

DESIGN DESIGNATION
 Current ADT (1964) - 1420
 Design Year ADT (1967) - 3050
 D.H.V. - 455
 D - 60%
 T - 14%
 V - 50 m.p.h.

S-170 (5)

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	S-170 (5)

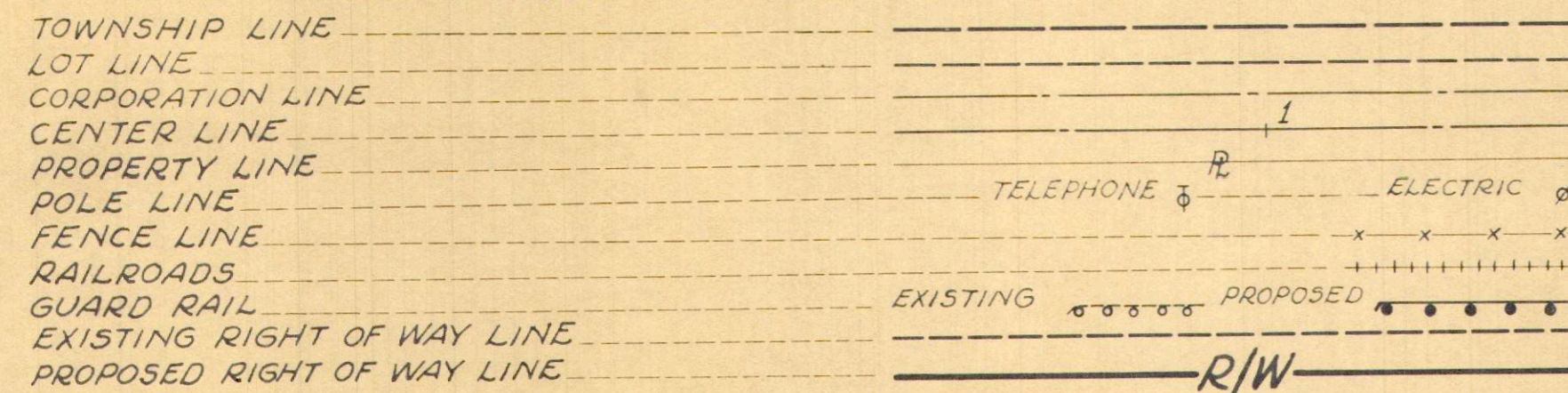
1/70

HOL-39-(13.22-13.62)

STATE OF OHIO
 DEPARTMENT OF HIGHWAYS
HOL-39-(13.22-13.62)
 MONROE & HARDY TOWNSHIPS
 HOLMES COUNTY

1967 SPECIFICATIONS

CONVENTIONAL SIGNS



INDEX OF SHEETS

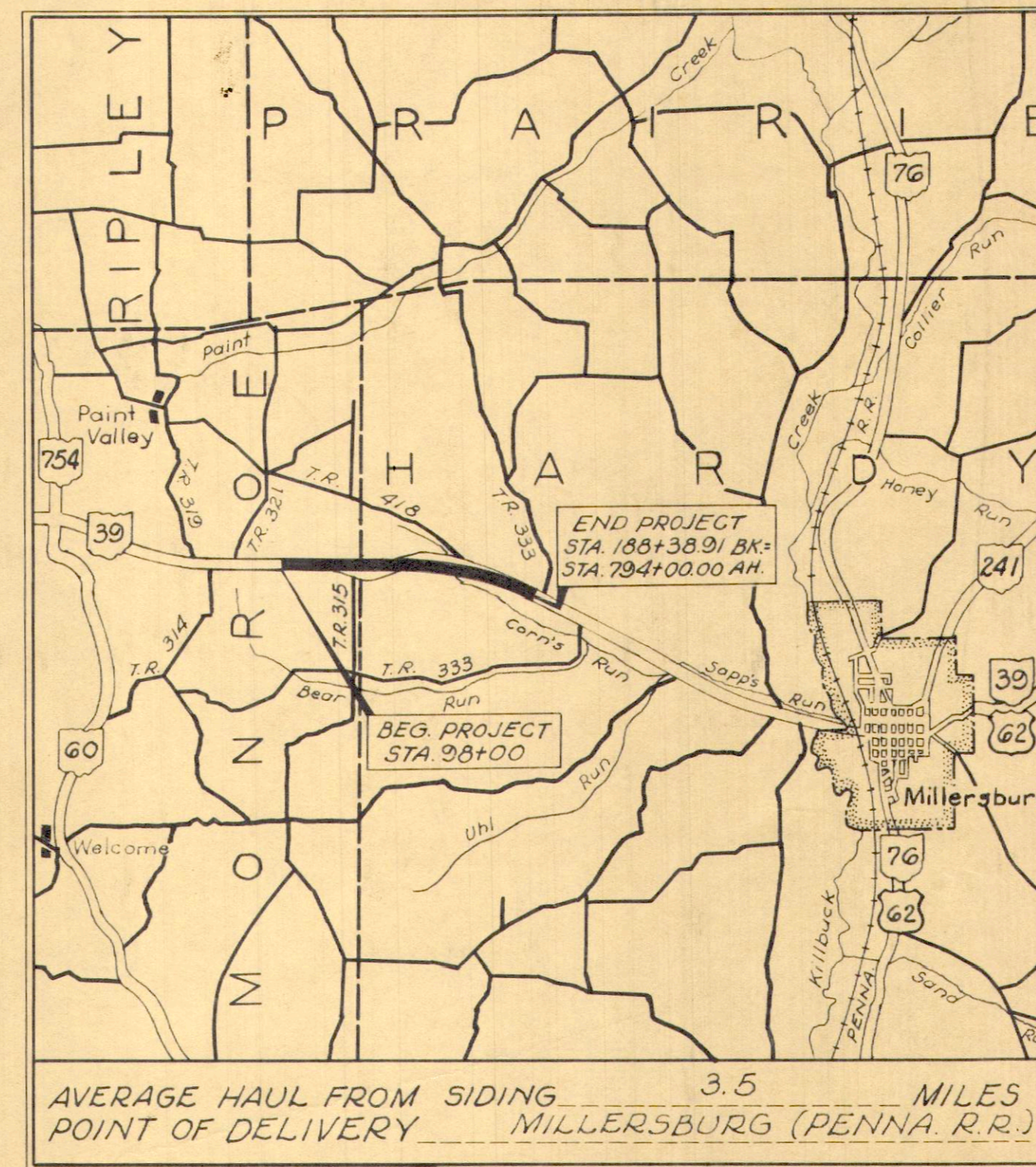
TITLE SHEET	1
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LINE DATA

BEGIN PROJECT STA. 98+00.00
 END PROJECT STA. 108+38.91
 NO ADDITIONS OR DEDUCTIONS
 NET LENGTH OF PROJECT = 2,038.91 LIN. FT. OR 1.711 MILES

ADD FOR APPROACHES:
 LT. STA. 159+50 = 387.23 LIN. FT.

NET LENGTH OF WORK = 2,426.14 LIN. FT. OR 1.785 MILES

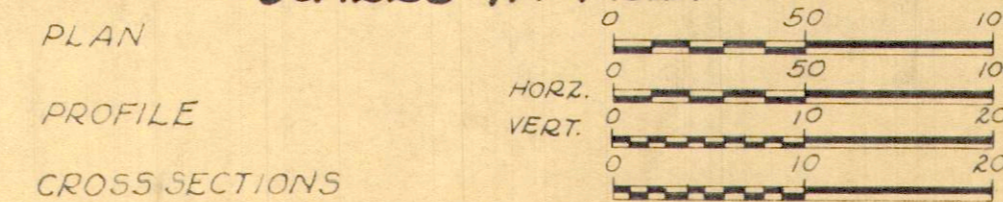


LOCATION MAP

SCALE IN MILES

PORTION TO BE IMPROVED
 FEDERAL HIGHWAYS
 STATE HIGHWAYS
 OTHER ROADS

~SCALES IN FEET~



The standard specifications of the State of Ohio, Department of Highways, including changes and supplemental specifications listed in the proposal shall govern this improvement.

The right-of-way for this improvement will be provided by the State of Ohio.

I hereby approve these plans and declare the making of this improvement will not require the closing of the highway to traffic and that provisions for the maintenance and safety of traffic will be as set forth on the plans and estimates.

Approved: _____ Date: _____ Division Deputy Director

Approved: _____ Date: _____ Engineer of Bridges

Approved: _____ Date: _____ Engineer of Location and Design

Approved: _____ Date: _____ Deputy Director of Design and Construction

Approved: _____ Date: _____ Deputy Director of Right of Way

Approved: _____ Date: _____ Deputy Director of Planning and Programming

Approved: _____ Date: _____ First Assistant Director

Approved: _____ Date: _____ Director of Highways

STANDARD DRAWINGS

BP-5	6-1-65	HW-E	6-1-65	SP-53	6-30-61
BP-6	6-1-65	L-1	6-1-65		
CB-2.2A & B	6-1-65	MC-1	10-1-67		
CB-5	6-1-65	MC-3	5-1-66		
FAI-1	9-15-67	MC-4	6-1-65		
FAI-2	6-1-65	MC-5	6-1-65		
GR-1	1-1-67				
GR-2A	1-1-67				

SUPPLEMENTAL SPECIFICATIONS

DEPARTMENT OF TRANSPORTATION
 FEDERAL HIGHWAY ADMINISTRATION
 BUREAU OF PUBLIC ROADS

APPROVED: _____ DATE _____

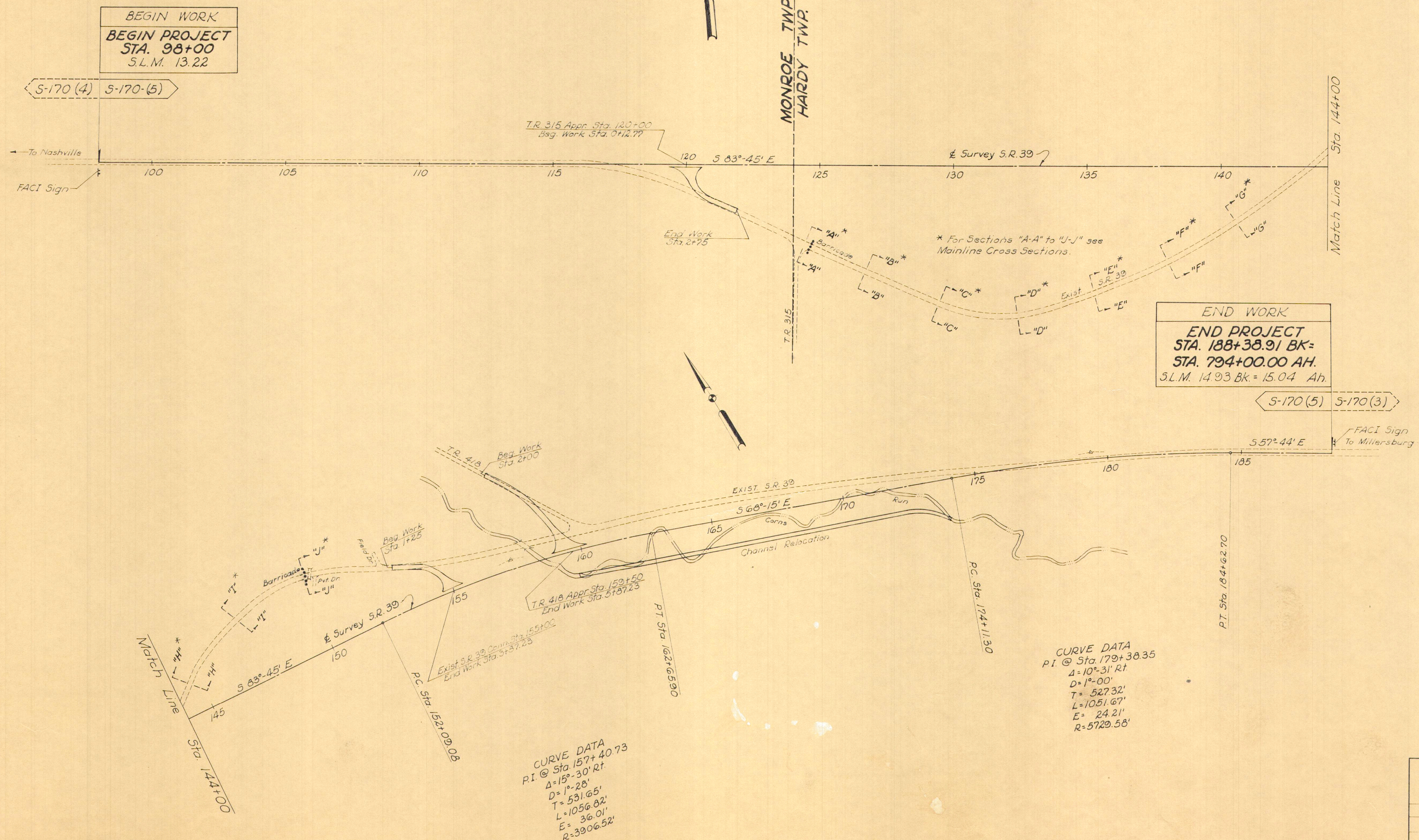
DIVISION ENGINEER

FILE No.	HOL-39-(13.22-13.62)
Date of Letting	_____
Contract No.	_____

SCHEMATIC LAYOUT

MONROE & HARDY TOWNSHIPS

SCALE IN FEET
0 200 400

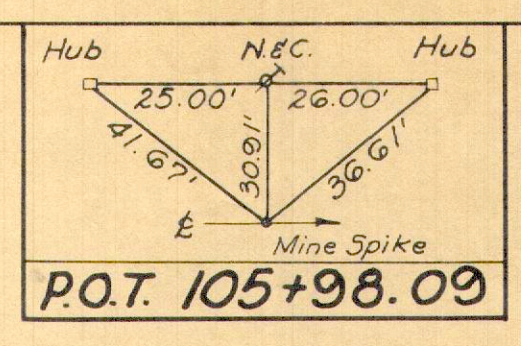
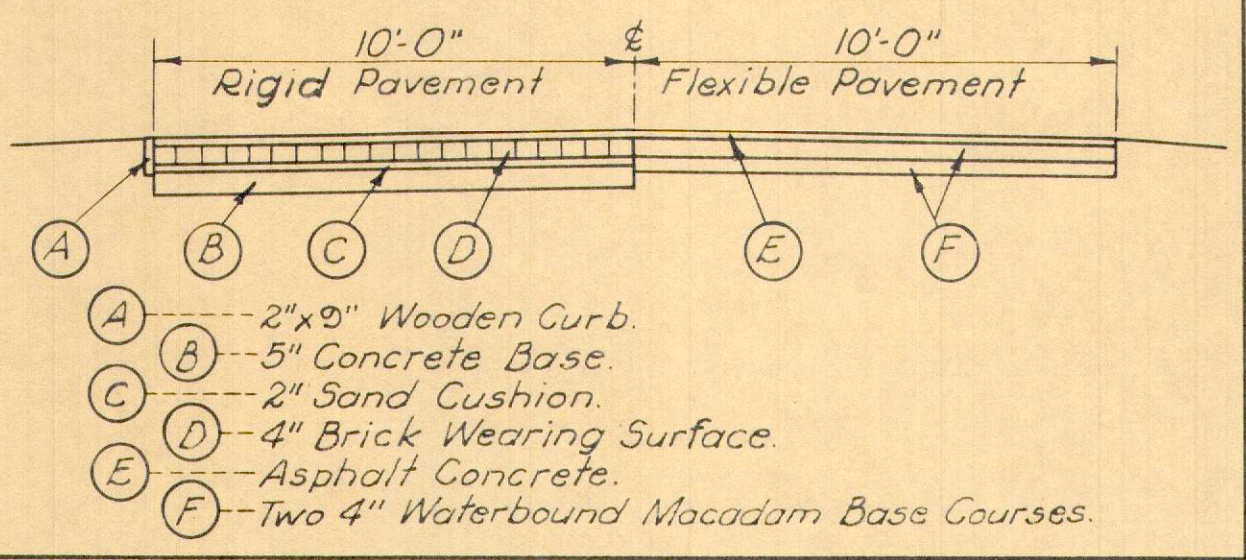


