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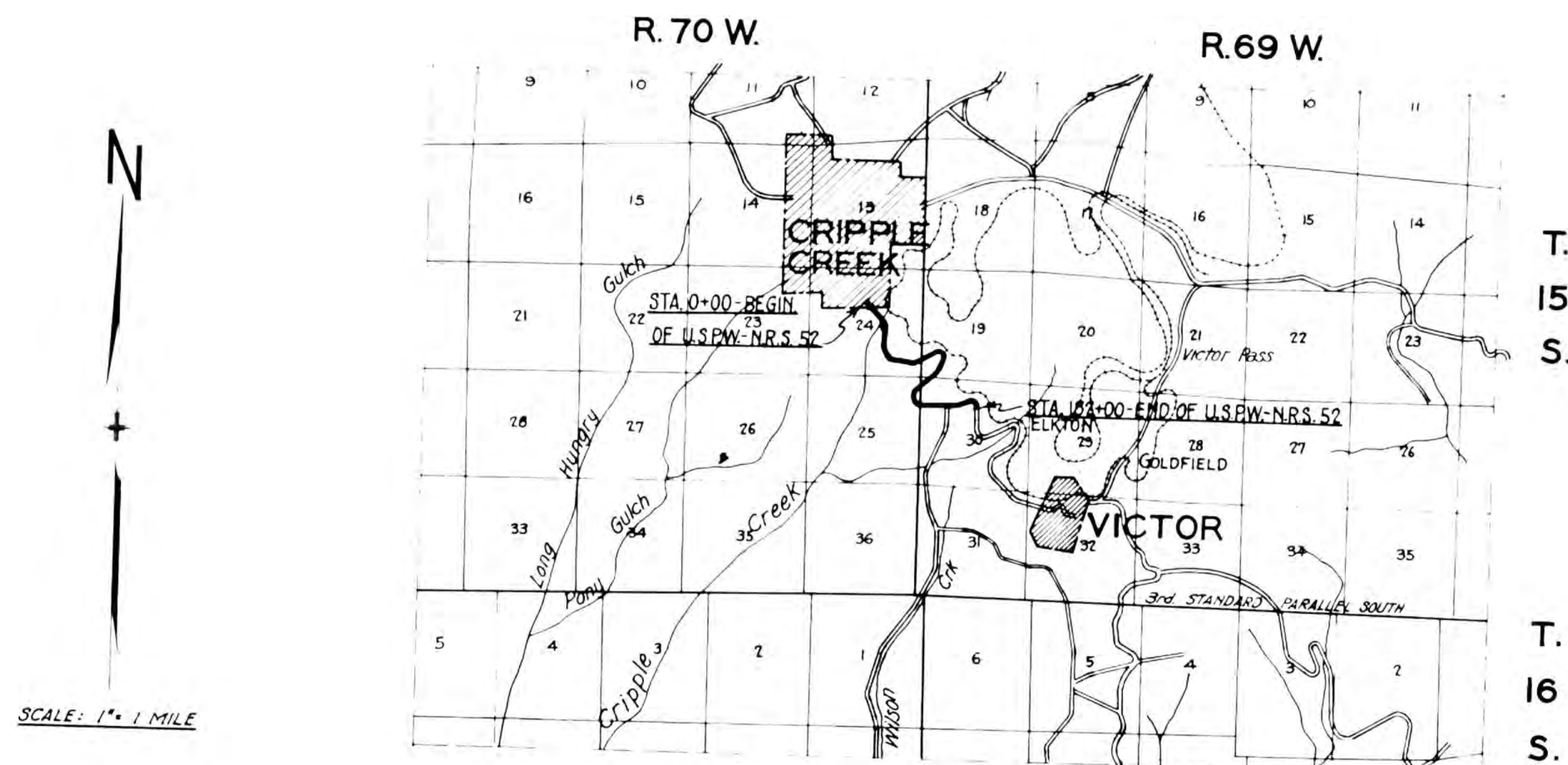
COLORADO STATE HIGHWAY DEPARTMENT PLAN AND PROFILE OF PROPOSED U.S.P.W. PROJECT NO. N.R.S 52 STATE HIGHWAY NO. 67 TELLER COUNTY

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 18,200 FT. = 3.446 MILES
NET LENGTH OF PROJECT

CONVENTIONAL SIGNS

CENTER LINE OF IMPROVEMENT
RIGHT-OF-WAY LINES
SECTION LINES
SECTION LINES
BARBED WIRE FENCE
GUARD FENCE



RECOMMENDED FOR APPROVAL 4/2/24

J. H. Calahan
ASSISTANT ENGINEER

APPROVED
Chas. H. Hail
STATE HIGHWAY ENGINEER

RECOMMENDED FOR APPROVAL

DIST. ENG. BUREAU PUBLIC ROADS

RECOMMENDED FOR APPROVAL

CHIEF ENG. BUREAU PUBLIC ROADS

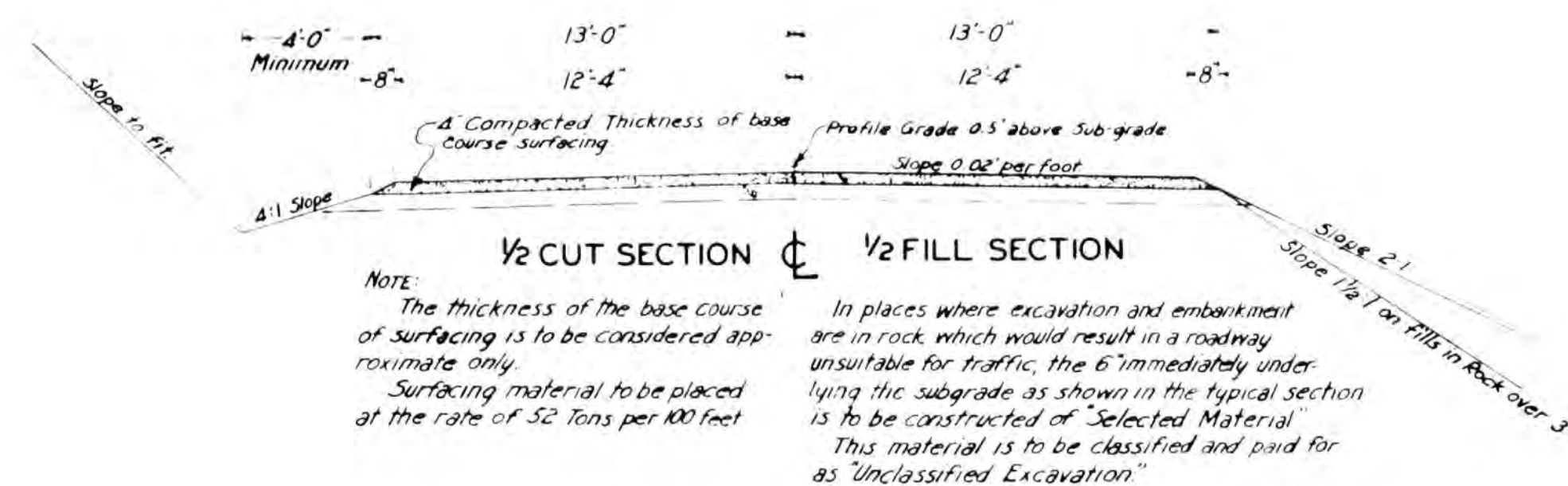
APPROVED

DIRECTOR BUREAU PUBLIC ROADS

TYPICAL CROSS SECTION OF IMPROVEMENT AND SUMMARY OF QUANTITIES

PER ROAD DIST NO	STATE	D.S. FILE NO	SHEET NO	TOTAL SHEETS
1	COLO	N.R.S. 52	8	

TYPICAL SECTION



GENERAL NOTES

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

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

All curves are to be super-elevated as provided for by the Standard Super-elevation Sheet included with the plans, except where modified by the Engineer to meet local requirements.

All roadway excavation required to construct this project is to be obtained as indicated on the plans. Quantities involved beyond the limits of the ditch as shown on the Typical Section, either noted on the Profile as "Borrow," or on the List of Structures as "Embankment" are to be classified and paid for as "Unclassified Excavation." This quantity is to be stated as part of the original excavation at locations indicated on the plans. Slope stakes beyond the limits of the Typical Section as shown are subject to change by the Engineer, to fit embankment conditions actually encountered during construction. Where excess excavation is indicated by profile quantities the excess material is to be used to uniformly widen curves and high fills within 300 feet of where produced and as directed by the Engineer.

The entire project is to be cleared and grubbed for the full width of the right-of-way, and the cost thereof is to be included in the lump sum price bid for "Clearing & Grubbing the entire Project." All debris and trash encroaching on the highway right-of-way is to be removed and the cost thereof included in the lump sum price bid for "Clearing and Grubbing the entire Project."

All cross culverts, unless otherwise noted on the plans, are to be provided with one headwall, to be placed on inlet end.

Except where limited by the Special Provisions power equipment may be used on this project.

The detour for this project lies along the present traveled road way. The contractor shall at his own expense be required to maintain in safe condition the detour and all temporary approaches to, and crossings of, intersecting roads.

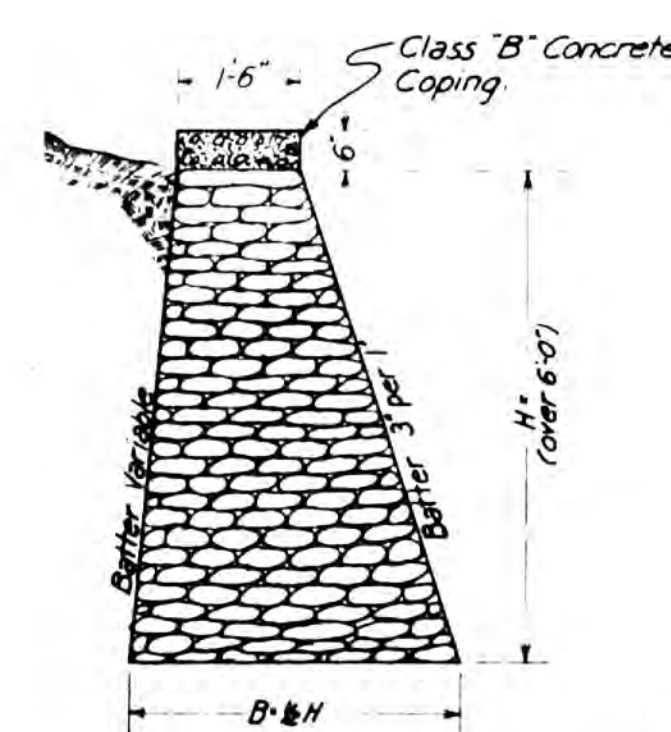
SUMMARY OF APPROXIMATE QUANTITIES

No	Item	Unit	Quantity
10a	Clear and Grub Entire Project	Lump Sum	•
11a	Remove 5 Structures	"	•
11b	Remove Log Cribbing Sta 117+	"	•
11c	Remove and Reset Guard Fence	Lin Ft	500
12b	Remove and Rebuild Fence	"	700
13c	Unclassified Excavation	Cu Yd	28,000
14a	Dry Rock " (Struct)	"	150
14b	" Common "	"	150
14c	Wet Rock "	"	150
14d	" Common "	"	150
18a	Station Yard Overhaul	Sta Yd	16,000
18b	Yard Mile Overhaul	Yd Mi	200
30x	Gravel or Crushed Rock Surfacing	Ton	9,500
46a	Class "A" Concrete	Cu Yd	26
46b	Class "B" Concrete	"	25
47	Reinforcing Steel	Lb	2,300
49	Cement Rubble Masonry	Cu Yd	115
53a	15" Corrugated Metal Culv Pipe	Lin Ft	26
53b	18" "	"	44
53c	24" "	"	74
53d	30" "	"	120
53e	36" "	"	156
53f	42" "	"	42
65	Dry Rubble Slope Paving	Sq Yd	20
72	Wire Cable Guard Fence	Lin Ft	1000
78	Project Markers	Each	2

