FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	253A	1	

COLORADO
STATE HIGHWAY DEPARTMENT

PLAN AND PROFILE OF PROPOSED
FEDERAL AID PROJECT NO. 253A
STATE HIGHWAY NO. 2
ROUTT COUNTY

INDEX OF SHEETS

LEGEND

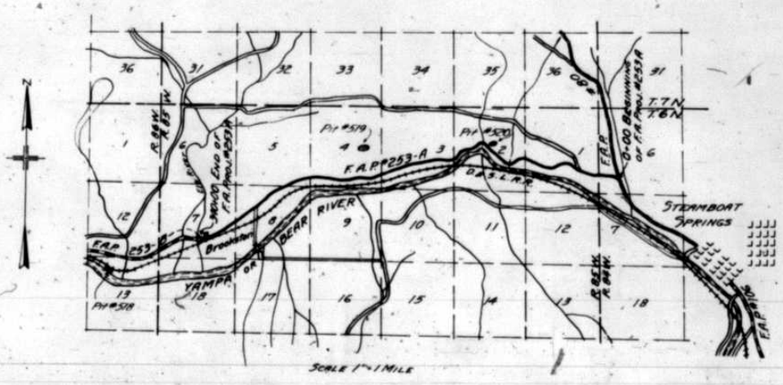
Survey Line
Right of Way Line
Railroad
Fence Line
Pole Line
Road (County or Private)
Section Line
Quarter Section Line

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 } 34362.5 FT. = 6.508 MILES.
NET LENGTH OF PROJECT }



RECOMMENDED FOR APPROVAL
ASSISTANT ENGINEER
APPROVED
STATE HIGHWAY ENGINEER
RECOMMENDED FOR APPROVAL
DISTRICT ENGINEER, BUREAU PUBLIC ROADS
RECOMMENDED FOR APPROVAL
CHIEF ENGR., BUREAU PUBLIC ROADS
APPROVED
DIVISION ENGINEER

TYPICAL CROSS SECTION OF IMPROVEMENT AND SUMMARY OF QUANTITIES

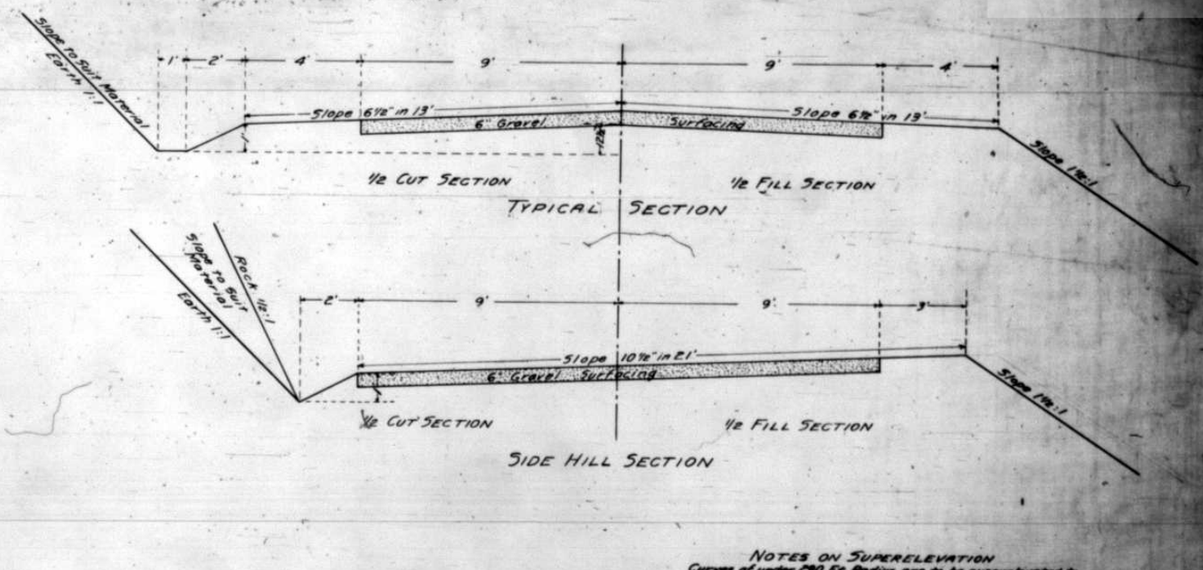
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHT. NO.
3	COLO.	223 A	1

Rev. 12-5-23.

LIST OF STRUCTURES

STATION	STRUCTURE	CORRUGATED METAL CULVERT PIPE LIN. FT. 15"	18"	24"	30"	CORRUGATED METAL SIPHON PIPE LIN. FT. 18"	CONCRETE CU. YDS. CL. 'A'	CL. 'B'	REINFO. STEEL LBS.	REMOVING CORR. MET. CULVERTS PIECES	CLEARING AND GRUBBING ACRES	RIPRAP SQ. YDS.	EXTRA EXCAVTN. CU. YDS.	EXTRA EMBANK. (BORROW) CU. YDS.	WIRE CABLE GUARD FENCE LIN. FT.
3+83	Remove Culvert									1					
4+70	do									1					
4+00	Dbl. 3'-6"x6' Conc. Box Culv.						475		5430				50		
7+60	18"x32' Conc. Siphon, H=1.0					32	90		618						
16+90	18"x36' Conc. Siphon, H=1.0					36	96		666						
16+60	15"x20' Side Drain	20						0.9							
22+10	15"x20' Side Drain	20						0.9							
27+75	15"x20' Side Drain	20						0.9							
30+25	4'-6"x6'-0" Conc. Box Culv.						36.5		3490				15		
30+80	Extend 15" C.M.P. (add Hdwls.)	4						1.8							
32+20	Headwalls for 15" C.M.P.							1.8							
36+06	Headwalls for 18" C.M.P.							1.8							
47+50	24"x32' Corr. Met. Pipe Culv.			32				3.4							
57+00	Headwalls for 18" C.M.P.							2.3							
58+50-65+10	Guard Fence on Left														700
65+00-66+00	Riprap														
69+28	Dbl. 3'-6"x6' Conc. Box Culv.						47.5		5430				40		
74+50	18"x34' Corr. Met. Pipe Culv.		38					2.3							
77+50-94+00	Guard Fence on Left														1350
83+50	18"x34' Corr. Met. Pipe Culv.		54					1.15							
94+00-104+00	Clearing and Grubbing										1.38				
98+35-98+65	Guard Fence - Both Sides														60
98+90	24"x34' Corr. Met. Pipe Culv.			72				3.4							
105+87-114+68	Guard Fence on Left														110
110+68	4'-4"x5'-6" Conc. Box Culv.						102.0		7210						
110+00-116+50	Guard Fence - Both Sides														500
129+15	4'-4"x8'-0" Conc. Box Culv.						85.0		5740						
128+40-139+80	Guard Fence - Both Sides														940
130+80-131+21	Guard Fence - Both Sides														80
141+00-152+50	Clearing and Grubbing										2.64				
138+75	18"x34' Corr. Met. Pipe Culv.		44					2.3							
156+35	30"x30' Corr. Met. Pipe Culv.				30			4.6							
160+00	2-15"x20' Side Drains	40						1.8							
160+00	Road Approach													60	
165+00	24"x28' Corr. Met. Pipe Culv.			28				3.4							
168+62	24"x30' Corr. Met. Pipe Culv.			30				3.4							
173+00	24"x30' Corr. Met. Pipe Culv.			30				3.4					70		
177+50-177+85	Channel Change												60		
179+58-180+00	Clearing and Grubbing										0.12				
186+35	24"x44' C.M.P. Culv.-Elbt. Hdwls				44			4.1						25	
189+37-190+11	Channel Change												3000		
191+80-192+00	Clearing and Grubbing										0.21				
196+11*	4'-7"x5'-6" Conc. Box Culv.						*36.5		*3430						
201+84	18"x34' Corr. Met. Pipe Culv.		34					2.3							
202+20-204+20	Guard Fence on Left														200
206+50	18"x30' Corr. Met. Pipe Culv.		30					2.3							
208+10-213+10	Guard Fence on Left														520
213+00-214+00	Channel Change												175		
214+00-216+00	Guard Fence on Left														120
214+18-216+00	Channel Change												100		
216+90	24"x32' Corr. Met. Pipe Culv.			32				3.4							
228+00	18"x30' Corr. Met. Pipe Culv.		30					2.3							
231+00	18"x30' Corr. Met. Pipe Culv.		30					2.3							
230+50-242	Clearing and Grubbing										1.08				
243+00	18"x30' Corr. Met. Pipe Culv.		30					2.3							
246+00-249	Clearing and Grubbing										0.12				
251+00	18"x40' Corr. Met. Pipe Culv.		36					2.3							
257+00	18"x36' Corr. Met. Pipe Culv.		36					2.3							
272+00	18"x34' Corr. Met. Pipe Culv.		34					2.3							
277+00	18"x34' Corr. Met. Pipe Culv.		34					2.3							
284+00	18"x40' Corr. Met. Pipe Culv.		40					2.3							
291+30	Road Approach													74	
293+00	18"x32' Corr. Met. Pipe Culv.		32					2.3							
301+00	18"x30' Corr. Met. Pipe Culv.		30					2.3							
308+50	18"x36' Corr. Met. Pipe Culv.		36					2.3							
317+00*	4'-6"x8'-0" Conc. Box Culv.						*36.5		*3430						
324+50-325	Guard Fence on Left														350
326+70	24"x44' Corr. Met. Pipe Culv.			44				3.4					300		
331+18	15"x20' Side Drain	20						1.8							
336+00	18"x28' Corr. Met. Pipe Culv.		28					2.3							
21+00-22+	Clearing and Grubbing										0.52				
42+50	18"x34' Corr. Met. Pipe Culv.		34					2.3							
122+00	15"x34' Corr. Met. Pipe Culv.	34						1.8							
215+00	18"x42' Corr. Met. Pipe Culv.		42					2.3							
382+00	18"x36' Corr. Met. Pipe Culv.		36					2.3							
28+00 +	18"x40' Corr. Met. Pipe Culv.		40					1.15							
30+60 +	24"x34" do				34			3.4							
37+00 +	18"x40" do		40												
	* These quantities changed for Federal Aid Participation.														
	TOTALS	138	788	346	30	-	68	-	410.1	959	35364	2	6.07		3810	159	4330

