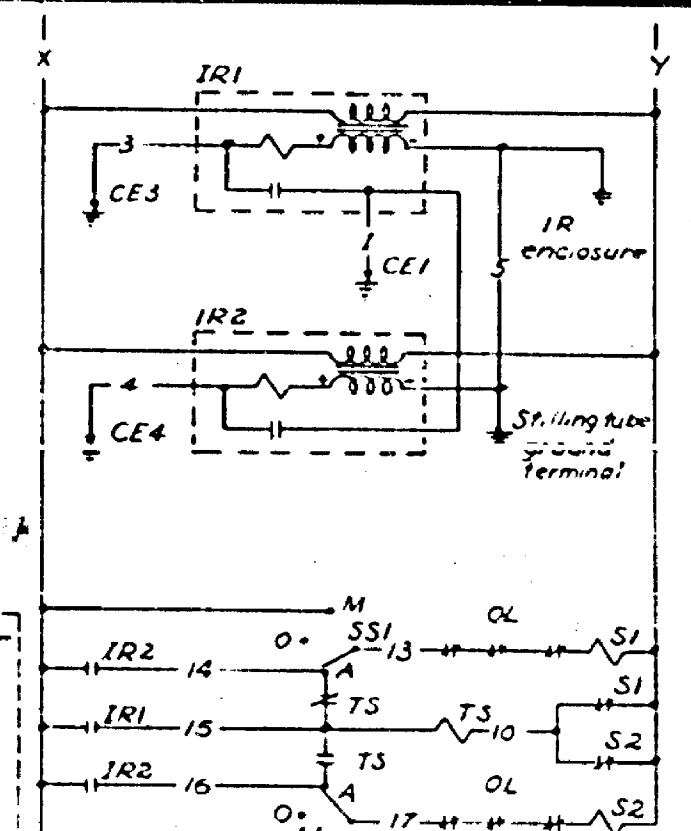
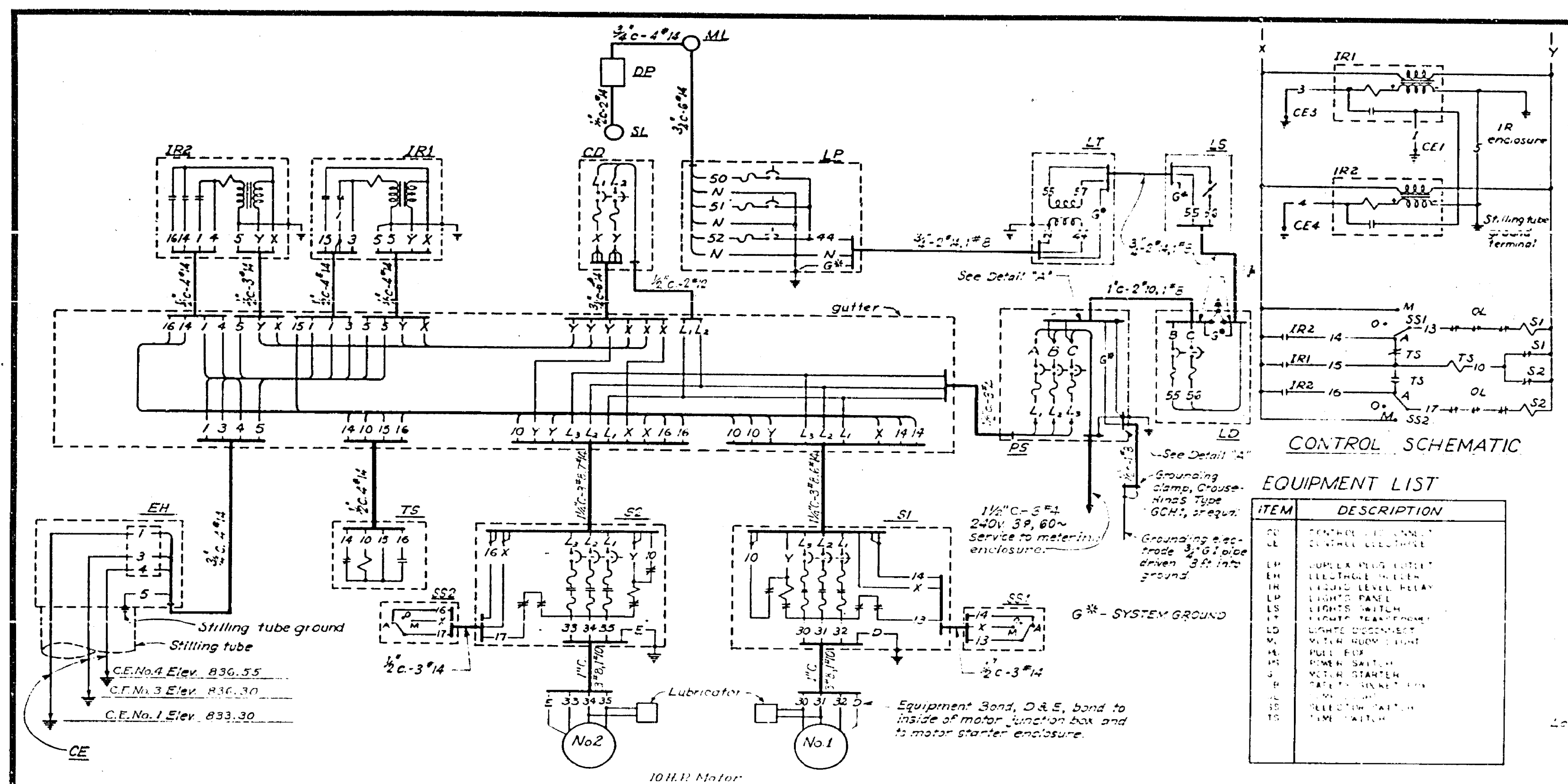
ELEVATION

STILLING TUBE DETAILS
SCALE: 3/4\"/>1-0"

NOTE:
Pumps shall be set on leveling screws only, free of all other contacts and their position adjusted so that floor plates are level and the column vertical. Bracing shall be adjusted so that it provides contact with column without moving or bringing stress upon any part of the pump or bracing and pumps secured tightly in proper position. Motor floor plate bolts shall be tightened up snugly against the plate. Dry grout shall then be rammed under the floor plate, allowed to set, leveling screws slacked, and the plates then bolted down tight against the grout.

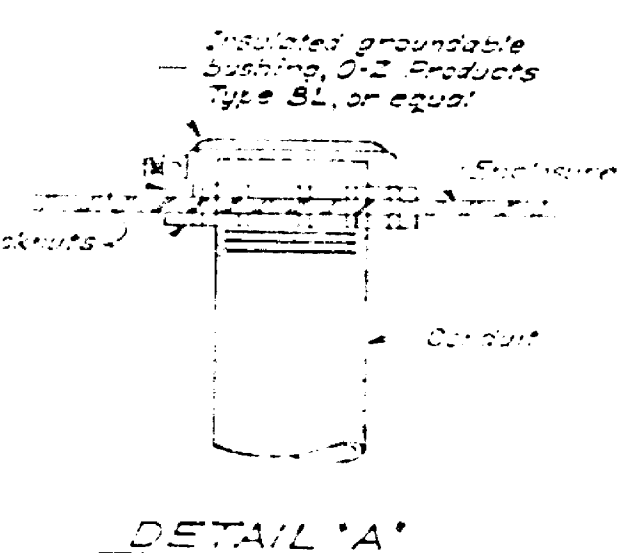
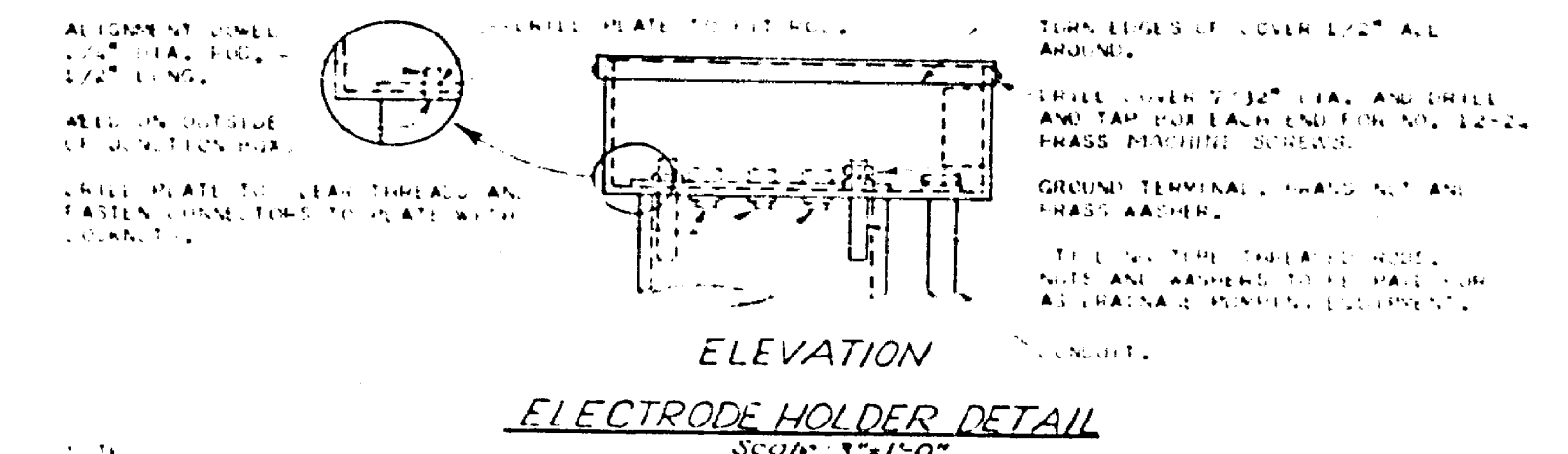
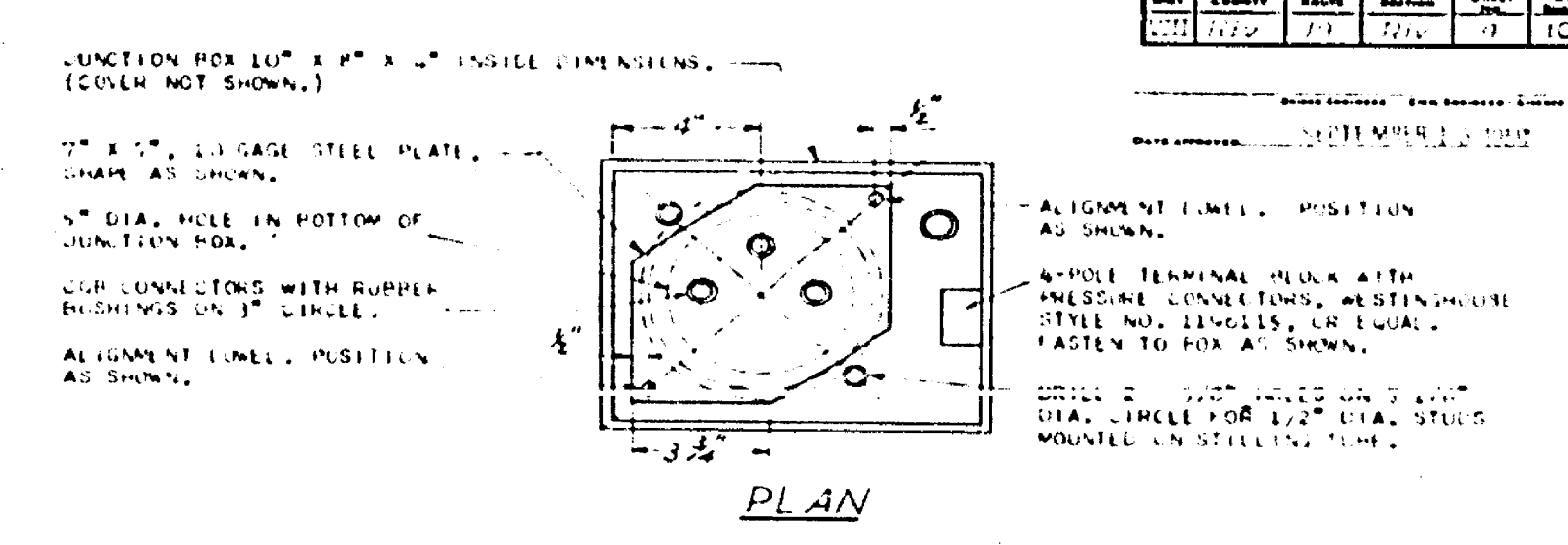
56C-60	STATE OF CALIFORNIA DEPARTMENT OF PUBLIC WORKS DIVISION OF HIGHWAYS	R-1787
VINE STREET UNDERPASS PUMPING PLANT		
PUMPING EQUIPMENT DETAILS		
SCALE: As Shown	BRIDGE: 66-033W	FILE: C-5413-20
DRAWING:		
FUEL DRAWING NO. P. 5613 1/1/50		

DESIGN	DATE	SCALE	PROJECT	NO.	REV.



EQUIPMENT LIST

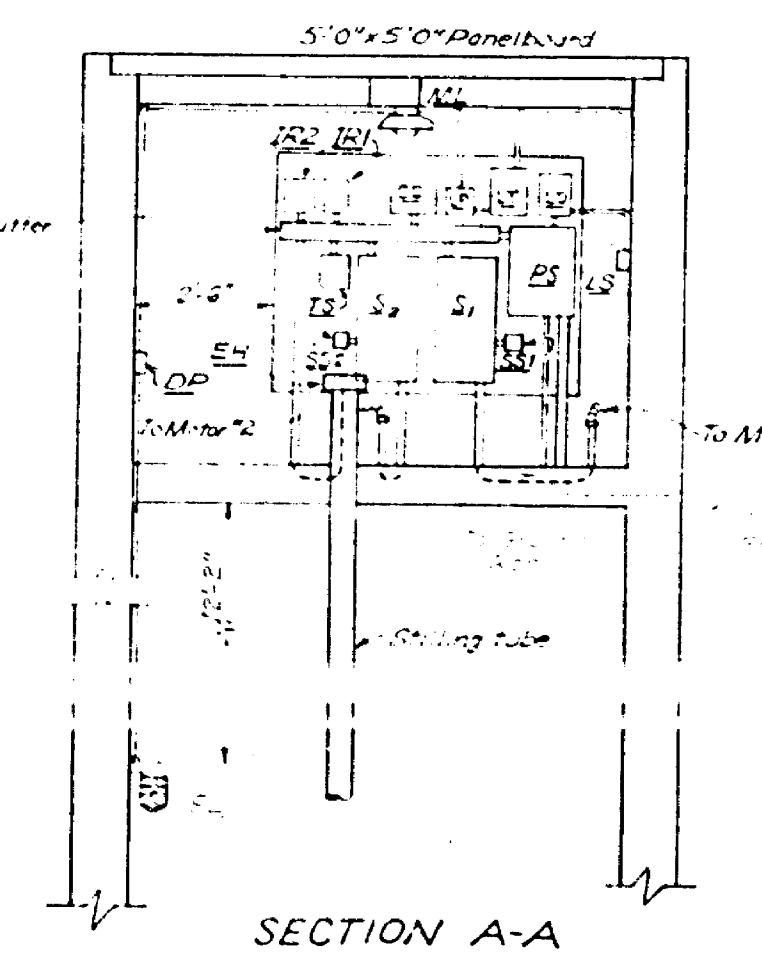
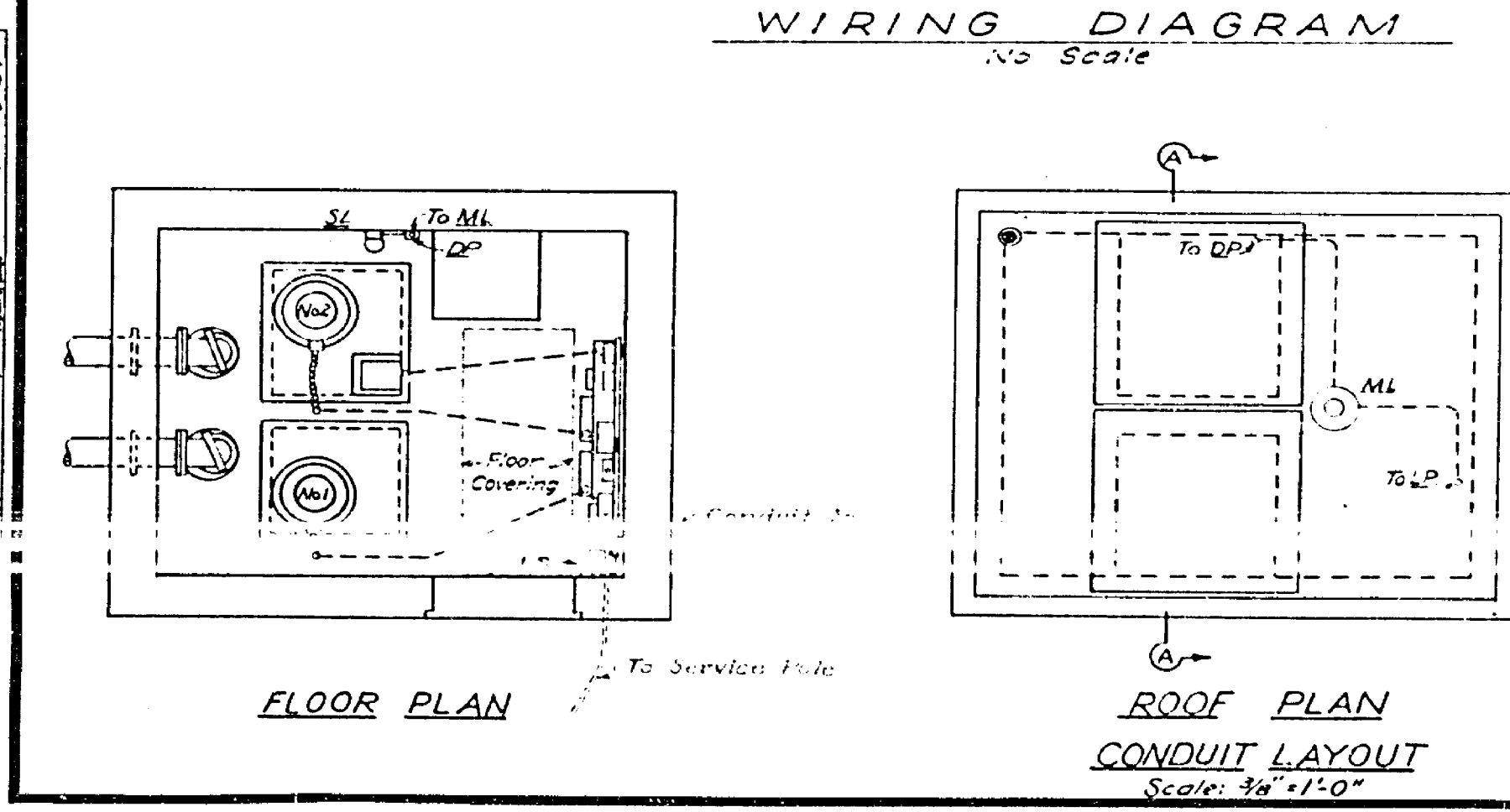
ITEM	DESCRIPTION
IR1	RELAY
IR2	RELAY
S1	SWITCH
S2	SWITCH
L1	LAMP
L2	LAMP
...	...



LEGEND

SYMBOL	DESCRIPTION
(Symbol)	...
(Symbol)	...
(Symbol)	...

NOTE:
All conduits entering enclosures shall be bonded to the enclosure by means of insulated groundable bushings, O-Z Products Type SL, or equal. See Detail A above.



BRIDGE DEPARTMENT

VINE STREET UNDERPASS
PUMPING PLANT
ELECTRICAL DETAILS

SCALE: AS NOTED

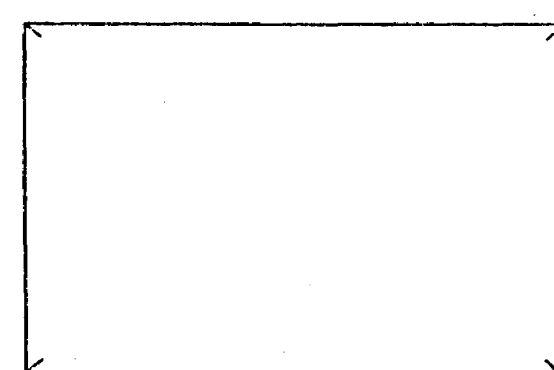
PREL. DRAWING NO. P-6022-2021

DESIGN	DATE	SCALE	PROJECT	NO.	REV.

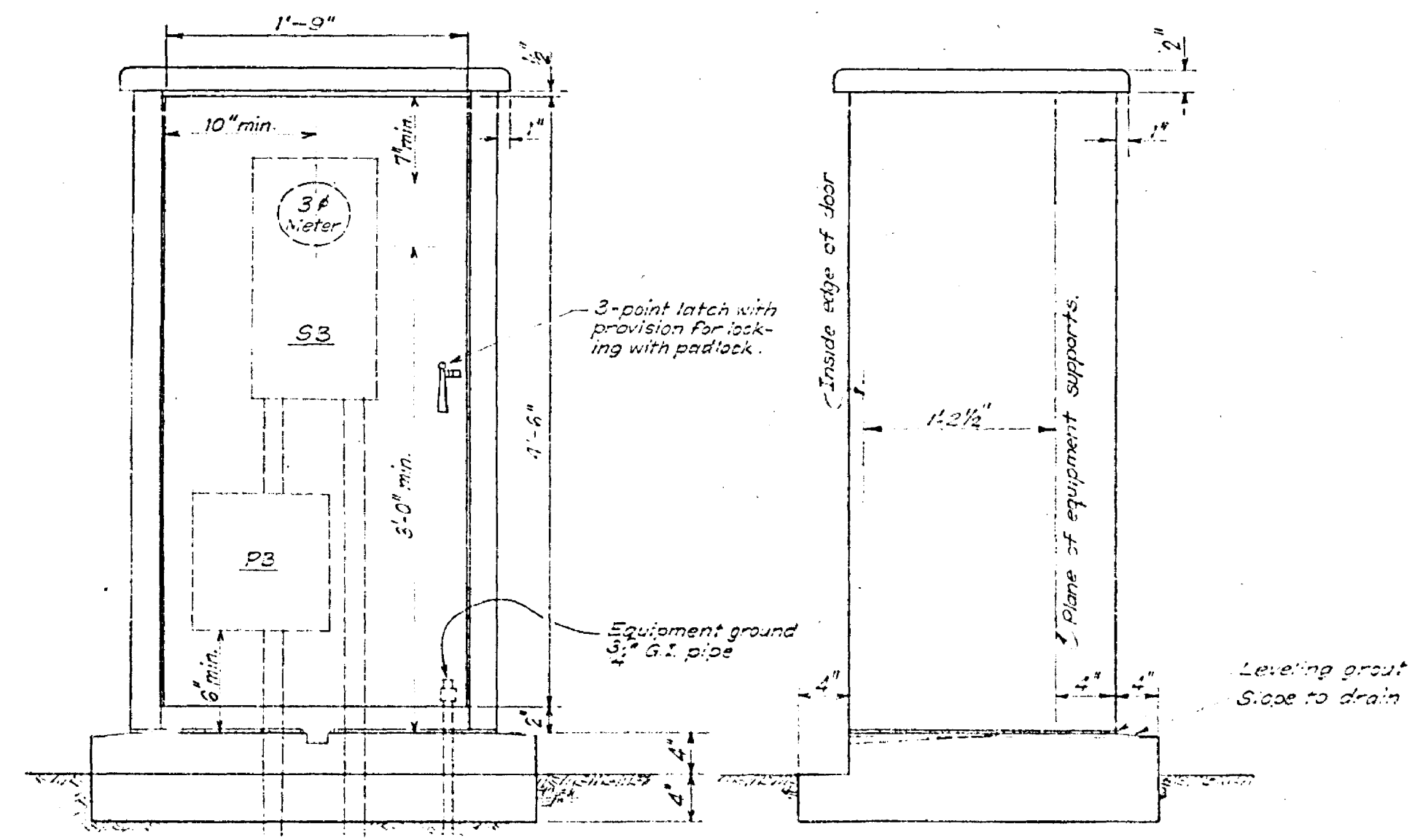
NO.	DATE	BY	CHKD.	APP'D.	SCALE
7	CALIF.				

NO.	DATE	BY	CHKD.	APP'D.	SCALE
VIII	10/10	W. J. ...			

