

COLORADO

STATE HIGHWAY DEPARTMENT

PLAN AND PROFILE OF PROPOSED

U.S. WORKS PROGRAM HIGHWAY PROJECT NO. W.P.M.S.-429-B(I)

STATE HIGHWAY NO. 119

GILPIN COUNTY

FED. ROAD DIST. NO.	STATE	U.S.W.P. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	W.P.M.S. 429-B(I)	1	

Rev. 11-8-39 from Proj. designation

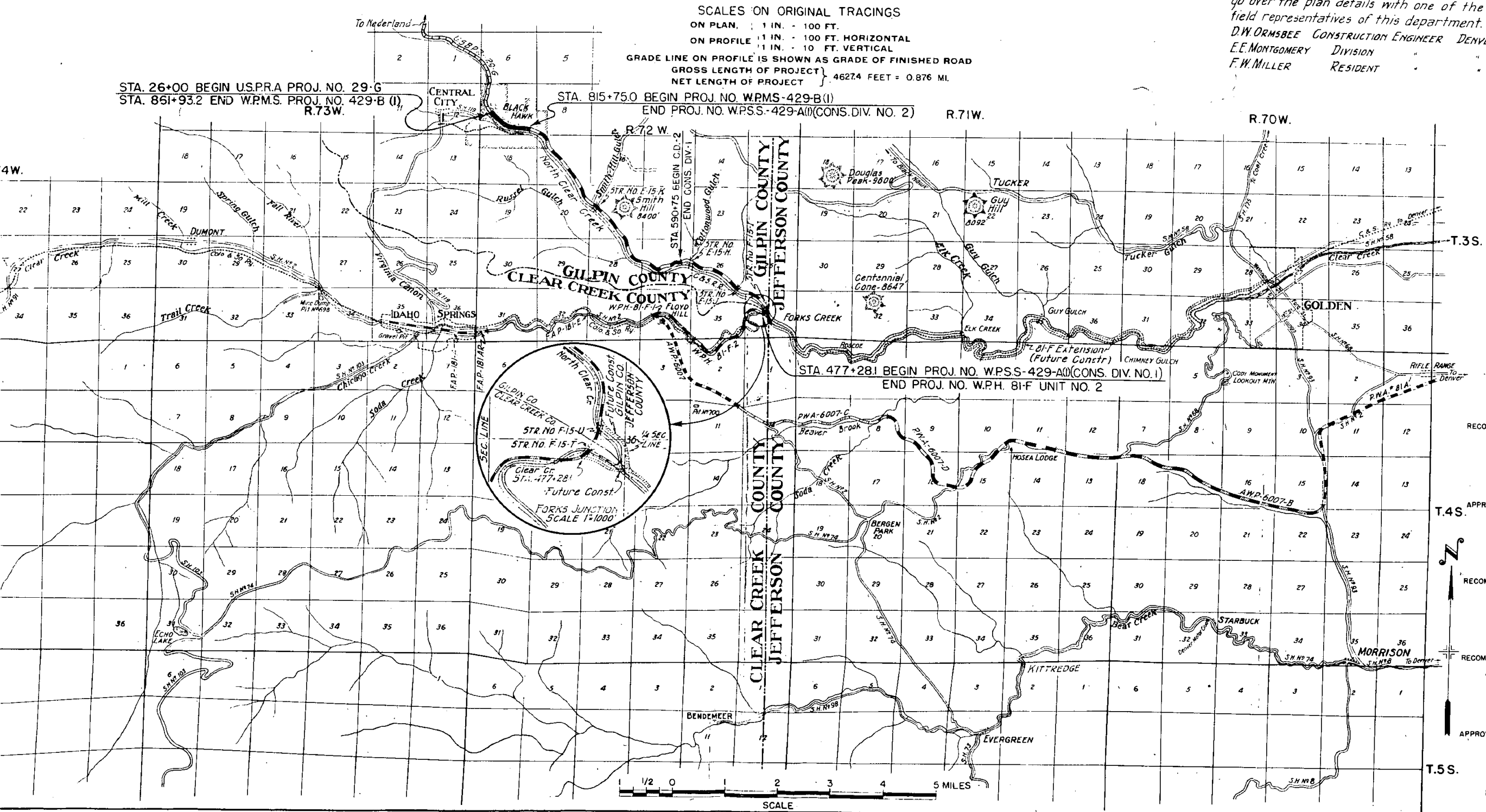
ETCH MAP & TITLE
 TYPICAL SECTION & SUMMARY OF APPROXIMATE QUANTITIES
 LIST OF STRUCTURES
 DETAILS OF TREATED TIMBER MINE PORTALS, STA. 845+ & 847+
 STANDARD HEADWALLS FOR C.M.P. CULVERTS M 102 E
 CONCRETE BOX CULVERTS M 104 D
 STANDARD TIMBER GUARD POSTS M 19 B
 STANDARD METHODS FOR SUPERELEVATION & DRAINAGE OF CURVES M 1 B
 TYPICAL SIDE APPROACH ROADS - ROADWAY INSTRUCTION TRAFFIC SIGNS M 2 B
 STANDARD MARKER POSTS M 7 B
 PLAN & PROFILE
 CROSS SECTIONS

CONVENTIONAL SIGNS

CENTER LINE OF SURVEY
 RIGHT OF WAY LINE
 SECTION LINE
 ONE-QUARTER SECTION LINE
 POLE LINE
 RAILROAD

NOTE

It is recommended that bidders on this project go over the plan details with one of the following field representatives of this department.
 D.W. ORMSBEE CONSTRUCTION ENGINEER DENVER, COLO.
 E.E. MONTGOMERY DIVISION
 F.W. MILLER RESIDENT



RECOMMENDED FOR APPROVAL

[Signature]
 ASSISTANT ENGINEER
 DATE Sept. 26, 1939

APPROVED

[Signature]
 STATE HIGHWAY ENGINEER
 DATE

RECOMMENDED FOR APPROVAL

DISTRICT ENGINEER
 PUBLIC ROADS ADMINISTRATION
 FEDERAL WORKS AGENCY

RECOMMENDED FOR APPROVAL

CHIEF, WESTERN REGION
 PUBLIC ROADS ADMINISTRATION
 FEDERAL WORKS AGENCY

APPROVED

COMMISSIONER
 PUBLIC ROADS ADMINISTRATION
 FEDERAL WORKS AGENCY

- 1 SKETCH MAP & TITLE
- 2 TYPICAL SECTION & SUMMARY OF APPROXIMATE QUANTITIES
- 3 LIST OF STRUCTURES
- 4 DETAILS OF TREATED TIMBER MINE PORTALS, STA. 845+ & 847+
- 5 STANDARD HEADWALLS FOR C.M.P. CULVERTS M 102 E
- 6 CONCRETE BOX CULVERTS M 104 D
- 7 STANDARD TIMBER GUARD POSTS M 19 B
- 8 STANDARD METHODS FOR SUPERELEVATION & WIDENING OF CURVES M 1 B
- 9 TYPICAL SIDE APPROACH ROADS - ROADWAY CONSTRUCTION TRAFFIC SIGNS M 2 B
- 10 STANDARD MARKER POSTS M 7 B
- 11 & 12 PLAN & PROFILE
- 13 TO 53 CROSS SECTIONS

COLORADO

STATE HIGHWAY DEPARTMENT

PLAN AND PROFILE OF PROPOSED

U.S. WORKS PROGRAM HIGHWAY PROJECT NO. W.P.M.S.-429-B (I)

STATE HIGHWAY NO. 119

GILPIN COUNTY

CONVENTIONAL SIGNS

CENTER LINE OF SURVEY --- 404
 RIGHT OF WAY LINE ---
 SECTION LINE ---
 ONE-QUARTER SECTION LINE ---
 POLE LINE ---
 RAILROAD ---

