

DEPARTMENT OF HIGHWAYS STATE OF COLORADO

PLAN AND PROFILE OF PROPOSED FEDERAL AID PROJECT NO. S0091 (5) STATE HIGHWAY NO. 71 WELD COUNTY

D. E. M.

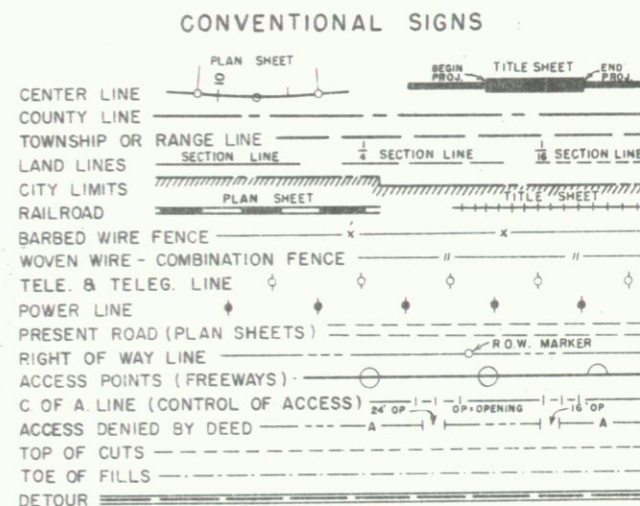
FEDERAL ROAD REGION NO.	DIVISION	PROJECT NO.	SHEET NO.
9	COLORADO	S C091 (5)	1

2-26-64 Deleted Sheet 6 W. E. M.

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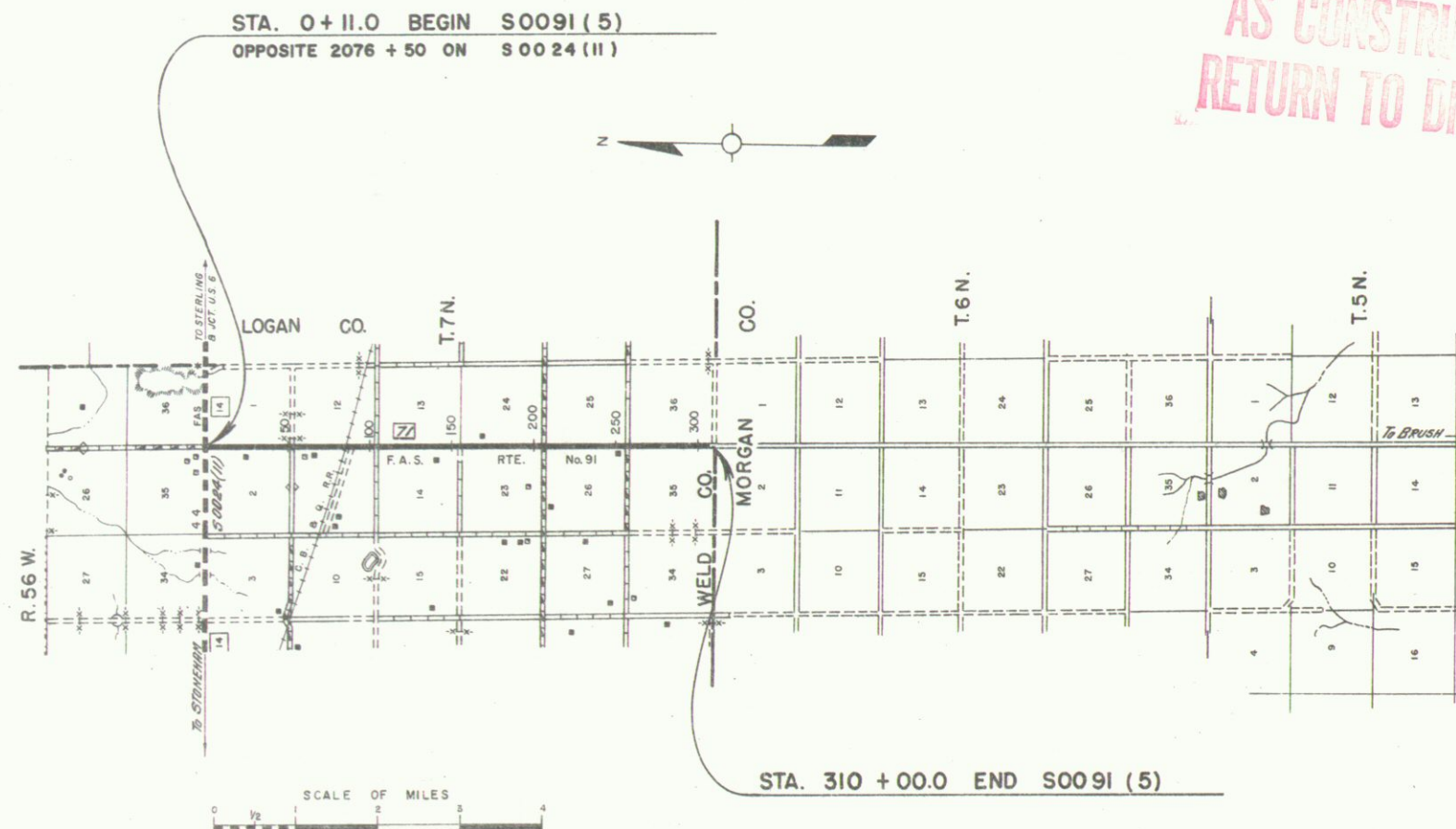