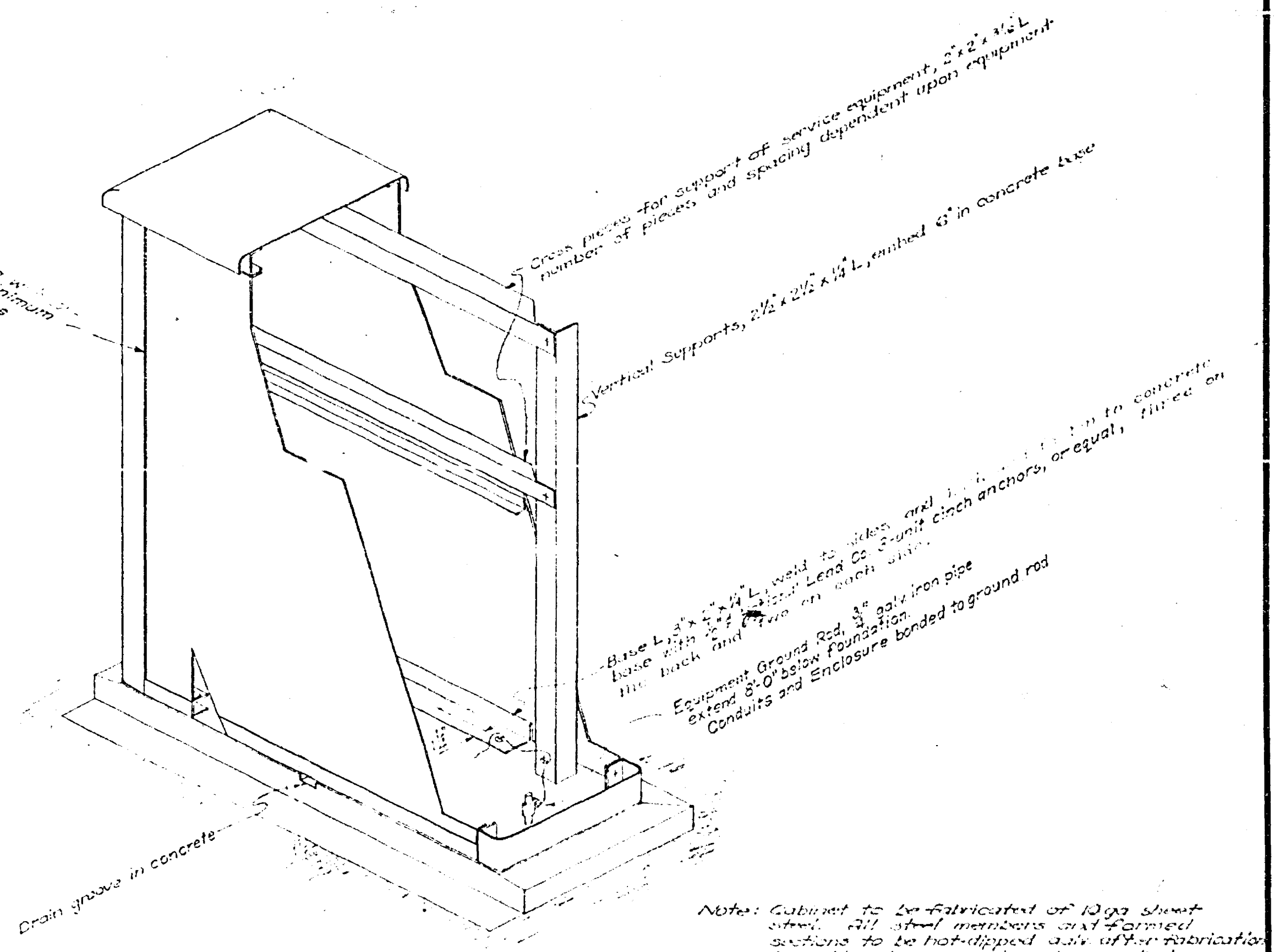
W. J. ...
 STATE OF CALIFORNIA
 DEPARTMENT OF PUBLIC WORKS



PLAN



ELEVATION



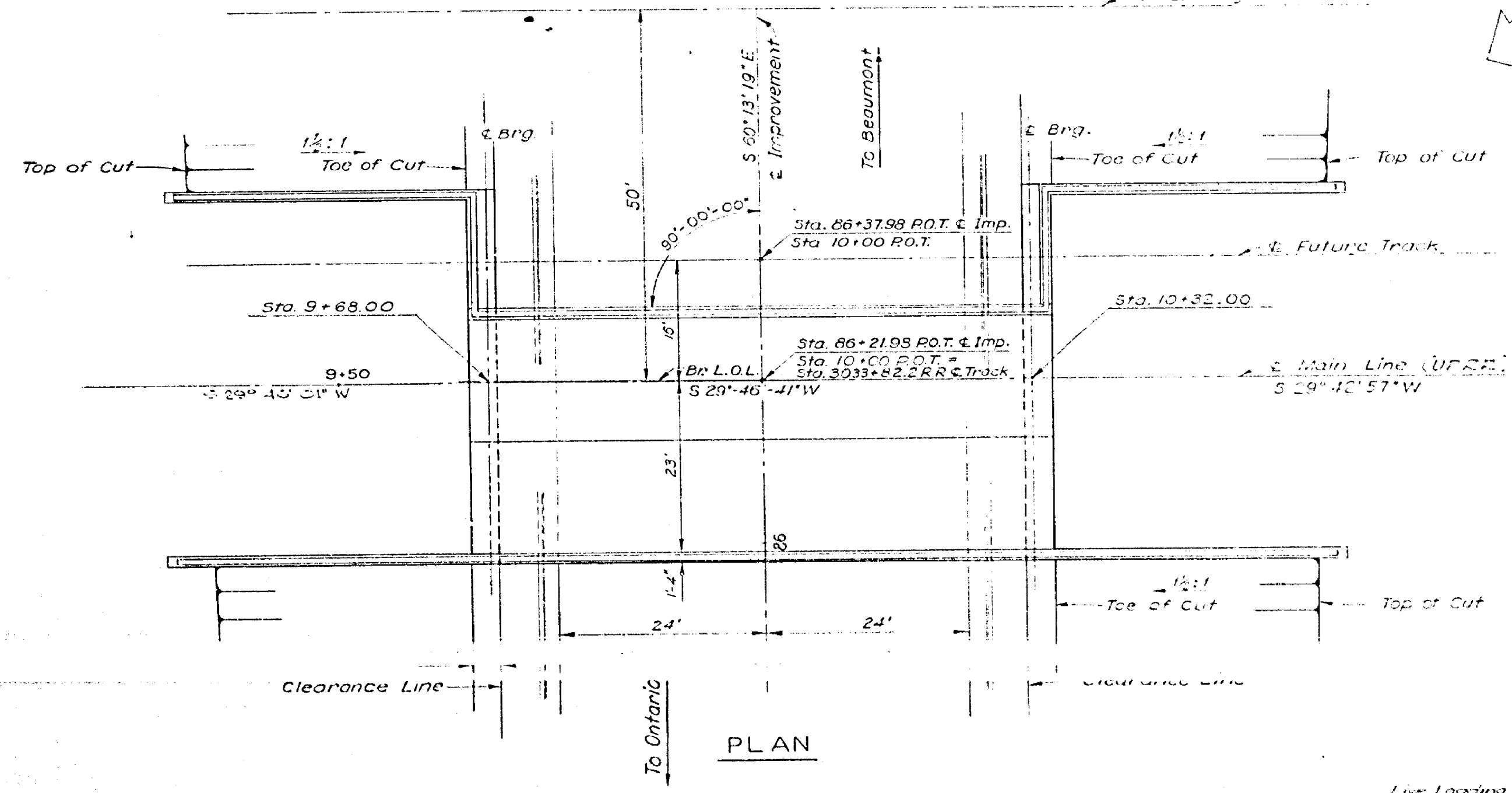
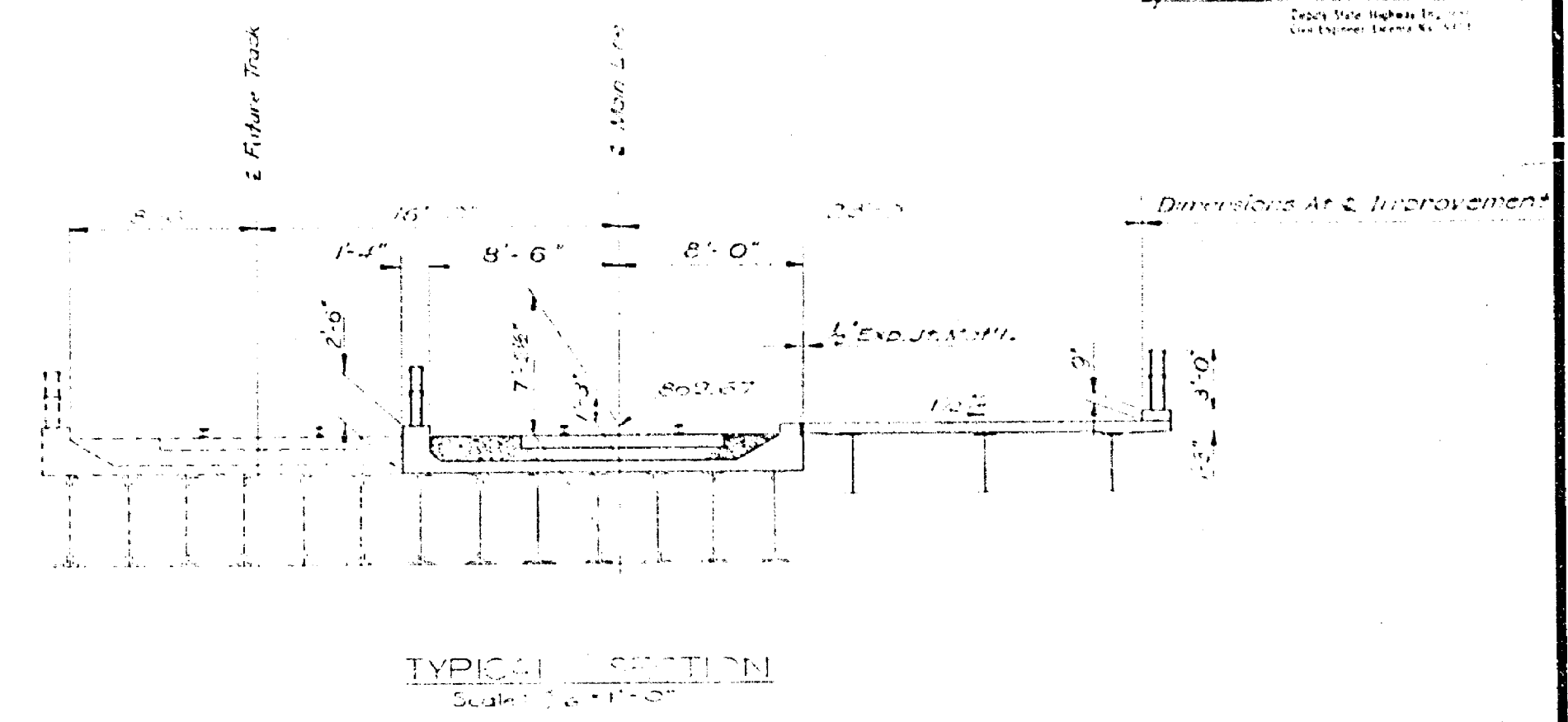
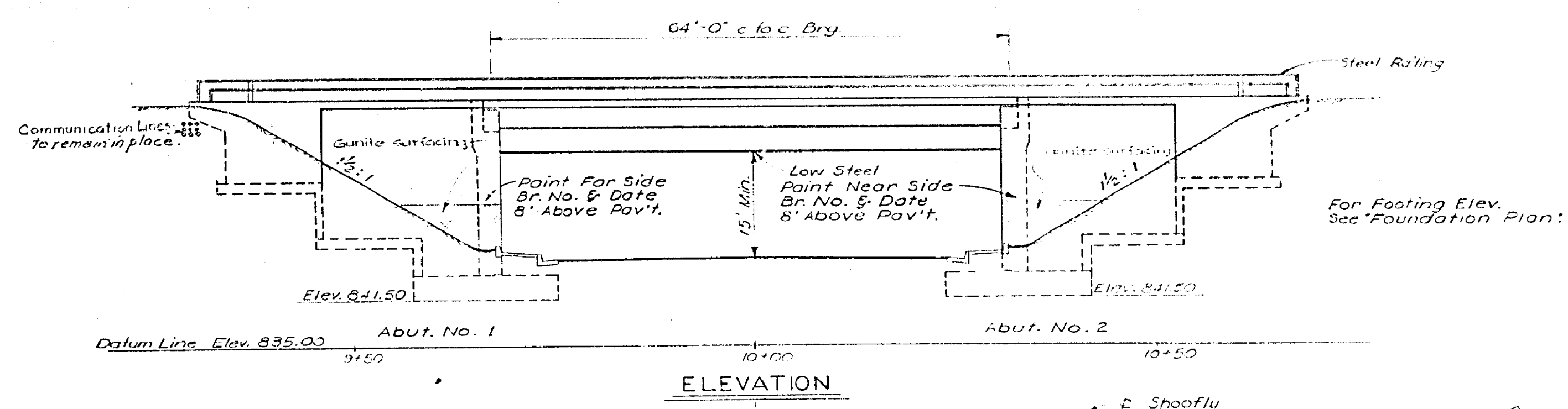
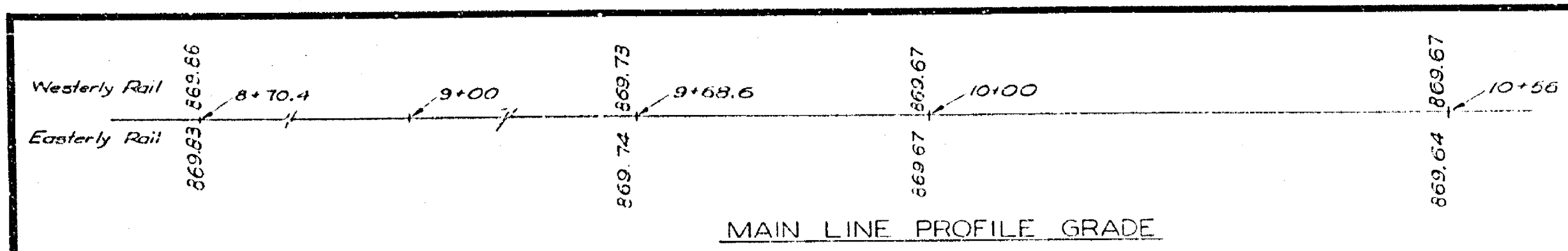
BRIDGE DEPARTMENT	DESIGN SECTION	44
DESIGN	W. J. ...	
DETAILS	W. J. ...	
QUANTITIES	W. J. ...	
SPECIFICATIONS	W. J. ...	

STATE OF CALIFORNIA DEPARTMENT OF PUBLIC WORKS	
VINE STREET UNDERPASS PUMPING PLANT	
METERING ENCLOSURE	
SCALE: NOTED	BRIDGE NO. 433W FILE DRAWING C-5413-22
PREL. DRAWING NO. P-5413-22	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
7	CALIF.			

DATE	CONTR.	SCALE	REVISION	BY	DATE
SEP 28 1937	1 13	1/2"	1		

G. E. McLOW
 CIVIL ENGINEER
 1000 BROADWAY, SAN FRANCISCO, CALIF.



INDEX TO PLANS

Sheet No.	Title
1	General Plan
2	Foundation Plan
3	Abutment No. 1 & 2
4	Abutment No. 1 & 2 Details
5	Typical Section
6	Steel Layout & Details, E 75 Loading
7	Steel Layout & Details, H 15 S 12 44
8	Bracing Details
9	Type 1A Cantilever Retaining Wall
10	Type 2A Cantilever Retaining Wall
11	Steel Railing Details
12	Log of Test Borings

APPROXIMATE QUANTITIES

STRUCTURE EXCAVATION	1,100 C.Y.
STRUCTURE BACKFILL	1,172 C.Y.
CLASS "A" CONCRETE (BRIDGES) (448 C.Y.)	LUMP SUM
RUBBER WATERSTOP	42 L.F.
BAR REINFORCING STEEL (BRIDGES) (100,000 LBS.)	LUMP SUM
MEMBRANE WATERPROOFING, 1 PLY	186 S.Y.
PROTECTIVE COVERING	124 S.Y.
STRUCTURAL STEEL (200,000 LBS.)	LUMP SUM
CLEANING AND PAINTING STRUCTURAL STEEL	LUMP SUM
STEEL RAILING	141 L.F.

Final quantity to be ascertained

DESIGN SECTION 3

DESIGN	Checked
DETAILS	Checked
QUANTITIES	Checked
SPECIFICATIONS	Checked

STATE OF CALIFORNIA
 DEPARTMENT OF PUBLIC WORKS
 DIVISION OF HIGHWAYS

VINE STREET UNDERPASS
 LOCATED ON HIGHWAY STREET, N.W. CORNER EAST OF
 ROUTE 44 IN CITY OF RIVERSIDE

GENERAL PLAN
 Scale: 1/2" = 1'-0" Except
 BRIDGE 50-249 FILE DRAWING 0-5413-1

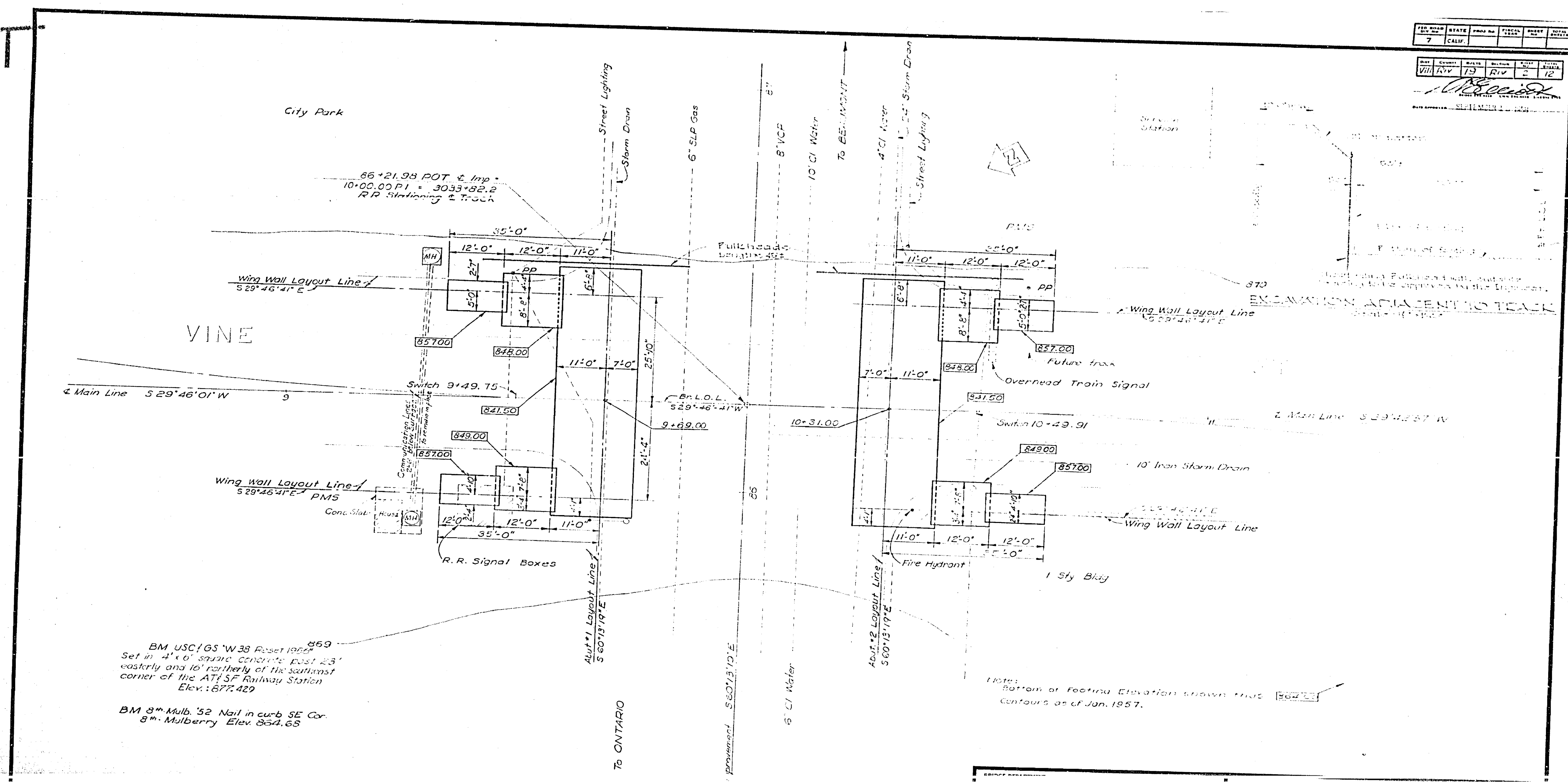
PREL. DRAWING NO. P. 0-5413-1 1 2 3 4 5 6 7 8 9 10 11 12

34

PROJECT NO.	STATE	FUNDING	DESIGN	DATE
7	CALIF.			

NO.	DATE	BY	REVISION
VIII	1/19	Riv	2

W. H. ...
 SUPERVISOR



66+21.98 POT & Imp
 10+00.00 P.I. = 3033+82.2
 R.R. Stationing 2 TRACK

VINE

Main Line 52°46'01" W

Wing Wall Layout Line
 52°46'41" E PMS

BM USC 165 W 38 Post 1954
 Set in 4' x 4' square concrete post 2.3'
 westerly and 16' northerly of the southeast
 corner of the AT&SF Railway Station
 Elev.: 877.429

BM 3" Mulb. 52 Nail in cur-b SE Cor.
 3" Mulberry Elev. 864.65

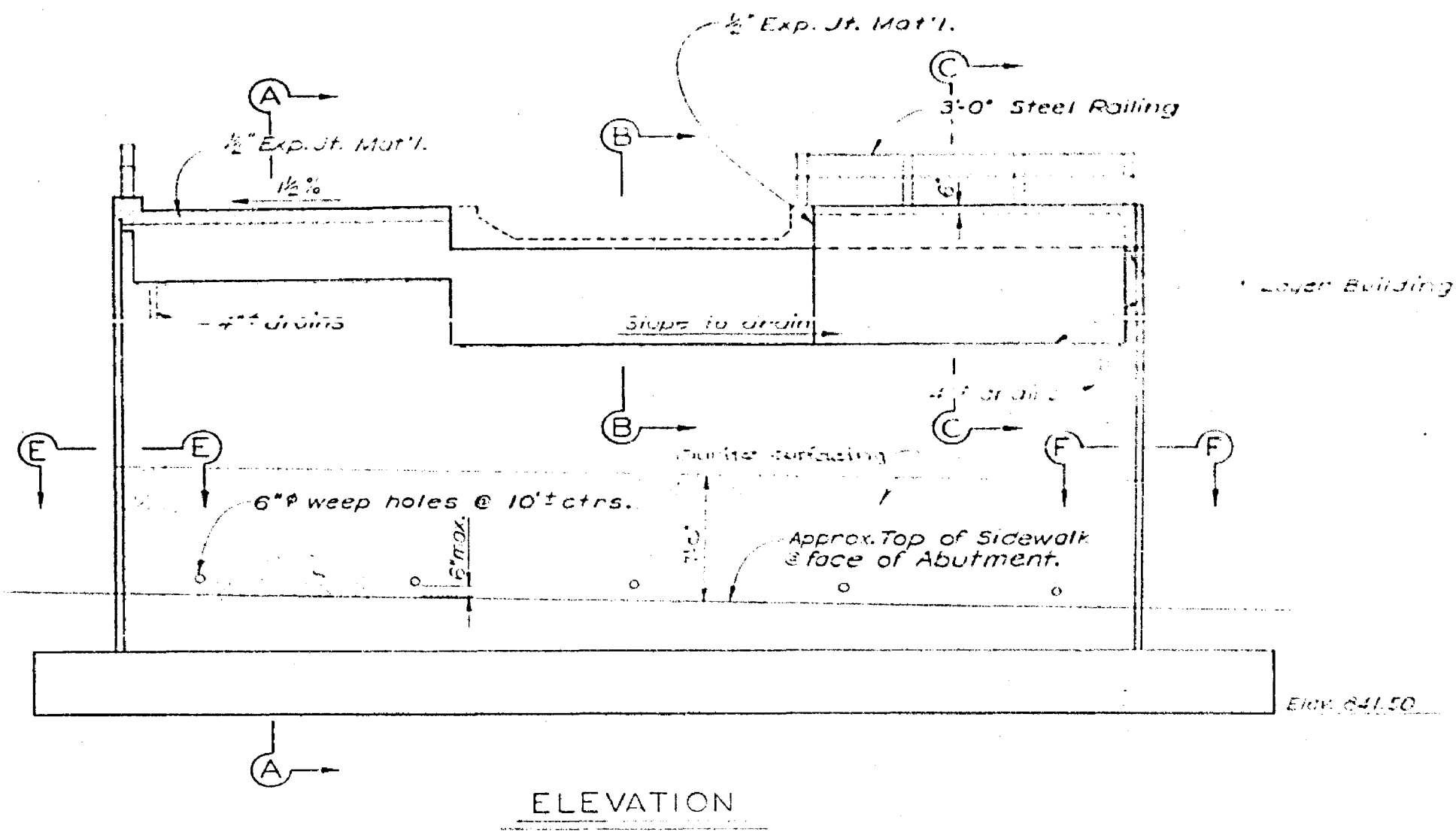
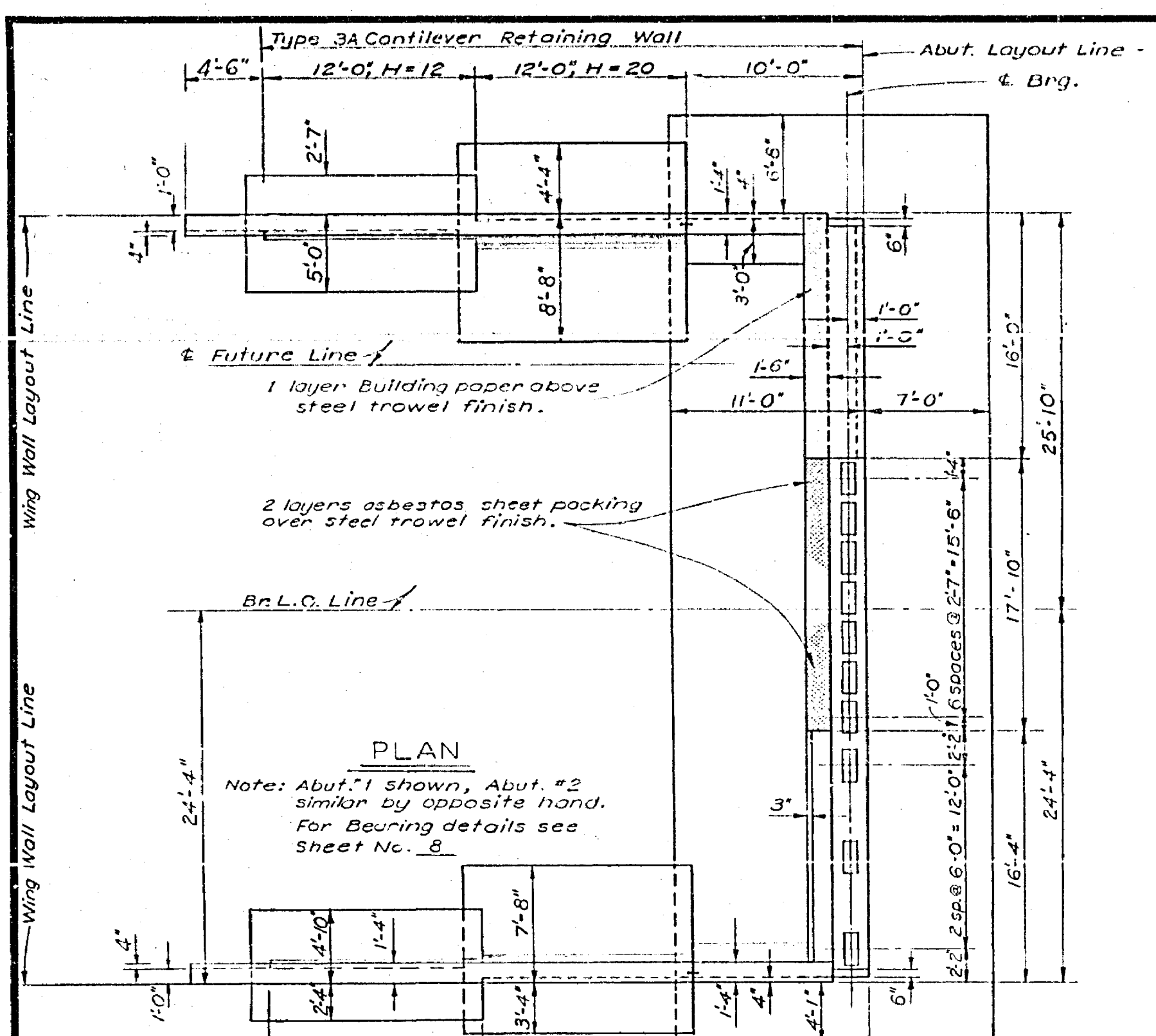
To ONTARIO

