

EMER. RELIEF
PROJECT NO. 149-D
Revised 2-24-35 W.M. M.L.A.
Revised for Flood Relief 7/1/35
Revised 8-2-35
Revised for F.A.P. 149-D-R2
Dec 20, 35

COLORADO STATE HIGHWAY DEPARTMENT

INDEX OF SHEETS

SHEET NO. 1	TITLE PAGE
2	SUMMARY OF QUANTITIES AND TYPICAL CROSS SECTION
3 to 7	BRIDGE DETAILS
8	STD. CONCRETE BOX CULVERTS
9	STD. PICKET SNOW FENCE
10	STD. GUARD FENCE
11	STD. WIRE FENCE AND MARKER POSTS
12 to 22	PLAN AND PROFILE
23 to 29	CROSS SECTIONS

SHEET NO. 1	TITLE PAGE
2	PLAN, PROFILE & SUMMARY OF QUANTITIES
3	DETAILS OF STRUCTURE, BR. NO. E.19-B
4	STAND. STRUCT. NUMBER LETTERING, M-10-A

SHEET NO. 1	TITLE PAGE
2	SUMMARY OF QUANTITIES AND TYPICAL SECTION
3	STANDARD W.C. & M.P. GUARD FENCE M 20 G
4	STD. WIRE FENCES (Tr Wood Posts) and MRRR Posts M 24 F
5	ROADWAY CONST. TRAFFIC SIGNS M 2 B
6	PLAN & PROFILE

PLAN AND PROFILE OF PROPOSED FEDERAL AID PROJECT NO. 149-D R2 STATE HIGHWAY NO. 8 ADAMS AND ARAPAHOE COUNTIES

CONVENTIONAL SIGNS

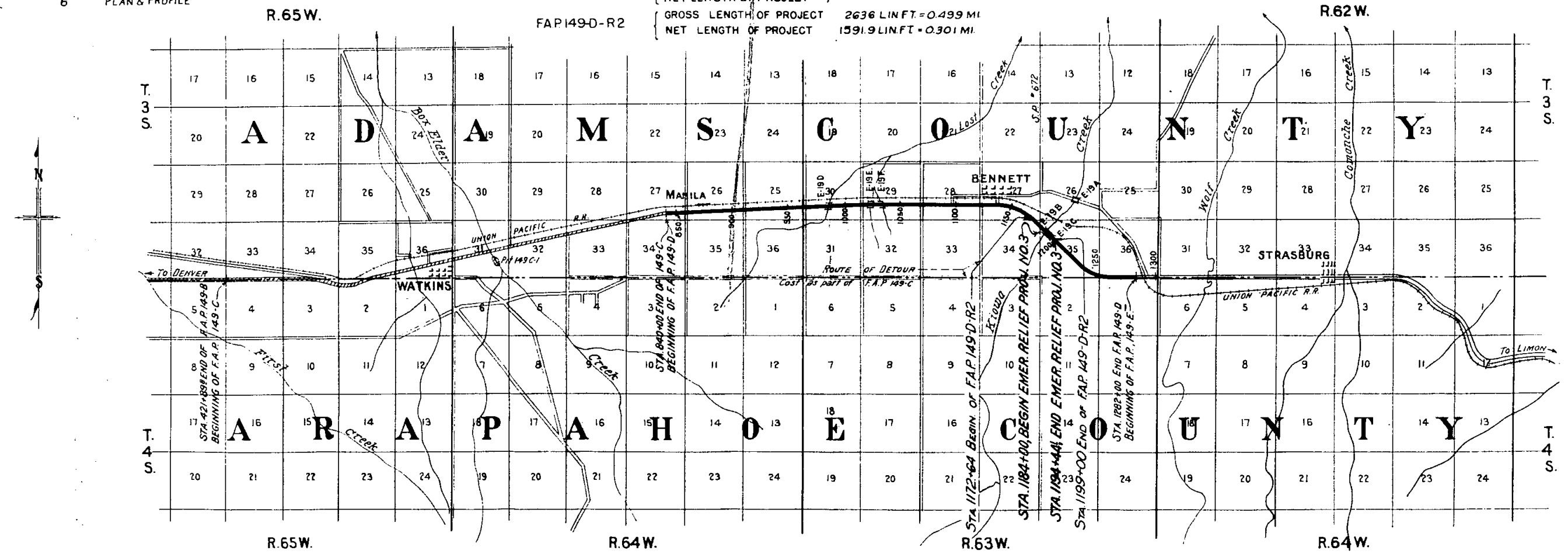
Survey Line	425
Right of Way Line	
Section Line	
One-quarter Section Line	
Township or Range Line	
Fence Line	
Pole Line	
Railroad	
Snow Fence	
Guard Fence	

NOTE

It is recommended that bidders on this project go over the plan details with one of the following field representatives of this Department:-

E.E. Montgomery.....Division Engineer.....Denver, Colorado
B.T. Miller.....Resident Engineer.....Denver, Colorado

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	
ORIGINAL PROJ.	GROSS LENGTH OF PROJECT 44,196.4 FT. = 8.370 MI. NET LENGTH OF PROJECT
EMER. RELIEF #3	GROSS LENGTH OF PROJECT 1,044.1 FT. = 0.197 MI. NET LENGTH OF PROJECT
FAP 149-D-R2	GROSS LENGTH OF PROJECT 2636 LIN. FT. = 0.499 MI. NET LENGTH OF PROJECT 1591.9 LIN. FT. = 0.301 MI.



