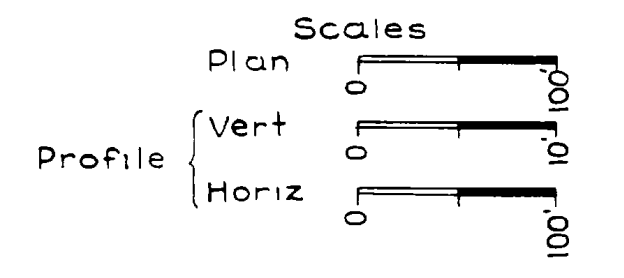
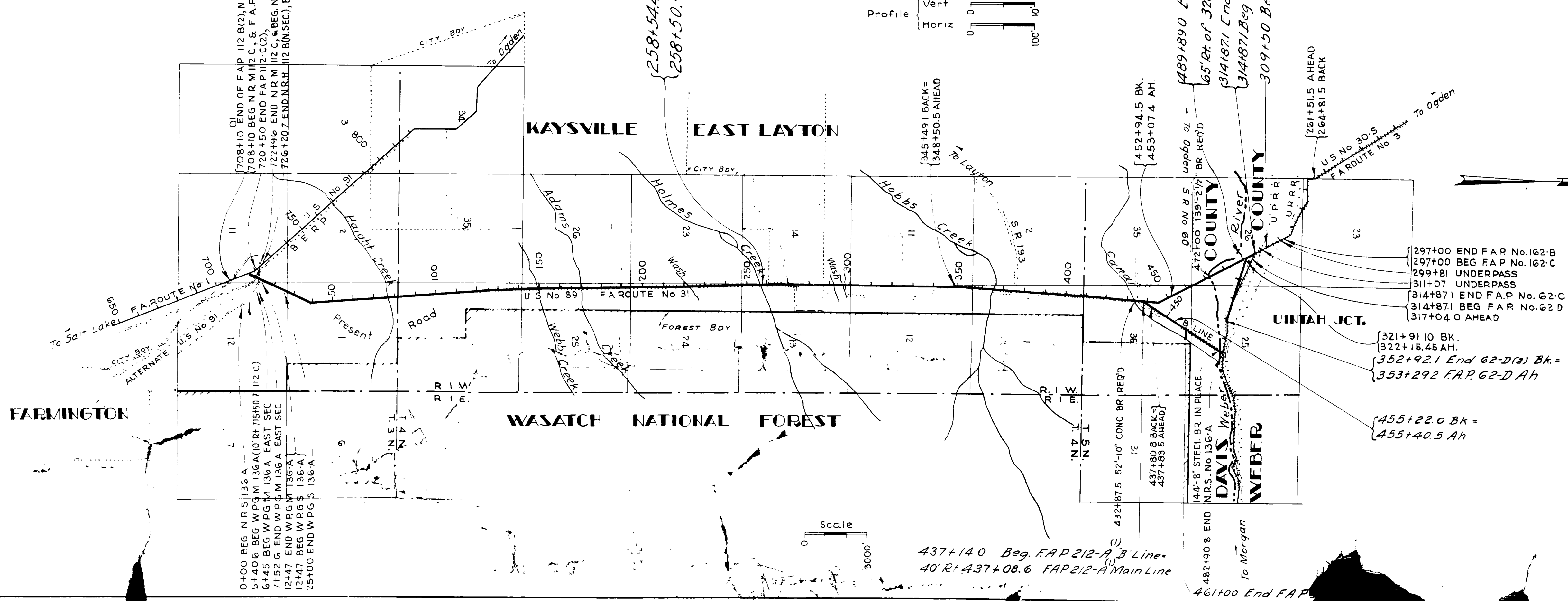


# STATE OF UTAH STATE ROAD COMMISSION

**PLANS OF PROPOSED STATE ROAD**  
**FEDERAL AID PROJECT**  
**NORTH FARMINGTON - UINTAH JCT.**  
**F.A.P. No. 212-A(1) LENGTH 4.770 MILES**  
**F.A.P. No. 62-D(2) LENGTH 0.716 MILES**  
**F.A.P. No. 62-C(2) LENGTH 0.101 MILES**

(258+544 N.R.S. 136 Original Proj. Bk =  
 298+50.9 Beg. F.A.P. 212-A(1))



INDEX TO SHEETS

1	Title Sheet
2	Typical Section
3	Plan & Profile
4-A	R/Way Markers
5	Std Gd Rail Type 'P'
6	X Sections

INDEX TO SHEETS F.A.P. No. 212-A

SHEET NO.	DESCRIPTION	DRAWING NO.
1	Title Sheet	
2	Typical Section	
3-11	Plan & Profile	
12	3x2x42 Concrete Box	E-694
13	30x108 C.G.M. Pipe Siphon	V-213
14	18x102 " "	F671 L6
15	5x25x3 Concrete Tank	V-192
16-21	52x10 Concrete Deck Bridge	C-184
22	6x3x54 Concrete Box	SC600-3136
	18x120 C.G.M. Pipe Siphon	F671 L9
	6x3x61.3 Concrete Box	SC600-3137
23-29	139'-2 1/2" I Beam Bridge	C-191
	18x147 C.G.M. Pipe Siphon	F671 L8
30	Std Guard Rail, Type 'P'	V-108-P
31 A	R/Way Markers & F.A.P. MKs.	V-391-RS
31 B	Super & Widen Curves	V-343-RS
31 C	Structuring for large C.G.M. P.	V-390
1-47	X Sections	

APPROVED APRIL 1939  
 STATE ROAD COMMISSION OF UTAH  
*Rosa C. Hewitt*  
 CHIEF ENGINEER

RECOMMENDED FOR APPROVAL

DISTRICT ENGINEER,  
PUBLIC ROADS ADMINISTRATOR,  
FEDERAL WORKS AGENCY

RECOMMENDED FOR APPROVAL

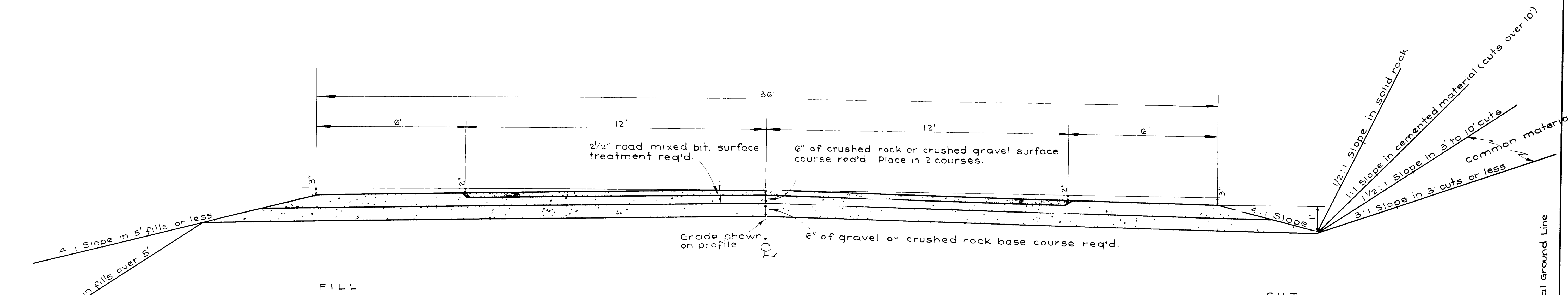
CHIEF WESTERN REGION  
PUBLIC ROADS ADMINISTRATOR,  
FEDERAL WORKS AGENCY

APPROVED

COMMISSIONER,  
PUBLIC ROADS ADMINISTRATOR,  
FEDERAL WORKS AGENCY

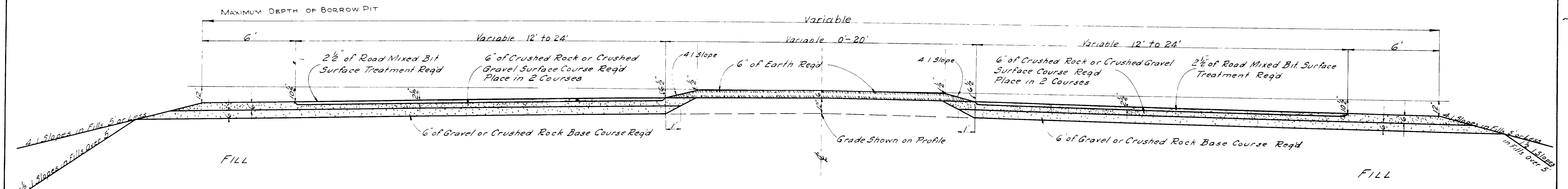
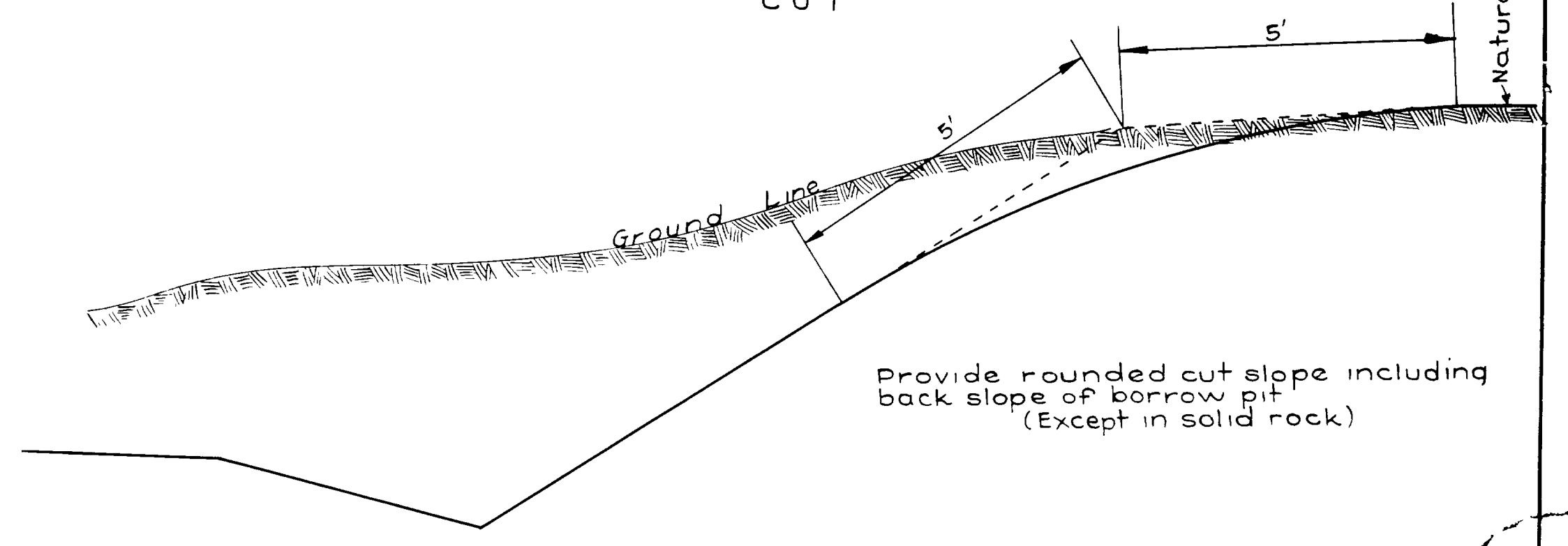
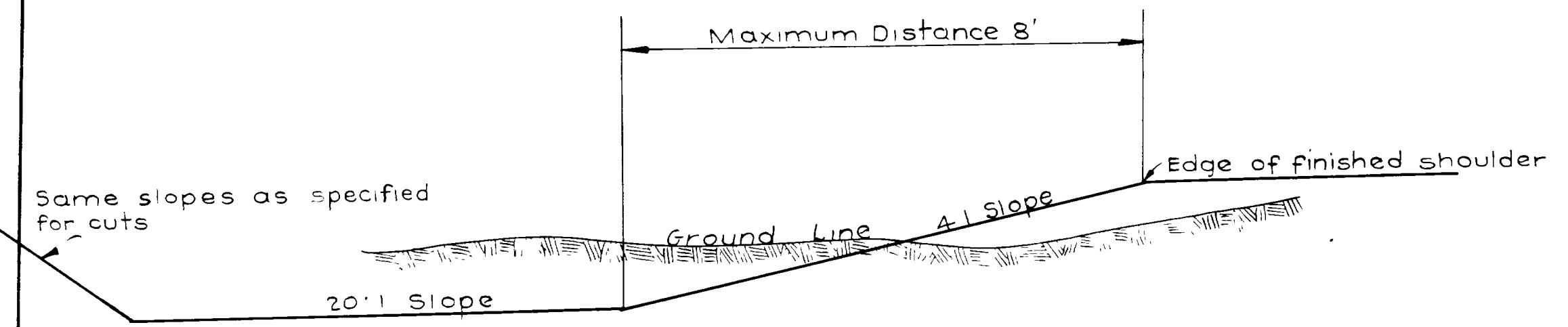
# TYPICAL CROSS SECTION

FED. ROAD DIST. NO.	STATE	F. A. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
12	UTAH	212-A(1)	1940	2	31
"	"	62-D(2)	"	"	7
"	"	62-C(2)	"	"	4



Used on FAP 212-A(1)  
 " " " 62-D(2)  
 " " " 62-C(2)

REVISIONS	DATE	BY	DESCRIPTION



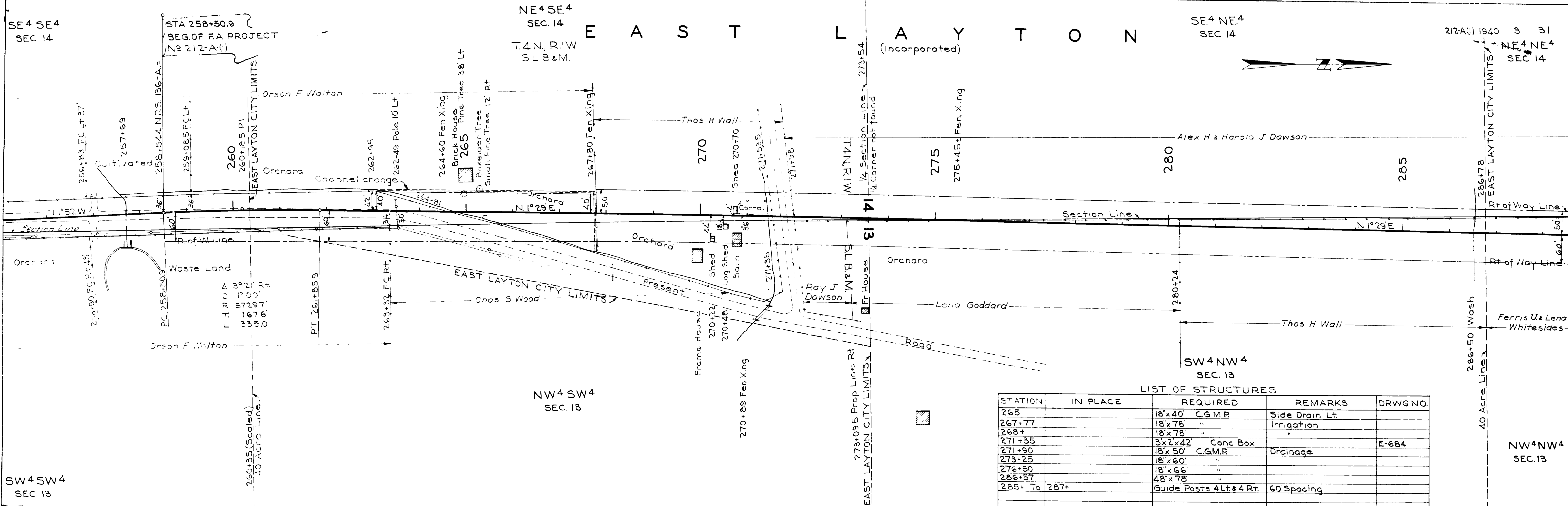
Typical Section of Roadway Showing Channelization of Highway at Intersection of FAP 212-A(1) & FAP 62-D(2) at Sta 488+50  
 Width of Traffic Island & Roadway Variable.

Widen and superelevate curves according to J-343RS

UTAH STATE ROAD COMMISSION  
 SALT LAKE CITY, UTAH  
 EZRA C. KNOWLTON, CHIEF ENGINEER

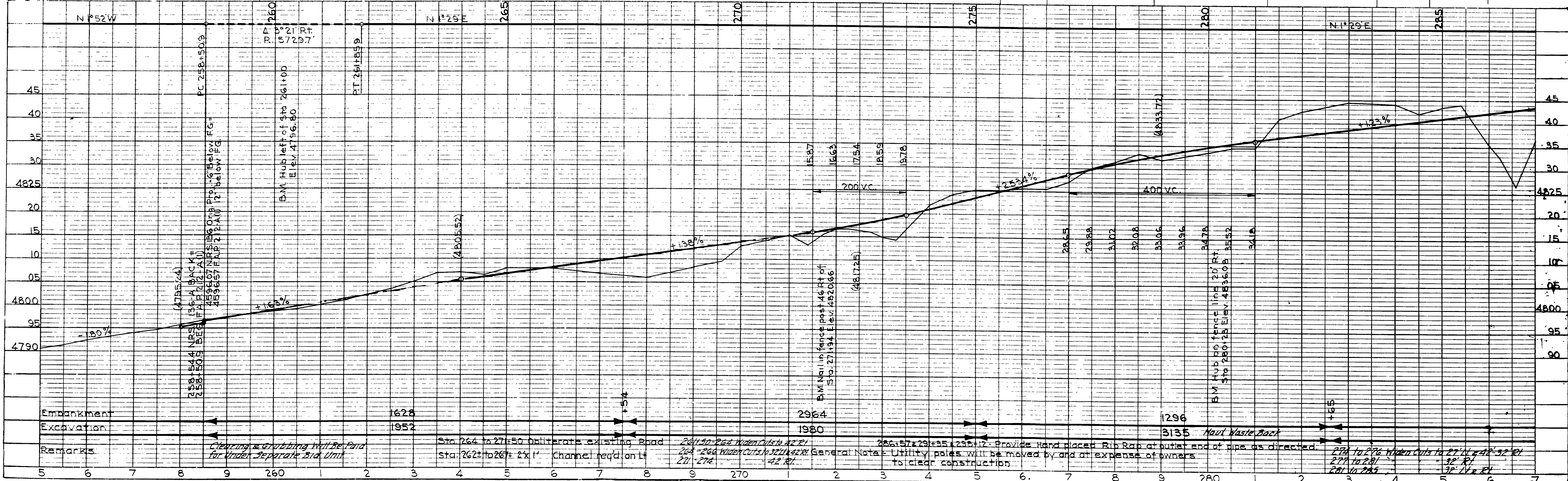
- TYPE -

36' ROADWAY  
 2 1/2" x 24' ROAD MIXED BIT  
 SURFACE TREATMENT  
 HIGHWAY CHANNELIZATION  
 TYPICAL SECTION



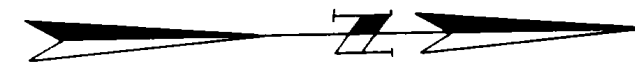
LIST OF STRUCTURES

STATION	IN PLACE	REQUIRED	REMARKS	DRWG NO.
265		18'x40'	CGMP	Side Drain Lt
267+77		18'x78'		Irrigation
268+		18'x78'		
271+35		3'x2'x42"	Conc Box	
273+25		18'x50'	CGMP	Drainage
276+50		18'x66'		
286+57		48'x78'		
285+ To 287+		Guide Posts 4 Lt & 4 Rt	60 Spacing	



PLAN DATE 1936  
 SURVEYOR C.M. Fonnasback  
 CHECKED H.S. Wright  
 TRACED F.B. Peterson 1939

PROFILE DATE 1939  
 SURVEYOR C.R. Kimball  
 CHECKED E.B. Peterson  
 TRACED F.B. Peterson 1939



PLAN

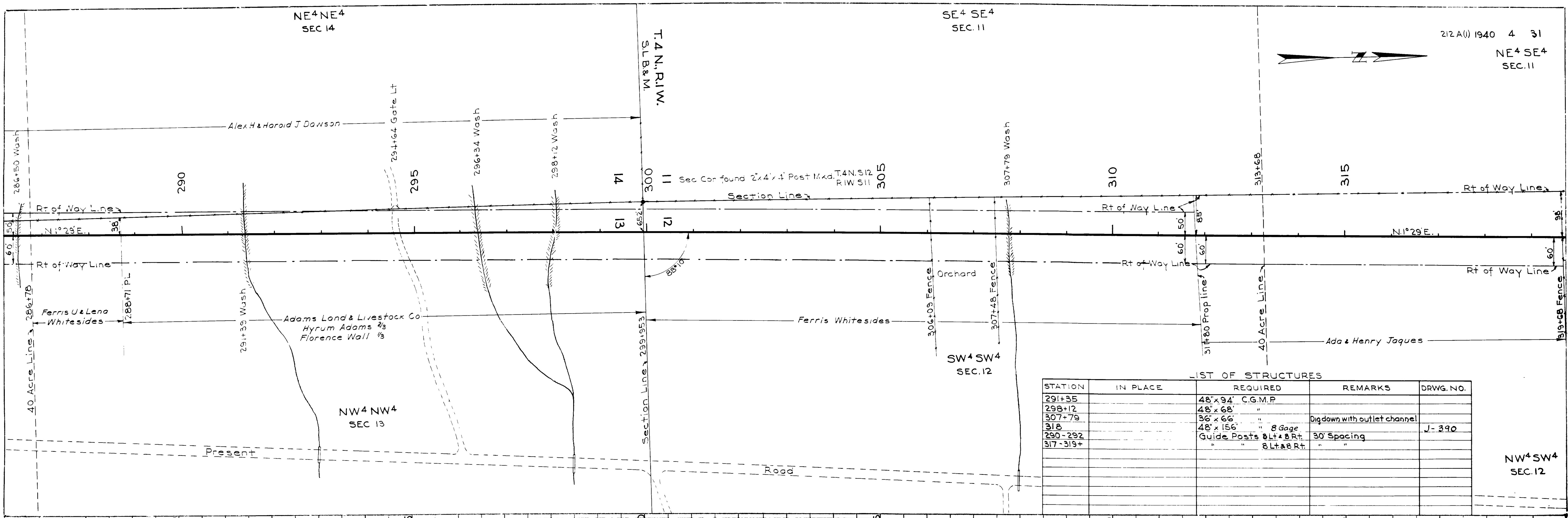
NO. 2	BOOK 11	DATE 1939
NO. 3178	TRACED	

CM Fornesback  
H.S. Wright  
F.B. Peterson

PROFILE

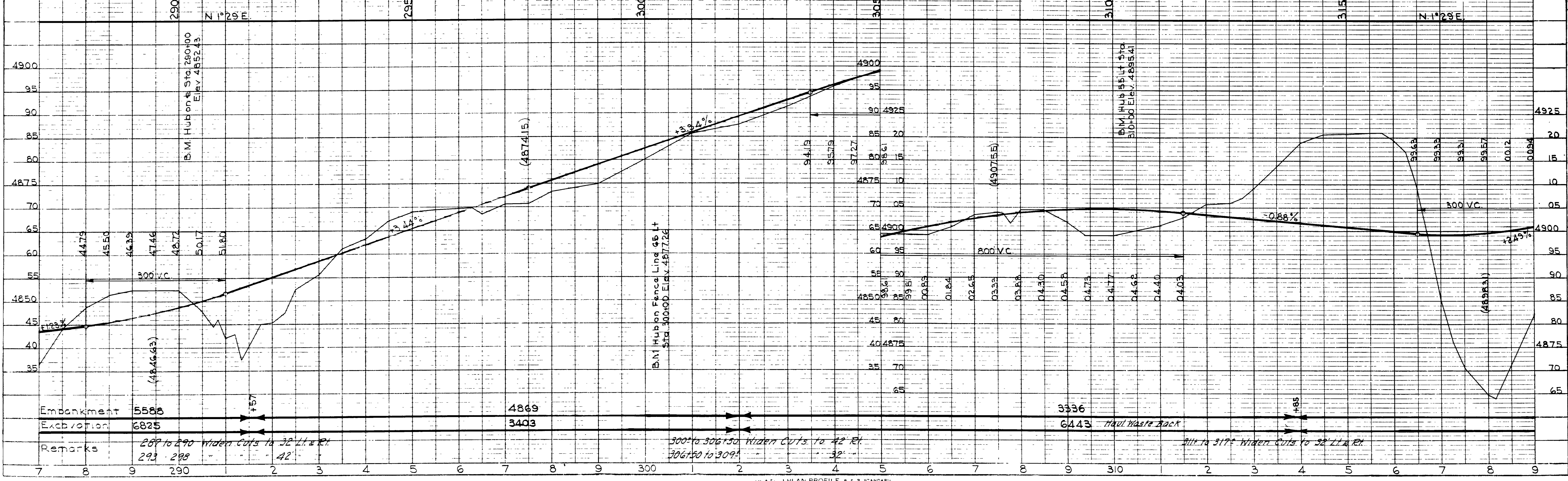
NO. 2	BOOK 11	DATE 1939
NO. 3178	TRACED	

CM Fornesback  
H.S. Wright  
F.B. Peterson



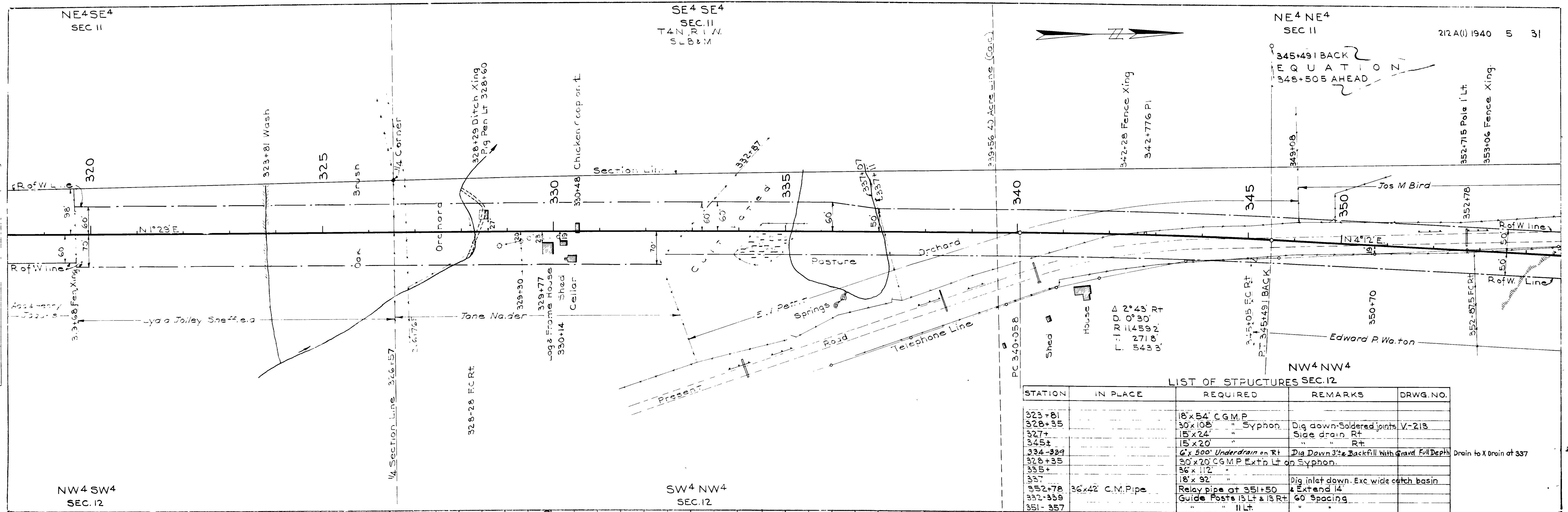
LIST OF STRUCTURES

STATION	IN PLACE	REQUIRED	REMARKS	DRWG. NO.
291+35		48' x 94'	C.G.M.P.	
298+12		48' x 68'	"	
307+79		36' x 66'	"	
318		48' x 156'	8 Gage	J-390
290-292		Guide Posts	8 Lt & 8 Rt 30' Spacing	
317-319+		"	8 Lt & 8 Rt	



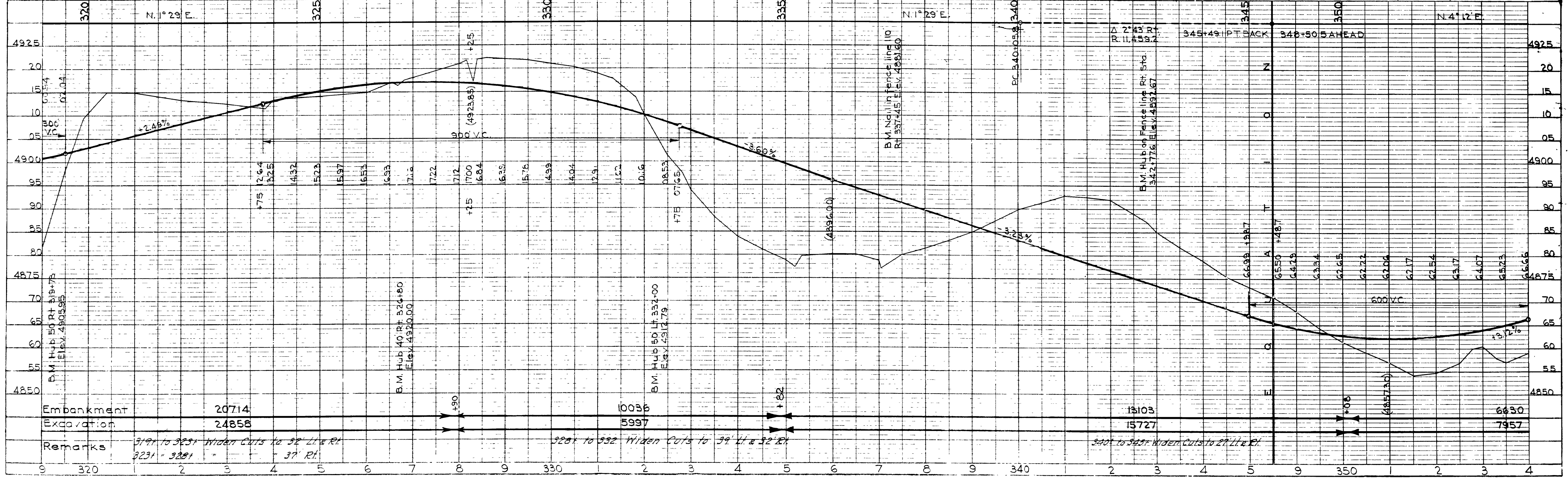
PLAN  
 C.M.I. CIVIL ENGINEERS  
 1518  
 1939  
 H.S. WRIGHT  
 I.P.B. PATTERSON

PROFILE  
 C.M.I. CIVIL ENGINEERS  
 1518  
 1939  
 H.S. WRIGHT  
 I.P.B. PATTERSON



LIST OF STRUCTURES SEC. 12

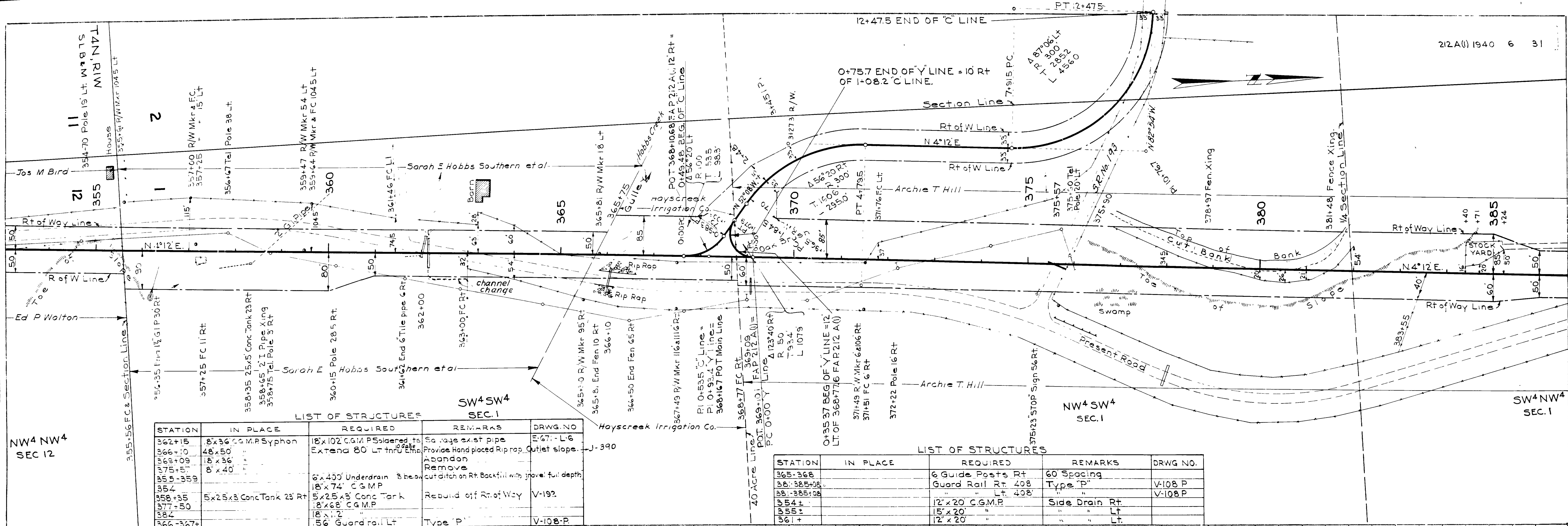
STATION	IN PLACE	REQUIRED	REMARKS	DRWG. NO.
323+81		18" x 54" CGMP		
328+35		30" x 108" Syphon	Dig down Soldered joints V-213	
327+		15" x 24" "	Side drain Rt	
345+		15" x 20" "	Rt	
334-339		6" x 500' Underdrain on Rt	Dig Down 3" & Backfill with Gravel Full Depth	
328+338		30" x 20" CGMP Extd Lt on Syphon	Drain to X drain at 337	
335+		36" x 112" "		
337-		18" x 92" "	Dig inlet down. Exc wide catch basin	
352+78	36" x 42" C.M. Pipe	Relay pipe at 351+50	& Extend 14'	
332-339		Guide Posts 13 Lt & 13 Rt	60' Spacing	
351-357		" 11 Lt		



EMBAKMENT 20714  
 EXCAVATION 24858  
 REMARKS 3197' to 3231' Widen Cuts to 32' Lt & Rt  
 3231' to 3281' " " " 37' Rt  
 3281' to 332' Widen Cuts to 39' Lt & 32' Rt  
 3401' to 3451' Widen Cuts to 27' Lt & Rt

PLAN  
 DESIGNED BY C.W. Fonesbeck 1939  
 CHECKED BY H.S. Wright 1939  
 NOTE BOOK NO. 3916  
 DRAWN BY F.B. Peterson 1939

PROFILE  
 DESIGNED BY C.W. Fonesbeck 1939  
 CHECKED BY H.S. Wright 1939  
 NOTE BOOK NO. 3917  
 DRAWN BY F.B. Peterson 1939

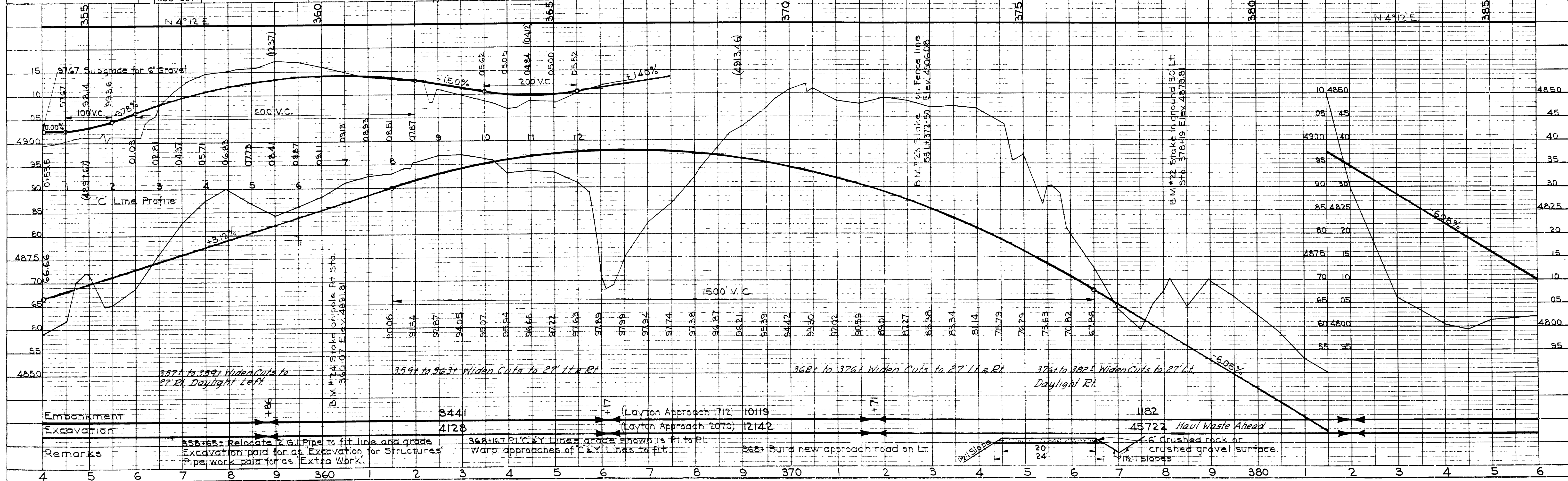


LIST OF STRUCTURES SEC. 1

STATION	IN PLACE	REQUIRED	REMARKS	DRWG. NO.
362+15	8x36 CG.M.P. Syphon	18x102 CG.M.P. Soldered to	Save exist pipe	E-47 - L-6
366+10	48x50	Extend 80 Lt thru	Provide hand placed Rip rap. Outlet slope.	J-390
368+09	18x36	Remove	Remove	
375+01	8x40	Remove	Remove	
359+35	5x25x3 Conc Tank 23 Rt	5x25x3 Conc Tank	Rebuild off Rt. of Way	V-192
366-367+	18x68 CG.M.P.	18x68 CG.M.P.	Type 'P'	V-108-P

LIST OF STRUCTURES

STATION	IN PLACE	REQUIRED	REMARKS	DRWG. NO.
365-368		6 Guide Posts Rt	60 Spacing	
368-385+08		Guard Rail Rt 408	Type 'P'	V-108 P
368-385+08		408		V-108 P
368+4+		12x20 CG.M.P.	Side Drain Rt	
368+5+		5x20	Lt	
368+6+		12x20	Lt	



Remarks

355+65 Relocate 2" G.I. Pipe to fit line and grade. Excavation paid for as Excavation for Structures. Pipe work paid for as Extra Work.

368+17 P.I. C&Y Lines grade shown is P.I. to P.I. Warp approaches of C&Y Lines to fit.

368+ Build new approach road on Lt.

368+ to 376+ Widen Cuts to 27' Lt & Rt

376+ to 382+ Widen Cuts to 27' Lt, Daylight Rt

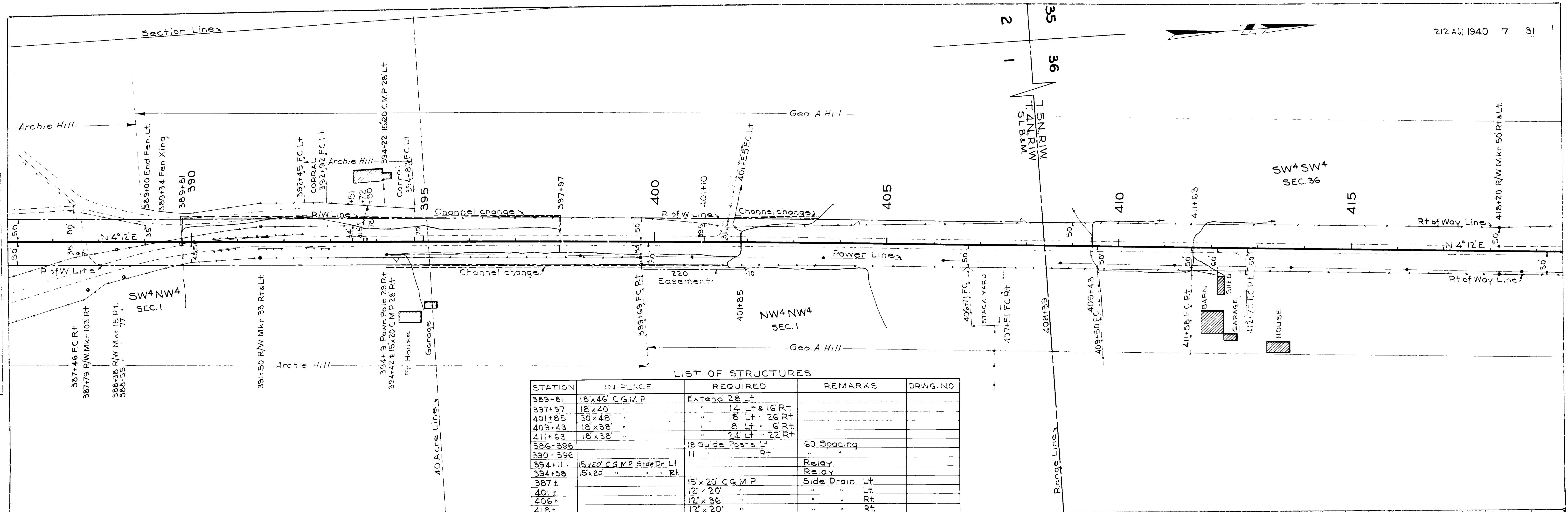
382+ Haul Waste Ahead

6" Crushed rock or crushed gravel surface.

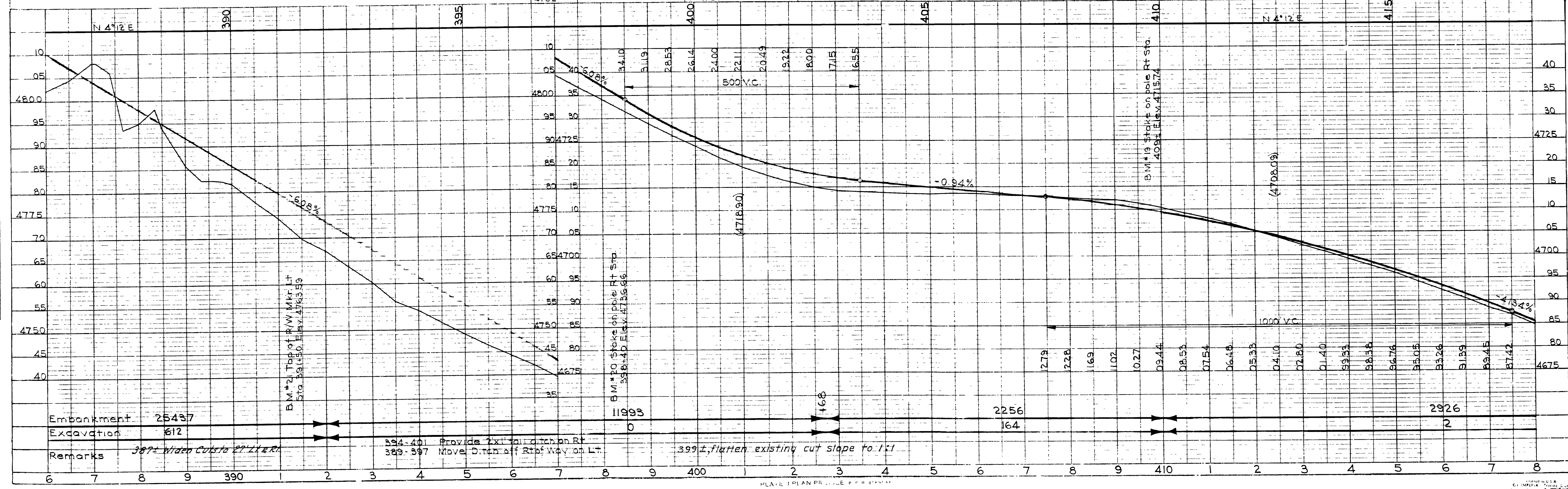
1 1/2% slopes.

PLAN  
 SURVEYED BY: C.W. Fonesbeck 1938  
 H.S. Wright 1939  
 F.B. Petersen 1939  
 NO. 3916 (Traced)

PROFILE  
 SURVEYED BY: C.W. Fonesbeck 1938  
 H.S. Wright 1939  
 F.B. Petersen 1939  
 NO. 3917 (Traced)



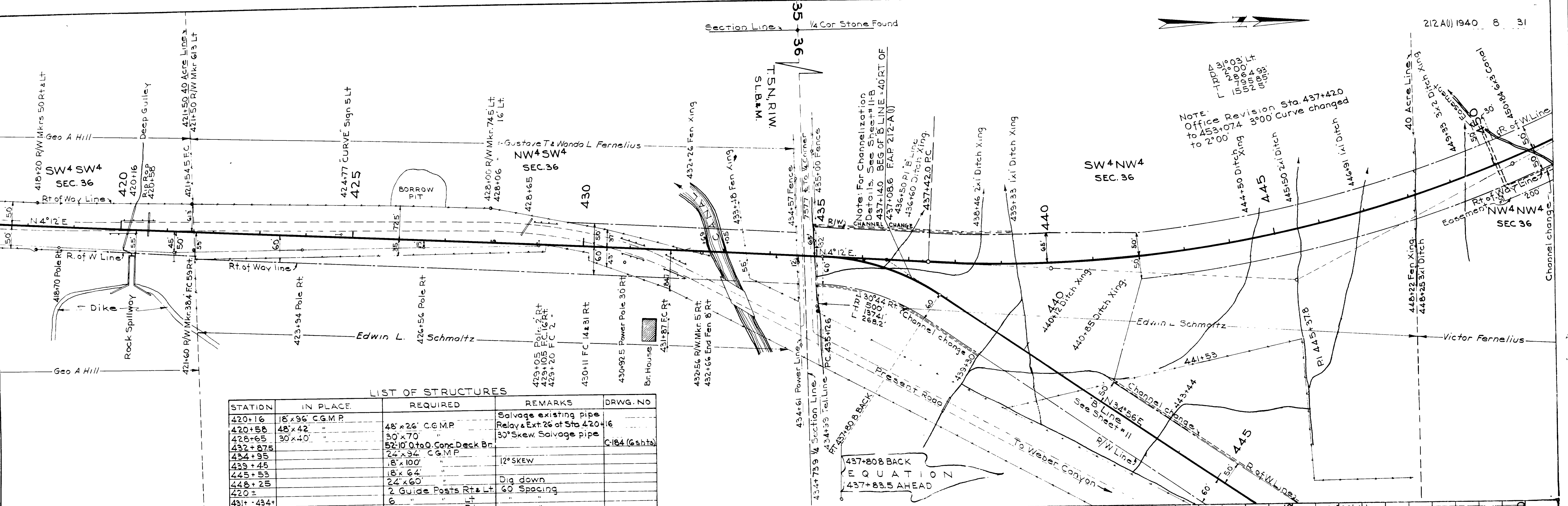
STATION	IN PLACE	REQUIRED	REMARKS	DRWG. NO.
389+81	18x46 CG.M.P.	Extend 28 ft		
397+37	18x40	14' x 16' Rt		
401+85	30x48	10' x 26' Rt		
409+43	18x38	18' x 26' Rt		
411+63	18x38	24' x 22' Rt		
386-396		18 Guide Posts	60 Spacing	
390-396		11		
394+11	15x20 CG.M.P. Side Dr. Lt.		Relay	
394+38	15x20 " " " Rt.		Relay	
387±		15x20 CG.M.P.	Side Drain Lt.	
401±		12x20	Rt. Lt.	
406±		12x36	Rt. Lt.	
418±		12x20	Rt. Lt.	



