FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TO SH
3	COLO.	195-C	1	

Revised 2/15/37 S.F.C.

COLORADO
STATE HIGHWAY DEPARTMENT

PLAN AND PROFILE OF PROPOSED
FEDERAL AID PROJECT NO. 195 C
STATE HIGHWAY NO. 8
CHEYENNE COUNTY

INDEX OF SHEETS

CONVENTIONAL SIGNS

Centerline of Improvement
County Line Boundary
Section Lines
Quarter Section Lines
Fences (Barbed Wire)
Telephone Lines

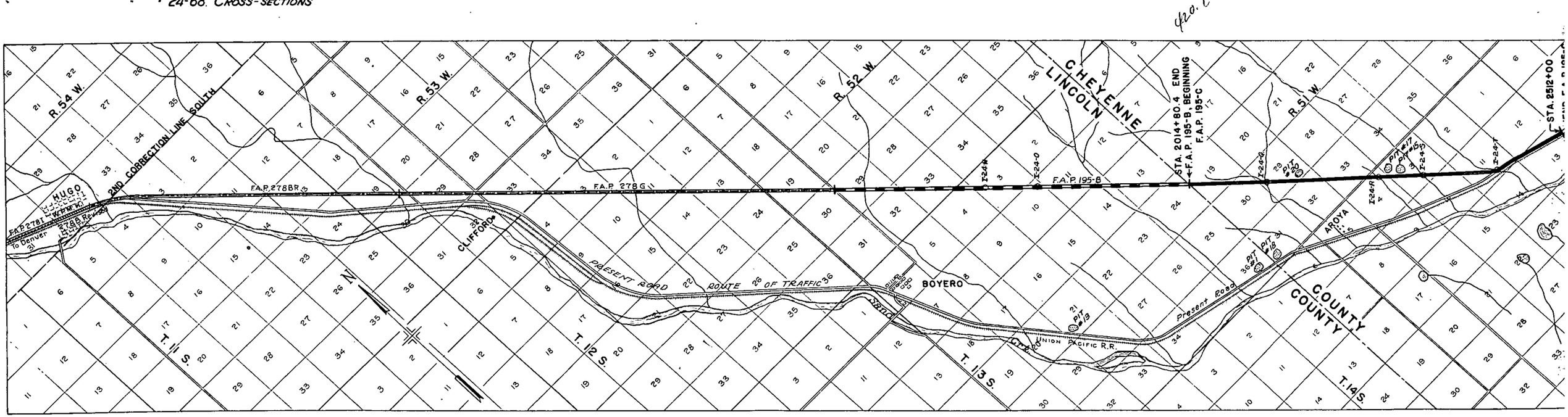
SCALES OF ORIGINAL TRACINGS

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 41647.5' = 7.887 Mi
NET LENGTH OF PROJECT 41647.5' = 7.887 Mi

420.9



SCALE IN MILES
0 1 2 3 4

NOTE

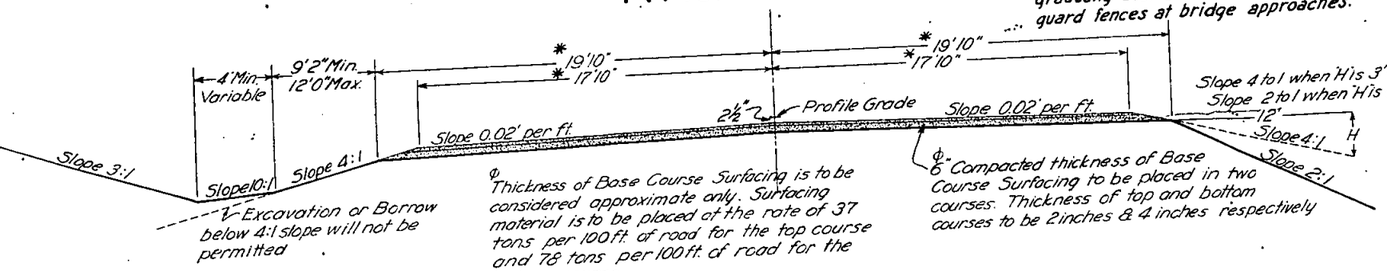
It is recommended that Bidders on this project go over the plan details with one of the following representatives of this department:

Ernest Montgomery, Div. Engr., Colo. Spgs.
H.R. Evans, Resident Engineer, Limon.

RECOMMENDED FOR APPROVAL 10/
J. E. Mallomery
ASSISTANT ENGI
APPROVED
Chas. D. Vail
STATE HIGHWAY ENGI
RECOMMENDED FOR APPROVAL
DIST. ENG. BUREAU PUBLIC R
RECOMMENDED FOR APPROVAL
CHIEF ENG. BUREAU PUBLIC R
APPROVED
DIRECTOR BUREAU PUBLIC R

TYPICAL CROSS SECTION OF IMPROVEMENT AND SUMMARY O

TYPICAL SECTION

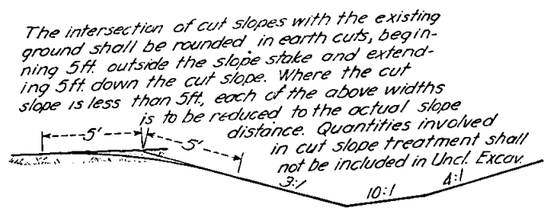


* Roadway embankment at bridge approaches shall be so constructed that the finish point of the gravel shoulder is 3 ft. outside the curb line of the bridge. Where widening of the section is necessary to achieve this result, it shall take place gradually over a distance of 300 ft. This is done to accommodate guard fences at bridge approaches.