NOTE

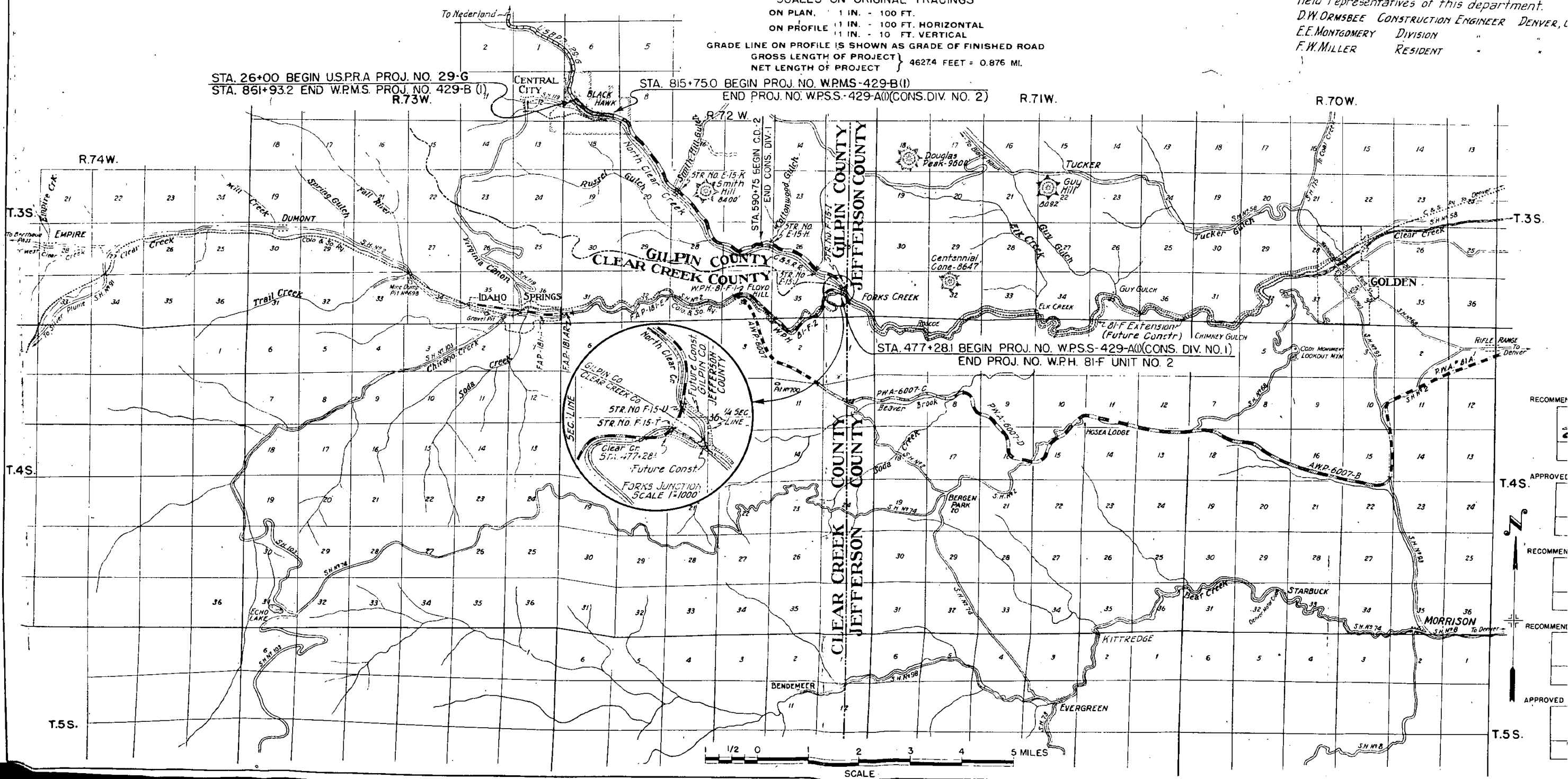
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 D.W. ORMSBEE CONSTRUCTION ENGINEER DENVER, CO.
 E.E. MONTGOMERY DIVISION
 F.W. MILLER RESIDENT

SCALES ON 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 4627.4 FEET = 0.876 MI.
 NET LENGTH OF PROJECT

STA. 26+00 BEGIN U.S.P.R.A. PROJ. NO. 29-G
 STA. 861+93.2 END W.P.M.S. PROJ. NO. 429-B (I)
 R.73W.

STA. 815+75.0 BEGIN PROJ. NO. W.P.M.S.-429-B (I)
 END PROJ. NO. W.P.S.S.-429-A (I) (CONS. DIV. NO. 2) R.71W.

R.70W.



TYPICAL CROSS SECTION OF IMPROVEMENT AND SUMMARY OF QUANTITIES

TYPICAL CROSS SECTION

16'-0" 14'-0" 2'-0" 16'-0" 14'-0" 2'-0"

1'-4" 12'-8" 12'-8" 1'-4"

Crushed Rock Surfacing

Slope 0.02' per ft.

6" Selected Material

Profile Grade 4"

0.50' below profile grade

Top of Subgrade

Slope 14:1

Slope 12:1

Slope 1:1

5'-0"

5'-0"

CUT SLOPE TREATMENT IN EARTH CUTS

The intersection of Cut Slopes with ground shall be rounded in earth cuts 5 ft. outside the slope stakes and extend down the cut slope. Where the Cut Slope is less than 5 ft. reduce each of the above Slope Treatment to the actual slope. Quantities involved in Slope Treatment included in "Unclassified Excavation".

Excavation or borrow below slopes shown will not be permitted.

Slope to suit Material.

The intersection of Cut Slopes with the existing ground shall be rounded in earth cuts beginning 5 ft. outside the slope stakes and extending 5ft. 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 be included in "Unclassified Excavation."

4" compacted thickness of Base Course Surfacing is to be placed at the rate of 55 tons per 100 lin. ft. of roadway.

ends of corrugated metal culvert pipes, which are not provided with walls, shall be covered with approximately 6" of material in such a manner that a minimum of metal shall be exposed in the completed work. This shall be accomplished by warping embankment slopes around and adjacent to the culvert.

No.	ITEM	UNIT	ROADWAY
10a	Clearing & Grubbing Entire Project	Lump Sum	•
11c	Removing 2 Buildings off R.O.W. Sta. 820+ to 827+	Lump Sum	•
11d	Removing 4 Buildings off R.O.W. Sta. 844+ to 848+	Lump Sum	•
11e	Removing Mill off R.O.W. Sta. 858+ to 860+	Lump Sum	•
11f	Removing Garage off R.O.W. Sta. 861+	Lump Sum	•
11g	Removing Rock Walls	Lin. Ft.	360
11h	Removing Timber Crib	Lin. Ft.	15
11i	Removing Frame Foundation off R.O.W. Sta. 826+	Lump Sum	•
13c	Unclassified Excavation	Cu.Yd.	60,000
13z	Boulder Excavation	Cu.Yd.	50
14a	Dry Rock Excavation (Structural)	Cu.Yd.	140
14b	Dry Common Excavation (Structural)	Cu.Yd.	210
14c	Wet Rock Excavation (Structural)	Cu.Yd.	40
14d	Wet Common Excavation (Structural)	Cu.Yd.	60
18a	Station Yard Overhaul	Sta. Yd.	155,000
18b	Yard Mile Overhaul	Yd. Mi.	1,000
26a	Gravel or Crushed Rock Surfacing	Ton	2,700
44b	Miscellaneous Treated Timber	Mft. bm	11.3
46a	Class "A" Concrete	Cu.Yd.	150
46b	Class "B" Concrete	Cu.Yd.	29
47	Reinforcing Steel	Lb.	13,400
53b	18" Corrugated Metal Culvert Pipe	Lin.Ft.	30
53c	24" Corrugated Metal Culvert Pipe	Lin.Ft.	108
53e	36" Corrugated Metal Culvert Pipe	Lin.Ft.	328
53g	48" Corrugated Metal Culvert Pipe	Lin.Ft.	118
53y	12" Corrugated Metal Culvert Pipe	Lin.Ft.	54

	Remove & Reset Pump, Pump House & Water Line Sta. 826+	Lump Sum	•
	Obliterate Old Channel Sta. 815+ to 860+.	Lump Sum	•
	Move Building & 3 Tanks off R.O.W. Sta. 857+	Lump Sum	•
	Move Power Poles off R.O.W. (WORK BY POWER CO. FORCES)	Lump Sum	•
	FORCE ACCOUNT ITEMS NOT RECEIVING FEDERAL AID		
	Build Pump Shed Sta. 859+	Lump Sum	•

All notes on Plans and Special Provisions designated for "W.P.S.S. 429-B(1)" are construed to apply to W.P.M.S. 429-B(1).