Embankment 25437  
 Excavation 612  
 Remarks: 387± Widen Cuts to 27' Lt. & Rt.  
 394-401 Provide 2x1' tail ditch on Rt.  
 389-397 Move Ditch off Rt. of Way on Lt.  
 399± flatten existing cut slope to 1:1

**PLAN**  
 DATE: 1939  
 DRAWN BY: C. W. Farnesbeck  
 CHECKED BY: H. S. Wright  
 NO. 3316

**PROFILE**  
 DATE: 1939  
 DRAWN BY: R. K. Dool  
 CHECKED BY: H. S. Wright  
 NO. 3317



**LIST OF STRUCTURES**

STATION	IN PLACE	REQUIRED	REMARKS	DRWG. NO.
420+16	18x96' C.G.M.P.		Salvage existing pipe	
420+58	48x42' "	48x26' C.G.M.P.	Relay & Ext. 26' at Sta. 420+6	
428+65	30x40' "	30x70' "	30' Skew Salvage pipe	
432+87.5		52' 10" to 0 Conc. Deck Br.		C-184 (Gshts)
434+95		24x34' C.G.M.P.		
439+45		18x100' "	12° SKEW	
445+53		18x64' "		
448+25		24x60' "	Dig down	
450+00		2 Guide Posts Rt. & Lt.	60' Spacing	
451+43.4				
453+43.4				
455+50		14' Guard rail Lt.		
457+00				
458+00				
459+00				
460+00				
461+00				
462+00				
463+00				
464+00				
465+00				
466+00				
467+00				
468+00				
469+00				
470+00				
471+00				
472+00				
473+00				
474+00				
475+00				
476+00				
477+00				
478+00				
479+00				
480+00				
481+00				
482+00				
483+00				
484+00				
485+00				
486+00				
487+00				
488+00				
489+00				
490+00				
491+00				
492+00				
493+00				
494+00				
495+00				
496+00				
497+00				
498+00				
499+00				
500+00				

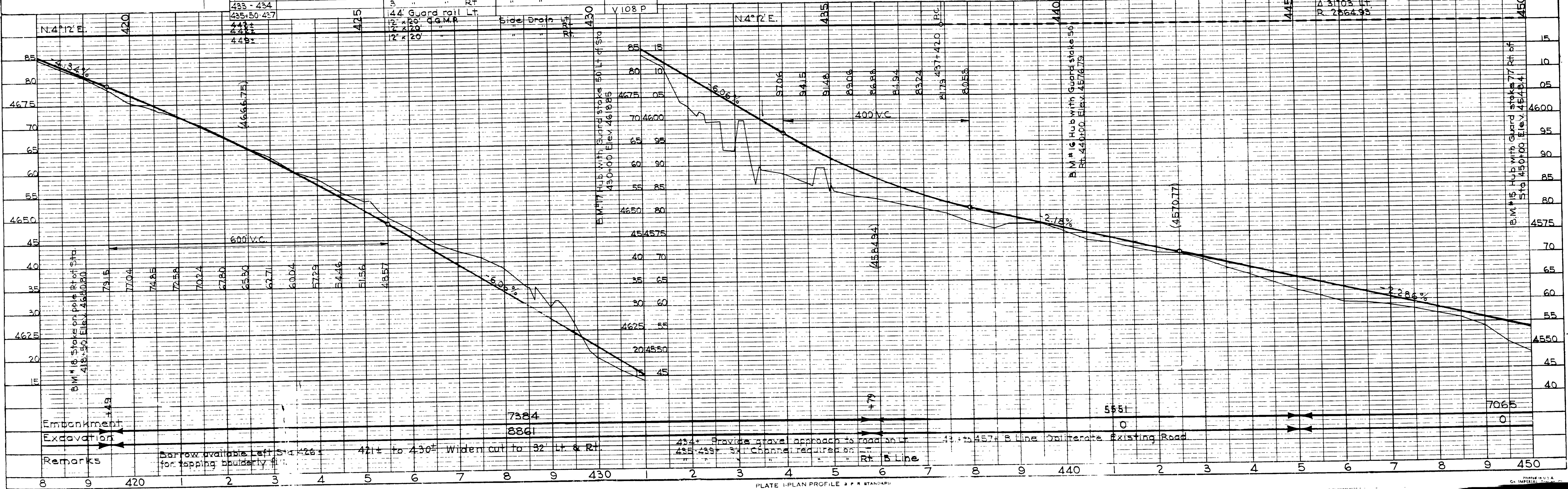
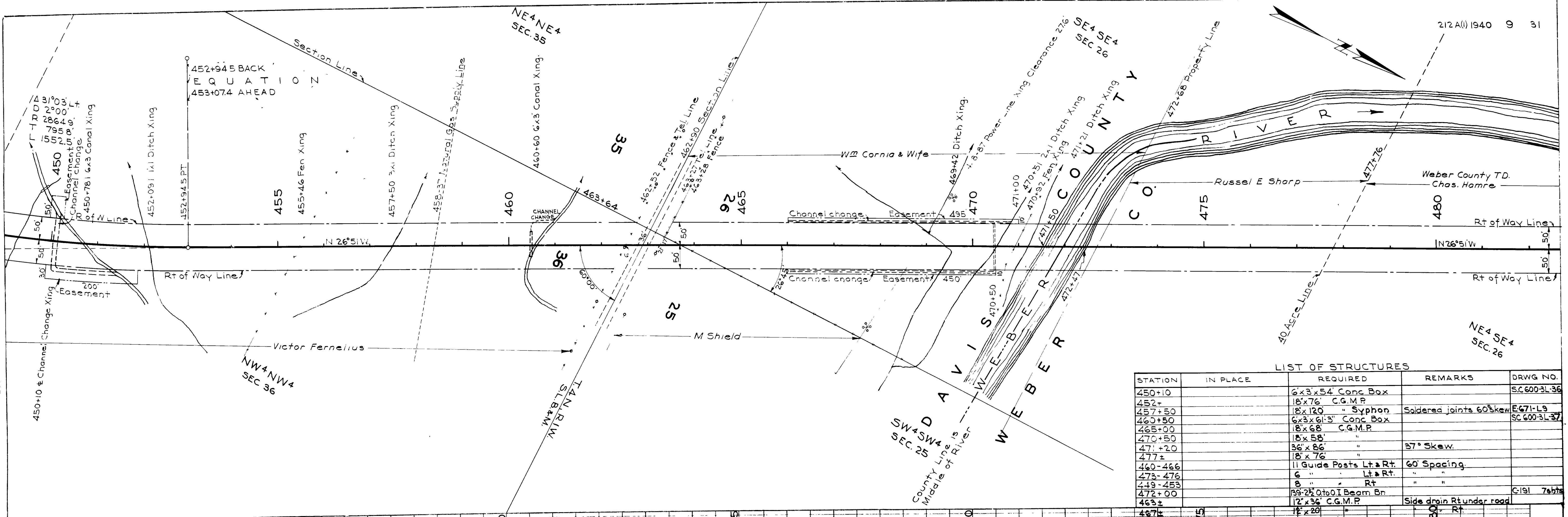


PLATE 1: PLAN PROFILE



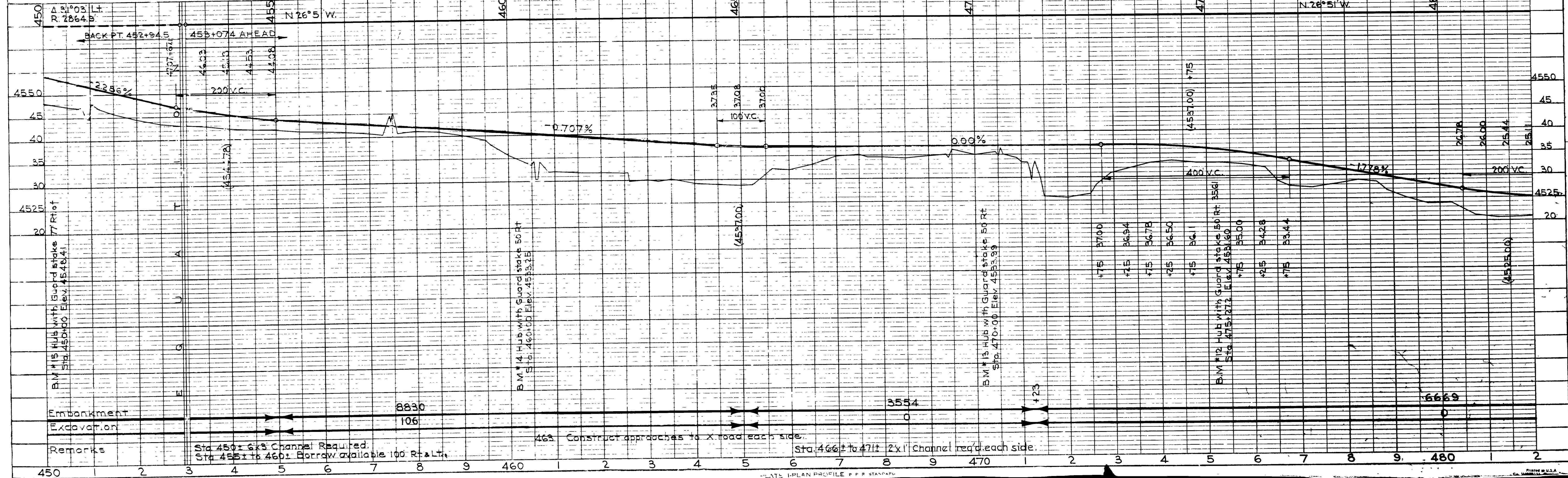
PLAN  
 DATE: 1938  
 DRAWN BY: H.S. Wright  
 CHECKED BY: F.B. Peterson  
 NOTED BY: H.S. Wright  
 NO. 3316 Traced

PROFILE  
 DATE: 1938  
 DRAWN BY: H.S. Wright  
 CHECKED BY: F.B. Peterson  
 NOTED BY: H.S. Wright  
 NO. 3317



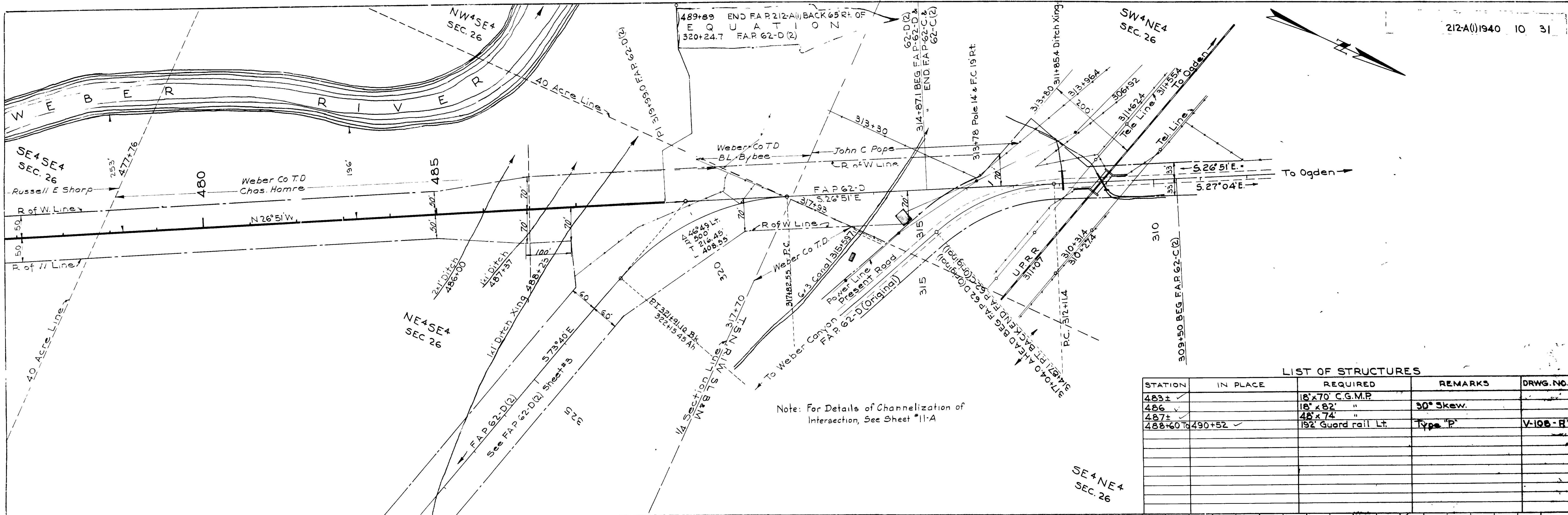
LIST OF STRUCTURES

STATION	IN PLACE	REQUIRED	REMARKS	DRWG. NO.
450+10		6x3x54 Conc. Box		S.C.600-3L-36
452+		18x76 C.G.M.P.		
457+50		18x120 " Syphon	Soldered joints 60° skew	E-471-L9
460+50		6x3x61.5" Conc. Box		S.C.600-3L-37
465+00		18x68 C.G.M.P.		
470+50		18x58		
471+20		36x86	37° Skew.	
477+		18x76		
460-466		11 Guide Posts Lt & Rt.	60 Spacing.	
473-476		6 " Lt & Rt.		
449-453		6 " Rt.		
472+00		33-24 0.00 I Beam Br.		C-191 7shts
463+		12x36 C.G.M.P.	Side drain Rt under road	
467+		18x20		
475		N.26°51'W		
480		Rt.		



Remarks  
 Sta. 450+ to 460+ 6x3 Channel Required.  
 Sta. 455+ to 460+ Borrow available 100 R. & Lt.  
 463 Construct approaches to X road each side.  
 Sta. 466+ to 471+ 2x1 Channel req'd each side.

PLAN  
NOTE BOOK NO. 3316  
C. W. FORTNECK 1936  
H. S. WRIGHT 1939  
F. B. PETERSEN 1939  
Traced



LIST OF STRUCTURES

STATION	IN PLACE	REQUIRED	REMARKS	DRWG. NO.
483±	✓	18' x 70' C.G.M.P.		
486	✓	18' x 82' "	30° Skew.	
487±	✓	48' x 74' "		
488+60 To 490+52	✓	192' Guard rail Lt.	Type "P"	V-106-R

PROFILE  
NOTE BOOK NO. 3317  
C. W. FORTNECK 1936  
H. S. WRIGHT 1939  
F. B. PETERSEN 1939  
Checked

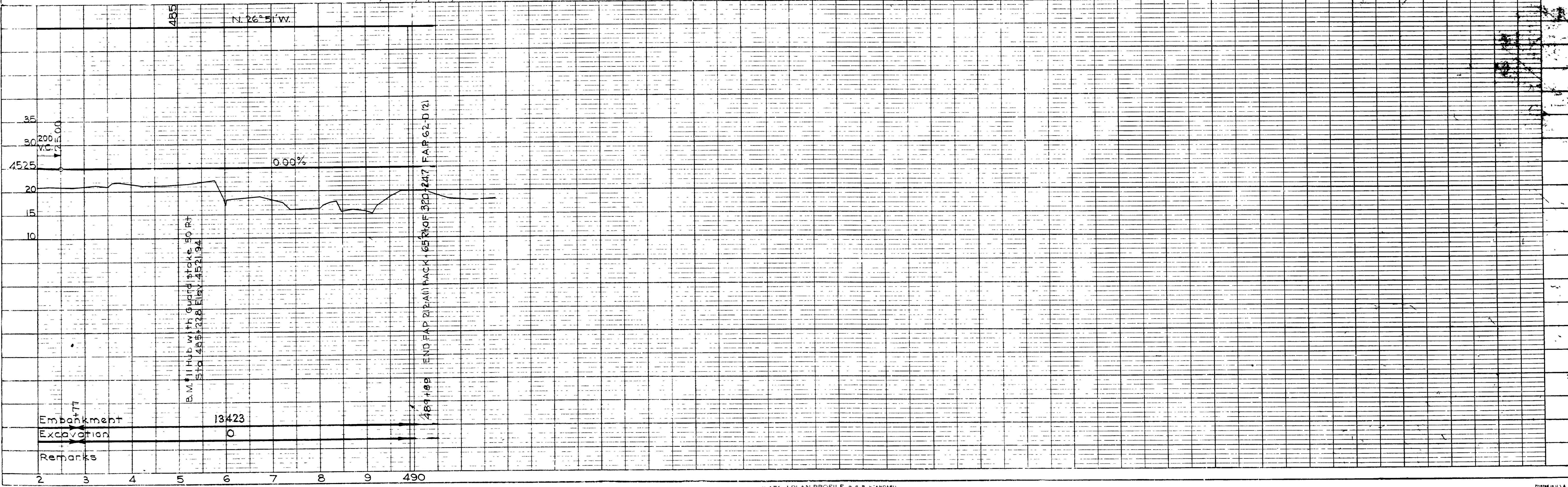
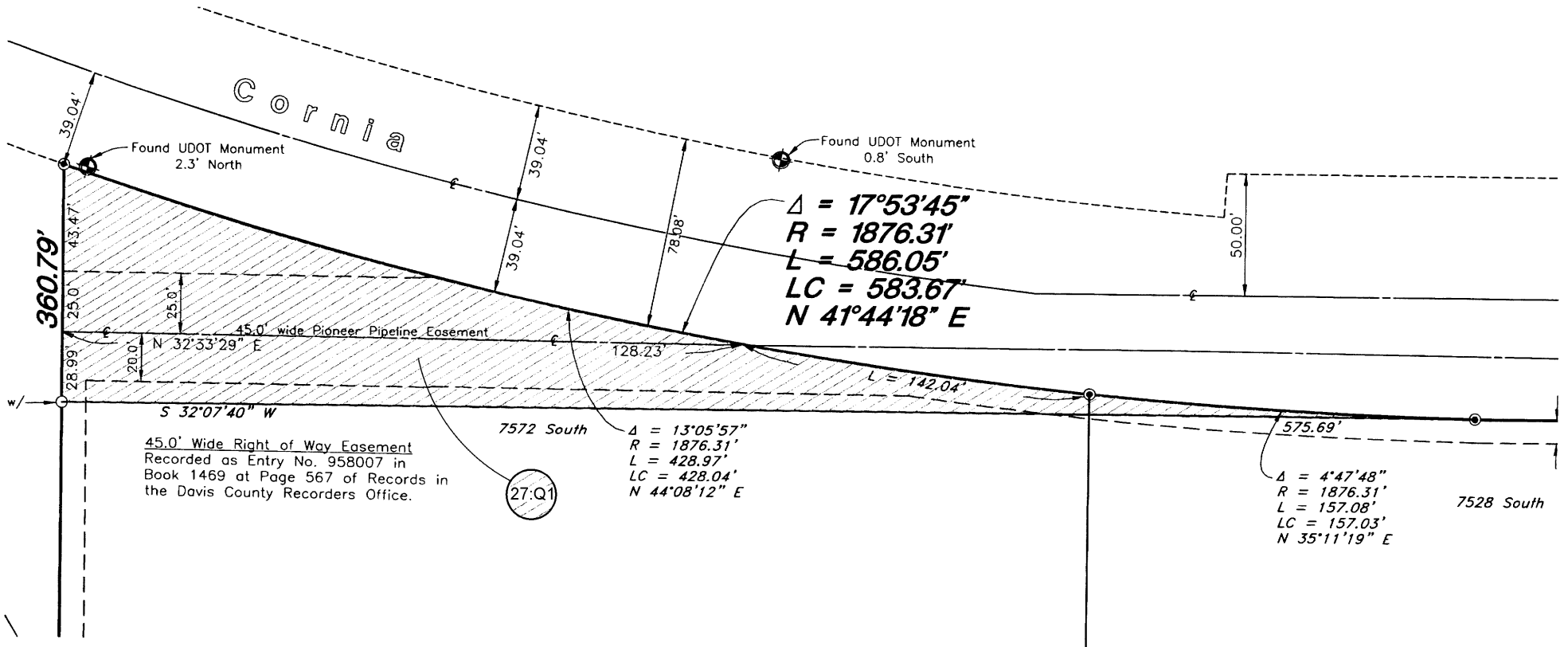
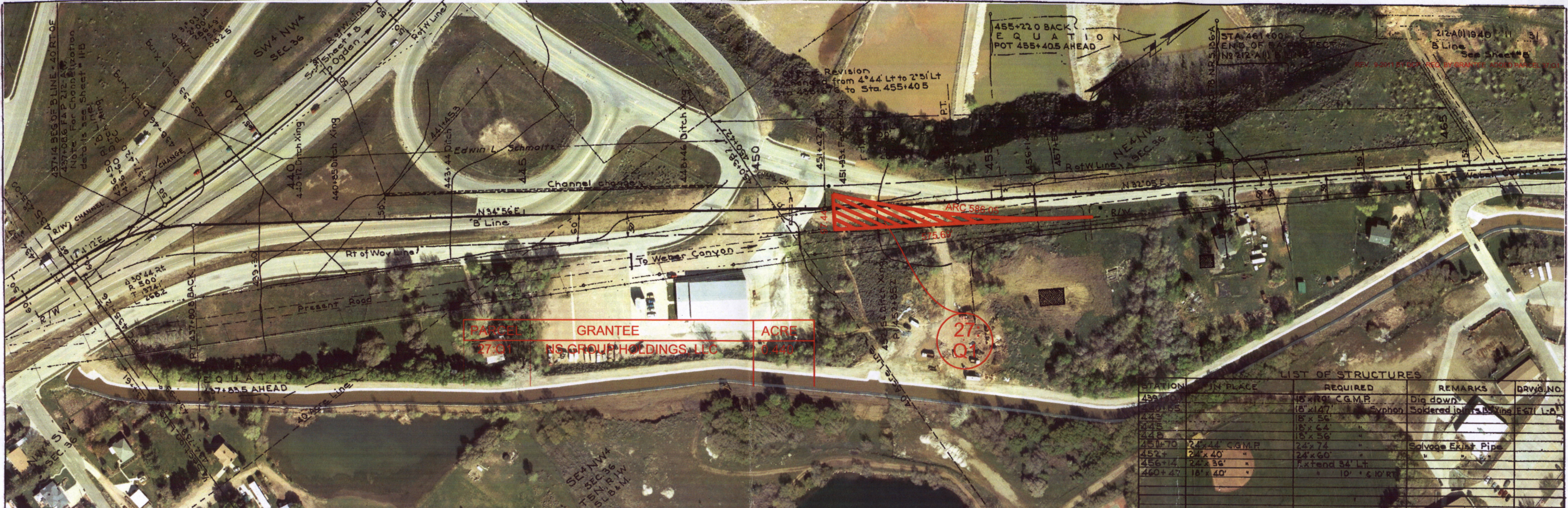


PLATE 1-PLAN-PROFILE R.F.R. STANDARD



Reference:

PLAN  
 DATE: 11/11/13  
 BY: T.M. Forrester  
 CHECKED: H. Wright  
 TRACED: F. B. Patches



PARCEL 27.01  
 GRANTEE NS GROUP HOLDINGS, LLC  
 ACRE 6.440

LIST OF STRUCTURES

STATION	IN PLACE	REQUIRED	REMARKS	DRWG. NO.
450+00		15'x90' C.G.M.P.	Dig down	
450+15		15'x47' Syphon	Soldered joints	E-71 L-8
442		8'x56'		
445		8'x64'		
448		15'x56'		
450+70	24'x44' C.G.M.P.	24'x74'	Solvoe Exst Pipe	
452+	24'x40'	24'x60'		
456+14	24'x36'	Extend 54' Lt		
460+47	18'x40'		10' x 6' 10" m	

PROFILE  
 DATE: 11/11/13  
 BY: T.M. Forrester  
 CHECKED: H. Wright  
 TRACED: F. B. Patches

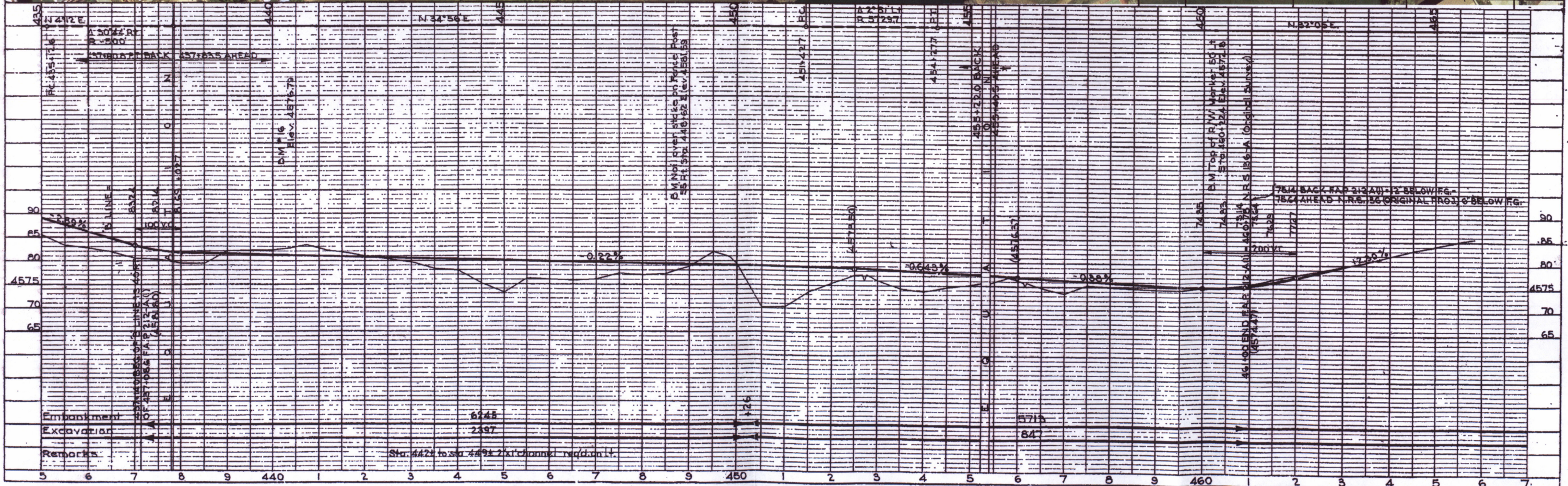
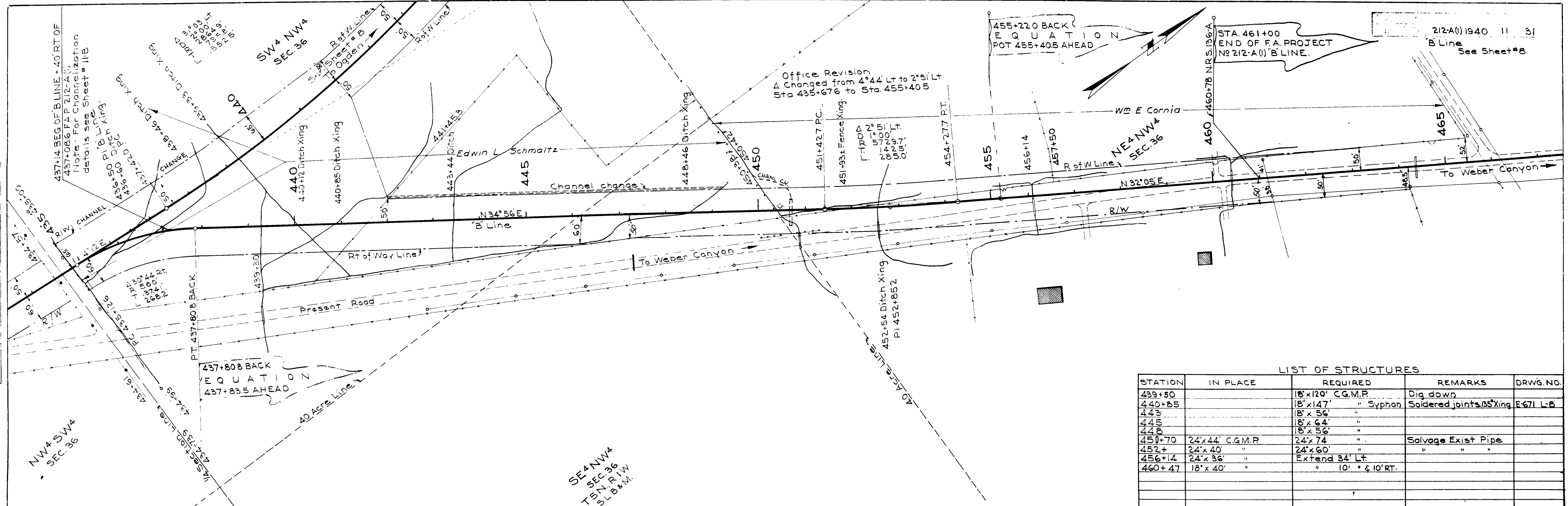


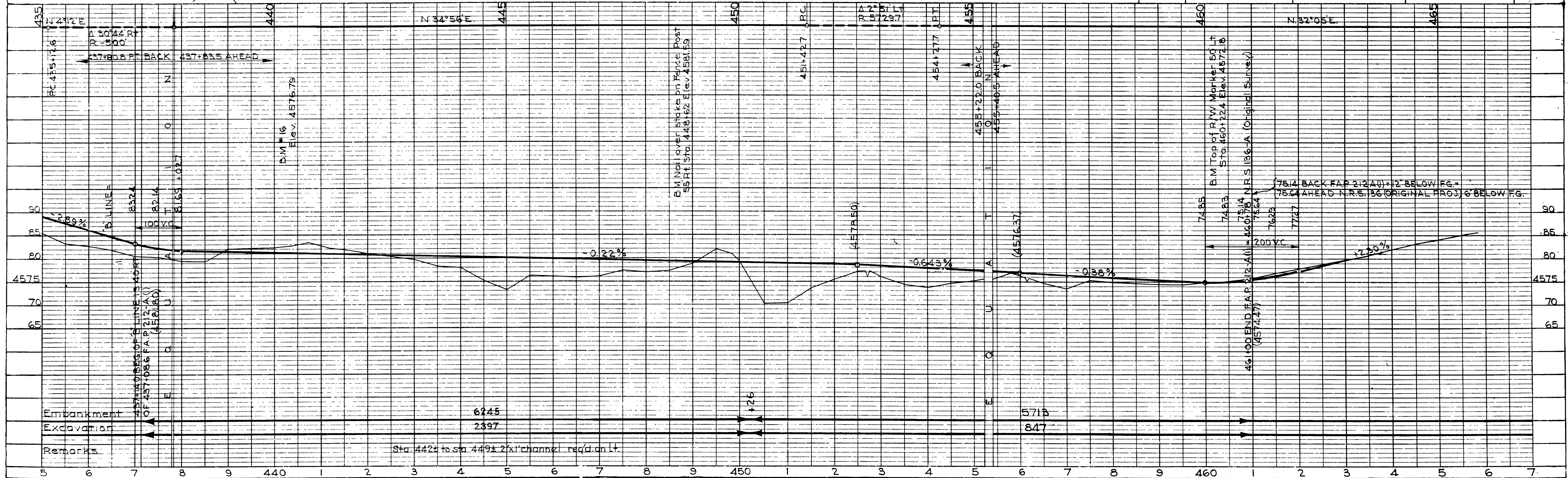
PLATE 1-PLAN-PROFILE & P & R STANDARDS

PLAN  
 DATE: 10/15/33  
 BY: F. B. Peterson  
 CHECKED: H. S. Wright  
 NO. 3316

PROFILE  
 DATE: 10/15/33  
 BY: F. B. Peterson  
 CHECKED: H. S. Wright  
 NO. 3316

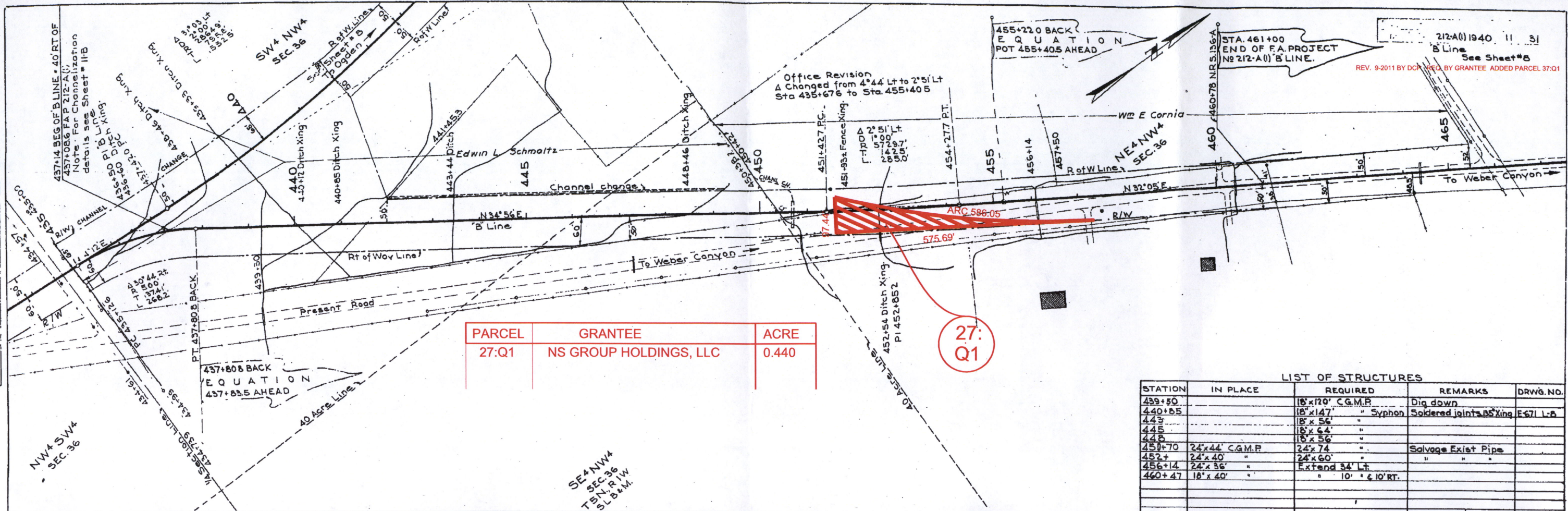


LIST OF STRUCTURES				
STATION	IN PLACE	REQUIRED	REMARKS	DRWG. NO.
439+50		18"x120' C.G.M.P.	Dig down	
440+85		18"x147' "	Syphon Soldered joints, BS Xing	E671 L-8
443		18"x56' "	"	
445		18"x64' "	"	
448		18"x56' "	"	
450+70	24"x44' C.G.M.P.	24"x74' "	Salvage Exist Pipe	
452+	24"x40' "	24"x60' "	"	
456+14	24"x36' "	Extend 34' Lt.	"	
460+47	18"x40' "	" 10' " & 10' RT.	"	



PLAN  
 DATE: 12/11/13  
 BY: M. Forde  
 CHECKED: M. Forde  
 TRACED: M. Forde

PROFILE  
 DATE: 12/11/13  
 BY: M. Forde  
 CHECKED: M. Forde  
 TRACED: M. Forde



PARCEL	GRANTEE	ACRE
27:Q1	NS GROUP HOLDINGS, LLC	0.440

27: Q1

LIST OF STRUCTURES

STATION	IN PLACE	REQUIRED	REMARKS	DRWG. NO.
439+50		18"x120" C.G.M.P.	Dig down	
440+55		18"x147"	Syphon	
443+		18"x56"	Soldered joints	
445		18"x64"		
448		18"x56"		
450+70	24"x44" C.G.M.P.	24"x74"	Salvage Exist Pipe	
452+	24"x40"	24"x60"		
456+14	24"x36"	Extend 34' Lt.		
460+47	18"x40"	10' x 10' RT.		

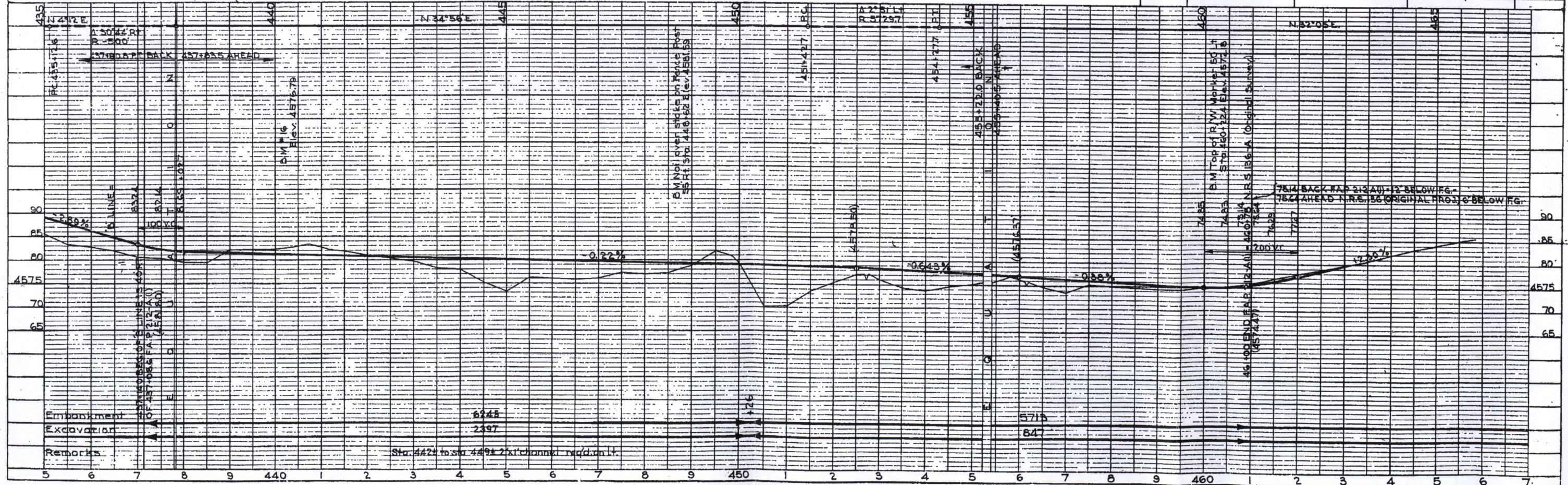
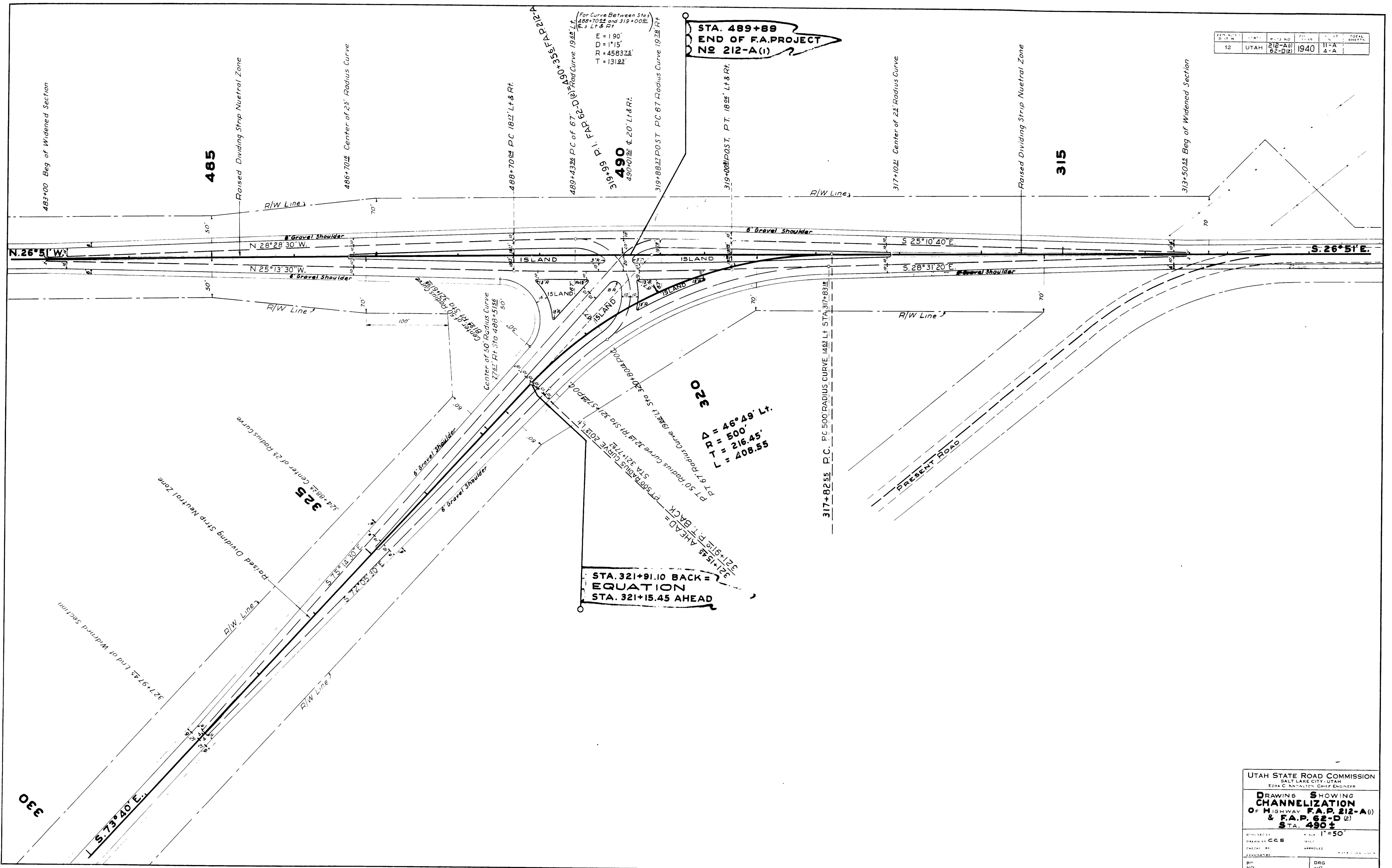


PLATE I-PLAN-PROFILE & P & R STANDARD

REV. 9-2011 BY DORR BY GRANTEE ADDED PARCEL 37:Q1

REV. NO.	DATE	BY	TOTAL SHEETS
12	UTAH	62-D(2)	4-A

REVISIONS	DATE	BY



UTAH STATE ROAD COMMISSION  
 SALT LAKE CITY, UTAH  
 EZRA C. KENTON, CHIEF ENGINEER

**DRAWING SHOWING CHANNELIZATION**  
 OF HIGHWAY F.A.P. 212-A(1)  
 & F.A.P. 62-D(2)  
 STA. 490 ±

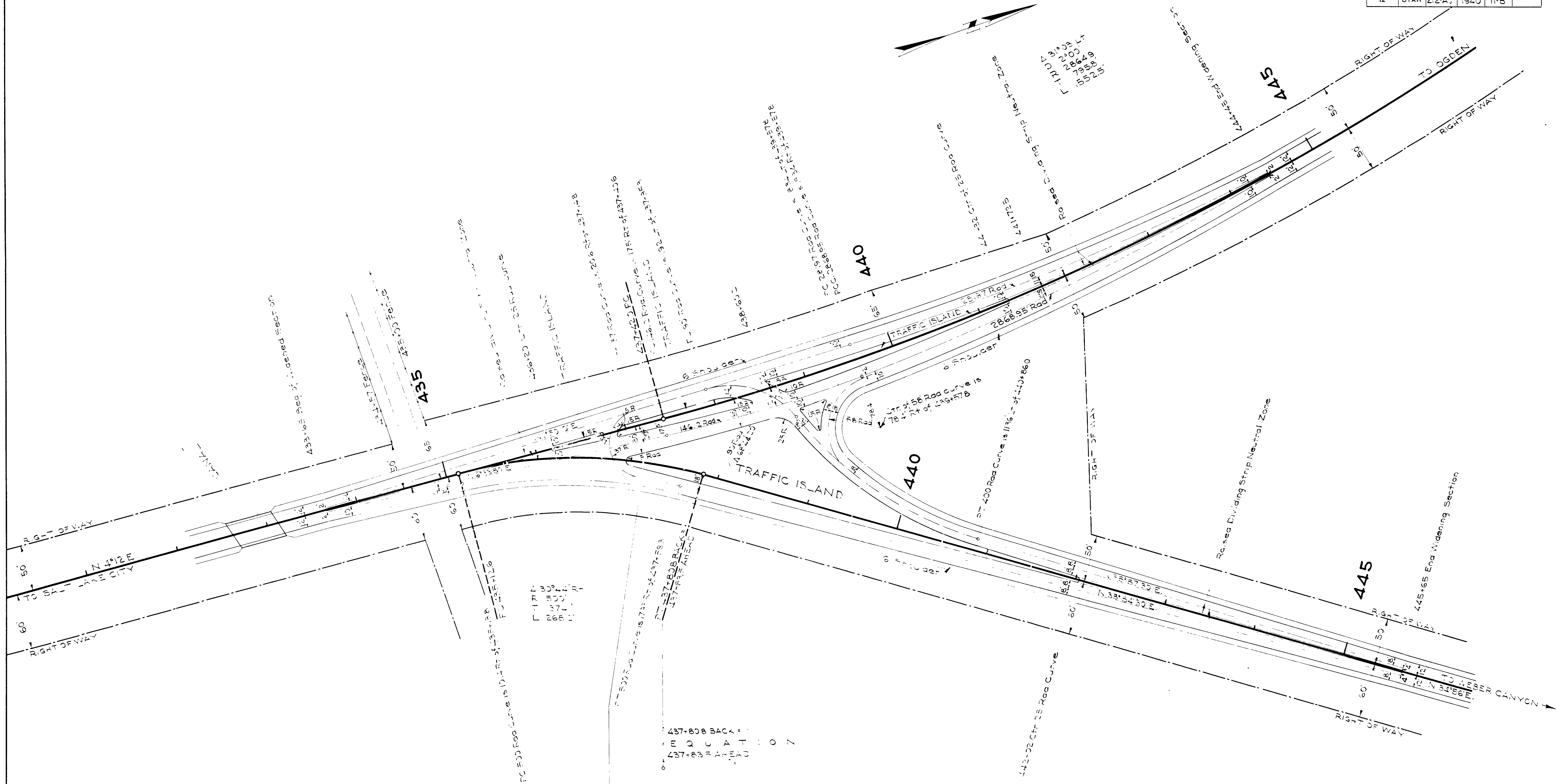
SCALE 1"=50'

DRAWN BY CCB  
 CHECKED BY  
 APPROVED BY

RF NO. DRG NO.

