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FEDERAL ROAD DIVISION NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLORADO	S 0120 (2) S 0120 (3)	1	

COLORADO
DEPARTMENT OF HIGHWAYS

PLAN AND PROFILE OF ~~PROPOSED~~

COMBINED FEDERAL AID PROJECT NO. S0120(2) & S0120(3)

STATE HIGHWAY NO. 370

ALAMOSA & RIO GRANDE COUNTIES

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TABULATION OF LENGTH AND DESIGN DATA

STATION	S 0120 (2) ROADWAY LIN. FT.	S 0120 (2) BRIDGES LIN. FT.	S 0120 (3) ROADWAY LIN. FT.	
324+37.5 Begin S 0120 (3) = End S 0120 (1)			10,658.8	
430+96.3 End S 0120 (3) = Begin S 0120 (2)				
437+92.7 Begin Bridge	696.4	52.5		
438+45.2 End Bridge				
647+93.9 Begin Bridge	209487	42.8		
648+36.7 End Bridge	2,044.4			
668+81.1 Bk. = 668+80.54 Ah Equat	7,805.6			
746+86.1 End S 0120 (2) 11' Lt. of 528+04.2 On S 0113(5)				
TOTALS	31,495.1	95.3	10,658.8	

SUMMARY	LIN. FT.	MI.
Roadway S 0120 (2)	31,495.1	5965
Bridges S 0120 (2)	95.3	0.018
TOTALS S 0120 (2)	31,590.4	5.983
Roadway S 0120 (3)	10,658.8	2.019
TOTALS S 0120 (3)	10,658.8	2.019

DESIGN DATA	S 0120 (2)	S 0120 (3)
MAXIMUM DEGREE OF CURVE	0°	0°
MAXIMUM GRADE	1.08%	0.40%
MINIMUM N.P.S.D. HORIZONTAL	>1,300'	>1,300'
MINIMUM N.P.S.D. VERTICAL	830'	>1,300'
MAXIMUM DESIGN SPEED	70 M.P.H.	70 M.P.H.

CONVENTIONAL SIGNS

CENTER LINE — ℄ PLAN SHEET — TITLE ℄ SHEET
RIGHT OF WAY LINE — R.O.W. MARKER
COUNTY LINE
TOWNSHIP OR RANGE LINE
LAND LINES — SECTION LINE — 1/4 SECTION LINE — 1/16 SECTION LINE
BARBED WIRE FENCE
COMBINATION WIRE FENCE
TELEPHONE & TELEGRAPH LINES
POWER LINE
PRESENT ROAD (Plan Sheets)

SCALES OF ORIGINAL DRAWINGS

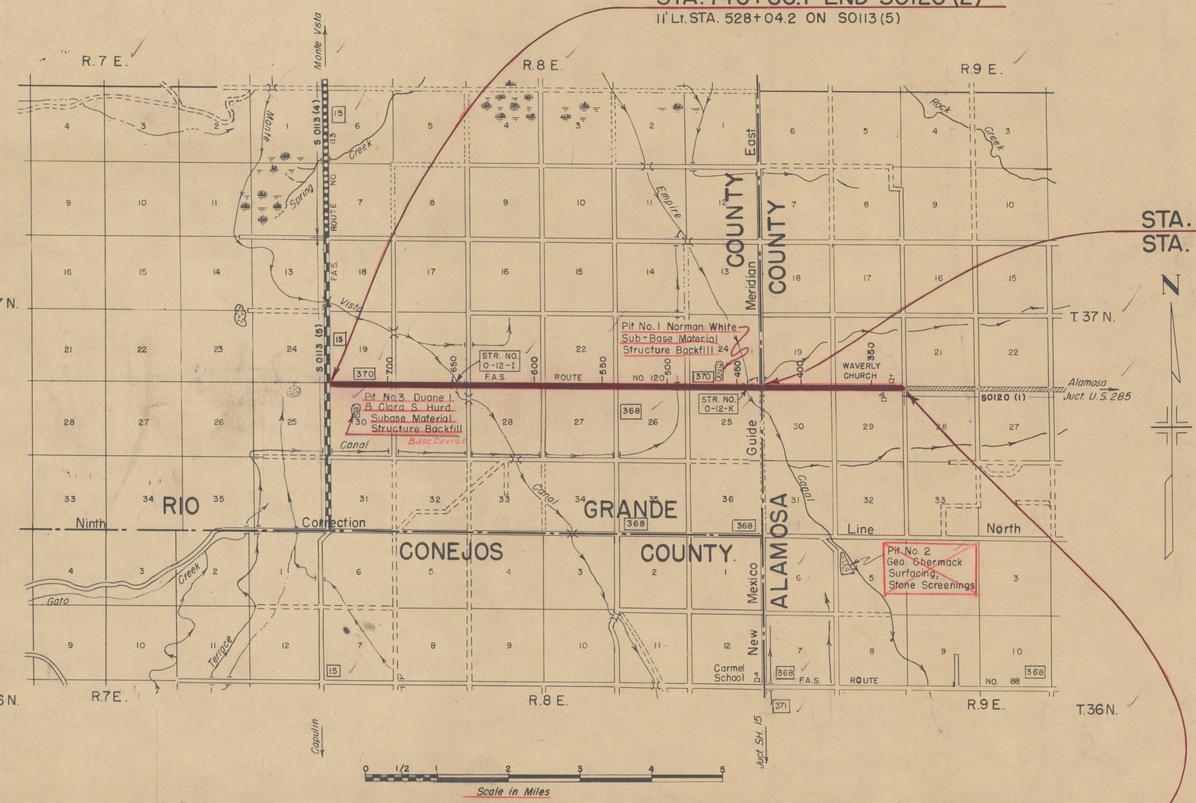
ON PLAN, 1 IN. = 100 FT.
ON PROFILE 1 IN. = 100 FT. HORIZONTAL; 1 IN. = 10 FT. VERTICAL
GRADE LINE ON PROFILE IS SHOWN AS GRADE OF FINISHED ROAD

	S0120(2)	S0120(3)	COMB. LENGTH
GROSS LENGTH OF PROJECT	31,590.4 FT. = 5.983 MI.	10,658.8 FT. = 2.019 MI.	42,249.2 FT. = 8.002 MILES
NET LENGTH OF PROJECT			

STA. 746+86.1 END S0120 (2)
11' Lt. STA. 528+04.2 ON S0113(5)

STA. 430+96.3 BEGIN S0120(2) =
STA. 430+96.3 END S0120 (3)

STA. 324+37.5 BEGIN S0120(3) =
STA. 324+37.5 END S0120 (1)



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:

Mr. R. B. Dudley, Dist. Const. Eng., Alamosa, Colo.
Mr. S. W. Baker, Resident Eng., Alamosa, Colo.
Phone — Residence 106; Office 171

COLORADO
DEPARTMENT OF HIGHWAYS

APPROVED: _____ 7-11-55
CHIEF ENGINEER — DATE

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

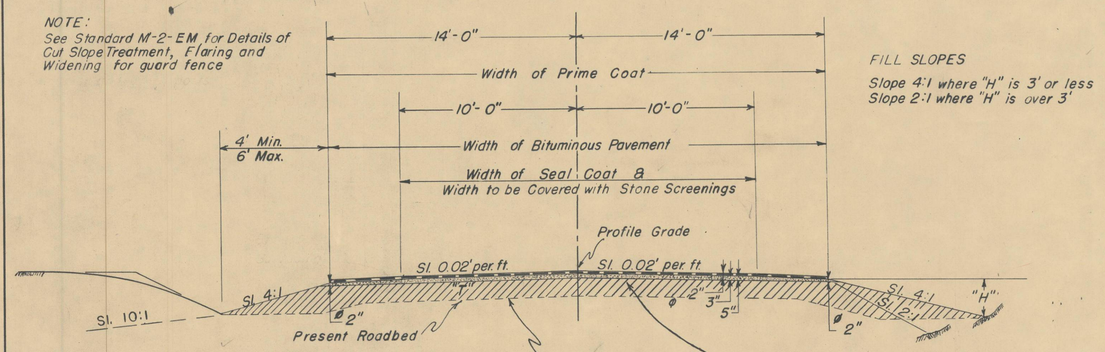
APPROVED: _____ DATE
DISTRICT ENGINEER

S0120(3) + S0120(2)
Waverly Road
S.H. # 370

DRAWER # 40
S0120(2)
S0120(3)

FEDERAL ROAD DIVISION NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLORADO	S 0120 (2) S 0120 (3)	2	

TYPICAL SECTION



FILL SLOPES
Slope 4:1 where "H" is 3' or less
Slope 2:1 where "H" is over 3'

Excavation or Borrow below 4:1 slope and/or 10:1 slope will not be permitted (WAS NOT)

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.

Thruout the project all the material between the present roadbed and the Bottom Course Surfacing is to be composed of Sub-Base Material. Estimated quantities involved in this operation are shown in the Sub-Base Material Plan on Sheet No. 2

Approximate 5" compacted thickness of Gravel or Crushed Rock Surfacing shall be placed in separate courses at the following rates per 100 lin. ft of roadway:

Top Course	31 tons.
Bottom Course	46 tons.

ϕ Thicknesses shown are approximate

GENERAL NOTES

This project is to be constructed in conformity with the Standard Specifications of the Colorado Department of Highways, adopted June 1, 1952.

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

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

All Corrugated Metal Pipe Cross Culverts including Arch Culverts shall be laid with Metal Aprons on each end unless otherwise noted on the plans.

For ~~preliminary~~ plan quantities of Asphaltic Road Materials and ~~Stone Screenings~~, the following rates of application were used.

PRIME COAT	MC-0	@ ~~0.40~~ Gals. per Sq. Yd.
PROCESS	MC	@ 0.60 Gals. per Sq. Yd. per inch.
SEAL COAT	RC	@ 0.19 Gals. per Sq. Yd.
STONE SCREENINGS	Type X	@ 20 Lbs. per Sq. Yd.

Rate of application and grade of Asphaltic Material shall be as determined by the Engineer at time of application.

All side approach roads to the project designated by the Engineer shall be primed and seal coated to approximately 50 feet out from edge of the Asphaltic surfacing or to the Right of Way line, whichever is less.

At Bridge Approaches, the Seal Coat and Stone Screenings shall be widened to meet the curbed width of the bridge and shall take place gradually over a distance of 300 Ft., each way from the Bridge ends.

It is estimated that Rolling of the Asphaltic Surfacing with Flat Wheeled Roller (Tandem) will be necessary after any rolling with Rubber Tired Rollers in order to provide a firm smooth surface.

It is estimated that material for Gravel Surfacing and Sub-Base Material for the project is available in the vicinity of the pits indicated in the following tabulations. Estimated quantities involved in these operations are shown below.

Alteration of these plans as herein outlined will be allowed only on written permission from the Department.

SUB BASE PLAN

MATERIAL TO BE PLACED	SOURCE, QUANTITY AVAILABLE & "R" VALUE		QUANTITY TONS CLASS 3	OVERHAUL TON MILES
S 0120 (3)				
330+00 to 430+96.3	Pit No. 1		Δ 77,463	119,166
From List of Structures	100,000 Cu. Yds.		565	869
Est. for Correcting Irregularities in Subgrade	R = 80		7,803	12,004
TOTALS S 0120(3)			85,831	132,039
S 0120 (2)				
430+96.3 to 437+92.7	Pit No. 3		Δ 6,868	4,812
438+45.2 to 601+32.0			Δ 58,111	50,081
601+32.0 to 647+93.9	160,000 Cu. Yds.		Δ 19,833	43,781
648+36.7 to 668+81.1 Bk.			Δ 8,142	13,456
668+80.5 Ah. to 746+86.1	R = 70±		Δ 23,121	15,894
From List of Structures			1,520	1,677
Est. for Correcting Irregularities in Subgrade			11,759	12,970
Bridge Widening & Covering Ends of Culverts			785	889
TOTALS S 0120(2)			130,139	143,560

Note: Min. thickness based on Curve "D"
Δ From Profile Quantities.

SURFACING PLAN

MATERIAL TO BE PLACED	SOURCE, QUANTITY AVAILABLE & "R" VALUE	QUANTITY TONS USED GRADING C			OVERHAUL TON MILES		
		TOP COURSE	BOTTOM COURSE		TOP COURSE	BOTTOM COURSE	
S 0120 (3)							
327+00 to 377+47.3	Pit No. 2	1,565	2,322		4,661	6,915	
377+47.3 to 430+96.3	200,000 Cu. Yds.	1,658	2,461		4,985	7,399	
From List of Structures	R = 81		633			1,899	
TOTALS S 0120(3)		3,223	5,416		9,646	16,213	
S 0120 (2)							
430+96.3 to 437+92.7		216	320		773	1,145	
438+45.2 to 647+93.9		6,495	9,637		36,624	54,342	
648+36.7 to 668+81.1 Bk.		635	942		4,968	7,370	
668+80.5 Ah. to 746+86.1		2,420	3,591		21,192	31,446	
From List of Structures		25	1,435		163	9,339	
TOTALS S 0120(2)		9,791	15,925		63,720	103,642	

COLORADO DEPARTMENT OF HIGHWAYS
FORM C. D. H. 126
JANUARY, 1952

SUMMARY OF ~~APPROXIMATE~~ FINAL QUANTITIES

ITEM NO.	ITEM	UNIT	S 0120 (2) ROADWAY	S 0120 (2) Roadway	S 0120 (2) BRIDGE STA. 438±	S 0120 (2) Bridge Sta. 438+	S 0120 (2) BRIDGE STA. 648±	S 0120 (2) Bridge Sta. 648+	S 0120 (3) ROADWAY	S 0120 (3) Roadway	Comb Project Totals	COMB. PROJECT TOTALS
11a	Removal of Bridge, Sta. 437+	Lump Sum			•	•					•	•
11b	Removal of Bridge, Sta. 648+	Lump Sum					•	•			•	•
11c	Removal of ~~12~~ Structures (10)	Lump Sum	•	7					•	3	10	•
11d	Adjust Manhole Ring and Cover	Each							3	3	3	3
11e	Removing and Resetting Mail Boxes	Lump Sum	•	•					•	•	•	•
11f	Remove and Reset Wood Division Box, Sta. 616+	Lump Sum	•	•							•	•
13c	Unclassified Excavation	Cu. Yd.	1,500	1366	50	329.4	150	164.7	300	97	1957.1	2,000
13d	Unclassified Ditch Excavation	Cu. Yd.	590	9.2					10	2.3	11.5	600
13s	Stripping	Cu. Yd.	4,000	7,731					11,000	4,055	11,786	15,000
14a	Dry Rock Excavation (Str.)	Cu. Yd.	10	0					10	0	0	20
14b	Dry Common Excavation (Str.)	Cu. Yd.	80	118.8	70	38.7	10	26.7	10	8.4	192.6	170
14c	Wet Rock Excavation (Str.)	Cu. Yd.	10	0					10	0	0	20
14d	Wet Common Excavation (Str.)	Cu. Yd.	30	1.8	20	15.0	20	3.0	10	0	19.8	80
16a	Structure Backfill (Class 1)	Cu. Yd.	170	127.1	120	103.4	90	56.5	30	13.3	300.3	410
16c	Mechanical Tamping	Hour	30	14.5	20	12	20	13.5	10	2	42.0	80
17a	Rolling with Tamping Roller (Two (2) Unit)	Hour	160	245					60	89	334	220
17b	Rolling with Tamping Roller (Four (4) Unit)	Hour	30	0					10	0	0	40
17c	Rolling with Flat Wheeled Roller (Tandem)	Hour	45	112					15	44	156	60
17d	Rolling with Flat Wheeled Roller (Three (3) Wheel)	Hour	310	231					190	65	296	-500
17e	Rolling with Rubber Tired Roller (One (1) Unit)	Hour	100	62					50	28	90	150
17ex	Rolling with Rubber Tired Roller (Two (2) Unit)	Hour	100	0					50	0	0	150
17f	Furnishing Tamping Roller (Two (2) Unit)	Each	0.7	0.7					0.3	0.3	1	1
17g	Furnishing Tamping Roller (Four (4) Unit)	Each	0.7	0					0.3	0	0	1
17h	Furnishing Flat Wheeled Roller (Tandem)	Each	0.7	0.7					0.3	0.3	1	1
17i	Furnishing Flat Wheeled Roller (Three (3) Wheel)	Each	0.7	0.7					0.3	0.3	1	1
17j	Furnishing Rubber Tired Roller (One (1) Unit)	Each	0.7	0.7					0.3	0.3	1	1
17jx	Furnishing Rubber Tired Roller (Two (2) Unit)	Each	0.7	0.					0.3	0	0	1
17k	Wetting	M Gal.	3,510	4855.5					1,820	416	5271.5	5,330
18c	Ton Mile Overhaul	Ton Mile	311,000	371,895					157,900	181,907	553,802	468,900
23c	Sub-Base Material (Class 3)	Ton	130,150	159,728.65					85,850	73,836.35	233,565.00	216,000
26c	Gravel or Crushed Rock Surfacing (Grading C)	Ton	25,750	15,064.65					8,650	5,339.70	20,404.35	34,400
29d	Asphaltic 120-150 Panatretion (W.O. 12551)	Ton		614.6213						207.2227	821.8440	
30x	Asphaltic Road Material MC0 (Prime)	Gal.	42,300	32,854					14,100	11,060	43,914	56,400
30y	Asphaltic Road Material RC (Seal)	Gal.	14,750	0					4,950	0	0	19,700
30z	Asphaltic Road Material MC (Process)	Gal.	124,900	0					40,000	0	0	164,900
31a	Road Mix Asphaltic Processing	Sq. Yd.	98,920	0					32,350	0	0	131,270
31x	Stone Screenings (Type X)	Ton	780	0					260	0	0	1,040
32a	Plant Mix Asphaltic Surfacing (W.O. 12551	Ton		9,852.50						3,367.15	13,219.65	
42a	Untreated Bridge Timber	Mft. bm.			0.4	0.328	0.4	0.384			0.712	08
42b	Treated Bridge Timber	Mft. bm.			0.3	0.288	0.3	0.288			0.576	06
46a	Class "A" Concrete	Cu. Yd.			101	101	78	77.6			178.6	179
47	Reinforcing Steel	Lb.			22,950	22935	13,850	13,780			36715	36,800
48	Structural Steel	Lb.			1,200	1160	900	895			2055	2,100
51x	Relaying 21" Pipe	Lin. Ft.	64	64							64	64
53b	18" Corrugated Metal Culvert Pipe	Lin. Ft.	55	55							55	55
53c	24" Corrugated Metal Culvert Pipe	Lin. Ft.	26	26							26	26
53d	30" Corrugated Metal Culvert Pipe	Lin. Ft.	22	22							22	22
53x	21" Corrugated Metal Culvert Pipe	Lin. Ft.	12	12							12	12
61ab	Steel Piling (8" BP @ 36#) } Tub Steel 10 3/4" O.D.	Lin. Ft.					364	271.91			271.91	364
61ac	Steel Piling (10" BP @ 42#) } Tub Steel 10 3/4" O.D.	Lin. Ft.			780	770.55					770.55	780
75cx	Metal Plate Guard Fence (Beam Type)	Lin. Ft.			150	150	125	125			275	275
61a	Welds	EACH				10		4			14	
89b	Drain Pipe (Concrete Floor) (4"x2'-0")	Each			2	2	2	2			4	4
92	Timber Guard Posts	Each	62	61					4	5	66	66
95xc	Metal Aprons for 29"x18" Corrugated Metal Pipe Arch Culverts	Each	9	9					4	2	11	13
95xd	Metal Aprons for 36"x22" Corrugated Metal Pipe Arch Culverts	Each	2	2							2	2
134c	29"x18" Corrugated Metal Pipe Arch Culverts	Lin. Ft.	268	268					86	44	312	354
134d	36"x22" Corrugated Metal Pipe Arch Culverts	Lin. Ft.	42	42							42	42
	STATE FORCES											
81a	Project Markers	Each	1	1					1	1	2	2
	STATE FORCES (NON-FED. AID)											
	Signing and Striping Entire Project	Lump Sum	•	•					•	•	•	•
	FORCE ACCOUNT (Non. Fed. Aid)											
	Relocate Poles (Work by San Luis Valley R.E.A. Forces)	Lump Sum	$295.23 •	$295.23								•

Comb = S 0120 (2) + S 0120 (3)

84.902 overrun

17,565 overrun

TIMBER GUARD POSTS

STATION	SIDE	SPACING	NO.
S 0120 (3)			
377+10	Rt. & Lt.	Culvert	2
404+25	Rt. & Lt.	Culvert	2
TOTAL S0120 (3)			4
S 0120 (2)			
437+	Rt. & Lt.	Bridge	24
439+00	Rt. & Lt.	Culvert	2
457+77	Rt. & Lt.	Culvert	2
467+00	Lt.	Culvert	1
510+42	Rt.	Culvert	1
536+34	Rt. & Lt.	Culvert	2
648+	Rt. & Lt.	Bridge	24
668+74	Rt. & Lt.	Culvert	2
694+85	Rt. & Lt.	Culvert	2
695+46	Rt. & Lt.	Culvert	2
TOTAL S 0120 (2)			62

FEDERAL ROAD DIVISION NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLORADO	S 0120 (2) S 0120 (3)	3	

Rev. 10-13-55 Item 47 E.L.K.

Excavation Cu. Yds.	Excavation Area	Embankment Area	Embankment Cu. Yds.

SUMMARY SHEET

FED. ROAD DIVISION NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S 0120 (3)	4X	

SCALE BOOKS

BOOK NO.	TICKET NO.		TONS CL-3	TONS HOT MIX	TONS BOTTOM COURSE
1	655501	655550	2134.10		
2			2256.35		
3		655650	2396.55		
4	648501	648550	2343.10		
5	648551		2381.15		
6			2517.50		
7			2464.15		
8			2315.30		
9			2387.70		
10			2533.85		
11			2518.25		
12			2505.55		
13		649900	2298.00		
14	655661	655700	2264.20		
15	655701		2044.20		
16			2260.60		
17			2492.75		
18			2379.40		
19			2416.80		
20		656000	2288.65		
21	658001	658050	2650.20		
22	658051		2435.10		
23			2444.50		
24			2293.35		
25		658250	2470.90		
26	658301	658350	2234.30		
27	658351		2192.65		
28		658450	2328.05		
29	658901	658950	2235.80		
30	658951	659000	2288.20		
31	660101	660150	2231.35		
32	658851	658900	836.20		
1	649451	649500		2024.40	
2	649401	649450		1342.75	
1	652901	652950			2845.85
2	652951	653000			2493.85
	TOTAL		73836.35	3367.15	5339.70

AC 120-150 ASPHALT

CAR NO.	TEST NO.	NET TONS	TONS USED	
UTLX 67809	22819	39.9925	27.6373	*
UTLX 62915	22825	39.4865	39.4865	
UTLX 67718	22825	40.0135	40.0135	
UTLX 62420	22835	39.8335	39.8335	
Truck 12-10A	22843	19.7550	19.7550	
Truck 12-20	22843	22.4000	16.7618	#
Truck 17-18	22843	21.0500	21.0500	
Truck 12-22	22843	21.9750	2.6851	@

* 12.3552 to S0120(2)
\# 5.6382 " "
@ 19.2899 " "
37.2833

Ref BK 8 Pg. 22

TOTAL		244.5060	207.2227

MC 0 ASPHALTIC PRIME

CAR NO.	TEST NO.	NET GALS.	GALS. USED	
UTLX 62305	22816	9646	6715	*
Truck 17-22	22820	5850	4345	#

* 2931 to S0120 (2)
\# 1505 " "
4436

Ref. BK 8 Pg. 17

TOTAL		15496	11060

SURFACING PLAN

MATERIAL PLACED	SOURCE	QUANTITIES AVAIL.	TONS HOT MIX	TONS BOTTOM COURSE	OVERHAUL TON-MILE HOT MIX	OVERHAUL TON-MILE BOTTOM COURSE
324+34.2-430+96.3	West Pit		3089.40		23409	
Road Approaches	28,160' from 486+13		277.75		2267	
332+00-430+96.3	Hurd Pit			4444.90		30873
324+342-332+00 (3h. Areas Only)				304.35		2421
Road Approaches				570.45		4450
Book 8 Pg 40, 41						
TOTAL			3367.15	5339.70	25676	37744

63420

WETTING AND ROLLING

ITEM	HOURS TAMPING 2-UNIT	FLAT WHEEL TAMDEM	FLAT WHEEL 3-WHEEL	R. TIRED 1-UNIT	MECH. TAMPING	WETTING M-GAL.
Emb.	44.5					28
Cl-3	44.5		65			224
B. Course				28		98
Hot Mix		44				
Maint.						66
CMP					2	
	Ref. BK 8 Pg. 43					
TOTAL	89	44	65	28	2	416

TIMBER GUARD POST

STATION	SIDE	SPACING	NO.
350+85	Rt	Manhole	1
362+65	Rt.	Manhole	1
377+10	Rt-Lt.	Culv.	2
377+29	Rt	Manhole	1
Ref BK 8	Pg 42		
TOTAL			5

SUB BASE PLAN

MATERIAL PLACED	SOURCE	QUANTITIES AVAIL.	TONS CLASS 3	OVER HAUL TON MILES
332+00-430+96.3	Pit NO. 1	Excavated	73836.35	118.487
Approaches Added in Roadway Sections	BBL To 463+61			
TOTAL			73836.35	118.487

SHEET TOTALS
EXCAVATION ..... CU. YDS.
EXCAVATION ..... CU. YDS.
EMBANKMENT ..... CU. YDS.

FINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, AREAS, NOTE BOOK, NO., BY, DATE, AREAS CHECKED

ORIGINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, AREAS, NOTE BOOK, NO., BY, DATE, AREAS CHECKED

SUMMARY SHEET

FED. ROAD DIVISION NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S 0120 (2)	4X7	

SCALE BOOK SUMMARY

BOOK NO.	TICKET NO.		TONS Sub-Base Cl. 3
1	661001	661050	2256.25
2	661050		2280.65
3			2154.95
4			2176.55
5			2204.40
6			2118.25
7			1988.55
8			2033.55
9			2062.15
10			2114.85
11			2049.55
12			2081.15
13			2221.90
14			2229.15
15			2162.60
16			2081.45
17			2246.90
18			2120.85
19			2185.15
20	661951	662000	2234.75
21	528001	528050	2314.65
22	528051	528100	2258.35
23	528101	528150	2438.45
24	528201	528250	2571.70
25	528151	528200	2491.70
26	528251	528300	2493.10
27	528301	528350	2499.40
28	528351	528400	2477.20
29	528401	528450	2499.15
30	528451	528500	2443.35
31	653001	653053	2276.30
32		653100	2510.25
33			2373.25
34			2457.20
35			2391.40
36			2516.70
37			2411.65
38			2462.30
39			2320.75
40			2420.70
41			2443.10
42			2563.25
43			2438.15
44			2363.50
45	649551	649600	1597.25
46	653701	653750	2212.25
47	656001	656050	2032.80
48	656051		2431.50
49			2399.90
50			2597.35
51			2511.45
52			2477.70
53			2284.20
54			2290.65
55			2444.25
56	654451	654500	2259.00
57	655001	655050	2365.20
58	655051		2301.50
59			2305.60
60			2190.85
61			2253.45
62			2332.25
63			2324.90
64			2292.40
65			2486.35
66	655451	655400	2395.30
67	658251	658300	2837.40
68	660051	660100	2168.40
69	650651	650700	2136.60
70	650551	650600	355.20
TOTAL			157,286.5

Excavation / Embankment

BOOK NO.	TICKET NO.		Excavation Cu. Yds.	Excavation Area	Embankment Area	Embankment Cu. Yds.
1	650701	650750	1863.65			
2	650751	650800	1898.70			
3	649501	649550	1990.70			
4	647801	647850	2056.50			
5	650601	650650	1947.55			
6	647001	647050	93.40			
1	658451	658500			254795	
2	658501	658550			2016.40	
3	658551	658600			2733.35	
4	658751	658800			3365.00	
5	658801	658850			3141.75	
6	652851	652900			1260.20	
Total			9852.50	15,064.65		

Tons Gravel

BOOK NO.	TICKET NO.		TOP Course	BOTTOM Course	SHOULDER Surf.	STONE Screen.
1	650701	650750	1863.65			
2	650751	650800	1898.70			
3	649501	649550	1990.70			
4	647801	647850	2056.50			
5	650601	650650	1947.55			
6	647001	647050	93.40			

SURFACING PLAN

MATERIAL PLACED	SOURCE	AVAIL.	QUANTITIES TONS USED GR "C" HOT MIX	QUANTITIES TONS USED GR "C" BOTTOM COURSE	OVERHAUL TON MILE HOT MIX	OVERHAUL TON MILE BOTTOM COURSE
430+96.3 - 486+13	29,160'		1639.14		9,909	
486+13 - 668+81.1 Bk	from		5427.88		39,367	
668+80.5 Ah. - 746+86.1	486+13		2319.23		22,547	
Bridge Widening	West		80.55		603	
Road Approaches	Pit		385.70		2844	
430+96.3 - 437+92.7	P.E No 3			310.03		1842
438+45.2 - 647+93.87				9326.12		36213
648+36.92 - 668+81.18				910.14		1545
668+80.5A - 721+80	2641.0' from 721+80			2359.27		2364
721+80 - 746+86.1				1115.69		823
Bridge Widening				137.60		534
Road Approaches				905.80		2498
Ref. BK. 8 Pg. 25-26						
Sub Total			9852.50	15064.65	75270	45819
Totals						121089

A C - ASPHALTIC (120-150)

CAR NO.	TEST NO.	NET TONS	TONS USED
UTLX 62936	13965	38.8950	38.8950
UTLX 61359	13965	38.7840	38.5767 ∝
UTLX 64693	13969	39.9195	39.2776 ∝
UTLX 62239	13969	39.8595	39.4829 ∝
UTLX 62626	13974	39.7480	39.6865 ∝
UTLX 66461	13974	39.7565	39.5124 ∝
Truck 17-18	13975	21.1500	21.1500
Truck 16-20	13975	22.1000	21.9737 ∝
UTLX 62335	22806	40.0435	39.6061 ∝
UTLX 67272	22806	40.0565	39.3771 ∝
UTLX 66112	22811	40.0980	40.0980
UTLX 62829	22811	39.7950	39.7950
UTLX 62416	22817	40.0350	40.0350
UTLX 67656	22817	40.2195	40.2195
UTLX 68306	22819	40.2625	40.2625
UTLX 67809	22819	39.9925	12.3552 *
Truck 12-20	22843	22.4000	5.6382 #
Truck 12-22	22843	21.9750	19.2879 ø
Truck 16-20	22843	21.4000	21.4000
* 27.6373 # 16.7618 ø 2.6851	Used on S0120 (3)		
∝ Diff is waste	Total 4.735 Tons		
Totals		666.4400	614.6213

Ref. Bk 8 Pg 21

R.O.W. MARKERS

MC-0 ASPHALTIC (PRIME)

CAR NO.	TEST NO.	NET GALS.	GALS. USED
UTLX 61868	13963	9383	9383
UTLX 66651	13963	9398	9398
UTLX 62256	22804	9637	9637
UTLX 62305	22816	9646	2931 *
Truck 17-22	22820	5850	1505 ø
* 6715 Used on			S0120 (3)
# 4345 " "			"
11,060			
Ref BK 8	Pg 13		
Total		43914	32854

WETTING AND ROLLING

ITEM	HOURS TAMPING 2-UNIT	FLAT TANDEM	WHEEL 3-WHEEL	R. TIRED 1-UNIT	Mech Tamp	WETTING M-GAL
Roadway	184					767.0
CL-3	61		202			3265.0
B. Course			29	62		287.5
Hot Mix		112				
Maint.						536.0
CMP					14.5	
Bridges 437+					12	
648+					13.5	
Totals	245	112	231	62	40.0	4855.5

Ref BK 8 Pg 29

TIMBER GUARD POSTS

STATION	SIDE	SPACING	NO.
437+	Rt-Lt	Bridge	28
457+77	Rt-Lt	Culv.	2
467+00	Lt	"	1
510+42	Rt	"	1
536+34	Rt-Lt	"	2
648+	Rt-Lt	Bridge	23
668+74	Rt-Lt	Culv.	2
694+85	Rt-Lt	"	2
TOTAL			61

SUBBASE SUMMARY PLAN

MATERIAL PLACED	SOURCE	QUANT. TONS CLASS 3	OVER HAUL TON MILES
437+92.3 - 500+00	Pit No. 1 Rec'd 4-3-67 to 4-13-67	56,681.45	27,757
500+00 - 746+93.1	Pit No. 3 2485.70 721+80 Unlimited	103,142.20	223,049
TOTAL		159,823.65	250,806

SUMMARY OF BRIDGES

BRIDGE 437+

ITEM	DESCRIPTION	UNIT	TOTAL
11a	Removal Bridge 437+	L.S.	L.S.
13c	Unclass. Excavation	Cu Yd.	329.4
14b	Dry Comm. Excav. (Str.)	Cu Yd.	38.7
14d	Wet Comm. Excav. (Str.)	Cu Yd.	15.0
16a	Struct Backfill (Cl. 1)	Cu Yd.	103.4
16c	Mechanical Hour	Hour	12
42a	Untreated Bridge Timber	Mftbm	0.328
42b	Treated Bridge Timber	Mftbm	0.288
46a	Cl "A" Concrete	Cu Yd.	101.0
47	Reinforcing Steel	lb	22,935
48	Struct. Steel	lb	1,160
61ac	Steel Piling	Lin.ft.	770.55
75cx	Metal Pl. Guard Fence (Beam Ty.	Lin Ft	150
89b	Drain Pipe 4"ø x 2'-0"	Each	2
	Welds	Each	10

Ref. BK 8 Pg 32

SUMMARY OF BRIDGES

BRIDGE 648+

ITEM	DESCRIPTION	UNIT	TOTAL
11b	Removal Bridge 648+	L.S.	L.S.
42b	Treated Bridge Timber	Mft BM	0.288
13c	Unclassified Excavation	Cu Yds.	164.7
48	Struct. Steel	lb	895
14d	Dry Comm Excavation (Str)	Cu Yd.	26.7
14d	Wet Comm Excavation (Str)	Cu Yd.	3.0
16a	Struct Backfill	Cu Yd.	565
16c	Mech. Tamping	Hour	13.5
42a	Untreated Bridge Timber	Mftbm	0.384
46a	Cl. "A" Concrete	Cu Yd	776
47	Reinforcing Steel	Lb	13780
61ab	Steel Piling	Linft	271.91
75cx	Metal Pl. Guard Fence	Linft.	125
89b	Drain Pipe 4"ø x 2'-0"	Each	2
	Welds	Each	4

Ref. BK. 8 Pg 35

SHEET TOTALS
- EXCAVATION ..... CU. YDS.
- EXCAVATION ..... CU. YDS.
- EMBANKMENT ..... CU. YDS.

FINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED, NOTE BOOK, NO., BY, DATE

ORIGINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED, NOTE BOOK, NO., BY, DATE

S-0120-(2) Increased Tonnage 1789.45 Tons Both Pits,

Tonnage and factor change.

White Pit

430+96.3 To 500+00 old 54.897.00 + 1789.45 = New 56,686.45 Tons.

Hurd Pit.

500+00 To 746+97.1 old 101,252.75 + 1789.45 = New 103,042.20 Tons.

159,728.65

Factor.

430+96.3 To 500+00 = $\frac{56,686.45 \text{ Tons}}{26,547 \text{ cu. yds.}}$ = New 2.135324142%

$\frac{54,897.00 \text{ Tons}}{26,547 \text{ cu. yds.}}$ = old 2.067917278%

0.067406864% Increase

500+00 To 746+97.1 = $\frac{103,042.20 \text{ Tons}}{43,560 \text{ cu. yds}}$ = New 2.365523415%

$\frac{101,252.75 \text{ Tons.}}{43,560 \text{ cu. yds.}}$ = old 2.324443296%

0.041080119% Increase

Ton Mile Haul

White Pit

430+96.3 To 500+00 old. Ton Miles 26,883. — New Ton Miles 27,757. = 874 Ton Mile Increase

500+00 To 746+97.1 $\frac{219,164.}{236,047}$ — $\frac{223,049}{250,806.}$ = $\frac{3885}{4759}$ Ton Mile Increase

56,686.45
103,042.20
159,728.65

1789.45

27,757.
26,883
.874

367,136

159,728.65
73,836.35
233,565.00

159,728.65
130 150.00
29,578.65

121,089
250 806
371 895
311,000
60,895

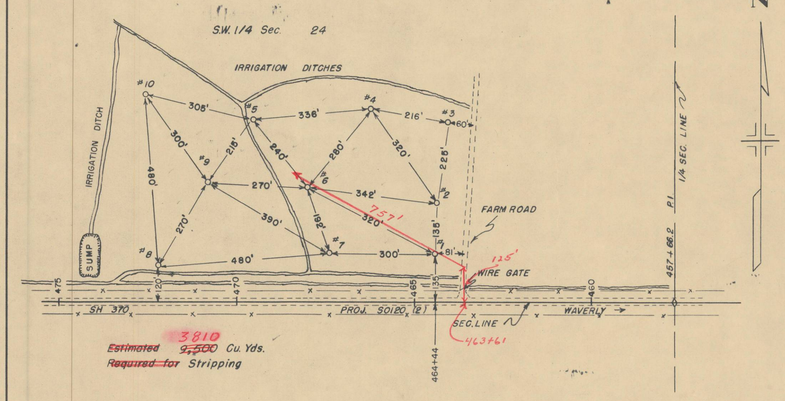
FEDERAL ROAD DIVISION NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S 0120(3) S 0120(2)	~~4~~ 5X	

PIT NO. 1

Owner – Norman White
SW 1/4 Sec. 24, T. 37 N., R. 8 E., N.M.P.M.

Sample No. 1588

Sub-Base Material
Structure Backfill



~~3,500~~ 3810 Cu. Yds.
~~Required for~~ Estimated for Stripping

Log of Pit

Test #	Depth	Description	Test #	Depth	Description
1	0.0 to 2.0	Overburden, Soil & Rock	6	0.0 to 2.0	Overburden, Sim. to No. 2
1-A	2.0 to 8.0	Sand & Gravel	6-A	2.0 to 8.0	Sand & Gravel, Sim. to No. 5-A
2	0.0 to 1.5	Overburden, Soil & Rock	7	0.0 to 2.0	Overburden, Soil & Rock
2-A	1.5 to 7.5	Sand & Gravel	7-A	2.0 to 8.5	Sand & Gravel
3	0.0 to 2.0	Overburden, Soil & Rock, Sim. to No. 2	8	0.0 to 1.0	Overburden, Sim. to No. 7
3-A	2.0 to 8.0	Sand & Gravel, Sim. to No. 2-A	8-A	1.0 to 9.0	Sand & Gravel
4	0.0 to 2.0	Overburden, Soil & Rock, Sim. to No. 2	9	0.0 to 1.0	Overburden, Sim. to No. 7
4-A	2.0 to 8.5	Sand & Gravel, Sim. to No. 2-A	9-A	1.0 to 9.0	Sand & Gravel, Sim. to No. 8-A
5	0.0 to 2.0	Overburden, Soil & Rock, Sim. to No. 2	10	0.0 to 1.0	Overburden, Sim. to No. 7
5-A	2.0 to 8.5	Sand & Gravel	10-A	1.0 to 9.0	Sand & Gravel, Sim. to No. 8-A

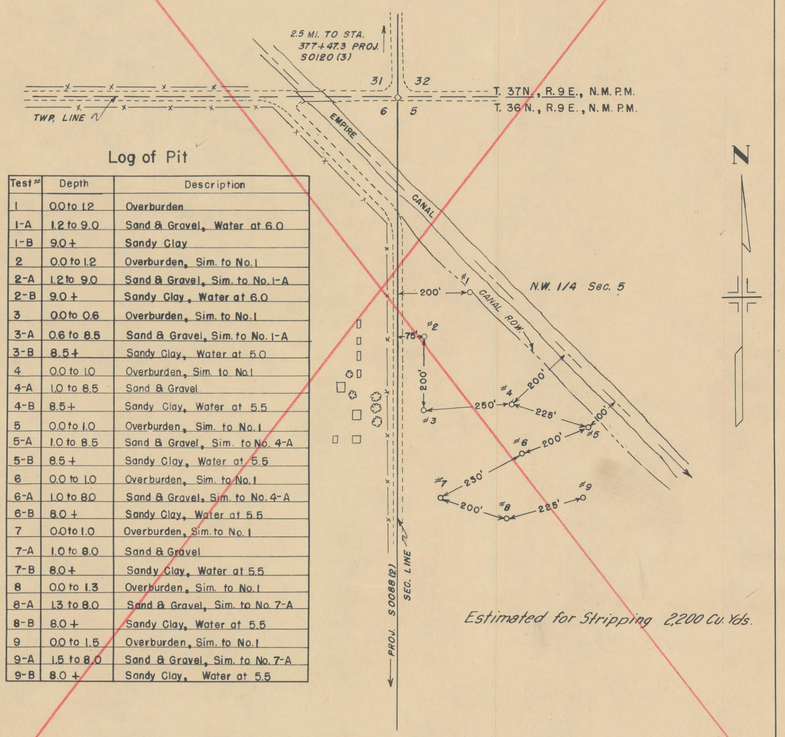
NOTE: All holes bottomed on Clay Soil.

PIT NO. 2

Owner – Geo. Chermack & Geo. D. Carter
N.W. 1/4 Sec. 5, T. 36 N., R. 9 E., N.M.P.M.

Sample No. 1125

Surfacing
Stone Screenings



Log of Pit

Test #	Depth	Description
1	0.0 to 1.2	Overburden
1-A	1.2 to 9.0	Sand & Gravel, Water at 6.0
1-B	9.0 +	Sandy Clay
2	0.0 to 1.2	Overburden, Sim. to No. 1
2-A	1.2 to 9.0	Sand & Gravel, Sim. to No. 1-A
2-B	9.0 +	Sandy Clay, Water at 6.0
3	0.0 to 0.6	Overburden, Sim. to No. 1
3-A	0.6 to 8.5	Sand & Gravel, Sim. to No. 1-A
3-B	8.5 +	Sandy Clay, Water at 5.0
4	0.0 to 1.0	Overburden, Sim. to No. 1
4-A	1.0 to 8.5	Sand & Gravel
4-B	8.5 +	Sandy Clay, Water at 5.5
5	0.0 to 1.0	Overburden, Sim. to No. 1
5-A	1.0 to 8.5	Sand & Gravel, Sim. to No. 4-A
5-B	8.5 +	Sandy Clay, Water at 5.5
6	0.0 to 1.0	Overburden, Sim. to No. 1
6-A	1.0 to 8.0	Sand & Gravel, Sim. to No. 4-A
6-B	8.0 +	Sandy Clay, Water at 5.5
7	0.0 to 1.0	Overburden, Sim. to No. 1
7-A	1.0 to 8.0	Sand & Gravel
7-B	8.0 +	Sandy Clay, Water at 5.5
8	0.0 to 1.3	Overburden, Sim. to No. 1
8-A	1.3 to 8.0	Sand & Gravel, Sim. to No. 7-A
8-B	8.0 +	Sandy Clay, Water at 5.5
9	0.0 to 1.5	Overburden, Sim. to No. 1
9-A	1.5 to 8.0	Sand & Gravel, Sim. to No. 7-A
9-B	8.0 +	Sandy Clay, Water at 5.5

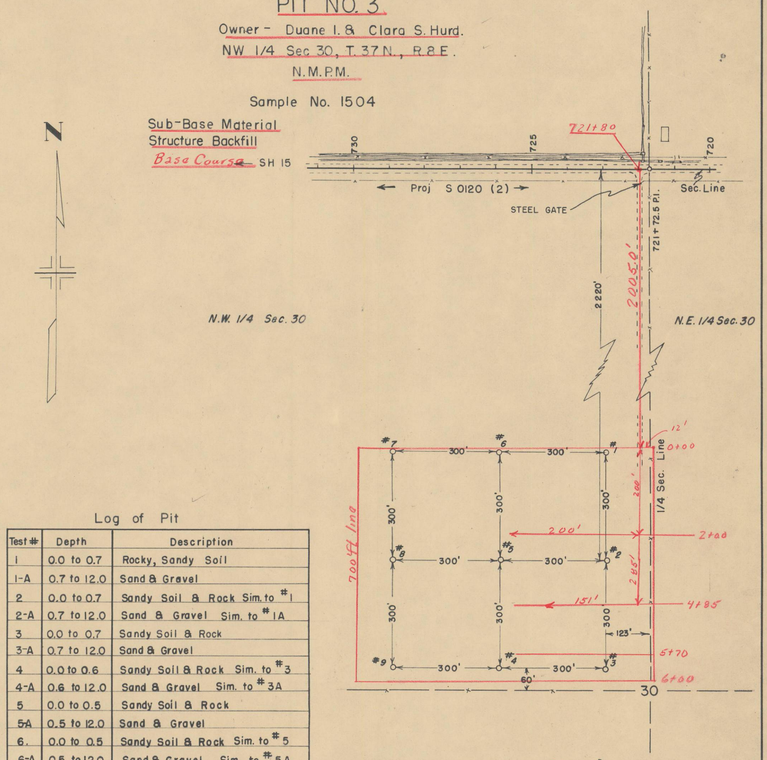
Estimated for Stripping 2,200 Cu. Yds.

PIT NO. 3

Owner – Duane I. & Clara S. Hurd.
NW 1/4 Sec 30, T. 37 N., R. 8 E.
N.M.P.M.

Sample No. 1504

Sub-Base Material
Structure Backfill
~~Base Course~~ SH 15



Log of Pit

Test #	Depth	Description
1	0.0 to 0.7	Rocky, Sandy Soil
1-A	0.7 to 12.0	Sand & Gravel
2	0.0 to 0.7	Sandy Soil & Rock Sim. to #1
2-A	0.7 to 12.0	Sand & Gravel Sim. to #1A
3	0.0 to 0.7	Sandy Soil & Rock
3-A	0.7 to 12.0	Sand & Gravel
4	0.0 to 0.6	Sandy Soil & Rock Sim. to #3
4-A	0.6 to 12.0	Sand & Gravel Sim. to #3A
5	0.0 to 0.5	Sandy Soil & Rock
5A	0.5 to 12.0	Sand & Gravel
6.	0.0 to 0.5	Sandy Soil & Rock Sim. to #5
6-A	0.5 to 12.0	Sand & Gravel Sim. to #5A
7	0.0 to 0.7	Sandy Soil & Rock
7A	0.7 to 12.0	Sand & Gravel
8	0.0 to 0.6	Sandy Soil & Rock Sim. to #7
8-A	0.6 to 12.0	Sand & Gravel Sim. to #7A
9	0.0 to 0.6	Sandy Soil & Rock
9-A	0.6 to 12.0	Sand & Gravel

~~Estimated for~~ Stripping ~~3,300~~ 4368 Cu. Yds.

(Pit No 2 S0109(3))
West Pit 29,160' from
Sta 486+13
Hot Mix
Stripping 3608 Cu Yds

COLORADO STATE HIGHWAY DEPARTMENT
S.H.D. FORM 129
NOVEMBER 1951

FINAL LIST OF STRUCTURES

FED. ROAD DIVISION NO.	DISTRICT	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9.	COLO.	S-0120(3) S-0120(2)	6X	

LOCATION	DESCRIPTION	REMOVE STRUCTURE		EXCAVATION (CUBIC YARDS)			STRUCTURAL EXCAVATION (CUBIC YARDS)		STRUCTURE BACKFILL (CUBIC YARDS)		MECH. TAMPING	GRAVEL OR CRUSHED ROCK SURFACING	Hot Mix	CONCRETE (CUBIC YARDS)		REINFORCING STEEL	Reference	CORRUGATED METAL CULVERT PIPE (LINEAR FEET)						Corr. Culv. Arch Pipe Lin Ft.	Metal Arch Pipe Ft.	METAL APRONS FOR C.M.P. CULVERTS Arch. NO.				MISCELLANEOUS
		NO.	KIND	UNCL.	EMB.	UNCL. DITCH	Dry	Wet	CL. 1		HOURS	TONS	TONS	CL. "A"	CL. "B"	LBS.		18"	21"	24"	30"			29"x18"	36"x22"	29"x18"		36"x22"		
324+34	Road Approach Lt. - Rt.											43.80	40.85				BK.8 Pg 40, 45													
330+50 - 333+00	Parking Area Rt.											244.50	117.55				Same													
336+87	Road Approach Lt.											19.10					Same													
337+45	Road Approach Lt.											10.05					Same													
338+87	Road Approach Rt.											10.10					Same													
339+10	Road Approach Lt.											30.95					Same													
339+30 - 341+00	Parking Area Lt.											46.55	60.75				Same													
340+30	Road Approach Rt.																													
342+90	Road Approach Lt.											20.00					Same													
343+00 - 377+26	Filled Drain Ditch Lt & Rt.																X-Sections													
350+85	Road Approach Rt. Adjust Manhole Cover and Ring. Rt.											9.65					BK.8, Pg 41													Adjust Manhole Ring & Cover
351+10	Road Approach Lt.											21.50					Same													
377+69 - 430+70	Filled Drain Ditch Lt. & Rt.																X-Sections													
361+40	Road Approach Rt.											10.35					BK.8, Pg 41													
367+35	Adjust Manhole Ring & Cover																													Adjust Manhole Ring & Cover.
377+10	Remove Wood Drv. Box Rt. & 24"x32' C.M.P.	2	Wdn box C.M.P.																											
	Cross Culvert, Ditches					2.3	8.4			13.3		2					X-sect. BK.8 Pg 39							44		2				
377+29	Adjust Manhole Cover & Ring Rt.																													Adjust Manhole Ring & Cover
377+47	Road Approach Lt & Rt.											30.30	47.95				BK.8 Pg 41													
403+29	Road Approach Lt.											9.70					BK.8 Pg 41													
404+00	Road Approach Rt.											20.60					Same													
404+25	Removed 18"x32 C.M.P.	1	C.M.P.																											
405+60	Road Approach Lt.											10.00					Same													
409+60	Road Approach Rt											10.40					Same													
430+24	Road Approach Lt.											43.40					Same													
430+96	Road Approach Rt												20.65				BK.8 Pg 40													
430+50	Project Marker Rt																													1- Project Marker (State forces
	Remove & Reset Mailboxes (Entire Project)																													Remove & Reset Mailboxes
→	Totals S-0120 (3)	3				2.3	8.4			13.3		2	590.45	277.75										44		2				
430+96	Road Approach Rt												20.50				BK.8 Pg 25													
430+96 - 437+60	Filled Drain Ditch Lt.																X-Sections													
431+06 - 437+60	Filled Drain Ditch Rt.																X-Sections													
437+69	Road Approach Rt & Lt.											8.75					BK.8 Pg 26, 27													
437+ - 438+	Removed Bridge (Str. No. 0-12-K)											Quantities in Summary																		
439+00	Removed 15"x 48' C.M.P.	1	C.M.P.																											
440+00	Cross Culvert & Aprons						18.9			17.9							X-Sect. BK.8, Page 24							50		2				
450+00	Road Approach Rt.											10.05					BK.8 Pg 26-27													
455+49	Removed 2'x1'x24" Wood Box. Side Drain & Wood	1	W.B.C.																											
	Retaining Walls Lt. Road Approach Lt											9.85					Same													
457+70	Removed 21"x60' C.M.P. & Wd Headwall	1	C.M.P.																											
457+77	Cross Culvert, Aprons, Ditches					3.5	13.6			14.5							X-Sect. BK.8 Page 24							47		2				
457+86	Road Approach, Rt											9.75					BK.8 Page 26-27													
467+00	Cross Culvert, Apron Inlet						20.1			23.0							X-Sect. BK.8, Page 24							88		1				12' furn by Co for total of 100'
438+67 - 484+43	Filled Drain Ditch Lt.																X-Sect													
460+00 - 480+00	Filled Drain Ditch Rt.																X-Sect.													
483+61	Road Approach Lt.											20.80					BK.8 Page 26, 27													
484+64	Road Approach Rt.											41.30	19.50				Same													
	Sub Total	2				3.5	62.6			55.4		100.50	40.00											180		5				

COLORADO STATE HIGHWAY DEPARTMENT
S H D. FORM 129
NOVEMBER 1951

FINAL LIST OF STRUCTURES

FED. ROAD DIVISION NO.	DISTRICT	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9.	COLO.		7X	