DESIGN SECTION		DIVISION OF HIGHWAYS	
Project Designer: <i>W. H. ...</i>		DATE: 1/19/57	
Chief Designer: <i>W. H. ...</i>		DRAWING NO. C-5113-2	
DESIGN	By: <i>W. H. ...</i>	SCALE	1" = 10'-0"
DETAILS	Checked: <i>W. H. ...</i>	BRIDGE NO.	4-19
QUANTITIES	Checked: <i>W. H. ...</i>	FILE	
SPECIFICATIONS	Checked: <i>W. H. ...</i>	DRAWING	C-5113-2
APPROVED	<i>W. H. ...</i>	PREL. DRAWING NO.	P-15412

35

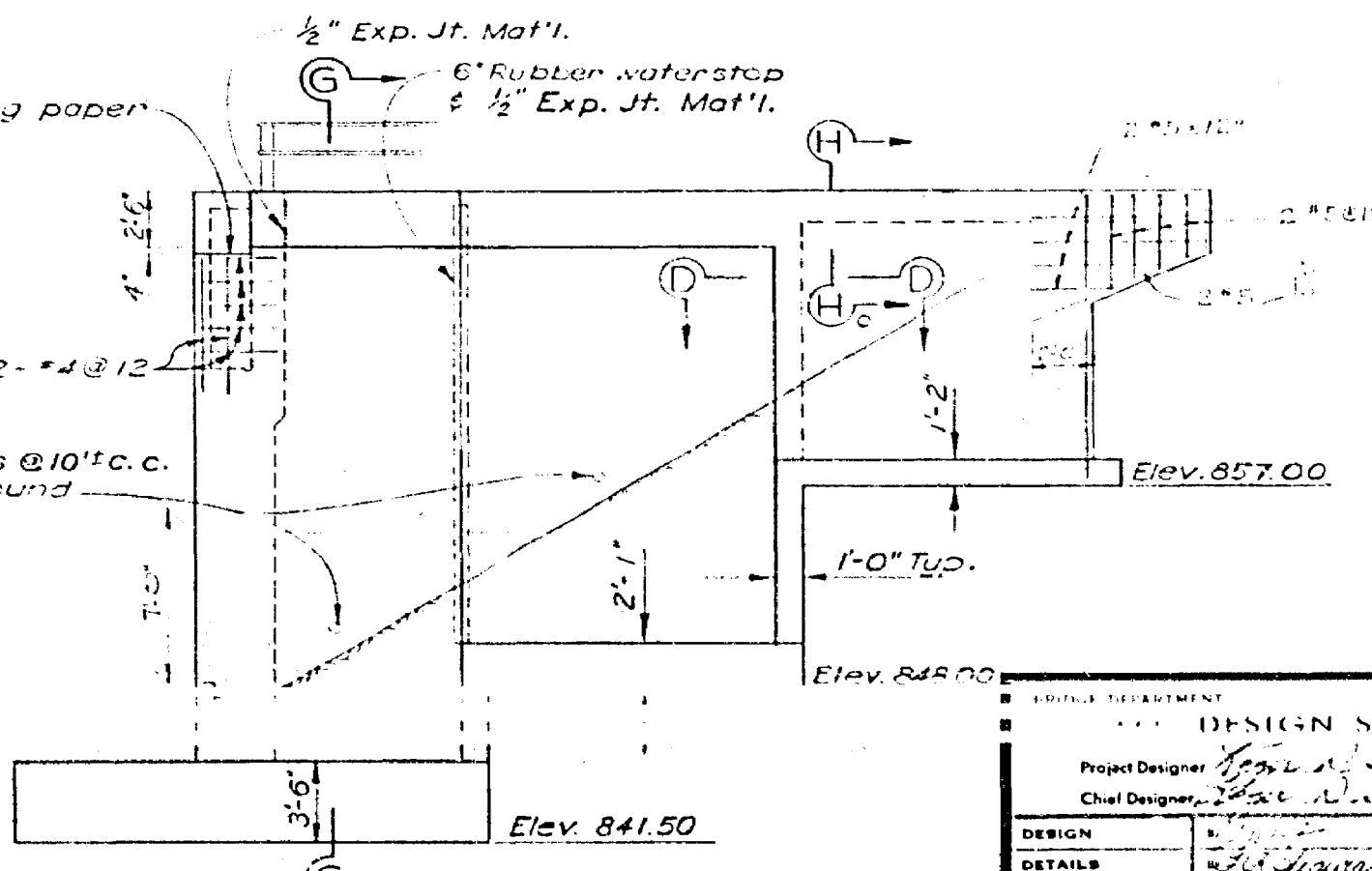
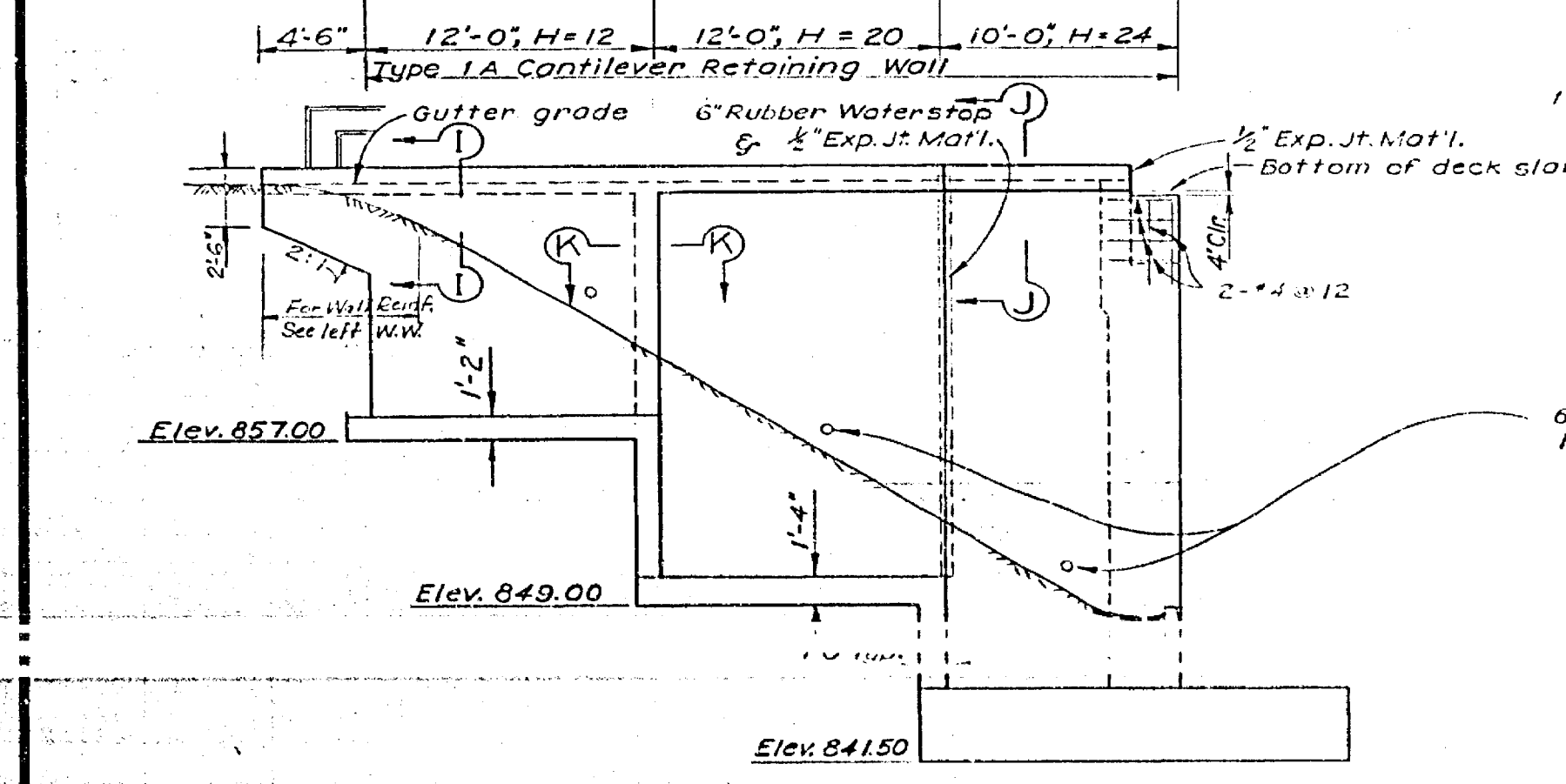
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	CALIF.				

DESIGNED BY	CHECKED BY	DATE
W. J.



SUMMARY OF ELEVATIONS

Abut. # 1 & 2	Elev.
Chnl. # 1	856.00
Chnl. # 2	857.00
Chnl. # 3	858.40
Chnl. # 4	859.18



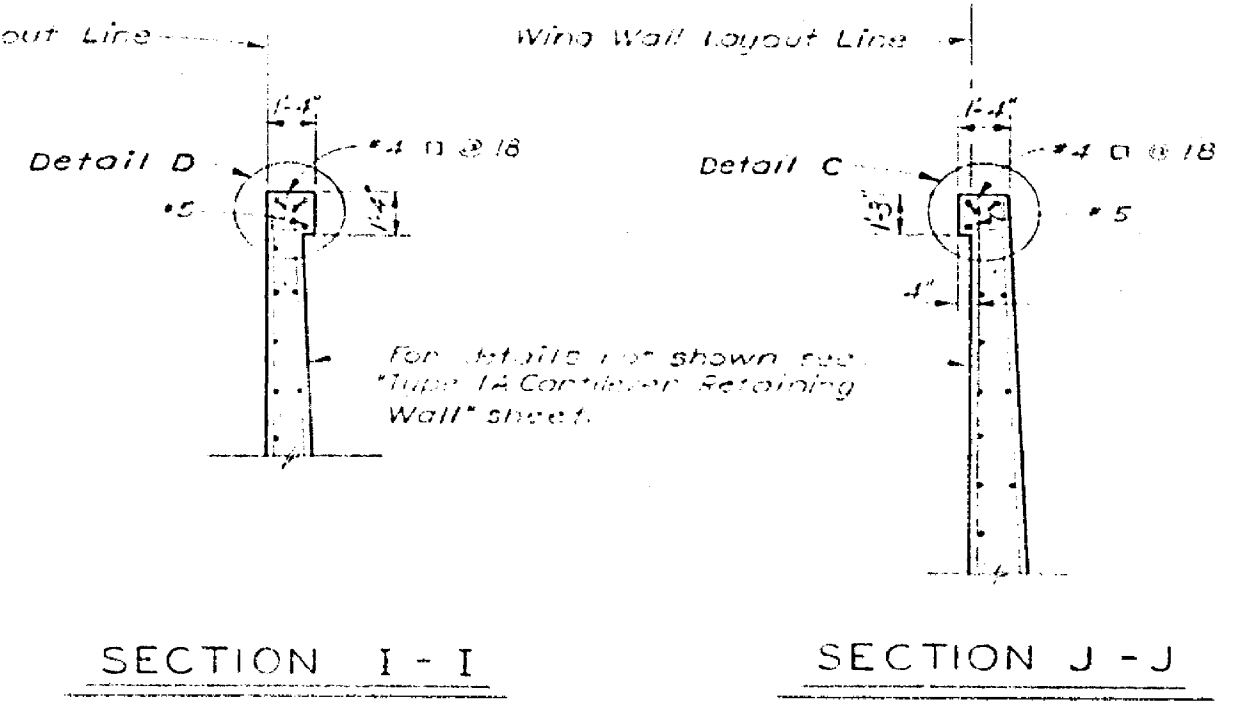
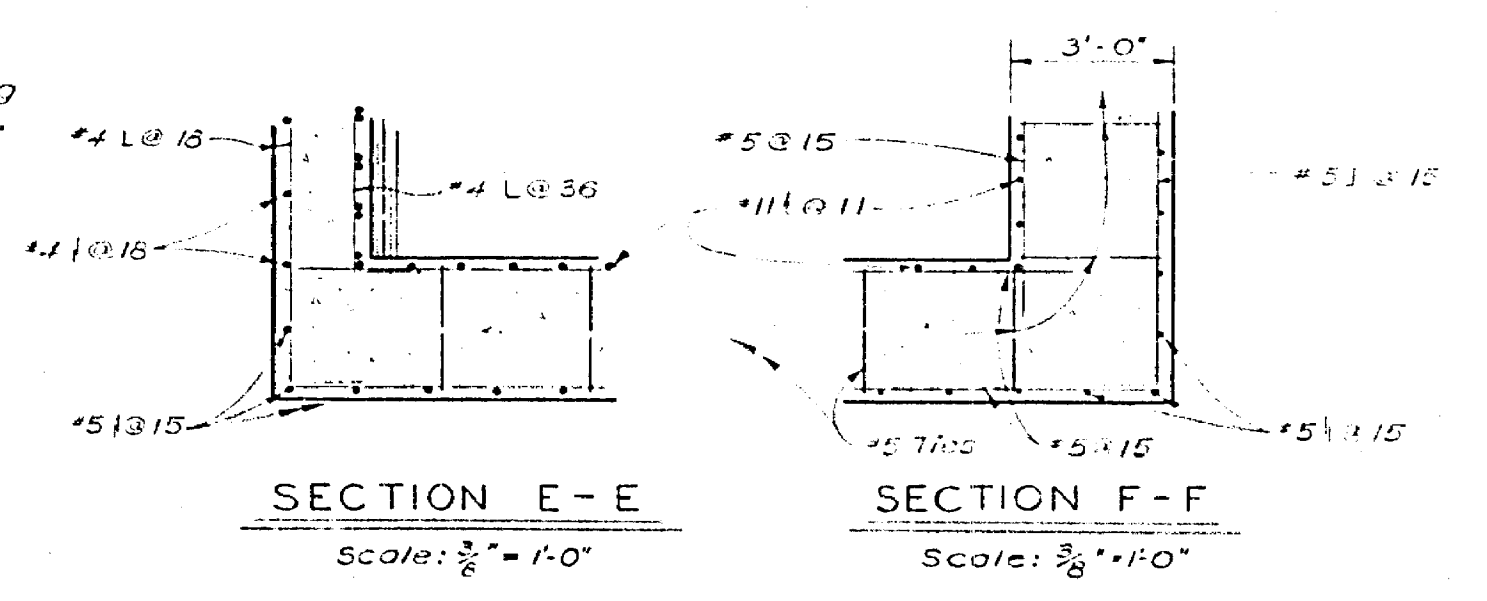
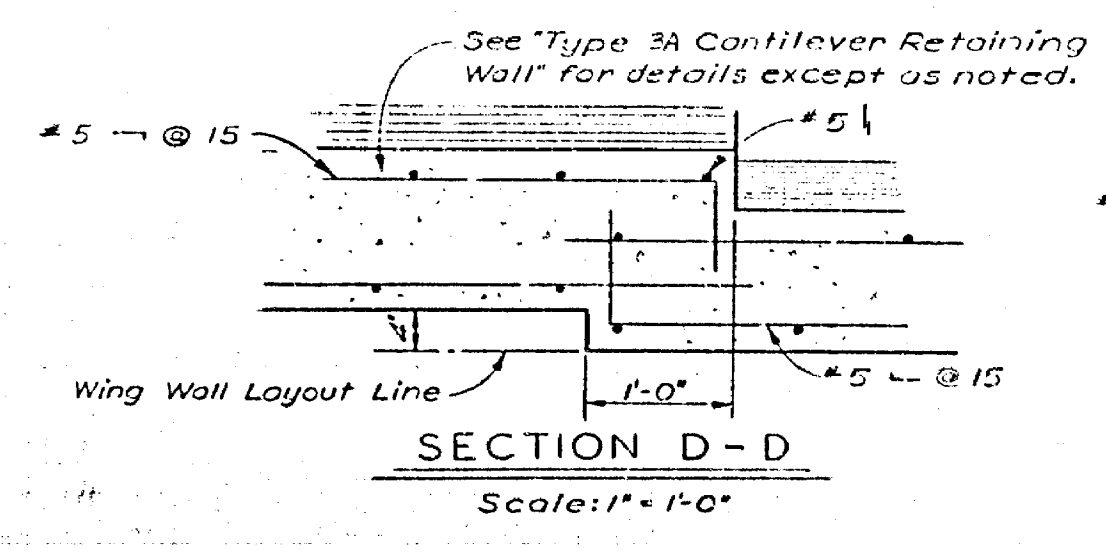
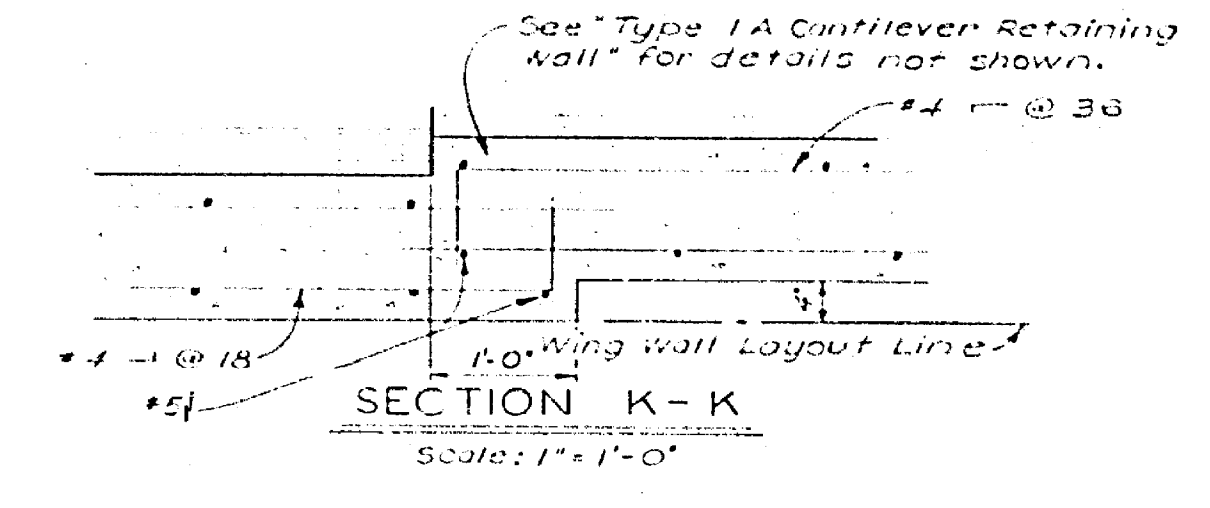
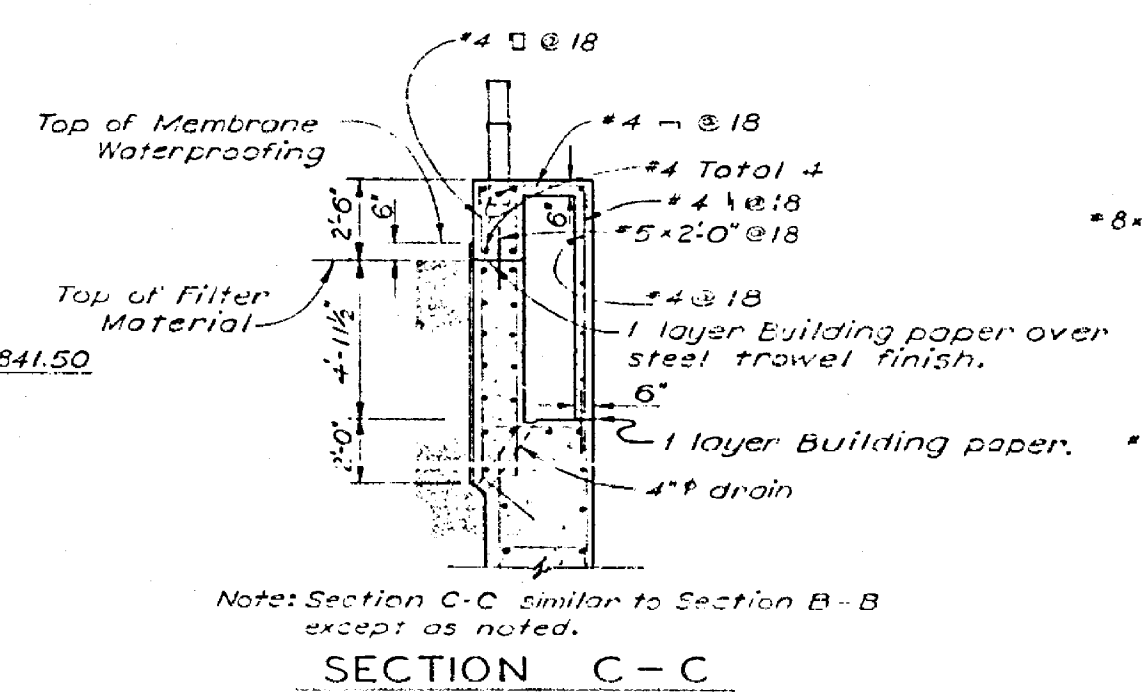
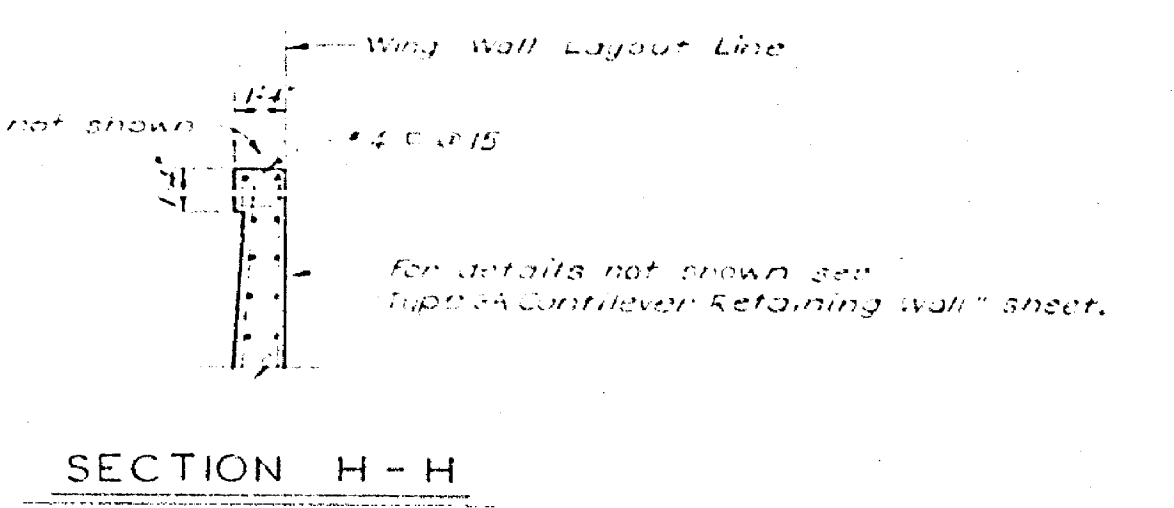
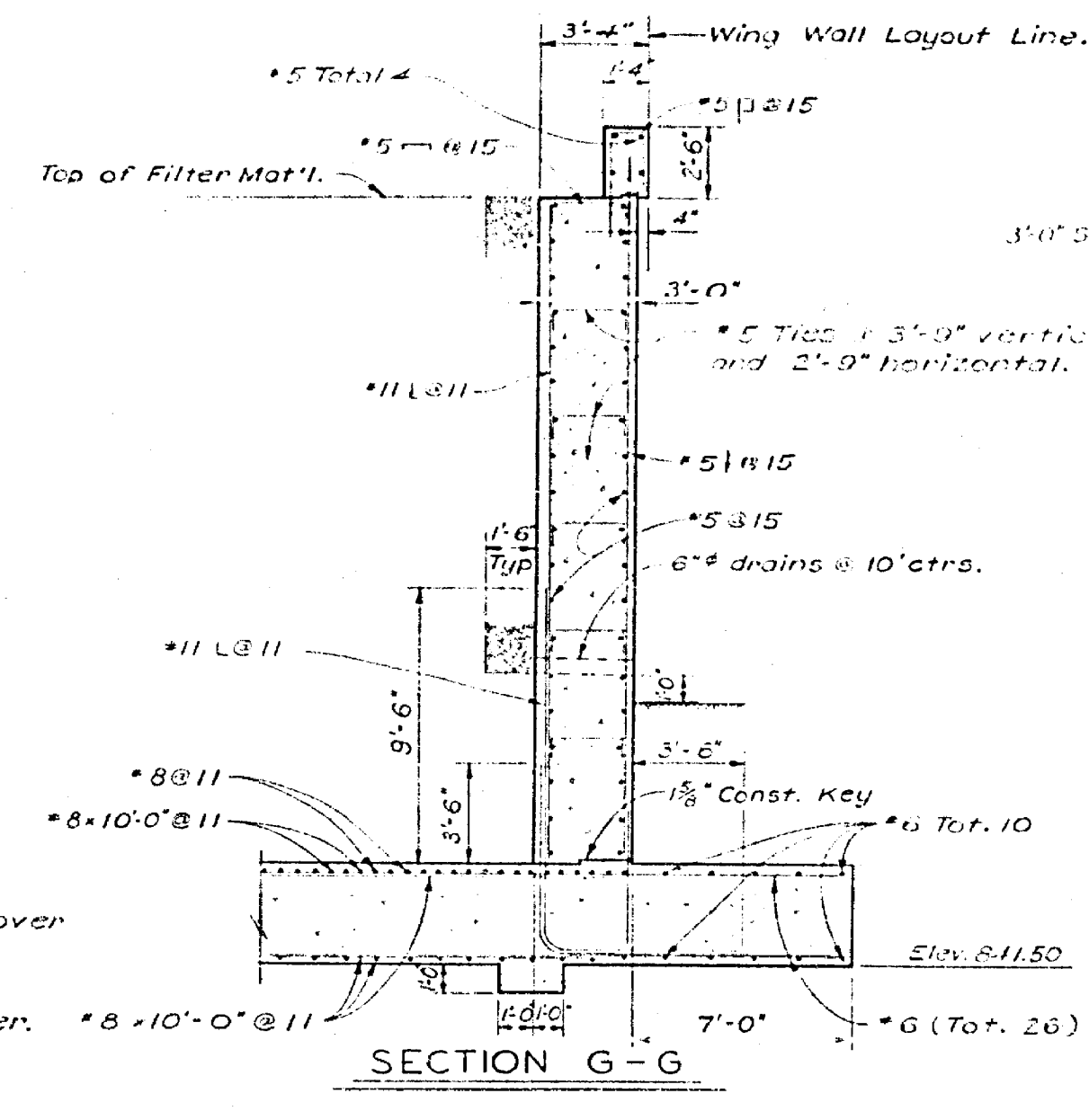
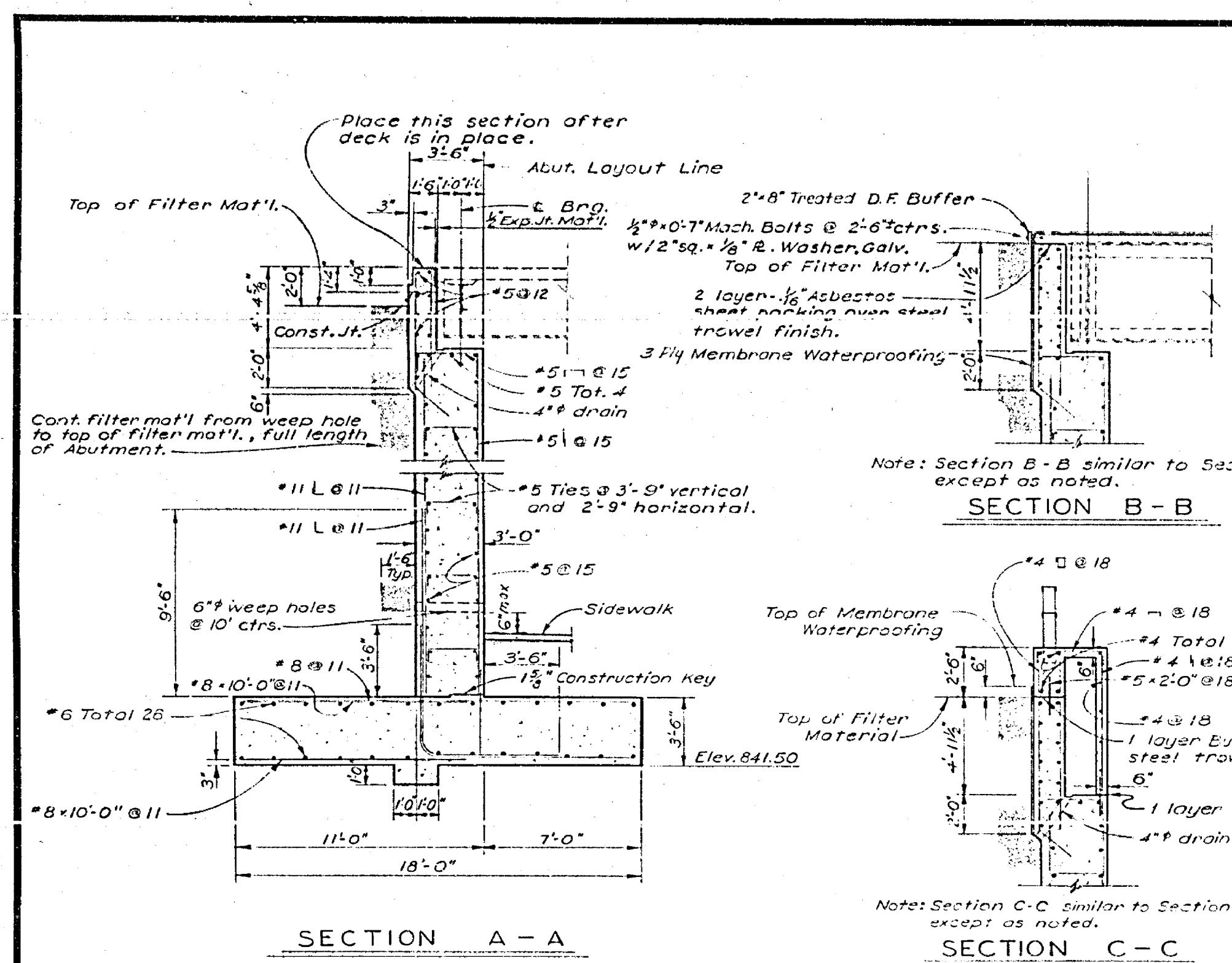
Notes: For Rubber Waterstop see "Type 3A Cantilever Retaining Wall" sheet, Det. W-1
 For Section A-A, B-B, C-C, D-D, E-E, F-F, G-G, H-H, I-I, J-J, & K-K see "Abutment No. 1 & 2 Details" sheet.