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
12	UTAH	2-2-A	1940	11-B	

REVISIONS	
DATE	BY



437-808 BACKSIGHT  
 EDUCATION  
 437-808 BACKSIGHT

437-808 BACKSIGHT  
 EDUCATION  
 437-808 BACKSIGHT

UTAH STATE ROAD COMMISSION  
 SALT LAKE CITY, UTAH  
 EZRA C. KNOWLTON, CHIEF ENGINEER

DRAWING SHOWING  
 CHANNELIZATION OF  
 HIGHWAY  
 445, STA. 435+00

DESIGNED BY: [ ] SCALE: 1" = 20'  
 DRAWN BY: [ ] CHECKED: [ ]  
 CHECKED BY: [ ] APPROVED: [ ]  
 EXAMINED BY: [ ]

BR NO. [ ] DRG NO. [ ]



FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
12	UTAH	212 (1)			

### SPECIAL NOTE

The contractor shall be responsible for, and shall promptly make all repairs necessary to fully restore, any damage to the canal system, its owners, operators and users due to any cause whatsoever occasioned by the contractor's operations in the construction of the work under the contract. Any arrangement necessary for control of water to facilitate construction operations shall be made by the contractor in conjunction with the Canal Company's officials.

### GENERAL NOTES

For Materials and Workmanship see State Standard Specifications for Road and Bridge Construction, Edition 1939.  
 All concrete to be class "A" and is to be cured as per Div. 5, Sec. 5, of the Specs. All corners to be finished square except as shown.  
 Reinforcing steel to be deformed bars overlapped not less than 50 diameters at all splices, secured against displacement by wiring at all intersections with No. 16 iron wire and shall have a minimum of 1" clear cover of concrete.  
 All reinforcing steel shall fulfill the requirements of the A.S.H.O. specifications M-31.  
 Bar diagrams are not drawn to scale, and those bars not detailed are either straight or field bent. All dimensions are to 1/4" of bar unless otherwise shown.  
 All structural steel shall fulfill the requirements of State Standard Specs of 1939 and shall be given one shop coat of Red Lead Paint A.S.H.O. M-71 or M-72 and two field coats of Aluminum Paint A.S.H.O. M-63.  
 Contractor to furnish all materials.

### DESIGN DATA

A.S.H.O. Specifications of .335  
 H-15 Loading  
 Concrete stresses based on ultimate compression stress of 3000 #/sq in.  
 $f_c = 900 \text{ #/sq in.}$   $f_s = 16000 \text{ #/sq in.}$  Structural steel 18000 # in bending.

### QUANTITIES

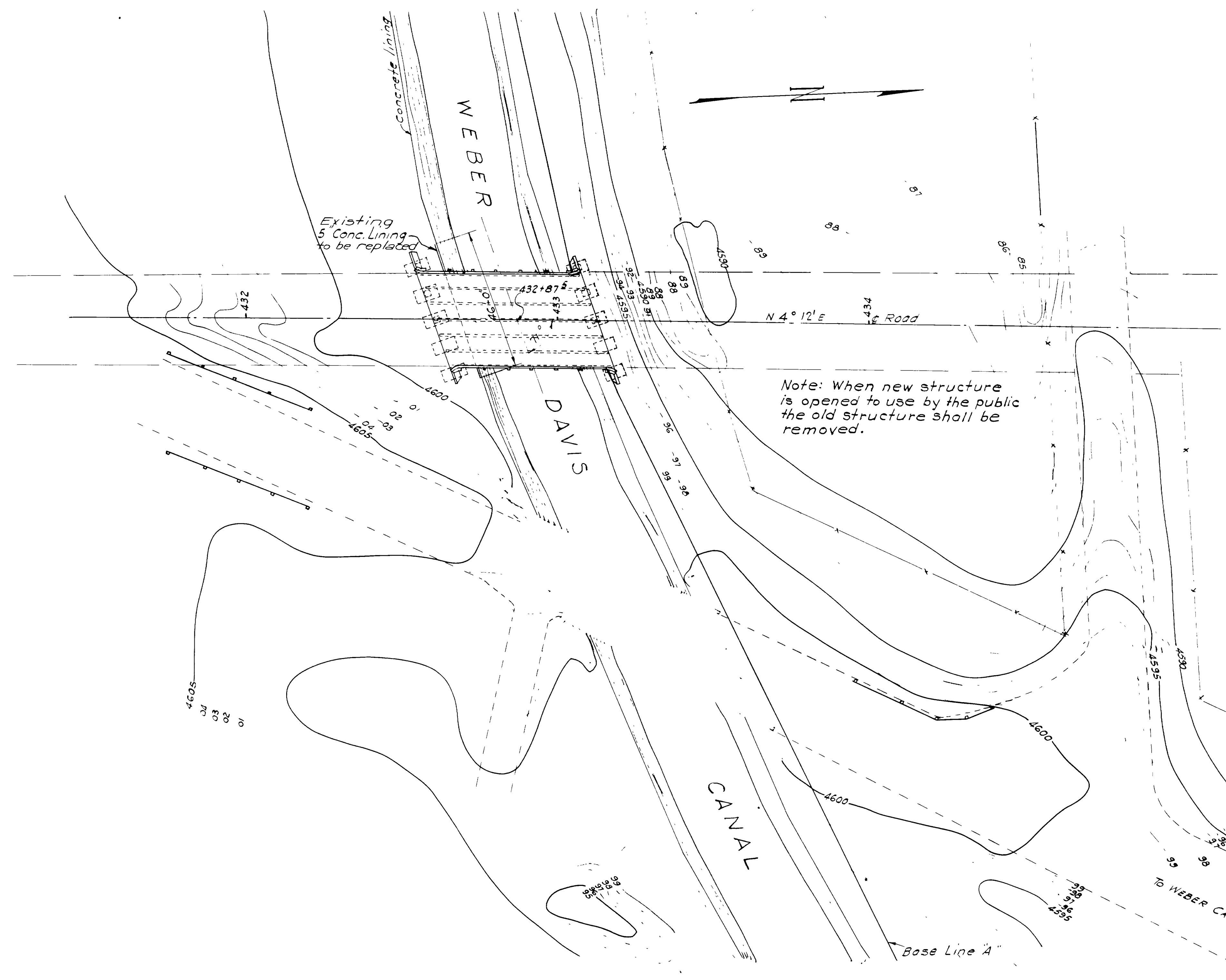
Excav. for Struct.	160 cu. yds.
Concrete, C. A.	98 cu. yds.
Reinforcing Steel	12,882 lbs
Structural Steel	6,500 lbs

Sheet 1 of 6 Sheets

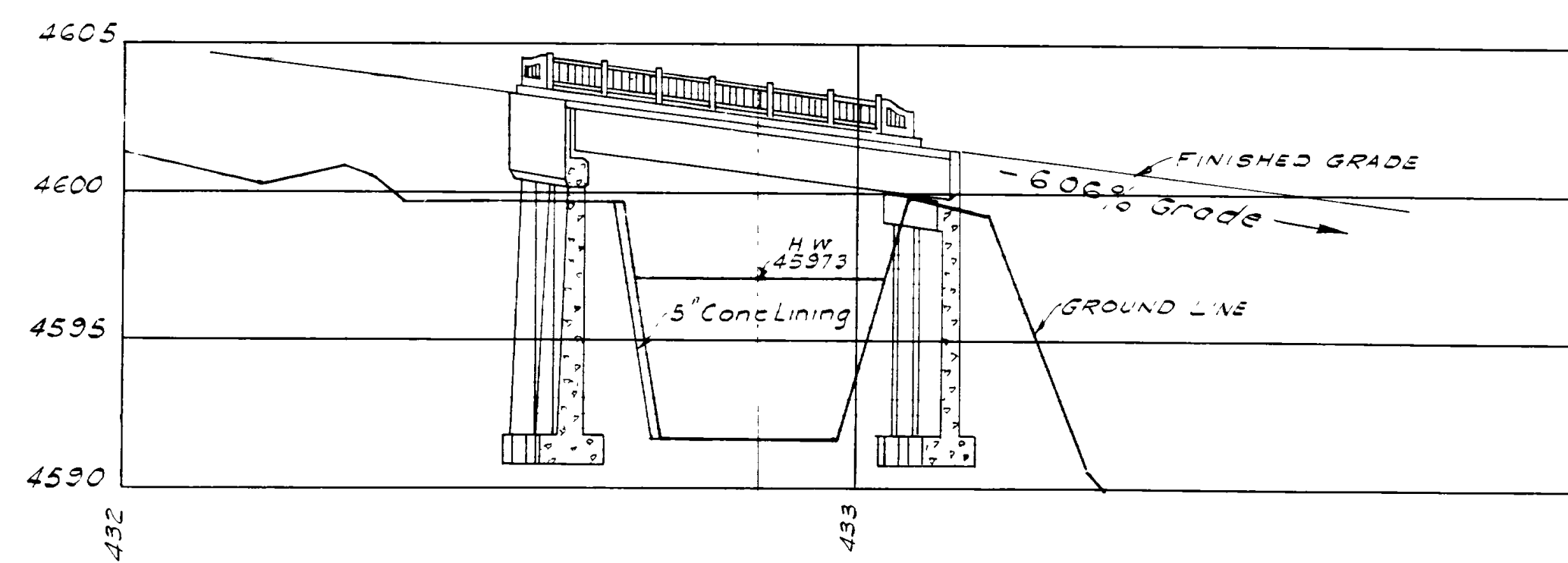
UTAH STATE ROAD COMMISSION  
 SALT LAKE CITY, UTAH  
 EZRA C. KNOWLTON, CHIEF ENGINEER

SITUATION PLAN  
 WEBER DAVIS CANAL BR.  
 Sta. 432+87.5 F.A. P. 212(1)  
 Uintah Mtn. Rd. Davis Co.

DESIGNED BY: K.V.T. SCALE: As Shown  
 DRAWN BY: H. H. H. H.  
 CHECKED BY: APPROVED: H. H. H. H.  
 EXAMINED BY: H. H. H. H.  
 BRIDGE NO. 25-16 DRG NO. C-184

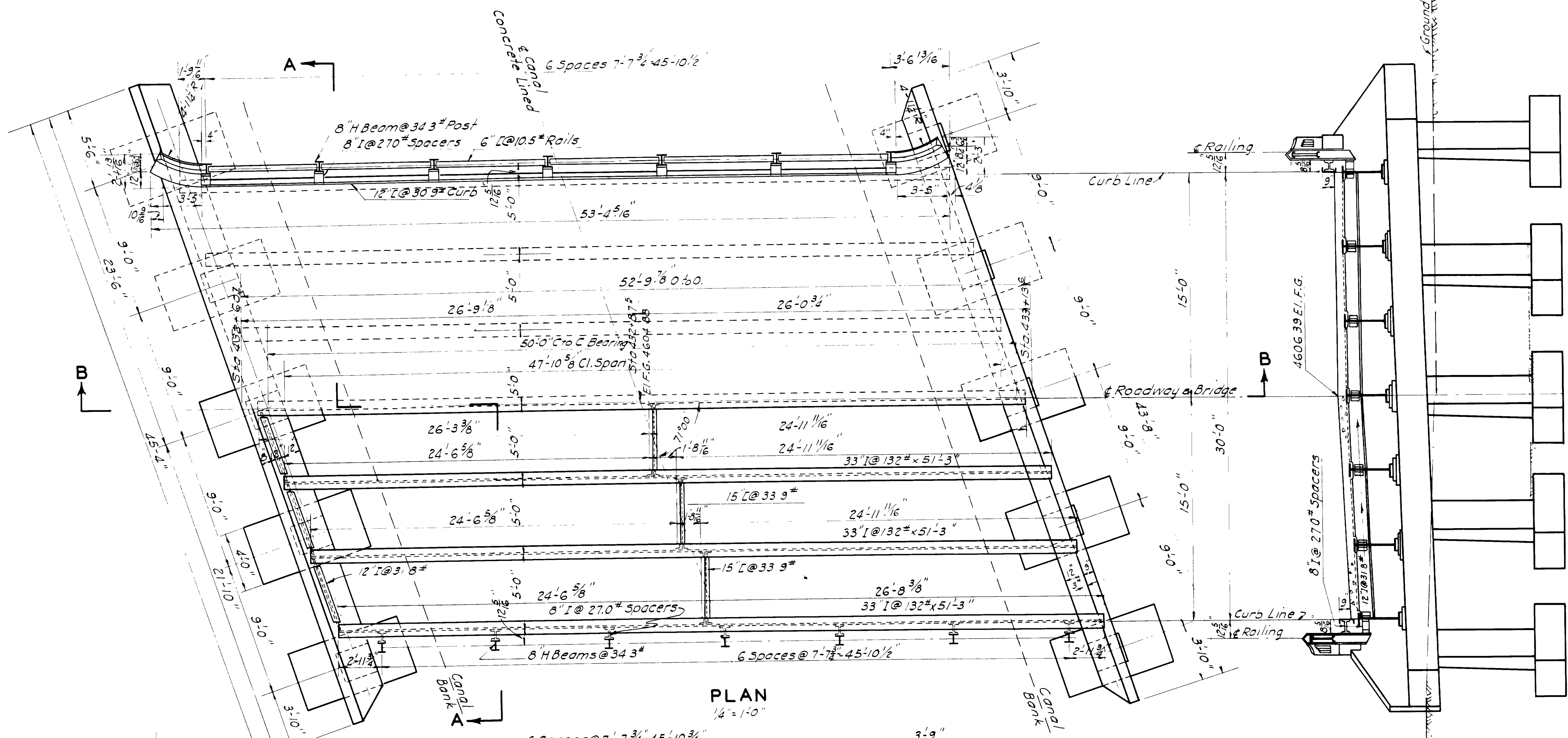


PLAN  
 1" = 20'-0"



Horiz. 1" = 20'-0" PROFILE Vert. 1" = 5'-0"

NO.	REVISIONS	DATE	BY	CHKD.
1	REVISED	9/22/39	PLM	



PLAN  
1/4" = 1'-0"

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

**NOTE:-**  
When excavations for footings are being made the contractor shall use such methods and provide strutting to positively prevent displacement of material supporting the canal lining. The excavation for the toe of the footing shall not extend beyond the absolute minimum to accommodate the forms.  
All backfilling shall be carefully placed so as to obtain maximum compaction.

**NOTE:-**  
Along the North bank the concrete lining of canal is not to be disturbed, and any caving or breaking of concrete during construction of bridge is to be replaced and paid for by the contractor.

NO.	DATE	REVISIONS
1	1/25/25	REVISED
2	2/1/25	REVISED

SHEET 2 OF 6 SHEETS

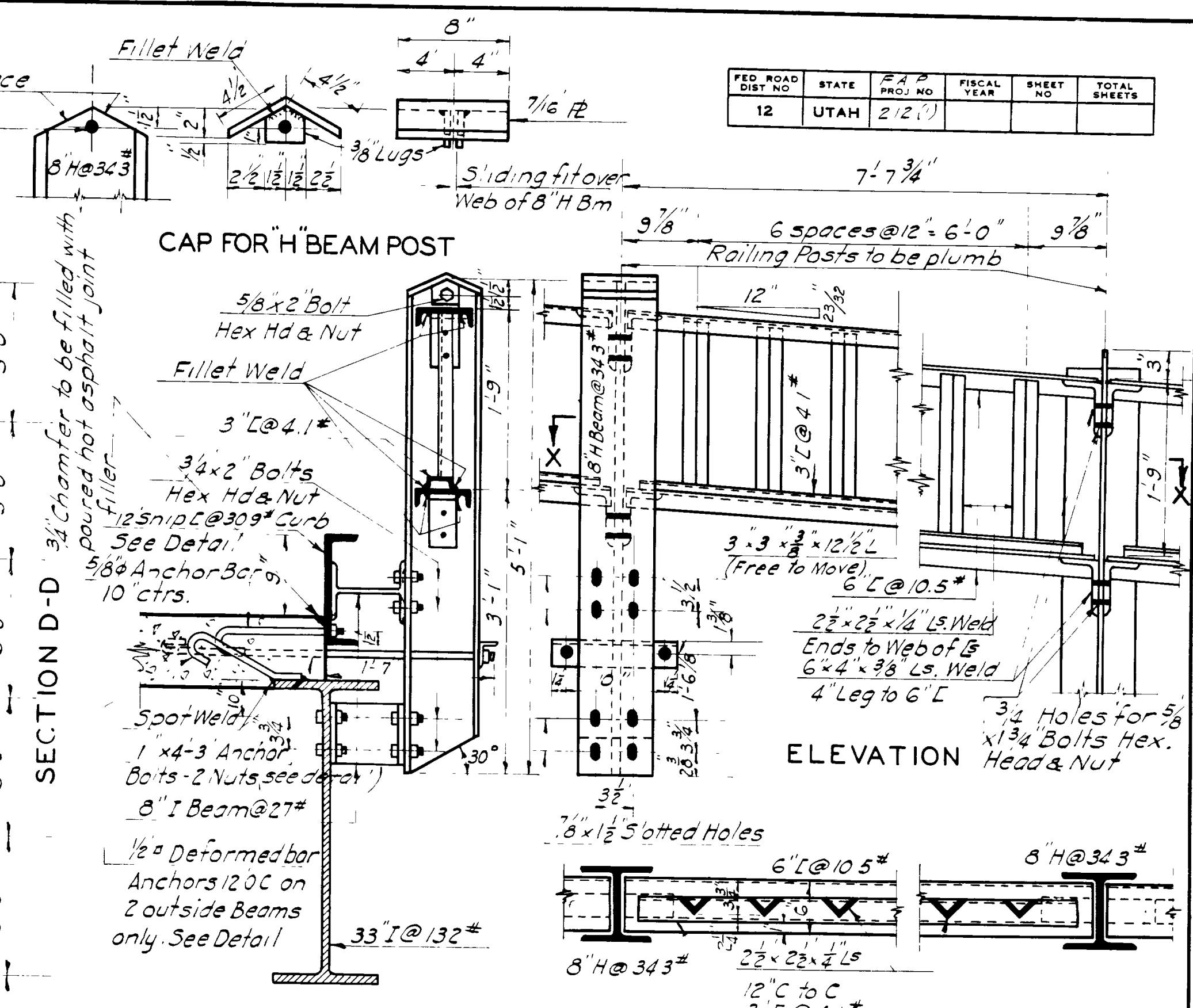
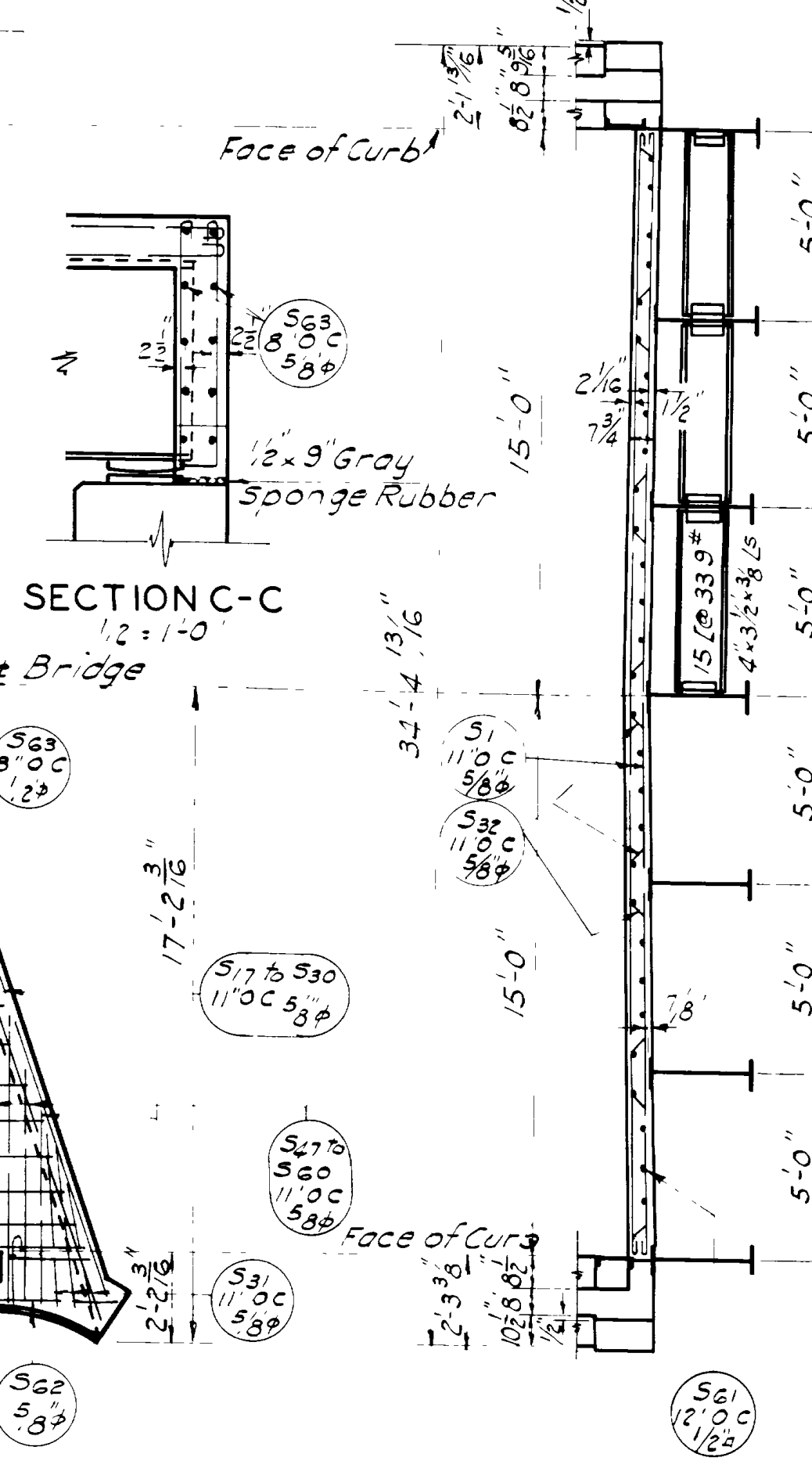
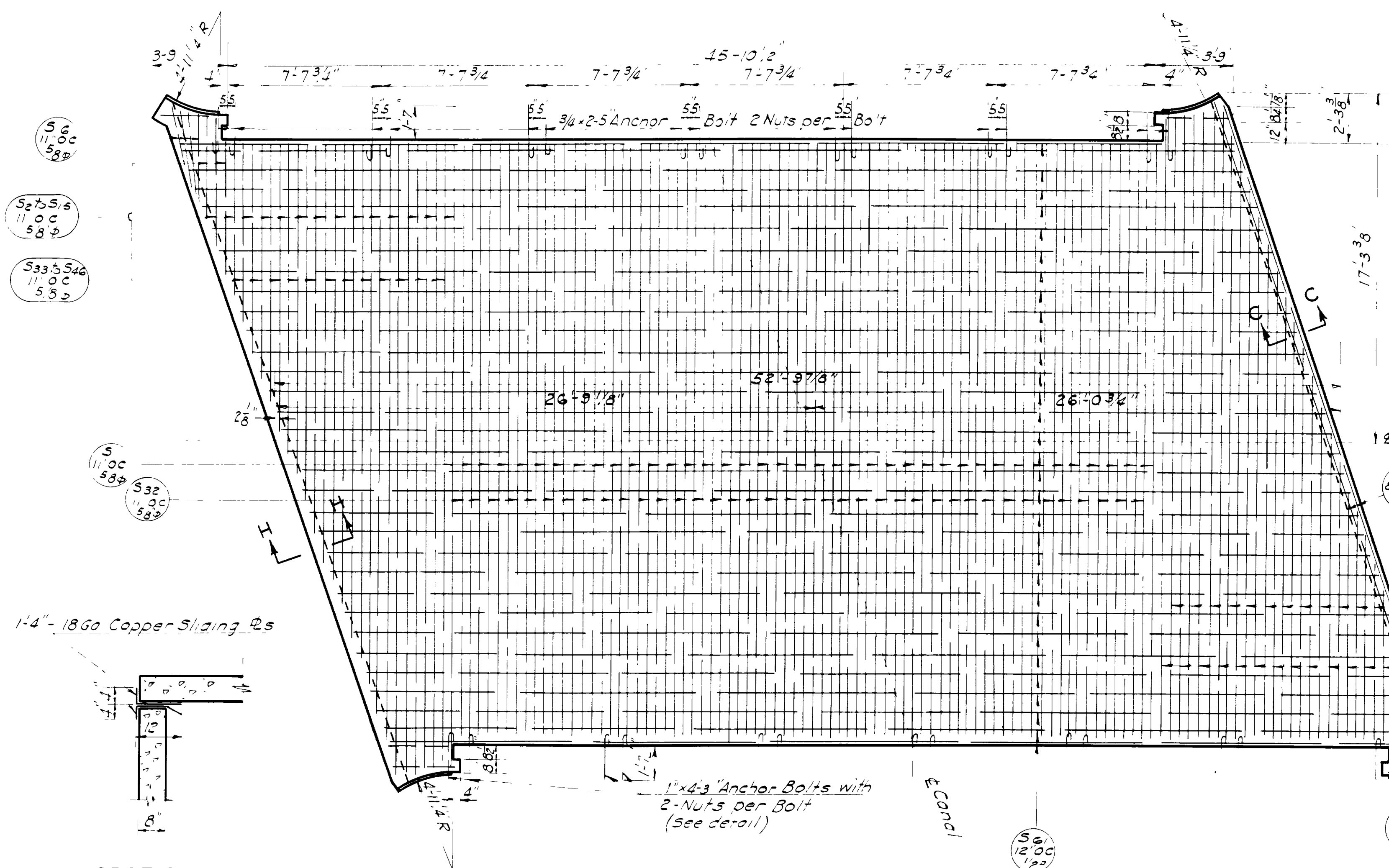
UTAH STATE ROAD COMMISSION  
SALT LAKE CITY - UTAH  
EZRA C. KNOWLTON - CHIEF ENGINEER

52' 10" 0" 0" I-BEAM BR WITH  
CONC. DECK 7' 0" X 11' 6" L  
WEBER DAVIS CANAL  
Sta 432+87.5 F.A.P. 212(1)  
Uintah Mtn Rd Davis Co.  
As Shown

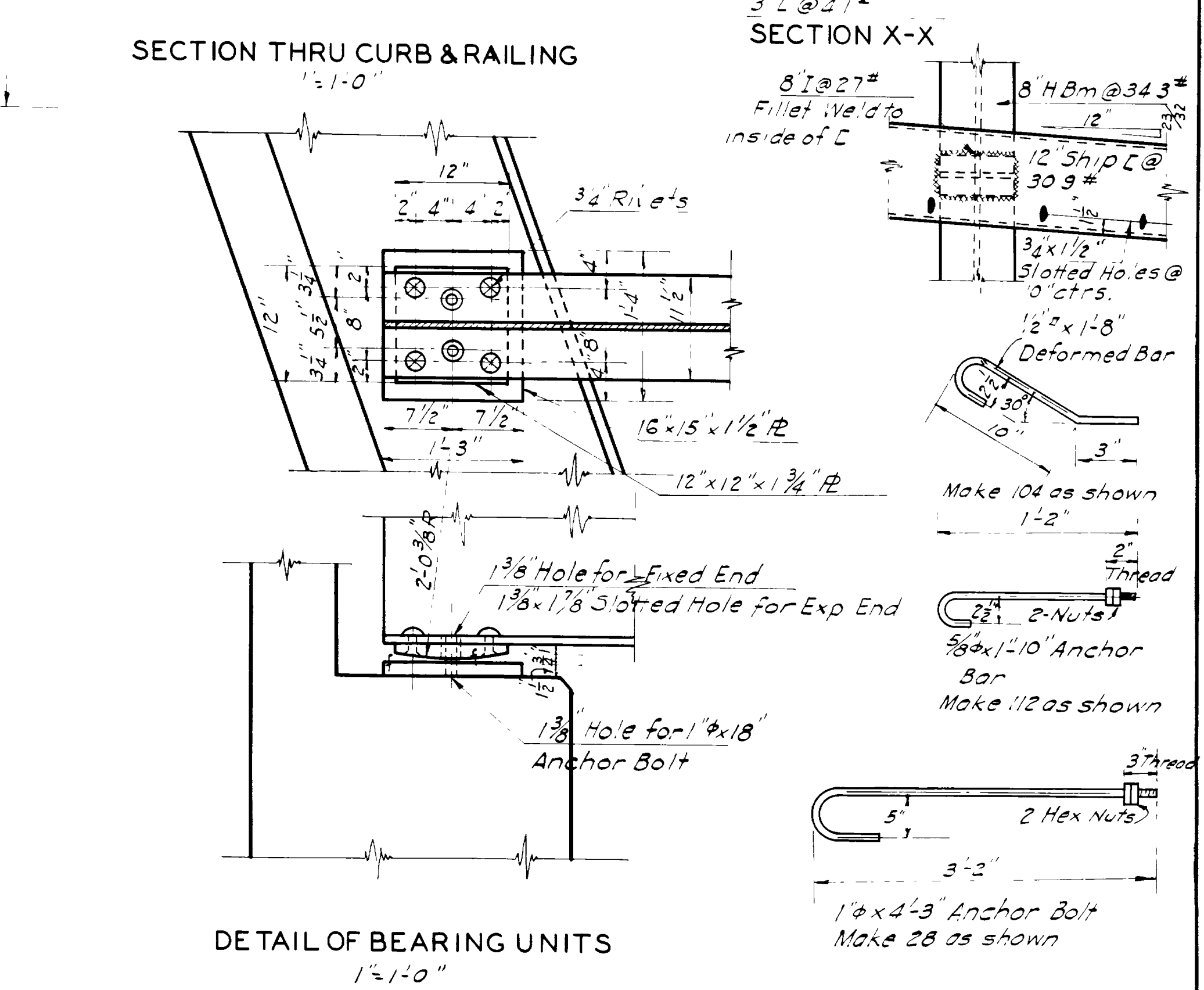
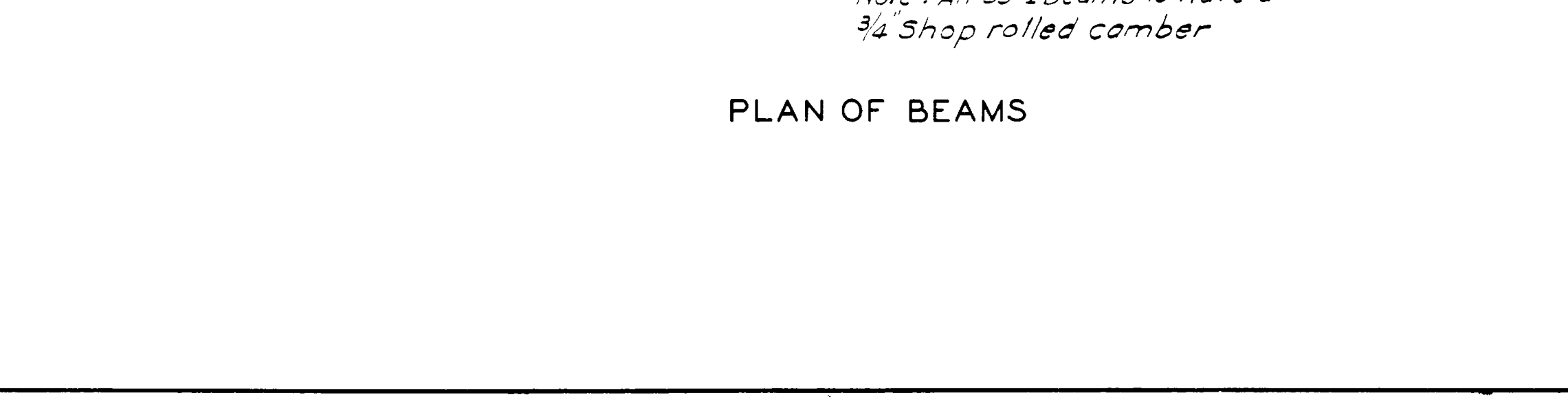
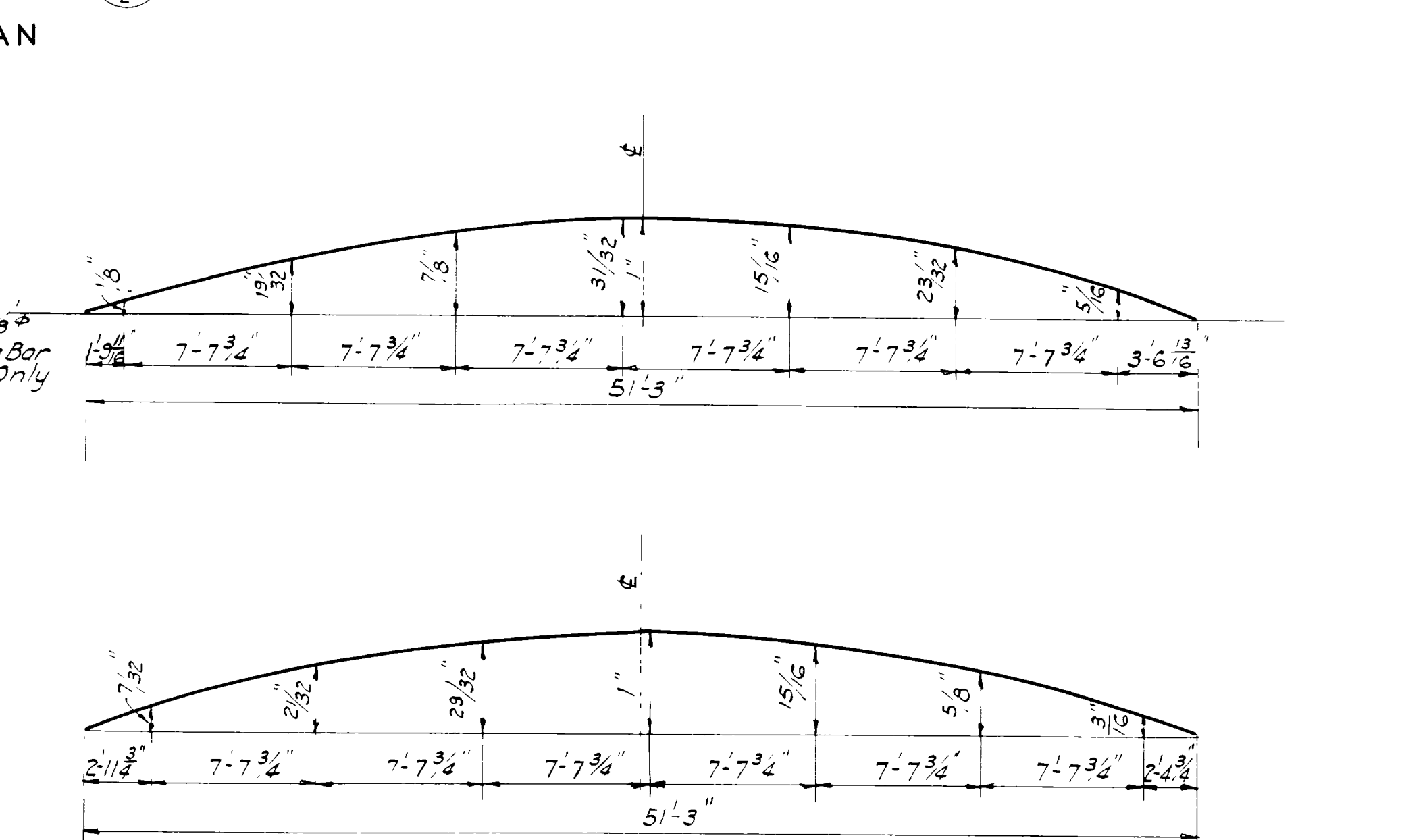
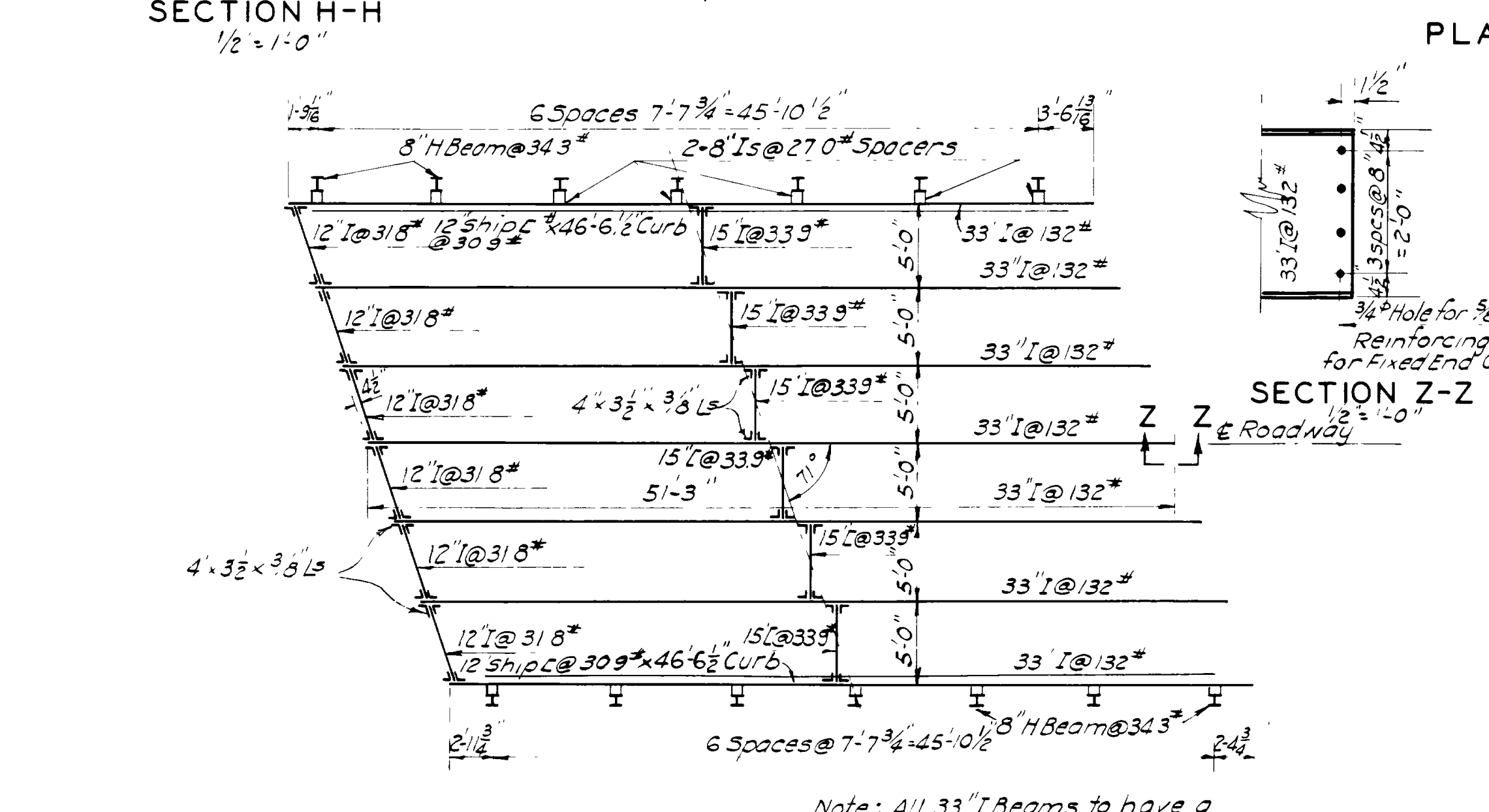
DESIGNED BY: KWT  
DRAWN BY: KWT  
CHECKED BY: KWT  
APPROVED BY: [Signature]  
THIRD GRADE ENGINEER

6-25-1-6  
BRIDGE NO. C-184 DRG. NO. C-184

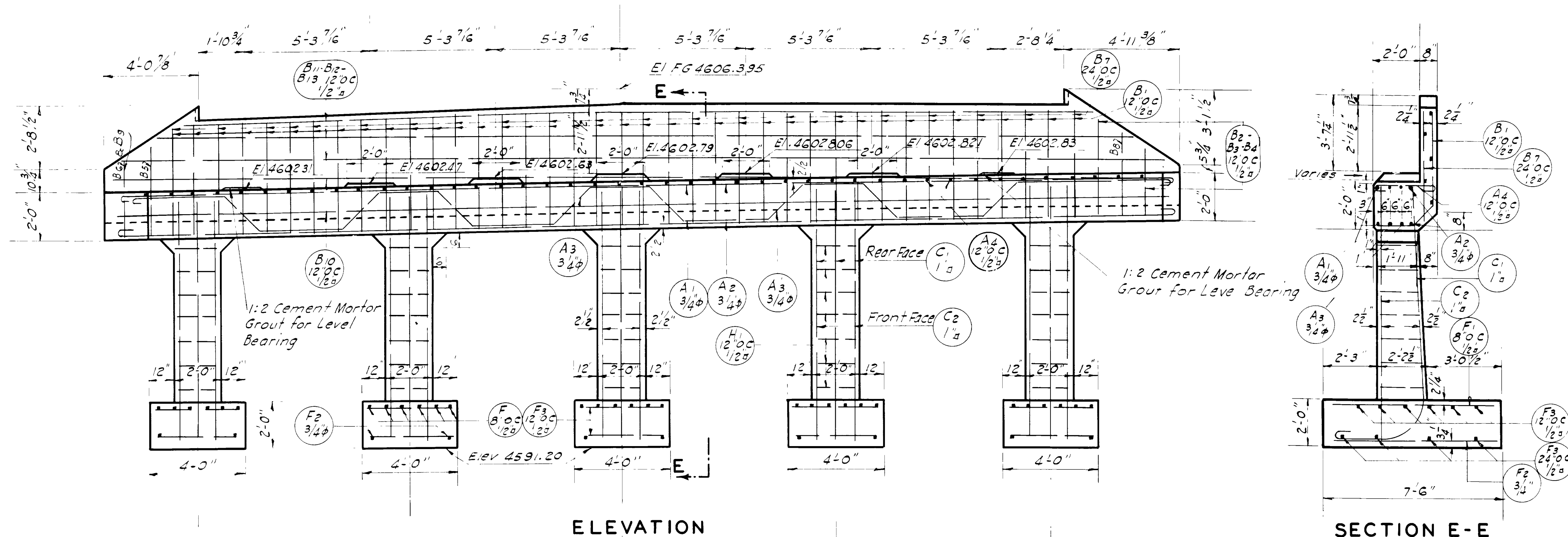
FED. ROAD DIST. NO.	STATE	F.A.P. PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
12	UTAH	212(1)			



NO.	DATE	REVISIONS
1	5-29-59	AS SHOWN

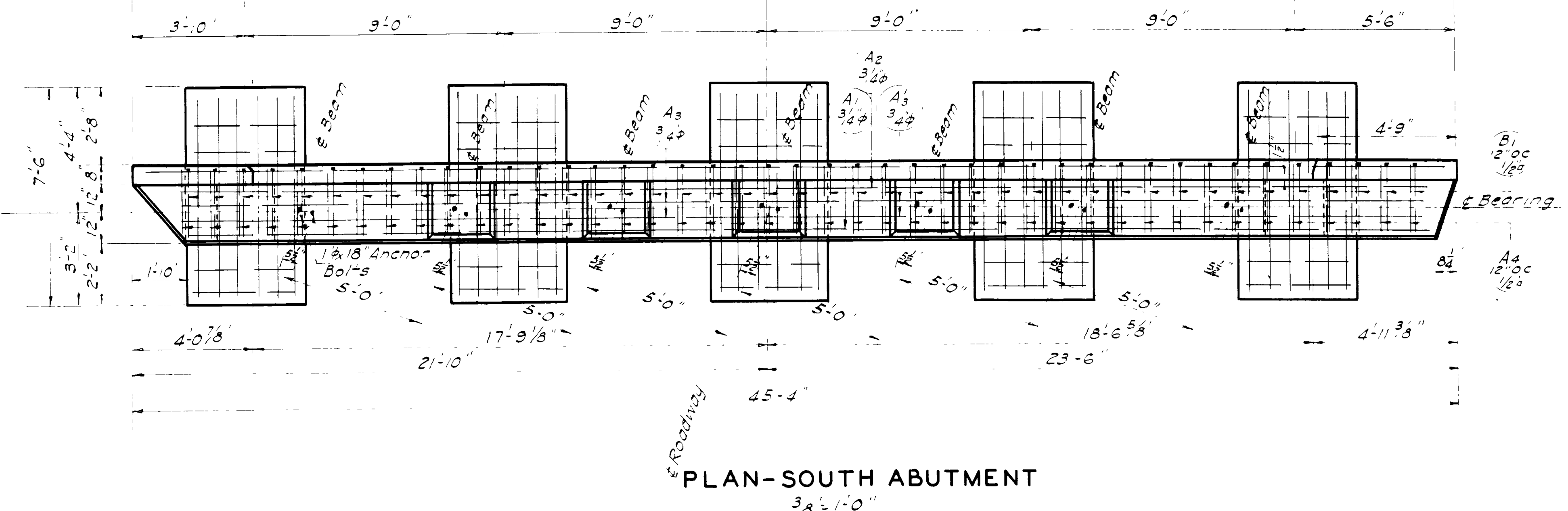


Sheet 3 of 6 Sheets  
 UTAH STATE ROAD COMMISSION  
 SALT LAKE CITY, UTAH  
 EZRA C. KNOWLTON, CHIEF ENGINEER  
 52'-10' 0\"/>



