

U.S.P.W.	U.S.P.W.	SHEET NO.	TOTAL SHEETS
NRH 240-A	NRH 240-A	1	1
AND	AND		
123 (1935)	123 (1935)		

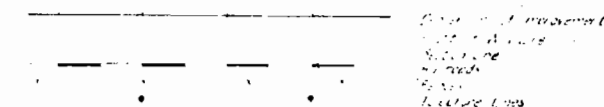
Revised 11-25-35 H.D.W.

COLORADO STATE HIGHWAY DEPARTMENT PLAN AND PROFILE OF PROPOSED U.S.P.W. HIGHWAY PROJECT NRH240-A(1935) & NRH 123 (1935) STATE HIGHWAY NO.4 EAGLE COUNTY

INDEX OF SHEETS

1. Top and Sketch Map
2. Typical Cross Section and Summary of Specifications
3. Standards Double Concrete Box Culvert, 12' x 12'
4. Details of Driveway Structure Sta. 33+75
- 7.9. Details of Bridge Sta. 34+8+
10. Standard Wire fences and Posts, Posts 12' x 4"
11. Wire with Guard Posts, M-20-6
12. Super-elevation for Curves, M-20-6
13. Concrete Headwalls, M-102 E
- 14-15. Plan and Profile
- 16-24. Roadway Cross Sections

CONVENTIONAL SIGNS



SCALES

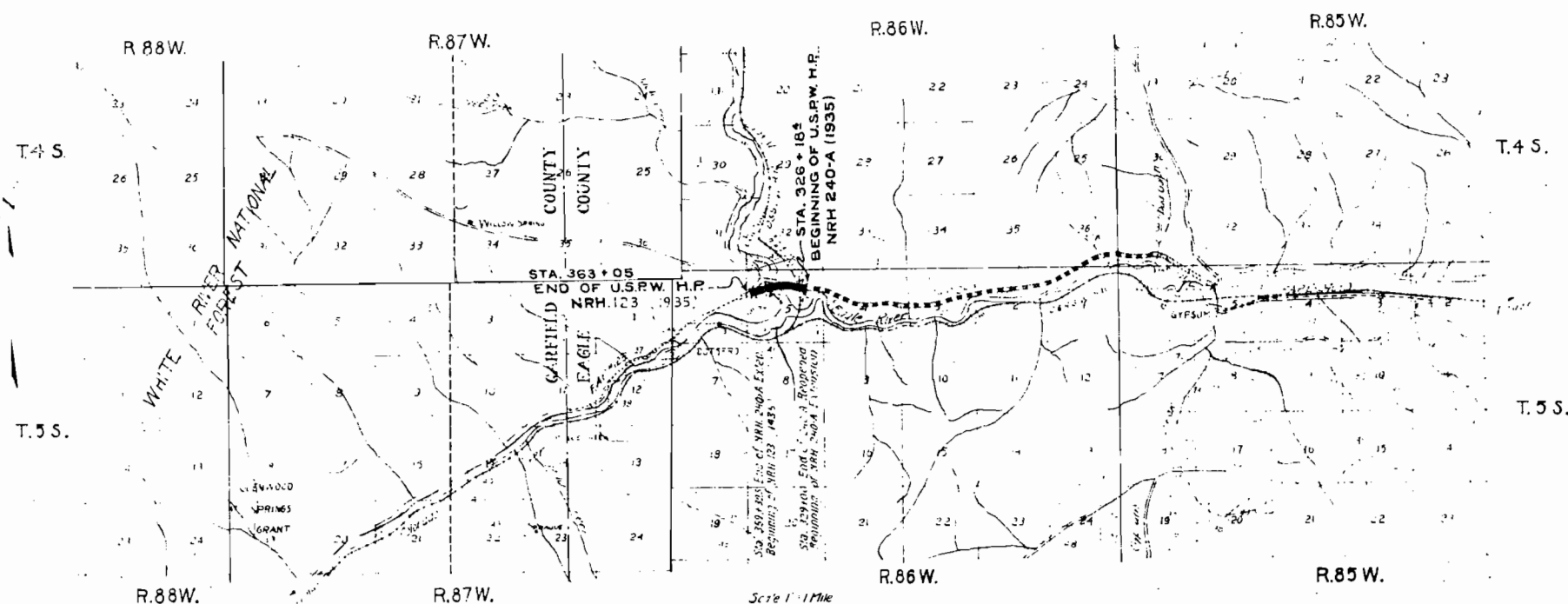
ON PLAN, 1 IN. = 100 FT.
ON PROFILE, 1 IN. = 100 FT. HORIZONTAL
1 IN. = 10 FT. VERTICAL

GRADE LINE ON PROFILE IS SHOWN AS GRADE OF FINISHED ROAD

GROSS LENGTH OF PROJECT } NRH 240-A (1935) REOPENED 281.6 FT. + 0.053 M/S
EXTENSION 303.55 + 0.572

NET LENGTH OF PROJECT } " 123 " REOPENED 365.5 + 0.069

3656.6 FT. + 0.658 M/S



RECOMMENDED FOR APPROVAL 11/25/35

E. C. ...
ASSISTANT ENGINEER

Chas. D. ...
STATE HIGHWAY ENGINEER

RECOMMENDED FOR APPROVAL

RECOMMENDED FOR APPROVAL

RECOMMENDED FOR APPROVAL

RECOMMENDED FOR APPROVAL

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RECOMMENDED FOR APPROVAL

TYPICAL CROSS SECTION OF IMPROVEMENT AND SUMMARY OF QUANTITIES

Revised as Const. 11-25-35

REVISED	BY	DATE	REASON
1	W.H. 240-A	12-23-35	REVISION
2	W.H. 240-A	12-23-35	REVISION

Revised July 12, 1934 by E.E. changed items 11-41 & 48

Revised 8/30/34 G.O.G.

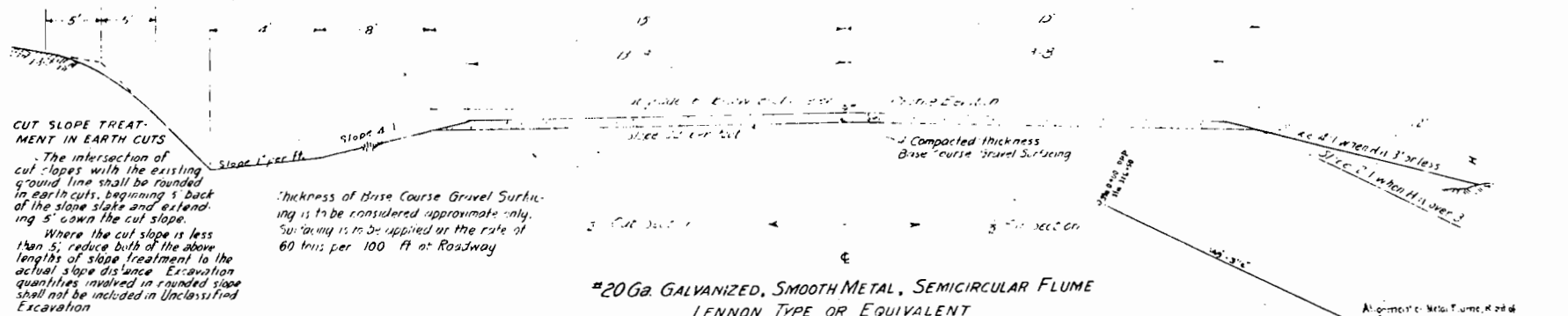
9-10-34 A.W.

9-14-34 A.W.

9-21-35, 10-1-35, 10-1-35, 10-1-35

SUMMARY OF APPROXIMATE QUANTITIES

No.	Item	Revised as Constructed					Quantity		Total
		Excav.	Struct.	Concrete	Wire Cable	Corr. Met. Pipe	Wire Cable	Corr. Met. Pipe	
10 a	Clearing and Grubbing Entire Project	Lump Sum	\$26.32	\$240.21	\$337.77	-	-	-	\$300.00
11 a	Removing 1" Steel Plates	Lump Sum	\$20.00	\$20.00	-	-	-	-	\$40.00
12 a	Remove Fence	Lump Sum	45	17.83	-	-	-	-	1825
12 b	Remove Guard Fence	Lump Sum	326	87	-	-	-	-	423
12 c	Unclassified Excavation	Cu. Yd.	724.12	632.12	4696	320	-	-	76214.9
13 c	Cut Slope Treatment	Min.	0.55	0.043	0.095	-	-	-	0.293
14 b	Dry Com. Ercan Structure	Cu. Yd.	48	186.8	546	175.8	356.8	317.3	1439.4
14 d	Wet Com.	Lump Sum	-	13.7	-	-	-	-	1061.9
13 d	Sta. Rd. Overhaul	Sta. Rd.	-	27.6081	3246.8	-	-	-	27485.9
18 b	Id. M.	Lump Sum	-	627	-	-	-	-	62.7
30 x	Gravel or Crushed Rock Surfacing	Sq. Yd.	169	152.6	213	13.5	-	-	2274.1
42 a	Untreated Bridge Timber	Lump Sum	-	-	-	0.408	0.360	0.768	0.768
44 b	Misc. Treated	Lump Sum	2.28	0.57	-	-	-	-	2.85
45 a	Class "A" Concrete	Cu. Yd.	1	73.6	316.7	314	567	1272.4	1272.4
46 b	Class "B" Concrete	Cu. Yd.	-	1205	33	202	202	217.35	217.35
47	Reinforcing Steel	Lb.	-	6010	34510	46350	67560	154430	154430
48	Structural Steel	Lb.	-	-	-	133868	421723	555591	555591
53 b	18" Corrugated Metal Culvert Pipe	Lump Sum	-	84	-	-	-	-	84
53 c	24"	Lump Sum	-	238	96	-	-	-	334
53 d	36"	Lump Sum	-	110	-	-	-	-	110
72	Wire Cable Guard Fence	Lump Sum	-	296	3432	-	-	-	3728
75 a	34" Barbed Wire Fence	Lump Sum	-	135	332	-	-	-	467
75 b	34" Barbed Wire Gate	Lump Sum	-	-	-	-	-	-	1
78	Project Markers	Lump Sum	-	-	-	-	-	-	2
79	Right-of-Way	Lump Sum	-	-	-	-	-	-	13
81	Brace Name Plates	Lump Sum	-	-	-	-	-	-	3
82	Shovel Capers	Lump Sum	-	-	-	-	-	-	152
83 a	Asbestos Road Dust Protection	Lump Sum	-	-	-	152	-	-	152
85 a	Drain Pipe with Flange (4" x 10")	Lump Sum	-	-	-	240	-	-	240
87 a	with Flange (2" x 6")	Lump Sum	-	-	-	4	-	-	4
87 c	with Flange (5" x 0")	Lump Sum	-	-	-	8	-	-	8
95 a	Rock Fill Bank Protection	Cu. Yd.	-	100	-	-	-	-	100
95 b	Comb. Wire Fence	Lump Sum	-	327	366	-	-	-	4283
98 y	Driveway Gates	Lump Sum	-	-	-	-	-	-	5
	Galv. Metal Flume (10" x 9")	Lump Sum	-	280	7	-	-	-	350
	Raising 54" x 18" Cor. Metal Pipe	Lump Sum	-	-	-	-	-	-	161.05
	Raising Telegraph Wires (Work to be done & materials to be furnished by R.R. Co. Forces)	Lump Sum	-	-	-	-	-	-	161.05



GENERAL NOTES

This project is to be constructed in accordance with the Standard Specifications of the Colorado State Highway Department adopted January 1, 1930.

All quantities on the preliminary plans are to be considered approximate only.

All roadway excavation required to construct the project is to be obtained as indicated on the plans. Quantities include, beyond the limits of ditch as shown on the plans, either note for "Harrow" on the Plans or as "Embankment" in the structure list are to be classified and paid for as "Unclassified Excavation". These quantities are to be stated as part of the "normal excavation" at locations indicated on the plans. Any slope stakes beyond the limits or the typical ditches are subject to change by the Engineer in fit and proper consideration of actual conditions encountered during construction.

All curves are to be super-elevated in accordance with methods shown on the Standard Super-elevation sheet.

The entire project is to be closed for the width of the right-of-way and the cost thereof is to be included in the lump sum price for "Clearing and Grubbing the Entire Project".

At all places on the project where the new work lies along the present traveled road line, the contractor shall, at his own expense, prosecute construction that traffic may remain over the road. Also the contractor shall maintain in safe condition and at his own expense all temporary approaches and crossings of intersecting roads.

Except as limited by the special provisions power equipment may be used on this project.

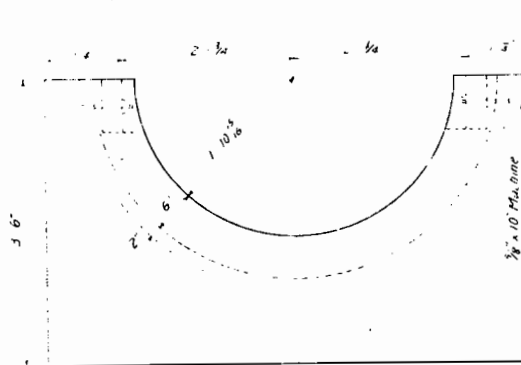
Unless otherwise specified, the inlet ends of all C.M.P. cross culverts are to be provided with concrete headwalls.

FENCING REQUIREMENTS

Station	Side	Rem. Old Fence Lin. Ft.	Rem. R.W. Fence Lin. Ft.	Build Comb. Wire Fence Lin. Ft.	Driveway Gates Each
326+18.4 to 326+65	L	45	35	-	-
327+50 to 328+40	R	-	63	-	-
329+39 to 329+75	R	-	-	-	-
330+100 to 332+75	X	340	-	-	-
333+50 to 332+20	X	360	-	-	-
335+50 to 337+00	L	-	69	-	-
336+00 to 348+30	R	-	-	1113	-
337+00 to 348+30	R	-	-	-	-
340+80 to 342+55	X	150	-	-	-
343+75 to 344+00	R	-	-	-	-
344+00 to 345+00	X	260	-	-	-
344+70 to 351+06	L	-	-	501	-
351+06 to 353+60	L	-	-	471	-
352+40 to 355+80	X	120	-	-	-
356+50 to 358+00	R	-	-	94	-
356+50 to 358+00	R	-	-	62	-
356+50 to 363+05	L	-	-	678	-
Totals		1825	467	4283	5

SECTION

Flume to be furnished complete in place with standard joint fittings and 1" cut-off collars. All timber to be treated.

