FEDERAL ROAD REGION NO.	DIVISION	PROJECT NO.	SHEET NO.
9	COLORADO	CC10-0075-06	1

(R-1) D.H.H 11-26-68

E.E. Olson

31

THE STATE DEPARTMENT OF HIGHWAYS
DIVISION OF HIGHWAYS - STATE OF COLORADO

PLAN AND PROFILE OF PROPOSED
COLORADO PROJECT NO. CC 10-0075-06
STATE HIGHWAY NO. 75

JEFFERSON, ARAPAHOE, AND DOUGLAS COUNTIES

470A MP 14.110 TO MP 17.081
121B MP 0.000 TO MP 4.699

SANTA FE

CONVENTIONAL SIGNS

PLAN SHEET — BEGIN PROJ — TITLE SHEET — END PROJ

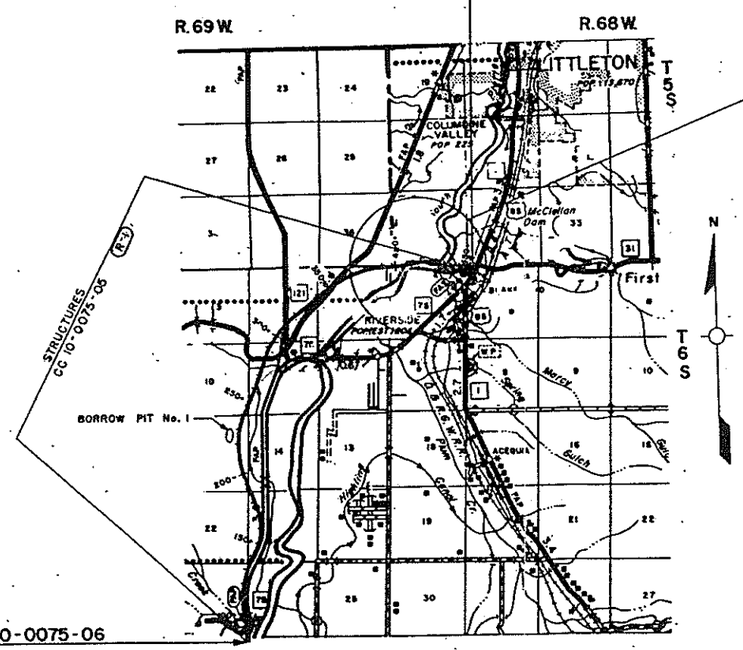
CENTER LINE
COUNTY LINE
TOWNSHIP OR RANGE LINE
LAND LINES — SECTION LINE — 1/4 SECTION LINE — 1/16 SECTION LINE
CITY LIMITS
RAILROAD — PLAN SHEET — TITLE SHEET
BARBED WIRE FENCE
WOVEN WIRE - COMBINATION FENCE
TELE. & TELEG. LINE
POWER LINE
PRESENT ROAD (PLAN SHEETS)
RIGHT OF WAY LINE — R.O.W. MARKER
ACCESS POINTS (FREEWAYS)
C OF A LINE (CONTROL OF ACCESS) — 24' OP — OP=OPENING — 16' OP
ACCESS DENIED BY DEED
TOP OF CUTS
TOE OF FILLS
DETOUR
PROPOSED POWER LINE
GUARD RAIL
DRAINAGE
IRRIGATION

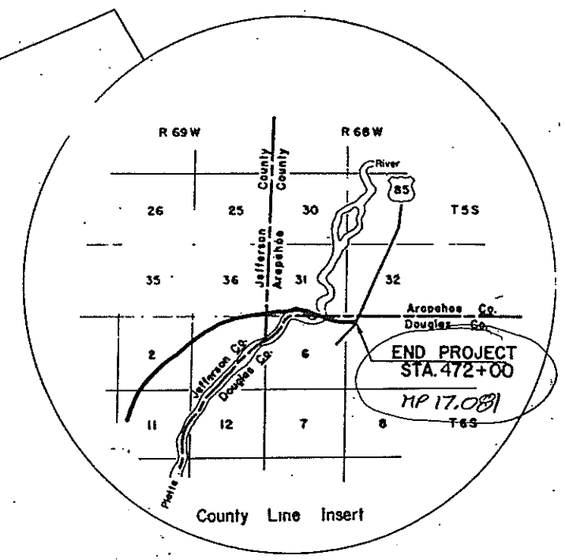
SCALES OF ORIGINAL DRAWINGS

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
GROSS LENGTH OF PROJECT: 39,217.8' = 7.428 MI.
NET LENGTH OF PROJECT: 39,044.4' = 7.395 MI.

END PROJECT CC 10-0075-06
STA. 472+00





SEE SPECIAL PROVISIONS FOR NOTICE TO BIDDERS

DIVISION OF HIGHWAYS

APPROVED: Chas. E. Shumate 11-21-68
CHIEF ENGINEER DATE

By: L. L. Bonne, Deputy Chief Engr.

PLANS PREPARED UNDER CONTRACT CT10-0075-04
BY
BARTON, STODDARD, MILHOLLIN & HIGGINS
DENVER, COLO. BOISE, IDAHO

Alan F. Higgins
ALAN F. HUGGINS REGISTERED PROFESSIONAL ENGINEER 7147 STATE OF COLORADO

D.H.H.

DEPARTMENT OF HIGHWAYS—STATE OF COLORADO
I.B.G.R. 1966
SEP 1 1969

AS CONSTRUCTED
REVISED DATE

FEDERAL ROAD REGION NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
8	COLORADO	CC-10-0075-06	2	6

(R-1) D.H.H. 11-26-68

AS CONSTRUCTED
REVISED DATE 9-12-7

SEEDING

COMMON NAME	BOTANICAL NAME	PERCENT PURITY	PERCENT GERMINATION	RATE PLS/ACRE
(Median, 25 Acres)				
Blue Grama	Bouteloua Curtipendula	35	60	2 lbs.
Western Wheatgrass	Agropyron Smithii	85	70	5 lbs.
Perenial Ryegrass	Loluim Perenne	90	85	3 lbs.
Yellow Sweet Clover	Melilotus Officinalis	98	85	2 lbs.
(Side Slopes, 120 Acres)				
Western Wheatgrass	Agropyron Smithii	85	70	8 lbs.
Crested Wheatgrass (Fairway Strain)	Agropyron Cristatum	90	85	6 lbs.
Perenial Ryegrass	Loluim Perenne	90	85	2 lbs.
Yellow Sweet Clover	Melilotus Officinalis	98	85	2 lbs.

"As Constructed no Revisions"
Sheets 4, 22-24, 26, 28-30, 32-37 and 53 and 72

TABULATION OF LENGTH & DESIGN DATA

STATION	ROADWAY LIN. FT. Jefferson	ROADWAY LIN. FT. Arapahoe	ROADWAY LIN. FT. Douglas	MAJOR STRUCTURES LIN. FT. No Work	MAJOR STRUCTURES LIN. FT. Douglas
80+00.0 Begin Proj.					
307+55.0 Bk. = 307+37.2 Ah.	22,755.0				
406+28 (County Line)	9,890.8				
444+13.3 (County Line)		3,785.3			
So. Platte River Str. 445+86.7				173.4	
467+72.5 Santa Fe Dr. Str.			2,185.8		*
472+00.0 End Proj.			427.5		
TOTAL FT.	32,645.8	3,785.3	2,613.3	173.4	*
TOTAL MILES	6.183	0.717	0.495	0.033	*

SUMMARY	Lin. Ft.	Miles
Roadway - Net Length	39,044.4	7.395
Major Structures - No Work	173.4	0.033
Gross Length	39,217.8	7.428

DESIGN DATA	
Maximum Design Speed	60 M.P.H.
Maximum Degree of Curve	4°00'
Maximum Grade	3.49 %
Minimum Stopping Sight Distance - Horz.	680'
Minimum Stopping Sight Distance - Vert.	605'
Design Loading of Major Structures	HS-20-44

(* No ℄ Length involved.)

GENERAL NOTES

For preliminary plan quantities of bituminous materials the following rates of application were used:

Prime Coat MC @ 0.40 gal/S.Y.
Tack Coat SS @ 0.05 gal/S.Y.

Rates of application were determined by the Engineer at the time of application.

Public approaches and entrances to buildings or residences were paved to the right of way line.

A total of 3691 hrs of flagging for controlling traffic was required for the project.

The force account item, "Clearing Of Building Sites, Etc." included removal of all foundations, wells, buildings and other appurtenances not removed by the owner, and necessary backfilling of cellars, cesspools, wells, etc., to provide neat roadside conditions. All utilities encroaching on construction were moved by the owners.

Any layer of bituminous pavement that was a succeeding layer placed thereon was completed full width before succeeding layer was placed.

Road approaches which require bituminous pavement were primed and a 2" thickness of pavement placed.

Old road was obliterated at the following location Sta. 310+00 to 314+00 Lt.

All fills and base of fills to a depth of 6" were constructed with moisture and density control.

The minimum thickness of topsoil was 4".

Seeding was required within right of way limits on all areas not surfaced. (See table for types)

Concrete pipe for this project was furnished with metal joint fasteners as shown on "M" standard. Joint fasteners were installed on the 2 connections at the outlet end of each culvert.

Compaction for Str. Backfill, Class 3, was Standard. (R-1)

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	Title Sheet
2	Index, General Notes, Tabulation of Length, Design Data, & Seeding
3-4	Typical Sections
5-9	Summary of ~~Approximate~~ Final Quantities
10-15	List of Structures
16, 16A & 16B	Summary of Earthwork Quantities
17	Surfacing Materials Plan, Tabulations of Delineators, Guard Rail & Br.
18	Tabulations of Fencing Quantities, Right of Way Markers, Curb Type 6 Sec. M & Bituminous Slope & Ditch Paving
19-20	Miscellaneous Details
21-33	Structure Plans
34 & 35C	Details of C-20 Pipe Protection Structure, Sta. 311+72 & 287+0
35-35B	Details C-10 Pipe Protection Structure, Sta. 390+75
36	Intersection Details Sta. 314+50
37	Intersection Details Sta. 384+50
38	Intersection Details Sta. 287+00 & Delour Details
39	Utilities Relocation Plan
40-41	Details of Storm Drain at Sta. 364+50 to 425+60
42	Details of Storm Drain at Santa Fe Interchange
43-45	Details of Interchange at Sta. 467+72.46 (Santa Fe)
46-60	Plan & Profile Sheets
61-79	Signing Plans
80-107	Drainage Cross Sections & Deer Creek Cross Sections

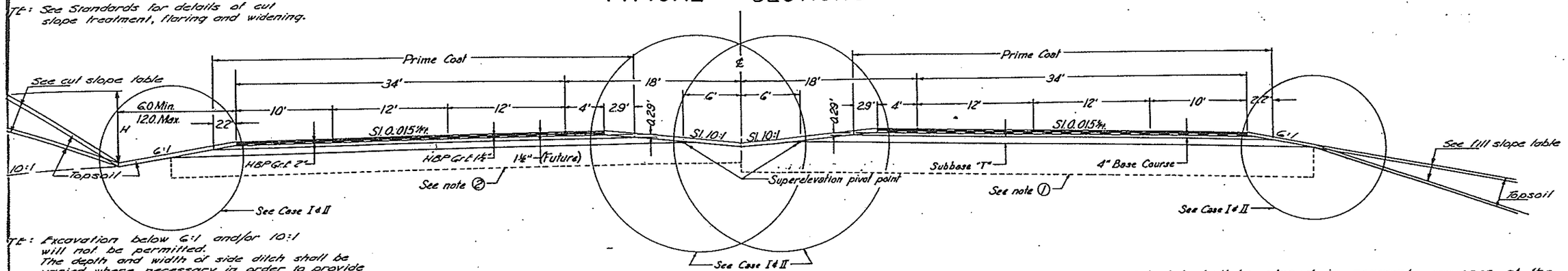
STANDARD DRAWINGS

STD. NO.	TITLE	DATE
M-203-A	Superelevation & Widening of Curves - Crowned Highways	7-30-68
M-203-A-1	Superelevation of Curves - Divided Highways	7-30-68
M-203-B	Approach Roads, Flaring, Cut Slope Treatment, Bridge and Crest Widening	7-30-68
M-203-C	Ditch Types	7-23-68
M-206-A	Excavation and Backfill for Structures (2 Sheets)	11-1-68
M-412-B	Concrete Pavement Bridge Approach Slab	7-23-68
M-500-A	Letters and Figures for Structure Numbers	7-1-65
M-510-AA	Structural Plate Culvert Details (2 Sheets)	9-16-68
M-601-A	Single and Double Box Culverts	10-25-68
M-601-C	Wingwalls for Concrete Box Culverts (4:1 Side Slopes)(2 Shts.)	10-25-68
M-601-H	Type "G" Headwalls	10-25-68
M-603-M	Metal Culvert Pipe H-20 Loading	7-23-68
M-603-CA	Concrete & Metal End Sections	7-23-68
M-603-RC	Reinforced Concrete Pipe	7-23-68
M-604-BA	Inlet Type "C"	7-19-68
M-604-D	Steps for Manholes and Inlets	7-23-68
M-604-E	Manholes	7-24-68
M-606-AB	Guard Rail Type 3 (3 Sheets)	7-10-68
M-607-A	Wire Fences & Gates (2 Sheets)	5-6-68
M-609-A	Curbs & Gutters	7-19-68
M-612-A	Marker Posts & Bench Marks	7-24-68
M-612-C	Delineators (2 Sheets)	7-11-68
M-614-A	Timber Barricades	11-15-68
M 604-AA	Concrete Inlet Type 3 & 3 Double	12-2-68
M 604-AB	Concrete Inlet Type 13	7-19-68
M-614-TB	Traffic Signing for Highway Construction (3 Sheets)	7-8-68
M-615-A	Embankment Protector Types 3 & 4 (2 Sheets)	7-30-68
S-614-19A	Typical Ground Sign Placement	11-18-68
S-614-20B	Class I Ground Sign Installations	7-1-68
S-614-21B	Class II Ground Sign Installations	7-1-68
S-614-22B	Typical Marker Assembly Installations	9-27-68
S-614-23B	Laminated Aluminum Panels and Post Spacing Table for Class III Signs (2 Sheets)	7-15-68
S-614-25B	Sheet Aluminum Panels for Class III Signs (2 Sheets)	7-15-68
S-614-26B	Break-Away Sign Support Details for Ground Signs (2 Sheets)	6-7-68
S-614-27B	Pedestals, Footings and Sign Island for Class III Signs (2 Sheets)	11-21-68
S-614-29A	Typical Pavement Markings	7-10-68
S-614-31B	U.S. & Colorado Route Markers	3-1-68
S-614-32A	Auxiliary Markers	7-15-68
S-614-35A	Typical Multi-Sign Installations	11-14-68

REGION NO.	DISTRICT	PROJ. NO.	NO.	SHEETS
8	COLORADO	CC10-0075-06	3	

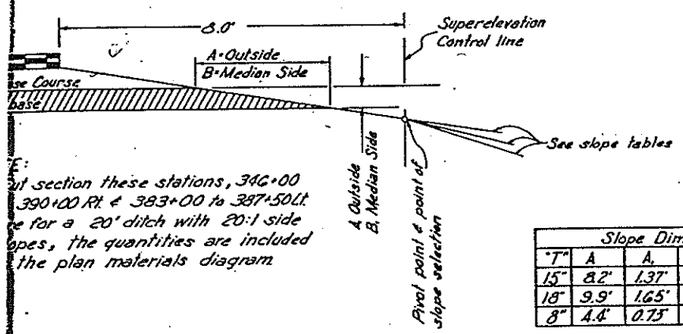
TYPICAL SECTIONS

NOTE: See Standards for details of cut slope treatment, flaring and widening.



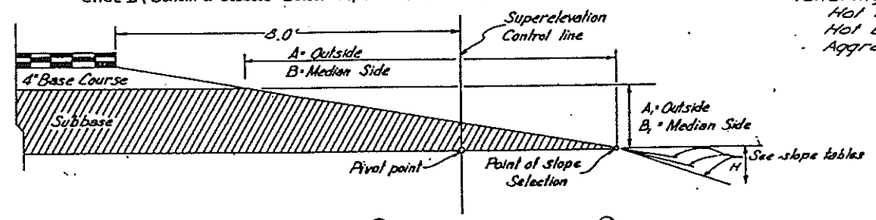
NOTE: Excavation below 6:1 and/or 10:1 will not be permitted.
The depth and width of side ditch shall be varied where necessary in order to provide proper drainage.

CASE I (Bottom of subbase Above superelevation control line intersection)



NOTE:
Cut section these stations, 346+00 to 390+00 Rt. & 383+00 to 387+50 Lt. use for a 20' ditch with 20:1 side slopes, the quantities are included in the plan materials diagram.

CASE II (Bottom of subbase Below superelevation control line intersection)



Material shall be placed in separate courses at the following rates per 100 Lin. Ft. of roadway.

Hot Bituminous Pavement (1½" Top Layer) (Gr. E)	70
Hot Bituminous Pavement (2" Bottom Layer) (Gr. E)	93
Aggregate Base Course (Class 6)	176

Slope Dimensions				
"T"	A	A1	B	B1
15"	8.2'	1.37'	10.9'	1.09'
18"	9.9'	1.65'	13.0'	1.30'
8"	4.4'	0.73'	5.8'	0.58'

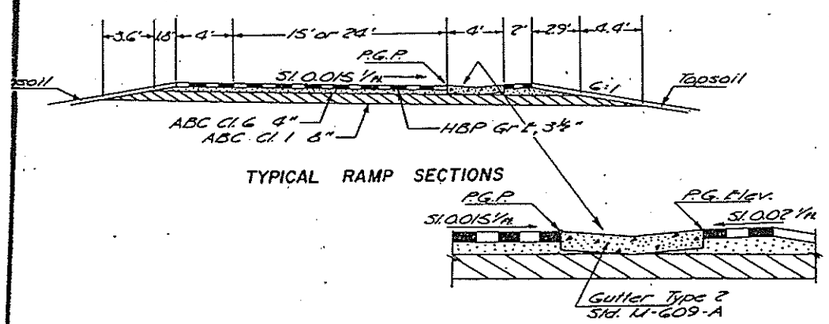
Slope Table			
Cut		Fill	
H	S.S.	H	S.S.
0'-10'	6:1	0'-6'	6:1
10'-30'	4:1	6'-10'	4:1
30'-	3:1	10'-	3:1

Stations 145+00 to 200+00 daylight cuts right.

① Sta. 80+00 to 286+40; T=18", in cut areas subexcavate 3' & backfill.

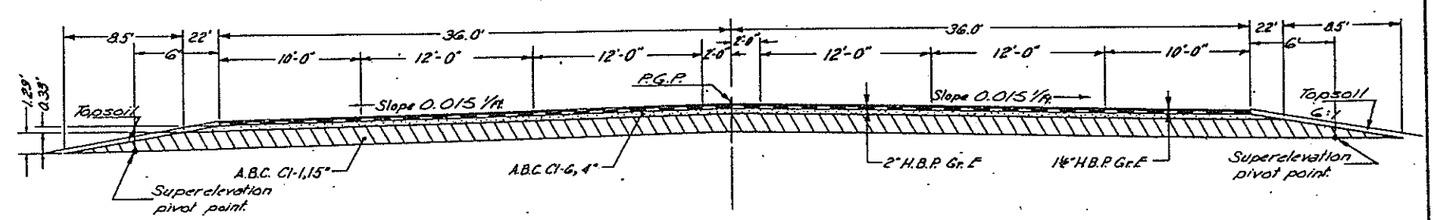
② Sta. 286+40 to 403+00; T=15", in cut areas subexcavate 2' & backfill.

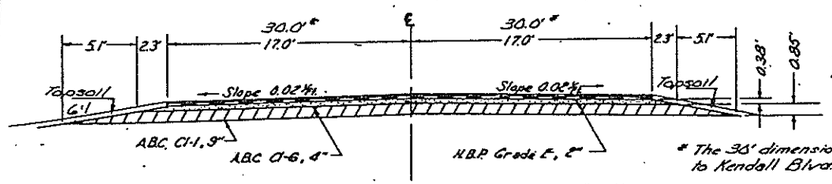
In fill areas of less than 3ft., natural ground shall be excavated to a plane 3 ft below subgrade elevation and backfilled. See special provisions.



