

COLORADO STATE HIGHWAY DEPARTMENT

PLAN AND PROFILE OF PROPOSED P.W.A. DOCKET COLO. 804-D PROJECT NO. 158-F STATE HIGHWAY NO. 4 TELLER COUNTY

INDEX OF SHEETS

Sheet No. 1	Title Sheet	M-103-D
2	Typical Section and Summary of Quantities	M-110-B
3	List of Structures	M-107-F
4	List of Fencing, R.O.W. Markers, Guard Fence & Guard Posts	M-20-A
5	Details of Bridge, Sta. 998+	M-19-A
6	Concrete Box Culverts	M-27-A
7	Double Concrete Box Culvert	M-10-A
8	Standard Appurtenances for M.P. Culverts (Revised)	M-1-B
9	Standard Wire Cable Guard Fence	M-2-BX
10	Timber Guard Posts	
11	Wire Fences with Glass Posts & Marker Posts	
12	Structure Number Lettering	
13	Methods for Superelevation and Widening of Curves	
14	Typical Road Approach Road, Traffic Signs	
15	Plan and Profile Signs	
16	Grade Cross Section Sheets	
17	24-224 Channel Changes	

CONVENTIONAL SIGNS

CENTER LINE OF SURVEY	
RIGHT OF WAY LINES	
TOWNSHIP AND RANGE LINES	
SECTION LINES	
1/4 SECTION LINES	
BARBED WIRE FENCE	
PRESENT ROAD	

NOTE:-

It is recommended that workers on this project go over the plan details with one of the following field representatives of this department:

Ernest Montgomery, Dist. Engineer, Colo. Springs
Wm. Littlefield, Res. Engineer, Colo. Springs

SCALES ON ORIGINAL TRACINGS

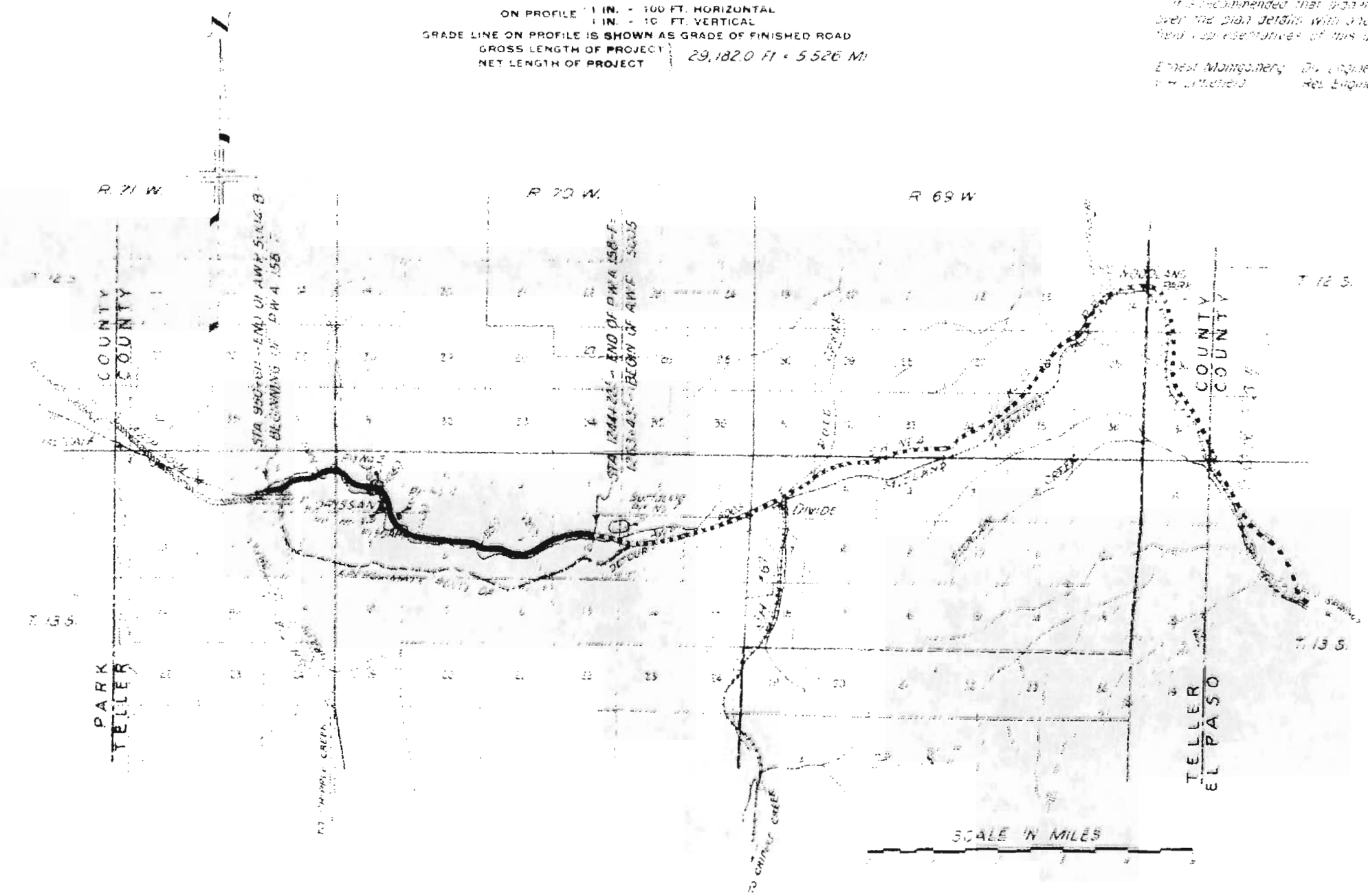
ON PLAN: 1 IN. = 100 FT.

ON PROFILE: 1 IN. = 100 FT. HORIZONTAL

1 IN. = 10 FT. VERTICAL

GRADE LINE ON PROFILE IS SHOWN AS GRADE OF FINISHED ROAD

GROSS LENGTH OF PROJECT 29,182.0 FT. = 5.526 MI.
NET LENGTH OF PROJECT



INACTIVE

RECOMMENDED FOR APPROVAL:

STATE HIGHWAY ENGINEER
RECOMMENDED FOR APPROVAL:
DIST. ENG. BUREAU PUBLIC ROADS
RECOMMENDED FOR APPROVAL:
INSTR. ENG. BUREAU PUBLIC ROADS
APPROVED:
DIRECTOR BUREAU PUBLIC ROADS