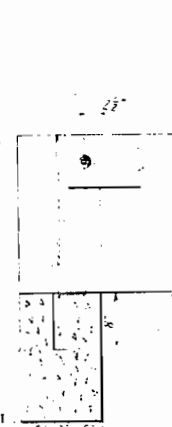


ELEVATION OF HEADWALL

R.O.W. MARKERS

Station	Side	Number
326+18.4	R.S.L.	1
328+06	L.	2
342+55	R.S.L.	14
344+30	R.S.L.	2
351+00	R.	1
363+05	R.S.L.	2
Total		13

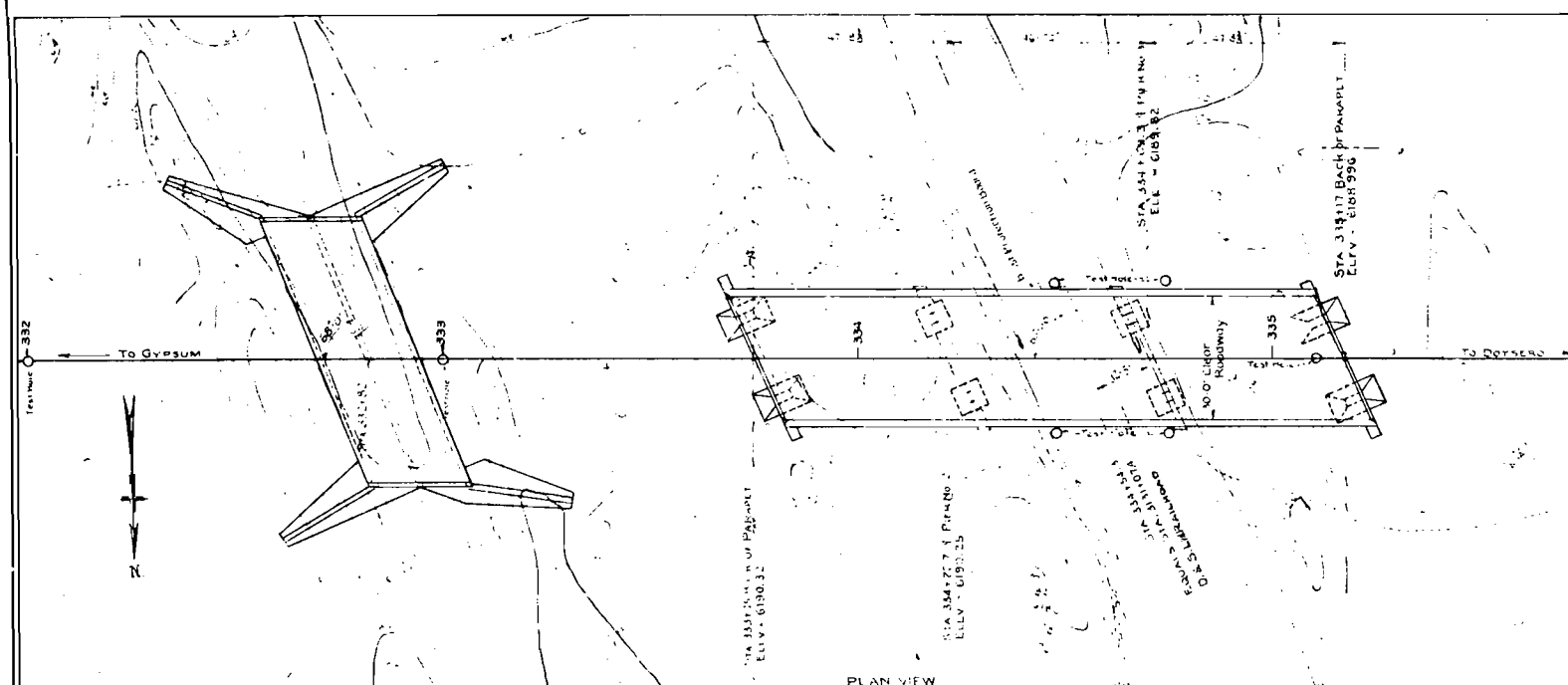
ELEVATION



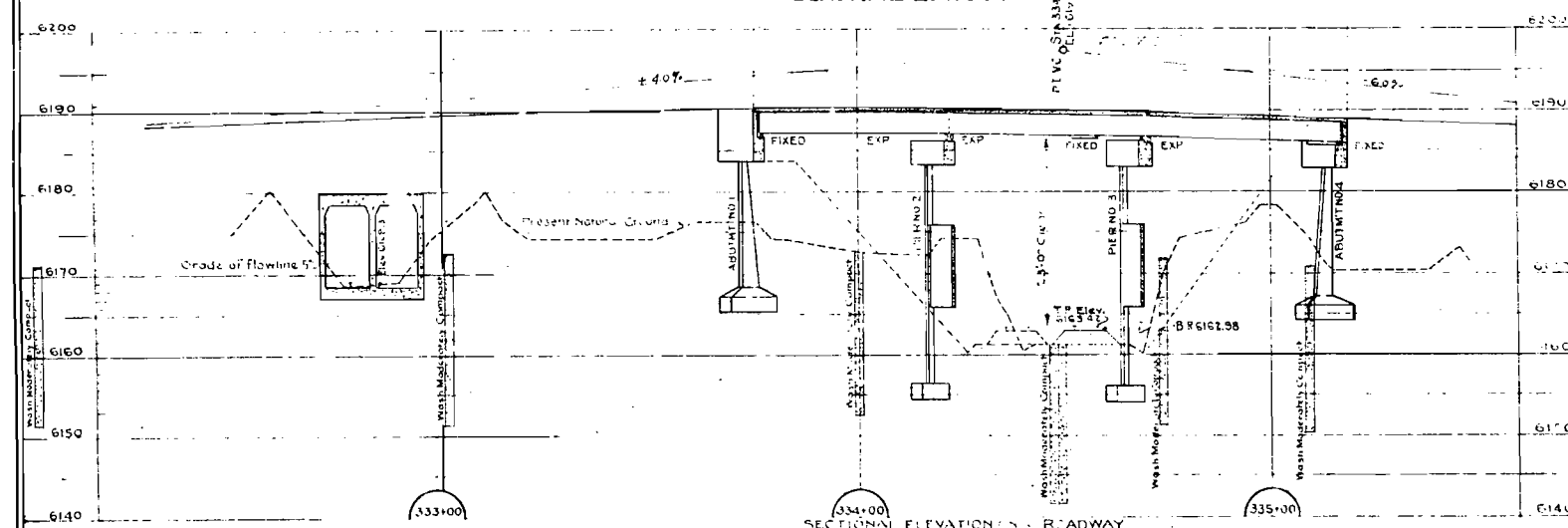
SECTION

TABULATION OF STRUCTURES

Station	Description	As Constructed					Quantity		Misc.
		Remove	Excav.	Struct.	Concrete	Wire Cable	Corr. Met. Pipe	Wire Cable	
326+18.4	Project Marker and Approach	Each	-	-	-	-	-	-	1 Project Marker
325+50 to 328+40	Wire Cable Guard Fence, Left	-	-	-	-	-	-	-	296
329+39 to 329+75	Remove Wire Cable Gd. Fnc., Lt.	-	-	-	-	-	-	-	466
330+100 to 332+75	Wire Cable Guard Fence, Rt.	-	-	-	-	-	-	-	386
333+50 to 332+20	Metal Flume (10" x 9")	-	-	-	-	-	-	-	722
335+50 to 337+00	Remove Wood Sill, Concrete Headwall	-	-	-	-	-	-	-	350 Metal Flume
336+00 to 348+30	C.M.P. Cross Culvert, Remove Sill	-	-	-	-	-	-	-	281 Metal Tr. Timber
337+00 to 348+30	Intercepting Ditches, Rt. & Lt.	-	-	-	-	-	-	-	930
340+80 to 342+55	Double 10" x 9" C.B. Pipe to B1	-	-	-	-	-	-	-	14
343+75 to 344+00	Highway Overpass	-	-	-	-	-	-	-	456
344+00 to 345+00	Wire Cable Guard Fence, Lt.	-	-	-	-	-	-	-	930
344+70 to 351+06	Rt.	-	-	-	-	-	-	-	14
351+06 to 353+60	C.M.P. Cr. Culv. Hdwl. Inlet & Outlet	-	-	-	-	-	-	-	456
356+50 to 358+00	Road App. & C.M.P. Side Drain P.	-	-	-	-	-	-	-	220 lbs. reinforcing steel
356+50 to 358+00	54" x 18" C.M.P. Type 6 Headwall, W.M.S. 24"	-	-	-	-	-	-	-	C.M.P. furnished by R.R.
356+50 to 358+00	24" x 18" C.M.P. Headwall, W.M.S. 24"	-	-	-	-	-	-	-	196
356+50 to 358+00	Intercepting Ditches, Rt. & Lt.	-	-	-	-	-	-	-	322
356+50 to 358+00	C.V.P. Cross Culvert & Ditch	-	-	-	-	-	-	-	W.O. #5479, #5480
356+50 to 358+00	Wire Cable Guard Fence, Rt. & Lt.	-	-	-	-	-	-	-	196
356+50 to 358+00	C.M.P. Cross Culvert, 100' x 14" Rock 34" Proj.	-	-	-	-	-	-	-	322
356+50 to 358+00	Intercepting Ditch, Lt.	-	-	-	-	-	-	-	196
356+50 to 358+00	Project Marker, Remove C.M.P.	-	-	-	-	-	-	-	196
356+50 to 358+00	5' x 7' x 32" Concrete Culvert Pass	-	-	-	-	-	-	-	196
Totals		4	1370	2895	13.7	74.7	15.35	84	334



GENERAL LAYOUT.



SUMMARY OF QUANTITIES FOR ENTIRE VIADUCT.

ITEM NUMBER	DESCRIPTION	UNIT	SUPERSTRUCTURE	SUBSTRUCTURE	TOTAL
14 a	DRY ROCK EXCAVATION	CUYD			
14 b	DRY COMMON "	CUYD		356.8	356.8
14 c	WET ROCK	CUYD			
14 d	WET COMMON	CUYD			
42 a	UNTREATED BRIDGE TIMBER	MFTBM		0.408	0.408
46 a	CLASS "A" CONCRETE	CUYD	158.0	156.0	314.0
47	REINFORCING STEEL INCLUDING 1" FOR OVERRUN	LBS	23800	22550	46350
48	STRUCTURAL STEEL INCLUDING 1" FOR OVERRUN AND PLAST BOARD FRAME	LBS	133263	600	133863
62	SHEET COPPER NO 16 B & S GAGE	LBS	152		152
86	ASBESTOS WOOD BLAST PROTECTION BOARD	SQFT	240		240
89 a	DRAIN PIPE WITH FLANGE GALVANIZED 3x4x6	EACH	4		4
81	BRONZE NAME PLATE	EACH	1		1
	EXPANSION JOINT MATERIAL 1"x12"	LIN FT			36

BAR BENDING DIAGRAMS ALL DIMENSIONS TO FACE OF BAR				BAR LIST FOR SUBSTRUCTURE										
				MARK	SIZE	NUMBER	LENGTH	TYPE	l	m	n	r	t	
REFERENCE DRAWINGS														
SUBSTRUCTURE DETAILS SHEET NO. 1														
SUPERSTRUCTURE DETAILS SHEET NO. 2														
ROCK COVER DETAILS SHEET NO. 3														
				2176 Lin Ft 3/4" BARS @ 0.376 Lbs Per Lin Ft									= 818 Lbs	
				320 Lin Ft 1/2" " @ 0.668 " " " "									= 214 "	
				5192 Lin Ft 3/8" " @ 0.850 " " " "									= 4413 "	
				1390 Lin Ft 5/8" " @ 1.923 " " " "									= 1236 "	
				1390 Lin Ft 3/4" " @ 1.502 " " " "									= 2088 "	
				257 Lin Ft 7/8" " @ 2.044 " " " "									= 525 "	
				1314 Lin Ft 1" " @ 2.670 " " " "									= 3508 "	
				1683 Lin Ft 1 1/8" " @ 3.400 " " " "									= 5722 "	
				867 Lin Ft 1 1/2" " @ 4.303 " " " "									= 3731 "	
													= 298 "	
													TOTAL	
													= 22560 Lbs	

REFERENCE DRAWINGS
SUBSTRUCTURE DETAILS SHEET NO. 1
SUPERSTRUCTURE DETAILS SHEET NO. 2
ROCK EXCAVATION DETAILS SHEET NO. 3

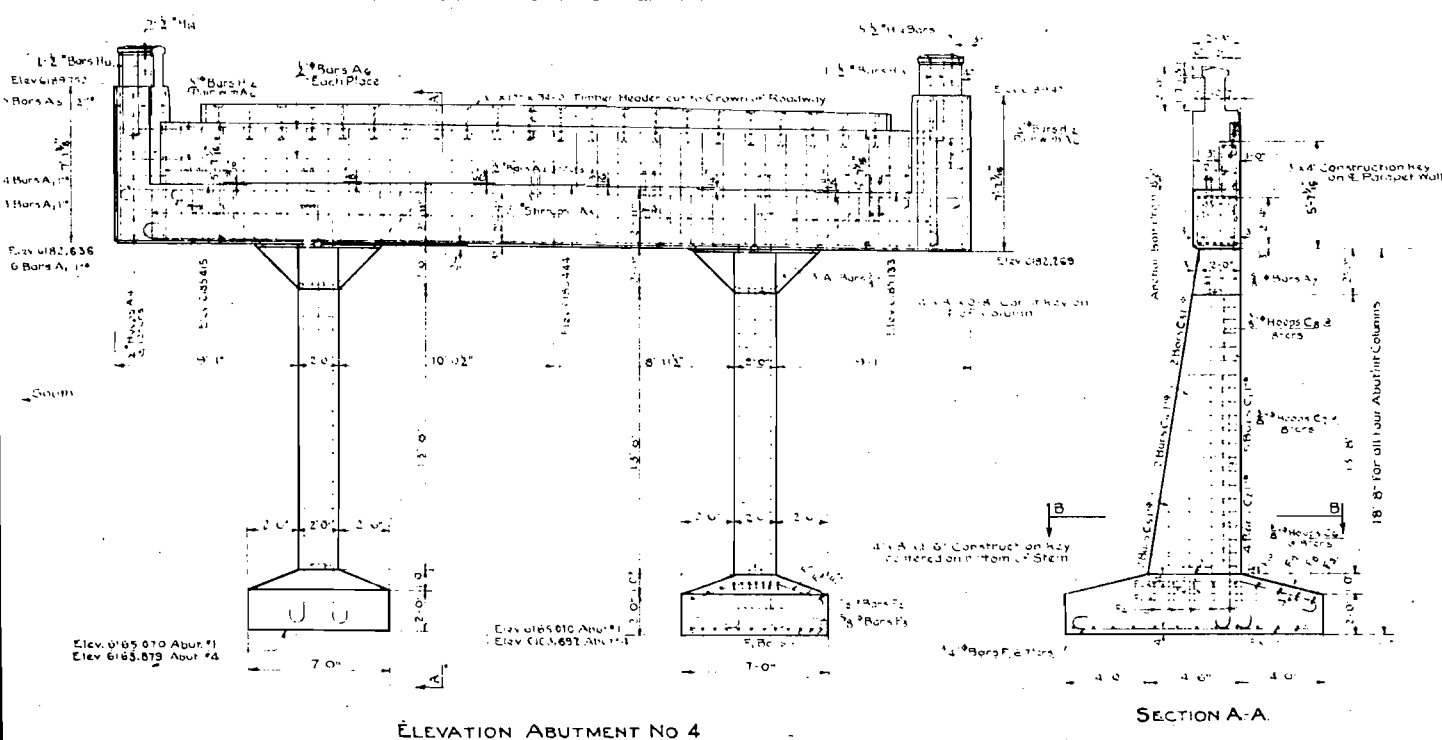
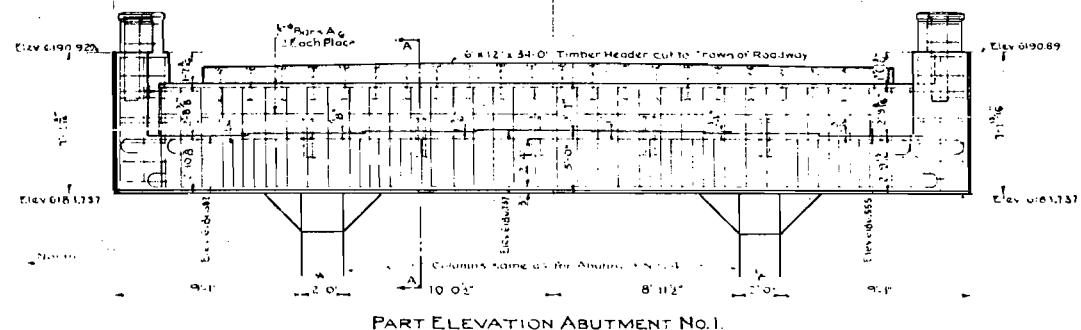
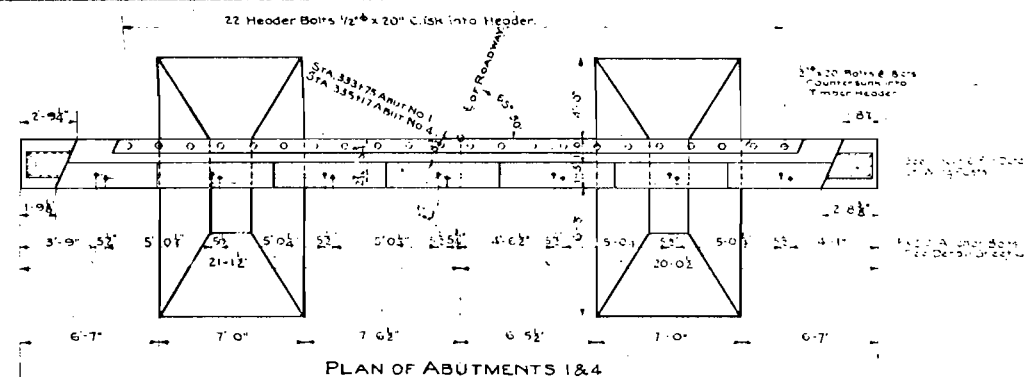
GENERAL NOTES

ALL WORK SHALL BE DONE ACCORDING TO THE STANDARD SPECIFICATIONS OF THE COLORADO STATE HIGHWAY DEPARTMENT, ADOPTED JAN. 1, 1930.
 ALL CONCRETE SHALL BE CLASS "A".
 ALL EXPOSED SURFACES SHALL BE ROUGHED FREE OF FORM MARKS.
 ALL EXPOSED CORNERS, EXCEPT ON HANDRAILS, SHALL BE REVEALED TO A 2" FACE.
 ALL FLOOR SLABS AND CURBS SHALL BE POURED MONOLITHICALLY.
 ALL CONSTRUCTION JOINTS SHALL BE THOROUGHLY CLEANED BEFORE FRESH CONCRETE IS POURED.
 FOOTINGS IN ROCK SHALL BE POURED ON TO THE ROCK AND NOT FORMED.
 THICKNESS OF FLOOR SLAB SHOWN INCLUDES 1" CONCRETE WEARING SURFACE.
 ALL REINFORCING BARS SHALL BE ROUNDED OR SQUARE PLAIN OR DEFORMED AS SHOWN AND NOTED.
 ALL REINFORCING BARS SHALL BE TAGGED WITH THE STATION NUMBER AND LETTER DESIGNATION.
 SECONDARY BARS WHEN SPICED SHALL BE GIVEN A LAP OF 50 DIAMETERS.
 SOUNDINGS AND DEPTH OF FOOTINGS SHOWN ARE ACCORDING TO THE BEST AVAILABLE DATA.
 IF ESSENTIALLY DIFFERENT CONDITIONS ARE ENCOUNTERED, THE BRIDGE ENGINEER WILL INSPECT AND DETERMINE IF REVISION IS NECESSARY.
 ALL FIELD BARS SHALL BE 1" DIAM UNLESS OTHERWISE NOTED. ALL HOLES TO BE 7/8" DIAM.
 ALL FIELD DIMENSIONS ON THE PLANS ARE BASED ON THE USE OF CARNegie BEAMS IF OTHER BEAM SECTION IS USED, DIMENSIONS DO NOT APPLY.
 FORMS FOR CONCRETE SURFACES EXPOSED IN THE FINISHED WORK SHALL BE CONSTRUCTED OF SH PLATE OR TONGUE AND GROOVE LUMBER 3x5.
 MAXIMUM SOIL PRESSURE 300 LBS. PER SQ. FT.
 SEE SPECIAL PROVISION FOR CONCRETE FINISH, AUG. 8, 1934.
 OLD WARE SURFACE FINISH AND CLASS 3-RAVE.
 FINISH AS SPECIFIED.
 CLASS 2 SURFACE FINISH REQUIRED FOR HANDRAILS, DRAINAGE AND CURBS, EXCEPT PANELS ON BOTH SIDES OF ROAD.
 POLES AND WING POSTS, SHALL RECEIVE CLASS 4 SURFACE FINISH.

