FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	S 0170(1)	1	

REV. SHEET NO. 9 OF INDEX - 8/10/49 - E.E.O.

170.01

COLORADO
STATE HIGHWAY DEPARTMENT

PLAN AND PROFILE OF PROPOSED
FEDERAL AID SECONDARY PROJECT NO. S 0170(1)
STATE HIGHWAY NO. 83
DOUGLAS COUNTY

INDEX OF SHEETS

SCALES ON ORIGINAL TRACINGS

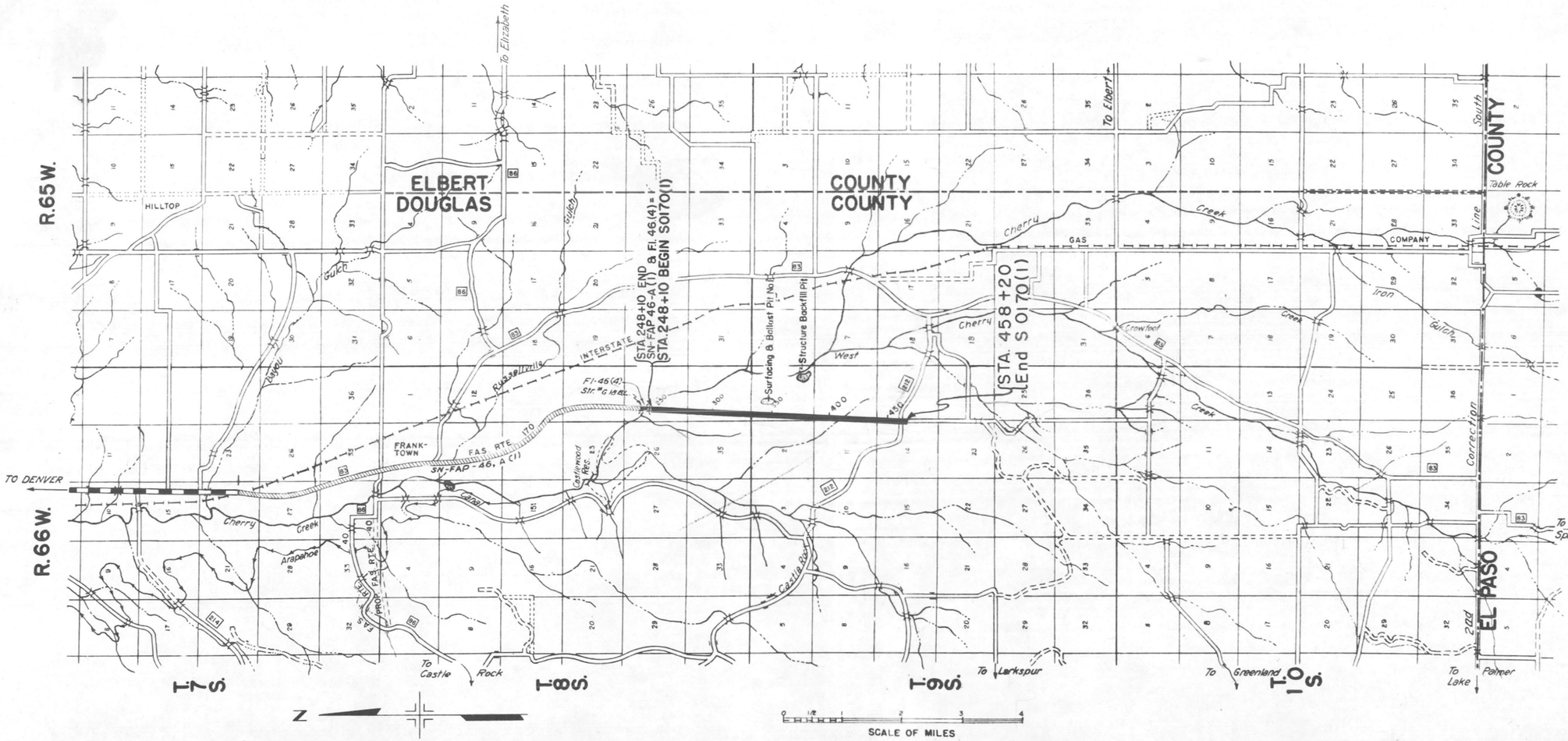
ON PLAN, 1 IN. = 100 FT.
ON PROFILE { 1 IN. = 100 FT. HORIZONTAL
1 IN. = 10 FT. VERTICAL

GRADE LINE ON PROFILE IS SHOWN AS GRADE OF FINISHED ROAD

GROSS AND NET LENGTH OF PROJECT - 21,010.0 FT. = 3.979 MILES

CONVENTIONAL SIGNS

Center Line
Right of Way Line
Township Line
Section Line
One Quarter Section Line
Barbed Wire Fence
Combination Wire Fence
Telephone and Telegraph Lines
Snow Fence



Notice to Bidders:

It is recommended that bidders on this project go over the plan details with one of the following field representatives of this Department:
H. T. Stitt District Engineer Denver, Colo.
F. W. Miller Construction Engr. Denver, Colo.

RECOMMENDED FOR APPROVAL

Jas. B. Bull
ASSISTANT ENGINEER DATE 7-19-49

APPROVED

Merl E. Watkins
STATE HIGHWAY ENGINEER DATE 7-19-49

RECOMMENDED FOR APPROVAL - DATE

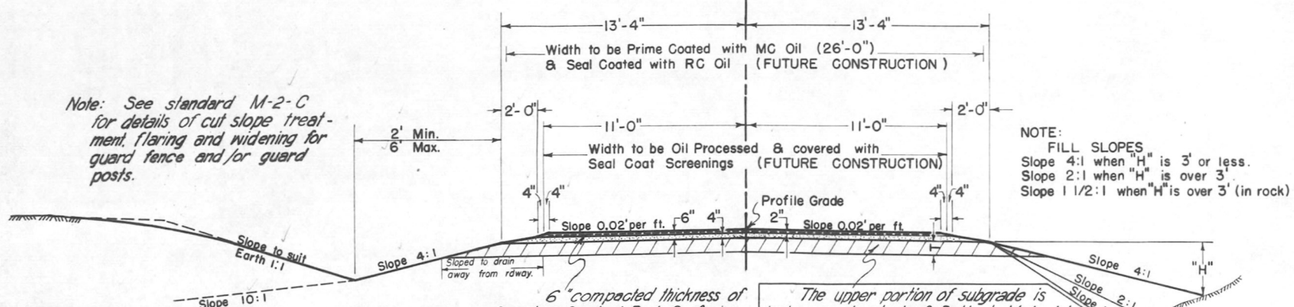
DISTRICT ENGINEER
PUBLIC ROADS ADMINISTRATION
FEDERAL WORKS AGENCY

APPROVED DATE

DIVISION ENGINEER
PUBLIC ROADS ADMINISTRATION
FEDERAL WORKS AGENCY

FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	S0170 (1)	2	

TYPICAL ℄ SECTION



Note: See standard M-2-C for details of cut slope treatment, flaring and widening for guard fence and/or guard posts.

NOTE:
FILL SLOPES
Slope 4:1 when "H" is 3' or less.
Slope 2:1 when "H" is over 3'.
Slope 1 1/2:1 when "H" is over 3' (in rock)

6" compacted thickness of Gravel or Crushed Rock Surfacing is to be placed in two courses:

The upper portion of subgrade is to be constructed of Ballast Material at locations designated in Ballast material tabulation. Estimated quantities involved in this operation and thickness of material required are tabulated on sheet No.5. (FUTURE CONSTRUCTION)

Approximate 2" Top Course surfacing is to be placed at the rate of 25 tons per 100 Lin. Ft. of roadway. (FUTURE CONSTRUCTION)

Approximate 4" Bottom Course surfacing is to be placed at the rate of 55 tons per 100 lin. ft., of roadway. (FUTURE CONSTRUCTION)

Excavation or borrow below 4:1 slope and/or 10:1 slope will not be permitted.