SCALES OF ORIGINAL DRAWINGS

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 } 30,989.0 Lin. Ft. = 5.869 Mi.
NET LENGTH OF PROJECT }

TABULATION OF LENGTH & DESIGN DATA

STATION	ROADWAY LIN. FT.	
0 + 11.0 BEGIN S0091 (5), OPPOSITE 2076 + 50 ON S0024 (11)	30,989.0	
310 + 00.0 END S0091 (5)		
TOTAL =	30,989.0	
SUMMARY	LIN. FT.	MILES
ROADWAY	30,989.0	5.869
ROADWAY TOTAL (NET & GROSS LENGTH) =	30,989.0	5.869
DESIGN DATA		
Maximum Grade	3.2 %	
Maximum Degree of Curve	Tangent	
Minimum S.S.D. (Vertical)	650'	
Minimum S.S.D. (Horizontal)	>1300'	
Maximum Design Speed	70 M.P.H.	



AS CONSTRUCTED PLANS
RETURN TO DIST. 4 DESIGN

SEE SPECIAL PROVISIONS FOR
NOTICE TO BIDDERS

DEPARTMENT OF HIGHWAYS
STATE OF COLORADO

APPROVED: *W. E. M.* 2-7-64
CHIEF ENGINEER DATE

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

APPROVED: _____ DATE _____

DIVISION ENGINEER

W. E. M.

FEDERAL ROAD DISTRICT NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLORADO	S 0091 (5)	2	