LOCATION	DESCRIPTION	REMOVE STRUCTURE NO.	REMOVE STRUCTURE KIND	EXCAVATION CUBIC YARDS UNCL.	EXCAVATION CUBIC YARDS EMB.	EXCAVATION CUBIC YARDS UNCL. DITCH	STRUCTURAL EXCAVATION CUBIC YARDS Dry	STRUCTURAL EXCAVATION CUBIC YARDS Wet	STRUCTURE BACKFILL CUBIC YARDS CL. 1	MECH. TAMPING HOURS	GRAVEL OR CRUSHED ROCK SURFACING TONS	Hot Mix Tons	CONCRETE CUBIC YARDS CL. "A"	CONCRETE CUBIC YARDS CL. "B"	REINFORCING STEEL LBS.	Reference	CORRUGATED METAL CULVERT PIPE LINEAR FEET 18"	21"	24"	30"	Corr. Culv. Arch Pipe Lin. 29"X18"	Metal Arch Pipe Ft. 36"X22"	METAL APRONS FOR C.M.P. CULVERTS NO. 29"/18	36"/22	MISCELLANEOUS
485+07	Removed Timber Guard Rail, Rt. Extend	1	Wd. Rail					1.8	5.3																
	30"x110' C.M.P. 12' Rt. No. Aprons															X-Sections BK8 Pg 24				13					
486+13	Road Approach Lt.										81.75	78.85				BK8 Pg 25Lt									
487+00 ~ 489+00	Filled Drain Ditch Lt.															X-Sections									
496+22	Double Road Approach Rt.										7.55					BK8 Pg 26									
499+00 ~ 498+00	Filled Drain Ditch Rt.															X-Sections									
509+33	Road Approach Rt.										10.05					BK8 Pg 27									
510+42	Extend 21'X84 C.M.P. 10' Rt. No Aprons						1.6		3.3							X-Sections BK8 Pg 24		11							
520+00	Road Approach Rt.										10.25					BK8 Pg 27									
536+34	Removed 18"x11"x52 C.M.P. Cross Culvert Ditches	1	C.M.P.			3.2	14.8		13.9							X-Sections BK8 Pg 24					46		2		
536+72	Road Approach Rt & Lt.										80.90	46.75				BK8 Pg 25-27									
548+94	Road Approach Lt.										9.35					BK8 Pg 27									
544+85	Road Approach Lt.										9.25					Same.									
549+76	Road Approach Rt.										20.95					Same									
550+38	Road Approach Rt.										No Quant. Involved														
561+96	Road Approach Rt										10.45					Same									
558+23	Road Approach Lt										17.15					Same									
568+51	Extend 18"x 86' C.M.P. 6' Rt. Ditch					1.7	1.0		1.8							X-Sections BK8 Pg 24	7								
578+00	Road Approach Lt.										9.25					BK8 Pg 27									
590+42	Extend 18"x 34' C.M.P Side Drain Rt.																								
	12' East, 8' West Road Approach Rt & Lt										49.70	49.75				BK8 Pg 24	13 9								
616+18	Remove & Reset Wd. Div. Box Rt.																								Removed & Reset Wd Div. Box.
621+00 ~ 641+92	Filled Drain Ditch Rt.															X-Sections									
640+14	Removed 2-2'x1'x17' Wld box side drains																								Work by Co Forces
	Road Approaches Rt & Side Drains										10.65					BK8 Pg 26	26		26						
642+43 ~ 647+74	Filled Drain Ditch Rt.															X-Sections									
642+13	Extend 30"x 34' C.M.P Side drain Rt.																								
	8' at outlet Road Approach Rt & Lt.										90.05	30.15				X-Sections BK8, Pg 24-27				9					
643+50 ~ 645+00	Parking Area Lt.										123.85	98.85				BK8, 25-27									
647+ ~ 648+	Removed Timber Bridge Sta. No. 0-12-I										Quantities in Summary														
646+00 ~ 647+00	Filled Drain Ditch Lt.																								
649+00 ~ 651+00	Filled Drain Ditch Rt.																								
655+90	Road Approach Lt.										10.50					BK8, Pg 27									
657+10	Road Approach Rt.										10.30					Same									
657+78	Road Approach Lt.										9.20					Same									
668+74	Removed 30"x 36' C.M.P Cross Culvert.	1	C.M.P.				18.3		14.7							X-Sections BK 8, Pg 24						42		2	
669+00	Road Approach Rt.										17.65					BK8, Pg 27									
692+73	Road Approach Lt										18.95					Same									
694+85	Removed 21"x 36' C.M.P. & Relayed 20'	1	C.M.P.																						
	ds Cross Culvert. Sta 695+47 Cross Culvert.						9.8		14.5							X-Sections BK 8, Pg 24					42		2		
695+22	Road Approach Rt- Lt.										81.55	41.75				BK 8, Pg 25-27									
695+47	Relay 21"x 64' C.M.P. 20' from 694+85					0.8	15.7		18.2							BK 8, Pg 24		1							Relay 21"x 64' C.M.P.
	44' from 695+47 No Aprons Ditch																								
708+30	Road Approach Rt										19.50					BK8, Pg 27									
	Sub-Totals	4				5.7	56.2	1.8	71.7		709.40	345.70					55	12	26	22	88	42	4	2	

COLORADO STATE HIGHWAY DEPARTMENT
S. H. D. FORM 129
NOVEMBER 1951

FINAL LIST OF STRUCTURES

FED. ROAD DIVISION NO.	DISTRICT	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9.	COLO.	S-0120-(3) S-0120-(2)	8X.	

LOCATION	DESCRIPTION	REMOVE STRUCTURE		EXCAVATION (CUBIC YARDS)			STRUCTURAL EXCAVATION (CUBIC YARDS)		STRUCTURE BACKFILL (CUBIC YARDS)		MECH. TAMPING	GRAVEL OR CRUSHED ROCK SURFACING	Hot Mix	CONCRETE (CUBIC YARDS)		REINFORCING STEEL	Reference	CORRUGATED METAL CULVERT PIPE (LINEAR FEET)					Corr. Culv. Arch Pipe Lin.	Metal Arch Pipe Ft.	METAL APRONS FOR C.M.P. CULVERTS (NO.)		MISCELLANEOUS
		NO.	KIND	UNCL.	EMB.	UNCL. DITCH	Dry	Wet	CL. 1		HOURS	TONS	TONS	CL. "A"	CL. "B"	LBS.		18"	21"	24"	30"		29"x18"	36"x22"	29"/18	36x22	
710+50	Road Approach Lt.											7.00					BK 8 Pg 27										
720+04	Road Approach Rt.											8.95					Same										
721+00	Road Approach Rt.											9.00					Same										
721+80	Road Approach Lt.											30.25					Same										
735+10	Road Approach Lt.											40.70					Same										
746+65	Project Marker Rt (State Forces)																										1 Project Marker (State Forces)
	Mechanical Tamping Entire Project										141.5						BK 8 Pg 29										
	Removing & Resetting Mail Boxes Entire Project																										Removing & Resetting Mail Boxes
	Totals S-0120 (2)	7				9.2	118.8	1.8			141.5	809.90	385.70					55	12	26	22		268	42	9	2	

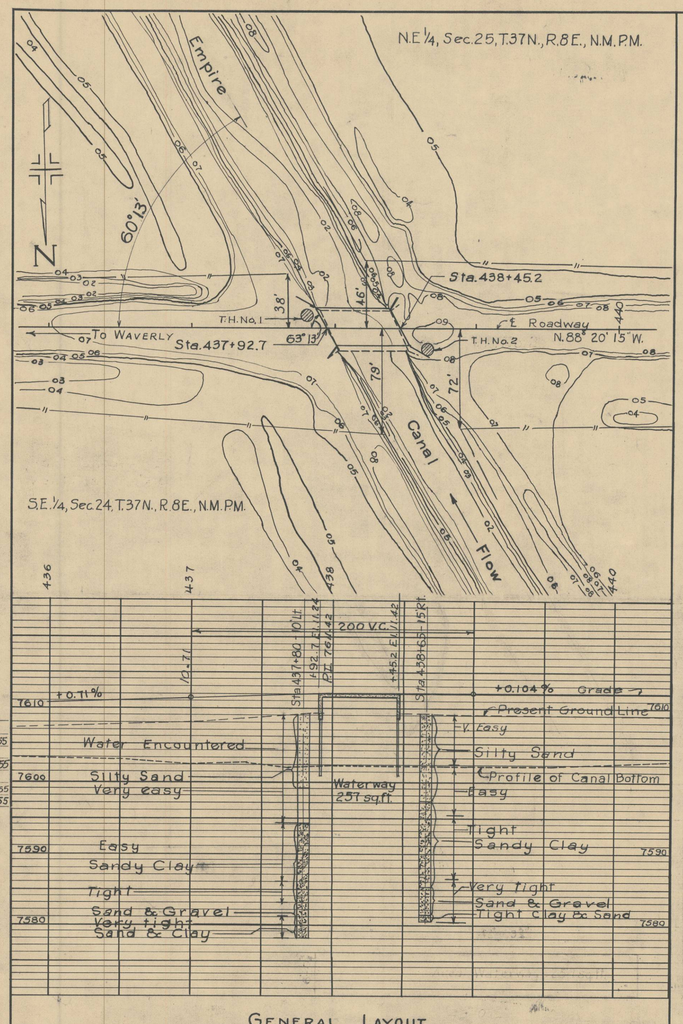
C. F. HIRSCHEL CO. DENVER, COLO.

COLO. DEPT. OF HIGHWAYS
FORM C.D.H. 138
JULY 1953—500

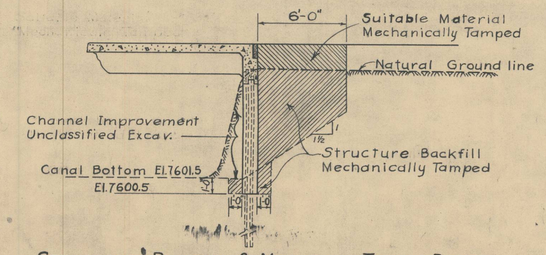
BRIDGE TRACING SHEETS—LOADING DATA AND GENERAL NOTES

REVISIONS

FED. ROAD DIV. NO.	DISTRICT	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S 0120 (2)	89	



GENERAL LAYOUT



STRUCTURE BACKFILL & MECHANICAL TAMPING DIAGRAM

All material that is to be mechanically tamped, shall be placed in horizontal layers not more than 6 inches in depth and tamped before the next layer is placed.

	Initial	Date
Designed By	E.F.S.	3-1-55
Checked By		
Drawn By	W.L.P.	3-15-55
Checked By		
Traced By	J.C.S.	5-8-55
Checked By	D.S.M.	6-8-55

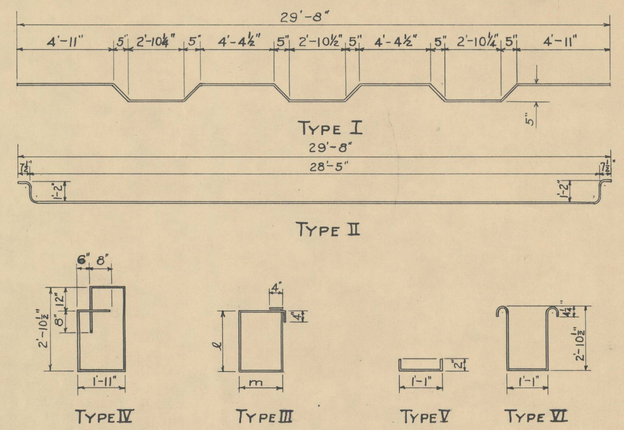
BAR LIST FOR ENTIRE STRUCTURE

Mark	Size	No. Req'd	Length	Type	Dimensions ℓ	Dimensions m
401	½"ϕ	196	26'-2"	Str.		
402	½"ϕ	72	3'-9"	III	1'-0½"	0'-6"
403	½"ϕ	62	10'-11"	IV		
404	½"ϕ	124	8'-0"	Str.		
405	½"ϕ	64	29'-3"	Str.	(Field	Bend)
406	½"ϕ	32	26'-6"	Str.		
407	½"ϕ	180	7'-10"	VI		
408	½"ϕ	56	1'-5"	V		
410	½"ϕ	6	10'-8"	Str.		
411	½"ϕ	6	10'-8"	Str.		
412			8'-2"			
to	½"ϕ	4 ea.	by 4" to	Str.		
419			10'-6"			
420	½"ϕ	2	3'-6"	Str.		
421			11'-0"			
to	½"ϕ	4 ea.	by 2'-9" to	Str.		
423			5'-6"			
424	½"ϕ	2	10'-8"	Str.		
425	½"ϕ	2	11'-5"	Str.		
426			8'-2"			
to	½"ϕ	4 ea.	by 1⅞" to	Str.		
442			10'-8"			
443			19'-0"			
to	½"ϕ	4 ea.	by 5'-6" to			
445			8'-0"			
446	½"ϕ	2	4'-0"			
501	⅝"ϕ	32	30'-8"	I		
502	⅝"ϕ	32	32'-0"	II		
503	⅝"ϕ	32	29'-8"	Str.		
601	¾"ϕ	6	29'-8"			
801	1"ϕ	4	29'-8"			
1101	⅞"ϕ	16	52'-0"	Str.		
1102	1⅜"ϕ	8	45'-0"	Str.		
1103	1⅜"ϕ	8	40'-0"	Str.		
1104	1⅜"ϕ	8	34'-0"	Str.		
1105	1⅜"ϕ	8	26'-0"	Str.		

BAR SUMMARY FOR ENTIRE STRUCTURE

12,661 Lin.ft. ½"ϕ @ 0.668 lb. per lin.ft.	=	8458 lbs.
2955 " " ⅝"ϕ @ 1.043 " " " "	=	3082 "
178 " " ¾"ϕ @ 1.502 " " " "	=	268 "
118 " " 1"ϕ @ 2.670 " " " "	=	316 "
1992 " " 1⅜"ϕ @ 5.313 " " " "	=	10,583 "
Plus 1% ± Overrun		228 "
Total		22 935 "

BAR BENDING DIAGRAM



All Dimensions are out to out.

SCHEDULE OF BRIDGE TIMBER

	No.	Size	Length	Untreated	Treated
Headers	2	6" x 12"	27'-4½"	328 bd.ft.	
Posts S4S	12	6"x 8"	6'-0"		288 bd.ft.
			Total	328 bd.ft.	288 bd.ft.

SUMMARY OF QUANTITIES (ENTIRE STRUCTURE)

ITEM	DESCRIPTION	UNIT	TOTAL
11a	Removal of Bridge, Sta. 437+	Lump Sum	Lump Sum
13c	Unclassified Excavation	Cu.Yd.	50
14b	Dry Common Excavation (Str.)	Cu.Yd.	65
14d	Wet Common Excavation (Str.)	Cu.Yd.	20
16a	Structure Backfill (Class I)	Cu.Yd.	120
16c	Mechanical Tamping	Hour	12
42a	Untreated Bridge Timber	M ft. bm.	0.328
42b	Treated Bridge Timber	M ft. bm.	0.288
46a	Class "A" Concrete	Cu. Yd.	101
47	Reinforcing Steel (Plus 1% ± Overrun)	Lb.	22 935
48	Structural Steel (Plus ½% for Paint)	Lb.	1160
61ac	Steel Piling (10" BP @ 42 #F)	Lin. ft.	780
75cx	Metal Plate Guard Fence (Beam Type)	Lin. ft.	150
89b	Drain Pipe (Concrete Floor) (4"ϕ x 2'0")	Each	2

HARDWARE— Post to curb, 72 - ⅞"ϕ x 0'10" sq. hd., hex. nut, lock washer in Structural Steel. Headers — 38 - ⅝"ϕ x 1'-4" bolts, G.I.O.G. washers in bid price of untreated timber. Rail to Timber Posts — 12 - ⅝"ϕ x 10" bolts, special head, hex. nut, G.I.O.G. washer, in bid price of Guard Rail. Rail-to-Rail - 108 - ⅝"ϕ x 1¼" bolts, special head, sq. nut, included in price of Guard Rail.
Rail to Steel Posts — 36 - ⅝"ϕ x 1¼" bolts, special head and square nut included in price of Guardrail.

GENERAL NOTES

ALL WORK SHALL BE DONE ACCORDING TO THE STANDARD SPECIFICATIONS OF THE COLORADO DEPARTMENT OF HIGHWAYS APPLICABLE TO THE PROJECT.
ALL CONCRETE SHALL BE CLASS "A" AND AIR ENTRAINED AS SPECIFIED.
ALL CONCRETE SURFACES EXPOSED TO VIEW SHALL RECEIVE CLASS "1" SURFACE FINISH, EXCEPT THE UNDERSIDE OF FLOOR SLABS AND ABUTMENT FACES BETWEEN OUTSIDE STRINGERS.
CONCRETE GIRDERS, FLOOR SLABS, AND CURBS SHALL BE POURED MONOLITHICALLY.
FORMS FOR CONCRETE SURFACES EXPOSED IN THE FINISHED WORK SHALL BE CONSTRUCTED OF SHIPLAP OR TONGUE AND GROOVE LUMBER 5 3 5 UNLESS FACED WITH PANEL BOARD.
FOOTINGS IN ROCK SHALL BE POURED OUT TO ROCK AND NOT FORMED.
SOUNDINGS AND DEPTH OF FOOTING SHOWN ARE IN ACCORDANCE WITH THE BEST AVAILABLE DATA AND WHEN DIFFERENT CONDITIONS ARE ENCOUNTERED THE BRIDGE ENGINEER WILL INSPECT AND DETERMINE IF REDESIGN IS NECESSARY.
ALL REINFORCING STEEL SHALL CONFORM TO ASTM SPECIFICATION A 305-50T OR THE LATEST REVISION THEREOF, AND SHALL BE INTERMEDIATE GRADE STEEL OF A DEFORMED TYPE. EACH BAR SHALL BE TAGGED WITH THE NUMBER DESIGNATION AND THE STATION NUMBER OF THE PROJECT. PRIMARY BARS SHALL NOT BE SPLICED AND SECONDARY BARS WHEN SPLICED SHALL LAP 20 DIAMETERS OF THE BAR. DIMENSIONS FOR REINFORCING STEEL NOT SHOWN AS CLEAR SHALL BE TO THE CENTER LINE OF THE BAR.
ALL STRUCTURAL STEEL SHALL BE PAINTED ONE SHOP COAT OF ZINC CHROMATE AND TWO FIELD COATS OF ALUMINUM, UNLESS OTHERWISE NOTED, EXCEPT THE UNEXPOSED PORTION OF STEEL PILING NEED NOT BE PAINTED.
HANDRAIL BOLTS SHALL HAVE HEX HEADS, NUTS, AND LOCK WASHERS UNLESS OTHERWISE SPECIFIED AND ALL RIVETS, EXCEPT AS NOTED ARE ¾" DIA. AND SHALL BE POWER DRIVEN.
WHEN TREATED TIMBER OR PILING IS SHOWN ON THE DRAWING THE PRESERVATIVE FOR TREATMENT SHALL BE CREOSOTE OIL.
WHEN EXCAVATING FOR FOOTINGS THE FINAL ONE FOOT IN DEPTH SHALL BE DONE BY HAND LABOR METHODS.
TREATED TIMBER POSTS SHALL BE PAINTED TWO FIELD COATS OF ALUMINUM PAINT AFTER GUARDRAIL IS IN PLACE.

LOADING DATA

LIVE LOAD = A.A.S.H.O. (H-20-44)
DEAD LOAD ASSUMES 15 LBS. PER SQ. FT. ADDITIONAL WEARING SURFACE WHICH INCLUDES THE ½ INCH CONCRETE MONOLITHIC WEARING SURFACE SHOWN.

DESIGNING DATA

A. A. S. H. O. 1953 UNIT STRESSES, EXCEPT AS NOTED.

Reinforcing Steel fs = 20000 lbs. per sq. in.
Structural Steel fs = 18000 lbs. per sq. in.
fc = 1000 lbs. per sq. in.
n = 10

STRUCTURE NO. 0-12-K

COLORADO
DEPARTMENT OF HIGHWAYS
50' CONCRETE GIRDER SPAN
24' CLEAR ROADWAY — 1'-0" CURBS
60°-13' SKEW

GENERAL LAYOUT— BAR LISTS— SUMMARY OF QUANTITIES

Across EMPIRE CANAL
Sta. 437+92.7 To 438+45.2
Near ALAMOSA-RIO GRANDE CO. LINE Sec. 25/24 T. 37 N. R. 8E.

Designed by E.F.S.	Approved by L.L. Hammel
Made by W.L.P.	Bridge Engineer
Checked by	Date: July 1 1955

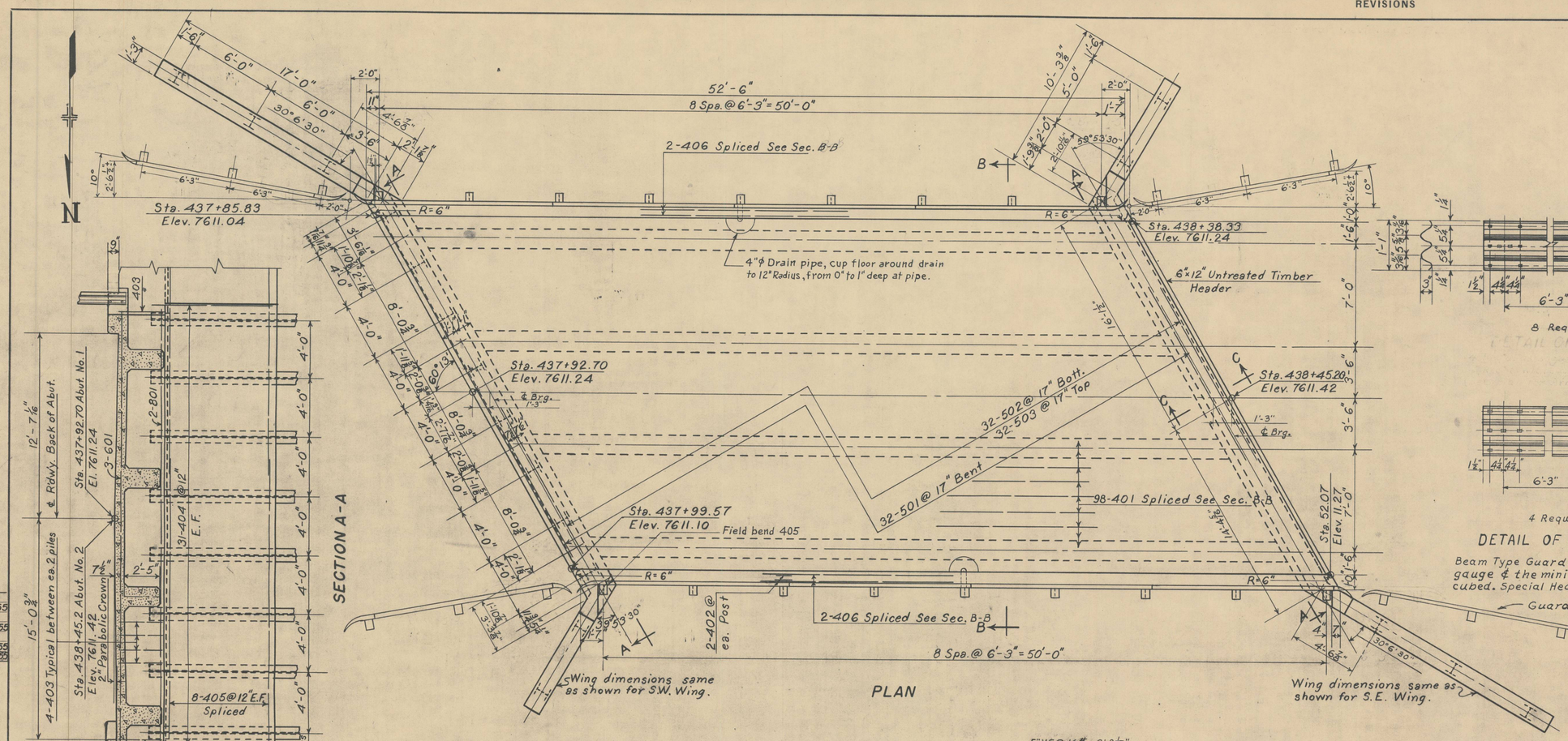
COLO. DEPT. OF HIGHWAYS
FORM C.D.H. 137
MAR. 1953

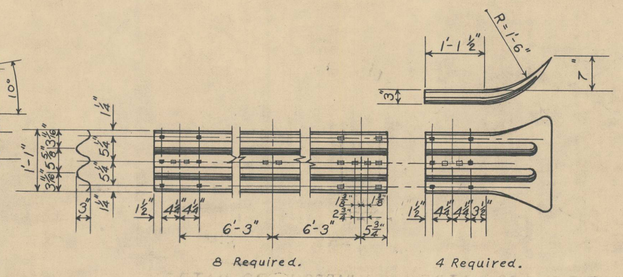
BRIDGE TRACING SHEETS—PLAIN

REVISIONS

FED. ROAD DIV. NO.	DISTRICT	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S 0120 (2)	10	

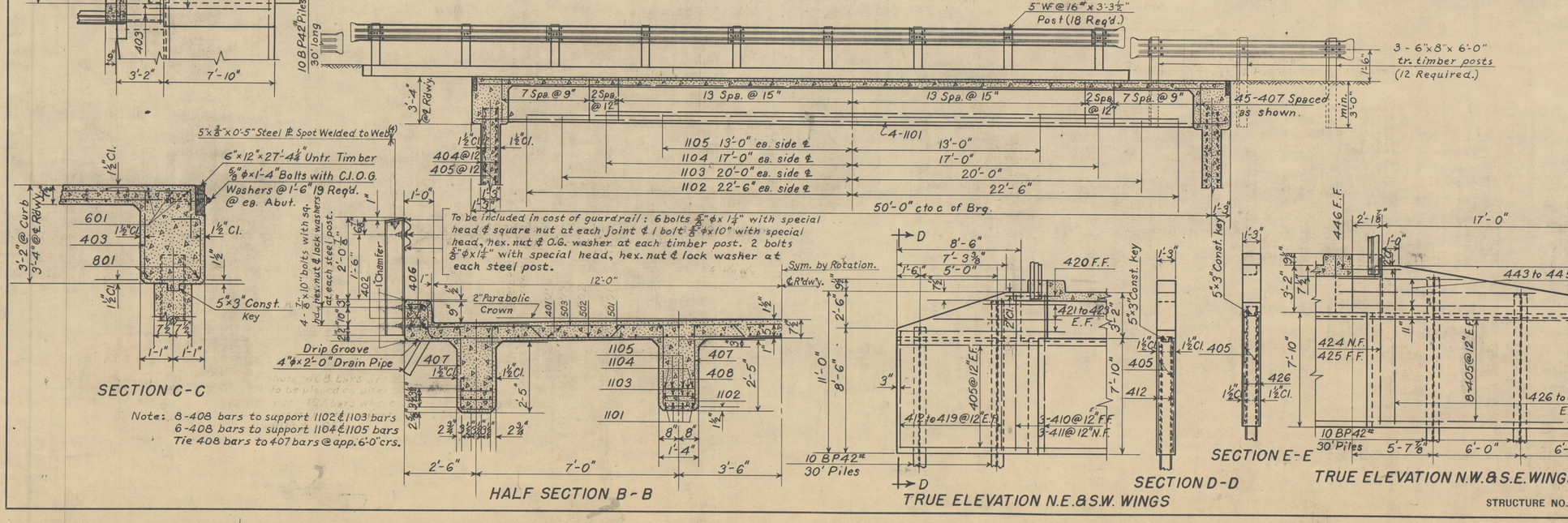
	Initial	Date
Designed By	E.F.S.	3-1-55
Checked By		
Drawn By	W.L.P.	3-15-55
Checked By		
Traced By	J.L.G.	4-15-55
Checked By	B.L.I.	4-22-55





Beam Type Guardrails shall not be lighter than No.12 U.S. Standard gauge & the minimum acceptable modulus shall be 1.05 inches cubed. Special Head Bolts used in Guardrail shall be galvanized.