The depth and width of the side ditch shall be varied where necessary in order to provide proper drainage and/or entrance to drainage structures.

TABULATION OF LENGTH AND DESIGN

STATION	ROADWAY	BRIDGES	
	LIN. FT.	LIN. FT.	LOADING
248+10.0 END SN-FAP 46A(1) & F.I. 46(4)= BEGIN S 0170(1) 458 +20.0 END S 0170(1)	21,010.0		
TOTALS:	21,010.0		

SUMMARY

	LIN. FT.	MILES
Total S 0170(1) Roadway	21,010.0	3.979
" " Bridges	0	0

DESIGN DATA

Maximum Degree of Curve	Tangent
Maximum Grade	7 %
Minimum N.P.S.D. Horizontal	> 1300'
Minimum N.P.S.D. Vertical	430'
Maximum Design Speed	50 M.P.H.

GENERAL NOTES

This project is to be constructed in conformity with the Standard Specifications of the Colorado State Highway Department adopted January 1, 1948.

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

All roadway excavation required to construct this Project is to be obtained and used as indicated on the plans. Quantities involved beyond the limits of the ditches shown on the Typical Cross Section, either noted as "Borrow" on the Plans or as "Embankments" 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 limits of the Typical Section as shown, are subject to change by the Engineer to fit conditions actually met in construction.

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

Except as otherwise noted on the plans, payment for overhaul will be based on measurement along the centerline of the project.

Right of Way fences, including line posts, shall be constructed approximately six (6) inches inside the boundary of the Highway Right of Way as shown on the plans.

Approximate location and quantities involved in construction of intercepting ditches are tabulated on summary of earthwork quantities sheet.

All curves are to be superelevated and widened as provided by the Standard Superelevation sheet included with the plans, except as otherwise noted on plans.

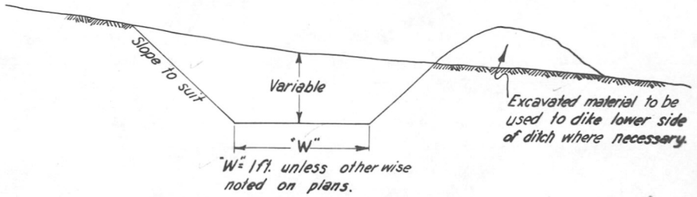
If excavation operations develop material which will stand on slopes steeper than slope stake lines, the Department reserves the right to change cut slopes during the progress of such excavations.

The Detour for this project lies along the present traveled road. At all places on the project where the new work lies along the present traveled road, the Contractor shall, at his own expense, prosecute construction in such manner that traffic may readily pass over the road. Also, the Contractor shall maintain in safe condition and at his own expense, all temporary approaches to and crossings of intersecting roads.

All corrugated metal pipe cross culverts shall be laid without headwalls or metal aprons unless otherwise noted on plans.

Culverts projecting from embankments shall be covered with approximately 6 inches of embankment material in such a manner that a minimum of pipe shall be exposed in the completed work. This shall be accomplished by warping embankment slopes around and adjacent to the culvert.

TYPICAL SECTION FOR DITCHES



FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	S0170 (1)	3	

Rev. Summary w/Item 76c w 8-10-49 w E.E.O.

SUMMARY OF APPROXIMATE QUANTITIES

ITEM NO.	ITEM	UNIT	ROADWAY		
10a	Clearing and Grubbing Entire Project	Lump Sum	•		
12a	Removing Fence	Lin. Ft.	3400		
12b	Removing and Rebuilding Fence	Lin. Ft.	200		
13c	Unclassified Excavation	Cu. Yd.	113000		
13d	Unclassified Ditch Excavation	Cu. Yd.	3600		
14a	Dry Rock Excavation (Str.)	Cu. Yd.	120		
14b	Dry Common Excavation (Str.)	Cu. Yd.	360		
14c	Wet Rock Excavation (Str.)	Cu. Yd.	40		
14d	Wet Common Excavation (Str.)	Cu. Yd.	120		
16b	Structure Backfill (Class 2)	Cu. Yd.	830		
16d	Mechanical Tamping	Hour	90		
17ax	Rolling with Tamping Roller (2 unit)	Hour	230		
17by	Rolling with Tamping Roller (4 unit)	Hour	120		
17dx	Furnishing Tamping Roller (2 unit)	Each	1		
17dy	Furnishing Tamping Roller (4 unit)	Each	1		
17g	Wetting	M Gal.	2860		
18a	Station Yard Overhaul	Sta. Yd.	447000		
18b	Yard Mile Overhaul	Yd. Mi.	9400		
53b	18" Corrugated Metal Culvert Pipe	Lin. Ft.	118		
53c	24" Corrugated Metal Culvert Pipe	Lin. Ft.	496		
53e	36" Corrugated Metal Culvert Pipe	Lin. Ft.	170		
53gx	48" Corrugated Metal Culvert Pipe (10 gauge)	Lin. Ft.	168		
53i	60" Corrugated Metal Culvert Pipe	Lin. Ft.	72		
53k	84" Corrugated Metal Culvert Pipe	Lin. Ft.	312		
64	Dry Rubble Slope and Ditch Paving (12" thick)	Sq. Yd.	410		
76c	Barbed Wire Fence with Metal Posts	Lin. Ft.	43100		
76g	Barbed Wire Gates	Each	11		
77	Picket Snow Fence	Lin. Ft.	2900		
81b	Right Of Way Markers	Each	20		
92	Timber Guard Posts	Each	30		
95c	Metal Aprons for 24" C.M.P. Culverts	Each	2		
146	Timber Barricades	Each	1		
81a	Project Markers (State Forces)	Each	1		
	FORCE ACCOUNT ITEM				
	Placing 6" of earth in bottom of C.M.P. Stock Passes, Sta's 262+, 379+, & 445+	Lump Sum	•		

FENCING REQUIREMENTS

LOCATION	SIDE	REMOVE FENCE LIN. FT.	BUILD B.W. FENCE LIN. FT.	B. W. GATES EACH	REMOVE & REBUILD FENCE LIN. FT.
252+98.5	X	300			
321+40 to 332+76.2	Rt.	1200			
332+76.2	X	300			
344+69.9	X	300			
386+03.1	X	300			
412+70.4	X	300			
438+87.3	X	300			
455+85	X	305			
456+35	X				200
277+00	Rt & Lt			2	
332+76.2	Rt & Lt			4	
376+00	Rt & Lt			2	
400+25	Rt			1	
401+50	Lt			1	
424+00	Lt			1	
248+10 to 456+00	Rt		21,521		
248+10 to 455+85	Lt		21,506		
TOTALS		3305	43,021	11	200

TIMBER GUARD POSTS

STATION	SIDE	SPACING	NO.
262+00	Rt & Lt	Culvert	2
278+00	Rt & Lt	Culvert	2
292+00	Rt & Lt	Culvert	2
307+15	Rt & Lt	Culvert	2
320+00	Rt & Lt	Culvert	2
*347+50 to 351+50	Rt & Lt	100'	10
356+40	Rt & Lt	Culvert	2
*360+50 to 365+50	Rt & Lt	100'	12
379+00	Rt & Lt	Culvert	2
387+00	Rt & Lt	Culvert	2
*394+50 to 398+50	Rt & Lt	100'	10
400+75	Rt & Lt	Culvert	2
*409+00 to 412+00	Rt & Lt	100'	8
*418+50 to 422+50	Rt & Lt	100'	10
426+00	Rt & Lt	Culvert	2
432+40	Rt & Lt	Culvert	2
436+50 to 437+50	Rt & Lt	50'	6
*446+00 to 453+00	Rt & Lt	100'	16
456+00	Lt	Culvert	2
TOTALS *Future Construction			66
TOTALS This Construction			30

R.O.W. MARKERS

STATION	SIDE	NUMBER
252+92.3	Lt.	1
252+94.4	Lt	1
253+02.6	Rt	1
253+04.7	Rt	1
276+00	Rt & Lt	2
302+00	Rt & Lt	2
328+00	Rt & Lt	2
356+00	Rt & Lt	2
382+00	Rt & Lt	2
408+00	Rt & Lt	2
435+00	Rt & Lt	2
455+85	Lt	1
456+00	Rt	1
TOTAL		20