FENCING REQUIREMENTS

STATION	SIDE	REMOVE	REM. & REBUILD	BUILD	GATES	
		FENCE LIN. FT.	FENCE LIN. FT.	B WIRE LIN. FT.	B W. DWY. NO.	DWY. NO.
950 + 61' - 965 + 00	RI	1425				
974 + 75 - 997 + 77		2285				
993 + 00 - 997 + 70	LI	480				
1007 + 55 - 1013 + 00		550				
1013 + 00 - 1016 + 30	RI	335				
1017 + 00 - 1019 + 40		245				
1033 + 00 - 1044 + 30	LI	1040				
1044 + 30 - 1051 + 10	L & R	720				
1051 + 10 - 1052 + 70	RI	160				
1051 + 85 - 1060 - 60	L & R	910				
1060 + 75	X	190				
1070 + 90	X	125				
1086 + 85 - 1091 + 45	RI	475				
1091 + 45 - 1095 + 90	LI	465				
1091 + 30 - 1108 + 25	RI	1715				
1097 + 85 - 1100 + 35	RI	250				
1100 + 35 - 1107 + 90	L & X	930				
1131 + 30 - 1136 + 65	RI	595				
1136 + 65 - 1151 + 95	L & R	2940				
1151 + 95 - 1161 + 00	L & R	1415				
1173 + 85 - 1185 + 00	RI	1125				
1176 + 00 - 1210 + 00	LI	3410				
1188 + 00 - 1196 + 00	RI	860				
1201 + 85 - 1244 + 22'		4223				
1210 + 00 - 1244 + 22'	L & R	3440				
1287 + 00 - 1291 + 00	RI		450			
1350 + 65 - 1365 + 175	LI		1480			
1350 + 65 - 1362 + 89	RI		3250			
1369 + 00 - 1344 + 22'			27385			
1373 + 40 - 1308 + 525	RI		425			
1371 + 60 - 1336 + 55			2535			
1340 + 85 - 1347 + 75			680			
1345 + 00 - 1350 + 00			500			
1350 + 75 - 1356 + 00			485			
1356 + 80 - 1363 + 70			350			
1361 + 00 - 1386 + 90			265			
1391 + 50 - 1398 + 70			720			
1399 + 00 - 1409 + 00			1000			
1415 + 00 - 1427 + 55			1255			
1429 + 50 - 1434 + 30			470			
1434 + 75 - 1438 + 50			325			
1439 + 25 - 1442 + 90			355			
1445 + 30 - 1450 + 60			590			
1451 + 10 - 1460 + 25			955			
1460 + 50 - 1475 + 40			1520			
1478 + 45 - 1481 + 75			330			
1488 + 00 - 1244 + 22'			5620			
1552 + 00						
1520 + 55						
1534 + 00						
1541 + 25	LI					
1546 + 75						
1560 + 20						
1568 + 00						
1553 + 50	RI					
1558 + 00	LI					
TOTALS		30,313	450	54,685	8	

R.O.W. MARKERS

STATION	SIDE	NO.
950 + 61'	RI	1
963 + 00	LI	2
963 + 937	RI	2
965 + 175	L & R	4
975 + 48	LI	1
975 + 39	RI	1
980 + 30	LI	1
980 + 28	RI	1
1002 + 89		2
1004 + 72	LI	1
1005 + 02	RI	1
1008 + 525		2
1013 + 10		1
1015 + 34	LI	1
1017 + 00	RI	2
1021 + 00		2
1029 + 00	LI	2
1030 + 85		2
1034 + 24	RI	1
1034 + 37	LI	1
1045 + 00	RI	1
1049 + 96		1
1056 + 50		1
1061 + 00		1
1070 + 24		1
1070 + 98	LI	1
1075 + 00	RI	1
1085 + 50		2
1095 + 00	LI	1
1095 + 89	RI	1
1099 + 00		1
1100 + 30		1
1120 + 40	RI	1
1128 + 50		1
1141 + 21		1
1148 + 67	LI	1
1161 + 33		1
1151 + 50	RI	2
1152 + 32		1
1160 + 50		1
1175 + 50		1
1178 + 00	LI	2
1177 + 89	RI	1
1179 + 63	LI	1
1179 + 82		1
1189 + 939		2
1197 + 75		1
1198 + 72	RI	1
1210 + 68	LI	1
1210 + 15	RI	1
1244 + 22'		1
TOTAL		66

GUARD POSTS

STATION	SIDE	SPACING	NO.
957 + 00 - 961 + 00	LI	50	9
965 + 80 - 973 + 80		40	21
982 + 20 - Culvert	RI		4
982 + 23 - 987 + 88	LI	40	15
988 + 50 - 989 + 50	LI	50	3
989 + 20 - 990 + 70	RI	50	4
997 + 44 - 997 + 94		50	2
997 + 96 - 998 + 05		35	3
998 + 64 - 998 + 712		35	3
998 + 75 - 1000 + 255		50	5
1006 + 50 - 1009 + 50		50	7
1015 + 30 - 1021 + 30		50	14
1019 + 50 - 1021 + 00	LI	50	4
1031 + 50 - 1033 + 10	RI	40	10
1042 + 57 - 1043	L & R		5
1047 + 50 - 1049 + 00	RI	50	5
1048 + 20 - 1049 + 00	LI	50	3
1049 + 47 - 1051 + 80	RI	10	1
1056 + 50 - 1059 + 40		50	1
1059 + 50 - 1062 + 90	LI	50	9
1070 + 50 - 1080 + 00	RI	50	10
1080 + 43 - 1080	LI		4
1090 + 25 - 1092 + 25	RI	50	5
1092 + 00 - 1099 + 00	LI	50	16
1097 + 20 - 1098 + 20	RI	50	3
1108 + 50 - 1113 + 30		50	1
1109 + 50 - 1111 + 30	LI	50	5
1117 + 00 - 1127 + 00	RI	50	2
1129 + 00 - 1134 + 00	RI	50	3
1130 + 40 - 1133 + 40	LI	50	6
1139 + 30 - 1143 + 40	RI	40	12
1145 + 50 - 1147 + 50	RI	40	8
1148 + 50 - 1150 + 60	LI	30	8
1159 + 00 - 1164 + 00	LI	50	1
1160 + 40 - 1162 + 90	RI	50	10
1169 + 00 - 1173 + 00		40	11
1172 + 50 - 1174 + 50	LI	40	9
TOTAL			308

GUARD FENCE

STATION	SIDE	LIN. FT.
967 + 00 - 971 + 08	RI	408
971 + 16 - 973 + 16		200
974 + 00 - 978 + 08	LI	408
978 + 16 - 981 + 78		376
993 + 42 - 996 + 54		312
997 + 745 - 998 + 055		31
998 + 637 - 998 + 947		31
1003 + 20 - 1006 + 96		376
1008 + 00 - 1009 + 68		168
1012 + 00 - 1014 + 08	RI	408
1014 + 10 - 1014 + 72		56
1025 + 25 - 1029 + 35		408
1029 + 41 - 1031 + 09		168
1033 + 10 - 1031 + 7		56
1042 + 40 - 1051 + 08		168
1057 + 25 - 1059 + 19		168
1059 + 80 - 1062 + 92	RI	312
1067 + 00 - 1070 + 28		328
1080 + 34 - 1084 + 42		408
1084 + 50 - 1085 + 70		120
1086 + 26 - 1089 + 258		344
1089 + 50 - 1099 + 54		104
1102 + 00 - 1105 + 12		312
1115 + 50 - 1121 + 80	LI	280
1126 + 10 - 1148 + 10		200
1149 + 00 - 1151 + 97	RI	200
1157 + 2 - 1159 + 98		260
1164 + 80 - 1166 + 20	LI	360
1173 + 30 - 1176 + 30	RI	200
1177 + 00 - 1178 + 525		168
TOTAL		7558

FED. ROAD DIST. NO.	STATE	R.W.A. PROJ. NO.	SHEET NO.
3	COLO.	158-F	16

NOTE: Poles encroaching on Right of Way are to be moved by owners.

