

MSI Separator Sheet



MSI2010

FAD

See 7A (1)

12-18-50

✓
④

SH III

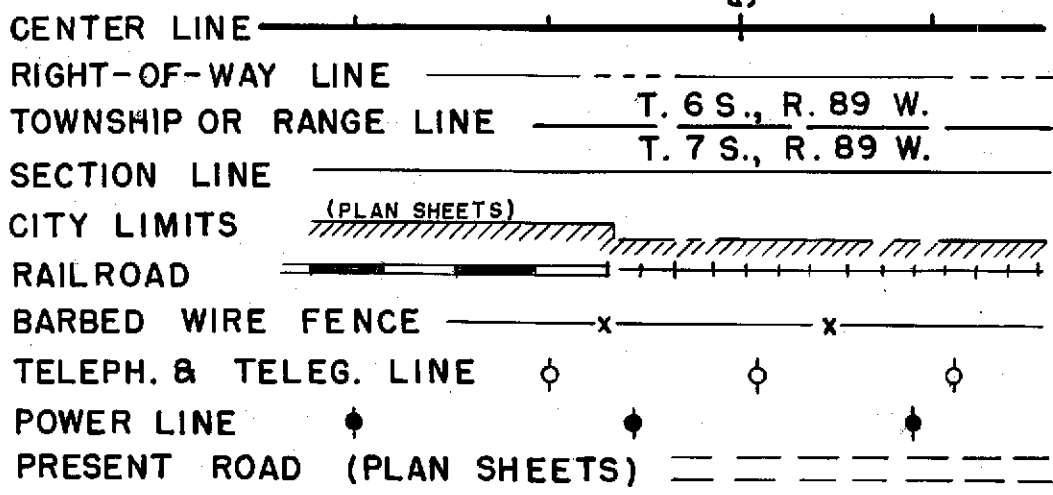
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COLORADO
STATE HIGHWAY DEPARTMENT
PLAN AND PROFILE OF PROPOSED
FEDERAL AID SECONDARY PROJECT NO. S 0079 (I)
STATE HIGHWAY NO. 111
HUERFANO COUNTY

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	
NET LENGTH OF PROJECT	
23,280.6 Ft. = 4.409 MI.	20,570.6 Ft. = 3.896 MI.
GROSS LENGTH OF PROJECT	
26,274.6 Ft. = 4.976 MI.	22,939.6 Ft. = 4.345 MI.

CONVENTIONAL SIGNS



NOTE:

It is recommended that bidders on this Project go over the plan details with one of the following field representatives of this Department.

J. A. Solmonson, Construction Engineer, Pueblo, Colo.
S.W. Baker, Resident Engineer, Huerfano Co.

TABULATION OF LENGTH AND DESIGN

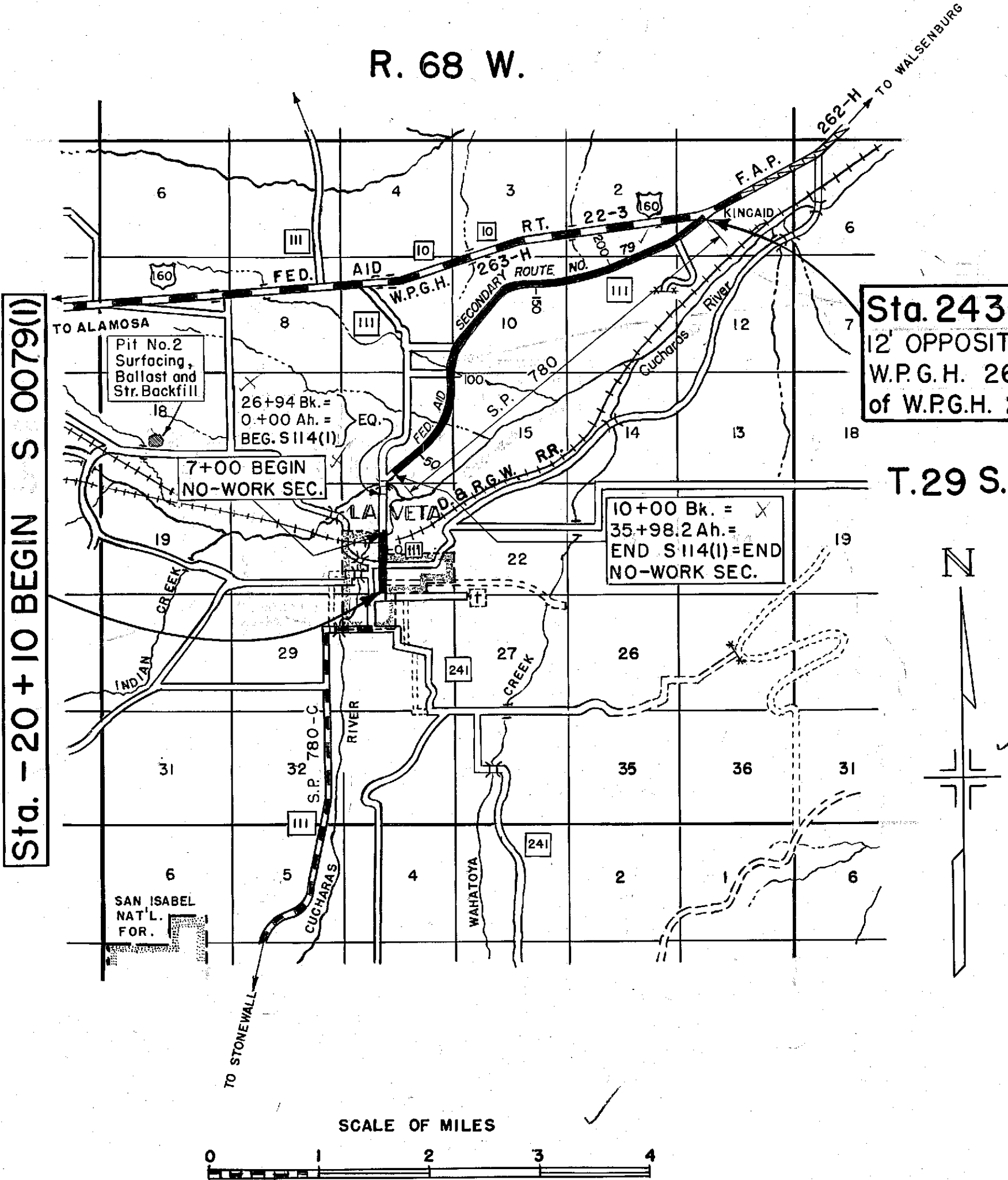
STATION	ROADWAY LINEAR FEET		NO WORK SECTION
	INSIDE LA VETA	OUTSIDE LA VETA	
-20 +10 BEGIN S 0079 (I)	22'	22'	LIN FT.
-7 +70 End 22' Rdwy. = Begin 49' Rdwy.	1240	770	
0 +00 End 49' Rdwy. = Begin 22' Rdwy.	700		
7 +00 Begin No-Work Section			625
13 +25 La Veta City Limits			1369
26 +94.0 Bk. = 0 +00 Ah. EQUATION = Begin S 114 (I)			1000
10 +00.0 Bk. = 35 +98.2 Ah. EQUATION = End No-Work Section = End S 114 (I)		4780.7	
83 +78.9 Bk. = 85 +50.9 Ah. EQUATION		15,789.9	
243 +40.8 END S 0079 (I) 12' opposite Sta. 561 +42.6 on W.P.G.H. 263-H (742.6' to beginning of W.P.G.H. 263-H)			
TOTALS	1940	770	20,570.6 2994

SUMMARY

	LIN. FT.	MILES
Inside La Veta 22' Roadway	1940.0	.367
Inside La Veta 49' Roadway	770.0	.146
Outside La Veta 22' Roadway	20,570.6	3.896
Total Roadway	23,280.6	4.409
No-Work Section	2,994.0	.567
S 0079 (I) Roadway Including No-Work Section	26,274.6	4.976

DESIGN DATA

	INSIDE LA VETA	OUTSIDE LA VETA
Maximum Degree of Curve	0°00'	24°00'
Maximum Grade	2.1%	4.5%
Minimum N.P.S.D. Horizontal	> 1300'	620'
Minimum N.P.S.D. Vertical	> 1300'	370'
Maximum Design Speed		45 M.P.H.



Sta. 243+40.8 END S 0079 (I)
12' OPPOSITE STA. 561 +42.6 ON
W.P.G.H. 263-H (742.6' to beginning
of W.P.G.H. 263-H)

RECOMMENDED FOR APPROVAL:

ASSISTANT ENGINEER DATE 12-18-50

APPROVED: STATE HIGHWAY ENGINEER DATE 12-19-50

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

RECOMMENDED FOR APPROVAL:

DISTRICT ENGINEER DATE

APPROVED:

DIVISION ENGINEER DATE

TYPICAL SECTIONS

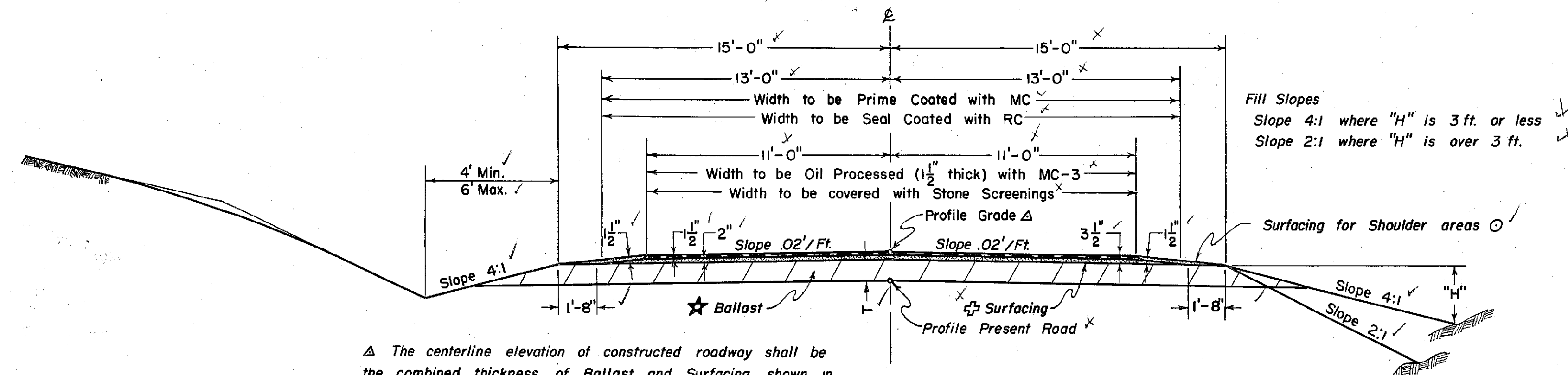
FED. ROAD DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	S 0079(1)	2	

Rev 4-4-51 JPK Title Block

NOTE:

See Standard M-2-DM for details of cut slope treatment, flaring and widening for guard fence and/or marker posts.

TYPICAL SECTION STAS. -20+10 to -15+20, -12+40 to -9+30, 0+00 to 7+00 and 35+98.2 to 243+40.8

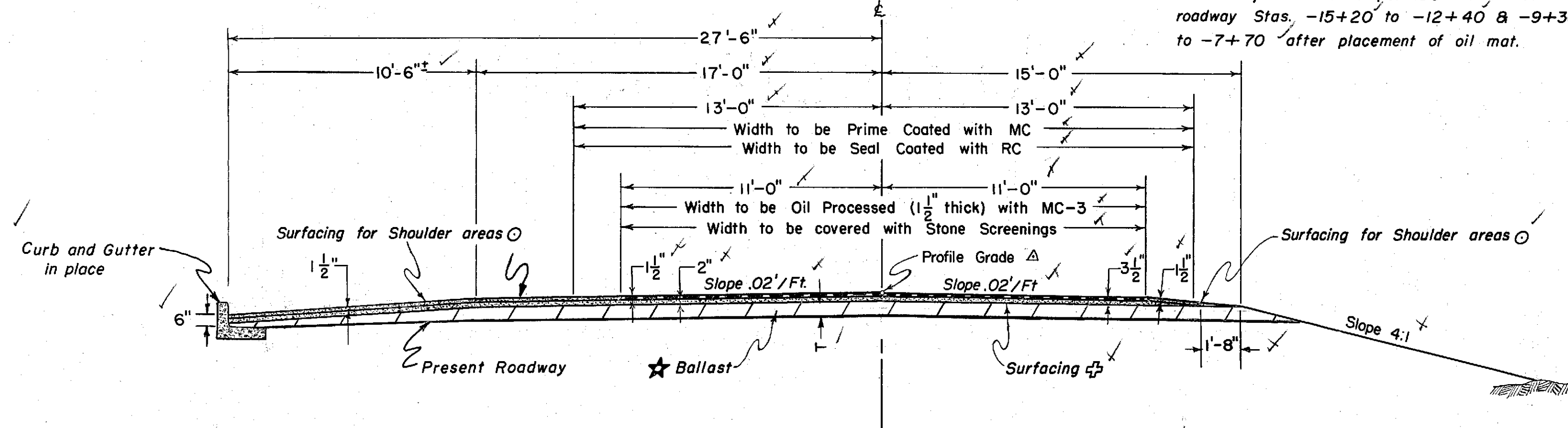


△ The centerline elevation of constructed roadway shall be the combined thickness of Ballast and Surfacing, shown in tabulations sheet 6 above profile of present roadway, except from Sta. 234+00 to end of Project, where grading quantities are shown on plans.

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

TYPICAL SECTION

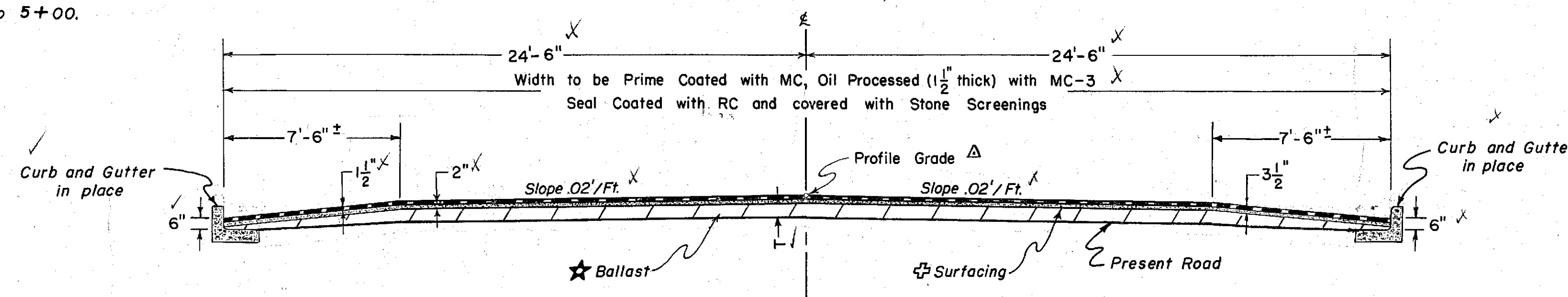
STAS. -15+20 to -12+40
and -9+30 to -7+70



○ Approximate 1 1/2" thickness Base Course Surfacing for Shoulder areas to be placed at the rate of 6 Tons per 100 lin. ft. of roadway Stas. -20+10 to -15+20, -12+40 to -9+30, 0+00 to 7+00, and 35+98.2 to 243+40.8, and 17 Tons per 100 lin. ft. of roadway Stas. -15+20 to -12+40 and -9+30 to -7+70 after placement of oil mat.