LIST OF STRUCTURES

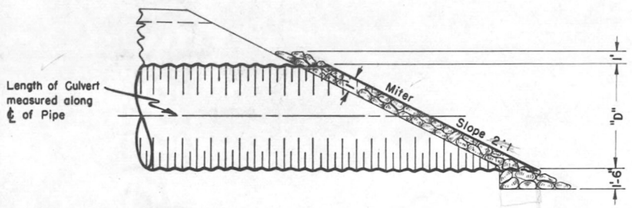
FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO	SO 170 (1)	4	

STATION	DESCRIPTION	EXCAVATION UNCLASSIFIED CUBIC YARD EXC.	EXCAVATION UNCLASSIFIED CUBIC YARD EMB.	EXCAVATION UNCL. DITCH CU. YD.	STRUCTURAL EXCAVATION CUBIC YARD ●	STRUCTURAL BACKFILL CU. YD. CLASS 2	MECH. TAMPING HOUR	DRY RUBBLE SLOPE AND DITCH PAVING 12" THICK SQ. YD.	GRAVEL OR CRUSHED ROCK SURF. ø TON	CORRUGATED METAL CULVERT PIPE LINEAR FEET 18"	24"	36"	48" △	60"	84"	PICKET SNOW FENCE LIN. FT.	METAL APRONS for C.M.P. CULVERTS 24"	MISCELLANEOUS
259+00	Cross Culvert, inlet ditch			5	3	20	2				60							
262+00	Cross Culvert, mitered ends, with slope paving at inlet and outlet, and ditches (W=7')			125	99	67	7	64							54			
	(Stock Pass) details on sheet 5.																	
2+7+00	Road Approaches, Rt. and Lt.		85						100									
278+00	Cross Culvert				1	16	2				50							
292+00	Cross Culvert and ditches			10	12	16	2				50							
294+ to 301+	Picket Snow Fence, Rt.															700		
307+15	Cross Culvert and ditches			5	2	17	2				52							
320+00	Cross Culvert and inlet ditch			5	5	17	2				52							
332+76.2	Side drain Rt., Double road approaches, Rt. and Lt.		120		9	11	1		185	40								
336+ to 347+	Picket Snow Fence, Rt.															1100		
348+90	Cross Culvert				68	104	10						168					
356+40	Cross Culvert, metal apron at inlet and ditches.			5	3	13	1				40						1	
363+00	Cross Culvert				5	48	5					100						
366+ to 374+	Picket Snow Fence, Rt.															800		
376+00	Side drain Rt., Road approaches Rt. and Lt.		145		9	7	1		100	28								
379+00	Cross Culvert, mitered ends with slope paving at inlet and outlet, and ditches (W=7') (Stock Pass) details on sheet 5.			50	71	72	7	64							58			
382+ to 385+	Picket Snow Fence, Rt.															300		
387+00	Cross Culvert, metal apron at inlet, inlet ditch (W=2')			100	15	14	1				40						1	
397+00	Cross Culvert, mitered ends with slope paving at inlet and outlet, and inlet ditch (W=7') details on sheet 5.			25	36	89	9	64							72			
400+25	Road approach, Rt.	50							50									
400+75	Cross Culvert and inlet ditch			10	9	16	2				48							
401+50	Road approach, Lt.		25						50									
411+25	Cross Culvert and inlet ditch (W=3')			20	12	34	3					70						
421+75	Cross Culvert, mitered ends with slope paving at inlet and outlet, and ditches (W=4') details on sheet 5.			20	60	60	6	37						72				
424+00	Road approach, Lt.	25							50									
426+00	Cross Culvert and inlet ditch			10	8	16	2				48							
429+	Alter Reservoir Lt., build dike and slope pave dam, details on sheet 21.	1000						50										
432+40	Cross Culvert and inlet ditch.			5	3	18	2				56							
436+78	Cross Culvert, mitered ends with slope paving at inlet and outlet, and ditches (W=7') details on sheet 5.			100	90	92	9	64							74			
436+78 to 445+	Diversion Ditch Rt. (W=2')			350														
446+00	Cross Culvert, mitered ends with slope paving at inlet and outlet, inlet ditch (W=7') (Stock Pass) details on sheet 5.			25	88	67	7	64							54			
454+75	Side drain with outlet ditch Lt., Road approaches to county road, Lt. and Rt.	*670		50	17	13	1		100	50								
455+70	Timber barricade (Details on sheet 5)																	1 Timber Barricade
456+10	Road approaches, Rt. and Lt.	*1860							240									
458+20	Project Marker, Rt. (State Forces)																	1 Project Marker (State Forces)
	TOTALS	1075	375	920	625	827	84	407	875	118	496	170	168	72	312	2900	2	

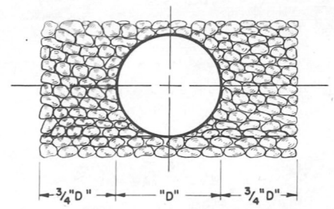
● Structural Excavation is estimated to be 75% Common and 25% Rock, each of which is estimated to be 75% Dry and 25% Wet.
△ 10 Gauge
* Included in profile quantities as borrow.
ø FUTURE CONSTRUCTION

FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	S0170 (1)	5	

DETAIL OF SLOPE PAVING AND MITER FOR C.M.P. CULVERTS



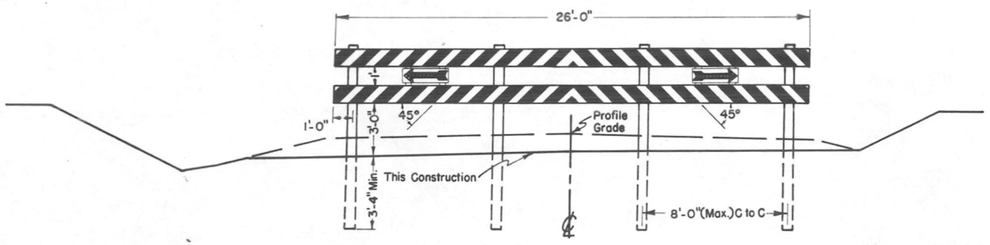
SIDE ELEVATION



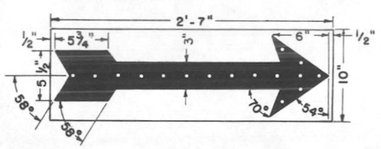
FRONT ELEVATION

NOTE:
Both ends of Pipes to be cut to slope of 2:1 with axis of Pipes. Roadway fill slopes shall be warped to suit conditions encountered on construction.

BARRICADE DETAIL AT STATION 455+



DETAIL OF REFLECTORIZED ARROW



GENERAL NOTES:

All work on Barricade shall be done in accordance with the Standard Specifications of the Colorado State Highway Department adopted January 1, 1948.

All work and materials required for Barricade shall be included in the bid price for "Timber Barricade".

Cross pieces of Barricade are to be 2"x12" miscellaneous untreated timber (8" alternate black and white stripes). Posts are to be 6"x6"x 9'-6" (treated).

Cross pieces are to be securely bolted to posts with 2 - 5/8"x 5" lag screws, and washers, per post per cross piece.

Reflector buttons shall be Signal Service ALA 31 (white crystals) or suitable equivalent, on black arrow. Minimum thickness of lumber to be 1".

Posts shall not be driven.

BALLAST MATERIAL TABULATION (FUTURE CONSTRUCTION)

It is estimated that Ballast material for the project is available in the vicinity of the pit indicated in the following tabulation. Estimated quantities involved in this operation are shown below.

Alteration of the plan as here outlined will be allowed only on written permission from the Department.