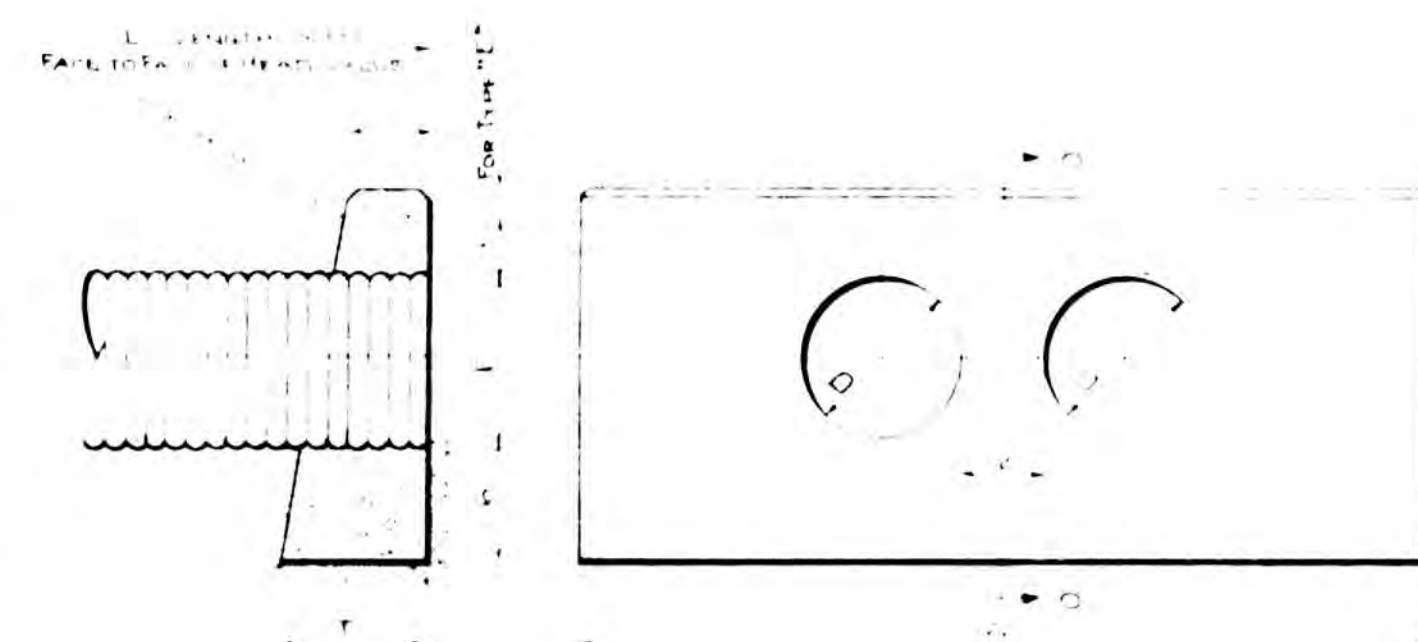
LIST OF STRUCTURES

Location	Description	Remove Struct No	Excavation Cu Yd		Structural Excavation Cu Yd			Class "A" Conc Cu Yd	Class "B" Conc Cu Yd	Reinf Steel Lb	Corrugated Culvert		Metal Pipe		Remove and Rebld B.W. Fence Lin Ft	Remove a Reset Guard Fence Lin Ft	Cement Rubble Masonry Cu Yd	Dry Rubble Slope Paving Sq Yd	Wire Cable Guard Fence Lin Ft	Miscellaneous	
			Uncl	Emb							15"	18"	24"	30"							36"
0+00 5+60 13+50	Project Marker C.M.P. Cross Culvert Conc. Box Culv in place Reg'd Cem Rubble Mas- onry Wall at Inlet								2 25				120							1-Project Marker	
18+76	C.M.P. in place, Reg'd Inlet Ditch		50						1 2								65				
27+00 - 34+00	Remove and Rebuild Barbed Wire Fence		10												700						
28+00	C.M.P. Cross Culvert and Inlet Ditch					15			1 65				36								
48+00	C.M.P. Cross Culvert					100			3 0					56							
56+50	C.M.P. Cross Culvert					105			3 0					60							
61+40	Remove, Relay & Extend C.M.P. Inlet Ditch		10			15			0 9		16									Relay 28' of Pipe	
75+00 - 80+00	Guard Fence on Right																		500		
112+25	C.M.P. Cross Culvert, Inlet Ditch		150			30			3 0					40							
113+20	Remove C.M.P. Culvert	1																			
116+00 - 117+82	Remove Log Cribbing																			Remove Log Cribbing	
117+00	Wood Box Culv in place, Reg'd Cem Rubble Masonry Wall at Inlet		50			25			1 0								50				
119+28	4x2x38" Conc Box Culv, Inlet Ditch, Slope Pav- ing, Remove old C.B.C.	1	50			120		25 6		2271								20			
137+70	C.M.P. Cross Culvert, Inlet Ditch, Remove Culv	1	20			15			1 1			38									
143+00 - 148+00	Guard Fence on Right																		500		
148+90	Remove, Relay & Extend C.M.P. Inlet Ditch		10			15			1 1			6								Relay 28' of Pipe	
157+00	C.M.P. Cross Culvert, Inlet Ditch		10			20			1 65				38								
162+90	Remove, Relay, & Extend C.M.P. Inlet Ditch		10			15			0 9		10									Relay 26' of Pipe	
167+25 - 172+20	Remove & Reset Guard Fence															495					
176+85	C.M.P. in place, Remove Hdwl on Rt, Inlet Ditch	1	15																		
178+00	C.M.P. Cross Culvert, Inlet Ditch		50			50			4 0					42							
178+89	C.M.P. in place, Remove Hdwl on Rt, Inlet Ditch	1	20																		
182+00	Project Marker																			1-Project Marker	
Totals		5	465			590		25 6	24 75	2271	26	44	74	120	156	42	700	495	115	20	1000

* NOTE: Structural Excavation is estimated to be 50% Common and 50% Rock, each of which is estimated to be 50% Wet and 50% Dry.



DETAIL OF CEMENT RUBBLE MASONRY WALL

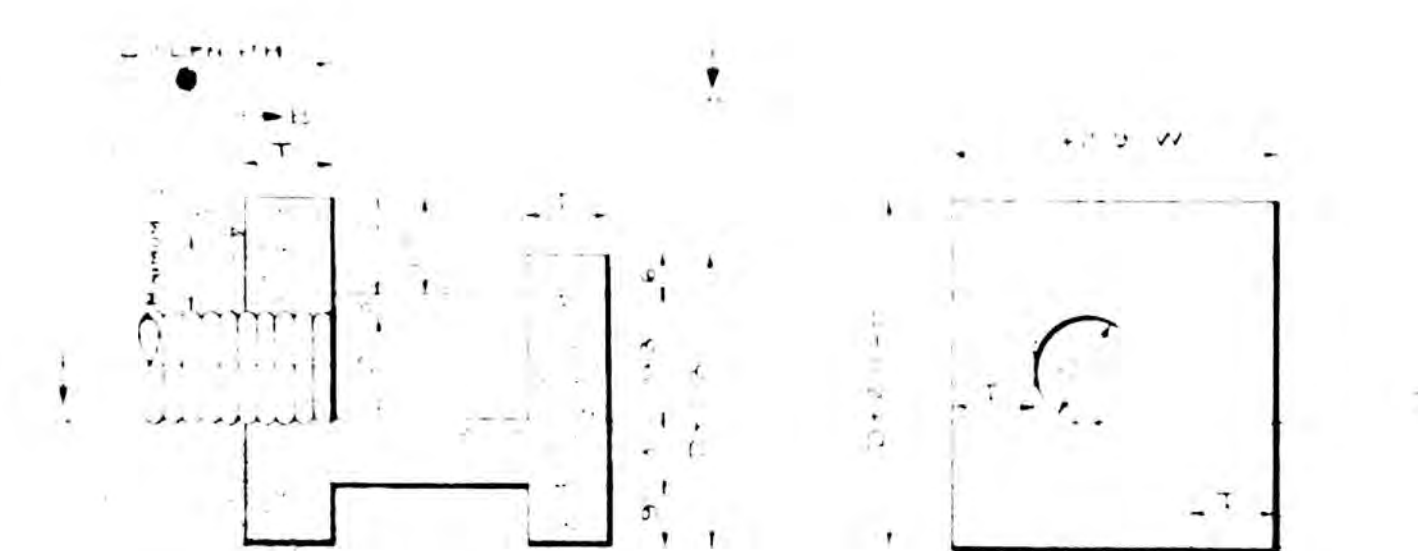


SECTIONAL ELEVATION O-O FRONT ELEVATION

TABLE OF DIMENSIONS & QUANTITIES FOR DOUBLE CORRUGATED METAL PIPE CULVERT & HEADWALLS

DIAMETER OF PIPE	WIDTH OF HEADWALL	HEIGHT OF HEADWALL	THICKNESS OF HEADWALL	CONCRETE IN ONE HEADWALL	QUANTITY
12	4.0	4.0	1.0	1.1	1.1
18	4.0	4.0	1.0	1.1	1.1
24	4.0	4.0	1.0	1.1	1.1
30	4.0	4.0	1.0	1.1	1.1
36	4.0	4.0	1.0	1.1	1.1
42	4.0	4.0	1.0	1.1	1.1
48	4.0	4.0	1.0	1.1	1.1

STD. HEADWALLS FOR DOUBLE CORRUGATED METAL PIPE CULVERTS.



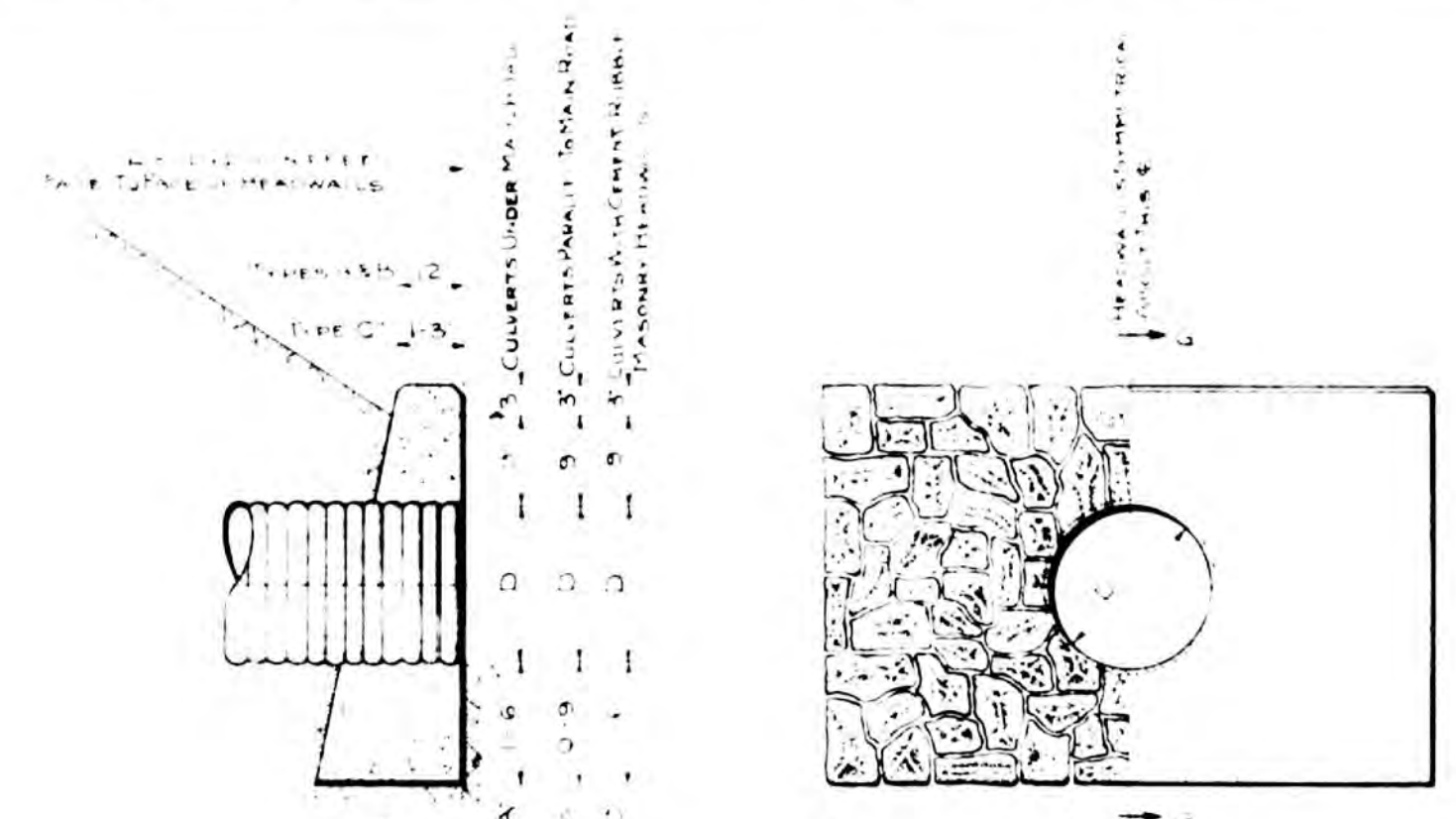
SECTIONAL ELEVATION C-C SECTIONAL ELEVATION B-B