ELEVATION

SECTION E-E

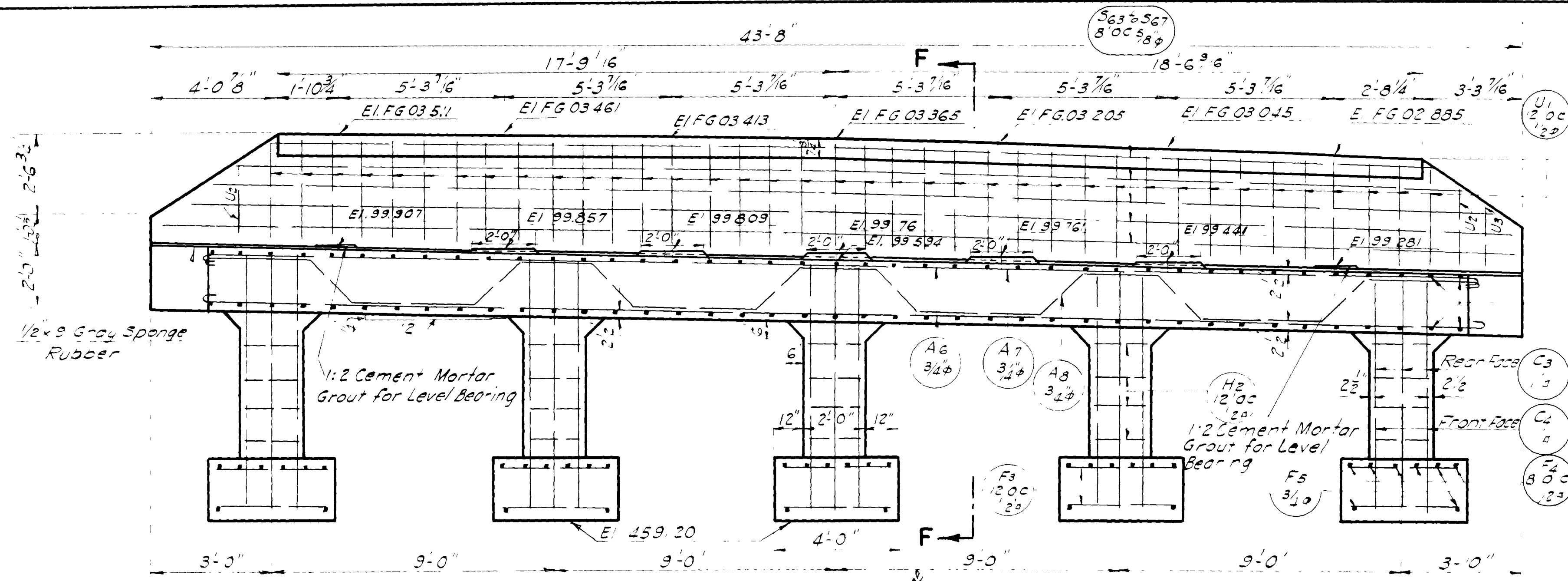


PLAN-SOUTH ABUTMENT

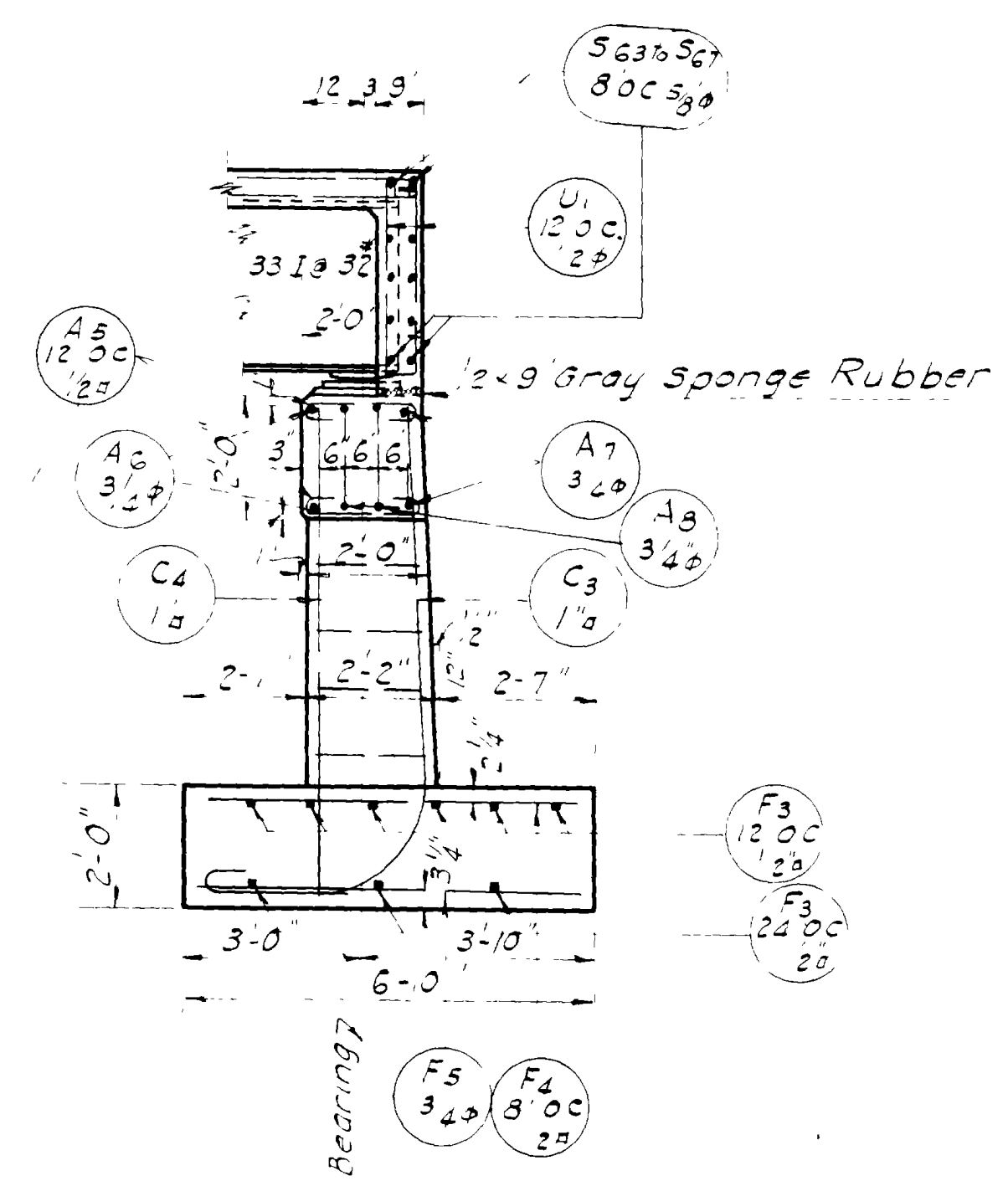
NO.	DATE	BY	REVISION
1	5/20/47	KWT	

Sheet 4 of 6 Sheets  
 UTAH STATE ROAD COMMISSION  
 SALT LAKE CITY, UTAH  
 EZRA C. KNOWLTON, CHIEF ENGINEER  
 52'-10" 0" 0" I-BEAM BR. WITH  
 CONC. DECK 7' 0" X 11" L  
 WEBER DAVIS CANAL  
 5+0.432+97.5 F.A.P. 212 (1)  
 Uintah Mtn. Rd. Davis Co.  
 DESIGNED BY: KWT SCALE: As Shown  
 DRAWN BY: KWT ISSUE: March 24 '39  
 CHECKED BY: APPROVED: [Signature]  
 EXAMINED BY: CHIEF BRIDGE ENGINEER  
 5-25-16  
 BRIDGE NO. DRG NO. C-134

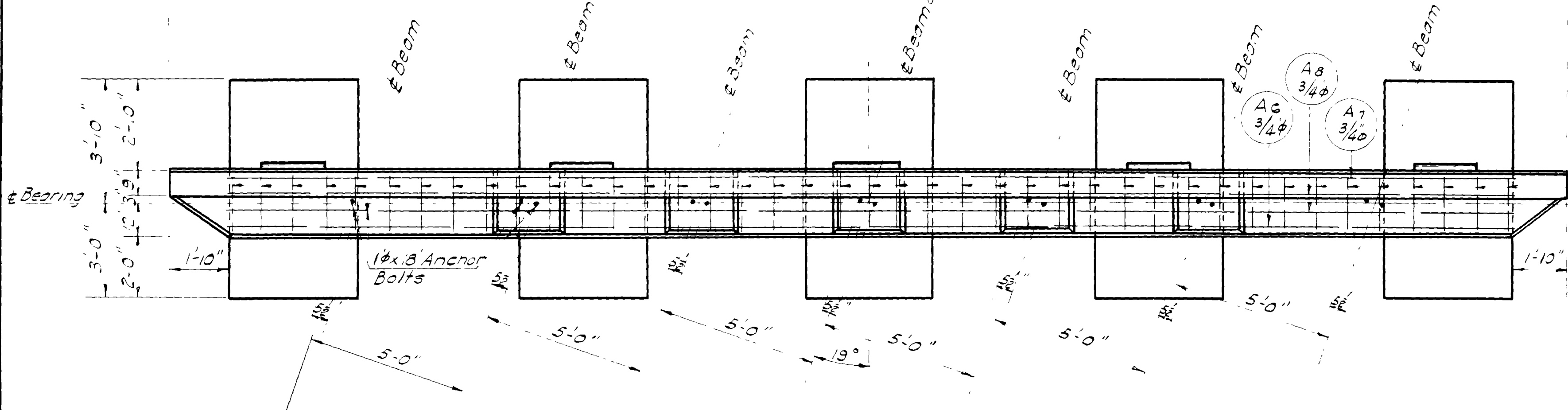
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
12	UTAH	212			



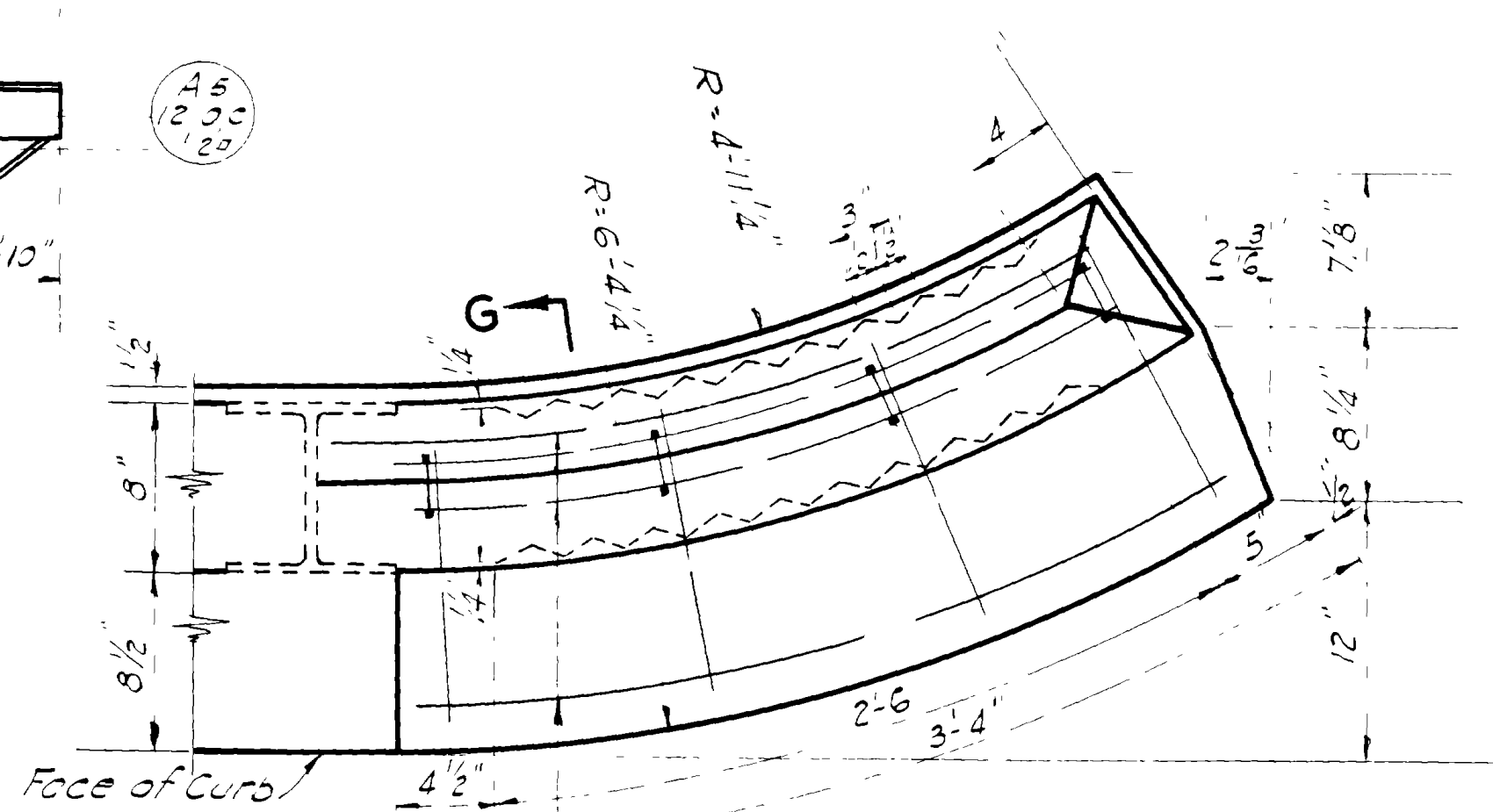
ELEVATION



SECTION F-F

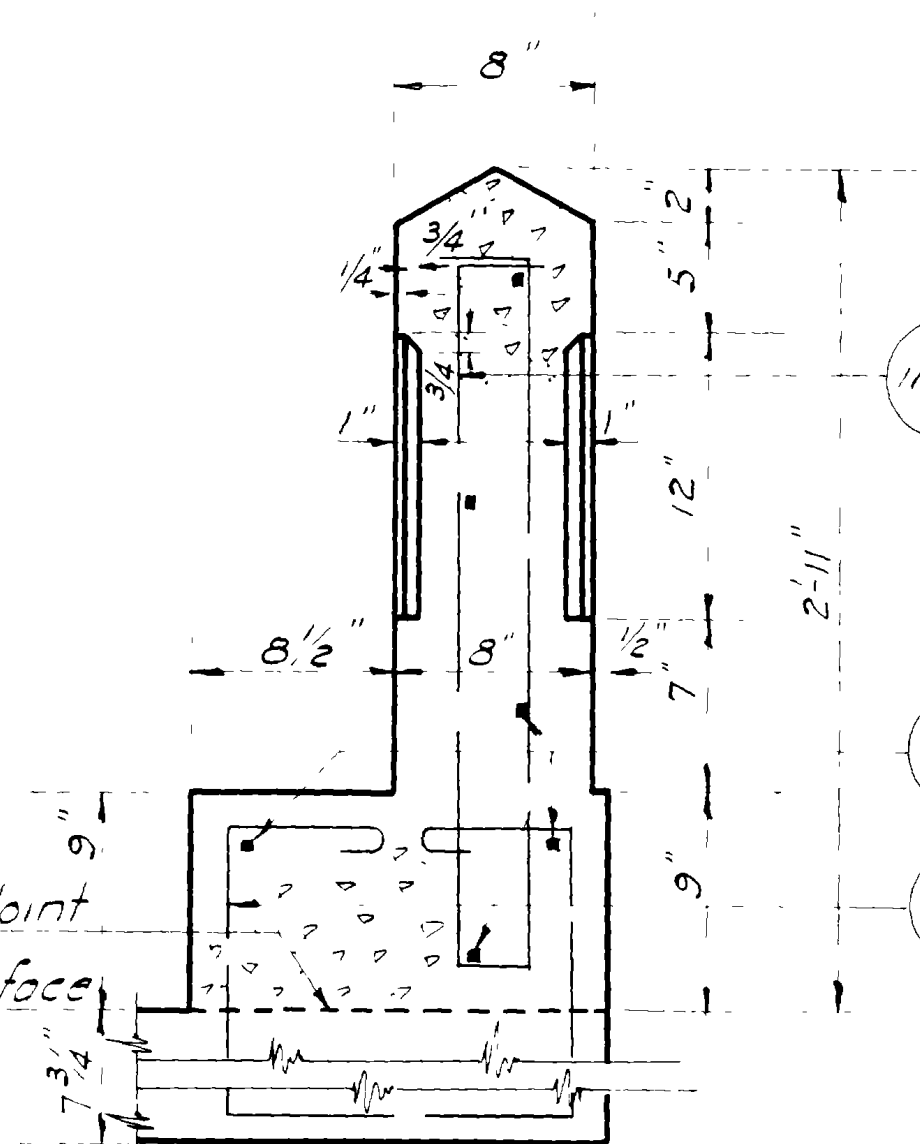


PLAN - NORTH ABUTMENT

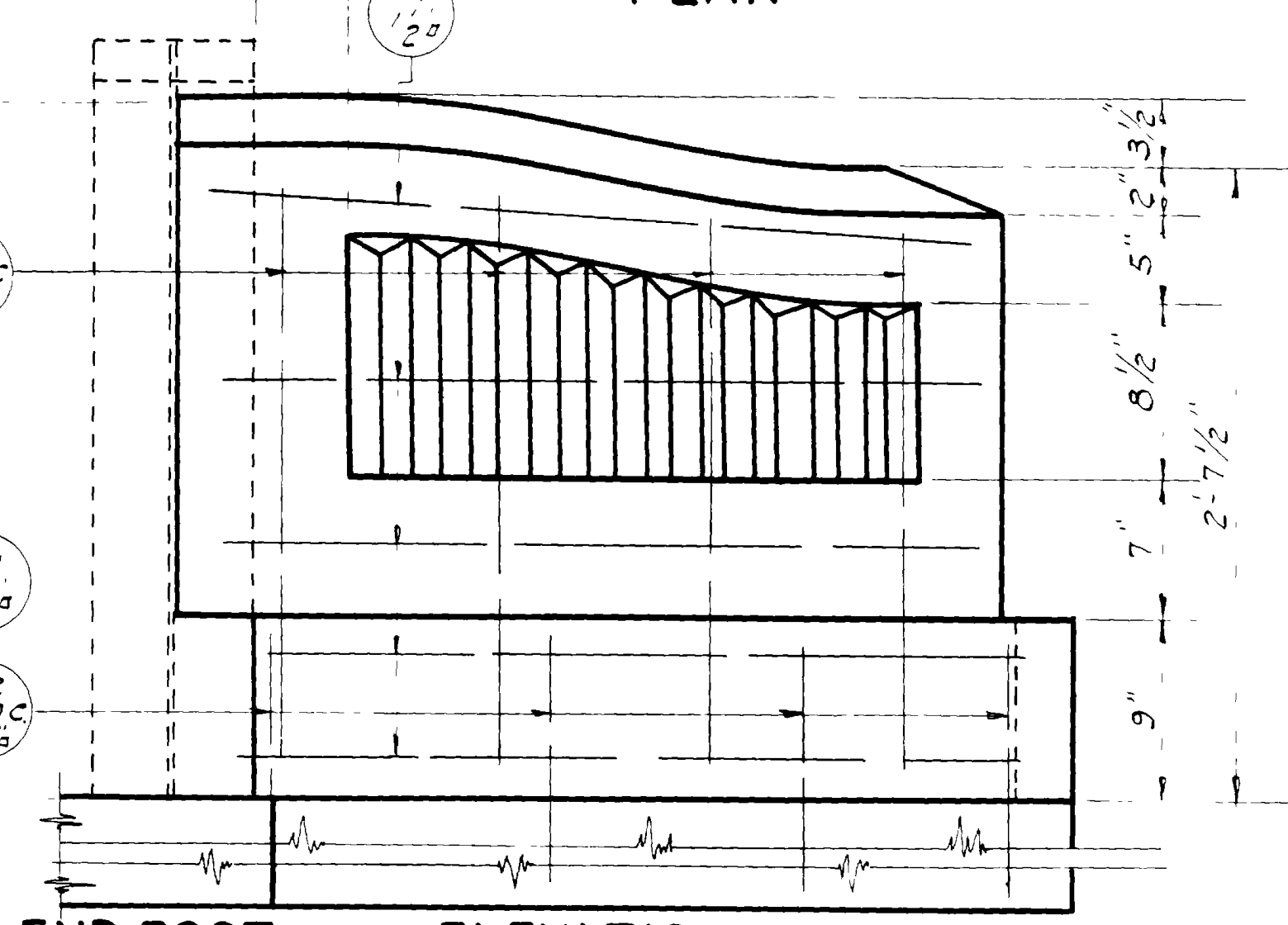


PLAN

REVISIONS	DATE	BY	CHK



SECTION G-G DETAIL OF END POST



ELEVATION

Sheet 5 of 6 Sheets  
 UTAH STATE ROAD COMMISSION  
 SALT LAKE CITY, UTAH  
 ERNEST C. KNOWLTON, CHIEF ENGINEER  
 52-10' 0" I-BEAM BR. WITH  
 CONC DECK 7' 00" X 10' 0"  
 WEBER DAVIS CANAL  
 Sta 432+87.5 FA P212(1)  
 Uintah Mtn Rd Davis Co.  
 DESIGNED BY KWT SCALE AS SHOWN  
 DRAWN BY KWT  
 CHECKED BY KWT  
 APPROVED BY [Signature]  
 6-25-1-8  
 BRIDGE NO. \_\_\_\_\_ DRG NO. C-184

MARK	LOCATION	SIZE	LGTH.	NO BARS	TOTAL LENGTH	SKETCH	O/b O
S1	Slab	5/8"	31'-1"	76	2362'-4"		29'-9"
S2	"	5/8"	32'-5"	2	62'-10"		31'-1"
S3	"	5/8"	32'-9"	2	65'-6"		31'-5"
S4	"	5/8"	33'-0"	2	66'-0"		31'-8"
S5	"	5/8"	33'-4"	2	66'-8"		32'-0"
S6	"	5/8"	30'-11"	2	61'-10"		29'-7"
S7	"	5/8"	28'-3"	2	56'-6"		26'-11"
S8	"	5/8"	25'-7"	2	51'-2"		24'-3"
S9	"	5/8"	22'-11"	2	45'-0"		21'-7"
S10	"	5/8"	20'-3"	2	40'-6"		18'-11"
S11	"	5/8"	17'-7"	2	35'-2"		16'-3"
S12	"	5/8"	14'-11"	2	29'-10"		13'-7"
S13	"	5/8"	12'-3"	2	24'-6"		10'-11"
S14	"	5/8"	9'-7"	2	19'-2"		8'-3"
S15	"	5/8"	8'-3"	2	16'-6"		6'-11"
S16	"	5/8"	5'-11"	6	35'-6"		1'-7"
S17	"	5/8"	32'-7"	2	65'-2"		31'-3"
S18	"	5/8"	32'-11"	2	65'-10"		31'-7"
S19	"	5/8"	33'-2"	2	66'-4"		31'-10"
S20	"	5/8"	31'-9"	2	63'-6"		30'-5"
S21	"	5/8"	29'-1"	2	58'-2"		27'-9"
S22	"	5/8"	26'-5"	2	52'-10"		25'-11"
S23	"	5/8"	23'-9"	2	47'-6"		22'-5"
S24	"	5/8"	21'-1"	2	42'-2"		19'-9"
S25	"	5/8"	18'-5"	2	36'-10"		17'-1"
S26	"	5/8"	15'-9"	2	31'-6"		14'-5"
S27	"	5/8"	13'-1"	2	26'-2"		11'-9"
S28	"	5/8"	10'-5"	2	20'-10"		8'-1"
S29	"	5/8"	9'-2"	2	18'-4"		7'-10"
S30	"	5/8"	6'-6"	2	13'-0"		5'-2"
S31	"	5/8"	6'-4"	4	25'-4"		5'-0"
S32	"	5/8"	32'-10"	38	1247'-8"		
S33	"	5/8"	34'-4"	1	34'-4"	$o=1-10 \frac{1}{2}"$	
S34	"	5/8"	34'-7"	1	34'-7"	$o=2-1 \frac{1}{2}"$	
S35	"	5/8"	34'-11"	1	34'-11"	$o=2-5 \frac{1}{2}"$	

MARK	LOCATION	SIZE	LGTH.	NO BARS	TOTAL LENGTH	SKETCH	O/b O
S36	Slab	5/8"	34'-0"	1	34'-0"		16'-6"
S37	"	5/8"	31'-2"	1	31'-2"		11'-6"
S38	"	5/8"	28'-5"	1	28'-5"		8'-8"
S39	"	5/8"	25'-7"	1	25'-7"		8'-8"
S40	"	5/8"	22'-9"	1	22'-9"		8'-8"
S41	"	5/8"	19'-11"	1	19'-11"		8'-8"
S42	"	5/8"	17'-2"	1	17'-2"		8'-8"
S43	"	5/8"	14'-4"	1	14'-4"		8'-8"
S44	"	5/8"	11'-6"	1	11'-6"		8'-8"
S45	"	5/8"	8'-8"	1	8'-8"		8'-8"

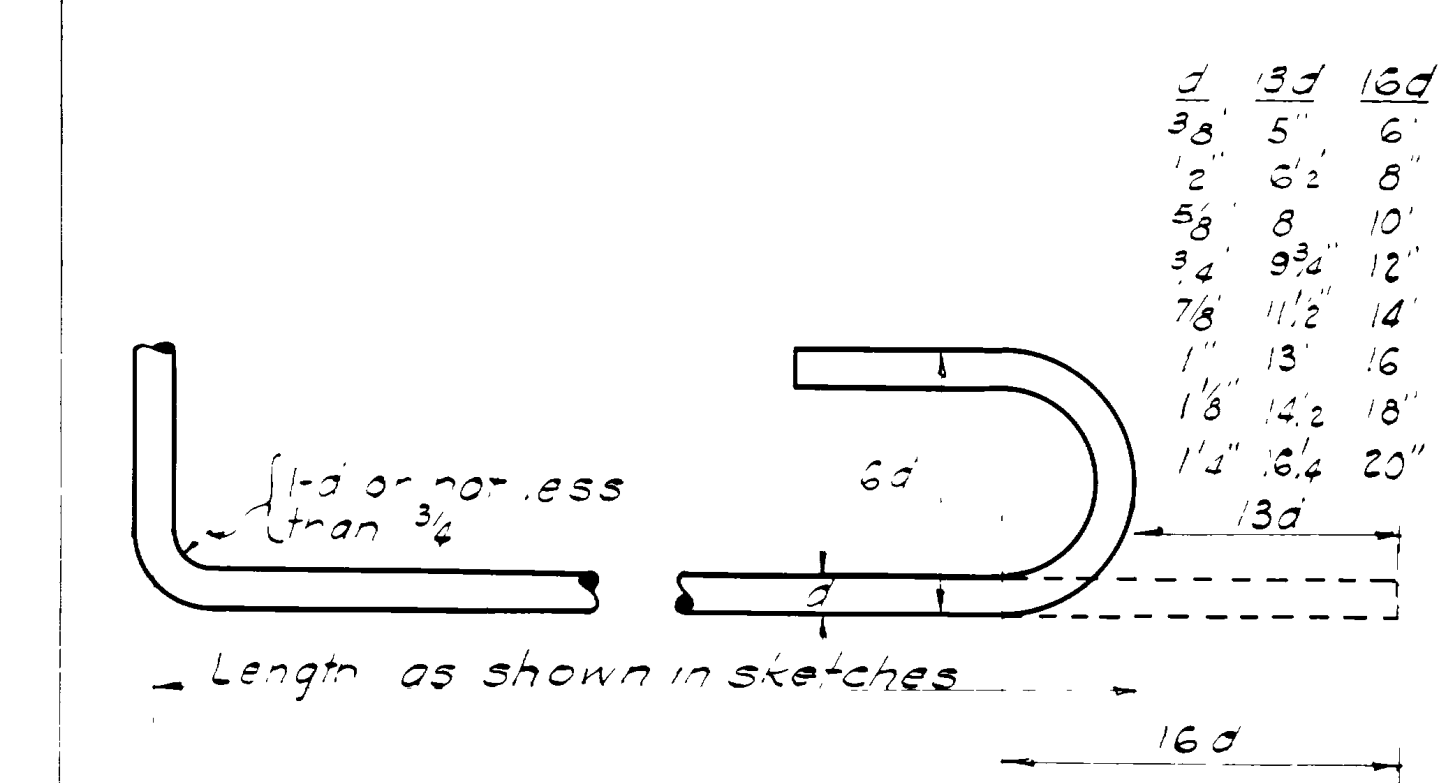
MARK	LOCATION	SIZE	LGTH.	NO BARS	TOTAL LENGTH	SKETCH	O/b O
S46	Slab	5/8"	7'-1"	1	7'-1"		8'-8"
S47	"	5/8"	34'-3"	1	34'-3"		8'-8"
S48	"	5/8"	34'-5"	1	34'-5"	$o=1-11"$	8'-8"
S49	"	5/8"	34'-8"	1	34'-8"	$o=2-12"$	8'-8"
S50	"	5/8"	34'-11"	1	34'-11"	$o=2-4"$	8'-8"
S51	"	5/8"	31'-0"	1	31'-0"		8'-8"
S52	"	5/8"	29'-2"	1	29'-2"		8'-8"
S53	"	5/8"	26'-5"	1	26'-5"		8'-8"
S54	"	5/8"	23'-9"	1	23'-9"		8'-8"
S55	"	5/8"	20'-9"	1	20'-9"		8'-8"
S56	"	5/8"	18'-0"	1	18'-0"		8'-8"
S57	"	5/8"	15'-2"	1	15'-2"		8'-8"
S58	"	5/8"	12'-4"	1	12'-4"		8'-8"
S59	"	5/8"	9'-6"	1	9'-6"		8'-8"

REVISIONS

MARK	LOCATION	SIZE	LGTH.	NO BARS	TOTAL LENGTH	SKETCH	O/b O
B8	Back Wall	5/8"	3'-7"	1	3'-7"		
B9	"	5/8"	3'-2"	1	3'-2"		
C1	Abut. Column	1/2"	14'-11"	15	223'-9"		
C2	"	1/2"	10'-8"	10	106'-8"		
C3	"	1/2"	11'-9"	15	176'-3"		
C4	"	1/2"	7'-8"	10	76'-8"		
F1	Abut. Fig.	1/2"	7'-3"	30	217'-6"		
F2	"	1/2"	7'-3"	10	72'-6"		
F3	"	1/2"	3'-9"	95	356'-3"		
F4	"	1/2"	6'-7"	30	197'-6"		
F5	"	1/2"	6'-7"	10	66'-10"		
H1	Column Hoops	3/8"	7'-8"	35	268'-4"		
H2	"	3/8"	7'-9"	20	155'-0"		
U1	Back Wall Stirrups	3/8"	7'-4"	38	278'-8"		
U2	"	3/8"	5'-0"	2	11'-8"		
U3	"	3/8"	4'-6"	1	4'-6"		
P1	End Post	3/8"	5'-5"	16	86'-8"		
P2	End Post Curb	3/8"	5'-7"	16	89'-4"		
R1	End Post	3/8"	3'-2"	24	76'-0"		

MARK	LOCATION	SIZE	LGTH.	NO BARS	TOTAL LENGTH	SKETCH	O/b O
S60	Slab	5/8"	8'-1"	1	8'-1"		
S61	"	5/8"	23'-3"	64	1808'-0"		
S62	"	5/8"	3'-3"	8	26'-0"		
S63	Back wall	5/8"	35'-4"	2	70'-8"		
S64	"	5/8"	33'-0"	2	66'-0"		
S65	"	5/8"	41'-0"	2	82'-0"		
S66	"	5/8"	22'-6"	4	90'-0"		
S67	"	5/8"	23'-0"	4	92'-0"		
A1	Bridge Seat	3/8"	23'-9"	4	95'-0"		
A2	"	3/8"	24'-10"	4	99'-4"		
A3	"	3/8"	26'-3"	2	52'-6"		22'-9"
A4	"	3/8"	23'-6"	2	47'-2"		25'-0"
A5	"	3/8"	3'-5"	43	146'-11"		3'-4"
A6	"	3/8"	2'-9"	82	225'-6"		7'-8"
A7	"	3/8"	21'-8"	2	43'-6"		40'-0"
A8	"	3/8"	24'-4"	4	96'-4"		
A9	"	3/8"	26'-2"	4	104'-8"		22'-8"
B1	Back Wall	3/8"	6'-7"	39	257'-0"		
B2	"	3/8"	6'-1"	1	6'-1"		
B3	"	3/8"	5'-5"	1	5'-5"		
B4	"	3/8"	4'-9"	1	4'-9"		
B5	"	3/8"	5'-10"	1	5'-10"		
B6	"	3/8"	4'-11"	1	4'-11"		
B7	"	3/8"	4'-8"	20	93'-4"		

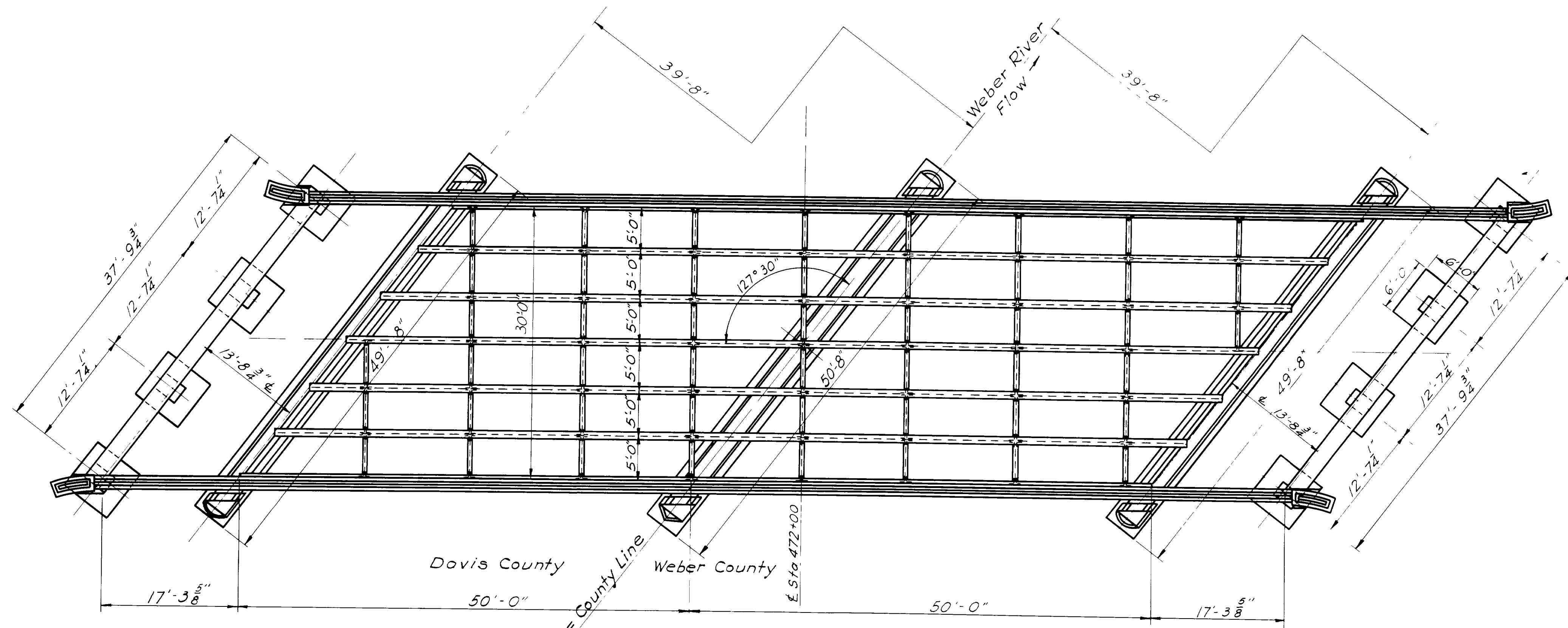
$$\begin{aligned}
 583'-4" \times 0'-17" @ 3.4" &= 1983.3 \\
 726'-6" \times 0'-3.6" @ 1502 &= 1091.2 \\
 6019'-0" \times 0'-584" @ 1043 &= 6277.8 \\
 3587'-9" \times 0'-5.7" @ 85 &= 3049.3 \\
 718'-2" \times 0'-2.0" @ 668 &= 479.3 \\
 \text{TOTAL} &= 12,881.6\#
 \end{aligned}$$



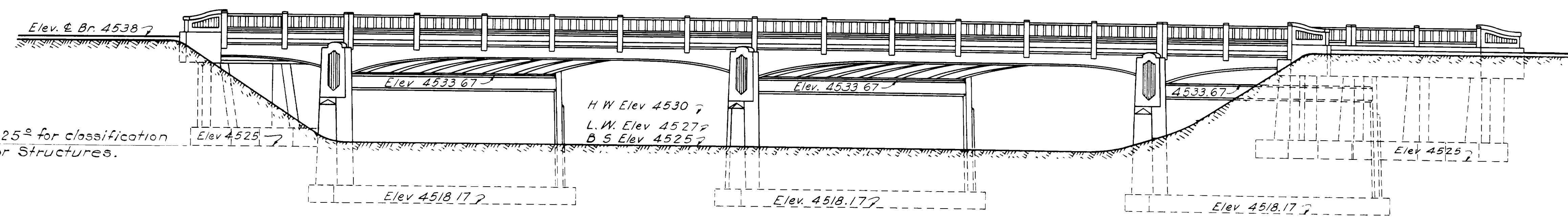
ROD NOTES  
 When hooks are called for the lengths given in Total Length column include allowance for hooks as shown in above detail.  
 Lengths given in sketches are center to center of bend points.

Sheet 6 of 6 Sheets  
 UTAH STATE ROAD COMMISSION  
 SALT LAKE CITY, UTAH  
 ERLA C. KNOWLTON, CHIEF ENGINEER  
 52'-0" O'60" I-BEAM BR WITH CONC DECK 7'00" XING L WEBER DAVIS CANAL S-3 432+875 F.A.P. 212(1) Uintah N-D Rd. Dav's Co.  
 DESIGNED BY KWT  
 CHECKED BY KWT  
 BR 6-25-1-6 DRG NO C-184

FILE NO.	STATE	FED. AID	PROJECT	SHEET	TOTAL
12	UTAH	212-A(5)			



**PLAN**  
Scale:  $\frac{1}{8}'' = 1'-0''$



**WEST ELEVATION**  
Scale:  $\frac{1}{8}'' = 1'-0''$

**GENERAL NOTES**

All concrete to be Class "A" and is to be cured as per Division 5, Section 5, of the Specifications. All exposed edges to be chamfered 1" except as noted.

Reinforcing steel to be deformed bars overlapped not less than 50 diameters at all splices, secured against displacement by wiring at all intersections with #16 iron wire and shall have a minimum of 1" clear cover of concrete. All reinforcing steel shall fulfill the requirements of the A.A.S.H.O. Specifications M-31.

Bar diagrams are not drawn to scale and those bars not detailed are either straight or field bent. All dimensions are to  $\epsilon$  of bar unless otherwise shown.

All structural steel shall fulfill the requirements of the State Std. Specs. of 1939 and shall be given one shop coat of Red Lead Paint A.A.S.H.O. M71 or M72 and two field coats of Aluminum Paint A.A.S.H.O. Mes. Shop welds shall not be given the shop coat of Red Lead Paint, but shall be given one coat of linseed oil to facilitate field inspection of the welds.

After field inspection and approval, the unpainted surfaces shall be given one field coat of Red Lead Paint before the final field coats of Aluminum Paint are applied.

Contractor shall furnish all materials. Payment for furnishing and placing copper flashings, bumper blocks and bolts shall be included in price bid for concrete.

For Materials and Workmanship see State Standard Specifications for Road and Bridge Construction, 1939 edition.

**DESIGN DATA**

Live Load: H-15 Loading as per A.A.S.H.O. Specifications of 1935.

Stresses:  $f_c = 900 \text{ #/a}''$   $f_s = 16,000 \text{ #/a}''$  Structural Steel in tension = 18,000 #/a''

**QUANTITIES**

Excavation for Structures	175 Cu.Yds
Excavation for Structures - Wet	250 Cu.Yds
Concrete - Class "A"	380 "
Reinforcing Steel	40,238 Lbs.
Structural Steel	100,000 "

Sheet 1 of 7 sheets.

UTAH STATE ROAD COMMISSION  
SALT LAKE CITY, UTAH  
E. C. KNOWLTON, CHIEF ENGINEER

**WEBER RIVER BRIDGE**  
139'-0" O. TO O. 127°30' L. X-ING  
Sta. 472+00 F.A.P. 212-A(5)  
No. Farmington-Uintah

DESIGNED BY E.W. AS NOTED  
DRAWN BY E.W. AS NOTED  
CHECKED BY [Signature] Aug 8, 1939

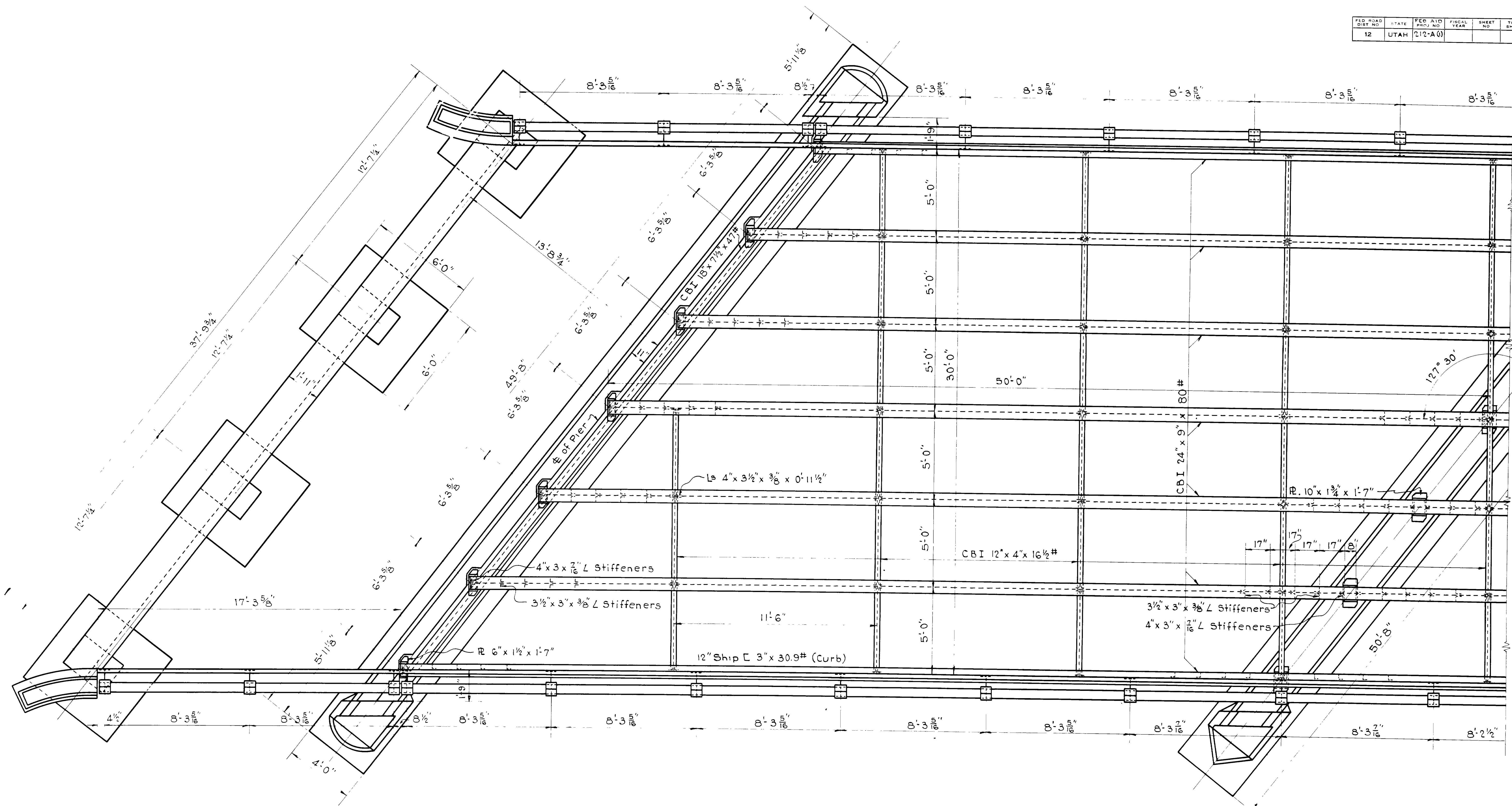
Note: Bridge is situated across Davis-Weber County Line.