MATERIAL TO BE PLACED	SOURCE	QUANTITY AND THICKNESS					OVERHAUL
		AVAILABLE	* THICKNESS "T" INCHES	CLASS 1		CLASS 2		
				THICK. INCHES	TONS	THICK. INCHES	TONS	TON MILES
248+10 to 282+50	Pit No. 1 800 ft. Lt. Sta. 349+00 in NW 1/4, Sec. 1, T.9S, R66W.	Ample	6	6	3130			2306
282+50 to 304+00			14	6	1957	8	3010	1030
304+00 to 304+20			8	8	25			1
304+20 to 310+00			8	8	719			Free
310+00 to 319+00			14	6	819	8	1260	Free
319+00 to 350+00			8	8	3844			Free
350+00 to 362+50			6	6	1138			Free
362+50 to 376+00			14	6	1228	8	1891	Free
376+00 to 393+80			8	8	2207			Free
393+80 to 449+00			8	8	6845			3578
449+00 to 455+35			6	6	578			639
Correcting Irregularities in Subgrade					2249		616	755
TOTALS					24739		6777	8309

* *Based on Curve "C" of S.H.D. Design No. 12.*

SURFACING PLAN (FUTURE CONSTRUCTION)

It is estimated that material for Gravel Surfacing for the project is available in the vicinity of the pit indicated in the following tabulation. Estimated quantities involved in this operation are shown below.

Alteration of the Surfacing Plan as here outlined will be allowed only on written permission from the Department.

MATERIAL TO BE PLACED	SOURCE	QUANTITY			OVERHAUL
		AVAILABLE	TONS USED		
			TOP COURSE GRADING C	BOTTOM COURSE GRADING B	TON MILES
248+10 to 304+20	Pit No. 1 800 ft. Lt. Sta. 349+00 in NW 1/4, Sec. 1, T9S, R66W.	Ample	1403	3086	2385
304+20 to 393+80			2240	4928	Free
393+80 to 455+35			1539	3385	2870
Estimated for Road Approaches				875	277
TOTALS			5182	12274	5532

NOTE:

✓ Alignment and Grades as shown are subject to modification during construction after approval by the Denver Office.

✓ Soil data shown on the plans is obtained from best available testing laboratory information. This information is shown for convenience of the Contractor and the Department does not guarantee the accuracy of these tests. If materials not conforming to the data on plans are encountered during construction the grading plan shown on the plans will be modified where necessary to secure dense, stable embankments.

✓ Fencing, R.O.W. Markers and Guard Posts are tabulated on sheet 3.

FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	S0170(1)	15	

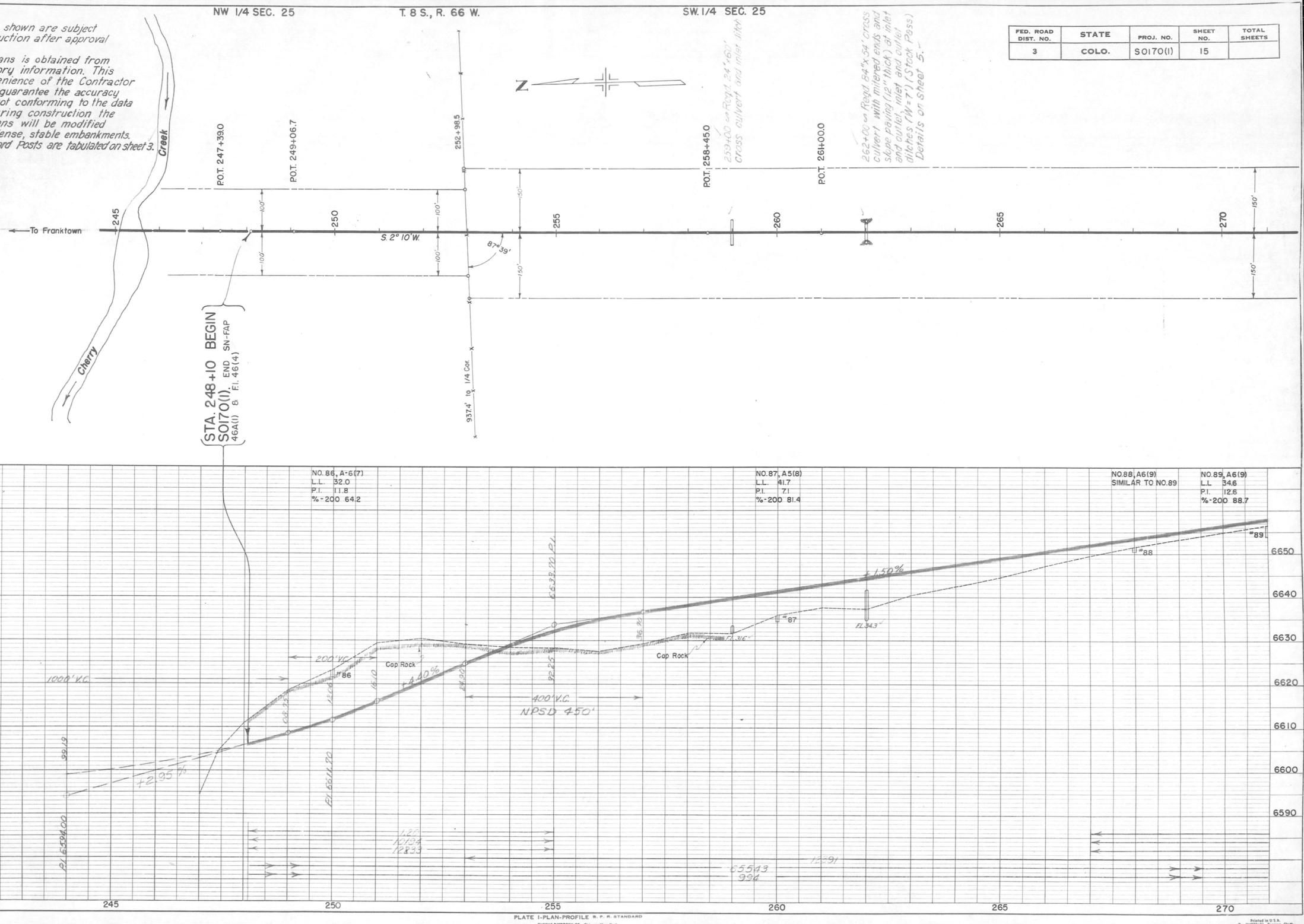


PLATE I-PLAN-PROFILE B. P. R. STANDARD

EUGENE DIETZGEN CO., Chicago-New York

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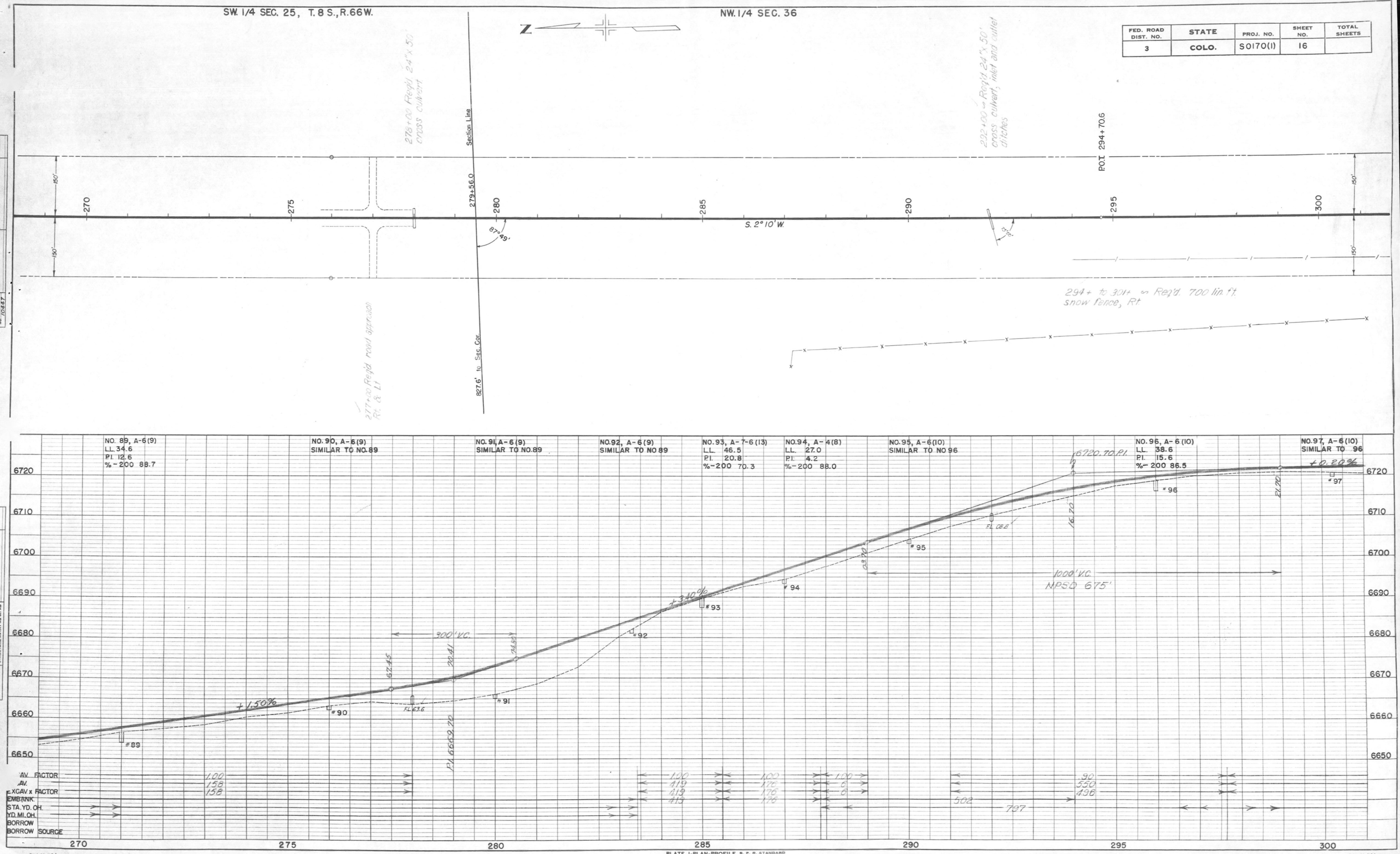
PLAN: SURVEYED, PLOTTED, LAYOUT CHECKED, RT. OF WAY CHECKED — NOTE BOOK No. 1046 1047 — DATE 07-30-68 — J.L.C.

PROFILE: SURVEYED, PLOTTED, GRADES CHECKED, B.M.'s NOTED, STRUCTURE NOTATIONS CHECKED — NOTE BOOK No. 1045

FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	S0170(1)	16	



PLAN — NOTE BOOK NO. 10446 — SURVEYED — PLOTTED — ALIGNMENT CHECKED — RT. OF WAY CHECKED — J.L.G. — 10-30-46

PROFILE — NOTE BOOK NO. 10451 — SURVEYED — PLOTTED — GRADES CHECKED — B.M.'s NOTED — STRUCTURE NOTAT'NS CH'KD

PLATE 1-PLAN-PROFILE B. P. R. STANDARD

EUGENE DIETZGEN CO., Chicago-New York

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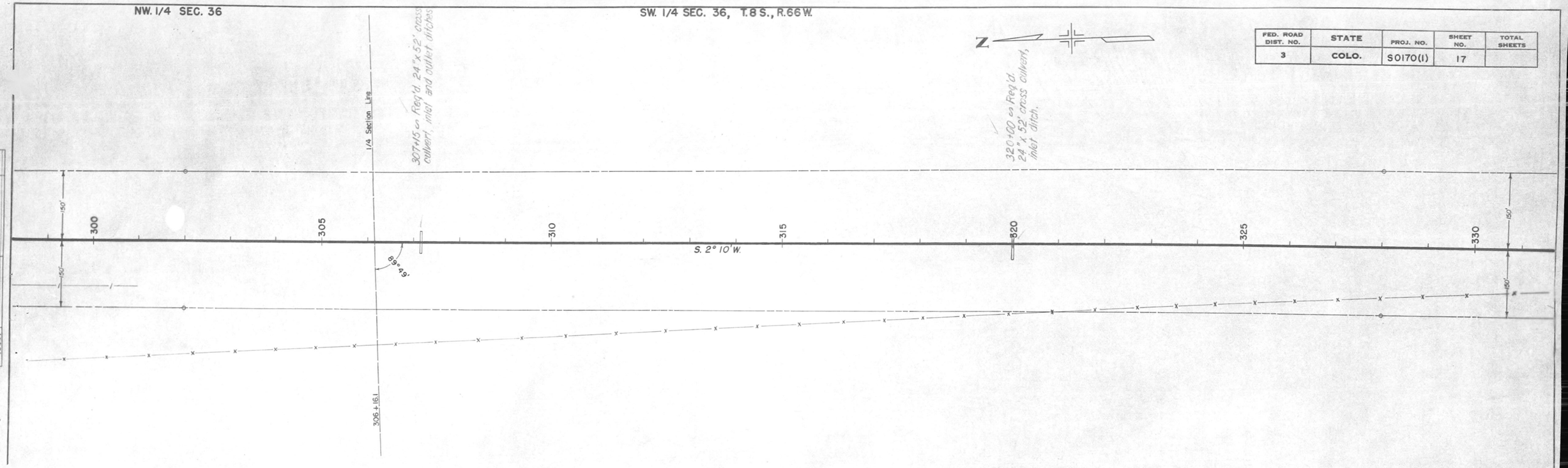
FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	S0170(1)	17	