Guardrail dimensions same as South Side.



Note: 8-408 bars to support 1102 ℄ 1103 bars
6-408 bars to support 1104 ℄ 1105 bars
Tie 408 bars to 407 bars @ app. 6'-0" crs.

COLORADO
DEPARTMENT OF HIGHWAYS

REINFORCED CONCRETE SLAB & GIRDER TRESTLE
24' CLEAR ROADWAY
60°13' SKEW

Across EMPIRE CANAL
Sta. 437+92.70 To 438+45.20
Near ALAMOSA Sec. 24/25, T. 37 N., R. 8 E.

Designed by E.F.S.	Approved by C. D. Knowlton
Made by W.L.P.	Bridge Engineer
Checked by	Date: July 1, 1955

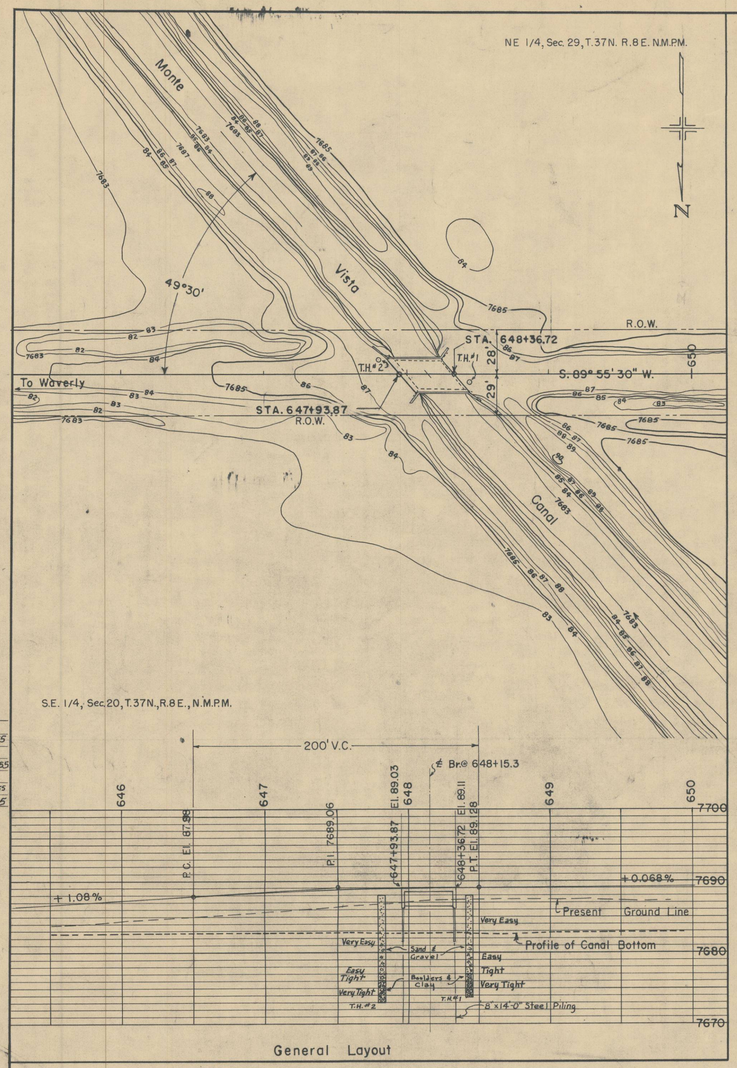
STRUCTURE NO. 0-12-K

COLO. DEPT. OF HIGHWAYS
FORM C.D.H. 138
JULY 1953—500

BRIDGE TRACING SHEETS—LOADING DATA AND GENERAL NOTES

REVISIONS Bar List Revised By M.E.P. - 10/13/55

FED. ROAD DIV. NO.	DISTRICT	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S-0120(2)	10 11	



General Layout

	Initial	Date
Designed By	E.F.S.	3-1-55
Checked By		
Drawn By	T.J.M.	3-30-55
Checked By		
Traced By	E.M.C.	3-22-55
Checked By	A.E.S.	5-2-55

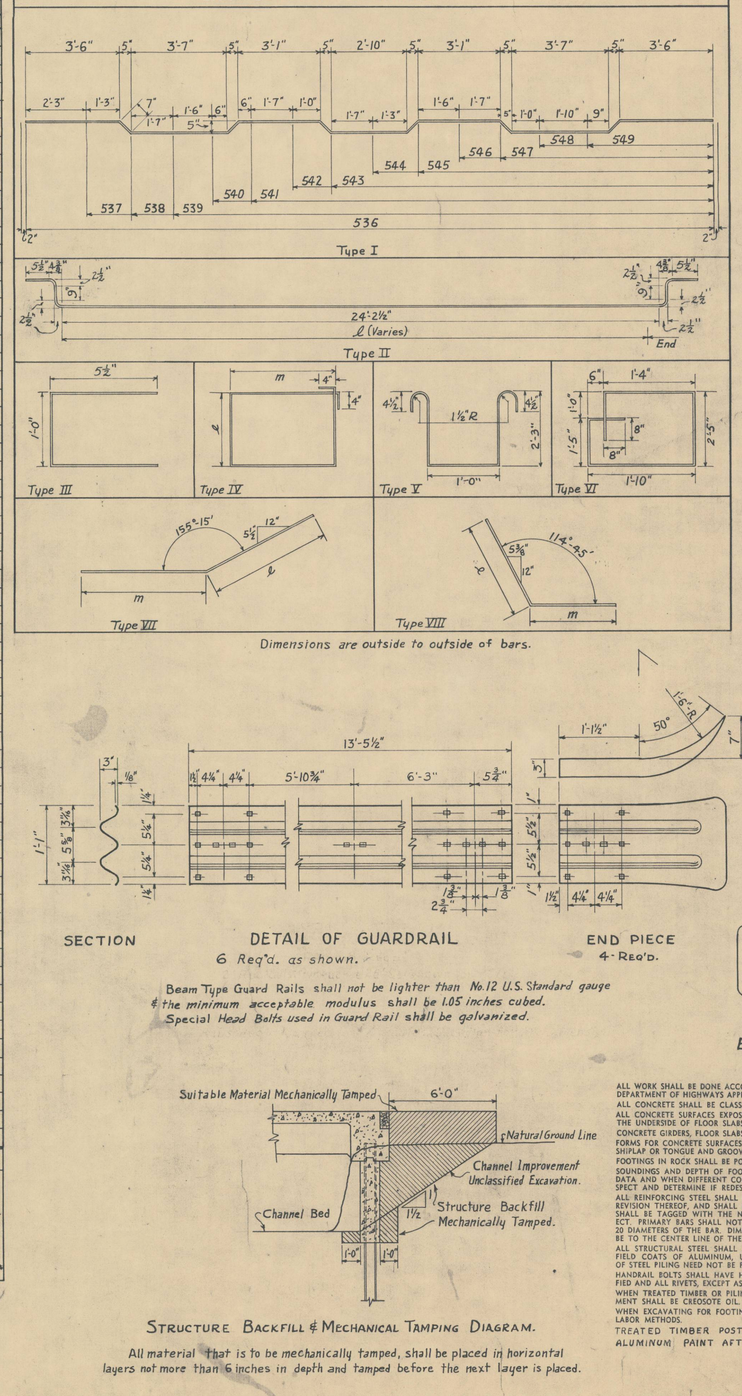
BAR LIST FOR ENTIRE STRUCTURE

Mark	Size	No. Req'd	Length	Type	Dimensions ℓ	m	n
401	½"ϕ	48	5'-3"	Str.			
402	"	10	26'-8"	VII	12'-8"	14'-0"	
403	"	10	31'-4"	VII	12'-6"	18'-10"	
404	"	10	31'-0"	VIII	7'-0"	24'-0"	
405	"	10	24'-9"	VIII	6'-6"	18'-3"	
406			5'-0"				
to	"	4 ea.	By 5/8" to	Str.			
414			7'-7"				
415			4'-10"				
to	"	4 ea.	By 8" to	Str.			
419			7'-6"				
420			3'-6"				
to	"	4 ea.	By 4'-0" to	Str.			
422			11'-6"				
423			1'-8"				
to	"	4 ea.	By 2'-7" to	Str.			
425			6'-10"				
426	"	40	9'-8"	VI			
427	"	4	9'-0"	IV	2'-5"	1'-10"	
428	"	16	21'-11"	Str.			
429	"	58	21'-2"	Str.			
430	"	184	6'-6"	V			
431	"	44	1'-11"	III			
432	"	28	3'-10"	IV	6"	1'-1"	
501	5/8"ϕ	4	35'-6"	Str.			
502	"	2	33'-6"	Str.			
504	"	15	27'-10"	II			
505			25'-4"		23'-6"	By ½ r to	
to	"	2 ea.	to	II			
519			3'-2"		1'-4"		
520	"	15	25'-9"	Str.			
521			24'-3"				
to	"	2 ea.	By 1'-7" to	Str.			
535			2'-1"				
536	"	16	26'-8"	I			
537	"	2	24'-5"	I			
538	"	2	22'-7"	I			
539	"	2	21'-0"	I			
540	"	2	19'-6"	I			
541	"	2	17'-11"	I			
542	"	2	16'-4"	I			
543	"	2	14'-9"	I			
544	"	2	13'-2"	I			
545	"	2	11'-4"	I			
546	"	2	9'-10"	I			
547	"	2	8'-3"	I			
548	"	2	6'-8"	I			
549	"	2	4'-10"	I			
801	1"ϕ	2	34'-0"	Str.			
802	"	2	36'-0"	Str.			
1001	1¼"ϕ	16	42'-6"	Str.			
1002	1¼"ϕ	8	36'-0"	Str.			
1003	1¼"ϕ	8	32'-0"	Str.			
1004	1¼"ϕ	8	28'-0"	Str.			
1005	1¼"ϕ	8	22'-0"	Str.			

BAR SUMMARY

5278 Lin. Ft.	½" ϕ @ 0.668 #/ft. =	3526 #
2643 " "	5/8" ϕ @ 1.043 #/ft. =	2757 #
140 " "	1" ϕ @ 2.670 #/ft. =	374 #
1624 " "	1¼" ϕ @ 3.373 #/ft. =	6988 #
	+1% ℄ Overrun =	135 #
	Total =	13780 #

BAR BENDING DIAGRAMS



Dimensions are outside to outside of bars.

SUMMARY OF QUANTITIES (ENTIRE STRUCTURE)

ITEM	DESCRIPTION	UNIT	TOTAL
11b	Removal of Bridge, Sta. 648+	Lump Sum	Lump Sum
42b	Treated Bridge Timber	M.Ft.bm.	.288
13c	Unclassified Excavation	Cu. Yds.	110
48	Structural Steel (Includes 2% for paint)	Lb.	895
14b	Dry Common Excavation (Str.)	Cu. Yds.	6
14d	Wet Common Excavation (Str.)	Cu. Yds.	20
16a	Structure Backfill (Class 1)	Cu. Yds.	85
16c	Mechanical Tamping	Hours	13.5
42a	Untreated Bridge Timber	Mft. bm	.384
46a	Class "A" Concrete	Cu. Yd.	77.6
47	Reinforcing Steel (Includes 1% for overrun)	Lb.	13780
61ab	Steel Piling (8"BP36 # 14' long)	Lin.Ft.	364
75cx	Metal Plate Guard Fence (Beam Type)	Lin.Ft.	125
89b	Drain Pipe (Concrete Floor) (4"ϕx2'-0")	Each	2

SCHEDULE OF BRIDGE TIMBER

	No.	Size	Length	Untreated	Treated
Headers	2	6"x12"	32'-0"	384- bd.ft.	
Posts S4S	12	6"x 8"	6'-0"		288 bd.ft.
Total				384 bd.ft.	288 bd.ft.

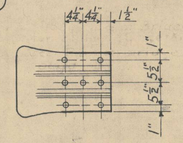
HARDWARE — Posts to curb - 56-7/8"x-10" Bolts sq. hds. hex. nuts & Lock Washers in Structural Steel. Headers - 42-5/8"x1'-8" Bolts C.I.O.G. Washers in bid price of untreated timber. Rail to Timber Posts - 12-5/8"x10" Bolts special head, Hex. Nut C.I.O.G. washers, in bid price of Guard Rail. Rail to Rail - 96-5/8"x1¼" Bolts, Special head, sq. nuts, included in price of Guard Rail. Rail to Steel Posts — 28-7/8"x1¼" bolts, special head & square nut, included in price of Guardrail.

SECTION

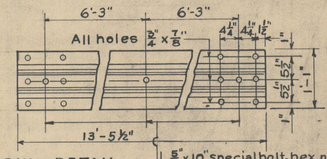
DETAIL OF GUARDRAIL
6 Req'd. as shown.

END PIECE
4- Req'd.

Beam Type Guard Rails shall not be lighter than No.12 U.S. Standard gauge & the minimum acceptable modulus shall be 1.05 inches cubed. Special Head Bolts used in Guard Rail shall be galvanized.



END PIECE
8 Req'd.



WING GUARDRAIL DETAIL
4 Sections Req'd.

⅝" x 10" special bolt, hex. nut & Lock washer each post.

STRUCTURE BACKFILL & MECHANICAL TAMPING DIAGRAM.

All material that is to be mechanically tamped, shall be placed in horizontal layers not more than 6 inches in depth and tamped before the next layer is placed.

GENERAL NOTES

ALL WORK SHALL BE DONE ACCORDING TO THE STANDARD SPECIFICATIONS OF THE COLORADO DEPARTMENT OF HIGHWAYS APPLICABLE TO THE PROJECT.
ALL CONCRETE SHALL BE CLASS "A" AND AIR ENTRAINED AS SPECIFIED.
ALL CONCRETE SURFACES EXPOSED TO VIEW SHALL RECEIVE CLASS "1" SURFACE FINISH, EXCEPT THE UNDERSIDE OF FLOOR SLABS AND ABUTMENT FACES BETWEEN OUTSIDE STRINGERS.
CONCRETE GIRDERS, FLOOR SLABS, AND CURBS SHALL BE POURED MONOLITHICALLY.
FORMS FOR CONCRETE SURFACES EXPOSED IN THE FINISHED WORK SHALL BE CONSTRUCTED OF SHIPLAP OR TONGUE AND GROOVE LUMBER S 3 S UNLESS FACED WITH PANEL BOARD.
FOOTINGS IN ROCK SHALL BE POURED OUT TO ROCK AND NOT FORMED.
SOUNDINGS AND DEPTH OF FOOTING SHOWN ARE IN ACCORDANCE WITH THE BEST AVAILABLE DATA AND WHEN DIFFERENT CONDITIONS ARE ENCOUNTERED THE BRIDGE ENGINEER WILL INSPECT AND DETERMINE IF REDESIGN IS NECESSARY.
ALL REINFORCING STEEL SHALL CONFORM TO ASTM SPECIFICATION A 305-50T OR THE LATEST REVISION THEREOF, AND SHALL BE INTERMEDIATE GRADE STEEL OF A DEFORMED TYPE. EACH BAR SHALL BE TAGGED WITH THE NUMBER DESIGNATION AND THE STATION NUMBER OF THE PROJECT. PRIMARY BARS SHALL NOT BE SPLICED AND SECONDARY BARS WHEN SPLICED SHALL LAP 20 DIAMETERS OF THE BAR. DIMENSIONS FOR REINFORCING STEEL NOT SHOWN AS CLEAR SHALL BE TO THE CENTER LINE OF THE BAR.
ALL STRUCTURAL STEEL SHALL BE PAINTED ONE SHOP COAT OF ZINC CHROMATE AND TWO FIELD COATS OF ALUMINUM, UNLESS OTHERWISE NOTED, EXCEPT THE UNEXPOSED PORTION OF STEEL PILING NEED NOT BE PAINTED.
HANDRAIL BOLTS SHALL HAVE HEX. HEADS, NUTS, AND LOCK WASHERS UNLESS OTHERWISE SPECIFIED AND ALL RIVETS, EXCEPT AS NOTED ARE ¾" DIA. AND SHALL BE POWER DRIVEN.
WHEN TREATED TIMBER OR PILING IS SHOWN ON THE DRAWING THE PRESERVATIVE FOR TREATMENT SHALL BE CREOSOTE OIL.
WHEN EXCAVATING FOR FOOTINGS THE FINAL ONE FOOT IN DEPTH SHALL BE DONE BY HAND LABOR METHODS.
TREATED TIMBER POSTS SHALL BE PAINTED TWO FIELD COATS OF ALUMINUM PAINT AFTER GUARDRAIL IS IN PLACE.

LOADING DATA

LIVE LOAD — A. A. S. H. O. (H-20-44)
DEAD LOAD ASSUMES 15 LBS. PER SQ. FT. ADDITIONAL WEARING SURFACE WHICH INCLUDES THE ½ INCH CONCRETE MONOLITHIC WEARING SURFACE SHOWN.

DESIGNING DATA

A. A. S. H. O. 1953 UNIT STRESSES, EXCEPT AS NOTED.
Reinforcing Steel fs = 20000 lbs. per sq. in.
Structural Steel fs = 18000 lbs. per sq. in.
fc = 1000 lbs. per sq. in.
n = 10

COLORADO DEPARTMENT OF HIGHWAYS

40'-CONCRETE GIRDER SPAN
24'-ROADWAY-1'-0"CURBS
49°-30' SKEW
GENERAL LAYOUT - BAR LISTS
SUMMARY OF QUANITIES

Across Monte Vista Canal
Sta. 647+93.87 To 648+36.72
Near Bowen Church Sec. 29/20 T. 37 N. R. 8 E.

Designed by E.F.S.	Approved by C.H.D. Kreutzfeldt
Made by T.J.M.	Bridge Engineer
Checked by	Date: July 1, 1955

STRUCTURE NO. O-12-I

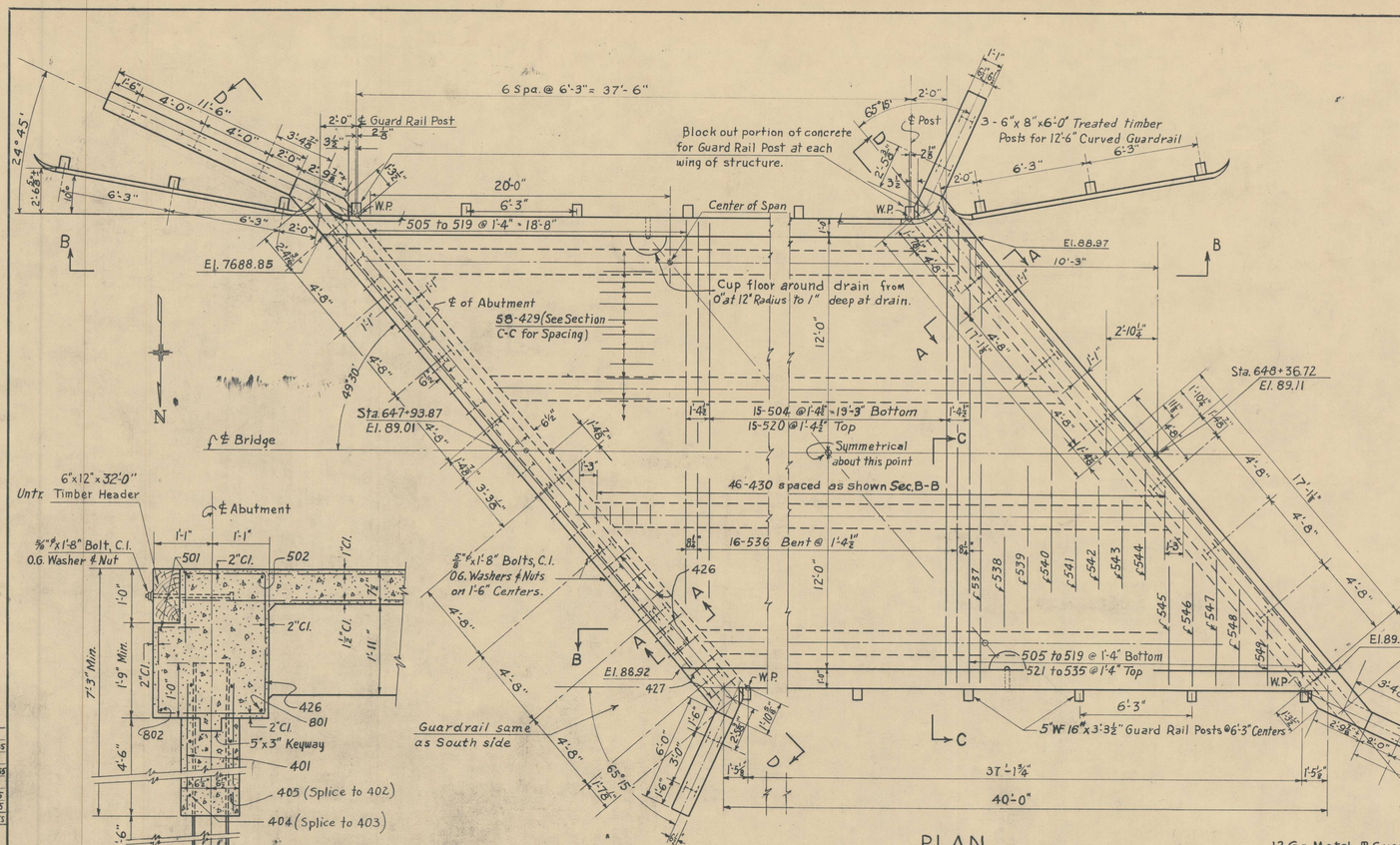
COLO. DEPT. OF HIGHWAYS
FORM C.D.H. 137
MAR. 1953

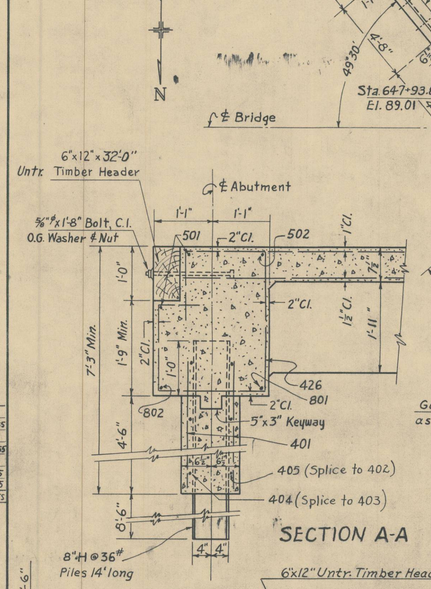
BRIDGE TRACING SHEETS—PLAIN

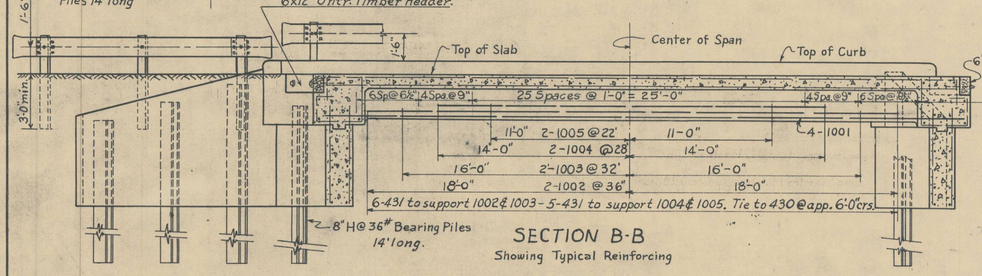
REVISIONS Bar List Revised By M.E.P. - 10/13/55

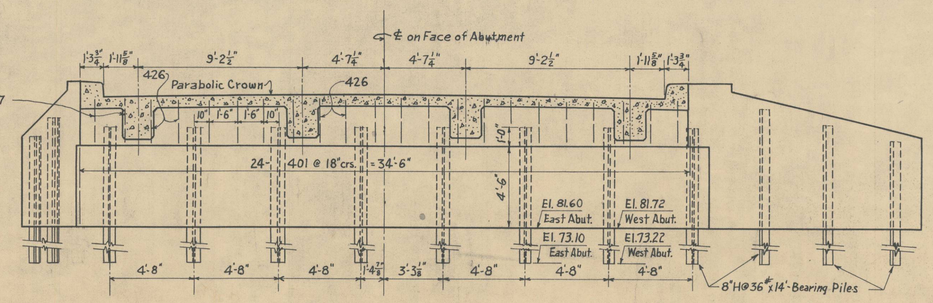
FED. ROAD DIV. NO.	DISTRICT	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S0120(2)	12	

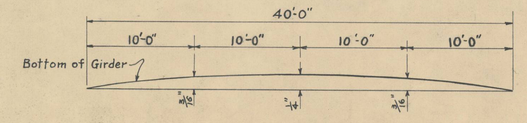
	Initial	Date
Designed By	E.F.S.	3-1-55
Checked By		
Drawn By	T.J.M.	3-30-55
Checked By		
Traced By	E.M.C.	4-5-55
Checked By	B.L.I.	4-25-55
Retraced by	J.C.S.	10 May 55

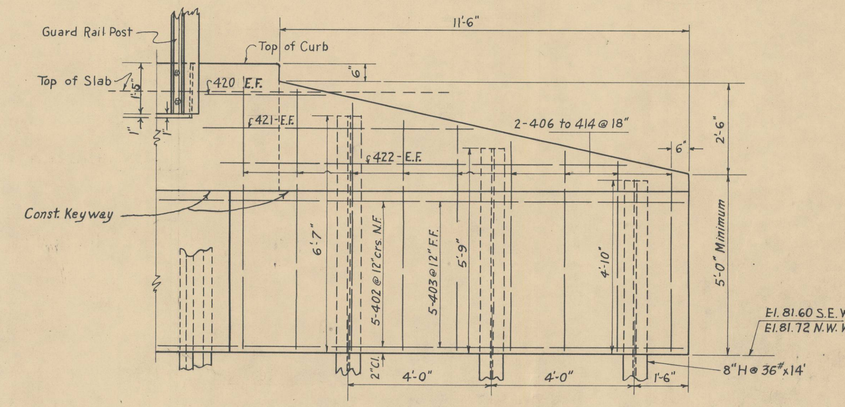


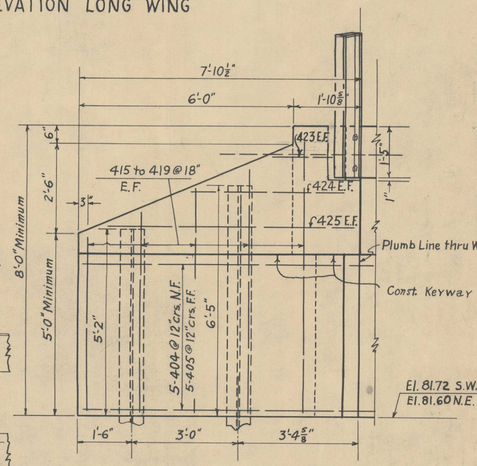




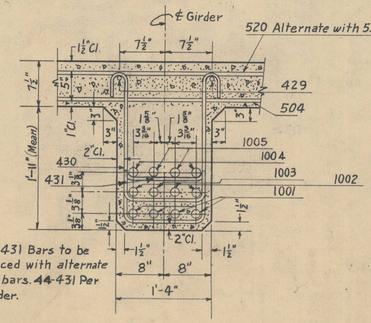








Both wood & steel posts, furnish 6-⅝"ϕ x 1¼" bolts, special head & nut at each joint. To be included in cost of Guard Rail.