TYPICAL RAMP SECTIONS

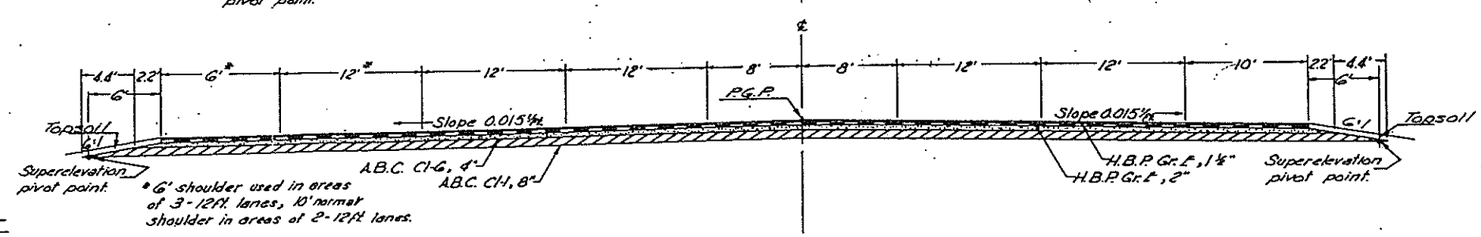
WADSWORTH & PLATTE CANYON RD.





* The 30' dimension applies to Kendall Blvd. only.

CHATFIELD ST. & DEER CREEK INTERSECTION

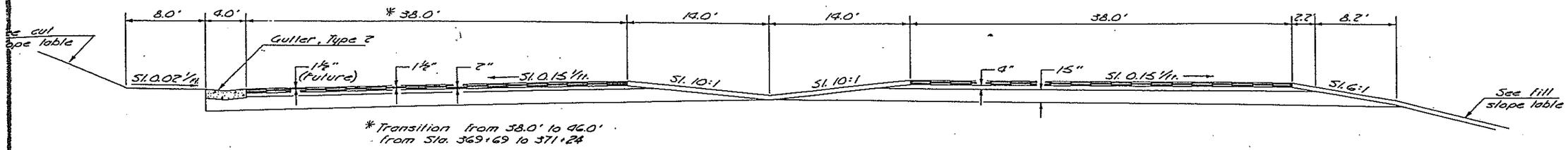


* 6' shoulder used in areas of 3-12ft. lanes, 10' normal shoulder in areas of 2-12ft. lanes.

SANTA FE DR. SH. 1, US 85

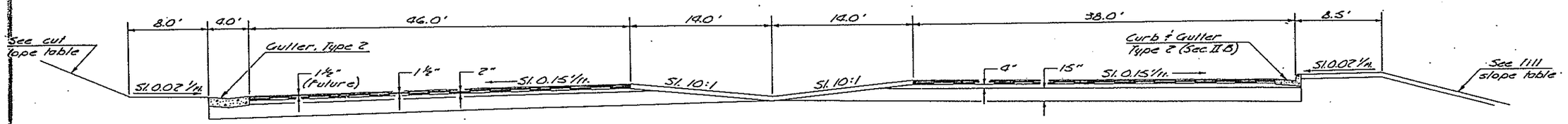
FEDERAL ROAD REGION NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLORADO	CC10-0075-06	4	

TYPICAL SECTIONS

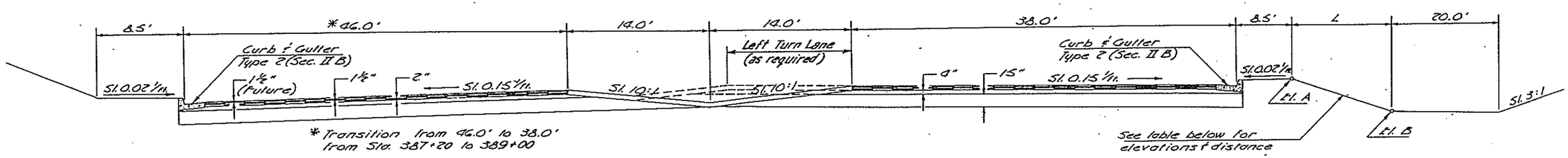


* Transition from 38.0' to 46.0' from Sta. 369+69 to 371+24

- SECTION STA. 367+00 to 371+00 -



- SECTION STA. 371+00 to 373+24.72 -



* Transition from 46.0' to 38.0' from Sta. 387+20 to 389+00

— SECTION STA. 373+24.72 to 386+50 —

SPECIAL DITCH TABULATION

Station	Elev. A	Elev. B	L	Station	Elev. A	Elev. B	L
371+00	5490.15	5488.40	65.75	379+00	5474.21	5471.37	71.86
371+50	5489.52	5481.70	83.96	379+50	5473.20	5470.48	71.38
372+00	5488.86	5475.00	102.08	380+00	5472.17	5469.55	70.98
372+50	5488.27	5468.30	120.41	380+50	5471.13	5468.62	70.54
373+00	5487.34	5462.03	136.43	381+00	5470.06	5467.69	69.98
373+50	5486.16	5457.07	147.77	381+50	5468.98	5466.76	69.38
374+00	5484.99	5453.44	155.15	382+00	5467.87	5465.82	68.70
374+50	5483.84	5451.16	158.54	382+50	5466.75	5464.89	67.94
375+00	5482.71	5450.21	158.00	383+00	5465.61	5463.96	67.90
375+50	5481.59	5450.60	153.47	383+50	5464.45	5463.03	66.18
376+00	5480.49	5452.32	145.01	384+00	5463.27	5462.10	65.18
376+50	5479.41	5455.39	132.56	384+50	5462.08	5461.17	64.14
377+00	5478.34	5459.36	117.44	385+00	5460.86	5460.23	63.02
377+50	5477.28	5463.36	102.26	385+50	5459.63	5459.63	60.50
378+00	5476.24	5467.36	96.02	386+00	5458.37	5458.37	60.50
378+50	5475.22	5470.57	79.10				

(R-1) D.h... 11-26-68

FEDERAL ROAD ADMIN. NO.	DIVISION	PROJ. NO.	SHEET NO.
•	COLORADO	CC10-0075-06	5

SUMMARY OF ~~APPROXIMATE~~ FINAL QUANTITIES

AS CONSTRUCTED REVISED DATE 9-12

Reference	ITEM NO.	ITEM	UNIT	JEFFERSON COUNTY STA. 80+00 – 406+28 Roadway		ARAPAHOE COUNTY STA. 406+28 – 444+13.3 Roadway		DOUGLAS COUNTY STA. 444+13.3 – 472+00 Roadway	SANTE FE I.C. Str. No. F-16-IC	Total	PROJECT TOTALS	FINAL TOTALS	+
15 7	201	Clearing and Grubbing	L.S.	•		•		•			•	AS CONSTRUCTED REVISED DATE 9-12	
1 2 3 (10 Pars 15)	202	Removal of Structure	Ea.	~~4~~	(R-1) 4	~~2~~	2	~~6~~	1		~~10~~	(R-1) 7	
1 14 14	202	Removal of Bridge	Ea.					~~2~~	2		~~2~~	2	
15 11 18	202	Remove & Reset Fence W.O. # 20832	L.S.		•							•	
1 (10 Pars 7 & 8)	202	Removal of Fence	Lin. Ft.	~~33,000~~	30,384			~~8,700~~	8,600		~~41,700~~	38,984	
	202	Plug Culvert	Ea.	~~4~~	6				2		~~4~~	8	4
16	203	Earthwork W.O. 20932	Cu. Yd.		77,960							77,960	
	203	Unclassified Excavation (Haul)	Cu. Yd.	~~1,260,000~~	1,375,787	~~71,000~~	54,598	~~100,000~~	84,786		~~1,431,000~~	1,515,171	84,171
16	203	Unclassified Excavation W.O. 20884	L.S.		•		~~41,104~~ ~~41,533~~					~~582,623~~ ~~580,978~~	~~8,623~~ ~~8,622~~
	203	Borrow (Haul)	Cu. Yd.	~~371,000~~	333,539			~~1,000~~			~~372,000~~		
	203	Borrow (Haul) W.O. 20979	Cu. Yd.		333,906							333,906	
16	203	Embankment (Standard)	Cu. Yd.	~~1,373,000~~	1,359,945	~~53,000~~	318,856	~~188,000~~	203,445		~~1,614,000~~	1,882,246	268,246
15 22 (10 Pars 16 & 17)	206	Structure Excavation (Haul)	Cu. Yd.	~~13,970~~	~~18,013~~ 18,222	~~210~~	1,822	~~4,460~~	~~3,723~~ 3740		~~18,990~~	~~30,118~~ 50,626	~~11,172~~ 12,636
2 27 14B	206	Structure Backfill W.O. # 20994	Cu. Yd.						402			402	
13 30 14B	206	Structure Backfill W.O. # 20841	Cu. Yd.		457							457	
15 23	206	Structure Backfill (Class 3) (Haul)	Cu. Yd.	~~4,950~~	6,802	~~190~~	445	~~1,630~~	2,180	~~270~~ 209	~~6,840~~	9,736	2,896
15 30 14B	206	Structure Backfill W.O. # 19073			510							510	
9 (Pars 36 & 53)	207	Topsoil (Haul)	Cu. Yd.	~~64,400~~	~~83,003~~ 83,152	~~4,500~~	12,932	~~8,800~~	7,511		~~77,700~~	~~103,452~~ 105,152	~~25,752~~ 25,752
9 (53 & 54)		Topsoil W.O. # 20834	Cu. Yd.		17,614							17,614	
10	208	Seeding, C.O. 20849	Acre	~~120~~	57.3	~~8~~	19.3	~~17~~	29.2		~~145~~	105.8	
11 (Pars 6 & 3)	208	Soil Sterilization	Sq. Yd.	~~280~~	174			~~990~~	331		~~1,270~~	505	7
7 (Pars 1 & 7)	209	Welting, C.O. 20979	M.G.	~~60,420~~	84,330	~~2,230~~	3,114	~~8,310~~	11,600		~~70,960~~	99,044	28,084
1 52 14B	210	Reset Water Service	Ea.	~~+~~	2						~~+~~	2	1
1 52 14B	210	Adjust Manholes	Ea.	~~3~~	1						~~3~~	1	
SCH. Bank 17	304	Aggregate Base Course (Class 1) W.O. # 20836	Ton		264,448.00		29,358.00		67,812.35			361,618.35	
SCH. Bank 17	304	Aggregate Base Course (Class 1) (Haul)	Ton	~~348,000~~	103,116.00	~~1,600~~	11,448.00	~~35,300~~	26,442.35		~~389,300~~	141,006.35	103,321.50
SCH. Bank 17	304	Aggregate Base Course (Class 6) (Haul)	Ton	~~64,100~~	14,283.00	~~6,800~~	1,193.00	~~17,200~~	3,035.20		~~88,100~~	18,511.20	41,427.39
SCH. Bank 17	304	Aggregate Base Course (Class 6) W.O. # 20836	Ton		85,658.00		7,152.00		18,206.19			111,016.19	
SCH. Bank 17	403	Hot Bituminous Pavement (Grading E) W.O. # 20836	Ton		57,833.00		5,511.00		16,399.35			79,743.35	
SCH. Bank 17	403	Hot Bituminous Pavement (Grading F) (Haul and Asphalt)	Ton	~~55,370~~	6,914.00	~~6,170~~	659.00	~~20,270~~	1,961.35	~~240~~	~~85,050~~	9,534.35	4,228.70
SCH. Bank 17	409	Cover Coat Material (Median)	Ton	~~30~~	54.60			~~110~~	29.30		~~140~~	83.90	
	~~411~~	~~Emulsified Asphalt (SS-1H)~~ Deleted C.O. 20974	~~Gal.~~	~~18,300~~							~~18,300~~		
SCH. Bank 17	411	Liquid Asphaltic Material (MC-70)	Gal.	~~124,100~~	22,787	~~12,300~~		~~28,300~~	12,567		~~166,200~~	35,354	~~22,270~~ 29,[illegible]
SCH. Bank 17	411	Liquid Asphaltic Material ~~(RC-800)~~ Peneprime W.O. # 20840	Gal.	~~15,100~~	92,607	~~1,600~~	8,523	~~3,600~~	6,446			107,576	
11 (Pars 7 & 8) 17	412	Concrete Pavement (10 inch)	Sq. Yd.			~~530~~	523	~~690~~	652		~~1,220~~	1,175	

& RC-800 Deleted By C.O. 20974

SUMMARY OF ~~APPROXIMATE~~ FINAL QUANTITIES

AS CONSTRUCTED
REVISED DATE 9-12-70

FEDERAL ROAD ADM. NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
1	COLORADO	CC10-007S-06	6	85

ITEM NO.	ITEM	UNIT	JEFFERSON COUNTY STA. 80+00 – 406+28 Roadway		ARAPAHOE COUNTY STA. 406+28 – 444+13.3 Roadway		DOUGLAS COUNTY STA. 444+13.3 – 472+00 Roadway		SANTE FE I.C. Str. No. F-16-16		Total	PROJECT TOTALS	FINAL TOTALS	+	–
502	Steel Piling (14BP73) Cutoffs @ 80%	Lin. Ft.								22.0		0	22.0	22.0	
502	Steel Piling (14BP73)	Lin. Ft.							~~960~~	827		~~960~~	827		133
502	Steel Piling (10BP42) Cutoffs @ 80%	Lin. Ft.								31		0	31	31.0	
502	Steel Piling (10BP42)	Lin. Ft.							~~2,023~~	2,085		~~2,023~~	2,085	62	
506	Heavy Riprap, C.O. 20992	Cu. Yd.	~~167~~	609	~~1,554~~	1,708		353				~~167~~	2,670	2,503	
507	Dry Rubble Slope and Ditch Paving	Tons Cu. Yd.	~~70~~				~~60~~	165				~~130~~	165.00	35.00	
507	Dry Rubble Slope and Ditch Paving (Special)	Tons Cu. Yd.	~~800~~	2,181.35				132.10			Bid Field Quantities	~~800~~	2,313.45	1,513.45	
507	Concrete Slope and Ditch Paving (Reinf.)	Cu. Yd.		19.0		2.4			~~190~~	283.17		~~190~~	304.57	114.57	
507	Bituminous Slope and Ditch Paving	Ton	~~170~~	319.99	~~10~~		~~10~~	22.41				~~190~~	342.40	152.40	
~~507~~	~~Concrete Slope and Ditch Paving~~ Deleted By C.O. 20974	~~Cu. Yd.~~	~~20~~		~~10~~							~~30~~	0	30	
509	Structural Steel (Galv.) (12'-0" x 6'-0")	Lbs.							~~18,300~~	18,228		~~18,300~~	18,228		72
510	Structural Plate Arch (15'-0" x 7'-5") W.O. #20988	Lin. Ft.		228									228		
510	Structural Plate Arch (~~12'-0" x 6'-0"~~) W.O. #18732	Lin. Ft.	~~450~~	76								~~450~~	76		374
510	Structural Plate Arch (15'-0" X 7'-5")	Lin. Ft.		450									450		
516	Dampproofing (Linseed Oil)	Sq. Yd.			~~530~~		~~690~~		~~180~~	144		~~1,400~~	144		1,256
518	Bridge Compression Joint Sealer (Type A)	Lin. Ft.			~~180~~	176	~~190~~	181				~~370~~	357		13
601	Concrete (Class A)	Cu. Yd.	~~732~~	600.99			~~6~~		~~91~~	91		~~829~~	691.99		137.01
601	Concrete (Class D)	Cu. Yd.							~~1,553~~	39.20		~~1,553~~	39.20	39.20	
601	Concrete (Class D) W.O. # 20801	Cu. Yd.								1553.00			1553.00		
602	Reinforcing Steel	Lbs.	~~80,000~~	60,693	~~24,400~~	24,342	~~32,200~~	32,433	~~537,800~~	543,229		~~674,600~~	660,697		13,903
603	8 inch Vitrified Clay Pipe	Lin. Ft.	~~800~~	810								~~800~~	810	10	
603	18 inch Reinf. Concrete Pipe Class II	Lin. Ft.	~~1,056~~	353			~~1,329~~	1310				~~2,384~~	1663		721
603	18 inch Reinf. Concrete Pipe Class III	Lin. Ft.	~~1,742~~	2374	~~286~~	578	~~1,297~~	1695				~~3,325~~	4647	1,322	
603	24 inch Reinf. Concrete Pipe Class II	Lin. Ft.					~~170~~	175				~~170~~	175	5	
603	24 inch Reinf. Concrete Pipe Class III	Lin. Ft.	~~438~~	338								~~438~~	338		100
603	30 inch Reinf. Concrete Pipe Class II	Lin. Ft.	~~1,023~~	1818								~~1,023~~	1818	795	
603	30 inch Reinf. Concrete Pipe Class III	Lin. Ft.	~~836~~	507								~~836~~	507		329
603	36 inch Reinf. Concrete Pipe Class II	Lin. Ft.	~~1,977~~	1958			~~18~~					~~1,995~~	1958		37
603	36 inch Reinf. Concrete Pipe Class III	Lin. Ft.	~~86~~	84				197				~~86~~	281	195	
603	42 inch Reinf. Concrete Pipe Class III	Lin. Ft.	~~1,016~~	1028			~~610~~	758				~~1,626~~	1786	160	
603	48 inch Reinf. Concrete Pipe Class III	Lin. Ft.	~~499~~	646	~~262~~	591						~~761~~	1237	476	
603	48 inch Reinf. Concrete Pipe Class II W.O. # 20832	Lin. Ft.		359									359		
603	54 inch Reinf. Concrete Pipe Class III	Lin. Ft.	~~160~~	160			~~550~~	550				~~710~~	710		

(P-1) C 11-26-68

FEDERAL ROAD REGION	DIVISION	PROJ. NO.	SHEET	TOTAL SHEETS
7	COLORADO	CC10-0075-06	7	85

SUMMARY OF ~~APPROXIMATE~~ FINAL QUANTITIES

AS CONSTRUCTED
REVISED DATE 9-12-70

ITEM NO	ITEM	UNIT	JEFFERSON COUNTY STA. 80+00 – 406+28 Roadway			ARAPAHOE COUNTY STA. 406+28 – 444+13.3 Roadway			DOUGLAS COUNTY STA. 444+13.3 – 472+00 Roadway		SANTE FE I.C. Str. No. F-16-IC		Total	PROJECT TOTALS	FINAL TOTALS	+	—
603	60 inch Reinf. Concrete Pipe Class III	Lin. Ft.	~~206~~	224										~~206~~	224	18	
603	22" x 13" Reinf. Conc. Arch Pipe Class III	Lin. Ft.							~~90~~	92				~~90~~	92	2	
603	58" x 36" Reinf. Conc. Arch Pipe Class III	Lin. Ft.							~~978~~	992				~~978~~	992	14	
603	18 inch Corrugated Steel Pipe	Lin. Ft.	~~51~~	70										~~51~~	70	19	
603	18 inch Corrugated Steel Pipe W.O. # 20973	Lin. Ft.	~~248~~	248											248		
603	36 inch Corrugated Steel Pipe	Lin. Ft.	~~43~~	44										~~43~~	44	1	
603	24 inch Corrugated Steel Pipe W.O. 20827	Lin. Ft.							~~350~~	350					350		
603	12 inch Cast Iron Pipe W.O. 20827	Lin. Ft.							~~365~~	365					365		
603	15 inch Corrugated Steel Pipe W.O. 20973	Lin. Ft.		708											708		
603	72 inch Corrugated Steel Pipe W.O. 20995	Lin. Ft.		310											310		
603	72 inch Corrugated Steel Pipe	Lin. Ft.	~~290~~	292										~~290~~	292	2	
603	58" x 36" Corrugated Steel Pipe Arch	Lin. Ft.	~~136~~	(P-1) 119										~~136~~	(P-1) 119		17
603	18 inch Reinf. Concrete End Section	Ea.	~~6~~	(P-1) 6		~~5~~	5		~~3~~	3				~~6~~	(P-1) 14	8	
603	24 inch Reinf. Concrete End Section	Ea.	~~6~~	6										~~6~~	6	–	–
603	30 inch Reinf. Concrete End Section	Ea.	~~2~~	(P-1) 2										~~2~~	(P-1) 2	–	–
603	36 inch Reinf. Concrete End Section	Ea.	~~1~~	1										~~1~~	1	–	–
603	42 inch Reinf. Concrete End Section	Ea.	~~2~~	2										~~2~~	2	–	–
603	48 inch Reinf. Concrete End Section	Ea.	~~1~~	1		~~1~~	1		~~2~~	2				~~2~~	~~4~~ 2	~~2~~ 0	
603	54 inch Reinf. Concrete End Section	Ea.	~~2~~	2										~~2~~	2	–	–
603	58" x 36" Steel End Section	Ea.	~~1~~	1										~~1~~	1	–	–
603	58" x 36" R.C.E.S.	Ea.												~~0~~	2	2	
604	Manhole, Slab Base (5 foot)	Ea.	~~1~~						~~2~~	~~2~~ 0				~~1~~	2	1	
604	Manhole, Slab Base (10 foot)	Ea.	~~5~~	3						2				~~5~~	3		2
604	Manhole, Slab Base (15 foot)	Ea.	~~1~~						~~1~~	1				~~2~~	1		1
604	Manhole, Box Base (10 foot)	Ea.	~~2~~	1					~~1~~	1				~~3~~	2		1
604	Manhole, Box Base (15 foot)	Ea.	~~3~~	4					~~1~~	1				~~4~~	5	1	
604	Inlet, Type C (5 foot)	Ea.	~~22~~	24		~~3~~	3		~~9~~	6				~~34~~	33		1
604	Inlet, Type C (15 foot) W.O. # 20828	Ea.								2					2		
604	Inlet, Type C (10 foot)	Ea.	~~1~~	2					~~1~~	3				~~2~~	5	3	
604	Inlet, Type 13 (5 foot)	Ea.	~~2~~	3					~~8~~	5				~~10~~	8		2
604	Inlet, Type 13 (15 foot) W.O. # 20828	Ea.		1											1		
604	Inlet, Type 13 (10 foot)	Ea.							~~3~~	4				~~3~~	4	1	
604	Inlet, Type 3 (5 foot)	Ea.	~~6~~	1										~~6~~	1		5
604	Inlet, Type 3 (10 foot)	Ea.	~~1~~	4										~~1~~	4	3	
604	Inlet, Type B (~~5~~ 10 foot) W.O. # 20828	Ea.	~~1~~	1										~~1~~	1	–	–