DESIGN SECTION	3
Project Designer	W. J. ...
Chief Designer	...
DESIGN	...
DETAILS	...
QUANTITIES	...
SPECIFICATIONS	...

VINE STREET UNDERPASS			
56C-C.C. ABUTMENT NO. 1 & 2			
SCALE 3/4" = 1'-0"	BRIDGE 56-330	FILE	DRAWING C-5413-3
PREL. DRAWING NO. P. 1 & 2	1	33	

36

DATE	STATE	PROJECT NO.	FILE NO.	DATE	SCALE
7	CALIF.				

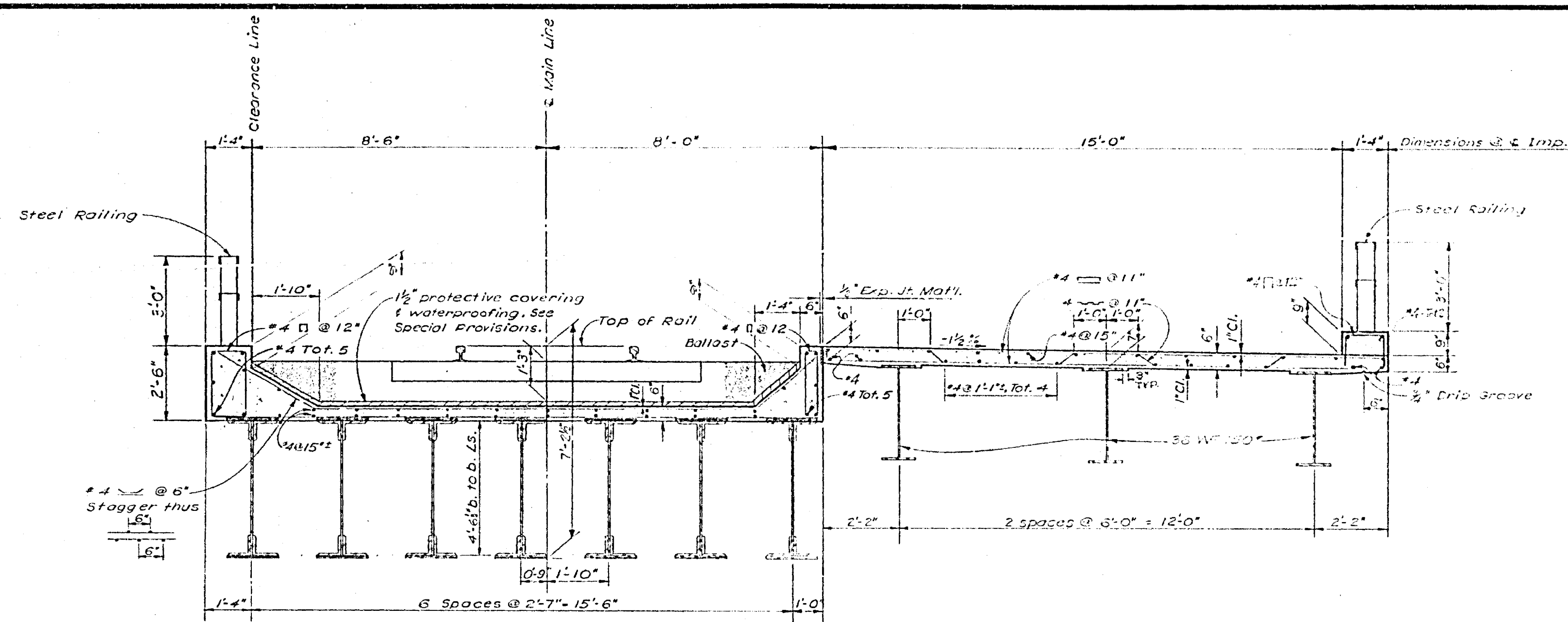


DESIGN SECTION 3		STATE OF CALIFORNIA DEPARTMENT OF PUBLIC WORKS DIVISION OF HIGHWAYS	
PROJECT DESIGNER: [Signature]		K-17287	
CHIEF DESIGNER: [Signature]		VINE STREET UNDERPASS	
DESIGN: [Signature]		562-60	
DETAILS: [Signature]		ABUTMENT NO. 1 & 2 DETAILS	
QUANTITIES: [Signature]		1" = 1'-0" EXCEPT SCALE AS NOTED	
SPECIFICATIONS: [Signature]		BRIDGE 495-334	
APPROVED: [Signature]		FILE	
DRAWING C-5413-4		DRAWING C-5413-4	
PREL. DRAWING NO. P-15413		FILE	

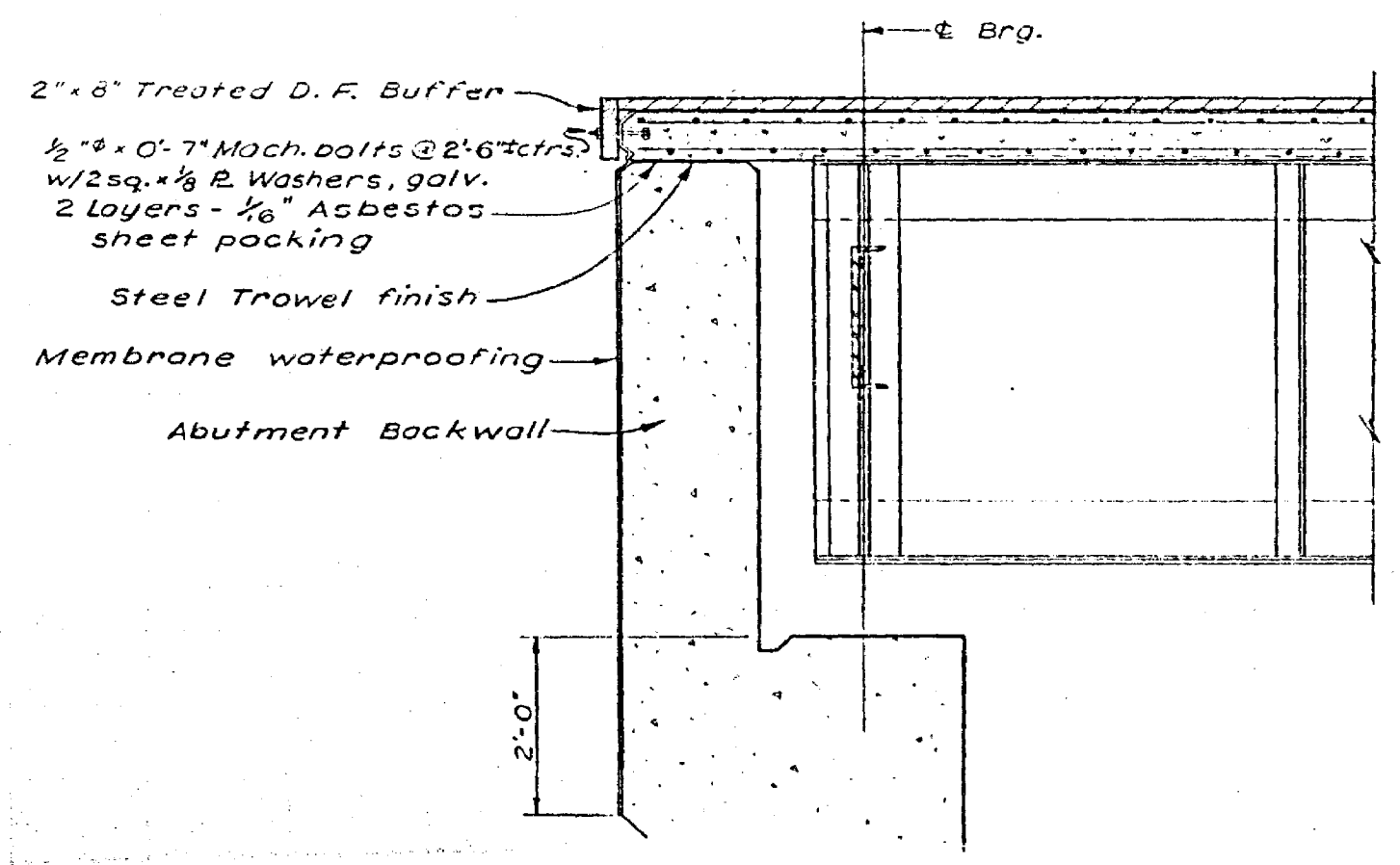
37

FED. HIGHWAY DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	CALIF.				

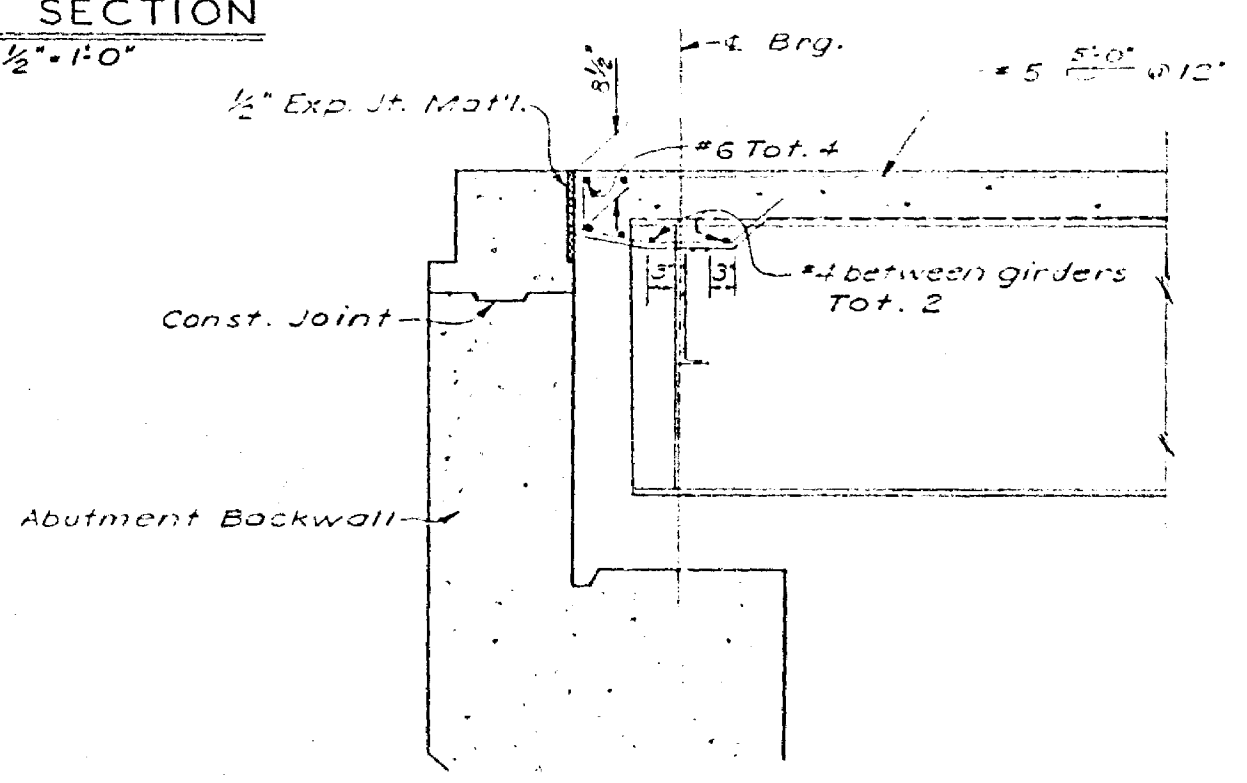
VIII
 RIV. 79
 CIV. 5-1-50
 M. S. ...
 SEPTEMBER 1, 1950



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



SECTION THRU ABUTMENT AT R.R.
Scale: 3/4" = 1'-0"



SECTION THRU ABUTMENT AT HIGHWAY
Scale: 3/4" = 1'-0"