Note: Bar dimensions are to center of bar unless marked "Cl." (Clear)

STRUCTURE NO. O-12-I

COLORADO
DEPARTMENT OF HIGHWAYS
40'-0" SPAN CONCRETE SLAB AND GIRDER BRIDGE
24'-0" ROADWAY
49°30' SKEW
Across Monte Vista Canal
Sta. 647+93.87 To 648+36.72
Near Bowen Church Sec. 20/29 T. 37 N. R. 8 E.

Designed by E.F.S.	Approved by [illegible]
Made by T.J.M.	Bridge Engineer
Checked by	Date: July 1, 1955

FED. ROAD DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S0120(3)	20	

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.

Timber Guard Posts are tabulated on sheet No. 3

NE 1/4, Sec. 29, T 37 N, R9E, NMPM

P.I. 324+37.5 Bk. = 324+34.2 Ahd.
Δ = 0°07' Rt.
6 Mail Boxes
324+34 Road Approach Rt.-Lt.

Uncultivated

336+33 – Right Road Approach, Lt.

337+45 – Right Road Approach, Lt.

339+10 – Right Road Approach, Lt.

339+30 to 341+00 Parking Area Lt.

STAKE ON FENCE POST — P.I. 341+15.9 — 30.8' — 30.0' — STAKE ON FENCE POST

342+90 – Right Road Approach, Lt.

343+00 – 377+26 Fill
343+10 to 377+26 – Right Rt. Drain Ditch, Lt.-Rt.

Cultivated

351+10 – Right Road Approach, Lt.

NW 1/4, Sec. 29, T 37 N, R9E, NMPM

Cultivated

Mountain States Tel. & Tel. Line

Mail Box — Mail Box — Light Brush — 25' Open Drive — Mail Box — House — Base Ball Screen — Play Yard — Comb. Tel. & Power Poles — 14' Steel Gate — School — Woven Wire, Steel Posts — P.I. 341+15.9 Δ = 0°31'40" Lt. — Guard Rail — Sign — Comb. Tel. & Power Pole — 90°00' — House — Board Fence — Mail Box

N89°38' 20" W. — S.89° 50' W.

Sign — Concrete Side Walk — Light Brush — Mail Box — REA Power Line

Man Hole — 90°45' — 8" Artesian Well — V Ditch 4'x2'

Prof. Marker in Place — 4 Mail Boxes — Sec. Line

Bearing Equation (N 89°-32' W. Bkwn S0120(1).) (N 89°-38' 20" W. Ahd on S0120(3))

STAKE ON TELE. POLE — P.I. 324+37.5 Bk. = 324+34.2 Ah. — S 0120(1) — S0120(3) — 47.0' — 49.5' — STAKE ON FENCE CORNER

STA. 324+37.5 BEGIN S0120 (3) =
END S 0120 (1)

330+24 – Right Road Approach, Rt.

10' Gate — House — Garage — Side Walk — 31x5' Pump House — 3' Gate — Church — 9' Side Walk — Parking Lot — Parking Lot — 2' Side Walk — House

Woven Wire — 330+50 to 332+ – Right Parking Area, Rt.

Light Brush — 4x3' Pump House — Uncultivated — Slow Sign — 2" Iron Pipe Capped Iron Bar Post Corner — Equipment Yard — Potato Shed — Combination Wire Fence

338+87 – Right Road Approach, Rt.

340+30 – Right Road Approach, Rt.

House — Chicken House

Cultivated

346+10 to 347+26 – Right Rt. Drain Ditch, Rt.

350+85 – Right Road Approach, Rt. Adjust Manhole Rim to Cover, Rt.

Cultivated

SE 1/4, Sec. 20, T 37N, R9E, NMPM.

SW 1/4 Sec. 20, T 37N, R9E, NMPM

1/4 Sec. Line

B.M. No. 45, Elev. 7589.45
Nail in Tree 38' Rt.
Sta. 333+50

B.M. No. 46, Elev. 7591.18
Nail in Fence Post 31' Rt.
Sta. 340+20

B.M. No. 47, Elev. 7588.03
Nail in Power Pole 29' Rt.
Sta. 345+85

B.M. No. 48, Elev. 7589.03
Nail in Power Pole 32' Rt.
Sta. 353+69

No 1 A-2-4(0)	No 1A A-4(1)	No 1B- A-6(5)
LL = 21.7	LL = 26.2	LL = 36.3
PI = N.P.	PI = 7.5	PI = 16.8
%200 = 20	%200 = 39	%200 = 48
R = 33	C.B.R. = 109	

No 2 = A-2-4(0)	No 2 A = A-1-b(0)	No 2 B A-2-4(0)
LL = 24.2	LL = 23.2	LL = 26.0
PI = 5.3	PI = 4.5	PI = 8.3
%200 = 33	%200 = 2.5	%200 = 15
R = 36	R = 49	

M.S.T.B.T. — R.E.A. — P.I. 7589.84 — P.I. 7590.84 — P.I. 7585.44 — P.I. 7590.04

+0.18% — +0.40% — +0.20% — -0.08% — +0.24%

No. 1
No. 1A
No. 1B

No. 2
No. 2A.
No. 2B.

89.24 — 89.76 — 90.14 — 90.54 — 90.73 — 90.72 — 90.16 — 90.16 — 90.40

300' V.C. — N.P.S.D. > 1,300'

300' V.C. — N.P.S.D. > 1,300'

300' V.C.

MIN. S.B. THICK.	8"		7"	
SUB-BASE, TONS	1,074	773	6691	6545
EXCAVATION	100	34	63	
TON MI. O.H.	2,774	1867	15,900	15705

325 — 330 — 335 — 340 — 345 — 350 — 355

7600 — 7590 — 7580

PLATE I-PLAN-PROFILE B. P. R. STANDARD
EUGENE DIETZGEN CO., Chicago-New York

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

PLAN: SURVEYED — PLOTTED — ALIGNMENT CHECKED — RT. OF WAY CHECKED — NOTE BOOK — NO. 18411 — BY — DATE

PROFILE: SURVEYED — PLOTTED — GRADES CHECKED — BY — NOTE BOOK — NO. 18412 — STRUCTURE DATA TKS CK'KD

FED. ROAD DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S0120(3)	21	

PLAN — SURVEYED ___ PLOTTED ___ ALIGNMENT CHECKED ___ B.M.'s NOTED ___ NOTE BOOK ___ NO. 1844 — BY ___ DATE ___

PROFILE — SURVEYED ___ PLOTTED ___ CURVES CHECKED ___ B.M.'s NOTED ___ STRUCTURE NOTATIONS CHKD ___ NOTE BOOK ___ NO. 1844

STAKE ON TELE-PHONE POLE
373'
P.O.T. 359+00
368'
STAKE ON FENCE POST

NW 1/4, Sec. 29, T.37N, R.9E, NMPM.

Cultivated

STAKE ON FENCE CORNER
430'
407'
STAKE ON TELE.PHONE POLE
P.I. 377+47.3
398'
STAKE ON FENCE POST

377+47 — Right Road Approach, Rt. & Lt.

24"x 32' CMP X-Drain

P.I. 377+47.3
Δ = 0°16' Rt.

377+69 - 430+70 Lt.
377+69 to 430+70 Right Hill Drain Ditch, Lt.-Rt.

NE 1/4, Sec.30, T.37N, R.9E, NMPM

Cultivated

355 — 359 P.O.T. — 360 — 365 — 370 — 375 — 380 — 385

Mountain State Tel Line

Light Brush — Light Brush — Light Brush — Light Brush

S.89°50'W. — N.89°54'W

4'x 2.5'x 2' Division Box

R.E.A. Power

Man Hole — Man Hole

Mail Box

House

14"x 12' CMP

361+40 — Right Road Approach, Rt.

362+35 — Right Adjust Manhole Ring & Cover, Rt.

Cultivated

SW 1/4, Sec. 20, T.37N, R.9E, NMPM.

377+10 — Remove Wd. Div. Box, Rt. Remove 24"x 32' CMP Right 29'-1.8" 44° Arch Cross Culvert, Ditches

377+24 — Right Adjust Manhole Ring & Cover, Rt.

8.4'x 3'x 2' Division Box 2 Wings

10" Well

89°52'

90°

Sec. Line

43"x 29"x 30' CMP Arch Pipe with Conc. Rubble Headwalls

House — Shed — House

2 V Ditches 4'x 2'

377+69 - 430+70 Rt. Drain Ditch, Rt.

Cultivated

SE 1/4, Sec.19, T.37N, R.9E, NMPM

B.M. No 49 Elev. 7592.60
Nail in Power Pole 32' RT.
Sta. 361+52

B.M. No 50 Elev. 7593.15
Nail in Power Pole 32' RT.
Sta. 369+36

B.M. No 51 Elev. 7596.24
Nail in Power Pole 33' RT.
Sta. 376+92

B.M. No 52 Elev. 7596.95
Nail in Power Pole 37' RT.
Sta. 383+70

No3 A-1-b(0)	No3A A-2-4(0)	No3B A-2-4(0)
LL = N.V.	LL = N.V.	LL = 24.8
P.I. = N.P.	P.I. = N.P.	P.I. = 7.9
% = 200=14	%200=23	%200=33
R = 77.0	R = 68.0	

No4 A-1-b(0) Similar To No3 — No4A A-2-4(0) Similar No3 — No4B A-2-4(0) Similar 3B

No5 A-2-4(0)	No5A A-2-4(0)
LL = 23.5	LL = 23.6
P.I. = 4.4	P.I. = 4.8
%200=28	%200=29

Comb. 5 B 5A C.B.R 21.6

No6 A-1-b(0)	No6A A-1-b(0)	No6B=A-2-4(0)
LL = N.V.	LL = 21.6	LL = 26.2
P.I. = N.P.	P.I. = N.P.	P.I. = 9.4
%200=13	%200=25	%200=28

M.S.T.&T.Co — R.E.A. — M.S.T.&T.Co

7600 — 7590 — 7580

+0.24% — +0.26%

P.I. 7594.60 — P.I. 7598.50 — P.I. 92.4

No3 No3A No3B — No4 No4A No4B — No5 No5A — No6 No6A No6B

MIN. S.B. THICK.	4"		
SUB-BASE, TONS		22,209	23,514
EXCAVATION TON MI. O.H.		45,076	47,402

355 — 360 — 365 — 370 — 375 — 380 — 385

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

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

FED. ROAD DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S0120(3)	22	

PLAN — SURVEYED — PLOTTED — ALIGNMENT CHECKED — RT. OF WAY CHECKED — NOTE BOOK — NO. 1811 — DATE — BY

NE 1/4, Sec30, T37N, R9E, NMPM

NW 1/4, Sec30, T37N, R9E, NMPM.

SE 1/4, Sec.19, T37N, R9E, NMPM

SW 1/4, Sec.19, T37N, R9E, NMPM.

Cultivated

Pasture

Mountain State Tel. & Tel. Line.

Light Brush

REA Power Line

2'- Ditch

N89°54'W

N89°59'W

9.5'x3'x2.5' Division Box

12'x2.8'x25' Division Box With 8'x2.5' Neck

10" Well

Reservoir.

15"x12 CMP

18"x32 CMP

18"x16" CMP

Mail Box

16' Wire Gate

Walk Bridge 4x3

16'x6' Wood Bridge

403+23 -- Rept Road Approach, Lt.

P.I. 404+297 1/4 Sec. Line. Δ=0°05' LT.

404+25 -- Remove 18"x32' CMP, Repl. 24"x16' Arch Corr. Culvert, Inlet Ditch.

405+60 -- Rept Road Approach, Lt.

404+00 -- Rept Road Approach, Rt.

404+ to 407+ Rep'd & FIH Drain Ditch, Rt.

404+40 -- Rep'd Road Approach, Rt.

409+26 -- Rept Road Approach, Rt.

409+ to 410+ -- Rept FIH Drain Ditch, Rt.

B.M. No 53 Elev. 7597.17
Nail in Power Pole 37' RT.
Sta 391 + 57

B.M. No 54 Elev. 7600.42
Nail in Power Pole 40' RT.
Sta 399 + 32

B.M. No 55 Elev. 7601.18
Nail in Power Pole 33' RT.
Sta 407+50

B.M. No 56 Elev. 7602.37
Nail in Power Pole 32' RT.
Sta 415 + 70

No 6 A-1-b(0)	No 6A A-1-b(0)	No 6B A-2-4(0)	No 7 A-1-b(0)	No 7A A-1-b(0)	No 7B A-2-4(0)	No 8 A-1-b(0)	No 8A A-2-4(0)	No 8B A-6(1)	No 9 A-1-b(0)	No 9A A-2-4(0)	No 9B A-6(1)
LL = N.V.	LL = 21.6	LL = 26.2	Similar to No 6	Similar to No 6A	LL = 27.2	LL = 21.0	LL = 21.3	LL = 29.3	Similar to No 8	Similar to No 8A	Similar to 8B
PI. = N.P.	PI. = N.P.	PI. = 9.4			PI. = 10.2	PI. = N.P.	PI. = 3.4	PI. = 12.4			
%200 = 13	%200 = 25	%200 = 28			%200 = 33	%200 = 19	%200 = 28	%200 = 39			
	R = 55.0					R = 58.0					

PI. 7598.50

PI. 7602.10

PI. 7604.66

±0.18%

±0.32%

±0.12%

FL. 980

R.E.A.

M.S.T. & T.

No 6 No 6A No 6B

No 7 No 7A No 7B

No 8 No 8A No 8B

No 9 No 9A No 9B

7610

7600

7590

MIN. S.B. THICK.			0"					4"			
SUB-BASE, TONS		16,658	17,051					19,009		17861	
EXCAVATION											
TON MI. O.H.		24,119	26,301					27,938		21,000	

385 390 395 400 405 410 415

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

EUGENE DIETZGEN CO., Chicago-New York

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PROFILE — SURVEYED — PLOTTED — GRADES CHECKED — BM. & TOPS OF STRUCTURE NOTATNS CHKD — NOTE BOOK — NO. 1812 — DATE — BY

FED. ROAD DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S0120(2) S0120(3)	23	

NW1/4, Sec.30, T37N, R9E, NMPM

Pasture

Uncultivated

430+50 -- Rcpld Project Marker, Rt. (State Forces)

430+96 -- Rcpld Road Approach, Rt. & Lt.

430+74 Rd Apr Lt

P.I. 430+963 Range Line COUNTY / COUNTY

Δ = 1°44' Rt.

450+26 - 437+60 Rcpld Fill

438+46 to 437+44 -- Rcpld Drain Ditch, Lt.

STAKE ON FENCE POST

49.4 44.0

S0120(3) S0120(2)

P.I. 430+96.3

45.2

STAKE ON POWER POLE

Flow

Empire

Uncultivated

60°13'

89°35'

90°10'

18' Board Gate

End Mountain State Tel. Line

Light Brush

Mail Box

N89°59'W

Bearing Equation { N89°59'W Bk on S0120(3) / S89°55'45"W Ahd on S0120(2)

Cultivated

SW1/4 Sec 19, T37N, R9E, NMPM

STA. 430+96.3 END S0120(3) =
BEGIN S0120(2)

S0120(3)
S0120(2)

ALAMOSA R-9E / RIO GRANDE R-8E

437+06 - 437+60 Rcpld Fill Drain Ditch, Rt.

437+94.2 to 438+43.7
48'-2 Span Timber Bridge
30' Clear Roadway
4'x12" Timber Abutments. Wingwalls.
R.R. Iron Piling
Stream Clearence 5.5'

437+69 -- Rcpld Road Approach, Rt. & Lt.

Uncultivated

4311 to 438+ -- Remove Bridge, Rcpld Bridge (Str. No. 0-12-K) (Details on Sheet No. 8 & 9)

438+46 to 437+44 -- Rcpld Fill Drain Ditch, Lt.

439+00 -- Remove 15"x48" C.M.P. Rcpld 29"x18"x50" Arch Cross Culvert. Inlet Ditch. Sta. 440+00

NE 1/4 Sec. 25, T37N, R8E, NMPM

Pasture

15"x48' C.M.P. X-Culv.

Willows

N88°20'15"W

End. R.E.A. Power Line

Slough

Heavy Brush

Canal

SE 1/4 Sec. 24, T37N, R8E, N.M.P.M

Uncultivated

B.M. No56 Elev. 7602.37
Nail in Power Pole 32' R.T.
Sta 415 + 70

B.M. No57 Elev 7603.64
Nail in Power Pole 32' R.T.
Sta 423 + 53

B.M. No58 Elev. 7606.11
Nail in Power Pole 35' R.T.
Sta 431 + 76

B.M. No59 Elev. 7607.48
Nail in Power Pole 65' R.T.
Sta 442 + 75

No9 A-1-b(0)	No9A=A-2-4(0)	No9B=A-6(11)
Similar to No8	Similar to No 8A	Similar to No 8B
	Sample No 787	

No10=A-1-b(0)	No10A=A-2-4(0)	No10B=A-6(3)
LL = N.V.	LL = 24.4	LL = 27.6
P.I. = N.P.	P.I. = N.P.	P.I. = 10.9
%200=15	%200=35	%200=47
C.B.R. = 14.1	Sample No 787	

No1=A-2-6(0)	No1A=A-6(2)	No1B=A-4(3)
LL = 52.1	LL = 28.9	LL = 29.1
P.I. = 33.3	P.I. = 10.6	P.I. = 8.3
%200=29	%200=43	%200=48
C.B.R = 7.9	Sample No 788	

No2=A-2-6(0)	No2A=A-6(0)	No2B=A-4(3)
Similar to No1	Similar to No 1A	Similar to No 1B

300' V.C.

200' V.C.

P.I. 11.42

P.I. 7605.62

P.I. 7607.16

+0.12%

+0.14%

+0.71%

+0.104%

F.L. 05.2

06.95 07.30 07.76

10.71 11.27 11.62

N.P.S.D. > 1,300'

No9 No9A No9B

No10 No10A No10B

No1 No1A No1B

No2 No2A No2B

7620 7610 7600 7590

STRUCTURE NOTES FOR BRIDGE, STA. 437+92.7 TO STA. 438+45.2, STR. NO. 0-12-K

PRESENT STRUCTURE:
- SPAN - 3 @ 14'
- CLEAR ROADWAY - 30'
- CLEAR WATERWAY - 264 SQ.FT.
- TYPE OF SUPERSTRUCTURE - TIMBER STRINGERS
- TYPE OF SUBSTRUCTURE -
- REQUIREMENTS AS TO REMOVAL - TO BE REMOVED

STREAM DATA: IRRIGATION CANAL
- DRAINAGE AREA IN SQ. MI. -
- VELOCITY DURING HIGH WATER -
- ELEVATION OF:
  - MAXIMUM HIGH WATER -
  - NORMAL STAGE -
  - LOW WATER - STREAM BED - 7376.15

PROPOSED STRUCTURE:
- POSITION REFERRED TO PRESENT STRUCTURE - REPLACING OLD STR.
- SPAN - 50'
- CLEAR ROADWAY - 24'
- CLEAR WATERWAY - 257' SQ.FT.
- TYPE OF SUPERSTRUCTURE - REINFORCED CONC. GIRDER - CONC. DECK
- TYPE OF SUBSTRUCTURE - CONC. REINFORCED ON STEEL PILING
- DETOUR STRUCTURE REQUIREMENTS - TRAFFIC MAINTAINED ALONG SIDE
- R.R. SIDING - 11 MILES HAUL TO BRIDGE SITE - 11 MILES

NEARBY STRUCTURES ON SAME STREAM:
- LOCATION - PRESENT BRIDGE
- WATERWAY -
- RECORD DURING FLOODS -

MIN. S.B. THICK.	0"					4"				4"	
SUB-BASE TONS	10,124	9782				6,868	9317			7,159	9754
EXCAVATION TON MI. O.H.	4,851	8725				4,812	6669			3,895	5624

415 420 425 430 435 440 445

PLAN
SURVEYED
PLOTTED
NOTE BOOK
PAGE
NO. 1843
ALIGNMENT CHECKED
RT. OF WAY CHECKED
BY
DATE

PROFILE
SURVEYED
PLOTTED
NOTE BOOK
PAGE
NO. 1846
GRADES CHECKED
B.M.'s NOTED
STRUCTURE NOTATIONS CHECKED
BY
DATE

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FED. ROAD DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S0120(12)	24	

N.E. 1/4, Sec. 25, T 37 N, R 8 E, N.M.P.M.

N.W. 1/4, Sec 25, T37N, R8E, N.M.P.M.

S.E. 1/4 Sec. 24, T 37 N, R 8 E, N.M.P.M.

S.W. 1/4, Sec. 24, T37N, R8E, N.M.P.M.

Pasture

Uncultivated

Cultivated

Hay Corral

Comb. Wire & Steel Posts

Heavy Brush

Light Brush

Wood Head Wall 3'x6'

12" Barrel Pipe

Borrow Ditch

21"x60' CMP Culv.

14' Opening

W=2'

4" Well

22" Wire Gate

Ditch = 1' W

18" x 15' Barrel Pipe

26 Wire Gate

W=2'

W=5'

Pond

Ditch = 2' W

BM. No60 Elev 7617.53
Nail in Fence Post 38' LT.
Sta 455+33

BM. No61 Elev 7614.40
Nail in Fence Post 30' LT.
Sta 465+40

445 450 455 460 465 470 475

N88°20'15"W

N88°16'15"W

Δ 0°-04' RT.

PI 457+66.2

88°46'

88°56'

17°25'

1/4 Sec. Line

457+70 – Remove 21"x60' C.M.P. & Wood Headwall, Regrd 20'x18'x42' Arch Cross Culvert Outlet Ditch (W=2') Sta. 457+77

457+86 – Regrd Road Approach, Rt.

455+49 – Remove 2'x1'x24' Wood Box Side Drain & Wood Retaining Walls Lt., Regrd Road Approach Lt.

450+00 – Regrd Road Approach Rt.

451+86 – Regrd Road Approach, Rt.

467+00 – Regrd 20'x18'x88' Arch Cross Culvert, Metal Apron at Inlet.

464+00 – 480+00 – Regrd Fill Drain Ditch, Rt.

432+62 – 439+48 – Regrd Fill Drain Ditch, Lt.

PLAN
SURVEYED
PLOTTED
ALIGNMENT CHECKED
R.I. OF WAY CHECKED
NOTE BOOK
NO. 184/2
BY
DATE

PROFILE
SURVEYED
PLOTTED
GRADES CHECKED
R.I. OF WAY
NOTE BOOK
NO. 184/2
BY
DATE
STRUCTURE NOTATNS. CH'KD

	No 3 = A-6(5)	No 3A = A-6(7)	No 3B = A-6(8)	No 4 = A-2-6(0)	No 4A = A-6(2)	No 4B = A-4(3)	No 5 = A-1-b(0)	No 5A = A-2-4(0)	No 5B = A-2-4(0)
	LL = 34.4	LL = 37.2	LL = 38.2	Similar to No 1	Similar to No 1A	Similar to No 1B	LL = 23.2	LL = 26.7	LL = 26.1
	P.I. = 14.4	P.I. = 16.5	P.I. = 14.1				P.I. = 4.1	P.I. = 9.3	P.I. = 8.2
	%200 = 51	%200 = 56	%200 = 65				%200 = 15	%200 = 35	%200 = 35
	R = 43.0	C.B.R. = 4.3					R = 60.0	C.B.R. = 10.1	

100' V.C.

600' V.C.

800' V.C.
NPSD > 1,300'

+0.10 4 %

+0.84 %

-0.06 %

+0.62 %

12.25

12.83

14.44

14.44

16.60

17.26

P.I. 7612.46

P.I. 7617.60

P.I. 7616.42

1660

1693

1828

F.L. 13.8

F.L. 12.2

7620
7610
7600
7590
7580

| | | | | |

FED. ROAD DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	SO120(2)	25	

NW 1/4, Sec. 25, T37N, R8E, N.M.P.M.

N.E. 1/4 Sec. 26, T37N, R8E, N.M.P.M.

SW 1/4 Sec. 24, T37N, R8E, N.M.P.M.

SE 1/4 Sec. 23, T37N, R8E, N.M.P.M.

Cultivated

483+61 Road Appr. Lt.

480+40 to 484+64 ~ Rgt. Drain Ditch, Rt.

485+07 ~ Removed Timber Guard Rail, Rt.; Extended 30"x110' C.M.P., 12° Rt. (No Aprons)

486+13 ~ Rgt. Road Approach, Rt.

487+71 to 489+ ~ Rgt. Elk Drain Ditch, Lt.

489+ to 492+ ~ Rgt. Fill Drain Ditch, Rt.

Sec. Line

30"x110' C.M.P.

30"x125' Sec. Check

Guard Rails

Comm. Wire & Wood Rails

90°-50'

S

Cow Corral

Board Fence

24"x1/2 Sect C.M.P. Check

W=3'

Earth Filled Check 24"x12' C.M.P.

Light Brush

S89°47'30"W

Covered Drain

N88°16'15"W

W=5'

Pond

10' Pump

18"x18"x78' Wd. Box

43"x27"x10' Arch Pipe in Check

W=6"

91°-47'

V-Ditch

24"x109' C.M.P.

Comb. Mountain State Tel. & R.E.A. Power Lines

Man Hole 2.5'x3.5'

28' Double Drive Gate

3.5 x 1.6 x 2.2 Div. Box.

2.5 x 1.4 Outlet

Man Hole 3'x4'

475 480 485 490 495 500 505

PI 484+64
Δ=1°-56'25" Lt.

484+64 ~ Rgt. Road Approach, Rt.

488+ to 495+ ~ Rgt. Fill Drain Ditch, Rt.

496+22 ~ Rgt. Double Road Approach, Rt.

497+ to 498+ ~ Rgt. Filled Drain Ditch, Rt.

