

FED. ROAD DIST. NO.	STATE	U.S.P.W.G.H. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	278-J	1	

COLORADO STATE HIGHWAY DEPARTMENT

PLAN AND PROFILE OF PROPOSED U.S.WORKS PROGRAM GRADE CROSSING PROJ. NO. W.P.G.H. 278-J STATE HIGHWAY NO. 8 CHEYENNE COUNTY

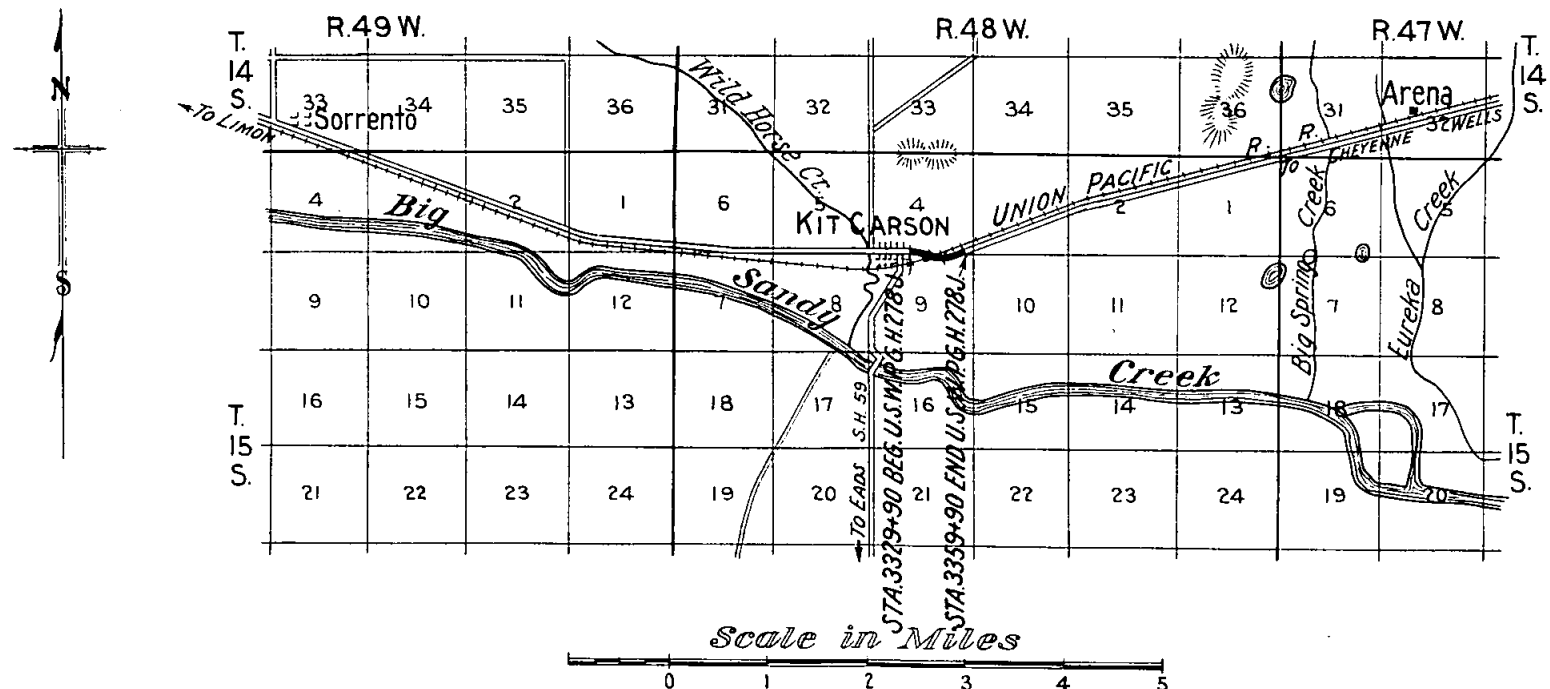
INDEX OF SHEETS

SHEET NO. 1-	TITLE SHEET
" 2-	TYPICAL SECTION & SUMMARY
" 3 TO 6-	DETAILS FOR R.R. OVERPASS
" No. 7-	ST'D CONC. BOX CULV'T M-104 D
" 8-	" " PAVING DRAIN M-11 B
" 9-	" CABLE & PLATE Gd FENCE M-20 G
" 10-	" FENCE & MARKERS M-27 A
" 11-	" STR'CT. NO LETTERING M-10 A
" 12-	" SUPERELEVATION SHEET M-1-A
" 13-	" APPRCH RDS & TRAFFIC SIGNS, M-2 B
" 14-	PLAN & PROFILE SHEET
" 15-22-	CROSS SECTIONS

CONVENTIONAL SIGNS

CENTER LINE OF SURVEY	—————+—————
RIGHT OF WAY LINES	-----+-----
TOWNSHIP LINES	-----+-----
SECTION LINES	-----+-----
ONE QUARTER SECTION LINES	-----+-----