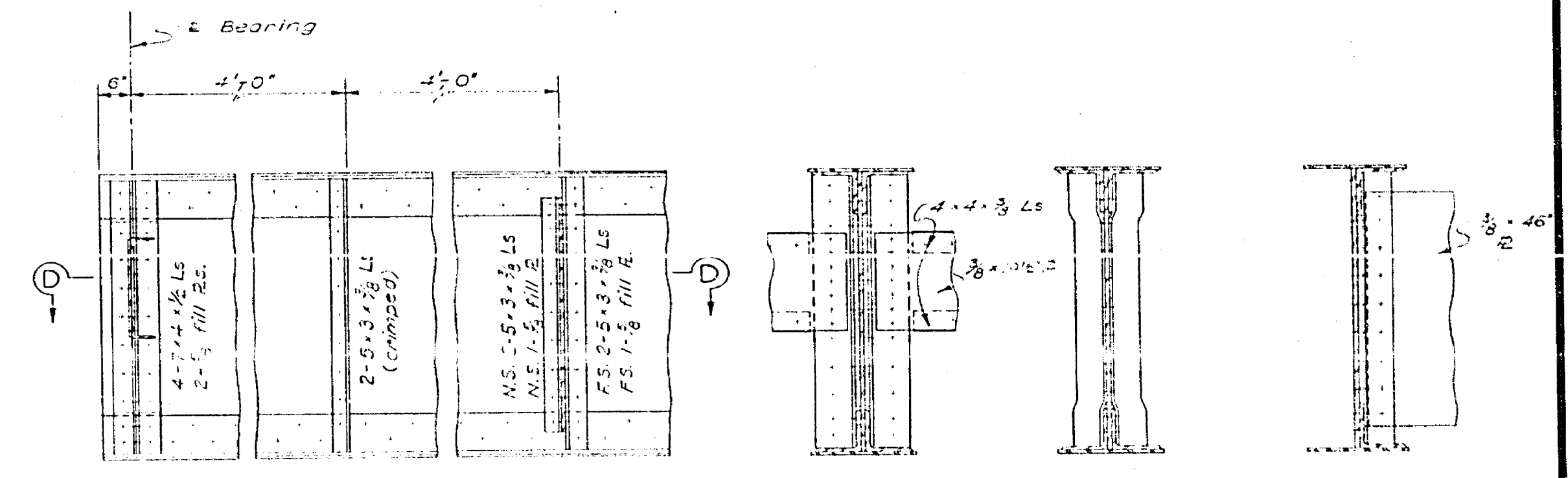
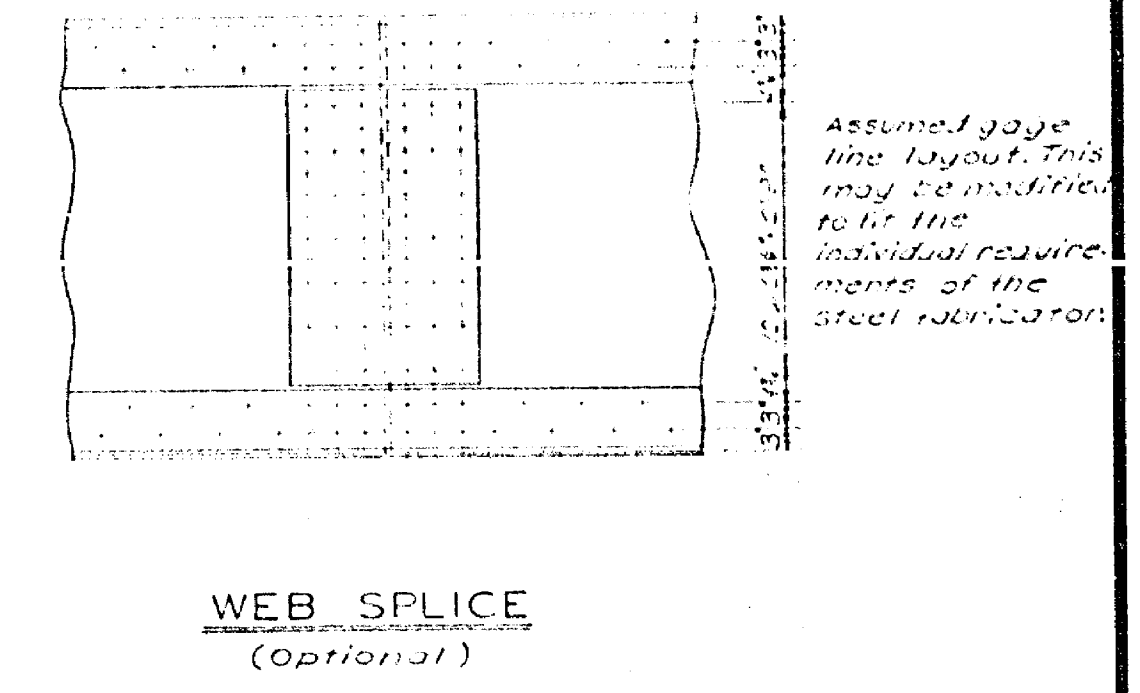
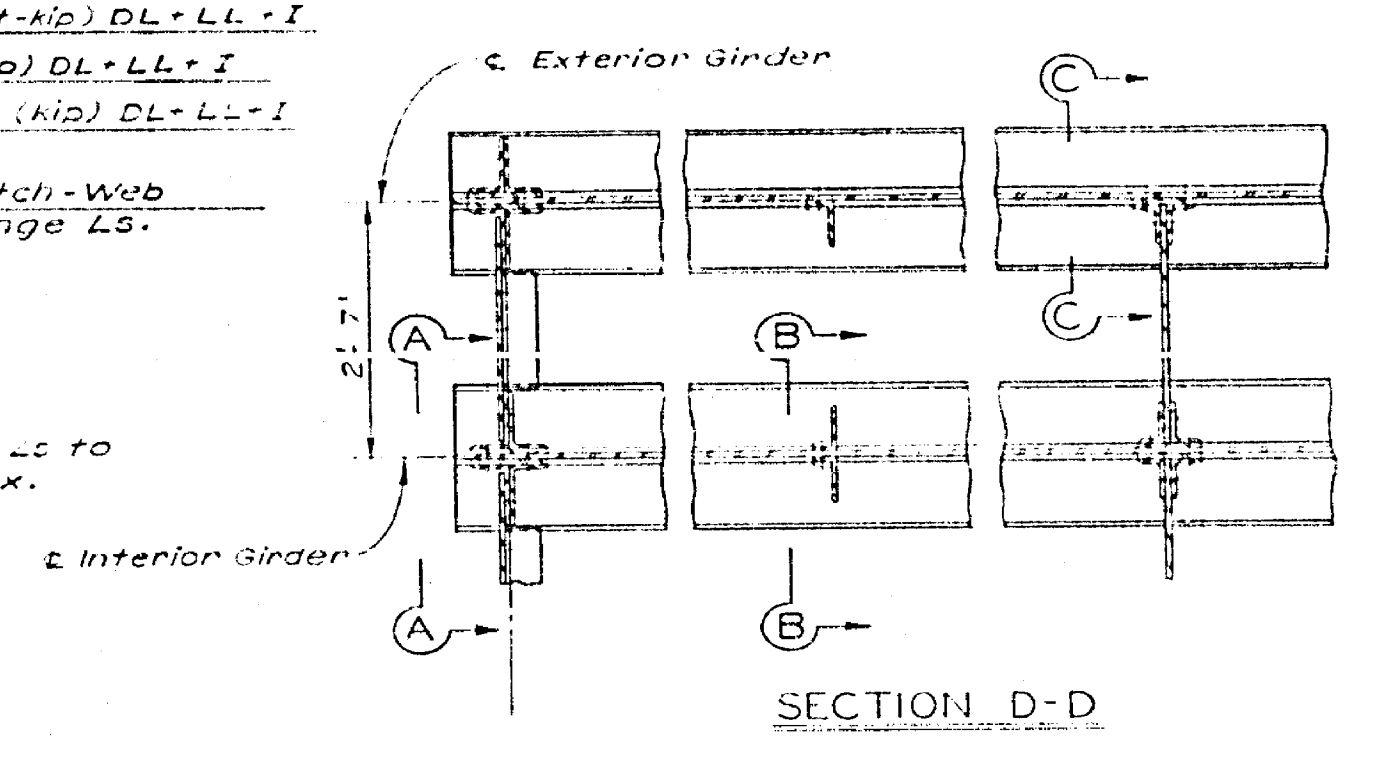
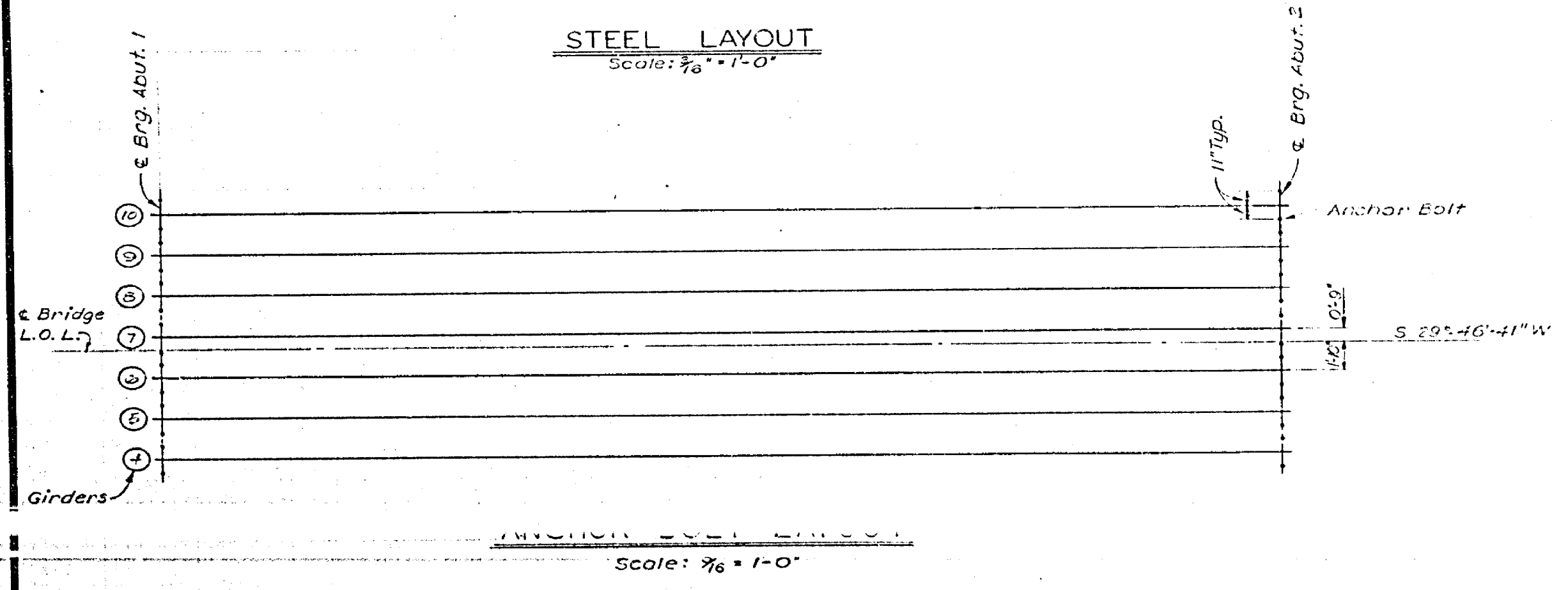
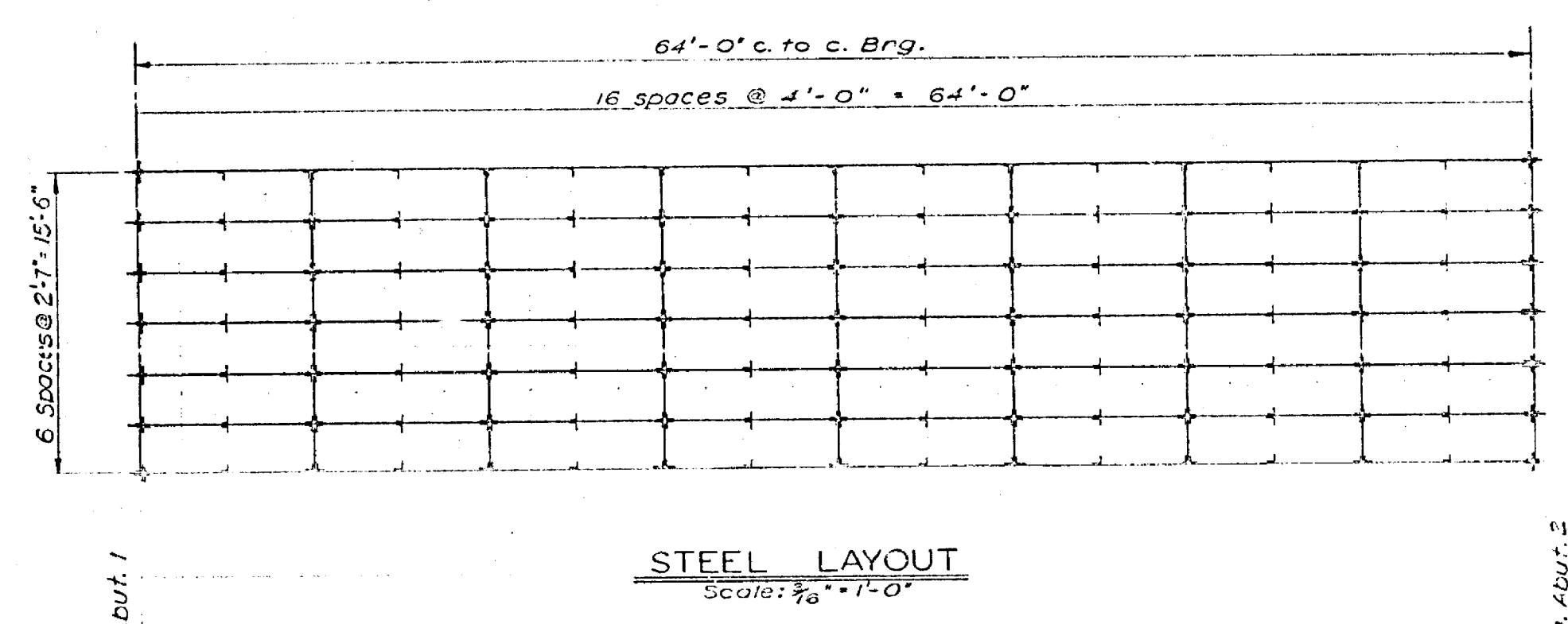
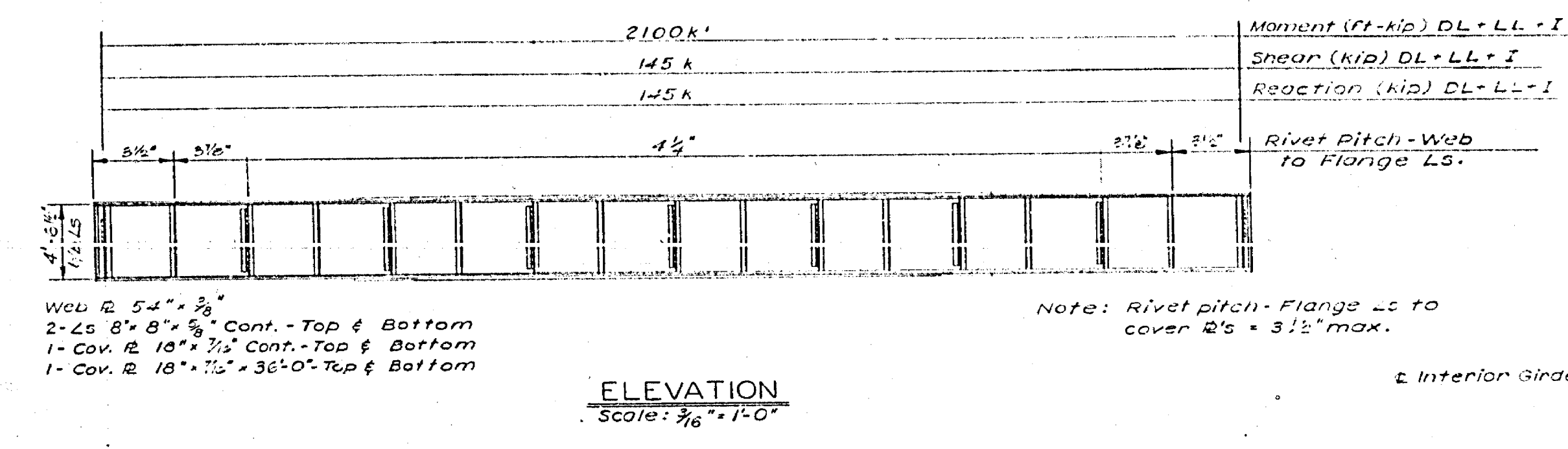
DESIGN SECTION	
Project Designer	<i>[Signature]</i>
Chief Designer	<i>[Signature]</i>
DESIGN	<i>[Signature]</i>
DETAILS	<i>[Signature]</i>
QUANTITIES	<i>[Signature]</i>
SPECIFICATIONS	<i>[Signature]</i>
Approved	<i>[Signature]</i>

STATE OF CALIFORNIA	
DEPARTMENT OF PUBLIC WORKS	
DIVISION OF HIGHWAYS	
P-1751	
VINE STREET UNDERPASS	
SEC-60 TYPICAL SECTION	
SCALE AS NOTED	BRIDGE 400-830
FILE	DRAWING
PREL. DRAWING NO. P. 5	3 10 0

DESIGN NO.	STATE	PROJECT NO.	SECTION	DATE
7	CALIF.			

DATE	COUNTY	ROUTE	SECTION	POST MILES	STATION
1/11	ALV	15	ALV	6	12

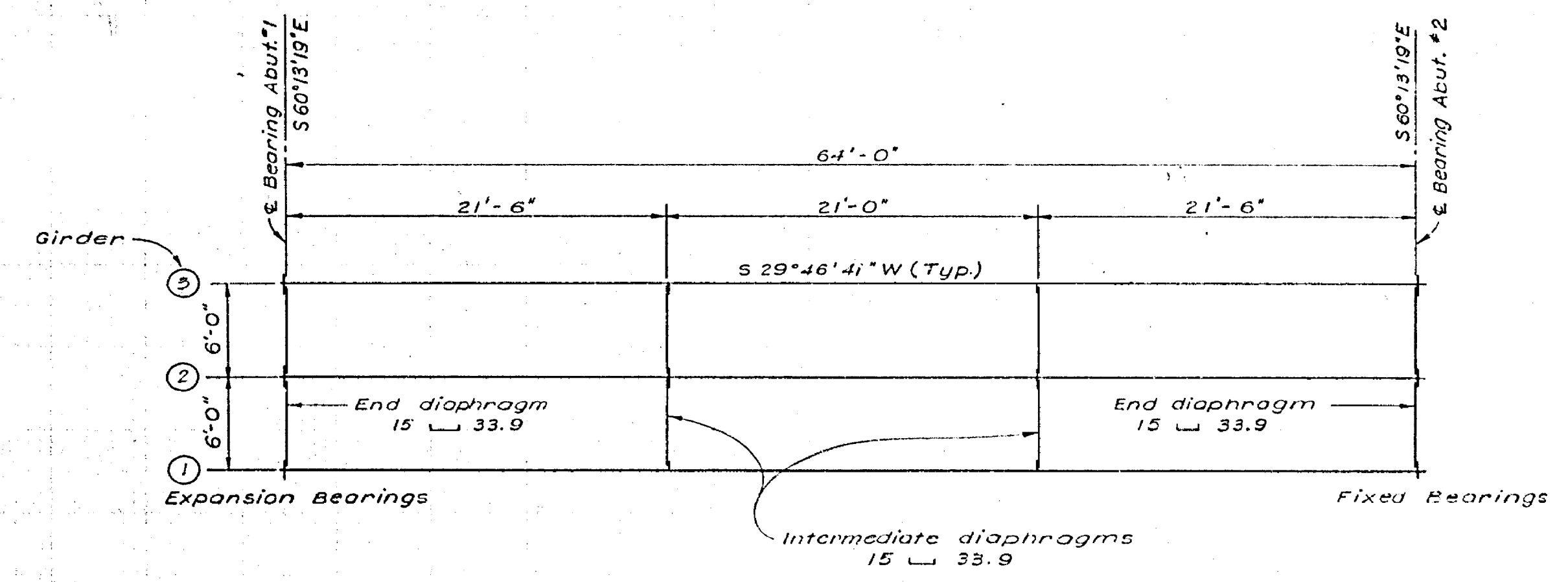
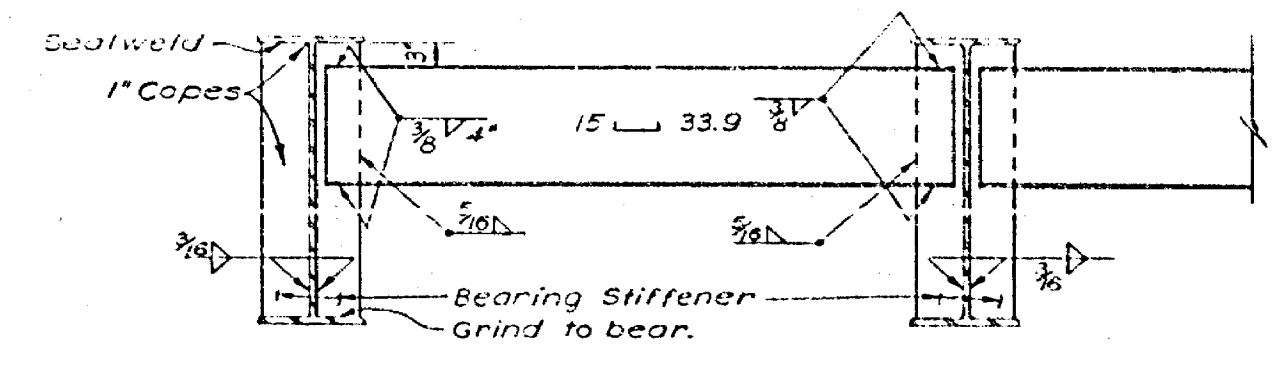
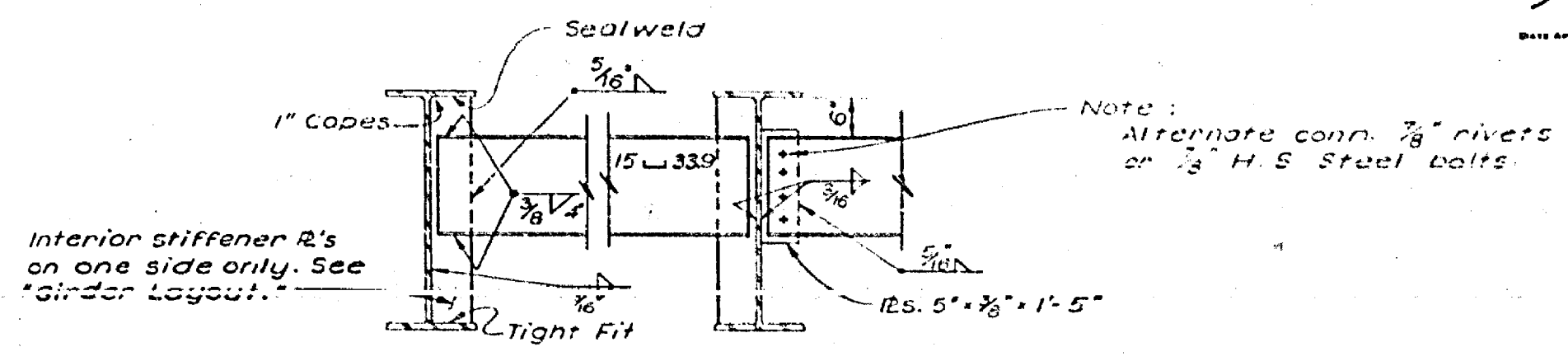
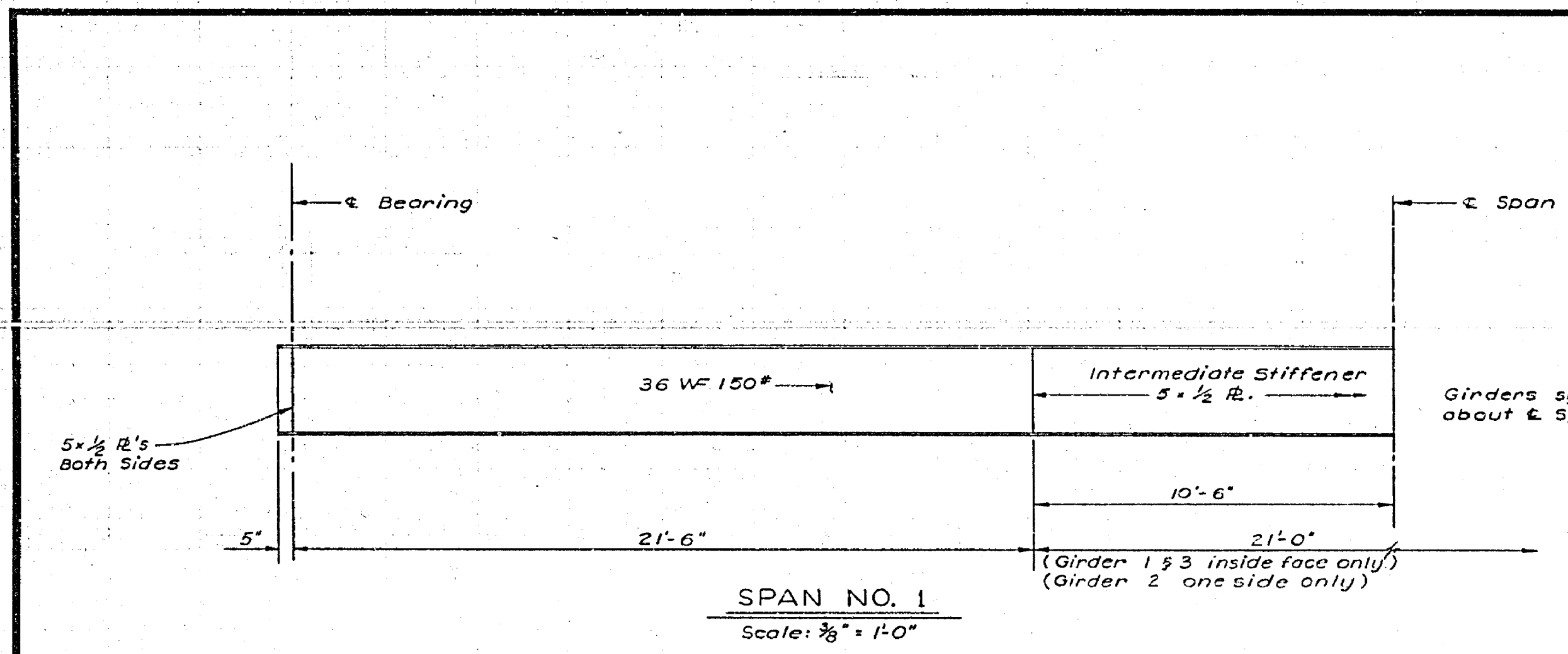
Beard
 DATE APPROVED: MARCH 11, 1937



Note:
 All rivets to be 7/8".
 If flange splices are necessary they shall be designed to A.R.E.A. specifications and submitted for approval.
 Flange splices shall be riveted.