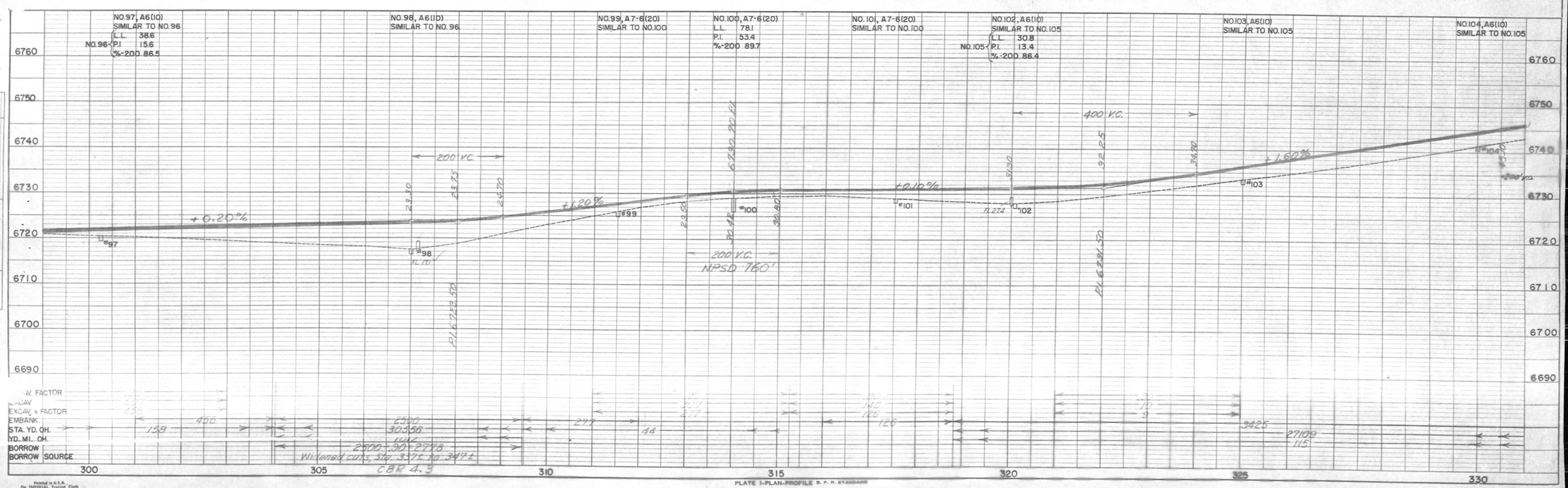


PLATE I-PLAN-PROFILE B. P. R. STANDARD

EUGENE DIETZGEN CO., Chicago-New York

Printed in U.S.A. On IMPERIAL Tracing Cloth

FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	S0170(1)	18	

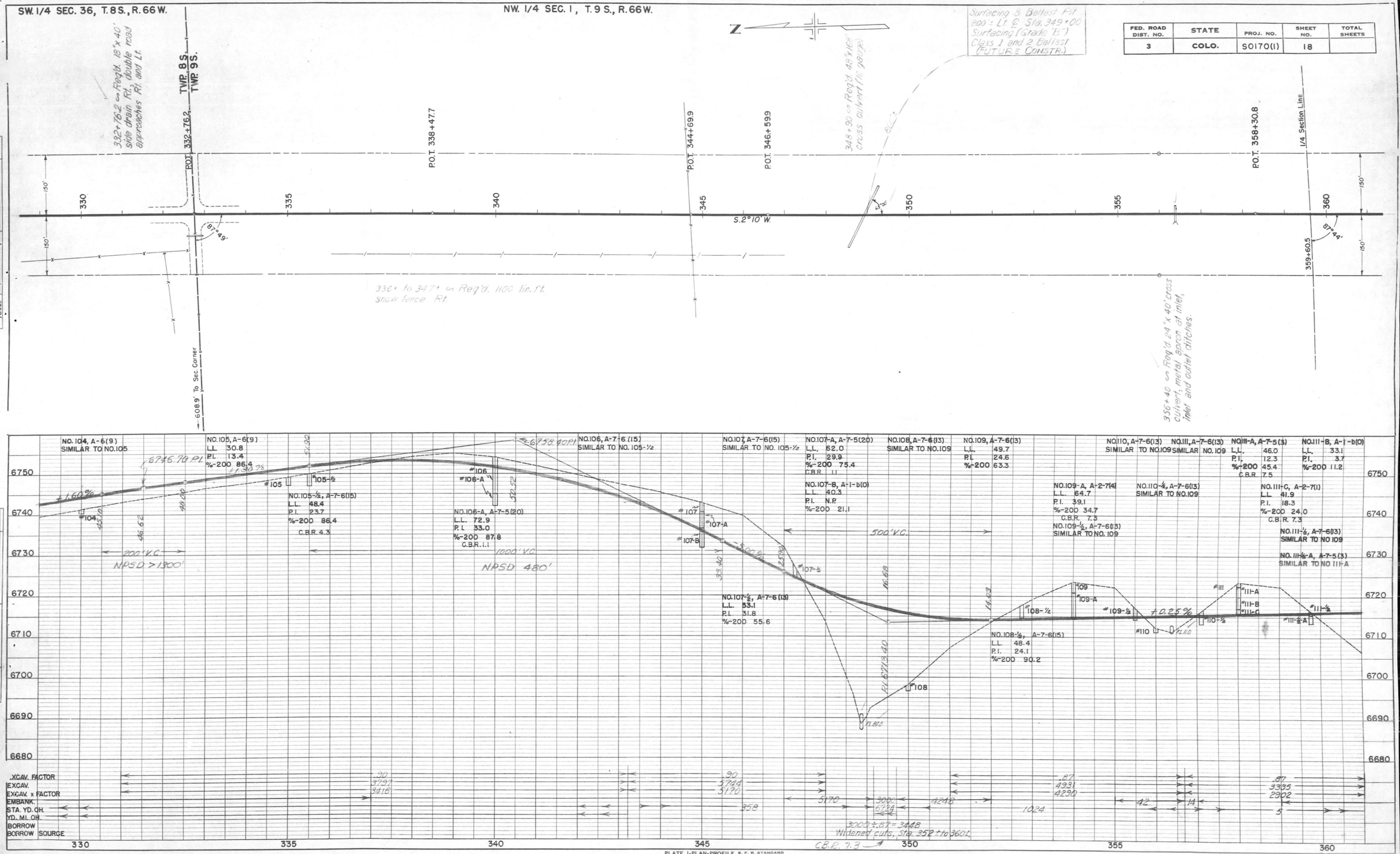


PLATE 1-PLAN-PROFILE B. P. R. STANDARD

FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	S0170(1)	19	

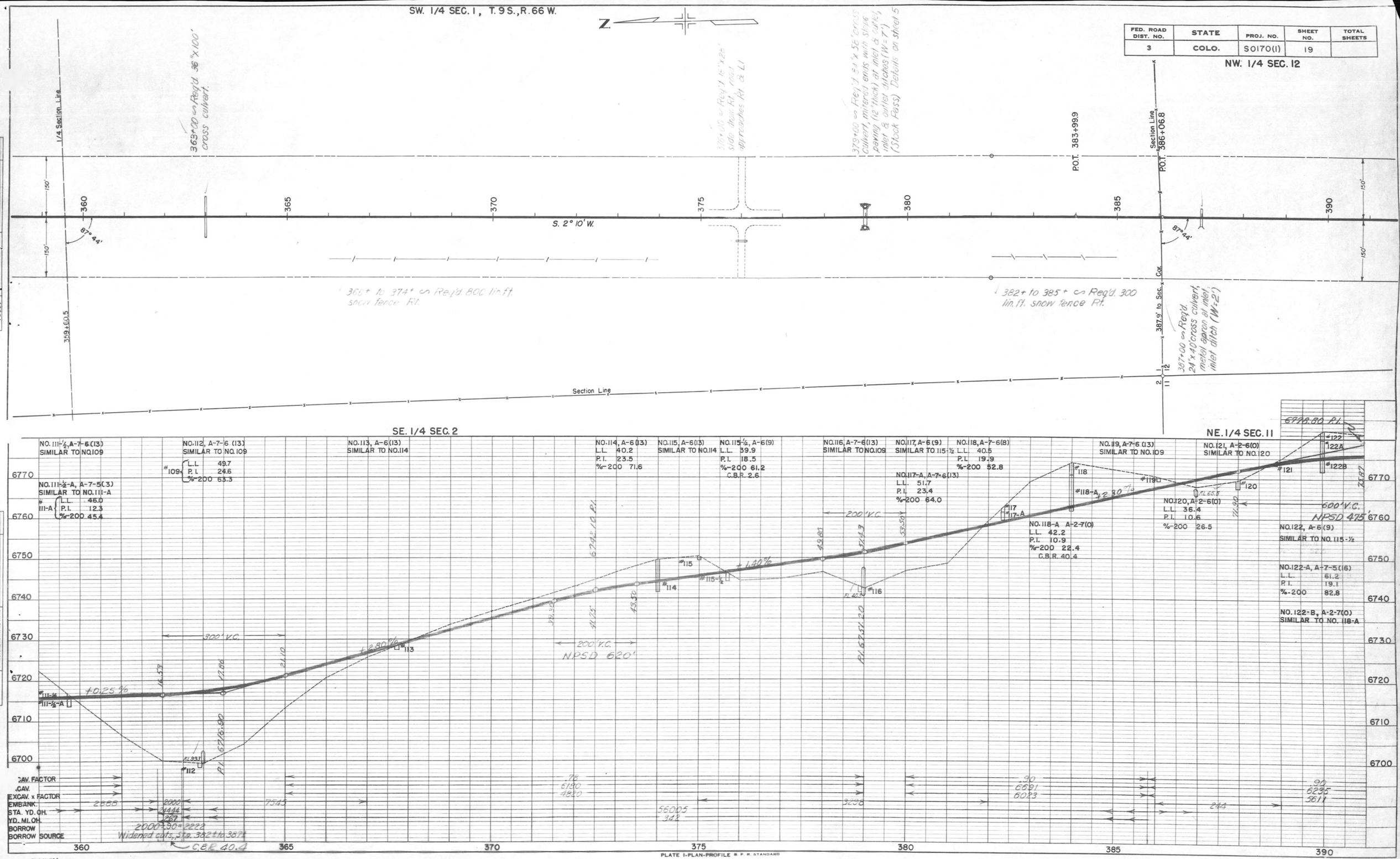


PLATE I-PLAN-PROFILE B. P. R. STANDARD

EUGENE DIETZGEN CO., Chicago-New York

Printed in U.S.A. On IMPERIAL Tracing Cloth

NOTE BOOK NO. 1046 / 1047

PLOTTED J.L.C. 10-30-48
ALIGNMENT CHECKED
RL. OF MAT CHECKED
STRUCTURE NOTATIONS CH'KD

FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	S0170(1)	20	

NW. 1/4 SEC. 12, T. 9 S., R. 66 W.