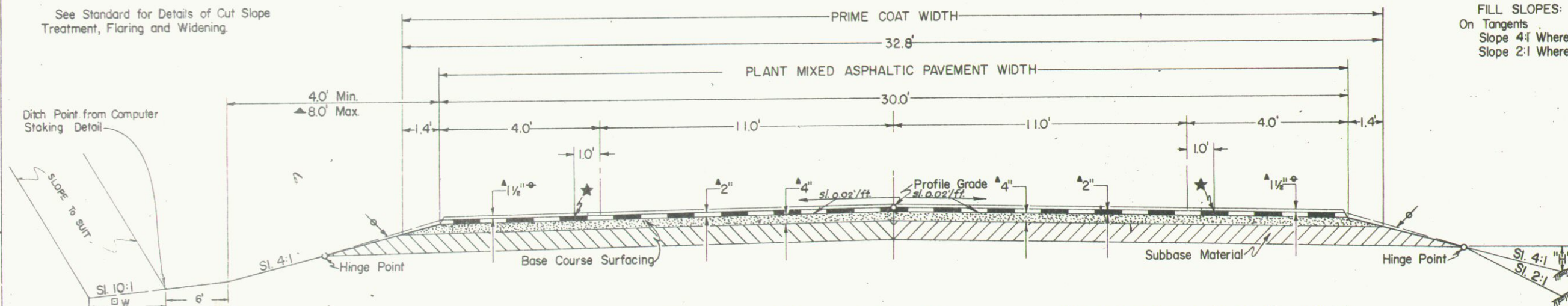
Rev. 2-26-64 Surfacing, W.E.M.

FILL SLOPES:

On Tangents
Slope 4:1 Where "H" is 3' or less.
Slope 2:1 Where "H" is over 3'.

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TYPICAL SECTION



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.

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

WIDENED DITCH FOR ADDITIONAL UNCLASS. EXCAV.

STA. To STA.	SIDE	WIDENING
201+ To 209+	LT. & RT.	4'
229+ To 237+	LT. & RT.	4'
255+ To 262+	LT. & RT.	4'

- ▲ Approximate Thickness.
- Asphaltic Pavement Future Construction.
- ★ Location of solid white painted stripe.
- ✂ Contractor will be required to blade Slope Material to this line after completion of Paving Operation.
- ▲ Width used for Quantities.

Approximate 6" compacted thickness of Gravel or Crushed Rock Surfacing shall be placed in separate courses at the following rates per 100 lin. ft. of roadway:

Plant Mixed Asphaltic Pavement	35	Tons
Base Course Surfacing	70	Tons

Material above the subgrade is to be constructed of Subbase Material at locations designated in Subbase Material tabulation. Estimated quantities involved in this operation and thickness of material required are tabulated in the Subbase Material Plan.

GENERAL NOTES

This project is to be constructed in conformity with the Standard Specifications of the Colorado Department of Highways, adopted Jan. 1, 1958.

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

Thickness of Subbase, Base Course Surfacing and Asphaltic Pavement Materials as shown on plans is approximate only. These materials are to be placed on basis of tonnages shown on Plans.

During construction of this Project, traffic will use the present traveled roadway.

All Guard Posts interfering with construction are to be removed by State Maintenance Forces.

Clearing and Grubbing for entire Project consists of light brush, grass and cultivated fields.

For preliminary plan quantities of Asphaltic Road Materials the following rates of application were used.

PRIME COAT at 0.40 Gals. 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 shall be primed and asphaltic surfaced 2" thick as follows:

Field approaches, 4' out from edge of processed mat. All others, 50' out from edge of processed mat or to Right of Way line, whichever is less.

SURFACING AND SUBBASE MATERIAL PLAN

It is estimated that material for Subbase and Surfacing for the Project is available in the vicinity of the pit indicated in the following tabulations. Estimated quantities involved in these operations are shown below. Alteration of the Subbase Material and Surfacing Plans, as here outlined, will be allowed only on written permission from the Department.

SURFACING PLAN

STATION	SOURCE AND AVAILABLE	QUANTITY		OVERHAUL	
		PL MIX ASPH. SURFACING	BASE COURSE	TONS	TON MILES
0 + 11 To 310 + 00		10,847	21,693		
ESTIMATED FOR: Approach to Project, 0+11 Approach to Project, 310 + List of Structures Correcting Irregularities	Undesignated				
		18	35		
		298	595		
		335	1,013		
TOTALS:		11,498	24,792		