TYPICAL SECTION

STAS. -7+70 to 0+00



Note:

The transition from 49' roadway to 22' roadway shall take place gradually over a total distance of 500 lin. ft. from Station 0+00 to 5+00.

★ 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 6.

3 1/2" compacted thickness of Gravel or Crushed Rock Surfacing to be placed in two courses:
Approximate 1 1/2" Top Course Surfacing to be placed at the rate of 19 Tons per 100 lin. ft. of roadway Stations -20+10 to -7+70, 0+00 to 7+00, and 35+98.2 to 243+40.8, and 41 Tons per 100 lin. ft. of roadway Stations -7+70 to 0+00.
Approximate 2" Bottom Course Surfacing to be placed at 27 Tons per 100 lin. ft. of roadway Stations -20+10 to -15+20, -12+40 to -9+30, 0+00 to 7+00, and 35+98.2 to 243+40.8, 44 Tons per 100 lin. ft. of roadway Stations -15+20 to -12+40, and -9+30 to -7+70, and 55 Tons per 100 lin. ft. of roadway Stations -7+70 to 0+00.

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 poles encroaching on construction are to be moved by the owners.
- 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.
- Except as otherwise noted on the plans, payment for overhaul will be based on measurement along the centerline of the project.
- 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.
- 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.
- Turning radii for street approaches shall conform to those used by the city in lieu of radii shown on Standard M-2-DM.
- All concrete used on this project shall be "Air Entrained Concrete".
- All side approach roads to the project shall be seal coated and covered with Stone Screenings to approximately 50 ft. out from the edge of the oil mat, or to the R.O.W. Line whichever is less.
- At R.R. crossings the present roadbed shall be excavated to provide for placing the required thickness of Surfacing and Ballast material to meet the present profile grade of the R.R. crossing. The transitions for this operation will take place gradually over a distance of 300 ft. each way from the R.R. crossing. Excavated material shall be used to widen roadway shoulders at R.R. crossing approaches.
- Asphaltic Road Material MC shall be used for prime coat over the widths shown by various typical sections previous to placing Oil Processed Material, Grade of MC oil to be determined by the Engineer. All side approach roads to the project shall be prime coated to approximately 50 ft. out from the edge of Oil Mat or to the R.O.W. Line whichever is less.
- Asphaltic Road Material MC-3 is to be used for processing oil mat on this project over the widths shown by the various typical sections.
- It is estimated that rolling of the Oil Processed Material with a flat wheeled roller will be necessary after compaction of mat with rubber tired roller in order to produce a smooth firm surface.
- Asphaltic Road Material RC shall be used for seal coating over the entire primed area. Grade of RC oil to be determined by the Engineer. Stone Screenings (Type 2) shall be placed over the entire processed area. For preliminary quantities, Asphaltic Road Material RC for the Seal Coat on the project has been estimated at 0.18 gal. per sq. yd. Exact rate to be determined by the Engineer.

Shaping Roadbed

The item "Shaping Roadbed" is estimated to apply on this project from Sta. -20+10 to Sta. 0+00, and from Sta. 10+00 Bk= 35+98.2 Ah. to Sta. 234+00.

Obliterating Old Road

It is estimated that the Old Road is to be obliterated from Sta. 241+ to 246+. (Surveyed Line)

SUMMARY OF APPROXIMATE QUANTITIES

ITEM NO.	ITEM	UNIT	ROADWAY			ROADWAY			PROJECT TOTALS
			Inside La Veta			Outside La Veta			
			22' Rdwy.	49' Rdwy.		Flared Intersection	22' Rdwy.	SUBTOTAL	
11ax	Removal of 1 Structure	Lump Sum	•	•					•
11bx	Removal of 2 Structures	Lump Sum		•					•
11cx	Removal of 2 Structures	Lump Sum				•	•	•	•
11dx	Removing and Resetting Mailboxes	Lump Sum					•	•	•
12a	Removing Fence	Lin. Ft.				1100	200	1300	1300
13c	Unclassified Excavation	Cu. Yd.	800			3500	700	4200	5000
13d	Unclassified Ditch Excavation	Cu. Yd.	20	15		50	15	65	100
14a	Dry Rock Excavation (Structural)	Cu. Yd.	5	6		15	4	19	30
14b	Dry Common Excavation (Structural)	Cu. Yd.	14	20		45	11	56	90
14c	Wet Rock Excavation (Structural)	Cu. Yd.	1	2		6	1	7	10
14d	Wet Common Excavation (Structural)	Cu. Yd.	5	6		15	4	19	30
16a	Structure Backfill (Class 1)	Cu. Yd.	25	33		60	22	82	140
16d	Mechanical Tamping	Hour	4	4		8	4	12	20
17ax	Rolling with Tamping Roller (2 Unit)	Hour	6	3		11	70	81	90
17ay	Rolling with Tamping Roller (4 Unit)	Hour	4	3		6	37	43	50
17b	Rolling with Flat Wheeled Roller	Hour	13	9		18	110	128	150
17c	Rolling with Rubber Tired Roller	Hour	7	5		8	60	68	80
17dx	Furnishing Tamping Roller (2 Unit)	Each	0.07	0.03		0.11	0.79	0.90	1
17dy	Furnishing Tamping Roller (4 Unit)	Each	0.07	0.03		0.11	0.79	0.90	1
17e	Furnishing Flat Wheeled Roller	Each	0.08	0.05		0.10	0.77	0.87	1
17f	Furnishing Rubber Tired Roller	Each	0.08	0.05		0.10	0.77	0.87	1
17g	Wetting	M. Gal.	125	61		204	1400	1604	1790
18a	Station Yard Overhaul	Sta. Yd.	325	425		750	8500	9250	10,000
18b	Yard Mile Overhaul	Yd. Mi.	60	70		360	110	470	600
18c	Ton Mile Overhaul	Ton Mi.	6080	3080		70,240	136,600	206,840	216,000
23a	Ballast (Class 1)	Ton	2540	1270		8420	15,870	24,290	28,100
23b	Ballast (Class 2)	Ton					14,500	14,500	14,500
26c	Gravel or Crushed Rock Surfacing (Grading C)	Ton	1530	910		4030	10,930	14,960	17,400
30j	Asphaltic Road Material MC-3	Gal.	5100	3500		13,800	45,500	59,300	67,900
30x	Asphaltic Road Material MC	Gal.	3060	1680		5420	24,440	29,860	34,600
30y	Asphaltic Road Material RC	Gal.	1375	756		1224	11,045	12,269	14,400
31ay	Road Mix Oil Processing (1 1/2" Thick)	Sq. Yd.	5765	4192			50,283	50,283	60,240
31ax	Road Mix Oil Processing (2" Thick)	Sq. Yd.				11,450		11,450	11,450
31d	Stone Screenings (Type 2)	Ton	70	45		115	520	635	750
37c	Sand Cushion	Cu. Yd.				10		10	10
46b	Class "B" Concrete	Cu. Yd.				4		4	4
53z	12" Corrugated Metal Culvert Pipe	Lin. Ft.	140						140
53b	18" Corrugated Metal Culvert Pipe	Lin. Ft.		124			40	40	164
53c	24" Corrugated Metal Culvert Pipe	Lin. Ft.				226	54	280	280
63	Grouted Rubble Slope and Ditch Paving (4" Thick)	Sq. Yd.					20	20	20
76a	Barbed Wire Fence with Treated Wooden Posts	Lin. Ft.				1000	100	1100	1100
84a	Concrete Curb	Lin. Ft.				190		190	190
92	Timber Guard Posts	Each				69	2	71	71
119	Shaping Roadbed	Mile	0.4	0.2			3.7	3.7	4.3
STATE FORCES									
81a	Project Markers	Each	1				1	1	2
	Reflectorized R.R. Advance Warning Signs	Each	1	1					2
	Signing and Striping Intersection, Sta. 243+	Lump Sum				•	•	•	•
FORCE ACCOUNT									
	Timber Grade Crossing Station 4 + 400 (Work by D. & R. G. W. R.R. Co. Forces)	Lump Sum	•						•
20a	Obliterating Old Road	Lump Sum				•	•	•	•

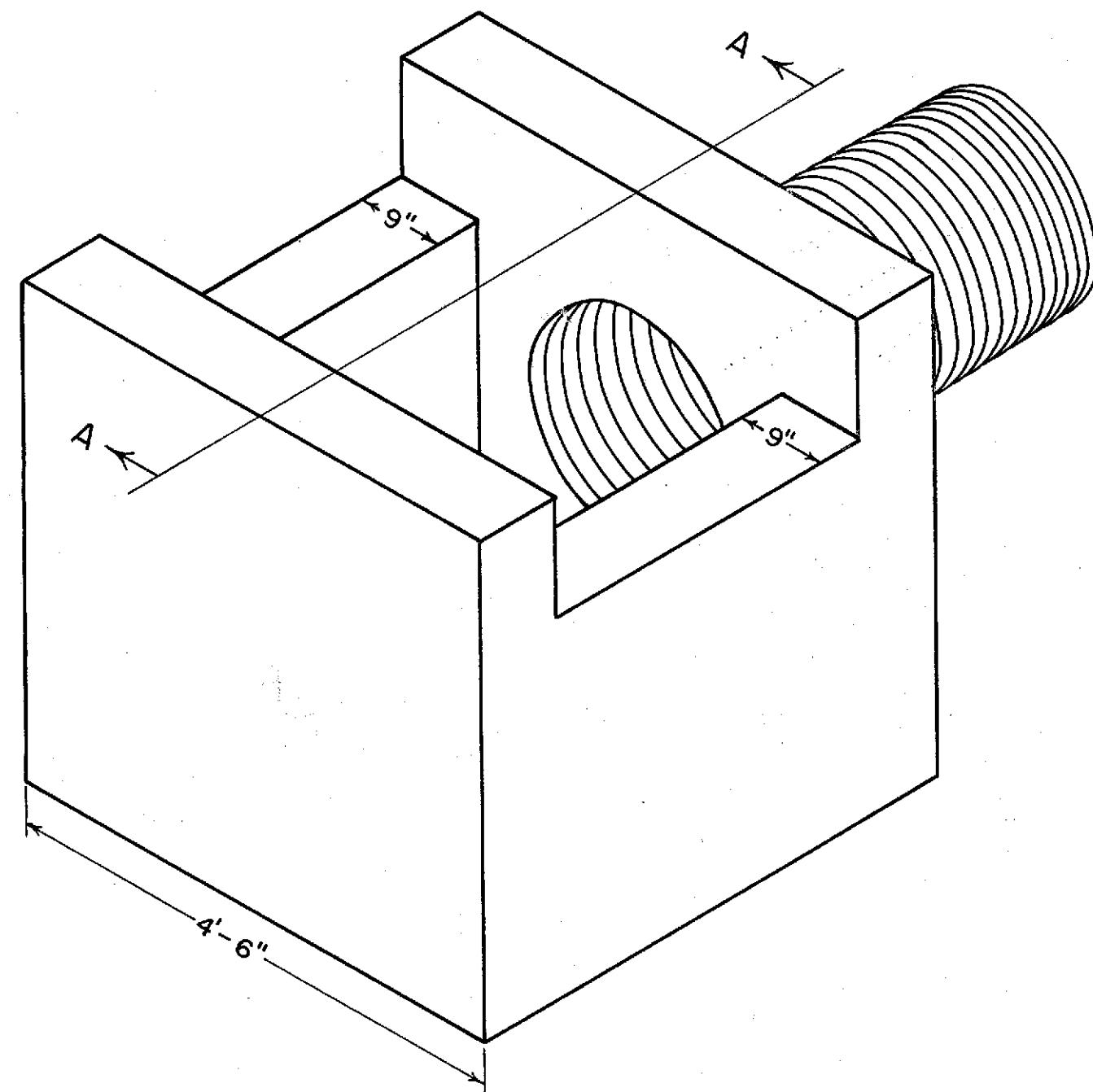
± Non Federal Aid

Rev on 4-4-51 on JPK on Title Block Deleted Flashing Signal &
Rev. Item #11 and N° 31
Deleted Item #94 & Added Item N° 92

FED. ROAD DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S 0079 (1)	4	

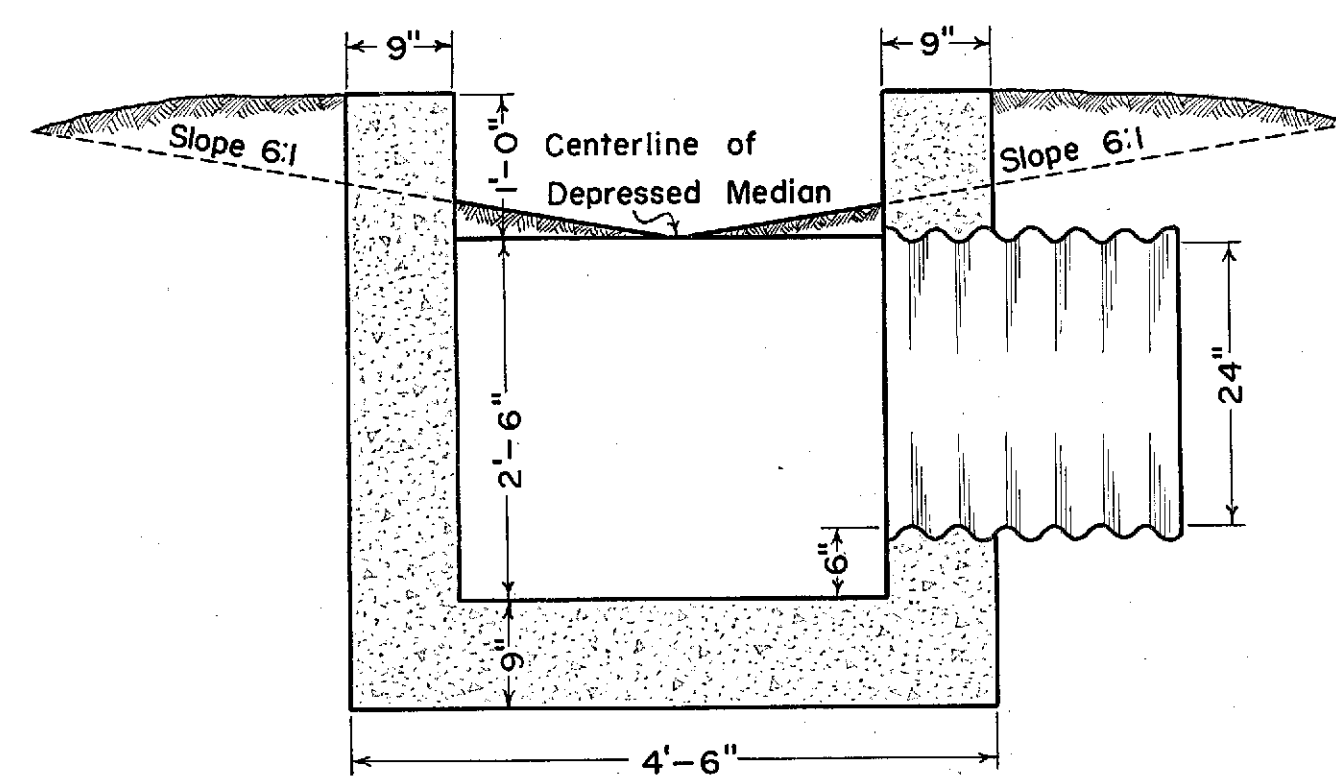
DETAILS OF DROP INLETS FOR MEDIAN DRAINS

RT. OF STA. 568+00 & RT. OF STA. 562+30



NOTE:

1.77 Cu. Yds. Class "B" Concrete required for 1-Drop Inlet with 1 C.M.P.
Volume occupied by pipes to be deducted for pay quantity of Concrete.