SW. 1/4 SEC. 12

NE. 1/4 SEC. 11

SE. 1/4 SEC. 11

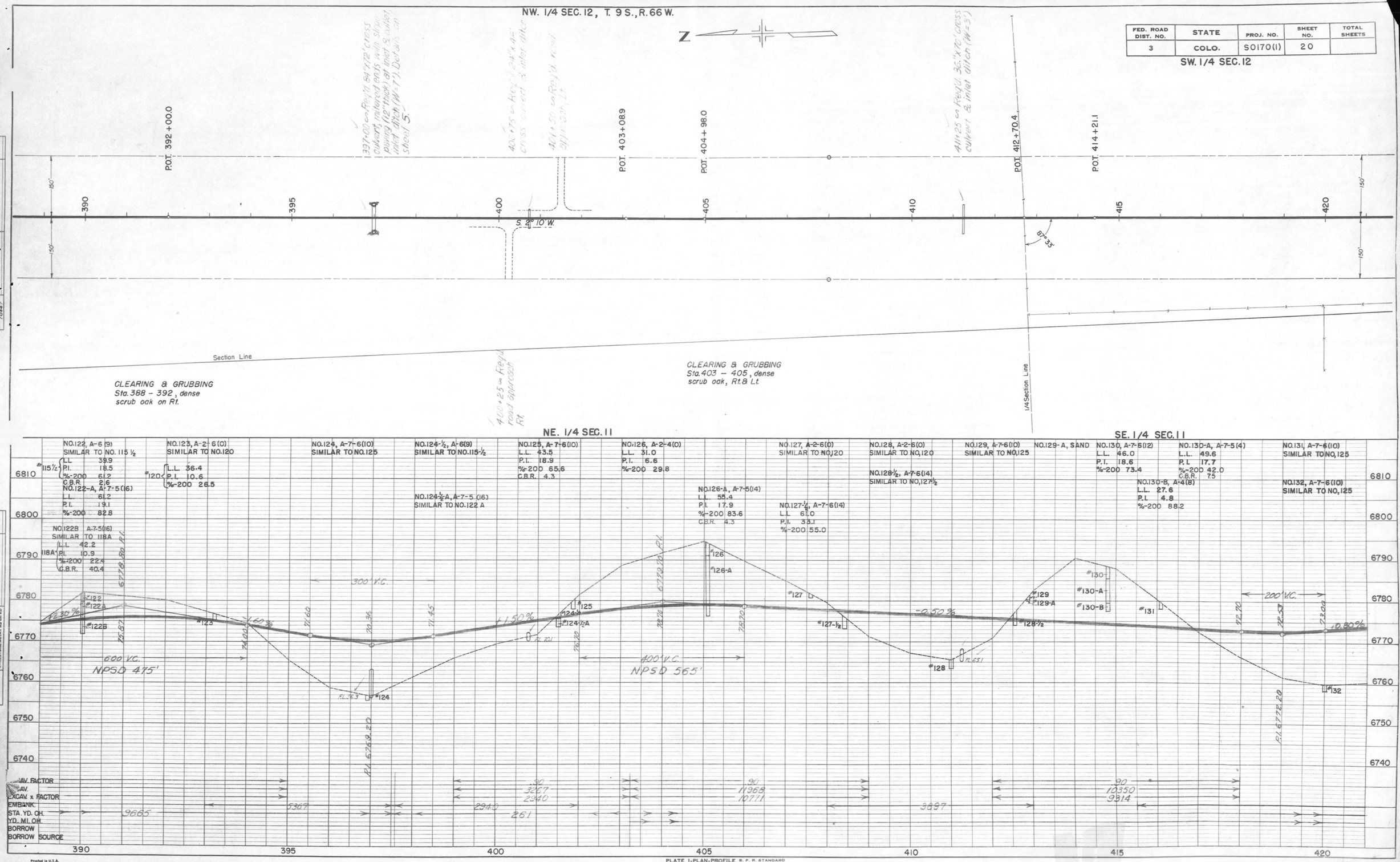


PLATE I-PLAN-PROFILE B. P. R. STANDARD

EUGENE DIETZGEN CO., Chicago-New York

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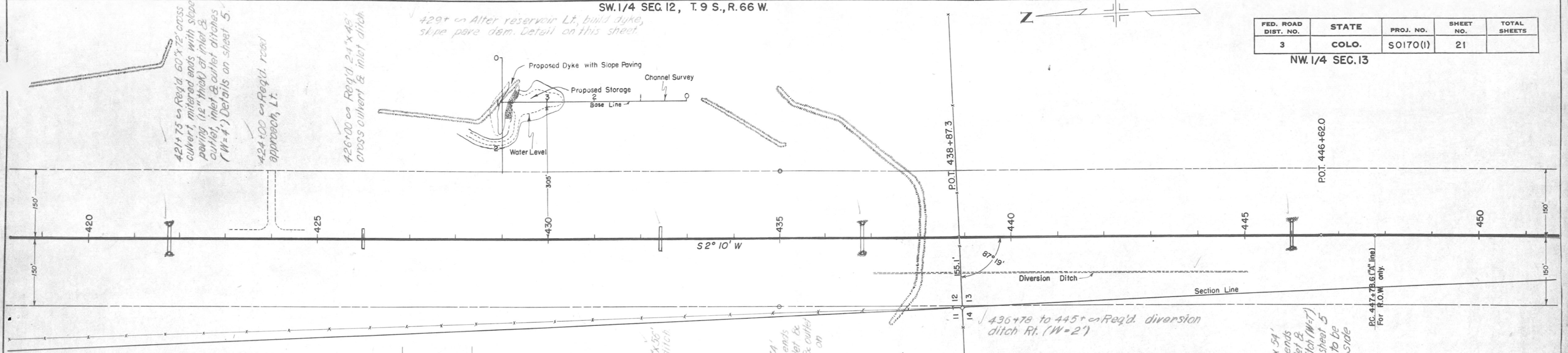
NOTE BOOK NO. 1046 1047 — PLOTTED — ALIGNMENT CHECKED — RT. OF WAY CHECKED — J.L.C. 12-3-76

NOTE BOOK NO. 1046 — CHARTS CHECKED — B.M.'s NOTED — STRUCTURE NOTAT'NS CH'KD

FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	S0170(1)	21	

SW. 1/4 SEC. 12, T. 9 S., R. 66 W.

NW. 1/4 SEC. 13



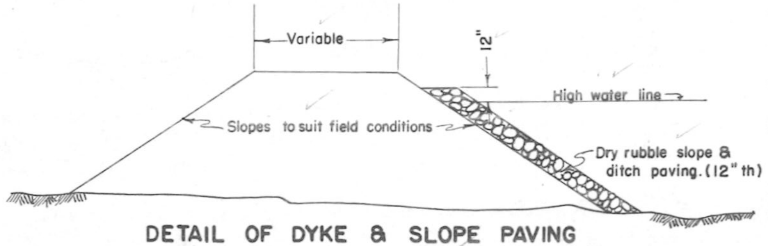
421+75 ∽ Req'd. 60"x 72' cross culvert, mitered ends with slope paving (12" thick) at inlet & outlet, inlet & outlet ditches (W=4') Details on sheet 5.

424+00 ∽ Req'd. road approach, Lt.

426+00 ∽ Req'd. 24"x 48' cross culvert & inlet ditch

429+ ∽ Alter reservoir Lt., build dyke, slope pave dam. Detail on this sheet.