SUBBASE MATERIAL PLAN

STATION	SOURCE AND AVAILABLE	THICKNESS INCHES	QUANTITY		OVERHAUL TON MILES
			TONS	CLASS 2	
0 + 11 To 83 + 00		15	26,442		
175 + 00 To 194 + 00		7	2,622		
ESTIMATED FOR: Correcting Irregularities Approach to Project, 0+11	Undesignated				
		15	2,907		
TOTALS:			32,131		

Δ Thickness based on Design Curve "C"

FENCING TABULATION

STATION	SIDE	REMOVE FENCE	REMOVE & REBUILD FENCE	BUILD B.W. FENCE WITH METAL POSTS	POSTS		B.W. GATES
		LIN. FT.	LIN. FT.	LIN. FT.	CORNER BRACE EACH	END EACH	
0 + 38 To 0 + 98	Lt X	190		120	2		
0 + 98 To 65 + 00	Lt & Rt	6,525		6,400	6		
0 + 98 To 65 + 00	Lt						
65 + 00 To 81 + 71.1	Lt	1,735		1,670	4		
83 + 78.2 To 105 + 88	Lt	2,310		2,210	3		
106 + 24 To 159 + 62	Lt		5,340				
159 + 62 To 168 + 86	Lt	1,025		925	2		
171 + 57 To 177 + 24	Lt	670		570	2		
265 + 92 To 294 + 56	Lt	3015		2,860	6		
26 + 45	Lt				2		1
27 + 05	Lt				2		1
34 + 64	Lt				2		1
37 + 21	Lt				2		1
52 + 85	Lt				2		1
68 + 35	Lt				2		1
79 + 70	Lt				2		1
86 + 90	Lt				2		1
124 + 00	Lt				2		1
177 + 12	Lt				2		1
265 + 70	Lt				2		* 1
TOTALS:		15,470	5,340	14,735	23	21	