SECTION AA

FENCING REQUIREMENTS

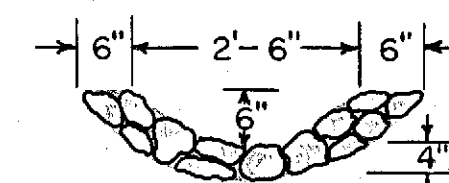
STATION	SIDE		REMOVE FENCE	BUILD BARBED WIRE FENCE
			LIN. FT.	LIN. FT.
554+620 to 564+287 562+00 to 562+50	Rt. Lt.		945 150	940
240+50 to 242+35 240+50 to 241+00	Lt. Lt.		175	90
OUTSIDE LA VETA 22' RDWY. TOTALS			175 ✓	90 ✓
INTERSECTION TOTALS			1095 ✓	940 ✓
PROJECT TOTALS			1270 ✓	1030 ✓

TIMBER GUARD POSTS

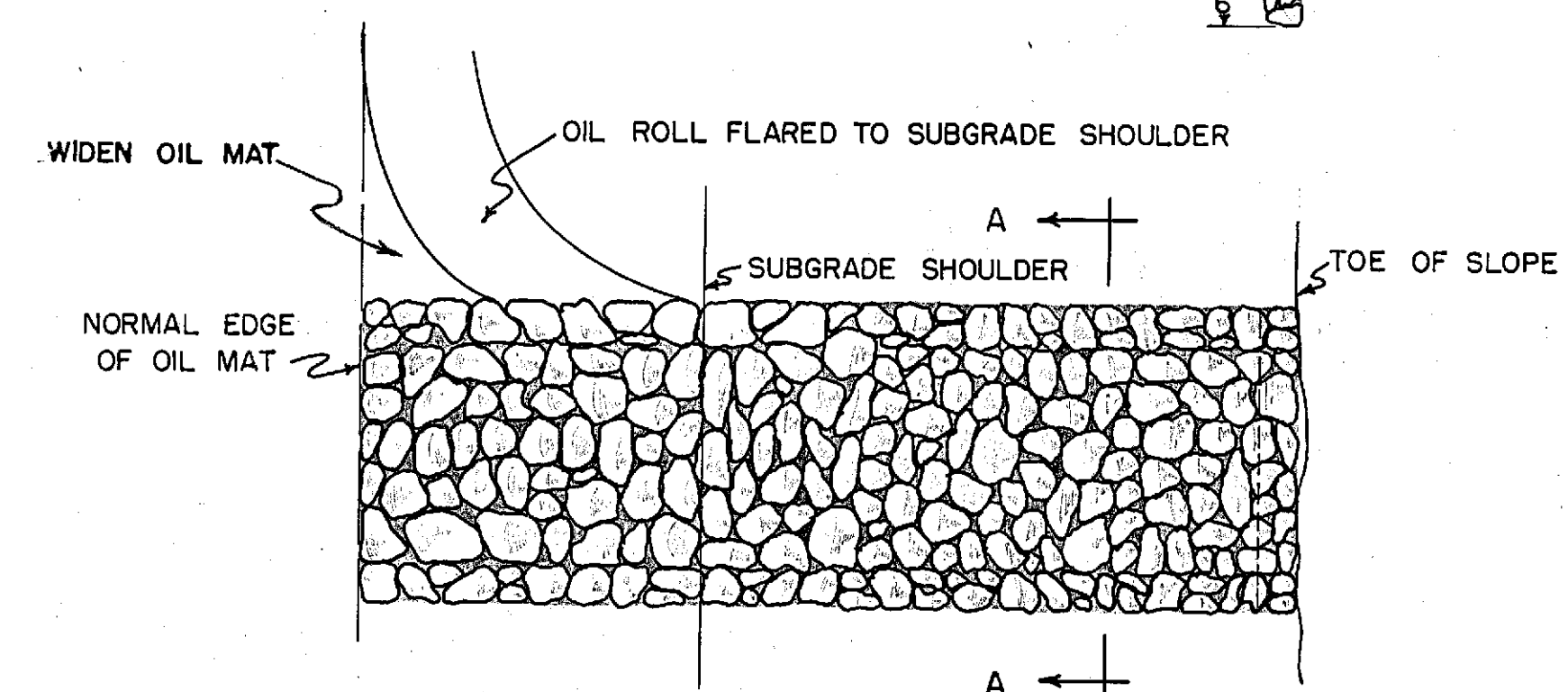
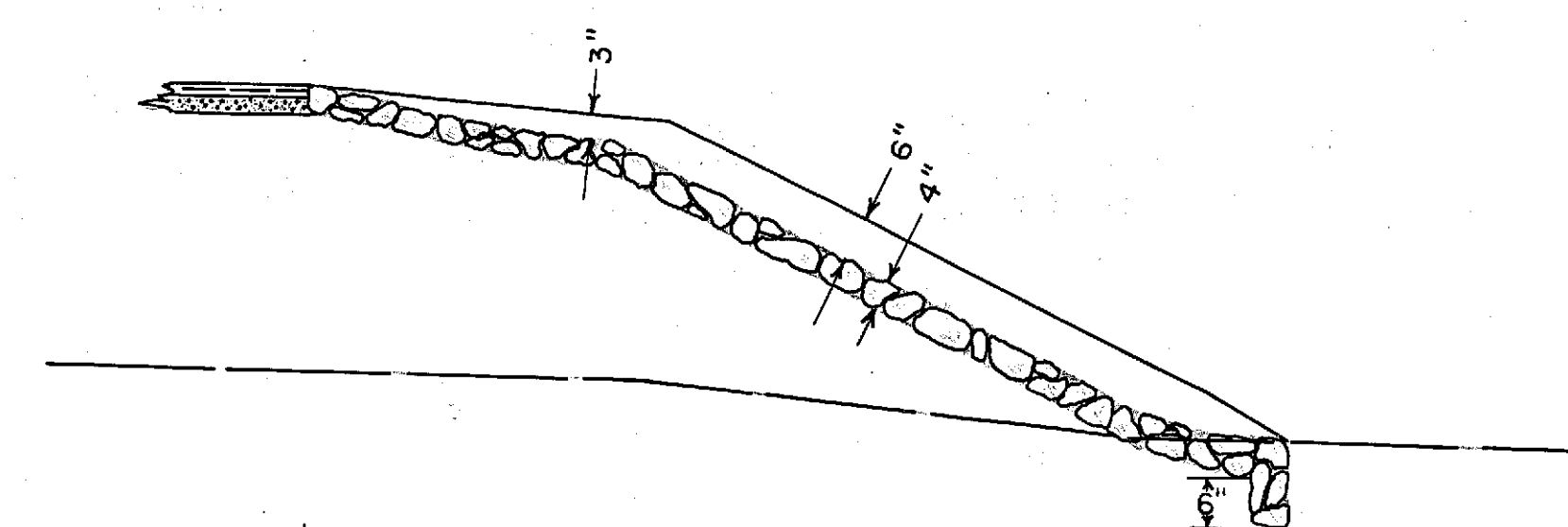
STATION	SIDE	SPACING	NO.
243+ (Depressed Median Lt.) 243+ (Depressed Median Rt.) 558+00 559+70 562+30	Lt. Rt. & Lt. Lt.	Culvert Culvert Culvert	27 38 1 2 1
242+35	Rt. & Lt.	Culvert	2
OUTSIDE LA VETA 22' RDWY. TOTALS			2 ✓
INTERSECTION TOTALS			69 ✓
PROJECT TOTALS			71 ✓

DETAILS OF GROUTED RUBBLE SLOPE PAVING

RT. AND LT. OF STA. 242 +



SECTION A-A



BALLAST PLAN

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 Ballast Plan as here outlined will be allowed only on written permission from the Department.

MATERIAL TO BE PLACED	SOURCE	QUANTITIES AND THICKNESS						OVERHAUL
		AVAILABLE	THICKNESS "T"	CLASS "1"		CLASS "2"		TON MILES
				THICKNESS	TONS	THICKNESS	TONS	
INSIDE LA VETA 22' RDWY.	Pit #2 (Firm) NE 1/4 SW 1/4 Sec. 18 T29S. R. 68 W 2.1 Miles to Sta. 13+21 Classification A-1-a(0)	162,000 Tons	▲ 6"	6"	524			883
			▲ 6"	6"	378			609
			▲ 6"	6"	332			516
			▲ 6"	6"	216			326
			▲ 6"	6"	749			962
Estimated for Transition (0+00 to 5+00) Estimated for Irregularities			▲ 6"	6"	105			138
					230			343
INSIDE LA VETA 49' RDWY.	- 7 + 70 to 0 + 00 Estimated for Irregularities		▲ 6"	6"	1147			1632
					115			163
OUTSIDE LA VETA 22' RDWY.	35 + 98.2 to 64 + 00 73 + 00 to 100 + 00 100 + 00 to 148 + 00 148 + 00 to 172 + 00 172 + 00 to 243 + 40.8 Estimated for Irregularities Estimated for Intersection		▲ 9"	4"	1961	5"	2662	8390
			○ 10"	4"	1770	6"	2932	11708
			○ 12"	4"	3360	8"	7536	34692
			○ 4"	4"	1680			6494
			○ 5"	5"	6284			29969
					796		1313	7259
					8410			46,440
TOTAL INSIDE LA VETA 22' RDWY.					2534			3777
TOTAL INSIDE LA VETA 49' RDWY.					1262			1795
TOTAL OUTSIDE LA VETA 22' RDWY.					24,261		14443	144,952
PROJECT TOTALS					28,057		14443	150,524

○ Based on thickness curve "B" of S.H.D. Design No. 12
▲ Based on thickness curve "C" of S.H.D. Design No. 12

SURFACING PLAN

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	AVAILABLE	QUANTITY TONS USED GRADING "C"			OVERHAUL
			TOP COURSE	BOTTOM COURSE	SHOULDER + COURSE	TON MILES
INSIDE LA VETA 22' RDWY. ✕ -20 + 10 ✕ to -15 + 20 ✕ ✕ -15 + 20 ✕ to -12 + 40 ✕ ✕ -12 + 40 ✕ to -9 + 30 ✕ ✕ -9 + 30 ✕ to -7 + 70 ✕ 0 + 00 to 7 + 00 ✕	Pit # 2 ✕ (Firm) ✕ NE 1/4 SW 1/4 Sec 18 T29S R68W ✕ 2.1 Miles to Sta. 13+21 ✕	162000 Tons	93 ✕ 53 ✕ 59 ✕ 30 ✕ 133 ✕	132 ✕ 123 ✕ 84 ✕ 70 ✕ 189 ✕	29 ✕ 48 ✕ 19 ✕ 27 ✕ 42 ✕	428 ✕ 360 ✕ 253 ✕ 192 ✕ 468 ✕
Approach to Project ✕ Estimated for Transition (0+00 + 5+00) Est. for Road Approaches	Classification A-1-a(0)		10 ✕ 56 ✕	14 ✕ 69 ✕ 240 ✕	3 ✕	47 ✕ 165 ✕ 386 ✕
INSIDE LA VETA 49' RDWY. - 7 + 70 ✕ to 0 + 00 ✕ Est. for Road Approaches			316 ✕	424 ✕ 160 ✕		1053 ✕ 228 ✕
OUTSIDE LA VETA 22' RDWY. ✕ 35+98.2 ✕ to 83+78.9 ✕ ✕ 85+50.9 ✕ to 243+40.8 ✕ Est. for Road Approaches ✕ ✕ Estimated for Irregularities (Sta. 64+00 to 73+00) ✕ Estimated for Intersection			908 ✕ 3000 ✕	1291 ✕ 4263 ✕	287 ✕ 947 ✕	4978 ✕ 32430 ✕
				160 ✕ 24 ✕		560 ✕ 53 ✕
			1144 ✕	2712 ✕	191 ✕	23,349 ✕
TOTAL INSIDE LA VETA 22' RDWY. ✕			434 ✕	921 ✕	168 ✕	2299 ✕
TOTAL INSIDE LA VETA 49' RDWY. ✕			316 ✕	584 ✕		1281 ✕
TOTAL OUTSIDE LA VETA 22' RDWY. ✕			5052 ✕	8450 ✕	1425 ✕	61,370 ✕
PROJECT TOTALS			5802 ✕	9955 ✕	1593 ✕	64,950 ✕

Surfacing for shoulder areas shall not be placed across road approaches.