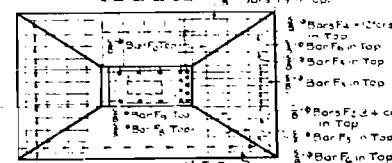
LOADING DATA.
 LIVE LOAD "A, A & B" H. O. AUG. 228 CLASS A (19-193)
 DEAD LOAD ASSUMES 5 LBS PER SQ. FT. ADDITIONAL WEARING SURFACE WHICH INCLUDES THE 1" CONCRETE MONOLITHIC WEARING SURFACE.
COLORADO
STATE HIGHWAY DEPARTMENT
GENERAL LAYOUT
3x48'0" SPANS I-BEAM CONCRETE
VIADUCT 30'0" ROADWAY 65'50" SKEW
Across D&S L.W. RAILROAD
Sta. 333+75 TO 335+17
Near Gypsum Sec. 5 T. 33 S. 17 E.
 Designed by KB. Approved by P. B. Bailey
 Made by KB. Bridge Engineer
 Checked by BR. Date: Aug. 28, 1934

FED. ROAD DIST. NO.	STATE	U.S.P.W.H. HIGHWAY	SHEET NO.	TOTAL SHEETS
3	COLO.	100 (M243A) (355)	5	

Revised J.H. 1934 by T.E. Elevation changed to conform to new steel sections used in Superstructure.



SECTION A-A



SECTION B-B

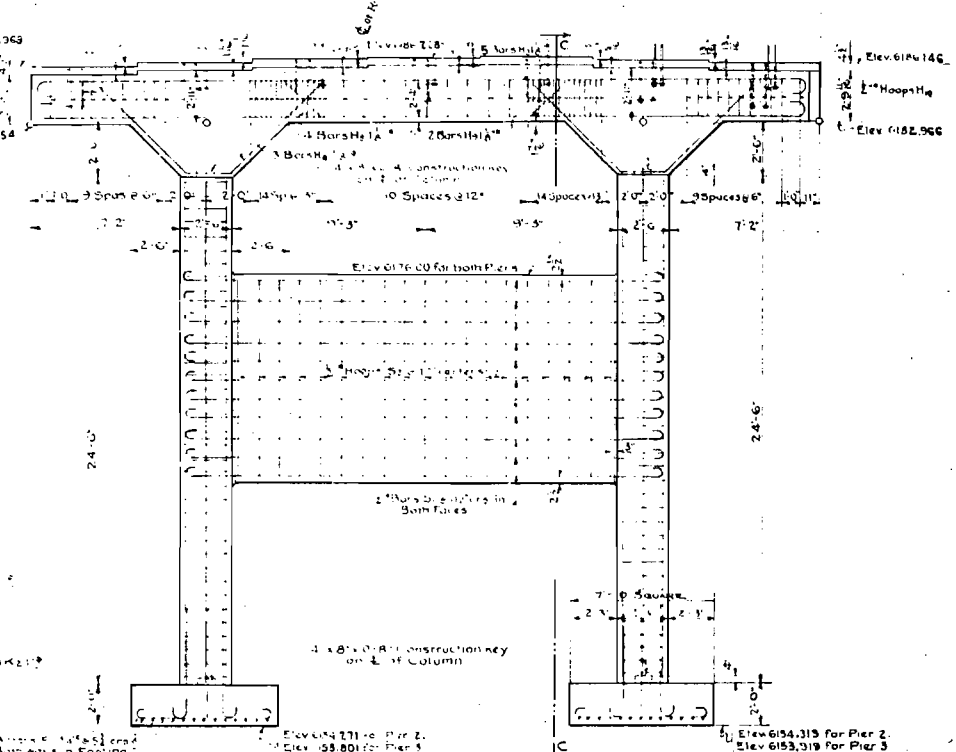
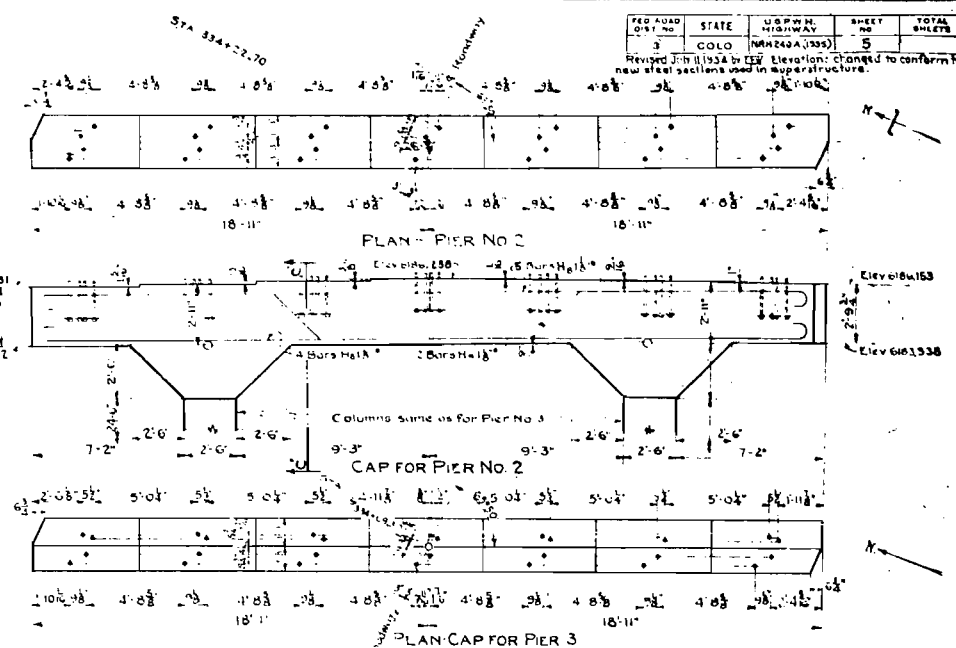
See Detail on Sheet 6

See Detail on Sheet 6

See Detail on Sheet 6

See Detail on Sheet 6

See Detail on Sheet 6



ELEVATION PIER NO. 3

REFERENCE DRAWINGS.

GENERAL LAYOUT, GENERAL NOTES, SUMMARY OF QUANTITIES FOR STRUCTURE, AND BAR LIST FOR PIERS & ABUTMENTS SHEET NO. 4
DETAILS FOR SUPERSTRUCTURE SHEET NO. 6

APPROVED:
DENVER & SALT LAKE WESTERN RAILROAD
34
Chief Engineer
Date: 1934

COLORADO

STATE HIGHWAY DEPARTMENT

SUBSTRUCTURE DETAILS FOR

3 @ 60' SPANS I-BEAM CONCRETE

VIADUCT, 30' ROADWAY 65'50" SKEW

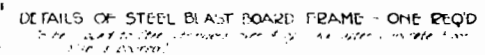
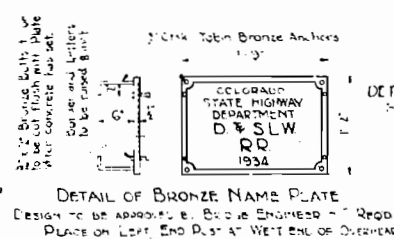
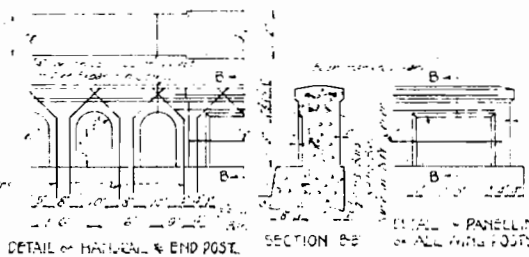
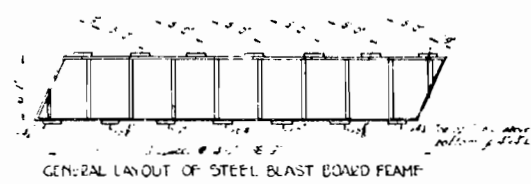
Across D&SLW RAILROAD

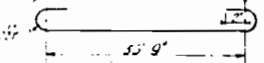
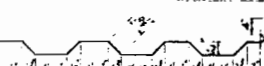
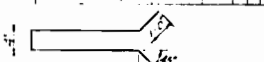
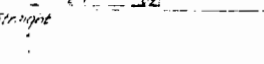
Sta. 333+75 to 335+17

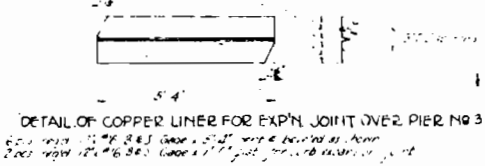
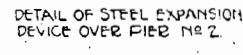
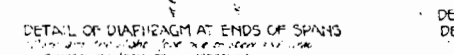
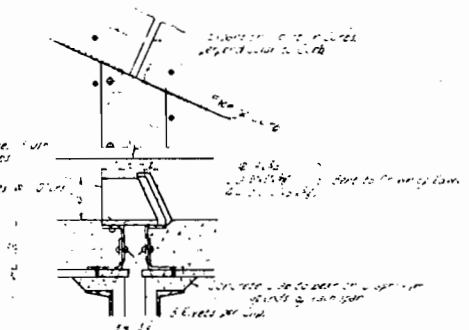
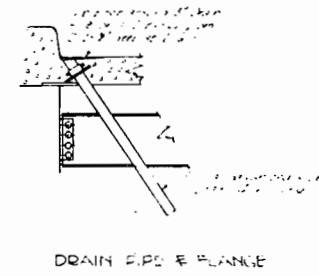
Near Dotsero Sec. 5 T. 5 S. R. 86 W.

Designed by KB
Checked by BR

Approved by KB
Bridge Engineer
Date: Aug. 23, 1934



MARK	SIZE	NO	LENGTH	BENDING	DIAGRAM	WGT
1	2"	1	21' 5"	straight		
2	3"	2	7' 5"			
3	3"	51	37' 0"			
4	5"	123	4' 6"			
11	2"	1	5' 5"	straight		
12	3"	8	5' 0"			
13	3"	7	3' 1"			
14	3"	40	3' 0"			
15	3"	24	3' 6"			
16	3"	8	16' 0"			
17	2"	2	2' 0"			
18	2"	2	2' 0"			
19	2"	2	2' 0"			
20	2"	2	2' 0"			
21	2"	2	2' 0"			
22	2"	2	2' 0"			
23	2"	2	2' 0"			
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76	2"	2	2' 0"			
77	2"	2	2' 0"			



ITEM	DESCRIPTION	QTY	UNIT	TOTAL
1	Cast in Concrete			
2	Reinforcing Steel	100	lb	100
3	Cast in Concrete			
4	Reinforcing Steel	100	lb	100
5	Cast in Concrete			
6	Reinforcing Steel	100	lb	100
7	Cast in Concrete			
8	Reinforcing Steel	100	lb	100
9	Cast in Concrete			
10	Reinforcing Steel	100	lb	100
11	Cast in Concrete			
12	Reinforcing Steel	100	lb	100
13	Cast in Concrete			
14	Reinforcing Steel	100	lb	100
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16	Reinforcing Steel	100	lb	100
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18	Reinforcing Steel	100	lb	100
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94	Reinforcing Steel	100	lb	100
95	Cast in Concrete			
96	Reinforcing Steel	100	lb	100
97	Cast in Concrete			
98	Reinforcing Steel	100	lb	100
99	Cast in Concrete			
100	Reinforcing Steel	100	lb	100

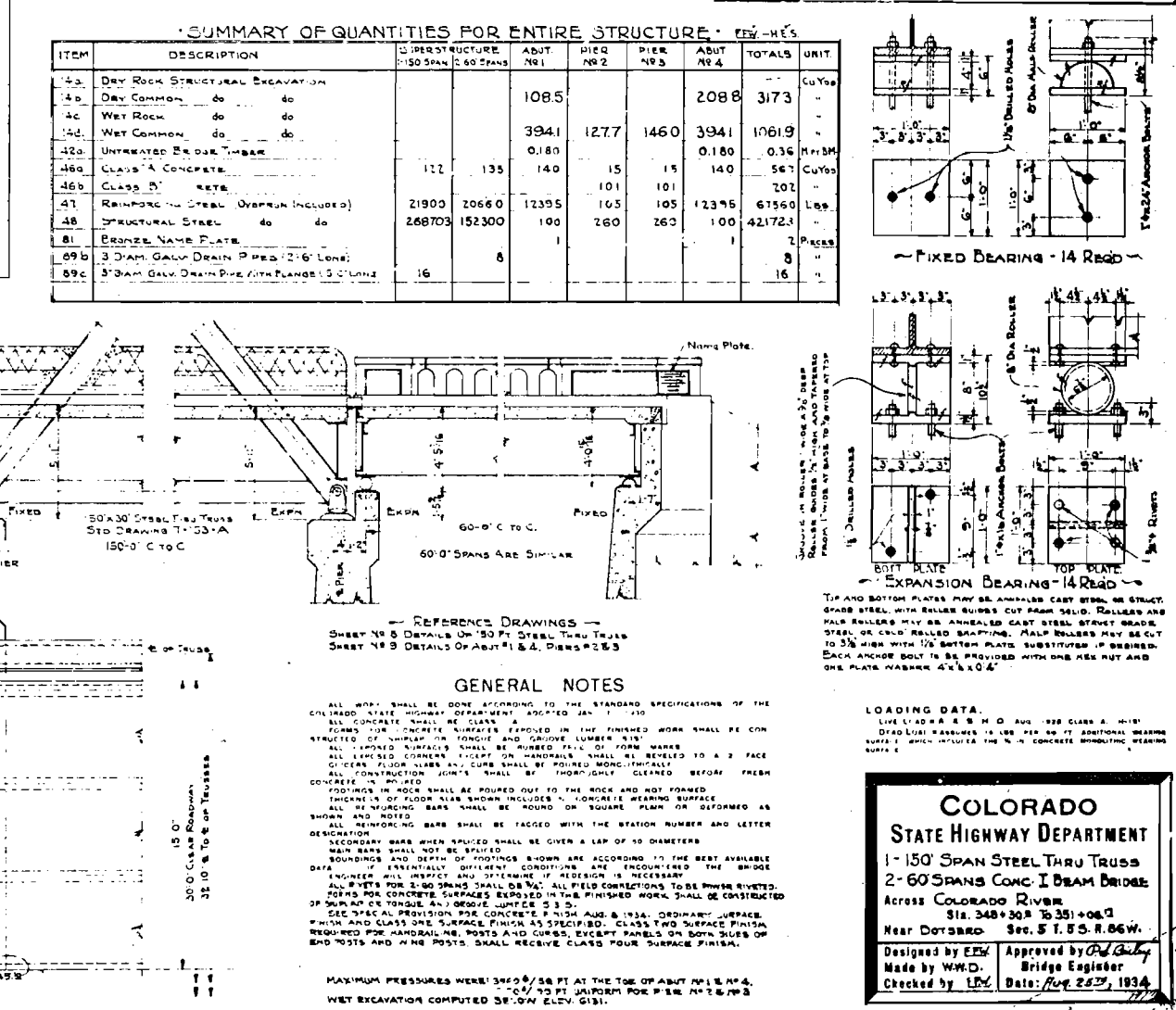
LOADING DATA.