RAILROADS	—————+—————
BARBED WIRE FENCE	-----+-----
WIRE CABLE GUARD FENCE	-----+-----
POLE LINES	-----+-----

SCALES OF ORIGINAL TRACINGS
ON PLAN, 1 IN. = 100 FT.
ON PROFILE 1 1/2 IN. = 100 FT. HORIZONTAL
1 1/2 IN. = 10 FT. VERTICAL
GRADE LINE ON PROFILE IS SHOWN AS GRADE OF FINISHED ROAD
GROSS LENGTH OF PROJECT } 3,000.00 FT. = 0.568 MI.
NET LENGTH OF PROJECT }



*Note: It is recommended that bidders on this Project go over the plan details with one of the following field representatives of this Department.
Ernest Montgomery, Division Engineer, located at Colo. Springs.*

RECOMMENDED FOR APPROVAL 12/3/35

J. H. Maloney
ASSISTANT ENGINEER

APPROVED
Chas. D. Vail
STATE HIGHWAY ENGINEER

RECOMMENDED FOR APPROVAL

----- DIST. ENG. BUREAU PUBLIC ROADS
RECOMMENDED FOR APPROVAL

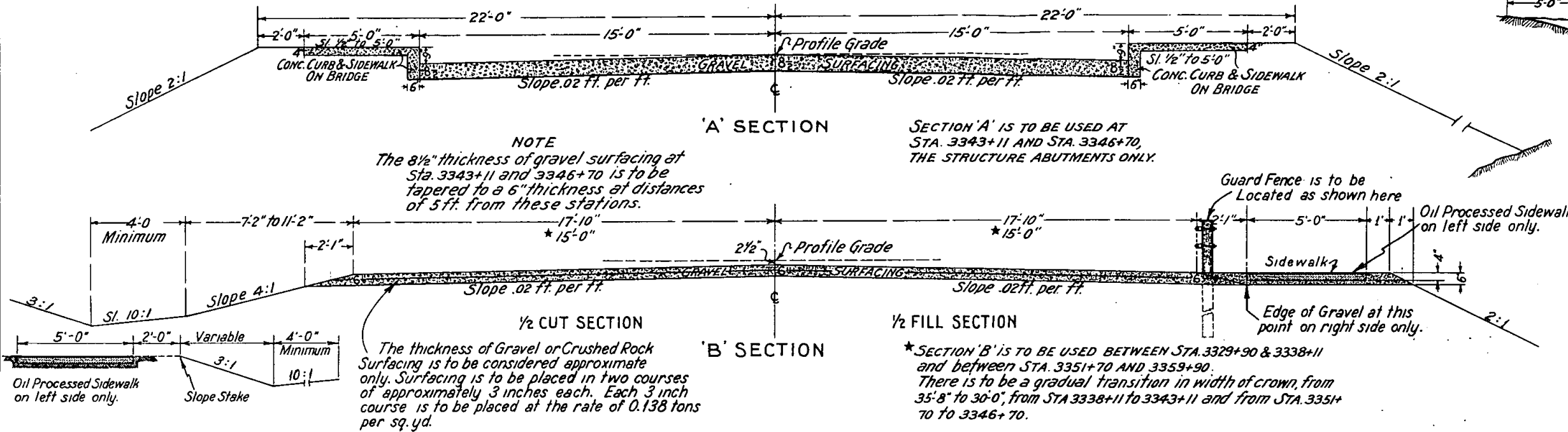
----- CHIEF ENG. BUREAU PUBLIC ROADS
APPROVED