6-25-15 C-191

NO.	DATE	REVISIONS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
12	UTAH	212-A(1)			

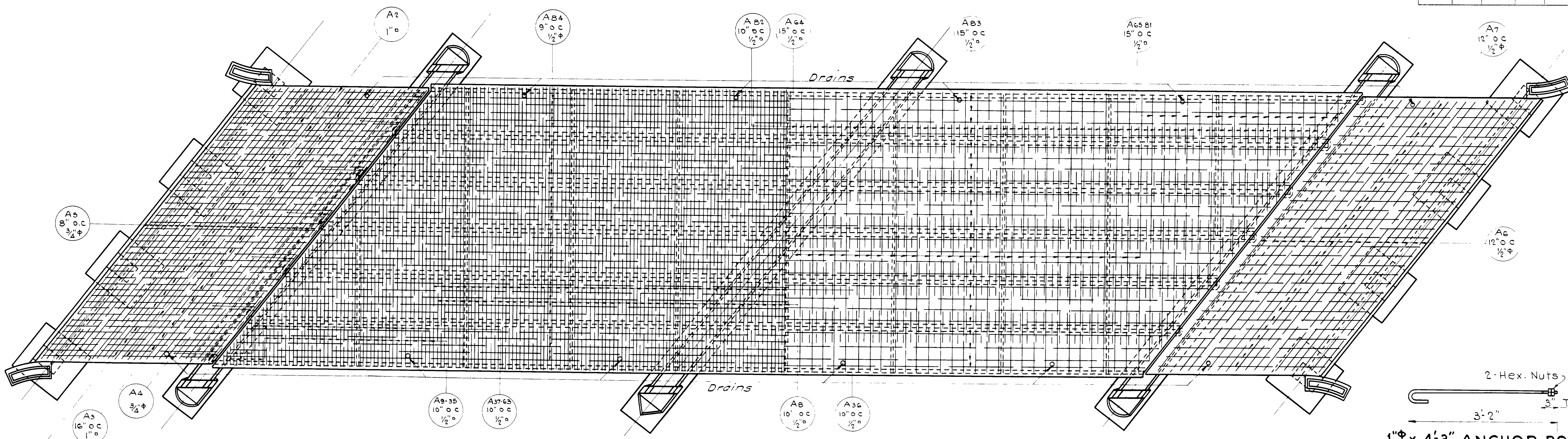
NO.	DESCRIPTION



HALF PLAN SHOWING STRUCTURAL STEEL ARRANGEMENT  
Symmetrical thru 180° rotation

Sheet 2 of 7 sheets  
 UTAH STATE ROAD COMMISSION  
 SALT LAKE CITY, UTAH  
 EDNA C. KNIGHTON, CHIEF ENGR.  
**WEBER RIVER BRIDGE**  
 139'-0" O. to O. 127° 30' X-ING  
 Sta. 472+00 F.A.P. 212-A(1)  
 No. Farmington, Utah  
 E.W. 3/8" = 1'-0"  
 E.W. *Aug 8, 1939*  
*W. H. H. H.*  
 BR 6-25-1-5 DPG C-191

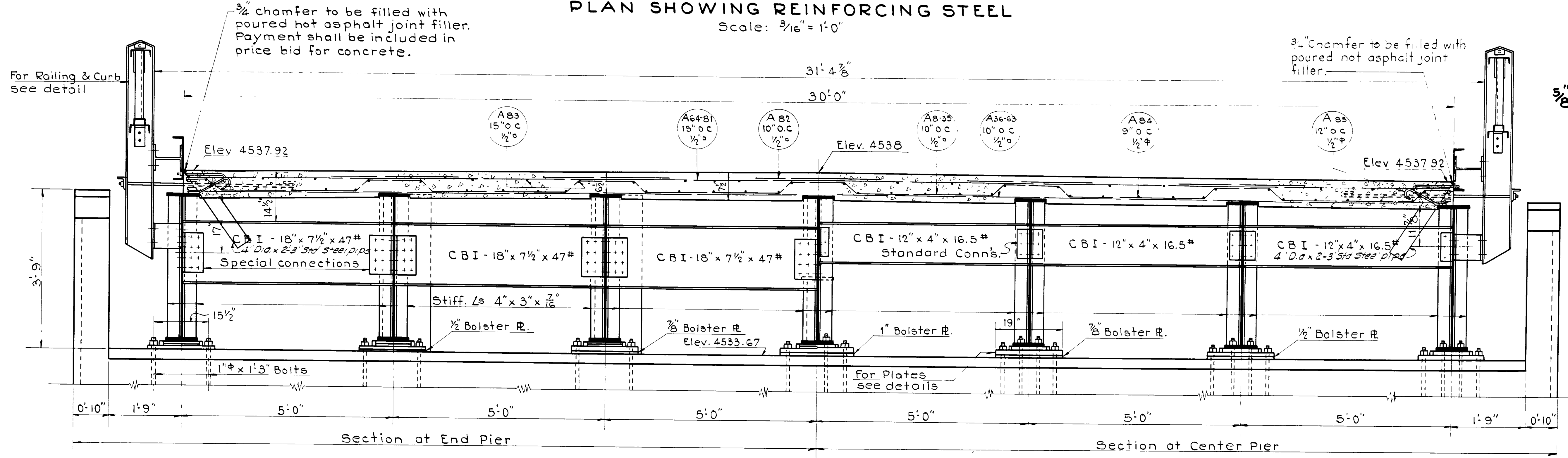




**PLAN SHOWING REINFORCING STEEL**  
Scale:  $\frac{3}{16}'' = 1'-0''$

2-Hex. Nuts  
3'-2" 3" Thread  
**1" x 4'-3" ANCHOR BOLT**  
Make 38 as shown  
No Scale

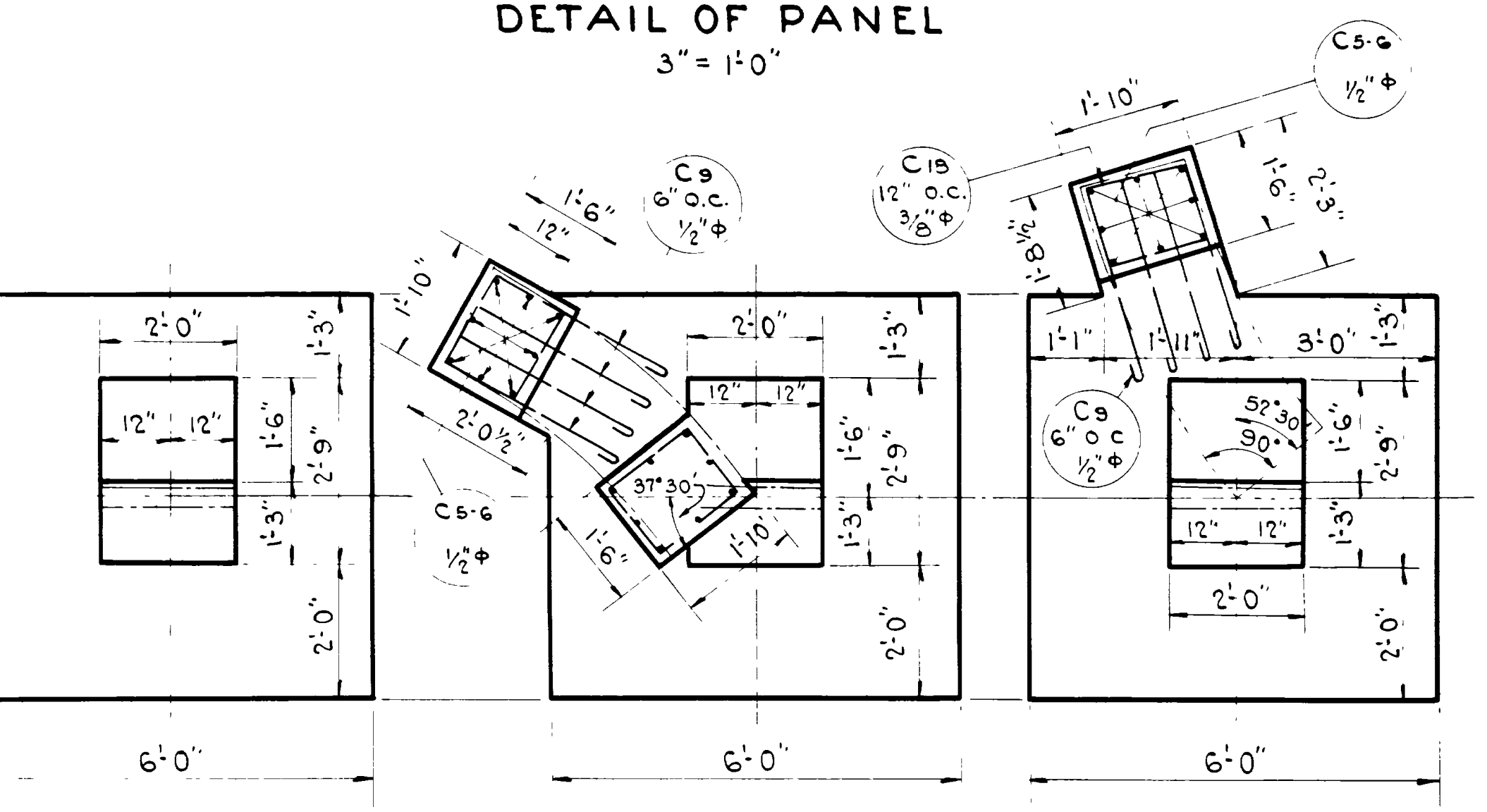
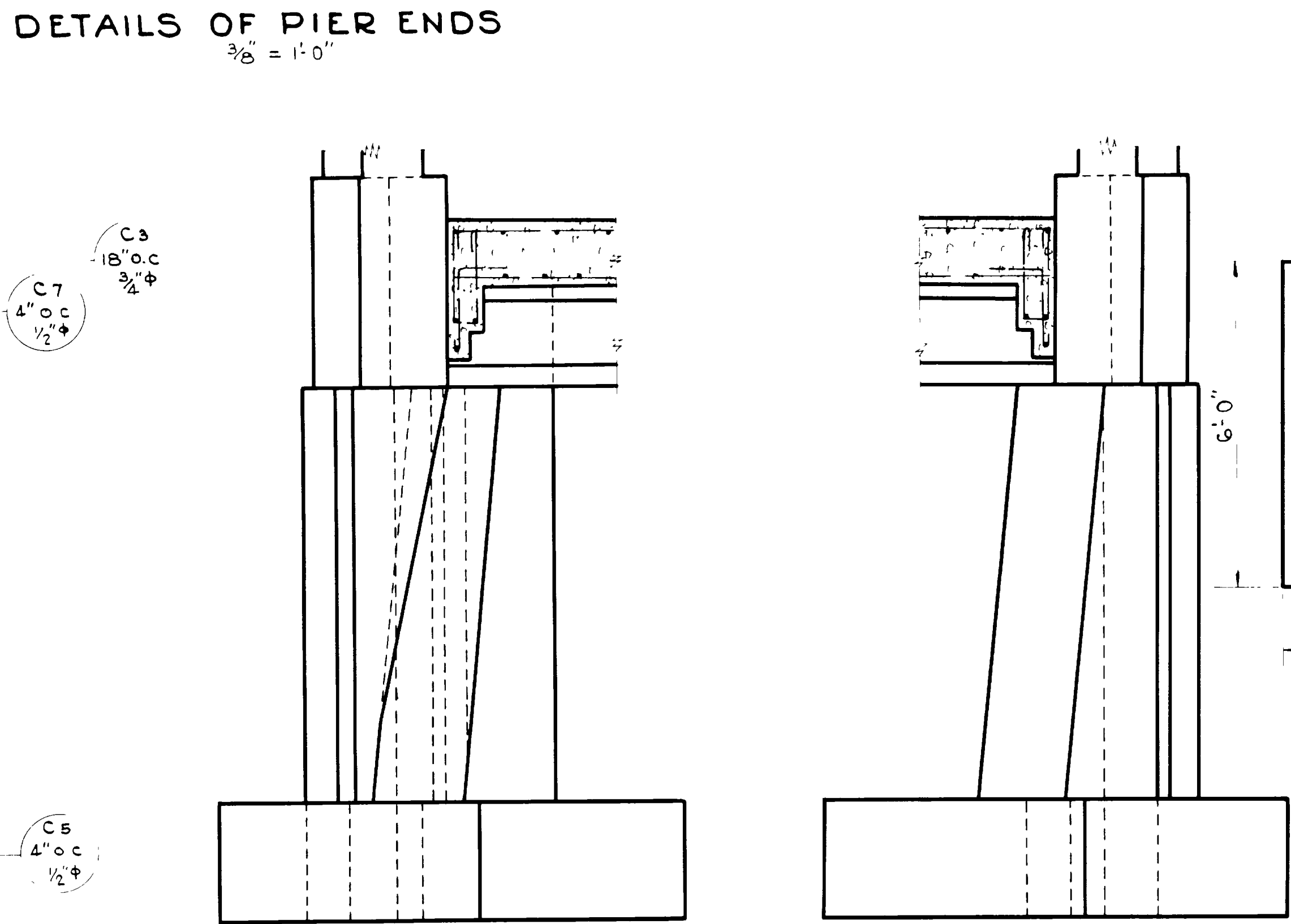
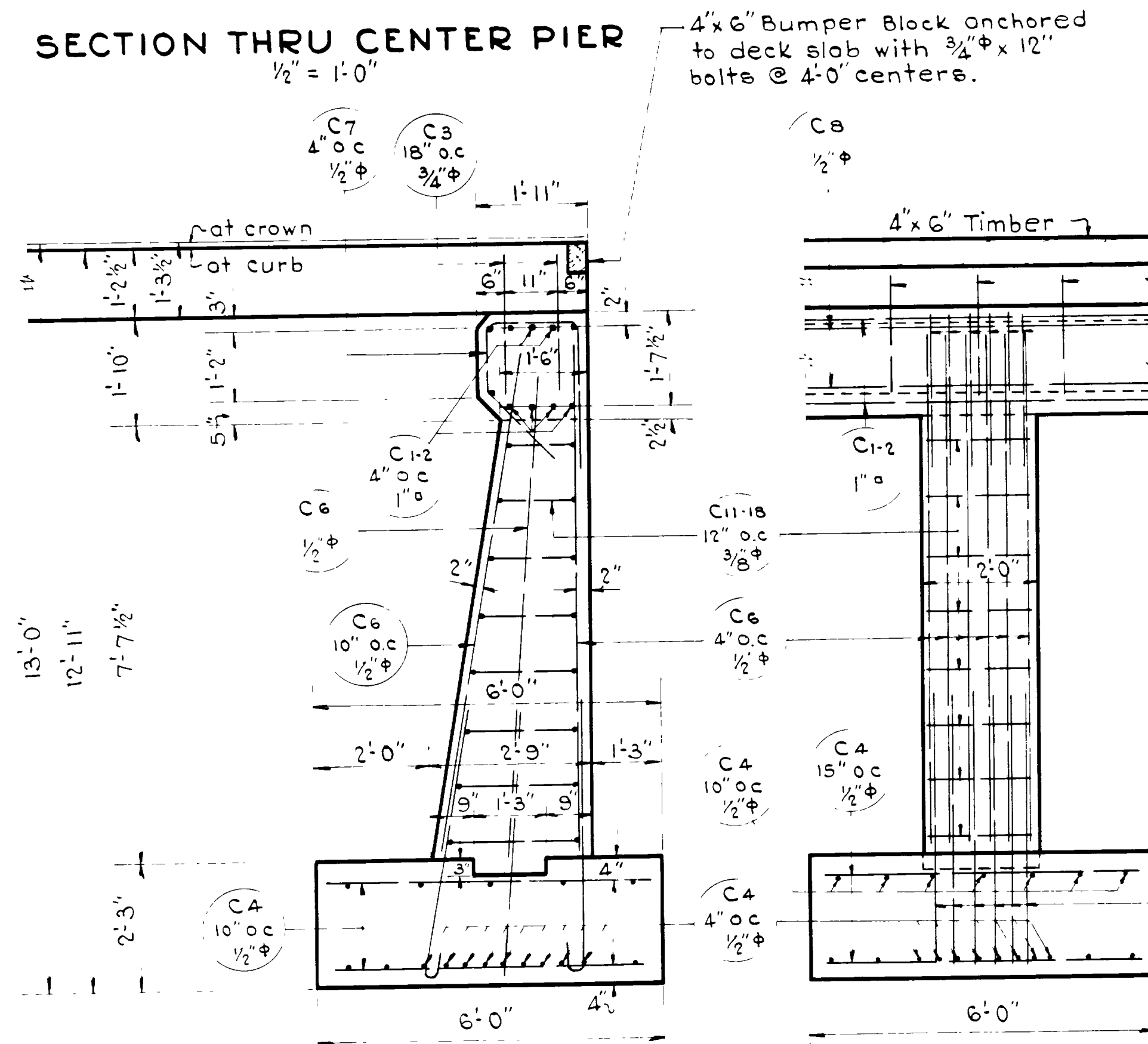
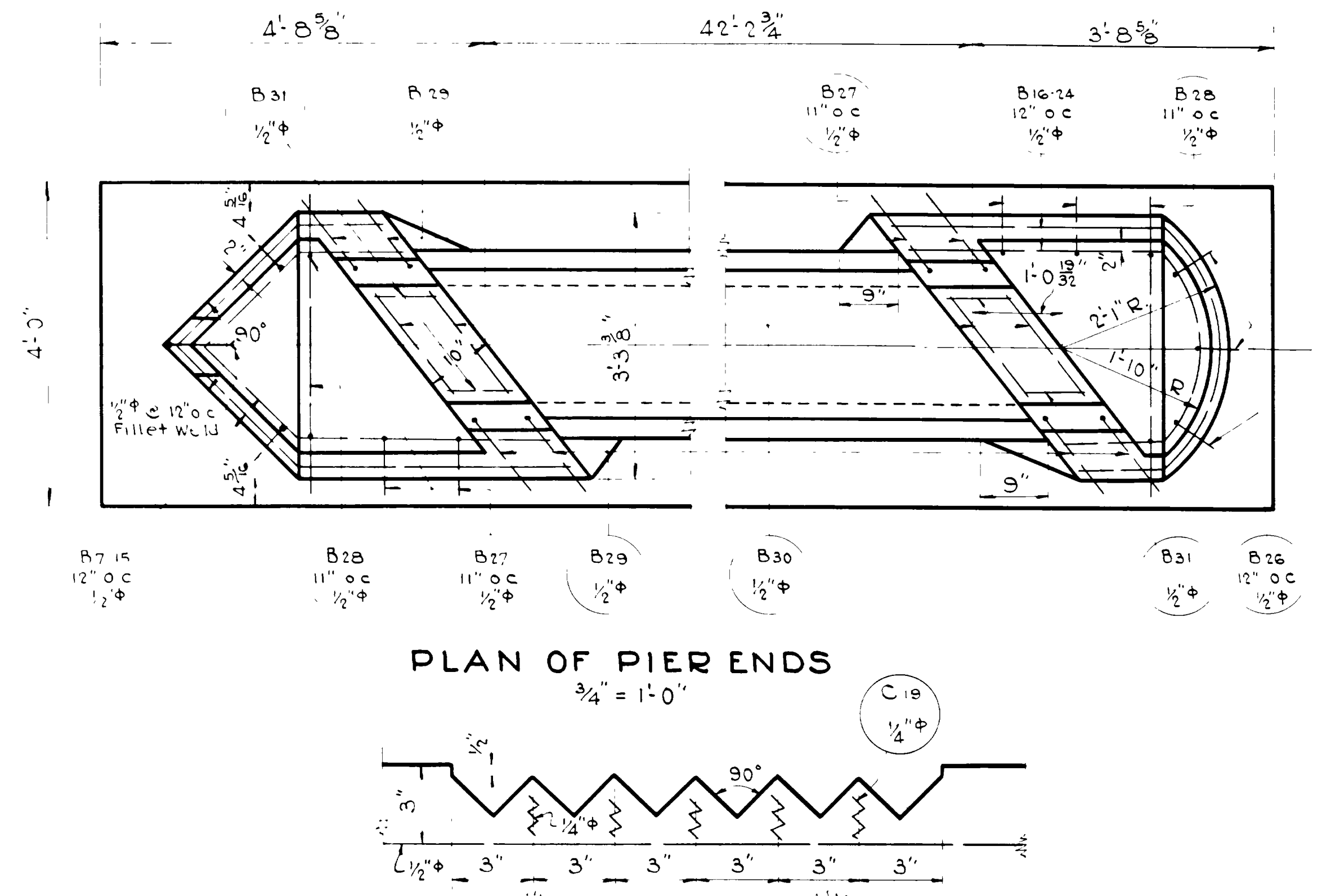
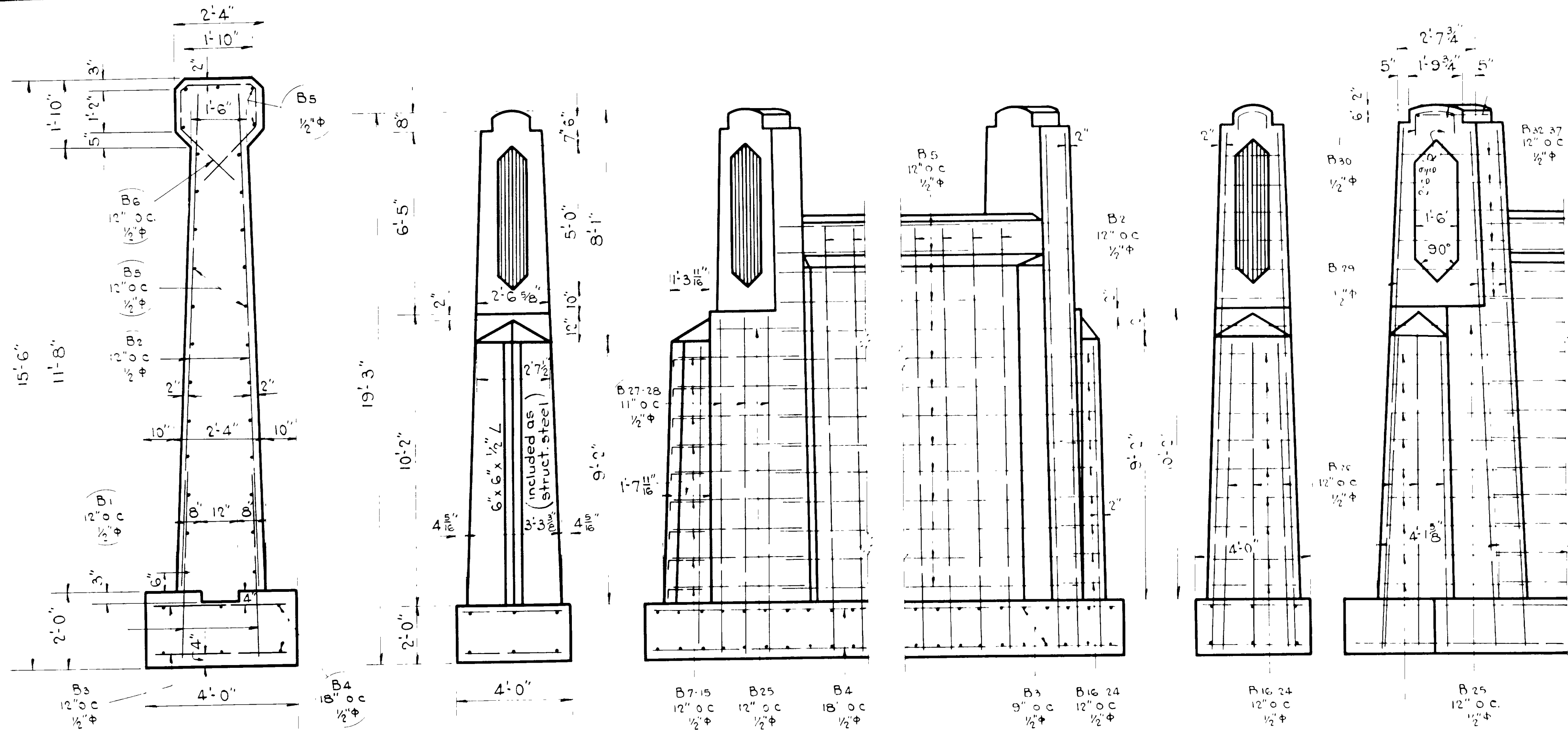
2-Hex Nuts  
1'-2" 2" Thd.  
**5/8" x 1'-10" ANCHOR BOLT**  
Make 320  
No Scale



**SECTION SHOWING ARRANGEMENT OF BEAMS, RAILING & SLAB**  
Scale:  $\frac{3}{4}'' = 1'-0''$

REVISIONS	DATE	BY

Sheet 3 of 7 sheets  
UTAH STATE ROAD COMMISSION  
SALT LAKE CITY, UTAH  
FRANCIS J. HANCOCK, CIVIL ENGINEER  
**WEBER RIVER BRIDGE**  
139'-0" O.T.O. 127'-30" L X ING  
Sta. 472+00 F.A.P. 212-A(1)  
No. Farmington-Uintah  
E.W. As noted  
Aug 8, 1939  
6-25-1-5 C-191

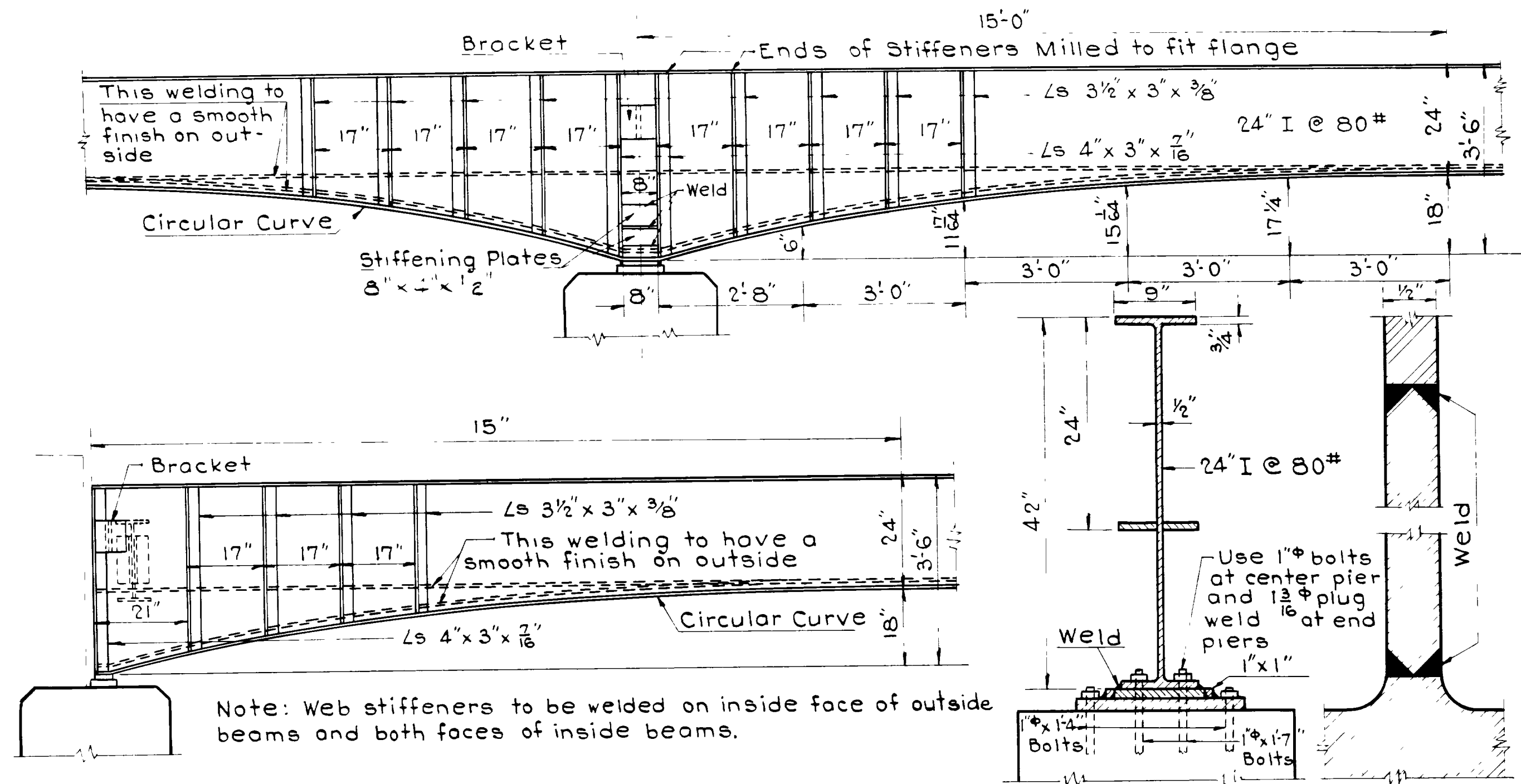
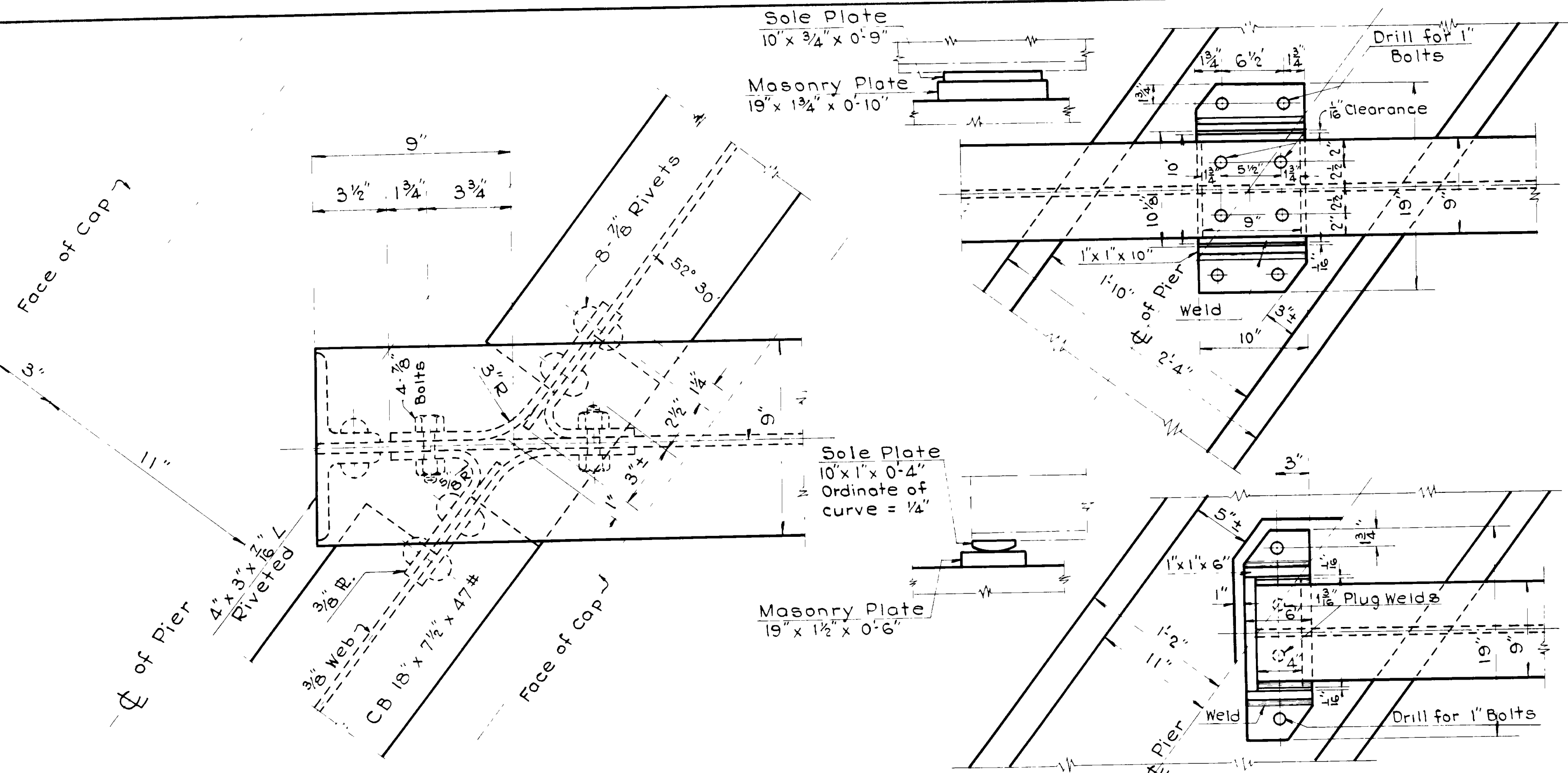


**DETAILS OF END PIERS - INSIDE**  
1/2" = 1'-0"

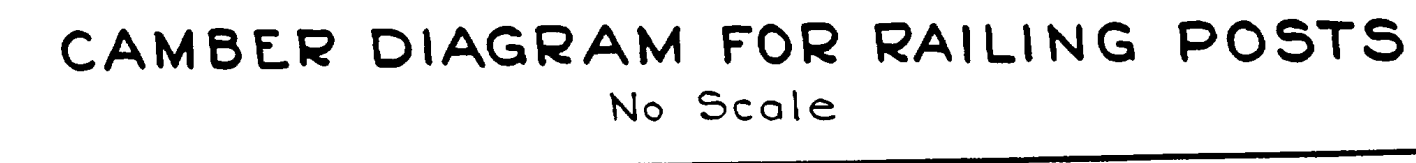
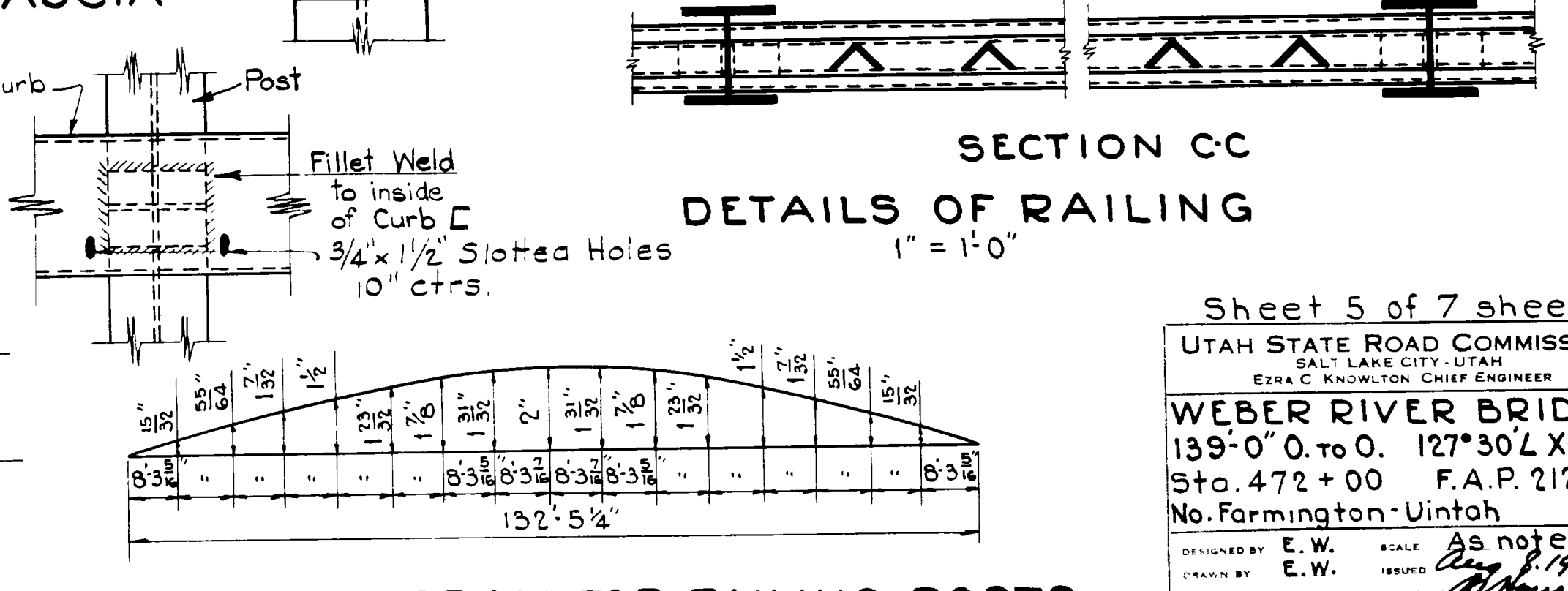
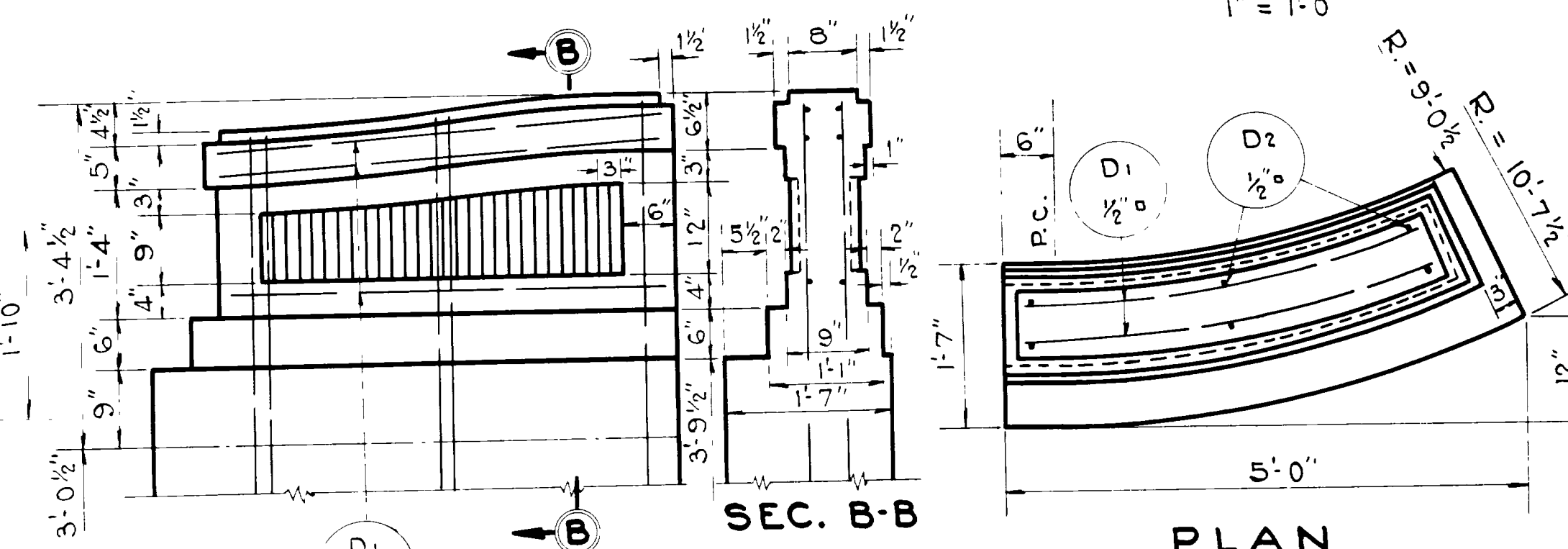
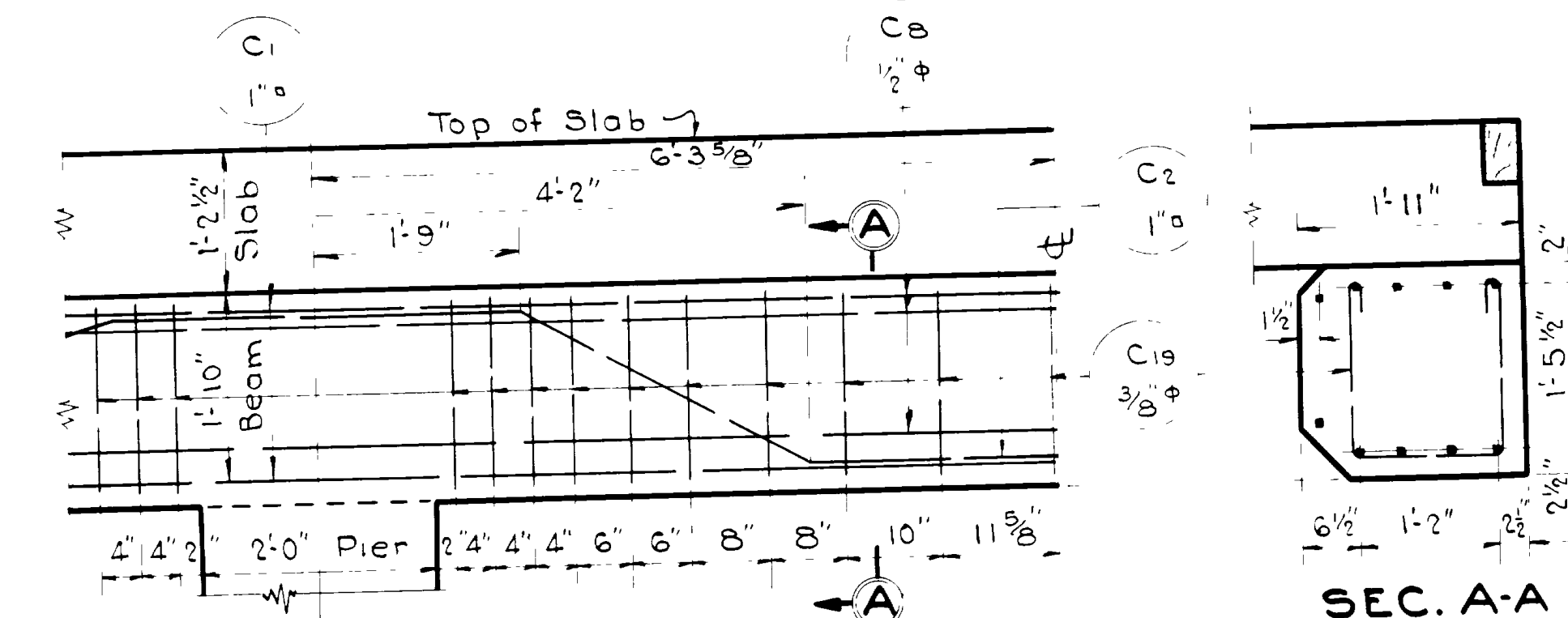
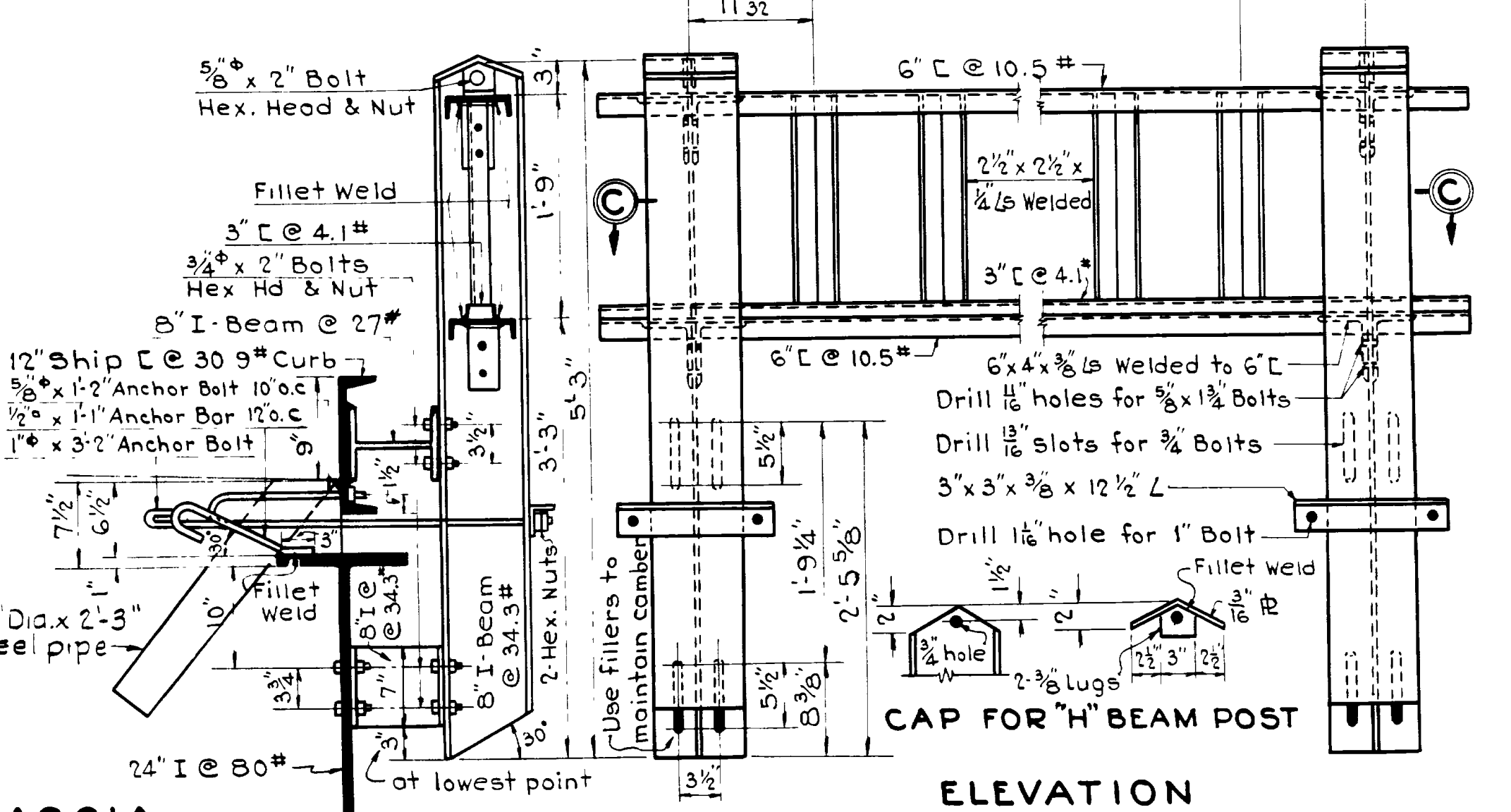
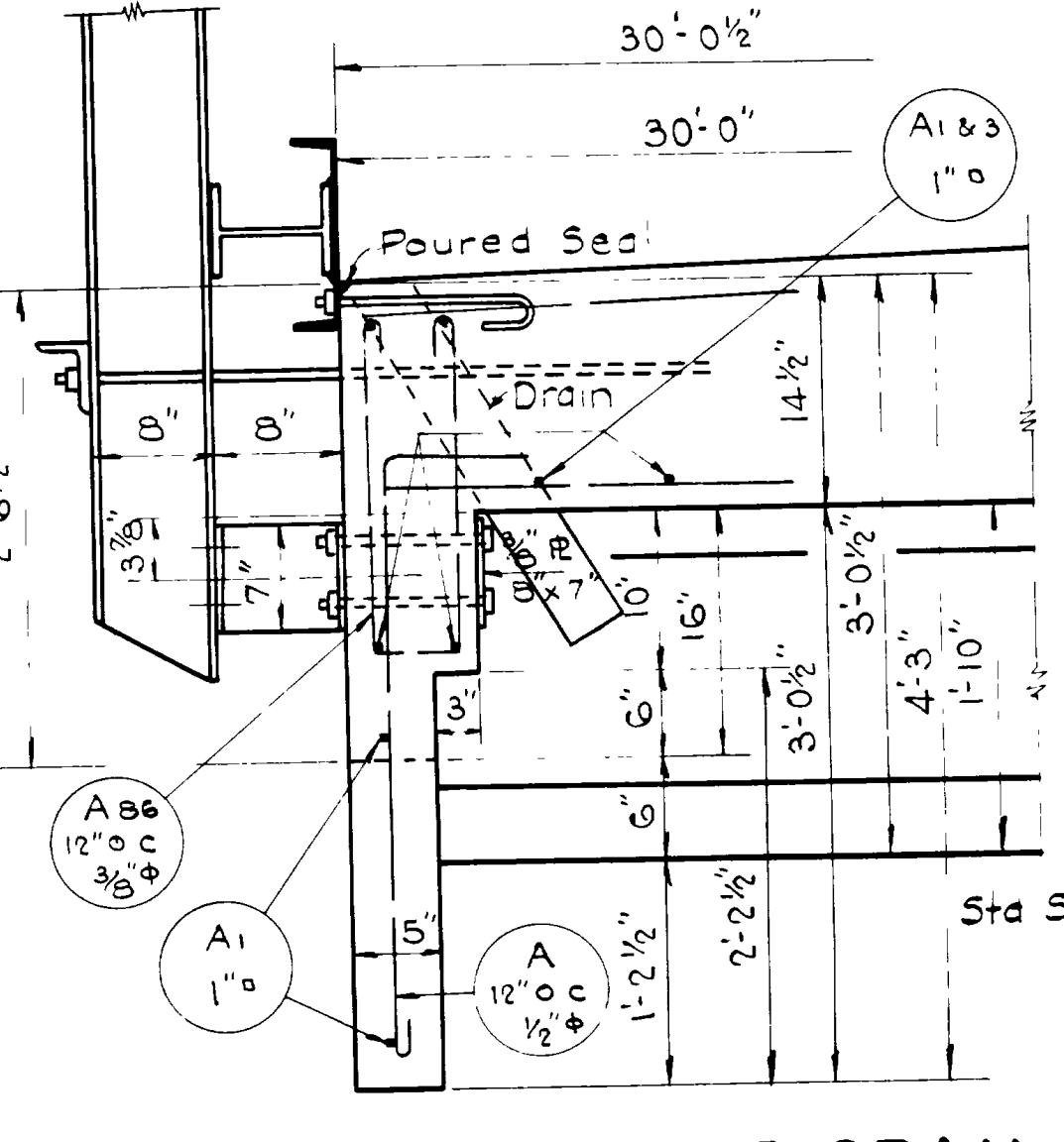
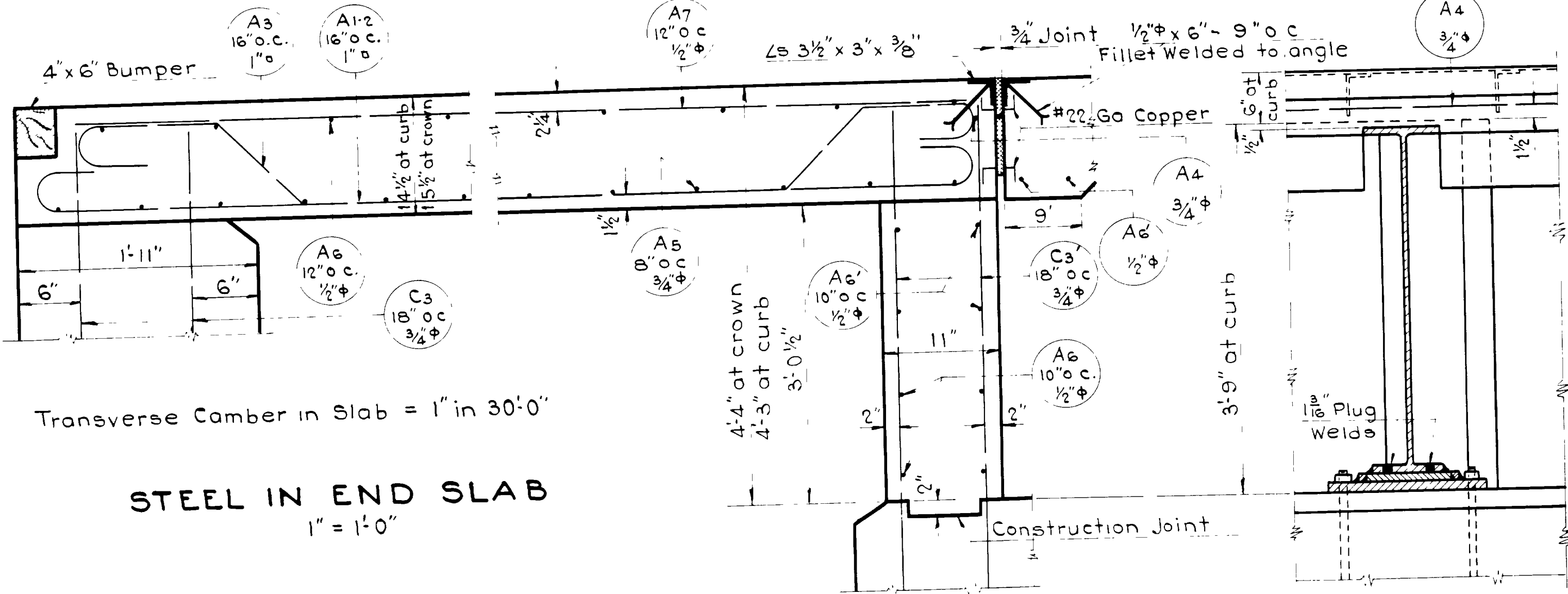
**END PIERS - OUTSIDE**  
1/2" = 1'-0"

**BASES OF END PIERS**  
1/2" = 1'-0"

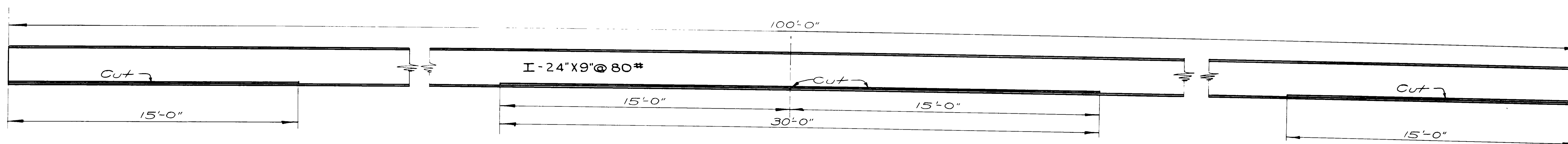
Sheet 4 of 7 sheets  
 UTAH STATE ROAD COMMISSION  
 SALT LAKE CITY, UTAH  
 ERIC C. KNOWLTON, CHIEF ENGINEER  
**WEBER RIVER BRIDGE**  
 139'-0" O. TO O. 127'-30" L. X. ING  
 Sta. 472+00 F.A.P. 212-A(1)  
 No. Farmington, Uintah  
 DRAWN BY: E.W. AS NOTED  
 CHECKED BY: E.W. AS NOTED  
 DATE: Aug 8, 1939  
 BR NO. 6-25-1-5 DRG. NO. C-191



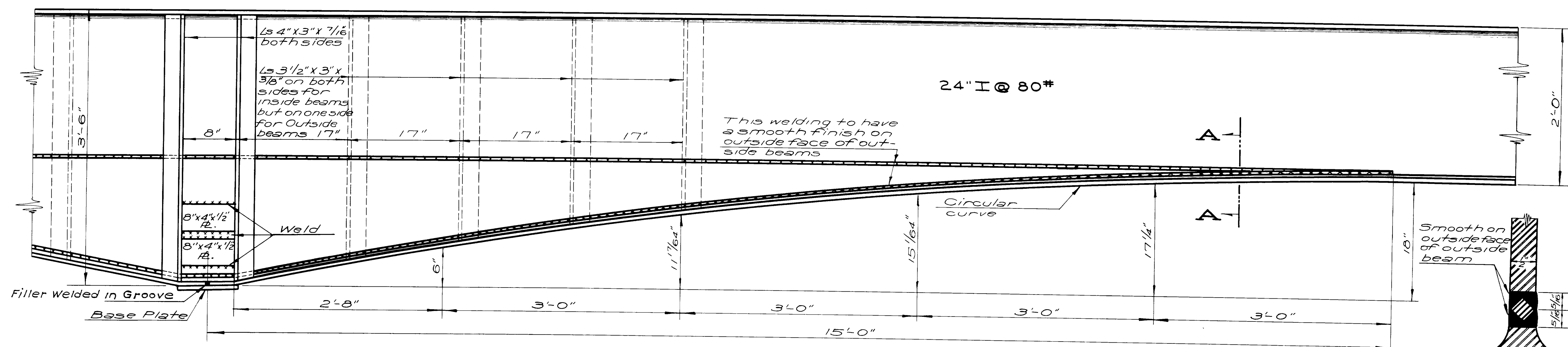
NO.	DATE	REVISIONS



Sheet 5 of 7 sheets  
 UTAH STATE ROAD COMMISSION  
 SALT LAKE CITY, UTAH  
 ERA C KNOWLTON, CHIEF ENGINEER  
**WEBER RIVER BRIDGE**  
 139'-0" O. TO O. 127°30' L X-ING  
 Sta. 472+00 F.A.P. 212-A(1)  
 No. Farmington-Uintah  
 DESIGNED BY E.W. | SCALE As noted  
 CHECKED BY E.W. | ISSUED Aug 8, 1939  
 APPROVED [Signature]  
 LEADERSHIP [Signature]  
 BR NO 6-25-1-5 DRG NO C-191



**SKETCH SHOWING LENGTH OF CUTS FOR WELDS**  
 BEAM TO BE FURNISHED IN ONE LENGTH WITHOUT SPLICES



**PART OF BEAM SHOWING WELDING DETAIL**  
 SCALE: 1 1/2" = 1'-0"

**SECTION A-A**  
 AT END OF WEB FILLER PL.

**NOTE:**

All welding materials and workmanship are to be in accordance with the requirements and practice of the American Welding Society.  
 Shop welds shall not be given the shop coat of red lead paint, but shall be given one coat of linseed oil to facilitate field inspection of the welds.  
 Web filler plate to be furnished without splices.