Fencing, Guard Fence, Guard Posts, and R.O.W. Markers required are tabulated on Sheet No. 4.

Grades and Alignment as shown hereon are subject to modification during construction, after approval by Denver office.

Δ 19°28' L
D 3°
T 3276'
L 6482'
R 19102'

PT. 951+84.1
Sta. 952+00 ~ Remove 1'x12' Wood Box Culv. Req'd. 15 cu. Yd. Excav. for Road. Appl. on Rt.

Sta. 957+50 ~ Req'd. 24'x54' C.M.P. Cross Culv. & 15 cu. Yd. Excav. for Inlet Ditch.

Sec. 1 T13S R71W
SW 1/4 NW 1/4

PI. 962+154

Sta. 968+07 ~ Req'd. 30'x86' C.M.P. Cross Culv.

Δ 46°36' L
D 6°
T 4113'
L 7762'
R 9555'

BEARING EQUATION:
N 65°17'E on A.W.P-5004-B =
N 65°19'E on F.A.P-158-F

Δ 14°18' R
D 4°
T 1793'
L 3575'
R 14325'

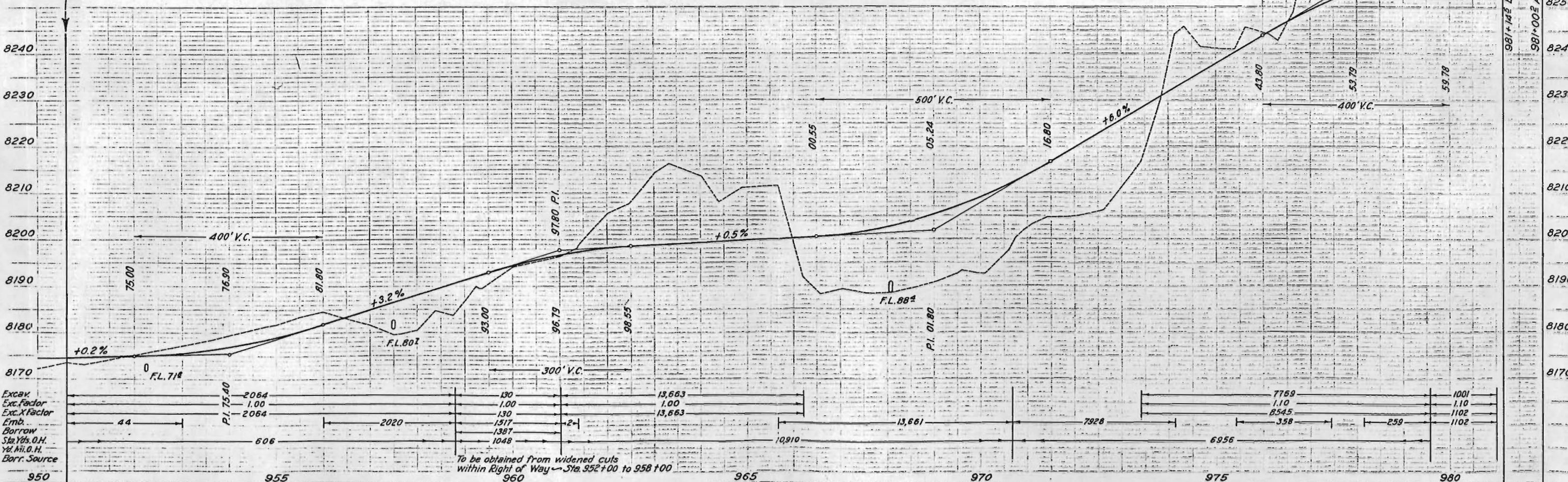
CLEAR & GRUBB:
Sta. 965+50 to 967+00 ~ Light Scattered Brush on Left.
Sta. 974+00 to 980+00 ~ Scattered Aspens & Pines.

Sta. 970+10 to 970+75 ~ Req'd. 30 cu. Yd. Excav. for Drain Ditch on Rt.

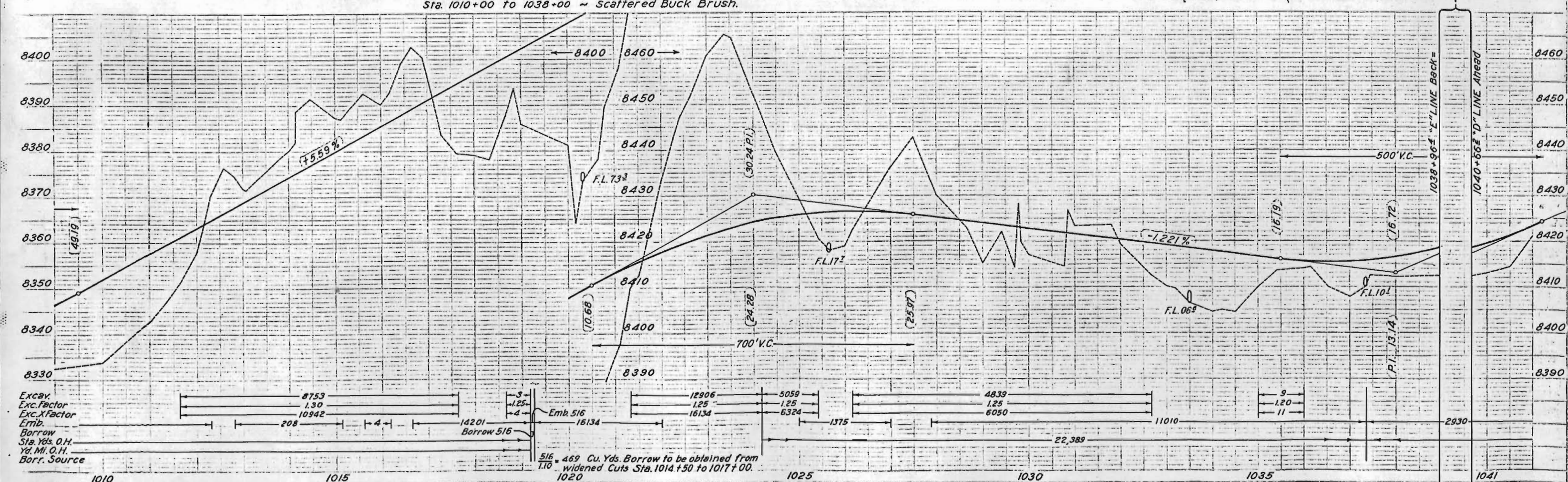
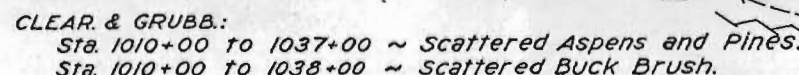
Δ 67°06' R
D 10°
T 3802'
L 6712'
R 5732'