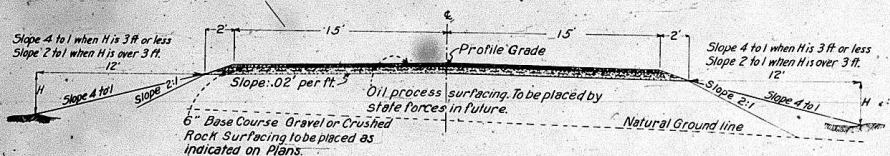
Scale ~ 1 inch = 1 mile

RECOMMENDED BY SUPERVISOR
E.E. Montgomery
APPROVED
CHAS. J. VICK
DIRECTOR BUREAU OF HIGHWAYS

TYPICAL CROSS SECTION OF IMPROVEMENT AND SUMMARY OF QUANTITIES

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	DATE
3	COLO.	149-D-R-2	2	

Rev. (Slopes) 1-23-36 AD.
 2nd. Correc. 2-17-36 AB.
 Rev. (as constructed) 2-3-37, PPB



TYPICAL SECTION OF IMPROVEMENT

Note: The thickness shown for the Base Course surfacing is to be considered approximate only. The surfacing is to be placed in two 3" layers at the following rates per square yard of surfacing. Bottom layer 0.372 tons; top layer 0.347 tons

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 this project is to be obtained as indicated on the plans.

The entire project is to be cleared for the full width of right of way and the cost thereof is to be included in the lump sum price for "Clearing and Grubbing the Entire Project". This item shall include removal of fallen trees, roots, branches, piles of mixed dirt, grass and twigs, and other flood debris. These materials are to be destroyed or otherwise disposed of downstream from the bridge, as directed by the Engineer.

No Overhaul is to be paid for on this project. The contract unit price for "Unclassified Excavation" shall include all hauling.

FENCING

REQUIREMENTS

Sta. to Sta.	DESCRIPTION	Remove Fence Lin. Ft.	Barbed Wire Fence Lin. Ft.	Guard Gates	Remove & Rebuild W.C. Fence
1172+194	1183+1625 Build Barbed Wire Fence Lt.				
1172+194	1176+100 Remove Fence Lt.	408	1140.5		
1174+325	1183+1973 Rebuild W.C. Guard Fence Rt.		1154		96.5
1172+1945	1183+1645 Barbed Wire Fence Rt.	162			
1172+1945	1174+155 Remove Fence Rt.				
1183+133	Driveaway Gate Lt.			1	
1194+441	1195+100 W.C. Guard Fence Lt. & Rt.		126.5		
1195+100	1198+1993 Barbed Wire Fence Rt.		399.5		
1199+100	Remove Fence	51			
1198+50	Driveaway Gate Lt.			1	
1176+100	1183+168 Remove Fence St.	795	485.0		
1185+607	1199+100 Barbed Wire Fence Lt.				281.0
1174+326	1183+145 Rebuild W.C. Guard Fence Lt.				32.10
1183+467	1183+975 Rebuild W.C. Guard Fence Lt.				
	Totals	1416	3179.5	2	1291.55

SUMMARY OF CONSTRUCTED QUANTITIES

No.	ITEM	UNIT	QUANTITY
10 a	Clearing & Grubbing Entire Project	Lump Sum	
12 a	Removing Fence	Lin. Ft.	1416
13 c	Unclassified Excavation	Cu. Yd.	2168.42
26 a	Gravel or Crushed Rock Surfacing	Ton	556.6
74	Wire Cable Guard Fence	Lin. Ft.	126.5
76 a	Barbed Wire Fence With Treated Wood Posts	" "	3179.5
76 h	Driveaway Gates	Each	2
74 x	Remove and Rebuild Wire Cable Guard Fce	Lin. Ft.	1891.55

PLAN	DATE	BY
1170	1175	1180
1185	1190	1195
1200		

PROFILE	DATE	BY
5470	5460	5450
5440	5430	5420
5410		

UNCL. ELEV.	CL. ELEV.	5% BOTTOM
1175	1180	1185
1190	1195	1200

872+84-7 Req. 1403 Lin. Ft. Barbed Wire Fence
1183+975 With Treated Timber Post
1175+98- Remove 100 Lin. Ft. Barbed Wire Fence

Remove & Rebuild
1174+326 } 201.6 Lin. Ft. Wire Cable Guard Fence Lt.
1183+143 } Cable and Post from old Fence in Good Condition May be Used in New Construction.
1183+143 } 50.75 Lin. Ft. Wire Cable Guard Fence Lt.
1183+975 }

1175+00 Req. 240 Ton. of Gravel on Crushed Rock
1184+00 Surfacing

Remove & Rebuild
1174+325 } 965 Lin. Ft. Wire Cable Guard Fence Rt.
1183+975 } Cable and Post in Good Condition from old Fence May be Used in New Construction

1175+98 } Remove 802 Lin. Ft. Barbed Wire Fence
1184+00 } With Timber Post
1172+940 } Req. 4503 Lin. Ft. Barbed Wire Fence
1183+143 } With Treated Timber Post

N.W. 1/4 Sec. 35 T. 35. R. 63 W.

1183+975-End Guard Fence
STA 1184+00 BEGIN E.R.P. No. 9

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
2	COLO.	149-D-R-2	6	6

See (as const) 2 & 3 P.P.B.

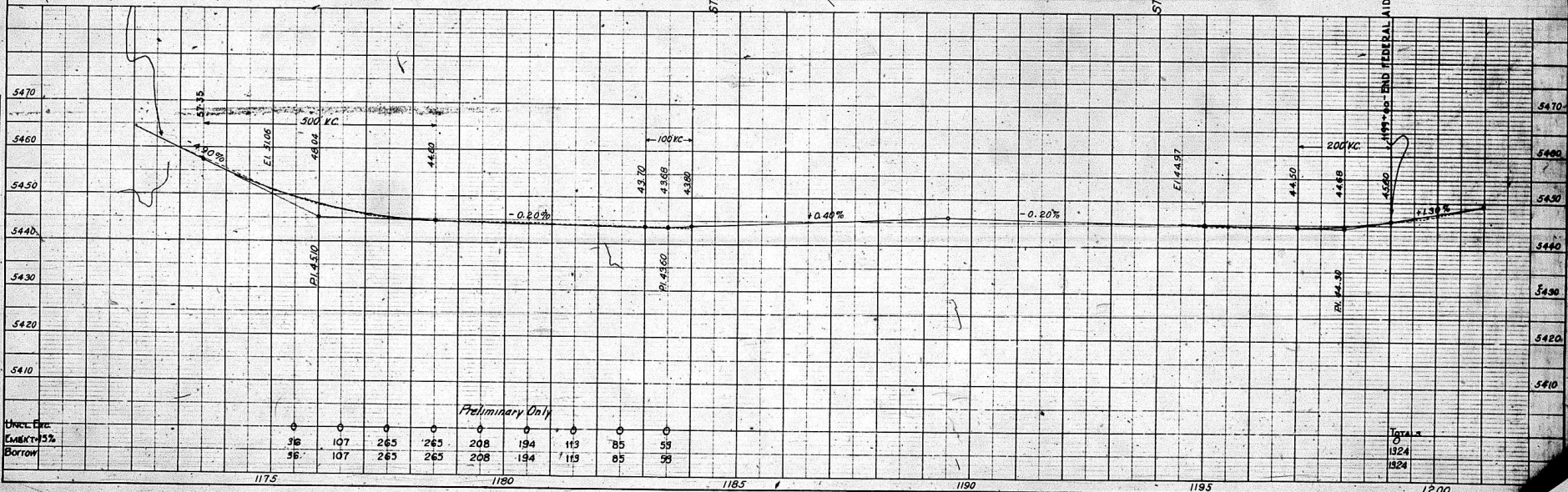
1195+00 } Req. 11540 Lin. Ft.
1199+00 } Barbed Wire Fence
1199+00- Remove 100 Lin. Ft. Barbed Wire Fence
1194+441 } Req. 63 Lin. Ft.
1195+000 } Wire Cable Guard Fence Lt.