LIVE LOAD - A A S H O 20.1, 1998 CLASS 8, H-19.

DEAD LOAD - ASSUMES 14 LBS PER SQ FT ADDITIONAL WEARING SURFACE WITH IT INCLUDES THE 7.5 CONCRETE MONOLITHIC WEARING SURFACE.

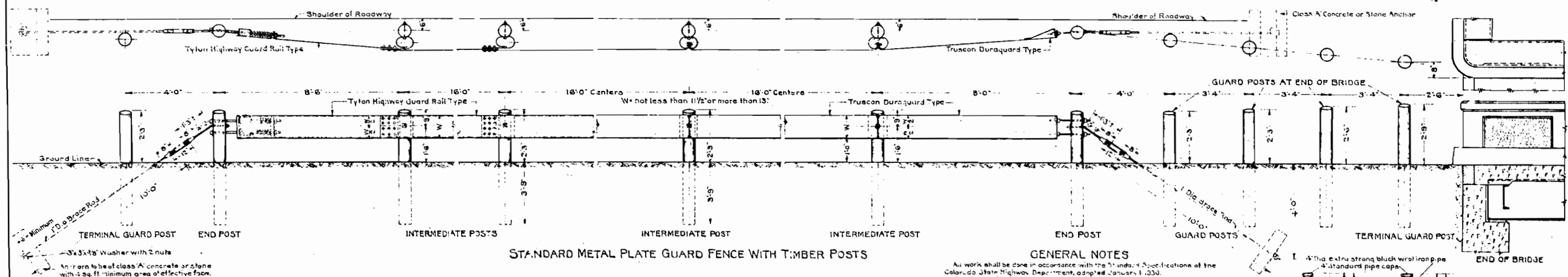
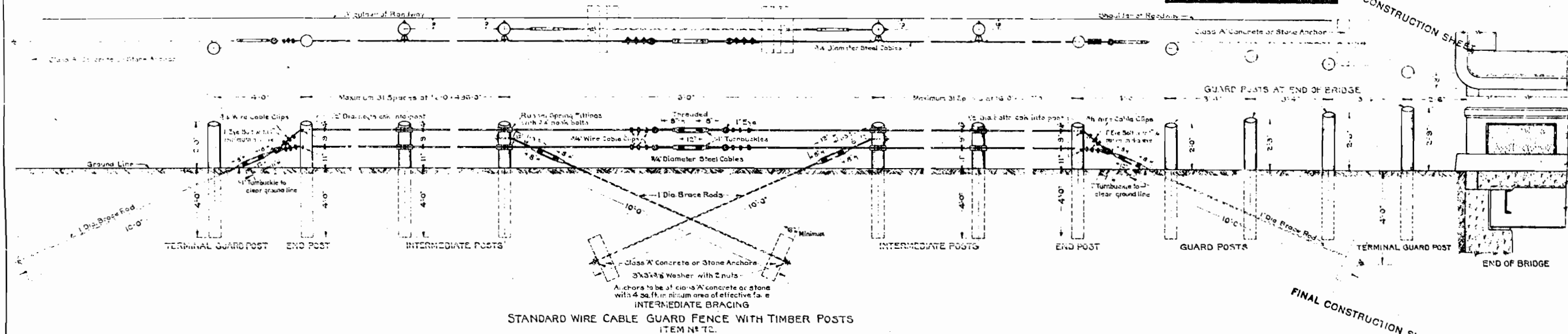
COLORADO
STATE HIGHWAY DEPARTMENT
 SUPERSTRUCTURE DETAILS
 3 SPANS @ 48'-0" - I BEAM CONC.
 VIADUCT - 30'-0" ROADWAY - 65' 50"
 SKEW
 Across D.S.L.W. RAILROAD
 Sta. 333.75 to 335+17
 Near GYPSUM Sec. T. N.

Designed by K.B.	Approved by <i>Pd. Bailey</i>
Made by K.B.	Bridge Engineer
Checked by D.R.	Date: <i>Aug 28, 1934</i>



STANDARD M-20-G

NO.	DATE	BY	FOR	SHEET NO.	TOTAL SHEETS
1	1934	AGK	STANDARD	1	1



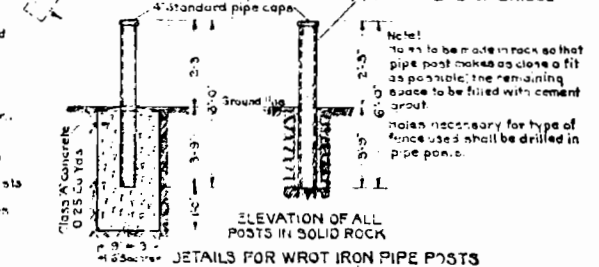
GENERAL NOTES

All work shall be done in accordance with the Standard Specifications of the Colorado State Highway Department, adopted January 1, 1930.
The length of guard fence to be paid for and designated on plans shall be measured from terminal guard post to terminal guard post.
When continuous wire cable fence is more than 500 ft. in length it shall have intermediate bracing complete with turnbuckles.

All wood posts shall be made from seasoned straight, sound lodge pole pine, southern yellow pine or west coast douglas fir.
No section of wood posts shall be less than 8' in length.
All wood posts shall be entirely peeled and shaved, thoroughly seasoned and dry, with square tops and all holes drilled before treatment is applied.
All wood posts shall be pressure treated with creosote for the full length of posts as provided for in the specifications.
All wood posts shall be set and jammed in plumb and firm, to the lines and grades directed by the engineer.

All fittings, cables and hardware shall be hot dip galvanized steel with sizes as noted and located as shown.
Eye bolts shall be welded or drop forged.
Standard continuous G washers shall be used under all bolt heads and nuts coming in contact with wood posts.
In case of the Ratchet spring fitting, the contractor may use the standard available offset casting fitting, but the Ratchet spring fitting shall be the standard Ratchet offset fitting or other equivalent fitting providing a maximum offset of 3/4" from face of post to centerline of cable and approved by the engineer.
When Ratchet spring fitting is used, the Ratchet spring fitting shall be approved by the engineer.
Only one style of offset fittings, turnbuckles, eye bolts and clips may be used on a project.

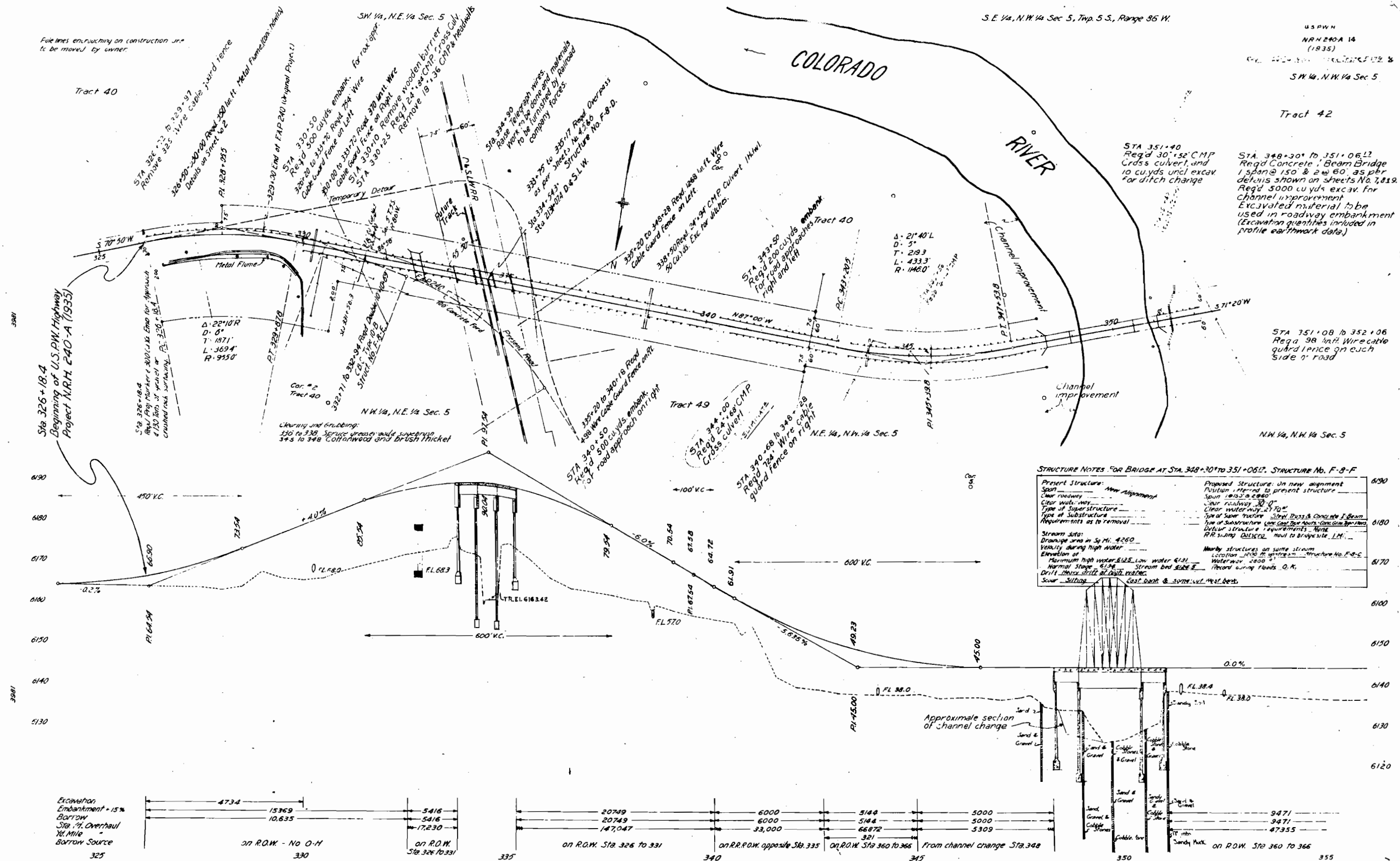
When plates for metal plate guard fence shall be not less than 1/2" thick.
Only one style of metal plate guard fence shall be shown on the plans, other equivalent types of plate guard fence approved by the engineer and complying with the specifications may be used. Only one type of plate guard fence may be used on a project.

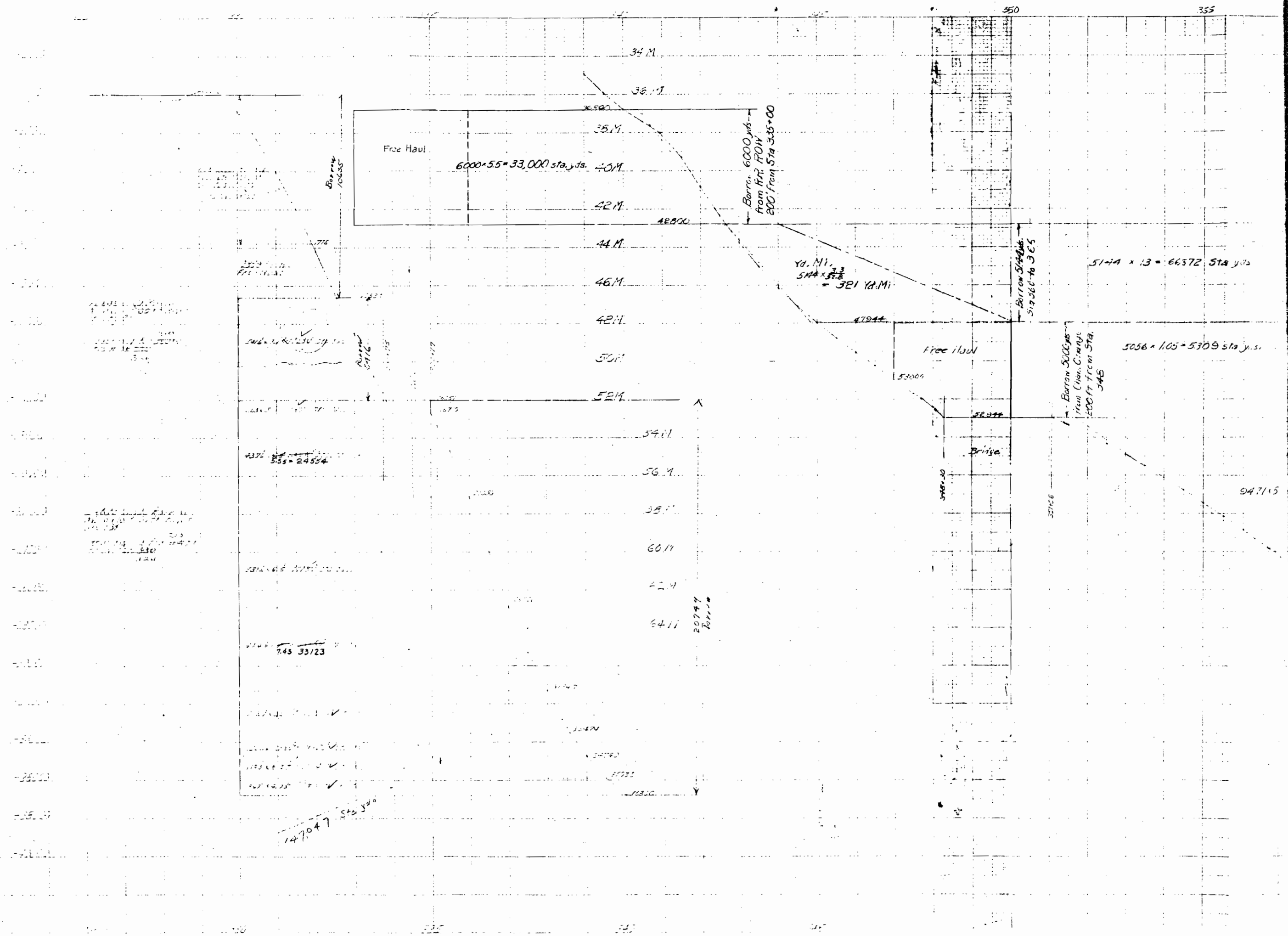


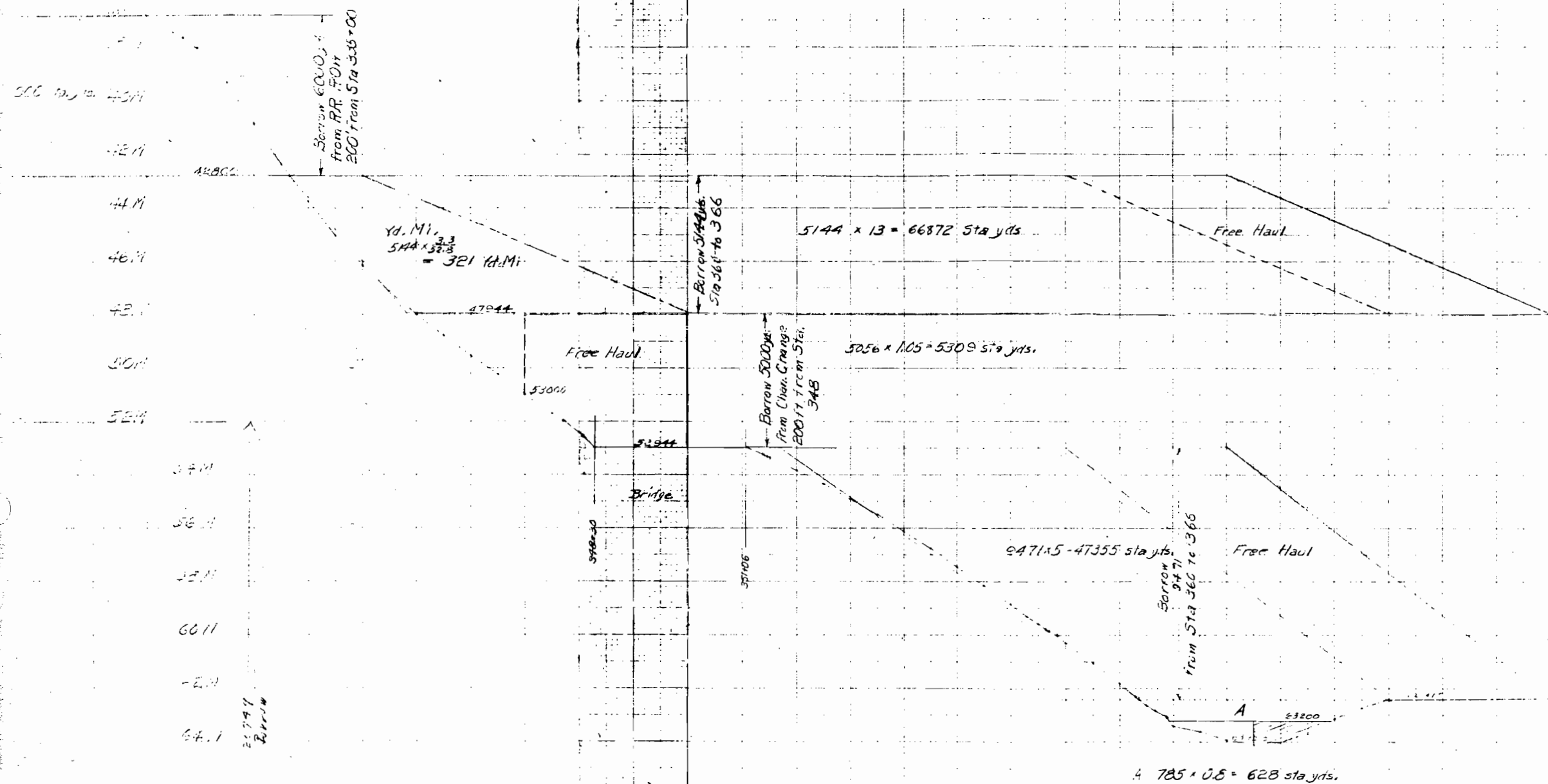
ELEVATION OF ALL POSTS IN MATERIAL OTHER THAN SOLID ROCK