----- DIRECTOR BUREAU PUBLIC ROADS

Revised 1/17/36 - JWS
" 2/18/36 - RLE

TYPICAL CROSS SECTION OF IMPROVEMENT AND SUMMARY OF QUANTITIES

TYPICAL SECTIONS



NOTE
The 8 1/2" thickness of gravel surfacing at Sta. 3343+11 and 3346+70 is to be tapered to a 6" thickness at distances of 5 ft. from these stations.

The thickness of Gravel or Crushed Rock Surfacing is to be considered approximate only. Surfacing is to be placed in two courses of approximately 3 inches each. Each 3 inch course is to be placed at the rate of 0.138 tons per sq. yd.

SECTION 'A' IS TO BE USED AT STA. 3343+11 AND STA. 3346+70, THE STRUCTURE ABUTMENTS ONLY.

SECTION 'B' IS TO BE USED BETWEEN STA. 3329+90 & 3338+11 and between STA. 3351+70 AND 3359+90. There is to be a gradual transition in width of crown, from 35'-8" to 30'-0", from STA 3338+11 to 3343+11 and from STA. 3351+70 to 3346+70.

The intersection of cut slopes with the existing ground shall be rounded in earth cuts, beginning 5 ft. outside the slope stake and extending 5 ft. down the cut slope. Where the cut slope is less than 5 ft., reduce each of the above widths of slope treatment to the actual slope distance. Quantities involved in slope treatment shall not be included in Unclassified Excavation.

GENERAL NOTES

This Project is to be constructed in conformity with the Standard Specifications of the Colorado State Highway Department, adopted August 1, 1935.

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

All Roadway excavations required to construct this Project are to be obtained as indicated on the plans.

Quantities involved beyond the limits of the ditch, as shown on the Typical Sections, either noted on Profile as "Borrow", or on List of Structures as "Embankment", are to be classified and paid for as "Unclassified Excavation". These quantities are to be staked 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 requirements actually met in construction.

The entire Project is to be cleared for the full 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.

All poles encroaching on Construction are to be moved by the owners.

Overhaul on Excavation will not be paid on this Project. The cost of Overhaul bid is to be included in the price bid per cubic yard for Unclassified Excavation.

SUMMARY OF APPROXIMATE QUANTITIES

No.	ITEM	UNIT	APPROX	RR. OPASS STA. 3343+	TOTALS
10a	Clearing & Grubbing entire Proj.	Lump Sum	•		•
12a	Removing Fence	Lin. Ft.	1100		1100
13c	Unclassified Excavation	Cu. Yd.	123000		123000
13x	Cut slope treatment	Mi.	0.3		0.3
14a	Dry Rock Excavation (Struct)	Cu. Yd.		180	180
14b	" Common "	" "	200	375	575
14c	Wet Rock Excavation	" "		10	10
14d	" Common "	" "	50	10	60
26a	Gravel or Crushed Rock Surt.	Ton	3600		3600
30f	Asphaltic Road Mat'l, M-C-2	Gal.	1000		1000
42a	Untreated Bridge Timber	M ft B.M.		0.4	0.4
46a	Class 'A' Concrete	Cu. Yd.	106	759	865
47	Reinforcing steel	Lbs.	9800	114,900	124,700
48	Structural steel	"		419,400	419,400
53b	18" Corr. Met. Culv. Pipe	Lin. Ft.	40		40
53c	24" Corr. Met. Culv. pipe	Lin. Ft.	78		78
53x	10" " " "	" "	264		264
74	Wire Cable Guard Fence	" "	4008		4008
76c	Barbed wire fence (Met. posts)	Lin. Ft.	4900		4900
76q	" " gates	Each	1		1
80b	Bronze Name plate	"		1	1
80c	Sheet copper	Lbs		317	317
81a	Project Markers	Each	2		2
81b	Right of Way Markers	"	17		17
85	Trash guard for paving drain	"	4		4
87	Oil-processed sidewalk	Sq. Yd.	1500		1500
89a	Drain pipe (Conc. Floor)	Each		10	10
	Removing R.R. Signs and Structures (Work by R.R. Co. Force)	Lump Sum	•		•
92	Obliterating old road (Force Acct)	Lump Sum	•		•
	Removing Telephone poles on R.O.W. (Force Acct)	" "	•		•