STATION	NO.	
	SIDE	LT. R
815 + 75		
816 + 30		
842 + 40		
842 + 60		
842 + 80		
844 + 38		
852 + 38		
860 + 45		
860 + 48		
861 + 93.2		
TOTAL	10	

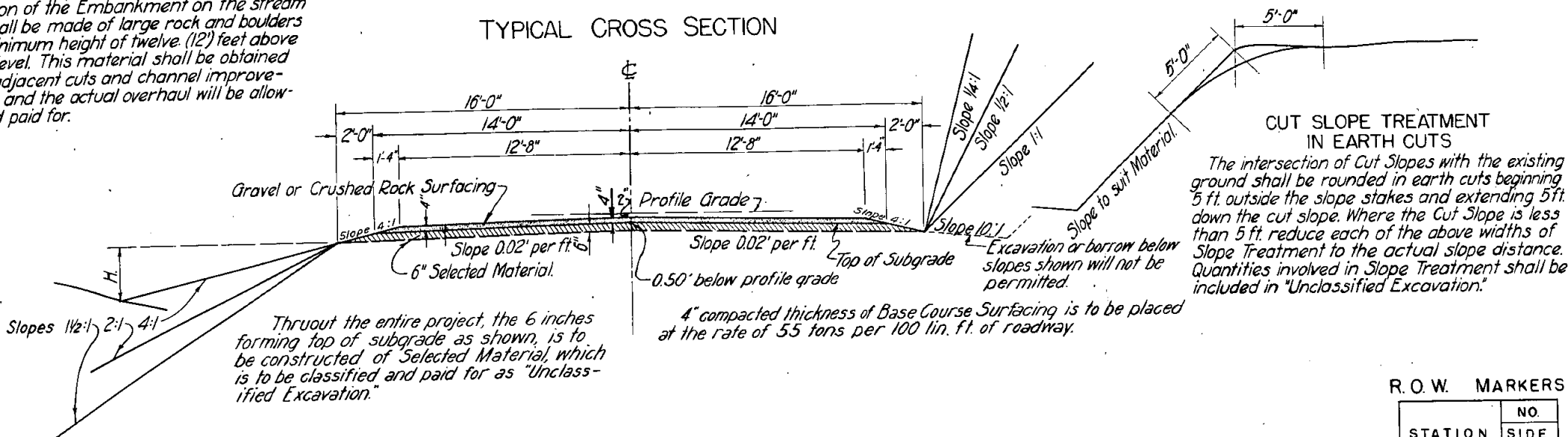
The Selected Material shall be classified and paid for as "Unclassified Excavation." Estimated Quantities involved and the Source of Material are shown below:-

MATERIAL TO BE PLACED	APPROXIMATE QUANTITIES	SOURCE OF MATERIAL	ESTIMATED OVERHAUL	
			STA. YDS.	YD. M
ROADWAY				
815+75 - 840+00	1600	On R.O.W. within Free Haul Limit	—	—
840+00 - 856+00	1050	On R.O.W. Lt. of Sta 838+ to 842+	3960	—
856+00 - 861+932	370	On R.O.W. Lt. of Sta 838+ to 842+	4070	20
TOTAL S	3020		8030	20

TYPICAL CROSS SECTION OF IMPROVEMENT AND SUMMARY OF QUANTITIES

Thruout the Project where Embankments extend into the present stream bed, the construction of the Embankment on the stream side shall be made of large rock and boulders to a minimum height of twelve (12) feet above water level. This material shall be obtained from adjacent cuts and channel improvements and the actual overhaul will be allowed and paid for.

TYPICAL CROSS SECTION



Thruout the entire project, the 6 inches forming top of subgrade as shown, is to be constructed of Selected Material, which is to be classified and paid for as "Unclassified Excavation."

4" compacted thickness of Base Course Surfacing is to be placed at the rate of 55 tons per 100 lin. ft. of roadway.

CUT SLOPE TREATMENT IN EARTH CUTS

The intersection of Cut Slopes with the existing ground shall be rounded in earth cuts beginning 5 ft. outside the slope stakes 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 be included in "Unclassified Excavation."

R.O.W. MARKERS

STATION	NO.	
	SIDE	LT. RT.
815 + 75		/
816 + 30		/
842 + 40		/
842 + 60		/
842 + 80		/
844 + 38		/
852 + 38		/
860 + 45		/
860 + 48		/
861 + 93.2		/
.TOTAL		10

NOTE:

All notes on Plans and Special Provisions designated for "W.P.S.S. 429-B(1)" are construed to apply to W.P.M.S. 429-B(1).

GENERAL NOTES

This Project is to be constructed in accordance with the Standard Specifications of the Colorado State Highway Department adopted June 1, 1937.

All Quantities on 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. Quantities involved beyond the limits of the ditch as shown on the Typical Cross 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." 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 Cross Section are subject to change by the Engineer to fit Embankment requirements actually encountered on Construction.

All Curves are to be superelevated and widened as provided for by the Standard and Superelevation Sheet included with Plans.

All Poles encroaching on Construction are to be moved by Owners.

All Corrugated Metal Cross Culverts are to be provided with one headwall on the inlet end unless otherwise noted on the Plans.

Payment for Overhaul will be based on measurement along center line of the Project unless otherwise stated on the Plans.

Large Rock excavated by the Contractor and falling outside the slope stakes in the stream channel shall not be included in Boulder Excavation, but shall be removed by the Contractor at his expense.

Material from Channel Changes shall be used for constructing dikes filling old channels, or flattening embankments, as directed by the Engineer.

During construction of this Project, traffic will use the present traveled Roadway. At all places on project where new construction encroaches on present road, traffic must be adequately provided for at the contractor's expense. Also the contractor shall construct and maintain in safe condition, all temporary approaches to and crossings of intersecting roads.

The ends of corrugated metal culvert pipes, which are not provided with headwalls, shall be covered with approximately 6" of material in such a manner that a minimum of metal shall be exposed in the completed work.

This shall be accomplished by warping embankment slopes around and adjacent to the culvert.

SELECTED MATERIAL

Selected Material shall be placed on the subgrade approximately 6 inches in thickness at the rate of 65 cu yds. per 100 lin. ft. of Roadway thruout the Entire Project.

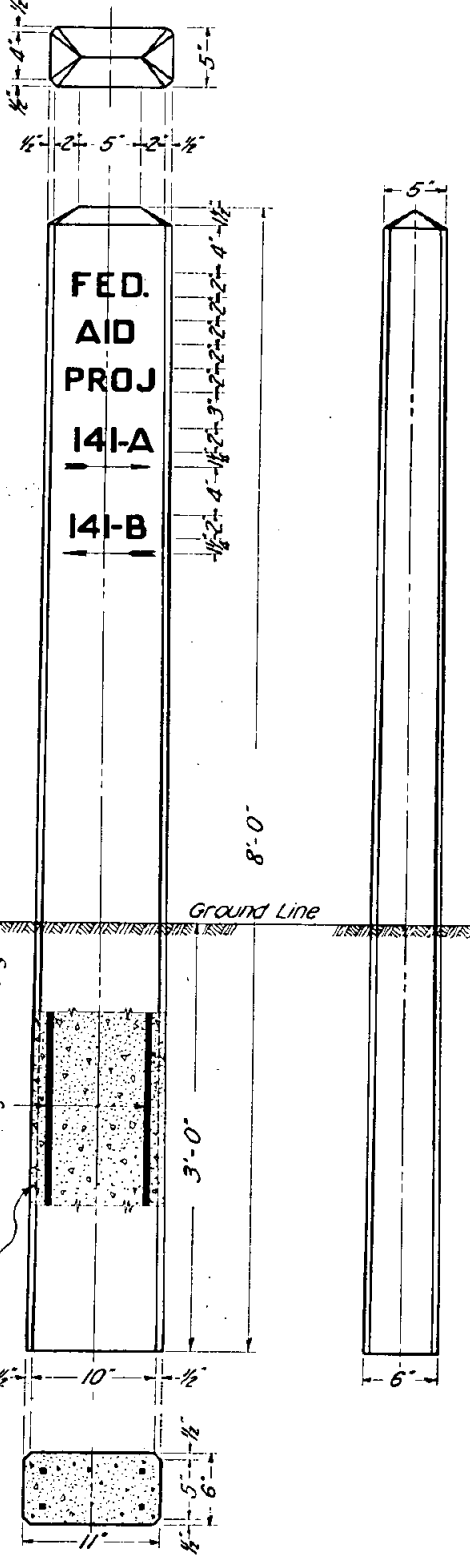
The Selected Material shall be classified and paid for as "Unclassified Excavation." Estimated Quantities involved and the Source of Material are shown below:-

MATERIAL TO BE PLACED STA. TO STA.	APPROXIMATE QUANTITIES CU. YDS.	SOURCE OF MATERIAL	ESTIMATED OVERHAUL	
			STA. YDS.	YD. MI.
ROADWAY				
815 + 75 - 840 + 00	1600	On R.O.W. within Free Haul Limit		
840 + 00 - 856 + 00	1050	On R.O.W. Lt. of Sta. 838 + to 842 +	3960	
856 + 00 - 861 + 93.2	370	On R.O.W. Lt. of Sta. 838 + to 842 +	4070	20
TOTALS	3020		8030	20