* In Cross Fence

D. S. M.

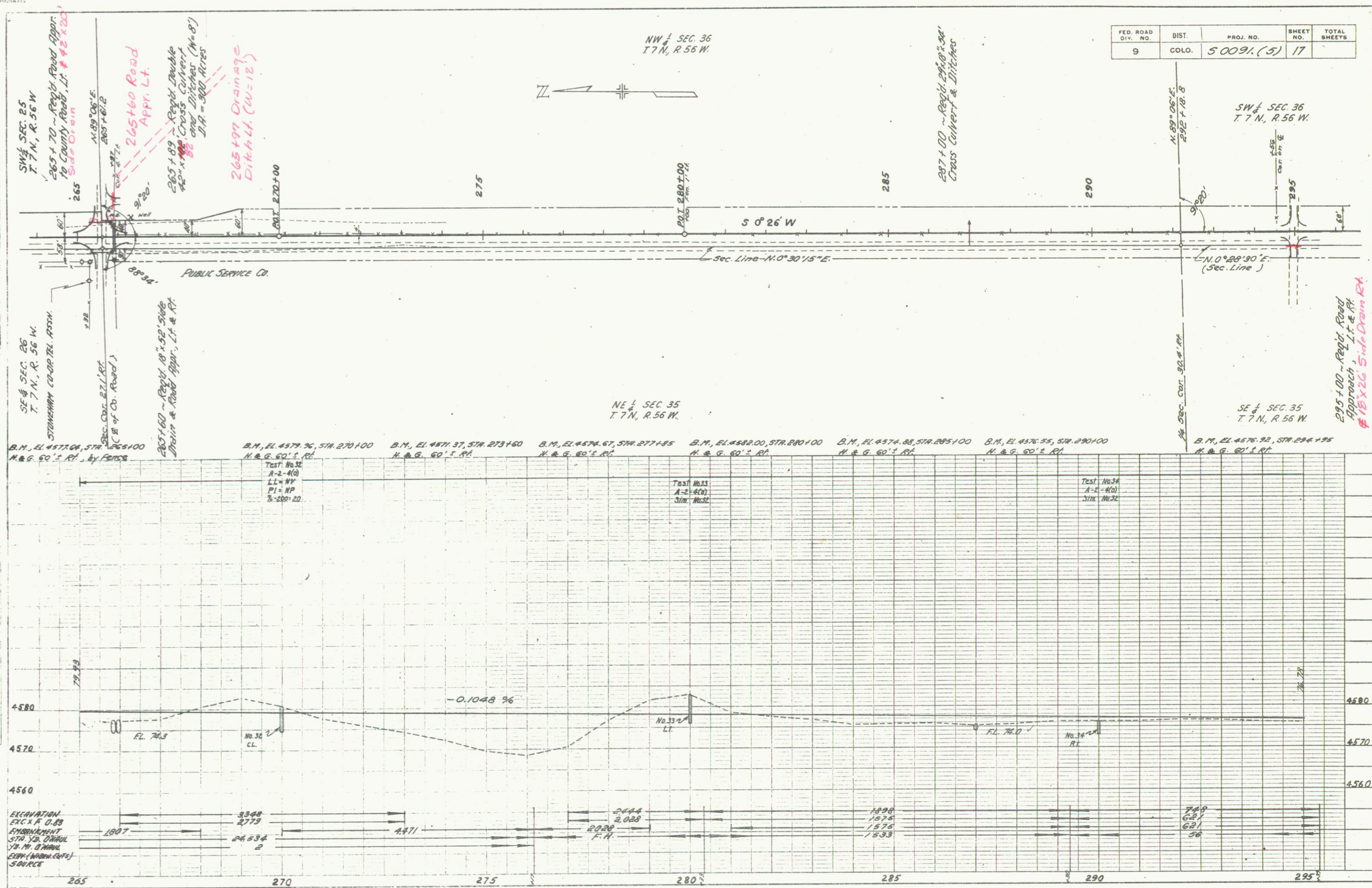
RIGHT OF WAY MARKERS

STATION	SIDE	EACH
2 + 00	Lt	1
30 + 00	Lt	1
56 + 00	Lt	1
85 + 00	Lt	1
111 + 00	Lt	1
137 + 00	Lt	1
163 + 00	Lt	1
189 + 00	Lt	1
215 + 00	Lt	1
242 + 00	Lt	1
260 + 00	Lt	1
290 + 00	Lt	1
316 + 00	Lt	1
TOTAL:		13

DELINEATORS

STATION	SIDE	SPACING	TYPE I
1 + 00 To 309 + 00	Lt & Rt	Tangent	79
Approach to Proj., 564.310+ Lt & Rt		1° Curves	8
TOTAL:			87

FED. ROAD DIV. NO.	DIST.	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	5 0091. (5)	17	



PLAN
 1/4\"/>

PROFILE
 1/4\"/>

EXCAVATION
 EXC. A 0.83
 FURNISHMENT
 STR. YD. DRAIN
 YD. M. DRAIN
 EXC. (WHEN CUTS)
 SOURCE

RD. ROAD NO.	DIST.	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	50091 (5)	18	