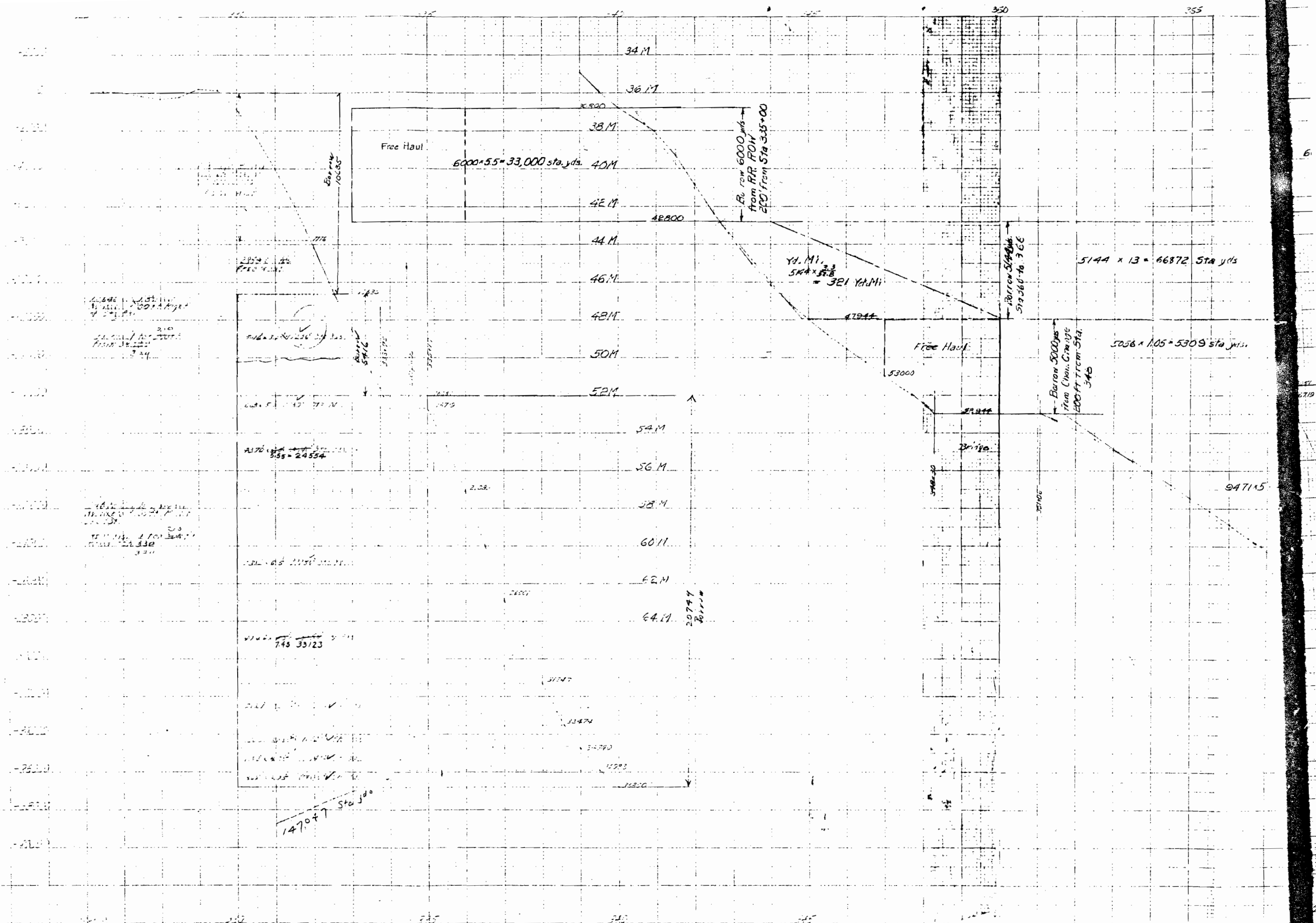
COLORADO
STATE HIGHWAY DEPARTMENT
STANDARD
WIRE CABLE & METAL PLATE
GUARD FENCE

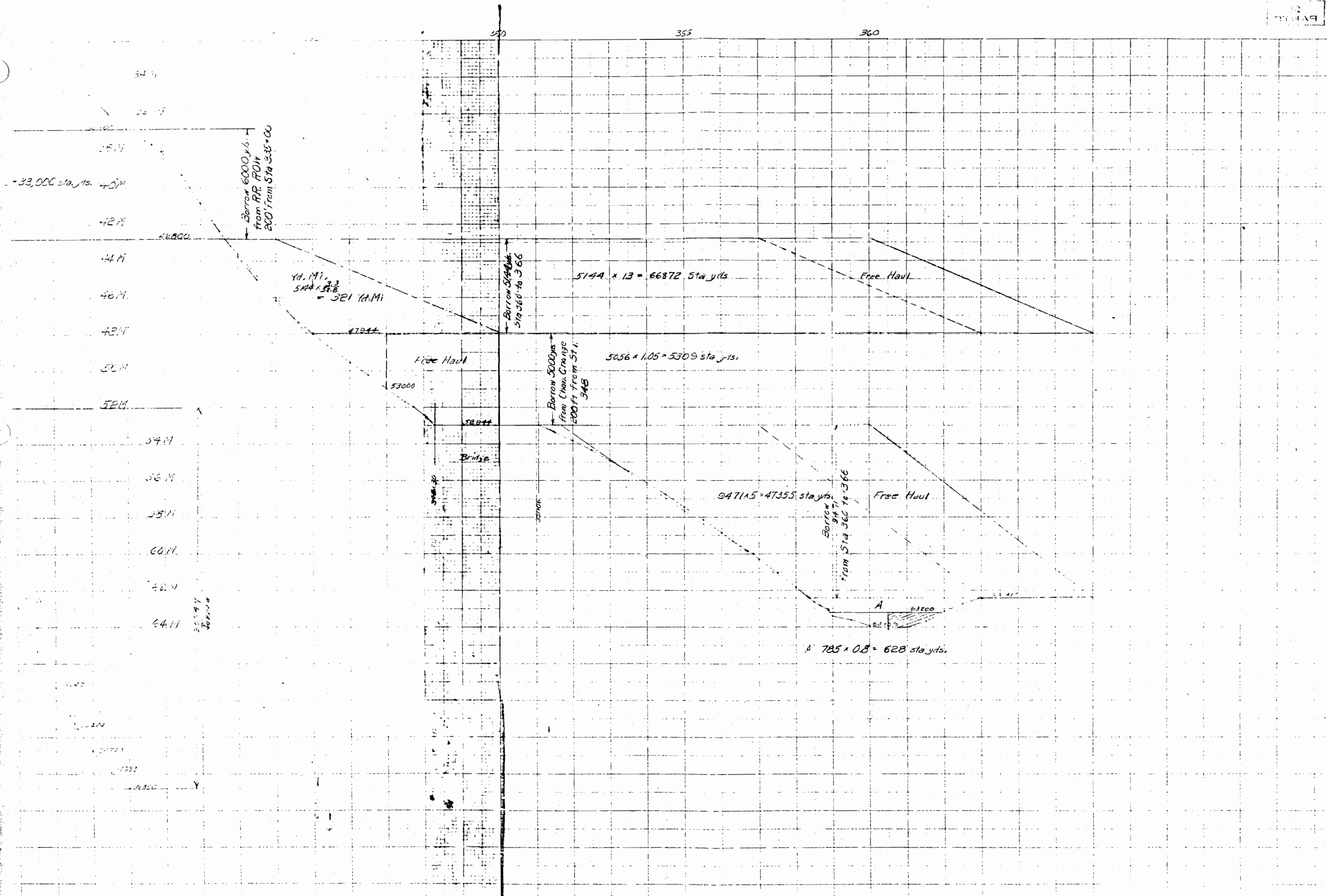
Designed by AGK
Made by AGK
Checked by
Approved by O. D. Bailey
Bridge Engineer
Date May 1st, 1934

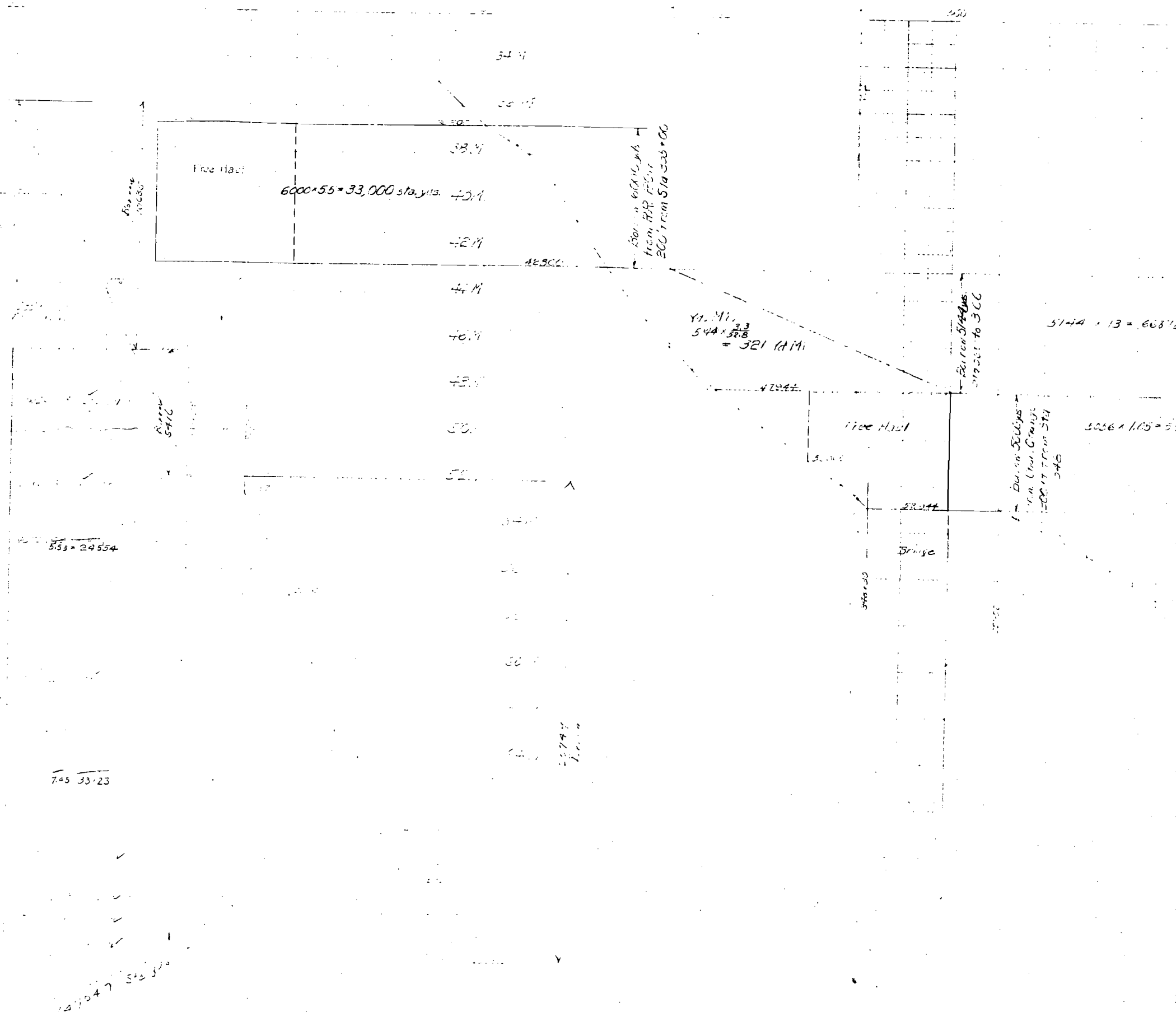












Barron 500 yds
from RR from
SEC 11 to STA 300+00

11.411
5144 x 13.3
= 321 18 141

Barron 5144 yds
Sta 300 to 366

$5144 \times 13 = 66872 \text{ sta yds}$

Free Haul

4724±

Free Haul

5300±

5294±

Bridge

340±30

52150

Barron 500 yds
from Chan. Grange
100 ft from STA
345

$5056 \times 1.05 = 5309 \text{ sta yds}$

$9471.5 = 47355 \text{ sta yds}$

Free Haul

Barron 947
from STA 300 to 366

A

43800

$A \quad 785 \times 0.8 = 628 \text{ sta yds}$

DATA REQUIRED TO ACCOMPANY SITUATION PLAN.

I. GENERAL REMARKS.

Fill out all blanks with care, giving information on all points listed, and supplementary remarks on features not listed. High water and foundation conditions are especially important and should be thoroughly investigated.

II. PROFILE.

Plot profile of centerline of roadway. Use natural scale, preferably 1" = 10'. At proper locations show section of test pits, noting material encountered, if available at time of survey.

Show present, and if possible, proposed finished grade noting elevations and gradients.

III. MAP.

Show present and proposed alignment of bridge and all approaches, as far as affected. Extend cross sections at least 60-ft. each side of C. L., giving location and elevation of points so that at least 2-foot contours may be accurately plotted. Show edge of water, falls, shoals, other obstructions, and direction of current at high water and at low water. Plot location of test pits, position and pointing of camera for each photo, all buildings, fences, and other features affected. Establish bench marks and give location of same. Reference C. L. and show North point. Give a C. L. profile of stream-bed for 500 feet up-stream and 500 feet down-stream from center line of survey. Plot proposed structure in soft pencil only. Do not ink.

IV. REPORT OF EXAMINATION OF BRIDGE-SITE.

Div. _____ County _____ Route _____ Sec. _____ Sta. _____

Date of survey _____ To be built by _____

1. Bridge Site

Location _____

Sec. _____ Twp. _____ Range _____ Local name _____ River _____ Creek _____

Distance from nearest shipping point _____

2. Source of materials

Sand _____ Length of haul to site _____ miles

Gravel _____ " " " " " "

Stone _____ " " " " " "

Falsework Timber _____ " " " " " "

Piling _____ " " " " " "

3. Cost Data.

Cost of following materials at site _____

Portland Cement _____ Per Bbl. _____

Sand, coarse and clean _____ " Cu. Yd. _____

Gravel _____ " " " " " "

Stone _____ " " " " " "

Falsework Timber _____ " Ft. B. M. _____

Piling _____ " Lin. Ft. _____

Cost per ton-mile for hauling _____

4. Waterway.

Drainage area in Sq. Miles approximate _____

Character of watershed _____

Elevation of Highest water _____ Date _____

Source of information on water elevation _____

Elevation of ordinary high water _____

Elevation of low water _____

Elevation of permanent ground-water _____

Is stream ever dry? _____ During what months? _____

Will all flood water pass through recommended structure? _____

Can channel be cleaned to afford more waterway? _____

Is stream cutting or silting up? _____

Is stream-stable in its banks? _____ Depth of scour? _____

Does stream carry light, medium, or heavy silt? _____

What clearance above high water should be allowed? _____

Is channel change necessary? _____

If channel change is necessary, illustrate location on sketch map. _____

5. Foundation Data.

Character of material _____

Distance from stream-bed to solid foundation _____

Recommended depth of footings _____

Should piles be used? _____ What length? _____

6. Old Bridge.

If there is no bridge at the present location include here data on nearest bridge over same stream. If possible show location of such bridge or bridges on the map.