BRIDGE DEPARTMENT DESIGN SECTION		STATE OF CALIFORNIA DEPARTMENT OF PUBLIC WORKS DIVISION OF HIGHWAYS	
3		K-1787	
VINE STREET UNDERPASS			
56C-6C			
STEEL LAYOUT & DETAILS, E75 LOADING			
DESIGN	DATE	SCALE	FILE
DETAILS	4-27	AS NOTED	
QUANTITIES	6-27		
SPECIFICATIONS			
APPROVED BY: <i>R. H. ...</i>		BRIDGE 3-3-39	DRAWING 5413-6
PREL. DRAWING NO. P-5413 10/21			

CITY	COUNTY	STATE	PROJ. NO.	TITLE	SHEET NO.	TOTAL SHEETS
7	CALIF.					
REV.		DATE	BY	CHKD.		
VIII		RIV. 19	RIV. 7	RIV. 12		



... DESIGN SECTION ... **3**

DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS
A-1187

VINE STREET UNDERPASS
56 C-60
GIRDER LAYOUT & DETAILS, H 15 S12-44

DESIGN	DATE	BY	CHKD.
DETAILS	8-57
QUANTITIES	8-57
SPECIFICATIONS			

SCALE AS NOTED BRIDGE 56-330 FILE DRAWING C-5413-P

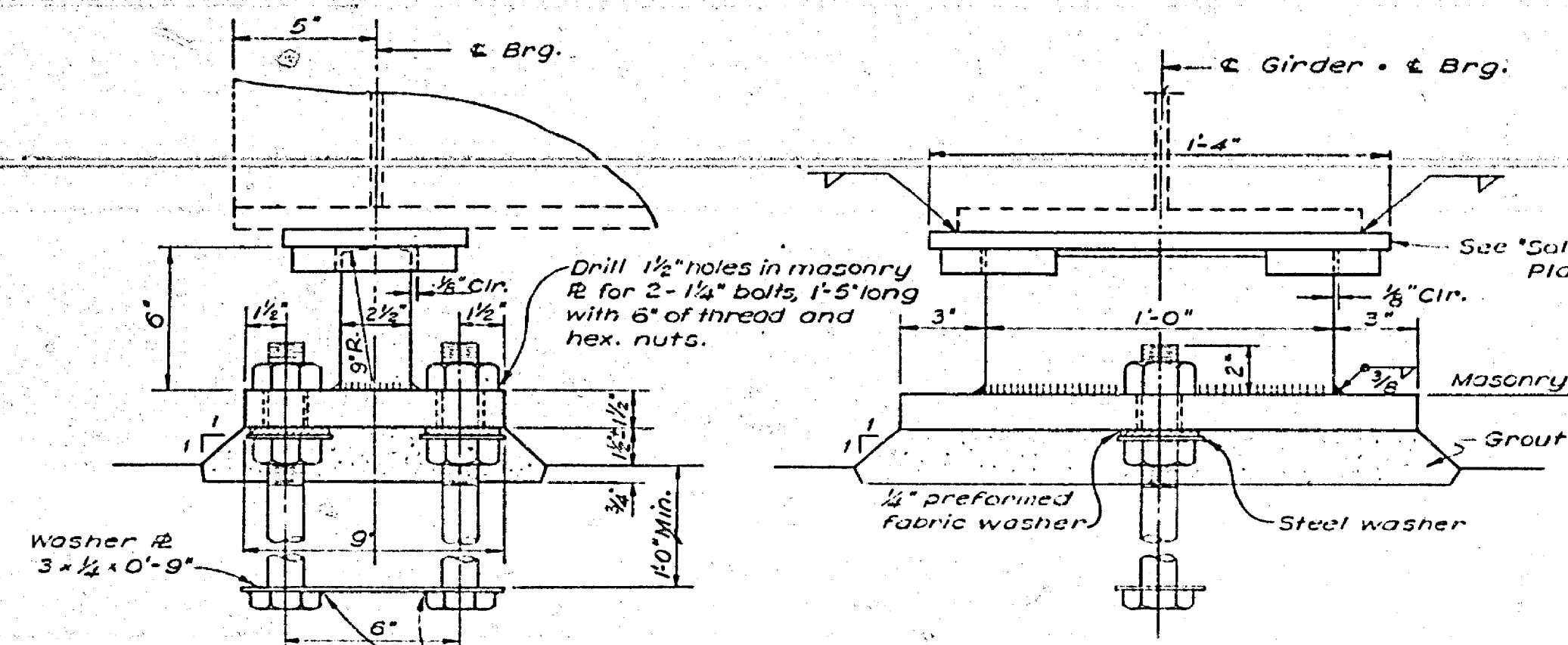
PREL. DRAWING NO. P. 5413 11/10/60

40

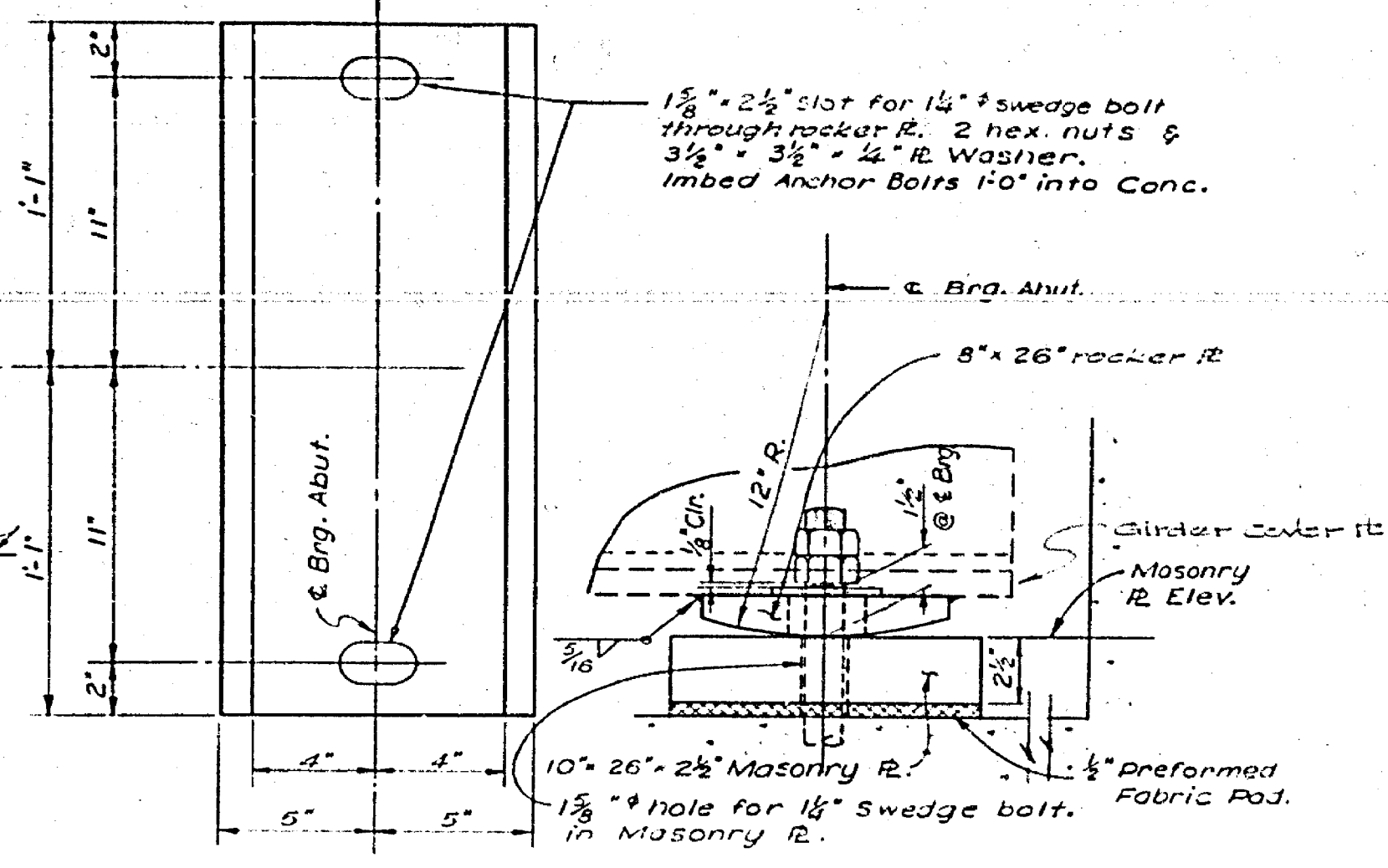


Rev.	By	Date	Checked	Scale	Notes
VIII	RIV	10	RIV	2	

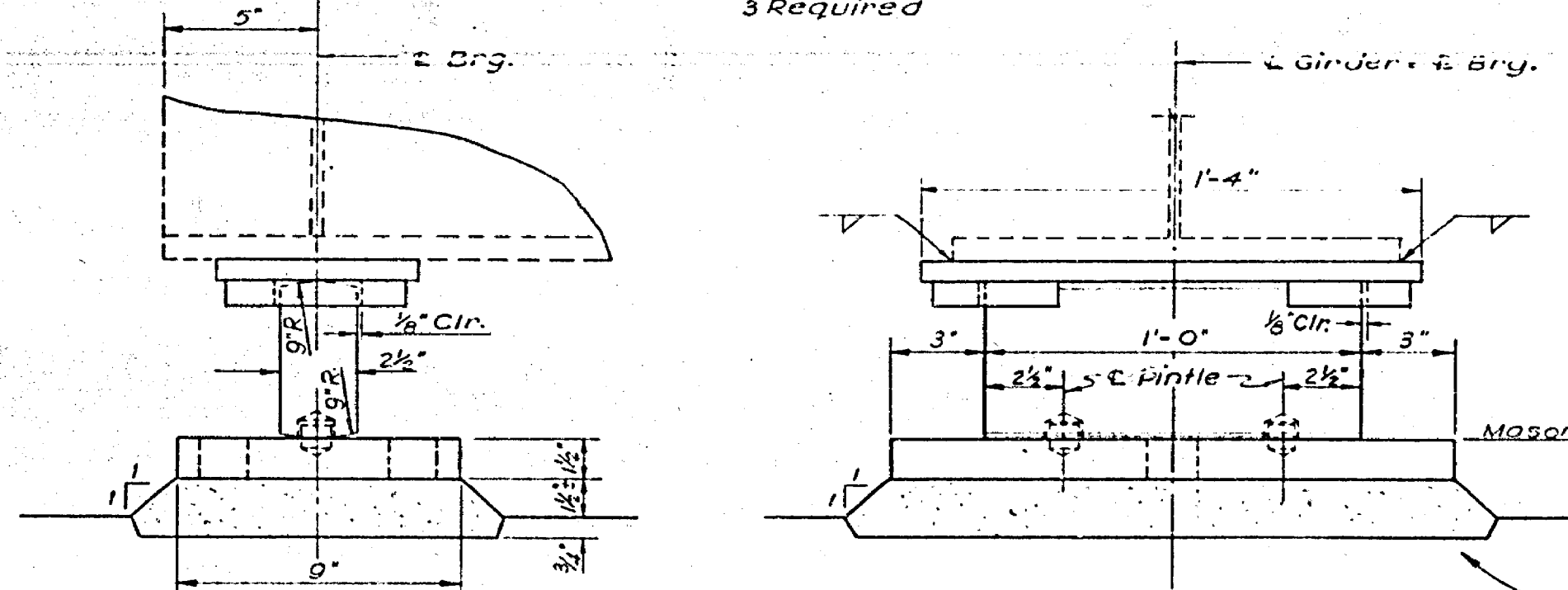
SEP 11 1958
 STATE OF CALIFORNIA
 DEPARTMENT OF PUBLIC WORKS
 DIVISION OF HIGHWAYS



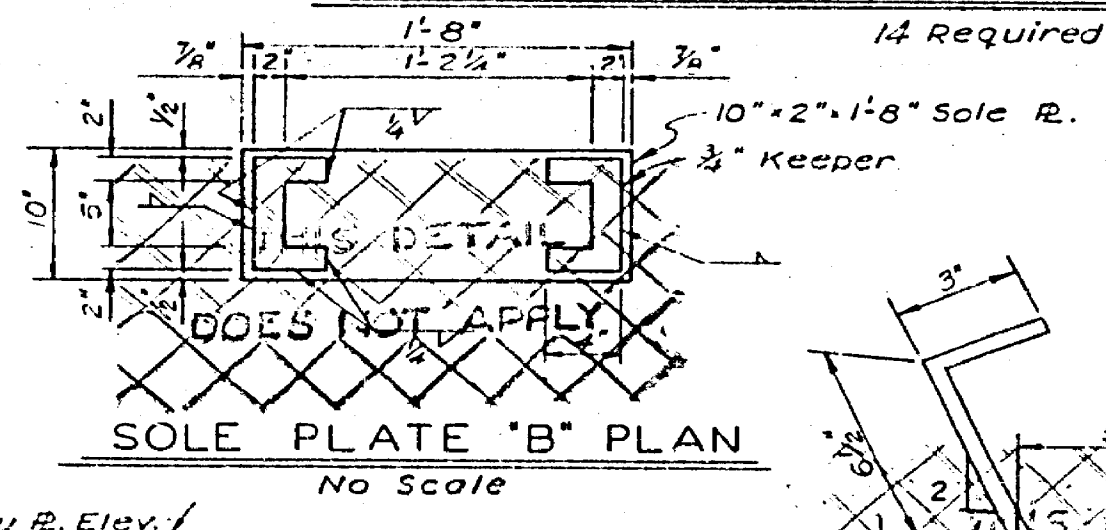
FIXED BEARING ASSEMBLY - HIGHWAY BRIDGE
3 Required



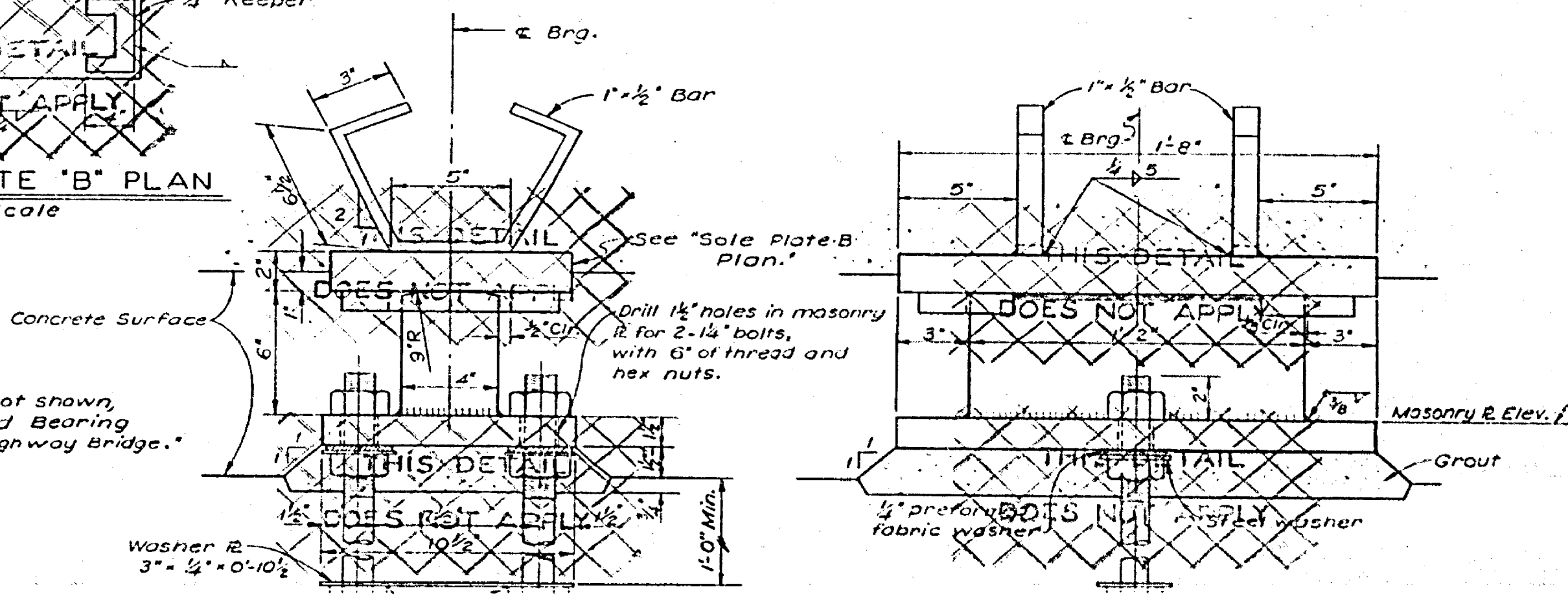
BEARING ASSEMBLY - RAILROAD BRIDGE
1/4 Required



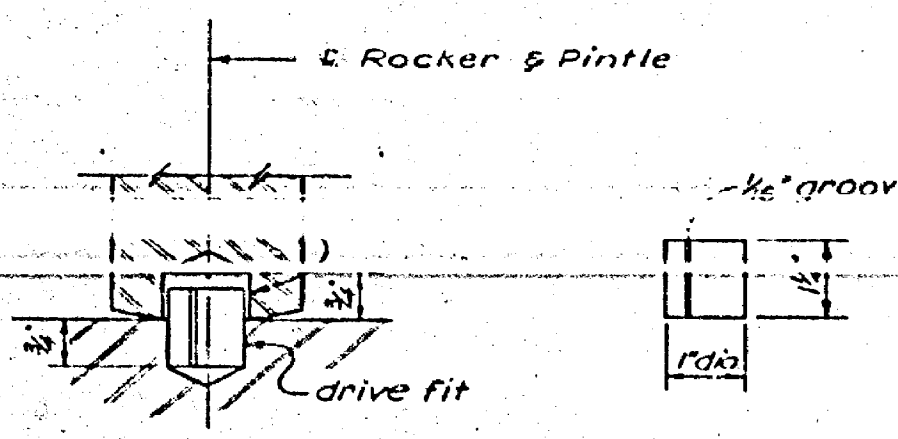
EXPANSION BEARING ASSEMBLY - HIGHWAY BRIDGE
3 Required



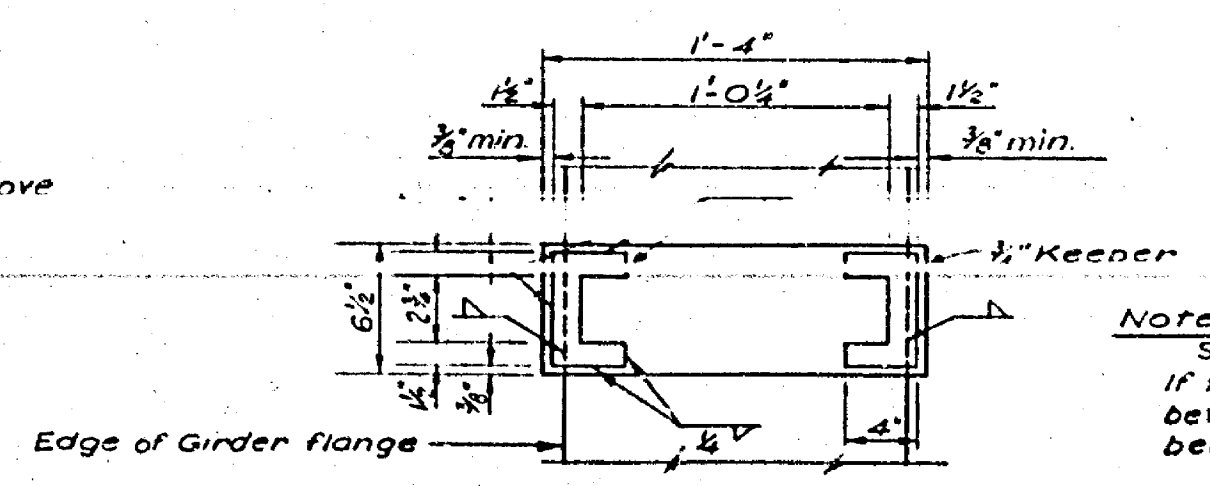
SOLE PLATE 'B' PLAN
No Scale



BEARING ASSEMBLY - FLUME BRIDGE
Required



PINTLE DETAIL
Scale: 1/2" = 1"



SOLE PLATE 'A' PLAN
No Scale

Note: Sole plate 'A' 3/8" min. thickness. If the girder has a grade of 2% or more, bevel the sole plate to provide a level bearing plane to the nearest 1/8".

BRIDGE DEPARTMENT		DESIGN SECTION		3	
Project Designer: <i>Norm R. Lindberg</i>					
Chief Designer: <i>Robert D. Lindberg</i>					
DESIGN	By: <i>W. J. C.</i>	Checked: <i>W. J. C.</i>			
DETAILS	By: <i>W. J. C.</i>	Checked: <i>W. J. C.</i>			
QUANTITIES	By: <i>W. J. C.</i>	Checked: <i>W. J. C.</i>			
SPECIFICATIONS	By: <i>W. J. C.</i>	Checked: <i>W. J. C.</i>			
Approved & Submitted by: <i>W. J. C.</i>					

STATE OF CALIFORNIA		DEPARTMENT OF PUBLIC WORKS		DIVISION OF HIGHWAYS	
VINE STREET UNDERPASS					
56 C-60					
BEARING DETAILS					
3" = 1'-0" Except	BRIDGE 1-6-4-2-2	FILE	DRAWING C-5413-B		
SCALE AS NOTED					
PREL. DRAWING NO. P-15-113					

Revised
Offset Diagram
10-56 F.Y.