LIST OF STRUCTURES

FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	S 0079(1)	7	

Rev. 4-4-51 J.P.K. Title Block Deleted Flashing Signals

STATION	DESCRIPTION		REMOVE STRUCTURE		EXCAVATION			STRUCTURAL EXCAVATION			STRUCTURE BACKFILL CLASS	MECH. TAMP	GRAVEL OR CRUSHED ROCK SURF	CONCRETE		CORRUGATED METAL CULVERT PIPE					MISCELLANEOUS			
			NO.	KIND	CU. YDS.			CU. YDS.						CU. YDS.	HR.	TON	CU. YDS.	CLASS	"B"	12"		LIN. FT.		
					UNCL.	EMBANK.	UNCL. DITCH	★																
-19+ ✓ -20+10 ✓ -18+10 ✓ -16+10 ✓	Project Marker Rt. Approach to Project Road Approaches Lt. & Rt. Remove W.B.C. Rt. Road Approaches Lt. & Rt.	1	W.B.C.																	1-Project Marker (State Forces)				
-16+35 ✓ -14+10 ✓ -12+35 ✓	Cross Culvert & Ditches Road Approaches Lt. & Rt. Cross Culvert & Ditches					5 ✓	10 ✓		9 ✓	1 ✓							50 ✓							
-12+10 ✓ -10+05 ✓ -8+10 ✓	Road Approaches Lt. & Rt. Road Approaches Lt. & Rt. Side Drain & Ditches Lt. Road Approaches Lt. & Rt.					5 ✓	9 ✓		9 ✓	1 ✓							50 ✓							
-12+10 ✓ -10+05 ✓ -8+10 ✓	Road Approaches Lt. & Rt. Road Approaches Lt. & Rt. Side Drain & Ditches Lt. Road Approaches Lt. & Rt.					5 ✓	6 ✓		7 ✓	1 ✓							60 ✓ 20 ✓ 60 ✓	40 ✓						
-6+10 ✓ -4+10 ✓	Road Approaches Lt. & Rt. Remove 18"x68" C.M.P. Lt. Side Drain & Ditches Lt. Road Approaches Lt. & Rt.	1	C.M.P.			5 ✓	19 ✓		17 ✓	2 ✓								68 ✓						
-2+10 ✓ 0+00 ✓ 1+ ✓	Road Approaches Lt. & Rt. Remove 15"x56" steel pipe Lt. Side Drain & Ditches Lt. Road Approaches Lt. & Rt. Railroad Advance Warning Sign Rt.	1	St. Pipe			5 ✓	15 ✓		15 ✓	1 ✓								60 ✓ 20 ✓ 56 ✓		1-Railroad Advance Warning Sign (State Forces)				
4+ ✓ 7+ ✓	Timber Grade Crossing with Automatic Flashing Railroad Advance Warning Sign Lt.																							
10+00 Bk. ✓ 38+60 ✓ 98+55 ✓ 101+85 ✓ 123+15 ✓ 123+45 ✓ 129+10 ✓ 140+75 ✓ 189+10 ✓ 189+50 ✓	Side Drain & Ditches Road Approach Lt. Road Approach Rt. Road Approach Rt. Road Approach Lt. Road Approach Rt. Road Approach Rt. Road Approach Rt. Road Approach Rt. Road Approach Lt. Road Approach Rt.					15 ✓ 15 ✓ 15 ✓ 40 ✓ 15 ✓ 15 ✓ 15 ✓ 15 ✓ 15 ✓ 15 ✓	5 ✓	10 ✓	7 ✓	1 ✓	25 ✓ 10 ✓ 10 ✓ 25 ✓ 10 ✓ 10 ✓ 10 ✓ 10 ✓ 10 ✓ 10 ✓						40 ✓			1-Project Marker (State Forces)				
217+00 ✓ 229+45 ✓ 242+35 ✓ 242+30 ✓ 243+ ✓	Road Approaches Lt. & Rt. Road Approach Rt. Grouted Rubble Slope Paving Lt. & Rt. (Details Sh.5) Cross Culvert & Ditches Project Marker Rt.					30 ✓ 15 ✓			15 ✓	2 ✓	20 ✓ 10 ✓							54 ✓		12 Sq.Yds. Grouted Rubble Slope Paving (4"th)				
✓558+00 ✓559+70 ✓243+ ✓562+30 ✓243+ ✓	Reqd for Cross Culvert: 1-Drop Inlet for Median Drain (Details on Sheet 5) & 24"x42" C.M.P. with outlet ditch. Remove 24"x56" C.M.P. & 36"x46" C.M.P. Lt. Cross Culvert & Ditches Concrete Curbing Lt. & Rt. (Details on Sheet 3) Reqd for Cross Culvert: 1-Drop Inlet for Median Drain (Details on Sheet 5) & 24"x48" C.M.P. with outlet ditch Sign & Stripe Intersection	2	C.M.P.			5 ✓ 15 ✓ 10 ✓ 10 ✓	15 ✓ 38 ✓ 23 ✓		13 ✓ 27 ✓ 16 ✓	1 ✓ 3 ✓ 2 ✓		1.77 ✓ 1.77 ✓				50 ✓ 110 ✓ 66 ✓			190 lin. ft. of Concrete Curbing. 1 Cu. Yd. of Sand Cushion Sign & Stripe Intersection (State Forces)					
INSIDE LA VETA LA VETA OUTSIDE LA VETA LA VETA	22' ROADWAY 49' ROADWAY 22' ROADWAY INTERSECTION	1 ✓ 2 ✓ 2 ✓ 2 ✓				15 ✓ 10 ✓ 220 ✓ 30 ✓	25 ✓ 34 ✓ 20 ✓ 76 ✓		25 ✓ 32 ✓ 22 ✓ 56 ✓	3 ✓ 3 ✓ 3 ✓ 6 ✓	240 ✓ 160 ✓ 160 ✓					140 ✓ 124 ✓ 40 ✓ 226 ✓								
PROJECT TOTALS		5 ✓				220 ✓ 65 ✓	155 ✓		135 ✓	15 ✓	560 ✓	3.54 ✓					140 ✓ 164 ✓ 280 ✓							

★ Structural Excavation is estimated to be 75% Common and 25% Rock, each of which is estimated to be 75% Dry and 25% Wet.
△ Quantities included in Surfacing Plan.

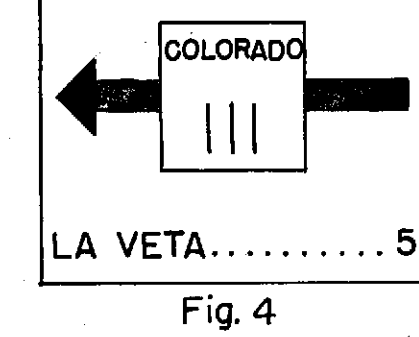
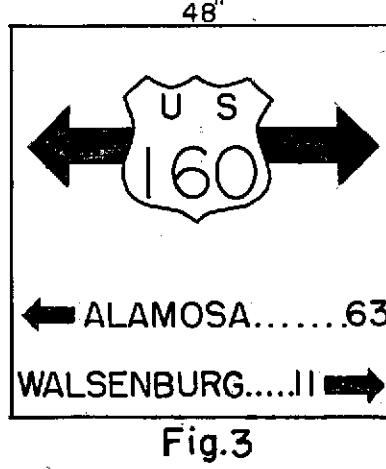
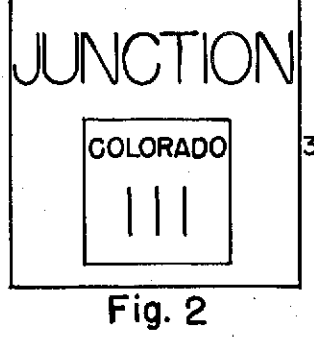
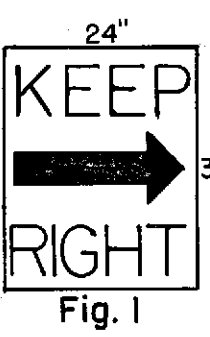
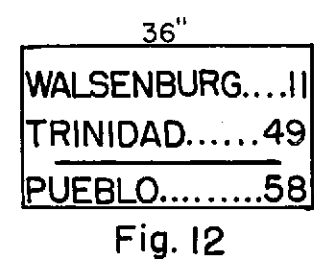
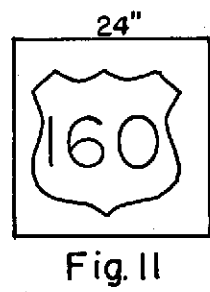
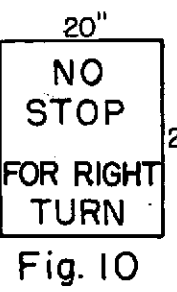
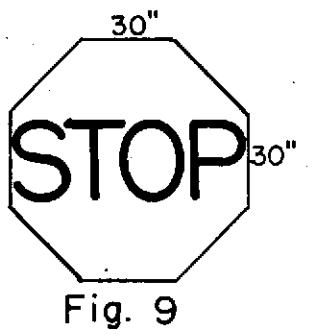
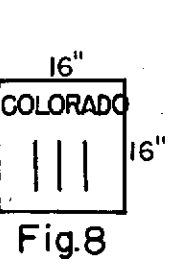
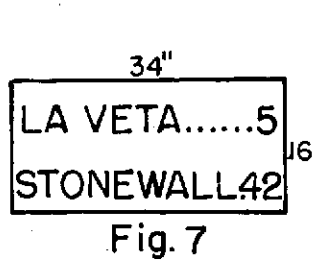
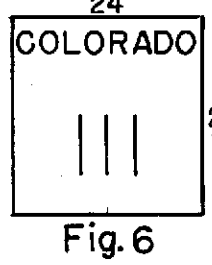
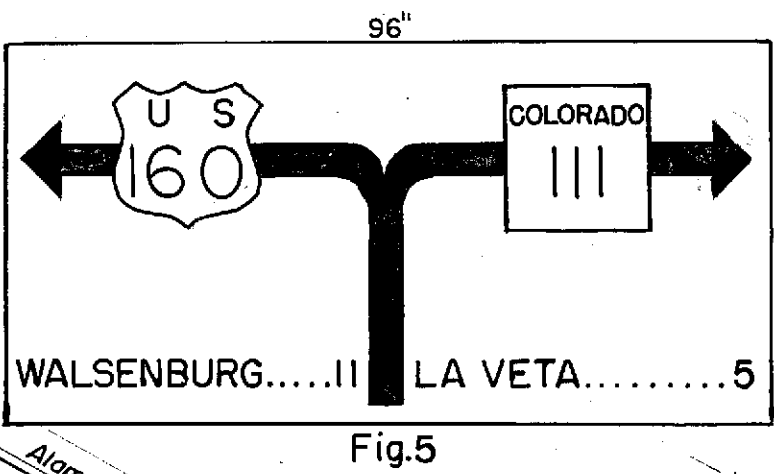
TRAFFIC SIGN PLAN

Details for Intersection of State Highways 10 & III, Sta. 243+

FED. ROAD DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S 0079 (1)	17A	

Rev. 1-26-51, Referred Rev. Ties To Sh. 16, Width of Pav. S.H. 10 (S.W. Quad)
Rev. 4-4-51 J.P.K. Title Block

SEE SHEET 16 OF PLANS FOR REVISED TIES



Ties to Curves

CURVE	P. C.	P. I.	P. T.	DELTA	DEGREE	TANGENT	LENGTH	RADIUS
A	12° Rt. Sta. 553 + 27.02	12° Rt. P.O.S.T. 287.70' Bk. P.I. Sta. 559 + 50	71.64° Rt. P.O.S.T. 65.90' Ah. P.I. Sta. 559 + 50	13° 20' 58" R.	2°	335.29'	667.47'	2865.0'
B	27.6° Rt. Sta. 564 + 26.66	12° Rt. Sta. 565 + 75.55	12° Rt. Sta. 567 + 25.25	5° 59' 02" R.	2°	149.70'	299.19'	2865.0'
C	11° Lt. P.O.S.T. 2.34' Ah. P.C. 241 + 14.7	11° Lt. P.O.S.T. 61.24' Ah. P.C. 241 + 14.7	28.39° Lt. P.O.S.T. 33.38' Ah. P.I. 242 + 24.8	33° 52' 02" L.	29° 37' 13"	58.90'	114.34'	193.5'
EI	27.53° Lt. P.O.S.T. 36.28' Ah. P.I. 242 + 24.8	5.97° Lt. P.O.S.T. 113.32' Ah. P.I. 242 + 24.8	83.47° Lt. P.O.S.T. 93.47' Ah. P.I. 242 + 24.8	120° L	124° 03' 36"	80.00'	96.73'	46.2'
GA	16.65° Lt. Sta. 566 + 32.70	12° Lt. Sta. 566 + 99.24	12° Lt. Sta. 567 + 65.94	4°	3°	66.70'	133.33'	1910.0'
GI	17.90° Lt. P.O.S.T. 187.38' Bk. P.T. 564 + 28.7	30.51° Lt. Sta. 564 + 34.57	17.00° Lt. Sta. 566 + 27.77	7° 44' 02" R.	2°	193.67'	386.70'	2865.0'
H	12° Lt. P.C. 554 + 62.0	12° Lt. P.O.S.T. 297.63' Ah. P.C. 554 + 62.0	3.15° Rt. P.O.S.T. 110.03' Ah. P.I. 559 + 50	9° 56' 46" R.	1° 40' 31"	297.63'	590.68'	3420.2'
J	2.98° Rt. P.O.S.T. 111.01' Ah. P.I. 559 + 50	8.76° Lt. P.O.S.T. 182.05' Ah. P.I. 559 + 50	4.61° Rt. P.O.S.T. 52.20' Ah. P.I. 242 + 24.8	56° 28' 46" L.	42° 43' 55"	72.00'	132.17'	134.1'
K	11° Rt. P.O.S.T. 0.66' Ah. P.C. 241 + 14.7	11° Rt. P.O.S.T. 81.81' Ah. P.C. 241 + 14.7	4.61° Rt. P.O.S.T. 52.20' Ah. P.I. 242 + 24.8	36° 00' L.	22° 56' 29"	81.15'	156.91'	249.8'
M	Sta. 557 + 66.0	34.59° Rt. P.O.S.T. 111.12' Bk. P.I. 559 + 50	17.25° Rt. P.O.S.T. 174.05' Ah. P.I. Sta. 559 + 50	6° 58'	2°	174.39'	348.33'	2865.0'
N	43.35° Rt. P.O.S.T. 122.80' Ah. P.I. 559 + 50	40.22° Rt. P.O.S.T. 148.90' Ah. P.I. 559 + 50	24.68° Rt. P.O.S.T. 170.08' Ah. P.I. 559 + 50	29° 26' 46"	57° 18'	26.28'	51.39'	100.0'
P	18.04° Rt. P.O.S.T. 223.37' Ah. P.I. 559 + 50	30.96° Rt. P.O.S.T. 238.49' Ah. P.I. 559 + 50	29.40° Rt. P.O.S.T. 258.31' Ah. P.I. 559 + 50	45°	119° 22' 30"	19.88'	37.70'	48.0'
Q	Sta. 561 + 62.3	4.65° Rt. P.O.S.T. 183.19' Bk. P.T. 564 + 28.7	Sta. 563 + 28.7	3° 19' 38"	2°	83.23'	166.36'	2865.0'
A	Portion of Main Center Line 2° Curve							

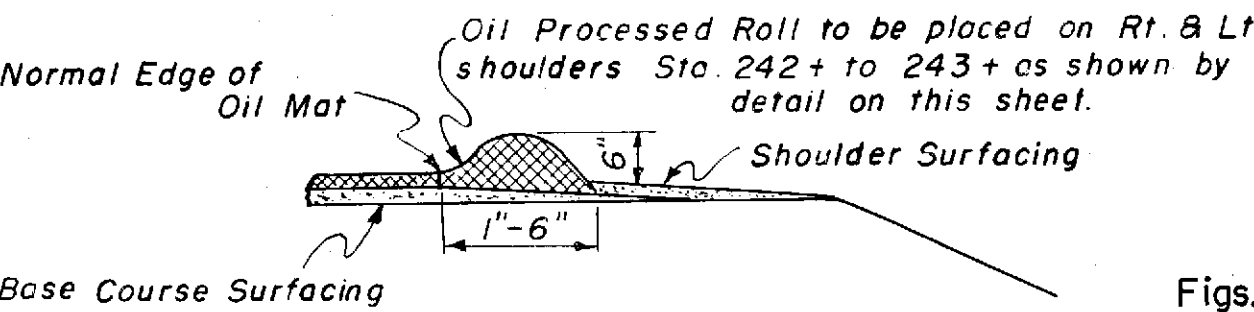
Miscellaneous Ties

Radius Point "a"	17.12° Rt. P.O.S.T. 303.45' Ah. P.C. Sta. 554 + 62	1' Radius
Radius Point "b"	19.27° Rt. P.O.S.T. 174.27' Ah. P.I. Sta. 559 + 50	2' Radius
Radius Point "c"	14.37° Rt. P.O.S.T. 222.2' Ah. P.I. Sta. 559 + 50	2' Radius
Radius Point "d"	10.40° Rt. P.T. Sta. 564 + 28.70	1' Radius
Radius Point "e"	18.00° Lt. P.O.S.T. 32.0' Bk. P.T. 243 + 21.0	1' Radius
Radius Point "f"	15.00° Lt. P.O.S.T. 223.2' Ah. P.I. 559 + 50	1' Radius
Radius Point "g"	19.20° Lt. P.O.S.T. 241.8' Ah. P.I. 559 + 50	1' Radius
Radius Point "h"	10.40° Lt. P.O.S.T. 179.1' Ah. P.I. 559 + 50	1' Radius
Radius Point "i"	11.80° Lt. P.O.S.T. 192.1' Ah. P.I. 559 + 50	1' Radius
Radius Point "k"	12.00° Rt. P.O.S.T. 0.4' Bk. P.T. 243 + 21.0	1' Radius
Begin Flare	Sta. 563 + 28.70	
Tangent "y"	Bearing S 75° 14' 28" W. Beginning at a point tangent to 1' Radius Point "a" and ending at P.C. of curve N.	
Tangent "z"	Bearing S 77° 35' 08" W. Beginning at P.T. of Curve P and ending at a point tangent to 1' Radius Point "d".	