SUMMARY OF ~~APPROXIMATE~~ FINAL QUANTITIES

(P-1) - H. 11-26-68

FEDERAL ROAD STATE & NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
1	COLORADO	CC10-0075-06	8	85

ITEM NO.	ITEM	UNIT	JEFFERSON COUNTY STA. 80+00 - 406+28 Roadway			ARAPAHOE COUNTY STA. 406+28 - 444+13.3 Roadway			DOUGLAS COUNTY STA. 444+13.3 - 472+00 Roadway		SANTE FE I.C. Str. No. F-16-IC		Total		PROJECT TOTALS	Final Totals	+	—
606	Guard Rail, Type 3	Lin. Ft.	~~7,145~~	9150		~~400~~	2,000		~~1,300~~	888				AS CONSTRUCTED REVISED DATE 8-12-70	~~8,845~~	12,038	3,193	
605	8" Perforated Underdrain W.O.# 19073, & #20994	Lin. Ft.		1,105						760						1,865		
605	8" Perforated Underdrain W.O.# 20841	Lin. Ft.		466												466		
607	Build Temporary Fence W.O.# 20832	L.S.		•												•		
607	End Post	Ea.	~~24~~	35					8						~~32~~	43	11	
607	Corner and Line Brace Post	Ea.	~~147~~	116		9			19						~~175~~	144		31
210	Reset Gates W.O.# 20987	Ea.			1 - 16' Gate							2 - 16' Gate			~~3-16' Gate~~	3-16' Gate		
210	Reset Chain Link Fence W.O.# 20987	Lin. Ft		455						803						1,258		
607	Fence, Combination Wire with Metal Posts	Lin. Ft.	~~67,000~~	65,699		~~7,300~~	7,521		~~6,200~~	4,192					~~81,000~~	77,412		3,588
607	16 foot Gate, Driveway	Ea.	4						~~2~~						~~6~~	4		2
607	20 foot Gate, Double Driveway	Ea.	~~2~~	3											~~2~~	3	1	
609	Curb and Gutter, Type 2 (Section IIB)	Lin. Ft.	~~2,795~~	2,840											~~2,795~~	2,840	45	
609	Curb, Type 2 (Section B)	Lin. Ft.				~~248~~	246		~~148~~	105					~~396~~	351		45
609	Curb and Gutter, Type 2 (Section IIM)	Lin. Ft.	~~466~~	394					~~861~~	252					~~1,327~~	646		681
609	Curb, Type 6 (Section M)	Lin. Ft.	~~34,210~~	30,867		~~1,940~~			~~2,270~~	3,228					~~38,420~~	34,095		4,325
609	Gutter, Type 2 (4 foot)	Lin. Ft.	~~625~~	714											~~625~~	714	89	
611	16' Cattle Guard W.O.# 20985	Ea.		1												1		
612	Right of Way Marker	Ea.	24			21			21						~~28~~	28		1
612	Delineator (Type I)	Ea.	~~379~~	481		56			~~50~~	179					~~486~~	706	233	
612	Delineator (Type II)	Ea.	~~52~~	78					~~44~~	56					~~66~~	134		32
612	Delineator (Type III)	Ea.		6		21			~~4~~	5					~~6~~	13	7	
614	Flagging	Hr.	~~4,000~~	2,307		~~100~~	231		~~500~~	1153					~~4,600~~	3,691.5	2,091.5	
614	Barricade (Class I Type F-1)	Ea.		16			2		4	5					4	23	22	
614	Barricade (Class I Type F-2)	Ea.	~~3~~	4					2						~~5~~	4		1
614	Pavement Marking Paint	Gal.	~~644~~	(P-1) 1,086		~~58~~	61		~~129~~	(P-1) 380					~~831~~	(P-1) 1,527	696	
614	Remove & Reset Signs W.O.# 18732	L.S.		•												•		
618	Prestressing Steel Wire or Strand	Lbs.		9							2,860				~~2,860~~	2,860	—	—
615	Embankment Protectors W.O.# 20973	Ea.														9		
~~620~~	~~Field Office~~ (Deleted) By C.O. 20974	~~Ea.~~	4												4			
620	Field Laboratory	Ea.	1												1	1		
620	Sanitary Facility	Ea.	2	1											2	1		1
~~621~~	~~Maintenance of Detours~~	~~L.S.~~	•						•						•	(P-1)		
626	Mobilization	L.S.	•			•			•						•			

(R-1) D.H. 11-26-68

FEDERAL ROAD REGION NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLORADO	CC10-0075-06	9	85

SUMMARY OF ~~APPROXIMATE~~ FINAL QUANTITIES

AS CONSTRUCTED
REVISED DATE 9-12-70

Plan Sheet No.	Reference Book No.	ITEM NO.	ITEM	UNIT	JEFFERSON COUNTY STA. 80+00 — 406+28 Roadway			ARAPAHOE COUNTY STA. 406+28 — 444+13.3 Roadway			DOUGLAS COUNTY STA. 444+13.3 — 472+00 Roadway		SANTE FE I.C. Str. No. F-16-IC		Total		PROJECT TOTALS	+	−
			FORCE ACCOUNT																
			Obliteration Old Road	L.S.	•												•		
			Clearing of Building Sites, etc.	L.S.	•						•						•		
			Preparation of Site (Clark Pit)	L.S	•												•		
			STATE FORCES																
			~~Signing and Striping Entire Project~~	~~L.S.~~	~~•~~			~~•~~			~~•~~						~~•~~		
			~~Striping Detour~~	~~L.S.~~	~~•~~						~~•~~						~~•~~		
			UTILITIES																
			~~Mountain States Tel. & Tel. Company~~	~~L.S.~~	~~•~~						~~•~~						~~•~~		
			~~Public Service Company of Colorado~~	~~L.S.~~	~~•~~			~~•~~			~~•~~						~~•~~		
			~~Intermountain R.E.A.~~	~~L.S.~~	~~•~~												~~•~~		
			Board of Water Commissioners City and County of Denver	L.S.	•												•		
4,5,6,7	614		Sign Panel (Class I)	Sq. Ft.	~~50~~ 55.24			0			~~42~~ 41.93					115 x 0	97.17 ~~98~~		5.17
4,5,6,7	614		Sign Panel (Class II)	Sq. Ft.	~~87 3911 19~~ 4732.50			80			~~131~~ 138.50						~~1,129.69~~ ~~1,084~~	(R-1)	45.69
4,5,6,7	614		Sign Panel (Class III)	Sq. Ft.	~~1,148~~ 1,339.50			~~172~~ 207.00			~~456~~ 516.50						2,063.00 ~~1,776~~	(R-1)	287.00
6	614		Timber Sign Post 4x4 inch	Lin. Ft.	~~314~~ 328			0			117						445 ~~431~~	(R-1)	14
4,5	614		Timber Sign Post 6x6 inch	Lin. Ft.	~~1,418~~ 1,555			~~140~~ 169			~~313~~ 359						2,083 ~~1,871~~	(R-1)	212
7	614		Steel Sign Post (6 WF 20)	Lin. Ft.	382			~~54~~ 50			~~184~~ 185						617 ~~620~~	(R-1)	3
			~~614~~	~~Steel Sign Post (8 WF 20)~~	~~Lin. Ft.~~	~~144~~											~~144~~	(R-1)	
			~~614~~	~~Steel Sign Post (10 WF 25)~~	~~Lin. Ft.~~	~~176~~		~~36~~									~~212~~	(R-1)	
7	614		Concrete Footing (Type I-C)	Each	26			4			10						40	(R-1)	
7	614		Concrete Footing (Type I)	Each							2						2	(R-1)	
			~~614~~	~~Concrete Footing (Type II)~~	~~Each~~	~~8~~											~~8~~	(R-1)	
			~~614~~	~~Concrete Footing (Type III)~~	~~Each~~	~~10~~		~~2~~									~~12~~	(R-1)	

SURFACING MATERIALS PLAN

AS CONSTRUCTED
REVISED DATE 9-12-70

FEDERAL ROAD REGION NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOT. SHEETS
9	COLORADO	CC10-0075-06	17	85

COUNTY	STATION TO STATION	LENGTH (STATIONS)	"T" (INCHES)	AGGREGATE BASE COURSE CLASS 1 TONS/STA.	TONS	TONS	CLASS 6 TONS/STA.	TONS	TONS	HOT BITUMINOUS PAVEMENT BOTTOM LAYER TONS/STA.	TONS	TONS	TOP LAYER TONS/STA.	TONS	TONS	LIQUID ASPHALTIC MATERIAL M.C. (PRIME) GAL.	GAL.	~~R.S. (TACK)~~ GAL.	GAL.	MEDIAN COVER MATERIAL TONS	TONS	STERILIZATION Sq. Yd.	Sq. Yd.
JEFFERSON	MP 0.000 80+00 - 286+40 MP 4.167	206.40	18	~~1078~~	~~222,500~~	238,714	~~178~~	~~36,740~~	64,381	~~93~~	~~19,195~~	22,734	~~70~~	~~14,448~~	17,110	~~69,718~~	13,570	~~8,714~~	62,665				
	286+40 - (307+55.03 Bk. = 307+37.22 Ah.)	21.1503	15	869	18,380		~~178~~	~~3,765~~	4,665	93	1,967		70	1,477		~~7,144~~	4,474	~~894~~	957				
	307+37.22 - 403+00	95.6278	15	~~869~~	83,100		~~178~~	~~17,022~~	21,090	~~93~~	~~8,893~~	8,547	~~70~~	~~6,694~~	6,433	~~32,302~~		~~4,038~~	23,871				
	403+00 - 406+28 MP 15.856	3.280	15	869	2850		~~178~~	~~584~~	724	93	305		70	230		~~1,108~~		~~138~~	866				
	Deer Creek Rd. 0+54 - 21+77	21.23	9	205	4,352		~~87~~	~~1847~~	2,288			1,084			816		1,700		250				
	Tapers, Widening, Etc. MP 14.110				2203			~~600~~	743		327					~~1206~~	375	~~151~~	664				
	Wadsworth Blvd. (S.H. 121) Intersection Sta. 314+50 1+44 - 8+59.39	7.1539	15	~~.957~~*	2,511		~~82*~~	~~597~~	727	44*	315		34*	243		~~1,145~~		~~143~~	892				
	Tapers, Transitions, Widening, Etc.				~~3,198~~	4,621		~~859~~	1,064							~~1,679~~		~~210~~	1,150	~~13~~	10	~~136~~	55
	Platte Canyon Rd. Intersection Sta. 1+44 - 7+36.37	5.9237	15	~~702~~	~~6,922~~	4,158	~~164~~	~~1,817~~	2,003	~~88~~	~~868~~	521	~~66~~	~~651~~	391	~~3,155~~		~~394~~	690				
	Tapers, Transitions, Widening, Etc.				~~5,055~~	6,675		~~1,359~~	1,686		614			583		~~2,979~~	2,668	~~335~~	602	~~13~~	45	~~136~~	119
	Chatfield Street								570		—	1,051											
	MP 15.856 ~~From List of Structures~~							~~591~~						~~1,431~~		~~3,295~~							
	Sub-Total Jefferson County				~~347,768~~	367,564		~~64,055~~	99,941		~~32,484~~	37,465		~~25,882~~	27,283	~~124,922~~	22,787	~~15,858~~	92,607	~~26~~	55	~~272~~	174
Arapahoe	406+28 - 444+13.3	37.853	~~X~~ 18	~~434~~	~~16,050~~	40,806	~~178~~	~~6,738~~	8,345	93	3,520		70	2,650		~~12,786~~		~~1,598~~	8,523				
	Sub-Total Arapahoe County				~~16,050~~	40,806		~~6,738~~	8,345		3,520			2,650		~~12,786~~		~~1,598~~	8,523				
DOUGLAS	445+86.7 - 472+00 MP 17.081	26.133	~~X~~ 18	~~424~~	~~11,088~~	28,172	~~178~~	~~4,652~~	5,764	93	2430		~~70~~	~~1,829~~	1,958	~~8,827~~	4,955	~~1,103~~	1,370				
	101+76.3 - 103+33.85 Ramp "A"	1.5755	~~X~~ 18	~~146~~	~~230~~	656	~~60~~	~~95~~	118	30	47		23	36		~~175~~		~~22~~	161				
	105+15.85 - 112+71.44 Ramp "A"	7.5559	~~X~~ 18	~~185~~	~~1389~~	3,506	~~79~~	~~597~~	740	42	317		31	234		~~1,142~~		~~143~~	890				
	Tapers, Widening, Transition & Flare				~~719~~	1,790		~~411~~	510		223			168		~~811~~		~~102~~	110	~~34~~	29	~~324~~	331
	200+91.8 - 209+81.77 Ramp "B"	8.8997	~~X~~ 18	~~146~~	~~1,299~~	4,326	~~60~~	~~534~~	662	30	270		23	205		~~989~~	775	~~124~~					
	Tapers, Widening, Flare				~~234~~	585		~~118~~	146		65			48		~~236~~		~~30~~	80	~~31~~		~~296~~	
	300+52 - 305+36 Ramp "C"	4.84	~~X~~ 18	~~146~~	~~707~~	2,352	~~60~~	~~290~~	359	30	145		23	111		~~538~~	434	~~67~~					
	Taper, Flare, Median Ramp "C"				~~312~~	785		~~206~~	255		114			85		~~414~~	341	~~52~~		~~28~~		~~270~~	
	400+00 - 405+59.92 Ramp "D"	5.5992	~~X~~ 18	~~185~~	~~1,036~~	2,721	~~79~~	~~442~~	548	42	235		31	174		~~846~~		~~106~~	668				
	407+37.51 - 413+16.01 Ramp "D"	5.7850	~~X~~ 18	~~146~~	~~845~~	2,407	~~60~~	~~347~~	430	30	174		23	133		~~643~~		~~80~~	512				
	Taper, Transition, Widening & Flare Ramp "D"				~~611~~	1,527		~~391~~	484		210			158		~~763~~		~~96~~	604	~~10~~		~~97~~	
	893+80 - 903+20 Santa Fe	23.000	~~X~~ 18	~~408~~	~~9,384~~	25,967	~~190~~	~~4370~~	5,749	103	2369		78	1,794		~~8,587~~	3,687	~~1093~~	1,549				
	Transitions, Widenings, Crossover, Sideroads, Etc.				~~7,457~~	19,460.90		~~4420~~	5476.39		~~4,475~~	2,574.70		4,083		~~4,081~~	2,375	~~503~~	502				
	~~From List of Structures~~							~~270~~						~~129~~		~~245~~							
	Sub-Total Douglas County				~~35,297~~	94,254.90		~~17,183~~	21,241.39		~~11,894~~	9,173.70		9,187		~~28,287~~	12,567	~~3,501~~	6,446	~~103~~	29	~~987~~	331
	PROJECT TOTALS				~~399,115~~	*502,624.90		~~87,936~~	*129,527.39		~~47,898~~	*50,158.70		~~37,719~~	*39,120	~~165,045~~	35,354	~~20,157~~	107,576	~~129~~	84	~~1,259~~	505

* ~~Based on average roadway width.~~ * Final Totals Verified by Scale Books and Tapes (Refer to Same) Work Order Included

NOTE: The ~~estimated~~ Final quantities are based on the following materials and rates of application. Actual materials and rates of application were as directed by the Engineer.
Aggregate Base Courses (Cl-1 & 6) 132 lbs./ft.³
Hot Bituminous Pavement, Grade "E" 146.7 lbs./ft.³
Liquid Asphaltic Material: Prime 0.40 gal./S.Y., ~~Tack 0.05 gal./S.Y.~~

GUARD RAIL

STATION TO STATION	SIDE	TYPE 3 LIN. FT.	
143+00 - 164+00	Rt.	2100	
202+00 - 204+00	Lt. & Rt.	300	
253+50 - 284+43	Rt.	3100	
251+75 - 284+43	Lt.	3275	
375+00 - 378+50 (Chatfield St.)	150' Lt.	375	
Sub-total Jefferson County	X	9150	
426+13 - 444+13 (S.B.L.)	Lt. & Rt.	2000	
Sub-total Arapahoe County	X	2000	
445+86 - 447+86 (N.B.L.)	Lt. & Rt.	400	
466+55 - 468+30 (E.B.L.)	Lt.	150	
467+15 - 468+90 (W.B.L.)	Lt.	150	
888+65 - 889+90 Santa Fe	Rt.	150	
901+10 - 901+85 Santa Fe	Lt.	37.5	
Sub-total Douglas County	X	887.5	
TOTALS ENTIRE PROJECT	X	12037.5	

TABULATION OF DELINEATORS

STATION TO STATION	SIDE	SPACING	DELINEATORS TYPE I EACH		TYPE II EACH		TYPE III EACH	
77+00 - 80+00 / 80+00 - 98+41	Lt. & Rt.	400'	~~4~~	8 / 8				
98+41 - 127+32	Lt. & Rt.	1° Curve	~~24~~	36				
105+75	Median				1			
106+60	Median				1			
127+32 - 137+48	Lt. & Rt.	400'	6					
~~133+50~~ Deer Creek Ramp	~~Median~~			40	~~1~~			
~~134+00~~	~~Med. & Lt.~~				~~2~~			
137+48 - 167+18	Lt. & Rt.	2° Curve	46					
167+18 - 193+61	Lt. & Rt.	377'	14					
168+60	Median				1			
169+20	Med. & Lt.				2			
192+60	Median				1			
193+40	Med. & Lt.				2			
193+61 - 230+67	Lt. & Rt.	137'	54					
234+30	Med. & Rt.				2			
235+00	Med. & Lt.				2			
230+67 - 288+44	Lt. & Rt.	385'	30					
288+44 - 304+55 + Intersect.	Lt. & Rt.	2° Curve	~~26~~	48	2			
304+55 - 320+00	Lt. & Rt.	Intersect.	~~61~~	71	~~18~~	45	6	
320+00 - 356+09	Lt. & Rt.	360'	20					
356+09 - 370+25	Lt. & Rt.	3° Curve	28					
370+25 - 393+00	Lt. & Rt.	Intersect.	~~60~~	66	19			
393+00 - 406+28	Lt. & Rt.	388'	6					
Sub-total Jefferson County	X	X	~~379~~	481	~~52~~	78	6	
406+28 - 420+15	Lt. & Rt.	388'	8					
420+15 - 440+74	Lt. & Rt.	2°30' Curve	40					
442+42 - 443+62	Med. & Rt.	30'	8					
444+02	Lt. & Rt.						2	
Sub-total Arapahoe County	X	X	56				2	
445+97	Med. & Lt.						2	
446+37 - 447+57	Med. & Lt.	30'	8					
447+57 - 455+40	Lt. & Rt.	4° Curve	~~12~~	14				
455+40 - 472+00	Lt. & Rt.	Interch.	~~30~~	157	~~114~~	56	~~2~~	3
Sub-total Douglas County	X	X	~~50~~	179	~~114~~	56	~~4~~	5
TOTALS ENTIRE PROJECT	X	X	~~485~~	716	~~166~~	134	~~6~~	13

Note: Final count made on documentation records, records retained in District Construction Engr.'s office. Tabulation of delineators conforms to final field count. T.E.S.