* Includes 80' furnished by County
+ " 34'



NOTES ON SUPERELEVATION

Curves of under 290 Ft. Radius are to be superelevated to a maximum of ½ inch for each foot width of roadway. This is to be accomplished by moving center of standard section to outside of curve, the change to take place within a distance of 100 Ft., half on curve and half on approaching tangent.

On sidehills the slope is always to be into the hill.

Where possible surplus excavation is to be wasted in such manner that a uniform widening of the roadway at curves to a maximum of 4 Ft. results.

ADJUSTMENT OF SUMMARY TO SHOW FEDERAL AID PARTICIPATION

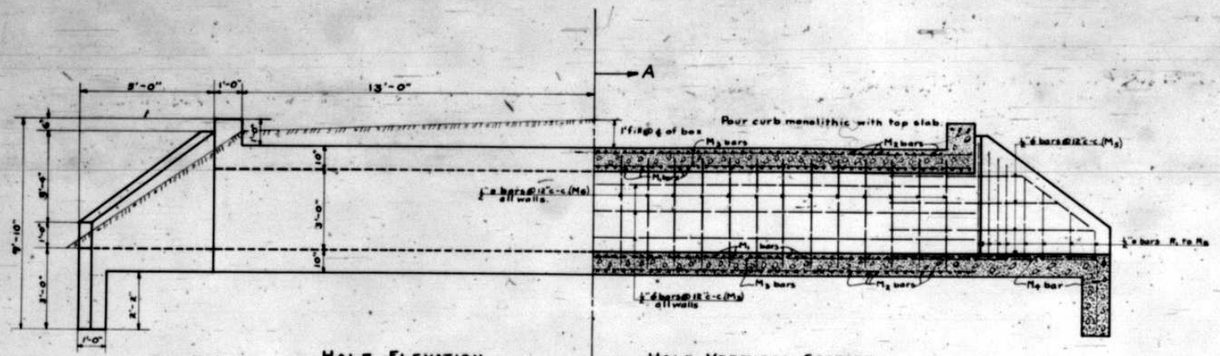
ITEM	QUANTITY FOR CONTRACT	INCREASE	DECREASE	TOTALS FOR FED. AID PARTICIPATION
Class 'A' Concrete	411 Cu. Yds.		73 Cu. Yd.	338 Cu. Yds.
Class 'B' Concrete	94 Cu. Yds.	7 Cu. Yd.		101 Cu. Yds.
Reinforcing Steel	35,400 Lbs.		6860 Lbs.	28,540 Lbs.
24" Corr. Met. Culv. Pipe	312 Lin. Ft.	94 Lin. Ft.		406 Lin. Ft.

Note - Bureau participates in cost of 24" Corrugated Metal Pipe Culverts at Sta. 196+11 and Sta. 317+00. The above table shown in last column the quantities which will appear in estimate for project agreement with the U.S.B.P.R.

SUMMARY OF QUANTITIES

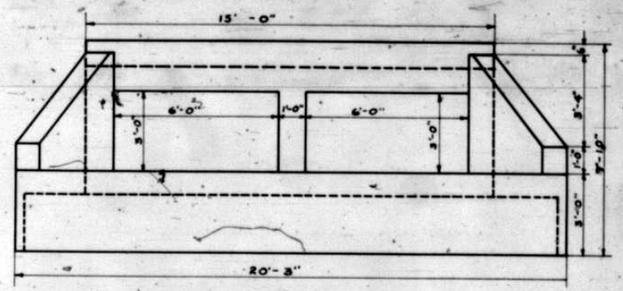
ITEM No.	ITEM	UNIT	QUANTITY	CONST. QUANTS.
1	Clearing & Grubbing	Acres	6.1	6.1
2	Excavation, Common	Cu. Yds.	68800	67473
3	Excavation, Rock	"	99,700	42627
4	Borrow Fill	"	12,700	10539
5	Overhaul	Sta. Yds.	13,600	13600
6	Gravel Surfacing	Sq. Yds.	68,750	68865
7	Concrete Class A	Cu. Yds.	411	410.1
8	Concrete Class B	"	94	99.8
9	Reinforcing Steel	Lbs.	35,400	35428
10	15" Corr. Met. Culvert Pipe	Lin. Ft.	158	158
11	18" do	"	708	708
12	24" do	"	312	312
13	30" do	"	30	30
14	18" Corr. Met. Siphon Pipe	"	68	68
15	Wire Cable Guard Fence	"	4330	4330
16	Riprap, 16" Thick	Sq. Yds.	298	NONE
17	Removing 2 Corr. Met. P. Culverts	Lump Sum		
18	Wetting & Rolling (To be done by State Forces)	Sq. Yds.	68,750	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	253-A	3	