BM No 62 Elev. 7617.77
Nail in Fence Post 32' LT.
Sta 478+51

BM No 63 Elev. 7620.69
Nail in Power Pole 50' RT.
Sta 485+50

BM. No 64 Elev. 7621.93
Nail in Power Pole 41' RT.
Sta 493+75

BM. No 65 Elev. 7624.19
Nail in Power Pole 38' RT.
Sta 501+60

	SURVEYED	DATE
PLAN	PLOTTED	
NOTE BOOK	ALIGNMENT CHECKED	BY
NO. 186/3	RT. OF WAY CHECKED	

	SURVEYED	DATE
PROFILE	PLOTTED	
NOTE BOOK	GRADES CHECKED	BY
NO. 186/6	R.S.E. CHECKED	
	STRUCTURE NOTATNS CH'KD	

No 6=A-1-b Similar to No 5

No 6A=A-6(4) LL=31.9 P.I.=11.4 %200=57

No 6B=A-6(8) LL=35.6 P.I.=16.8 %200=60

R.E.A=2°

No 7=A-1-b-(0) Similar to No 5

No 7A=A-4(1) LL=26.3 P.I.=8.4 %200=40

No 7B=A-6(8) Similar to No 6B

No 8=A-1-b(0) Similar to No 5

No 8A=A-4(1) Similar to No 7A

No 8B=A-6(8) Similar to No 6B

R.E.A=2°

R.E.A=2°

7630 7620 7610 7600 7590

PI 7622.00

PI 7623.12

PI 7626.12

+0.62%

+0.08%

+0.30%

No 6 No 6A No 6B

No 7 No 7A No 7B

No 8 No 8A No 8B

20.14

21.59

22.24

600' V.C.

NPSD > 1,300'

MIN. S.B. THICK. 4"

SUB-BASE TONS 24,346 22896

EXCAVATION 13,633 10,960

TON MI. O.H. 2 11 191

475 480 485 490 495 500 505

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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 DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S0120(2)	26	

PLAN — SURVEYED — PLOTTED — NOTE BOOK — NO. 1241-3 — BY — DATE — ALIGNMENT CHECKED — RT. OF WAY CHECKED

N.E.1/4, Sec 26, T37N, R8E, N.M.P.M.

N.W.1/4, Sec 26, T37N, R8E, N.M.P.M.

Cultivated

Uncultivated

510+42 — Extend 21"x84" C.M.P. 10' Ft. (No Aprons)

1/4 Sec Line

88°15'

21"x84' C.M.P. X-Culv.

15"x18' C.M.P. From Field

Sub Check 24"x12' C.M.P.

V-Ditch

Dry Rubble 24'x90' C.M.P. Across Co. Road

18"x1"x52' C.M.P.

W=3'

W=2'

LIGHT BRUSH

Light Brush

505 510 515 520 525 530 535

S89°47'30"W

S89°39'15"W

Comb. Wire

5.3x1.8x2.0 Div. Box 3.0x1.5 Outlet

18"x18' C.M.P. 16' Open Spandrel

12"x12" Box 6" Weir

8.4x2.9x3.5 Div. Box 6.4x1.9 Outlet

Comd. Mountain State Tel. & R.E.A. Power Lines

Man Hole 3'x4'

15"x16' C.M.P.

16' Wire Gate

12' Wire Gate

W=2'

Covered Drain

Light Brush

Man Hole 2.5'x4'

8.4x2.5x2.6 Div. Box 6.4x2.0 Outlet

When Wire & Wood Rails

Equipment Yard

90°-28'

PH. Silo

509+33 — Rapid Road Approach, Ft.

520+00 — Rapid Road Approach, Ft.

P.I. 510+51.0 Δ=0°-08'25" LT.

P.I. 536+72.0 Δ=0°-26' LT.

S.E.1/4, Sec 23, T37N, R8E, N.M.P.M.

S.W.1/4, Sec 23, T37N, R8E, N.M.P.M.

Cultivated

Cultivated

BM. No 66 Elev 7627.52
Nail in Power Pole 37' RT.
Sta 509+20

BM. No 67 Elev 7630.42
Nail in Power Pole 33' RT
Sta 516+10

BM. No 68 Elev 7633.03
Nail in Power Pole 35' RT
Sta 523+40

BM. No 69 Elev. 7634.57
Nail in Power Pole 34' RT.
Sta 531+25

No 9 = A-2-4(0)	No 9A = A-4(1)	No 9B = A-4(4)
LL = 26.8	LL = 29.7	LL = 29.1
P.I. = 7.6	P.I. = 10.3	P.I. = 9.8
%200 = 27	%200 = 41	%200 = 54
C.B.R = 22.7	C.B.R = 9.5	
R = 53.0		

No 10 = A-2-4(0)	No 10A = A-4(1)	No 10B = A-4(4)
Similar to No 9	Similar to No 9A	Similar to No 9 B

No 11 = A-2-4(0)	No 11A = A-6(1)	No 11B = A-6(3)
LL = 27.8	LL = 32.2	LL = 39.2
P.I. = 9.9	P.I. = 13.0	P.I. = 21.6
%200 = 34	%200 = 36	%200 = 36

PROFILE — SURVEYED — PLOTTED — NOTE BOOK — NO. 1241-6 — BY — DATE — GRADES CHECKED — B.M.'s NOTED — STRUCTURE NOTATIONS CK'D

7640 7630 7620 7610

P.I. 7626.08

P.I. 7632.36

P.I. 7636.78

-0.48%

+0.26%

No 9 No 9A & No 9B

No 10 No 10A No 10B

No 11 No 11A No 11B

MIN. S.B. THICK
SUB-BASE TONS
EXCAVATION
TON MI. O.H.

153 164

4"
8201
36463

159 113

14 48

505 510 515 520 525 530 535

PLATE 1-PLAN-PROFILE B. P. R. STANDARD
EUGENE DIETZGEN CO., Chicago-New York

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FED. ROAD DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S0120(2)	27	

PLAN — SURVEYED / PLOTTED / ALIGNMENT CHECKED / RT. OF WAY CHECKED — NOTE BOOK — NO. 1816/3 — DATE / BY

N.E. 1/4, Sec 27, T37N, R8E, N.M.P.M.

S.E. 1/4, Sec 22, T37N, R8E, N.M.P.M.

N

Pasture

Cultivated

Cultivated

Cultivated

Sec. Line

1/4 Sec. Line

18"x11"x52" C.M.P. Arch Pipe

24"x30' C.M.P. Across Co. Road

89°-16'

90°-33'

90°-28'

88°-56'

15'x16' C.M.P.

W=3'

12" Wing Gate

2" Well

End Dry Rubble Wall

24"x200' C.M.P. in Ditch

No Fence

Shed

12' Open Drive

Dry Rubble Wall

W=1'

Leave in Place

18"x91' Iron Siphon

24"x30' C.M.P.

W=3'

18"x86' C.M.P.

12"x16' C.M.P. From Field

Dry Rubble

Light Brush

Mail Box

3' Walk

8'x12' CMP

6" Well

17' Wire Gate

Potato Cellar

Board Fence

14' Wire Gate

2"x8' Cattle Guard

W=2'

W=1.5

84"x25"x26' Div. Box

64"x20' Outlet

End Covered Drain

Comb. Mountain State Tel. & R.E.A. Power Lines.

S89°13'15"W.

S89°13'45"W.

535 540 545 550 555 560 565

536+34 -- Remove 18"x11'x52" C.M.P. Repl. 29'x18"x46" Arch Cross Culvert D.I. Tches

536+72 -- Repl. Road Approach, Rt. & Lt.

P.I. 536+72.0 Δ=0°26' Lt.

543+94 -- Repl. Road Approach Lt.

544+to 547+-- Repl. Ditch, Lt.

544+85 -- Repl. Road Approach, Lt.

549+76 -- Repl. Road Approach, Rt.

550+38 -- Repl. Road Approach, Rt.

551+16 -- Repl. Road Approach, Rt.

551+96 -- Repl. Road Approach, Rt.

553+23 -- Repl. Road Approach, Lt.

P.I. 563+57.6 Δ=0°00'30" Rt.

563+51' -- Extend 18"x86' C.M.P. 6' Rt. Ditch, Rt.

563+to 565+-- Repl. Ditch, Rt.

563+67 -- Repl. Road Approach, Rt.

B.M. No 70 Elev. 7636.57
Nail in Power Pole 30' RT.
Sta 539+20

B.M. No 71 Elev 7643.94
Nail in Power Pole 29' RT.
Sta 546+98

B.M. No 72 Elev. 7644.15
Nail in Power Pole 31' RT.
Sta 554+65

B.M. No 73 Elev. 7646.18
Nail in Power Pole 30' RT.
Sta 562+95

PROFILE — SURVEYED / PLOTTED / GRADES CHECKED / BM & TBM / STRUCTURE NOTATIONS CH'KD — NOTE BOOK — NO. 1816 — DATE / BY

7650 7640 7630 7620

R.E.A. M.S.T.&T. R.E.A. R.E.A.

P.I. 636.78 Fl. 333.3

0.46%

No12 = A-2-4(0) Similar to No11

No12A = A-6( ) Similar to No11A

No12 No12A

P.I. 643.68

+0.30%

No13 = A-7-6(7)
LL = 41.1
PI = 16.9
%200 = 54
C.B.R. = 9.3

No.13

+0.36%

No14 = A-2-4(0)
LL = 27.6
PI = 8.2
%200 = 23
C.B.R. = 27.8

No14A = A-6-(3)
LL = 34.3
PI. = 14.3
%200 = 45
C.B.R = 6.9

No14B = A-2-4(0)
LL = 27.1
PI = 7.3
%200 = 14

No14 No14A No14B

P.I. 646.98

| | | |

FED. ROAD DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S0120(2)	28	

PLAN — SURVEYED / PLOTTED / NOTE BOOK / NO. 1841 — ALIGNMENT CHECKED / RT. OF WAY CHECKED — BY / DATE

N.W. 1/4, Sec 27, T37N, R8E, N.M.P.M.

5178+00 ~ Road Approach, Lt.

Cultivated

V-Ditch

1x1 Ditch

15' Wood Gate

18"x 22' C.M.P Dry Rubble

Hd. Gate

W=3'

Cultivated

18"x 20' C.M.P Dry Rubble

Adobe Cellar

P.I. 590+42.4
Δ=0°39'5" Rt.

89°-52'

12"x 16' C.M.P Dry Rubble
1 Hd. Gate

Uncultivated

W=4'

Light Brush

565 570 575 580 585 590 595

S89°13'45"W

S89°53'15"W

Comb. Mountain State Tel. & R.E.A. Power Lines

Man Hole 2'5 x 4'

W=2½'

2'x2' Box
4'x6' Pump House
2'x2' Box

18"x 34' C.M.P

90°-07'

Cultivated

Posture

Cultivated

590+42 ~ Extend 18"x 34' C.M.P. Side Drain, Rt. 12' East & 8' West, Road Approach, Rt. & Lt.

Sec. Line

S.W. 1/4, Sec. 22, T37N, R8E, N.M.P.M.

N

BM. No 74 Elev. 7649.83
Nail in Power Pole 30' RT.
Sta 570 + 35

BM. No 75 Elev. 7653.16
Nail in Power Pole 30' RT.
Sta 578 + 25

BM. No 76 Elev. 7657.09
Nail in Power Pole 30' RT.
Sta 586 + 20

BM. No 77 Elev. 7658.93
Nail in Power Pole 36' RT.
Sta 592 + 40

No15 = A-2-4(0)
Similar to No14

No15A = A-2-4(0)
LL = 22.9
PI = 9.0
%200 = 28

No16 = A-2-4(0)
Similar to No14

No16A = A-6(3)
LL = 30.3
PI = 11.8
%200 = 48

No16B = A-6(8)
LL = 34.9
PI = 14.4
%200 = 67

No17 = A-1-b(0)
LL = 24.6
P.I. = N.P.
%200 = 18

R.E.A. ~

M.S.T.&T. ~

7670 7660 7650 7640 7630

+.036%

+.042%

No15
No15A

No16
No16A
No16B

No17

P.I. 7650.22

P.I. 7659.88

PROFILE — SURVEYED / PLOTTED / NOTE BOOK / NO. 1841 — GRADES CHECKED / B.M.'S NOTED / STRUCTURE NOTATIONS CK'D — BY / DATE

| | | |

FED. ROAD DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S0120(2)	29	

PLAN — SURVEYED — PLOTTED — NOTE BOOK — No. 1841a — ALIGNMENT CHECKED — BY — DATE

N.E. 1/4, Sec. 28, T37N, R8E, N.M.P.M.

Uncultivated

Cultivated

S.E. 1/4, Sec. 21, T37N, R8E, N.M.P.M.

Cultivated

N

PL 616+26.2
Δ = 0°06.75" RT.

1/4 Sec. Line

616+ to 618+ -- Reset Fill
Drain Ditch, Rt.

89°-23'

89°-26'

8'x20' Dry Rubble

18', 14' C.M.P.

End 3' Ditch

Light Brush

Light Brush

S 89°53'15" W

Comb. Mountain State Tel. & R.E.A. Power Lines

V-Ditch

Metal Posts

V-Ditch

2x2' Well

4'x4' Well

4'x4' Well

5'x3'x2' Div. Box
3'x3' Outlet

V-Ditch

2x2' Man Hole

V-Ditch

Easement

2'x1' Ditch

West

595 | 600 | 605 | 610 | 615 | 620 | 625

616+18 -- Removed & Reset Wood Division Box, Rt.

615+50 to 641+ -- Reset Irrigation Ditch, Rt. (No. 21)

C.O. Work

616+ to 641+ -- Reset Irrigation Ditch, Rt.

621+ to 641+ Reset Filled Drain Ditch, Rt.

BM. No 78 Elev. 7662.55
Nail in Power Pole 36' RT.
Sta 599+40

BM. No 79 Elev. 7666.04
Nail in Power Pole 35' RT.
Sta 607+20

BM. No 80 Elev. 7670.01
Nail in Power Pole 36' RT.
Sta 615+08

BM. No 81 Elev. 7672.60
Nail in Power Pole 35' RT.
Sta 622+90

No 18 = A-2-6(0)	No 18A = A-2-4(0)
LL = 30.2	LL = 27.8
P.I. = 10.8	P.I. = 9.0
%200 = 25	%200 = 34
C.B.R. = 13.3	R = 560

No 19 = A-2-4(0)	No 19A = A-2-6(0)
LL = 23.4	LL = 30.5
P.I. = 4.9	P.I. = 10.8
%200 = 27	%200 = 33

No 20 = A-4-(2)	No 20A = A-4(2)	No 20B = A-6(2)	No 20C = A-1-a(0)
LL = 28.6	LL = 28.7	LL = 33.7	LL = 24.0
P.I. = 9.6	P.I. = 10.0	P.I. = 14.5	P.I. = N.P.
%200 = 44	%200 = 46	%200 = 39	%200 = 10

PROFILE — SURVEYED — PLOTTED — NOTE BOOK — No. 1841a — GRADES CHECKED — B.M.'s NOTED — STRUCTURE NOTATIONS CHKD — BY — DATE

7680 | 7670 | 7660 | 7650

+0.46%

+0.44%

No 18
No 18A

No 19
No 19A

No 80
No 20A
No 20B
No 20C

P.I. 7665.40

MIN. S.B. THICK.		4"				
SUB-BASE, TONS				1,048	566.5	
EXCAVATION	2	4	24	8	10,330	14,635	63	75
TON MI. O.H.						

595 | 600 | 605 | 610 | 615 | 620 | 625

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

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FED. ROAD DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S0120(2)	30	

N.W.1/4, Sec. 28, T37N, R8E, N.M.P.M.

Cultivated

Man Hole 2'x4'

Light Brush

West.

2'x1' Ditch

V- Ditch

Easement

Light Brush

12' Opening
2'x1'x17' Wood Box

2'x1'x17' Wood Box

Metal Posts

640+14 -- Remove
2-2'x1'x17' Wood Side Drains, Repl. 18"x24" C.M.P. Side Drains
24'+26' Road Approach, Rt.

642+43-641+74
642+ to 647+ -- Repl. Fills
Drain Ditch, Rt.

Cultivated

S.W.1/4, Sec 21, T37N, R8E, N.M.P.M.

BM. No 82 Elev. 7675.89
Nail in Power Pole 35' RT.
Sta 630+80

Pl. 642+13.4
Δ=0°04.5' RT.

642+ to 645+ -- Repl. Parking Area, Lt.

3 Walk
C.
H.
3 Walk
12' Opening
3 Walk Gate
2 End Wood Rails
Wood Rails
4 Sign
1 Double Gate

Wall Box
30'x34' C.M.P.

End Conc. Mountain Spillway & R.E.A. Power Lines

Sec. Line

642+13 -- Extend 30'x34' C.M.P. Side Drain, Rt. & at Outlet
Road Approach, Rt. & Lt.

642+ to 647+ -- Repl. Irrigation Ditch, Rt. (W-27)

BM. No 83 Elev. 7680.01
Nail in Power Pole 32' RT.
Sta 638+50

Flow

646+ to 648+ -- Fill Drain Ditch, Lt.

49°30'

1'x1' Ditch

2'x1' Opening
18" C.M.P. Culvert
Hd. Gate

Monte Vista Canal

BM. No 84 Elev. 7684.66
Nail in Power Pole 32' RT.
Sta 645+20

N.E.1/4, Sec 29, T37N, R8E, N.M.P.M.

Cultivated

2' Span Timber Bridge 34'
4"x12" Stringers, Girders & Flooring
Timber Pile Abutment & Piers 7"x9" Timber Caps.
Stream Clearance 3.5'

Mountain State Tel. Line

Light Brush

S89°55'30"W

Light Brush

1'x1' Ditch

RE. A. Power Line

14' Gate

647+ to 648+ -- Remove
Timber Bridge, Repl. Bridge Str. No. 0-12-I (Details on Sheet No 10x11)

649+ to 651+ -- Repl. Fill Drain Ditch, Lt.

Cultivated

S.E.1/4, Sec 20, T37N, R8E, N.M.P.M.

BM. No 85 Elev. 7687.67
Nail in Power Pole 32' RT.
Sta 651+85

No21=A-2-4(0)	No21A=A-4(2)	No21B=A-6(2)	No21C=A-1-a(0)
LL =30.5	Similar No20A	Similar No20B	Similar No20C
PI =10.4			
%200=30			

No22=A-2-4(0)	No22A=A-6(5)
Similar No 21	LL =35.2
	P.I. =15.7
	%200=51

No23 A-2-4(0)	No23 A=A-2-4(0)
LL =26.8	LL =28.0
PI. =6.8	PI. =9.4
%200=10	%200=30

7700
7690
7680
7670
7660

Pl. 767.72

Pl. 768.04

Pl. 89.06

Pl. 89.50

400' V.C.

M.S.T.A.=0

R.E.A.=0

200' V.C.

200' V.C.

80.96
82.31
84.20
87.98
88.81
89.13
89.43
89.6
90.00

+0.44%
+0.54%
+1.08%
+0.068%
+0.050%

No21
No21A
No21B
No21C

No22
No22A

No23
No23A

N.R.S.D. = 830'

STRUCTURE NOTES FOR BRIDGE, STA. 647+93.9 TO STA. 648+36.7, STR. NO. 0-12-I

PRESENT STRUCTURE:
- SPAN - 2@17'
- CLEAR ROADWAY - 20'
- CLEAR WATERWAY - 119 SQ.FT.
- TYPE OF SUPERSTRUCTURE - TIMBER
- TYPE OF SUBSTRUCTURE -
- REQUIREMENTS AS TO REMOVAL - TO BE REMOVED

STREAM DATA: IRRIGATION CANAL
- DRAINAGE AREA IN SQ. MI. -
- VELOCITY DURING HIGH WATER -
- ELEVATION OF:
  - MAXIMUM HIGH WATER - LOW WATER -
  - NORMAL STAGE - STREAM BED -

PROPOSED STRUCTURE:
- POSITION REFERRED TO PRESENT STRUCTURE - SAME LOCATION
- SPAN - 34'
- CLEAR ROADWAY - 24'
- CLEAR WATERWAY - 93 SQ. FT.
- TYPE OF SUPERSTRUCTURE - REINFORCED CONC. DECK & GIRDERS
- TYPE OF SUBSTRUCTURE - STEEL PILINGS
- DETOUR STRUCTURE REQUIREMENTS - TRAFFIC to be Routed alongside old Str.
- R.R. SIDING - 15 Miles HAUL TO BRIDGE SITE - 15 Miles

NEARBY STRUCTURES ON SAME STREAM:
- LOCATION - Present Bridge at this location
- WATERWAY - 119 SQ. FT.
- RECORD DURING FLOODS - IRRIGATION CANAL

| | | |

FED. ROAD DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S0120(2)	31	

PLAN — NOTE BOOK NO. 184/9 — SURVEYED — PLOTTED — ALIGNMENT CHECKED — RET. OF WAY CHECKED — BY — DATE

N.E. 1/4, Sec. 29, T 37 N, R 8E, N.M.P.M.

N.W. 1/4, Sec. 29, T 37 N, R 8E, N.M.P.M.

S.E. 1/4, Sec 20, T 37 N, R 8E, N.M.P.M.

S.W. 1/4, Sec. 20, T 37 N, R 8E, N.M.P.M.

Cultivated

Cultivated

Cultivated

Cultivated

655+90 ~ Right Road Approach, Lt.

657+78 ~ Right Road Approach, Lt.

657+10 ~ Right Road Approach, Lt.

668+74 ~ Removed 30"x36" C.M.P. Right 36"x22"x42" Arch Cross Culvert

Pl. Equ. 669+81 BK = 668+05 Ahd Δ = 0°-03.5' Lt.

14' Sec. Line

89°-27'

90°-18'

N

14' Wire Gate

End Telephone Line

22' Opening

15' Side Drain

19' Wood Gate

Mail Box

29"x18"x36' C.M.P.

V-Ditch

1'x1' Ditch

Light Brush

S 89°55'30" W

S 89°52' W

12' Wire Gate

R.E.A. Power Line

1'x1' Ditch

11'x2'x2' Div. Box 6'x3' Outlet

21' Opening

655 660 665 670 675 680 685

BM. No 86 Elev. 7691.94
Nail in Power Pole 32' RT.
Sta 659+90

BM. No 87 Elev. 7697.01
Nail in Power Pole 31' RT.
Sta 668+05

BM. No 88 Elev 7700.61
Nail in Power Pole 31' Rt.
Sta 675+93

BM. No 89 Elev. 7704.25
Nail in Power Pole 30' Rt
Sta 683+85

PROFILE — NOTE BOOK NO. 184/6 — SURVEYED — PLOTTED — GRADES CHECKED — B.M.'s NOTED — STRUCTURES & DITCHES CHECKED — BY — DATE

No 24 = A-2-4(0) Similar No 23

No 24A = A-2-4(0) Similar To No 23A

No 25 = A-2-6(0) LL = 33 PI = 10.6 %200 = 20

No 26 = A-2-6(0) Similar No 25

EQUATION

Pl. 7698.68

Pl. 7693.50

Pl. 7703.88

R.E.A.

300' V.C.

400' V.C. N.P.S.D. > 1,300'

92.75 93.59 94.61

97.20 98.51 99.48

+0.50%

+0.74%

+0.40%

+0.58%

F.L. 94.7

No 24 No 24A

No 25

No 26

668+81 Bk

668+80.5 Ah

7710 7700 7690 7680 7670

90.00

MIN. S.B. THICK. 4"

SUB-BASE TONS 11,616 — 8,142

EXCAVATION TON MI. O.H. 13,414 — 13,456

655 660 665 670 675 680 685

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

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FED. ROAD DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S0120(2)	32	

PLAN — NOTE BOOK No. 1841 — SURVEYED — PLOTTED — ALIGNMENT CHECKED — RELIEF MAP CHECKED — BY — DATE

N.W. 1/4 Sec. 29, T37N, R8E, N.M.P.M.

Cultivated

692+73 – 22ft Road Approach, Lt.

695+22 – 22ft Road Approach, Rt. & Lt.

695+47 – Relay 21"x64' C.M.P. (20' from Sta 694+85 & 44' from Sta 695+47) as Cross Culvert (No Aprons)

Sec. Line

88°45'

9'x6'x2' Div. Box
4'x2' Outlet
3'x6' Outlet
21"x36' C.M.P.

1'x1' Ditch

685 — 690 — 695 — 700 — 705 — 710 — 715

S89°52'W

24"x12' C.M.P.

Mail Box

44' Opening Pump House

21"x44' C.M.P.

694+85 – Remove 21"x16' C.M.P. & Relay 20' as Cross Culvert at Sta 695+47 (Present Pipe is 21"x36") 22ft 29"x18"x42' Cross Culvert

Mountain State Tel. Line

Projected Line to be Const

15' Wire Gate

18' Wire Gate

Metal Posts

16' Wood Gate

14' Wood Gate

Light Brush

Projected Line 87°50'34"

Survey Line S88°01'15"W

R.E.A. Power Line

1'x1' Ditch

18' Wire Gate

1'x1' Ditch

710+50 – 22ft Road Approach, Lt.

712+90 – 22ft Road Approach, Rt.

Cultivated

Pasture

Cultivated

S.W. 1/4 Sec. 20, T37N, R8E, N.M.P.M.

N.E. 1/4, Sec. 30, T37N, R8E, N.M.P.M.

S.E. 1/4, Sec. 19, T37N, R8E, N.M.P.M.

Pl. 696+00 Δ = 1°50'15" LT. — Survey Line

Pl. 696+00 Δ = 2°01'26" LT. — Project Line

To be Constructed

Same Point

1028+35 – 22ft Road Approach, Rt.

BM. No90 Elev. 7708.30
Nail in Power Pole 30' Rt.
Sta 691+70

BM. No91 Elev. 7713.27
Nail in Power Pole 31' Rt.
Sta 699+80

BM. No92 Elev. 7716.40
Nail in Power Pole 30' Rt.
Sta 707+70

BM. No93 Elev. 7721.26
Nail in Power Pole 30' Rt.
Sta 715+50

PROFILE — NOTE BOOK No. 1846 — SURVEYED — PLOTTED — GRADES CHECKED — BM. & TIES — STRUCTURE NOTATNS CH'KD — BY — DATE

No27 = A-6-2(0)
LL = 33.0
PI. = 15.5
%200 = 30
C.B.R. = 13.0
R = 49.7

R.E.A.

M.S.T.&T.Co.

Pl. 7713.16

+0.58%

No27

F.L. 079.0

F.L. 082

No28 = A-2-6(0) Similar No 27

No28A = A-7-6(9)
LL = 44.8
PI. = 20.3
%200 = 56

No28
No28A

+0.46%

Pl. 7718.22

+0.62%

No29

No29 = A-2-6(0) Similar No 27

7730 / 7720 / 7710 / 7700 / 7690

MIN. S.B. THICK
SUB-BASE, TONS
EXCAVATION
TON MI. O.H.

5' — 5'

24,319 — 4" — 15,882

22,733 — 12,588

685 — 690 — 695 — 700 — 705 — 710 — 715

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

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COLORADO DEPARTMENT OF HIGHWAYS
Form C.D.H. 134
April 1954

FED. ROAD DIV. NO.	DIST.	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S0120(2)	33	

PLAN — SURVEYED, PLOTTED, NOTE BOOK, NO. 1846, ALIGNMENT CHECKED, RT. OF WAY CHECKED, BY, DATE

PROFILE — SURVEYED, PLOTTED, GRADES CHECKED, NOTE BOOK, NO. 1846, STRUCTURE NO(AT)NS CHKD, BY, DATE

N.W.1/4, Sec.30, T.37N, R.8E, N.M.P.M.