Φ Thickness of Base Course Surfacing is to be considered approximate only. Surfacing material is to be placed at the rate of 37 tons per 100 ft. of road for the top course and 78 tons per 100 ft. of road for the bottom course.

CUT SLOPE TREATMENT

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. each of the above widths is to be reduced to the actual slope distance. Quantities involved in cut slope treatment shall not be included in Uncl. Excav.



FENCING REQUIREMENTS

STATION	TO	STATION	SIDE	REMOVE FENCE LIN. FT.	BUILD B.WIRE FENCE LIN. FT.	B.WIRE GATES LT.	B.WIRE GATES RT.	CATTLE GUARDS 16' ROWY. LT.	CATTLE GUARDS 16' ROWY. RT.
2014+80		2288+60	L		27,380				
2014+80		2287+60	R		27,280				
2067+80			X	175					
2086+15			X	175					
2087+80			X	175					
2088+21						/	/		
2141+02						/	/		
2163+60						/	/	/	/
2192+00						/	/		
2214+36						/	/		
2238+67						/	/		
2264+00			X	175					
2288+10		2361+00	R		7,255				
2288+45			X	175					
2288+95					14,183				
2289+45		2512+00	L			1	1		
2314+00			R	450					
2361+00		2365+50	L	1,118					
2365+50		2457+40	X	100					
2457+00									
TOTALS				2,543	76,098	16		2	

R.O.W. MARKERS

STATION	SIDE LT.	SIDE RT.	NUMBER
2051+50	/	/	2
2067+75	/	/	2
2088+22	/	/	2
2125+90	/	/	2
2141+02	/	/	2
2163+60	/	/	2
2214+36	/	/	2
2238+67	/	/	2
2264+00	/	/	2
2288+10	/	/	2
2288+95	/	/	2
2314+15	/	/	2
2349+25	/	/	2
2361+00		/	1
2369+58	2	/	3
2457+40	/	/	2
2485+15	/	/	2
2512+00	/	/	2
TOTAL			36

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 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 involved beyond the limits of the side ditches, as shown on the typical section, either noted as "Borrow" on the plans or as "Embankment" in the list of structures, 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. Any slope stakes beyond the typical ditches are subject to change by the Engineer to fit embankment requirements actually encountered during construction.

All curves are to be superelevated in accordance with the methods shown on the Standard Superelevation Sheet.

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.

The detour for the project lies along the present road as indicated on the title sheet. Where the new work is on the present traveled roadway the contractor shall, at his own expense so prosecute construction that traffic can readily pass over the road. Also, the contractor shall maintain in safe condition and at his own expense, all temporary approaches and crossings of intersecting highways.

All C.M.P. Culverts are to be constructed without headwalls unless otherwise called for on the plans. Where but one headwall is called for it is to be placed at the inlet end unless otherwise stated.

Except as otherwise noted on the plans all overhaul will be paid for as measured along the center line of the project.

All road approaches to the project are to be surfaced with a 4 inch thickness of "Gravel or Crushed Rock Surfacing" extending approximately 30 ft. from the edge of the highway. The estimated quantity of this surfacing material is shown in the List of Structures

SUMMARY OF APPROXIMATE QUANTITIES

NO.	ITEM	UNIT	ROADWAY	BRIDGE 2096+	BRIDGE 2228+	BRIDGE 2274+	BRIDGE 2360+		TOTALS
									2,600
10a.	Clearing and Grubbing Entire Proj.	Lump Sum	2,600						171,000
12a.	Removing Fence	Lin. Ft.	169,500		1,500				12
13c	Unclassified Excavation	Cu. Yd.	12						180
13d.	Cut Slope Treatment	Mile	130	10	20	10	10		2,695
14a.	Dry Rock Excavation (Str.)	Cu. Yd.		920	640	470	285		660
14b.	Dry Common Excavation (Str.)	Cu. Yd.		300	190	110	10		814
14c.	Wet Rock Excavation (Str.)	Cu. Yd.		120	225	30	309		303,000
14d	Wet Common Excavation (Str.)	Cu. Yd.							24.00
18a.	Station Yard Overhaul	Sta. Yd.	303,000						47,800
18b.	Yard Mile Overhaul	Yd. Mi.	2400						1,861
26a	Gravel or Crushed Rock Surf'g	Ton	47,800	598	370	377	280		46
46a.	Class "A" Concrete	Cu. Yd.	236	20	6	14	6		187,600
46r	Class "A" Concrete (Handrail)	Cu. Yd		66,800	39,000	43,700	22,600		300
47.	Reinforcing Steel	Lbs.	15,500						492
53b.	18" Corrugated Metal Culvert Pipe	Lin. Ft.	300						366
53c.	24" Corrugated Metal Culvert Pipe	Lin. Ft.	492						1,008
53d.	30" Corrugated Metal Culvert Pipe	Lin. Ft.	366						76,100
74.	Wire Cable Guard Fence	Lin. Ft.	1008						16
76c.	Barbed Wire Fence with Metal Posts	Lin. Ft.	76,100						576
76g.	Barbed Wire Gates	Each	16		298		278		36
80c.	Sheet Copper	Pound		36					2
81b.	Right of Way Markers	Each		2					34
82	Cattle Guards (16' Roadway)	Each			16	4	12	2	1.9
89a	Drain Pipe (Concrete Floor)	M Ft. bm			0.4	0.6	0.4	0.5	317,700
428	Untreated Bridge Timber	Pounds		169,500	23,000	102,000	23,200		1,916
48	Structural Steel	Lin. Ft.					1,916		256
60a	Treated Timber Piling	Lin Ft.					256		128
60c	Piling Cut-Off	Each					128		
60e	Metal Pile Shoes								