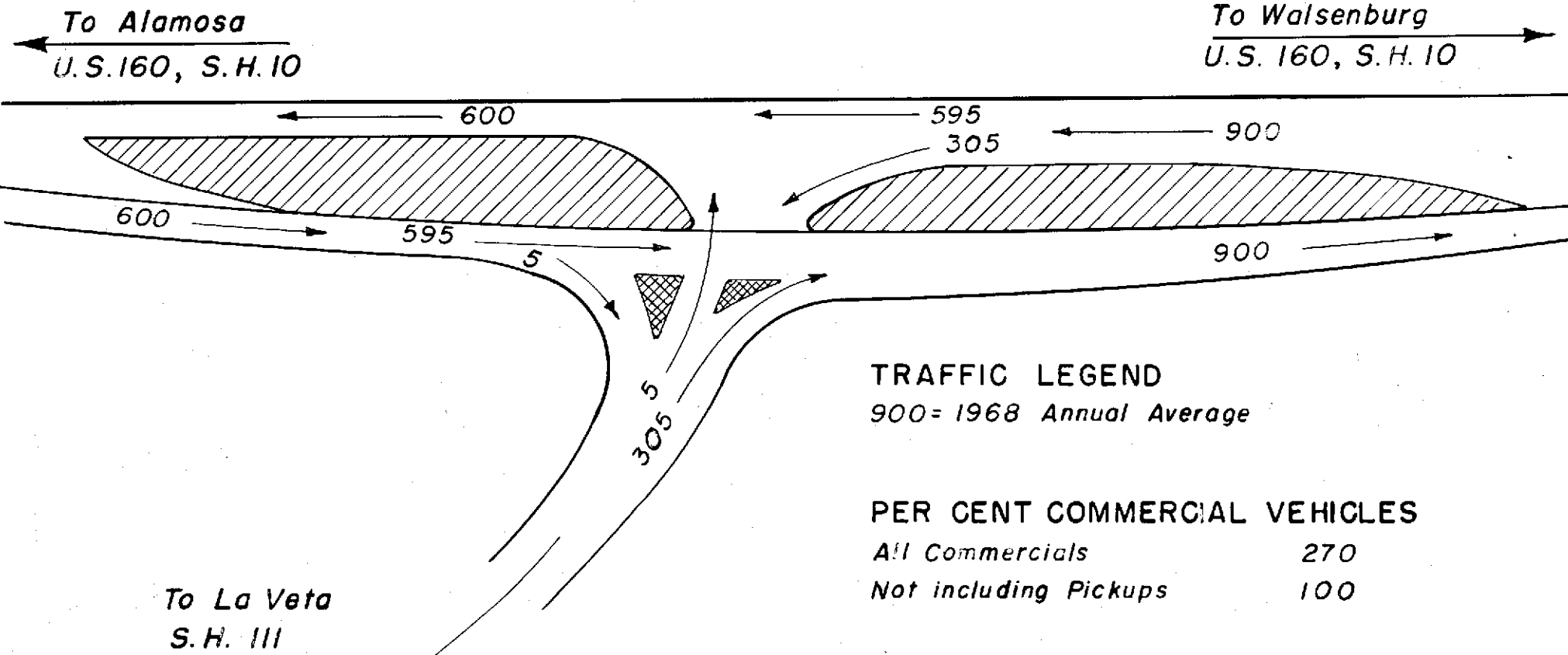
SIGN SUMMARY

Figure No.	Quantity
1	2
2	2
3	1
4	1
5	1
6	1
7	1
8	1
9	1
10	1
11	2
12	1
13	2
14	1
15	1

DETAIL OF OIL PROCESSED ROLL



TURNING MOVEMENT COUNT



TRAFFIC LEGEND
900 = 1968 Annual Average

PER CENT COMMERCIAL VEHICLES
All Commercial 270
Not including Pickups 100

DETAILS FOR FLARE

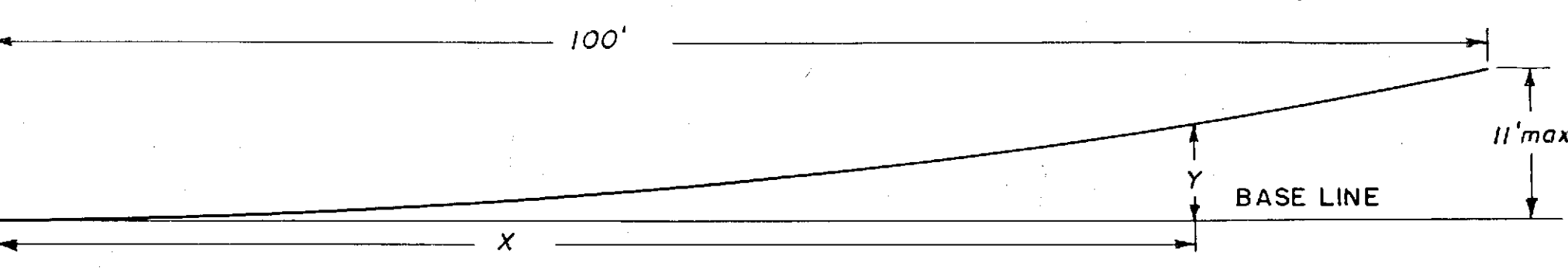
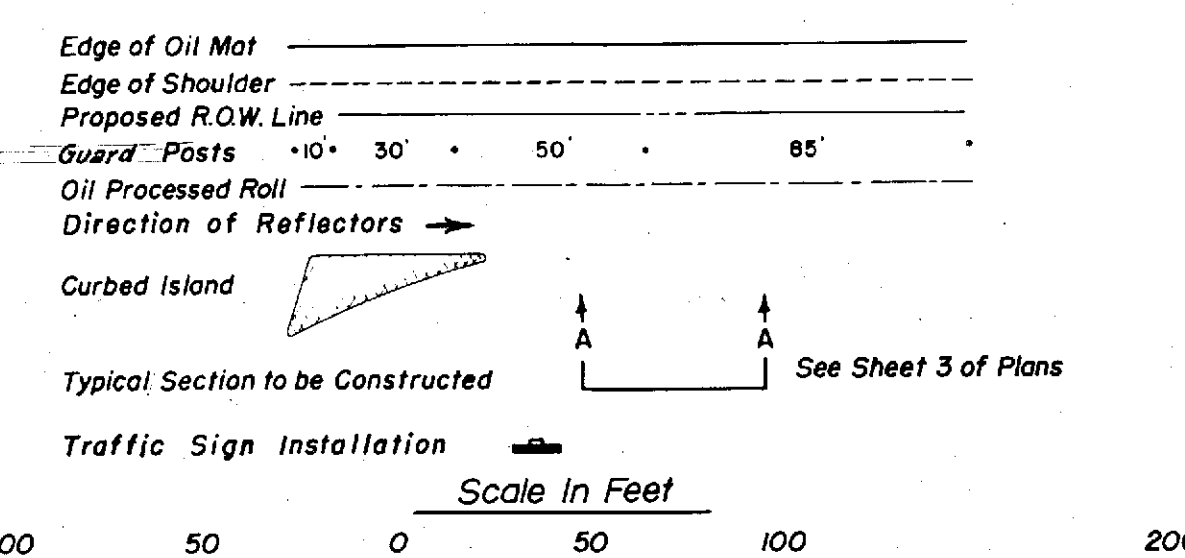


TABLE OF OFFSETS-100' FLARE

Maximum Offset = 11'	X	10'	20'	30'	40'	50'	60'	70'	80'	90'	100'
	Y	0.11'	0.44'	0.99'	1.76'	2.75'	3.96'	5.39'	7.04'	8.91'	11.00'

Legend of Symbols



Scale in Feet

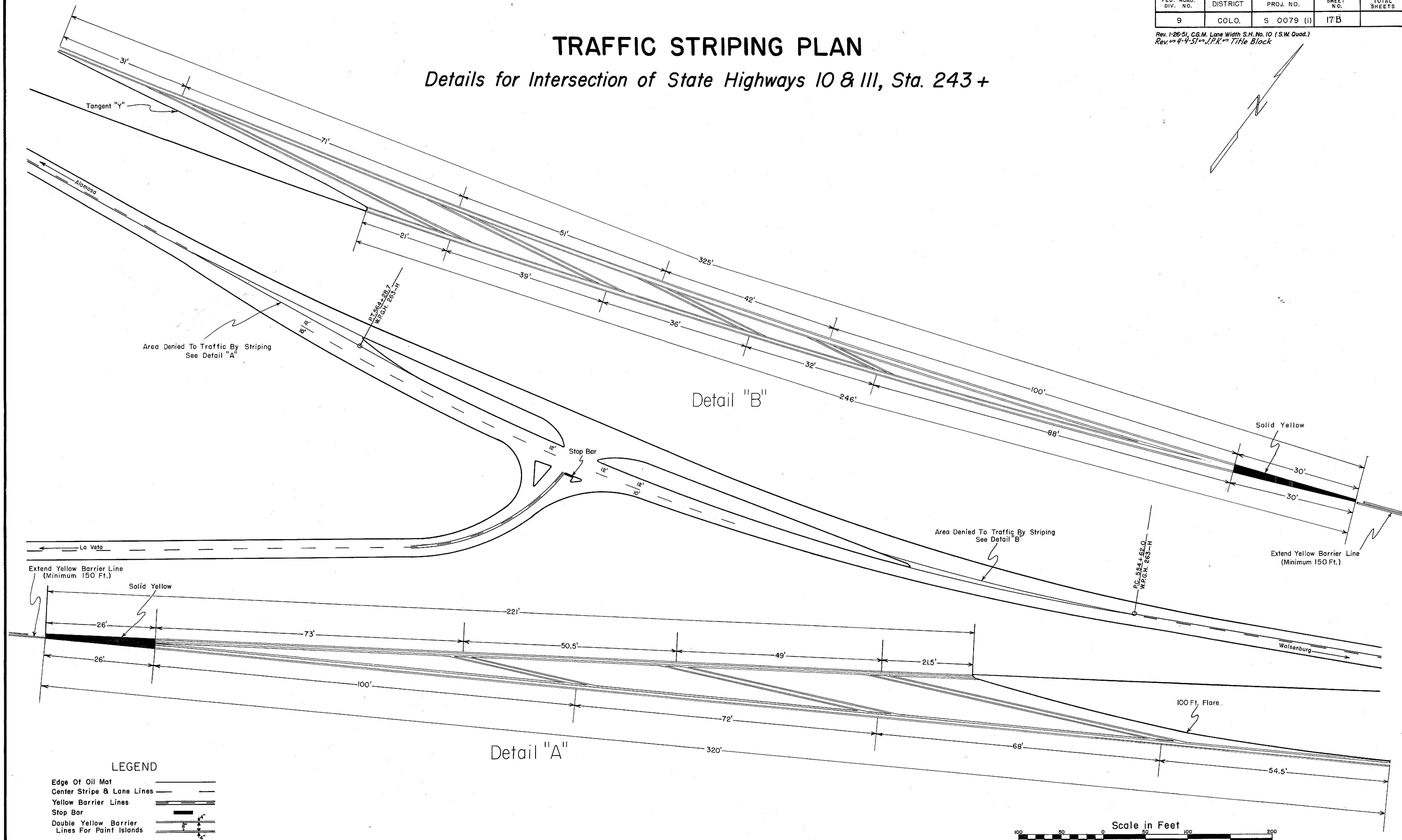


FED. ROAD. DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S 0079 (1)	17B	

Rev. 1-26-51, C.G.M. Lane Width S.H. No. 10 (S.W. Quad.)
Rev. 4-4-51, I.P.K. Title Block

TRAFFIC STRIPING PLAN

Details for Intersection of State Highways 10 & III, Sta. 243 +

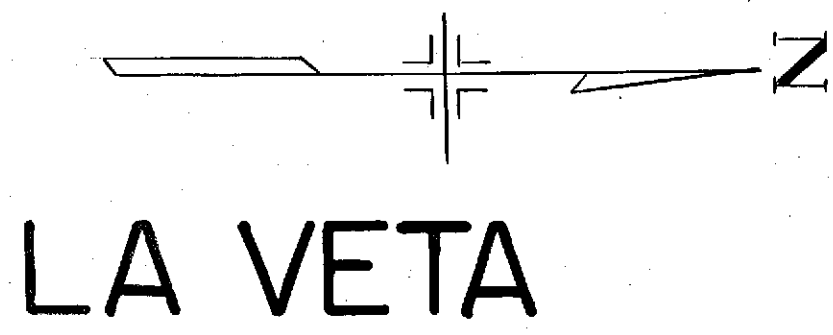


RECEIVED
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COUNTY OF LOS ANGELES
JAN 10 1955