MONUMENT ASSEMBLIES WILL BE SET ON CENTERLINE, DURING CONSTRUCTION, AT THE FOLLOWING LOCATIONS:

P.O.T. 99+00	P.O.T. 146+00
P.O.T. 104+00	P.C. 152+09.08
P.O.T. 110+00	P.O.C. 157+50
P.O.T. 116+00	P.T. 162+65.90
P.O.T. 122+00	P.O.T. 168+00
P.O.T. 128+00	P.C. 174+11.03
P.O.T. 134+00	P.O.C. 179+50
P.O.T. 140+00	P.T. 184+62.70

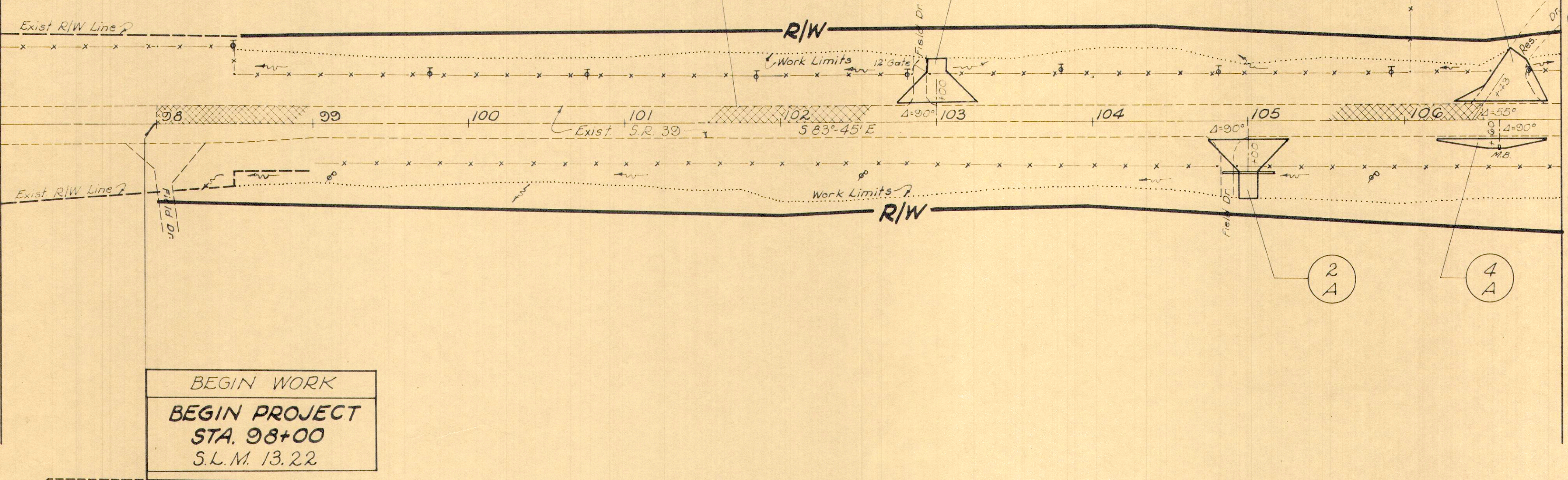
TOTAL ITEM 604, STANDARD MONUMENT ASSEMBLIES = 16 EACH.

PAVEMENT REMOVAL DETAIL



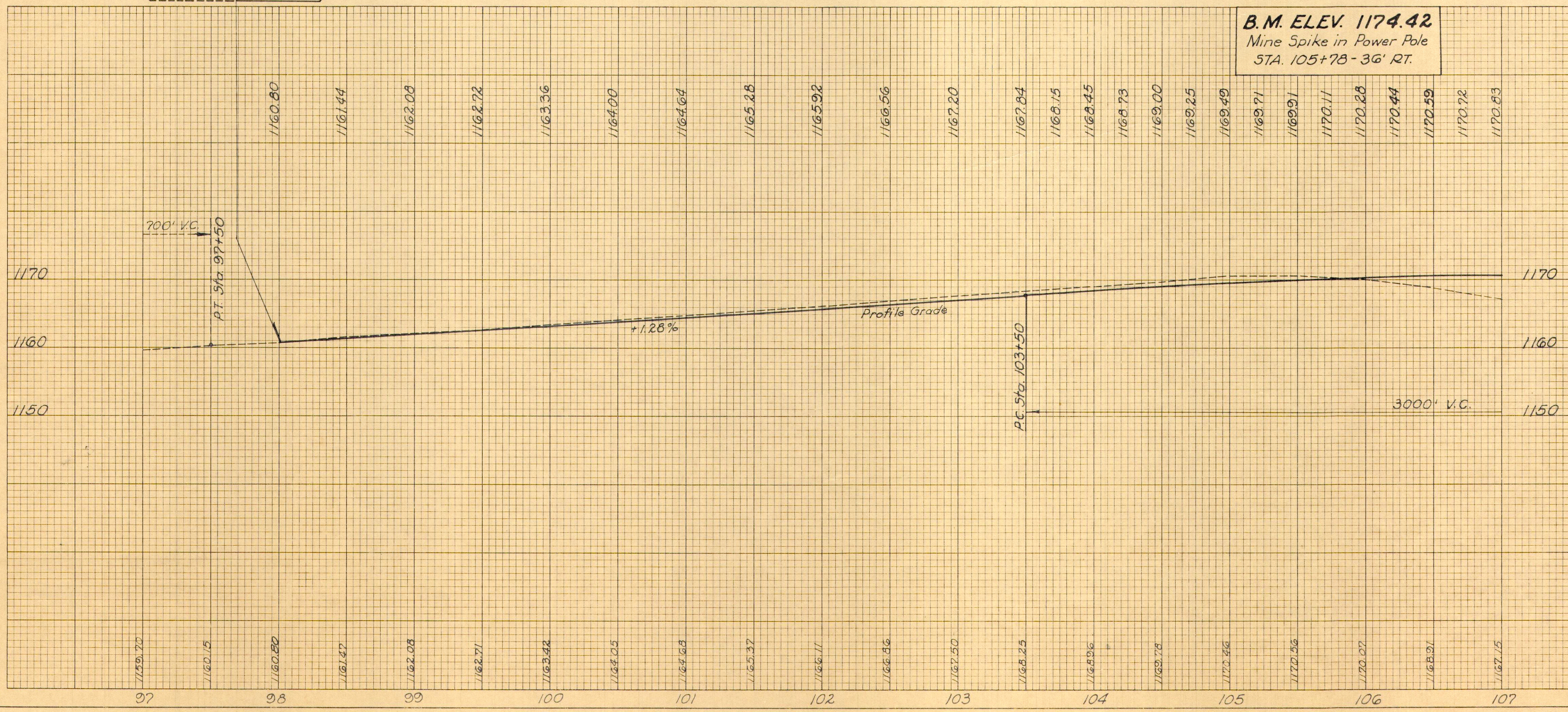
MATCH LINE STA. 97+00

MATCH LINE STA. 107+00



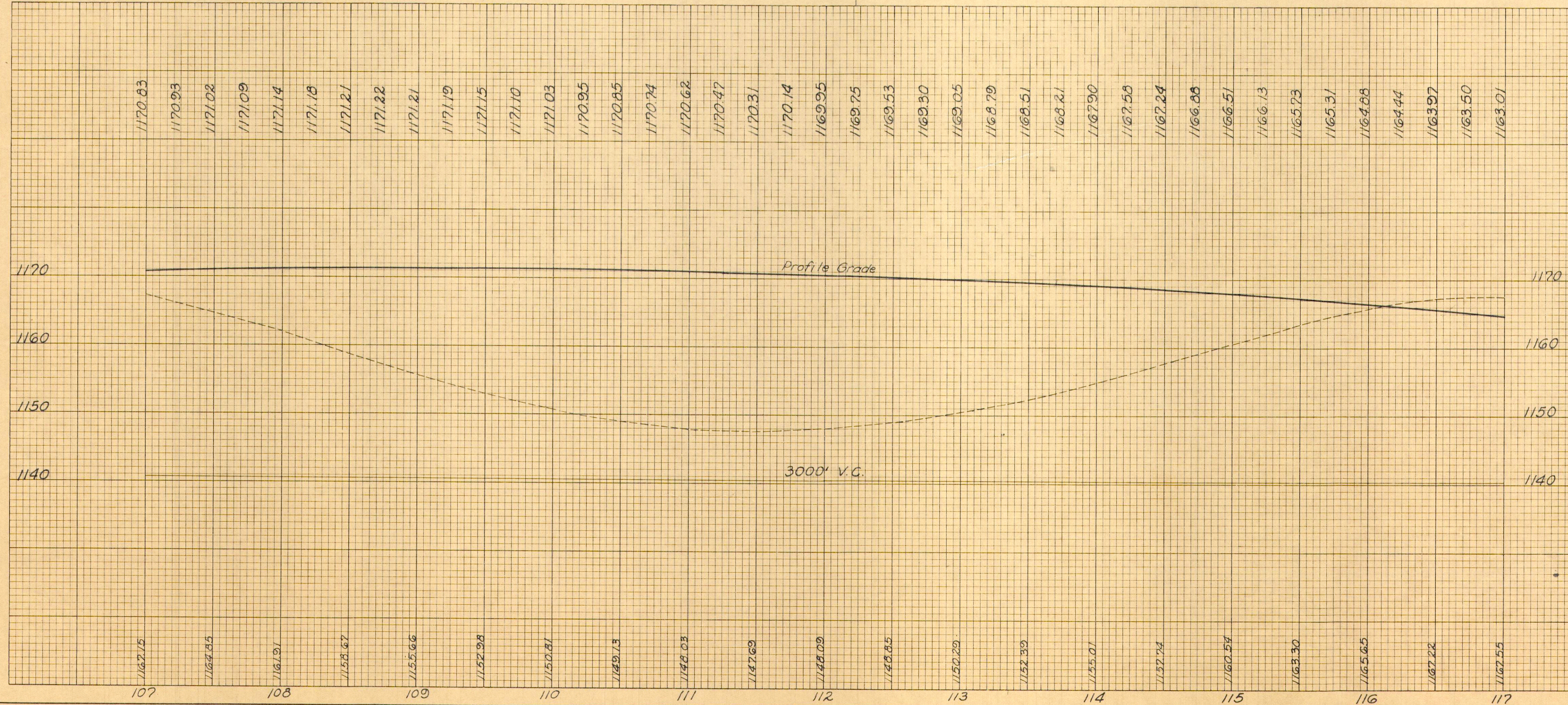
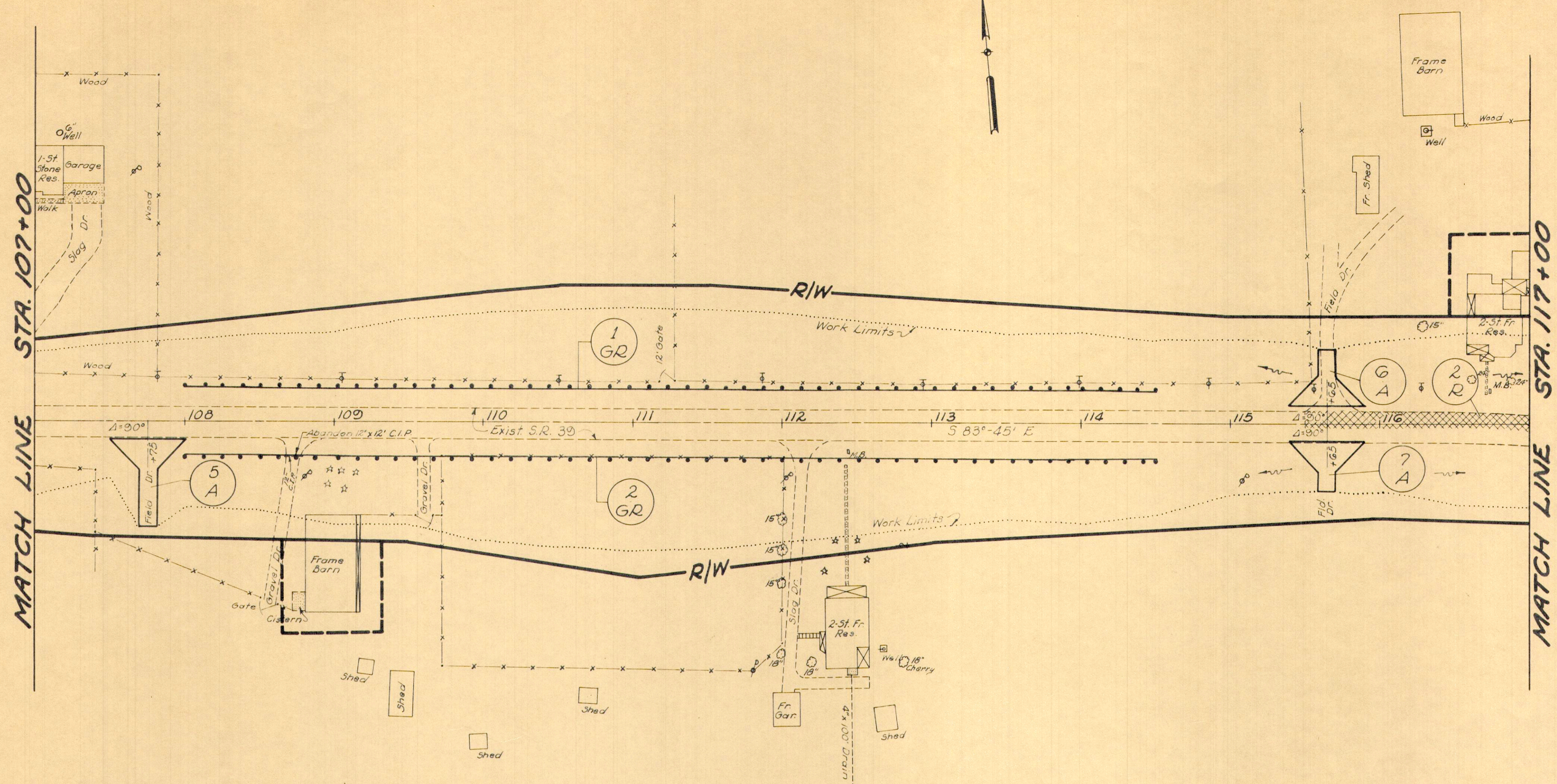
BEGIN WORK
 BEGIN PROJECT
 STA. 98+00
 S.L.M. 13.22

5-170 (4) 5-170 (5)