S.W.1/4, Sec.19, T.37N, R.8E, N.M.P.M.

Cultivated

Uncultivated

Cultivated

Cultivated

721+80 — Right Road Approach, Lt.

735+10 — Right Road Approach, Lt.

746+86.1 — Right Approach to Project

End Mountain State Tel. Line

Surveyed S88°01'15"W

587°50'34 Projected Line

Projected Line to be Const.

Surveyed Line

Surveyed & Projected Line S87°54'15"W

16' Drive Gate

16' Drive Gate

Light Brush

Light Brush

1'x1' Ditch

18' Wire Gate

2" Well

5'x16' Wood Bridge

Div. Boxes

R.E.A. Power

1'x2' Ditch

V-Ditch

8" Pump

19'x6'x3' Div. Box

10'x3'x3' Outlet

4'x3' Outlet

Metal Posts

Edge of Oil Mat

Pl. 746+86.6

Proj. S0113(5)

Range Line

S.T.H. 6

Proj. S0113(5)

Note Bearing Equation S87°54'15"W Bk on S0120(2) = N88°03'54" Ahd on S0113(5)

STA. 746+86.1 END S 0120(2)
11' Lt STA. 528+04.2 S 0113(5)

Project Marker, Rt. (Strike Forces)

S 0120(2)

746+63 — Right

720+04 — Right Road Approach, Rt.

721+00 — Right Road Approach, Rt.

Surveyed (Pl. 721+72.5 Δ=0°-07' Lt.) Line

Projected (Pl. 724+72.5 Δ=0°03'41" Rt.) Line

735+10 — Right Road Approach, Lt.

Drainage Ditch, Rt.

Note Elev. Equa. B.M. No 97 Elev. 7740.55 Bk on S0120(2) = 7738.79 Ahd on S0113(5) Spike on Power Pole 30' Rt. Sta. 527+56 S0113(5)

B.M. No 93 Elev. 7721.26
Nail in Power Pole 30' Rt
Sta. 715+50

B.M. No 94 Elev. 7726.69
Nail in Power Pole 35' Rt
Sta. 723+40

B.M. No 95 Elev. 7731.00
Nail in Power Pole 35' Rt
Sta. 731+60

B.M. No 96 Elev. 7735.07
Nail in Power Pole 34' Rt.
Sta. 739+40

No 30 = A-1-b(0)
LL = 27.4
P.I. = 5.3
%200 = 20
R = 60.0

No 31 = A-1-b(0)
Similar No 30

No 32 = A-1-b(0)
Similar No 30

No 33 = A-2-4(0)
LL = 30.8
P.I. = 10.4
%200 = 24

Pl. 731.24

+0.62%

+0.52%

No 30

No 31

No 32

No 33

M.S.T.A.T. = 0

7740

7730

7720

7710

7740.00

7750

7730

7720

SUMMARY OF EARTHWORK

EXCAVATION	S0120(3)	S0120(2)
FROM CROSS SECTIONS	100	871
ESTIMATED FOR SUBSIDENCE	10	87
ESTIMATED FOR CUT ENDS OF CULVERTS		
TOTALS	110 Cu. Yds.	958 Cu. Yds.

Note:
Excavated Material to be placed in Bottom of Fill Slopes. No overhaul will be allowed or paid for.

| | | |

Excavation Cu. Yds.	Excavation Area	Embankment Area	Embankment Cu. Yds.

Excavation Cu. Yds.	Excavation Area	Embankment Area	Embankment Cu. Yds.

FED. ROAD DIVISION NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S0120(2) S0120(3)	161	

SUMMARY OF EARTHWORK
S0120(2) & S0120(3)

EMBANKMENT

	CU. YARDS S0120(2)	S0120(3)
From Crossections	71473	45592
Excavation	− 1366	− 97
Net Embankment	70107	45495

EMBANKMENT X FACTOR

TONS S0120(2)	S0120(3)
159,728.65	73,836.75

TON MILE OVERHAUL

	TON-MILE S0120(2)	S0120(3)
From Tab. Sheets	250,806	130,459
From Surfacing Plan	121,089	63420
Total	371,895	193,879

EXCAVATION

	CU. YARDS S0120(2)	S0120(3)
From Crossections	1366	97

UNCL. DITCH EXCAVATION

	CU. YARDS S0120(2)	S0120(3)
From List of Structures	9.2	2.3

SHEET TOTALS		
	EXCAVATION	CU. YDS.
	EXCAVATION	CU. YDS.
	EMBANKMENT	CU. YDS.

FEDERAL ROAD DIVISION NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLORADO	S 0120 (2) S 0120 (3)	1	

RIGHT OF WAY

COLORADO
DEPARTMENT OF HIGHWAYS

PLAN AND PROFILE OF PROPOSED

FEDERAL AID SECONDARY PROJECT NO.S0120(2) & S0120(3)

STATE HIGHWAY NO. 370

ALAMOSA & RIO GRANDE COUNTIES

RIGHT OF WAY

INDEX OF SHEETS

SHEET NO. 1 TITLE SHEET.
2 TABULATION OF PROPERITIES.
3-16 PLAN AND PROFILE SHEETS SHOWING RIGHT OF WAY

CONVENTIONAL SIGNS

CENTER LINE — PLAN SHEET — R.O.W. MARKER — TITLE SHEET
RIGHT OF WAY LINE
COUNTY LINE
TOWNSHIP OR RANGE LINE
LAND LINES — SECTION LINE — 1/4 SECTION LINE — 1/16 SECTION LINE
RAILROAD — TITLE SHEET — PLAN SHEET
BARBED WIRE FENCE
COMBINATION WIRE FENCE
SNOW FENCE
TELEPHONE & TELEGRAPH LINES
POWER LINE
DETOUR
PRESENT ROAD (Plan Sheets)

SCALES OF ORIGINAL DRAWINGS

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

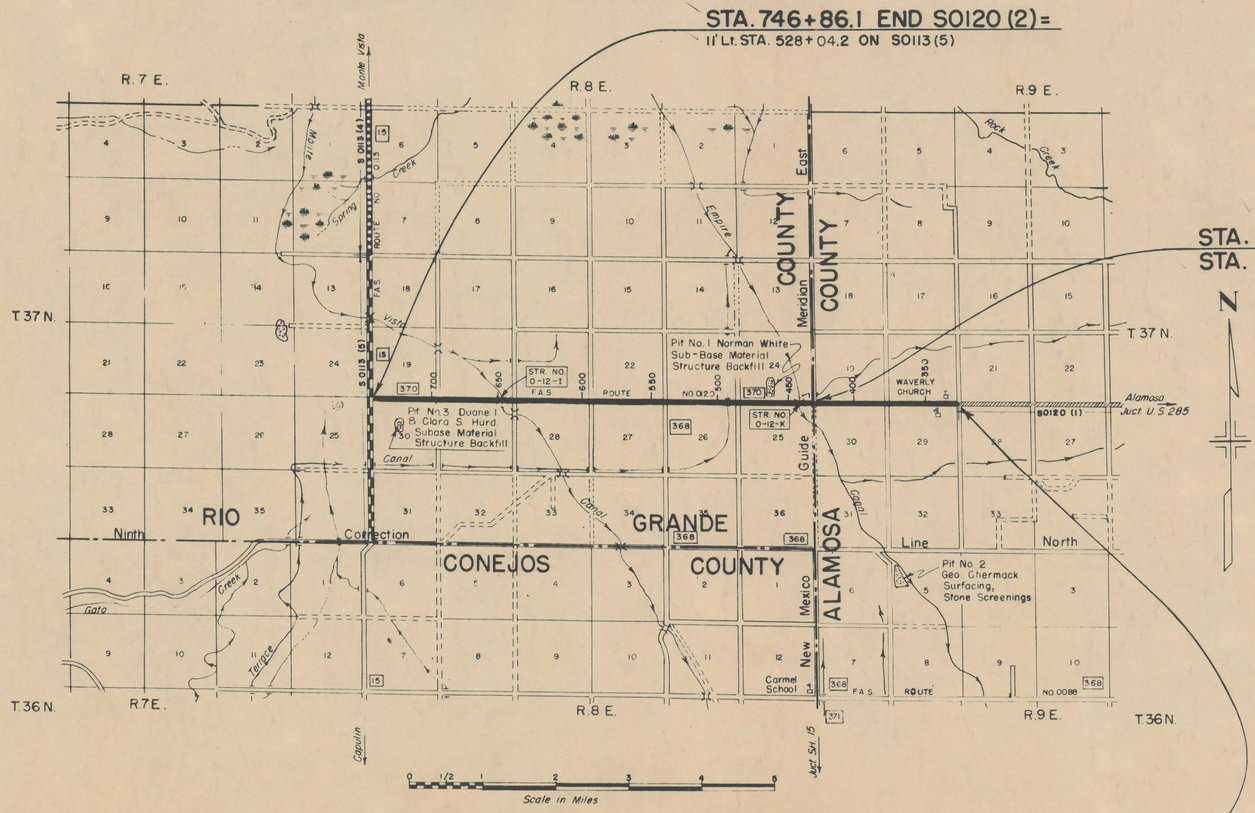
	S0120(2)	S0120(3)
GROSS LENGTH OF PROJECT	31,590.4 FT. = 5.983 MI.	10,658.8 FT. = 2.019 MI.
NET LENGTH OF PROJECT		

INFORMATION OBTAINED FROM AVAILABLE COUNTY RECORDS

STA. 746+86.1 END S0120(2)=
11' Lt. STA. 528+04.2 ON S0113(5)

STA. 430+96.3 BEGIN S0120(2)=
STA. 430+96.3 END S0120(3)

STA. 324+37.5 BEGIN S0120(3)=
STA. 324+34.2 END S0120(1)



COLORADO DEPARTMENT OF HIGHWAYS
FORM C.D.H. 136
JUNE, 1952

R.O.W. TABULATION OF PROPERTIES IN ALAMOSA & RIO GRANDE COUNTIES S.H. No. 370 PROJ. NO. S 0120(2) S 0120(3)

FEDERAL ROAD DIVISION NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLORADO	S 0120 (2) S 0120 (3)	2	

RIGHT OF WAY

PARCEL NO.	OWNER	ADDRESS	LOCATION	AREA IN ACRES			REMARKS	NO.
				TOTAL LAND IN TRACT	PARCEL	TO BE ACQUIRED		
	S 0120 (3) – Alamosa County							
	S 0120 (2) – Rio Grande County							
			T. 37 N., R. 8 E., N.M.P.M.					
1	W. H. Sewell & Clarinda K. Sewell	Monte Vista, Colo.	NE. 1/4 Sec. 30	160	2.112	0.240	R.O.W. purchased by Rio Grande Co. Quit Claim Deed recorded March 7, 1955 – Bk. 236, P. 148 – Reception no. 180058	
2	Duane I. Hurd & Clara S. Hurd	Monte Vista, Colo.	NW. 1/4 Sec. 30	160	2.233	0.453	R.O.W. purchased by Rio Grande Co. Quit Claim Deed recorded March 7, 1955 – Bk. 236, P. 147 – Reception no. 180057	

FED. ROAD DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S0120(3)	3	

RIGHT OF WAY

NE 1/4, Sec. 29, T37N, R9E, NMPM.

NW 1/4, Sec. 29, T37N, R9E, NMPM

SW 1/4 Sec. 20, T37N, R9E, NMPM

S E 1/4, Sec. 20 T37N, R9E, NMPM.

STAKE ON TELEPHONE POLE
P.I. 324+37.5 Bk. = 324+34.2 Ahd.
Δ = 0°07' Rt.
6 Me-11 Rods
S 0120 (1)
P.I. 324+37.5 Bk = 324+34.2 AHD.
S 0120 (3)
STAKE ON FENCE CORNER

STAKE ON FENCE POST
P.I. 341+15.9
STAKE ON FENCE POST

P.I. 324+37.5 Bk. = 324+34.2 Ahd. Δ = 0°07' Rt.

P.I. 341+15.9 Δ = 0°31'40" Lt.

Uncultivated

Mountain States Tel. & Tel. Line

25' Open Drive

Base Ball Screen

Play Yard

Comb. Tel. & Power Poles

14' Steel Gate

School

Woven Wire, Steel Posts

Guard Rail

R.O.W. Along Present Fence

Cultivated

Comb. Tel. & Power Pole

Board Fence

Mail Box

House

N89° 38' 20" W.

S.89° 50' W.

REA Power Line

R.O.W. Along Present Fence

Sign

Concrete Side Walk

Light Brush

10' Gate

Side Walk

3' Gate

9' Side Walk

Parking Lot

Parking Lot

2' Side Walk

House

Garage

3'x5' Pump House

Church

Woven Wire

4'x3' Pump House

Slow Sign

2" Iron Pipe Property Corner

Equipment Yard

Potato Shed

Combination Wire Fence

House

Chicken House

Uncultivated

Cultivated

Man Hole

V Ditch 4'x2'

8" A-1-test Well

90°00'

90°45'

4 Mail Boxes

Proj. Marker in Place

Sign

Man Hole

Sign Line

(N 89°-32' W. Elev. 5020.1) = (N 89°-38'20" W. Elev. 5020.0)

Bearing Equation

STA. 324+37.5 BEGIN S0120 (3) = END S0120 (1)

1/4 Sec. Line

N

B.M. No. 45, Elev. 7589.45
Nail in Tree 38' Rt.
Sta. 333+50

B.M. No. 46, Elev. 7591.18
Nail in Fence Post 31' Rt.
Sta. 340+20

B.M. No. 47, Elev. 7588.03
Nail in Power Pole 29' Rt.
Sta. 345+85

B.M. No. 48, Elev 7589.03
Nail in Power Pole 32' Rt.
Sta. 353+69

No1 A-2-4(0)	No1A A-4(1)	No1B- A-6(5)	No2 = A-2-4(0)	No2 A+A+b(0)	No2 B A-2-4(0)
LL = 21.7	LL = 24.2	LL = 36.3	LL = 24.2	LL = 23.2	LL = 26.0
PI = N.P.	PI = 7.5	PI = 16.8	PI = 5.3	PI = 4.5	PI = 8.3
%200 = 20	%200 = 39	%200 = 48	%200 = 33	%200 = 2.5	%200 = 15
R = 33	C.B.R. = 109		R = 36	R = 49	

M.S.T.B.T.-2-0

R.E.A.-2-0

P.I. 7589.84

P.I. 7590.84

300' V.C.

90.16

90.16

90.40

7600

7590

7580

+0.18%

+0.40%

+0.20%

-0.08%

+0.24%

No. 1
No. 1A
No. 1B

No. 2
No. 2A
No. 2B.

89.24

89.76

90.14

90.54

90.73

90.72

P.I. 7585.44

P.I. 7590.04

300' V.C.
N.P.S.D. > 1,300'

300' V.C.
N.P.S.D. > 1,300'

325 330 335 340 345 350 355

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

EUGENE DIETZGEN CO. Chicago New York

PLAN: SURVEYED, PLOTTED, NOTE BOOK, NO, DATE, BY, ALIGNMENT CHECKED, RT. OF WAY CHECKED

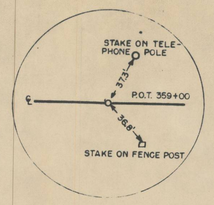
PROFILE: SURVEYED, PLOTTED, GRADES CHECKED, BM & NOTES, STRUCTURE NOTATIONS CK'D, NOTE BOOK, NO

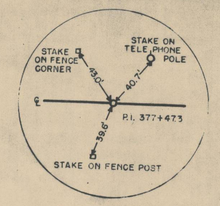
FED. ROAD DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO	TOTAL SHEETS
9	COLO.	S0120(3)	4	

RIGHT OF WAY

PLAN — SURVEYED / PLOTTED / ALIGNMENT CHECKED / RT OF WAY CHECKED — DATE — BY — NOTE BOOK — NO

PROFILE — SURVEYED / PLOTTED / GRADES CHECKED / B.M.'S PLOTTED / STRUCTURE NOTATIONS CHKD — DATE — BY — NOTE BOOK — NO





NW 1/4, Sec. 29, T37N, R9E, NMPM.

NE 1/4, Sec.30, T37N, R9E, NMPM

Cultivated

R.O.W. Along Present Fence

Mountain State Tel Line

Light Brush

S.89°50'W.

14"x12" CMP

Mail Box

Man Hole

House

R.E.A. Power

4'x2.5'x2' Division Box

R.O.W. Along Present Fence

P.I. 377+47.3

Δ=0°16' Rt.

90°16'

24"x32' CMP X-Drain

89°52'

6.4'x3'x2' Division Box 2 Wings 10" Well

43"x29"x30' CMP Arch Pipe with Conc. Rubble Headwalls

Sec. Line

House

Shed

House

2 V Ditches 4'x2'

N 89°54' W

SW 1/4, Sec. 20 T37N, R9E, NMPM.

SE 1/4, Sec. 19, T37N, R9E, NMPM

B.M. No 48 Elev. 7592.60
Nail in Power Pole 32' RT.
Sta. 361+52

B.M. No 50 Elev. 7593.15
Nail in Power Pole 32' RT.
Sta. 369+36

B.M. No 51 Elev. 7596.24
Nail in Power Pole 33' RT.
Sta. 376+32

B.M. No 52 Elev. 7596.95
Nail in Power Pole 37' RT.
Sta. 383+70

No 3 A-1-b(0)
LL = N.V.
P.I. = N.P.
% 200=14
R = 77.0

No 3A A-2-4(0)
LL = N.V.
P.I. = N.P.
%200=23
R = 66.0

No 3B A-2-4(0)
LL = 24.8
P.I. = 7.9
%200=33

No 4 A-1-b(0)
Similar To No 3

No 4A A-2-4(0)
Similar No 3

No 4B A-2-4(0)
Similar 3B

No 5 A-2-4(0)
LL = 23.5
P.I. = 4.4
%200=28

No 5A A-2-4(0)
LL = 23.6
P.I. = 4.8
%200=29

Comb. 5 B 5A
C.B.R. 21.6

No 6 A-1-b(0)
LL = N.V.
P.I. = N.P.
%200=13

No 6A A-1-b(0)
LL = 21.6
P.I. = N.P.
%200=25

No 6B A-2-4(0)
LL = 28.2
P.I. = 9.4
%200=25

M.S.T.&T.

R.E.A.

+0.24%

+0.26%

P.I. 7594.60

P.I. 7598.50

FL. 92.4

No 3
No 3A
No 3B

No 4
No 4A
No 4B

No 5
No 5A

No 6
No 6A
No 6B

7600
7590
7580

355 360 365 370 375 380 385

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

EUGENE DIETZGEN CO. Chicago New York

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

FED. ROAD DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S0120(3)	5	

RIGHT OF WAY

PLAN | SURVEYED | DATE
NOTE BOOK | PLOTTED | BY
NO | AS CONST. CHECKED
AS BUILT CHECKED

NE 1/4, Sec30, T37N, R9E, NMPM

NW 1/4, Sec30, T37N, R9E, NMPM.

Cultivated

Pasture

STAKE ON TELEPHONE POST — 39.6 — 42.6 — STAKE ON FENCE CORNER
Pl. 404+297
STAKE ON FENCE CORNER

N

R.O.W. Along Present Fence

Mountain State Tel. & Tel. Line.

Pl. 404+297 1/4 Sec. Line
Δ=0°05' LT.

15"x12 CMP
18"x32 CMP
18"x16" CMP

Mail Box
Mail Box
Mail Box

385 — 390 — 395 — 400 — 405 — 410 — 415

Light Brush — Light Brush — REA Power Line — Light Brush — Light Brush

N89°54'W — N89°59'W

9.5'x3'x2.5' Division Box

16 Wire Gate

Walk Bridge 4x3

16'x6' Wood Bridge

2'- Ditch

R.O.W. Along Present Fence Line

Reservoir.

10" Well

12'x2.8'x2.5' Division Box With 8"x2'-5" Neck

Cultivated

Cultivated

SE 1/4, Sec. 19, T37N, R9E, NMPM

SW 1/4, Sec. 19, T37N, R9E, NMPM.

B.M. No 53 Elev. 7597.17
Nail in Power Pole 37' RT.
Sta 391+57

B.M. No 54 Elev. 7600.42
Nail in Power Pole 40' RT.
Sta 399+32

B.M. No 55 Elev. 7601.18
Nail in Power Pole 33' RT.
Sta 407+50

B.M. No 56 Elev. 7602.37
Nail in Power Pole 32' RT.
Sta 415+70

No6 A-1-b(0)	No6A A-1-b(0)	No6B A-2-4(0)	No7 A-1-b(0)	No7A A-1-b(0)	No7B A-2-4(0)	No8 A-1-b(0)	No8A A-2-4(0)	No8B A-6(1)	No9 A-1-b(0)	No9A A-2-4(0)	No9B A-6(11)
LL = N.V.	LL = 21.6	LL = 26.2	Similar to No6	Similar to No6A	LL = 27.2	LL = 21.0	LL = 21.3	LL = 29.3	Similar to No8	Similar to No 8A	Similar to 8B
P.I. = N.P.	P.I. = N.P.	P.I. = 9.4			P.I. = 10.2	P.I. = N.P.	P.I. = 3.4	P.I. = 12.4			
%200 = 13	%200 = 25	%200 = 28			%200 = 33	%200 = 19	%200 = 2.8	%200 = 39			
	R = 55.0					R = 58.0					

R.E.A. 2-0

R.E.A. 1-0
M.S.T. & T. 2-0

Pl. 7598.50

Pl. 7602.10

Pl. 7604.66

+0.18%

+0.32%

+0.12%

FL. 980

7610 — 7600 — 7590

No6 No6A No6B

No7 No7A No7B

No8 No8A No8B

No9 No9A No9B

385 — 390 — 395 — 400 — 405 — 410 — 415

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 DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S 0120(2) S 0120(3)	6	

RIGHT OF WAY

NW 1/4, Sec. 30, T 37 N, R 9 E, NMPM

Pasture

Uncultivated

R.O.W. Along Present Fence

18' Board Gate

N89°59'W

R.O.W. Along Present Fence

Cultivated

SW 1/4 Sec. 19, T 37 N, R 9 E, NMPM

STA. 430+96.3 END S 0120(3) =
BEGIN S 0120(2)

Bearing Equation { N89°59'W Bk on S0120(3)
S89°55'45"W Ahd on S0120(2)

P.I. 430+963 Range Lines COUNTY COUNTY

Δ = 1°44' Rt.

89°35'

90°0'

ALAMOSA R-9E
RIO GRANDE R-8E

STAKE ON FENCE POST
45.4
44.0
℄ S0120(3)
S0120(2)
P.I. 430+96.3
45.2
STAKE ON POWER POLE

Flow

Empire

NE 1/4 Sec. 25, T 37 N, R 8 E, NMPM

Uncultivated

End Mountain State Tel. Line

Light Brush

Mail Box

60°13'

Pasture

R.O.W. Along Present Fence

15" x 48' C.M.P. X-Culv.

Willows

N88°20'15"W

End R.E.A. Power Line

437+94.2 to 438+43.7
48'- 2 Span Timber Bridge
30' Clear Roadway
4" x 12" Timber Abutments. Wingwalls.
R.R. Iron Piling
Stream Clearence 5.5'

Slough

R.O.W. Along Present Fence

Heavy Brush

Cond.

SE 1/4 Sec. 24, T 37 N, R 8 E, NMPM

Uncultivated

Uncultivated

BM No56 Elev. 7602.37
Nail in Power Pole 32' RT.
Sta 415+70

BM No57 Elev 7603.64
Nail in Power Pole 32' RT.
Sta 423+53

BM No58 Elev. 7606.11
Nail in Power Pole 35' RT.
Sta 431+36

BM No59 Elev. 7607.48
Nail in Power Pole 65' RT.
Sta 442+75

No9 A-1-b(0) Similar to No8
No9A = A-2-4(0) Similar to No 8A
No9B = A-6(11) Similar to No 8B
Sample No 787

No10 = A-1-b(0) LL = N.V. P.I. = N.P. %200 = 15 C.B.R = 14.1
No10A = A-2-4(0) LL = 24.4 P.I. = N.P. %200 = 35
No10B = A-6(3) LL = 27.6 P.I. = 10.9 %200 = 47
Sample No 787

No1 = A-2-6(0) LL = 52.1 P.I. = 13.3 %200 = 29 C.B.R = 7.9
No1A = A-6(2) LL = 28.9 P.I. = 10.6 %200 = 43
No1B = A-4(3) LL = 29.1 P.I. = 8.3 %200 = 48
Sample No 788

No2 = A-2-6(0) Similar to No1
No2A = A-6(0) Similar to No1A
No2B = A-4(3) Similar to No1B

300' V.C.

06.95
07.30
07.91

+0.12%
+0.14%
+0.71%
+0.104%

P.I. 11.42

200' V.C. @ F.L. 05.2

10.71
11.27
11.52

N.P.S.D. > 1,300'

P.I. 760.62

P.I. 760.16

LOW WATER-STREAM BED

7620
7610
7600
7590

415 420 425 430 435 440 445

PLATE I-PLAN-PROFILE F. H. A. STANDARD

EUGENE DIETZGEN CO. Chicago New York

Printed in U.S.A.
IMPERIAL Type Corp.

FED. ROAD DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S0120(2)	7	

RIGHT OF WAY

N.E. 1/4, Sec. 25, T 37 N, R 8 E, N.M.P.M.

N.W. 1/4, Sec 25, T 37 N, R 8 E, N.M.P.M.

Pasture

Uncultivated

Hay Corral

Comm. Wire & Steel Posts

2'x1'x24' Wood Box Side Drain

17" Wire Gate

Heavy Brush

88°46'

PI 457+66.2

Δ 0°-04' RT.

Wood Head Wall, 3'x6'

12" Barrel Pipe

17"15' Borrow Ditch

Comm. Wire & Steel Posts

Cultivated

R.O.W. Along Present Fence

445 450 455 460 465 470 475

Light Brush

N88°20'15"W

Light Brush

21"x60' CMP Culv.

14' Opening

W=2'

4" Wall

22" Wire Gate

88°56'

Ditch = 1' W

18" x 15' Barrel Pipe

26 Wire Gate

W=2'

W=5'

N88°16'15"W

Light Brush

Pond

Uncultivated

Cultivated

R.O.W. Along Present Fence

Ditch = 2' W

Cultivated

S.E. 1/4 Sec. 24, T 37 N, R 8 E, N.M.P.M.

S.W. 1/4, Sec. 24, T 37 N, R 8 E, N.M.P.M.