TABULATION OF BRIDGE APPROACHES

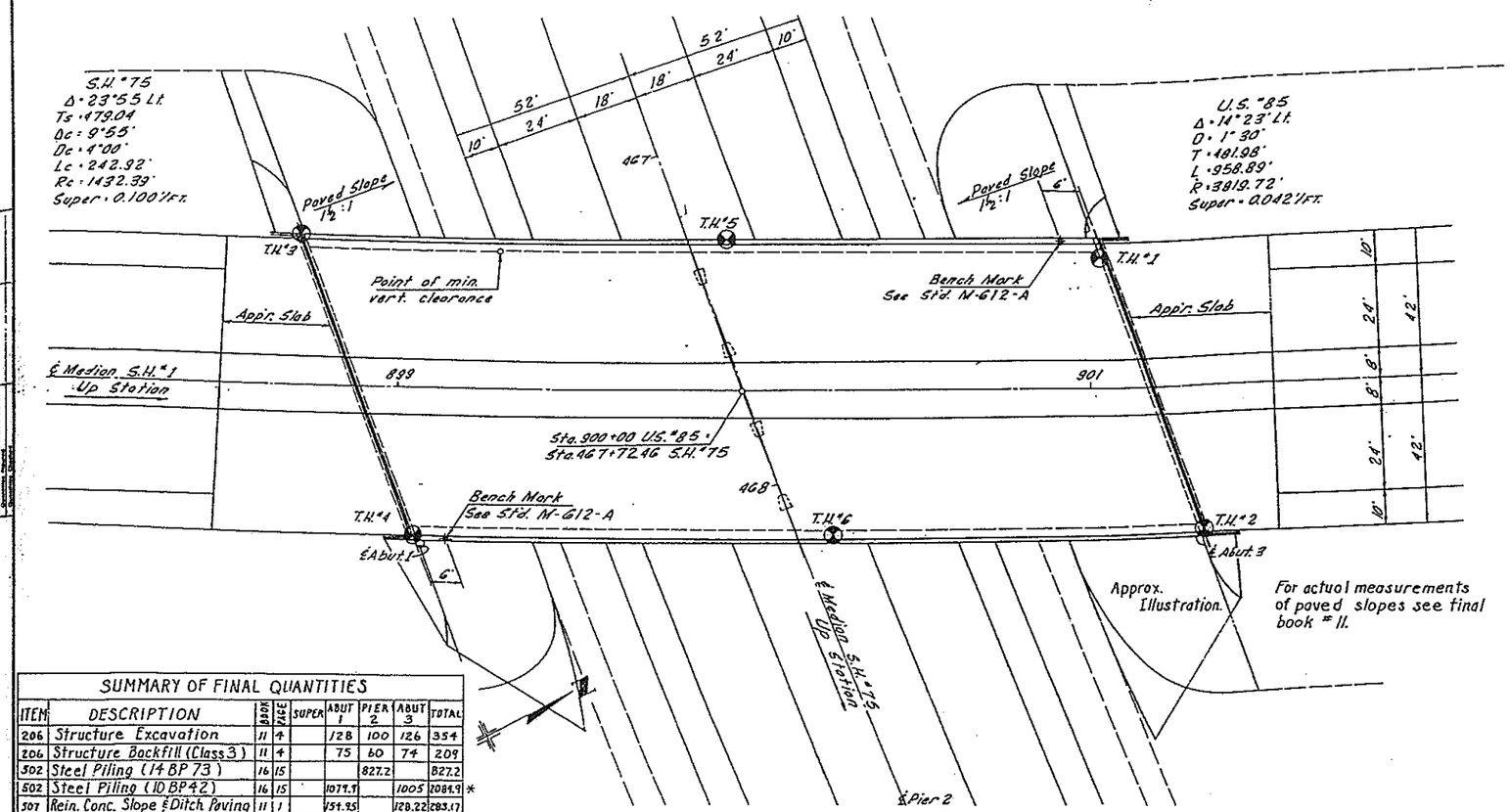
Station	Width Ft.	θ	Reinf. Steel Lb.		Conc. Pvm't (10") Sq. Yd.		Comp. Jt. Sealer Ty A Lin. Ft.		Curb Ty 2 Sec. B Lin. Ft.	
443+61 to 445+93	38'-0" / 38'-0"	30° / 30°	~~6,097~~ / ~~6,097~~	6,085.5 / 6,085.5	~~130.7~~ / ~~130.7~~	130.76 / 130.76	44'-0" / 44'-0"		~~62'~~ / ~~62'~~	61' / 61'
444+46 to 446+16	38'-0" / 38'-0"	30° / 30°	~~6,097~~ / ~~6,097~~	6,085.5 / 6,085.5	~~130.7~~ / ~~130.7~~	130.76 / 130.76	44'-0" / 44'-0"		62' / 62'	
Arapahoe Co. Total			~~24,388~~	24,342	~~522.8~~	523.04	176'-0"		~~248'~~	246'
898+52 to 901+51	84'-0" / 84'-0"	23°08' / 19°26'	~~16,632.5~~ / ~~15,245.3~~		~~355.9~~ / ~~326.7~~	325.7 / 326.2	92'-0" / 89'-0"		~~78'~~ / ~~70'~~	53' / 52'
Douglas Co. Total			~~31,877.8~~	32,120	~~682.6~~	651.9	181'-0"		~~148'~~	105'
Proj. Total			~~56,265.8~~	56,462	~~1,205.4~~	1,174.94	357'-0"		~~396'~~	351'

See Final Inspection Book Dated 3-6-70 & 4-15-70 Under Approach Slabs

REVISIONS

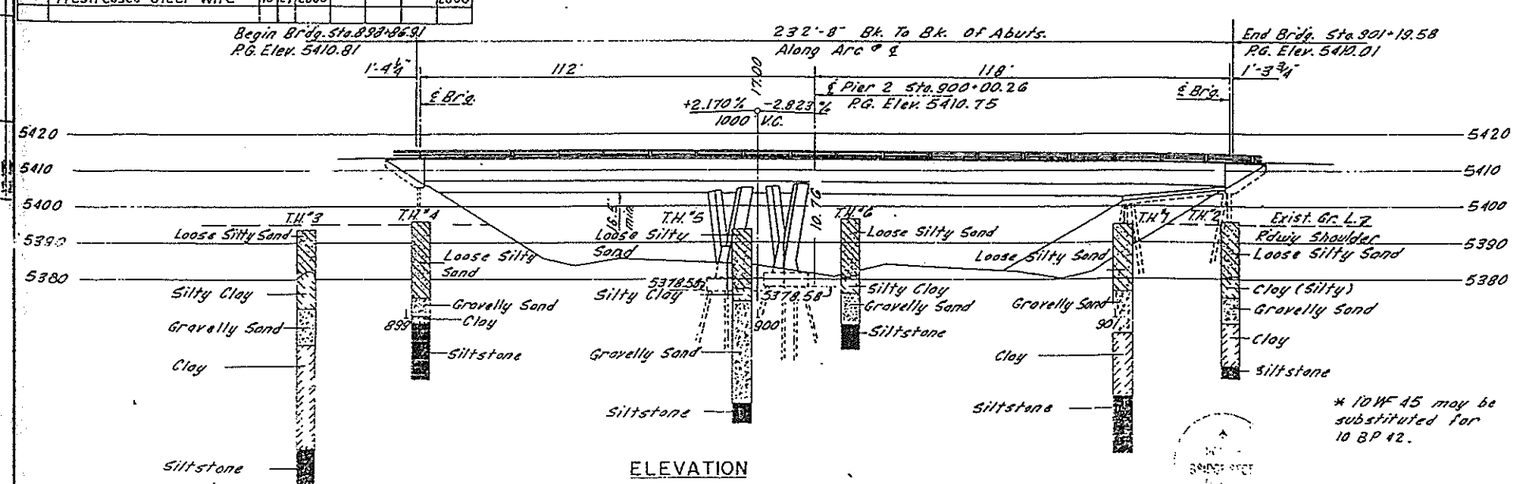
AS CONSTRUCTED
REVISED DATE SEP 19

FEDERAL ROAD REGION No.	DIVISION	PROJECT No.	SHEET No.
9	COLORADO	CC 10-0075-06	21



PLAN

SUMMARY OF FINAL QUANTITIES									
ITEM	DESCRIPTION	BOOK	PAGE	SUPER	ABUT 1	PIER 2	ABUT 3	TOTAL	
206	Structure Excavation	11	4		128	100	126	354	
206	Structure Backfill (Class 3)	11	4		75	60	74	209	
502	Steel Piling (14 BP 73)	16	15			827.2		827.2	
502	Steel Piling (10 BP 42)	16	15		1079.9		1005	2084.9	*
507	Rein. Conc. Slope & Ditch Paving	11	1		154.95		128.22	283.17	
509	Structural Steel (Galv.)	15	27					16,228	
516	Dampproofing	11	2	144				144	
601	Concrete Class "A"	15	24			91		91	
601	Concrete Class "D"	15	25	1592.2				1592.2	
602	Reinforcing Steel	15	26	508574		34635		543229	
618	Prestressed Steel Wire	15	27	2860				2860	



ELEVATION

GENERAL NOTES

All work shall be done according to the Standard Specifications of the Colorado Department of Highways applicable to the project.

Concrete shall be Class "A" or Class "D".

All reinforcing steel shall be intermediate grade steel of a deformed type. Each bar shall be tagged with a bar designation and station number of the project.

Dimensions for reinforcing steel not shown as "clear" shall be to the centerline of the bar.

Soundings and depth of footings are accordance with the best available data and when different conditions are encountered the Bridge Engineer will inspect and determine if redesign is necessary.

When excavating for footings the final one foot of depth shall be done by hand labor methods.

For details of structural excavation and structural backfill, see Standard M-206-A.

All concrete surfaces marked with the symbol ✗ as shown on Sht. No. shall receive class "2" surface finish.

If by permission of the Engineer primary bars are spliced, they shall lap a minimum of 40 diameters for bars near the top of beams having more than 12 inches of concrete under the bars, and 24 diameters for bars near the bottom of members. Secondary bars when spliced shall lap 24 diameters of the bar.

All concrete chamfers to be ¾" unless otherwise noted.

All structural steel not otherwise noted shall be A.A.S.H.O. M 183.

Welding shall conform to the latest edition of the AWS Standard Specifications for welding highway bridges as amended.

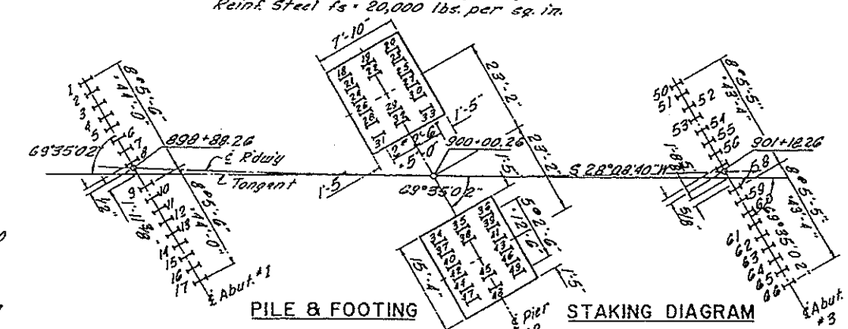
Bolts shall be furnished in the amount of two percent in excess of the nominal number required for each size and length.

Girder shoring shall remain in place until slab has been poured and concrete reached a minimum compressive strength of 2500 psi or 14 days lapsed time and prestressing of pier cap has been completed.

All wood or other destructible material used to form the inside girder cells shall be removed.

Loading Data:
Live Load = A.A.S.H.O. H5-20-44 or Int. Alt.
Dead Load = Assumes 15 lbs. per sq. ft. additional wearing surface (which includes the ½" concrete monolithic wearing surface shown) and 2" asphalt surfacing.

Designing Data:
A.A.S.H.O. 1965 unit stresses
Conc. fc = 1,200 lbs. per sq. in., n = 10
Reinf. Steel fs = 20,000 lbs. per sq. in.



PILE & FOOTING STAKING DIAGRAM

SUMMARY OF QUANTITIES						
ITEM	DESCRIPTION	UNIT	Super Struc.	Abut. 1	Pier 2	Abut. 3	Total
206	Structure Excavation	C.Y.		125	100	122	347
206	Structure Backfill Cl. 3	C.Y.		105	60	100	265
502	Steel Piling (14 BP 73)	L.F.			960		960
* 502	Steel Piling (10 BP 42)	L.F.		986		1037	2023
507	Conc. Slope & Ditch Paving	C.Y.		95		95	190
509	Structural Steel (Galv.)	lbs.					18226
516	Dampproofing (Linseed Oil)	S.Y.	171				171
601	Concrete Class "A"	C.Y.			91		91
601	Concrete Class "D"	C.Y.	1553				1553
602	Reinforcing Steel	Lbs.	503,115		34635		537,750
618	Prestressed Steel Wire or Strand	Lbs.	2860				2860
463	Hot Bituminous Pave. (Gr. 2)	Tons	239				239

COLORADO
DEPARTMENT OF HIGHWAYS
2 SPAN CONTINUOUS
(118'-0" & 112'-0")
CONCRETE BOX GIRDER

Under STATE HIGHWAY I
Near LITTLETON Sec. 5 T. 6 S R. 68 W.

Designed by B.S.M.H.
Made by F.W.
Checked by A.L.

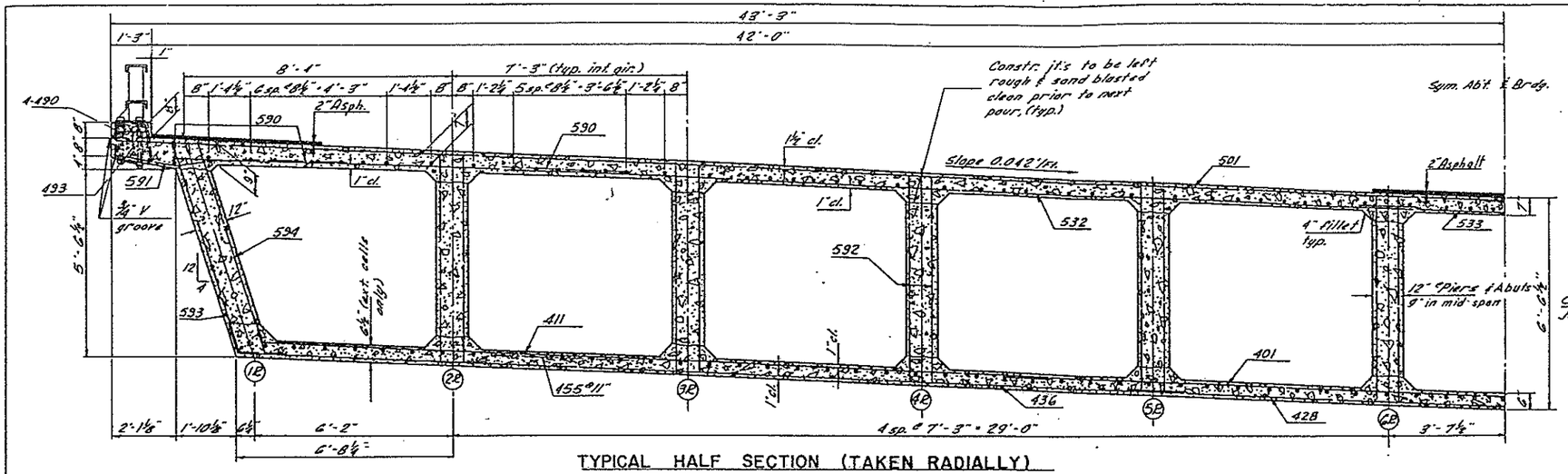
Approved by
Bridge Engineer
Date: 19

Revised P.C. 10-23-66

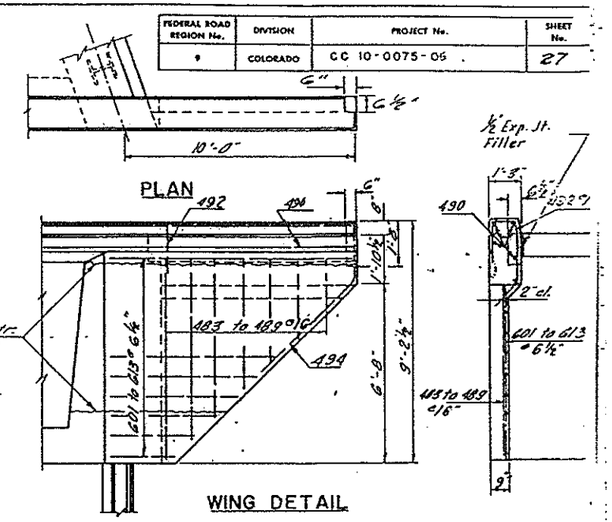
BEGIN BRIDGE STA. 896+86.91 END BRIDGE STA. 901+19.58 STRUCTURE NO. F-16-IC

REVISIONS

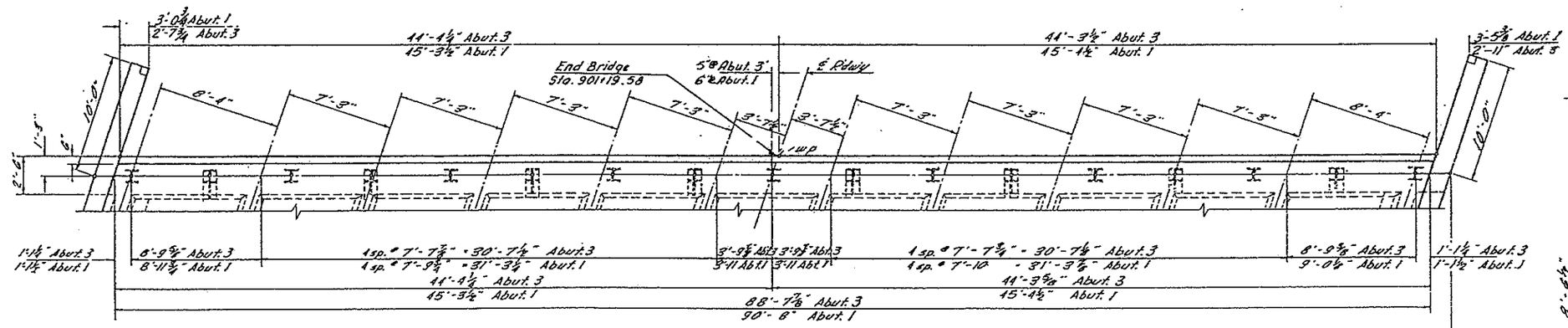
FEDERAL ROAD REGION No.	DIVISION	PROJECT No.	SHEET No.
9	COLORADO	CC 10-0075-06	27



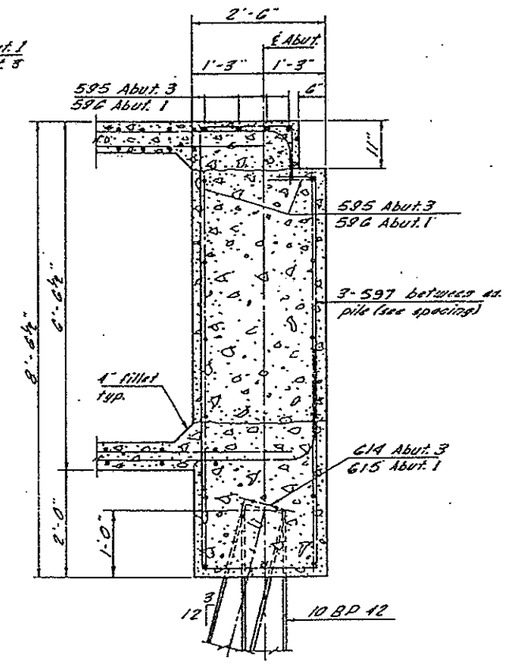
TYPICAL HALF SECTION (TAKEN RADIALLY)



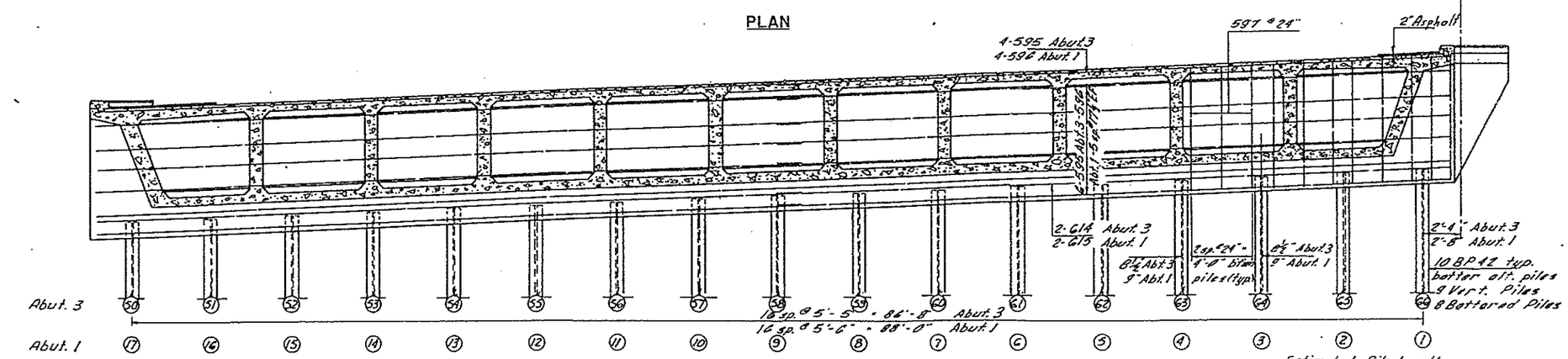
WING DETAIL



PLAN



SECTION THRU ABUTMENT



ELEVATION OF ABUTMENT NO. 3 AS SHOWN

ABUTMENT NO. 1 SIMILAR EXCEPT AS NOTED

Estimated Pile Length
Abut. 1 - ~~42' to 74' (Avg. 58')~~ 48.2' to 74.3' (59.9' Avg.)
Abut. 3 - ~~59' to 64' (Avg. 61')~~ 51.2' to 67.2' (55.8 Avg.)
Drive To 55 T/Pile
10 WF 45 may be substituted for 10 BP 42.