EQUATION

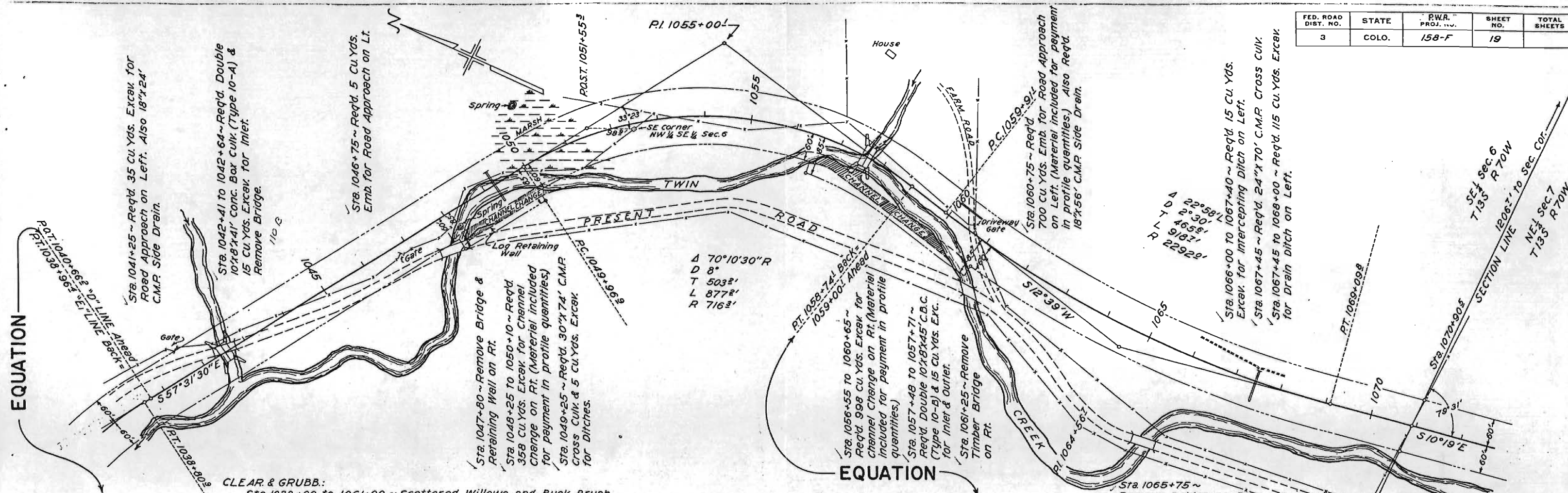
981+14.5 Back =
981+00.2 Ahead



Revised: 5-25-37 by H.R.H.