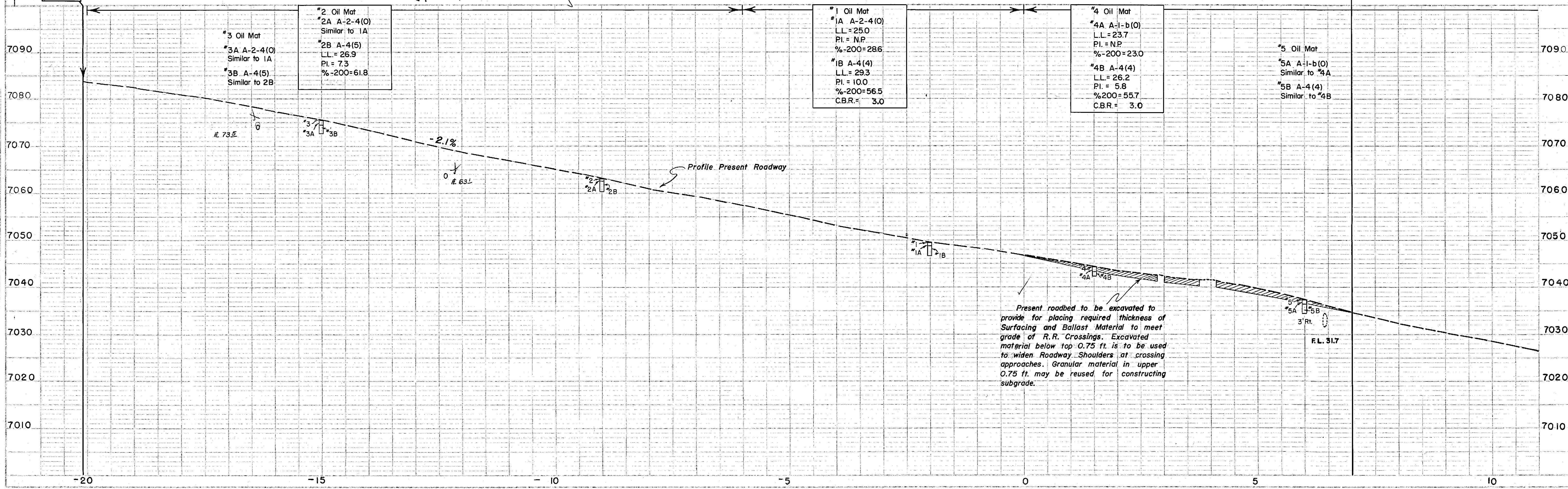
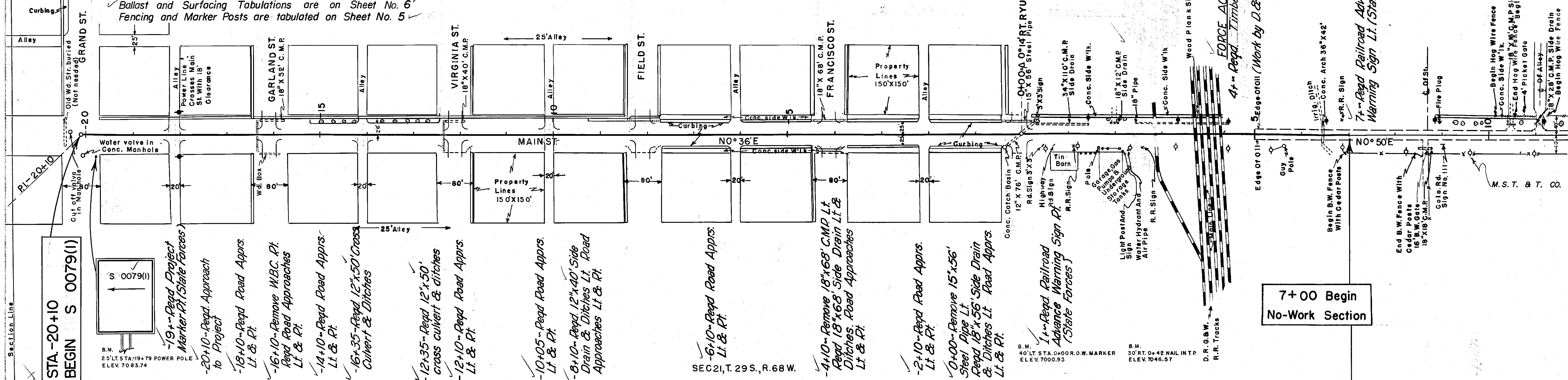
PROJECT
COUNTY ENGINEER
COUNTY OF LOS ANGELES
JAN 10 1955

PROFILE
COUNTY ENGINEER
COUNTY OF LOS ANGELES
JAN 10 1955

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 plans will be modified where necessary to secure dense, stable embankments.
Ballast and Surfacing Tabulations are on Sheet No. 6
Fencing and Marker Posts are tabulated on Sheet No. 5



LA VETA



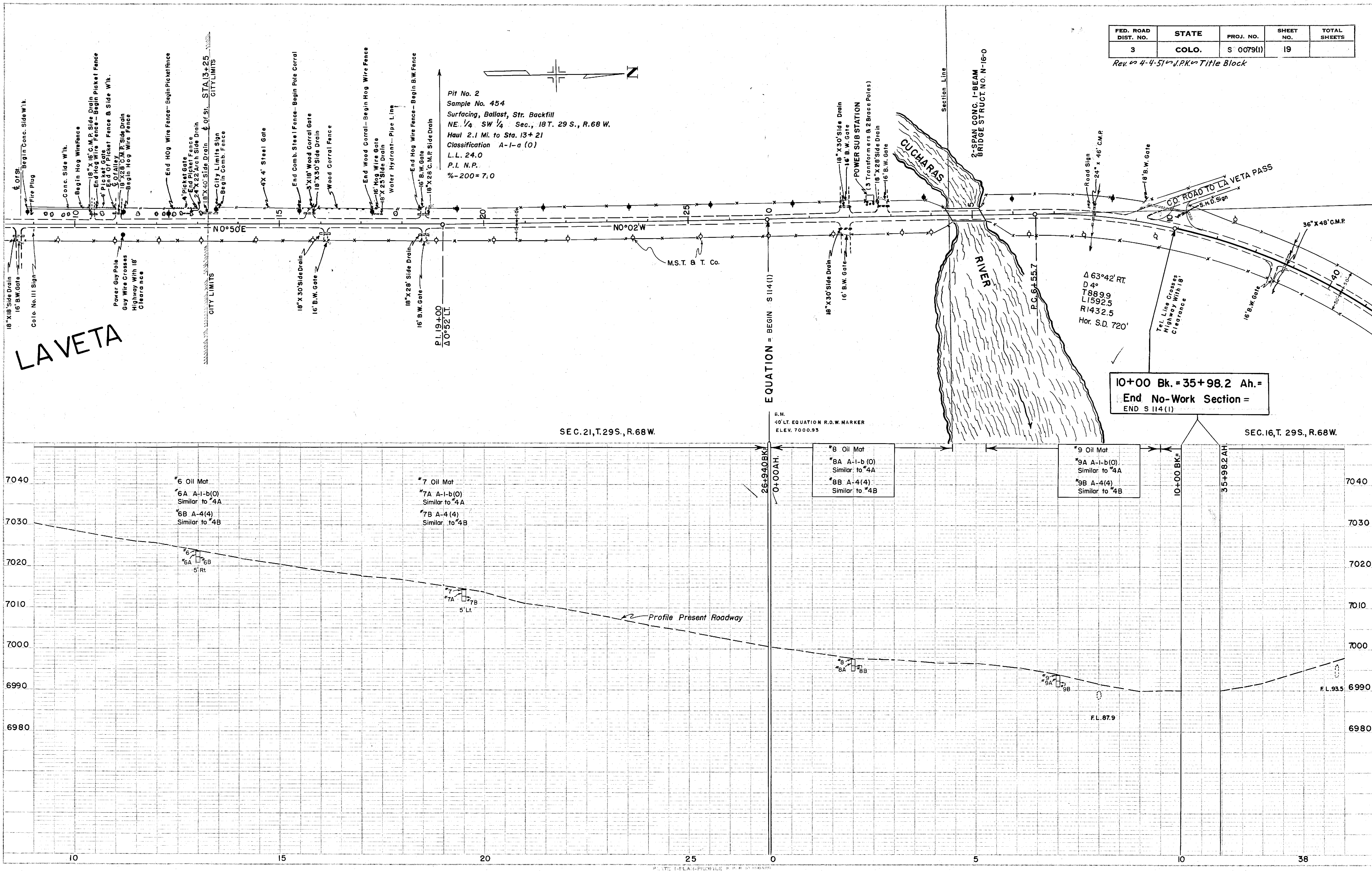
Rev. 4-4-51 J.P.K. Title Block, Deleted Flashing Signal, Rev. Topog.

FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	S 0079(1)	18	

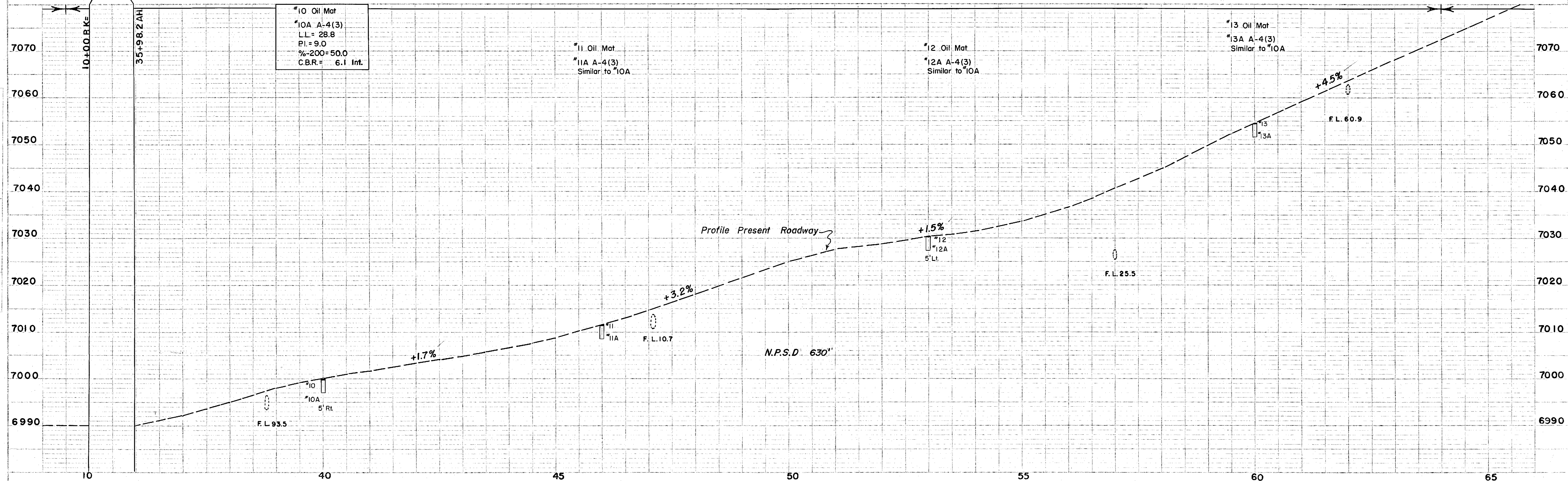
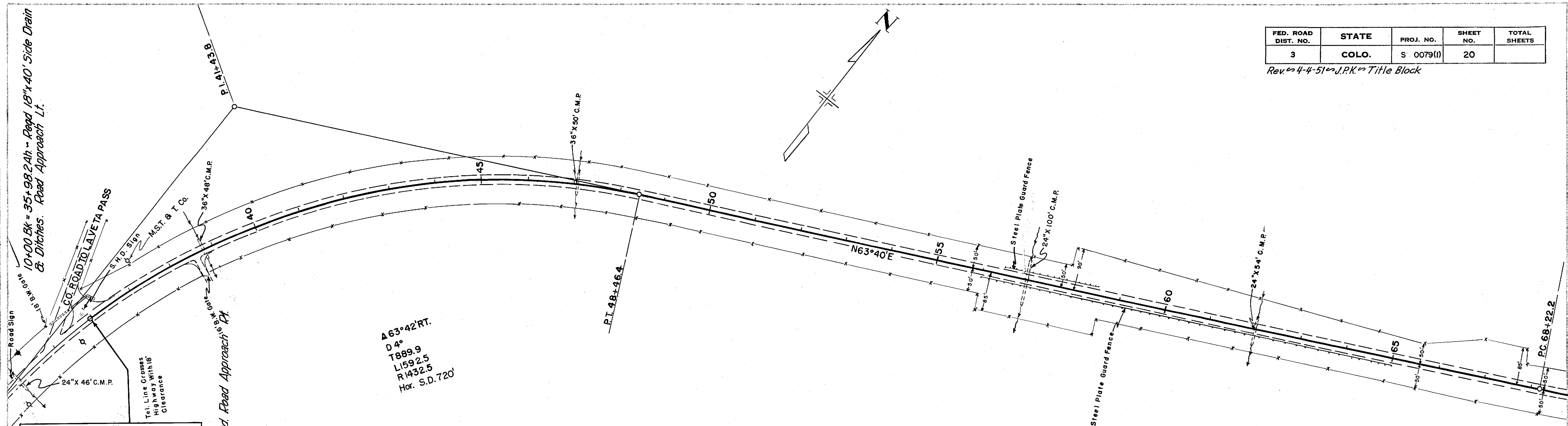
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3	COLO.	S 0079(1)	19	

Rev. 4-4-51 J.P.K. Title Block

PROFILE
 DATE 10/15/55
 DRAWN BY J. H. S.
 CHECKED BY J. H. S.
 NO. 15355

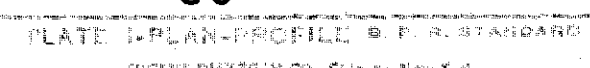
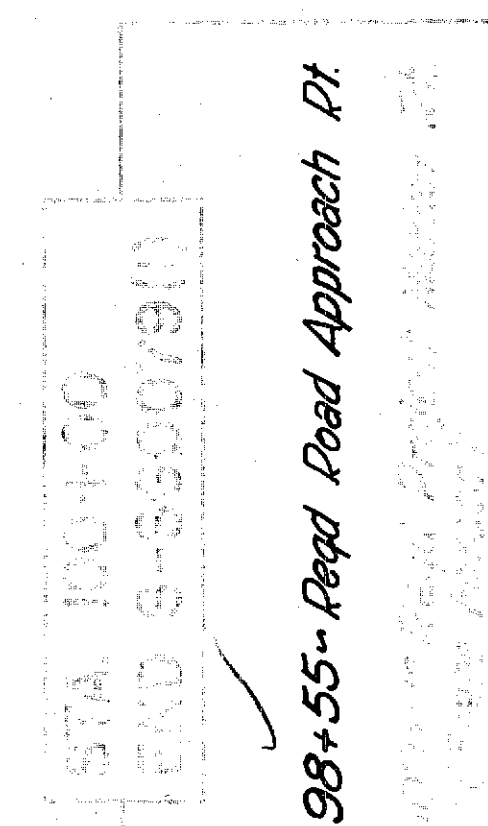


FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	S 0079(1)	20	



A diagram showing a line segment with a point labeled 'Z' at one end and a cross symbol in the middle.