AS CONSTRUCTED
REVISED DATE SEP 1 3 1970

COLORADO
DEPARTMENT OF HIGHWAYS
TYPICAL HALF SECTION & ABUTMENT DETAILS

Under STATE HIGHWAY 1
Near LITTLETON Sec. 5 T. 6 S. R. 68 W.

Designed by B.S.M.H.
Made by F. W.
Checked by A. L.
Approved by Bridge Engineer
Date: 19

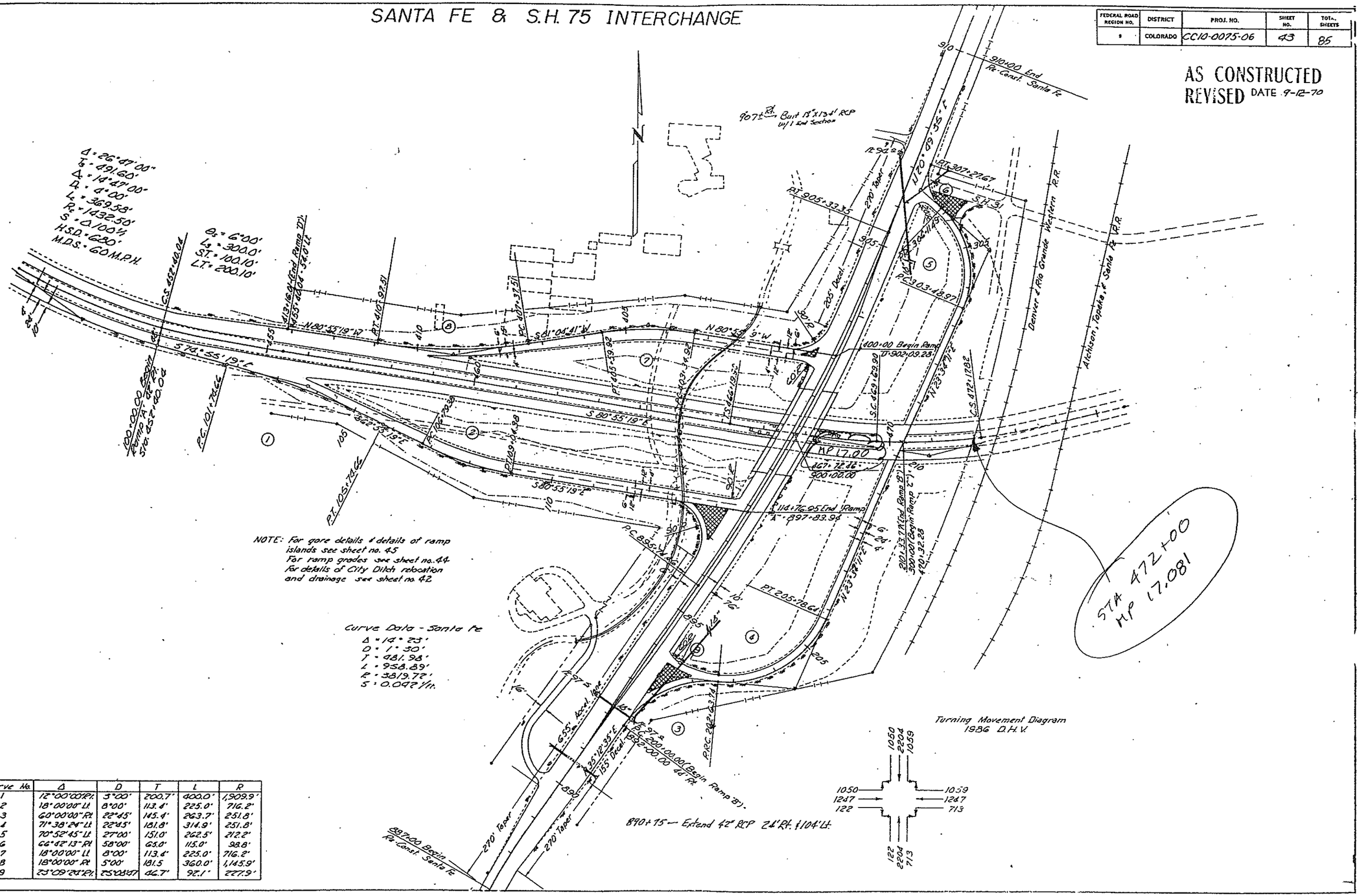
STRUCTURE NO. F-16-1C

115-4 Chatfield Inn

SANTA FE & S.H. 75 INTERCHANGE

FEDERAL ROAD REGION NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOT. SHEETS
8	COLORADO	CC10-0075-06	43	85

AS CONSTRUCTED
REVISED DATE 9-12-70

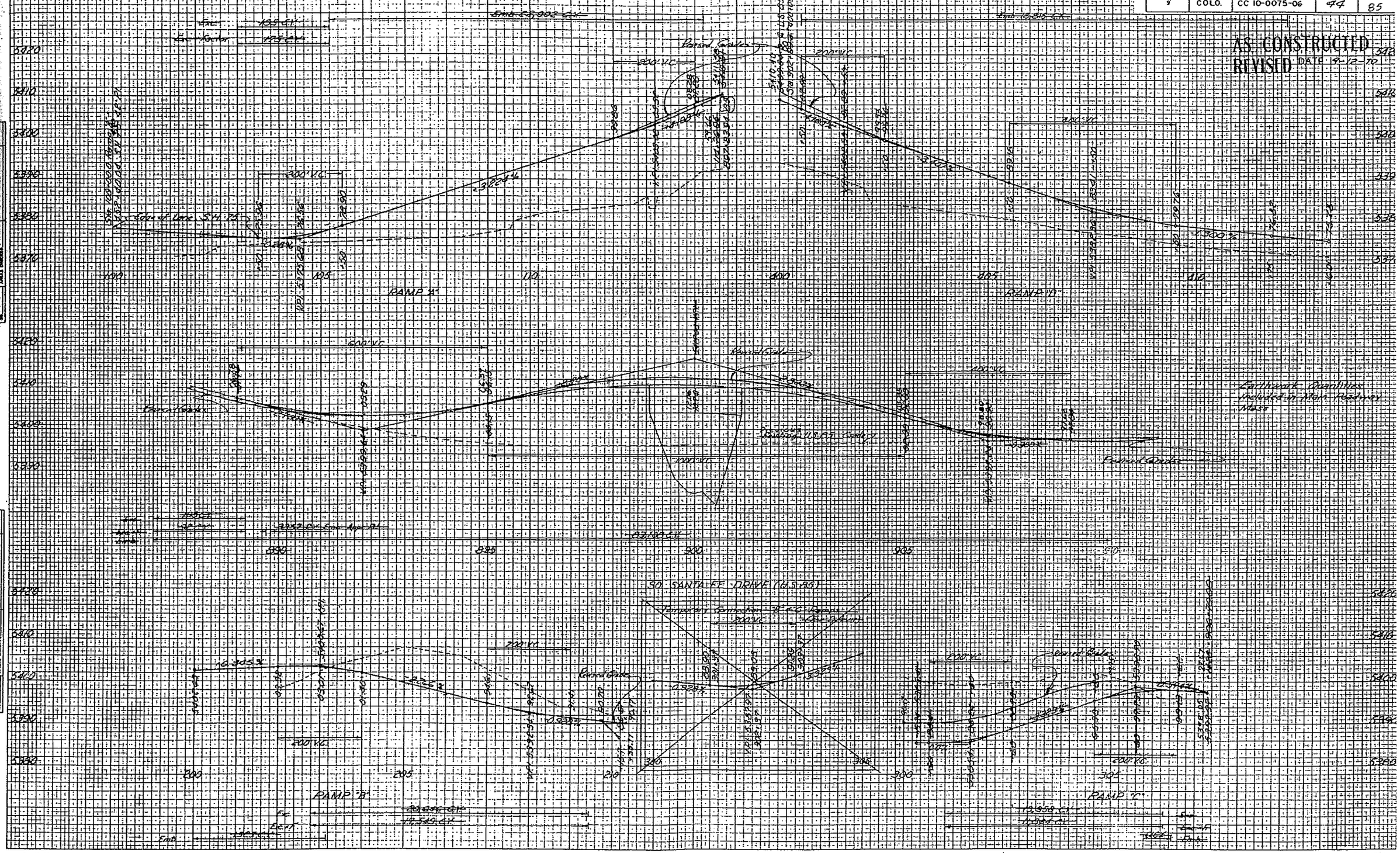


Curve No.	Δ	D	T	L	R
1	12°00'00"Rt.	3°00'	200.7'	400.0'	1,909.9'
2	18°00'00"Lt.	8°00'	113.4'	225.0'	716.2'
3	60°00'00"Rt.	22°45'	145.4'	263.7'	251.8'
4	71°38'24"Lt.	22°45'	181.8'	314.9'	251.8'
5	70°52'45"Lt.	27°00'	151.0'	262.5'	212.2'
6	66°42'13"Rt.	58°00'	65.0'	115.0'	98.8'
7	18°00'00"Lt.	8°00'	113.4'	225.0'	716.2'
8	18°00'00"Rt.	5°00'	181.5	360.0'	1,145.9'
9	23°09'24"Rt.	25°08'57"	46.7'	92.1'	227.9'

SANTA FE & S.H. 75 INTERCHANGE RAMP PROFILES

FEDERAL RD. REGION NO.	DIST.	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	CC 10-0075-06	44	85

AS CONSTRUCTED
REVISED DATE 9-12-70

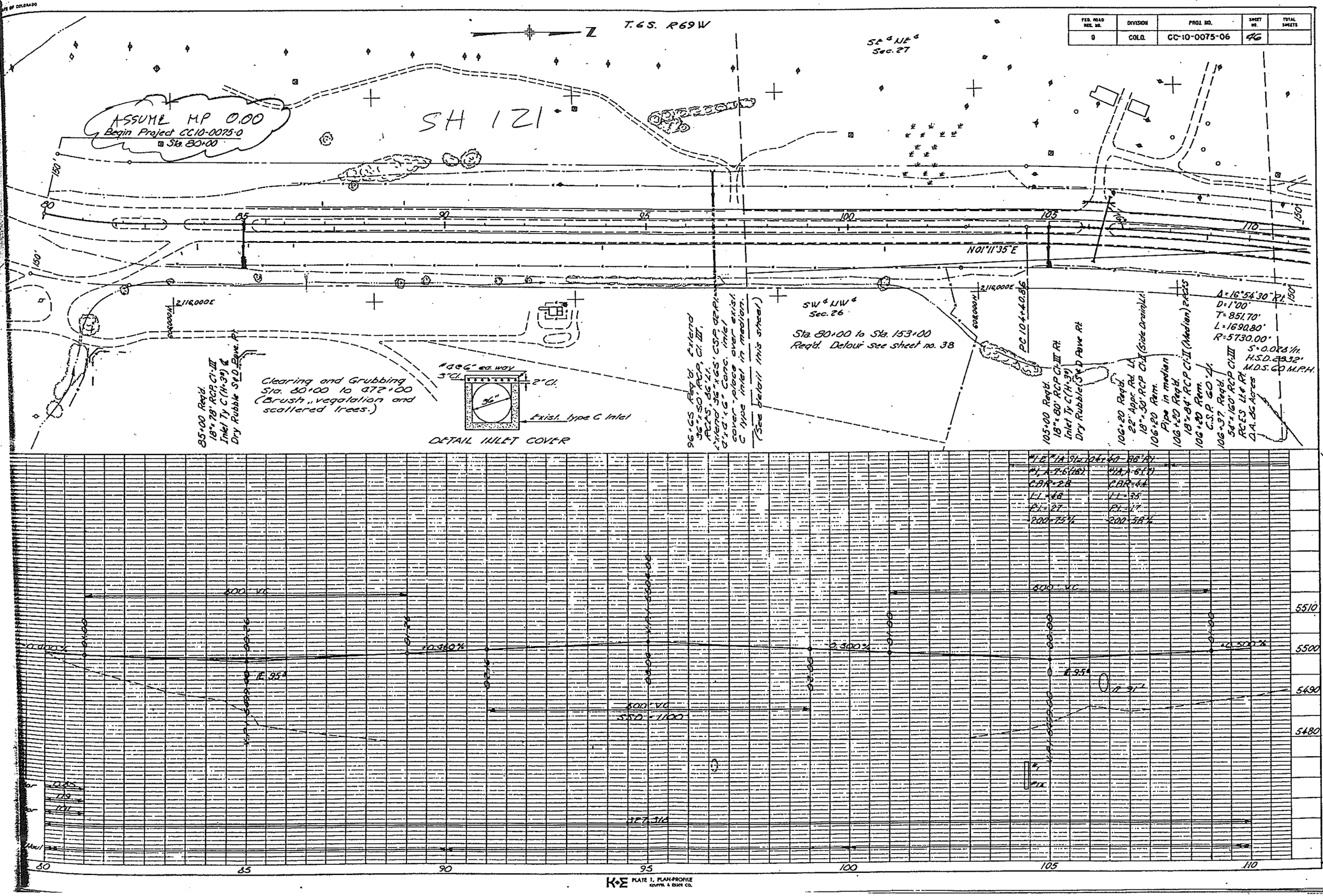


Printed in U.S.A.
On INTERNAL Drawing Chart

PLATE 3 CROSS SECTION & P. R. STANDARD

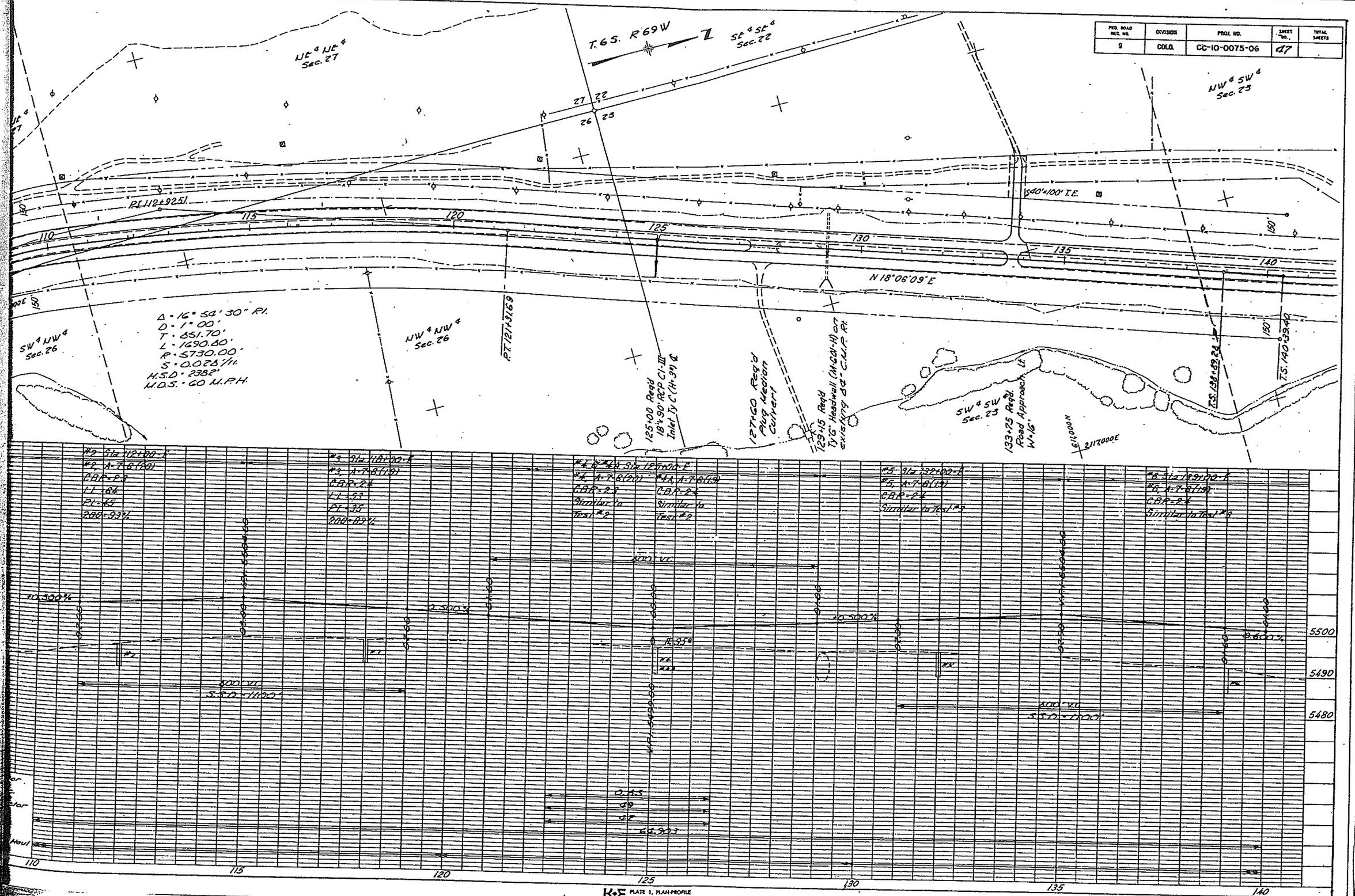
Printed in U.S.A.
On INTERNAL Drawing Chart

FED. ROAD REG. NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	CC-10-0075-06	46	