SUMMARY OF APPROXIMATE QUANTITIES

No.	ITEM	UNIT	ROAD
10a	Clearing & Grubbing Entire Project	Lump Sum	
11c	Removing 2 Buildings off R.O.W. Sta. 820 + to 827 +	Lump Sum	
11d	Removing 4 Buildings off R.O.W. Sta. 844 + to 848 +	Lump Sum	
11e	Removing Mill off R.O.W. Sta. 858 + to 860 +	Lump Sum	
11f	Removing Garage off R.O.W. Sta. 861 +	Lump Sum	
11g	Removing Rock Walls	Lin. Ft.	
11h	Removing Timber Crib	Lin. Ft.	
11i	Removing Frame Foundation off R.O.W. Sta. 826 +	Lump Sum	
13c	Unclassified Excavation	Cu. Yd.	
13z	Boulder Excavation	Cu. Yd.	
14a	Dry Rock Excavation (Structural)	Cu. Yd.	
14b	Dry Common Excavation (Structural)	Cu. Yd.	
14c	Wet Rock Excavation (Structural)	Cu. Yd.	
14d	Wet Common Excavation (Structural)	Cu. Yd.	
18a	Station Yard Overhaul	Sta. Yd.	
18b	Yard Mile Overhaul	Yd. Mi.	
26a	Gravel or Crushed Rock Surfacing	Ton	
44b	Miscellaneous Treated Timber	Mft. bm.	
46a	Class "A" Concrete	Cu. Yd.	
46b	Class "B" Concrete	Cu. Yd.	
47	Reinforcing Steel	Lb.	
53b	18" Corrugated Metal Culvert Pipe	Lin. Ft.	
53c	24" Corrugated Metal Culvert Pipe	Lin. Ft.	
53e	36" Corrugated Metal Culvert Pipe	Lin. Ft.	
53g	48" Corrugated Metal Culvert Pipe	Lin. Ft.	
53y	12" Corrugated Metal Culvert Pipe	Lin. Ft.	
74x	Timber Guard Posts	Each	
81a	Project Markers	Each	
81b	Right of Way Markers	Each	
FORCE ACCOUNT			
	Remove & Reset Pump, Pump House & Water Line Sta. 826 +	Lump Sum	
	Obliterate Old Channel Sta. 815 + to 860 +	Lump Sum	
	Move Building & 3 Tanks off R.O.W. Sta. 857 +	Lump Sum	
	Move Power Poles off R.O.W. (WORK BY POWER CO. FORCES)	Lump Sum	
FORCE ACCOUNT			
ITEMS NOT RECEIVING FEDERAL AID			
	Build Pump Shed Sta. 859 +	Lump Sum	

PROJECT MARKER POST
ITEM N° 81a

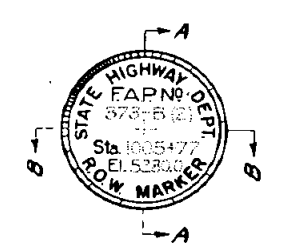


NOTES FOR PROJECT MARKER POSTS

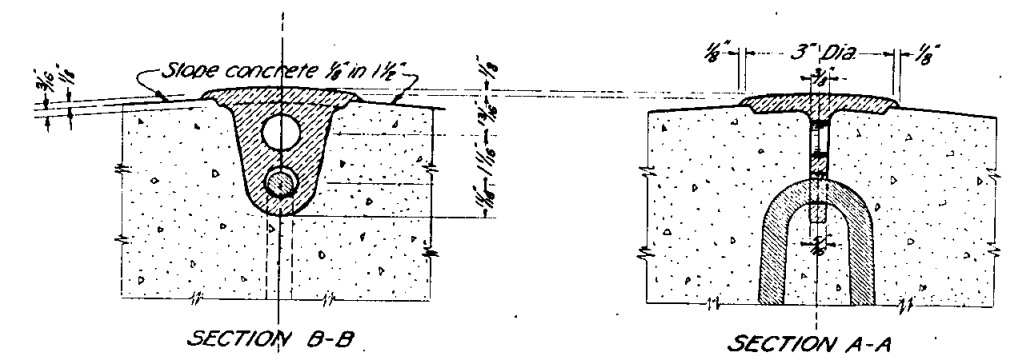
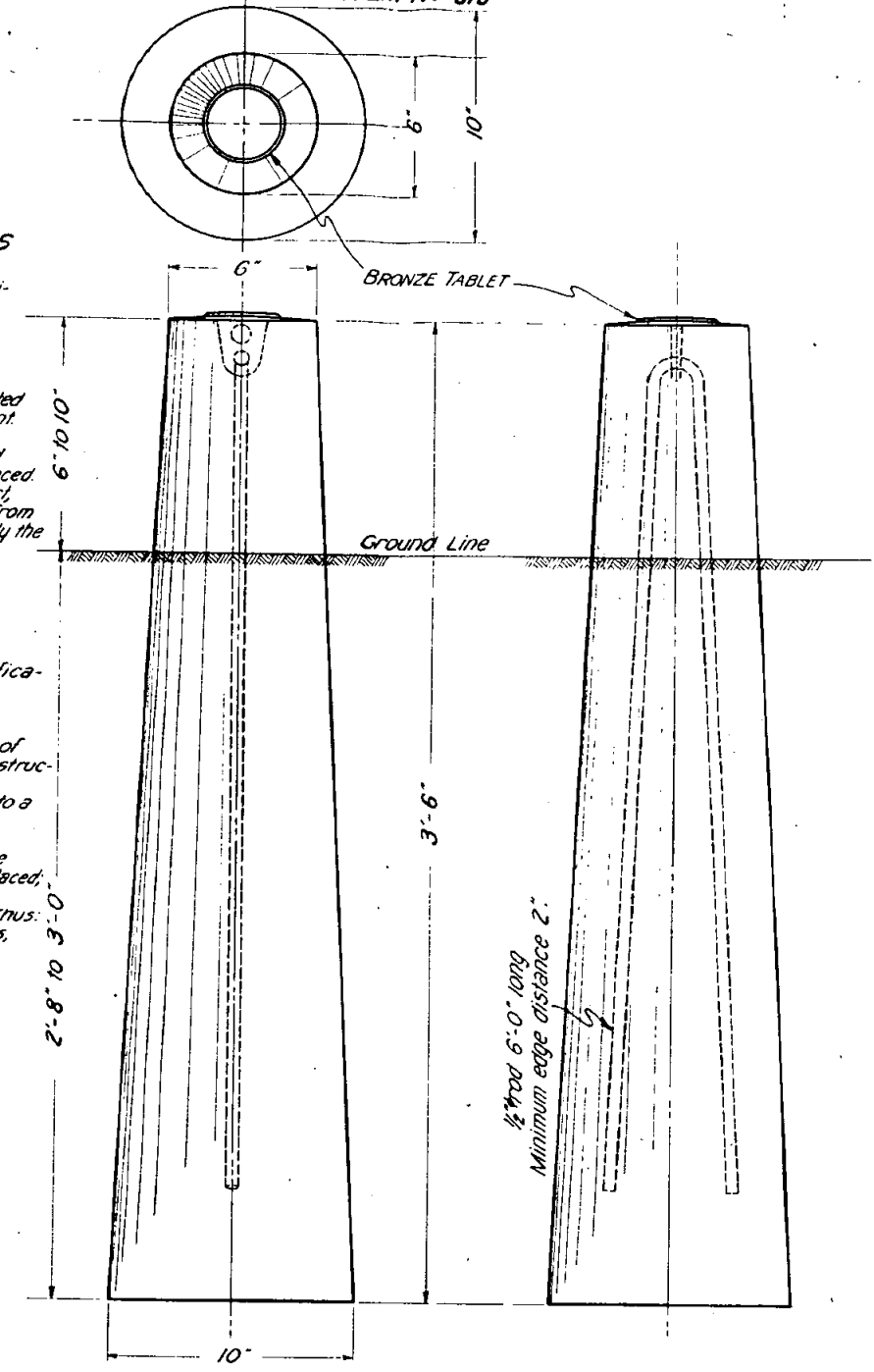
All work shall be done in accordance with the Standard Specifications of the Colorado State Highway Department, adopted June 1, 1937.
Posts shall be made of Class "A" concrete, except use white Portland Cement.
All exposed surfaces shall be rubbed free of form marks.
All letters and numbers shall be 2" plain upright black, painted or stenciled on the concrete with a good quality of black paint. See item N° 41, "Second Field Coat - Dark".
Numbers and arrows shall show the proper numbers and directions of the projects each way from where the post is placed.
Post to be set with sign facing the road at the end of the project, two feet inside the R.O.W. line or at a point amply protected from traffic in such a position that the sign will indicate properly the projects to which it refers.

NOTES FOR R.O.W. MARKER POSTS

All work shall be done in accordance with the Standard Specifications of the Colorado State Highway Department, adopted June 1, 1937.
Posts shall be made of Class "A" concrete.
The upper 12 inches of marker posts shall be rubbed free of form marks, and the top surface of the post must be constructed to drain thoroughly.
All exposed surfaces of the bronze tablet are to be ground to a smooth surface.
All letters are to be depressed a minimum of $\frac{1}{16}$ inch.
Information on the bronze tablet indicated by pin lines is to be stamped in the field by the engineering party after post is placed; $\frac{3}{16}$ inch letters and figures to be used.
Project designations on tablets shall be properly shown. Thus: "F.A.P.N°" for Federal Aid Projects, "S.P.N°" for State Projects, "P.W.A. N°" for P.W.A. Projects, etc.