TABLE OF DIMENSIONS & QUANTITIES FOR INTERCEPTING HEADWALLS

DIAMETER OF PIPE	WIDTH OF HEADWALL	HEIGHT OF HEADWALL	THICKNESS OF HEADWALL	CONCRETE IN ONE HEADWALL	QUANTITY
12	4.0	4.0	1.0	1.1	1.1
18	4.0	4.0	1.0	1.1	1.1
24	4.0	4.0	1.0	1.1	1.1
30	4.0	4.0	1.0	1.1	1.1
36	4.0	4.0	1.0	1.1	1.1
42	4.0	4.0	1.0	1.1	1.1
48	4.0	4.0	1.0	1.1	1.1

SECTIONAL PLAN A-A

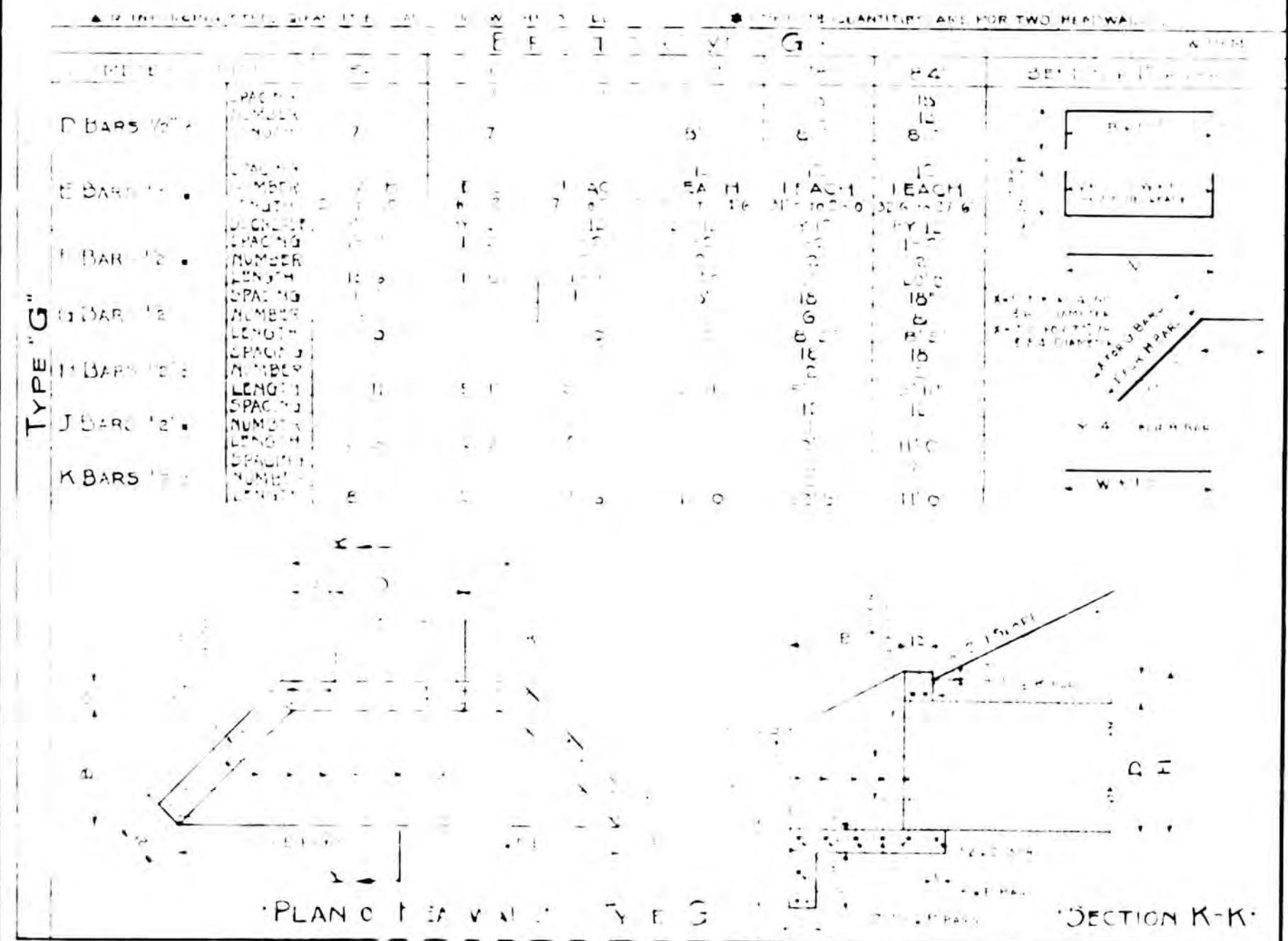
INTERCEPTING HEADWALLS.



SECTIONAL ELEVATION G-G HALF FRONT ELEVATION TYPE C HALF FRONT ELEVATION TYPES A & B

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

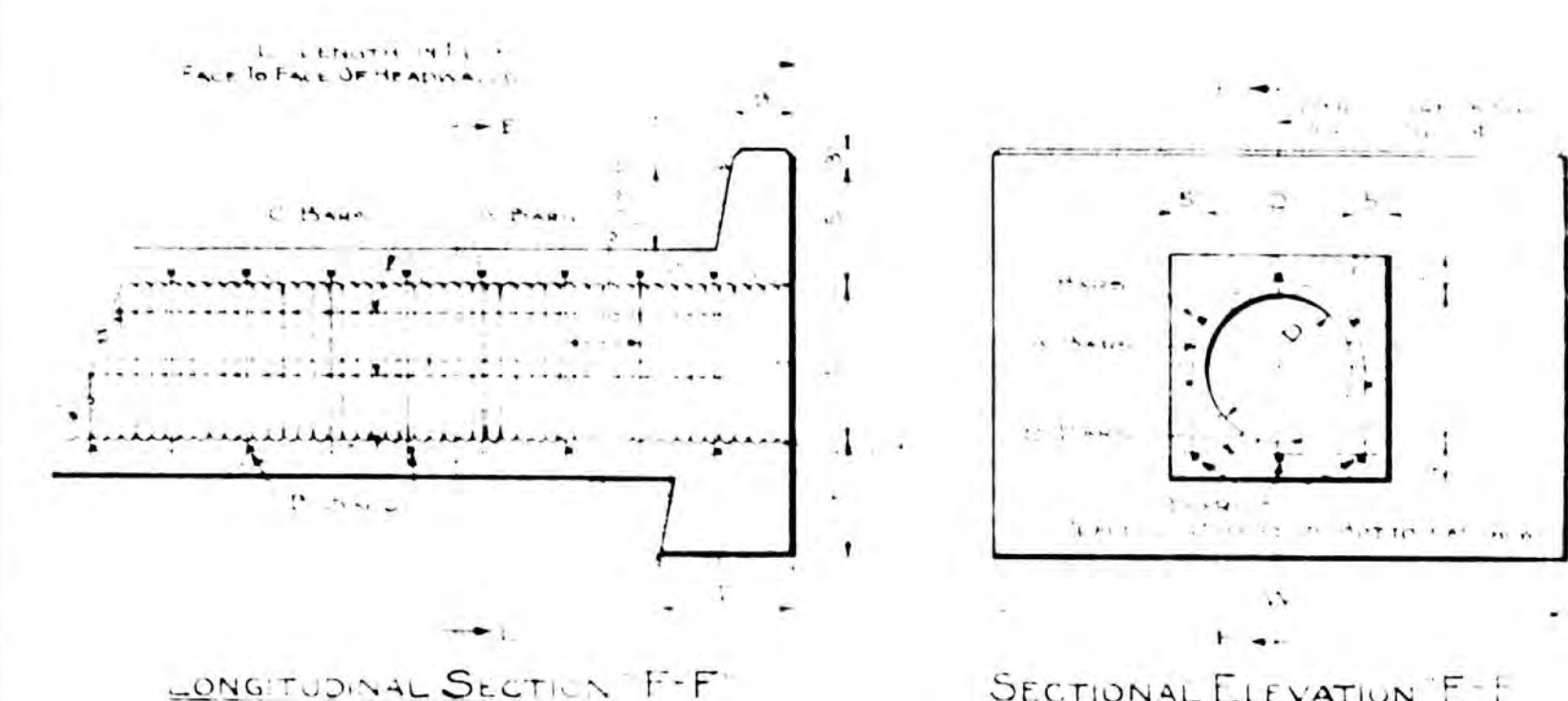
DIAMETER OF PIPE	WIDTH OF HEADWALL	HEIGHT OF HEADWALL	THICKNESS OF HEADWALL	CONCRETE IN ONE HEADWALL	QUANTITY
12	4.0	4.0	1.0	1.1	1.1
18	4.0	4.0	1.0	1.1	1.1
24	4.0	4.0	1.0	1.1	1.1
30	4.0	4.0	1.0	1.1	1.1
36	4.0	4.0	1.0	1.1	1.1
42	4.0	4.0	1.0	1.1	1.1
48	4.0	4.0	1.0	1.1	1.1



PLAN C HEADWALL TYPE G SECTION K-K

STANDARD HEADWALLS FOR CORRUGATED METAL PIPE CULVERTS.

STANDARD M-102-E



LONGITUDINAL SECTION F-F SECTIONAL ELEVATION E-E

TABLE OF DIMENSIONS & QUANTITIES FOR INCASED PIPE CULVERT

DIAMETER OF PIPE	WIDTH OF HEADWALL	HEIGHT OF HEADWALL	THICKNESS OF HEADWALL	CONCRETE IN ONE HEADWALL	QUANTITY
12	4.0	4.0	1.0	1.1	1.1
18	4.0	4.0	1.0	1.1	1.1
24	4.0	4.0	1.0	1.1	1.1
30	4.0	4.0	1.0	1.1	1.1
36	4.0	4.0	1.0	1.1	1.1
42	4.0	4.0	1.0	1.1	1.1
48	4.0	4.0	1.0	1.1	1.1

SPECIAL NOTES

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.