CHEYENNE COUNTY

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	195C	15	

N. W. 1/4 Section 19
Twp. 13S. R. 51W.

S.W. 1/4 Section 19
Twp. 13S. R. 51W.

1478.8' to Sec. Corner

County Line

Sta. 2019+00, Req'd.-30'x74'
C.M.P. Culvert and 5 Cu. Yds.
Excav. for Ditches.

P.O.T. Sta. 2030+00

2010 2015 2020 2025 2030 2035 2040

S. 44° 41' E.

Sta. 2014+80±
Range Line

Sta. 2014+804
END F.A.P. 195B
BEGINNING F.A.P. 195C
END OF F.A.P. 195-B

All pole lines encroaching on construction are to be moved by owners.
Fencing, gates, cattle guards and R.O.W. markers are tabulated on sheet No. 2.
Alignment and grades shown on plans are subject to modification during construction.

Sta. 2040+00, Req'd.-
30'x72' C.M.P. Culvert and
5 Cu. Yds Excav for Ditches.

LINCOLN COUNTY

-1.20% -1.74% 200' V.C. 400' V.C. -0.60% -1.79% 1200' V.C. -0.25%

4670 4660 4650 4640 4630

Uncl. Excav.
Embt. +15%
Borrow
Sta. Yds.
Yd. Mi.
Bor. Source

2010 2015 2020 2025 2030 2035 2040

S.W. 1/4 Section 19
Twp. 13 S. R. 51 W.

AROYA

CREEK

P.O.T. Sta. 2050+00

Dikes

CHANGE

CHANNEL

S.E. 1/4 Section 19
Twp. 13 S. R. 51 W.

Sta. 2032+to 2065+ Req'd. - 12000 Cu. Yds. Excav. for Channel Change Lt. 1800 Cu. Yds. to be used in Roadway Embankment as Borrow, 10200 Cu. Yds. to be used in Dikes and banks of new Channel.

1449.4' to Sec. Corner

45°35'

Sta. 2067+75.6

Sta. 2067+00, Req'd. - 6000 Cu. Yds. Excav. for Channel Change Rt. Material to be used for Dike and Banks of new Channel.

2040 2045 2050 2055 2060 2065 2070

S. 44° 41' E.

-0.25% -0.50% 200' V.C. -0.44%

4640 4630 4620

Channel Change & Dike

Channel Change Sta. 2053+00

Uncl. Excav.
Embt. +15%
Borrow
Sta. Yds.
Yd. Mi.
Bor. Source

RT. OF WAY CHECKED

NO.

STRUCTURE NO. STA. & KND.

NO.

Sta. 2072+00, Req'd. – 9000 Cu. Yds. Excav. for Channel Change Lt. 4756 Cu. Yds. to be used in Roadway Embankment as Borrow, 4244 Cu. Yds. in Dyke and Banks of new Channel.

N

P.O.T. Sta. 2078+00

Sta. 2086+00, Req'd. – 1500 Cu. Yds. Excav. for Channel Change Rt. material to be used for Dyke and Banks of new Channel

1464 ± to Sec. Corner

New Alignment

STRUCTURE NOTES FOR BRIDGE STA. 2096 + 80.00 TO 2098 + 86.17

PRESENT STRUCTURE:
Span
Clear roadway
Clear waterway
Type of Superstructure
Type of Substructure
Requirements as to removal

STREAM DATA:
Drainage area in Sq. Miles 23.3
Velocity during highwater
Elevation of:
Maximum highwater
Normal Stage Dry
Drift Light

Low water
Stream bed 4606.0
Scour Medium

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	195C	16	

Revised 2-15-37 C.W.

N.W. ¼ Section 29
Twp. 13 S. R. 51 W.

2070 2075 2080 2085 2090 2095 2100

S. 44° 41' E.

ARROYA CREEK

N.E. ¼ Section 30
Twp. 13 S. R. 51 W.