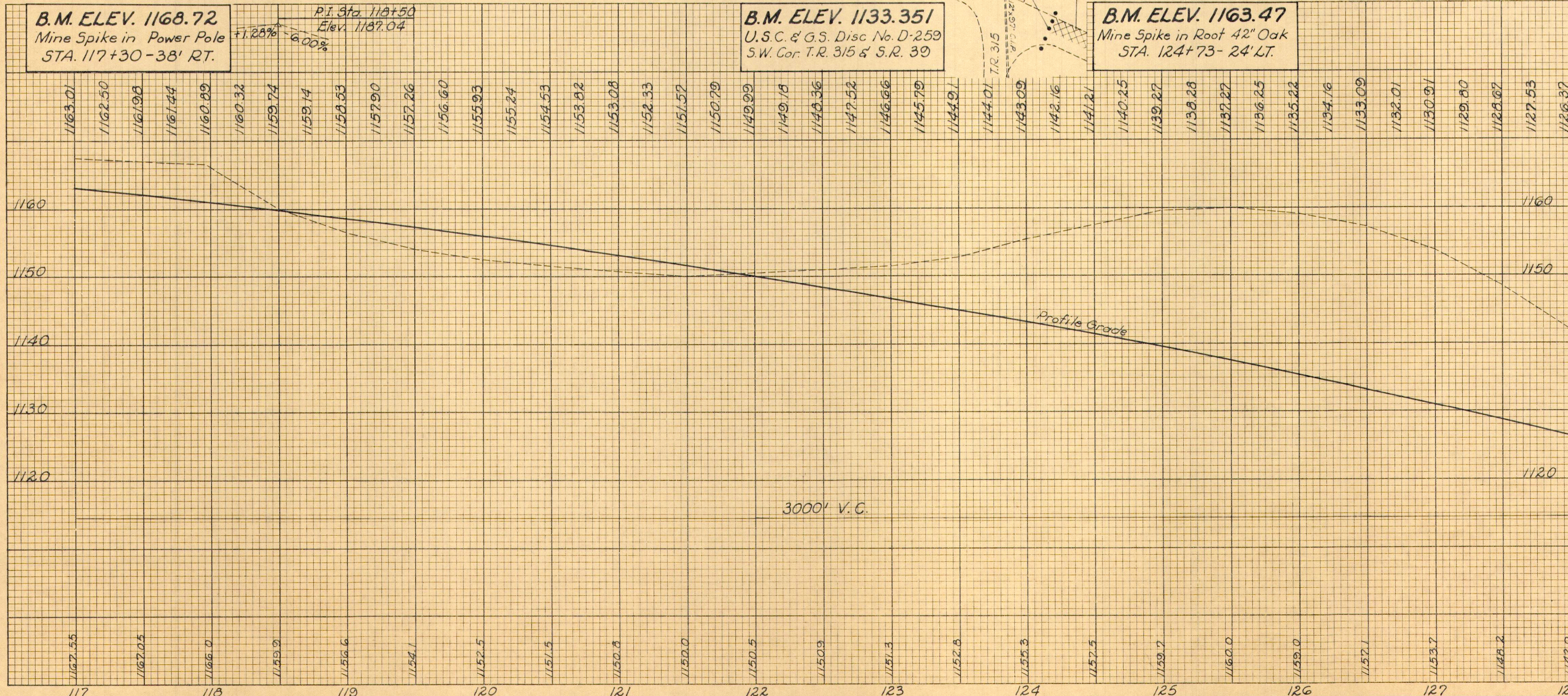
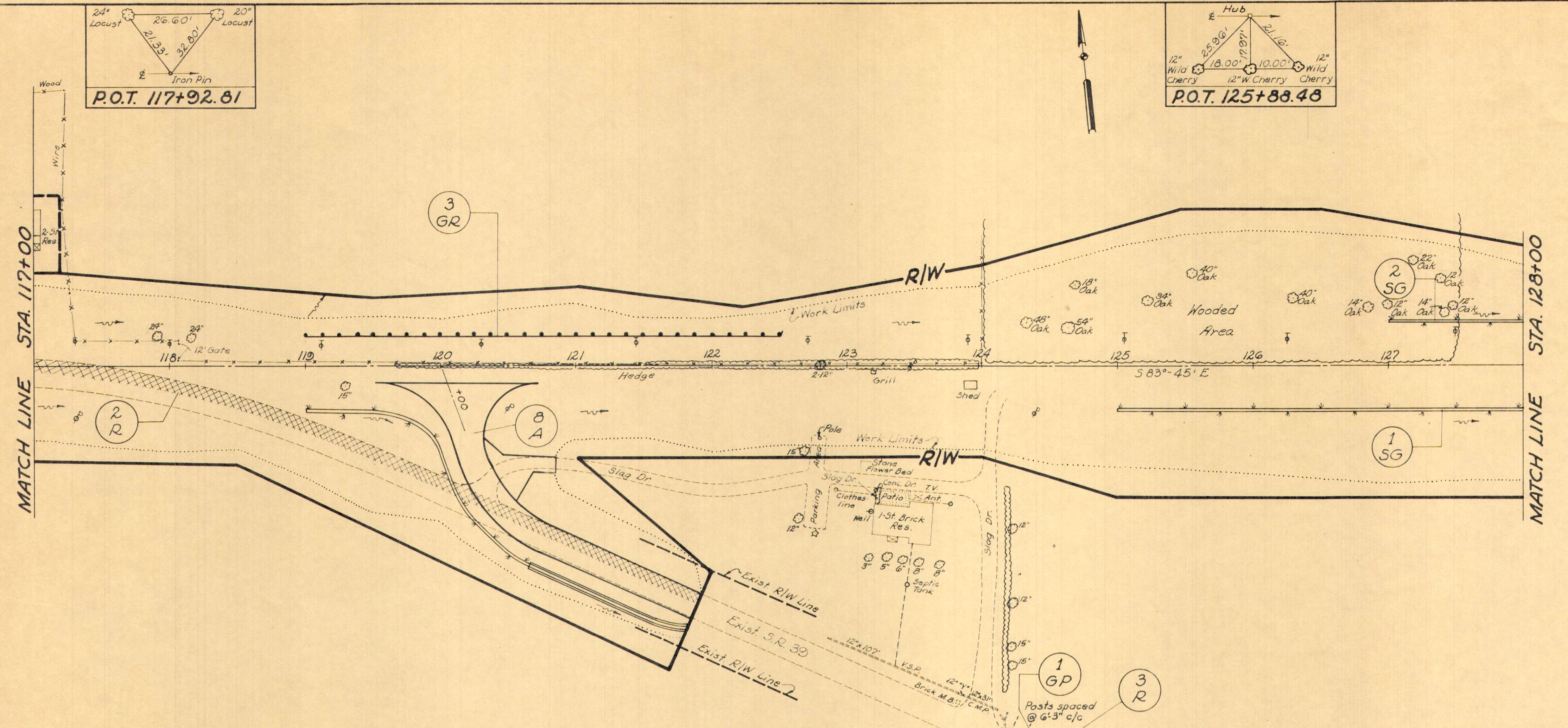
QUANTITIES

SEE SHEET NO.	408	404	304	TOTALS
BIT PRIME COAT	40.8			40.8
ASPH CONC.		7.6		7.6
AGGR BASE			40.7	40.7
CU. YD.				
GAL.				
42.3				
12.3				
10.1				
11.6				
14.7				
4.3				
34				34
1039				1039
103+00				
103+00				
106+43				
106+60				
LT.				
RT.				
LT.				
RT.				
LT&RT				
98+00 TO 106+50				
1039				
1039				



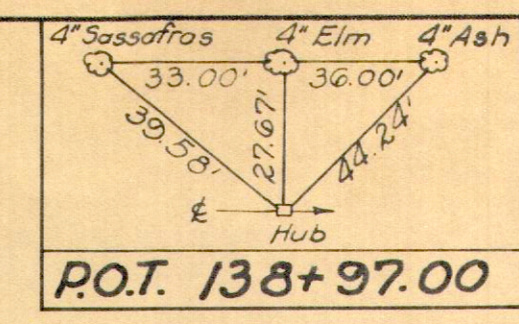
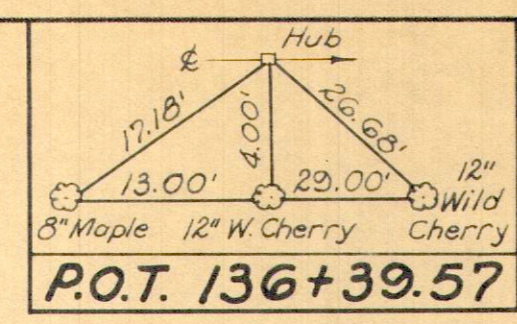
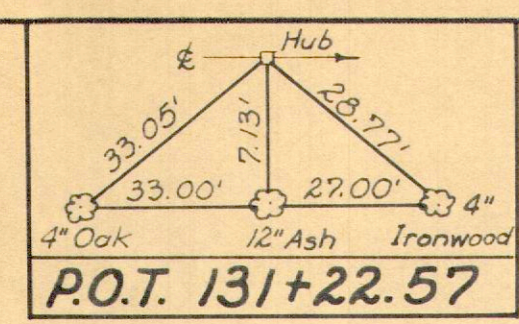
REF. NO.	STATION TO STATION	SIDE	202 EXIST. PAVT. REMOVED DISPOSED SQ. YD.	606 GUARD RAIL TYPE 4 MODIFIED LIN. FT.	304 ASGC BASE CU. YD.	SEE SHEET NO.	
5-A	107+7.5	RT					
6-A	115+6.5	LT					
7-A	115+6.5	RT					
1-GR	108+00 TO 114+50	LT		650	16.7	24	
2-GR	108+00 TO 114+50	RT		650	12.3	27	
2-R	115+50 TO 117+00	&	183		11.2	27	
TOTALS							40.2

PLAN & PROFILE -- STA. 107+00 to STA. 117+00



REF. NO.	STATION TO STATION	SIDE	202 EXIST. PAVT. REMOVED & DISPOSED SQ. YD.	203 SUBGRADE PREPARATION SQ. YD.	606 GUARD POSTS EACH	606 GUARD RAIL TYPE 4 MODIFIED LIN. FT.	660 SODDING SQ. YD.	601 PAVED OUTER TYPE 7.5 LIN. FT.	QUANTITIES
8-A	120+00	RT.		701.7			185	126	
1-GP	124+50	RT.							
3-GR	119+00 TO 122+50	LT.			5	350			
2-R	117+00 TO APPROX. STA. 2+75	LEFT	642						
3-R	124+50 TO 128+00	RT.	475						
1-SG	125+00 TO 126+00	RT.					200		
2-SG	127+00 TO 128+00	LT.					67		
TOTALS			1117	701.7	5	350	455	126	

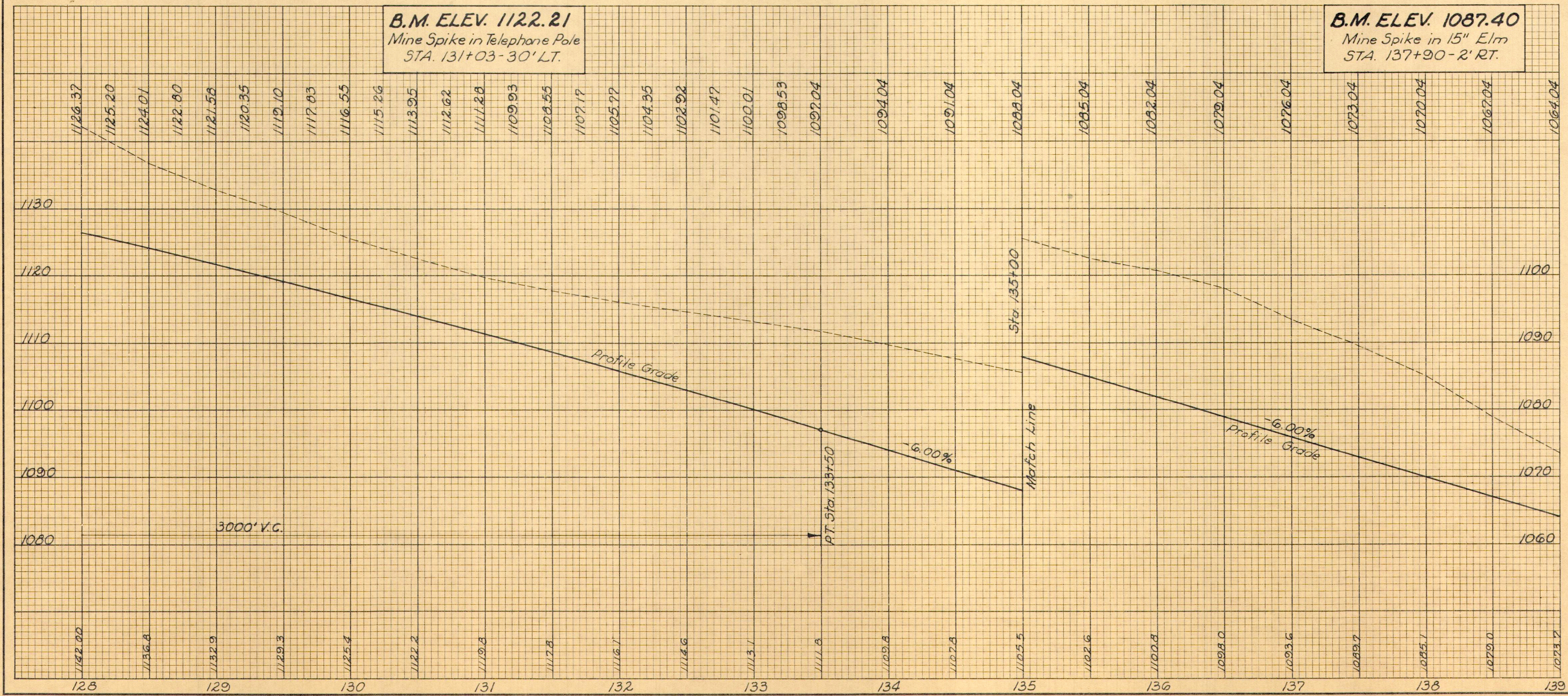
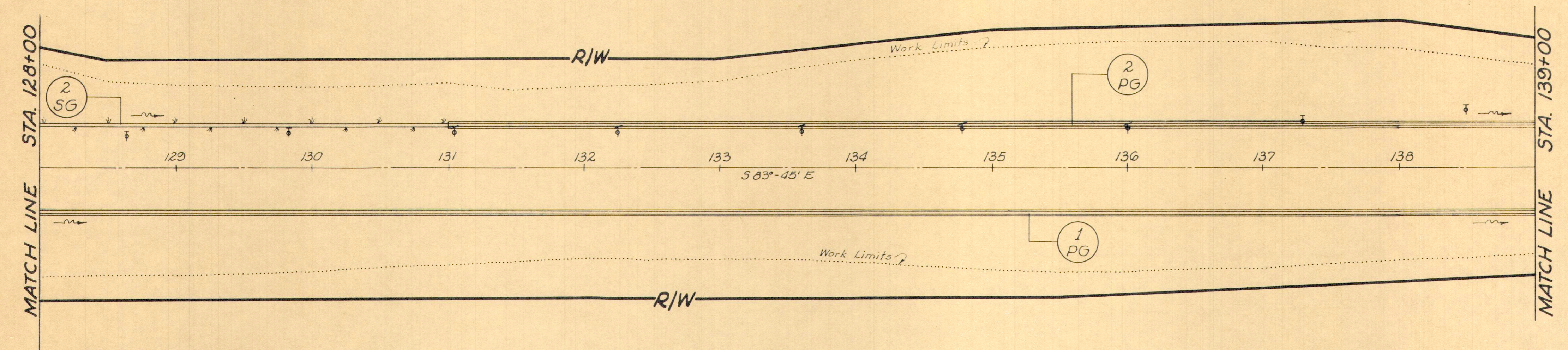
PLAN & PROFILE-STA. 117+00 TO STA. 128+00



FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

HOL-39-(13.22-13.62)