2. ALL STRUCTURES SHALL BE DESIGNED FOR A DESIGN LOAD OF 10,000 LB. PER LINEAL FOOT.

3. ALL STRUCTURES SHALL BE DESIGNED FOR A DESIGN WIND SPEED OF 70 MPH.

4. ALL STRUCTURES SHALL BE DESIGNED FOR A DESIGN FLOOD OF 100 YEARS.

5. ALL STRUCTURES SHALL BE DESIGNED FOR A DESIGN EARTHQUAKE OF 0.15g.

6. ALL STRUCTURES SHALL BE DESIGNED FOR A DESIGN COLLISION OF 10,000 LB. PER LINEAL FOOT.

7. ALL STRUCTURES SHALL BE DESIGNED FOR A DESIGN IMPACT OF 10,000 LB. PER LINEAL FOOT.

8. ALL STRUCTURES SHALL BE DESIGNED FOR A DESIGN TORSION OF 10,000 LB. PER LINEAL FOOT.

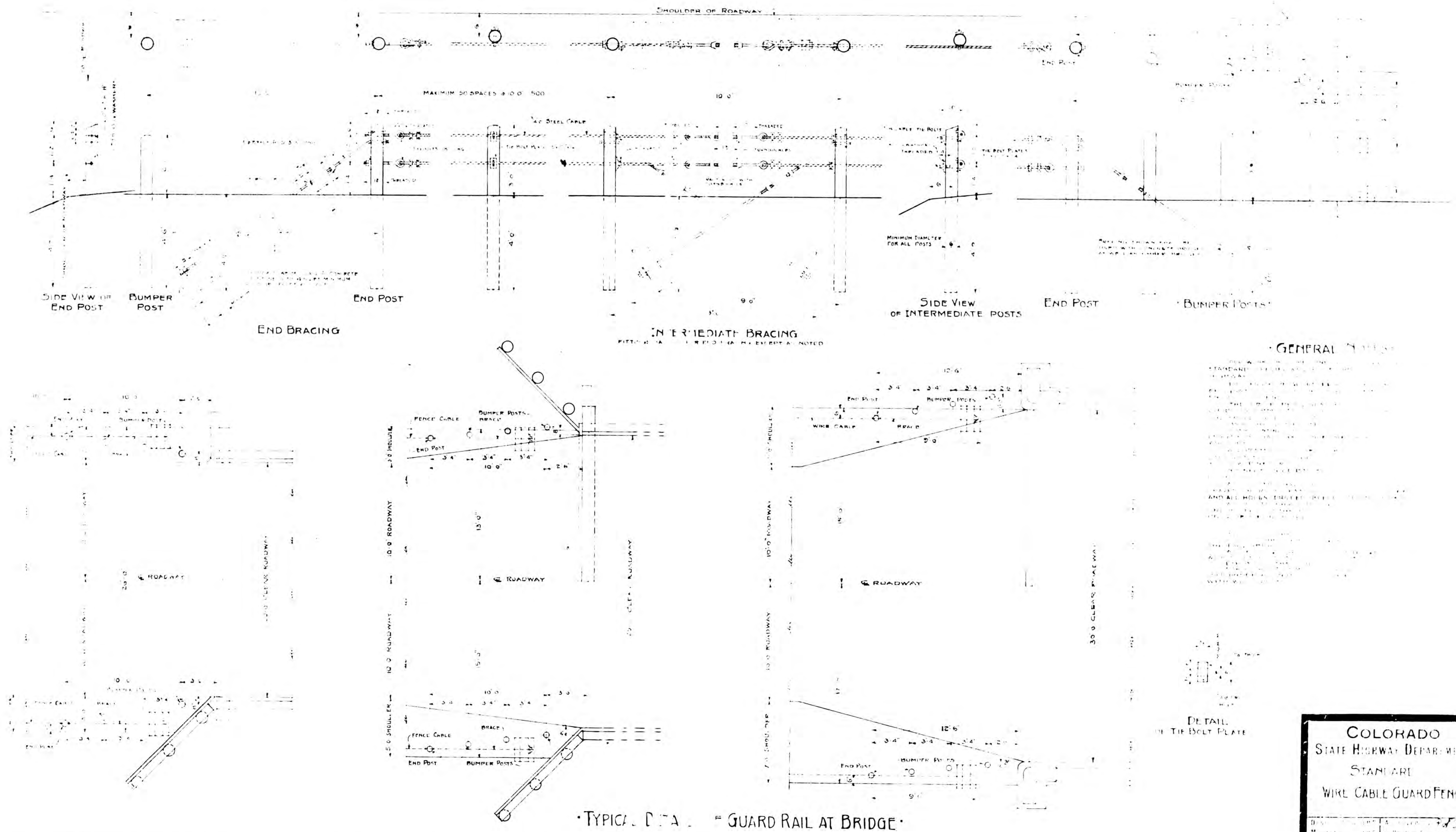
9. ALL STRUCTURES SHALL BE DESIGNED FOR A DESIGN BENDING OF 10,000 LB. PER LINEAL FOOT.

10. ALL STRUCTURES SHALL BE DESIGNED FOR A DESIGN SHEAR OF 10,000 LB. PER LINEAL FOOT.

COLORADO
STATE HIGHWAY DEPARTMENT
STANDARD HEADWALL
INTERCEPTING HEADWALL
CORRUGATED METAL PIPE CULVERT
WITH HEADWALL

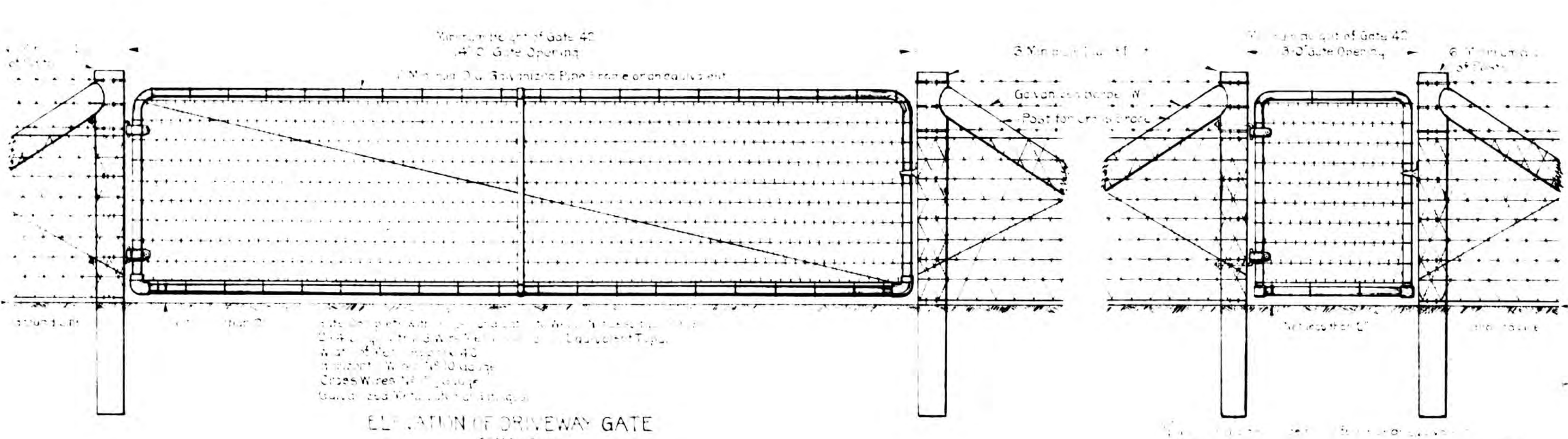
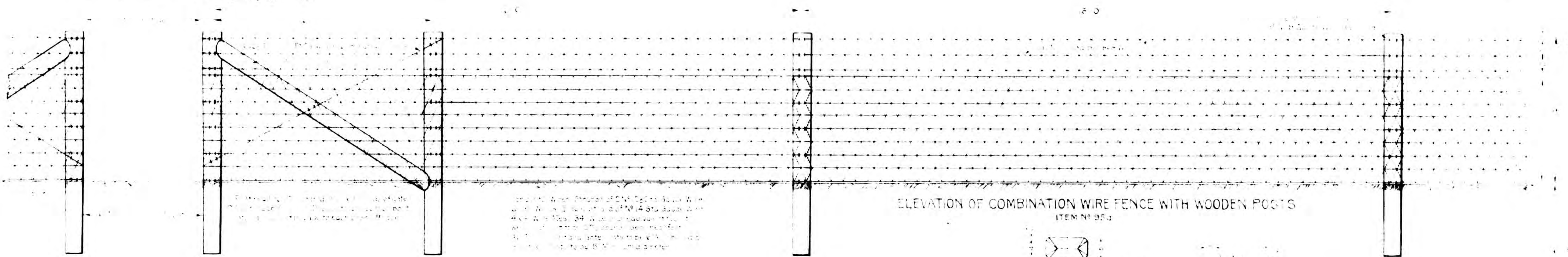
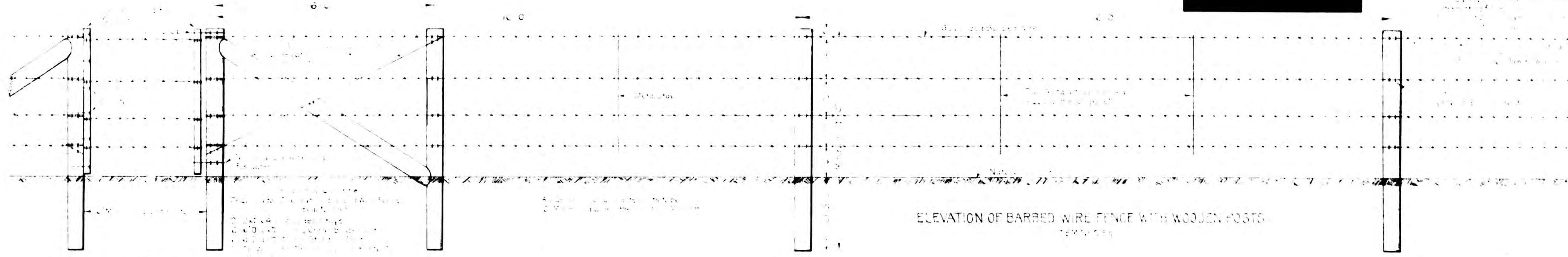
APPROVED BY: [Signature]
DATE: [Date]