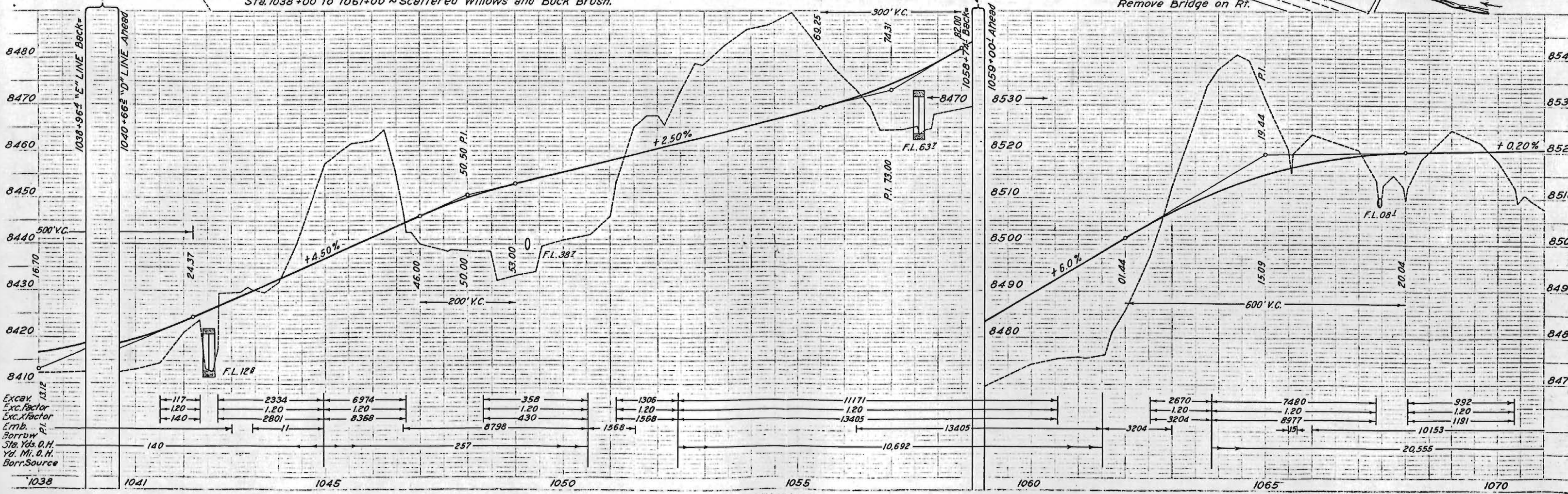
EQUATION



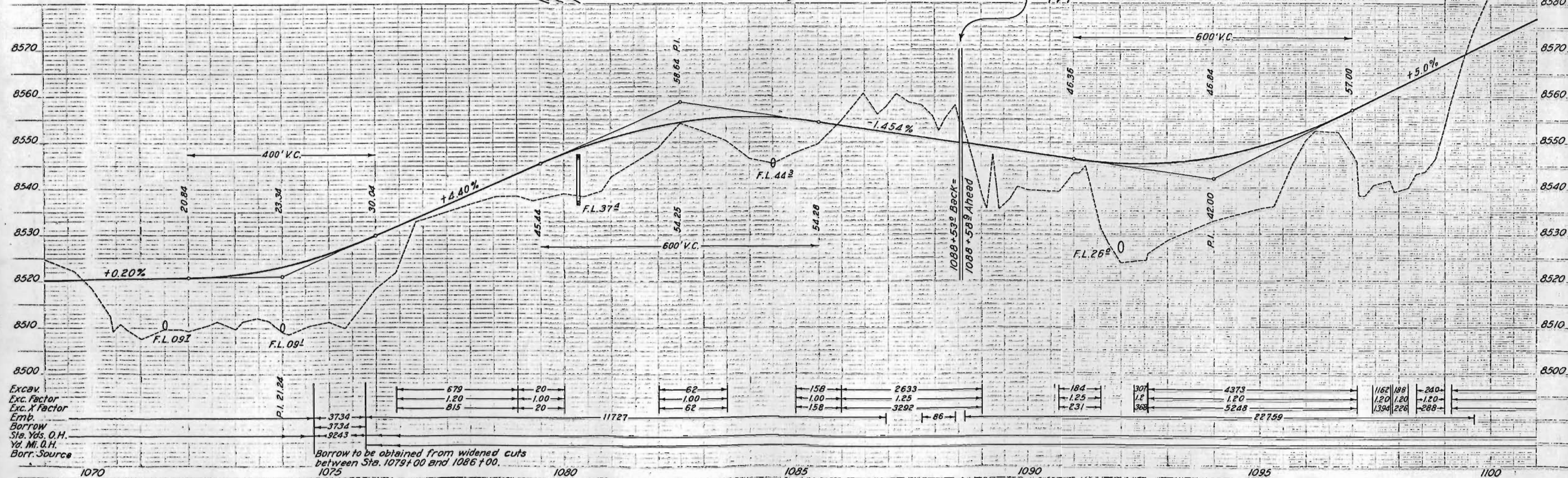
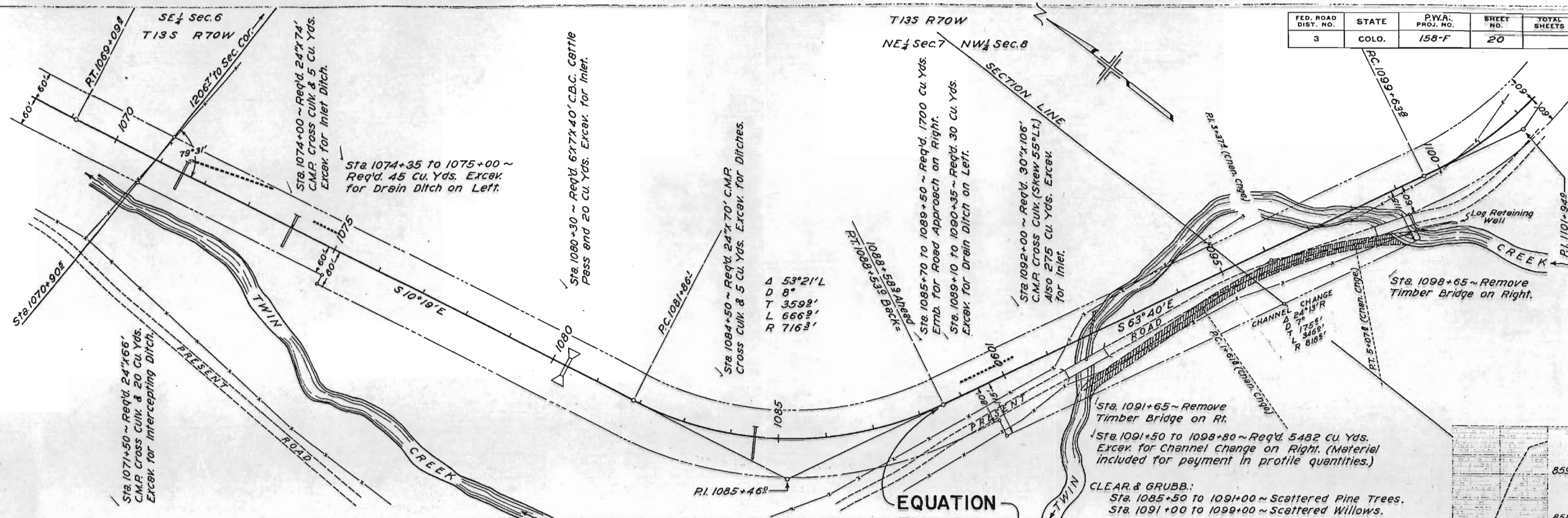
FED. ROAD DIST. NO.	STATE	P.W.R. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	158-F	19	

CLEAR & GRUBB:
Sta. 1038+00 to 1061+00 ~ Scattered Willows and Buck Brush.