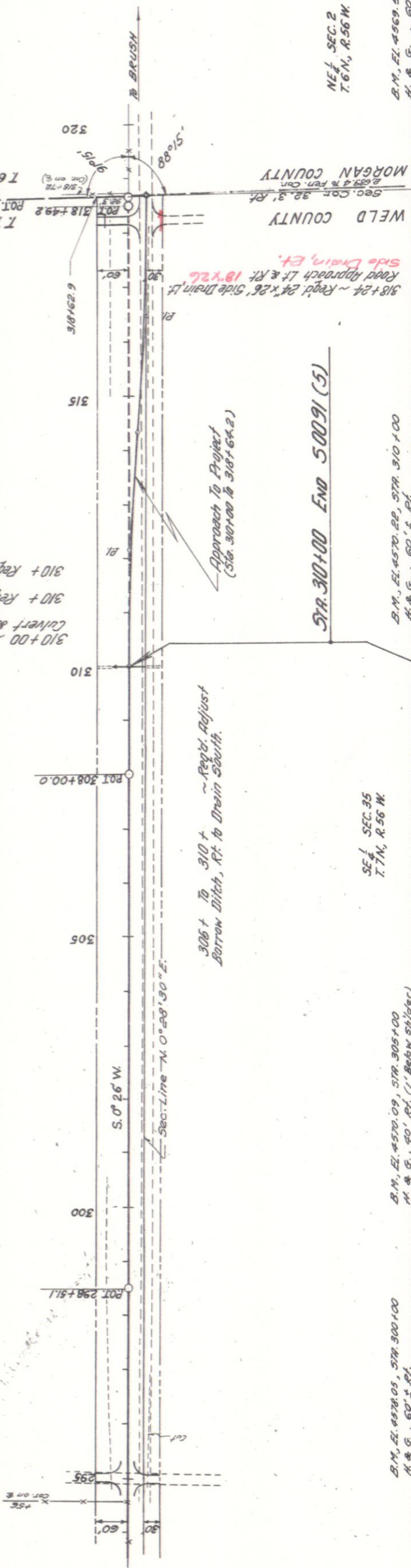
NW 1/4 SEC. 1
T. 6 N., R. 56 W.

Approach to Proj.
Δ = 4° 18' RT
T = 215.1'
E = 4.0'
D = 1° 00'
L = 430.0'
P = 5730.0'

310 + Reg'd. Identification Sign
310 + Reg'd. Approach to Project
310 + 00 ~ Reg'd. 24' x 64' Cross
Culvert & Ditches



SW 1/4 SEC. 36
T. 7 N., R. 56 W.



STA. 310+00 END 50091 (5)

NE 1/4 SEC. 2
T. 6 N., R. 56 W.

B.M. EL. 4578.05, STA. 300+00
H. & G., 60' ± RT

SE 1/4 SEC. 35
T. 7 N., R. 56 W.

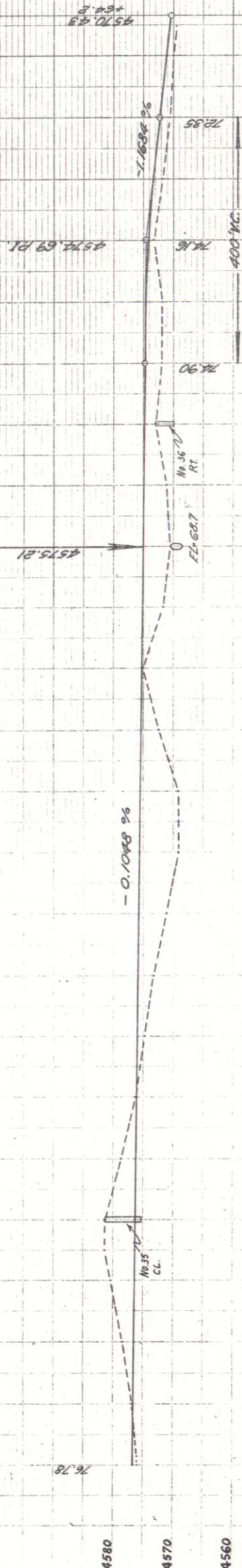
B.M. EL. 4570.22, STA. 310+00
H. & G., 60' ± RT

B.M. EL. 4569.52, STA. 318+50
H. & G., 60' ± RT

Test No. 15
A-2-4(0)
Sim. No. 32

Test No. 36
A-2-4(0)
Sim. No. 32

Approach to Project



ELEVATION
FIC X.F. 0.83
ELEVATION
STA. 300+00
STA. 310+00
STA. 320+00
SOURCE

5220
4333
4410
14.413

136
104

74.90
74.96
74.95

400' W.C.

1.1634%

4574.43

4570

4560

4580

4570

4560

295 300 305 310 315 320