REVISIONS	DATE	BY	NO.

Sheet No. 6 of 7 Sheets

UTAH STATE ROAD COMMISSION  
 SALT LAKE CITY, UTAH  
 E. W. KNOWLTON, CHIEF ENGINEER

**WEBER RIVER BRIDGE**  
 139'-0" O-O 127'-30" L X-ING  
 STA. 472+00 F. A. P. 212-A (1)  
 NO FARMINGTON-UINTAH

DESIGNED BY E. W. SCALE As Shown  
 DRAWN BY E. W. ISSUED Aug 8, 1939  
 CHECKED BY APPROVED  
 EVAL. BY

BR NO 6-25-1-5 DRG NO C-191

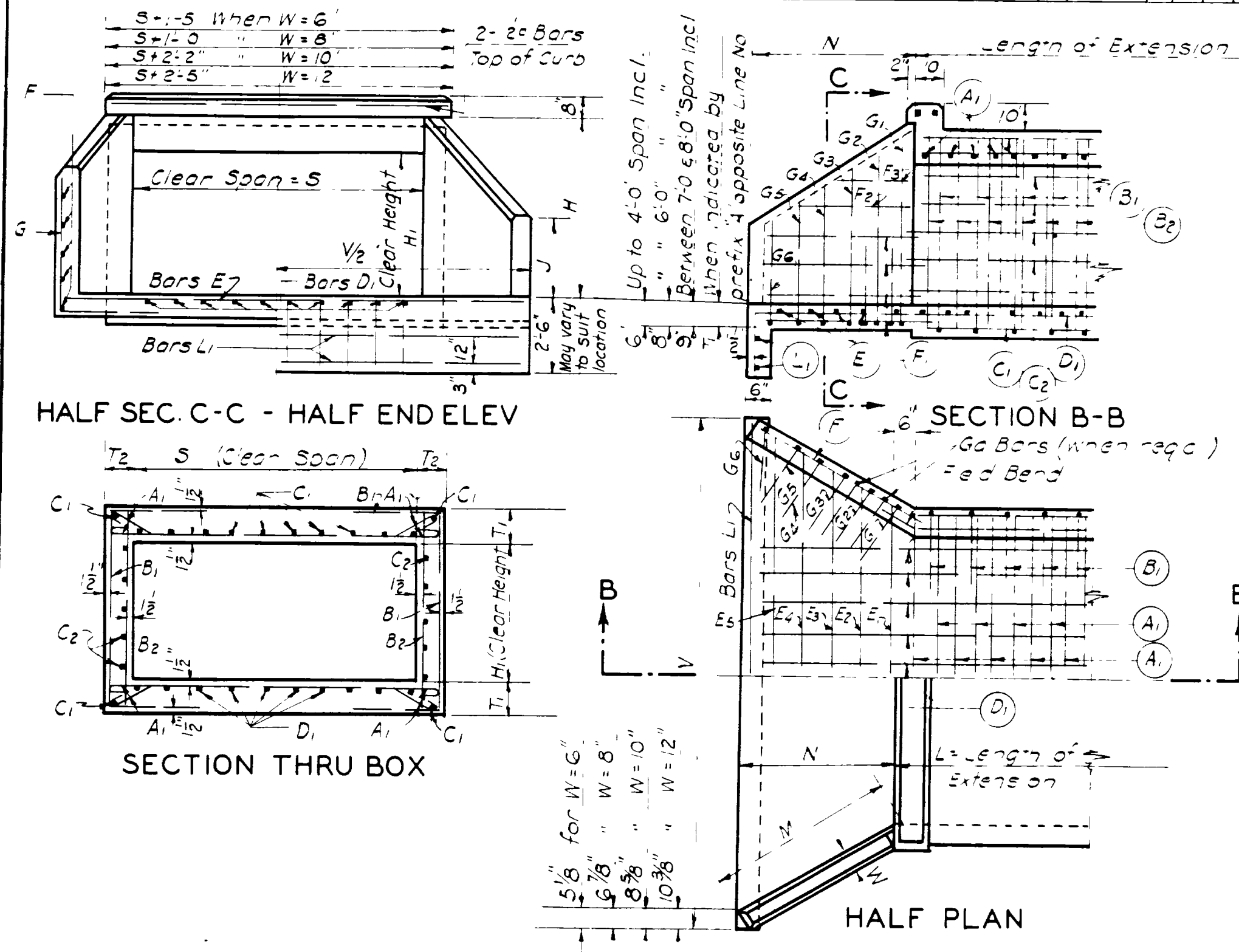


GENERAL DIMENSIONS AND SCHEDULE

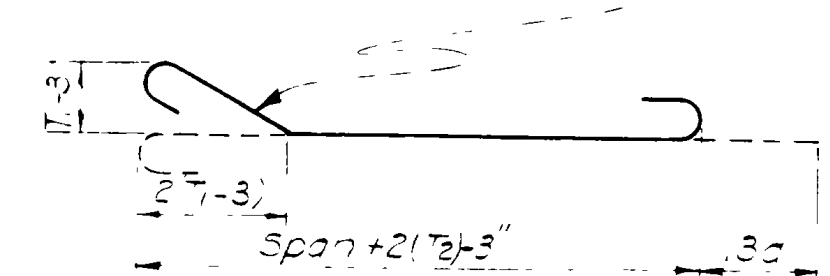
FED. ROAD DIST. NO. 12 STATE UTAH PROJECT NO. 62-02 FISCAL YEAR SHEET NO. TOTAL SHEETS

LINE NO.	FILL	LENGTH L	CLEAR SPAN S	CLEAR HEIGHT H <sub>1</sub>	H	T <sub>1</sub>	T <sub>2</sub>	N	M	J	V	W	BARS A <sub>1</sub>		BARS B <sub>1</sub>		BARS B <sub>2</sub>		BARS C <sub>1</sub>		BARS C <sub>2</sub>		BARS D <sub>1</sub>		BARS E - ONE EACH										BARS F - TWO EACH										BARS G - TWO EACH										CURB BARS	BARS L <sub>1</sub>	STEEL LBS.	CONC. CU YDS	EXCAVATION	C.Y. VOLS. A FT. BARRE.	C.Y. VOLS. ONE END	LINE NO.																																																																														
													NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	E <sub>1</sub>	E <sub>2</sub>	E <sub>3</sub>	E <sub>4</sub>	E <sub>5</sub>	E <sub>6</sub>	E <sub>7</sub>	E <sub>8</sub>	E <sub>9</sub>	E <sub>10</sub>	E <sub>11</sub>	E <sub>12</sub>	E <sub>13</sub>	E <sub>14</sub>	E <sub>15</sub>	E <sub>16</sub>	F <sub>1</sub>	F <sub>2</sub>	F <sub>3</sub>	F <sub>4</sub>	F <sub>5</sub>	F <sub>6</sub>	F <sub>7</sub>	F <sub>8</sub>	F <sub>9</sub>	F <sub>10</sub>	F <sub>11</sub>	F <sub>12</sub>	F <sub>13</sub>	F <sub>14</sub>									F <sub>15</sub>	F <sub>16</sub>	G <sub>1</sub>	G <sub>2</sub>	G <sub>3</sub>	G <sub>4</sub>	G <sub>5</sub>	G <sub>6</sub>	G <sub>7</sub>	G <sub>8</sub>	G <sub>9</sub>	G <sub>10</sub>	G <sub>11</sub>	G <sub>12</sub>	G <sub>13</sub>	G <sub>14</sub>	G <sub>15</sub>	G <sub>16</sub>																																																												
378	1'-0"	22'-0"	8'-0"	5'-0"	5'-11"	9'	6'	5'-3"	6'-0"	2'-0"	5'-2"	8'	66	8	10'-8"	66	8	11'-5"	44	12	6'-3"	12	8	21'-9"	10	23'-2"	8	20'-3"	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120

REVISIONS  
DATE BY

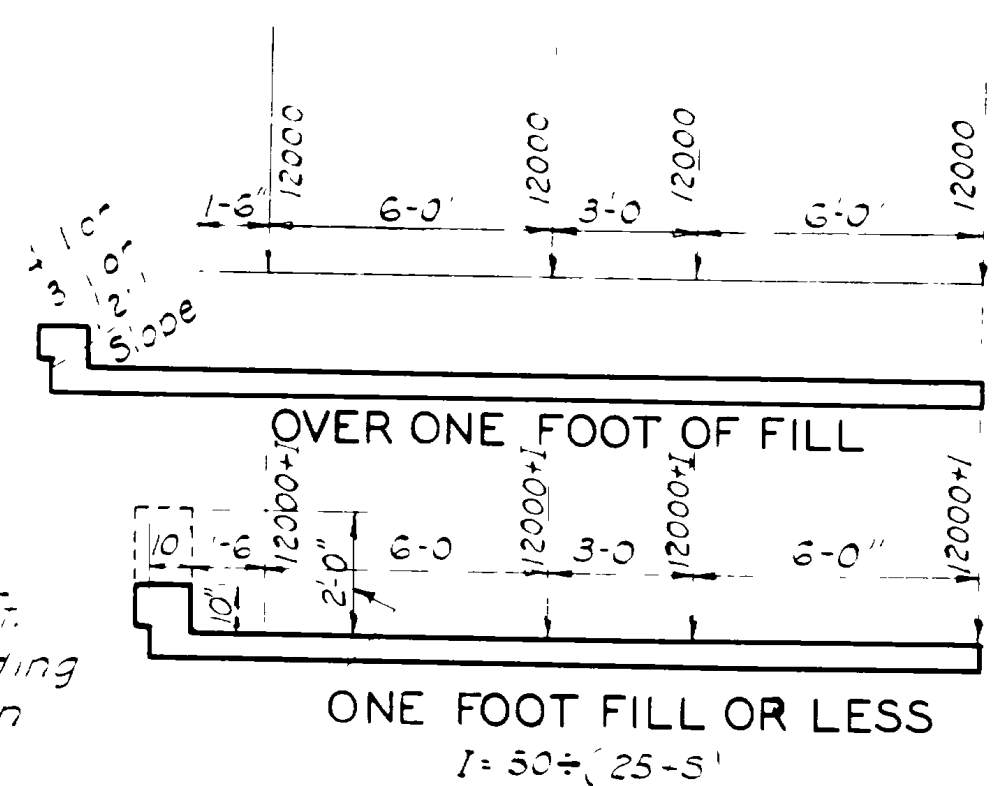


Note: Bars A to be placed in position so bent up end of bar will terminate at hooked end of bar.



**DESIGN DATA**  
Live load impact for one foot or less Extensions less than 8'-4" one 18 ton truck plus impact of load on rear axle. Extensions 8'-4" and over, 2-5 ton trucks plus impact of load on rear axle. No impact for fills over one foot. Live load for 15' spans 3-0' No live loads for 5' spans 0-0'. 4.5 H-10 slabs for 1935 H-15 load ng to govern. Dead load: 150 lb/cu ft for concrete-120 lb/cu ft for first foot of fill, and 100 lb/cu ft for each succeeding foot of fill. Allowable stresses: Steel 16,000 lb in tension, concrete 900 lb in compression.

**GENERAL NOTES**  
For Materials and Workmanship see State Standard Specifications for Road and Bridge Construction, 1939 edition. All exposed edges to be chamfered 1" unless otherwise noted. All reinforcing bars to be 1/2" and spaced 12" on centers except as otherwise specified. Beginning with Line 387, longitudinal steel in top and bottom slabs shall be equal to 35% of the main reinforcement and in no case less than 1/2" @ 12 Cts.



Note: Beginning with Line 352, for fills 12' or less main curbs 3-0' high. The above note void, beginning with Line 387.

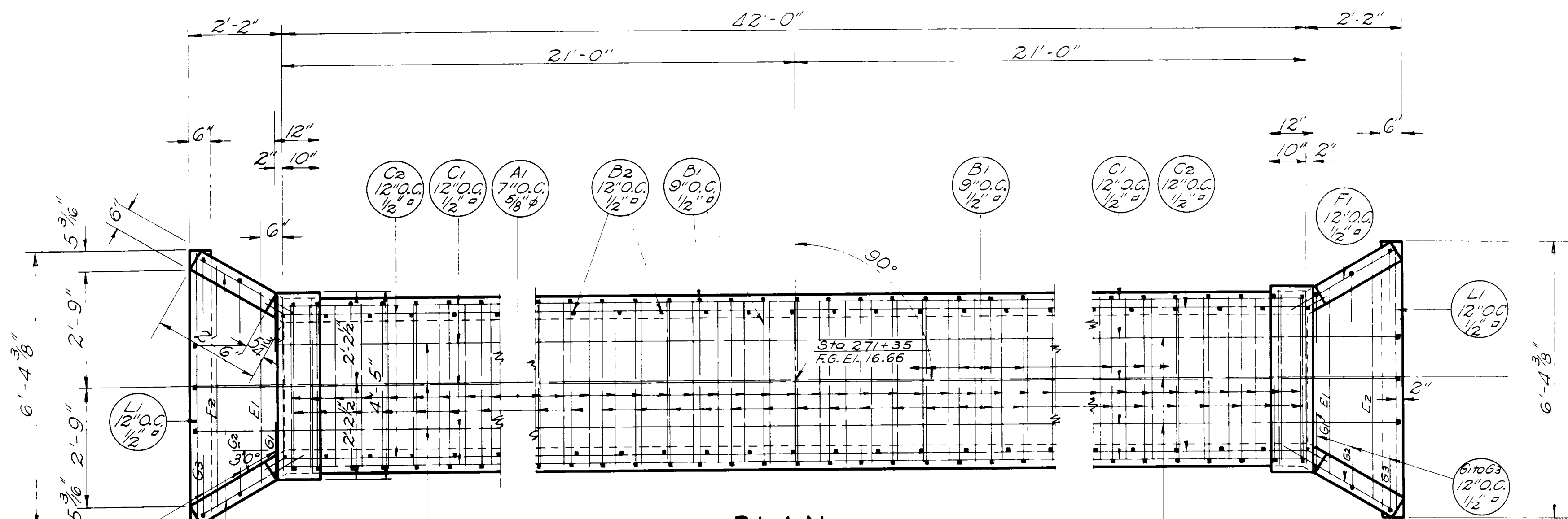
Note: Where Alkali Retardant Treatment is specified, the dimensions shown on this plan for bottom slab, side walls and wing walls shall be increased so as to provide 1" additional cover for the reinforcing steel.

$H = H_1 + 2"$   
 $J = 366 H + 5833$   
 $N = 3509 H + 3638$   
 $M = 10981 H + 4290$   
 $V_1 = 1098 H + S + 425 (W=6)$   
 $V_2 = 10981 H + S + 7168 (W=8)$   
 $V_3 = 10981 H + S + 10085 (W=10)$   
 $V_4 = 10981 H + S + 13002 (W=12)$

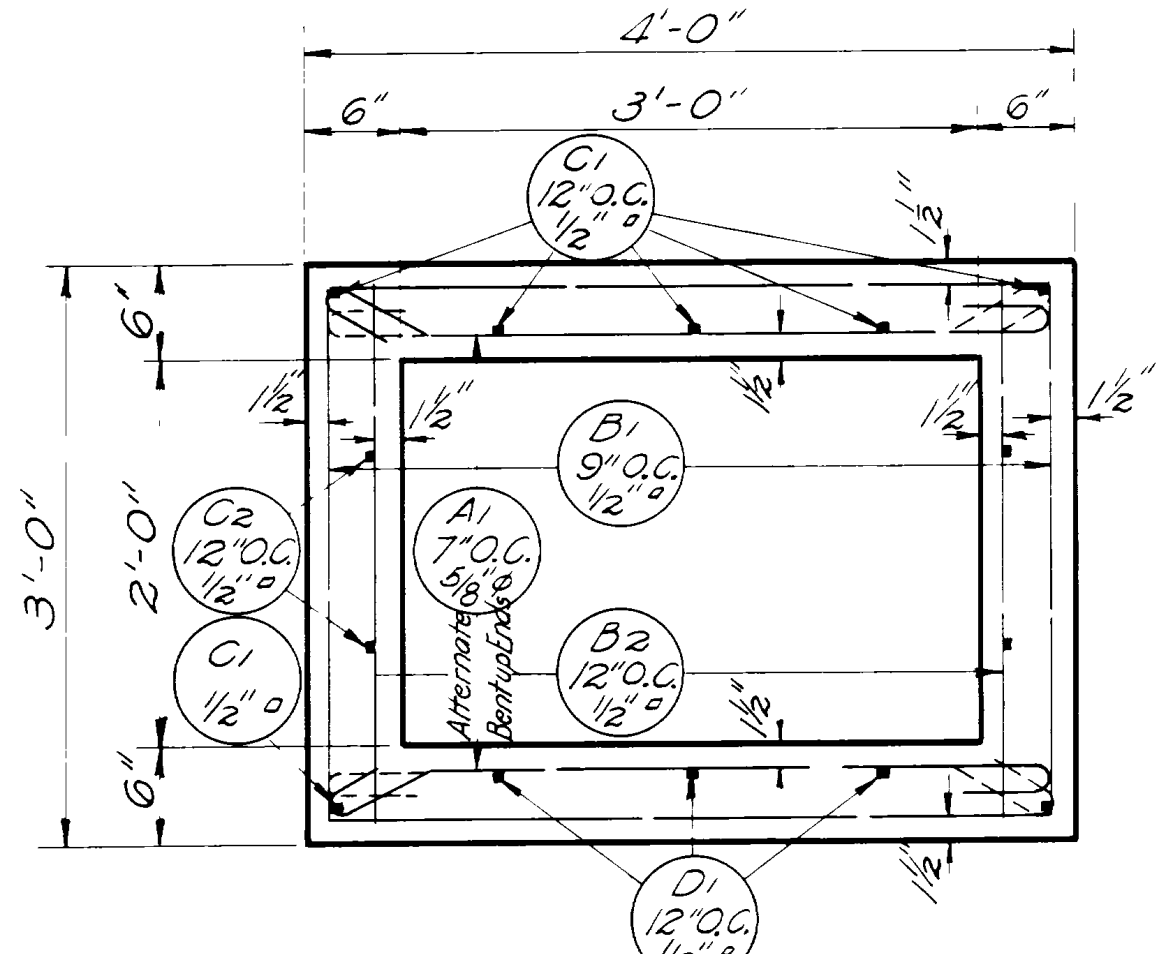
LINE	STATION	EXTENSION	NO.	STATION	EXTENSION
388	352+44	14	RT. & L.		

UTAH STATE ROAD COMMISSION  
STANDARD CULVERT EXTENSIONS  
VARIOUS HEIGHTS AND SPANS  
BRIDGE NO. \_\_\_\_\_ DRG NO. E-232-9

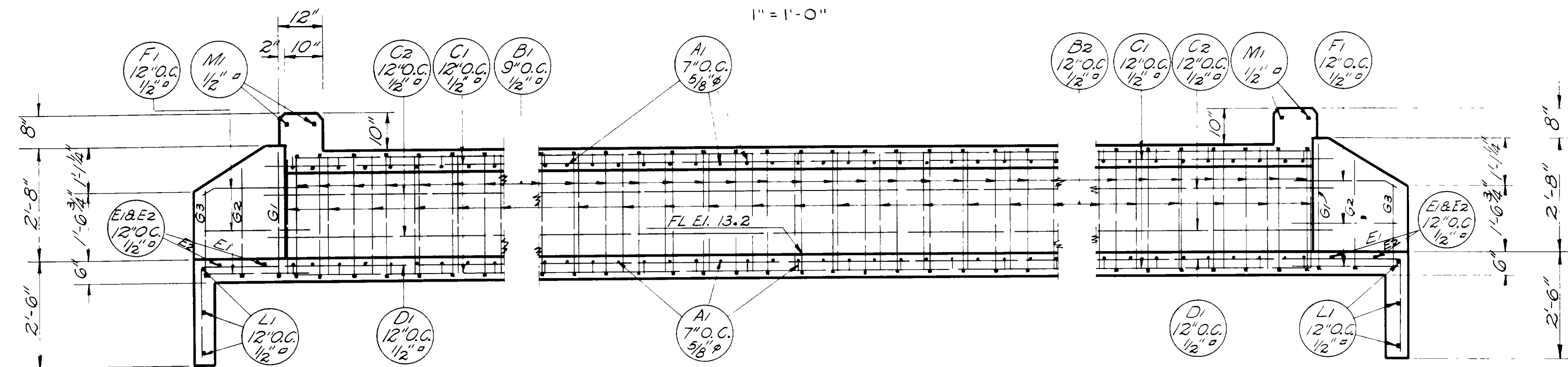




PLAN  
1/2" = 1'-0"



SECTION THRU BARREL  
1/2" = 1'-0"



LONGITUDINAL SECTION ON C  
1/2" = 1'-0"

NOTE: Chamfer all exposed edges 1"

REINFORCING STEEL SCHEDULE

MARK	LOCATION	SIZE	LGTH	NO. BARS	TOTAL LENGTH	SKETCH	Q. TO O.
A1	Top & Bot. Slab	5/8"	5'-1"	146	742'-2"		
B1	Sidewalls	1/2"	6'-5"	114	731'-6"		
B2	Sidewalls	1/2"	2'-9"	86	236'-6"		
C1	Slab	1/2"	23'-0"	14	322'-0"		
C2	Sidewalls	1/2"	24'-0"	8	192'-0"		
D1	Bot. Slab	1/2"	47'-4"	6	284'-0"		
E1	Inlet & Outlet	1/2"	4'-6"	2	9'-0"		
E2	" " "	1/2"	5'-8"	2	11'-4"		
F1	Wingwalls	1/2"	3'-0"	12	36'-0"		
G1	Wingwalls	1/2"	4'-1"	4	16'-4"		
G2	" " "	1/2"	3'-6"	4	14'-0"		
G3	" " "	1/2"	2'-1"	4	11'-8"		
L1	Apron	1/2"	6'-1"	6	36'-6"		
M1	Curb	1/2"	4'-2"	4	16'-8"		

742'-2" of 5/8" @ 1.043# = 774.1  
 1917'-6" of 1/2" @ 0.85# = 1629.9  
 Total = 2404.0#

GENERAL NOTES

For materials and workmanship see State Standard Specifications for Road and Bridge Construction, 1939 edition.

DESIGN DATA

H-15 Loading as per the A. A. S. H. O. Specifications of 1935.

QUANTITIES

Excavation for Structure ----- 40 Cu yds  
 Concrete - Class "A" ----- 10.9 Cu. yds.  
 Reinforcing Steel ----- 2404 Lbs.

UTAH STATE ROAD COMMISSION  
 SALT LAKE CITY, UTAH  
 EZRA C. KNOWLTON, CHIEF ENGINEER

**CONCRETE CULVERT**  
 3'-0" x 2'-0" x 42'-0"

STA 271+35 FA P 212-A (1)  
 N. FARMINGTON - UTAH JCT., DAVIS CO.

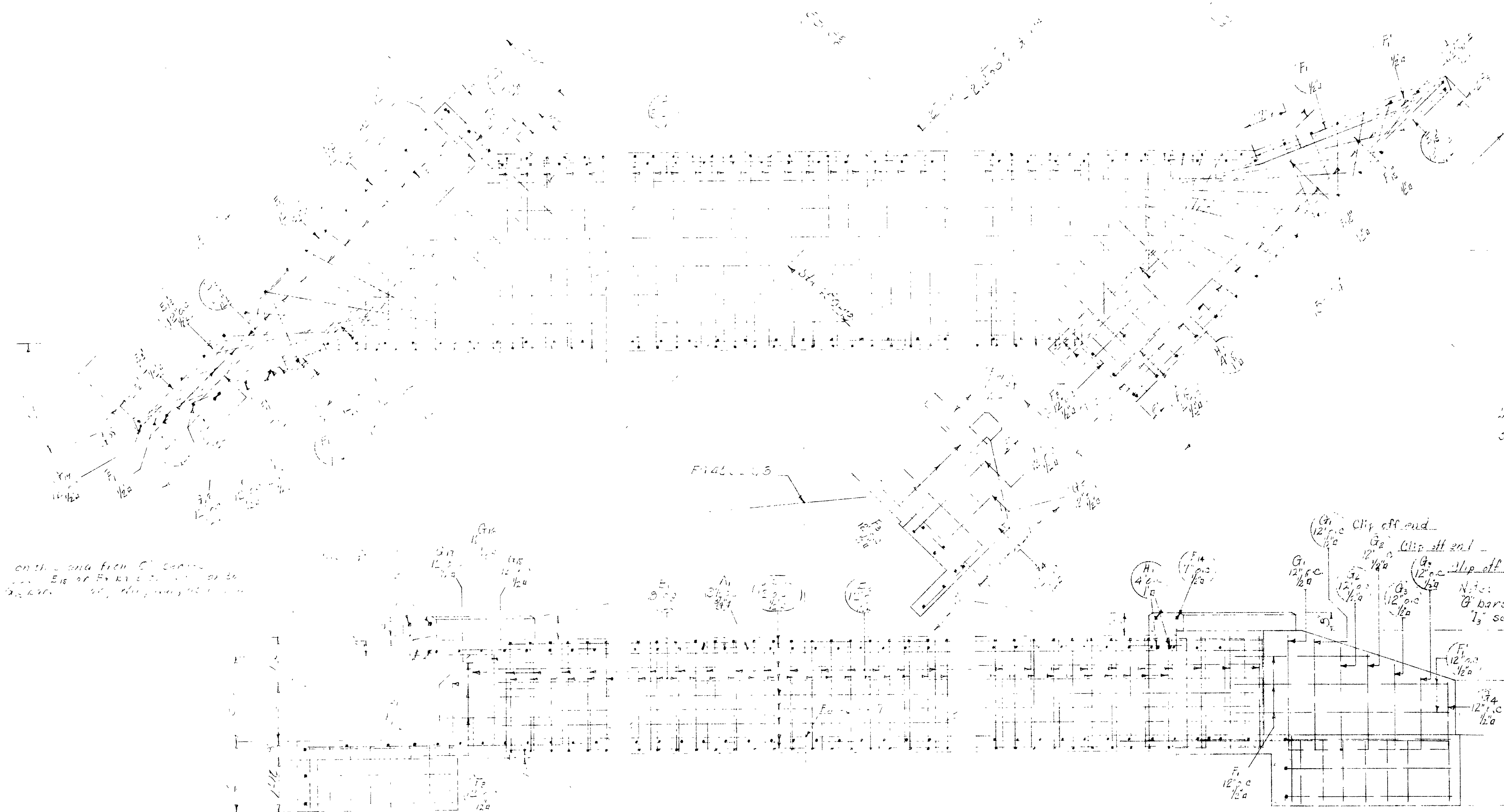
DESIGNED BY: O.T.P. As Noted  
 DRAWN BY: O.T.P. Aug. 14, 1939  
 CHECKED BY: [Signature]  
 APPROVED BY: [Signature]

BR NO. [ ] DRG NO. **E-684**

REVISIONS	DATE	BY



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

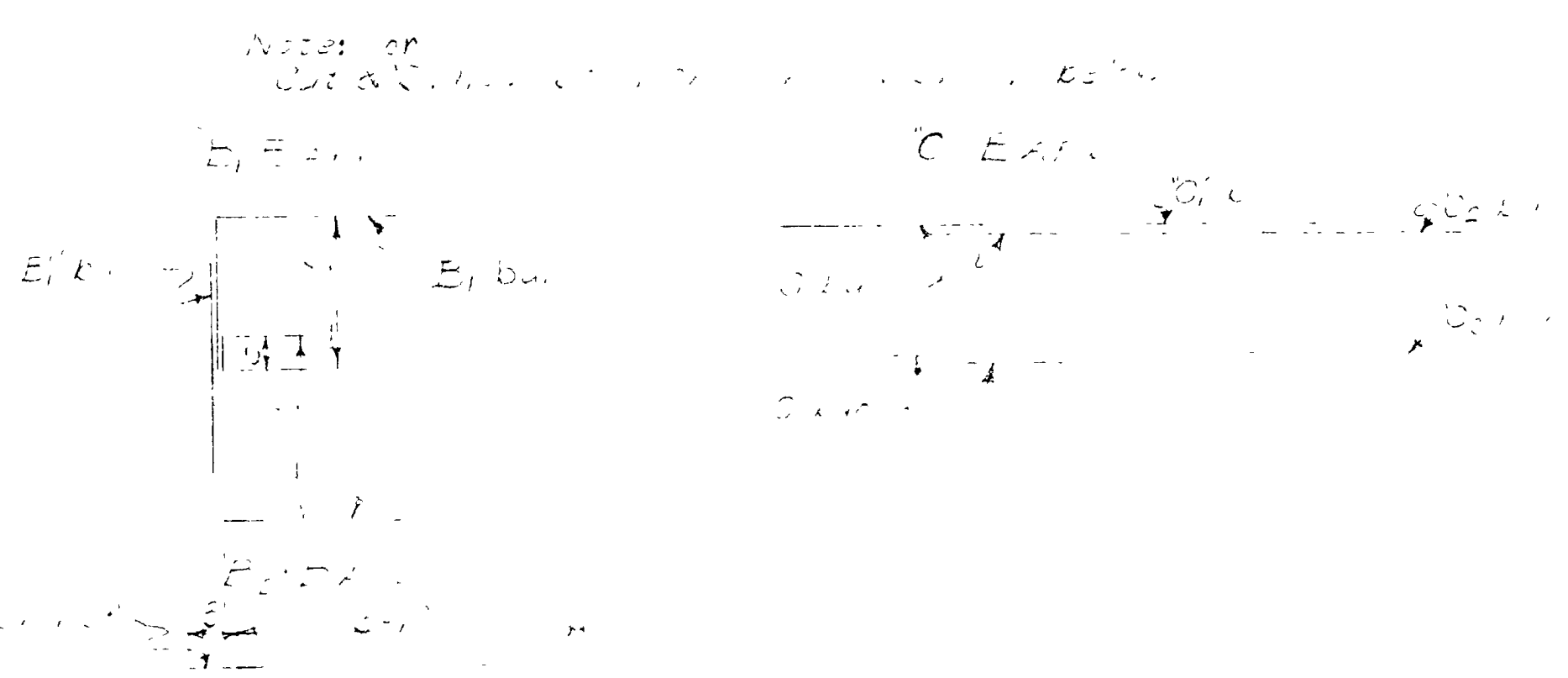
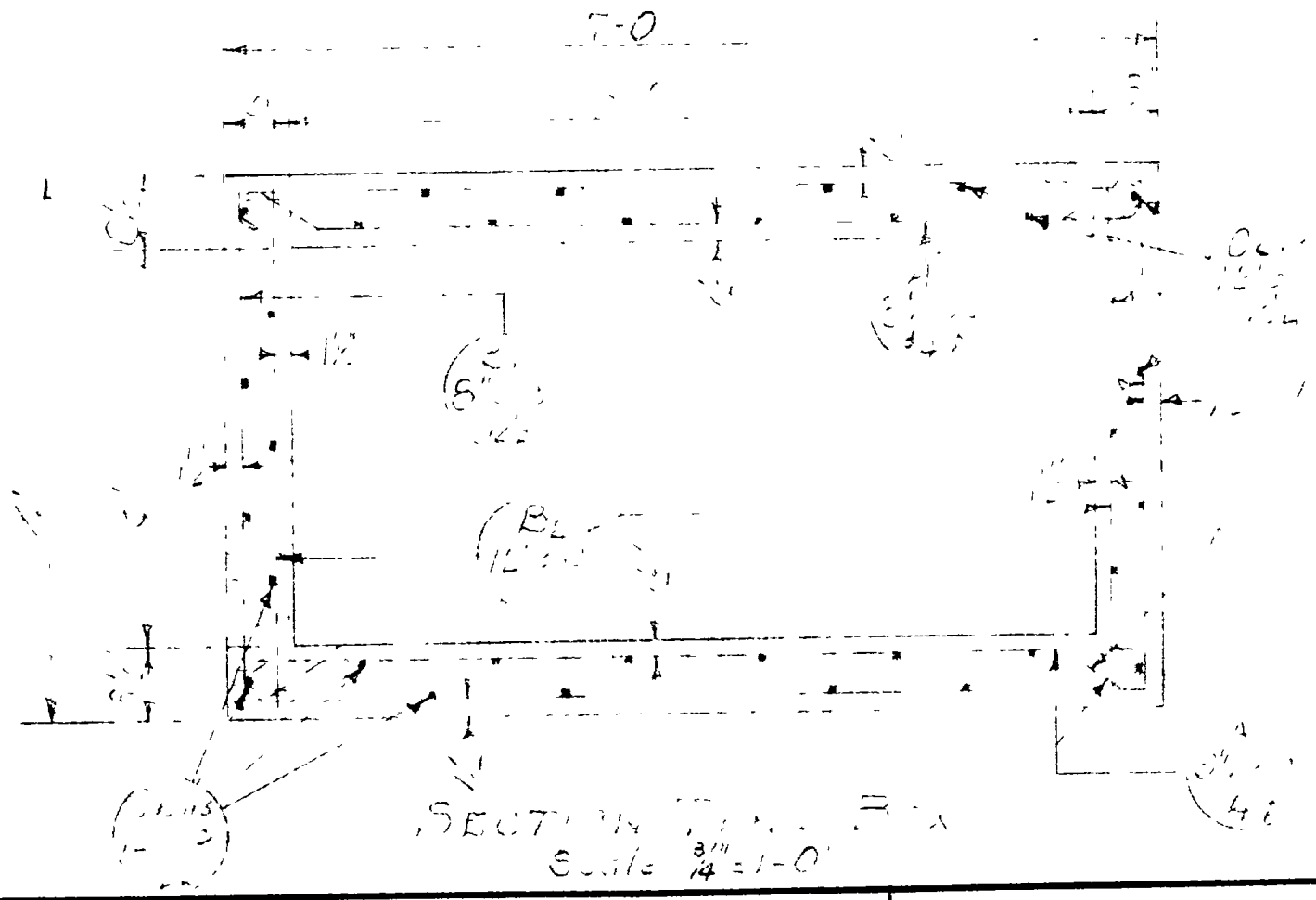


G. n. Notes

Design Data  
 Loadings: H-15 loading  
 Stresses:  $f_s = 16,000 \text{ psi}$   
 $f_c = 900 \text{ psi}$

REVISIONS	DATE	BY

Note:  
 1. All work on this and from G. Section  
 2. All work on this and from G. Section  
 3. All work on this and from G. Section



Quantities  
 Excav for Struct. C.Y.  
 Concrete Class "A" 46 C.Y.  
 Reinf. Steel 10,749 lbs.

Sheet 1 of 2 Sheets

UTAH STATE ROAD COMMISSION  
 SALT LAKE CITY, UTAH  
 EZRA C. KNOWLTON, CHIEF ENGINEER

6'-0" x 3'-0" x 105'-5" Box  
 45° KING L  
 STA. 450+73 FAR 212A(1)  
 No Farm - Utah Davis Co.

DESIGNED BY: M.J.C. SCALE: As Shown  
 DRAWN BY: M.J.C. ISSUED: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_ APPROVED: \_\_\_\_\_  
 EXAMINED BY: \_\_\_\_\_ CHIEF ENGINEER

BR. NO. \_\_\_\_\_ DRG. NO. E-690

REINFORCING STEEL ON HAND

- AS PER DRG. SC-600-3 LINE 33

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

MARK	LOCATION	SIZE	LGTH	NO. BARS	TOTAL LENGTH	SKETCH	O.B.O.
A1		3/4"	8'-5"	186	1565'-6"		
B1		1/2"	3'-3"	186	170'-6"		
B2		1/2"	4'-1"	108	441'-0"		
C		1/2"	40'-0"	22	88'-0"		
C1			16'-0"	22	351'-0"		
D1			7'-6"	8	61'-0"		
D2			3'-1"	8	75'-8"		
E1			7'-10"	1	7'-10"		
E2			9'-0"	1	9'-0"		
E3			10'-2"	1	10'-2"		
E13			10'-8"	2	16'-6"		
E14			7'-6"	4	30'-0"		
E15			7'-0"	7	49'-0"		
F1			5'-10"	8	46'-8"		
F3			6'-11"	8	55'-4"		
G1			5'-8"	1	5'-8"		
G2			5'-1"	1	5'-1"		
G3			4'-6"	1	4'-6"		
G4			3'-11"	1	3'-11"		
G15			5'-5"	1	5'-5"		
G16			4'-3"	1	4'-3"		
G17			4'-1"	1	4'-1"		
G18			3'-5"	1	3'-5"		
G19		1/2"	2'-9"	1	2'-9"		

1565'-6" of 3/4" @ 1.502#/' = 2351.4  
 3347'-6" of 1/2" @ .85#/' = 3263.5  
 TOTAL 5614.9 #

MARK	LOCATION	SIZE	LGTH	NO. BARS	TOTAL LENGTH	SKETCH	O.B.O.
A1	S/Ses	3/4"	8'-5"	186	338'-8"		
A2			7'-8"	4	30'-8"		
A3			6'-11"	4	27'-8"		
A4			6'-1"	4	24'-4"		
A5			5'-4"	4	21'-4"		
A6			4'-6"	4	18'-0"		
A7			3'-9"	4	15'-0"		
B1	Sidewalls	1/2"	9'-0"	32	1188'-0"		
B1		1/2"	1'-10"	186	341'-0"		
B2		1/2"	3'-10"	104	398'-8"		
C	Sops & Sidewalls	1/2"	40'-0"	46	1840'-0"		
C2		1/2"	5'-5"	22	334'-0"		
C3		1/2"	29'-4"	12	352'-0"		
D3	Floors Outlet	1/2"	7'-8"	4	30'-8"		
D2		1/2"	9'-8"	3	29'-0"		
D3	Inlet	1/2"	7'-0"	7	49'-0"		
E1	Outlet	1/2"	5'-3"	1	5'-3"		
E2		1/2"	6'-7"	1	6'-7"		
E3		1/2"	7'-6"	1	7'-6"		
E13		1/2"	7'-0"	2	14'-0"		

MARK	LOCATION	SIZE	LGTH	NO. BARS	TOTAL LENGTH	SKETCH	O.B.O.
E14	Curb	1/2"	5'-10"	4	23'-4"		
E15	Floor-Inlet	1/2"	10'-8"	3	32'-0"		
E15		1/2"	8'-9"	1	8'-9"		
E15		1/2"	6'-6"	1	6'-6"		
F1		1/2"	5'-10"	2	11'-8"		
G5	INLET - W.W.	1/2"	4'-9"	1	4'-9"		
G6	"	1/2"	5'-5"	1	5'-5"		
H	Curb Beam	1/2"	9'-7"	4	38'-4"		

675'-2" of 3/4" @ 1.502 = 1014.85  
 38'-4" of 1" @ 3.90 = 130.33  
 4693'-3" of 1/2" @ .85 = 3989.26  
 TOTAL 5134.44 #

REVISIONS	DATE	BY

NOTE: Steel on hand to be revised as shown on Sheet No. 1.