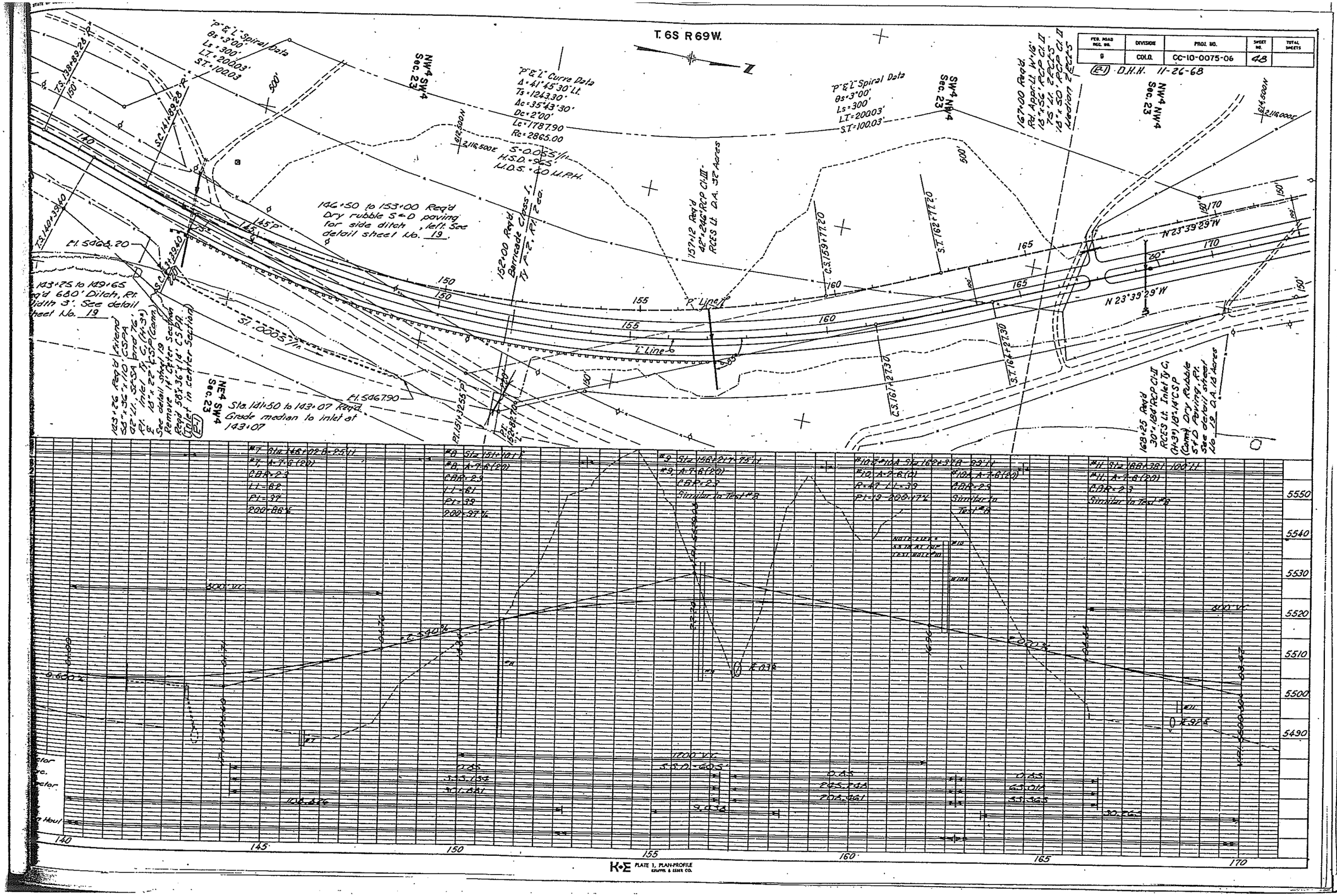


K+E PLATE 1, PLAN-PROFILE KEUFFEL & ESSER CO.

FED. ROAD REG. NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	CC-10-0075-06	47	



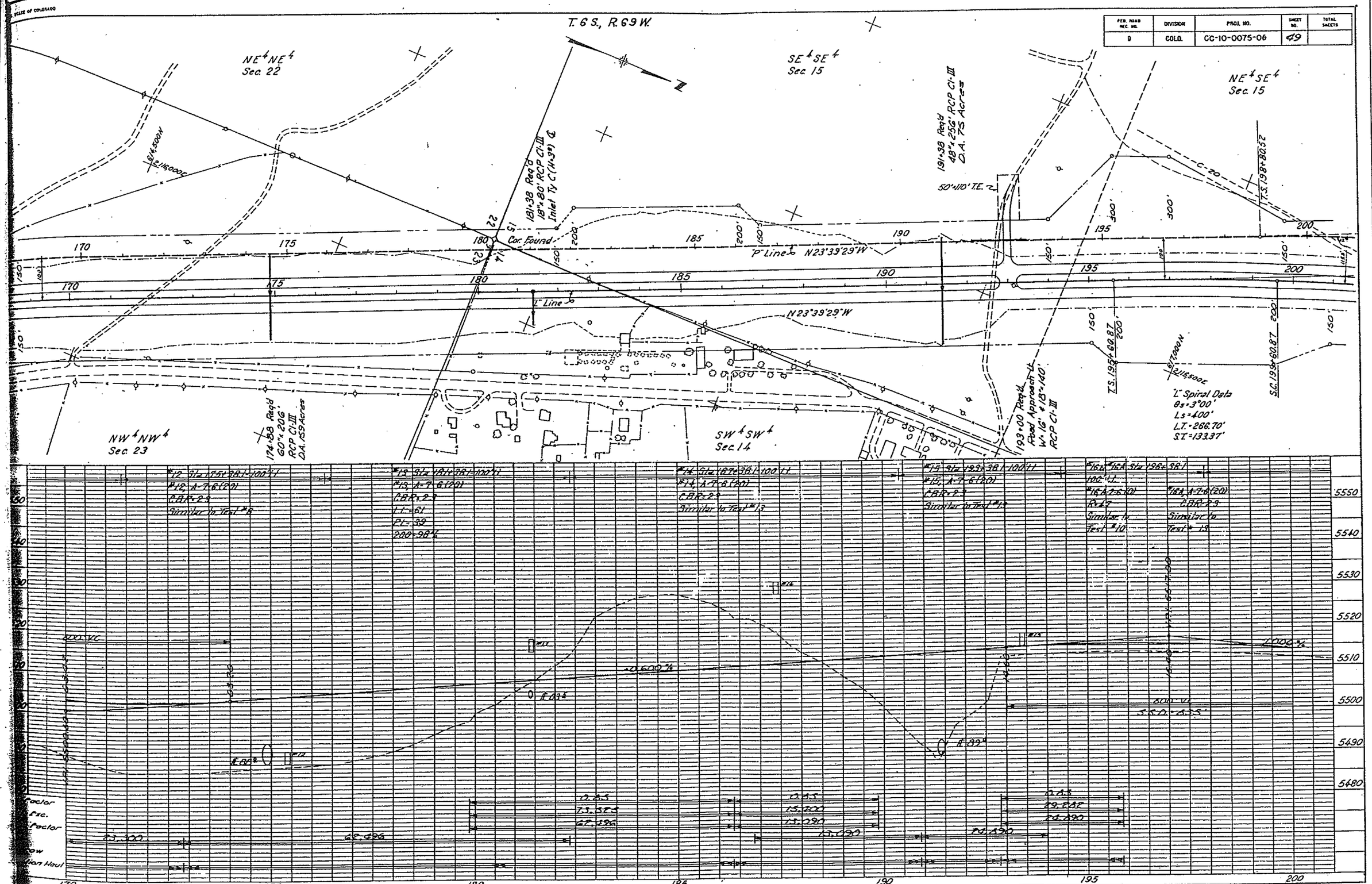
K+E PLATE 1, PLAN-PROFILE
KEUFFEL & ESSER CO.



T. 6S R 69W.
FED. ROAD REG. NO. 9
DIVISION COLO.
PROJ. NO. CC-10-0075-06
SHEET NO. 48
TOTAL SHEETS
D.H.H. 11-26-68
"P" & "L" Spiral Data
θs = 3°00'
Ls = 300'
LT = 200.03'
ST = 100.03
"P" & "L" Curve Data
Δ = 41°45'30" Lt.
Ts = 1243.30'
Δc = 35°43'30"
Dc = 2°00'
Lc = 1787.90
Rc = 2865.00
S = 0.055'/ft.
H.S.D. = 965'
M.D.S. = 60 M.P.H.
146+50 to 153+00 Req'd Dry rubble S&D paving for side ditch, left. See detail sheet No. 19.
152+00 Req'd Barricade Class I, Ty F-2, Rt. 2 ea.
157+12 Req'd 42"x246' RCP Cl. III RCES Lt. D.A. 32 Acres
167+00 Req'd Rd. Appr. Lt. W=16' 18"x56' RCP Cl. II 75' Lt. 2 RCES 18"x50' RCP Cl. II Median 2 RCES
143+25 to 149+65 Req'd 680' Ditch, Rt. Width 3'. See detail sheet No. 19
143+26 Req'd Extend 58"x36"x110' CSPA 42' Lt. Inlet Ty C, (H=3') 18"x 22' CSP (Conn.) See detail sheet 19 Remove 14' Center Section Req'd 58"x36"x14' CSPA (Inlet in center Section)
Sta. 141+50 to 143+07 Req'd Grade median to inlet at 143+07
168+25 Req'd 30"x184' RCP Cl. II RCES Lt. Inlet Ty C, (H=3') 18"x14' CSP (Conn.) Dry Rubble S&D Paving, Rt. See detail sheet No. 19 D.A. 18 Acres
N 23°39'29" W
"P" Line
"L" Line
Sta. 146+02.8 = 25' Lt.
#7, A-7-6 (20)
CBR = 2.3
LL = 62
PI = 37
200 = 86%
#8 Sta. 151+10.1
#8, A-7-6 (20)
CBR = 2.3
LL = 61
PI = 39
200 = 97%
#9 Sta. 156+21.7 = 75' Lt.
#9, A-7-6 (20)
CBR = 2.3
Similar to Test #8
#10 & #10A Sta. 162+37.8 = 99' Lt.
#10, A-2-6 (0)
R = 47 LL = 39
PI = 19 200 = 17%
#10A, A-7-6 (20)
CBR = 2.3
Similar to Test #8
#11 Sta. 168+38.1 = 100' Lt.
#11, A-7-6 (20)
CBR = 2.3
Similar to Test #8
800' VC
1200' VC
S.S.D. = 605'
5550
5540
5530
5520
5510
5500
5490
140
145
150
155
160
165
170
K+E PLATE 1, PLAN-PROFILE KEUFFEL & ESSER CO.

STATE OF COLORADO

FED. ROAD REC. NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	CC-10-0075-06	49	



K+E PLATE 1, PLAN-PROFILE KEUFFEL & ESSER CO.

STATE OF COLORADO

FED. ROAD REG. NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	CC-10-0075-06	50	

T. 6S. R. 69W.

"P" Curve Data
Δ = 30°55'00"
Ts = 546.80'
Δc = 18°55'00"
Dc = 4°00'
Lc = 472.90'
Rc = 1432.50'

"P" Spiral Data
θs = 6°00'
Ls = 300'
L.T. = 200.11'
S.T. = 100.10'

Spiral Data
θs = 6°00'
Ls = 300'
L.T. = 200.11'
S.T. = 100.10'

"L" Curve Data
Δ = 43°35'30" Rt.
Ts = 1728.13
Δc = 37°35'30"
Dc = 01°30'00"
Lc = 2506.11'
Rc = 3819.72'
S = 0.042'/ft.
H.S.D. = 1125'
M.D.S. = 60 M.P.H.

"L" Spiral Data
θs = 3°00'
Ls = 400'
L.T. = 266.70'
S.T. = 133.37'

"P" Spiral Data
θs = 3°00'
Ls = 300'
L.T. = 200.03'
S.T. = 100.03'

"P" Curve Data
Δ = 12°40'30" Rt.
Ts = 468.30'
Δc = 6°40'30"
Dc = 2°00'00"
Lc = 333.80
Rc = 2865.00'

"P" Spiral Data
θs = 3°00'
Ls = 300'
L.T. = 200.03'
S.T. = 100.03'

PI 212+88.63 "L"
P.I. 204+27.30 "P"
P.I. 225+24.79 "P"
N 12,500.0
N 12,115,000.0
2,114,500 E
C.S. 206+53.44
S.T. 209+53.44
S.C. 201+80.52
S.C. 191+48.87
C.S. 224+66.61
S.T. 228+66.61
S.C. 223+58.49
T.S. 220+58.49
C.S. 226+92.24
S.T. 229+92.24
"L" Line
"P" Line
215 N01°15'19"E
230 N19°55'56"E
S39°29'W
TC 100'
C-20
NE4 SE4 Sec. 15
SE4 NE4 Sec. 15
NE4 NE4 Sec. 15
211+00 Req'd 18"x 75' RCP, CI-III Inlet To C(H-3") & Dry Rubble S&D Pave Rt.
212+00 to 222+00 Req'd Dry rubble S&D paving for side ditches. See detail Sheet No. 19

#17 Sta 202+69.9 110.9' Lt
#17 A-7-6(20)
CBR-2.3
Similar to Test #3

#18 Sta 204+09 110.9' Lt
#18 A-2-4(0)
R=75
LL=NV
PI=NP
200=14%

#19 Sta 212+72.9 63.1' Rt
#19 A-7-5(1)
CBR=2.2
LL=44
PI=26
200=68%

#20 Sta 215+05 93.2' Rt
#20 A-4(2)
CBR=5.3
LL=28
PI=9
200=44%

#21 Sta 223+05 85.1' Rt
#21 A-4(2)
CBR=5.3
LL=28
PI=9
200=44%
1600' VC
S.S.D. = 670'

#22 Sta 227+62 36.5' Rt
#22 A-7-6(20)
CBR=2.3
LL=70
PI=48
200=79%

400' VC
S.S.D. = 269'
R=304'
N.P.I. 557+00
#14

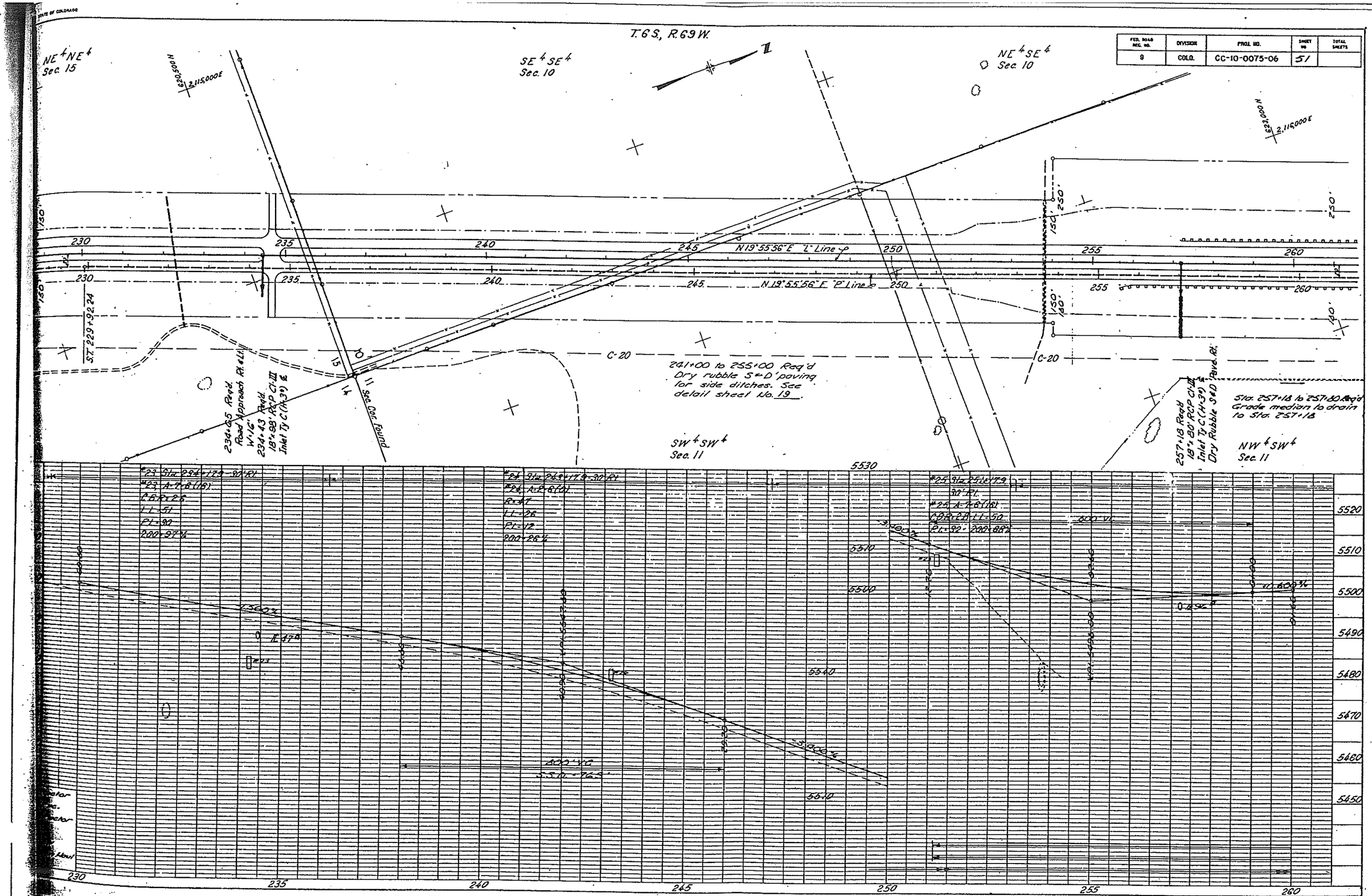
5570
5560
5550
5540
5530
5520
5510
5500

200 205 210 215 220 225 230

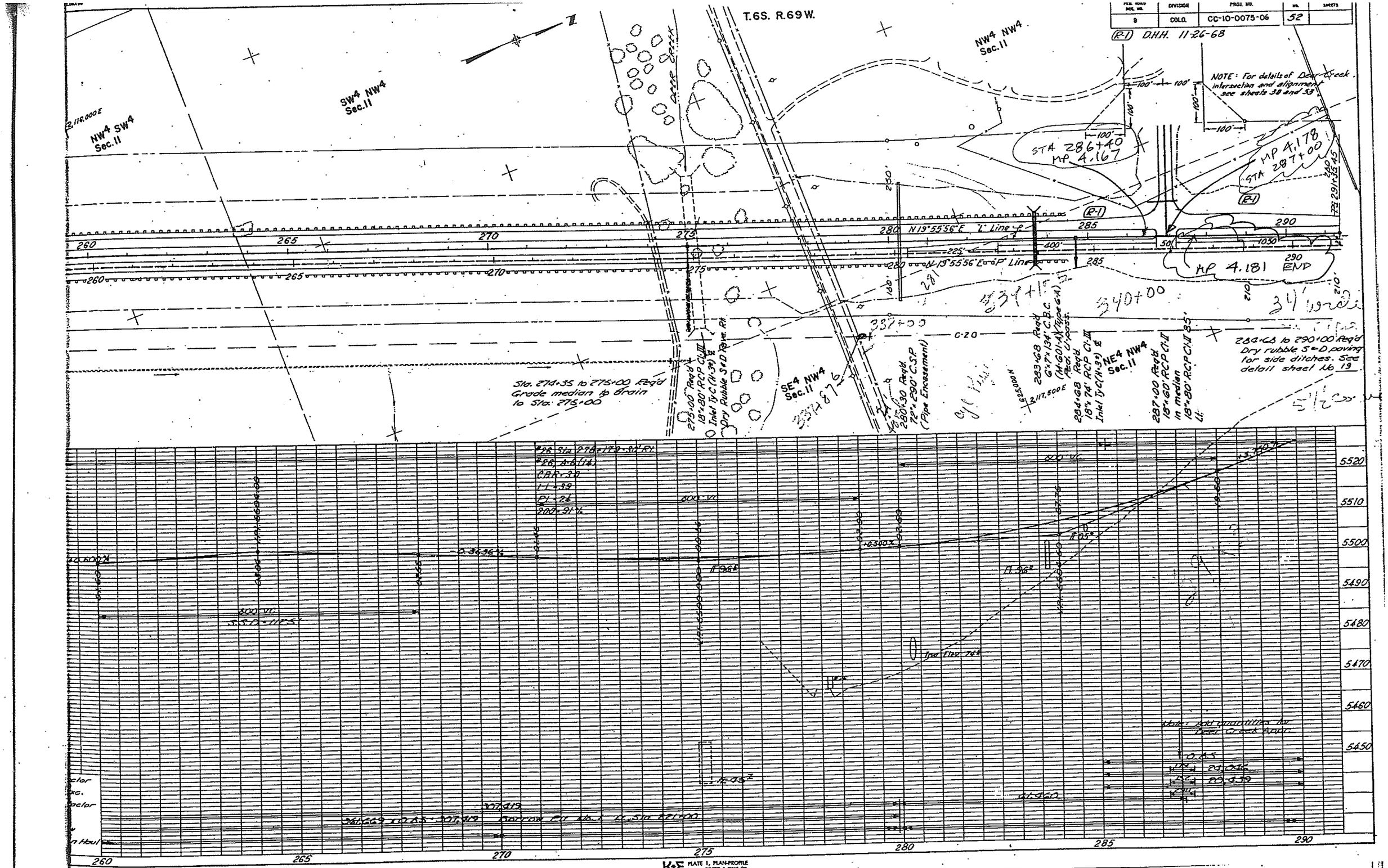
K+E PLATE 1, PLAN-PROFILE KEUFFEL & ESSER CO.