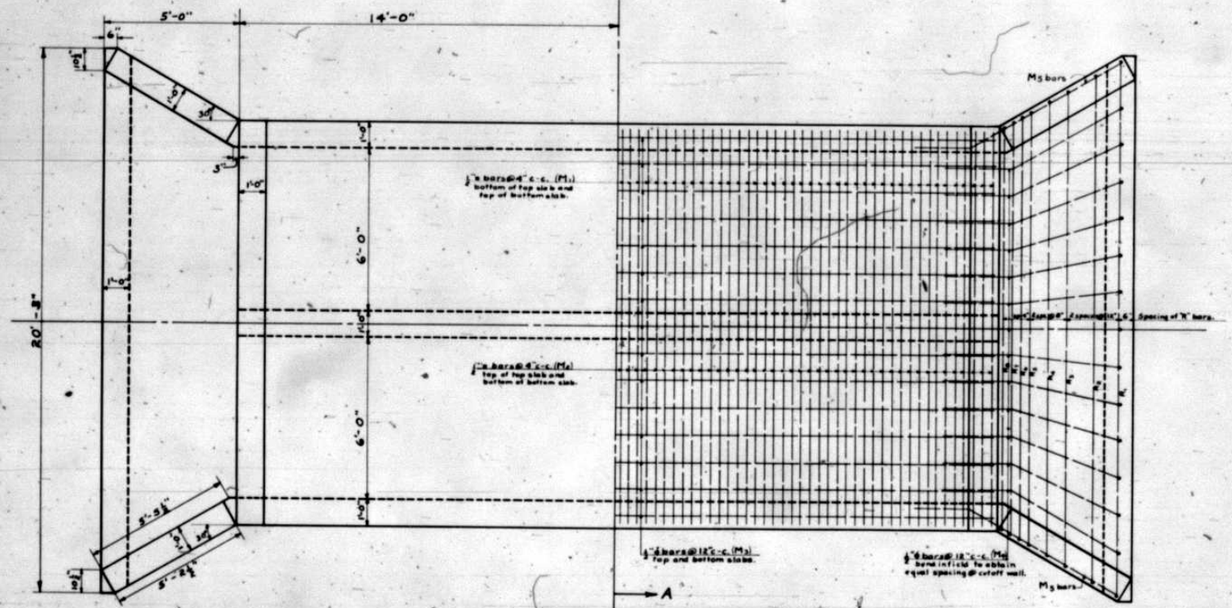


HALF ELEVATION

HALF VERTICAL SECTION



END VIEW



HALF PLAN

HALF HORIZONTAL SECTION

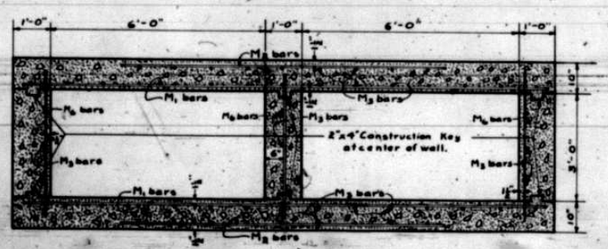
BAR LIST

MARK	SIZE	LENGTH	NUMBER	BENDING DIAGRAM
M1	½" ø	14'-6"	168	
M2	½" ø	5'-0"	168	
M3	½" ø	27'-3"	57	
M4	½" ø	4'-0"	81	
M5	½" ø	10'-0"	26	7'-6"
M6	½" ø	3'-6"	16	
R1	½" ø all R bars	21'-9"	2 each	
R2		21'-11"		
R3		22'-4"		
R4		22'-9"		
R5		23'-0"		
R6		23'-0"		
R7		23'-3"		
R8		23'-6"		

4635 lin.ft of ½" ø bars @ 0.850# per ft. = 3940 lbs.
1994 lin.ft. of ½" ø bars @ 0.668# per ft. = 1332 lbs.
+3% for overrun = 168 lbs.
Total = 5430 lbs.

SUMMARY OF QUANTITIES	
Reinforcing Steel (includes 3% for overrun)	5430 lbs.
Class A (1:2:4) Concrete	47.6 cu. yds.

—Above Quantities are for one culvert.—



SECTION A-A

GENERAL NOTES

All work to be done in accordance with the Standard Specifications of the Colorado State Highway Department.
All Concrete to be Class A (1:2:4) Mixture.
All exposed surfaces to be rubbed free of form marks.
All reinforcing bars shall be plain round or plain square as shown.
All walls shall have forms on both sides.
All construction joints shall be thoroughly cleaned before fresh concrete is poured.

Maximum Soil Pressure = 700 lbs. per sq. ft.

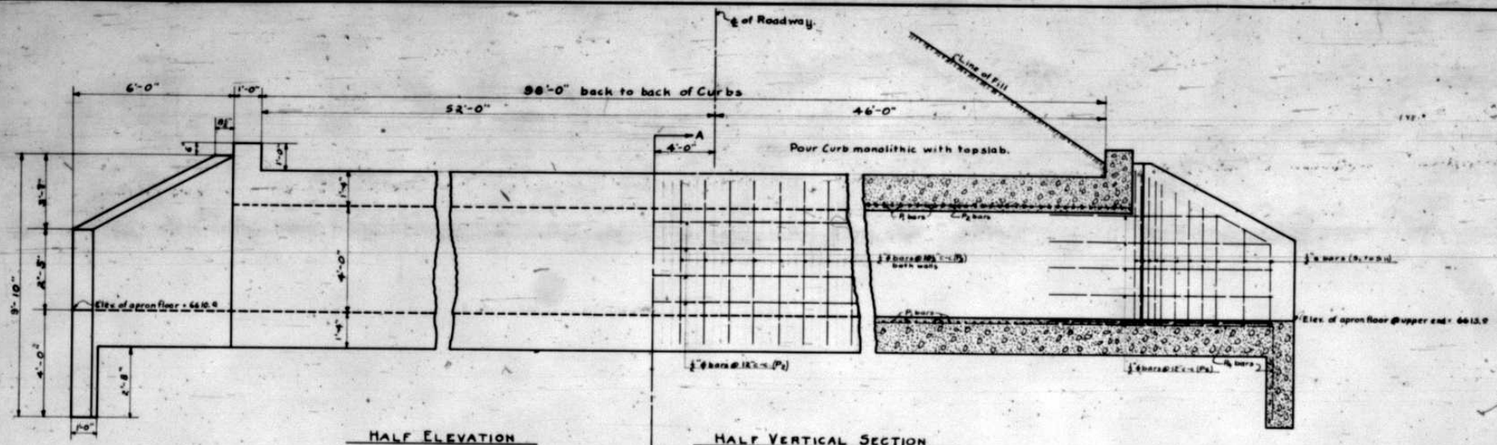
LOADING DATA

Live Load: A.A.S.H.O. Class 2-15.
15 Tons gross load each 4½ on rear axle 6ft. gage 14ft. wheel base
Dead Load: Concrete 150# per cu.ft.
Earth 100# per cu.ft.
Impact Factor = 30%

COLORADO
STATE HIGHWAY DEPARTMENT
DOUBLE 3'x6' BOX CULVERT

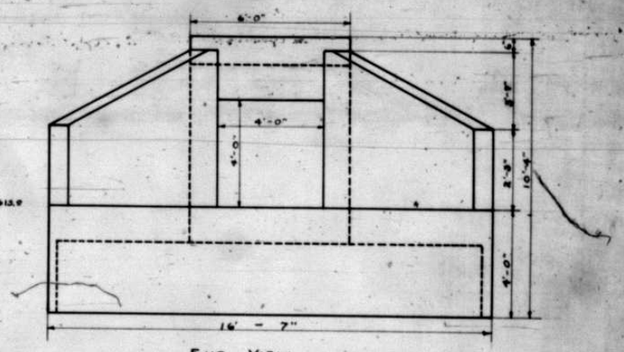
Sta. 4+00	Sta. 69+28
Across Irrigation Ditch	Across Irrigation Ditch
Sec. 6 T 6 N. R. 64 W.	Sec. 1 T 6 N. R. 65 W.
Near Steamboat Springs	
Designed by R.W.J.	Approved by [illegible]
Made by R.W.J.	Bridge Engineer
Checked by R.S.D.	Date 11-7-1923

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	253-A	4	



HALF ELEVATION

HALF VERTICAL SECTION



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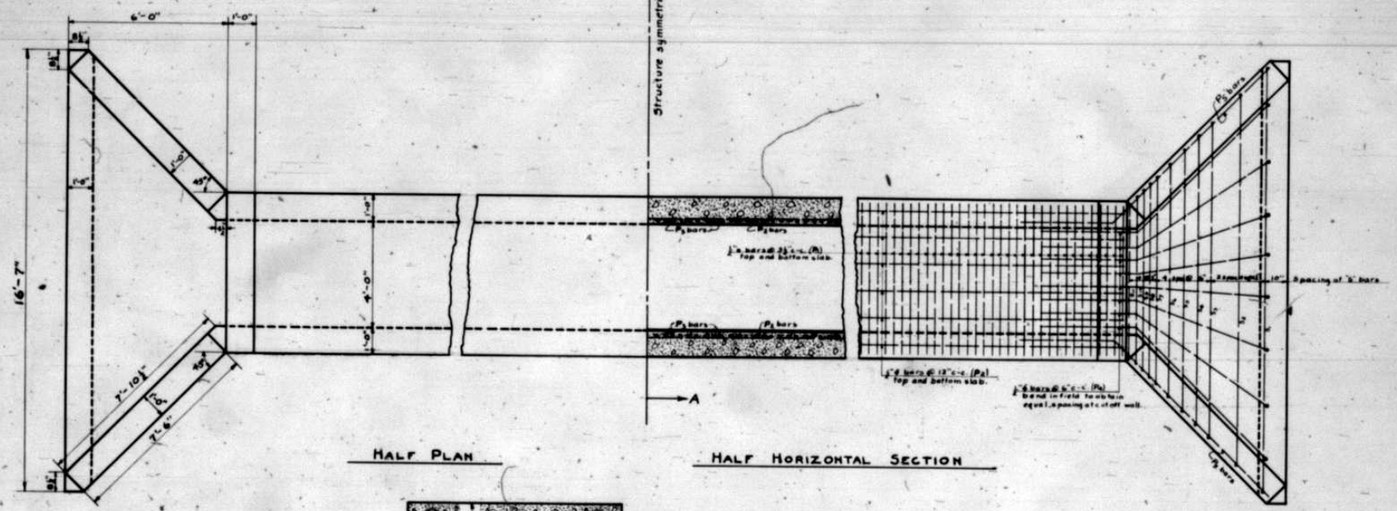
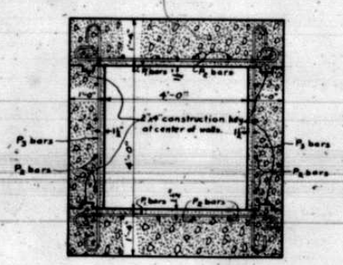