Type _____ Number and length of spans _____

Area of waterway provided under old structure _____ Sq. Ft. _____

Has this area proved sufficient at flood times? _____

Is it too large? _____

Give foundation data on bridges in vicinity. When possible, get pile driving data, logs of borings, etc., for adjoining structures, and where considered advantageous procure plans.

Elevation of under-clearance _____

Disposition of existing structure _____

Remarks _____

7. Recommendations for New Structure.

Type _____ Number and length of spans _____

What is the least clear span permissible? _____

Width of roadway _____ Are sidewalks desired? _____

Angle of Skew recommended _____

Will approaches be desired, or will same be filled? _____

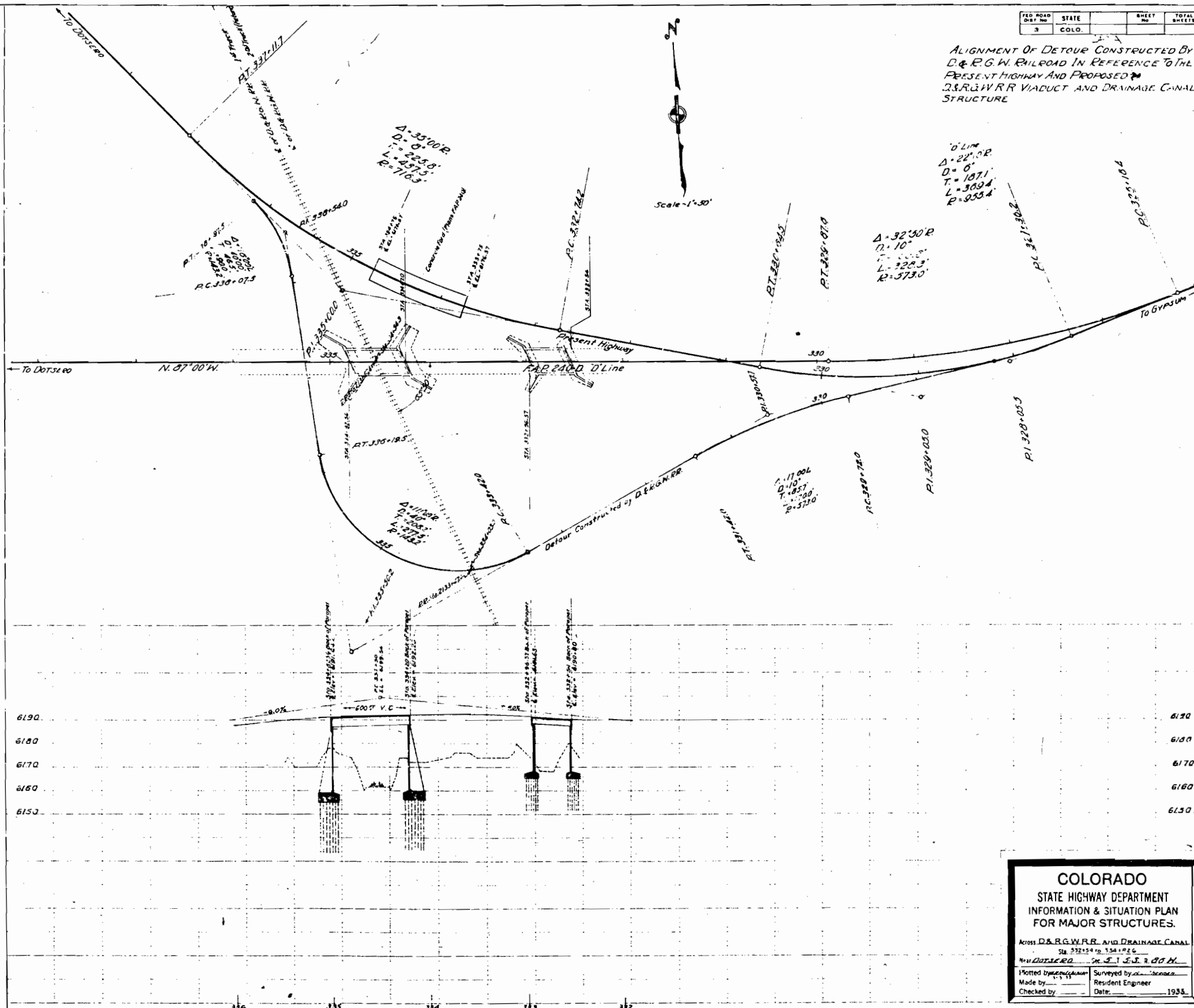
Approximate cost per Cu. Yd. of approach-filling at bridge site? _____

Is it necessary to maintain traffic alongside old structure? _____

If so, how shall it be done? _____

Submitted by _____
Engineer.

NOTE. When bridge is recommended to be left in place, complete structural details shall be procured from the bridge itself or from existing plans of the structure. When possible these plans shall be forwarded with the plans of the project.



FED. ROAD DIST. NO.	STATE	SHEET NO.	TOTAL SHEETS
3	COLO.		

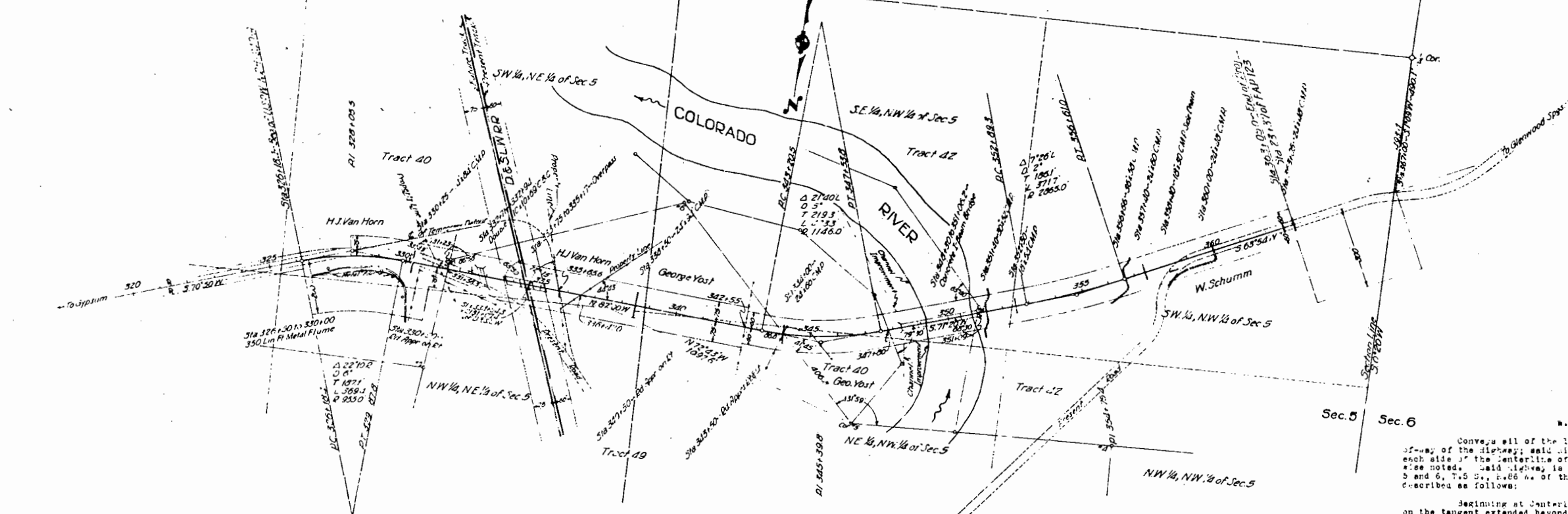
ALIGNMENT OF DETOUR CONSTRUCTED BY D.R.G.W.R. RAILROAD IN REFERENCE TO THE PRESENT HIGHWAY AND PROPOSED D.R.G.W.R. VIADUCT AND DRAINAGE CANAL STRUCTURE

COLORADO	
STATE HIGHWAY DEPARTMENT	
INFORMATION & SITUATION PLAN	
FOR MAJOR STRUCTURES.	
Across D.R.G.W.R. AND DRAINAGE CANAL	
Sta. 332+54 to 334+00	
Plotted by _____	Surveyed by _____
Made by _____	Resident Engineer _____
Checked by _____	Date: 1933 _____

STRUCTURE NO. F-8-D. F-8-E.

SEC. 5, T.5S, R.86W. 6th PM.

FLORIDA STATE HIGHWAY PROJ.
DIST. NO. 3 COLO. 240-A
RIGHT-OF-WAY MAP NO. 1



L. J. VAN HORN
Conveys all of the land situated within the right-of-way of the highway; said right-of-way extends 75.0 feet on each side of the centerline of the highway, except where otherwise noted. Said highway is located in parts of Tract 40 (A.) and Tract 49, (B.) Sec. 5, T.5S, R.86W. of the 6th P.M., more particularly described as follows:

(A.)
Beginning at Centerline Station 351+43.0, a point on the property line, whence corner #7 of Tract 49, Sec. 5, bears S. 46°11'W. for 31.3 feet; thence along said property line, S. 25°12'E. for 92.9 feet; to the south R.O.W. line of the highway; thence along said R.O.W. line, S. 87°00'E. for 80.3 feet; thence on a curve to the left, with a radius of 1030.0 feet, for 202.5 feet; thence S. 8°16'W. for 45.0 feet; thence S. 81°44'E. and on a curve to the left, with a radius of 960.0 feet, for 167.3 feet; thence S. 19°10'W. for 30.0 feet; to Centerline Station 356+19.4, the beginning of T.5S, R.86W. Highway Project 240-A (1958); thence S. 19°10'W. for 203.6 feet, to the north R.O.W. line of the highway; thence along said R.O.W. line, S. 70°50'W. end on a curve to the right, with a radius of 755.0 feet, for 491.0 feet; thence S. 87°00'W. for 112.2 feet; thence S. 3°00'W. for 110.0 feet; thence S. 87°00'W. for 77.9 feet, to the property line; thence along said property line, S. 33°12'E. for 92.2 feet, to the point of beginning.

(B.)
Beginning at Centerline Station 356+47.0, a point on the west property line, whence corner #5 of Tract 40, Sec. 5, bears N. 72°45'W. for 107.6 feet; thence along said property line, S. 46°11'W. for 130.6 feet to the south R.O.W. line of the highway; thence along said R.O.W. line, S. 87°00'E. for 101.1 feet, to the east property line; thence along said property line, S. 14°45'W. for 143.5 feet; thence S. 46°17'W. for 60.9 feet, to the point of beginning.

Said right-of-way contains 1.466 acres of uncultivated land, of which 1.466 acres are to be acquired, and 0.000 acres are to be retained in the R.O.W. of the present road, leaving a remainder of 0.000 acres to be acquired.

GEORGE YOST
Conveys all of the land situated within the right-of-way of the highway; said right-of-way extends 75.0 feet on each side of the centerline of the highway, except where otherwise noted. Said highway is located in parts of Tract 49 and Tract 40, Sec. 5, T.5S, R.86W. of the 6th P.M., more particularly described as follows:

Beginning at Centerline Station 356+47.0, a point on the property line, whence corner #5 of Tract 49 bears N. 72°45'W. for 107.6 feet; thence along said property line, S. 46°11'W. for 87.0 feet; thence S. 14°45'W. for 14.4 feet, to the north R.O.W. line of the highway; thence along said R.O.W. line, S. 87°00'E. for 665.4 feet; thence S. 3°00'W. for 15.0 feet; thence S. 17°00'W. for 65.1 feet; thence on a curve to the left, with a radius of 1200.0 feet, for 456.0 feet; thence S. 71°00'W. for 37.4 feet, to the tract line, along the east bank of the Colorado River; thence along said tract line, S. 8°10'E. for 111.3 feet to the south R.O.W. line of the highway; thence along said R.O.W. line, S. 71°00'W. for 15.0 feet; thence on a curve to the right, with a radius of 1350.0 feet, for 110.0 feet; thence S. 47°00'W. for 78.3 feet; thence S. 3°00'W. for 15.0 feet; thence S. 87°00'W. for 528.3 feet to the property line; thence along said property line, S. 46°17'E. for 104.6 feet, to the point of beginning.

Said right-of-way contains 3.347 acres of land, of which 1.003 acres are uncultivated, and 2.344 acres are cultivated, all of which is to be acquired.

D. J. L. R. R.
Conveys all of the land situated within the right-of-way of the highway; said right-of-way extends 75.0 feet on each side of the centerline of the highway. Said highway is located in Tracts 40 and 49, T.5S, R.86W. of the 6th P.M., more particularly described as follows:

Beginning at Centerline Station 351+43, a point on the east property line of the D. J. L. R. R., whence the corner #7 of Tract 49 bears S. 46°11'W. for 31.3 feet; thence along said property line, S. 25°12'E. for 91.3 feet, to the south R.O.W. line of the highway; thence along said R.O.W. line, S. 87°00'E. for 473.5 feet, to the east property line of the R.R.; thence along said property line, S. 14°45'W. for 107.4 feet, to the north R.O.W. line of the highway; thence along said R.O.W. line, S. 87°00'W. for 411.7 feet, to the east property line of the D. J. L. R. R.; thence along said property line, S. 46°11'W. for 91.3 feet, to the point of beginning.

Said right-of-way contains 1.514 acres of uncultivated land.

Conveys all of the land situated within the right-of-way of the highway; said right-of-way extends 60.0 feet on each side of the centerline of the highway, except where otherwise noted. Said highway is located in Tract 42, Sections 5 and 6, T.5S, R.86W. of the 6th P.M., more particularly described as follows:

Beginning at Centerline Station 367+00.0, a point on the tangent extended beyond the end of Project 240-A, whence the west corner of Sec. 5 bears S. 1°19'W. for 490.1 feet; thence S. 25°06'W. for 300.0 feet; thence S. 63°54'E. for 100.1 feet; thence S. 25°06'W. for 240.0 feet; thence S. 1°19'W. for 622.0 feet; thence on a curve to the right, with a radius of 1025.0 feet, for 379.5 feet; thence S. 71°20'W. for 100.9 feet, to a point on the tract line along the west bank of the Colorado River; thence along said tract line, S. 2°50'W. for 36.5 feet; thence along said tract line, S. 1°19'W. for 100.9 feet, to the north R.O.W. line of the highway; thence along said R.O.W. line, S. 71°20'W. for 100.9 feet; thence on a curve to the left, with a radius of 1025.0 feet, for 379.5 feet; thence S. 63°54'E. for 100.1 feet; thence S. 25°06'W. for 240.0 feet; thence S. 25°06'W. for 300.0 feet, to the point of beginning.