1194+441 } Req. 635 Lin. Ft.
1195+00 } Wire Cable Guard Fence Rt.

1195+00 } Req. 3995 Lin. Ft.
1195+985 } Barbed Wire Fence

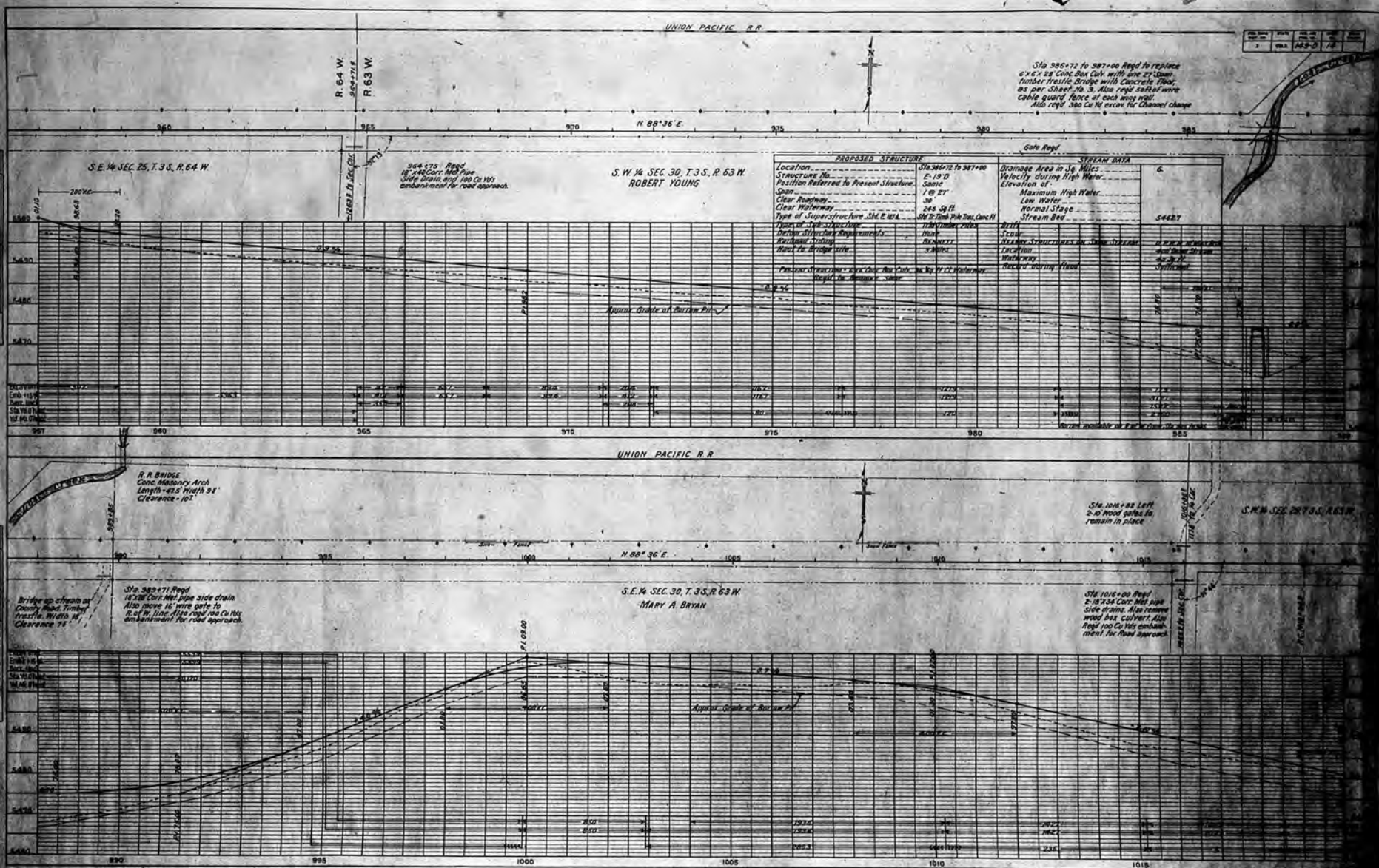
1194+43 } Req. 260 Ton.
1197+00 } Gravel or Crushed Rock Surfacing