STATE OF COLORADO

FED. ROAD REG. NO.	DIVISION	PROJ. NO.	SHEET NO	TOTAL SHEETS
9	COLO.	CC-10-0075-06	51	

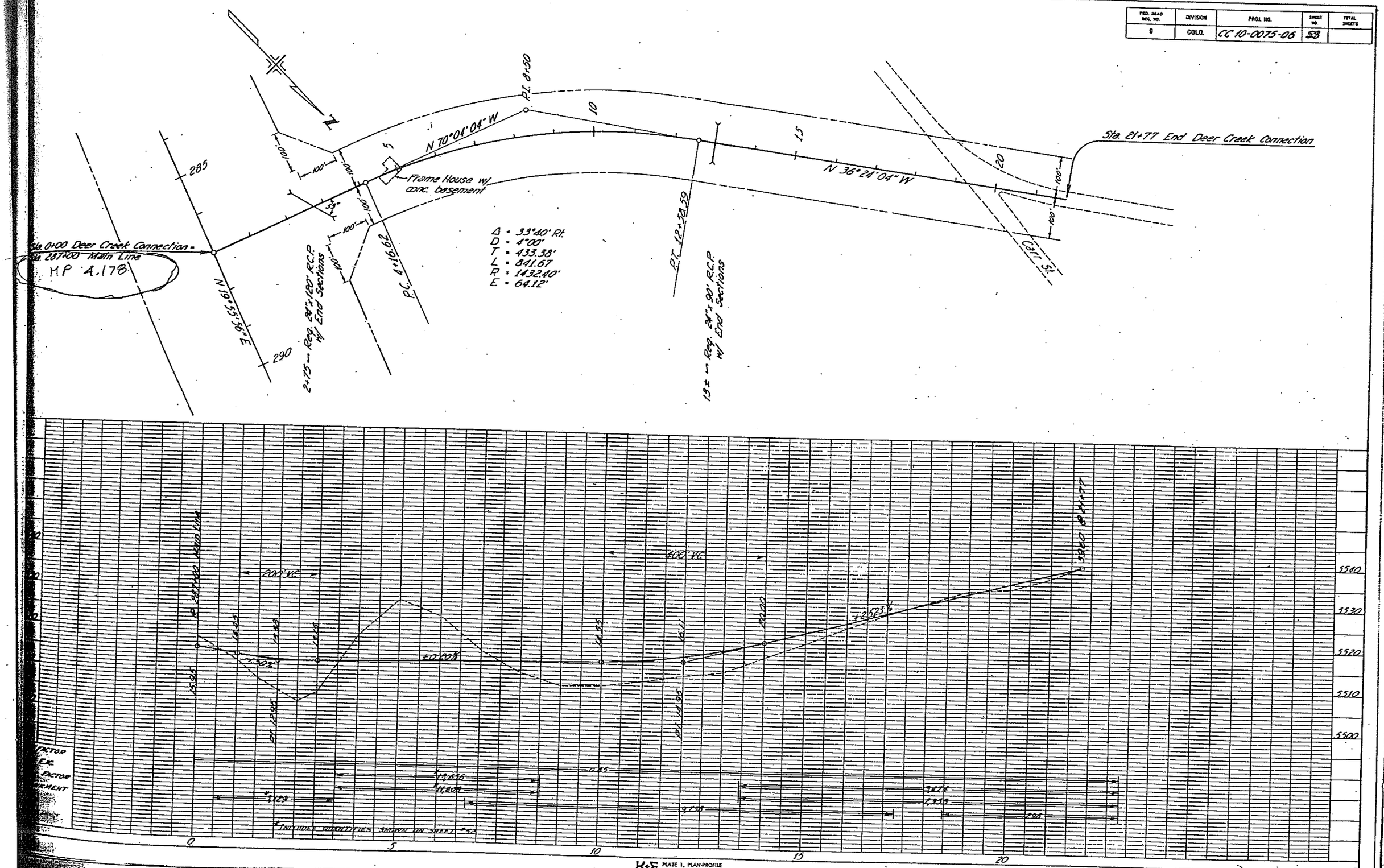


K+E PLATE 1, PLAN-PROFILE KEUFFEL & ESSER CO.



T.6S. R.69W.
DIVISION
COLO.
PROJ. NO.
CC-10-0075-06
52
D.H.H. 11-26-68
NOTE: For details of Deer Creek intersection and alignment see sheets 38 and 53
NW4 SW4 Sec.11
SW4 NW4 Sec.11
NW4 NW4 Sec.11
SE4 NW4 Sec.11
NE4 NW4 Sec.11
DEER CREEK
STA 286+40 MP 4.167
MP 4.178 STA 287+00
MP 4.181 END
N19°55'56"E "L" Line
N19°55'56"E "P" Line
Sta. 274+35 to 275+00 Req'd Grade median to drain to Sta. 275+00
275+00 Req'd 18"x80' RCP Cl.III Inlet Ty C (H-3) ℄ Dry Rubble S&D Pave. Rt.
280+30 Req'd 72"x290' C.S.P. (Pipe Encasement)
283+68 Req'd 6"x7"x134' C.B.C. (M-601-A) (Type 6-A) Red. U-pass.
284+68 Req'd 18"x74' RCP Cl.III Inlet Ty C (H-3) ℄
287+00 Req'd 18"x60' RCP Cl.II in median 18"x80' RCP Cl.II 85' Lt.
284+68 to 290+00 Req'd Dry rubble S&D paving for side ditches. See detail sheet No. 19
C-20
800' VC
Note: Add quantities for Deer Creek Appr.
K+E PLATE 1, PLAN-PROFILE

FED. ROAD REG. NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	CC 10-0075-06	53	



K+E PLATE 1, PLAN-PROFILE KEUFFEL & ESSER CO.

STATE OF COLORADO

FED. ROAD REG. NO.	DIVISION	PROJ. NO	SHEET NO.	TOTAL SHEETS
9	COLO.	CC-10-0075-06	54	

T. 6S. R. 69W.

N

"L" Curve Data
Δ = 26°23'30" Rt.
Ts = 822.01'
Δc = 20°23'30"
Dc = 2°00'
Lc = 1019.58'
Rc = 2864.79'
S = 0.055 ft/ft
H.S.D. = 965'
H.D.S. = 60 M.P.H.

"L" Spiral Data
θs = 3°00'
Ls = 300'
LT = 200.03'
ST = 100.03'

PI 299+57.46 "L"
PI 300+00.09 "P"

Buried Telephone cable

EQUATION: S.T. 307+55.03 "L" Bk = 307+37.22 Ahd

"P" Spiral Data
θs = 4°30'
Ls = 300'
LT = 200.06
ST = 100.06

"P" Curve Data
Δ = 26°23'30" Rt.
Ts = 598.30'
Δc = 17°23'30"
Dc = 3°00'
Lc = 579.70'
Rc = 1910.00'

"P" Spiral Data
θs = 4°30'
Ls = 300'
LT = 200.06'
ST = 100.06'

SE4 SW4 Sec. 2
NE4 SW4 Sec. 2
NW4 SE4 Sec. 2
SW4 SE4 Sec. 2
NE4 NW4 Sec. 11

N 19°55'56" E "L" Line
N 19°55'56" E 290 "P" Line
1050' Accel lane

C-20

287+00 296+00
~~290+00 to 298+00 Req'd~~
Dry rubble S-D paving for side ditches. See detail sheet No. 19.

4+45
18" × 102' RCP Cl-III
RCES Lt. & Rt.

1+35
18" × 89' RCP Cl-III
RCES Lt. & Rt.

AS CONSTRUCTED
REVISED DATE 9-12-70

MP 4.699 = ~~BKD~~ SH 75
MP 14.110 = 470A
470A

Sta 309+00 Rt. to Sta. 316+00 Lt.
Pipe protection C-20. See detail sheet No. 34.

Sta 318 ± Rt. Built concrete slab at Corps Office Bull Pen (3' × 19' × .5')

309+00
Remove C.S.P.

Extend 12" to existing Pl

Inlet Tp C(H=4.2') for details of intersection SH 75 & SH 121 see Sheet No. 36.

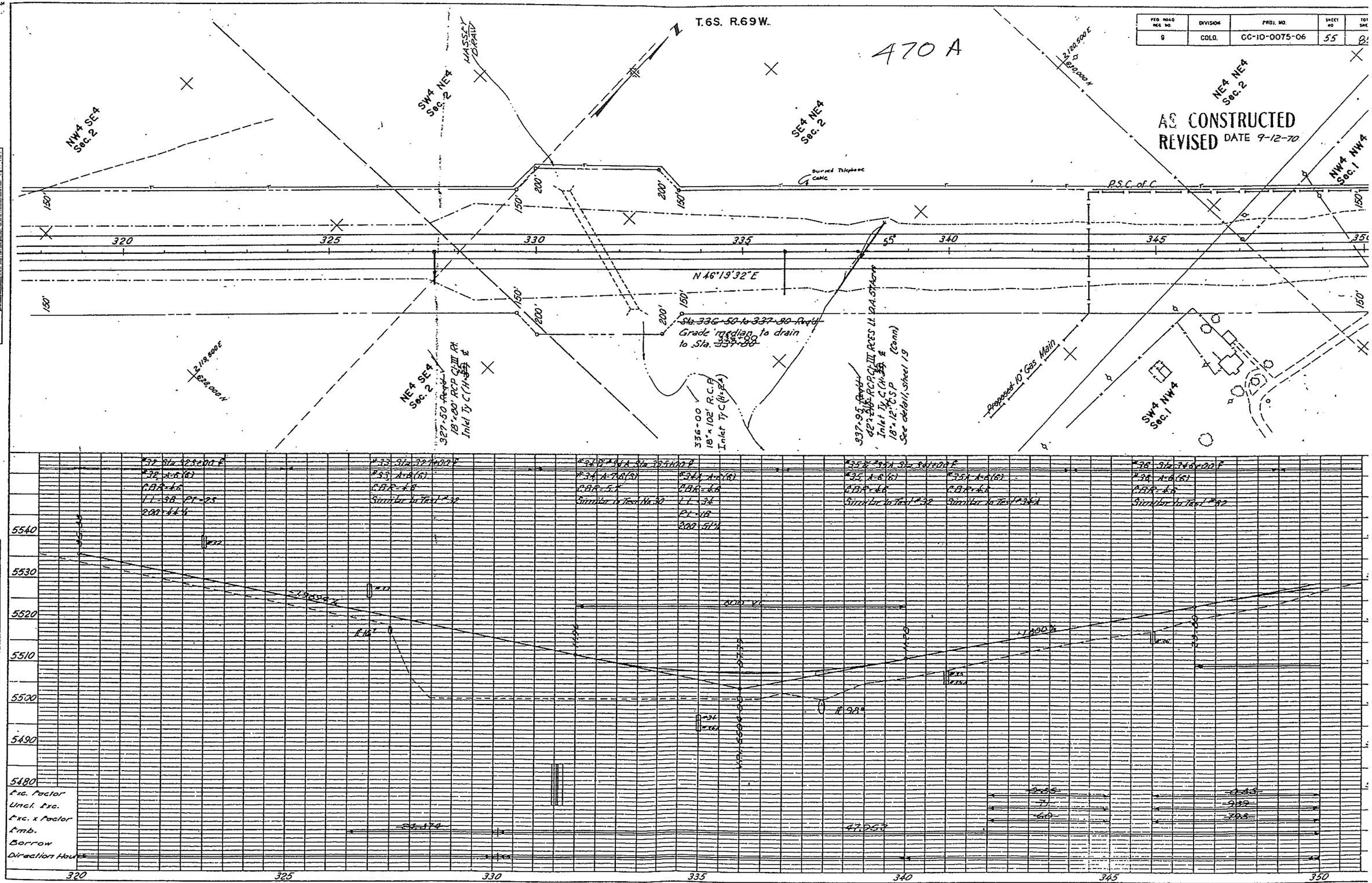
Exc. Factor
Uncl. Exc.
Exc. x Factor
Emb.
Borrow
Direction Haul

290 295 300 305 310 315 320

K+E PLATE 1, PLAN-PROFILE
KEUFFEL & ESSER CO.

DEPARTMENT OF HIGHWAYS STATE OF COLORADO

FED. ROAD REG. NO.	DIVISION	PROJ. NO.	SHEET NO.	TOT. SHE
9	COLO.	CC-10-0075-06	55	8

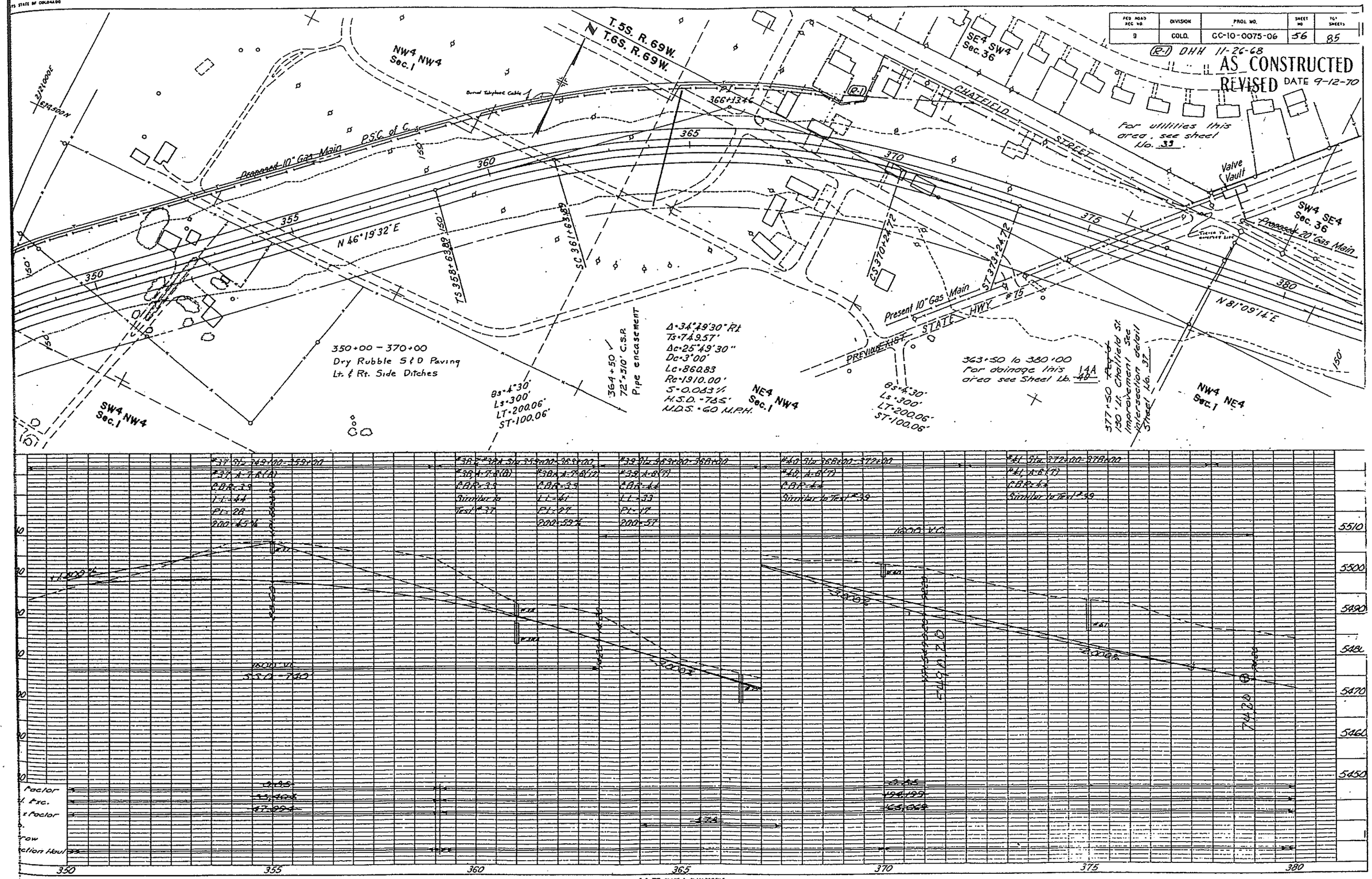


K+E PLATE 1, PLAN-PROFILE KEUFFEL & ESSER CO.