HALF PLAN

HALF HORIZONTAL SECTION



SECTION A-A

BAR LIST

MARK	SIZE	NUMBER	LENGTH	BENDING DIAGRAM
P_1	½" ϕ	687	6'-6"	
P_3	½" ϕ	220	7'-4"	
P_2	½" ϕ	100	22'-0"	
P_4	½" ϕ	16	12'-6"	
P_5	½" ϕ	20	10'-0"	
S_1	⅝" ϕ all	2 each	20'-6"	
S_2			19'-6"	
S_3			18'-10"	
S_4			18'-3"	
S_5			18'-8"	
S_6			18'-1"	
S_7			17'-5"	
S_8			17'-8"	
S_9			17'-6"	
S_{10}			17'-5"	
S_{11}			17'-1"	

4069 lin. ft. of ½" ϕ bars @ 0.850# per lin. ft. = 4139 lbs.
4285 lin. ft. of ⅝" ϕ bars @ 1.468# per lin. ft. = 2856 lbs.
+ 3% for overrun = 215 lbs.
Total = 7210 lbs.

SUMMARY OF QUANTITIES	
Total Reinforcing Steel (includes 3% for overrun)	7210 lbs.
Class A (1:2:4) Concrete	102.2 cu. yds.

GENERAL NOTES

All work to be done in accordance with the Standard Specifications of the Colorado State Highway Department.
All Concrete to be Class A mixture.
All exposed surfaces to be rubbed free of form marks.
All reinforcing bars shall be plain round or plain square as shown.
All walls shall have forms on both sides.
All bars spliced in the field to be given a lap of 30 diameters for bond.
All construction joints shall be thoroughly cleaned before fresh concrete is poured.
Maximum Soil Pressure = 4330 lbs. per sq. ft.

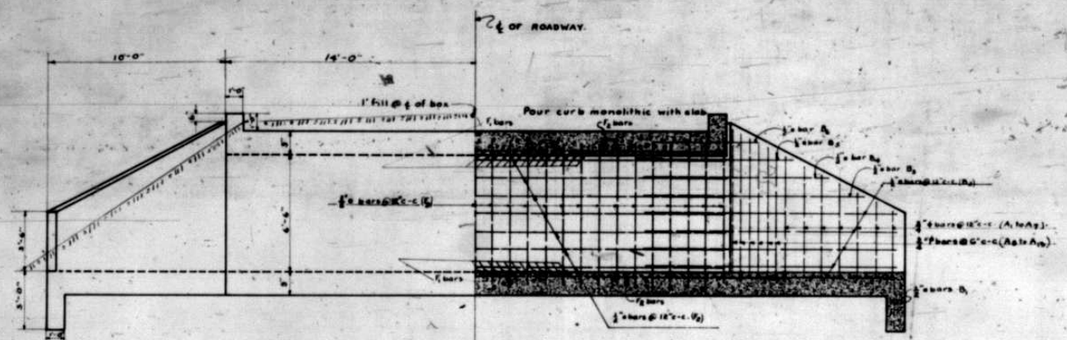
LOADING DATA:
No Live Load used.
DEAD LOAD: Earth fill at 177# per cu. ft. or 1248# per sq. ft.

COLORADO
STATE HIGHWAY DEPARTMENT
4'x4' BOX CULVERT

Sta. 110+68
Across Gulch
Near Steamboat Springs Sec. 8 T. 6 N. R. 85 W.

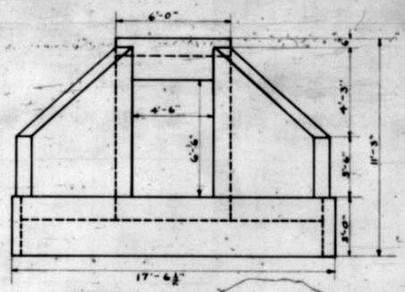
Designed by R.W.J.	Approved by _____ Bridge Engineer
Made by R.W.J.	
Checked by R.M.A.	Date 11-18-1929

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO	253-A	5	



HALF ELEVATION

HALF VERTICAL SECTION



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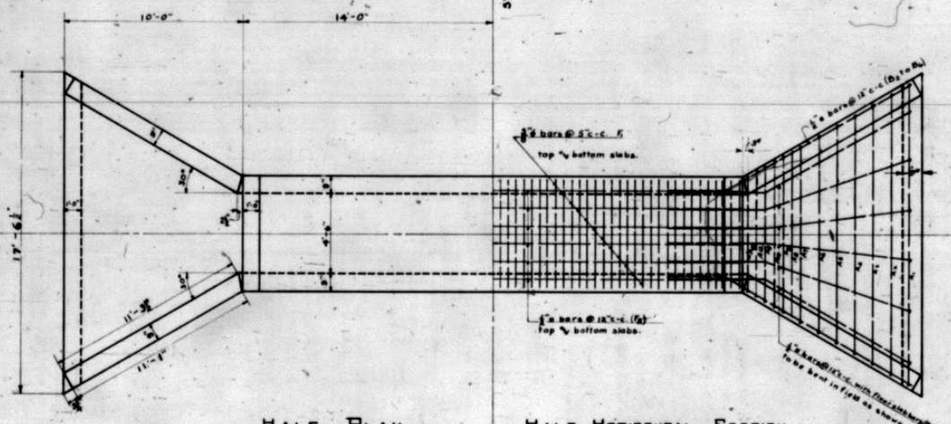
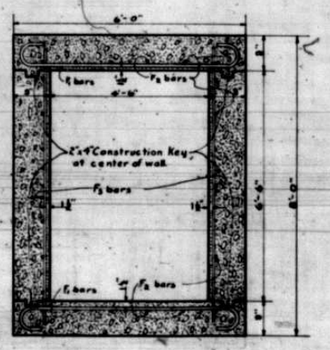


HALF PLAN

HALF HORIZONTAL SECTION



SECTION A—A

BAR LIST

MARK	SIZE	NUMBER	LENGTH	BENDING DIAGRAM
F_1	⅝" ℄	135	7'-0"	
F_2	½" ▫	26	27'-3"	
F_3	½" ▫	38	7'-6"	
A_1	⅝" ℄	2 each	23'-6"	
A_2			23'-2"	
A_3			22'-10"	
A_4			22'-6"	
A_5			22'-2"	
A_6			21'-10"	
A_7			21'-6"	
A_8			21'-2"	
A_9			20'-10"	
A_{10}			20'-6"	
A_{11}			20'-2"	
A_{12}			19'-10"	
A_{13}			19'-6"	
B_1	½" ▫	20	14'-6"	
B_2	½" ▫	4	12'-0"	
$B_{3,4}$	½" ▫	4	3'-6"	
B_5	½" ▫	4	7'-0"	
$B_{6,7}$	½" ▫	4	4'-6"	
B_8	½" ▫	12	15'-0"	

546 lin ft of ⅝" ℄ bars @ 1.502 lbs per lin ft =	850	lbs.
345 do. ⅝" ℄ do. 1.043 lbs per lin ft =	986	lbs.
1739 do. ½" ▫ do. 0.830 lbs per lin ft =	1435	lbs.
+3% ± for overrun =	39	lbs.
Total =	3430	lbs.