Rev. 4-4-51 J.P.K. Title Block

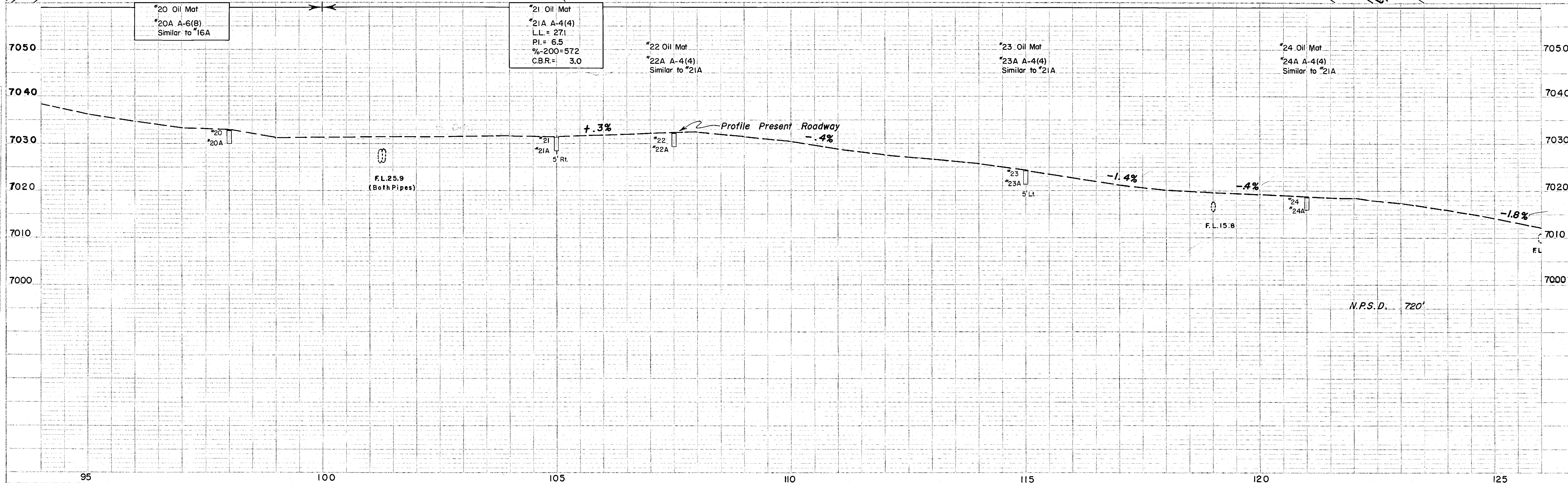
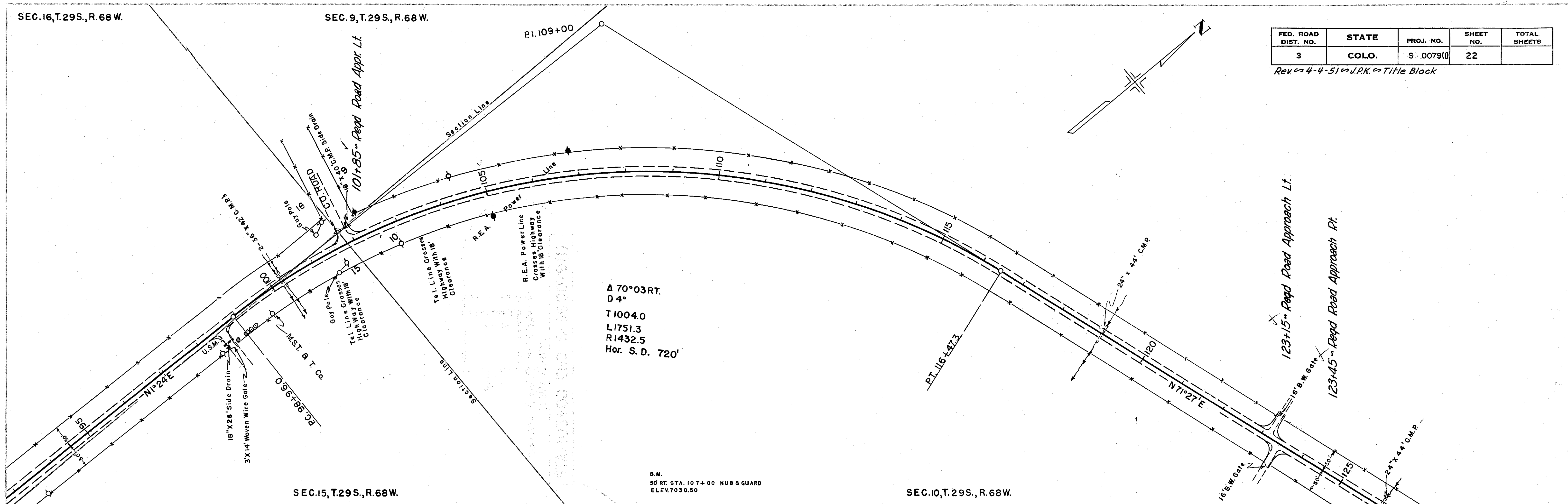


SEC. 16, T. 29 S., R. 68 W.

SEC. 9, T. 29 S., R. 68 W.

FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	S. 0079(1)	22	

Rev. 4-4-51 J.P.K. Title Block



PLAN	DATE	BY	CHKD	APP'D
15355	11/15	L.H.S.		

PROFILE	DATE	BY	CHKD	APP'D
15355	11/15	L.H.S.		

PLATE 1 PLAN-PROFILE OF ROADWAY

DATE	2-2-50
BY	David M. H. H. H. H.
PLANNED	PLANNED
ALIGNED	ALIGNED
NO. 15355	NO. 15355

DATE	2-2-50
BY	David M. H. H. H. H.
PLANNED	PLANNED
ALIGNED	ALIGNED
NO. 15355	NO. 15355

FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	S 0079(1)	23	

Rev. 4-4-51 J.P.K. Title Block

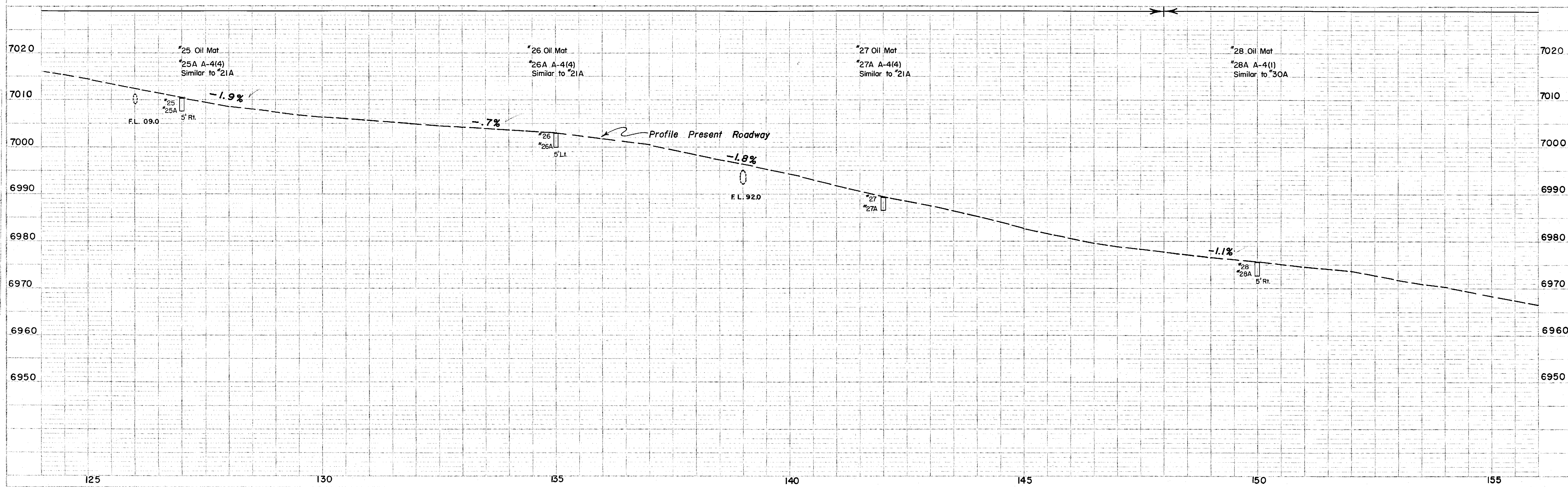
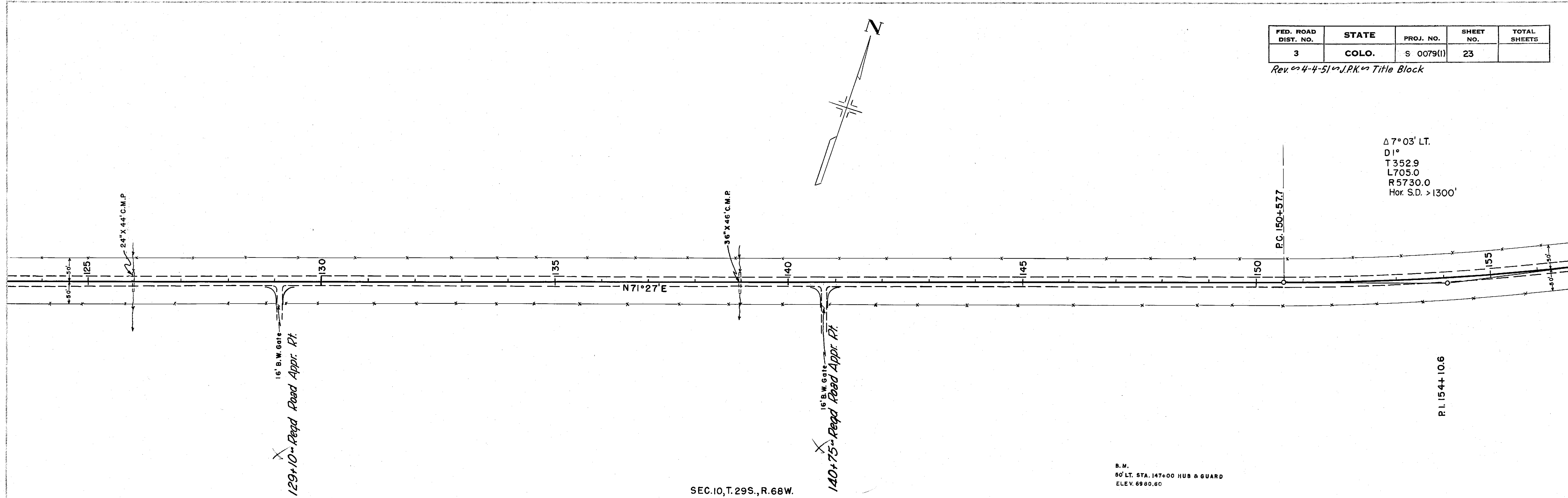


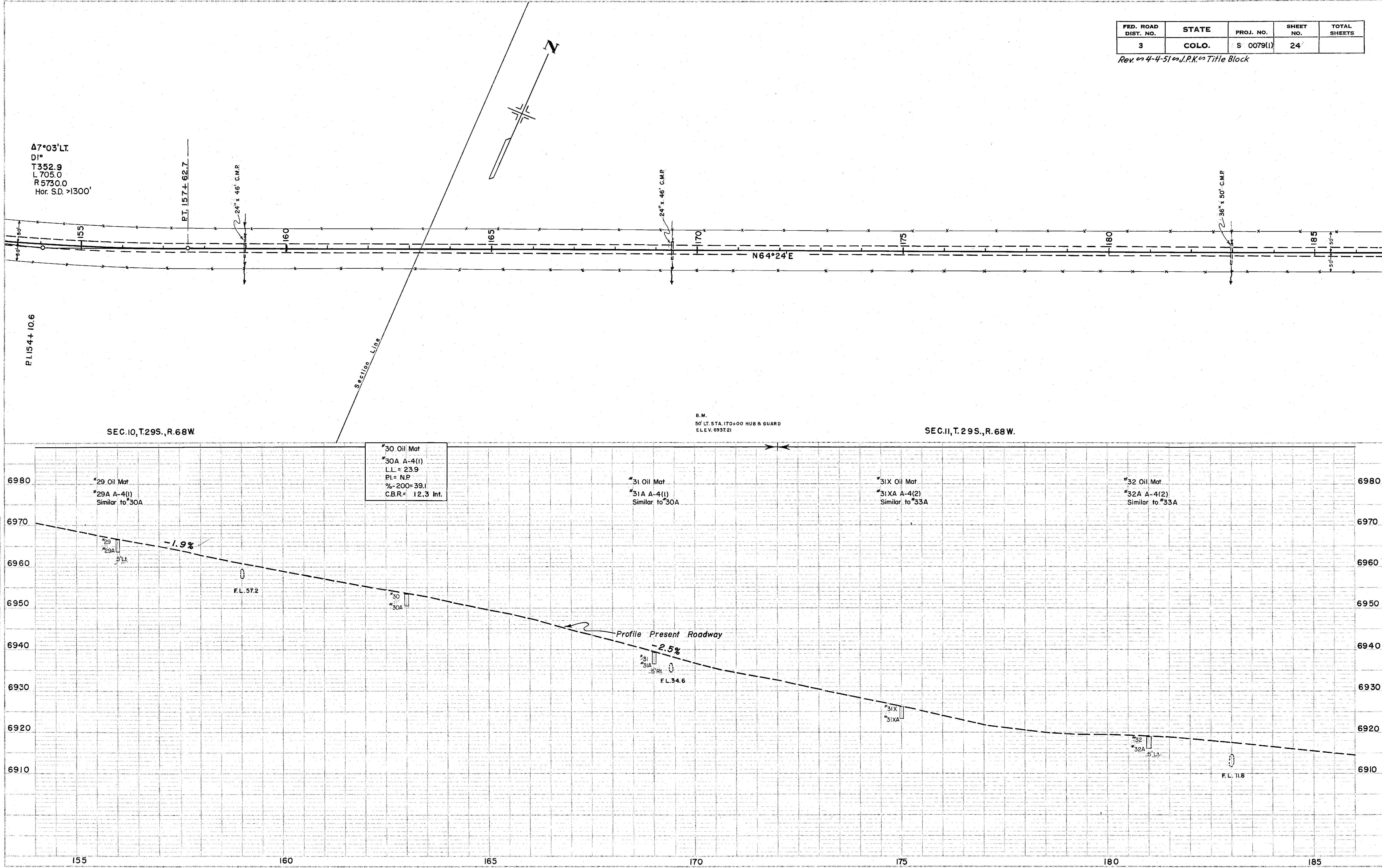
PLATE 1-PLAN-PROFILE & ELEV. STATIONS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	S 0079(1)	24	