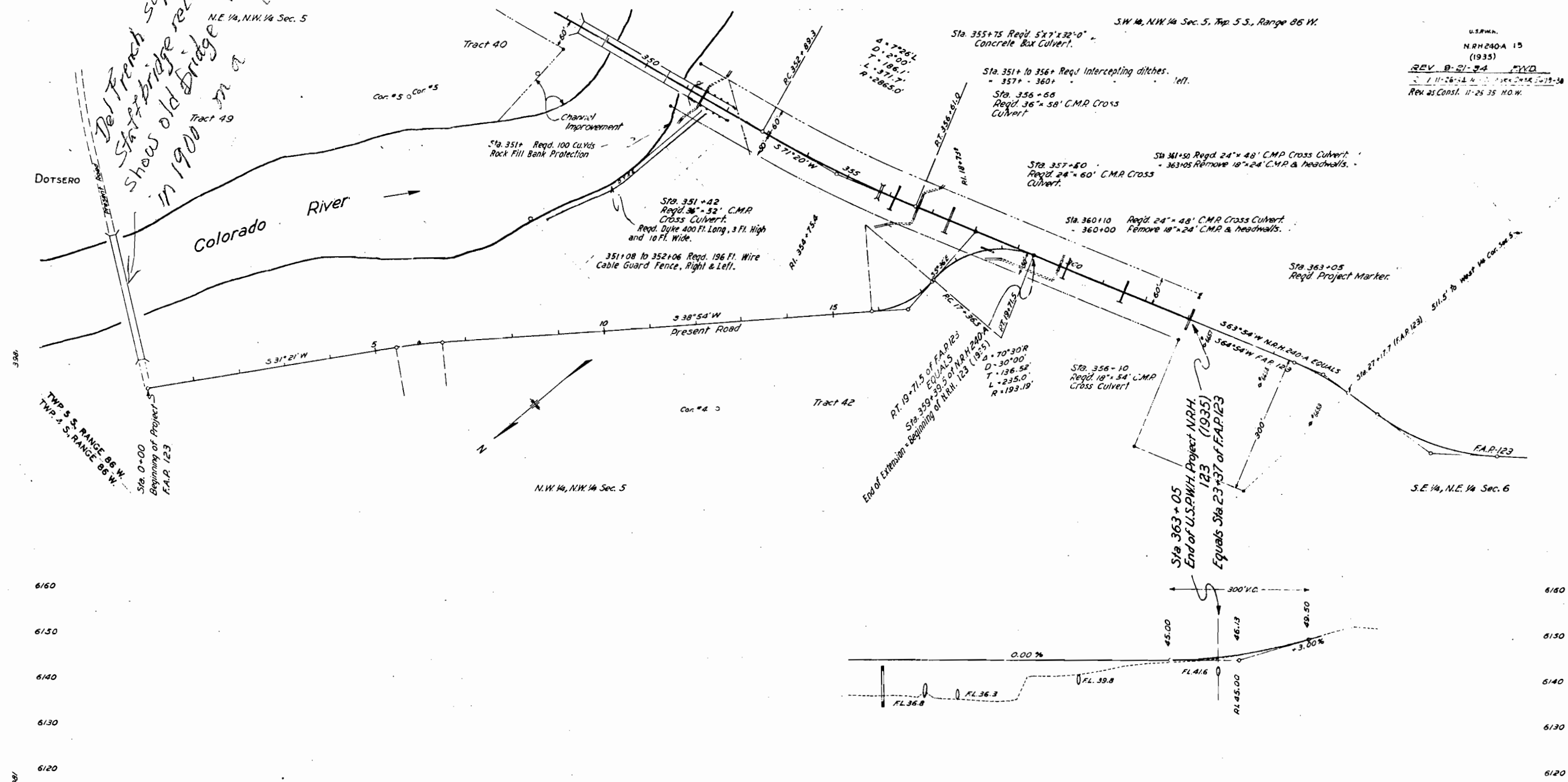
Said right-of-way contains 1.666 acres, of which 1.666 acres are cultivated, leaving a remainder of 0.000 acres of uncultivated land, of which 0.000 acres are contained in the present road, leaving a remainder of 0.000 acres of uncultivated and 1.666 acres of cultivated land to be acquired.

W. SCHUMM
Conveys all of the land situated within the right-of-way of the highway; said right-of-way extends 60.0 feet on each side of the centerline of the highway, except where otherwise noted. Said highway crosses the Colorado River between the center lines defining the banks, and forming the boundaries of Tract 40, on the east, and Tract 42, on the west, Sec. 5, T.5S, R.86W. of the 6th P.M., and is more particularly described as follows:

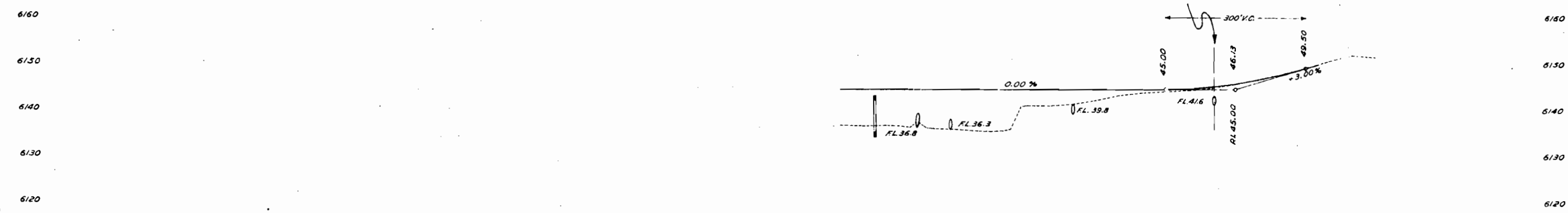
Beginning at Centerline Station 347+50, a point on the west boundary of Tract 40, defining the east bank of the river, whence corner #2 of Tract 40 bears S. 11°59'W. for 466.7 feet; thence along said boundary line, S. 11°59'W. for 410.0 feet to the north R.O.W. line of the highway; thence along said right-of-way line, S. 71°20'W. for 100.9 feet, to a point on the east boundary of Tract 42, defining the west bank of the river; thence along said boundary line, S. 2°50'W. for 36.5 feet; thence S. 71°20'W. for 100.9 feet, to the south right-of-way line of the highway; thence along said right-of-way line, S. 71°20'W. for 100.9 feet, to the east boundary of the river, and the boundary of Tract 40; thence along said boundary line, S. 2°50'W. for 36.5 feet, to the point of beginning.

Said crossing contains 0.007 acres.

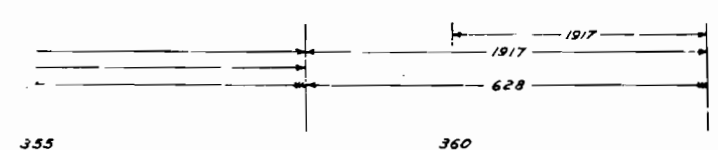
*Del French says
State bridge records
show old bridge
in 1900 on a
county road.*

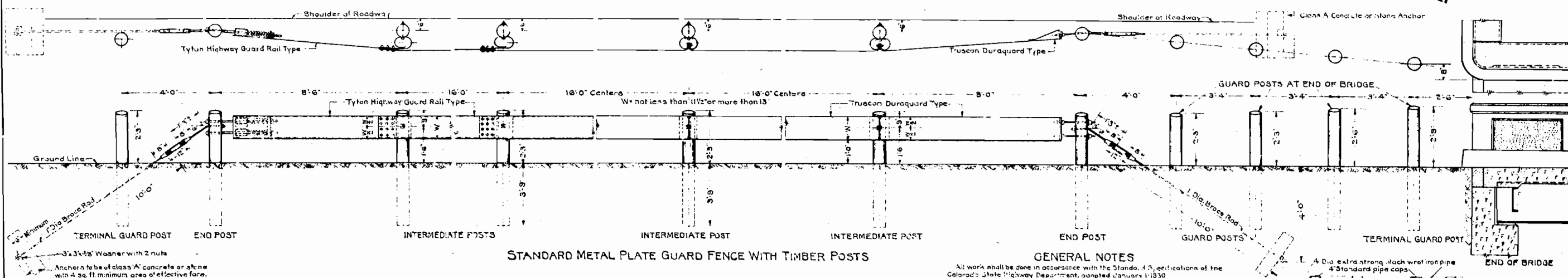
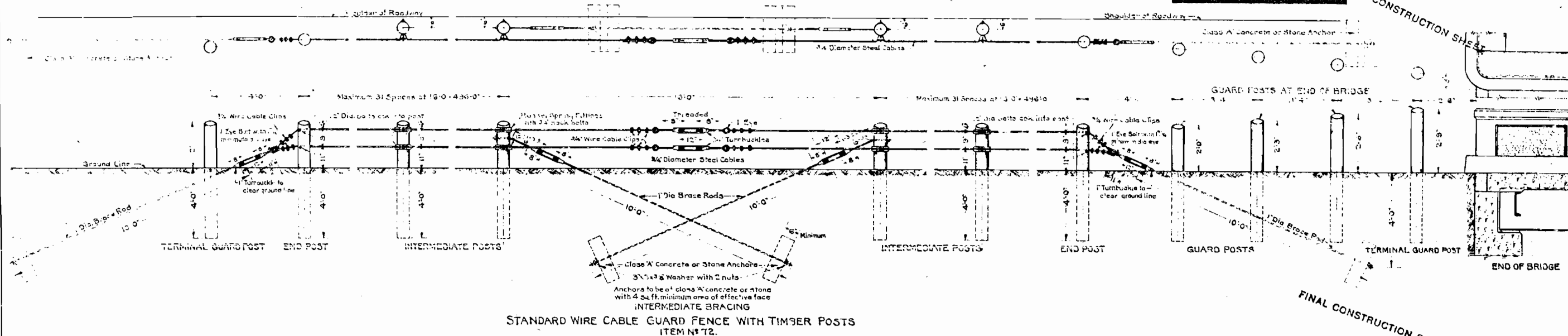


U.S.R.W.H.
N.R.H. 240-A 15
(1935)
REV 9-21-34 FWD
11-26-34
Rev as Const. 11-25-35 H.O.W.



Excavation
Embankment +15%
Borrow
Sta. Yd. Overhaul
Yd. Mile
Borrow Source





GENERAL NOTES

All work shall be done in accordance with the Standard Specifications of the Colorado State Highway Department, adopted January 1-1930.
The length of guard fence to be paid for and designated on plans shall be measured from terminal guard post to terminal guard post.
When continuous wire cable fence is more than 300 ft. in length it shall have intermediate bracing complete with turnbuckles.

All wood posts shall be made from seasoned, straight sound lodge pole pine, southern yellow pine or western Douglas fir.
No section of wood posts shall be less than 6 in. in diameter.
All wood posts shall be entirely cased and shrouded, shrouds seasoned and dry, with square tops and all holes drilled before treatment is applied.

All wood posts shall be pressure treated with creosote for the full length of posts as provided for in the specifications.
All wood posts shall be set and tamped in place and firm, to the lines and grades directed by the engineer.

All fittings, cables and hardware shall be hot dip galvanized steel with sizes as shown and located as shown.
The bolts shall be welded or cross forged.

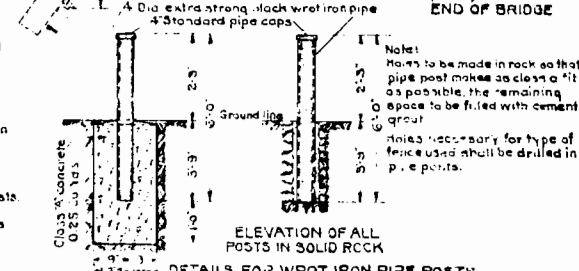
Standard hot iron or steel washers shall be used under all ball heads and nuts coming in contact with wood posts.

In lieu of the Russell spring fitting, the contractor may use the Hubard or the offset canting fitting, the Blackum offset fitting, the standard Blackum offset fitting, or other equivalent fitting, providing a minimum offset of 3/4 in. from the end of post to centerline of cable or turnbuckle, as approved by the engineer.

Any other fitting or other fittings equivalent to those shown on plans and approved by the engineer may be used in lieu of turnbuckles, eye bolts, and clips, showing plans. Only one style of offset fittings, turnbuckles, eye bolts and clips may be used on a project.

Meta plates for metal plate guard fence shall be not less than N° 12 gauge.

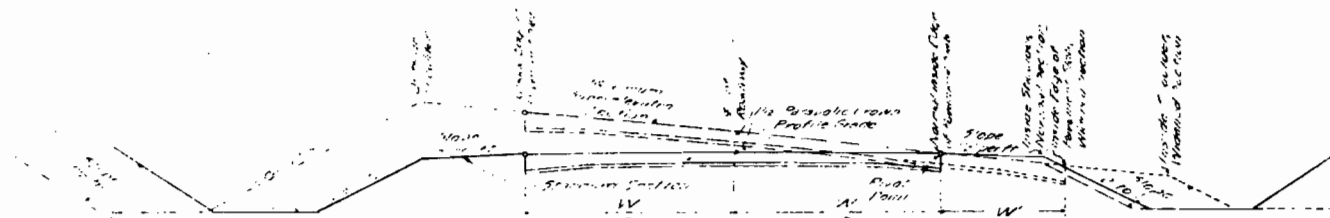
In lieu of the metal plate guard fence types shown on this sheet, other equivalent types of plate guard fence approved by the engineer and complying with the specifications may be used. Only one type of plate guard fence may be used on a project.



ELEVATION OF ALL POSTS
IN MATERIAL
OTHER THAN SOLID ROCK

COLORADO
STATE HIGHWAY DEPARTMENT
STANDARD
WIRE CABLE & METAL PLATE
GUARD FENCE

Designed by A.G.K. Approved by O.D. Bailey
Made by A.G.K. Bridge Engineer
Checked by Date May 1st, 1934



PAVEMENT SECTION

SUPERELEVATION AND WIDENING NOTES FOR PAVEMENT SECTION

Curves on projects using the pavement section are to be super-elevated and widened as indicated in the accompanying drawings and table.

The normal inside edge of the pavement slab is to remain at the standard elevation of 0.15 ft below the profile grade, and the outside edge of the slab is to be super-elevated at the rate per foot width of roadway given in the table or graph. The section is to be widened to the normal inside edge of the pavement.

When the degree of curvature exceeds 10, the inside portion of the curve must also be widened from the normal inside edge to the inside edge of the curve of 10 or less. The widening section is to have a flat crown.

The slope of the shoulder shall conform to the rate per foot width of roadway required except that the inside shoulder shall have a flat crown and slope of 0.15 ft per foot width until the super-elevation is reached.

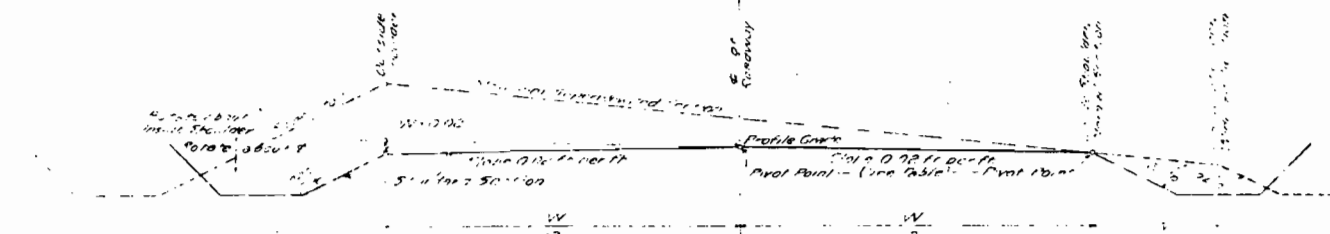
The outside ditch along a super-elevated section is to be modified from the standard where a ditch is required to provide drainage.

Details of plans for super-elevating and widening are shown on the General Plan for Widening and the Graph of Super-elevation Factors.

The subgrade for the pavement is to be constructed to conform to the super-elevation and widening requirements for the pavement section.

SUPERELEVATION FACTORS AND OFFSETS FOR WIDENING FOR PAVEMENT SECTION

Super-elevation Factor	20°	40°	60°	80°	100°	120°	140°	160°	180°	200°	220°	240°	260°	280°	300°
Rate of Super-elevation (in feet) per foot width of roadway	0.0017	0.0034	0.0051	0.0068	0.0085	0.0102	0.0119	0.0136	0.0153	0.0170	0.0187	0.0204	0.0221	0.0238	0.0255
Offset (in feet) for widening W (in feet)	0.0017	0.0034	0.0051	0.0068	0.0085	0.0102	0.0119	0.0136	0.0153	0.0170	0.0187	0.0204	0.0221	0.0238	0.0255
Offset (in feet) for widening W (in feet)	0.0017	0.0034	0.0051	0.0068	0.0085	0.0102	0.0119	0.0136	0.0153	0.0170	0.0187	0.0204	0.0221	0.0238	0.0255



GRADED OR SURFACING SECTION

SUPERELEVATION AND WIDENING NOTES FOR GRADED OR SURFACING SECTION

Curves on projects using the graded or surfacing section are to be super-elevated and widened as indicated in the accompanying drawings and table.

The normal inside edge of the pavement slab is to remain at the standard elevation of 0.15 ft below the profile grade, and the outside edge of the slab is to be super-elevated at the rate per foot width of roadway given in the table or graph. The section is to be widened to the normal inside edge of the pavement.

When the degree of curvature exceeds 10, the inside portion of the curve must also be widened from the normal inside edge to the inside edge of the curve of 10 or less. The widening section is to have a flat crown.

The slope of the shoulder shall conform to the rate per foot width of roadway required except that the inside shoulder shall have a flat crown and slope of 0.15 ft per foot width until the super-elevation is reached.