RIGHT OF WAY MARKER POST
ITEM N° 81b



DETAIL OF BRONZE TABLET
FOR RIGHT OF WAY MARKER POST

STANDARD M-7-B

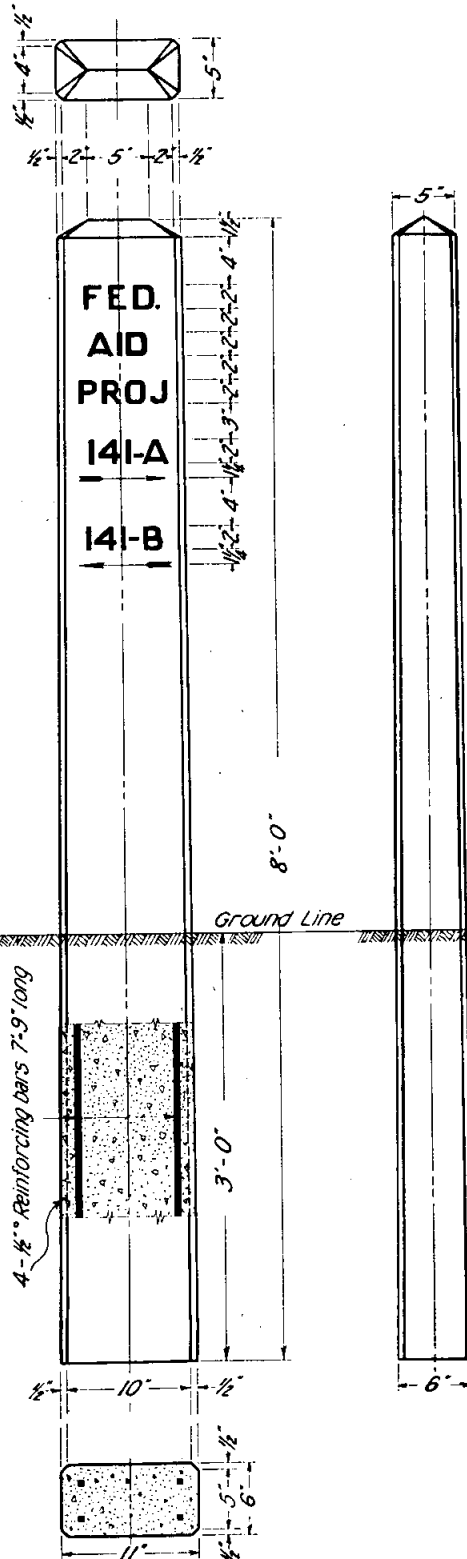
FED. ROAD DIST. NO.	STATE	W.P.S.S.	SHEET NO.	TOTAL SHEETS
3	COLO.	429B(1)	10	

COLORADO
STATE HIGHWAY DEPARTMENT
STANDARD
MARKER POSTS

Designed by REL
Made by FFS
Checked by REL

Approved by
Date: Apr. 17 1939

PROJECT MARKER POST ITEM N° 81a

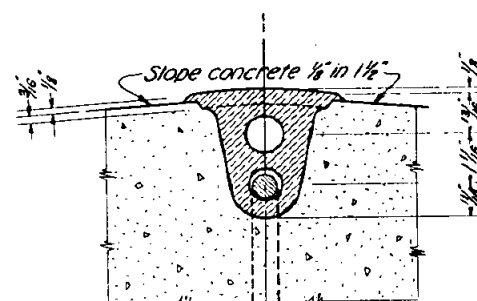
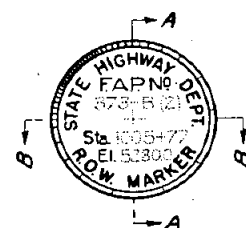


NOTES FOR PROJECT MARKER POSTS

All work shall be done in accordance with the Standard Specifications of the Colorado State Highway Department, adopted June 1, 1937.
Posts shall be made of Class "A" Concrete, except use White Portland Cement.
All exposed surfaces shall be rubbed free of form marks.
All letters and numbers shall be 2" plain upright black, painted or stenciled on the concrete with a good quality of black paint. See item N° 41, "Second Field Coat - Dark."
Numbers and arrows shall show the proper numbers and directions of the projects each way from where the post is placed.
Post to be set with sign facing the road at the end of the project, two feet inside the R.O.W. line or at a point amply protected from traffic in such a position that the sign will indicate properly the projects to which it refers.

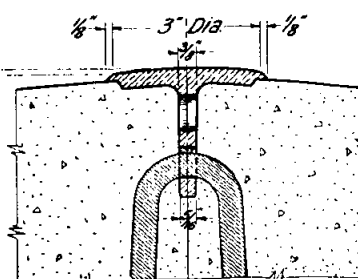
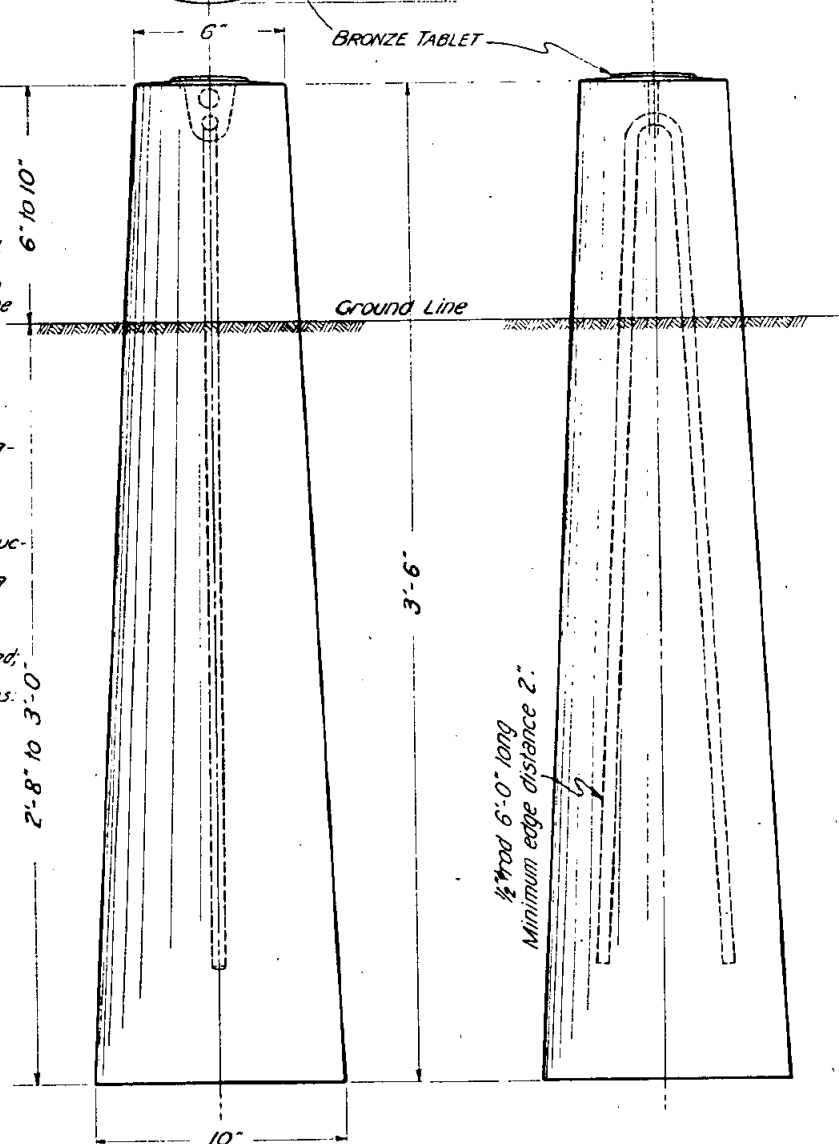
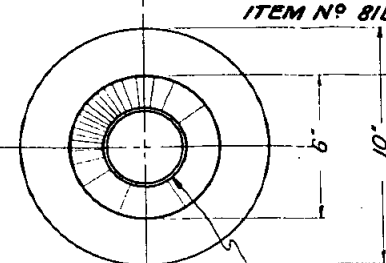
NOTES FOR R.O.W. MARKER POSTS

All work shall be done in accordance with the Standard Specifications of the Colorado State Highway Department, adopted June 1, 1937.
Posts shall be made of Class "A" Concrete.
The upper 12 inches of marker posts shall be rubbed free of form marks, and the top surface of the post must be constructed to drain thoroughly.
All exposed surfaces of the bronze tablet are to be ground to a smooth surface.
All letters are to be depressed a minimum of $\frac{1}{16}$ inch.
Information on the bronze tablet indicated by pin lines is to be stamped in the field by the engineering party after post is placed; $\frac{3}{16}$ inch letters and figures to be used.
Project designations on tablets shall be properly shown. Thus: "F.A.P. N°" for Federal Aid Projects, "S.P. N°" for State Projects, "P.W.A. N°" for P.W.A. Projects, etc.