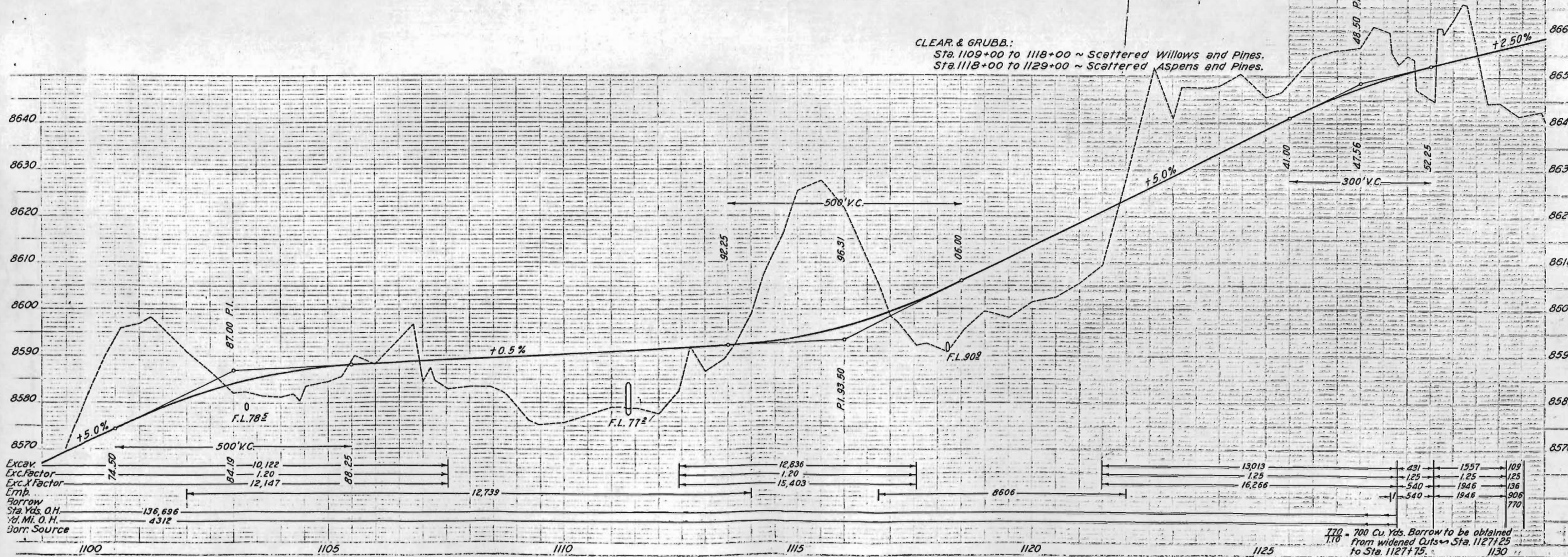
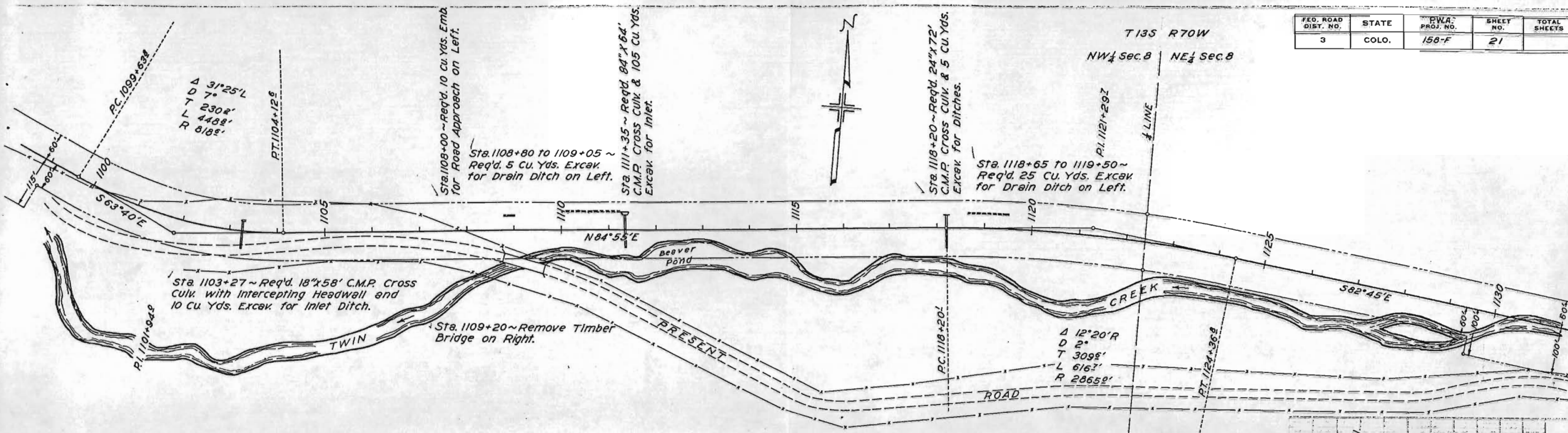
EQUATION



FED. ROAD DIST. NO.	STATE	P.W.A. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	158-F	20	



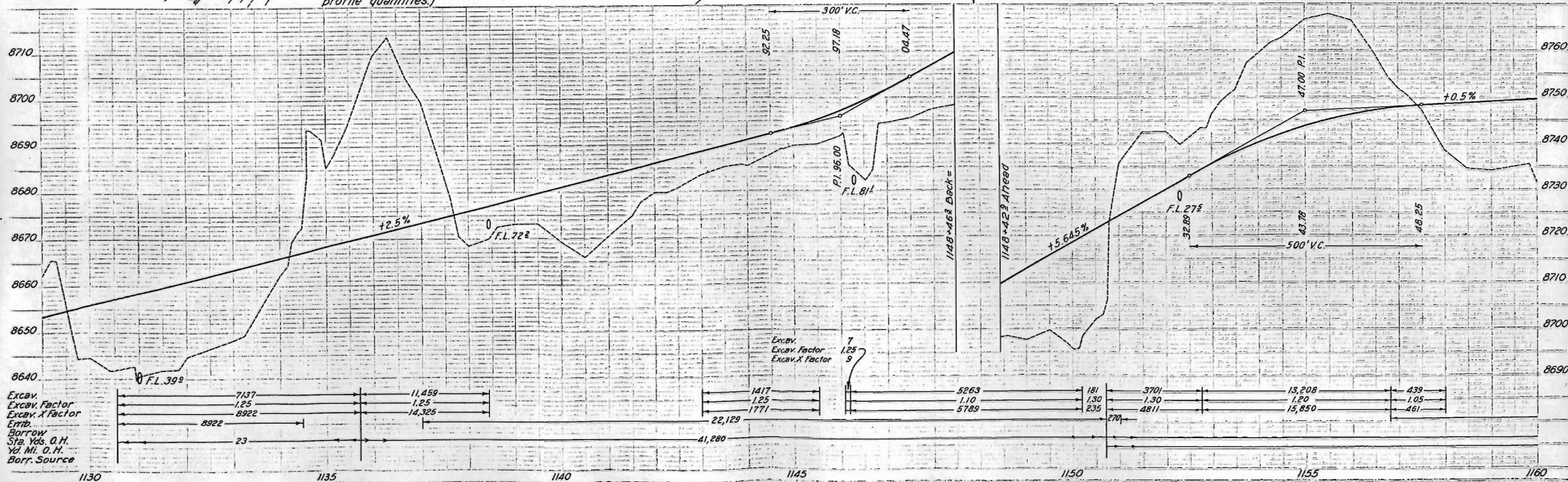
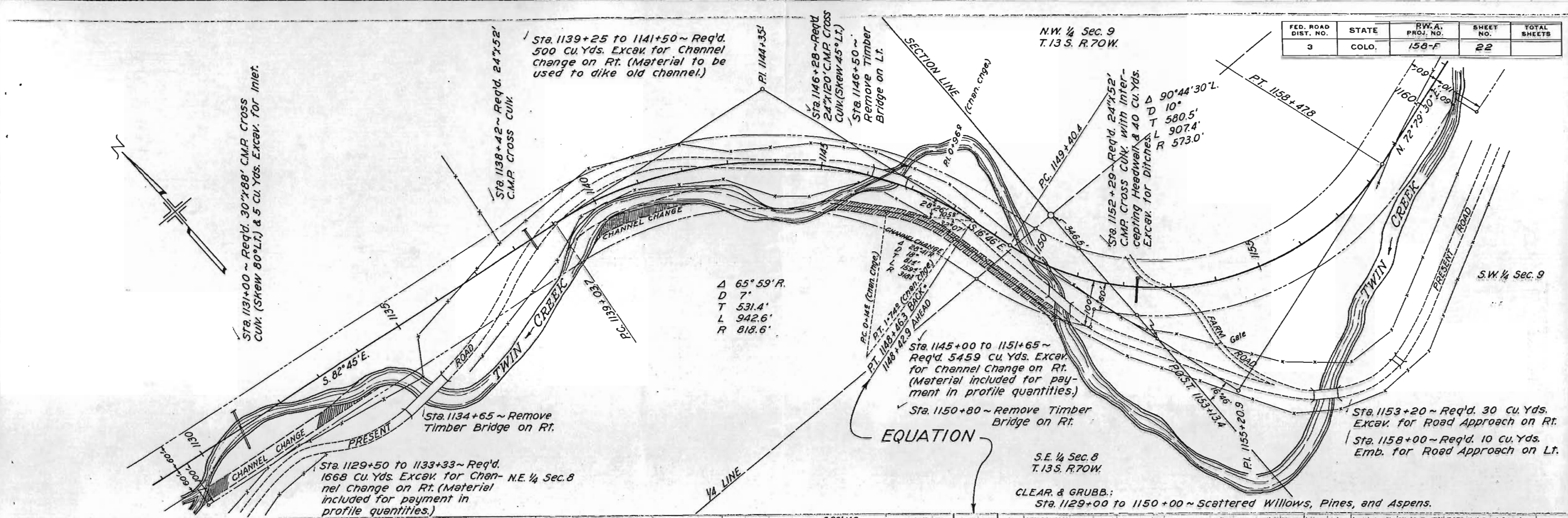
FED. ROAD DIST. NO.	STATE	PWA PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	158-F	21	