Rev. 4-4-51 as J.P.K. Title Block

DATE	2-3-50
BY	Louis V. Mancini, Jr.
CHECKED	E.H.S.
NO.	15355

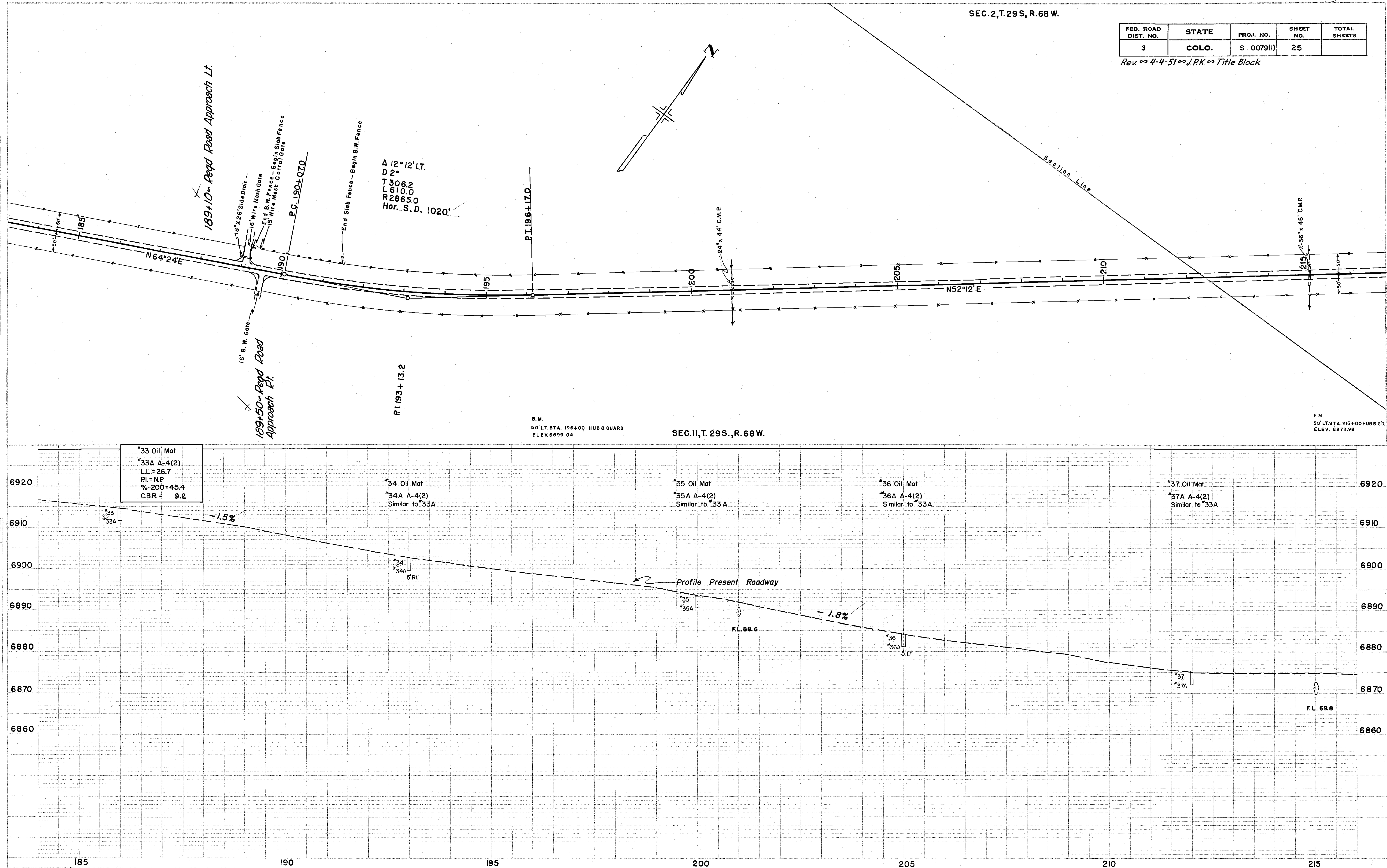
DATE	2-3-50
BY	Louis V. Mancini, Jr.
CHECKED	E.H.S.
NO.	15355



REPRODUCED FROM

PLAN	REVISION	DATE	BY	CHKD
1	1	10/1/50	Louis J. Mordella	L.H.S.
2	2	10/1/50	L.H.S.	L.H.S.
3	3	10/1/50	L.H.S.	L.H.S.
4	4	10/1/50	L.H.S.	L.H.S.
5	5	10/1/50	L.H.S.	L.H.S.
6	6	10/1/50	L.H.S.	L.H.S.
7	7	10/1/50	L.H.S.	L.H.S.
8	8	10/1/50	L.H.S.	L.H.S.
9	9	10/1/50	L.H.S.	L.H.S.
10	10	10/1/50	L.H.S.	L.H.S.

PROFILE	REVISION	DATE	BY	CHKD
1	1	10/1/50	Louis J. Mordella	L.H.S.
2	2	10/1/50	L.H.S.	L.H.S.
3	3	10/1/50	L.H.S.	L.H.S.
4	4	10/1/50	L.H.S.	L.H.S.
5	5	10/1/50	L.H.S.	L.H.S.
6	6	10/1/50	L.H.S.	L.H.S.
7	7	10/1/50	L.H.S.	L.H.S.
8	8	10/1/50	L.H.S.	L.H.S.
9	9	10/1/50	L.H.S.	L.H.S.
10	10	10/1/50	L.H.S.	L.H.S.



FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	S 0079(1)	26	

SEC. 11 T. 29 S., R. 68 W.

B. M.
50' LT. STA. 215+ 00 HUB & GUARD
ELEV. 6873.96

SEC. 1, T. 29 S., R. 68 W.

B.M.
50' RT. STA. 245+00 HUB & G'D.
ELEV. 6833.02

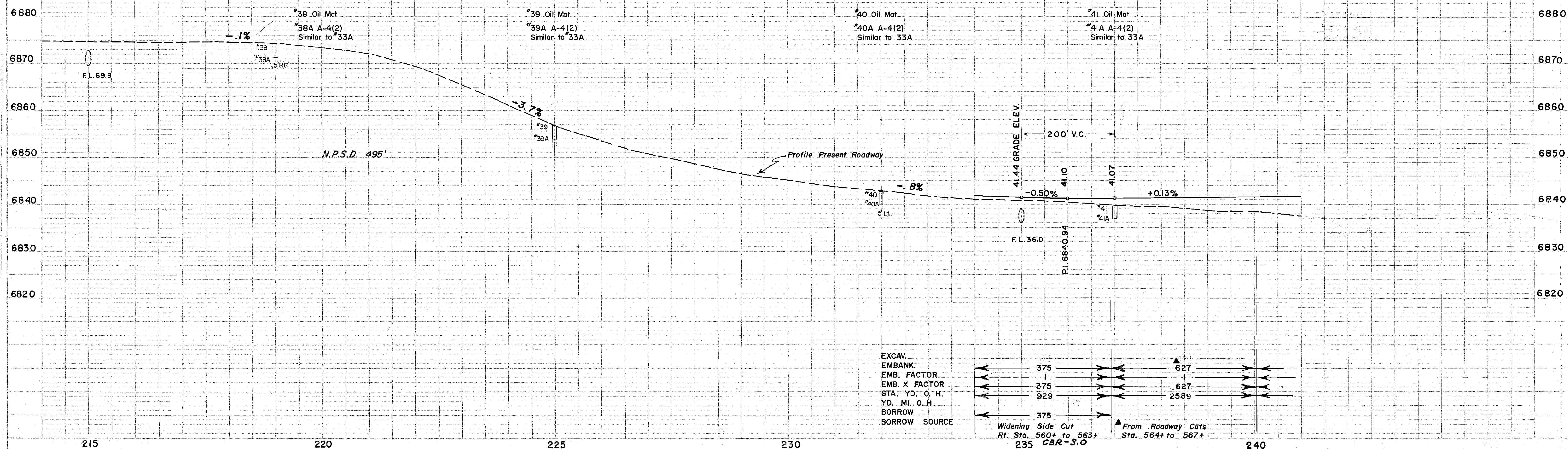
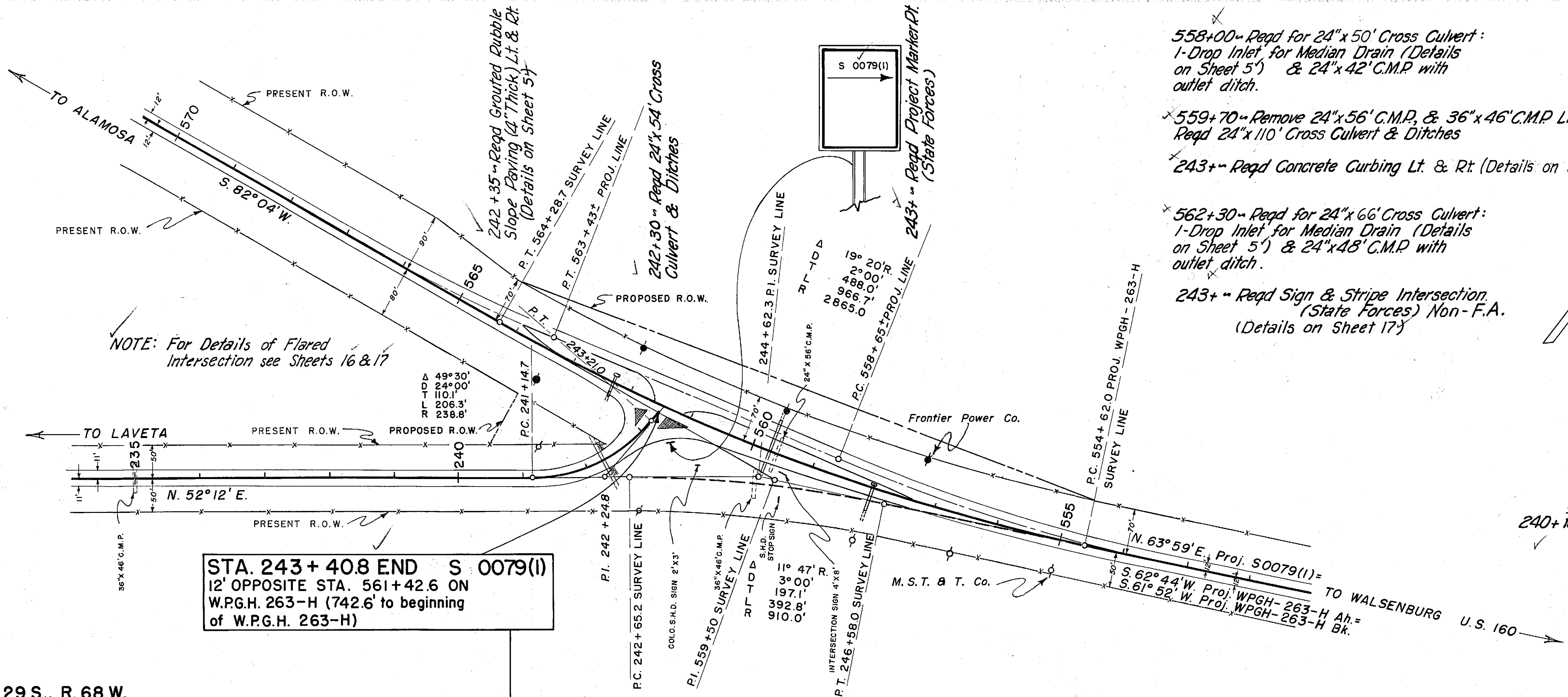


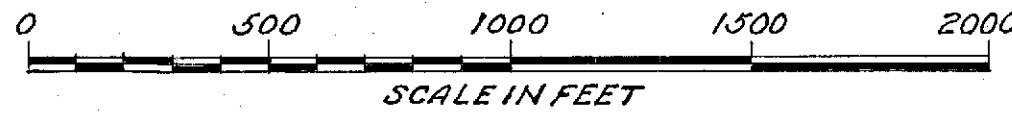
PLATE 1-PLAN-PROFILE M. P. R. STANDARDS
EUGENE ROSENCO, Chicago-New York

Rev. 4-4-51 J.P.K. Title Block



FED. ROAD DIST. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	Eng. S.P.S.(1-12)(2-3)-509		

PRELIMINARY
OWNERSHIP MAP
PLAT
OF PARTS OF
T.3 S., R.67 W., 6th. P.M.
T.3 S., R.68 W., 6th. P.M.
SHOWING CLAIMANTS WITH REGARD TO
RIGHT OF WAY FOR PROJECT
Eng. S.P.S.(1-12)(2-3)-509
FEB. 10, 1949.



N.E. 1/4 Sec. 24, T.3 S., R.68 W.
Charles M. Schayer

PLAZA COURT

VASQUEZ COURT

N.E. 1/4 Sec. 24, T.3 S., R.68 W.
Equitable Life Assurance Society,
Intermountain Terminal Co.,
Leland J. Gulich,
National Union Security Association,
Maplecrest Turkey Farms,
Intermountain Terminal Co.,
Consumers Cooperative Association.

DICKINSON SUBDIVISION
BLOCK 1.
Lot 1 Merlin H. Minge
Plot A City & County of Denver.

S.E. 1/4 Sec. 13, T.3 S., R.68 W.
BLOCK 2.
Lots 1 to 4 E.J. Campbell Wholesale Liquor Co.
Lot 5 Peterson Co.
Lots 13 & 26 City & County of Denver.

BLOCK 3
Lot 13 City & County of Denver
E. 58' Lot 16 " " " "

S.W. 1/4 Sec. 13, T.3 S., R.68 W.
E. CANKERS ADDITION - BLOCK 4.
Lot 1 Nicholas J. & Louise W. Ritkin.
Lot 2 Louis J. Curtis.
Lot 3 Keith O. & Vera H. Moyle
Lot 4 Steve E. & Mary Jane Drotar.
Lot 5 Richard R. & Aileen V. Drake.
Lot 6 John K. & Palma G. Gover.
Lot 7 Ronald E. & Betty A. Wilbanks.
Lot 10 Harold B. & Betty B. Hogeman.
Lot 11 Robert R. & Evelyn E. Watkins.
Lot 12 Harold E. & Zoe E. Shinkman.
Lot 13 Marle W. & Hope Trilapough.
Lot 14 John A. & Emily Houser.

S.E. 1/4 Sec. 13, T.3 S., R.68 W.
Guy Martin.
Gilbert Clark & Joseph Grandall.
Reiter Lenhart Machinery Co.
E. Cankers Add. (See above).
The Buda Engine Sales & Service Co.
Jessie F. Bennett.
George E. Rollett.
" " "
O.V. & Antonia M. Wilson.
Elizabeth V. Buckley & Sue Lee Huntley.
" " " "
L.G. Hall.
Guy Martin.
John Millard Rea Jr. & Gladys L. Rea.
Emil & Hazel E. Martin.
Wade C. & Jeffrie M. Charter.
John Millard Rea.
Reiter Lenhart Machinery Co.
Robert M. Hancock.
Canada Dry Bottling Co. of Denver, Inc.
Leslie G. Hall.
George W. & Betty A. Belk.
Agnes Pochin.
C.M. Dickinson.
Dickinson Subdivision (See left).

S.E. 1/4 N.E. 1/4 Sec. 13, T.3 S., R.68 W.
SHEPARD'S ADD. - BLOCK 5.
Lots 1 to 15 J.E. & Adele M. Adamson.
" 16 to 23 NW of Vasquez Blvd. " " " "
" 35 to 40 " " " "
" 41 to 44 Joseph E. Newman.
" 45 to 48 J.E. & Adele M. Adamson.

N.W. 1/4 Sec. 18, T.3 S., R.67 W.
Walter S. Cheesman Realty Co.
Associated Traders, Inc.
William D. Webber.
Martinson Construction Co.
" " "
Walter S. Cheesman Realty Co.
Elder Construction Co.
George & Nellie Kasman.
Martinson Construction Co.
Phillips Petroleum Co.
Lyman B. Newman.
John J. & James W. Mee.