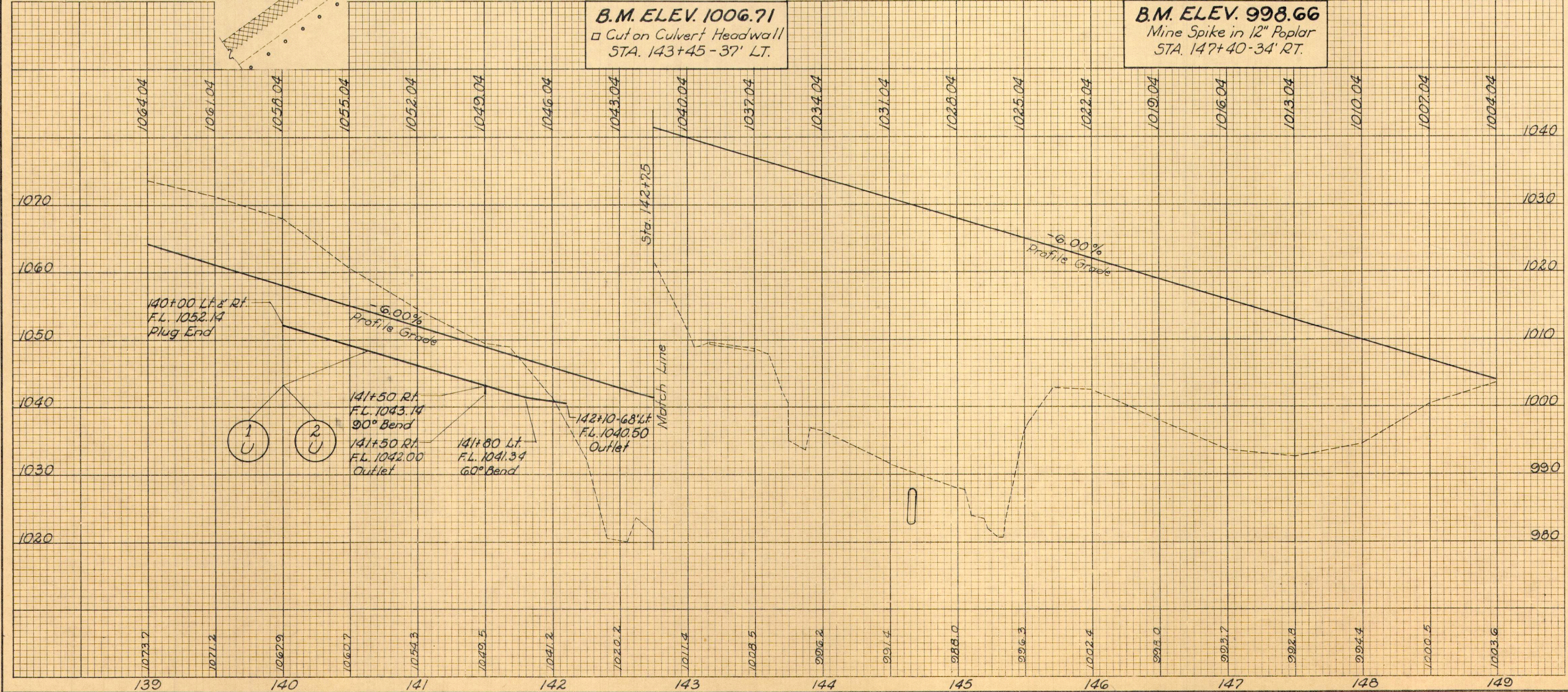
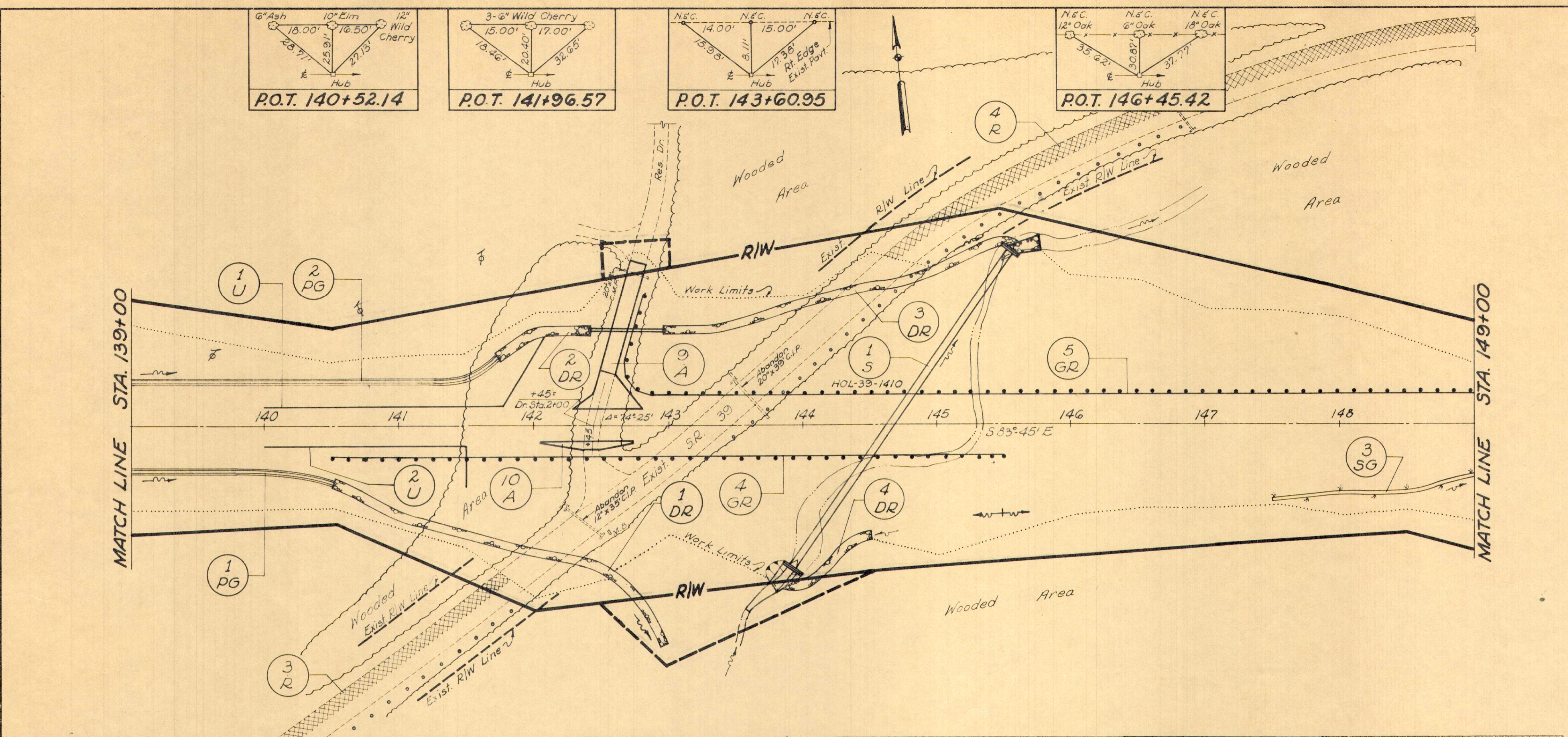
15
70



QUANTITIES

REF. NO.	STATION TO STATION	SIDE	202 EXIST. PAVT. REMOVED & DISPOSED SQ. YD.	660 SODDING SQ. YD.	601 PAVED GUTTER TYPE 1-2 LIN. FT.	TOTALS
1-PG	128+00 TO 139+00	RT.				
2-PG	131+00 TO 139+00	LT.		367 267	1102 801	834
3-PG	128+00 TO 139+00	RT.	1430	200		1430
2-SG	128+00 TO 131+00	LT.				
TOTALS						1903

PLAN & PROFILE - STA. 128+00 TO STA. 139+00



REF. NO.	STATION TO STATION	SIDE	202	203	606	660	601	602	603	605	304	403	BENDS & BRANCHES	SEE SHEET NO.				
			PIPE REMOVED OVER 15" DISPOSED	EXCAVATION NOT INCL. EMBANKMENT CONSTR.	EMBANKMENT	GUARD RAIL	SCODDING	DUMP, RAP, ROCK CHAIN REINF. PROT.	PAVED CONC. TYPE 1-2	CONC. MASONRY	CONDUIT TYPE	DEEP PIPE UNDER DRAIN	ASPH. CONC. BASE	BIT. POLYME. COAT.	90° BEND	60° BEND		
			LINEAL SQ. YD.	CU. YD.	CU. YD.	SQ. YD.	SQ. YD.	CU. YD. LIN. FT. UN. FT.	CU. YD. LIN. FT. UN. FT.	CU. YD. LIN. FT. UN. FT.	CU. YD. LIN. FT. UN. FT.	GAL.	EACH	EACH	EACH	EACH		
9-A	142+45	LT.																
10-A	142+45	RT.																
1-D2	140+50 TO 143+00	RT.																
2-D2	141+75 TO 142+43	LT.																
3-D2	142+97 TO 145+62	LT.																
4-D2	143+93 TO 144+50	RT.																
4-G2	140+50 TO 145+50	RT.																
5-G2	DR. STA. 0+96 1/2 LT. TO 149+00	LT.																
1-P2	139+00 TO 140+50	RT.				50												
2-P2	139+00 TO 141+25	LT.				93												
3-R	139+00 TO 141+80(L)	RT.																
4-R	141+70(L) TO 149+00	LT.	410															
1-S	144+66	LT.&RT.	581															
3-S6	147+50 TO 149+00	RT.																
1-U	140+00 TO 142+10	LT.																
2-U	140+00 TO 141+50	RT.																
TOTALS			18	991	13	9	102	33	262	430	6.05	54	288	20	404	41.5	6.7	48.5

PLAN & PROFILE - STA. 139+00 TO STA. 149+00

P.O.T. 151+23.44 PC. 152+09.08 EXT. 157+37.49

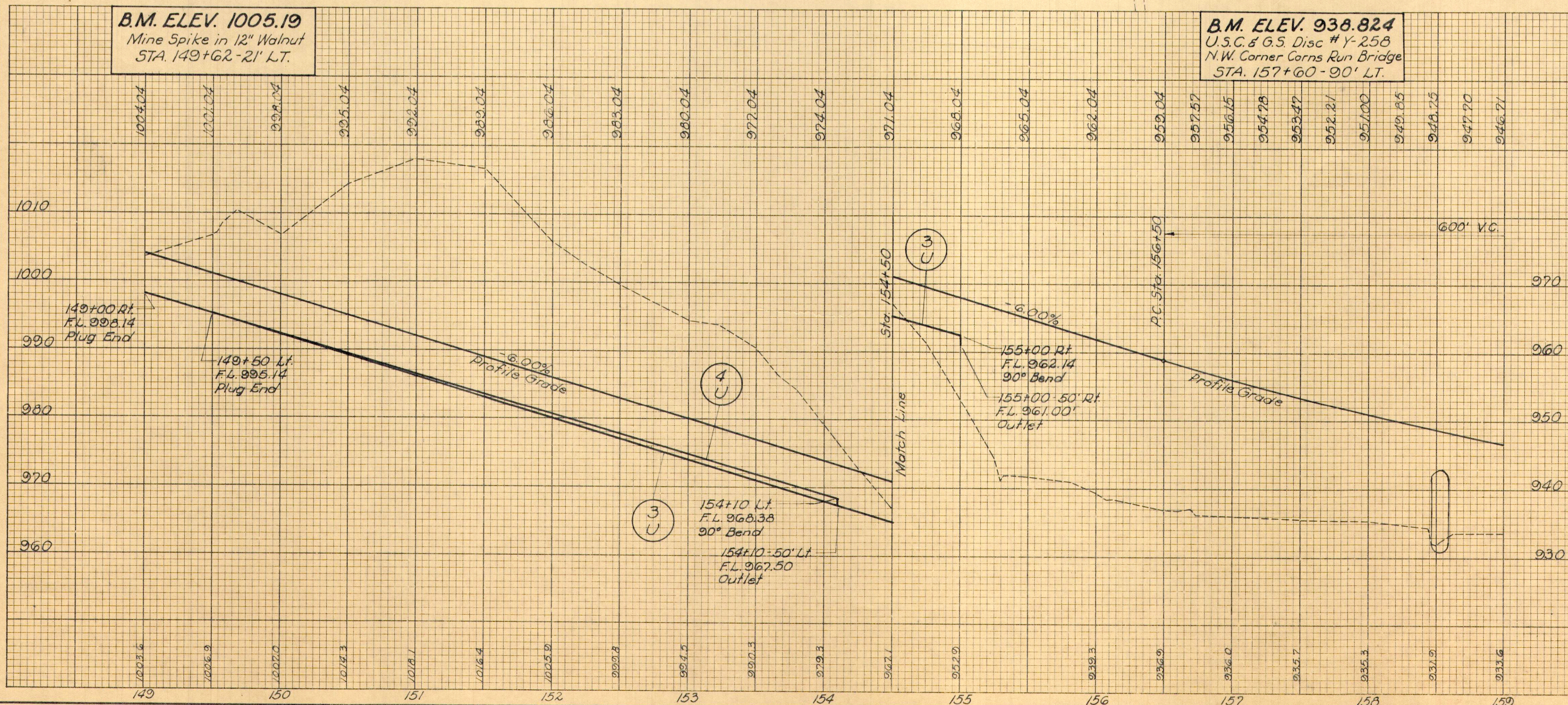
CURVE DATA
 P.I. @ Sta. 157+40.73
 Δ = 15°30' Rt.
 D = 1" 28'
 T = 531.65'
 L = 1056.82'
 R = 3906.53'
 E = 36.01'

MATCH LINE STA. 149+00

MATCH LINE STA. 159+00

B.M. ELEV. 1005.19
 Mine Spike in 12" Walnut
 STA. 149+62-21' LT.

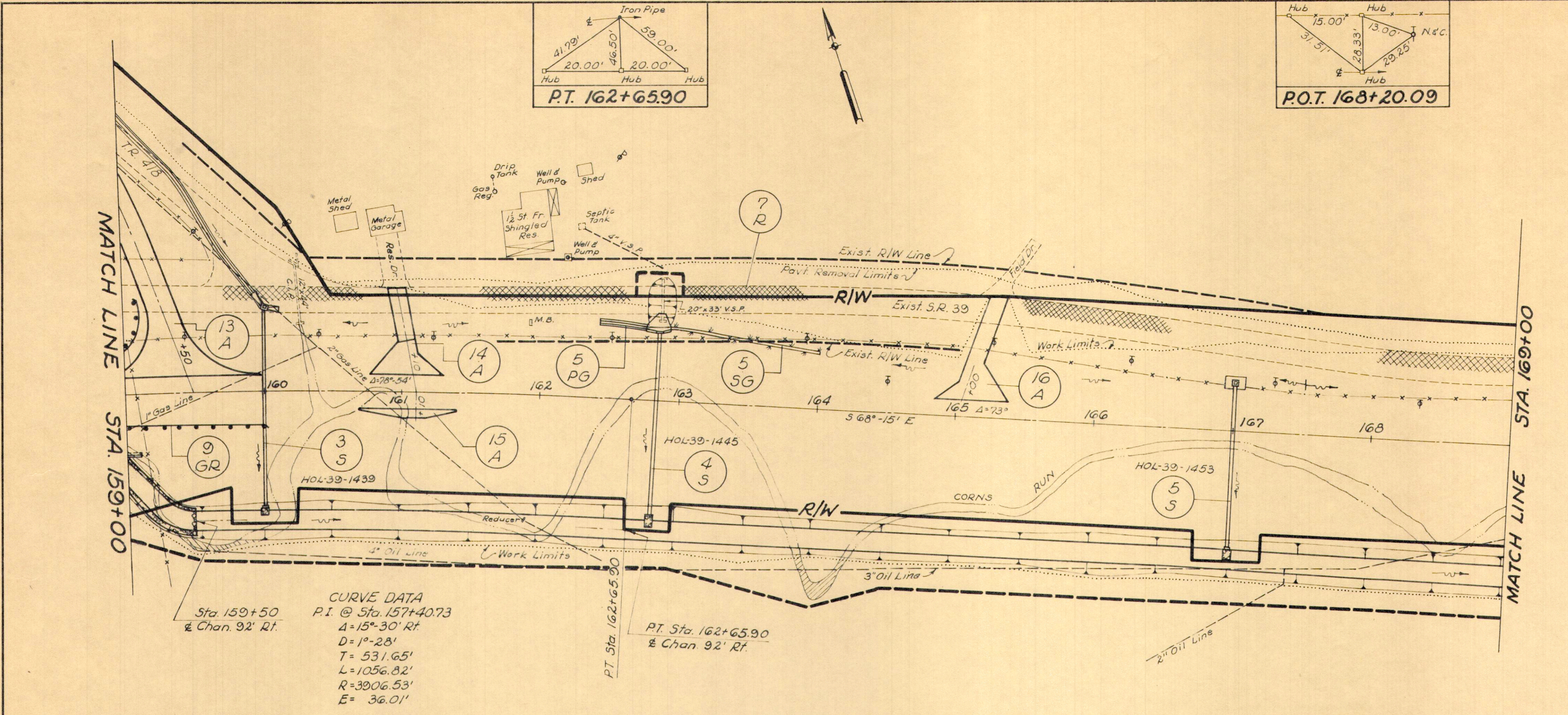
B.M. ELEV. 938.824
 U.S.C. & G.S. Disc # Y-258
 N.W. Corner Carns Run Bridge
 STA. 157+60-90' LT.