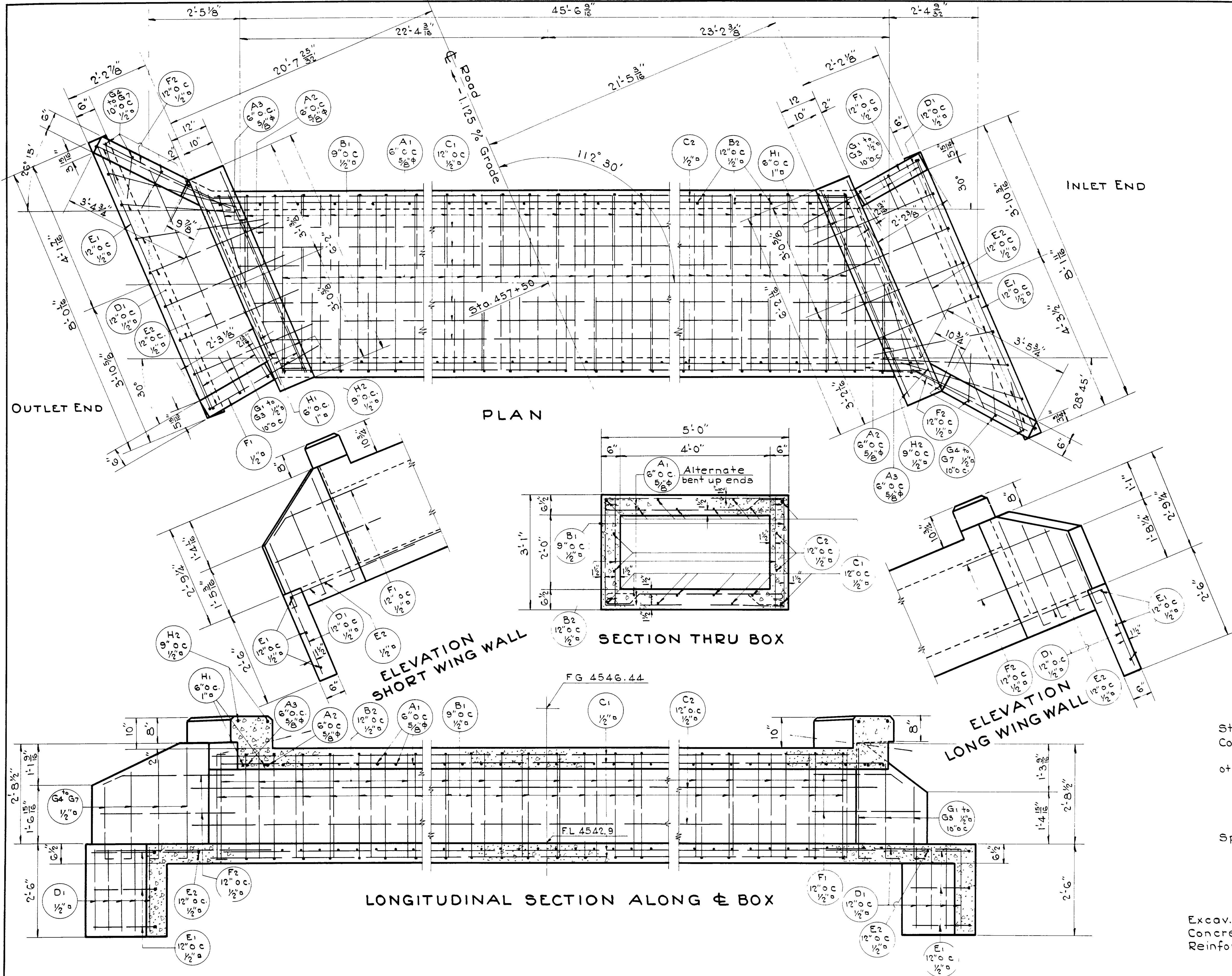
Sheet 2 of 2 Sheets

UTAH STATE ROAD COMMISSION  
 SALT LAKE CITY - UTAH  
 EZRA C. KNOWLTON, CHIEF ENGINEER

6'-0" x 3'-0" x 105'-5" Box  
 45° XING L  
 STA. 450+73 F.A.P. 212-A(1)  
 No FARMINGTON-UNTA DAVIS Co.

DRAWN BY: M.L.G. SCALE: NONE  
 CHECKED BY: M.L.G. ISSUED: \_\_\_\_\_  
 EXAMINED BY: \_\_\_\_\_ APPROVED: \_\_\_\_\_ CHIEF ENGINEER

BR. NO. \_\_\_\_\_ DRG. NO. E-690



MARK	LOCATION	SIZE	LGTH	NO. BARS	TOTAL LENGTH	SKETCH	Q. TO O.
A1	Slabs	3/8"	6'-2"	176	1085'-4"		4'-8 1/2"
A2	"	3/8"	4'-11"	4	19'-8"	$a = 2'-6"$	3'-5 1/2"
A3	"	3/8"	3'-10"	4	15'-4"	$a = 1'-5"$	2'-4 1/2"
B1	Sidewalls	1/2"	7'-0"	122	854'-0"		
B2	"	1/2"	2'-10"	92	260'-8"		
C1	Slabs	1/2"	40'-0"	16	640'-0"		
C1	"	1/2"	7'-4"	16	117'-4"		
C2	Sidewalls	1/2"	40'-0"	4	160'-0"		
C2	"	1/2"	9'-7"	4	38'-4"		
D1	"	1/2"	5'-9"	18	103'-6"		
E1	Apron	1/2"	7'-9"	6	46'-6"		
E2	"	1/2"	6'-7"	2	13'-2"		
F1	Short W Wall	1/2"	3'-3"	4	13'-0"	Field bend	
F2	Long "	1/2"	4'-5"	4	17'-8"	Field bend	
G1	Short "	1/2"	3'-0"	2	6'-0"	$a = 1'-10"$	
G2	"	1/2"	3'-7"	2	7'-2"	$a = 2'-5"$	
G3	"	1/2"	4'-1"	2	8'-2"	$a = 2'-11"$	
G4	Long "	1/2"	3'-0"	2	6'-0"	$a = 1'-10"$	
G5	"	1/2"	3'-5"	2	6'-10"	$a = 2'-3"$	
G6	"	1/2"	3'-10"	2	7'-8"	$a = 2'-8"$	
G7	"	1/2"	4'-1"	2	8'-2"	$a = 2'-11"$	
H1	Curb Beam	1"	5'-11"	4	20'-4"		
H2	Curb	1/2"	5'-11"	4	23'-8"		

20'-4" of 1" bars @ 3.400 = 69.1  
 1120'-4" of 3/8" @ 1.043 = 1168.5  
 2337'-10" of 1/2" @ 0.85 = 1987.2  
 Total = 3224.8 Lbs.

**GENERAL NOTES**

For materials and workmanship see State Standard Specifications for Road and Bridge Construction, 1939 edition.  
 All exposed edges to be chamfered 1" unless otherwise shown.

**DESIGN DATA**

H-15 Loading in accordance with A.A.S.H.O. Specifications of 1935.  
 $f_c = 900 \text{ #/sq in}$ ;  $f_s = 16000 \text{ #/sq in}$ ;  $n = 10$

**QUANTITIES**

Excav. for Structure 40 C.Y.  
 Concrete, Class 'A' 15 "  
 Reinforcing Steel 3225 Lbs.

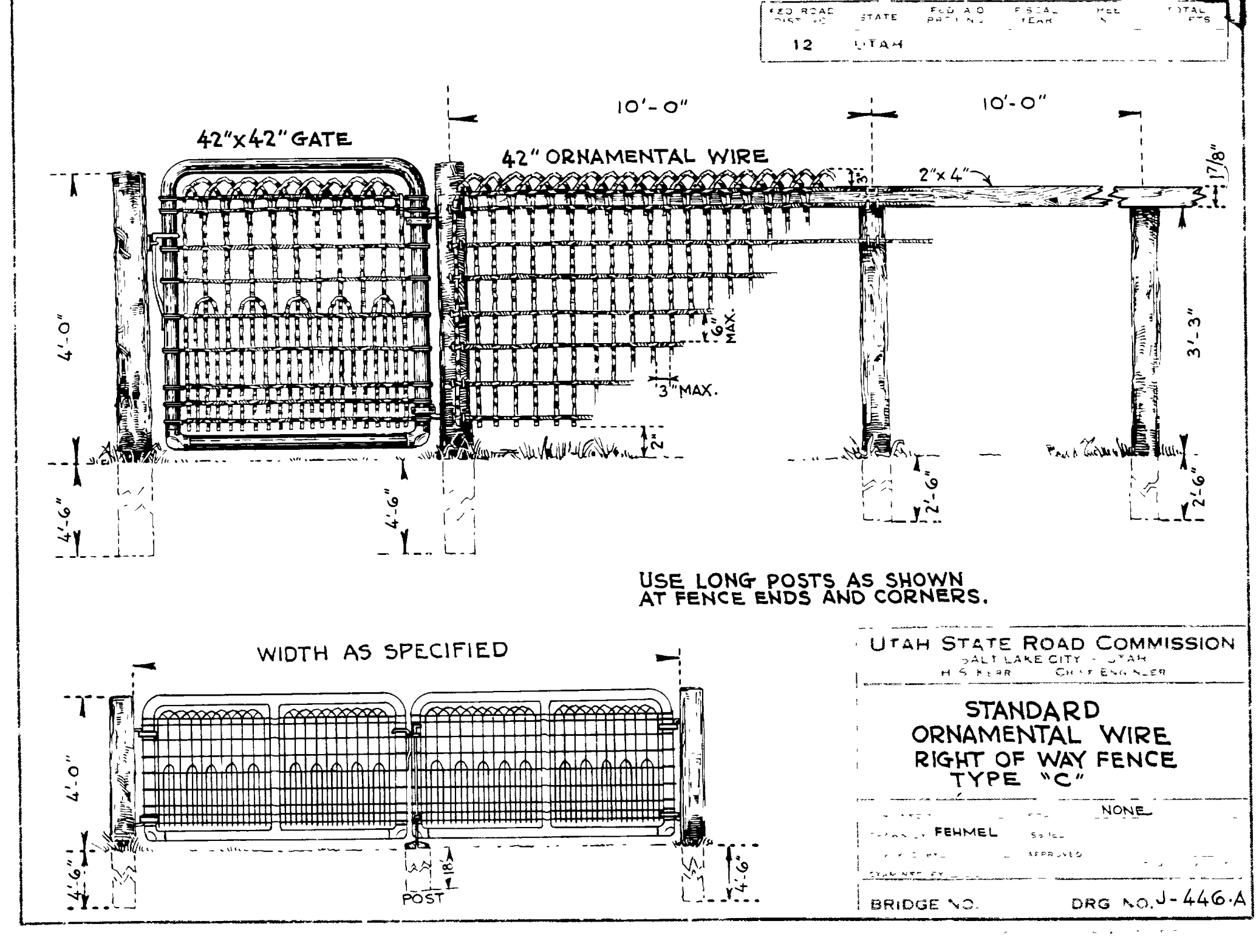
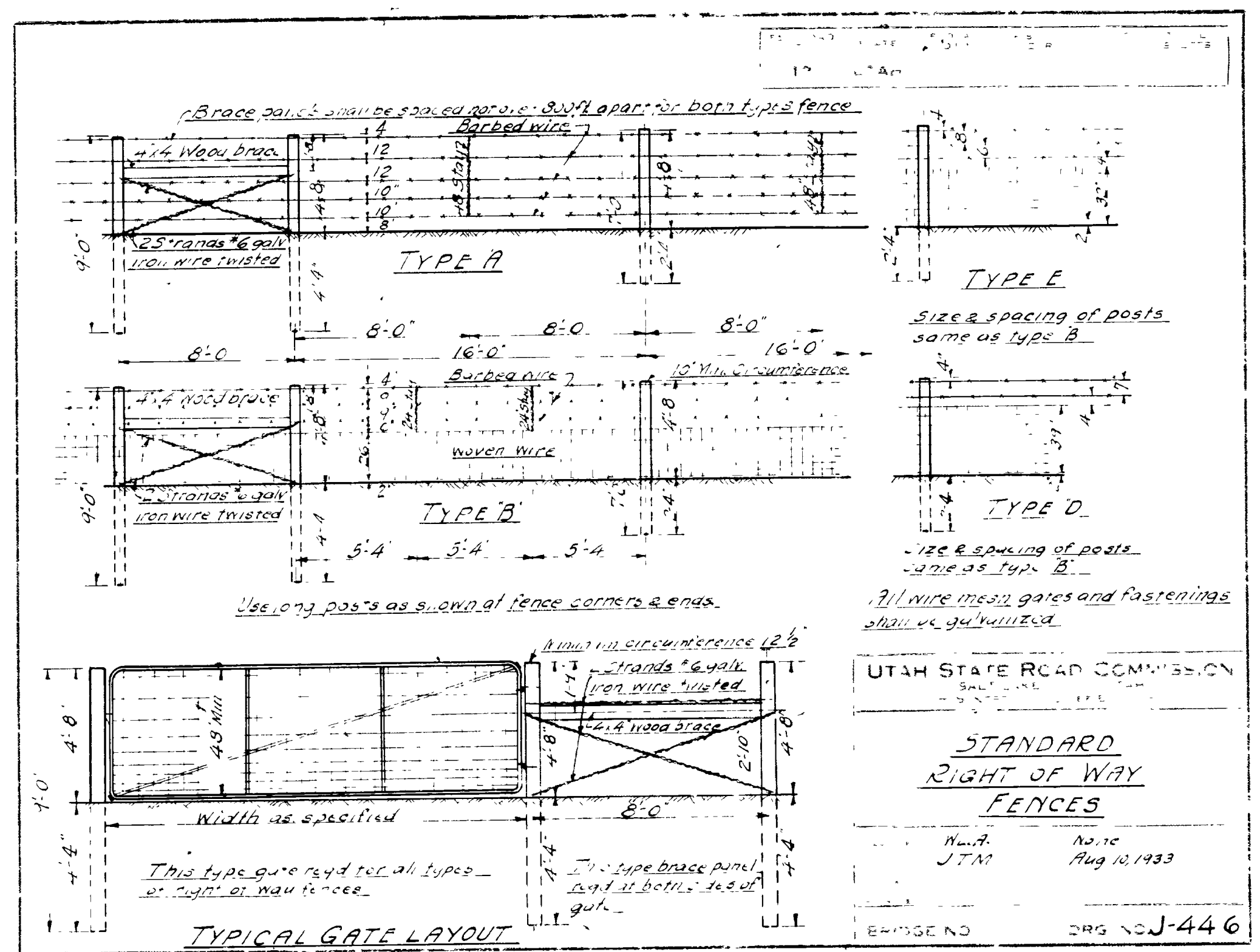
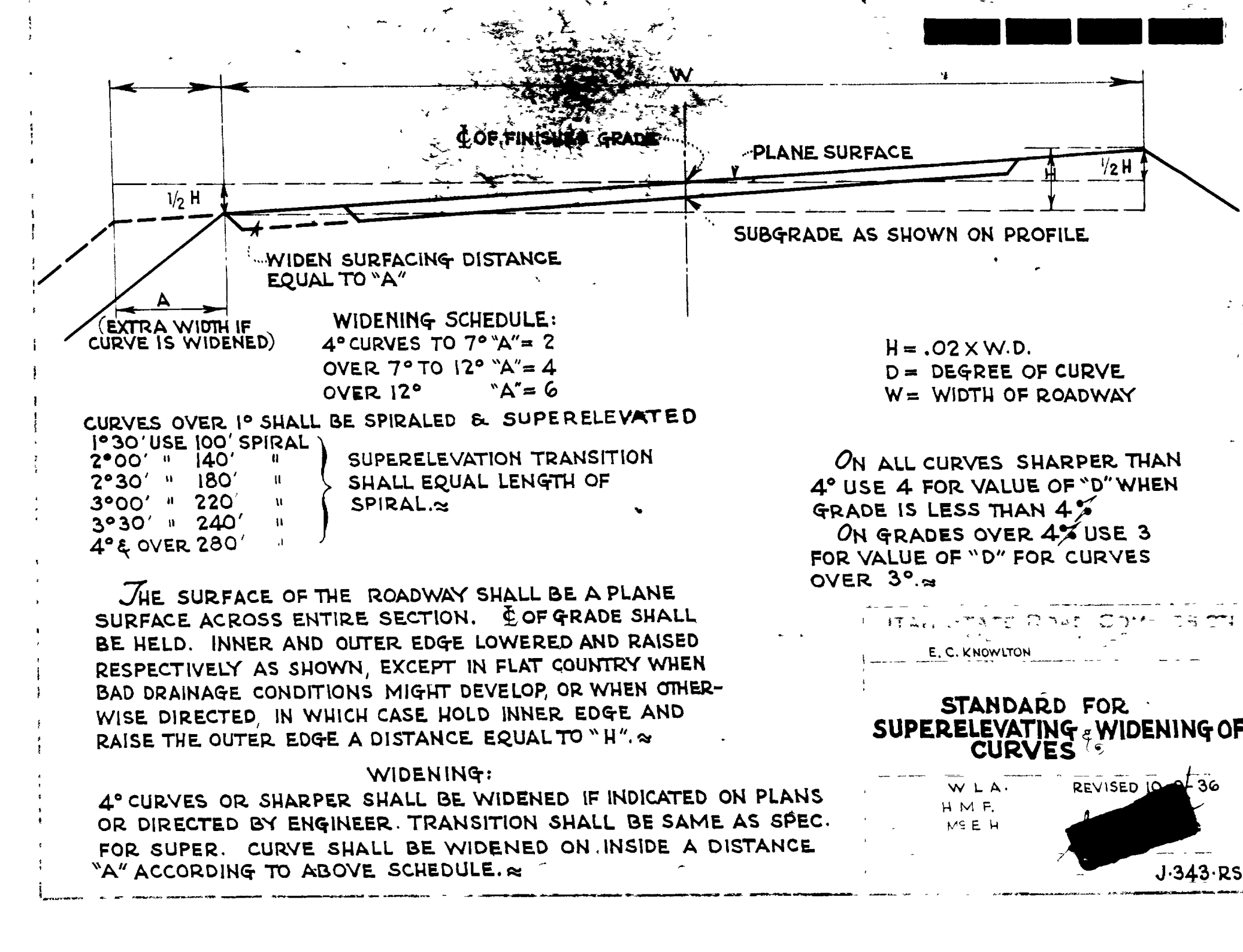
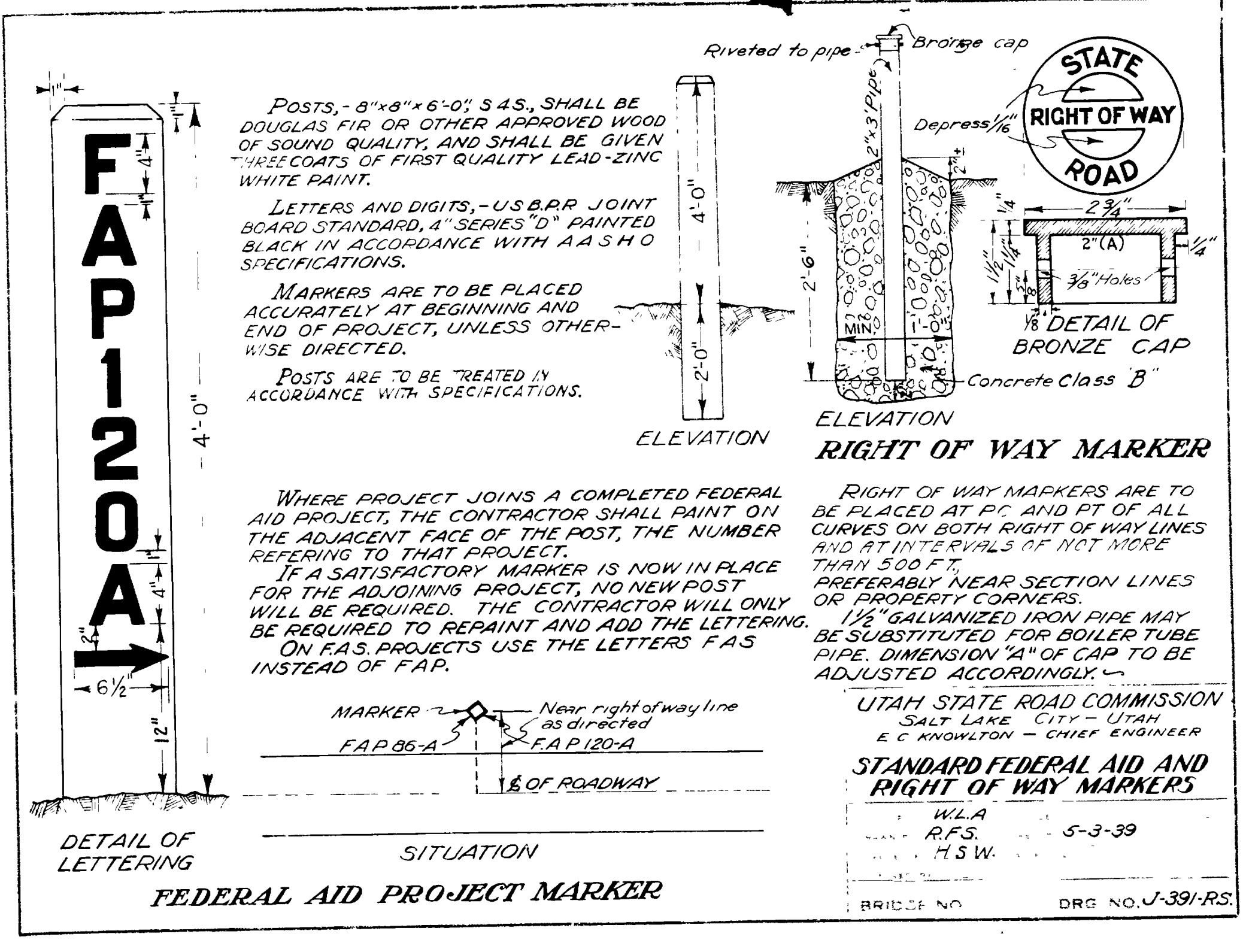
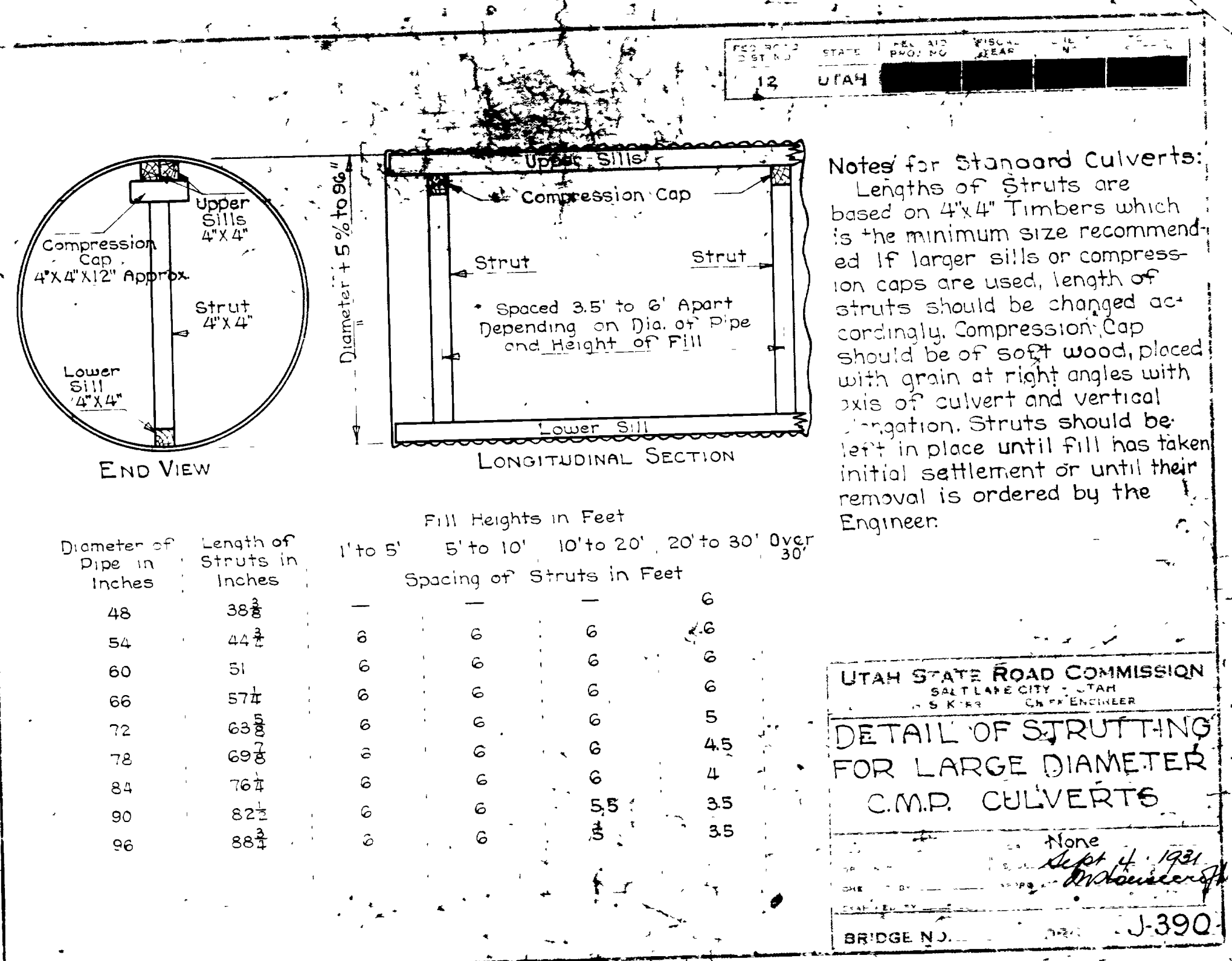
UTAH STATE ROAD COMMISSION  
 SALT LAKE CITY, UTAH  
 EZRA C. KNOWLTON, CHIEF ENGINEER

**4' x 2' CONCRETE BOX**  
**112' 30" X-ING L**  
 Sta. 457+50 F.A.P. 212-A(1)  
 No. Form: Uintah Jet. Davis Co.

DESIGNED BY O.T.P. SCALE 3/4" = 1'-0"  
 DRAWN BY O.T.P. M.J.C. ISSUED Jan 18, 1946  
 CHECKED BY *[Signature]*  
 EXAMINED BY *[Signature]*

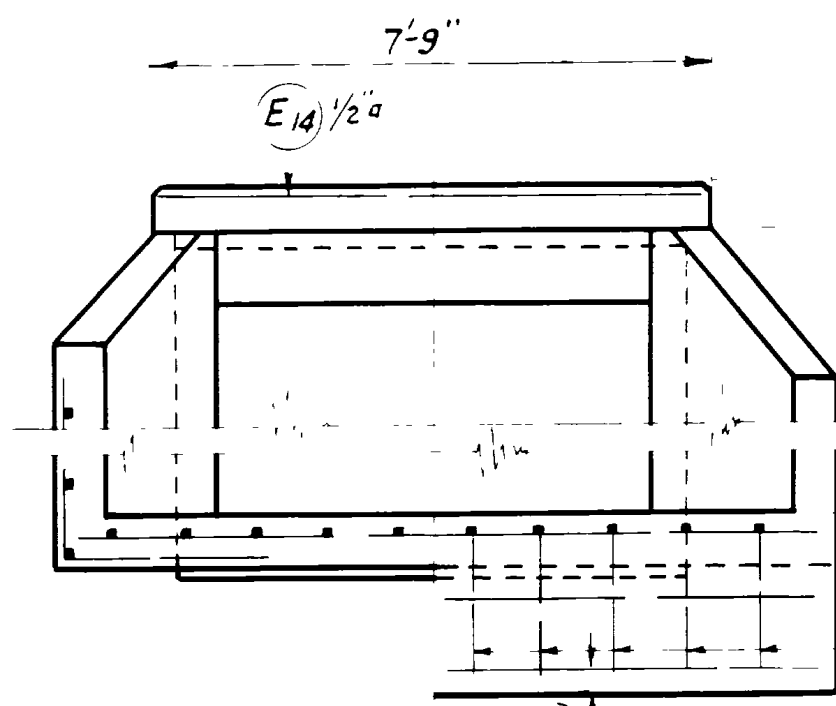
BR NO. DRG. NO. **E-693**

REVISIONS	DATE	BY

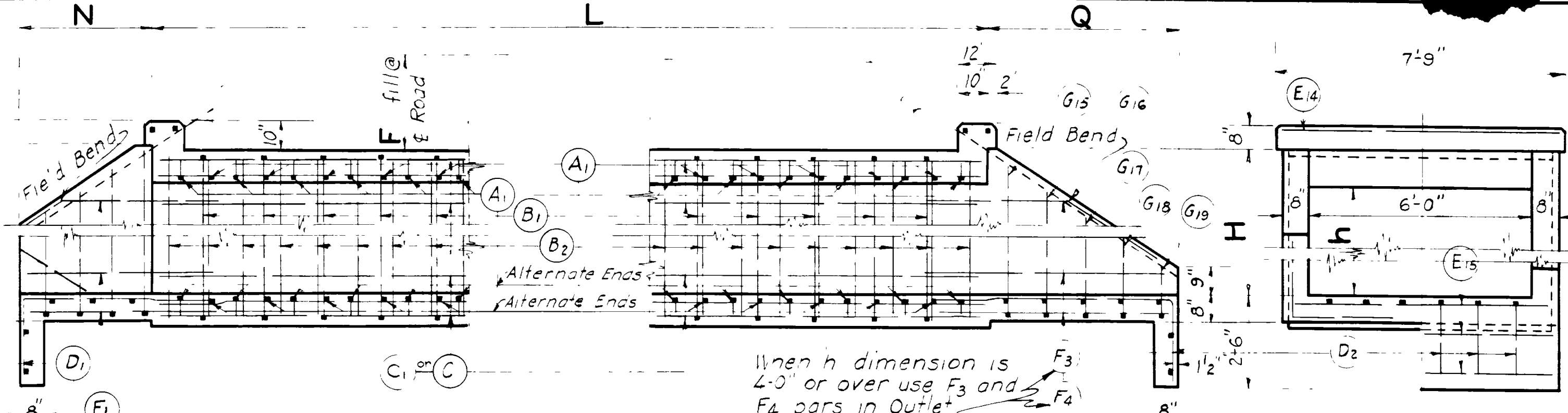


DIMENSION FORMULA

- Clear height of opening
Fill at road
Length of barrel
Thickness of top & bottom slab
Thickness of side walls
h + T1 + 2
951
1098
1098
366
1500



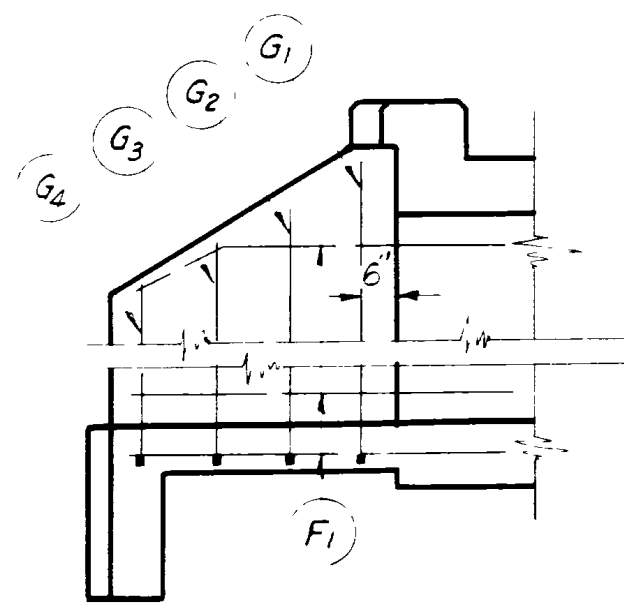
HALF SEC. HALF ELEV. INLET STRUCTURE



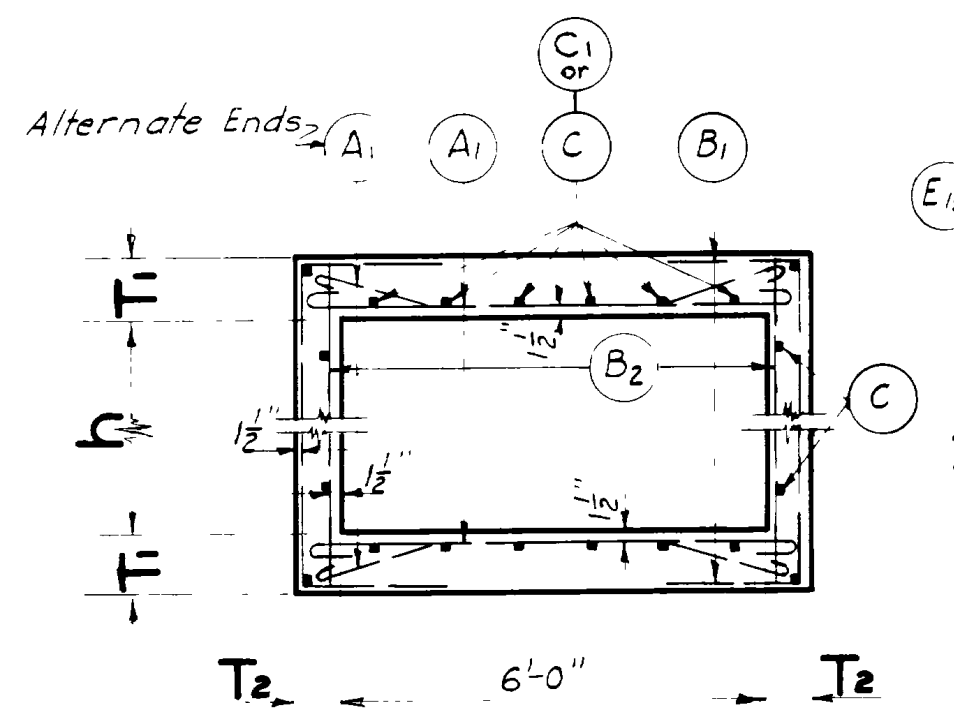
SECTION ON CULVERT

HALF SEC. HALF ELEV. OUTLET STRUCTURE

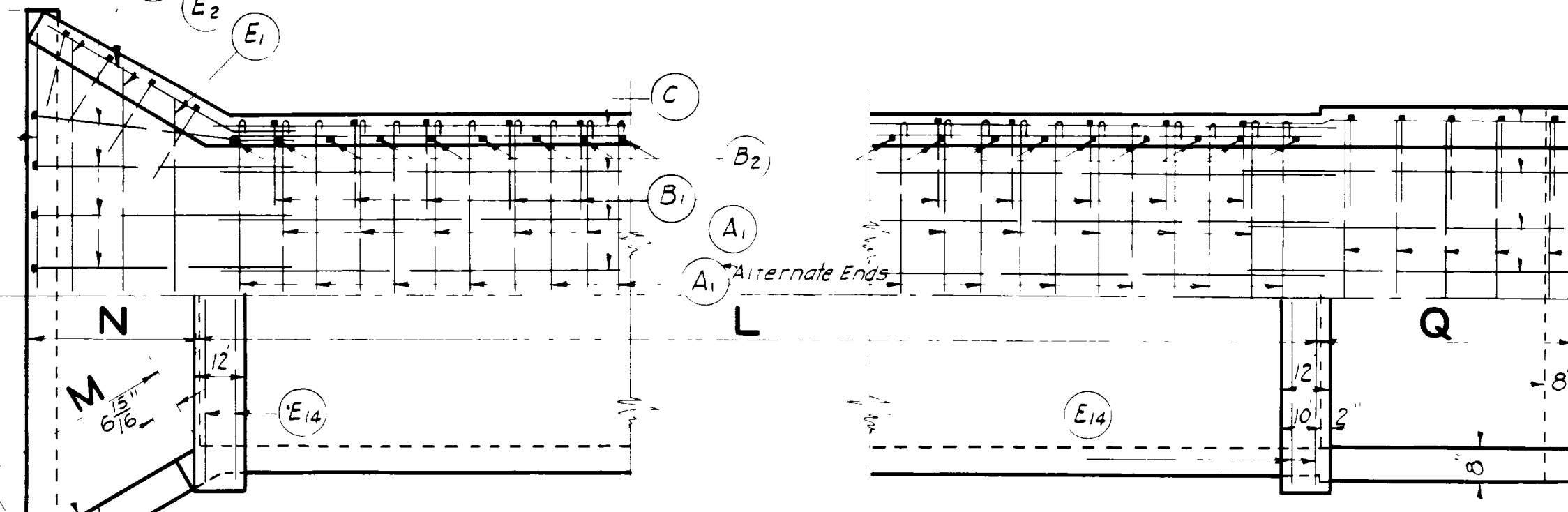
NOTE RECORDED DIMENSIONS ARE TO NEAREST 1/2"



ELEV. INLET WING



SECTION THRU BARREL



HALF SECTION & HALF PLAN

Table with columns: FED. ROAD DIST. NO., STATE, PROJ. NO., FISCAL YEAR, SHEET NO., TOTAL SHEETS.

DESIGN DATA

AASHTO Specifications for 1935
H-15 Loading, Stresses: Concrete 900#/sq
Steel 16000#/sq

GENERAL NOTES

All concrete to be class 'A' and is to be kept moist 14 days after pouring.
Reinforcing steel shall be deformed bars over lapped not less than 50 diameters at all splices...

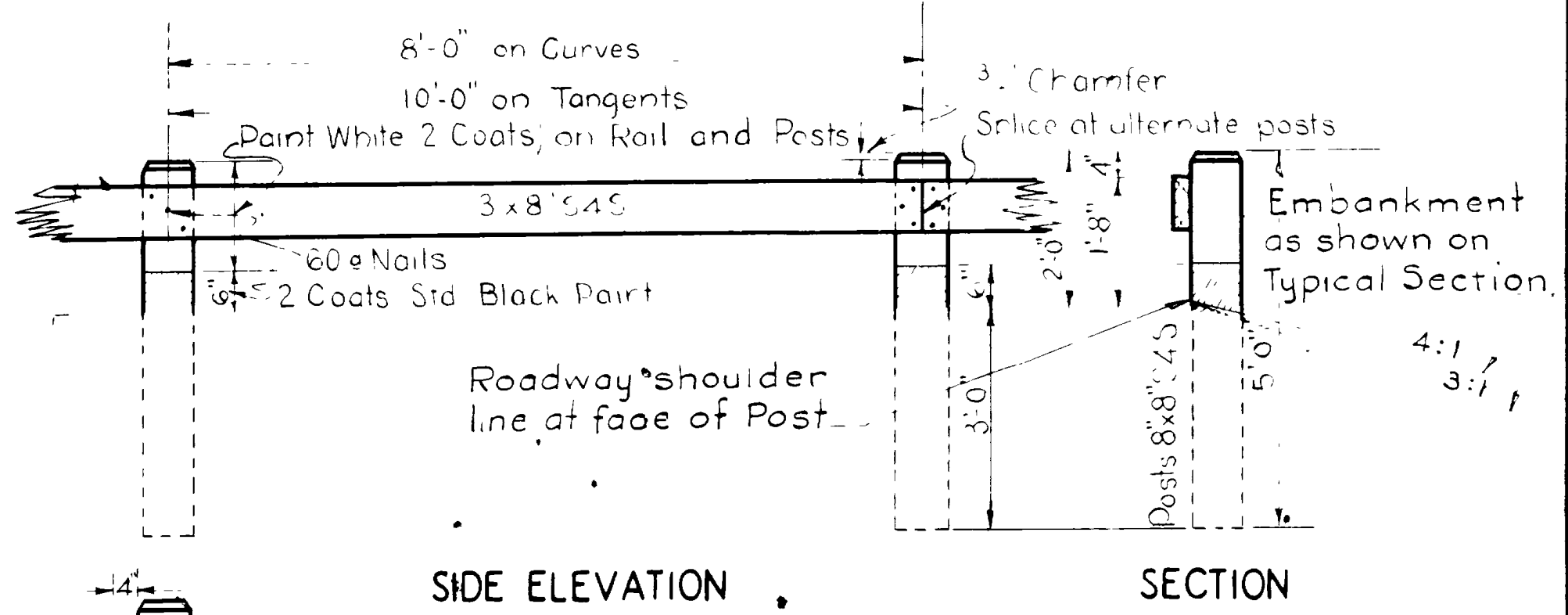
Table with columns: REVISIONS, DATE, BY, CHECKED BY.

Main data table with columns: GENERAL DIMENSIONS, A1 BARS, B1 BARS, C BARS, D1 BARS, E BARS INLET, G BARS INLET, G BARS OUTLET, STEEL, CONC, CEMENT, SAND, GRAVEL, etc.

REMARKS

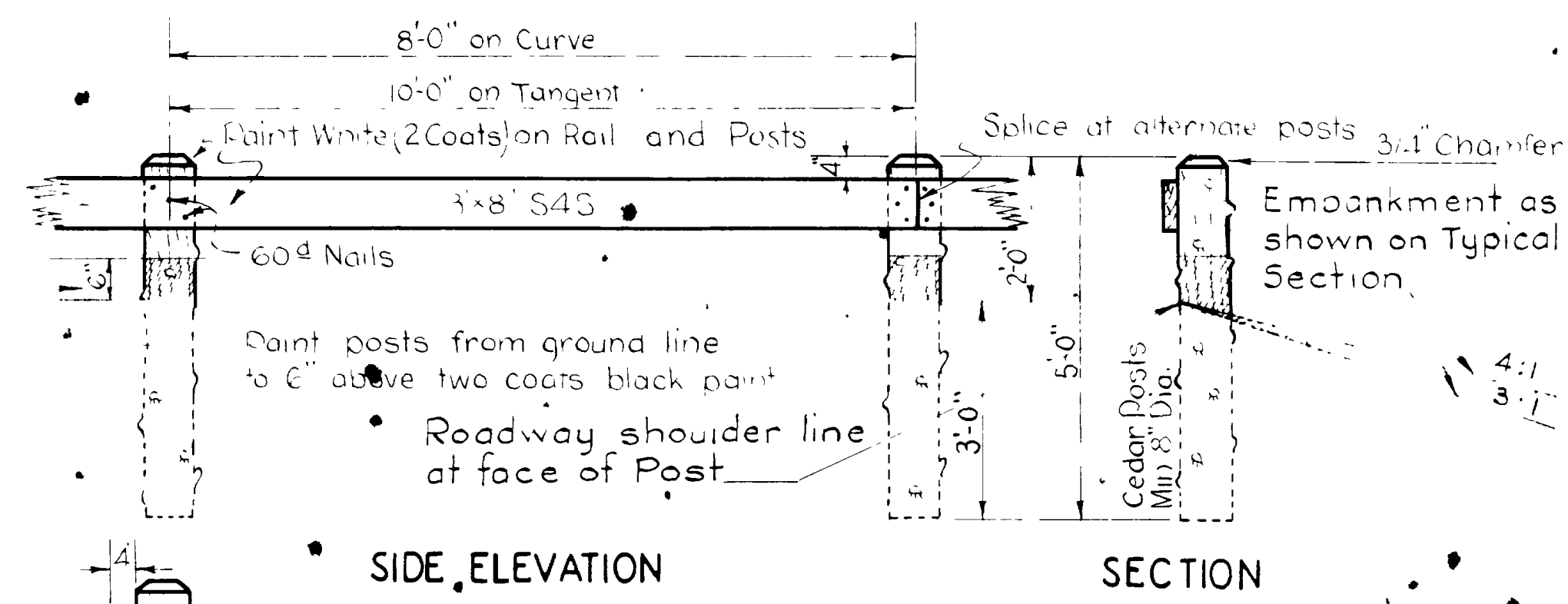
Technical details and specifications for reinforcement bars: DETAIL 'A' BAR, DETAIL 'B' BAR, DETAIL 'D' BAR, DETAIL 'G' BAR. Includes formulas like D1 = N + 2'-1" and D2 = Q + 2'-1".

UTAH STATE ROAD COMMISSION
SALT LAKE CITY, UTAH
EZRA C. KNOWLTON, CH. ENGR.
STANDARD 6' SPAN CULVERT
DESIGNED BY: [Signature]
CHECKED BY: [Signature]
BRIDGE NO. SC-600-3



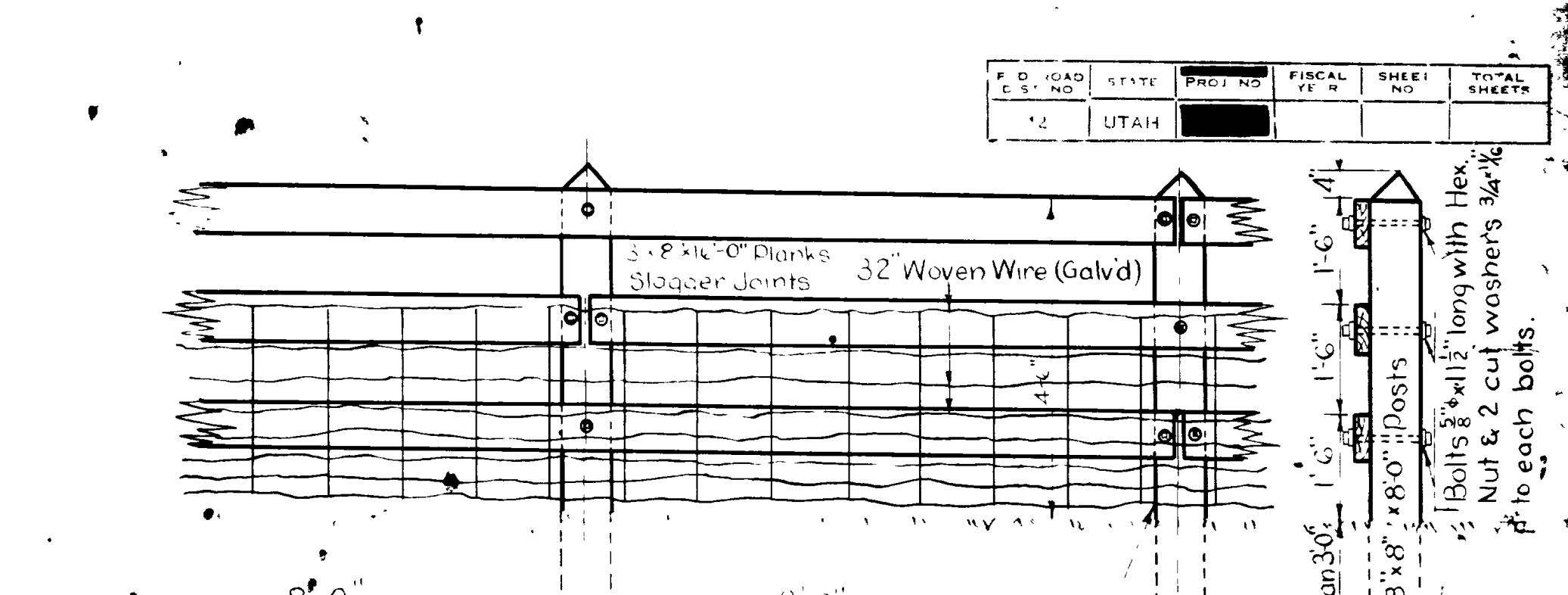
SIDE ELEVATION SECTION

TYPE "H"



SIDE ELEVATION SECTION

TYPE "H-C"



ELEVATION SECTION

TYPE "R-R"

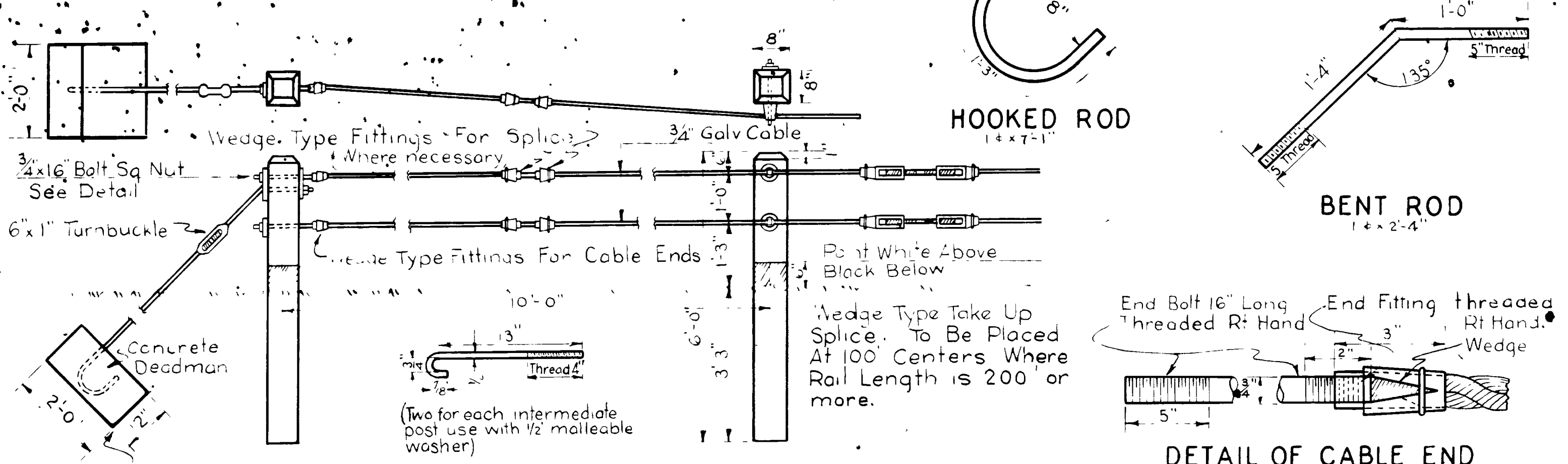
NOTE: All lumber to be treated in accordance with specifications.