Sta. 2080+45, Req'd. – 6'x7'x42' C.B.C. and 20 Cu. Yds. Excav. for Ditches.

Sta. 2088+21, Req'd. – 18"x30' C.M.P. Side Drain Lt. and 50 Cu. Yds. Embkt. for Approaches Lt and Rt.

Sta. 2088+21.5

PROPOSED STRUCTURE:
Position referred to present structure
Span 4 @ 50'-0"
Clear roadway 30'-0"
Clear waterway 1050 ±
Type of Superstructure Conc. I Beam
Type of Substructure Conc. Abuts. – Closed Cant-lever Gravity Conc. Piers
Detour Structure requirements – None
R.R. siding – Aroya – Haul to bridge site 3½ Mi.
Nearby structures on same stream:
Location
Waterway
Record during floods

Sta. 2096+80 to 2098+86.17 Req'd. – Bridge (as per Detail on Sheets No. 4a, 4b, 4c, & 4d.)
Sta. 2096+14.5 to 2096+77.5 Req'd. – 126 Lin. Ft. Wire Cable Guard Fence 6.3 ft. Lt. and 6.3 ft. Rt.
Sta. 2098+88.7 to 2099+51.7 Req'd. – 126 Lin. Ft. Wire Cable Guard Fence 6.3 ft. Lt. and 6.3 ft. Rt.

Sta. 2098+00 Req'd. – 5000 Cu. Yds. of Excav. to improve Channel; 3877 Cu. Yds. to be used in Roadway fill between Sta. 2095+ and 2096+, – 1123 Cu. Yds. to be used to dyke new channel.

4630 4620 4610

Dike
Channel Change
0.44%
EL. 15.6

Unc. Excav.
Embt. +15%
Borrow
Sta. Yds.
Yd. Mi.
Bor. Source

3751
3751

5014
4756
29020

258

2078
2078
1280

3877
3877
42650
540

Channel Change Sta. 2072+00

Channel Change Sta. 2098+00

16.36 16.05 16.00 15.99 16.05 16.00

200 V.C.

2070 2075 2080 2085 2090 2095 2100

N

P.O.T. Sta. 2105+00

S.W. ¼ Section 29
Twp. 13 S. R. 51 W.

S.E. ¼ Section 29
Twp. 13 S. R. 51 W.

2100 2110 2115 2120 2125 2130

S. 44° 41' E.

Sta. 2103+00, Req'd. – 30"x72' C.M.P. Culvert and 5 Cu. Yds. Excav. for Ditches.

Sta. 2114+50, Req'd. – 30"x72' C.M.P. Culvert and 5 Cu. Yds. Excav. for Ditches.