SUMMARY OF QUANTITIES		
Total Reinforcing Steel	3430 lbs. (Includes 3% for overrun)	
Concrete Class A	36.4 cu yds.	

Above Quantities are for one culvert.

GENERAL NOTES

All work to be done in accordance with the Standard Specifications of the Colorado State Highway Department.
All Concrete to be Class A (1:2:4) mixture.
All reinforcing bars shall be plain round or plain square as shown.
All exposed surfaces to be rubbed free of form marks.
All walls to have forms on both sides.
All construction joints to be thoroughly cleaned before fresh concrete is poured.
Maximum soil pressure = 1250 lbs. per sq. ft.

LOADING DATA

LIVE LOAD: AASHO Class E-18
10 Tons gross Load on each axle on rear axle.
6Ft. gage.
14Ft. wheel base.

DEAD LOAD: Concrete: 150# per cu ft.
Earth: 100# per cu ft.

IMPACT: 30%

COLORADO
STATE HIGHWAY DEPARTMENT

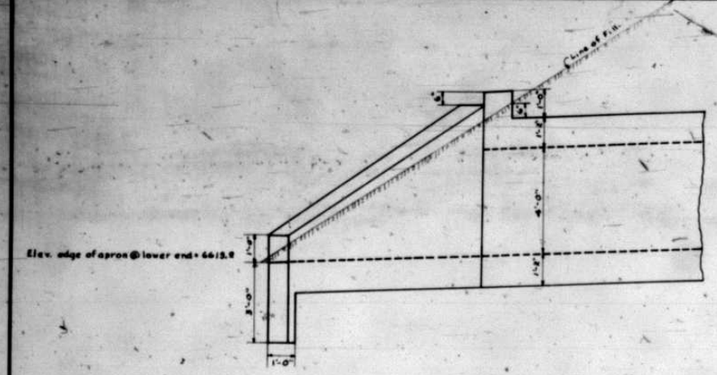
4'-6"x6'-6" Box Culvert.
Across Gulches Near Steamboat Springs

Sta. 30+25	Sta. 196+11	Sta. 317+00
Sec. 1 T. 6 N. R. 85 W.	Sec. 4 T. 6 N. R. 85 W.	Sec. 7 T. 6 N. R. 85 W.

Designed by: R.W.J.
Made by: R.W.J.
Checked by: R.M.A.

Approved by: [signature]
Bridge Engineer
Date 11-17-1923

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	253-A	6	



ELEVATION

PLAN

SECTION A-A

BAR LIST

MARK	SIZE	NUMBER	LENGTH	BENDING DIAGRAM
K1	½" ø	478	6'-8"	
C1	½" ø	16	7'-2"	
K2	½" ø	80	22'-0"	
K3	½" ø	164	5'-6"	
K4	½" ø	18	17'-0"	
K5	½" ø	10	17'-0"	
K6	½" ø	10	11'-0"	
C2	½" ø	4	7'-6"	
C3	½" ø	4	6'-8"	
C4	½" ø	4	5'-10"	
C5	½" ø	4	5'-0"	
H1	all ½" ø 2 each		21'-2"	
H2			20'-7"	
H3			20'-0"	
H4			19'-5"	
H5			18'-10"	
H6			18'-7"	
H7			18'-2"	
H8			17'-8"	
H9			17'-6"	
H10			17'-3"	
H11			17'-1"	

SUMMARY OF QUANTITIES		
4718 lin ft of ½" ø bars @ 0.850# per lin. ft.	=	4010 lbs.
2346 lin ft of ½" ø bars @ 0.668# per lin. ft.	=	1567 lbs.
+ 3% % for overrun	=	163 lbs.
Total Reinforcing Steel	=	5740 lbs.
Class A (1:2:4) Concrete		85.2 cu. yds.

GENERAL NOTES

All work to be done in accordance with the Standard Specifications of the Colorado State Highway Department.
All Concrete to be Class A (1:2:4) mixture.
All exposed surfaces to be rubbed free of form marks.
All reinforcing bars to be plain round or plain square as shown.
All walls to have forms on both sides.
All construction joints shall be thoroughly cleaned before fresh concrete is poured.

Maximum Soil Pressure = 3330 lbs. per sq. ft.

LOADING DATA:
No Live Load used.
Dead Load: Earth 3150# per cu. ft.
Concrete 150# per cu. ft.

COLORADO
STATE HIGHWAY DEPARTMENT
4'x4' SKEW BOX CULVERT

Sta. 129+15

Across Gulch.

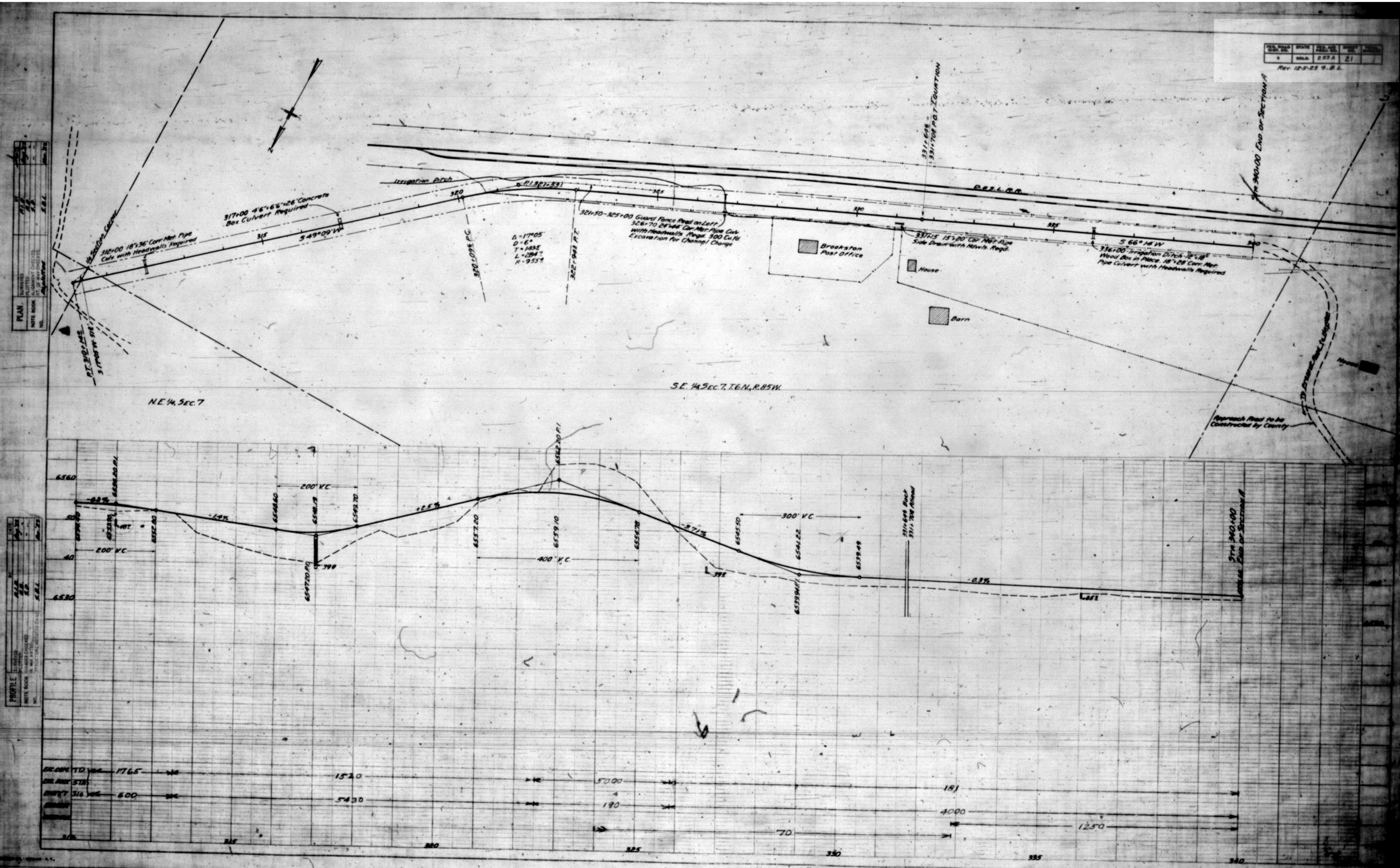
Near Steamboat Springs.