PAINTING  
Posts to be painted from ground line to 16" above - 2 Coats Std Black Paint. Remainder of posts and railing to be given two coats of white paint.

Woven Wire shall be fastened to roadway side of post by 1" Galv staples - 5 per post.

NOTE: Posts shall be 8x8x6-0 S4S with 1" bevel top end. Painted two coats of State Standard White paint. Paint posts from ground line to 6" above two coats of standard black paint. All guard rail fittings to be hot dipped double galvanized.

NOTE: All lumber to be treated in accordance with specifications.

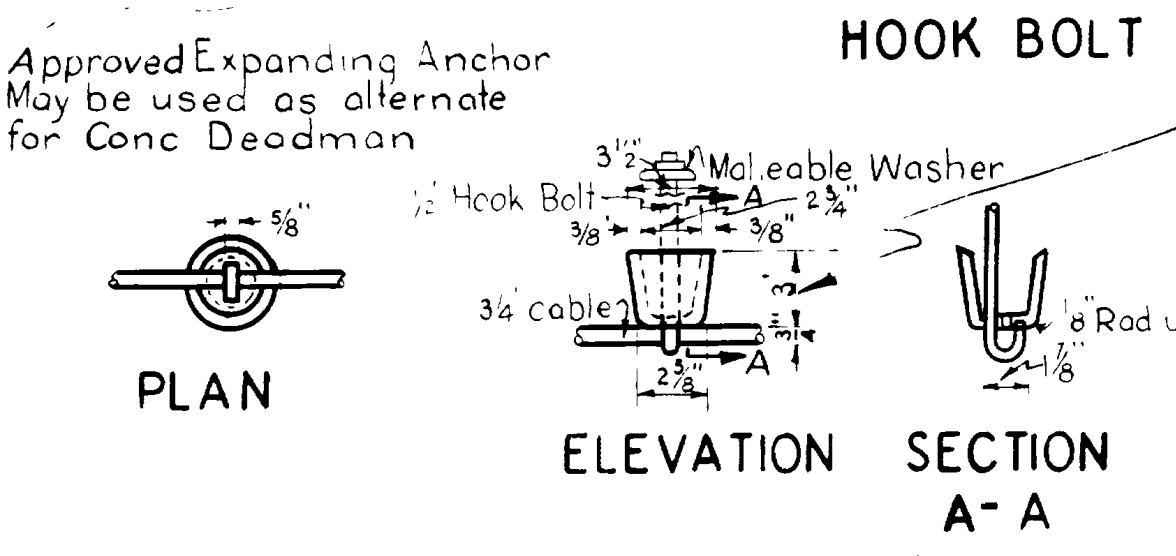


HOOKED ROD

BENT ROD

DETAIL OF CABLE END

DETAIL OF TAKE UP CABLE SPLICE



HOOK BOLT

ELEVATION SECTION A-A

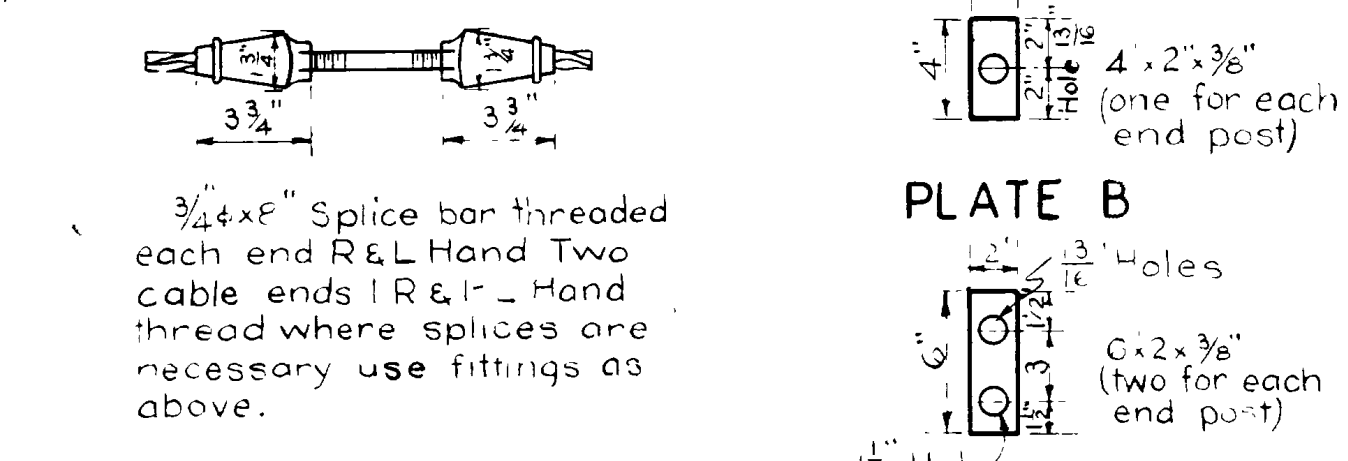
DETAIL OF C.I. PEDESTAL FOR INTERM. POSTS

ITEM	KIND	AMT
Conc Dead Man	C.I. Alternate for	4 Cu Ft
Cement	Expanded Anchor	1 Sack
Plates "A"	6" x 2" x 3/8"	2
Plates "B"	4" x 2" x 3/8"	1
Turnbuckle	6" x 1"	1
Hooked Rod	1 1/2 x 7-1/2"	1
Bent Rod & Nut	1 1/2 x 2-4"	1
Wire Cable	3/4 Dia	31 Lb Ft
Wood Post	8" x 8" x 6'-0"	1
End Bolt	3/4 x 6" With Sq Nut	2
Wedge	Cable End	2

ITEM	KIND	AMT
Hook Bolt & Nut	1/2 x 1 3/8"	2
Nail Washer	For 1/2" Bolt	2
Wire Cable	3/4" Dia	20 Lb Ft
Pedestals	Cast Iron	2
Wood Post	8" x 8" x 6'-0"	1

TYPE "C"

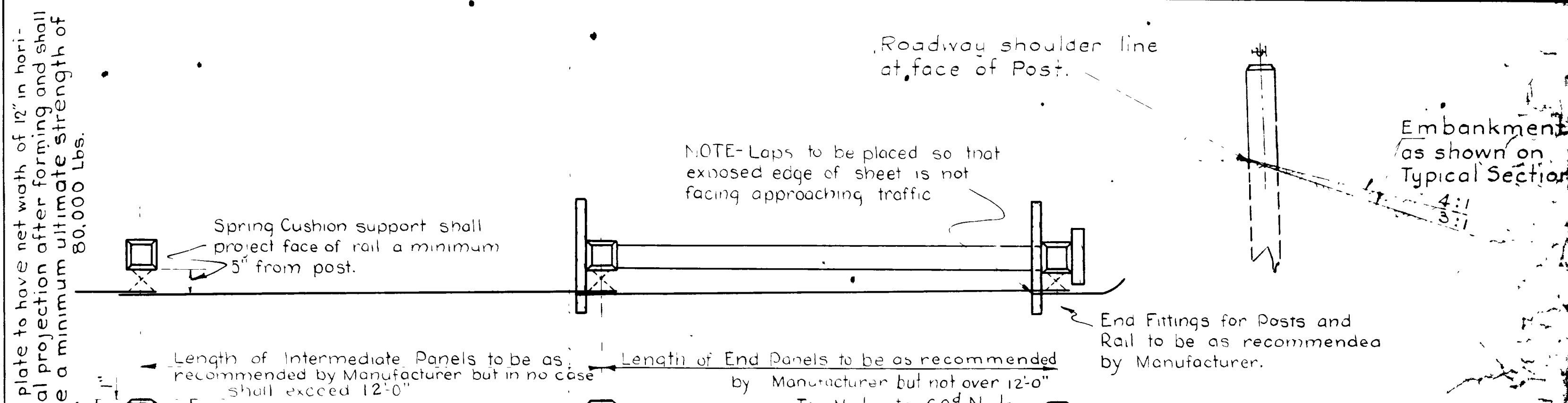
Note: Alternate types of take up splices may be used upon written approval of the Engineer.



DETAIL OF 3/4" CABLE SPLICE

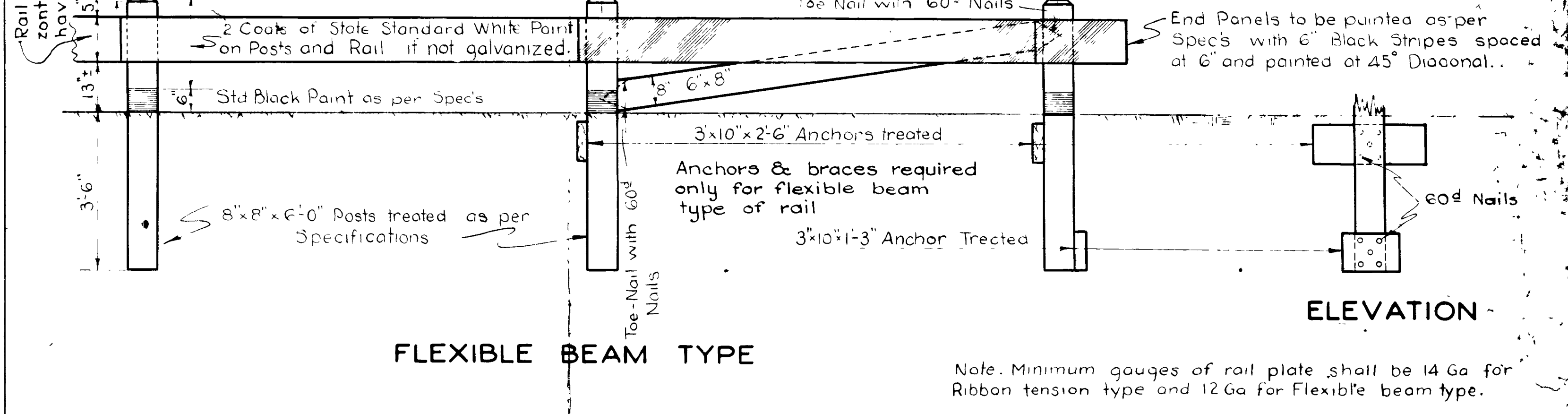
PLATE B

PLATE A



FLEXIBLE BEAM TYPE

ELEVATION

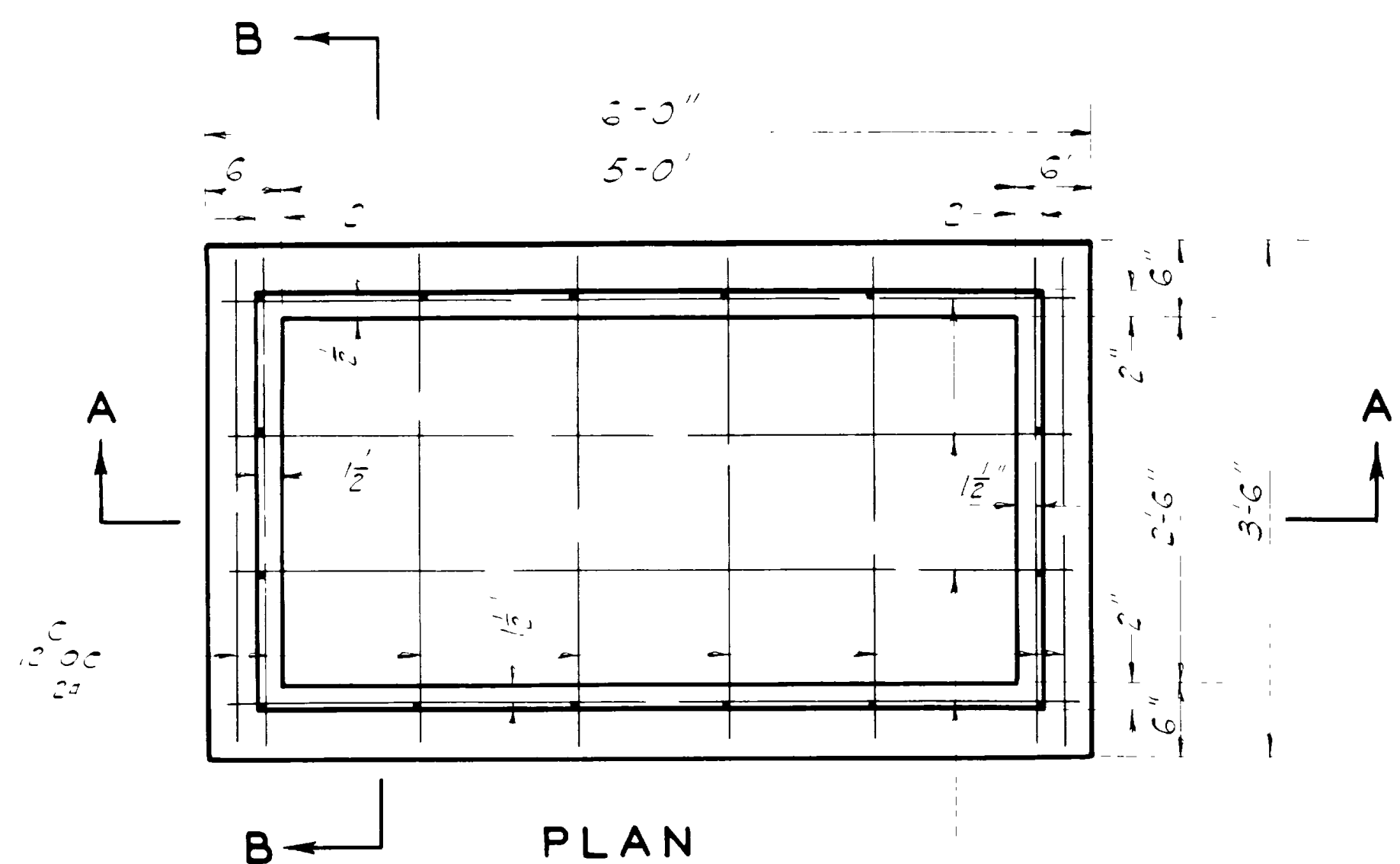


TENSION RIBBON TYPE

TYPE "P"

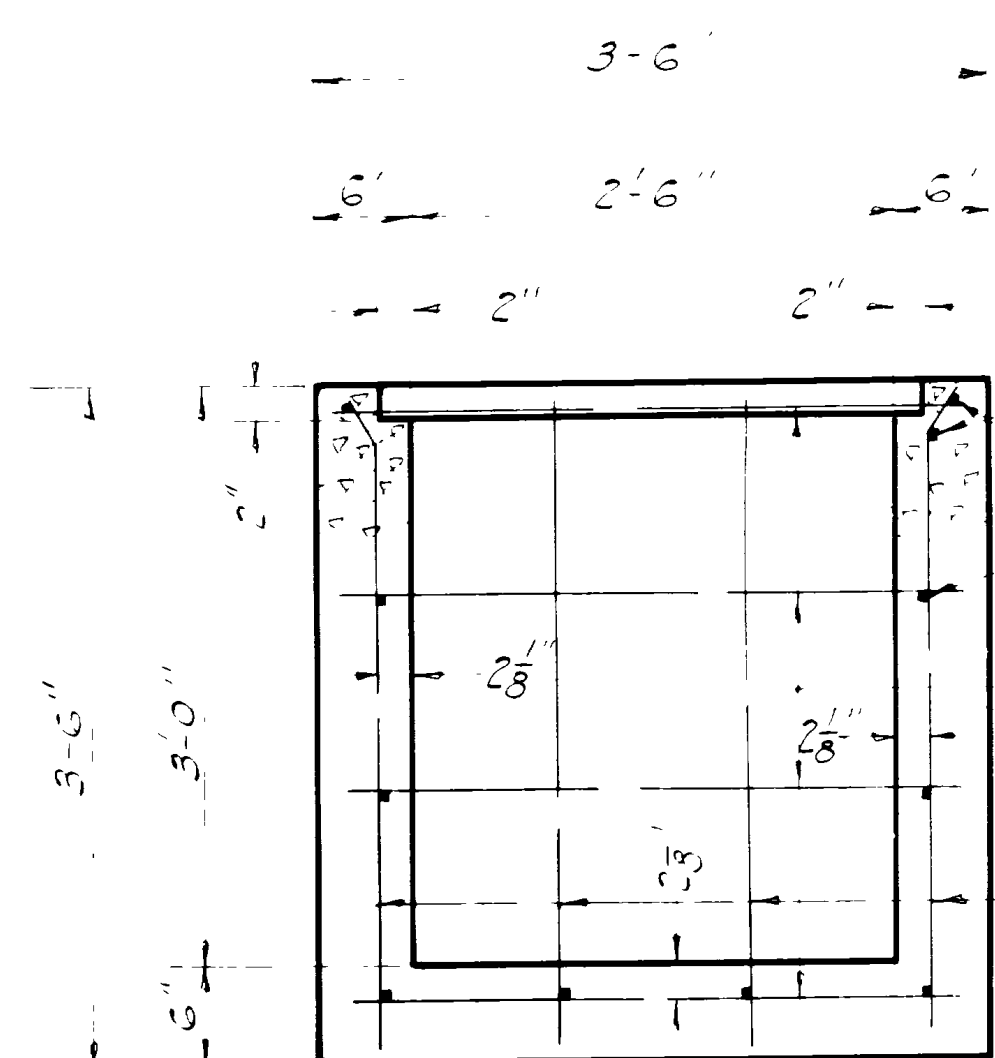
Note: Minimum gauges of rail plate shall be 14 Ga for Ribbon tension type and 12 Ga for Flexible beam type.

NOTE:  
Location of Tank, also size and location of inlet and outlet Pipes to be determined by Engineer in field



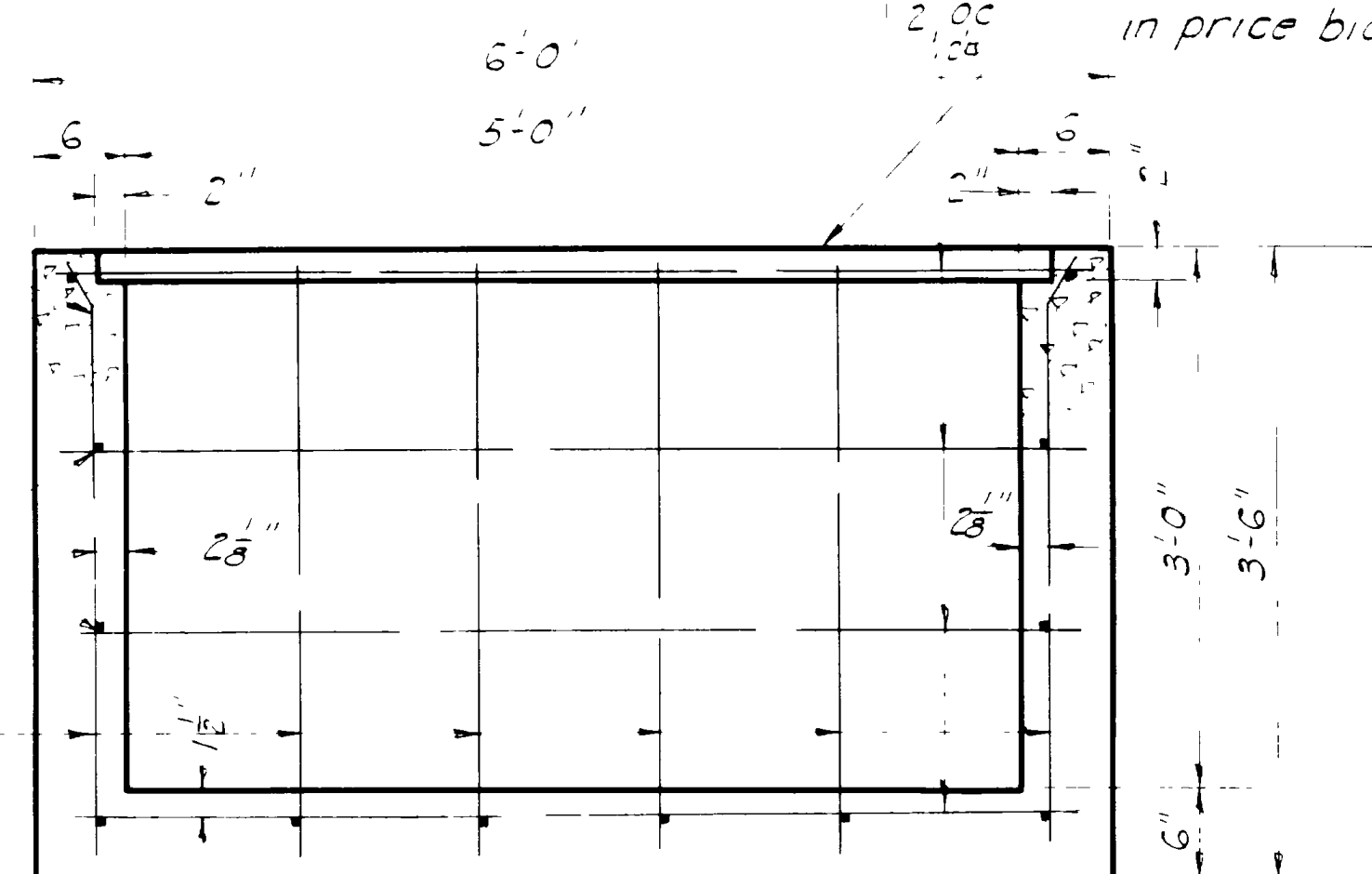
PLAN

Provide 2" Plank Cover  
2'-9 1/2" x 5'-3 1/2" to be included  
in price bid for concrete



SECTION B-B

Field Bars



SECTION A-A

**GENERAL NOTES**

For Materials and Workmanship see "State Standard Specifications for Road and Bridge Construction," Edition of 1939.

REVISIONS	DATE	BY	REASON
1	9-21-39	MM	

REINFORCING STEEL SCHEDULE						
BAR	LOCATION	NO. BARS	LENGTH	TOTAL LENGTH	SKETCH	QTY
A	Storage Tank	5-9	0	57-6		
B		3-3	16	52-0		
C		3-3	12	39-0		
148-6" 0" 2 3/8 @ .35 # = 126 #						

**QUANTITIES**

Excavation for Structure 57 c y.  
Concrete Class 4 13 c y.  
Reinforcing Steel 126 lbs.

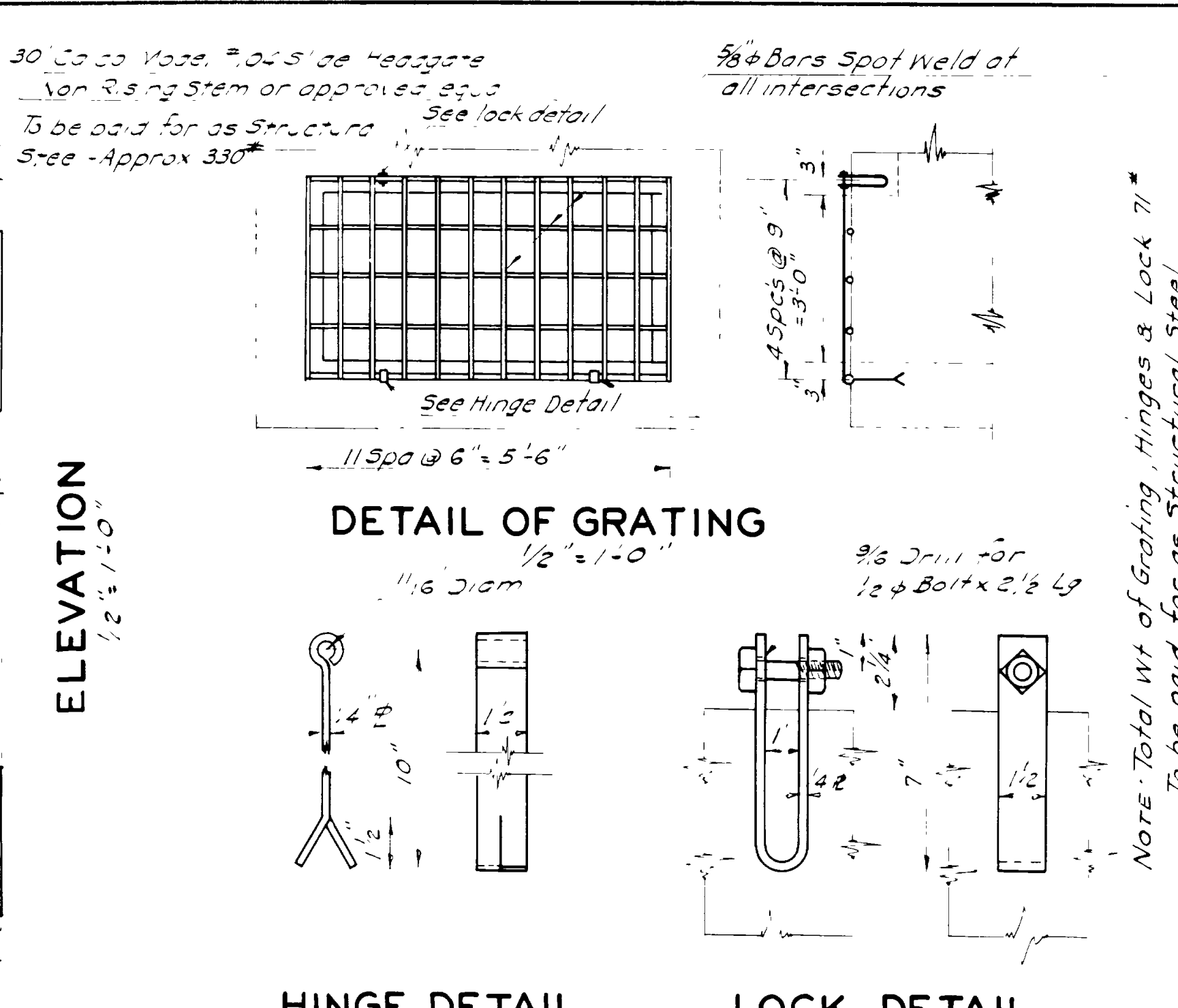
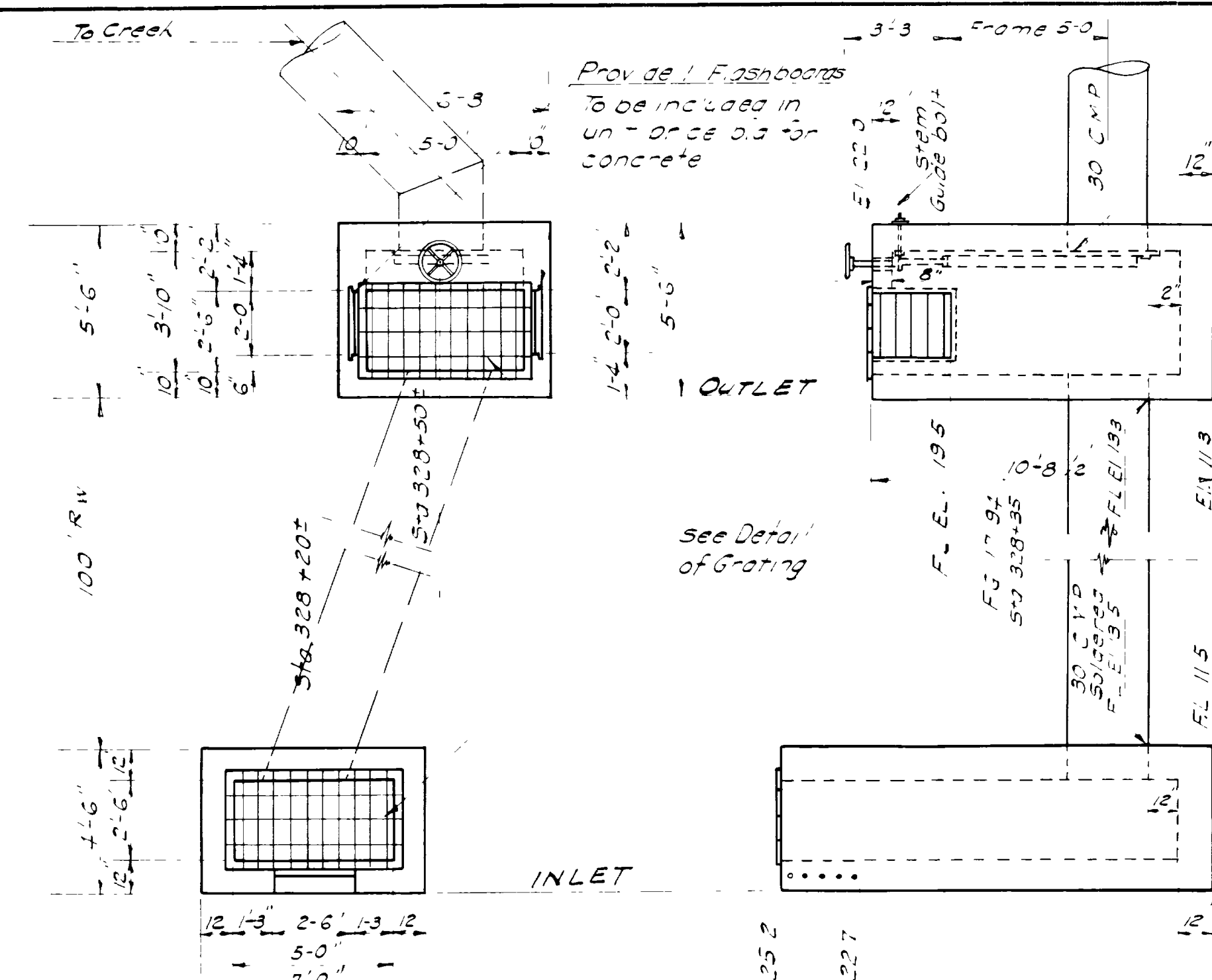
UTAH STATE ROAD COMMISSION  
SALT LAKE CITY, UTAH  
EZRA C. KNOWLTON, CHIEF ENGINEER

**WATER STORAGE TANK**

Sta 358+35 ± F.A.P. 2124(1)  
No Farmington-Uintah Co. Davis Co.

DESIGNED BY MJC SCALE 1" = 1'-0"  
DRAWN BY MJC ISSUED May 15, 1939  
CHECKED BY APPROVED BY

DR NO. DRG NO. V-192

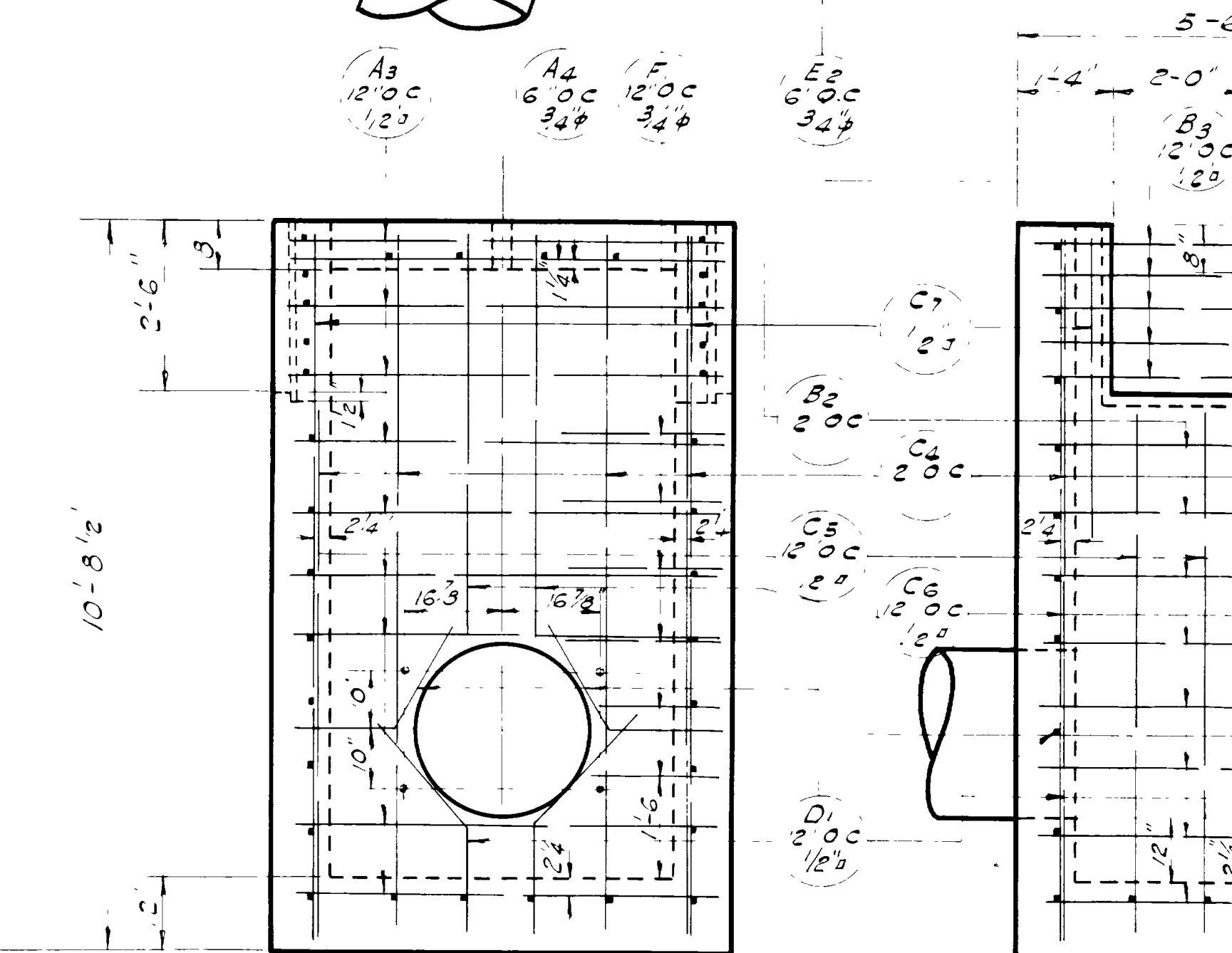
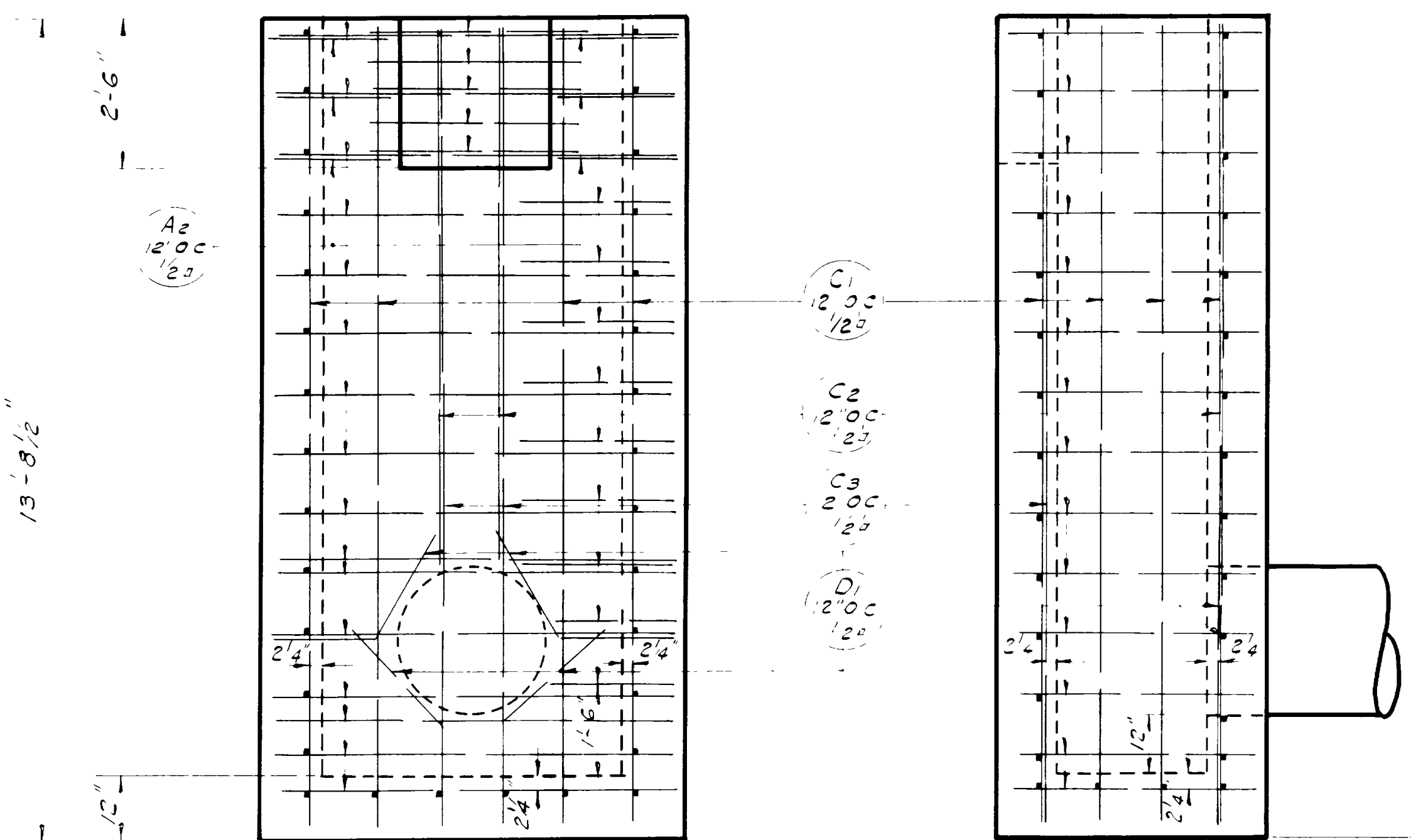
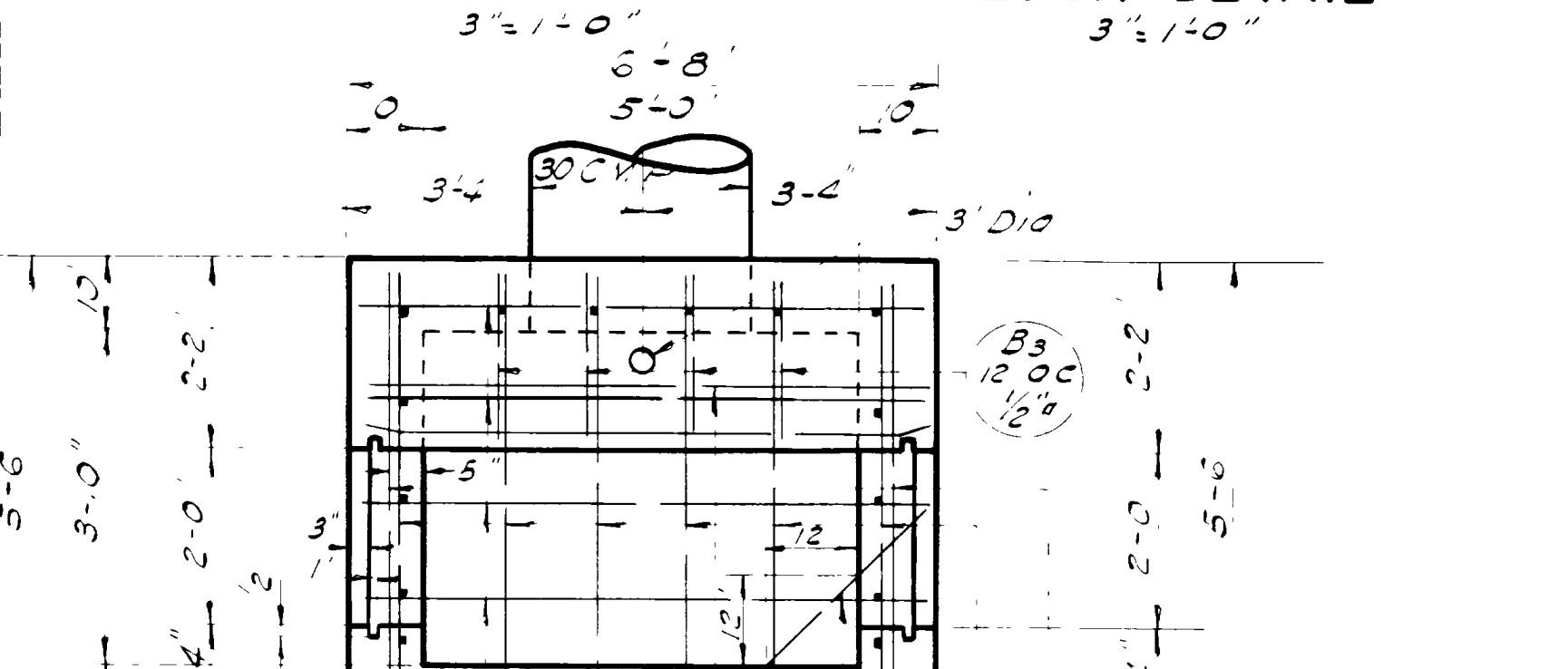
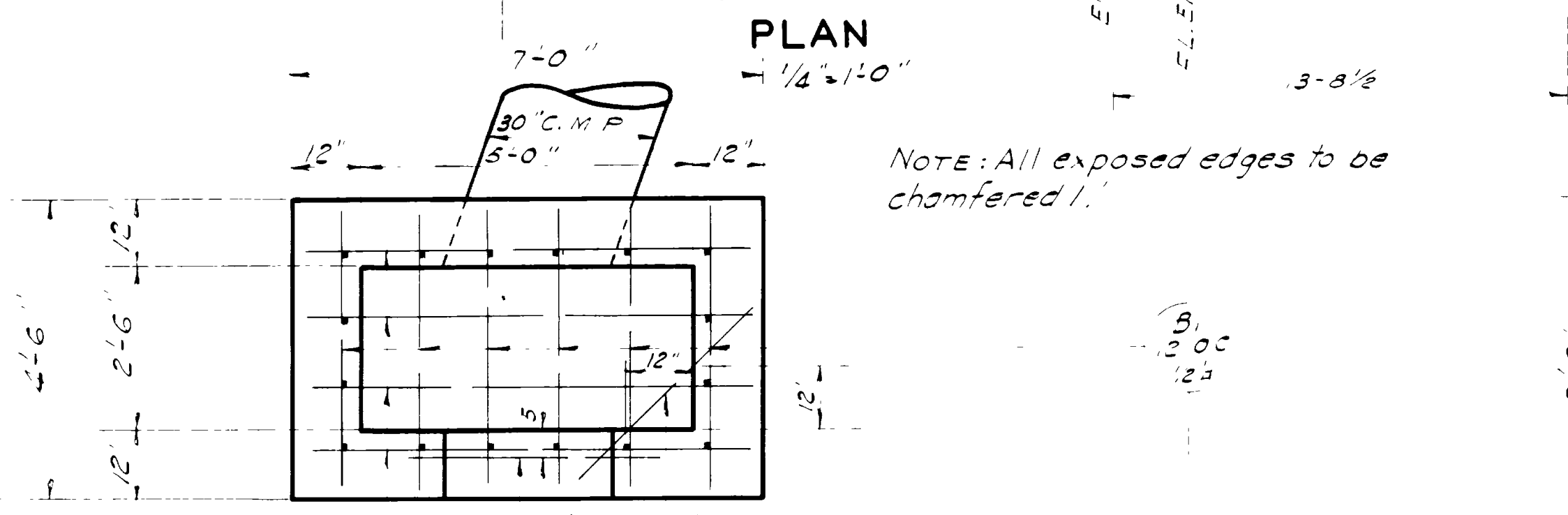


Note: Total Wt of Grating, Hinges & Lock 71 lbs.  
To be paid for as Structural Steel.

MARK	LOCATION	SIZE	LGTH	NO BARS	TOTAL LENGTH	SKETCH	QTY
A1	Inlet	1/2"	6'-9"	26	175'-6"		
A2	"	1/2"	2'-0"	6	12'-0"		
A3	Outlet	1/2"	6'-5"	21	134'-9"		
A4	"	1/2"	6'-5"	2	12'-10"		
B1	Inlet	1/2"	4'-3"	32	136'-0"		
B2	Outlet	1/2"	5'-3"	20	105'-0"		
B3	"	1/2"	1'-11"	4	7'-8"		
C1	Inlet	1/2"	13'-5"	12	161'-0"		
C2	"	1/2"	9'-0"	2	22'-0"		
C3	"	1/2"	11'-0"	2	22'-0"		
C4	Outlet	1/2"	10'-5"	10	104'-0"		
C5	"	1/2"	8'-0"	4	32'-0"		
C6	"	1/2"	6'-0"	4	24'-0"		
C7	"	1/2"	4'-6"	2	9'-0"		
D1	Inlet & Outlet	1/2"	3'-6"	12	42'-0"		
E1	Inlet	3/4"	3'-6"	5	17'-6"		
E2	Outlet	3/4"	5'-3"	10	52'-6"		
F1	Ladder Rungs Inlet & Outlet	3/4"	3'-3"	15	48'-9"		

131'-7" of 3/4" @ 1.502# = 197.6  
983'-1" of 1/2" @ .85 = 835.6  
TOTAL 1033.2#

REVISIONS	DATE	BY	REASON
1	2/25/35	JMM	



**GENERAL NOTE**  
For Material and Workmanship see "State Standard Specifications for Road and Bridge Construction", Edition of 1939.

**DESIGN DATA**  
A.A.S.H.O. Specs of 1935

**QUANTITIES**  
Excavation for Struct. 140 c y  
Concrete C.I.' 16.8 "

DETAIL OF INLET SYPHON WELL  
1/2" x 1'-0"

DETAIL OF OUTLET SYPHON WELL  
1/2" x 1'-0"

UTAH STATE ROAD COMMISSION  
SALT LAKE CITY, UTAH  
EDNA C. KNOWLTON, CHIEF ENGINEER  
**SYPHON WELLS 30" C.M.P.**  
GRATINGS-CONTROL HEADGATE  
5x2 329\*35 F.A.P. 212-A(1)  
No Farmington-Uintah-Jct. Davis Co.  
DESIGNED BY JTP  
DRAWN BY JTP  
CHECKED BY [Signature]  
EXAMINED BY [Signature]  
APPROVED [Signature] 2/25/35  
DATE  
NO. DPG  
V-213