SECTION B-B

RIGHT OF WAY MARKER POST ITEM N° 81b



SECTION A-A

DETAIL OF BRONZE TABLET
FOR RIGHT OF WAY MARKER POST

STANDARD M-7-B

FED. ROAD DIST. NO.	STATE	W.P.S.S.	SHEET NO.
3	COLO.	429B(7)	10

COLORADO
STATE HIGHWAY DEPT.
STANDARD
MARKER POST

Designed by R.E.L. Approved
Made by F.E.S. Date:
Checked by R.E.L.

C. 8
72 W.
48

NOTES:
All poles encroaching on construction are to be moved by Owners.
Excavation from channel changes shall be used for constructing dikes, filling old channels or flattening embankments, as directed by the Engineer.
Alignment and grades indicated hereon are subject to adjustment during construction after approval from Denver Office.
Right of Way Markers tabulated on Sheet No. 2

Sta. 817+25 to 819+25 ~ Req'd. 5 timber guard posts Rt.
Sta. 825+39 ~ Req'd. 48"x60" C.M.P. cross culvert & 50 cu. yds. of uncl. excav. for ditches.
Sta. 822+50 to 842+00 ~ Req'd. 40 timber guard posts Lt.
Sta. 830+30 to 832+80 ~ Req'd. remove 250 lin. ft. of rock wall Rt.

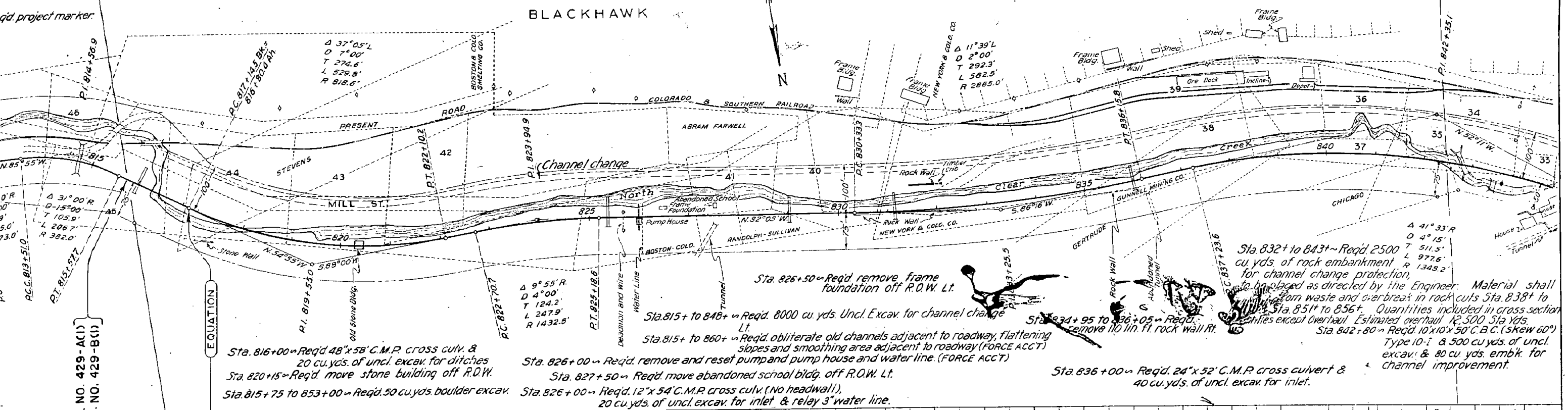
S. E. 1/4 OF SEC. 7
T. 3 S. R. 72 W.
Sta. 829+05 ~ Req'd. 36"x54" C.M.P. cross culvert & 50 cu. yds. of uncl. excav. for ditches.
Sta. 831+15 ~ Req'd. 24"x56" C.M.P. cross culvert & 30 cu. yds. of uncl. excav. for ditches.

Sta. 832+00 to 832+15 ~ Req'd. remove 15 lin. ft. of timber crib Lt.
Sta. 842+25 to 848+25 ~ Req'd. 13 timber guard posts Rt.

FED. ROAD DIST. NO.	STATE	U.S.W.P.H. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	WPSS. 429-B(1)	11	

Rev. 10-18-39 by Sta. 815+ to 848+ From F/A to Quant & show Ch Change

S.W. 1/4 OF SEC. 7
T. 3 S. R. 72 W.



Sta. 816+00 ~ Req'd. 48"x58" C.M.P. cross culv. & 20 cu. yds. of uncl. excav. for ditches
Sta. 820+15 ~ Req'd. move stone building off R.O.W.
Sta. 815+75 to 853+00 ~ Req'd. 50 cu. yds. boulder excav.

Sta. 826+00 ~ Req'd. remove and reset pump and pump house and water line. (FORCE ACCT)
Sta. 827+50 ~ Req'd. move abandoned school bldg. off R.O.W. Lt.
Sta. 826+00 ~ Req'd. 12"x54" C.M.P. cross culv. (No headwall), 20 cu. yds. of uncl. excav. for inlet & relay 3" water line.

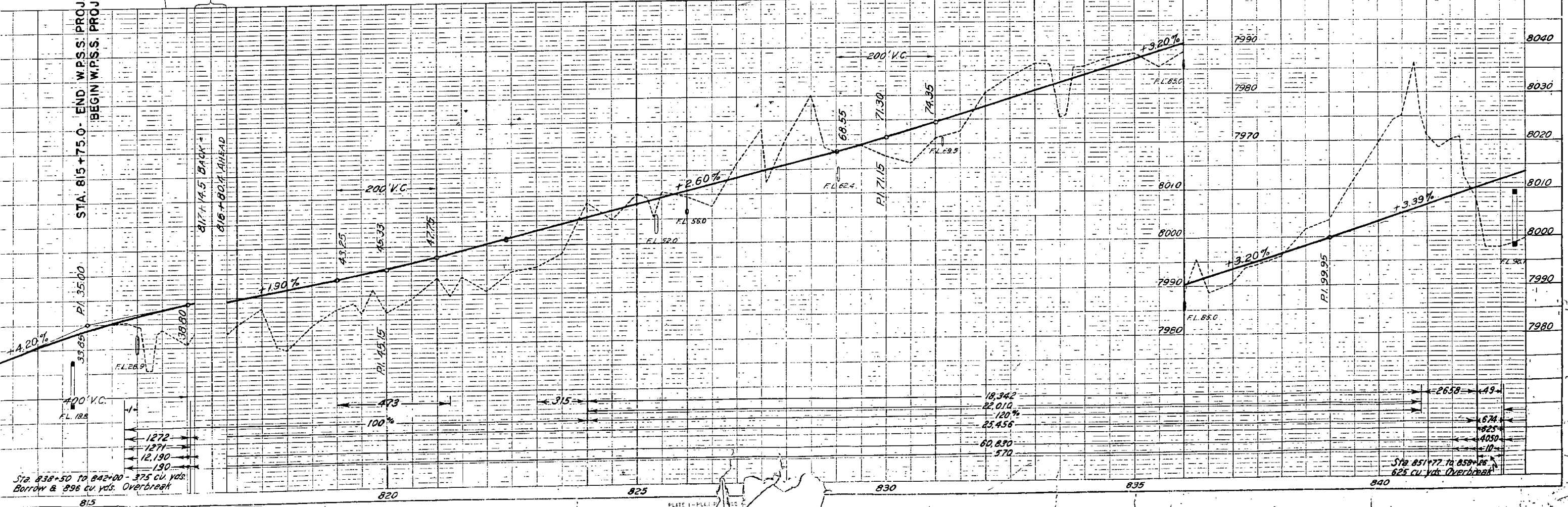
Sta. 826+50 ~ Req'd. remove frame foundation off R.O.W. Lt.

Sta. 815+ to 848+ ~ Req'd. 8000 cu. yds. Uncl. Excav. for channel change Lt.
Sta. 815+ to 860+ ~ Req'd. obliterate old channels adjacent to roadway, flattening slopes and smoothing area adjacent to roadway (FORCE ACCT)

Sta. 834+95 to 836+05 ~ Req'd. remove 110 lin. ft. rock wall Rt.

Sta. 836+00 ~ Req'd. 24"x52" C.M.P. cross culvert & 40 cu. yds. of uncl. excav. for inlet.

Sta. 832+ to 843+ ~ Req'd. 2500 cu. yds. of rock embankment for channel change protection, to be placed as directed by the Engineer. Material shall be taken from waste and overbreak in rock cuts Sta. 838+ to Sta. 851+ to 856+ ~ Req'd. 12,500 Sta. yds. quantities except Overhaul. Estimated Overhaul 12,500 Sta. yds. Sta. 842+80 ~ Req'd. 10"x10"x50" C.B.C. (skew 60°) Type 10-I & 500 cu. yds. of uncl. excav. & 80 cu. yds. embk. for channel improvement.