Sec. 2 T 6 N. R 83 W.

Designed by R.W.J.	Approved by [illegible]
Made by R.W.J.	Bridge Engineer
Checked by R.W.J.	Date 10-11-1928

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
8	COLO.	253 A	21	

Rev. 12-5-23 S.B.L.



FED. ROAD DEMP. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	259 A	20	

PC 272+08.2
Δ=15°00'
D=12°
T=70.12
L=140.31
R=478.17

PT 276+48.3

Irrigation Ditch

Sta 282+00 Back
Sta 283+00 Ahead Equation

PI 274+77.1

284+00 18"-40' Corr. Met Pipe Culv. with Hdwls. Regd.

S 49°59' W

Elevation 7,000 Road Approach Beyond 7% Gr. to Embankment

Winter Bridge Steamboat Springs

293+00 18"-32' Corr. Met Pipe Culv. with Hdwls. Required.

PC 294+80.8

Δ=5°40'
D=2°
T=14.18
L=28.31
R=2864.2

PT 297+69.5

PI 296+22.8

S 44°19' W

301+00 18"-30' Corr. Met Pipe Culv. with Hdwls. Required.

PC 305+82.7

PT 307+72.5

308+50 12"-18' Wood Box in Place.
18"-36' Corr. Met Pipe Culvert with Headwalls Required.
Δ=4°50'
D=1°
T=24.18
L=48.33
R=5729.6

S 49°59' W

S. W. ¼, Sec. 8

S.E. ¼ Sec. 7

PT 310+48.8

S 17°08' W - 95.16 Meas.

N. W. ¼ Sec. 8, T. 6 N., R. 85 W.

N. E. ¼, Sec. 7.

6580
70
60
50
6540

+0.4%
-1.0%
+3.0%
-3.267%
+0.2%
-2.2%
+1.8%
-0.8%

6571.40 P.I.
6569.40
6569.40
6571.40
6575.80 P.I.
6571.40
6571.00
6559.67
6557.17
6556.92
6557.10 P.I.
6553.50
6552.00
6552.30
6555.90 P.I.
6556.30 P.I.
6554.90
6556.45
6554.70
6557.00 P.I.
6554.60

200' V.C.
200' V.C.
300' V.C.
200' V.C.
200' V.C.

511
495

Sta 282+00 Back
Sta 283+00 Ahead

Elec. Conn.				774				1690			490		640			2,635							
Elec. Prod.																							
Quant. Yr.				1980				1395			25		630			2090							
Footway				1.5	1.57																		
Roadway								950															

280 282 285 290 295 300 305 310

PLATE I - PLAN-PROFILE B. P. R. STANDARD

N.E. ¼, Sec. 8

S.W. ¼, Sec. 4

N.W. ¼, Sec. 8

S.E. ¼, Sec. 5, T. 6N., R. 85W.

Section Corner

S 79°-10' W

S 80°-59' W

S 63°-59' W

S 76°-59' W

S 66°-49' W

PC Sta 245+93.31

PT Sta 249+61.88

PI Sta 247+50.9

PC Sta 251+88

PT Sta 253+10.22

Δ = 19°
D = 10°
T = 968
L = 1909
R = 573.2

PI Sta 250+68.4

PC Sta 260+59.84

PT Sta 262+31.32

Δ = 15°00'
D = 6°
T = 1088
L = 2627
R = 953.2

PC Sta 272+68.81

PT Sta 275+96.52

PI Sta 274+32.66

Δ = 10°10'
D = 5°
T = 1024
L = 2028
R = 1146.2

PC Sta 276+08.2

PT Sta 278+10.2

PI Sta 277+09.22

Δ = 18°30'
D = 12°
T = 192
L = 1902
R = 478.8

Irrigation Ditch

Sta 245+00 to 249+00 - 0.12 Acre Clearing and Grubbing Required.

2571.00 18°36 Corr. Met. Pipe Culv. with Hdwls. Required.

2571.00 18°36 Corr. Met. Pipe Culv. with Hdwls. Regd.

2721.00 18°36 Corr. Met. Pipe Culv. with Hdwls. Regd.

2771.00 18°36 Corr. Met. Pipe Culv. with Hdwls. Regd.

PLAN
SURVEYED: F.I.B.
NOTE BOOK: F.I.B.
NO.: Reported
DRAWN: F.I.B.
TRACED: A.S.
CHECKED: S.R.L.
DATE: Aug. 22 / Jan. 23

PROFILE
SURVEYED: F.I.B.
NOTE BOOK: F.I.B.
NO.: Reported
DRAWN: F.I.B.
TRACED: A.S.
CHECKED: S.R.L.
DATE: Aug. 22 / Jan. 23

6590
80
70
6560

+1.0%
-2.0%
+1.6%
-1.6%
+0.5%
-0.2%
-2.0%
+0.8%

200' V.C.
100' V.C.