STA 1194+441 END E.R.P. No. 3





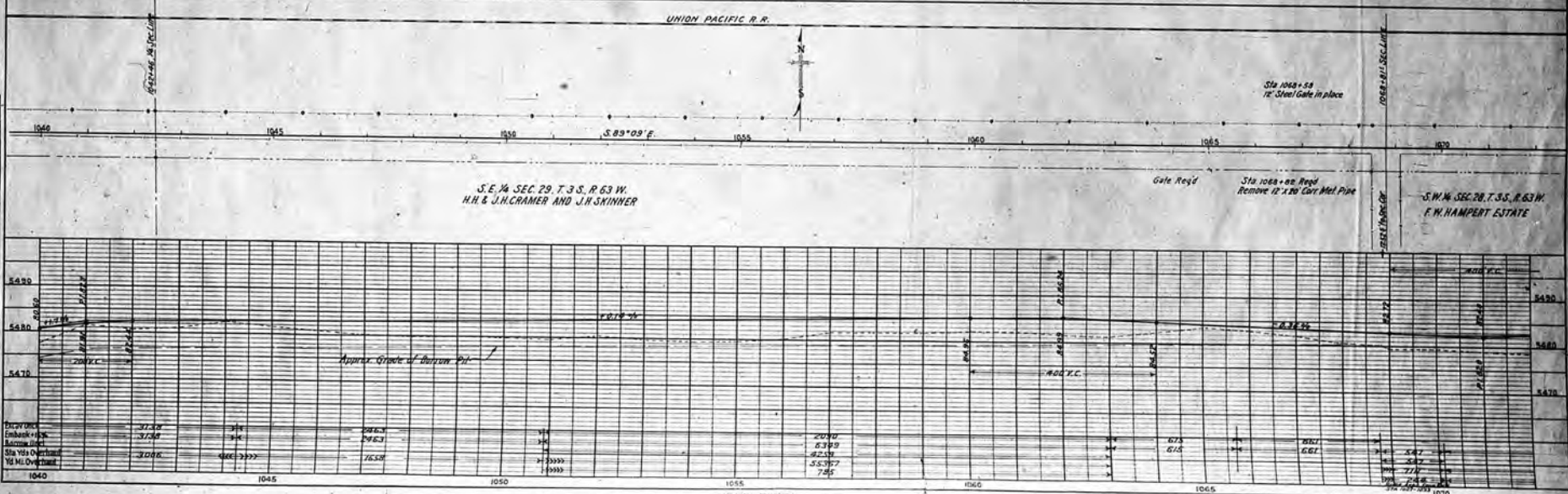
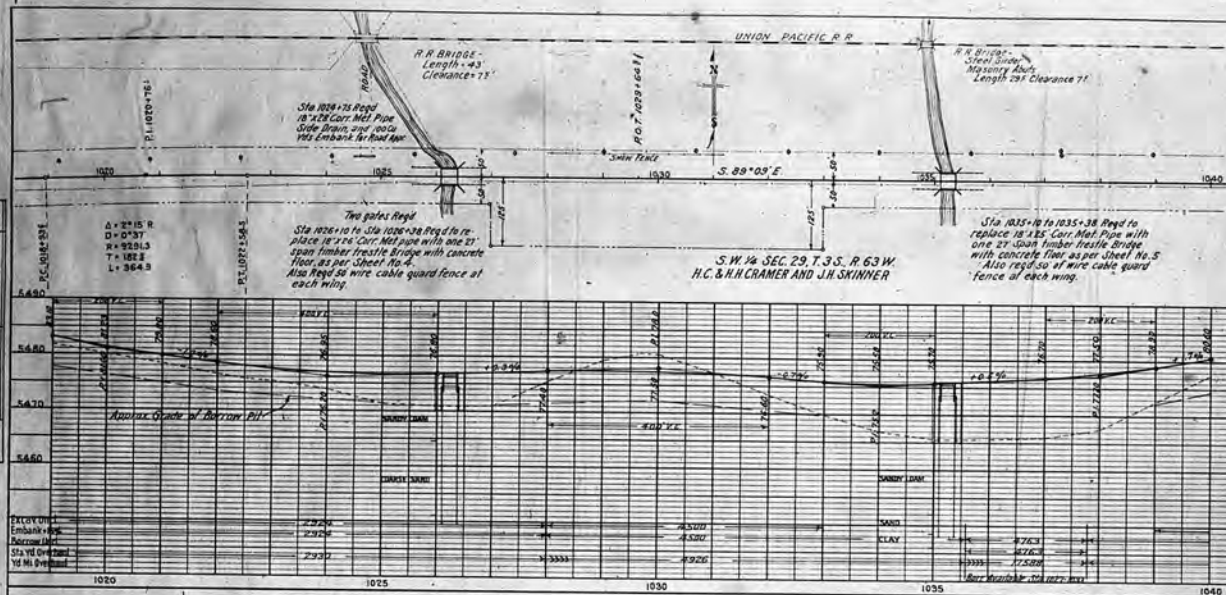