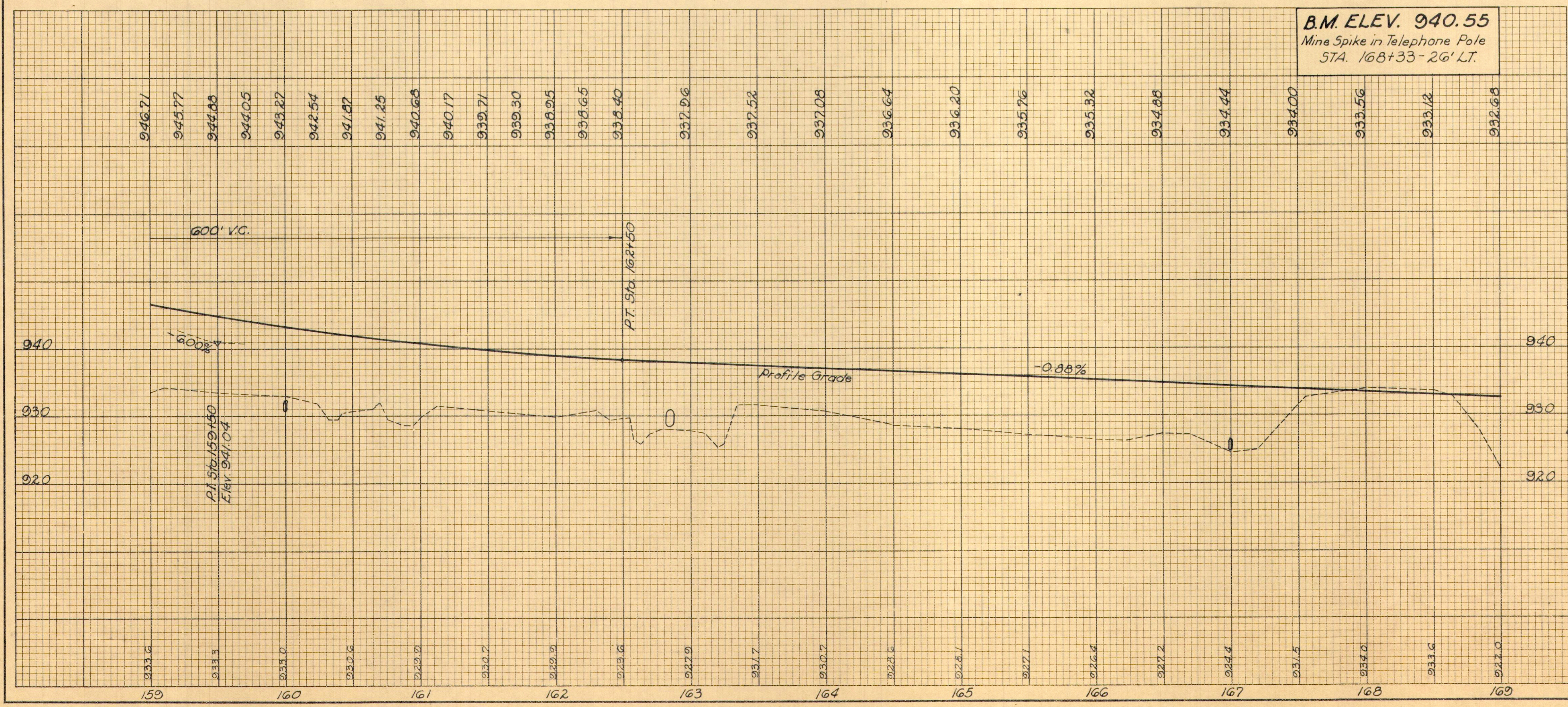
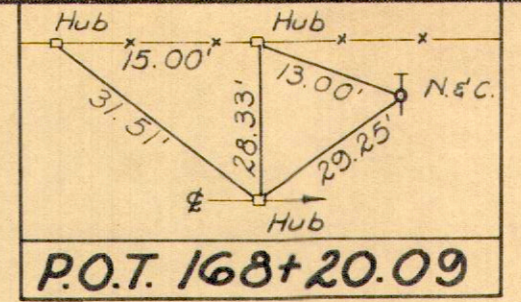
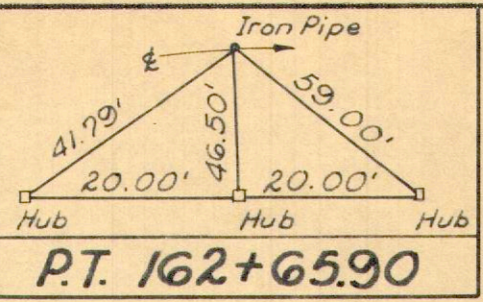
REF NO.	STATION TO STATION	SIDE	202	203	606	600	601	602	BENDS UNDERDRAIN	603	604	605	604	304	402	404	408	SEE SHEET NO.
11-A	155+00	LT.																
12-A	157+25	RT.																
5-DR	154+75 TO 156+53	RT.																
6-DR	155+44 TO 157+75	LT.																
7-DR	157+36 TO 159+00	RT.																
2-GR	150+40	LT.																
5-GR	149+00 TO 149+50	LT.																
6-GR	149+00 TO 157+75	LT.																
7-GR	EX. S.R. 39 APPR. TH. 50' LT. TO T.R. 418 STA. 51+25 RT.	LT.																
8-GR	155+00 TO DR. STA. 0+93(C) RT.	RT.																
9-GR	DR. STA. 1+00 TO 159+00	RT.																
3-PG	149+00 TO 154+75	RT.																
4-PG	153+75 TO 154+26	LT.																
4-R	149+00 TO 150+40(L)	LT.																
5-R	155+00 TO 157+25(L)	LT.																
6-R	158+00 TO 158+85	LT.																
1-S	EXIST. S.R. 39 APPR. STA. 3+21	RT.																
2-S	158+52	LT.																
4-5G	151+50 TO 153+75	LT.																
3-U	149+00 TO 155+00	RT.																
4-U	149+50 TO 154+10	LT.																
TOTALS																		

PLAN & PROFILE - STA. 149+00 TO STA. 159+00

HOL-39-(13.22-13.62)

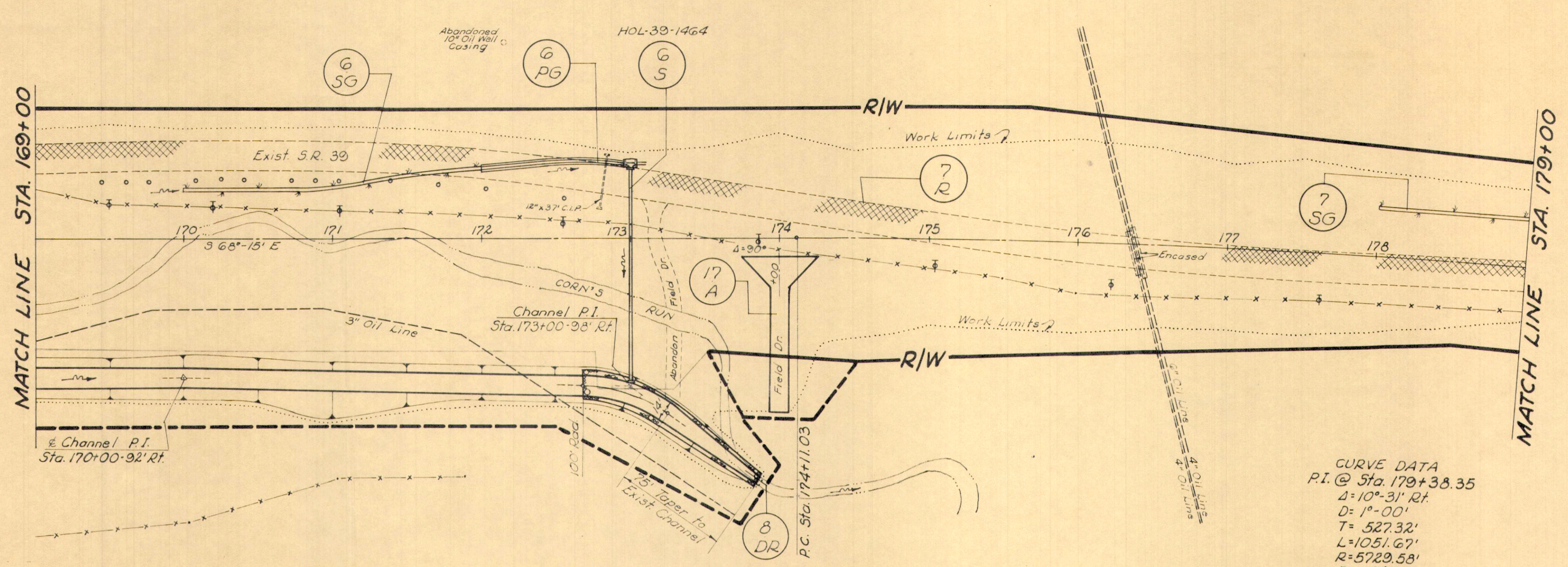
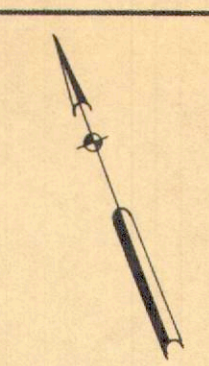
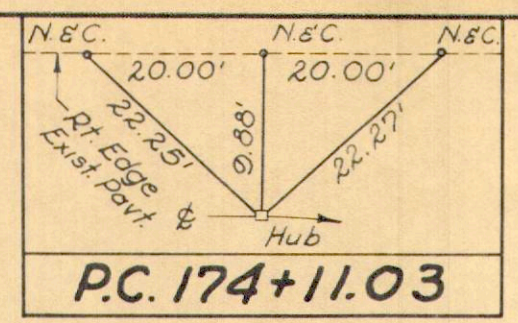


CURVE DATA
 P.I. @ Sta. 157+40.73
 $\Delta = 15^{\circ} 30'$ Rt
 $D = 1^{\circ} 28'$
 $T = 531.65'$
 $L = 1056.82'$
 $R = 3906.53'$
 $E = 36.01'$

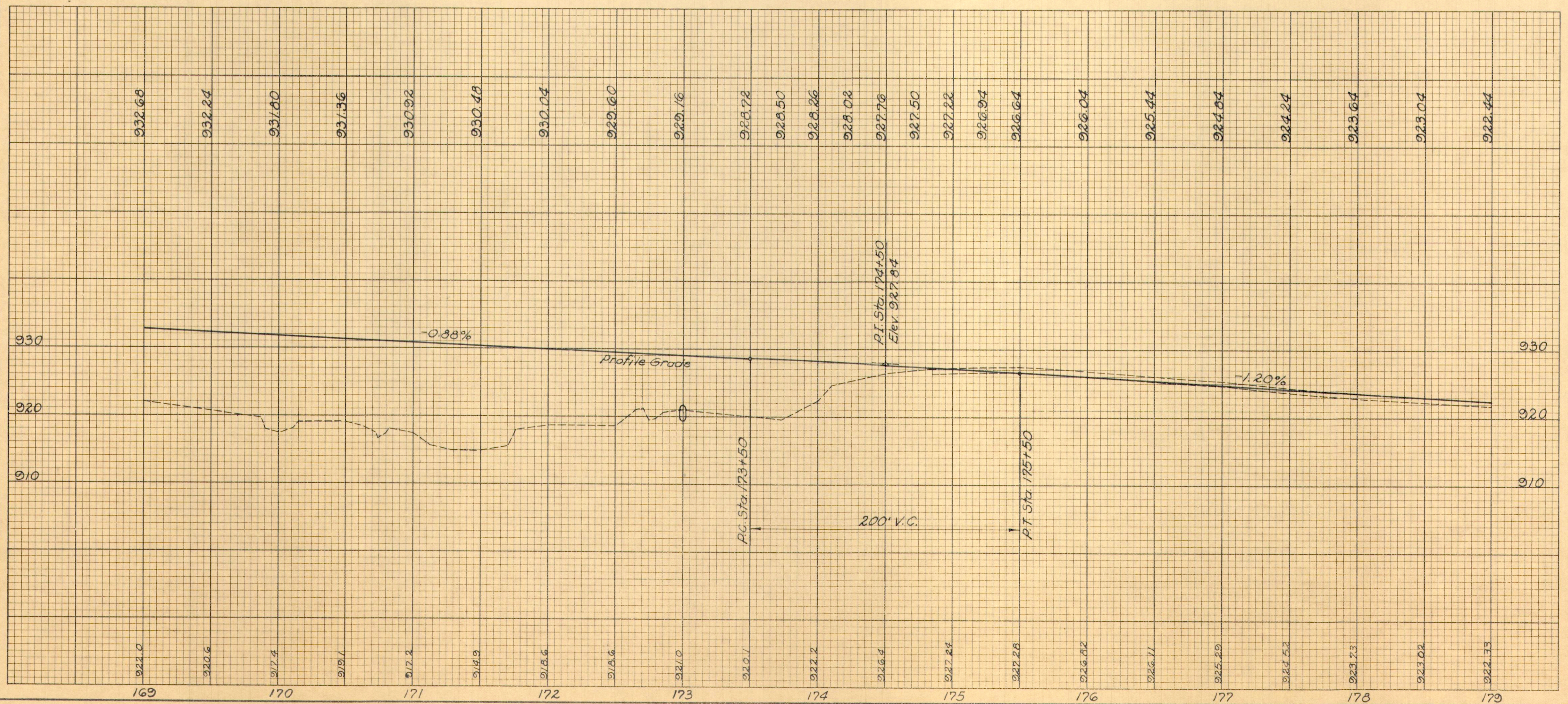


REF. NO.	STATION TO STATION	SIDE	202	203	606	600	601	602	603	604	604	304	402	404	408	SEE SHEET NO.
13-A	159+50	LT.														50451
14-A	161+10	LT.														42
15-A	161+10	RT.			100											43
16-A	165+00	LT.														
9-GR	159+00 TO 160+00.57	RT.														
5-PG	162+40 TO 162+78	LT.														
7-R	159+70 TO 169+00	LT.	1151													
3-S	160+00	LT/RT														
4-S	162+84	LT/RT														
5-S	167+00	LT/RT														
5-SG	162+92 TO 164+00	LT.														
TOTALS			44	46	248.1	100	16	20	144	1	1	277.9	8.6	11.5	146.6	