Sta. 838+50 to 842+00 - 375 cu. yds. Borrow & 896 cu. yds. Overbreak

Sta. 851+72 to 858+25 - 625 cu. yds. Overbreak

S.W. 1/4 OF SEC. 8
T. 3 S. R. 72 W.

NOTES:
All poles encroaching on construction are to be moved by Owners.
Excavation from channel changes shall be used for constructing dikes, filling old channels or flattening embankments, as directed by the Engineer.
Alignment and grades indicated hereon are subject to adjustment during construction after approval from Denver Office.
Right of Way Markers tabulated on Sheet No. 2

Sta. 817+25 to 819+25 ~ Req'd. 5 timber guard posts Rt.

Sta. 825+39 ~ Req'd. 48"x60" C.M.P. cross culvert & 50 cu. yds. of uncl. excav. for ditches.

Sta. 822+50 to 842+00 ~ Req'd. 40 timber guard posts Lt.

Sta. 830+30 to 832+80 ~ Req'd. remove 250 lin. ft. of rock wall Rt.

S.E. 1/4 OF SEC. 7
T. 3 S. R. 72 W.

Sta. 829+05 ~ Req'd. 36"x54" C.M.P. cross culvert & 50 cu. yds. of uncl. excav. for ditches.

Sta. 831+15 ~ Req'd. 24"x56" C.M.P. cross culvert & 30 cu. yds. of uncl. excav. for ditches.

Sta. 842+25 to 848+25 ~ Req'd. 13 timber guard posts Rt.

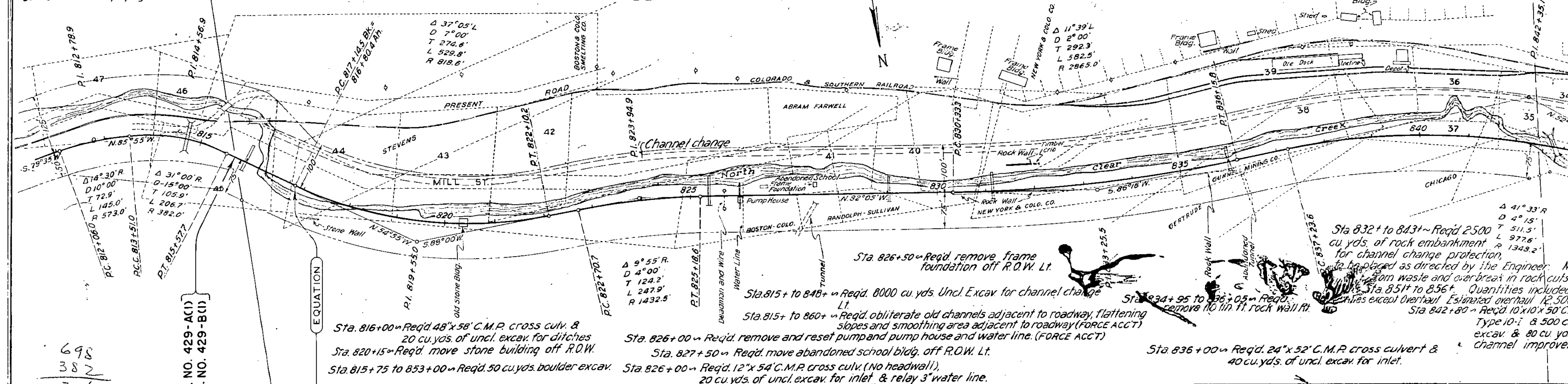
FED. ROAD DIST. NO.	STATE	U.S.W.P.H. PROJ. NO.	SHEET NO.
3	COLO.	W.P.S.S. 429-B(1)	11

Rev. 10-18-39 1/2 in. Sta. 815+ to 848+ From F.H.I. to Quant. & show

S.W. 1/4
T. 3 S.

Sta. 815+75 ~ Req'd. project marker.

BLACKHAWK



698
382
316

STA. 815+75.0 - END W.P.S.S. PROJ. NO. 429-A(1)
BEGIN W.P.S.S. PROJ. NO. 429-B(1)

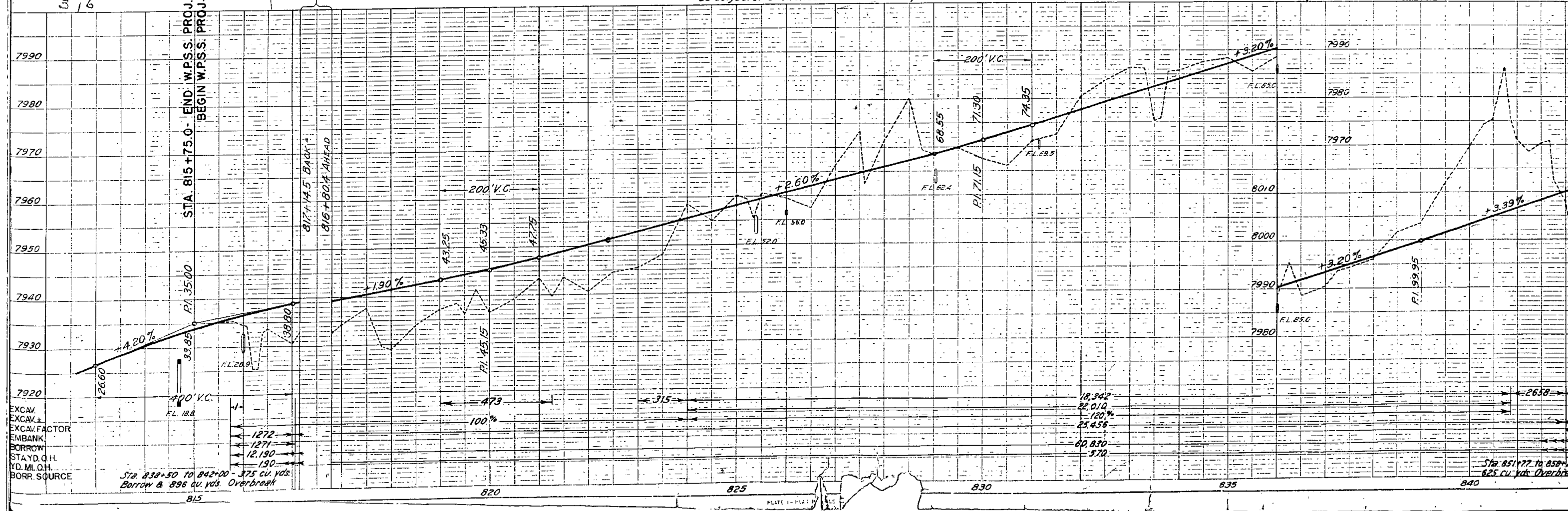
EQUATION

Sta. 816+00 ~ Req'd. 48"x58" C.M.P. cross culv. & 20 cu. yds. of uncl. excav. for ditches.
Sta. 820+15 ~ Req'd. move stone building off R.O.W.
Sta. 815+75 to 853+00 ~ Req'd. 50 cu. yds. boulder excav.

Sta. 826+00 ~ Req'd. remove and reset pump and pump house and water line. (FORCE ACCT)
Sta. 827+50 ~ Req'd. move abandoned school bldg. off R.O.W. Lt.
Sta. 826+00 ~ Req'd. 12"x54" C.M.P. cross culv. (No headwall), 20 cu. yds. of uncl. excav. for inlet & relay 3" water line.

Sta. 836+00 ~ Req'd. 24"x52" C.M.P. cross culvert & 40 cu. yds. of uncl. excav. for inlet.

Sta. 832+ to 843+ ~ Req'd. 2500 cu. yds. of rock embankment for channel change protection, to be placed as directed by the Engineer. M. Sta. 851+ to 856+ ~ Quantities included 30m waste and overbreak in rock cuts. Sta. 851+ to 856+ ~ Quantities included 12,500 cu. yds. except Overhaul. Estimated overhaul 12,500 cu. yds. Sta. 842+80 ~ Req'd. 10'x10'x50" C.M.P. Type 10-I & 500 cu. yds. excav. & 80 cu. yds. channel improvement.



EXCAV.
EXCAV. FACTOR
EMBANK.
BORROW
STAYD. Q.H.
YD. M.O.H.
BORR. SOURCE

Sta. 838+50 to 842+00 - 375 cu. yds. Borrow & 896 cu. yds. Overbreak

Sta. 851+77 to 858+25 ~ 825 cu. yds. Overbreak

Sta. 844+76 ~ Req'd. 18"x30" C.M.P. side drain Rt. and
300 cu. yds. of embank. for road approaches Rt. & Lt.

Sta. 856+25 ~ Req'd. 50 cu. yds. of embank. for road approach Lt.