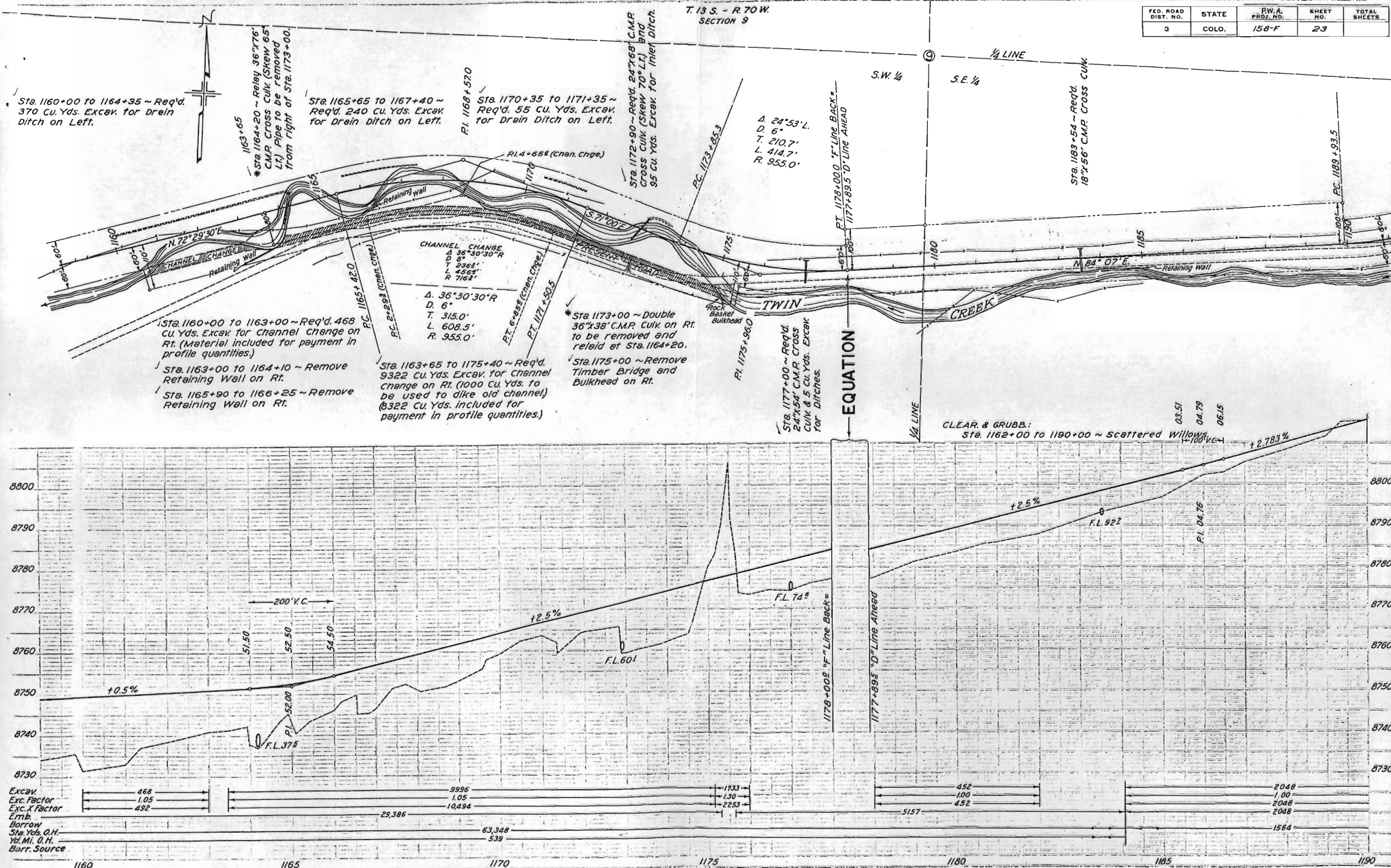
Excav.	74.50	84.19	10.122	88.25	12.739	12.836	13013	431	1557	109
Exc. Factor			1.20			1.20		1.25	1.25	125
Exc. Factor			12.147			15.403		540	1946	136
Emb.							16.266	540	1946	906
Borrow										770
Sta. Yds. O.H.	136,696									
Yd. Mi. O.H.	4312									
Borr. Source										

770 = 700 Cu. Yds. Borrow to be obtained from widened Cuts Sta. 1127+25 to Sta. 1127+75.

FED. ROAD DIST. NO.	STATE	R.W.A. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	158-F	22	