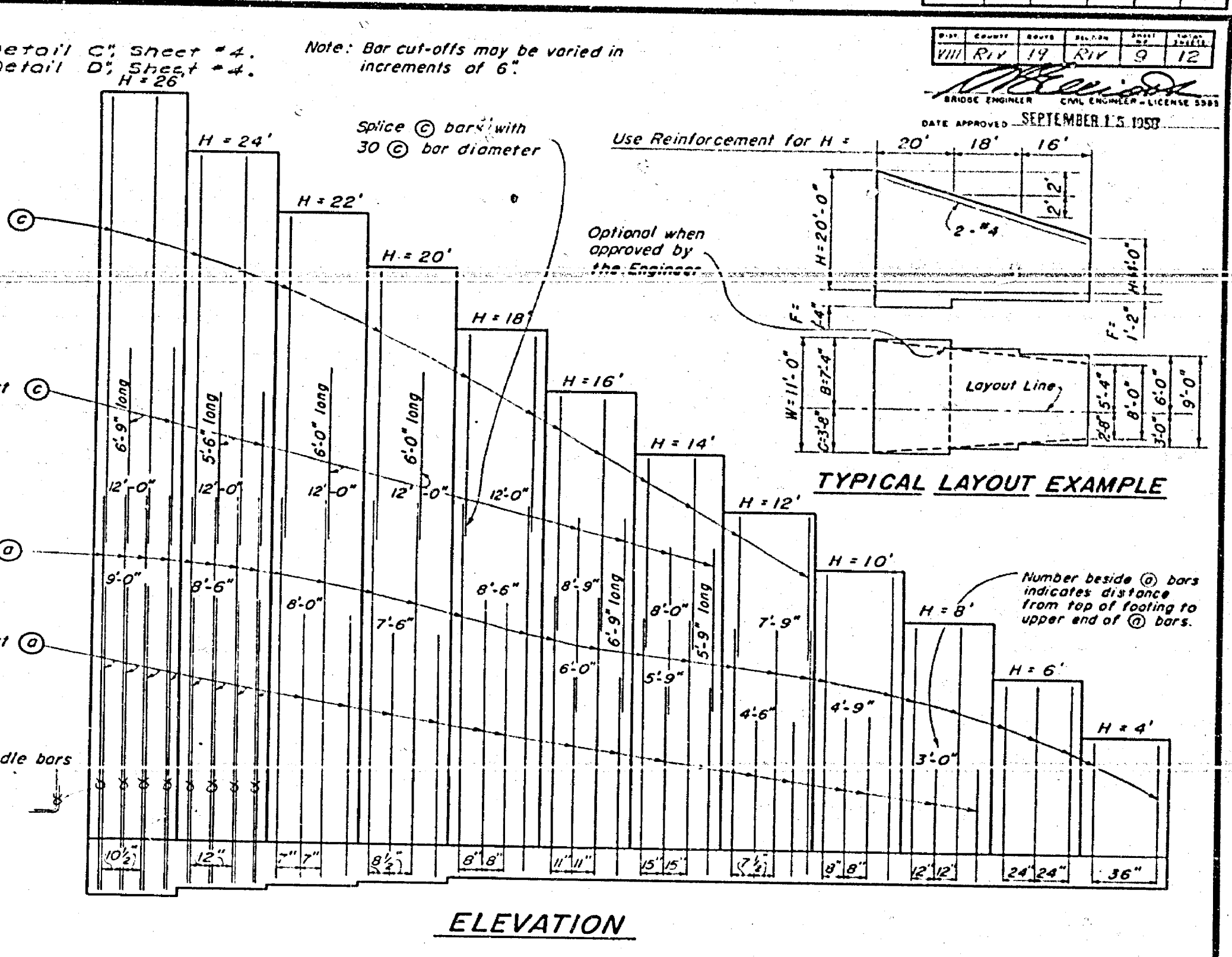
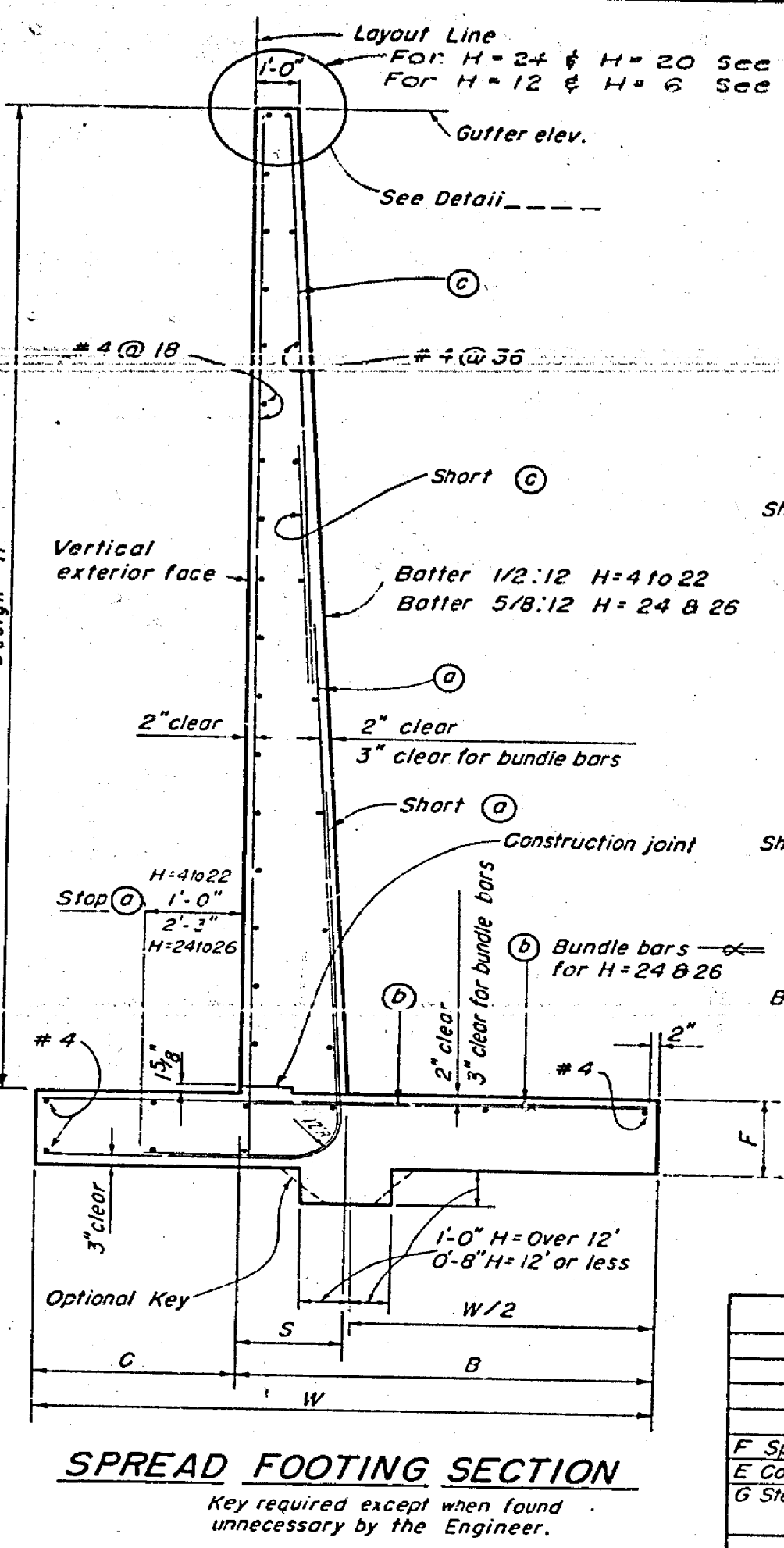
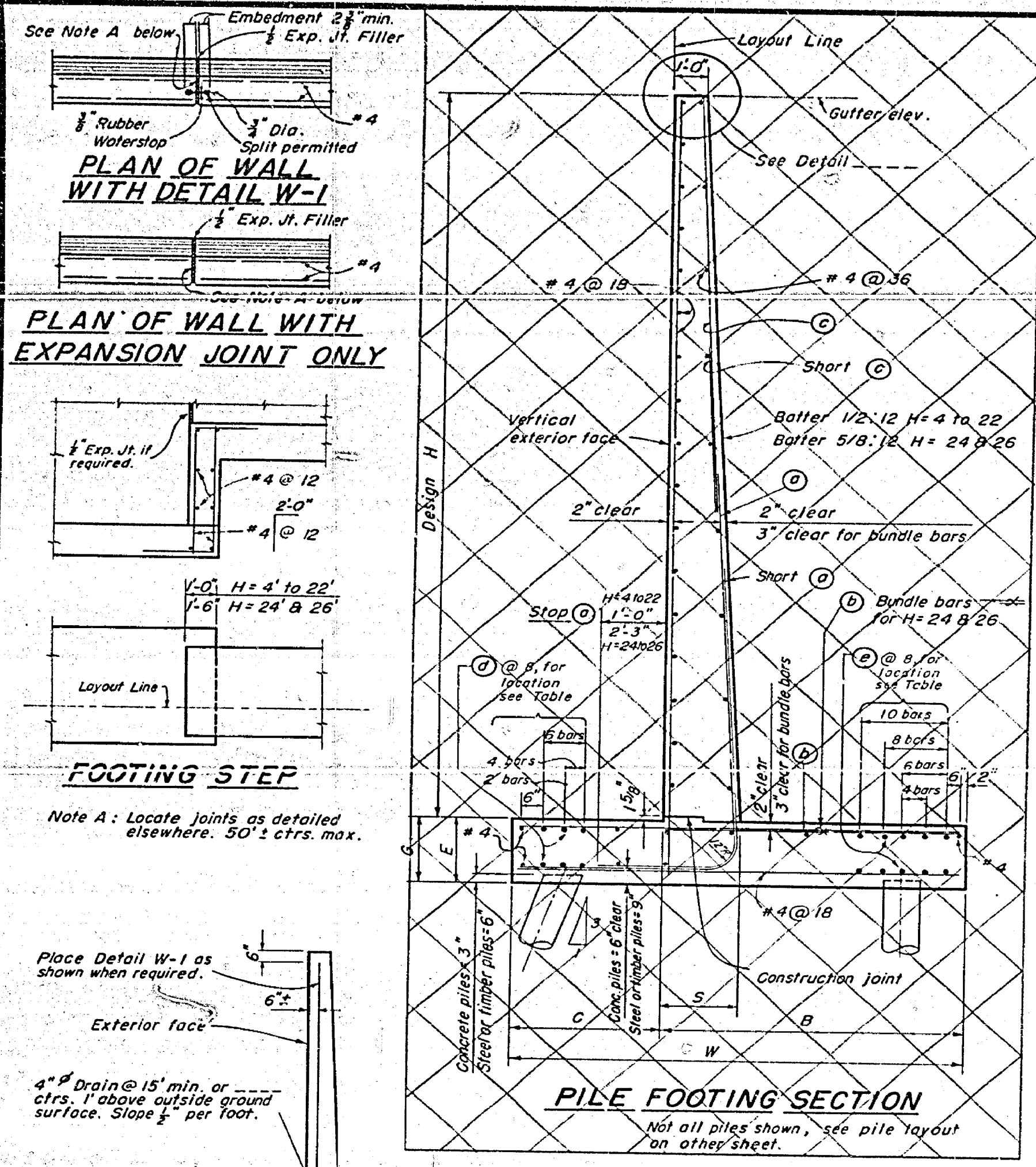
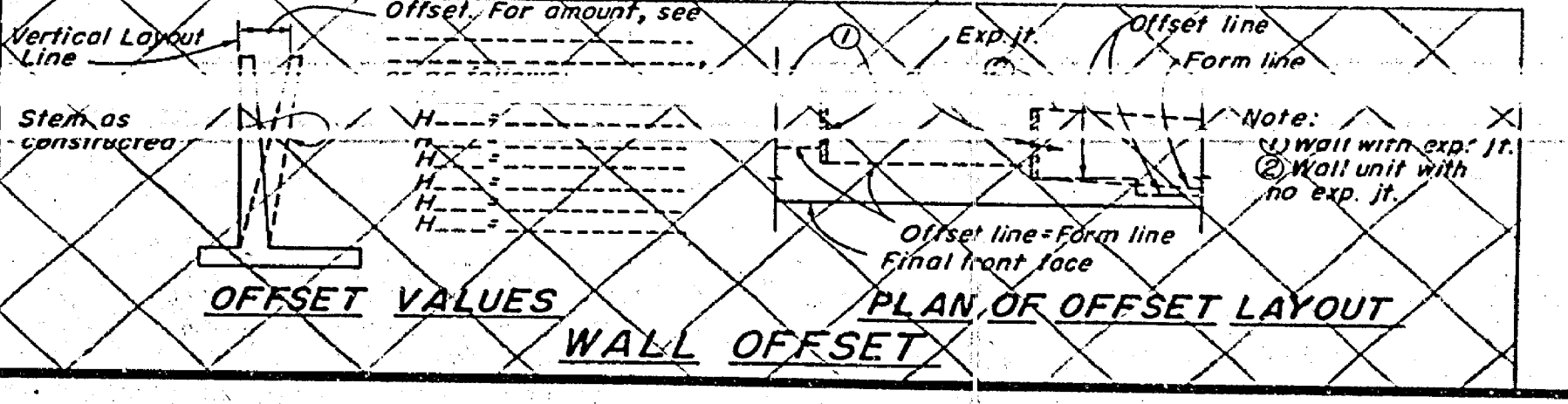
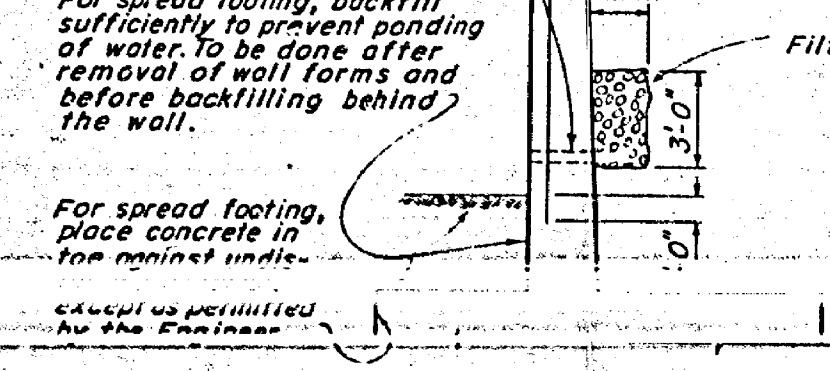


TABLE OF REINFORCING STEEL DIMENSIONS AND DATA

H	26'	24'	22'	20'	18'	16'	14'	12'	10'	8'	6'	4'
W	14'-3"	13'-3"	12'-0"	11'-0"	10'-0"	9'-0"	8'-0"	7'-2"	6'-2"	5'-2"	4'-2"	3'-2"
C	4'-9"	4'-5"	4'-0"	3'-9"	3'-4"	3'-0"	2'-8"	2'-4"	1'-8"	1'-8"	1'-4"	1'-0"
B	9'-6"	8'-10"	8'-0"	7'-9"	6'-8"	6'-0"	5'-4"	4'-10"	4'-2"	3'-6"	2'-10"	2'-2"
F Spread Ftg.	1'-10"	1'-8"	1'-6"	1'-4"	1'-2"	1'-2"	1'-2"	1'-2"	1'-2"	1'-2"	1'-2"	1'-2"
E Concrete Pile	2'-1"	1'-11"	1'-9"	1'-7"	1'-5"	1'-5"	1'-5"	1'-5"	1'-5"	1'-5"	1'-5"	1'-5"
G Steel or Timber	2'-4"	2'-2"	2'-0"	1'-10"	1'-8"	1'-8"	1'-8"	1'-8"	1'-8"	1'-8"	1'-8"	1'-8"
S	2'-4"	2'-3"	1'-11"	1'-10"	1'-9"	1'-9"	1'-7"	1'-6"	1'-5"	1'-4"	1'-3"	1'-2"
@ bars	#8 @ 10"	#8 @ 12"	#7 @ 14"	#7 @ 17"	#6 @ 24"	#5 @ 11"	#5 @ 15"	#5 @ 30"	#5 @ 15"	#4 @ 8"	#4 @ 12"	#4 @ 12"
@ bars	#10 @ 10"	#10 @ 12"	#10 @ 7"	#10 @ 8"	#9 @ 8"	#9 @ 11"	#9 @ 15"	#6 @ 7"	#5 @ 8"	#5 @ 12"	#5 @ 24"	#5 @ 36"
@ bars, number-size	2-#7	2-#7	4-#7	4-#7	4-#7	6-#7	6-#7	6-#7	6-#7	6-#7	6-#6	6-#6
Toe Pressure P.S.F.	5040	4640	4480	4000	3590	3290	2980	2640	2270	1930	1570	1240
Spread Conc. CF/ft.	71.8	63.1	52.1	45.0	38.5	33.8	29.5	24.3	20.2	16.3	12.6	8.9
Footing Steel lbs/ft.	393	328	309	233	177	123	90	56	47	28	20	14
Conc. Conc. CF/ft.	73.4	64.4	53.1	45.8	39.0	34.1	29.8	24.2	20.2	16.3	12.6	8.9



Note: For concrete quantities for steel or timber pile footings, add 3" depth x footing width W to concrete pile footing quantities. Steel quantities remain the same.

DESIGN SECTION 3

PROJECT DESIGNER: [Signature]
CHECKED: [Signature]
DATE: 6-57
SPECIFICATIONS BY: [Signature]
APPROVAL RECOMMENDED BY: [Signature]

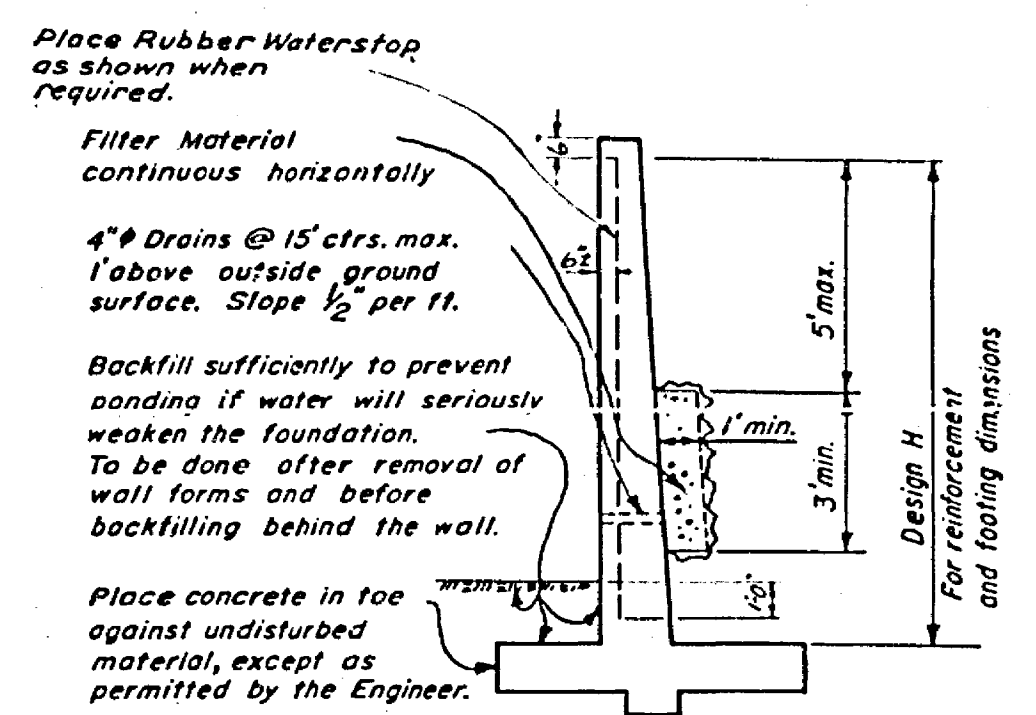
STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS R-1787

VINE STREET UNDERPASS
SGC-60
TYPE IA CANTILEVER RETAINING WALL

SCALE - NONE BRIDGE 5-40 XS-3-40 DRAWING E-5413-9

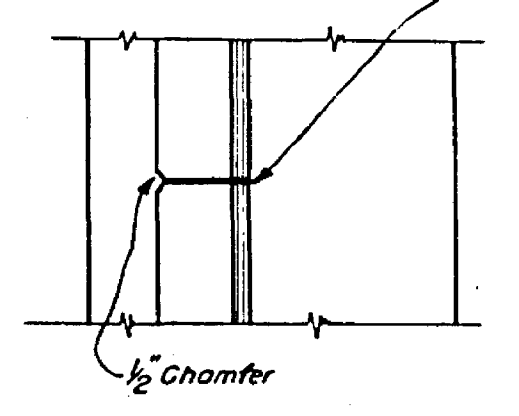
42

1/2" dia bar in footing
 B.J. Chrysler
 ed bars Nos. using 1-36

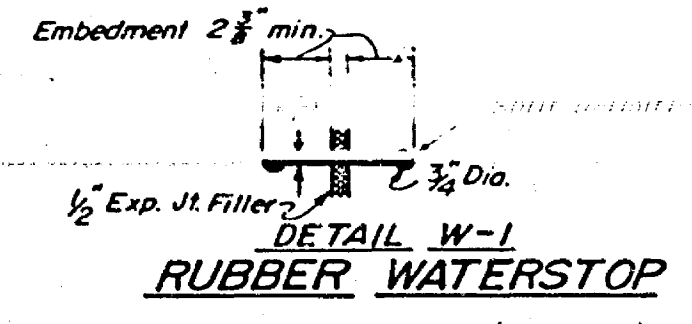


DESIGN AND DRAINAGE

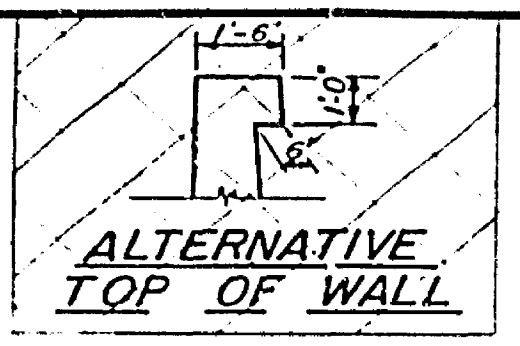
1/2" Expansion joint, fill with preformed expansion joint filler. Joint to extend thru out height of wall only. Locate joints as shown on Abut. Sheets.



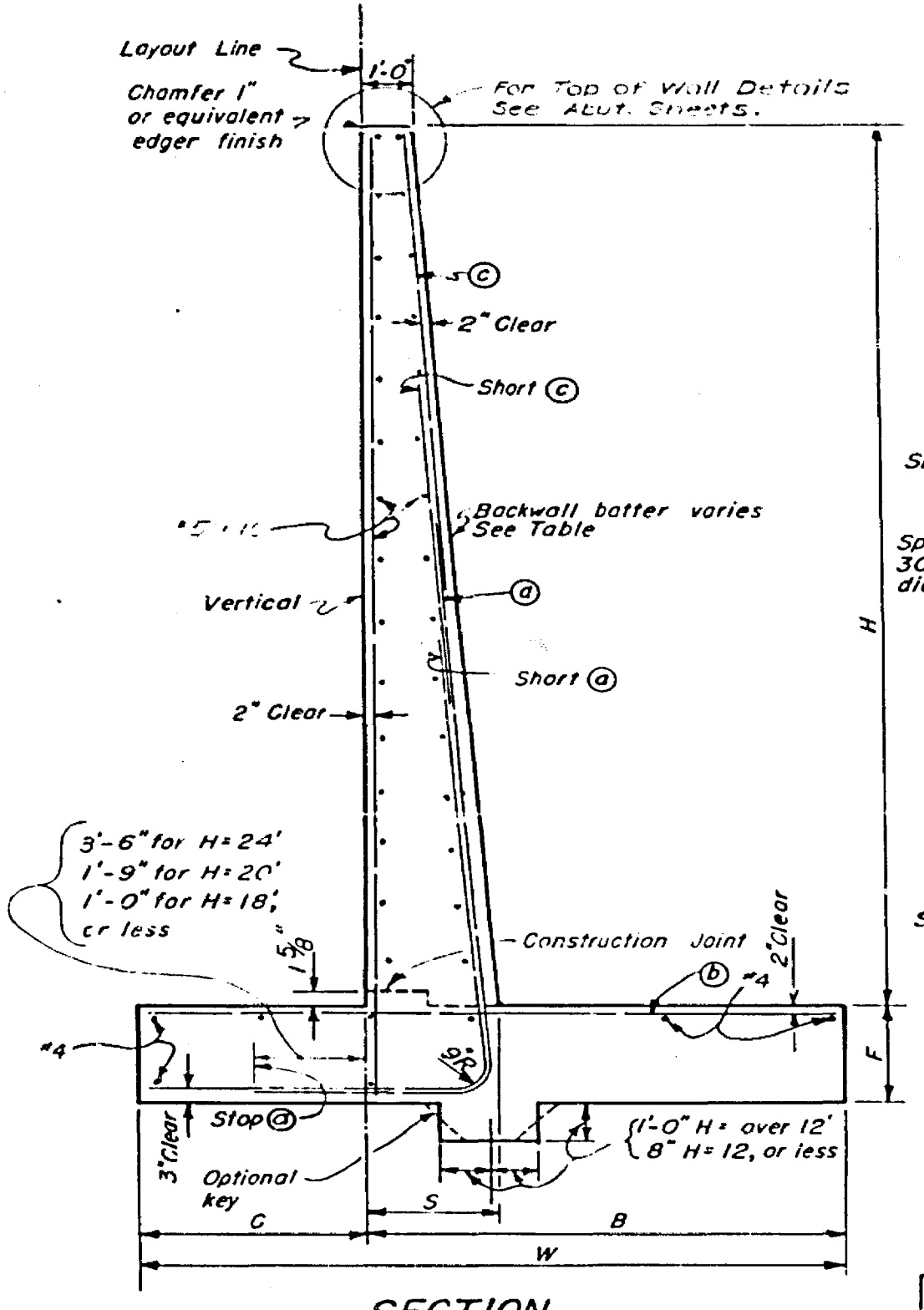
PLAN OF EXPANSION JOINT



DETAIL W-1 RUBBER WATERSTOP

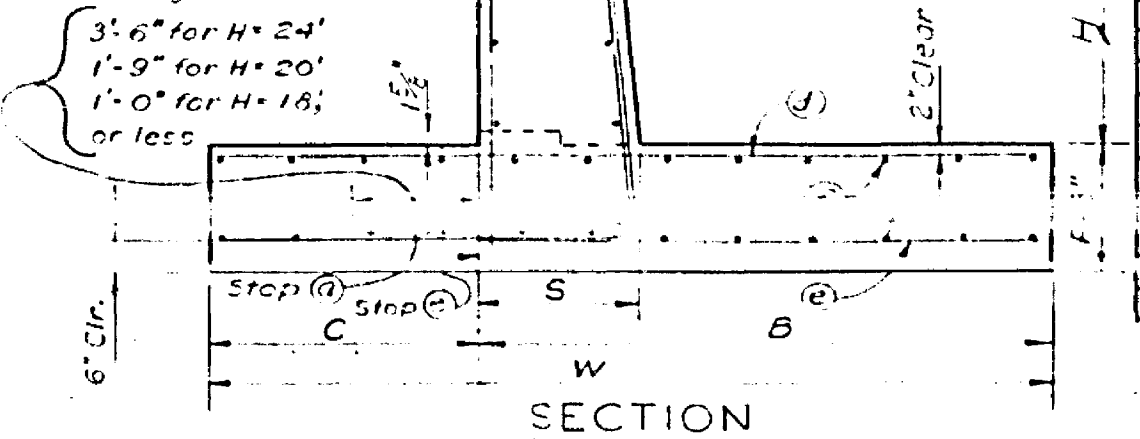


ALTERNATIVE TOP OF WALL

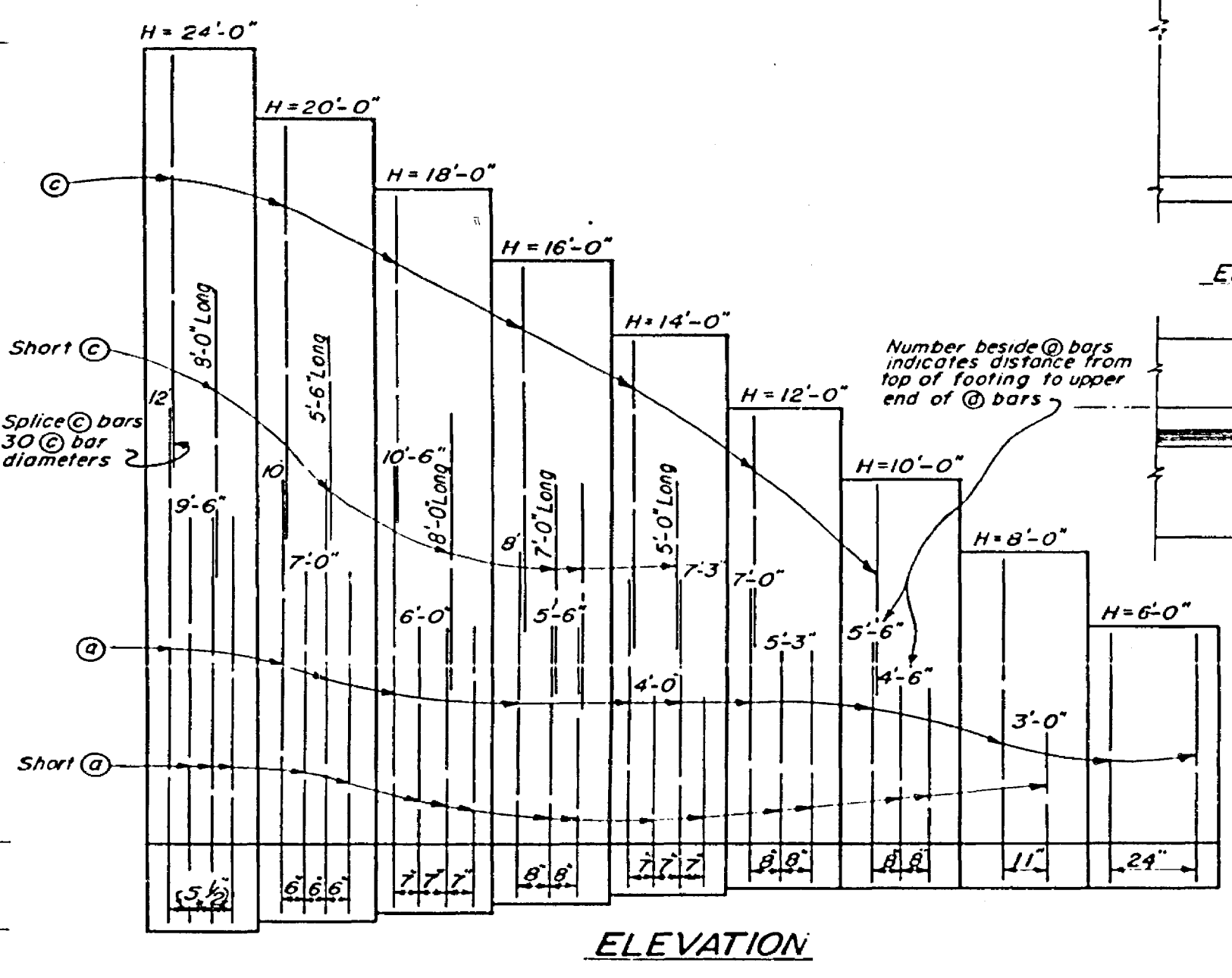


SECTION SPREAD FOOTING

Note: Piles not shown. See Abutment Layout Sheet.