436+78 to 445+ ∽ Req'd. diversion ditch Rt. (W=2')



DETAIL OF DYKE & SLOPE PAVING
Lt. STA. 429+

432+40 ∽ Req'd. 24"x 56' cross culvert & inlet ditch

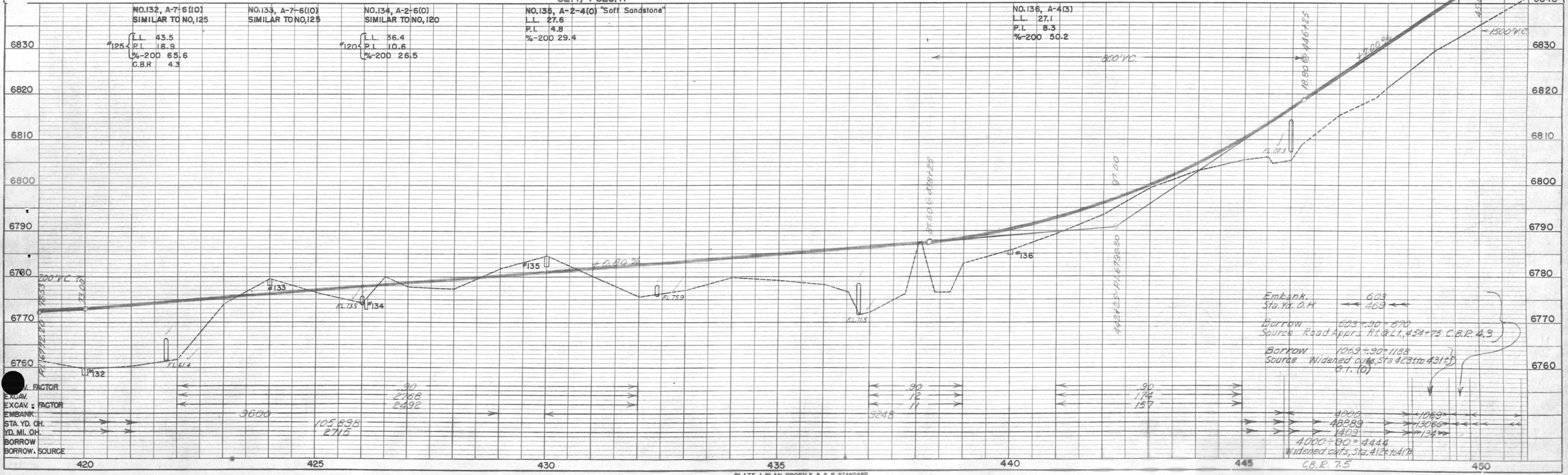
436+78 ∽ Req'd. 84"x 74' cross culvert, mitered ends with slope paving at inlet & outlet (12" thick), inlet & outlet ditches (W=7') Details on sheet 5.

Section Line

446+00 ∽ Req'd. 84"x 54' cross culvert, mitered ends with slope paving at inlet & outlet (12" thick), inlet ditch (W=7') Stock Pass. Details on sheet 5. Excavated material to be used to dyke lower side at inlet.

SE. 1/4 SEC. 11

NE. 1/4 SEC. 14



NO. 132, A-7-6(10)
SIMILAR TO NO. 125

#125 L.L. 43.5
P.I. 18.9
%-200 65.6
C.B.R 4.3

NO. 133, A-7-6(10)
SIMILAR TO NO. 125

NO. 134, A-2-6(0)
SIMILAR TO NO. 120

#120 L.L. 36.4
P.I. 10.6
%-200 26.5

NO. 135, A-2-4(0) "Soft Sandstone"
L.L. 27.6
P.I. 4.8
%-200 29.4

NO. 136, A-4(3)
L.L. 27.1
P.I. 8.3
%-200 50.2

~~V. FACTOR	.90	.90	.90	
EXCAV.	2768	12	174	
EXCAV. x FACTOR	2492	11	157	
EMBANK.	9600	9248		4000 / 1069
STA. YD. OH.	105 898			48889 / 13066
YD. MI. OH.	2715			1409 / 134
BORROW				
BORROW. SOURCE				

Embank. 603
Sta. Yd. O.H 469

Borrow 603 ÷ .90 = 670
Source Road Apprs Rt. & Lt., 454+75 C.B.R. 4.3

Borrow 1069 ÷ .90 = 1188
Source Widened cuts, Sta 423± to 431±
G.I. (0)

4000 ÷ .90 = 4444
Widened cuts, Sta. 412± to 417±
C.B.R. 7.5

PLATE 1-PLAN-PROFILE B. P. R. STANDARD

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FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	S0170(1)	22	

NW. 1/4 SEC. 13, T. 9 S., R. 66 W.

SW. 1/4 SEC. 13

456+ to 458+ on Adjust side ditch grades to drain ahead. See Cross Sections.

454+75 on Reqd 18"x50' side drain with outlet ditch Lt. road approach to County road Rt. & Lt.

COUNTY ROAD

To Colo. Springs

P.I. 468+48.6

P.O.T. 457+34.4 = P.I. 457+39.61 ("A" line)

Approximate Location for Timber Barricade

FUTURE CONSTRUCTION

S 2° 10' W

S 9° 26' W

℄ for R.O.W

Section Line

Original Survey
Δ = 4° 46' R
D = 0° 15'
T = 954.0'
L = 1906.7'
R = 22,920.0

455+70 on Reqd timber barricade. Details on sheet 5.

456+10 on Reqd road approach Rt. & Lt.

COUNTY ROAD

To Castle Rock

455+20 on Reqd Project Marker Rt. (Skate Fences)

STA. 458+20.0 END
S0170(1)

S0170(1)

Marking for Project Marker
Rt. Sta. 458+20

P.C. 464+34.8

P.T. 466+85.3 Bk ("A" line) = 467+17.6 Ah. (Main line)

Δ = 7° 16' Rt.
D = 1° 00'
T = 363.8'
L = 726.7'
R = 5730.0'

P.T. 472+11.5

1/4 Section Line

NE. 1/4 SEC. 14

SE. 1/4 SEC. 14

6897.55 P.I.

NO.137 A-4(3)
LL 25.2
P.I. 2.8
%-200 52.4

NO.137A A-4(5)
LL 32.2
P.I. 10.1
%-200 60.8

NO.137½ A-7-6(11)
SIMILAR TO 127½
LL 61.0
P.I. 33.1
NO.137½ %-200 55.0
C.B.R 4.3

NO.138 A-4(3)
LL 32.8
P.I. 0.8
%-200 49.2

NO.138A A-6(7)
LL 37.5
P.I. 16.9
%-200 57.2

NO.138B A-4(0)
LL 29.0
P.I. 6.4
%-200 37.2

NO.137½ A
NO.137½A
NO.137½B
15' Rt.

NO.137 A A-7-6(3)
LL 41.1
P.I. 15.2
%-200 42.0
C.B.R. 7.5

NO.137½B A-2-4(0)
LL 25.6
P.I. N.P.
%-200 23.2

NO.137
NO.137A
7' Rt.

NO.138
NO.138A
NO.138B
NO.138C
30' Rt.

NO.138C A-6(7)
LL 32.8
P.I. 4.5
%-200 64.2

+3.00%
4505
1500' V.C.
NPSD 480'
-3.00%
4533
P.I. 6821.50

6890 6880 6870 6860 6850 6840 6830

450 455 460 465 470 475 480

FACTOR				90		
EXCAV.				4669		
EXCAV. x FACTOR				4201		
EMBANK.	1674		4201			
STA. YD. OH.	4222			2163		
YD. MI. OH.						
BORROW	1674 ÷ .90 = 1860					
BORROW SOURCE	Road apprs. Rt. & Lt. 456+10					

C.B.R. 4.3

PLATE 1-PLAN-PROFILE S. P. R. STANDARD

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NOTE BOOK NO. 46-58 | ALIGNMENT CHECKED | RT. OF WAY CHECKED

NOTE BOOK NO. 46-58 | GRADES CHECKED | B.M.'S NOTED | STRUCTURE DATA TO GO TO