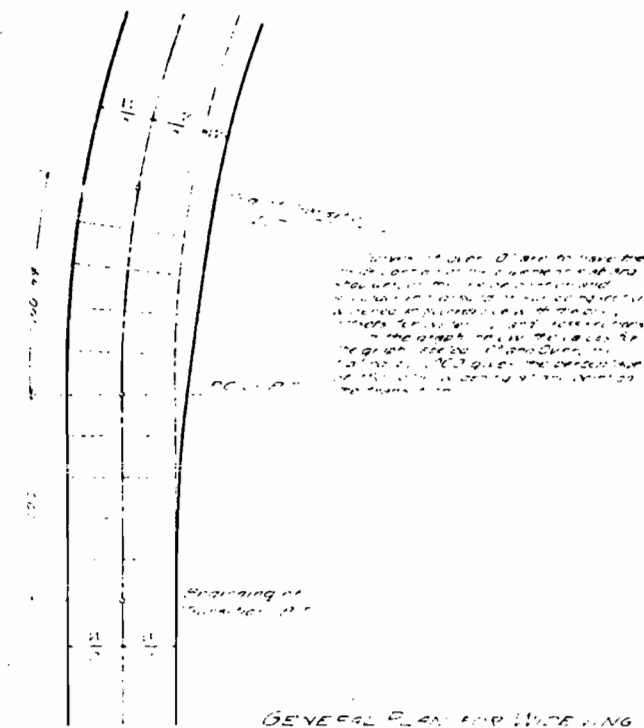
The outside ditch along a super-elevated section is to be modified from the standard where a ditch is required to provide drainage.

Details of plans for super-elevating and widening are shown on the General Plan for Widening and the Graph of Super-elevation Factors.

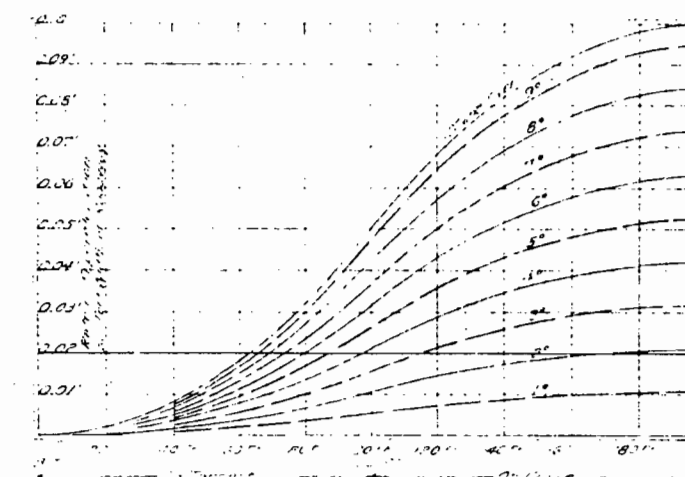
The subgrade for the pavement is to be constructed to conform to the super-elevation and widening requirements for the pavement section.

SUPERELEVATION FACTORS AND OFFSETS FOR WIDENING FOR GRADED OR SURFACING SECTION

Super-elevation Factor	20°	40°	60°	80°	100°	120°	140°	160°	180°	200°	220°	240°	260°	280°	300°
Rate of Super-elevation (in feet) per foot width of roadway	0.0017	0.0034	0.0051	0.0068	0.0085	0.0102	0.0119	0.0136	0.0153	0.0170	0.0187	0.0204	0.0221	0.0238	0.0255
Offset (in feet) for widening W (in feet)	0.0017	0.0034	0.0051	0.0068	0.0085	0.0102	0.0119	0.0136	0.0153	0.0170	0.0187	0.0204	0.0221	0.0238	0.0255
Offset (in feet) for widening W (in feet)	0.0017	0.0034	0.0051	0.0068	0.0085	0.0102	0.0119	0.0136	0.0153	0.0170	0.0187	0.0204	0.0221	0.0238	0.0255



GENERAL PLAN FOR WIDENING



GRAPH OF SUPERELEVATION TRANSITION FACTORS

The graph of super-elevation transition factors is to be used in the design of curves on projects using the graded or surfacing section. The graph is to be used in the design of curves on projects using the graded or surfacing section.

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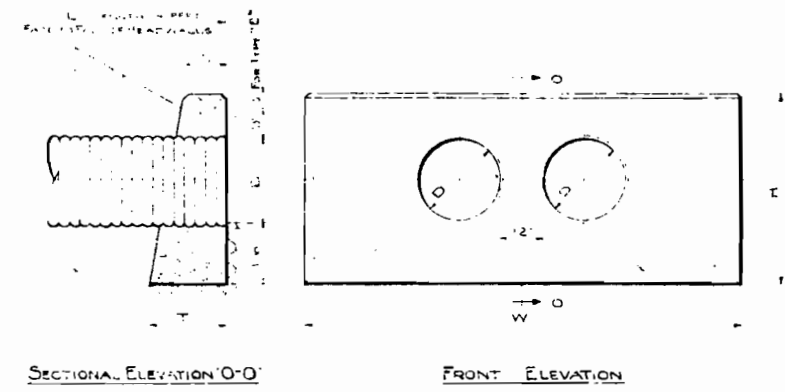
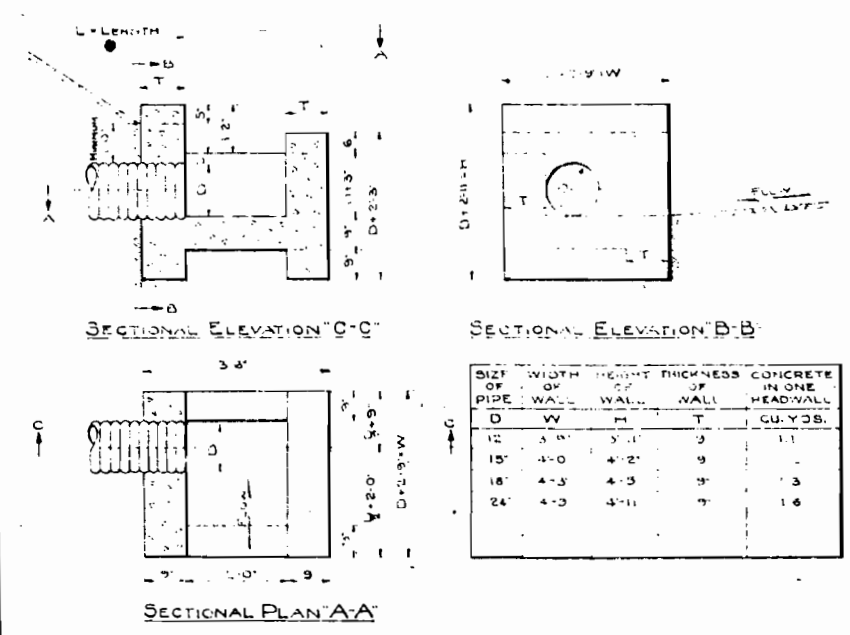


TABLE OF DIMENSIONS & QUANTITIES FOR DOUBLE CORRUG METAL PIPE CULVERT & HEADWALLS									
TYPE	D	W	H	F	CONCRETE FOR 2 HEADWALLS		CORRUGATED METAL PIPE		CEMENT RUBBLE MASONRY
					CU YDS	CU YDS	CU YDS	CU YDS	
Type E	12	12	12	1.1	31	do	16	24	do
	15	15	15	1.1	45	do	17	24	do
	18	18	18	1.1	63	do	18	24	do
	24	24	24	1.2	70	do	18	24	do
Type F	12	12	12	1.1					
	15	15	15	1.1					
	18	18	18	1.1					
	24	24	24	1.2					

STD. HEADWALLS FOR DOUBLE CORRUGATED METAL PIPE CULVERTS.



SIZE OF PIPE WALL THICKNESS OF WALL CONCRETE IN ONE HEADWALL

D	W	H	T	CU YDS.
12	12	12	1	1.1
15	15	15	1	1.1
18	18	18	1	1.1
24	24	24	1	1.1

INTERCEPTING HEADWALLS.

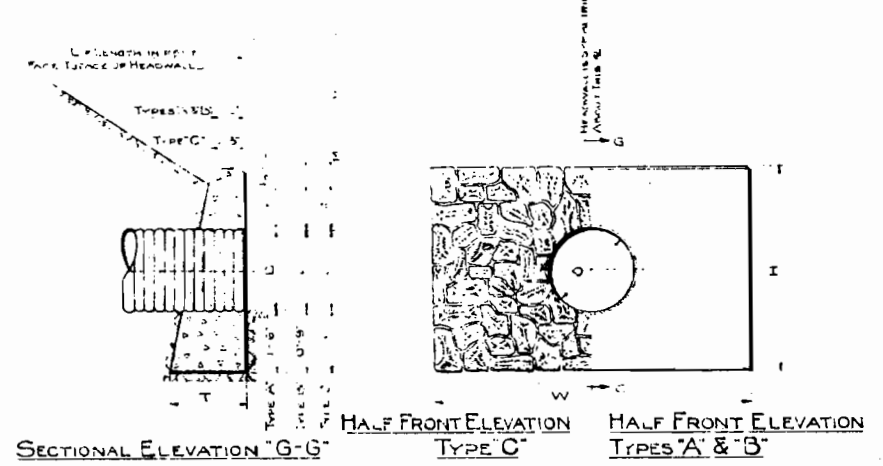
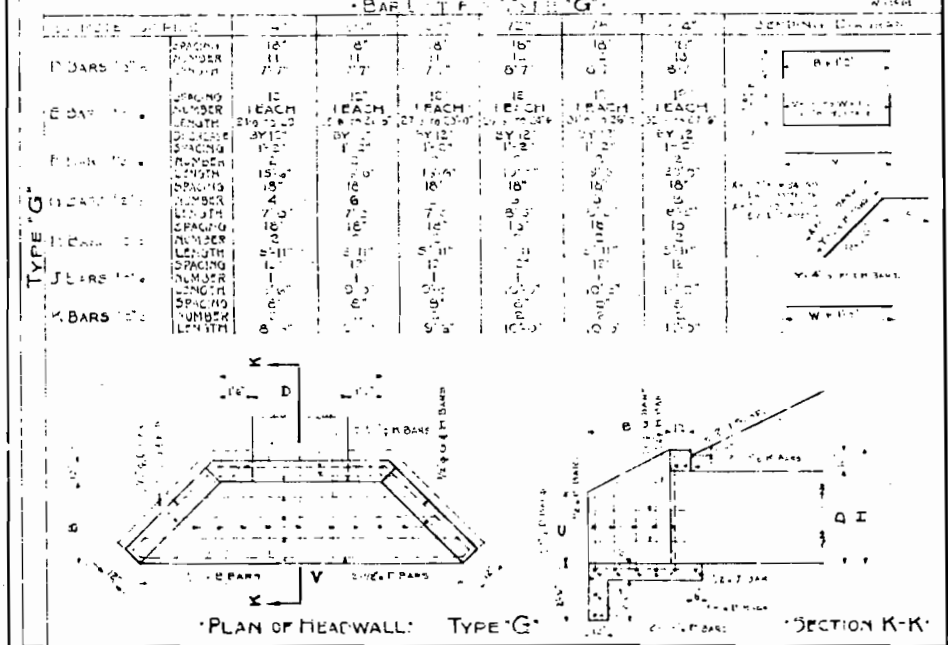


TABLE OF DIMENSIONS & QUANTITIES FOR CORRUGATED METAL PIPE CULVERTS & HEADWALLS

TYPE	D	W	H	T	CONCRETE FOR 2 HEADWALLS		CORRUGATED METAL PIPE		CEMENT RUBBLE MASONRY	
					CU YDS	CU YDS	CU YDS	CU YDS		
Type A	12	12	12	1	1.1	1.1	1.1	1.1	1.1	1.1
	15	15	15	1	1.1	1.1	1.1	1.1	1.1	1.1
Type B	12	12	12	1	1.1	1.1	1.1	1.1	1.1	1.1
	15	15	15	1	1.1	1.1	1.1	1.1	1.1	1.1
Type C	12	12	12	1	1.1	1.1	1.1	1.1	1.1	1.1
	15	15	15	1	1.1	1.1	1.1	1.1	1.1	1.1



STANDARD HEADWALLS FOR CORRUGATED METAL PIPE CULVERTS.

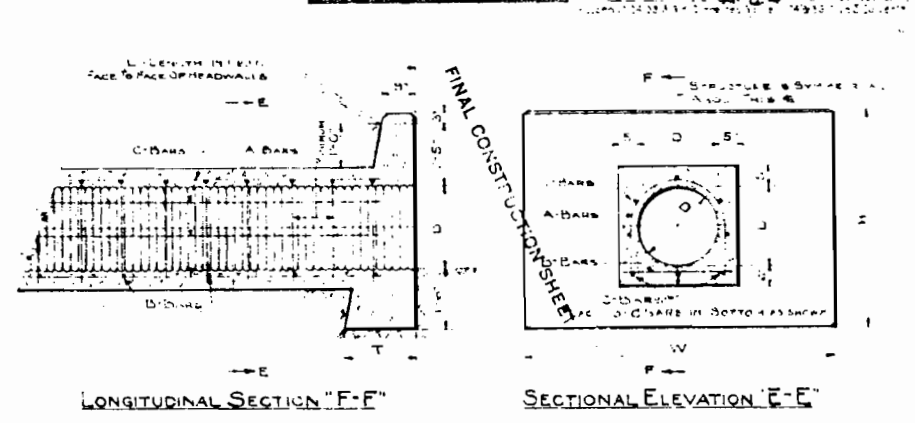


TABLE OF DIMENSIONS & QUANTITIES FOR INCASED PIPE CULVERT									
DIAMETER OF PIPE	D	12	15	18	24	30	DESIGNING DIAGRAM		
WIDTH OF HEADWALL	W	4'-0"	5'-0"	6'-0"	7'-6"	9'-0"			
HEIGHT OF HEADWALL	H	4'-2"	4'-5"	4'-8"	5'-2"	5'-8"			
WIDTH OF HEADWALL BASE	T	1'-7"	1'-9"	1'-9"	2'-0"	2'-3"			
		12	15	18	24	30			
A-BARS		3#	4#	5#	6#	7#	D=12		
B-BARS		3#	4#	5#	6#	7#	D=12		
C-BARS		6	8	8	9	9	L=12'-0"		
		6	8	8	9	9			
ITEM#	DESCRIPTION	UNIT	14'-0"	16'-0"	22'-0"	24'-0"	30'-0"	36'-0"	42'-0"
46	CONCRETE CLASS A CULVERT	CU YD	1670.22	2210.43	3140.12	4570.25			
47	REINFORCING STEEL	LBS	539.62	612.25	866.17	1215.55	1690.24		
53	GALV. CORR. STEEL PIPE	LN							

SPECIAL NOTES

1. ALL STRUCTURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, LATEST EDITION.

2. ALL STRUCTURES SHALL BE DESIGNED TO RESIST A MINIMUM OF 100 PSI OF WATER PRESSURE.

3. ALL STRUCTURES SHALL BE DESIGNED TO RESIST A MINIMUM OF 100 PSI OF AIR PRESSURE.

4. ALL STRUCTURES SHALL BE DESIGNED TO RESIST A MINIMUM OF 100 PSI OF SOIL PRESSURE.

5. ALL STRUCTURES SHALL BE DESIGNED TO RESIST A MINIMUM OF 100 PSI OF ROCK PRESSURE.

6. ALL STRUCTURES SHALL BE DESIGNED TO RESIST A MINIMUM OF 100 PSI OF ICE PRESSURE.

7. ALL STRUCTURES SHALL BE DESIGNED TO RESIST A MINIMUM OF 100 PSI OF FLOOD PRESSURE.

8. ALL STRUCTURES SHALL BE DESIGNED TO RESIST A MINIMUM OF 100 PSI OF COLLAPSE PRESSURE.

9. ALL STRUCTURES SHALL BE DESIGNED TO RESIST A MINIMUM OF 100 PSI OF BURST PRESSURE.

10. ALL STRUCTURES SHALL BE DESIGNED TO RESIST A MINIMUM OF 100 PSI OF PUNCTURE PRESSURE.

INCASED PIPE CULVERTS.

GENERAL NOTES FOR ALL STRUCTURES

1. ALL STRUCTURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, LATEST EDITION.

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COLORADO
STATE HIGHWAY DEPARTMENT
STANDARD HEADWALLS
INTERCEPTING HEADWALLS
INCASED METAL PIPE CULVERT
WITH HEADWALLS
CORRUGATED METAL PIPE CULVERTS

Designed by: *Ed. Barry*
Made by: *Ed. Barry*
Approved by: *Ed. Barry*
Date: *10-1-32*