4630 4620 4610

16.36 16.05 16.00 15.99

200 V.C.

+0.08%

EL. 15.8

EL. 15.5

Unc. Excav.
Embt. +15%
Borrow
Sta. Yds.
Yd. Mi.
Bor. Source

1419.3
1419.3

2120

16.12

16.06

800 V.C.

+0.70%

21.24

2164

2380

16.79

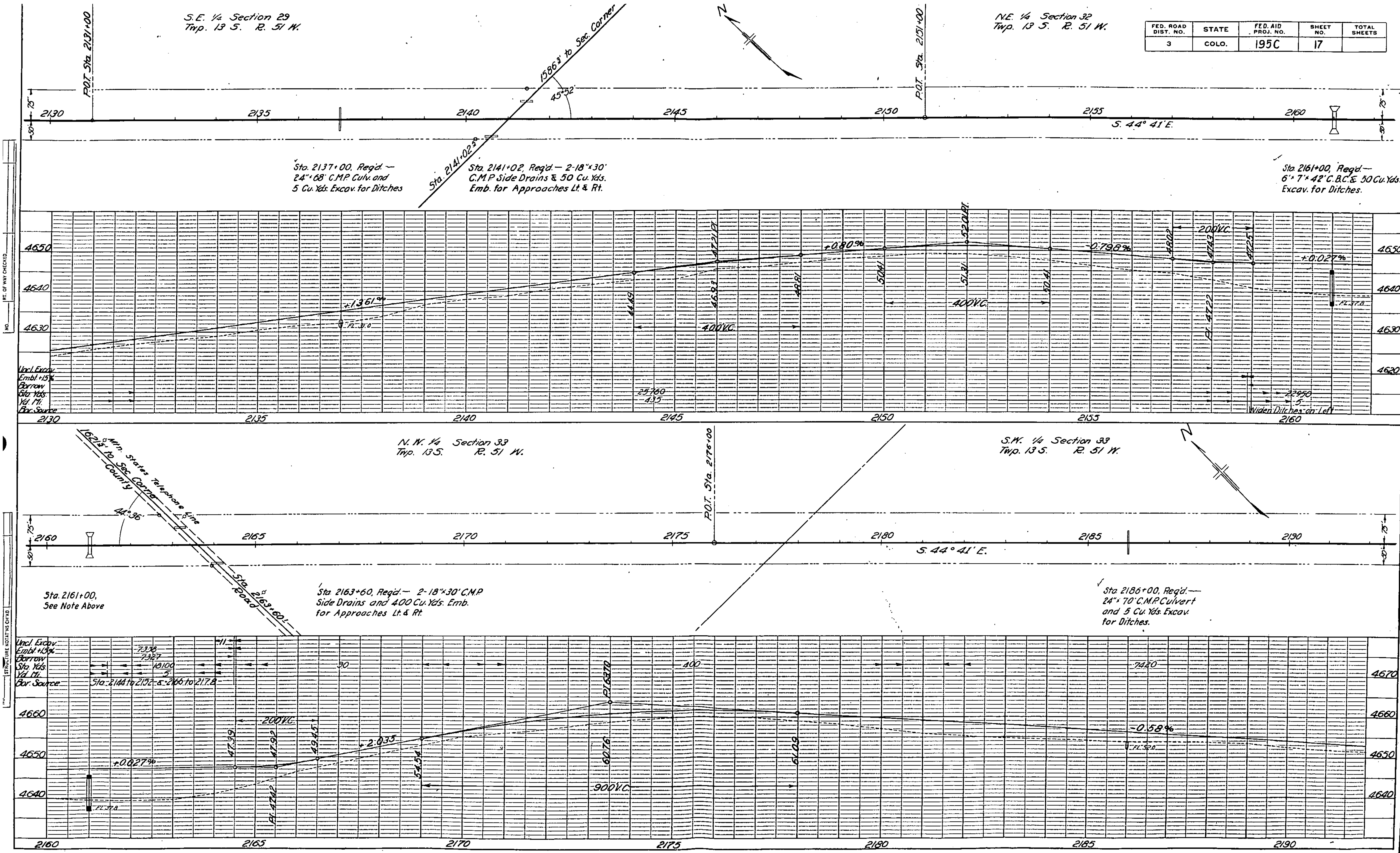
+1.361%

500 V.C.

2100 2105 2110 2115 2120 2125 2130

STRUCTURE NOTATIONS CHKD.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	195C	17	



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	195C	18	

Revised 2/15/37 - F.E.B.

S.W. ¼ Section 33
Twp. 13 S. R. 51 W.

S.E. ¼ Section 33
Twp. 13 S. R. 51 W.

1702' to Sec. Corner Township Line

P.O.T. Sta. 2200+00

S. 44° 41' E.

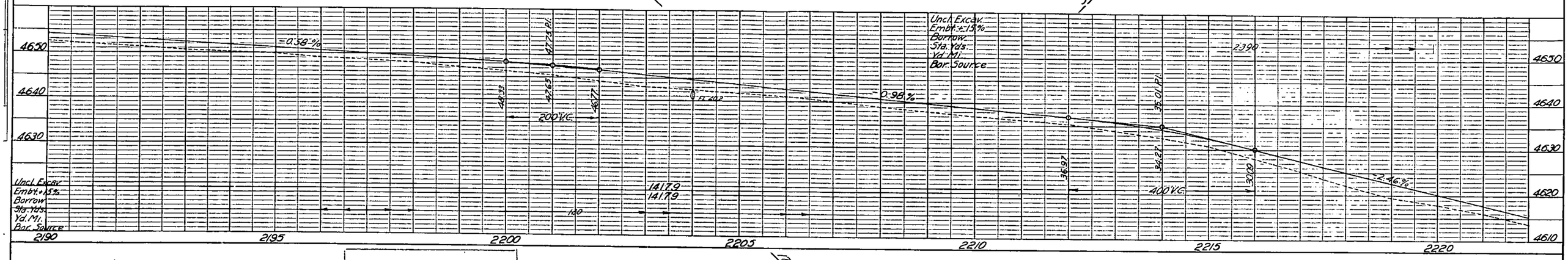
Sta. 2192+00, Req'd. - 18"x 30' C.M.P. Side Drain Lt. and 200 Cu. Yds. Emb'k't. for Approaches Rt. and Lt.

Sta. 2204+00, Req'd. - 24"x 70' C.M.P. Culvert and 5 Cu. Yds. Excav. for Ditches.

46°14'

Sta. 2214+36

Sta. 2214+36, Req'd. - 18"x 30' C.M.P. Side Drain Rt. and 100 Cu. Yds. Emb'k't. for Approaches Lt. and Rt.



N.E. ¼ Section 4
Twp. 14 S. R. 51 W.

Sta. 2228+10.83 to 2228+50.18 Req'd. - Bridge. (as per Details on Sheets No. 5a & 5b.) Also Req'd. - 1500 Cu. Yds. Excav. for Channel Improvement.

Req'd - Sta. 2227+30.3 to 2227+93.3, 63 Lin. Ft. Wire Cable Guard Fence Lt.
Sta. 2227+60.3 to 2228+23.3, 63 Lin. Ft. Wire Cable Guard Fence Rt.

Req'd - Sta. 2228+37.7 to 2229+00.7
63 Lin. Ft. Wire Cable Guard Fence Lt.
Sta. 2228+67.7 to 2229+30.7
63 Lin. Ft. Wire Cable Guard Fence Rt.