STANDARD WIRE CABLE GUARD FENCE WITH TIMBER POSTS.
ITEM N° 72



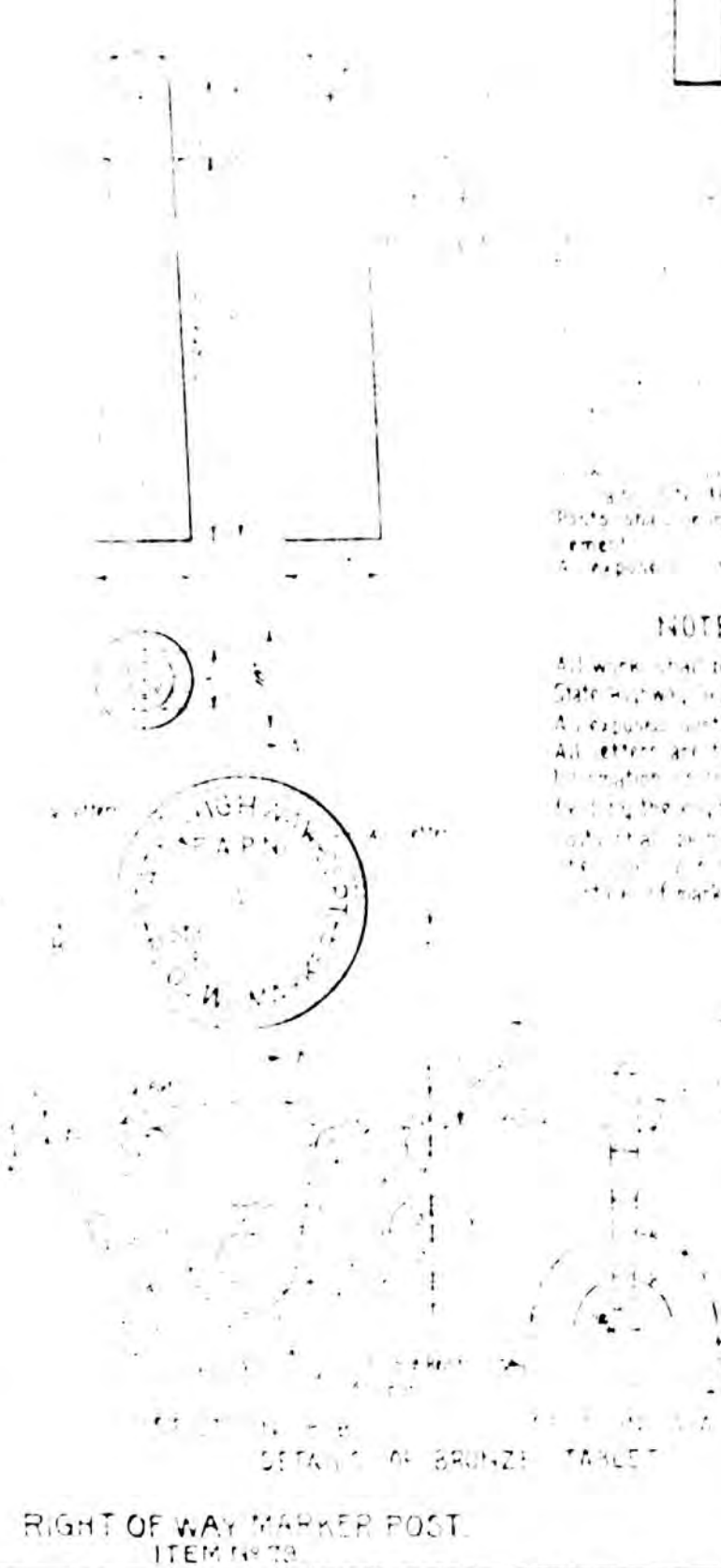
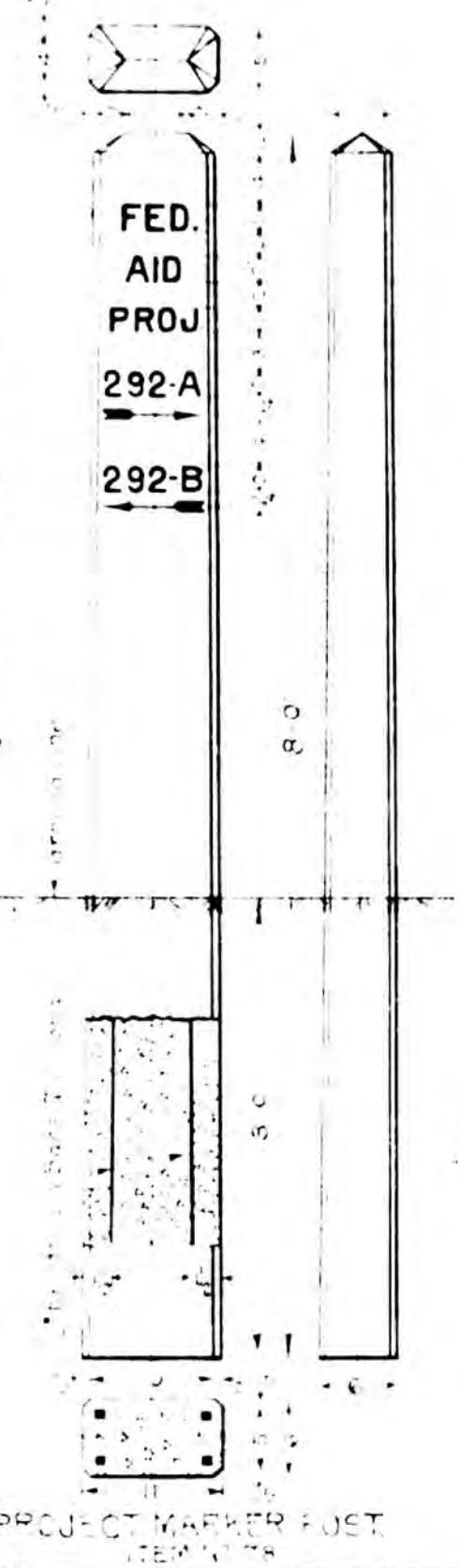
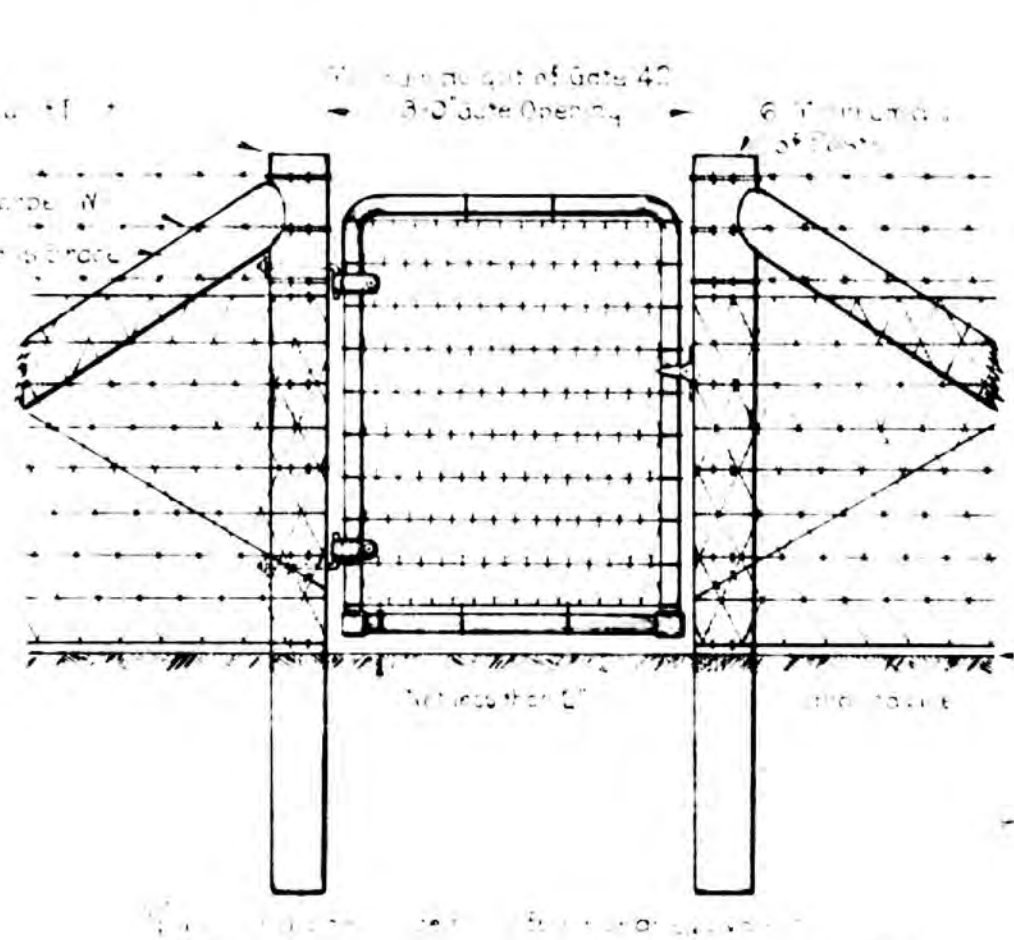
COLORADO
STATE HIGHWAY DEPARTMENT
STANDARD
WIRE CABLE GUARD FENCE

STANDARD M-24-F



GENERAL NOTES FOR WIRE FENCES

1. All wire fences shall be constructed in accordance with the following specifications:
a. The wire shall be galvanized steel, 12 gauge, and shall be twisted around the middle strand.
b. The posts shall be wooden, 4x4, and shall be spaced at 12 foot intervals.
c. The fence shall be constructed in a perspective view, with the top strand being the highest and the bottom strand being the lowest.



COLORADO
STATE HIGHWAY DEPARTMENT
STANDARD
WIRE FENCE
AND
MARKER POSTS

Designed by AGH Approved by T. G. L.
Made by AGH Bridge Engineer
Checked by GHD Date 1/1/54

M-1-A

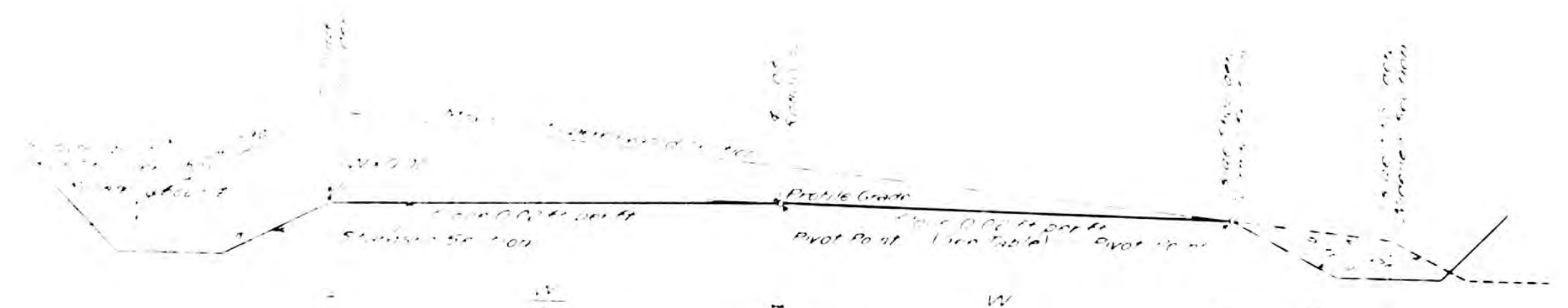


PAVEMENT SECTION

TABLE 1. FACTORS AND OFFSETS FOR WIDENING FOR PAVEMENT SECTION

NOTE: This table is used to determine the factors and offsets for widening a pavement section. The factors are based on the width of the existing pavement and the width of the new pavement. The offsets are based on the width of the existing pavement and the width of the new pavement.

Width of Existing Pavement (ft)	Width of New Pavement (ft)	Factor	Offset (ft)
12	14	0.0001	0.0001
14	16	0.0002	0.0002
16	18	0.0003	0.0003
18	20	0.0004	0.0004
20	22	0.0005	0.0005
22	24	0.0006	0.0006
24	26	0.0007	0.0007
26	28	0.0008	0.0008
28	30	0.0009	0.0009
30	32	0.0010	0.0010
32	34	0.0011	0.0011
34	36	0.0012	0.0012
36	38	0.0013	0.0013
38	40	0.0014	0.0014
40	42	0.0015	0.0015
42	44	0.0016	0.0016
44	46	0.0017	0.0017
46	48	0.0018	0.0018
48	50	0.0019	0.0019
50	52	0.0020	0.0020
52	54	0.0021	0.0021
54	56	0.0022	0.0022
56	58	0.0023	0.0023
58	60	0.0024	0.0024
60	62	0.0025	0.0025
62	64	0.0026	0.0026
64	66	0.0027	0.0027
66	68	0.0028	0.0028
68	70	0.0029	0.0029
70	72	0.0030	0.0030
72	74	0.0031	0.0031
74	76	0.0032	0.0032
76	78	0.0033	0.0033
78	80	0.0034	0.0034
80	82	0.0035	0.0035
82	84	0.0036	0.0036
84	86	0.0037	0.0037
86	88	0.0038	0.0038
88	90	0.0039	0.0039
90	92	0.0040	0.0040
92	94	0.0041	0.0041
94	96	0.0042	0.0042
96	98	0.0043	0.0043
98	100	0.0044	0.0044