PLAN & PROFILE-STA. 159+00 TO STA. 169+00

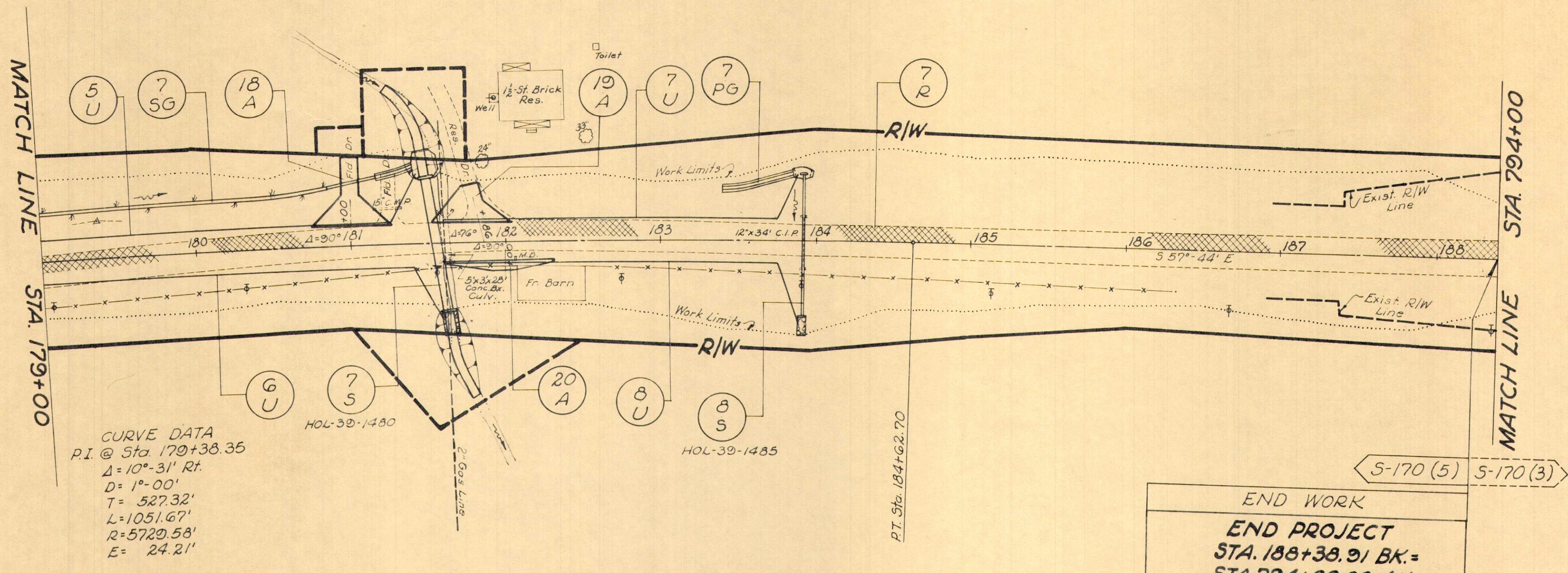
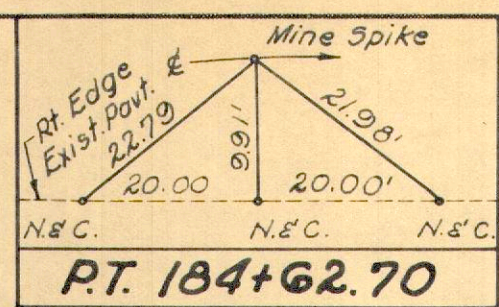
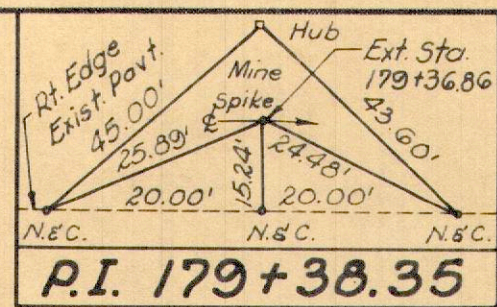


CURVE DATA
 P.I. @ Sta. 179+38.35
 Δ = 10°-31' Rt.
 D = 1°-00'
 T = 527.32'
 L = 1051.67'
 R = 5729.58'
 E = 24.21'



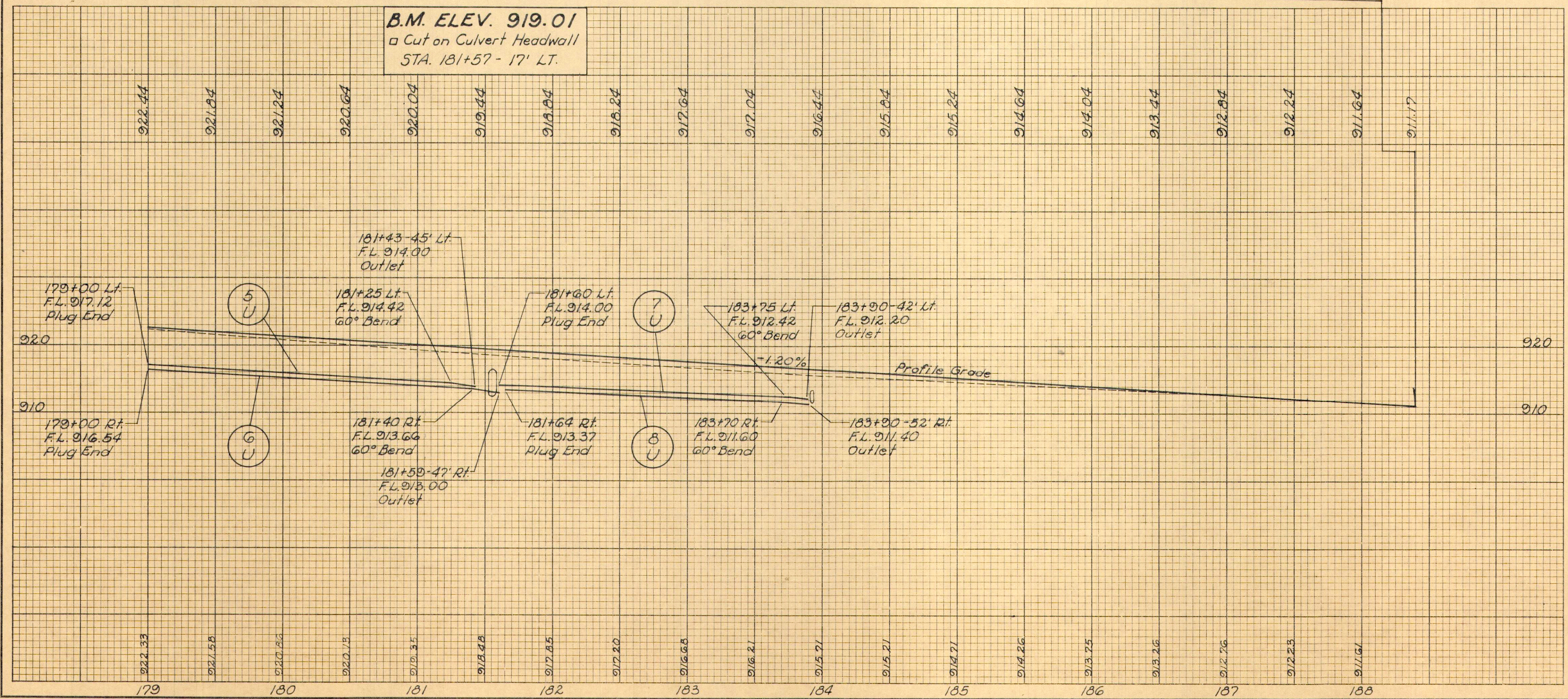
REF. NO.	STATION TO STATION	SIDE	202 PIPE REMOVED EXIST. PAVT. REMOVED 15" & UNDER DISPOSED	201 DIP, PAVED DUMP- CAP, EXPOSED ROCK TYPE REINFC 1-2 PART.	600 SODDING	601 SQ. YD. S.Y. L.F. C.Y.	602 CONC. MASONRY	603 CON. DUIT TYPE A*	304 AGGR. BASE	SEE SHEET NO.	
17-A	174+00	RT.								45	
6-DR	172+20 TO 173+85	RT.								57	
6-P6	172+00 TO 172+95	LT.									
7-R	169+00 TO 179+00	LT.	1234	115							
6-5	173+00	LEFT	37								
6-55 7-56	170+00 TO 172+00 173+00 TO 179+00	LT. LT.			134 67						
TOTALS			37	1234	233	6	96	115	102	142	26.7

PLAN & PROFILE - STA. 169+00 TO STA. 179+00



END WORK
END PROJECT
STA. 188+38.91 BK. =
STA. 794+00.00 AH.
S.L.M. 14.93 BK. = S.L.M. 15.04 AH.

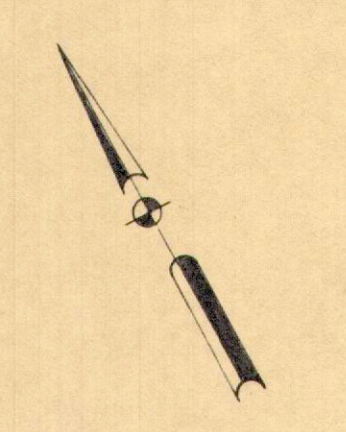
B.M. ELEV. 919.01
□ Cut on Culvert Headwall
STA. 181+57 - 17' LT.



REF. NO.	STATION TO STATION	SIDE	EXIST. SURF. REMOVED	PIPE REMOVED	EXIST. DIRT REMOVED	EXCAVATION	EMBANKMENT	SOODING	RIP-PAVED AREA	DUMP. ED. ROCK CHAN. 1/2 PROT.	DUMP. CONC. MASONRY	CONDUIT	DEEP PIPE UNDER DRAIN	ASPH. CONC. BASE	B.T. PRIME COAT	BEND'S UNDER DRAIN	SEE SHEET NO.
18-A	181+00	LT.															46
19-A	181+00	LT.															46
20-A	182+00	RT.															46
7-28	183+40 TO 183+86	LT.															
7-R	179+00 TO 188+38.91	LT. & RT.			1149												
7-5	181+56	LT. RT.															
8-5	183+52	LT. RT.															
7-56	179+00 TO 180+86	LT.															
5-U	179+00 TO 181+43	LT.															
6-U	179+00 TO 181+59	RT.															
7-U	181+60 TO 183+90	LT.															
8-U	181+64 TO 183+90	RT.															
TOTALS																	

PLAN & PROFILE-STA. 179+00 TO STA. 794+00

APPR. CURVE DATA
 P.I. @ Sta. 1+16.71
 Δ = 45°-54' Lt.
 D = 57°-20' Lt.
 T = 42.31'
 L = 80.06'
 R = 99.93'
 E = 8.59'



Appr. Sta. 0+00 = S.R. 39 Sta. 120+00
 Beg. Appr. Sta. 0+12.77

15' Wild Cherry

Exist. S.R. 39

End Sod & Beg. Paved Gutter Appr. Sta. 1+50

End Appr. Sta. 2+75

End Paved Gutter Sta. 2+75

TO T.R. 315

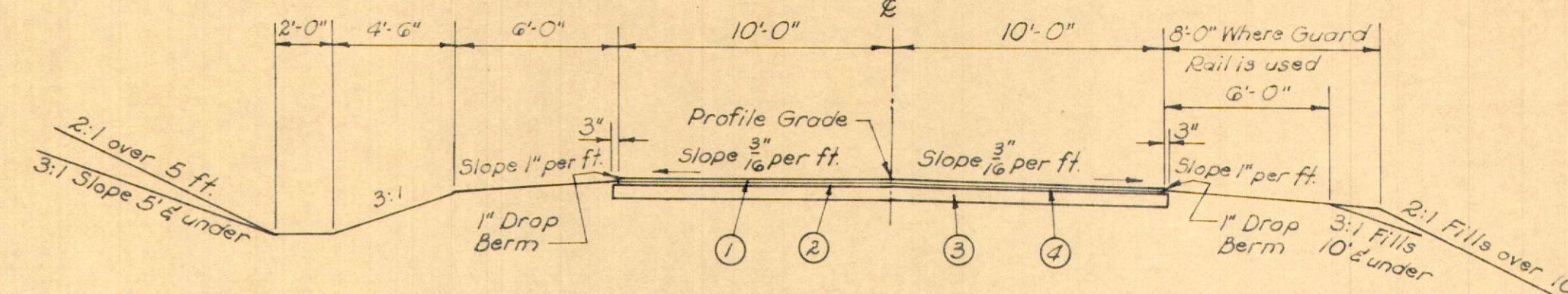
Exist. Ditch

End Sod & Beg. Paved Gutter Appr. Sta. 1+50

End Appr. Sta. 2+75

Exist. Ditch

TO T.R. 315



- ① Item 404 3/4" Asphalt Concrete (70-85)
- ② Item 402 1 1/2" Asphalt Concrete (70-85)
- ③ Item 304 7" Aggregate Base
- ④ Item 408 Prime Coat @ 0.4 gal. per sq. yd.

TYPICAL SECTION

APPROACH QUANTITIES

Item 203 Subgrade Preparation	701.7 Sq. Yds.
Item 304 Aggregate Base	139.5 Cu. Yds.
Item 402 Asphalt Concrete	24.4 Cu. Yds.
Item 404 Asphalt Concrete	14.6 Cu. Yds.
Item 408 Bituminous Prime Coat @ 0.4 gal. per sq. yd.	287.1 Gals.
Item 660 Sodding	188 Sq. Yds.
Item 601 Paved Gutter, Type 1-2	126 Lin. Ft.

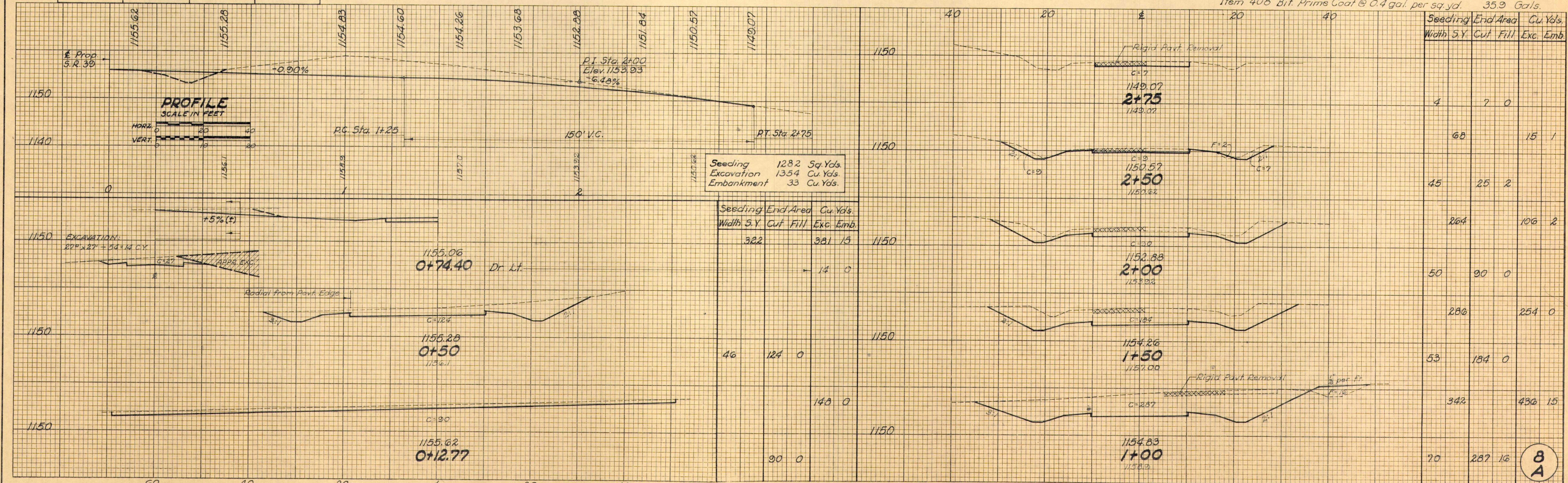
DRIVE QUANTITIES

Item 304 Aggregate Base	17.8 Cu. Yds.
Item 404 Asphalt Concrete	5.0 Cu. Yds.
Item 408 Bit. Prime Coat @ 0.4 gal. per sq. yd.	35.9 Gals.