EXC. COMMON 600 975 685 2100 535 1550
EXC. ROCK 185 1260 95 1325 975 1320
EMBKT
BORROW 1801
OVERHAUL 720 100

245 250 255 260 265 270 275

PLATE I - PLAN-PROFILE M.P.R. STANDARD

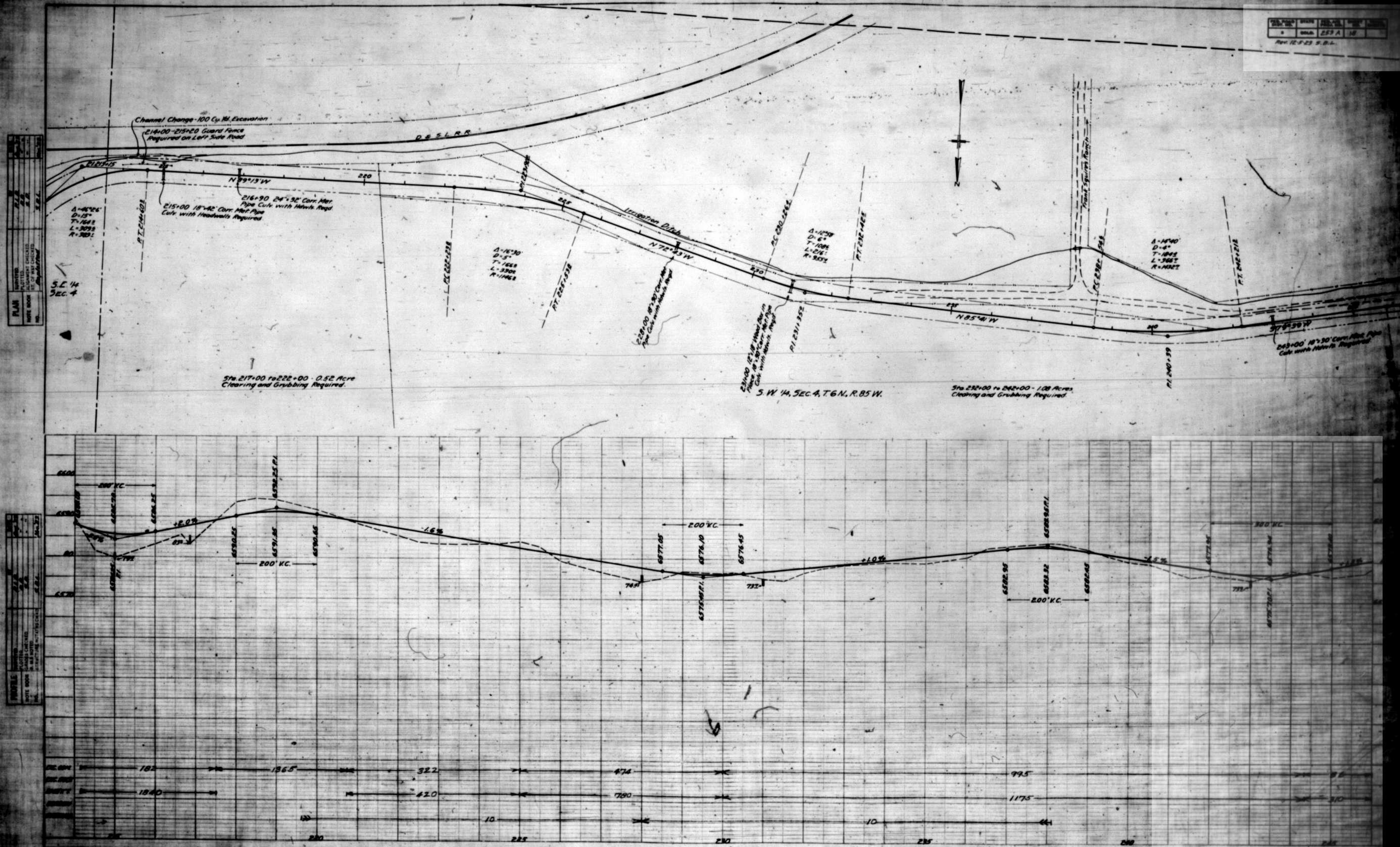


PLATE I - PLAN-PROFILE B.P.R. STANDARD

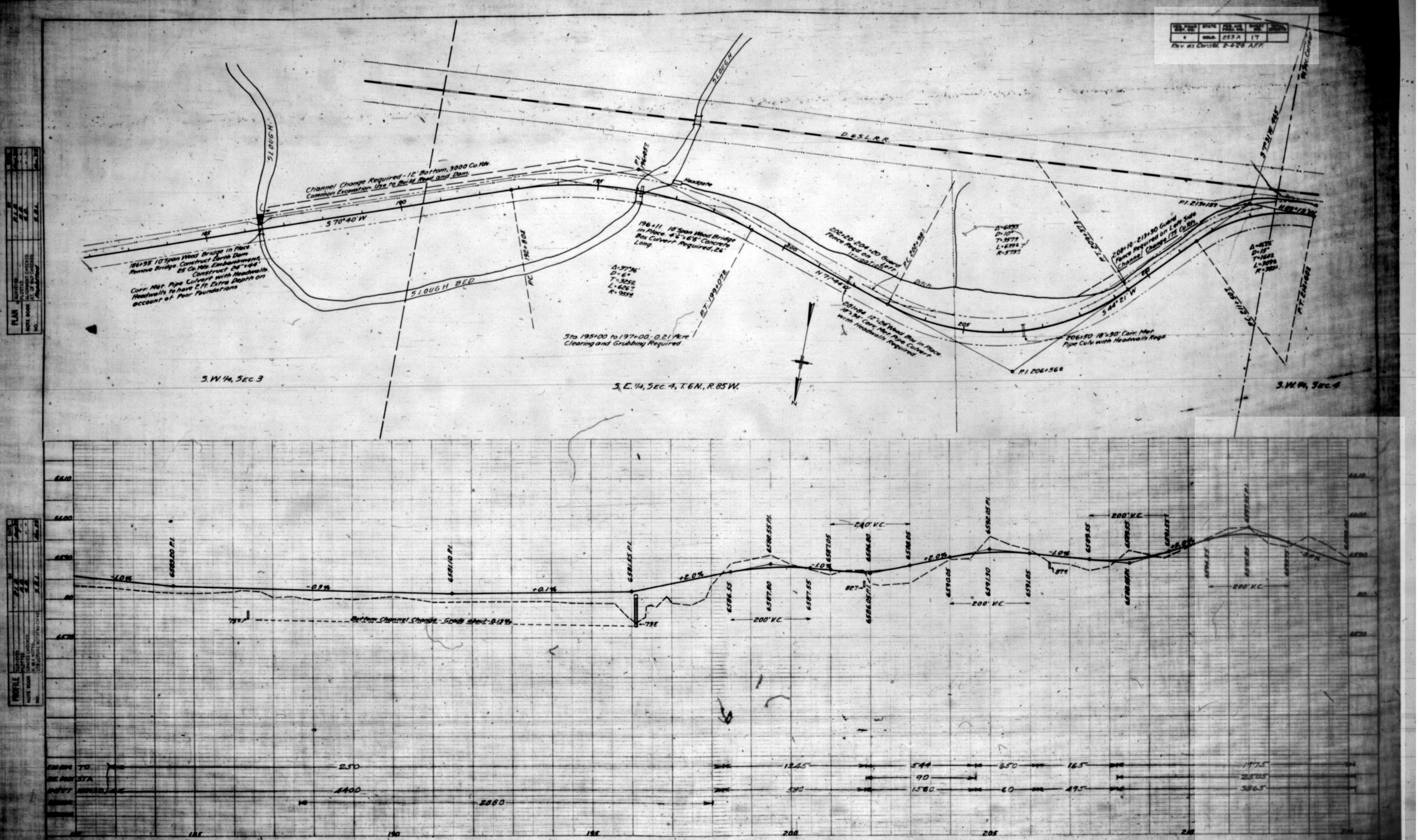


PLATE I - PLAN-PROFILE & P.R. STANDARD

		259A	16	

Rev. as Constd 8-4-76 A.F.P.

S.E. 1/4, Sec. 3

S.W. 1/4, Sec. 3, T. 6N., R. 85W.

1561+35 30"x30' Corr. Met. Pipe Culv. with Hdwls. Reqd.

1601+00 - 2-18"x20' Corr. Met. Pipe Side Drains with Hdwls. Reqd. Also Road Approaches, 60 Cu. Yds. Embankment

1651+00 24"x28' Corr. Met. Pipe Culv. with Hdwls. Reqd.

1681+62 24"x30' Corr. Met. Pipe Culv. with Hdwls. Reqd.

1731+00 24"x30' Corr. Met. Pipe Culv. with Hdwls. Reqd.

Pl. 1794+05

S 80° 50' W

S 30° 40' W

S 70° 40' W

SLOUGH

Pl. 1744.28

Pl. 1744.28

Pl. 1744.28

Pl. 1800+50

Channel Change 100'x1.5'x6' 60 Cu. Yds.

Channel Change 70 Cu. Yds.

Δ = 50°10'
D = 10°
T = 268.5'
L = 501.7'
R = 573.2'

Δ = 40°30'
D = 15°
T = 139.9'
L = 266.7'
R = 382.1'

Corral

Sta. 1779+50 to 1801+50 - 0.12 Acre Clearing and Grubbing Required.

PLAN

SURVEYED
DRAWN
NOTE BOOK
NO.

PROFILE

SURVEYED
DRAWN
NOTE BOOK
SCALED CHECKED
H. & V. SCALES
NO.

-5.6%

300' V.C.

6636.60

6599.44

6596.64

-0.22%

+1.0%

6594.20 P.I.

EXC. CON. TRENCH 23 205 56 2910 53 340

EXC. ROCK TRENCH 15 1830 30 1770

BORROW 450 CU. YDS. 810 3245 3060 45

CONCRETE

EMBANKMENT 1370

PLATE I - PLAN-PROFILE B. P. R. STANDARD

BEAR RIVER

S.W.¼, Sec. 2

N.W.¼, Sec. 2

S.E.¼, Sec 3, T. 6N., R. 85W.

Sta. 141+00 (Back) to 156+00 - 2.64 Acres Clearing and Grubbing Required.

130+80 - 131+20 Guard Fence Rigid Both Sides

130+44 P.T.

P.C. 131+38

129+10 - 129+80 Guard Fence Required on Both Sides of Road

129+15 - 4-4'-0" Conc. Box Culvert Required.

138+76 - 18'-4" Corr. Met. Pipe Culv. with Headwalls Required

P.I. 141+08

P.C. 144+98

P.T. 148+39

P.I. 147+08

Equation 142+63 P.T.

Equation 142+37 Back

Equation 144+30 Ahead

N 74° 50' W

S 66° 03' W

S 80° 50' W

S 88° 33' W

Δ=41°07'
D=12°
T=1794
L=3429
R=478.1

Δ=84°20'
D=6°
T=2068
L=4958
R=955.4

Δ=80°00'
D=30°
T=1636
L=2618
R=191.0

Δ=58°00'
D=22°
T=1283
L=1800
R=260.2

300' V.C.

300' K.C.

200' K.C.

+5.0%

-6.0%

+3.1%

+0.62%

-5.64%

6655.29 V.C.

6656.48

6655.85

6647.30

6655.80

6655.25

6652.65

6672.30 P.I.

6664.55

6662.30

6662.27

6666.27

6664.27

6658.80 P.T.

6655.80 P.C.

12'E

PLATE I - PLAN-PROFILE & P. R. STANDARD

BEAR RIVER

S.E. 1/4, SEC. 2

N.E. 1/4, SEC. 2, T. 6N., R. 85W.