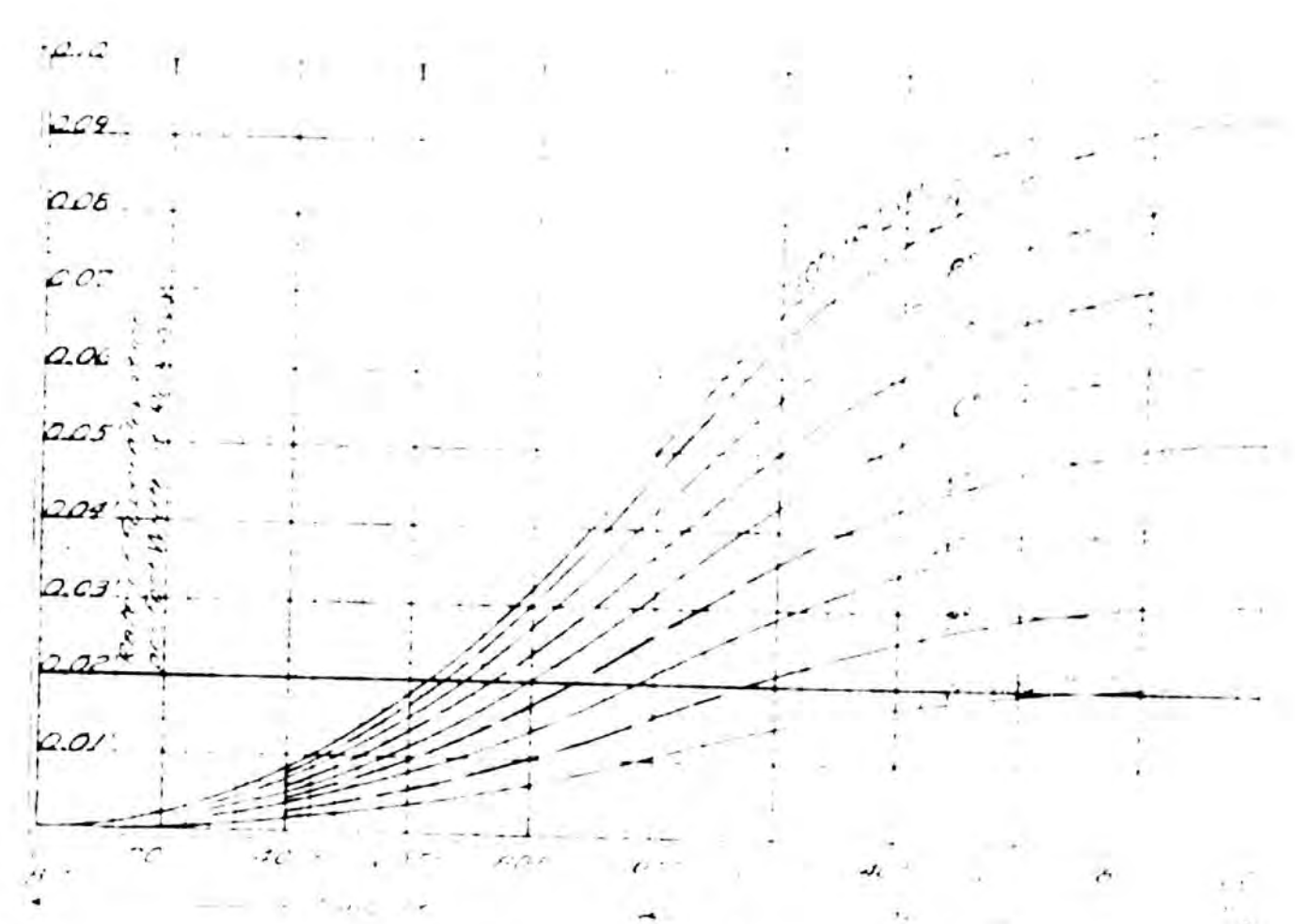
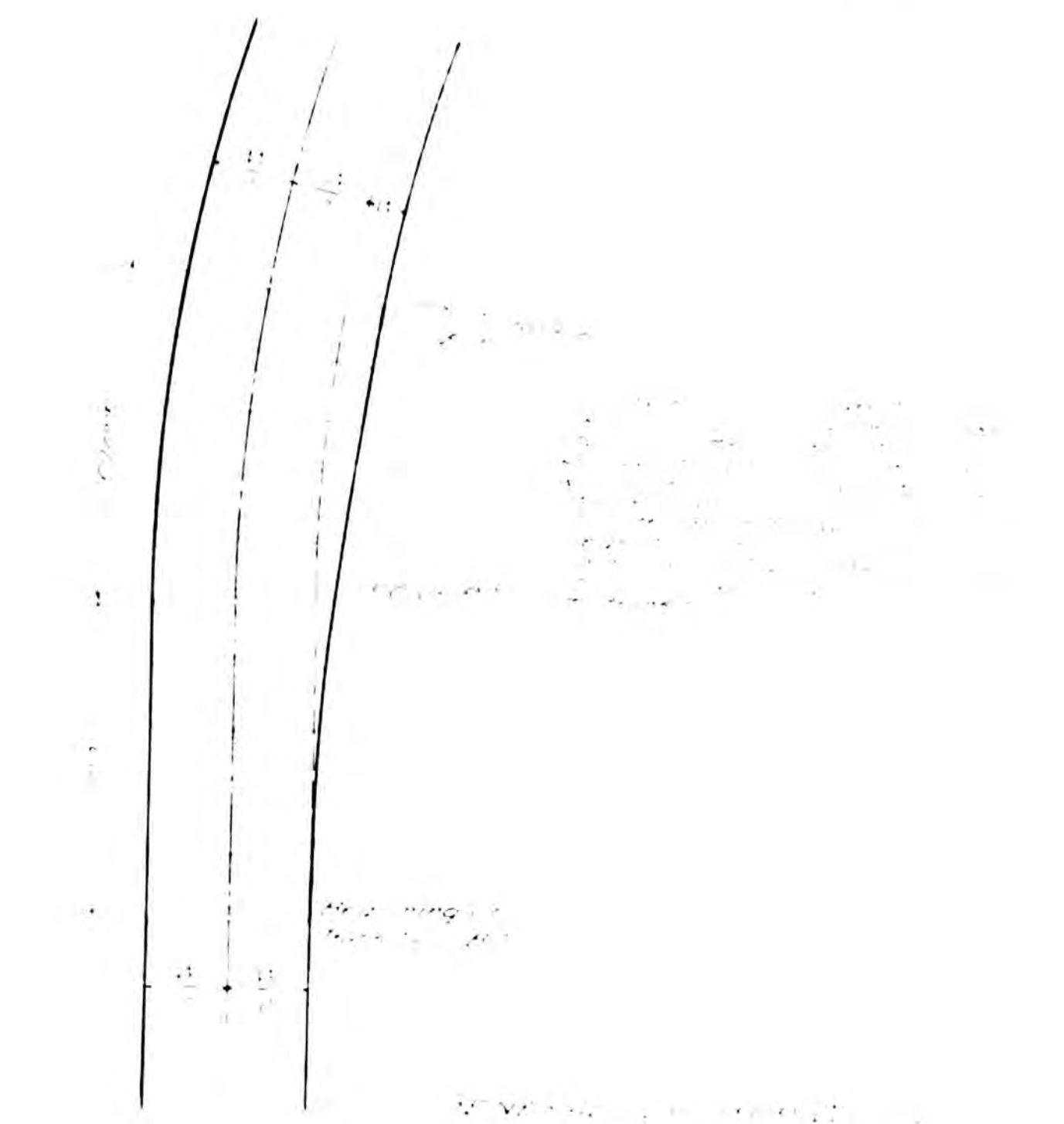


GRADED OR SURFACING SECTION

TABLE 2. FACTORS AND OFFSETS FOR WIDENING FOR GRADED OR SURFACING SECTION

NOTE: This table is used to determine the factors and offsets for widening a graded or surfacing section. The factors are based on the width of the existing pavement and the width of the new pavement. The offsets are based on the width of the existing pavement and the width of the new pavement.

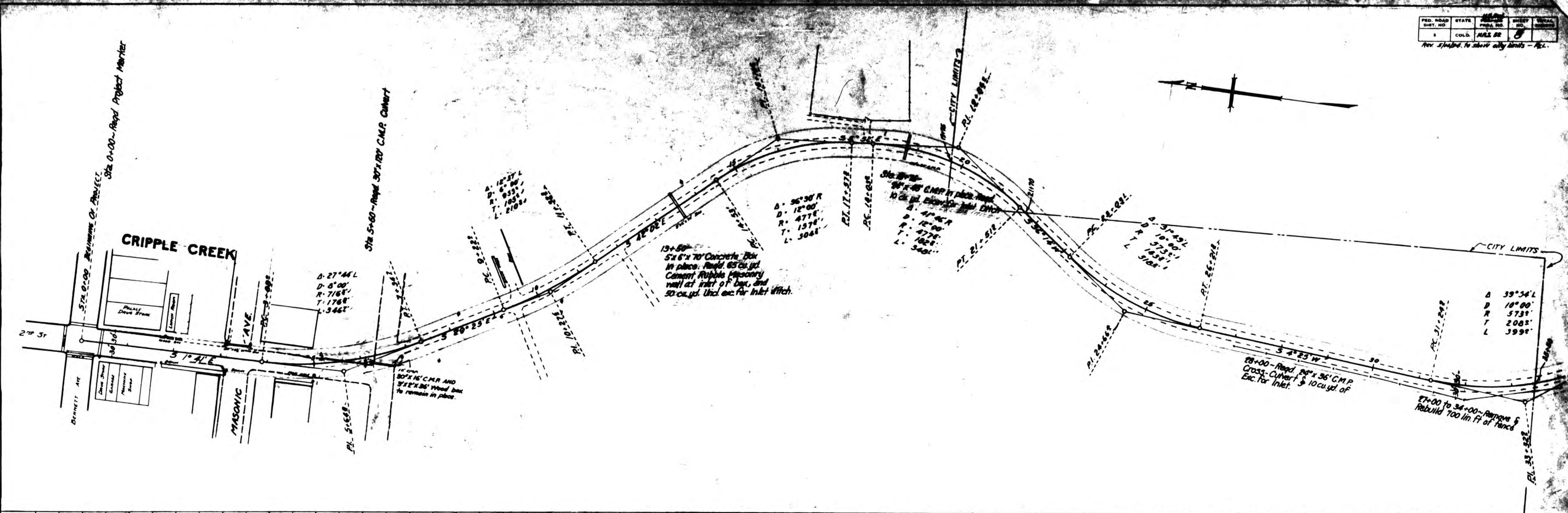
Width of Existing Pavement (ft)	Width of New Pavement (ft)	Factor	Offset (ft)
12	14	0.0001	0.0001
14	16	0.0002	0.0002
16	18	0.0003	0.0003
18	20	0.0004	0.0004
20	22	0.0005	0.0005
22	24	0.0006	0.0006
24	26	0.0007	0.0007
26	28	0.0008	0.0008
28	30	0.0009	0.0009
30	32	0.0010	0.0010
32	34	0.0011	0.0011
34	36	0.0012	0.0012
36	38	0.0013	0.0013
38	40	0.0014	0.0014
40	42	0.0015	0.0015
42	44	0.0016	0.0016
44	46	0.0017	0.0017
46	48	0.0018	0.0018
48	50	0.0019	0.0019
50	52	0.0020	0.0020
52	54	0.0021	0.0021
54	56	0.0022	0.0022
56	58	0.0023	0.0023
58	60	0.0024	0.0024
60	62	0.0025	0.0025
62	64	0.0026	0.0026
64	66	0.0027	0.0027
66	68	0.0028	0.0028
68	70	0.0029	0.0029
70	72	0.0030	0.0030
72	74	0.0031	0.0031
74	76	0.0032	0.0032
76	78	0.0033	0.0033
78	80	0.0034	0.0034
80	82	0.0035	0.0035
82	84	0.0036	0.0036
84	86	0.0037	0.0037
86	88	0.0038	0.0038
88	90	0.0039	0.0039
90	92	0.0040	0.0040
92	94	0.0041	0.0041
94	96	0.0042	0.0042
96	98	0.0043	0.0043
98	100	0.0044	0.0044

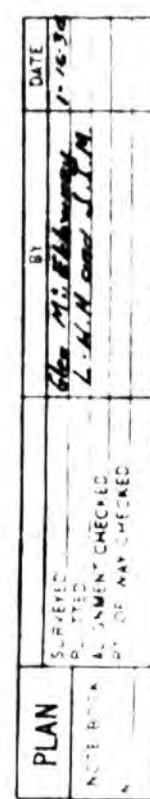


COLORADO
STATE HIGHWAY DEPARTMENT
DIVISION OF HIGHWAYS
FOR THE ELEVATION OF
WIDENING OF GRAVITY

FEB 1934
ENCL. DIV.
S. H. B.