1757' to Sec. Corner

N. W. ¼ Section 3
Twp. 14 S. R. 51 W.

44°32'

S. 44° 41' E.

Sta. 2228+67

Sta. 2238+67 Req'd. — 200 Cu. Yds. Emb. for Appr's. Lt. & Rt.

Sta. 2239+00, Req'd. — 24"x 66' C.M.P. Culv. & 10 Cu. Yds. Excav. for Ditches

STRUCTURE NOTES FOR BRIDGE STA. 2228+10.83 TO 2228+50.18

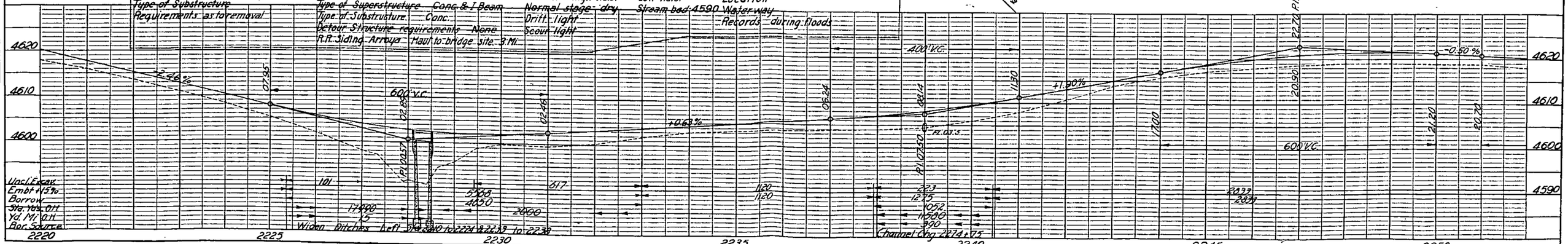
PRESENT STRUCTURE:
Span
Clear roadway
Clear waterway
Type of Superstructure
Type of Substructure
Requirements as to removal

New Alignment

PROPOSED STRUCTURE:
Position referred to present structure
Span 35'
Clear roadway 30'
Clear waterway 270 ±
Type of Superstructure Conc. & I Beam
Type of Substructure. Conc.
Detour Structure requirements None
R.R. Siding Arroya Haul to bridge site 3 Mi.

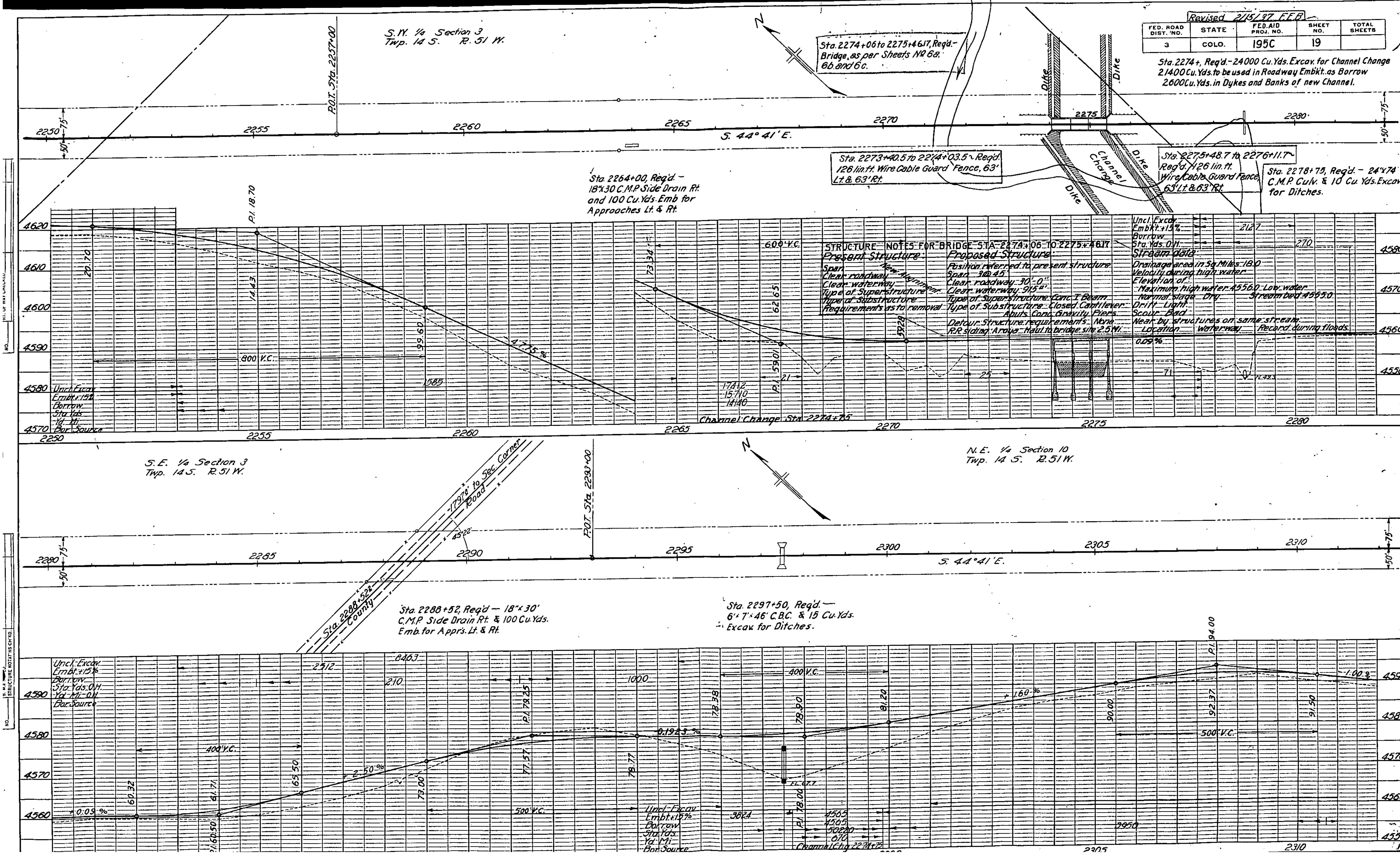
STREAM DATA:
Drainage area in Sq. Miles - 3.0
Velocity during high water
ELEVATION OF:
Maximum high water
Normal stage dry
Drift light
Scour light
Low water
Stream bed 4590