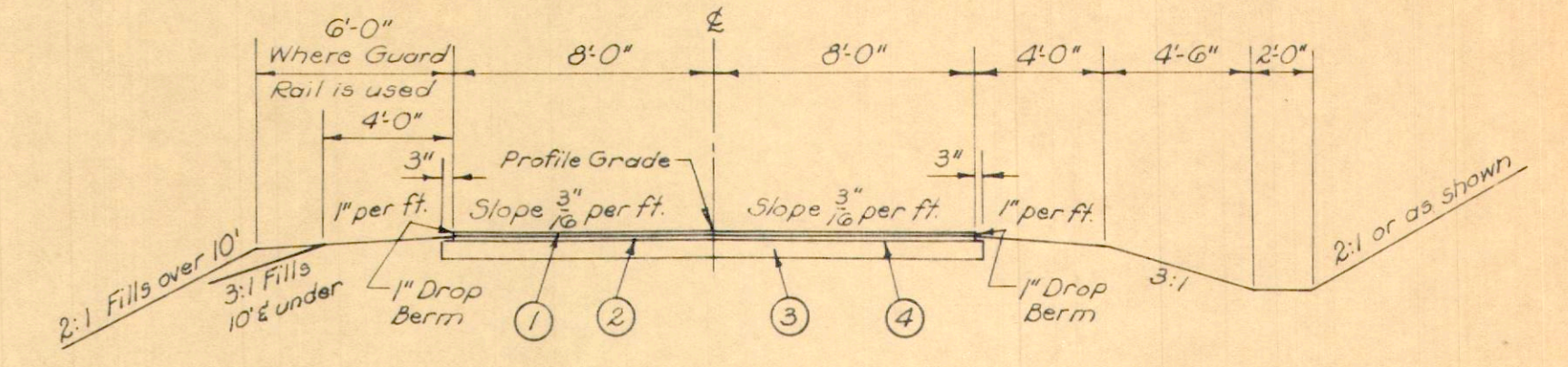
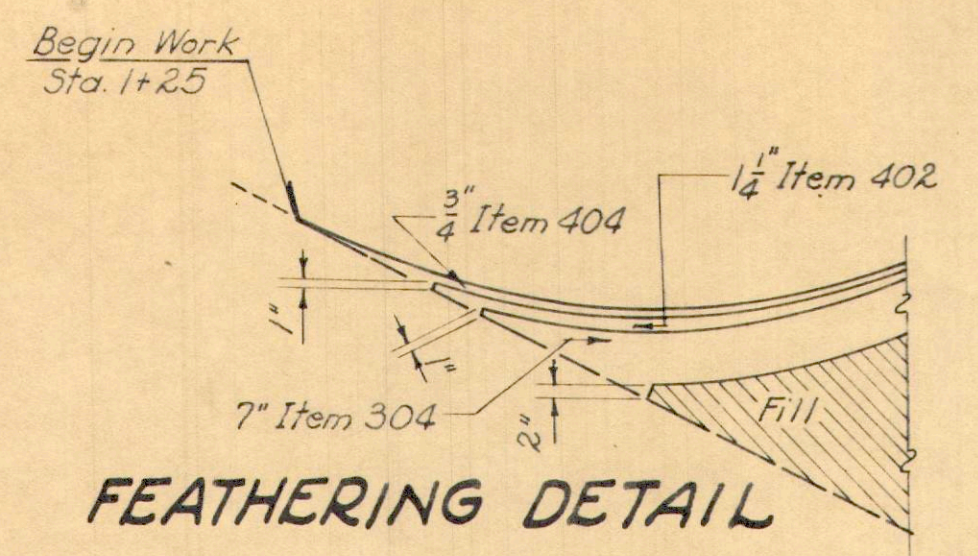
SUPERELEVATION TABLE

Lt. Edge Pavt. Elev.	Station	Profile Grade	Rt. Edge Pavt. Elev.
1154.90	PC. 0+74.40	1155.06	1155.22
1154.89	+75	1155.05	1155.21
1154.67	1+00	1154.83	1154.99
1154.44	+25	1154.60	1154.76
1154.10	+50	1154.26	1154.36
1154.02	P.T. +54.46	1154.13	1154.26
1153.52	+75	1153.68	1153.75
1152.72	2+00	1152.88	1152.84
1151.68	+25	1151.84	1151.68
1150.31	+50	1150.57	1150.41
1148.73	+75	1149.07	1148.90

PLAN SCALE IN FEET



HOL-39-(13.22-13.62)



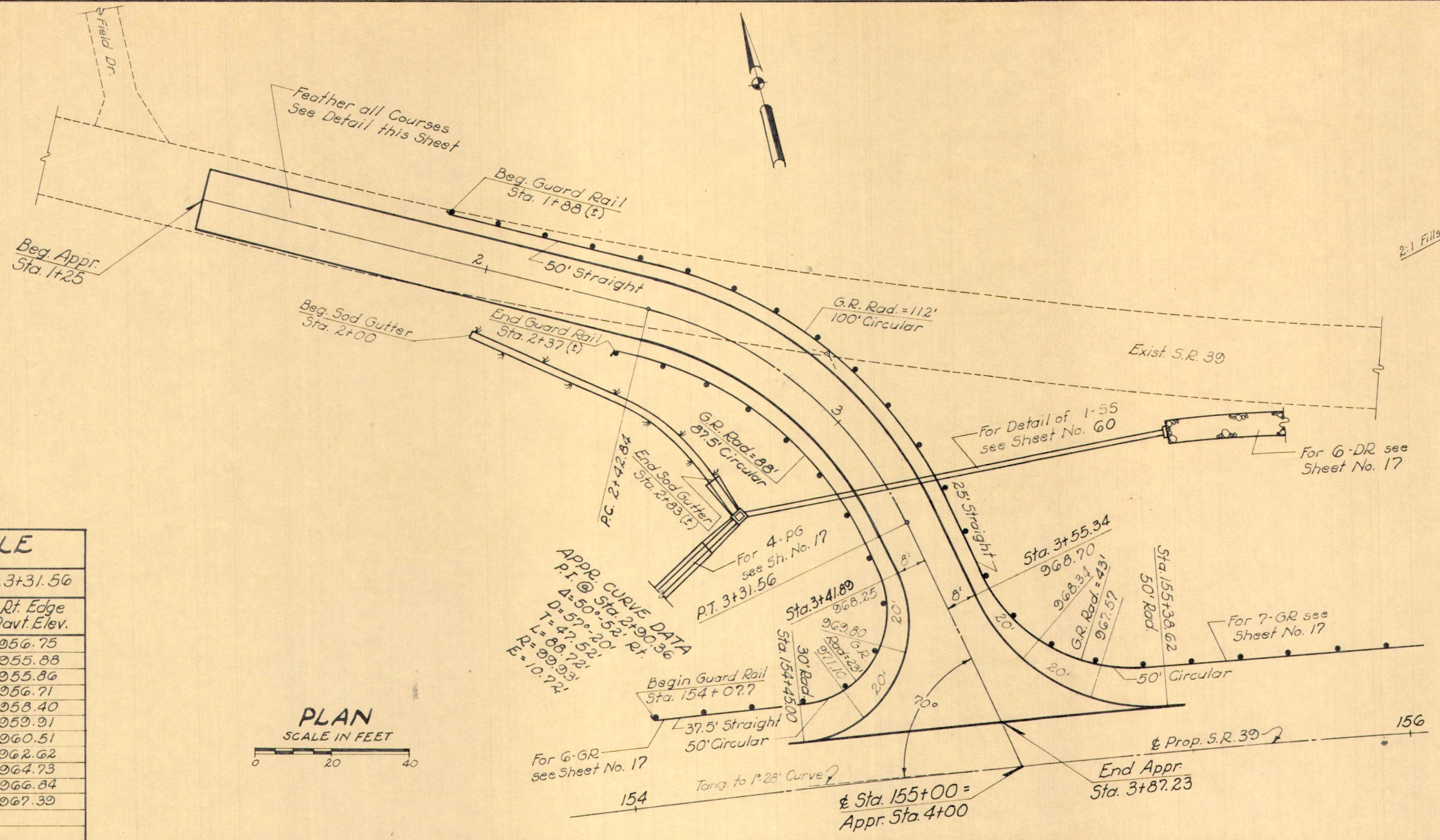
- ① Item 404 3/4" Asphalt Concrete (70-85)
 - ② Item 402 1/4" Asphalt Concrete (70-85)
 - ③ Item 304 7" Aggregate Base
 - ④ Item 408 Prime Coat @ 0.4 gal. per sq. yd.
- TYPICAL SECTION**

SUPERELEVATION TABLE

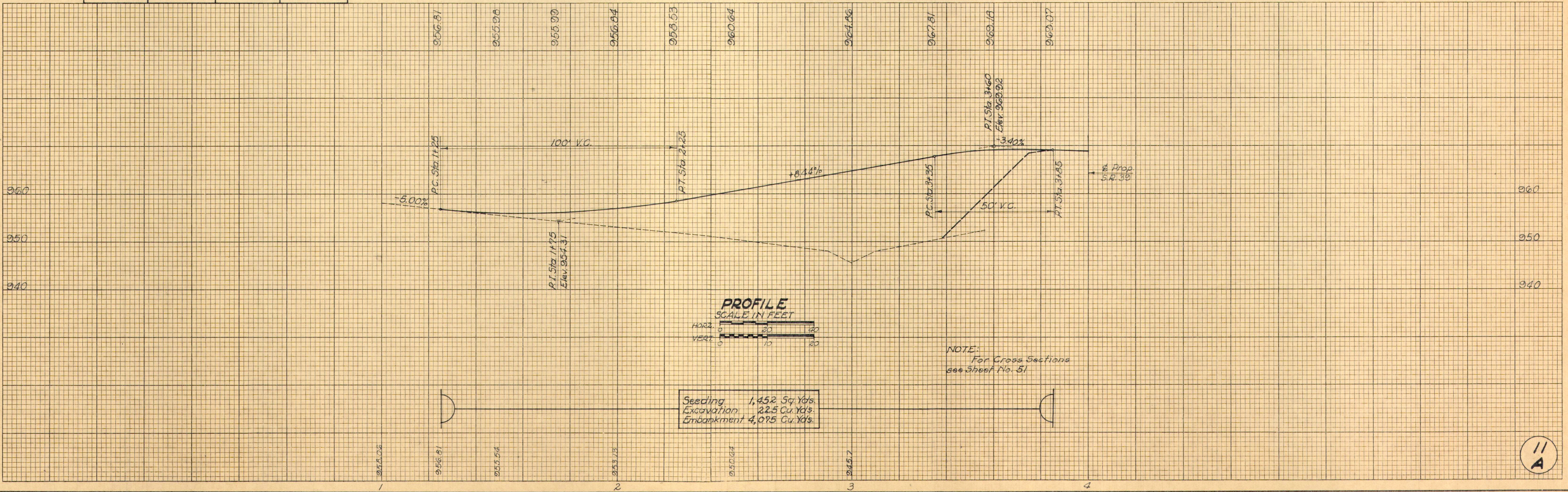
P.C. Sta. 2+42.84		D= 57°-20' Rt.		P.T. Sta. 3+31.56	
Lt. Edge Pavt. Elev.	Station	Profile Grade	Rt. Edge Pavt. Elev.		
956.67	1+25	956.31	956.75		
955.85	+50	955.98	955.88		
955.25	+75	955.92	955.86		
956.84	2+00	956.84	956.71		
958.60	+25	958.53	958.40		
960.11	P.C. +42.84	960.04	959.91		
960.77	+50	960.64	960.51		
962.88	+75	962.75	962.62		
964.92	3+00	964.86	964.73		
967.08	+25	966.97	966.84		
967.59	P.T. +31.56	967.52	967.39		

QUANTITIES

Item 304 Aggregate Base	98.3 Cu. Yds.
Item 402 Asphalt Concrete (70-85)	17.7 Cu. Yds.
Item 404 Asphalt Concrete (70-85)	11.3 Cu. Yds.
Item 408 Bit. Prime Coat @ 0.4 gal. per sq. yd.	202.2 Gals.
Item 606 Sodding	48 Sq. Yds.
Item 203 Subgrade Preparation	491.3 Sq. Yds.



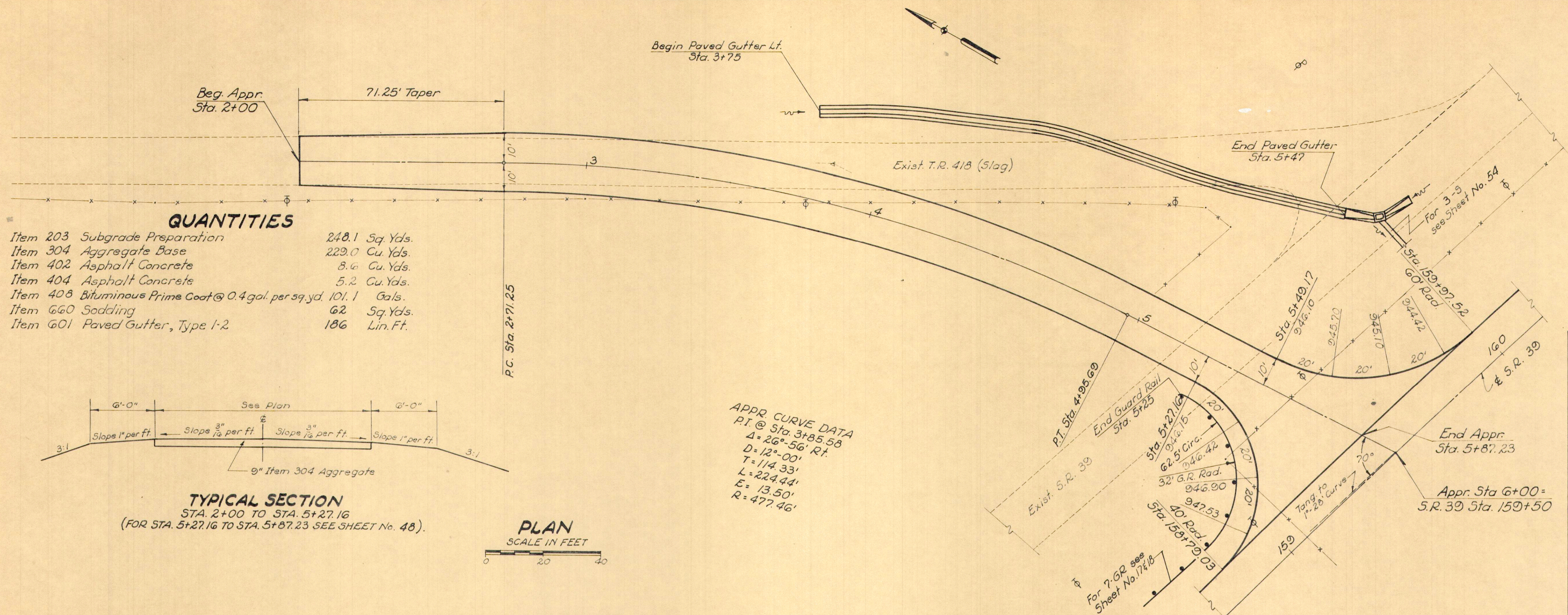
PLAN
SCALE IN FEET



PROFILE
SCALE IN FEET

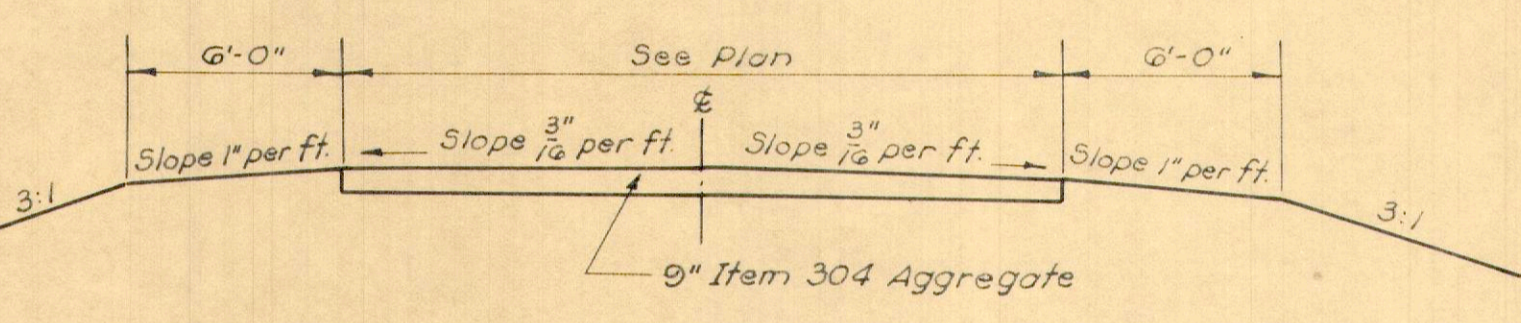
NOTE:
For Cross Sections
see Sheet No. 51

Seeding	1,452 Sq. Yds.
Excavation	22.5 Cu. Yds.
Embankment	4,075 Cu. Yds.