PLAN	DATE	FILE NO.	PROJECT NO.	SCALE
1	1914	14-9-2	15	

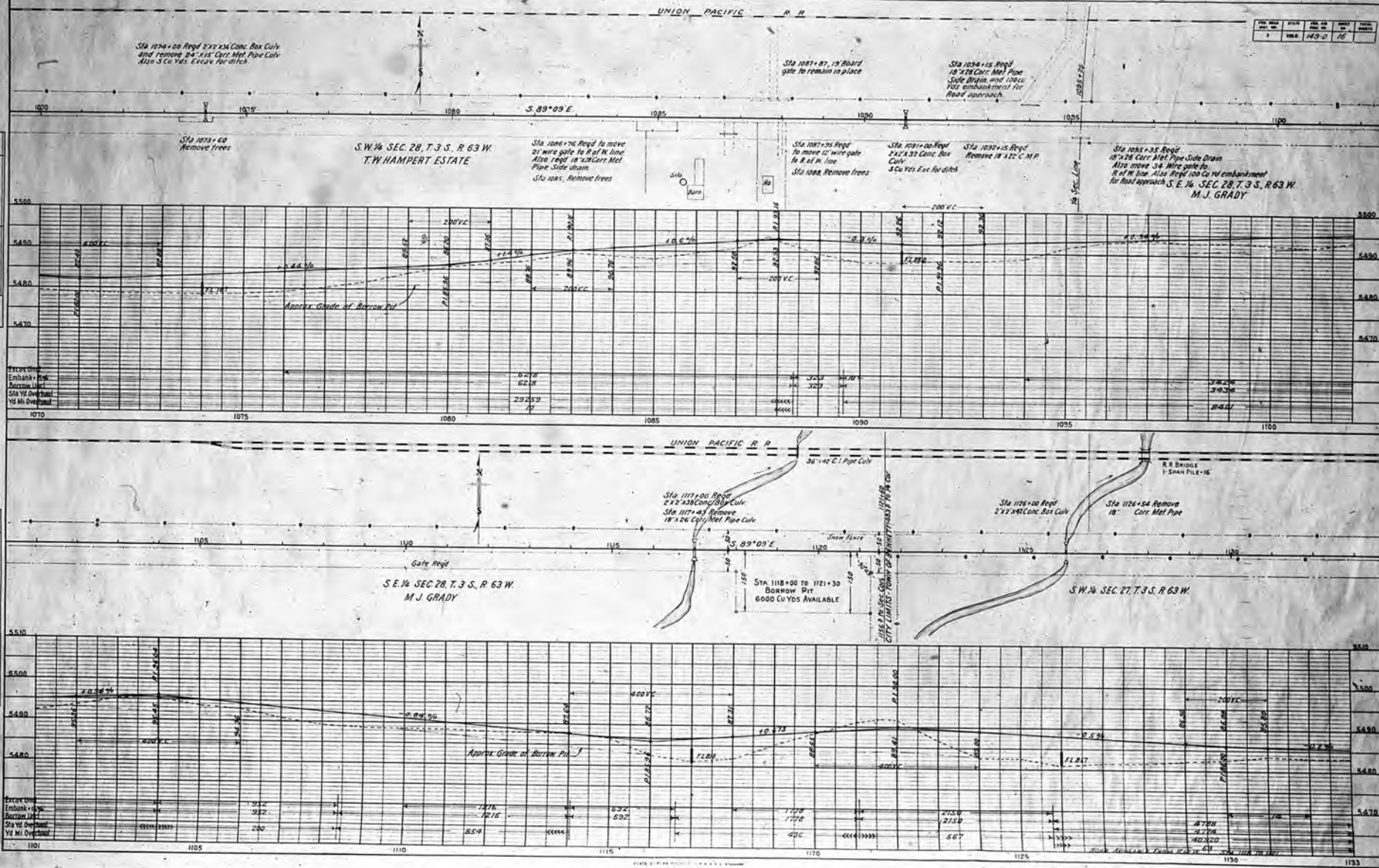
PLAN	DATE	FILE NO.	PROJECT NO.	SCALE
1	1914	14-9-2	15	

PROFILE	DATE	FILE NO.	PROJECT NO.	SCALE
1	1914	14-9-2	15	



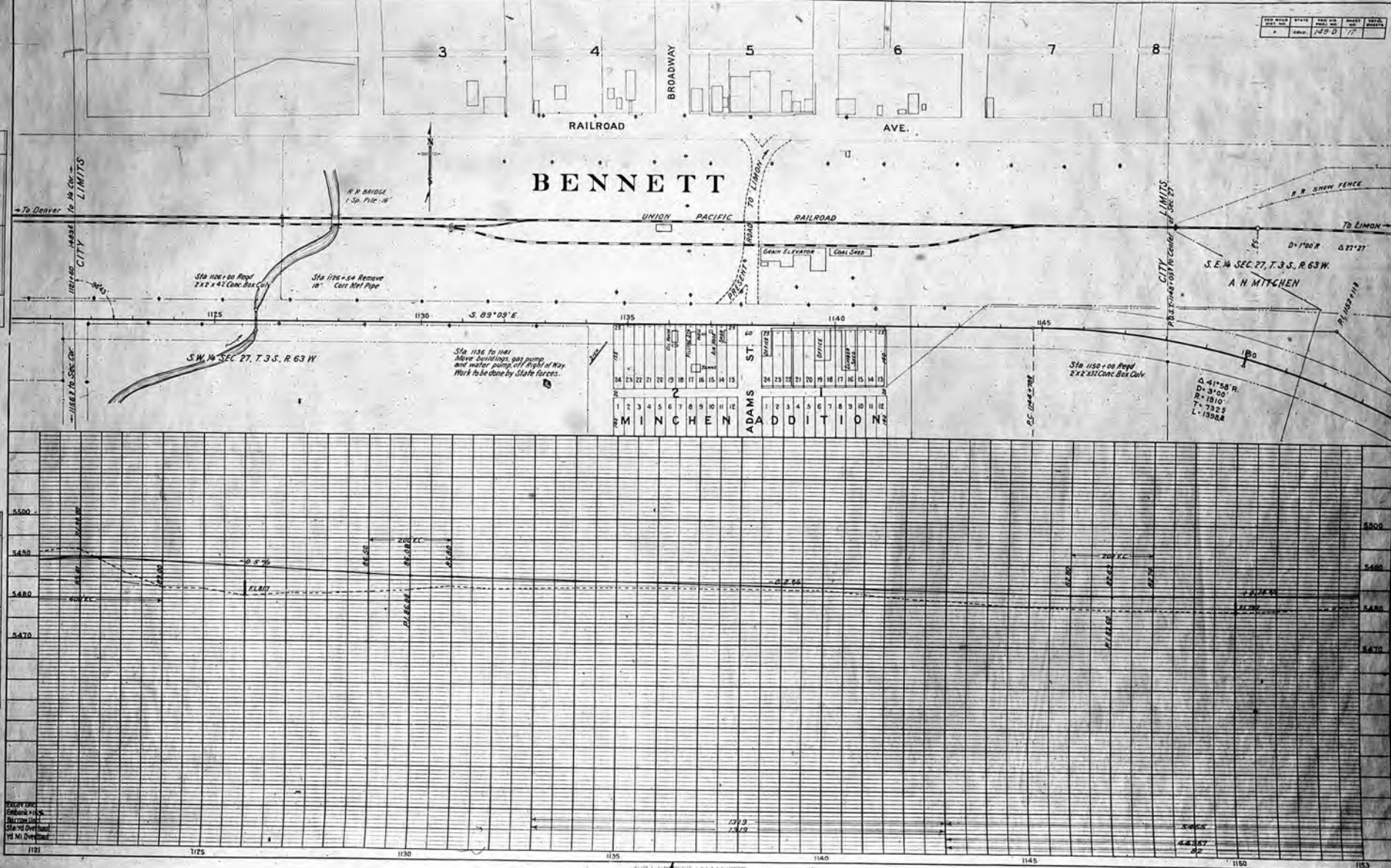
PROPOSED STRUCTURES	
Location	Sta 1026+10 to 1026+30
Structure No.	5-19 E
Position Referred to Present Structure	Same
Span	1 @ 27'
Clear Roadway	30'
Clear Waterway	200 Sq. Ft.
Type of Superstructure	Slab P.M.A.
Type of Substructure	7" Timber Pile Trestle
Details Structure Requirements	None
Railroad Station	Stewart
Haul to Bridge site	2.5 Mi.
Stream Data	
Drainage Area in Sq. Miles	34
Velocity during High Water	
Elevation of	
Low Water	
Normal Stage	
Stream Bed	
Drift	
Scour	
Heavy Structures on Same Stream	U.P.R.R.
Location	300' down stream
Waterway	300' up 27'
Record during Flood	Sufficient
Location	Sta 1026+10 to 1026+30
Type of Structure	18' 4" x 26" Cor. Met. Pipe Trestle