LIST OF STRUCTURES

STATIONS	DESCRIPTION	REMOVE STRUCT.		EXCAVATION Cu. Yds.		STRUCT. EXCAV. * Cu. Yds.		CLASS 'A' CONCRETE Cu. Yds.	REINF. STEEL L'bs	CORR. METAL CULV. PIPE - LIN. FT.				WIRE CAB. G'D FENCE LIN. FT.	MISCELL.
		Each	Uncl.	Embank.			10"			18"	24"	30"			
3329+90	Project Marker														1- Proj. M'kr.
3338+00	8x4x76 C.B.C., Type 8-I							160	99.8	9415					1596'
3335+10.5-3343+08.5	W. Cable G'd fence, R.&L.														
3343+11-3346+70	R.R. Overpass														
3356+00	Road App'ch			210											
3357+00	C.M.P. Cross Culv.							40				78			
3346+72.5-3359+08.5	W. Cable G'd fence, L.														1234'
3359+90	Project Marker														1- Proj. M'kr.
3346+72.5-3355+70	W. Cable G'd fence, R.														898'
3356+32.5-3359+125	" " " " R.														280'
(See Street 3-3334+60-3357+60)	4 Pavl Drains (Type II) Ends of Br. C.M.P. Side Drain on Lt.							5.4	368	6/10/12	20	20			4- trash Guards
TOTALS				210				*200	105.2	9783	264	40	78		4008'

* Structural Excav. is estimated to be 100% Common, which is estimated to be 75% Dry and 25% Wet.

SOURCE OF EMBANKMENT MATERIAL

Embankment Material noted on Profile as "Borrow", is estimated to be available as indicated in the following tabulation. Borrow Material shall be classified and paid for as "Unclassified Excavation."

SOURCE	TO BE PLACED	QUANTITY
Pit right of Stas. 3325-3328	3329+90-3336+75	2500 CU.YD.
Pit left of Sta. 3343	3336+75-3343+60	41,000 "
Pit right of Stas. 3346-3360	3346+05-3359+90	77,000 "
TOTALS		120,500

FENCING REQUIREMENTS

STATIONS	SIDE	REMOVE FENCE	BUILD B.W. FENCE	GATES
3329+90-3341+45	L.	160		
3329+90-3342+82	L.		1400	
3329+90-3342+82	R.		1360	
3346+68	X.	210		
3347+00-3353+12	L.		585	
3347+00-3355+93	R.		975	
3347+20-3354+00	X.	710		
3354+00-3355+50	L.		150	
3356+00	R.			1
3356+07-3359+90	R.		385	
TOTALS		1080	4855	1

R.O.W. MARKERS

STATIONS	SIDE	No.
3329+90	R & L	2
3338+57	R & L	4
3339+13	R	1
3342+67	L	1
3348+10	R	1
3353+12	R & L	2
3354+00	R & L	2
3356+29	L	1
3358+94	R	1
3359+90	R & L	2
TOTALS		17