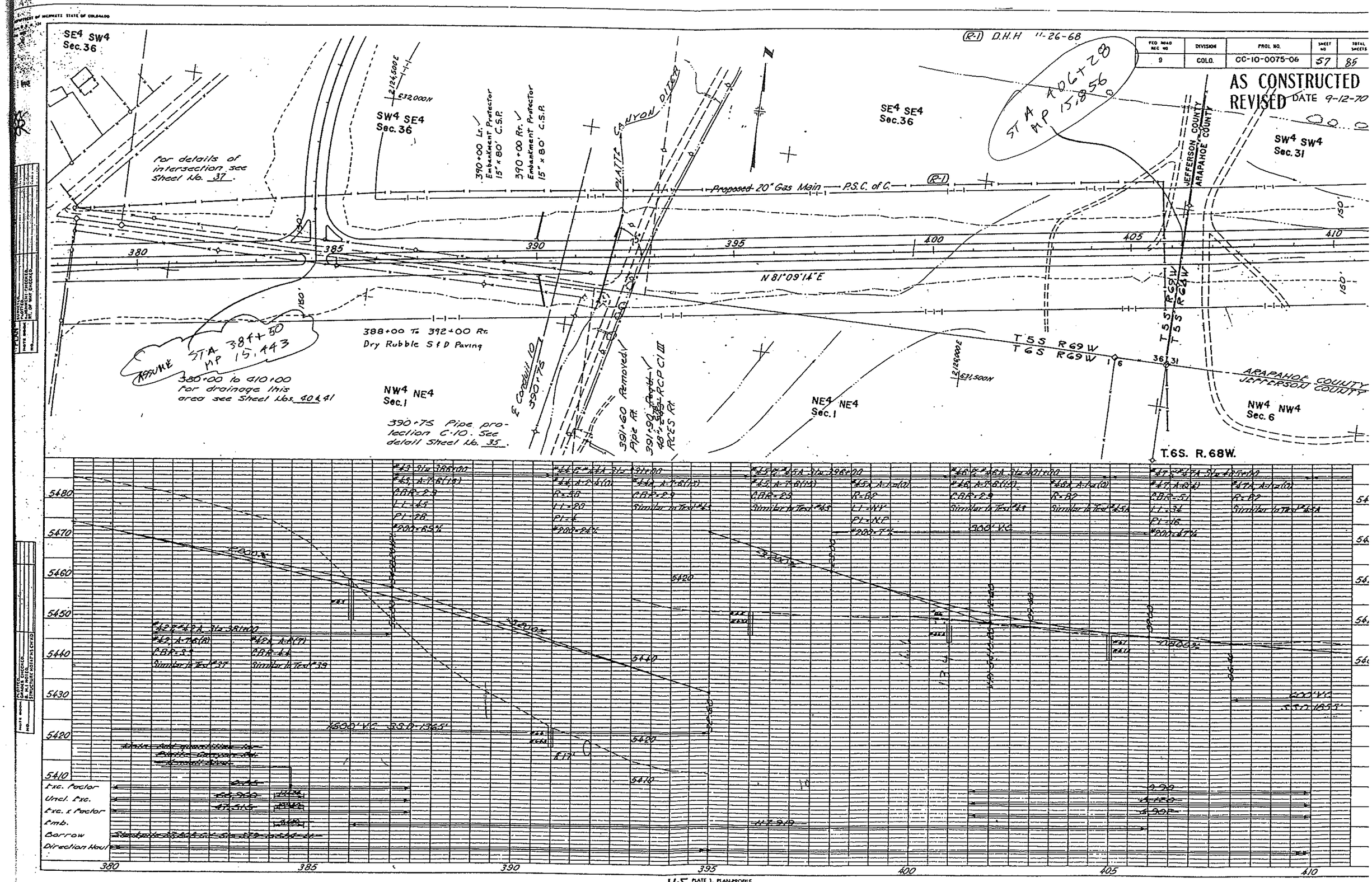
FED. ROAD REG. NO.	DIVISION	PROJ. NO.	SHEET NO.	TOT. SHEETS
9	COLO.	CC-10-0075-06	56	85

(R-1) DHH 11-26-68

AS CONSTRUCTED
REVISED DATE 9-12-70



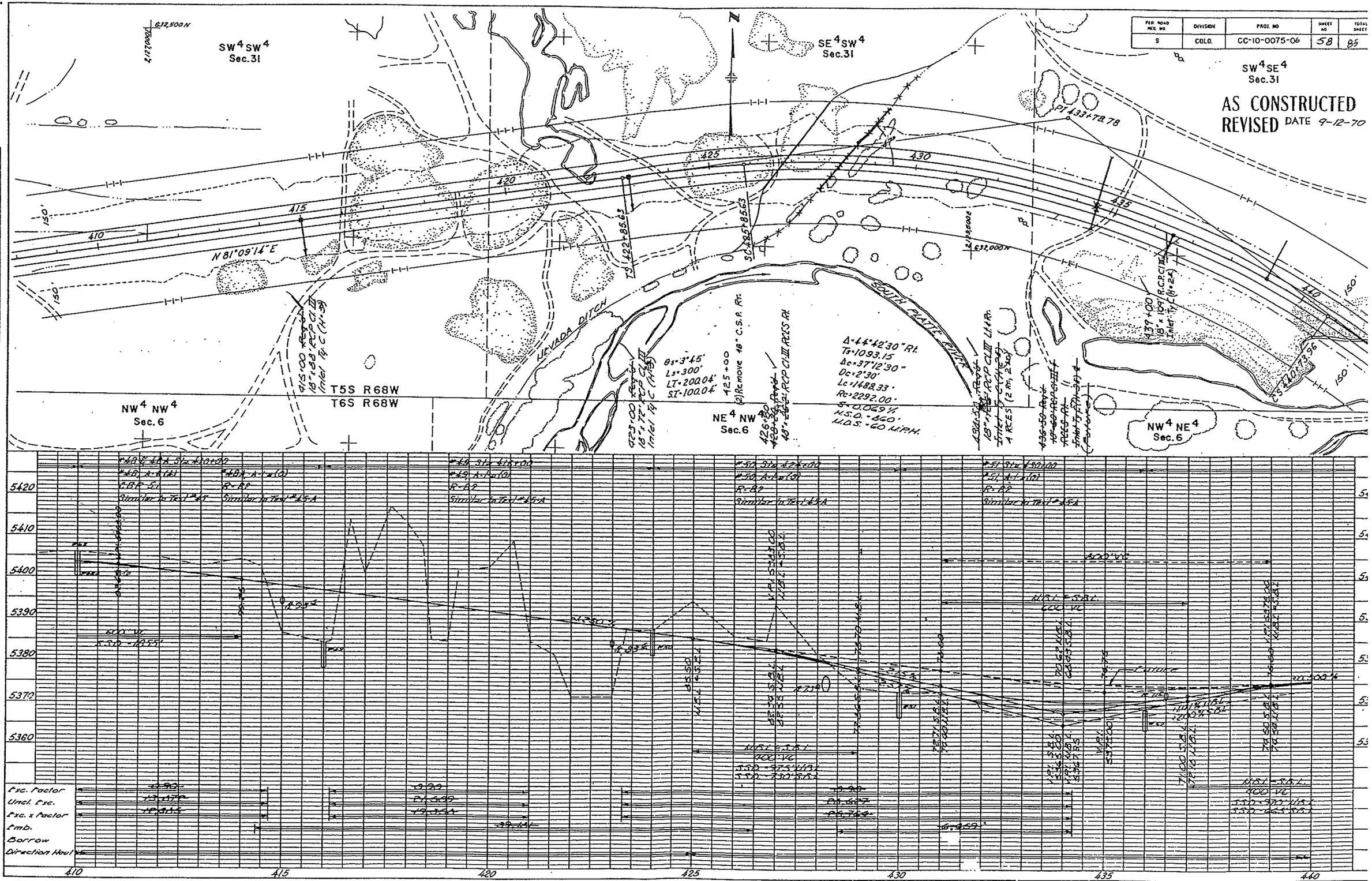
K+E PLATE 1, PLAN-PROFILE
KEUFFEL & ESSER CO.



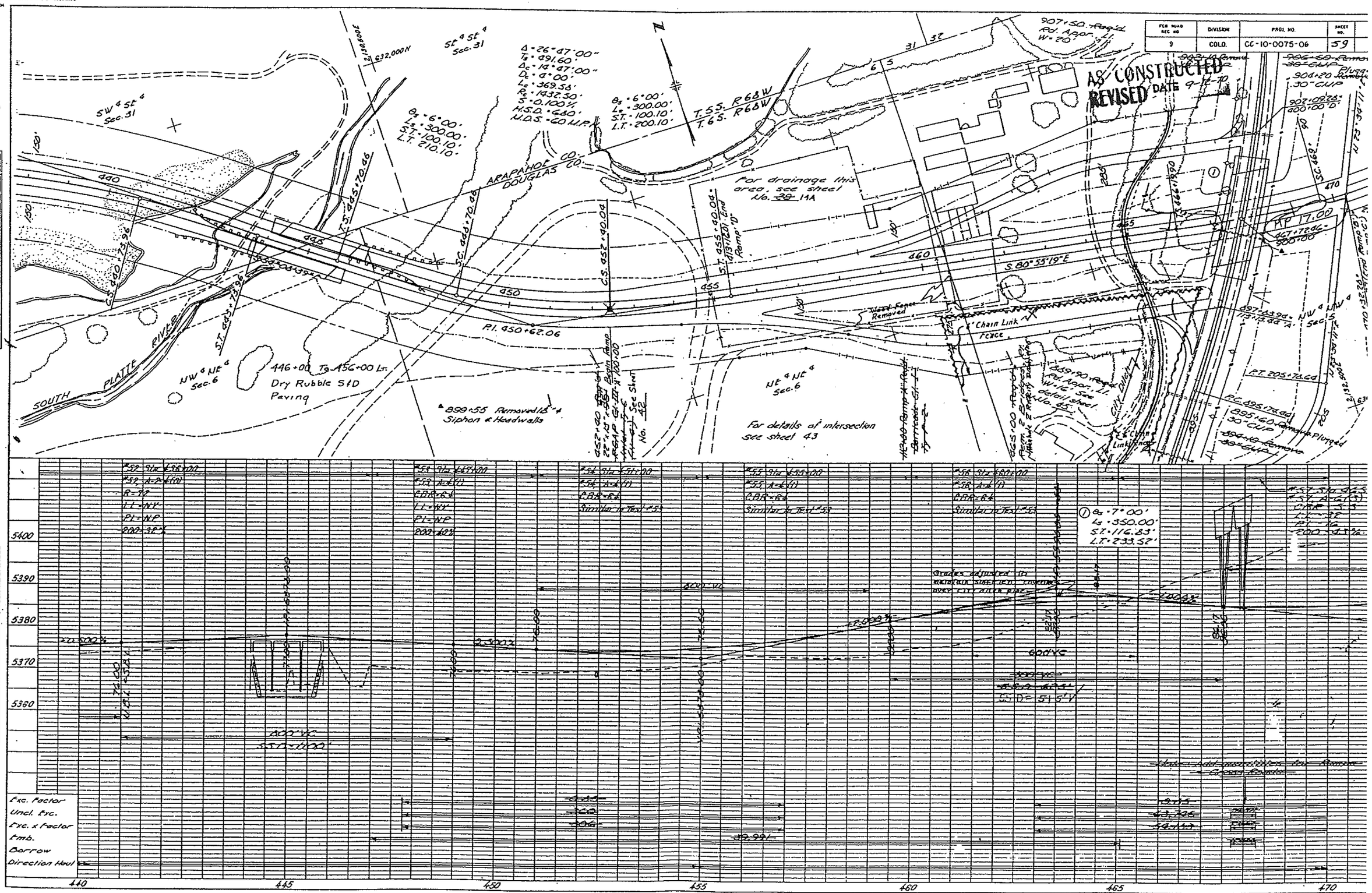
SE4 SW4 Sec. 36
SW4 SE4 Sec. 36
SE4 SE4 Sec. 36
SW4 SW4 Sec. 31
NW4 NE4 Sec. 1
NE4 NE4 Sec. 1
NW4 NW4 Sec. 6
T.6S. R.68W.
T 5 S R 69 W
T 6 S R 69 W
T 5 S R 68 W
JEFFERSON COUNTY
ARAPAHOE COUNTY
PLATTE CANYON DITCH
Proposed 20" Gas Main — P.S.C. of C.
N 81°09'14"E
STA 406+28 MP 15,856
STA 384+50 MP 15,443
ASSUME
For details of intersection see Sheet No. 37.
380+00 to 410+00 for drainage this area see Sheet Nos. 40 & 41
388+00 To 392+00 Rt. Dry Rubble S & D Paving
390+75 Pipe protection C-10. See detail Sheet No. 35.
390+00 Lt. Embankment Protector 15" x 80' C.S.P.
390+00 Rt. Embankment Protector 15" x 80' C.S.P.
℄ Conduit 10 390+75
391+60 Removed Pipe Rt.
391+90 Reqd. 48" x 24" RCP Cl III RCES Rt.
(R-1) D.H.H 11-26-68
AS CONSTRUCTED
REVISED DATE 9-12-70
FED ROAD REC NO 9
DIVISION COLO.
PROJ. NO. CC-10-0075-06
SHEET NO 57
TOTAL SHEETS 85
380
385
390
395
400
405
410
5480
5470
5460
5450
5440
5430
5420
5410
Exc. Factor
Uncl. Exc.
Exc. x Factor
Emb.
Borrow
Direction Haul
K+E PLATE 1, PLAN-PROFILE KEUFFEL & ESSER CO.

FED. ROAD REG. NO	DIVISION	PROJ. NO	SHEET NO	TOTAL SHEET
9	COLO.	CC-10-0075-06	58	85

AS CONSTRUCTED
REVISED DATE 9-12-70



K+E PLATE 1, PLAN-PROFILE KEUFFEL & ESSER CO.

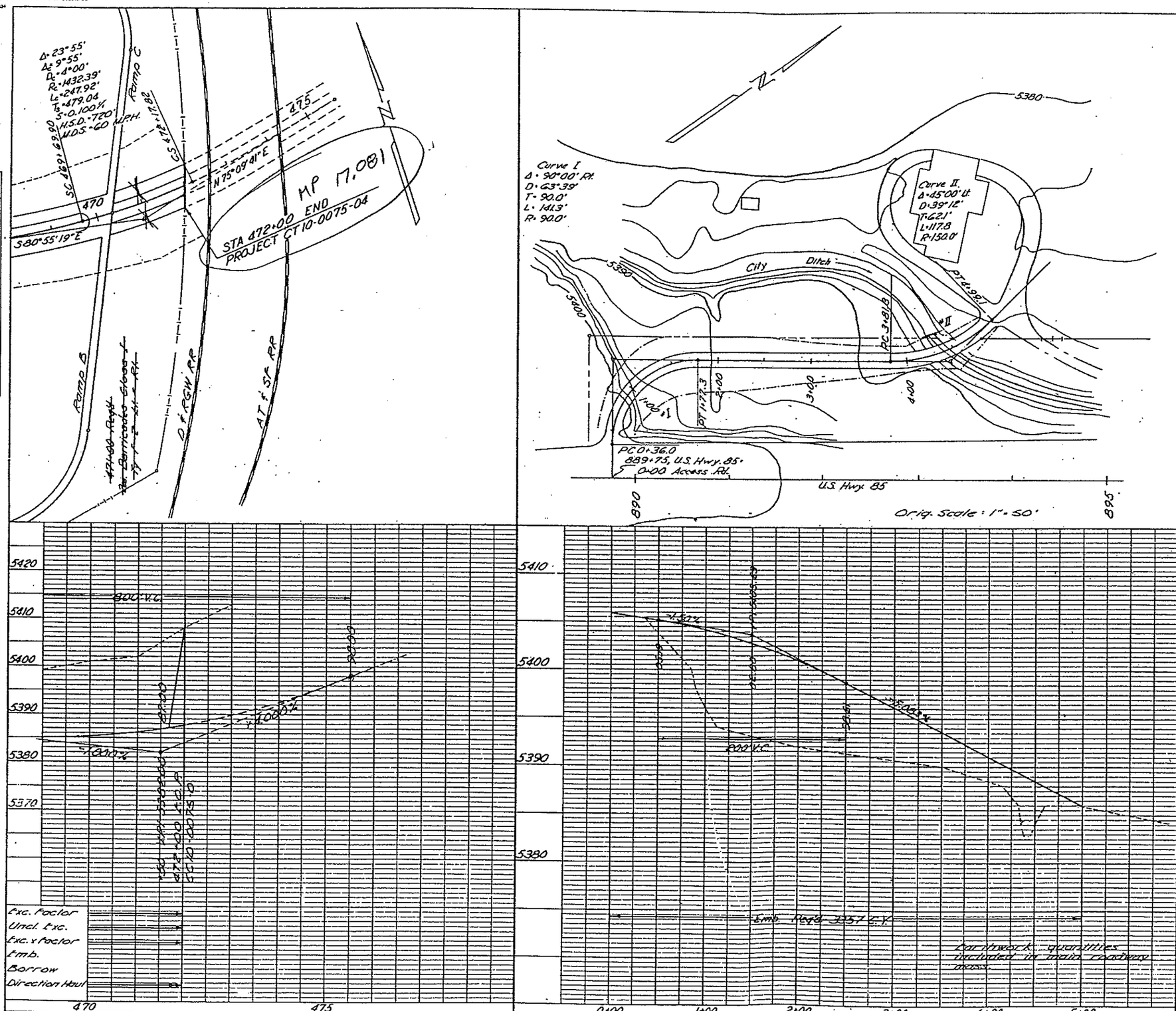


DEPARTMENT OF HIGHWAYS, STATE OF COLORADO
FED. ROAD REG. NO. 9
DIVISION COLO.
PROJ. NO. CC-10-0075-06
SHEET NO. 59
AS CONSTRUCTED
REVISED DATE 9-12-70
SOUTH PLATTE RIVER
ARAPAHOE CO.
DOUGLAS CO.
For drainage this area, see sheet No. 39 14A
For details of intersection see sheet 43
446+00 To 456+00 Lt. Dry Rubble S&D Paving
899+55 Removed 18" ϕ Siphon & Headwalls
P.I. 450+62.06
S. 80°55'19" E
Chain Link Fence
Wood Fence Removed
Exc. Factor
Uncl. Exc.
Exc. x Factor
Emb.
Borrow
Direction Haul
440
445
450
455
460
465
470
5400
5390
5380
5370
5360
K+E PLATE 1, PLAN-PROFILE

DEPARTMENT OF HIGHWAYS, STATE OF COLORADO

FED. ROAD REC. NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	CC-10-0075-06	60	8

AS CONSTRUCTED
REVISED DATE 9-12

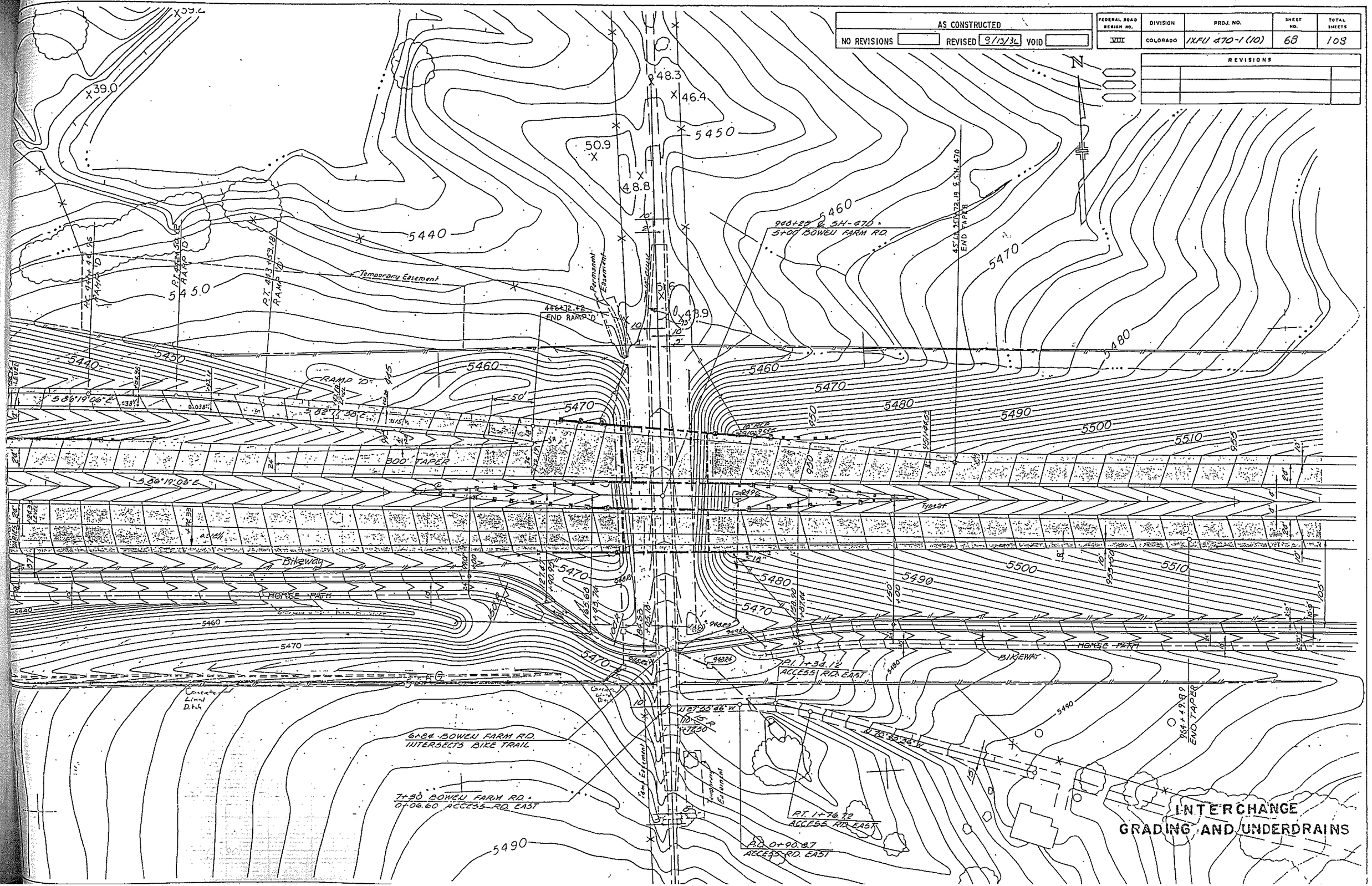


PLAN
NOTE BOOK
NO.
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
BY
DATE

PROFILE
NOTE BOOK
NO.
SURVEYED
PLOTTED
GRADES CHECKED
B. M. NOTED
STRUCTURE NOTATIONS CHK'D
BY
DATE

K+E PLATE 1, PLAN-PROFILE
KEUFFEL & ESSER CO.

AS CONSTRUCTED		
NO REVISIONS	REVISED 9/13/36	VOID

FEDERAL ROAD REGION NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	IXFU 470-1 (10)	68	108

REVISIONS