PROPOSED STRUCTURES
Location
Structure No.
Position Referred to Present Structure
Span
Clear Roadway
Clear Waterway
Type of Superstructure
Type of Substructure
Details Structure Requirements
Railroad Station
Haul to Bridge site
Stream Data
Drainage Area in Sq. Miles
Velocity during High Water
Elevation of
Low Water
Normal Stage
Stream Bed
Drift
Scour
Heavy Structures on Same Stream
Location
Waterway
Record during Flood
Location
Type of Structure



PLAN	DATE	BY	CHECKED
PLANNED	1914	W. H. HARRIS	W. H. HARRIS
DESIGNED	1914	W. H. HARRIS	W. H. HARRIS
NOTED	1914	W. H. HARRIS	W. H. HARRIS
NO.			

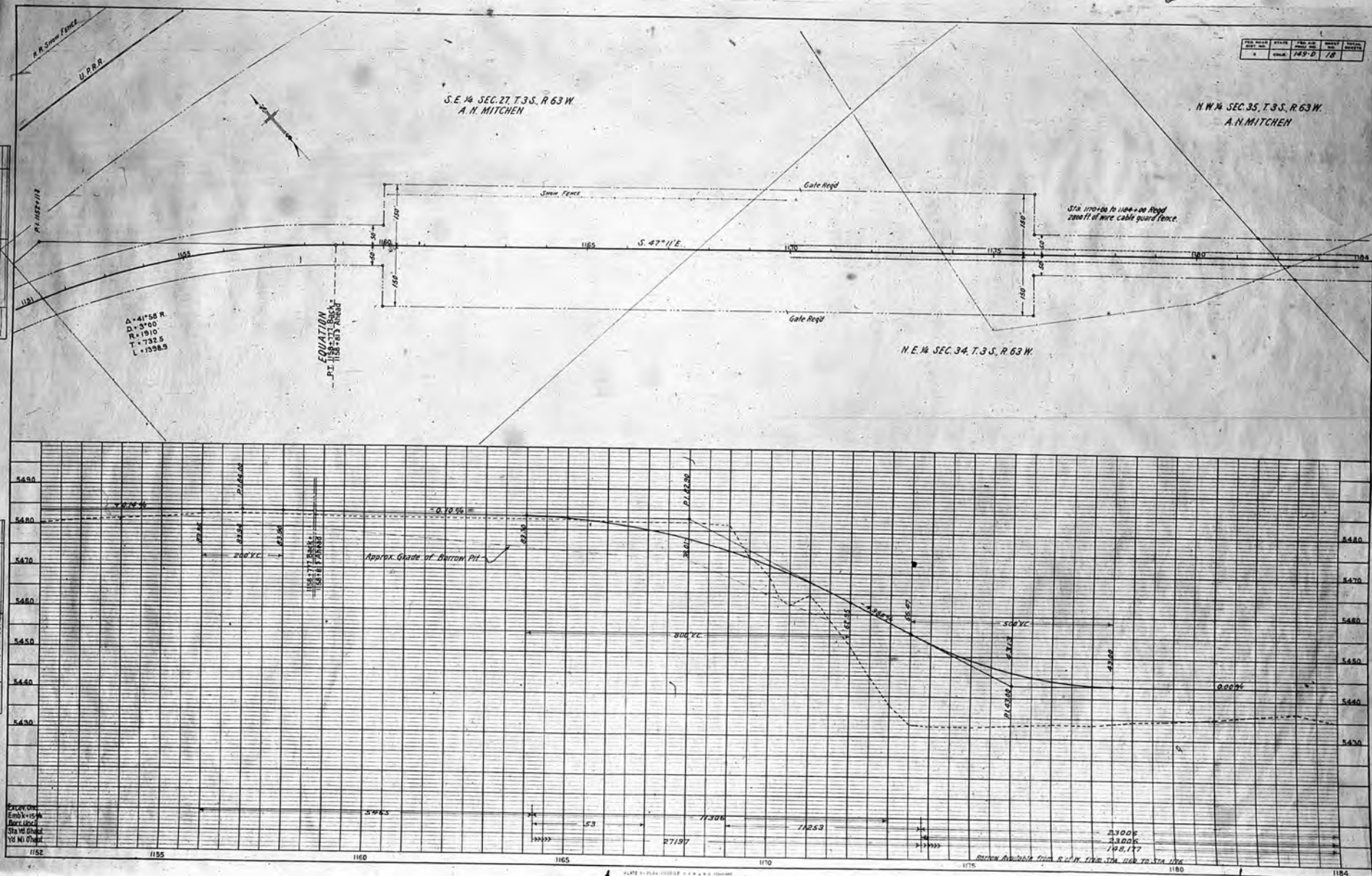
PROFILE	DATE	BY	CHECKED
PLANNED	1914	W. H. HARRIS	W. H. HARRIS
DESIGNED	1914	W. H. HARRIS	W. H. HARRIS
NOTED	1914	W. H. HARRIS	W. H. HARRIS
NO.			