1/4 Sec. Line

BM. No 60 Elev 7617.53
Nail in Fence Post 38' L.T.
Sta 455+33

BM. No 61 Elev 7614.40
Nail in Fence Post 30' L.T.
Sta 465+40

PLAN | SURVEYED | PLOTTED | ALIGNMENT CHECKED | TIE UP MAY BE CHECKED | NOTE BOOK | NO | BY | DATE

PROFILE | SURVEYED | PLOTTED | GRADE CHECKED | B.M. NOTED | STRUCTURE NO(S) AT N.O. CH. NO | NOTE BOOK | NO | BY | DATE

No 3 = A-6(5)
LL = 34.4
P.I. = 14.4
%200 = 51
R = 43.0

No 3A = A-6(7)
LL = 37.2
P.I. = 18.3
%200 = 86
C.B.R. = 43

No 3B = A-6(8)
LL = 38.2
P.I. = 14.1
%200 = 65

No 4 = A-2-6(0)
Similar to No I

No 4A = A-6(2)
Similar to No I A

No 4B = A-4(3)
Similar to No 1B

No 5 = A-1-b(0)
LL = 23.2
P.I. = 4.1
%200 = 15
R = 80.0

No 5A = A-2-4(0)
LL = 26.7
P.I. = 9.3
%200 = 35
C.B.R. = 10.1

No 5B = A-2-4(0)
LL = 26.1
P.I. = 8.2
%200 = 35

400' V.C.

600' V.C.

800' V.C.
N.P.S.D. > 1,300'

12.25
12.83
14.44
14.14
16.60
17.26
16.60
16.93
18.28

+0.10 4 %
+0.84 %
-0.06 %
+0.62 %

PI 761.2.46
PI 761.7.80
PI 761.6.42

FL 13.8
FL 12.2

No 3
No 3A
No 3B
No 4
No 4A
No 4B
No 5
No 5A
No 5B

7620
7610
7600
7590
7580

445 450 455 460 465 470 475

PLATE I PLAN-PROFILE

FED. ROAD DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S0120(2)	8	

RIGHT OF WAY

NW 1/4, Sec. 25, T37N, R8E, N.M.P.M.

NE. 1/4 Sec. 26, T37N, R8E, N.M.P.M.

SW. 1/4 Sec, 24, T37N, R8E, N.M.P.M.

SE 1/4 Sec. 23, T37N, R8E, N.M.P.M.

N

Cultivated

Cultivated

Cultivated

Cultivated

Cultivated

Pond

Sec. Line

N88°16'15"W

W=5'-5"

Guard Rails

10' Pump
18'x18'x7'8" Wd Box
43"x27"x10 Arch Pipe in Check

30'x110' C.M.P.

30'x125' Check

Guard Rails

Guard Rails

Comm. Wire & Wood Rails

90°-50'

5

Cow Corral

Board Fence

W=6'-2"

91°-47'

P.I. 484+64
Δ=10°-56'25" Lt.

R.O.W. Along Present Fence

24"x1/2 Sect C.M.P. Check

W=3'

V- Ditch

24"x109' C.M.P.

Comm. Mountain State Tel & R.E.A. Power Lines

Covered Drain

Man Hole 2.5'x3.5'

R.O.W. Along Present Fence

Earth Filled Check 24"x12' C.M.P.

Light Brush

28' Double Drive Gate

3.5 x 1.6 x 2.2 Div. Box

2.5 x 1.4 Outlet

Light Brush

Man Hole 3'x4'

S89°47'30"W

Covered Drain

475 480 485 490 495 500 505

BM No 62 Elev. 7617.77
Nail in Fence Post 32' LT.
Sta 478+51

BM No 63 Elev. 7620.69
Nail in Power Pole 50' RT.
Sta 485+50

BM. No 64 Elev. 7621.93
Nail in Power Pole 41' RT.
Sta 493+75

BM. No 65 Elev. 7624.19
Nail in Power Pole 38' RT.
Sta 501+60

No 6=A-1-b Similar to No5

No6A=A-6(4) LL=31.9 P.I.=11.4 %200=57

No6B=A-6(8) LL=35.6 P.I.=16.8 %200=60

No7=A-1-b-(0) Similar to No5

No7A=A-4(1) LL=26.3 P.I.=8.4 %200=40

No 7B=A-6(8) Similar to No6B

No 8=A-1-b(0) Similar to No5

No8A=A-4(1) Similar to No7A

No 8B=A-6(8) Similar to No6B

R.E.A.

R.E.A.

R.E.A.

P.I. 7622.00

P.I. 7623.12

P.I. 7626.12

+0.62%

+0.08%

+0.30%

No6 No6A No6B

No7 No7A No7B

No8 No8A No8B

7630
7620
7610
7600
7590

2044
2159
2224

600' V.C.
N.P.S.D. > 1,300'

PLATE I-PLAN-PROFILE A.A.S.H.O. STANDARDS

EUGENE DIETZGEN CO. Chicago New York

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

FED. ROAD DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S0120(2)	9	

RIGHT OF WAY

N.E.1/4, Sec.26, T37N, R8E, N.M.P.M.

N.W.1/4, Sec.26, T37N, R8E, N.M.P.M.

Cultivated

Uncultivated

R.O.W. Along Present Fence

1/4 Sec Line

88.15

21"x84' C.M.P. x-Culv.

15"x18' C.M.P. From Field

Sub Check 24"x12' C.M.P.

V-Ditch

Dry Rubble 24.5 SQ C.M.P. Across Co. Road 18.11"x52' C.M.P.

W=3'

W=2'

LIGHT BRUSH

Light Brush

505 510 515 520 525 530 535

S89°47'30"W

S89°39'15"W

Comb. Wire

5.3x1.8x2.0 Div. Box 3.0x1.5 Outlet

12"x15' C.M.P. 16 Open Span

6" Well

12'x8' Boat H

8.4x2.9x3.5 Div. Box 6.4x1.9 Outlet

Comd. Mountain State Tel. & R.E.A. Power Lines

Man Hole 3'x4'

15"x16' C.M.P.

16' Wire Gate

12' Wire Gate

W=2'

Covered Drain

Man Hole 2.5x4'

8.4x2.5x2.6 Div. Box 6.4x2.0 Outlet

Woven Wire & Wood Rails

Equipment Yard

90°-28'

Cultivated

R.O.W. Along Present Fence

Cultivated

Pit Silo

PI-510+51.0
Δ=0°-08'25" LT.

PI 536+72.0
Δ=0°-26' LT.

S.E.1/4, Sec.23, T37N, R8E, N.M.P.M.

S.W.1/4, Sec.23, T37N, R8E, N.M.P.M.

B.M. No66 Elev 7627.52
Nail in Power Pole 37' RT.
Sta 509+20

B.M. No67 Elev 7630.42
Nail in Power Pole 33' RT.
Sta 516+10

B.M. No68 Elev 7633.03
Nail in Power Pole 35' RT.
Sta 523+40

B.M. No69 Elev. 7634.57
Nail in Power Pole 34' RT.
Sta 531+25

No9 = A-2-4(0)	No9A = A-4(1)	No9B = A-4(4)
LL = 26.8	LL = 29.7	LL = 29.1
P.I. = 7.6	P.I. = 10.3	P.I. = 9.8
%200 = 27	%200 = 41	%200 = 54
C.B.R. = 22.7	C.B.R. = 9.5	
R = 53.0		

No10 = A-2-4(0) Similar to No9

No10A = A-4(1) Similar to No9A

No10B = A-4(4) Similar to No9B

No11 = A-2-4(0)	No11A = A-6(1)	No11B = A-6(3)
LL = 27.8	LL = 32.2	LL = 39.2
PI = 9.9	P.I. = 13.0	P.I. = 21.6
%200 = 34	%200 = 36	%200 = 36

PROFILE

7640
7630
7620
7610

P.I. 7626.08

+0.48%

No9 No9A No9B

P.I. 7632.36

+0.26%

No10 No10A No10B

No11 No11A No11B

P.I. 7636.78

505 510 515 520 525 530 535

PLATE 1-PLAN-PROFILE

EUGENE DIETZGEN CO. Chicago New York

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

FED. ROAD DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S0120(2)	10	

RIGHT OF WAY

N.E. 1/4, Sec 27, T37N, R8E, N.M.P.M.

Pasture

Sec. Line

16"x11'x32' C.M.P Arch Pipe
24"x30' C.M.P. Across Co. Road

88°-16'

15"x16' C.M.P.

Dry Rubble

W=3'

12' Wire Gate

2" Well

End Dry Rubble Wall
24"x200' C.M.P in Ditch
No Fence

Shed

12' Open Drive

R.O.W. Along Present Fence

Dry Rubble Wall

W=1'

Mail Box

18"x91' Iron Siphon

6' Wire Gate

24"x30' C.M.P

Cultivated

W=3'

18"x86' C.M.P.

12"x16' C.M.P From Field

Light Brush

Dry Rubble

Light Brush

Light Brush

Light Brush

Light Brush

535 540 545 550 555 560 565

S89°13'15"W

S89°13'45"W

Comd. Mountain State Tel. & R.E.A. Power Lines.

W=2'

8'4"x25'x26' Div. Box
6'4"x2'0 Outlet
End Covered Drain

90°-33'

88°-56'

90°-28'

P.I. 536+72.0
Δ=0°26' Lt.

P.I. 563+57.6
Δ=0°00.30"Rt

14 Wire Gate

3' Walk

18"x12' CMP

6' Well

2"x8' Cattle Guard

17' Wire Gate

Potato Cellar

Board Fence

R.O.W. Along Present Fence

Cultivated

Cultivated

1/4 Sec. Line

S.E. 1/4, Sec 22, T37N, R8E, N.M.P.M.

N

BM. No 70 Elev. 7636.57
Nail in Power Pole 30' RT.
Sta 539+20

BM. No 71 Elev 7643.94
Nail in Power Pole 29' RT.
Sta 546+98

BM. No 72 Elev. 7644.15
Nail in Power Pole 31' RT.
Sta 554+65

BM. No 73 Elev. 7646.18
Nail in Power Pole 30' RT.
Sta 562+95

No12 = A-2-4(0)
Similar to No11

No12A= A-6( )
Similar to No11A

No13=A-7-6(17)
LL = 41.1
PI = 16.9
%200= 54
C.B.R. = 9.3

No14=A-2-4(0)
LL =27.6
PI =8.2
%200=23
C.B.R. =27.8

No14A=A-6-(3)
LL =34.3
PI. =14.3
%200=45
C.B.R =6.9

No14B=A-2-4(0)
LL =27.1
PI =7.3
% 200=14

R.E.A.

R.E.A.

R.E.A.

M.S.T.B.T.Co

P.I. 7643.68

0.46 %

0.30 %

0.36 %

7650
7640
7630
7620

Δ FL. 33.3

No12
No12A

No13

No14
No14A
No14B

P.I. 7636.78

P.I. 7646.38

535 540 545 550 555 560 565

PLATE 1-PLAN-PROFILE B P R STANDARD

EUGENE DIETZGEN CO. Chicago New York

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

PLAN: SURVEYED, PLOTTED, GRADES CHECKED, R/W MONUMENTS & R/W STRUCTURE NOTATIONS CHECKED, NOTE BOOK, NO, BY, DATE

PROFILE: SURVEYED, PLOTTED, GRADES CHECKED, R/W MONUMENTS & R/W STRUCTURE NOTATIONS CHECKED, NOTE BOOK, NO, BY, DATE

FED. ROAD DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S0120(2)	11	

N.W. 1/4, Sec 27, T37N, R8E, N.M.P.M.

RIGHT OF WAY

Cultivated

V-Ditch

1x1 Ditch

15' Wood Gate

18" x 22' C.M.P. Dry Rubble

Hd. Gate

Cultivated

R.O.W. Along Present Fence

W=3½'

18" x 20' C.M.P. Dry Rubble

Aerato Cellar

Δ=0°39'57" R

R=1590.42'

88°52'

12" x 16' C.M.P. Dry Rubble

4 Hd. Gate

Uncultivated

W=4'

Light Brush

565 570 575 580 585 590 595

S89°13'45"W

S89°53'15"W

Comd. Mountain State Tel & R.E.A. Power Lines

Man-Hole 2'5 x 4

W=2½'

R.O.W. Along Present Fence

2'x2' Box
4'x6' Pump House
2'x2' Box

18" x 34' C.M.P.

90°-0'

Sec. Line

Cultivated

Pasture

Cultivated

S.W.1/4, Sec. 22, T37N, R8E, N.M.P.M.

N

BM No 74 Ele. 7649.83
Nail in Power Pole 30' RT.
Sta 570 + 35

No15 = A-2-4(0)
Similar to No14

No15A = A-2-4(0)
LL = 22.9
PI = 9.0
%200 = 28

BM No 75 Elev. 7653.16
Nail in Power Pole 30' RT
Sta 578 + 25

No16 = A-2-4(0)
Similar to No14

No16A = A-6(3)
LL = 30.3
PI = 11.8
%200 = 48

No16B = A-6(6)
LL = 34.9
PI = 14.4
%200 = 67

B.M. No 76 Elev. 7657.09
Nail in Power Pole 30' RT.
Sta 586 + 20

No17 = A-1-b(0)
LL = 24.6
P.I. = N.P.
%200 = 18

BM No 77 Elev. 7658.93
Nail in Power Pole 36' RT.
Sta 592 + 40

R.E.A.-40

M.S.T.&T.-40

7670
7660
7650
7640
7630

+.036%

+.042%

No15
No15A

No16
No16A
No16B

No17

P.I. 7650.22

P.I. 7659.88

565 570 575 580 585 590 595

PLATE 1 PLAN-PROFILE

EUGENE DIETZGEN CO. Chicago New York

FED. ROAD DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S0120(2)	12	

RIGHT OF WAY

N.E. 1/4, Sec. 28, T 37 N, R 8 E, N.M.P.M.

Uncultivated

Cultivated

R.O.W Along Present Fence

End 3' Ditch

8'x20' Dry Rubble

18'x14' C.M.P.

Light Brush

S 89°53'15" W

Comb. Mountain State Tel. & R.E.A. Power Lines

V-Ditch

R.O.W. Along Present Fence

Metal Posts

V-Ditch

2'x2' well

4'x4' well

4'x4' well

6'x3'x2' Div. Box

3'x3' Outlet

V-Ditch

1/4 Sec. Line

P.I. 616+26.2

Δ = 0°06'.5 Rt.

89°-23'

89°-26'

2'x2' Man Hole

V-Ditch

Easement

West

2'x1' Ditch

Cultivated

S.E. 1/4, Sec. 21, T 37 N, R 8 E, N.M.P.M.

595 600 605 610 615 620 625

BM. No 78 Elev. 7662.55
Nail in Power Pole 36' RT.
Sta 599+40

BM. No 79 Elev. 7666.04
Nail in Power Pole 35' RT.
Sta 607+20

BM. No 80 Elev. 7670.01
Nail in Power Pole 36' RT.
Sta 615+08

BM. No 81 Elev. 7672.60
Nail in Power Pole 35' RT.
Sta 622+90

No 18 = A-2-6(0)	No 18A = A-2-4(0)
L.L. = 30.2	L.L. = 27.8
P.I. = 10.8	P.I. = 9.0
%200 = 25	%200 = 34
C.B.R. = 13.3	R = 560

No 19 = A-2-4(0)	No 19A = A-2-6(0)
L.L. = 23.4	L.L. = 30.5
P.I. = 4.9	P.I. = 10.8
%200 = 27	%200 = 33

No 20 = A-4-(2)	No 20A = A-4(2)	No 20B = A-6(2)	No 20C = A-1-a(0)
L.L. = 28.6	L.L. = 28.7	L.L. = 33.7	L.L. = 24.0
P.I. = 9.8	P.I. = 10.0	P.I. = 14.5	P.I. = N.P.
%200 = 44	%200 = 46	%200 = 39	%200 = 10

7680
7670
7660
7650

+0.46 %

+0.44 %

No 18
No 18A

No 19
No 19A

No 20
No 20A
No 20B
No 20C

P.I. 7665.40

PLATE 1-PLAN-PROFILE

FED. ROAD DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S0120(2)	13	

RIGHT OF WAY

PLAN — SURVEYED BY | PLOTTED DATE | NOTE BOOK | CHECKED | RT. OF WAY CHECKED | NO

PROFILE — SURVEYED BY | PLOTTED DATE | NOTE BOOK | CHECKED | B.M.- NOTE | STRUCTURE NO | RT. OF WAY CHECKED

N.W.1/4, Sec. 28, T37N, R8E, N.M.P.M.

Cultivated

R.O.W Along Present Fence

Man Hole 2'x4'

Light Brush

West

2'x1' Ditch

Easement

V- Ditch

R.O.W. Along Present Fence

Metal Posts

Cultivated

S.W.1/4, Sec 21, T37N, R8E, N.M.P.M.

12' Opening

2'x1'x17' Wood Box

2'x1'x17' Wood Box

10" x 12" Dia. Box & 3 Outlet

Ext. Coms. Mountain States Tel. & Tel. & R.E.A. Power Lines

Sec. Line

P.I. 642+13.4

Δ=0°04.5' RT.

90°-00'

3 Wolps

C.

C.H.

H.

5' Walk 12' Opening

3' Walk Gate

6' End Wood Rails

Wood Rails

4' Double Gate

Sign

Mail Box

30"x34' C.M.P.

90°-15'

89°30'

1'x1' Ditch

12' Opening

18" C.M.P. Culvert

Hd. Gate

Flow

Monte Vista Canal

2' Span Timber Bridge 3.4' +/-L. Stringers, Girders & Flooring

Timber Pile Abutment & Piers (19" Timber Caps)

Stream Clearance 3.5'

N.E.1/4, Sec 29, T37N, R8E, N.M.P.M.

Cultivated

Mountain State Tel. Line

Light Brush

S89°55'30"W

14' Gate

Light Brush

1'x1' Ditch

R.E.A. Power Line

Cultivated

S.E.V4, Sec 20, T37N, R8E, N.M.P.M.

625 630 635 640 645 650 655

BM. No 82 Elev. 7675.89
Nail in Power Pole 38' RT.
Sta 630+80

BM. No 83 Elev. 7680.01
Nail in Power Pole 32' RT.
Sta 638+50

BM. No 84 Elev. 7684.66
Nail in Power Pole 32' RT.
Sta 645+20

BM. No 85 Elev. 7687.67
Nail in Power Pole 32' RT.
Sta 651+85

No21=A-2-4(0)
LL =30.5
PI =10.4
%200=30

No21A=A-4(2)
Similar No20A

No21B=A-6(2)
Similar No20B

No21C=A-1-a(0)
Similar No20C

No22=A-2-4(0)
Similar No 21

No22A=A-6(5)
LL =35.2
P.I. =15.7
%200=51

No23 A-2-4(0)
LL =26.8
PI. =8.8
%200=10

No23 A=A-2-4(0)
LL =28.0
PI. =9.4
%200=30

7700 7690 7680 7670 7660

+0.44%

+0.54%

+1.08%

+0.068%

+0.050%

4.00' V.C.

M.S.T.&T.-R.E.A.-P

80.96 82.31 84.20

P.I. 89.06

89.53 89.6 90.06

87.98 88.81 89.13

200' V.C.
N.P.S.D. = 8.30'

P.I. 89.50

No21 No21A No21B No21C

No22 No22A

No23 No23A

P.I. 76772

P.I. 7682.04

LOW WATER - STREAM BED -

PLATE 1-PLAN-PROFILE 8" R H STANDARD

EUGENE DIETZGEN CO. Chicago New York

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

FED. ROAD DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	50120(2)	14	

RIGHT OF WAY

N.E. 1/4, Sec. 29, T 37 N, R 8E, N.M.P.M.

Cultivated

14' Wire Gate

End Telephone Line

15' Side Drain

Mail Box

22' Opening

19' wood Gate

12' Wire Gate

R.E.A. Power Line

1'x1' Ditch

Light Brush

29"x18"x36' C.M.P.

11'x 2'x 2' Div. Box

6'x3' Outlet

89°-27'

90°-18'

1/4 Sec. Line

P.I. Equ. 668+81.1 BK = 668+03.5 Ahd.

Δ = 0°-03.5' L.T.

N

N.W. 1/4, Sec. 29, T 37 N, R 8E, N.M.P.M.

Cultivated

R.O.W. Along Present Fence Line

V- Ditch

1'x1' Ditch

Light Brush

21' Opening

R.O.W. Along Present Fence

Cultivated

S.E. 1/4, Sec 20, T 37 N, R 8E, N.M.P.M.

S.W. 1/4, Sec. 20, T 37 N, R 8E, N.M.P.M.

S 89°-55' 30" W

S 89°-52' W

655 660 665 670 675 680 685

BM. No 86 Elev. 7691.94
Nail in Power Pole 32' RT.
Sta 659 + 90

BM No 87 Elev. 7687.01
Nail in Power Pole 31' RT.
Sta 668+05

BM. No 88 Elev 7700.61
Nail in Power Pole 31' Rt.
Sta 675+93

BM. No 89 Elev. 7704.25
Nail in Power Pole 30' Rt
Sta 683+85

No 24 = A-2-4(0)
Similar No 23

No 24A = A-2-4(0)
Similar To No 23A

No 25 = A-2-6(0)
LL = 31.3
PI = 10.6
%200 + 20

No 26 = A-2-6(0)
Similar No 25

EQUATION

P.I. 7698.68

P.I. 7693.50

P.I. 7703.88

668+81.1 Bk = 668+80.5 Ah

R.E.A.

300' V.C.

400' V.C.
N.P.S.D. > 1,300'

90.00

92.75

93.59

94.61

97.20

98.51

99.48

+0.50%

+0.74%

+0.40%

+0.58%

F. 947

No 24
No 24A

No 25

No 26

7710
7700
7690
7680
7670

PROFILE SURVEYED / PLOTTED / NOTE BOOK / CROSS CHECKED / B.M. NOTED / STRUCTURE NOTES CHKD / DATE / BY

PLATE 1-PLAN-PROFILE U. S. F. R. STANDARD

EUGENE DIETZGEN CO. Chicago New York

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

FED. ROAD DIV. NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S0120(2)	15	

RIGHT OF WAY

N.W. 1/4 Sec. 29, T37N, R8E, N.M.P.M.

N.E. 1/4, Sec. 30, T37N, R8E, N.M.P.M.

Cultivated

Point of Beginning (1)

Sec. Line

N

(1) W. H. Sewell & Clarinda K. Sewell
Monte Vista, Colo.

Metal Posts

69°45'

9'x6'x2' Div. Box
4"x2' Outlet
1"x6' Outlet
2'-36" C.M.P.

1'x1' Ditch

24"x12' C.M.P.

S. Mail Box

S 89°52' W

685 690 695 700 705 710 715

21"x44' C.M.P.

Mountain State Tel. Line

Projected Line to be Const

15' Wire Gate

18' Wire Gate

16' Wood Gate

14' Wood Gate

Light Brush

Projected Line S 87°50'34" E

Survey Line S 88°01'15" W

R.E.A. Power Line

1'x1' Ditch

18' Wire Gate

1'x1' Ditch

44' Opening

Pump House

R.O.W. Along Present Fence

Cultivated

Pasture

Cultivated

S.W. 1/4 Sec. 20, T37N, R8E, N.M.P.M.

S.E. 1/4, Sec. 19, T37N, R8E, N.M.P.M.

Survey Line Pi 696+00 Δ = 1°-50'15" L.T.

Project Line Pi 696+00 Δ = 2°01'26" L.T.

To be Constructed

Same Point

BM. No90 Elev. 7708.30
Nail in Power Pole 30' Rt.
Sta 691+70

BM. No91 Elev. 7713.27
Nail in Power Pole 31' Rt.
Sta 699+80

BM. No92 Elev. 7716.40
Nail in Power Pole 30' Rt.
Sta 707+70

BM. No93 Elev. 7728.
Nail in Power Pole
Sta 715+50

No27=A-6-2(10)
LL = 33.0
P.I. = 13.5
%200+30
C.B.R. = 13.0
R = 49.7

No28=A-2-6(0)
Similar No27

No28A=A-7-6(9)
LL = 44.8
P.I. = 20.3
%200+56

No29=A-2-6(0)
Similar No27

R.E.An.

M.S.T.B.T.

Pi 7713.16

Pi 7718.22

+0.58%

+0.48%

+0.62%

No27

No28
No28A

No29

P.I. 0.79 Δ P.I. 0.82

7730
7720
7710
7700
7690

685 690 695 700 705 710 715

PLATE 1-PLAN-PROFILE 8" P.P.P. STANDARD

EUGENE DIETZGEN CO. Chicago New York

PLAN
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
NOTE BOOK
NO
BY
DATE

PROFILE
SURVEYED
PLOTTED
GRADES CHECKED
R & B NOTES
NOTE BOOK
NO
STRUCTURE NO'S AT CH RD

DEPARTMENT OF HIGHWAYS

FED. ROAD DIV. NO.	DIST.	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	S0120(2)	16	

RIGHT OF WAY

N.W.1/4, Sec. 30, T37N, R8E, N.M.P.M.

Point of Beginning (2)

Cultivated

Uncultivated

(2) Duane I. Hurd & Clara S. Hurd.
Monte Vista, Colo.

N

End Mountain State Tel. Line

587°50'34" Projected Line

Surveyed S88°01'15"W

1x1' Ditch

18' Wire Gate

2" Well

5'x16' Wood Bridge

Div. Boxes

R.E.A. Power

16' Drive Gate

Projected Line to be Const.

Light Brush

1'x2' Ditch

Surveyed Line

16' Drive Gate (2)

V-Ditch

Surveyed & Projected Line S87°54'15"W

9-8" Pump

Metal Posts

19'x6'x3' Div. Box
10'x3'x3' Outlet
4'x3' Outlet

Edge of Oil Mat

R.O.W. Along Present Fence

Note Bearing Equation
S87°54'15"W Bk on S0120(2) = N88°03'54" Ahd on S0113(5)

STA. 746+86.1 END S 0120(2) =
11' Lt STA. 528+04.2 S 0113(5)

S.W. 1/4, Sec. 19, T37N, R8E, N.M.P.M.

Cultivated

Cultivated

Photo Cellar

Surveyed Line (P.I. 721+22.5 Δ=0°-07' Lt.

Projected Line (P.I. 724+72.5 Δ=0°03'41" Rt.

Note Elev. Equa. B.M. No 97 Elev. 7740.55 Bk on S0120(2) = 7738.79 Ahd on S0113(5) Spike on Power Pole 30' Rt. Sta. 527+56 S0113(5)

B.M. No 93 Elev. 7721.26
Nail in Power Pole 30 Rt
Sta. 715+50

B.M. No 94 Elev. 7726.69
Nail in Power Pole 35 Rt
Sta. 723+40

B.M. No 95 Elev. 7731.00
Nail in Power Pole 35' Rt
Sta. 731+60

B.M. No 96 Elev. 7735.07
Nail in Power Pole 34' Rt.
Sta. 739+40

No 30 = A-1-b(0)
LL = 27.4
P.I. = 8.3
%200 = 20
R = 80.0

No 31 = A-1-b(0)
Similar No 30

No 32 = A-1-b(0)
Similar No 30

No 33 = A-2-4(0)
LL = 30.8
P.I. = 10.4
%200 = 24

P.I. 731.24

+0.62%

+0.52%

7740
7730
7720
7710

715 720 725 730 735 740 745