Nearby structures on same stream
Location
Waterway
Records during floods



Revised 2/15/37 E.F.B.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	195C	19	



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	195C	20	

N.W. 1/4 Section 11
Twp. 14 S. R. 51 W.

S.W. 1/4 Section 11
Twp. 14 S. R. 51 W.

1823.8' to Sec. Corner

N

44°29'

50' 75'

2310 2315 2320 2325 2330 2335 2340

P.C. Sta. 2336+36.8

S. 44°41' E.

Sta. 2314+15, Req'd.—
18" x 30' C.M.P. Side Drain Lt.
and 100 Cu. Yds. Emb. for
Approaches Lt. & Rt.

Sta. 2318+00, Req'd.—
24" x 68' C.M.P. Culvt. and
5 Cu. Yds. Excav. for Ditches

Sta. 2340+50, Req'd. —
24" x 76' C.M.P. Culvert and
10 Cu. Yds. Excav. for Ditches

Sta. 2314+14.8 County Road

N.E. 1/4 Section 10
Twp. 14 S. R. 51 W.

200' V.C.

88.00
87.08
86.30
P.I. 87.00
-1.00%
Fl. 79.6
-0.70%
77.90
76.16
P.I. 76.50
400' V.C.
73.73
-1.383%
70.97
78.76
P.I. 68.20
77.66
-0.27%
Fl. 62.7
400' V.C.

4590 4580 4570 4560

Uncl. Excav.				1642.9			
Emb'k't 115%				1170.5			
Borrow							
Sta. Yds. OH		110				5240	
Yd. Mi. OH				9300			
Borrow Source							

2310 2315 2320 2325 2330 2335 2340

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	195C	21	

Revised 2/15/37 F.E.B.

S.W. 1/4 SECTION 11 TWP. 14 S. R. 51 W.

S.E. 1/4 SECTION 11 TWP. 14 S. R. 51 W.

N

Δ = 33°13'L.
D = 1°00'
R = 5730.2'
T = 1709.1'
L = 3321.1'

Sta. 2360+30 to 2360+69.33 Req'd.- Bridge, (as per Details on Sheets No. 7a, 7b & 7c.)

Req'd.- Sta. 2359+49.5 to 2360+12.5
63 Lin. Ft. Wire Cable Guard Fence Lt.
Sta. 2359+79.5 to 2360+42.5
63 Lin. Ft. Wire Cable Guard Fence Rt.

Req'd.- Sta. 2360+56.8 to 2361+19.8
63 Lin. Ft. Wire Cable Guard Fence Lt.
Sta. 2360+86.8 to 2361+49.8
63 Lin. Ft. Wire Cable Guard Fence Rt.

Sta. 2366+00, Req'd.— 50 Cu. Yds. Emb. for Appr. Rt.

P.T. Sta. 2369+57.7 Ahead = Sta. 2450+29.8 Ah.

2340 2345 2350 2355 2360 2365

Dike

Present Road

Equation

Sta. 2340+50, See Previous Sheet for Requirement.

U.P.R. Survey of 1932

PACIFIC R. R.

43 span Trestle

P.I. Sta. 2363+45

Min States Telephone Line

UNION

HUGO

New Alignment

Equation: 2369+57.7 Bk. = 2450+29.8 Ah.