N.W. 1/4, SEC. 2

Sta. 94+00 to 104+00 - 1.98 Acres Clearing and Grubbing Required.

98+35-98+65 Guard Fence Required on Both Sides of Road

98+50 24"x72' Corr. Met. Pipe Culvert with Headwalls Reqd.

105+50-106+50 Guard Fence Required on Left Side of Road.

USE 28° CURVE IN CONSTRUCTION

110+00-112+50 Guard Fence Required on Both Sides of Road

1106.8 4'x4'x96' Concrete Box Culvert Required.

122+00 15"x74' Corr. Met. Pipe Culv. with Headwalls Reqd.

PLAN

SURVEYED
PLOTTED
NOTE BOOK
NO.

DATE
BY
CHECKED
QUANTITY CHECKED
AS OF MAY CHECKED
CHECKED

PROFILE

DATE
BY
CHECKED
QUANTITY CHECKED
AS OF MAY CHECKED
CHECKED

PLATE I - PLAN-PROFILE B. P. R. STANDARD

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHTS.
9	Wyo.	253 A	13	

Rev. 12-5-23 S.R.L.
Recon Cont. 2-2-26 A.F.F.

PLAN
NOTED
PLOTTED
NOTE BOOK
NO.
CROSS CHECKED
ALIGNMENT CHECKED
ART. OF WAY CHECKED

PROFILE
NOTED
PLOTTED
NOTE BOOK
NO.
CROSS CHECKED
ALIGNMENT CHECKED
ART. OF WAY CHECKED

S.W.¼, Sec. 1

S.E.¼, Sec. 2
T. 6 N., R. 85 W.

BEAR RIVER

Gravel Pit (Stripping Required)

Irrigation Ditch

Δ = 94°00'
D = 7°
T = 250'
L = 485'
R = 818'

64+61 P.T.

58+50 - 65+50 Guard Fence Required on Left. 63+00 to 66+00 100 Percent along Curb & Gutter Section

N. 79°12' W.

40 Cu. Yds. Excav. in Embankment (Approx.) Required

67+58 12' Span Wood Bridge to Be Removed by County

63+39 Double 3'x6'-16' Conc. Box Culvert Required

71+80 P.C.

Δ = 54°00'
D = 10°
T = 292.3'
L = 540'
R = 573'

74+50 18"x34' Corr. Met. Pipe Culv. With Hdwls. Reqd.

P.I. 74+23.2

S. 52°48' W.

Δ = 24°00'
D = 10°
T = 121.2'
L = 240'
R = 573'

77+50 - 91+00 Guard Fence Required on Left Side of Road

81+40.2 P.I.

84+75.8 P.I.

S. 76°48' W.

Δ = 9°30'
D = 9°30'
T = 52.8'
L = 100'
R = 603'

S. 85°18' W.

86+50.8 P.I.

N. 74°48' W.

Δ = 17°30'
D = 10°
T = 96.4'
L = 190'
R = 327.3'

Δ = 5°30'
D = 6°
T = 30.1'
L = 60'
R = 955'

N. 69°48' W.

89+80.5 P.I.

Δ = 10°30'
D = 10°
T = 58.2'
L = 105'
R = 573'

91+85.5 P.T.

N. 42°48' W.

92+48 P.C.

+0.1%
-1.6%
+0.105%
+2.4%
-2.0%
+1.0%
+2.0%

200' V.C.

PLATE I - PLAN-PROFILE, B. P. R. STANDARD

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	253 A	12	

Rev. 12-5-23 S.E.L.
Rev. as Constr. F-4-26 A.F.F.

PLAN
SURVEYED: F.L.E.S.D.
PLOTTED: A.A.
NOTE BOOK NO.: S.E.L.
ALIGNMENT CHECKED:
PROFILE AND CHECKED:

SLOUGH

S.E.¼ Sec. 1.

30+00 15"-36" Corr. Met. Pipe Culv. in Place Headwalls Required

36+08 15"-36" Corr. Met. Pipe Culv. in Place Headwalls Required

42+50 18"-36" Corr. Met. Pipe Culv. with Headwalls Required

47+60 24"-36" Corr. Met. Pipe Culv. with Headwalls Reqd.

Δ=36°10' L
D=12°
T=186.2
L=301.4
R=478.2

Δ=14°12'
D=10°
T=71.5
L=142.8
R=575.2

Δ=23°40'
D=6°
T=200.8
L=394.5
R=955.2

Δ=22°10'
D=8°
T=143.2
L=278.4
R=694.2

N. 66°04' W.

S. 77°46' W.

N. 88°02' W.

N. 64°22' W.

N. 38°12' W.

N. 13°-10'-00" W.

S.W.¼ Sec. 1.
T. 6 N., R. 85 W.

Elev. = 23
to 11+50 =
to 59+30 = 23
Scale 1"

(0)

5075

4070

1955

60

465

5495

1265

3945

65

PLATE I - PLAN-PROFILE S. P. R. STANDARD

		STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
		Colo.	253 A	11	

Rev. as Constr. F-496 A77

PLAN — HARDING — PLOTTED — NOTE BOOK — NO. — F.J.S. — K.D. — R.E.F. — CHECKED — R.E.F. FOR APPROVED

PROFILE — HARDING — PLOTTED — NOTE BOOK — NO. — F.J.S. — K.D. — R.E.F. — CHECKED — R.E.F. FOR APPROVED

Beginning of Project

S 67°-09' W 1610.2 ft. to Sec. Cor.

67+08.9 FAP 80°
P100 FAP 253 R.C.

Δ=73°-36'
T=1.32
L=1.92
R=1.50

P.I. 21+86.5

FAP 80 to Hayden

Equation

1+00.7 Back = P.F.
3+08.1 Ahead
3+08.1 Double 31.6 X 12 Concrete
4+10 Culvert Required Also
Channel Change 50 C.Y. Min. Excav.

3+83 12"-20' Corr. Met. Pipe Culvert to Place Required to be removed

4+70 16-2.30 Corr. Met. Pipe Culvert to be Removed

SW¼, Sec 6, T 6N., R 84W.

17+60 12'-18' Wood Box in Place 89°-36' Concrete Siphon Required, H-1.0'

10+00.9 P.I. Δ=0°29'R

N 88°-45' W

N 88°-16' W

16+40 15'-20' Corr. Met. Pipe Side Drain with Headwalls Req'd.

16+40 12'-18' Wood Box in Place 89°-36' Concrete Siphon Required, H-1.0'

Sta 16+72.3 0°24'W 1302' to Sec. Cor.

SE¼, Sec 1, T 6N., R 85W.

22+10 15'-20' Corr. Met. Pipe Side Drain with Headwalls Req'd.

Δ=22½°
D=10°
T=112.8
L=224.9
R=573.2

P.C. 24+22.8

Equation — Ft. 25+25.8 Back = 26+20.8 Ahead

27+75 15'-20' Corr. Met. Pipe Side Drain with Headwalls Req'd.

Δ=89°-59'
D=40°
T=20.0
L=31.4
R=143.2

20+00 18'-40' Corr. Met. Pipe Culv. with Headwalls Req'd.

N 66°-01' W

29+75 18'-32' Steel Wood Bridge in Place, 75 Ft. Removed by County

29+85 24'-38' Corr. Met. Pipe Culv. with Headwalls Req'd. 87.0 Ft. Extension to Culvert Required

30+80 18'-30' Corr. Met. Pipe Culvert in Place, Extension to Culvert Required

30+60 24'-38' Corr. Met. Pipe Culv. with Headwalls Req'd.

Note - Fences encroaching on road to be moved by County. Borrow available on right of way.

Station 0+00 Beginning of Project

+2.8%

3+83 Ahead

4+70 Back

-6.5%

6671.00 P.I.

6671.00

6671.25

6671.00

200' V.C.

6664.80 P.I.

-1.5%

6659.30 P.I.

-0.6%

6657.10 P.I.

-1.8%

-1.8%

-1.6%

5075

4070

2300

PLATE I - PLAN-PROFILE B. P. R. STANDARD