PLAN	DATE	BY	CHECKED
PLAN	2-7-34	H. H. H.	H. H. H.
NOTE BOOK			
NO.			





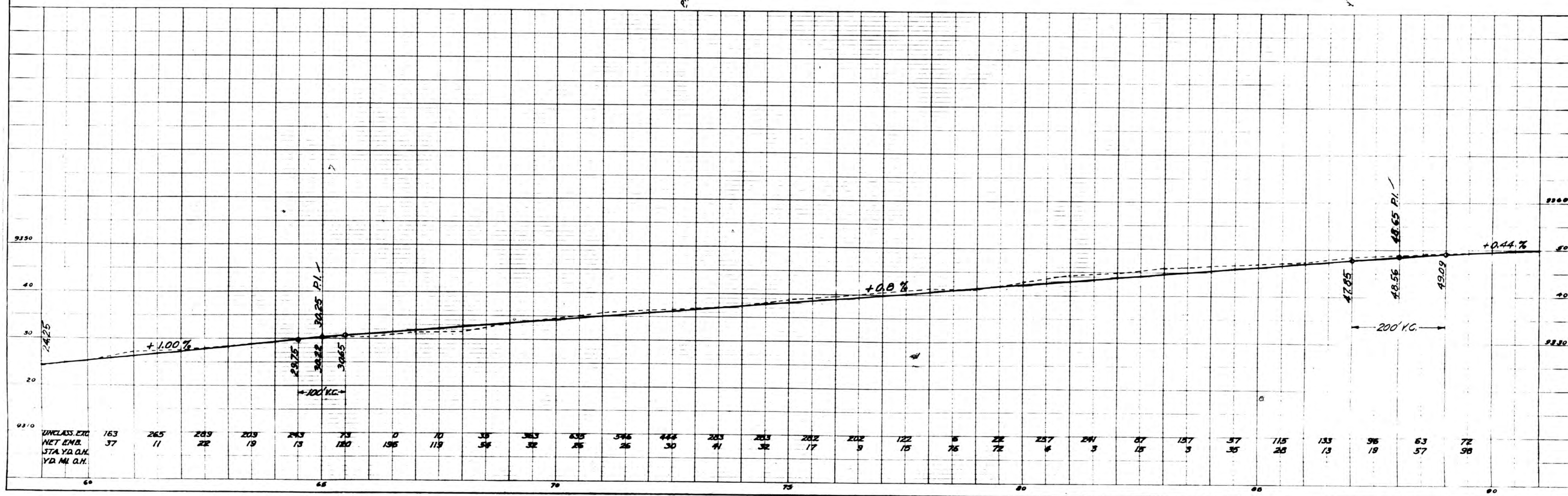
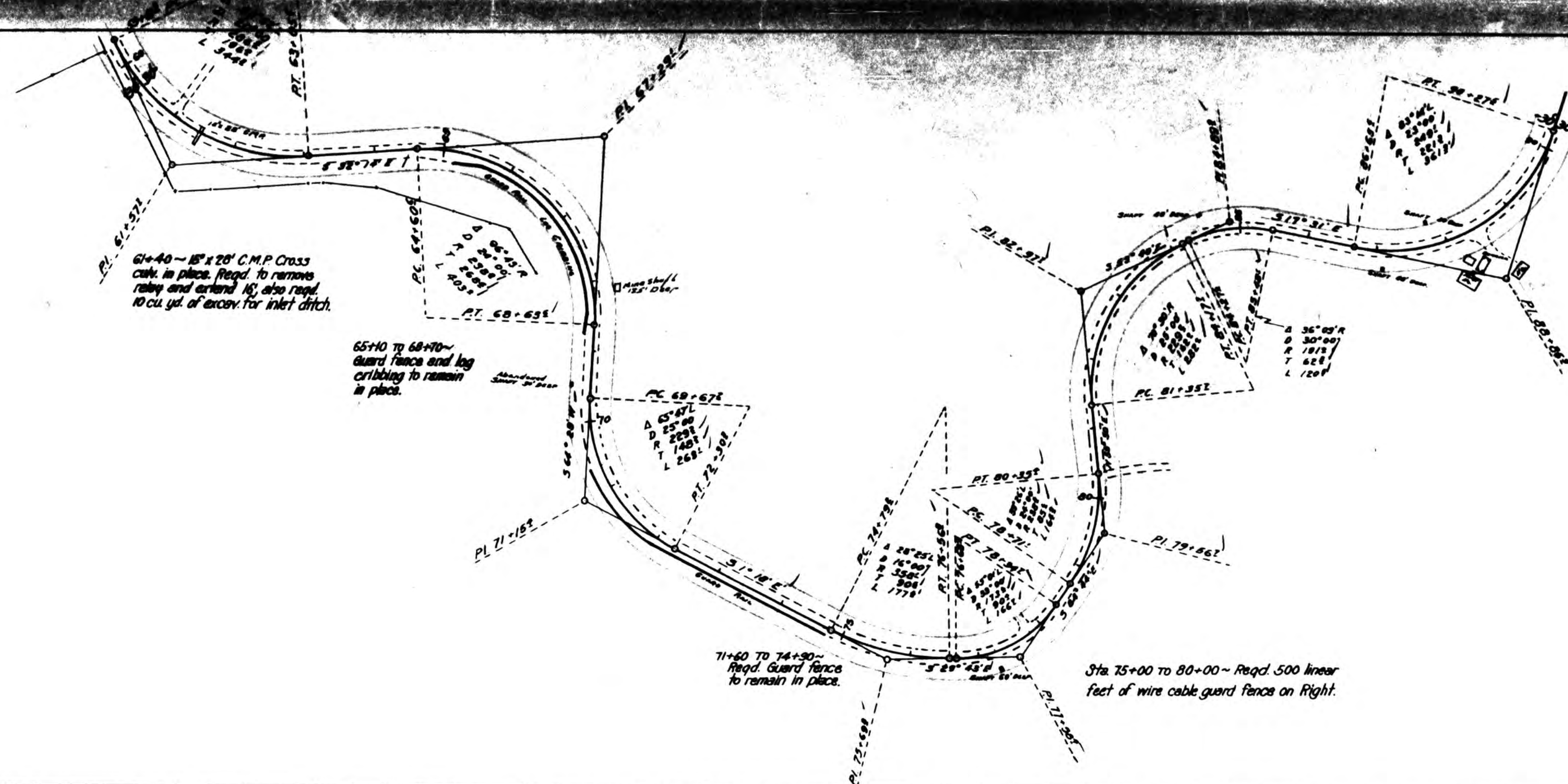
Profile view of a proposed road on a grid. The vertical axis shows elevation from 9280 to 9340. The horizontal axis shows stationing from 30+00 to 60+00. A solid line represents the proposed road profile, and a dashed line represents the existing ground. A vertical curve is indicated with a +1.00% grade. Data points for existing ground elevation, stationing, and other measurements are provided along the profile.

Station	Existing Ground Elevation	Proposed Road Elevation	Grade (%)	Other Data
30+00	9294.0	9294.0		UNCLASS. EX. 157 0
31+00	9295.1	9295.1		NET EMB. 152 11
32+00	9296.2	9296.2		STA. YD. Q.H. 120 32
33+00	9297.3	9297.3		YD. MI. Q.H. 133 22
34+00	9298.4	9298.4		137 1
35+00	9299.5	9299.5		365 0
36+00	9300.6	9300.6		169 1
37+00	9301.7	9301.7		18 26
38+00	9302.8	9302.8		32 35
39+00	9303.9	9303.9		126 3
40+00	9305.0	9305.0		240 0
41+00	9306.1	9306.1		253 0
42+00	9307.2	9307.2		119 19
43+00	9308.3	9308.3		143 21
44+00	9309.4	9309.4		180 0
45+00	9310.5	9310.5		78 1
46+00	9311.6	9311.6		43 13
47+00	9312.7	9312.7		2 106
48+00	9313.8	9313.8		0 133
49+00	9314.9	9314.9		0 109
50+00	9316.0	9316.0		102 3
51+00	9317.1	9317.1		472 0
52+00	9318.2	9318.2		367 0
53+00	9319.3	9319.3		374 0
54+00	9320.4	9320.4		215 0
55+00	9321.5	9321.5		43 53
56+00	9322.6	9322.6		7 170
57+00	9323.7	9323.7		37 94
58+00	9324.8	9324.8		106 15
59+00	9325.9	9325.9		144 37
60+00	9327.0	9327.0		



PLAN	1
DATE	1/1/34
BY	J. H. R.
CHECKED	
APPROVED	

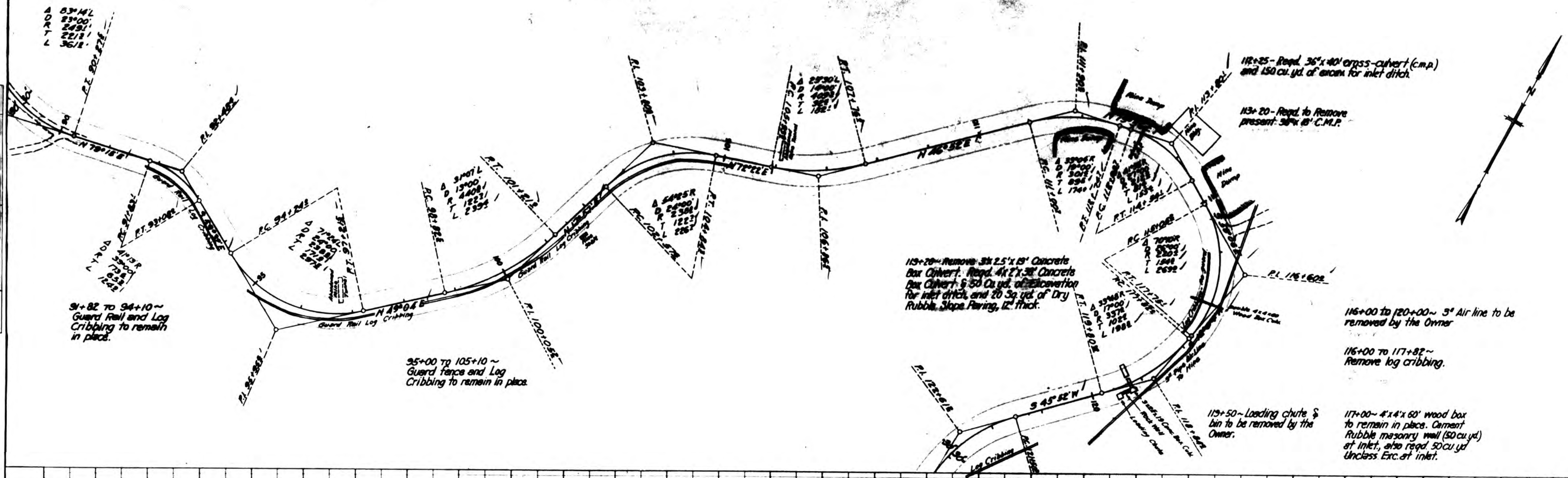
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3	COLO.	H.R. 3.32	10	