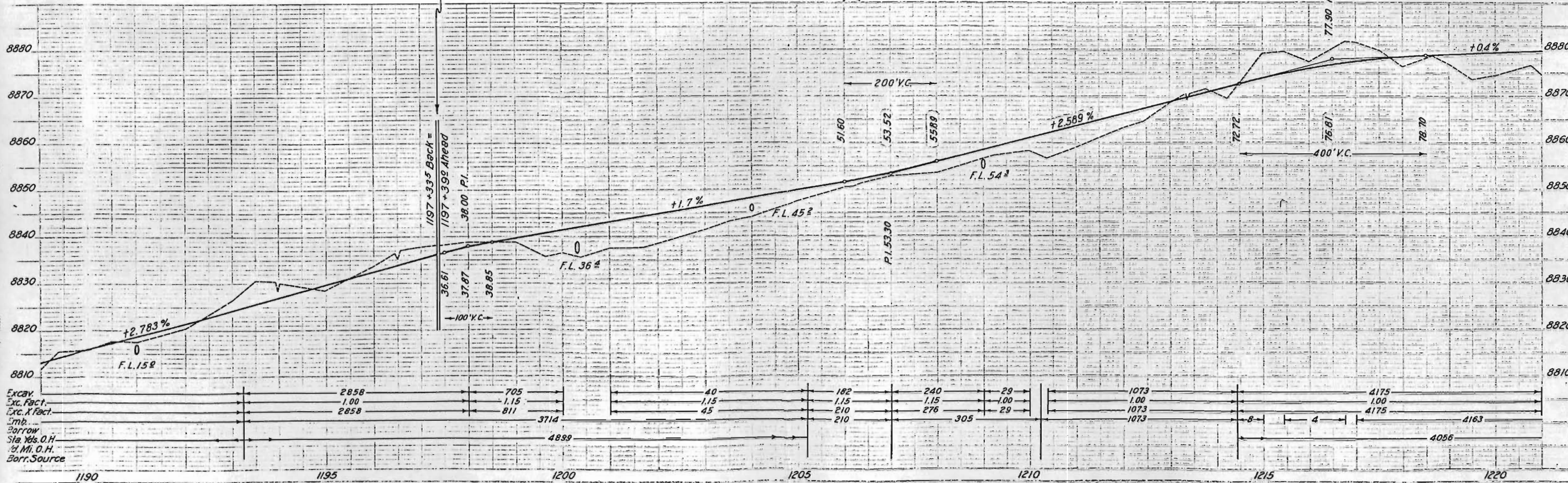
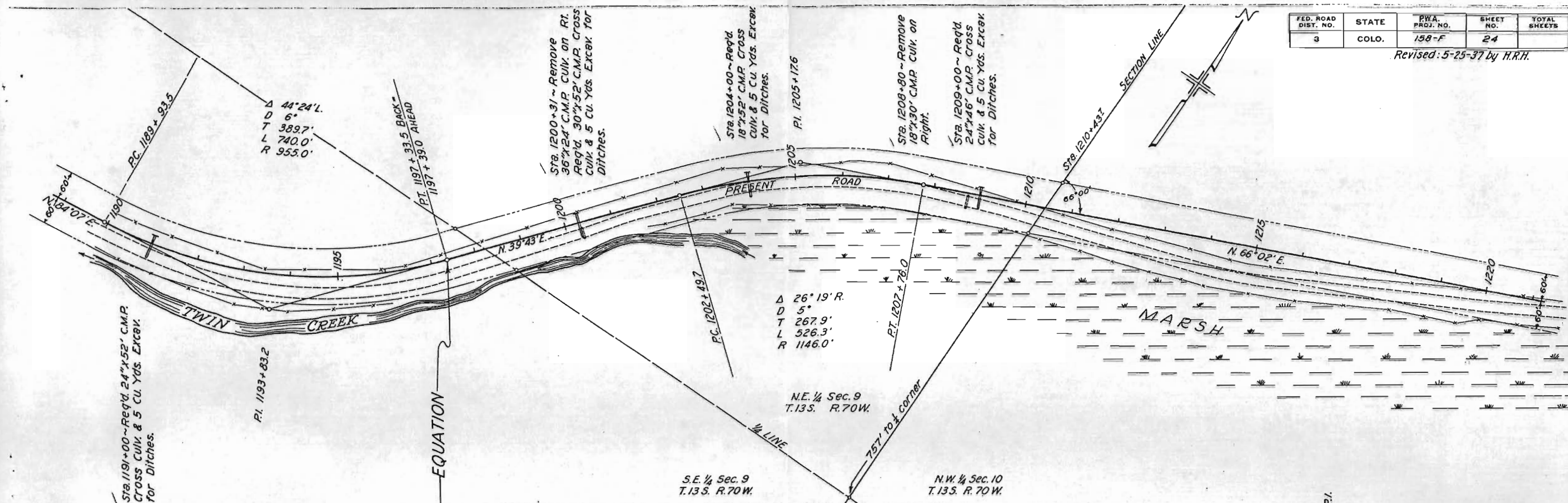


FED. ROAD DIST. NO.	STATE	P.W.A. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	158-F	23	



FED. ROAD DIST. NO.	STATE	P.W.A. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	158-F	24	

Revised: 5-25-37 by H.R.H.



FED. ROAD DIST. NO.	STATE	P.W.A. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	158-F	25	

Sta. 1223+00 ~ Req'd 24'x64' C.M.P. Cross Culv.

Sta. 1224+03 ~ Remove 18'x24' C.M.P. Culv. on Rt.

P.I. 1226+08.2

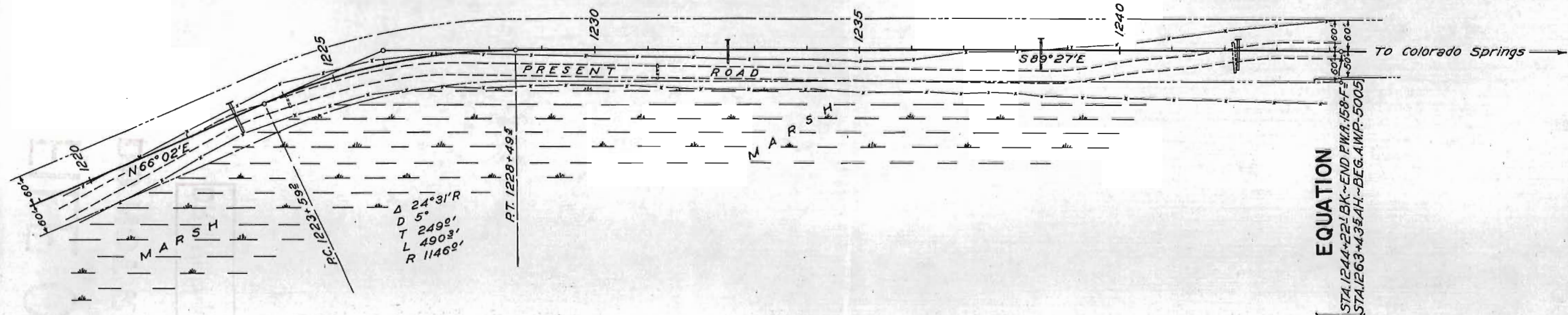
Sta. 1231+16 ~ Remove 5'x1'x30' Wood Box Culv. on Rt.

Sta. 1232+50 ~ Req'd 30'x46' C.M.P. Cross Culv. & 10 Cu. Yds. Excav. for outlet Ditch.

Sec. 10
T135 R70W

Sta. 1238+50 ~ Req'd 24'x60' C.M.P. Cross Culv. & 30 Cu. Yds. Excav. for Ditches.

Sta. 1242+27 ~ Remove and Re-lay 30'x60' C.M.P. Cross Culvert.



EQUATION

STA. 1244+22 ~ BK ~ END P.W.A. 158-F ~ STA. 1263+43 ~ AH ~ BEG. A.W.P. 5005