STRUCTURE NOTES FOR BRIDGES STA. 2360+30 TO 2360+69.33

Present Structure:
Span
Clear roadway
Clear waterway
Type of Superstructure
Type of Substructure
Requirements as to removal

Proposed Structure
Position referred to present structure
Span 1@36'
Clear roadway 30'-0"
Clear waterway 180±'
Type of Superstructure Concrete T-Beam
Type of Substructure - Closed Cantilever Conc. Abuts.
Detour Structure requirements None
R.R. siding Arroyo Haul to bridge site 9 Miles

Stream Data:
Drainage area in Sq. Miles 2.0
Velocity during high water
Elevation of:
Maximum high water
Normal stage
Drift Light
Scour Medium

Low water
Stream bed 4532

Near by structures on same stream:
Location 800' downstream U.P.R.
Waterway 60'
Record during floods Not known.

4570 4560 4550 4540 4530

0.27%
0
R.L. 667
65.10
65.51
65.22
-2.753%
58.22
47.21
400' V.C.
43.06
41.62
-0.038.3
500' V.C.
P.I. 41.70

2557
820
7281
12420
2365
2369
2451

Unc. Excav.
Emb. +15%
Borrow

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	195 C	22	

S.E. ¼ Section 11
Twp. 14 S. R. 51 W.

Sta 2457+38.3
2946 to ¼ Cor.

Sta 2463+17.6
2143.8 to ¼ Corner

N.W. ¼ Section 13
Twp. 14 S. R. 51 W.

75' 50' 2369 75' 50' 2451 2455 2460 2465 2470 Mtn. States Telephone Line 2475 2480 50' 50'

15°12'

S. 77°44' E.

565.3'

151.7'

Pipe and Cap

EQUATION
2369+57.7 Bk.
2450+29.8 Ah.

Sta 2477+00, Reqd. —
30"x76' C.M.P. Culvert &
5 Cu. Yds. Excav. for Ditches.

200'

UNION PACIFIC RAILROAD

Uncl. Excav.
Embt. +15%
Borrow
Sta. Yd
Yd. Mi.
Borrow Source

8599
8599
26240
470

4550
4540
4530
4520

4100 P.I.
4088
4030
41.04
200' V.C.
0.0383%
0.70%
3470 P.I.
3540
3465
3380
200' V.C.
0.90%
2840
2768
2730
200' V.C.
0.20%
2650 P.I.
0.60%
Fl. 21.5
2750 P.I.
26.70
26.40
25.90
200' V.C.

2369 2450 2455 2460 2465 2470 2475 2480

N.E. ¼ Section 13
Twp. 14 S. R. 51 W.

50' 50' 2480 2485 2490 2495 Mtn. States Telephone Line 2500 2505 2510 50' 50'

S. 77°44' E.

200'

UNION PACIFIC RAILROAD

Uncl. Excav.
Embt. +15%
Borrow
Sta. Yd. 0.11
Yd. Mi. 0.11
Borrow Source

4520
4510
4500

0.60%
1390
1330 P.I.
1300
200' V.C.
0.30%
1400
0965 P.I.
1060
200' V.C.

16.69
24.14
7.46

4605
4605

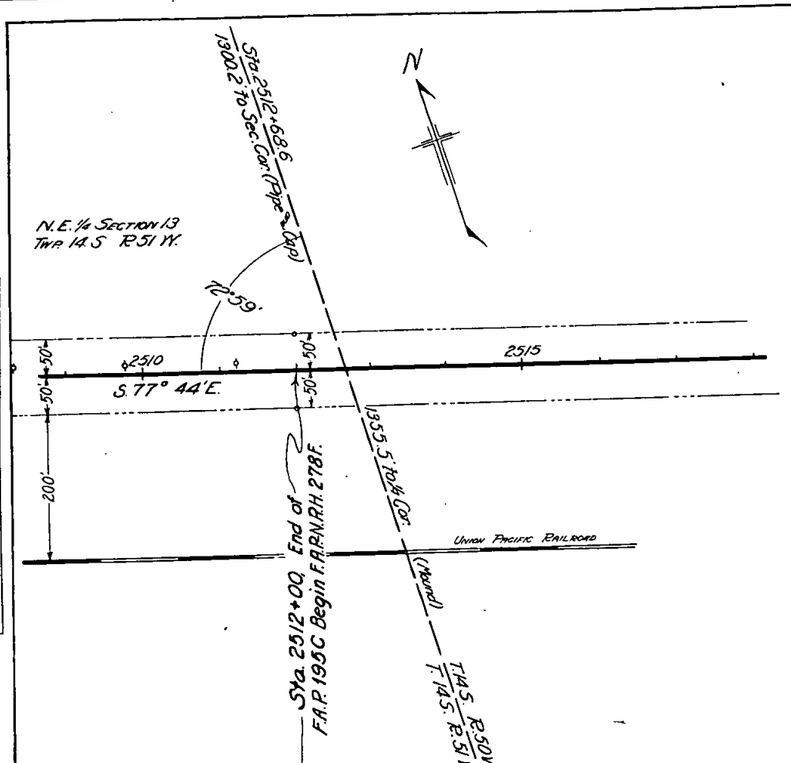
250

2480 2485 2490 2495 2500 2505 2510

Widen Ditches Within Free Haul Limits

STRUCTURE NO. A-13-CM-KD

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	195C	23	



NO. | STRUCTURE NOTATIONS CH'KD.