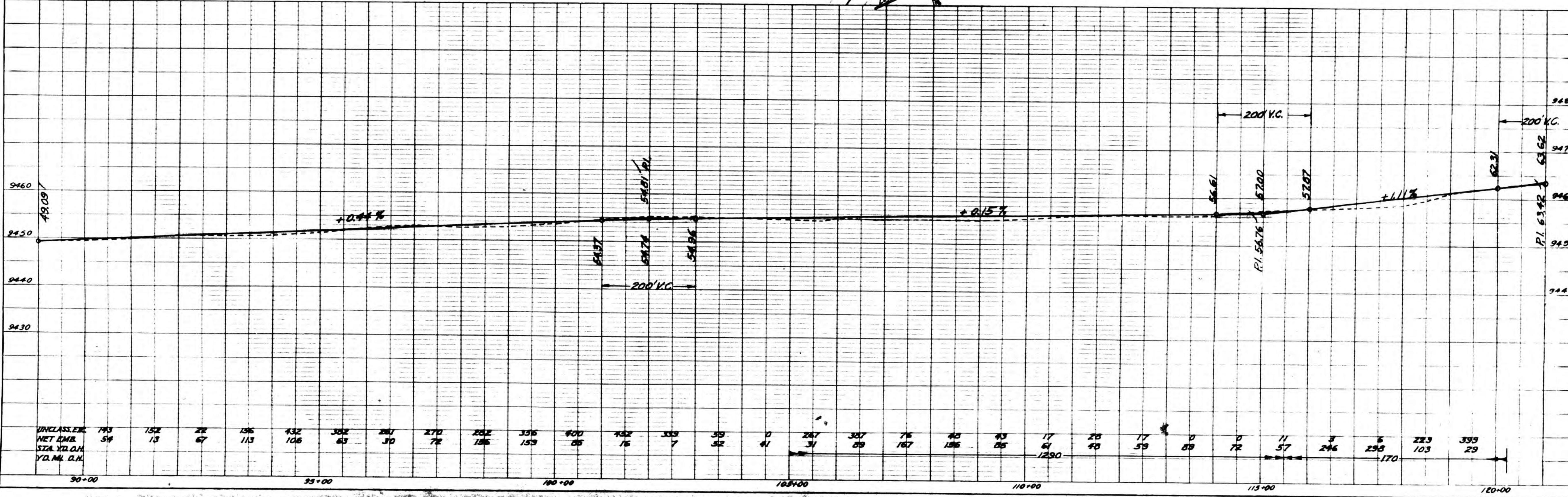


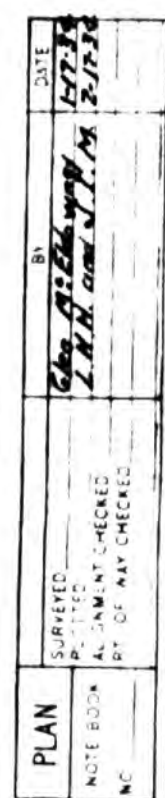
FED. ROAD DIST. NO.		STATE	U.S.R.V. PROJ. NO.	SHEET NO.	TOTAL SHEETS
2		COLO.	N.R.3.52	11	

PLAN	DATE	BY	CHECKED	BY
PLAN	2/1/34	W.H. L.	W.H. L.	W.H. L.
NOTES				
NOTES				

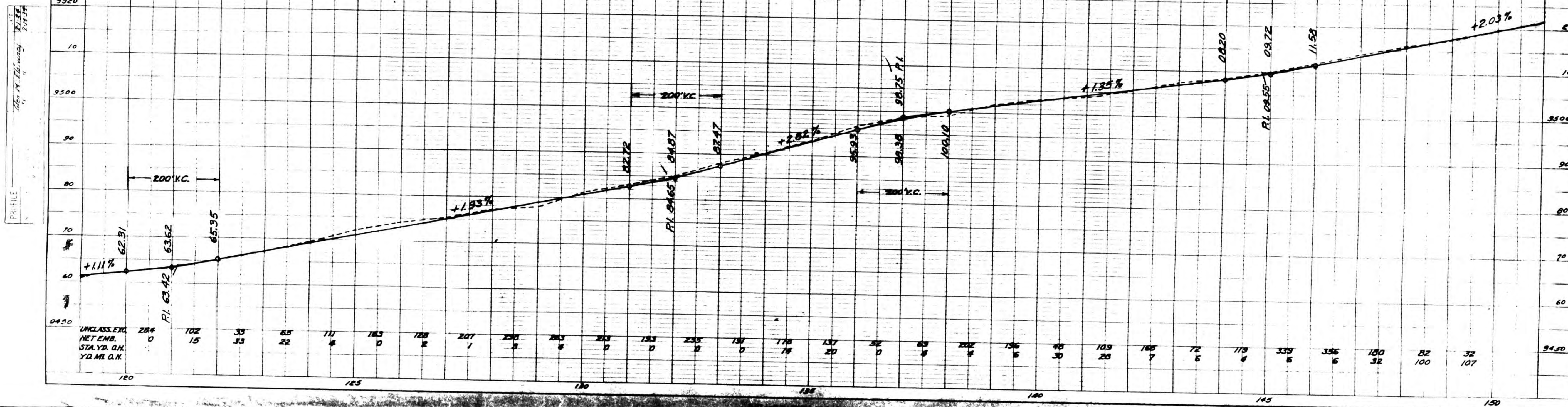
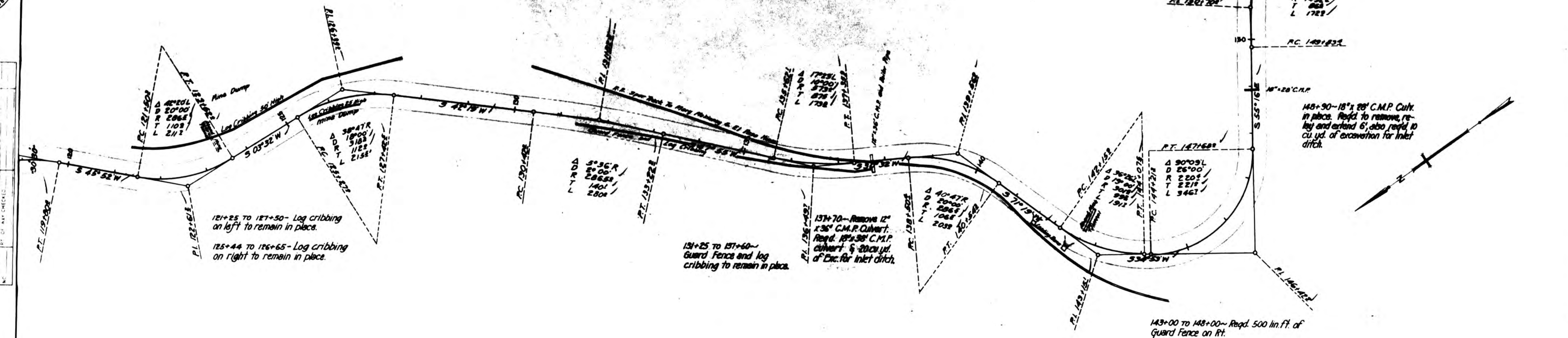


PROFILE	DATE	BY	CHECKED	BY
PROFILE	2/1/34	W.H. L.	W.H. L.	W.H. L.
NOTES				
NOTES				





FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
8	COLO.	HA9 52	12	

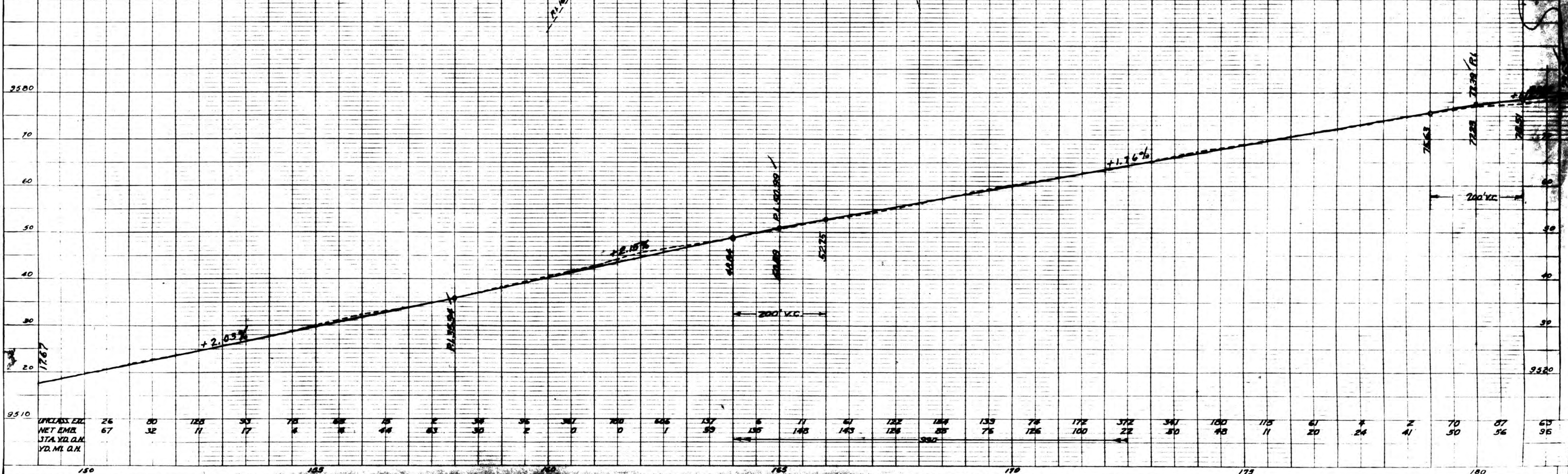
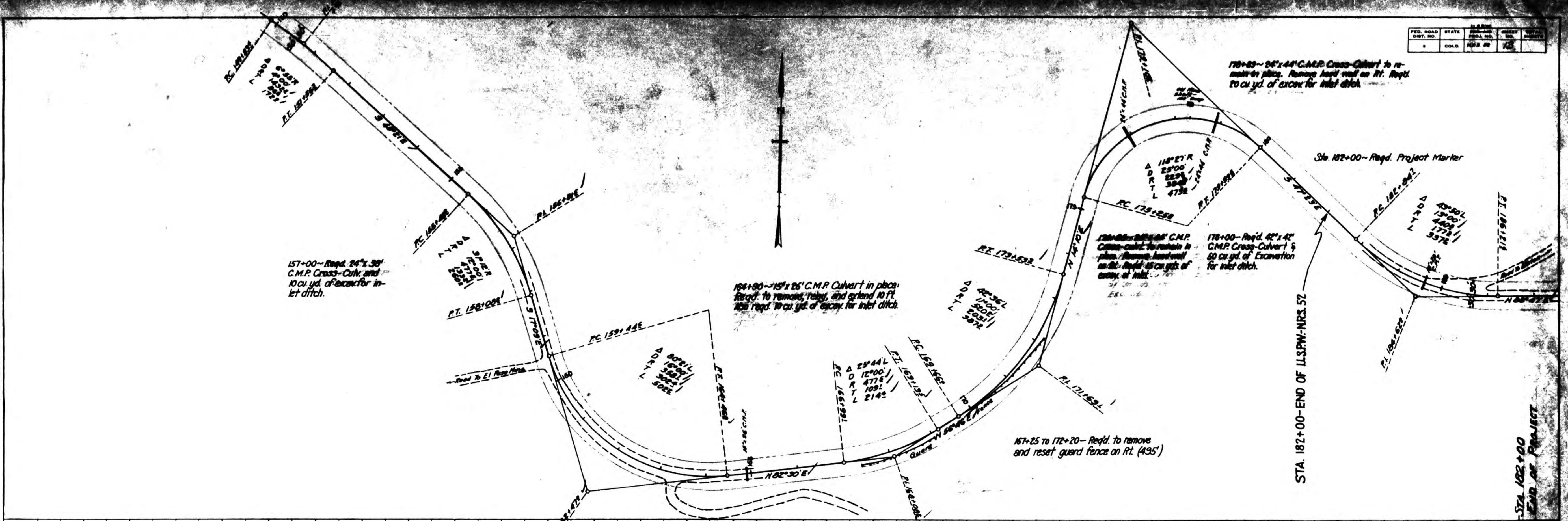


FEB 1934
 ENG. DIV.
 S. M. R.

DATE: FEB 1934
 BY: H. H. HAWKINS
 CHECKED: H. H. HAWKINS
 PLAN
 NOTE BOOK
 NO.

PROFILE
 H. H. HAWKINS
 1934

FED. ROAD DIST. NO.	STATE	SECTION	PROJECT NO.	DATE
2	COLA.	100	100	1934



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