Sta. 858+ to 860+ ~ Req'd. move mill off R.O.W.

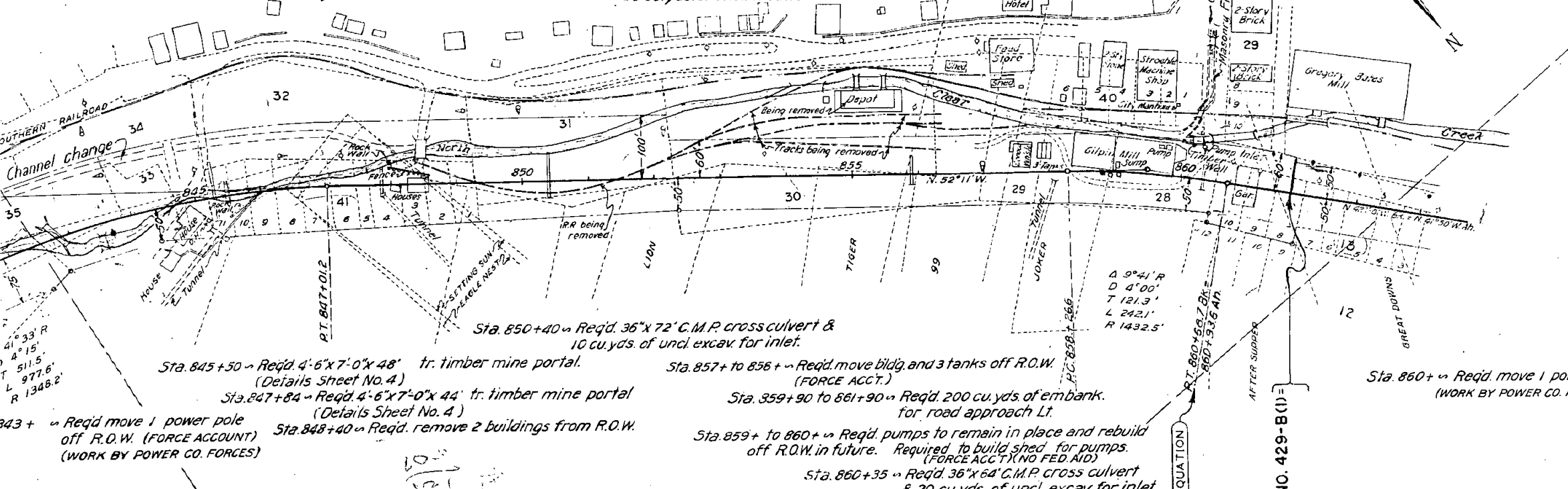
Sta. 861+ ~ Req'd. remove garage off R.O.W.

Sta. 844+80 ~ Req'd. remove 2 buildings off R.O.W.

Sta. 848+25 to 852+25 ~ Req'd. 9 timber guard posts Lt.

Sta. 845+30 ~ Req'd. 36"x92" C.M.P. cross culvert &
10 cu. yds. of uncl. excav. for ditches.

Sta. 855+90 ~ Req'd. 36"x46" C.M.P. cross culvert,
50 cu. yds. of uncl. excav. for inlet



FED. ROAD DIST. NO.	STATE	U.S.W.P.H. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	WPSS 429-B(1)	12	

Rev. 10-18-39 to 11-1-40 Show Channel change

BLACKHAWK

Sta. 845+50 ~ Req'd. 4'-6"x7'-0"x48" tr. timber mine portal.

(Details Sheet No. 4)

Sta. 847+84 ~ Req'd. 4'-6"x7'-0"x44" tr. timber mine portal
(Details Sheet No. 4)

Sta. 848+40 ~ Req'd. remove 2 buildings from R.O.W.

Sta. 843+ ~ Req'd. move 1 power pole
off R.O.W. (FORCE ACCOUNT)
(WORK BY POWER CO. FORCES)

Sta. 857+ to 858+ ~ Req'd. move bldg. and 3 tanks off R.O.W.
(FORCE ACCT.)

Sta. 859+90 to 861+90 ~ Req'd. 200 cu. yds. of embank.
for road approach Lt.

Sta. 859+ to 860+ ~ Req'd. pumps to remain in place and rebuild
off R.O.W. in future. Required to build shed for pumps.
(FORCE ACCT.) (NO FED. AID)

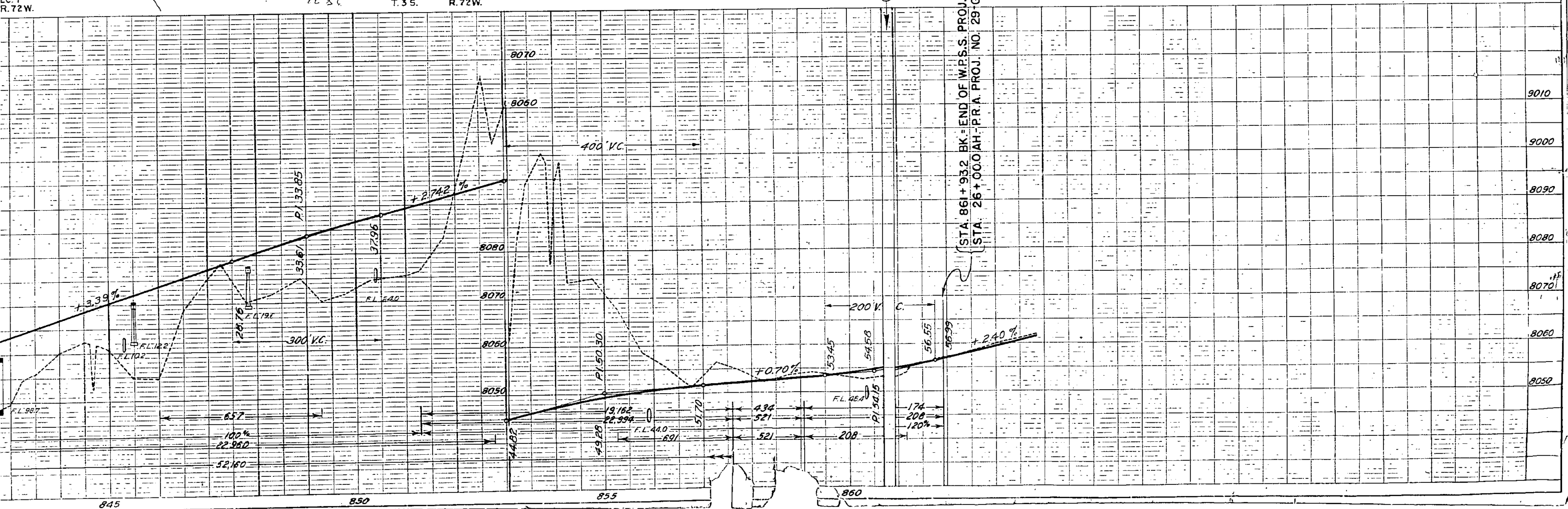
Sta. 860+35 ~ Req'd. 36"x64" C.M.P. cross culvert
& 20 cu. yds. of uncl. excav. for inlet.

Sta. 860+ ~ Req'd. move 1 power pole off R.O.W.
(WORK BY POWER CO. FORCES AT POWER CO. EXPENSE)

EC. 7
R. 72W.

S.W. 1/4 OF SEC. 7
T. 35. R. 72W.

N.W. 1/4 OF SEC. 7
T. 35. R. 72W.



Sta. 856+25 ~ Req'd. 50 cu. yds. of embank. for road approach Lt.
Sta. 858+ to 860+ ~ Req'd. move mill off R.O.W.
Sta. 861+ ~ Req'd. remove garage off R.O.W.

Sta. 848+25 to 852+25 - Req'd. 9 timber guard posts Lt.

Sta. 855+90 ~ Req'd. 36"x46" C.M.P. cross culvert,
50 cu. yds. of uncl. excav. for inlet

Sta. 857+ to 858+ ~ Req'd. move bldg. and 3 tanks off R.O.W.
(FORCE ACCT.)

Sta. 859+90 to 861+90 - Req'd. 200 cu. yds. of embank.
for road approach Lt.

Sta. 848+40 ~ Req'd. remove 2 buildings from R.O.W.

Sta. 859+ to 860+ ~ Req'd. pumps to remain in place and rebuild off R.O.W in future. Required to build shed for pumps.
(FORCE ACCT) (NO FED. AID)

Sta. 860+35 ~ Req'd. 36"x 64" C.M.P. cross culvert & 20 cu. yds. of uncl. excav. for inlet.

Sta. 860+ ~ Req'd. move 1 power pole off R.O.W.
(WORK BY POWER CO. FORCES AT POWER CO. EXPENSE)

S. W. 1/4 OF SEC. 7
T. 3 S. R. 72 W.

N. W. 1/4 OF SEC. 7
T. 3 S. R. 72 W.