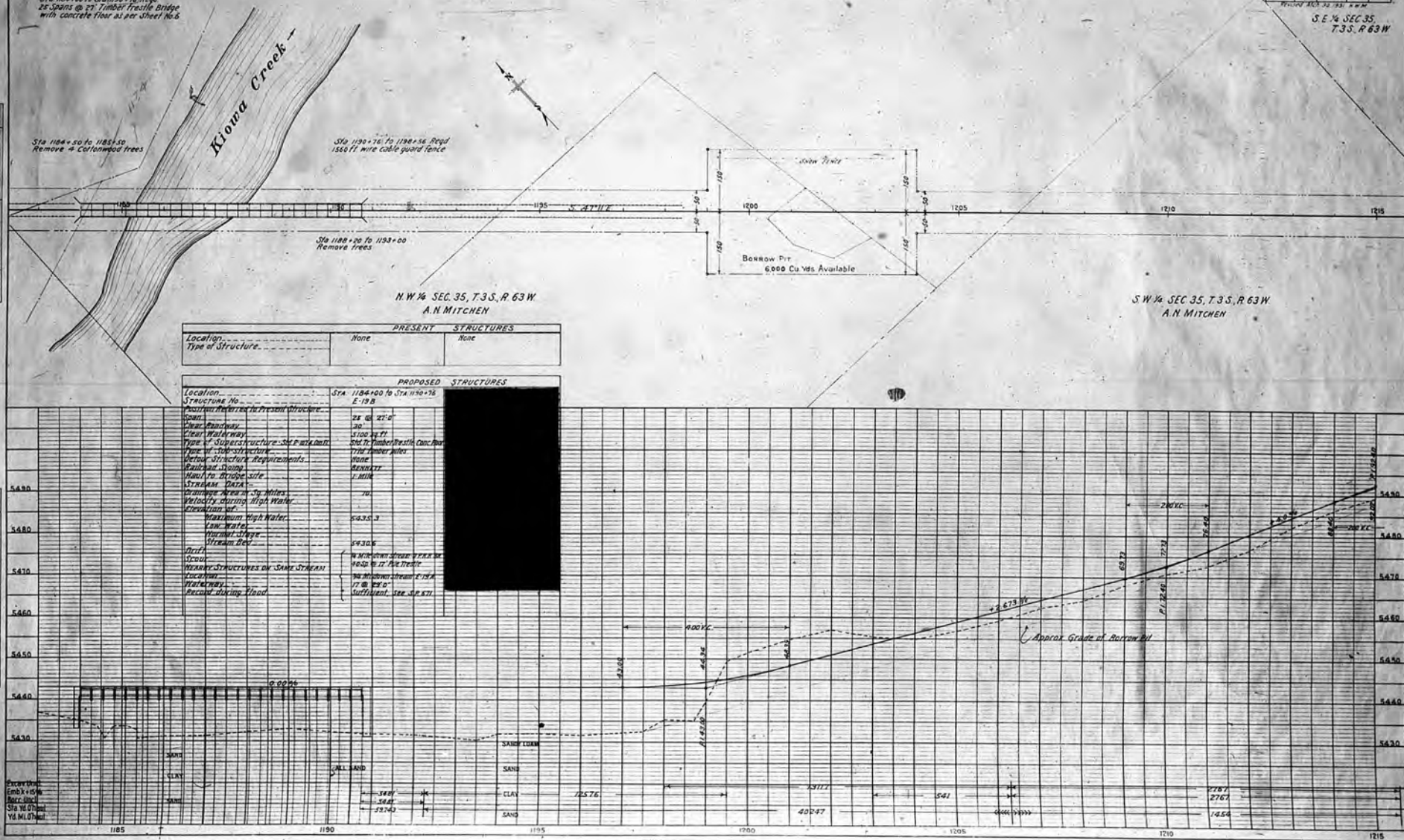


PLAN	SECTION	DATE	BY	CHECKED	APPROVED
1	1	1950	D	149-D	18

PLAN	SECTION	DATE	BY	CHECKED	APPROVED
1	1	1950	D	149-D	18

PROFILE	SECTION	DATE	BY	CHECKED	APPROVED
1	1	1950	D	149-D	18





PLAN	SECTION	DATE	BY	CHKD
PLAN	SECTION	189-0	20	

PLAN	SECTION	DATE	BY	CHKD
PLAN	SECTION	189-0	20	

PLAN	SECTION	DATE	BY	CHKD
PLAN	SECTION	189-0	20	

S.E. 1/4 SEC. 35, T. 3 S., R. 63 W.
A.H. MITCHEN

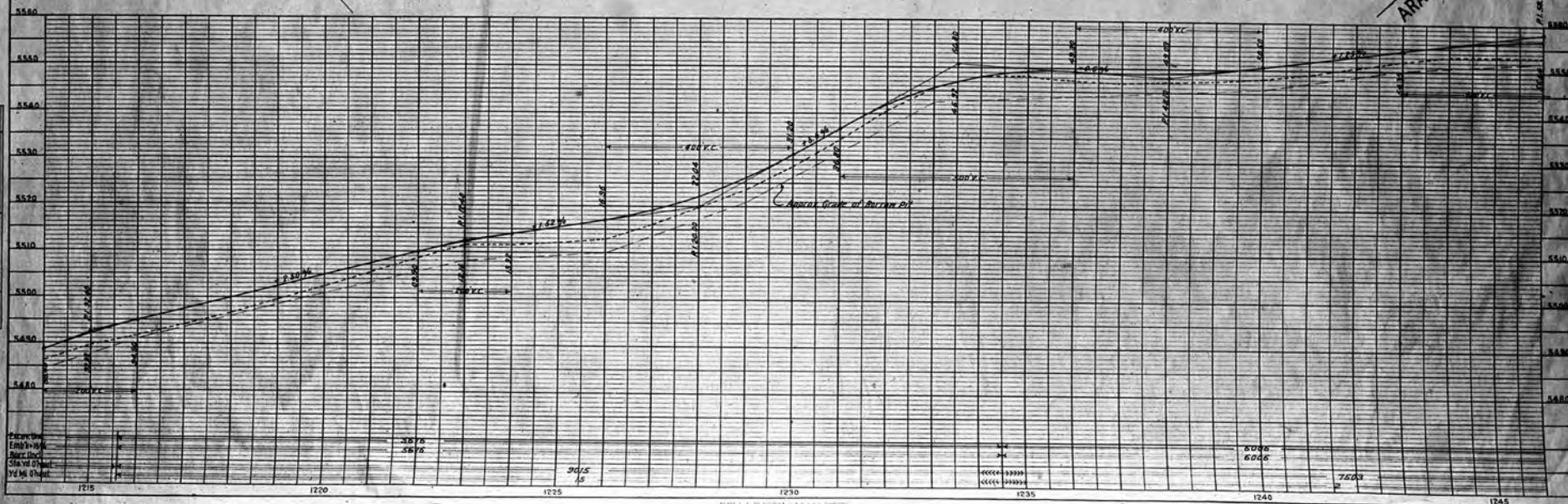
$\Delta = 43^{\circ}20' L$
 $D = 2700'$
 $R = 2865.0$
 $T = 1136.3$
 $L = 2166.7$