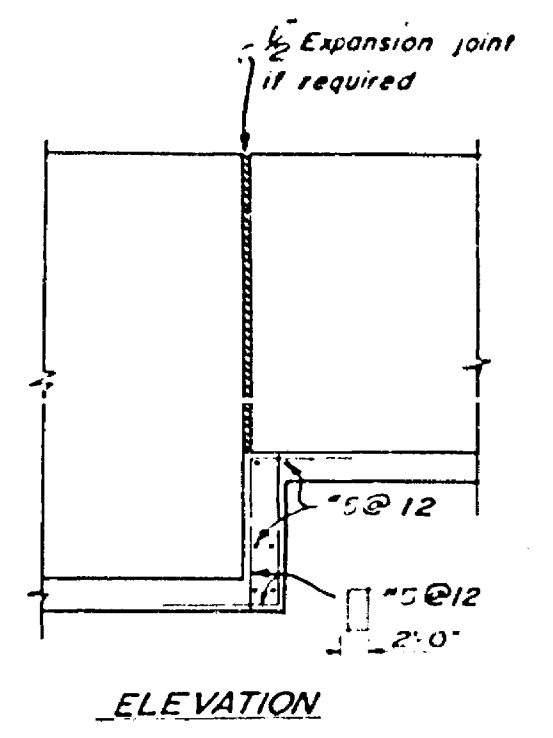


SECTION PILE FOOTING

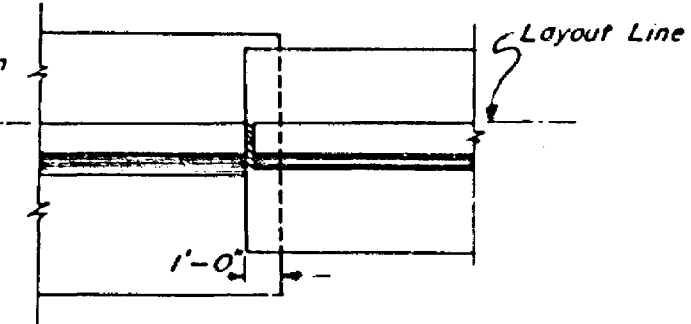


ELEVATION

TABLE OF REINFORCING STEEL DIMENSIONS AND DATA									
H	24'	20'	18'	16'	14'	12'	10'	8'	6'
W	14'-10"	13'-0"	11'-4"	10'-1"	9'-10"	7'-7"	6'-4"	5'-1"	3'-10"
C	5'-8"	4'-8"	3'-10"	3'-5"	3'-0"	2'-7"	2'-2"	1'-9"	1'-4"
B	9'-2"	8'-4"	7'-6"	6'-8"	5'-10"	5'-0"	4'-2"	3'-4"	2'-6"
F	2'-4"	2'-1"	1'-10"	1'-7"	1'-5"	1'-2"	1'-2"	1'-2"	1'-2"
S	2'-9"	2'-3"	1'-11 1/4"	1'-8"	1'-7"	1'-6"	1'-5"	1'-4"	1'-3"
B/W Batter	7/8 @ 12	3/4 @ 12	5/8 @ 12	1/2 @ 12	1/2 @ 12	1/2 @ 12	1/2 @ 12	1/2 @ 12	1/2 @ 12
c Bars	8 @ 11	8 @ 12	8 @ 14	6 @ 8	6 @ 14	5 @ 24	5 @ 24	5 @ 11	5 @ 15
a Bars	11 @ 5 1/2	11 @ 6	11 @ 7	11 @ 8	9 @ 7	8 @ 8	6 @ 8	5 @ 11	5 @ 15
b Bars	11 @ 5 1/2	11 @ 6	11 @ 7	11 @ 8	9 @ 7	8 @ 8	6 @ 8	5 @ 11	5 @ 15
e Bars	5 @ 11			5 @ 10				5 @ 11	5 @ 15
Exp. Jt.	5 @ 12			5 @ 12				5 @ 11	5 @ 15



ELEVATION



PLAN FOOTING STEPS

TYPICAL LAYOUT EXAMPLE

NOTES

Design Conditions:

Footing key is required except when found unnecessary by the Engineer.

Design Data:
 $f_c = 1200$ psi, $f_s = 20,000$ psi, $n = 10$ earth = 120 pcf.

Reinforcement:
 Intermediate Grade, Hard Grade or Rail Steel. Deformations shall conform to ASTM A 305. Bars shall lap 20 diameters, where spliced, unless otherwise shown on the plans. Bends shall conform to the Manual of Standard Practice, A.C.I.

All bar embedments are clear distances to outside of bar. Spacing for parallel bars is ctr. to ctr. of bars.

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STATE OF CALIFORNIA
 DEPARTMENT OF PUBLIC WORKS
 DIVISION OF HIGHWAYS

TYPE 3A CANTILEVER RETAINING WALL

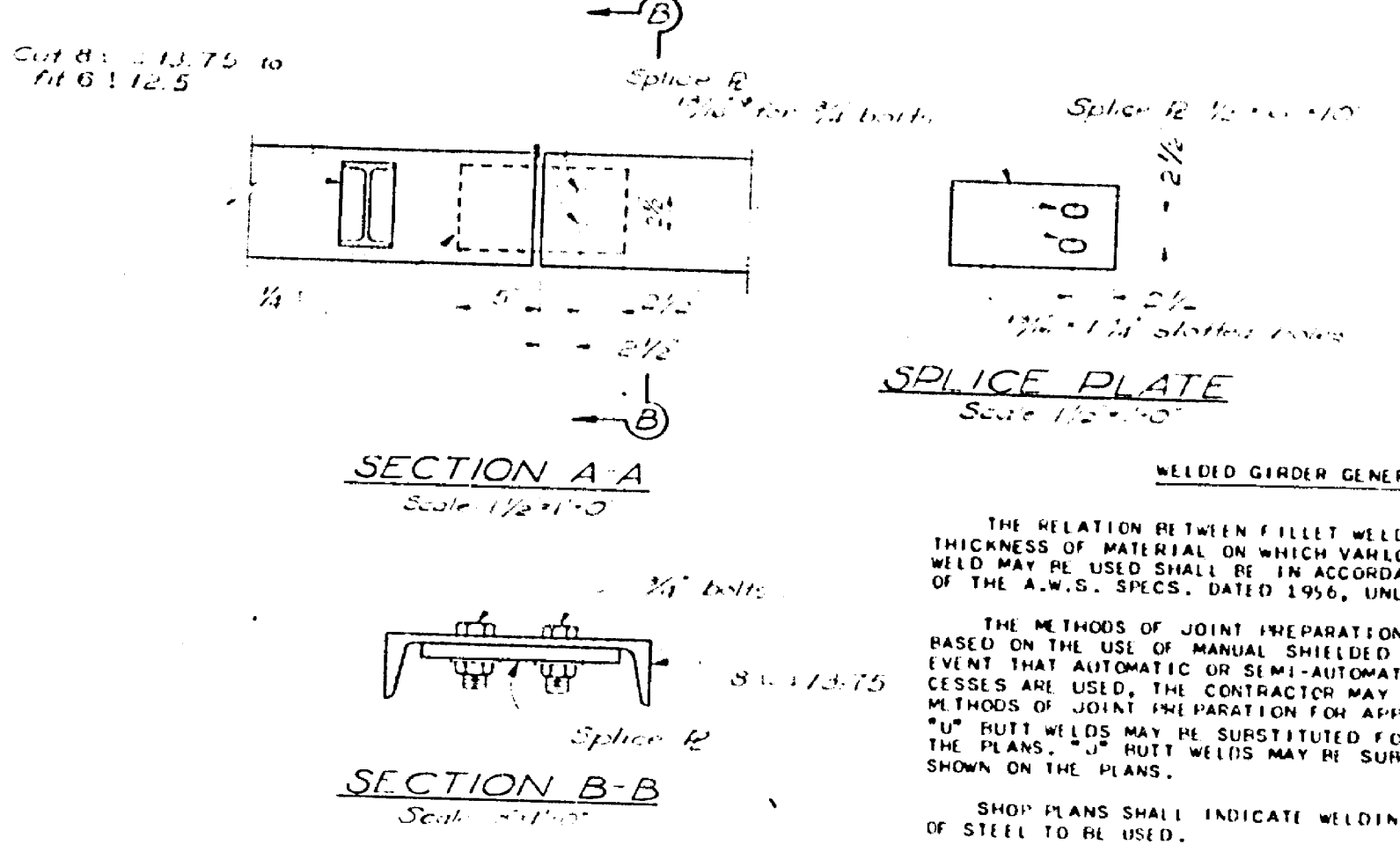
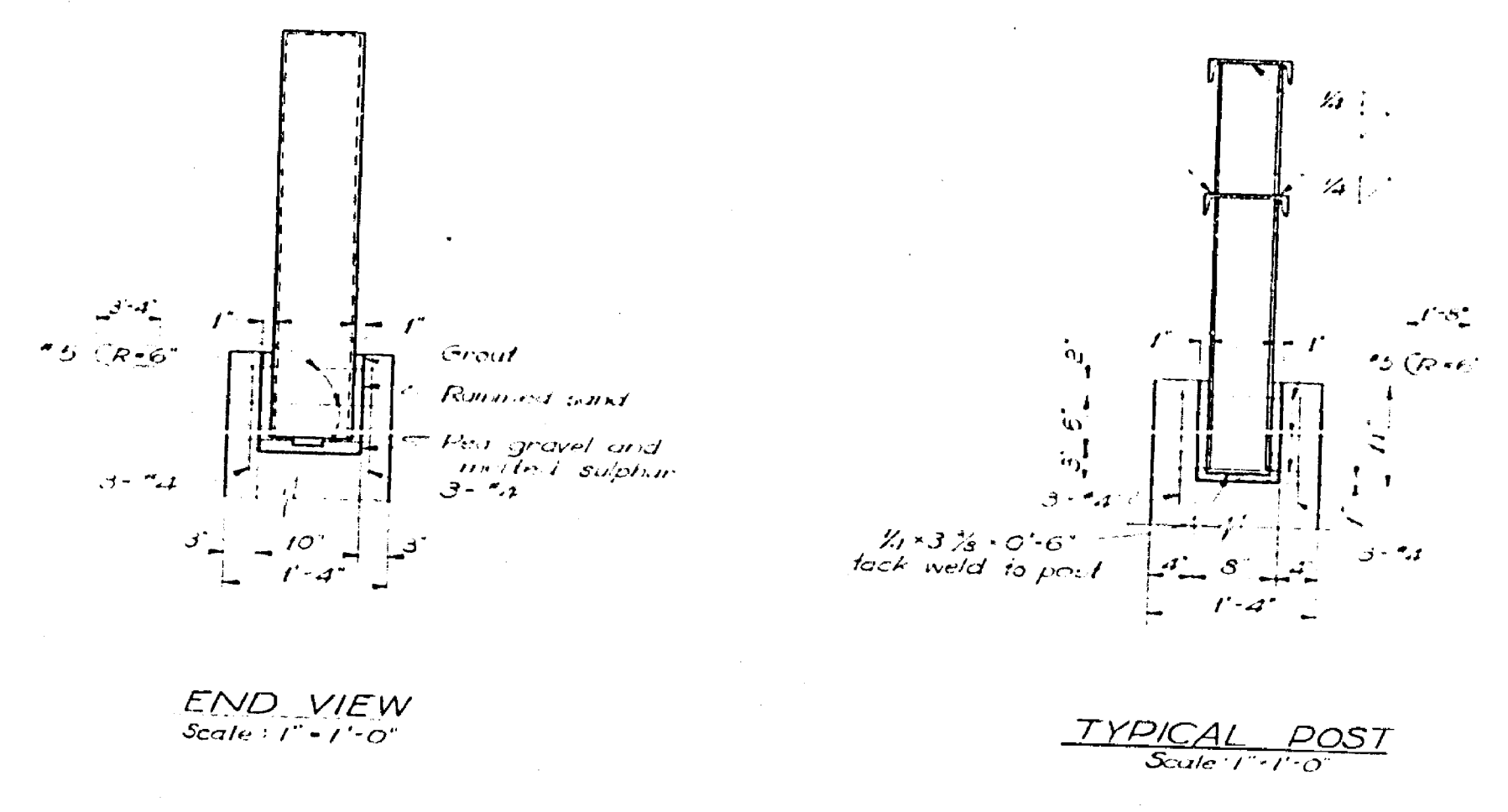
SCALE None BRIDGE SECTION FILE XS-3-37 DRAWING 1-10

BRIDGE DEPARTMENT

DESIGNED BY
 CHECKED BY
 APPROVED BY
 DATE

DATE	STATE	PROJECT NO.	FILE NO.	REVISION	APPROVAL
7	CALIF.				

NO.	DATE	BY	CHKD.	APPROVED
VII	7-23	JRV	TI	



WELDED GIRDER GENERAL NOTES

THE RELATION BETWEEN FILLET WELD SIZE AND THE MAXIMUM THICKNESS OF MATERIAL ON WHICH VARIOUS SIZES OF FILLET WELD MAY BE USED SHALL BE IN ACCORDANCE WITH ARTICLE 222(d) OF THE A.W.S. SPECS. DATED 1950, UNLESS OTHERWISE NOTED.

THE METHODS OF JOINT PREPARATION SHOWN ON THE PLANS ARE BASED ON THE USE OF MANUAL SHIELDED ARC WELDING. IN THE EVENT THAT AUTOMATIC OR SEMI-AUTOMATIC SHIELDED ARC METHODS ARE USED, THE CONTRACTOR MAY SUBMIT ALTERNATIVE METHODS OF JOINT PREPARATION FOR APPROVAL BY THE ENGINEER. "U" BUTT WELDS MAY BE SUBSTITUTED FOR VEE TYPE SHOWN ON THE PLANS. "J" BUTT WELDS MAY BE SUBSTITUTED FOR BEVEL TYPES SHOWN ON THE PLANS.

SHOP PLANS SHALL INDICATE WELDING SEQUENCE AND THE TYPE OF STEEL TO BE USED.

ALL FIELD SPLICES SHALL BE FITTED AND MATCHED IN THE SHOP.

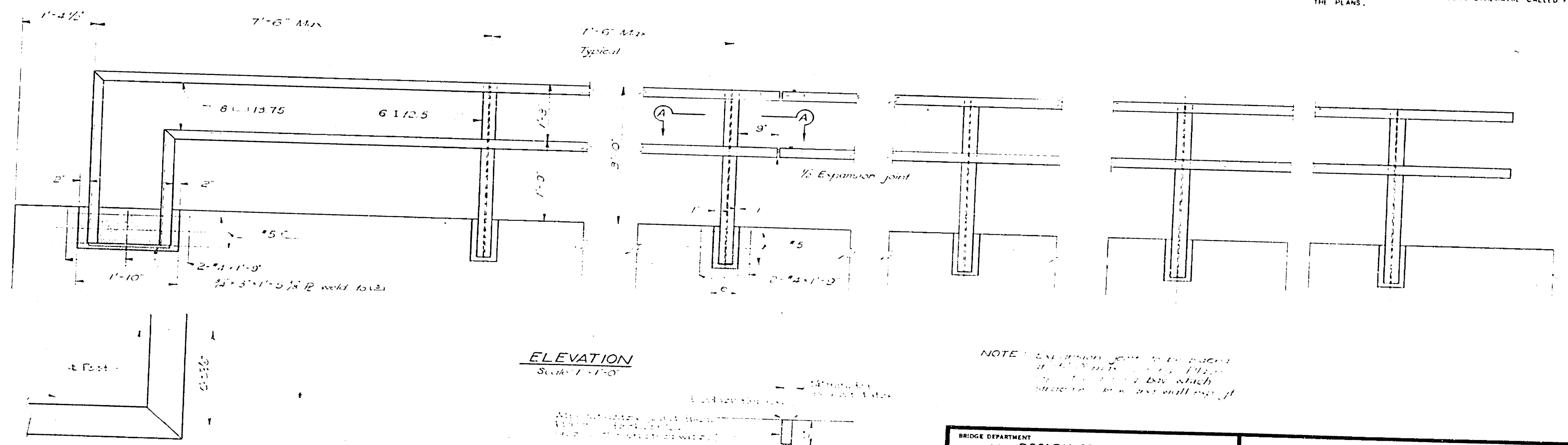
REINFORCED CONCRETE: $f'_c = 20,000$ P.S.F., $n = 10$

STRUCTURAL STEEL: $f_y = 1,000$ P.S.F. (NO. WAY SLAR ON GIRD)

FOOTING PRESSURE: 5 TONS P.S.F.

FILL-LOADING: TONS PER YARD

REINFORCEMENT: EMBEDMENT IS CLEAR TO OUTSIDE OF BAR AND IS 2" TO MAIN REINFORCEMENT, EXCEPT AS NOTED. HACKING FOR HOOKS IS FOUR DIAMETERS, EXCEPT AS NOTED. WHEN REINFORCING BARS ARE SPICED THEY SHALL HAVE A 20 DIAMETER LAP UNLESS OTHERWISE CALLED FOR ON THE PLANS.



NOTE: EXPANSION JOINT IS TO BE INSTALLED AT 30' INTERVALS. THE JOINT SHALL BE INSTALLED AT THE END OF EACH 30' INTERVAL. THE JOINT SHALL BE INSTALLED AT THE END OF EACH 30' INTERVAL.

BRIDGE DEPARTMENT DESIGN SECTION		STATE OF CALIFORNIA DEPARTMENT OF HIGHWAYS	
Chief Designer	Checked	VINE STREET UNDERPASS	
DESIGN	DATE	RAILING DETAILS	
DETAILS	DATE	SCALE AS NOTED	
QUANTITIES	DATE	BRIDGE	FILE
SPECIFICATIONS	DATE	DRAWING	C-5413-11
Approved & Recommended by	DATE	PREL. DRAWING NO.	P. 5413-11

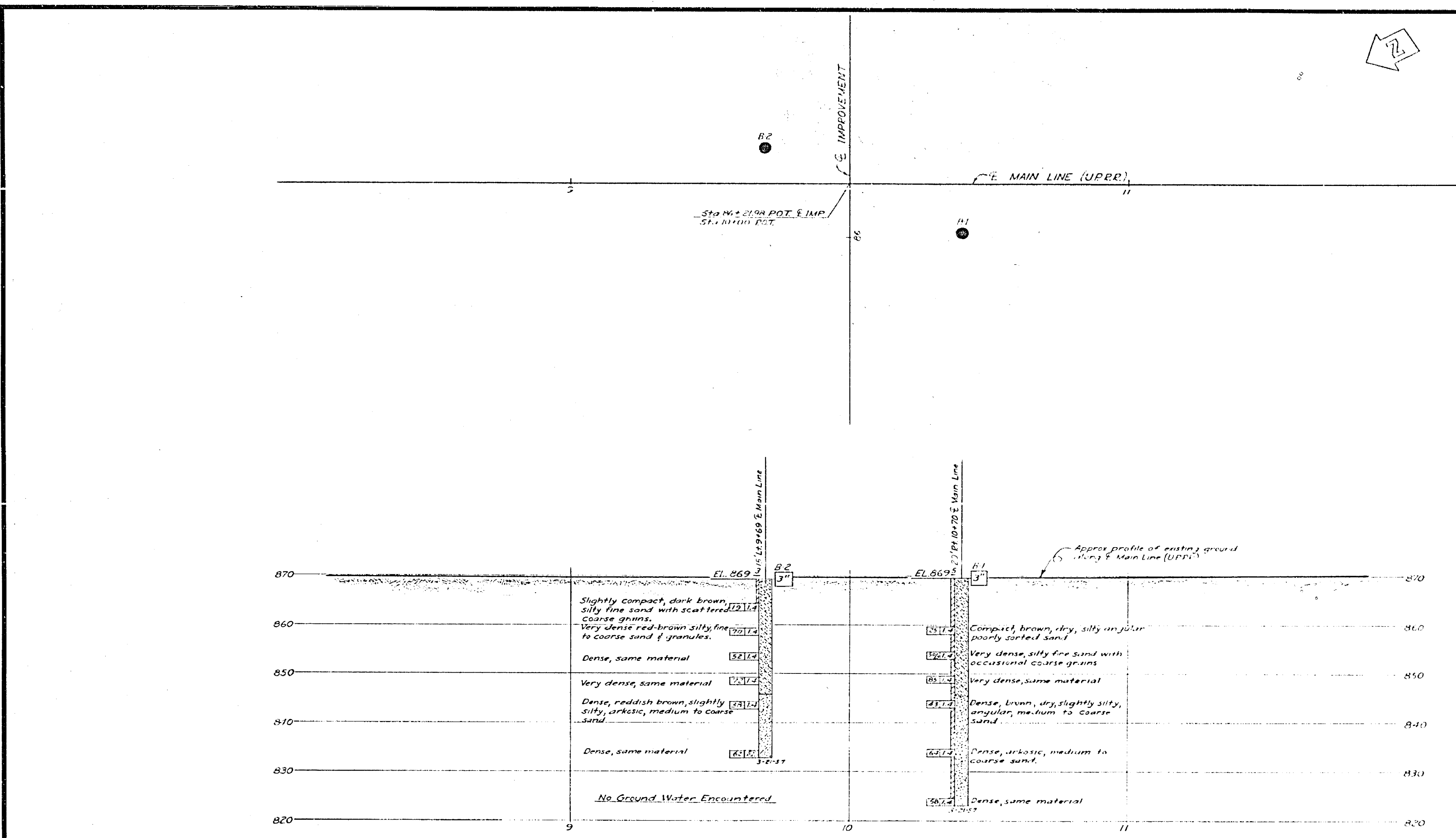
44

7	CAL.				
DATE	CONTRACT	REVISION	SECTION	NO.	DATE
7/74	44-339	100	270	12	7/74

M. J. ...
 DATE APPROVED: 7/74

BRIDGE DEPARTMENT

FIELD CHECKED	DATE
BY	
CHECKED	DATE
BY	



ALL BORINGS WERE MADE BY THE CONTRACTOR AND THE RESULTS THEREOF ARE SUBJECT TO THE APPROVAL OF THE DISTRICT ENGINEER.

<p>CLASSIFICATION OF MATERIAL BASED ON STANDARD GRADE SIZE LIMITS</p> <p>DIAGRAM SHOWING THE BASIS FOR ESTIMATES OF GRADE SIZE DISTRIBUTION USED IN DETERMINATION OF CLASS NAMES. IF GRAVEL IS PRESENT IN APPRECIABLE AMOUNTS THE TERM "GRAVELLY" MAY BE ADDED TO THE CLASS NAME, VIZ. "GRAVELLY SANDS". THE TERMS "COARSE", "MEDIUM" AND "FINE" WHEN USED TO DESCRIBE SAND, SILT AND GRAVEL REFER TO STANDARD GRADE SIZE LIMITS.</p>	<p>LEGEND OF EARTH MATERIALS</p> <table border="0"> <tr> <td>GRAVEL</td> <td>SILTY CLAY OR CLAYEY SILT</td> </tr> <tr> <td>SAND</td> <td>PEAT AND/OR ORGANIC MATTER</td> </tr> <tr> <td>SILT</td> <td>FILL MATERIAL</td> </tr> <tr> <td>CLAY</td> <td>IGNEOUS ROCK</td> </tr> <tr> <td>SANDY CLAY OR CLAYEY SAND</td> <td>SEDIMENTARY ROCK</td> </tr> <tr> <td>SANDY SILT OR SILTY SAND</td> <td>METAMORPHIC ROCK</td> </tr> </table>	GRAVEL	SILTY CLAY OR CLAYEY SILT	SAND	PEAT AND/OR ORGANIC MATTER	SILT	FILL MATERIAL	CLAY	IGNEOUS ROCK	SANDY CLAY OR CLAYEY SAND	SEDIMENTARY ROCK	SANDY SILT OR SILTY SAND	METAMORPHIC ROCK	<p>LEGEND OF BORING OPERATIONS</p> <table border="0"> <tr> <td>PLAN OF ANY BORING</td> <td>SOIL TUBE</td> </tr> <tr> <td>PENETROMETER</td> <td>ROTARY BORING</td> </tr> <tr> <td>2 1/2" CONE PENETROMETER</td> <td>PENETRATION BORING</td> </tr> <tr> <td>SAMPLER BORING (DRY)</td> <td></td> </tr> <tr> <td>ROTARY BORING (WET)</td> <td></td> </tr> <tr> <td>AUGER BORING (DRY)</td> <td></td> </tr> <tr> <td>JET BORING</td> <td></td> </tr> <tr> <td>CORE BORING</td> <td></td> </tr> <tr> <td>TEST PIT</td> <td></td> </tr> </table>	PLAN OF ANY BORING	SOIL TUBE	PENETROMETER	ROTARY BORING	2 1/2" CONE PENETROMETER	PENETRATION BORING	SAMPLER BORING (DRY)		ROTARY BORING (WET)		AUGER BORING (DRY)		JET BORING		CORE BORING		TEST PIT	
GRAVEL	SILTY CLAY OR CLAYEY SILT																															
SAND	PEAT AND/OR ORGANIC MATTER																															
SILT	FILL MATERIAL																															
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AUGER BORING (DRY)																																
JET BORING																																
CORE BORING																																
TEST PIT																																

NOTES

The contractor's attention is directed to Section 2, Article (c) of the Standard Specifications and to the Special Provisions accompanying this set of plans. Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.

STATE OF CALIFORNIA
 DEPARTMENT OF PUBLIC WORKS
 DIVISION OF HIGHWAYS

VINE ST. UNDERPASS
 SECTION
LOG OF TEST BORINGS

SCALE: HORIZ. 1" = 10' VERT. 1" = 10'

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