2 Gates road

S. 47° 11' E

S.W. 1/4 SEC. 35, T. 3 S., R. 63 W.

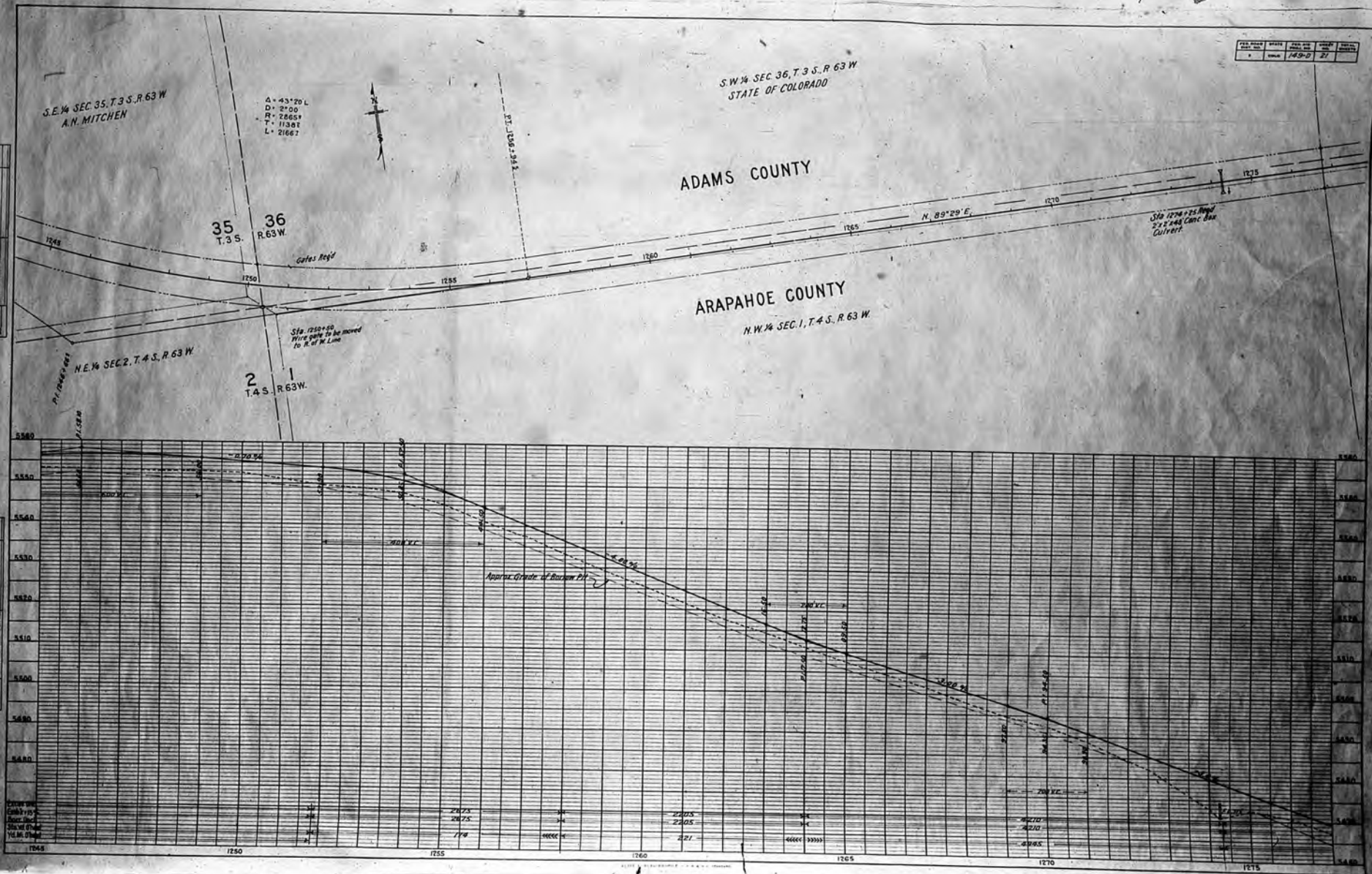
ADAMS COUNTY
ARAPAHOE COUNTY



SECTION	DATE	BY	SCALE	REVISIONS
1	1965	1450-D	27	

PLAN	SECTION	DATE	BY	SCALE	REVISIONS
1	1965	1450-D	27		

PROFILE	SECTION	DATE	BY	SCALE	REVISIONS
1	1965	1450-D	27		



S 1/2 SEC. 35, T.3 S., R. 63 W.
STATE SCHOOL LAND

ADAMS COUNTY

36
T.3 S., R. 63 W.

31
T.3 S., R. 62 W.

ARAPAHOE COUNTY

1
T.4 S., R. 63 W.

6
T.4 S., R. 62 W.

DATE	BY	APP'D	REVISED
1922	149-D	22	

DATE	BY	APP'D	REVISED
1922	149-D	22	