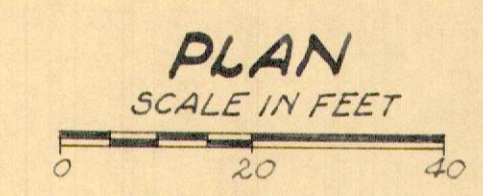


QUANTITIES

Item 203 Subgrade Preparation	248.1 Sq. Yds.
Item 304 Aggregate Base	229.0 Cu. Yds.
Item 402 Asphalt Concrete	8.6 Cu. Yds.
Item 404 Asphalt Concrete	5.2 Cu. Yds.
Item 408 Bituminous Prime Coat @ 0.4 gal. per sq. yd.	101.1 Gals.
Item 660 Sodding	62 Sq. Yds.
Item 601 Paved Gutter, Type 1-2	186 Lin. Ft.



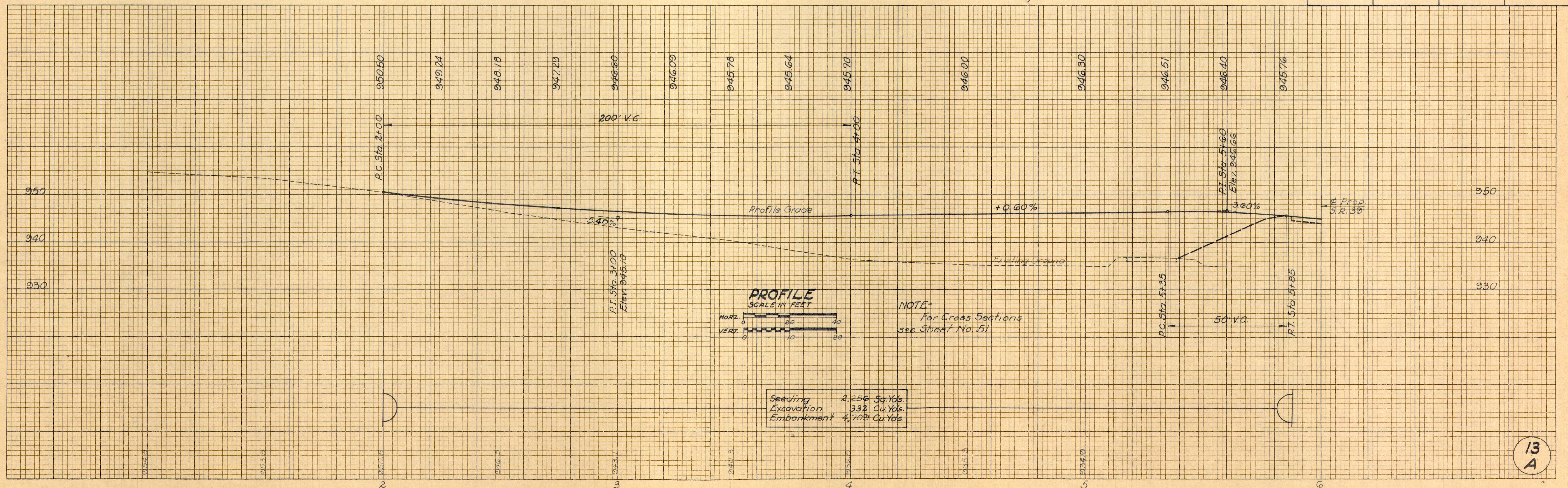
TYPICAL SECTION
STA. 2+00 TO STA. 5+27.16
(FOR STA. 5+27.16 TO STA. 5+87.23 SEE SHEET No. 48).



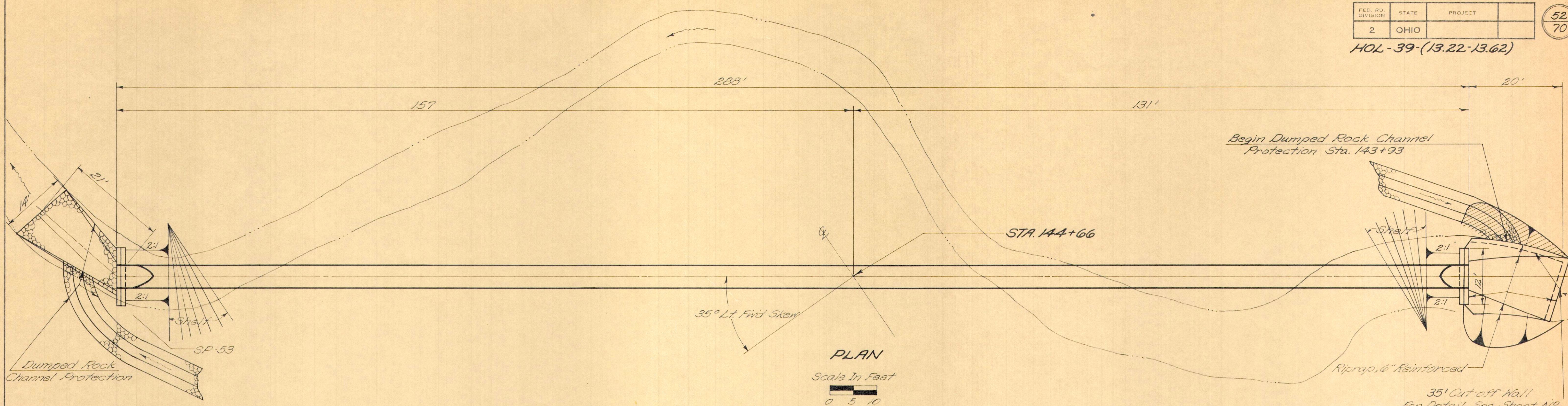
APPR. CURVE DATA
P.I. @ Sta. 3+85.58
 $\Delta = 26^{\circ} 56'$ Rt.
 $D = 12^{\circ} 00'$
 $T = 114.33'$
 $L = 224.44'$
 $E = 13.50'$
 $R = 477.46'$

SUPERELEVATION TABLE

P.C. Sta. 2+71.25		$D=12^{\circ} 00'$ Rt.		P.T. Sta. 4+95.69	
Lt. Edge Pavt. Elev.	Station	Profile Grade	Profile Grade	Rt. Edge Pavt. Elev.	Station
950.00	2+00	950.50	950.50	950.00	2+00
949.00	+25	949.24	949.24	948.88	+25
948.18	+50	948.78	948.78	947.89	+50
947.56	PC +71.25	947.41	947.41	947.10	PC +71.25
947.45	+75	947.29	947.29	946.98	+75
946.86	+100	946.60	946.60	946.29	+100
946.40	+125	946.09	946.09	945.78	+125
946.09	+150	945.78	945.78	945.47	+150
945.95	+175	945.64	945.64	945.33	+175
946.01	+200	945.70	945.70	945.39	+200
946.16	+225	945.85	945.85	945.54	+225
946.31	+250	946.00	946.00	945.69	+250
946.41	+275	946.15	946.15	945.84	+275
946.42	PT +95.69	946.27	946.27	945.96	PT +95.69
946.42	+300	946.30	946.30	945.99	+300
946.34	+325	946.45	946.45	946.14	+325



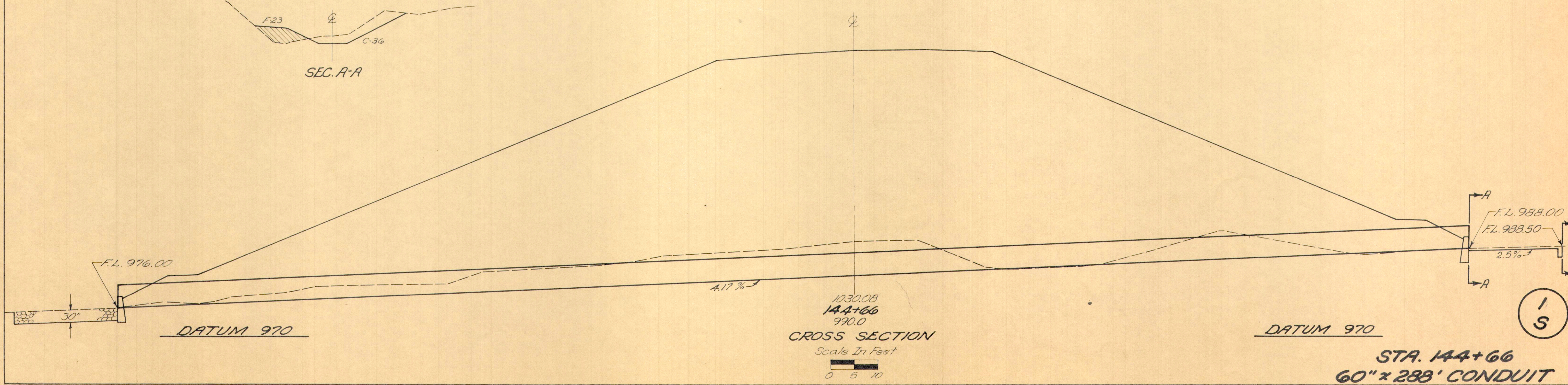
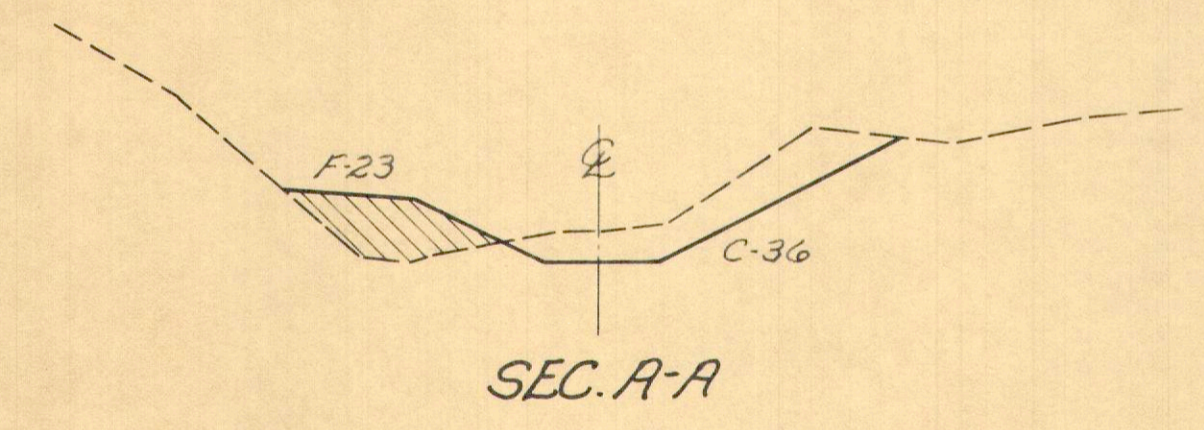
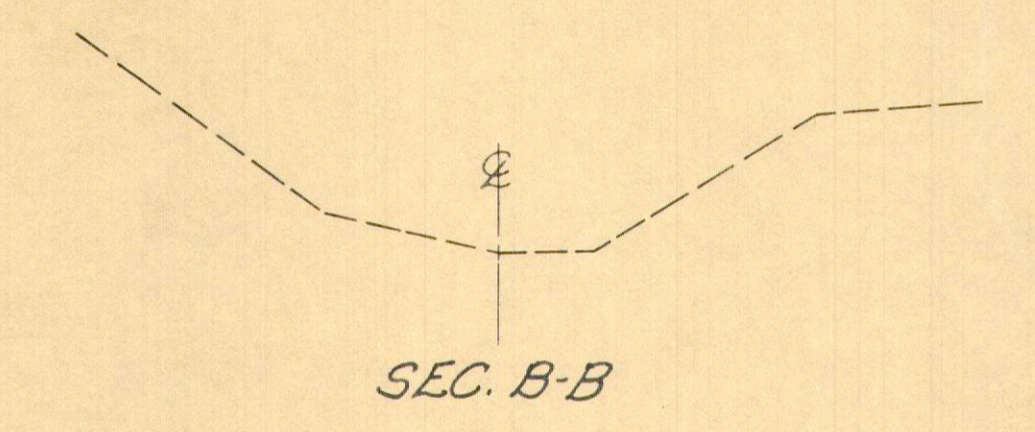
Seeding	2.256 Sq. Yds.
Excavation	332 Cu. Yds.
Embankment	4,709 Cu. Yds.



QUANTITIES

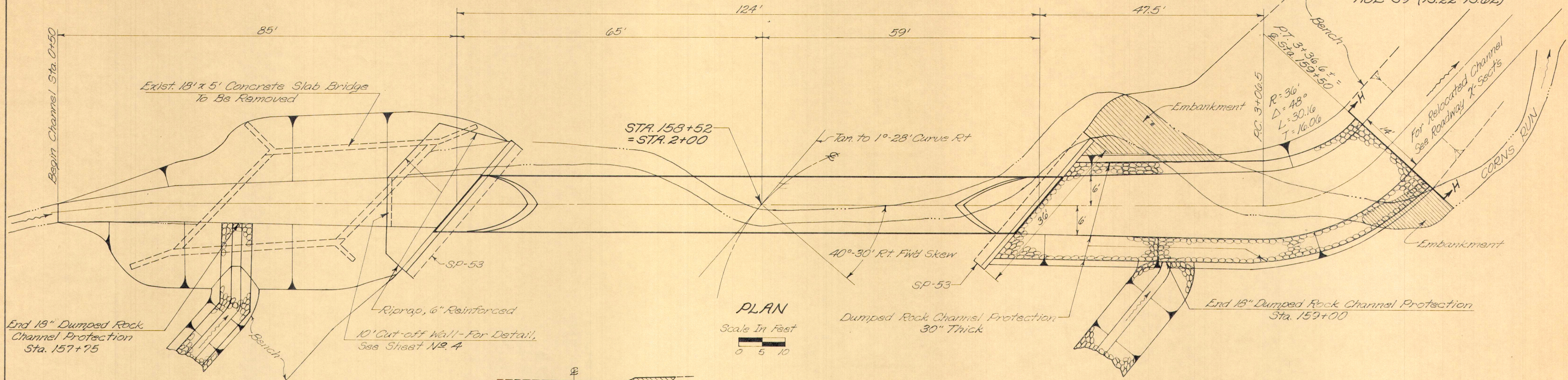
60" Conduit, Type A with Class B Bedding 707.03, gage 10-8	288 Lin. Ft.
Concrete Masonry	6.05 Cu. Yds.
Dumped Rock Channel Protection	20 Cu. Yds.
Riprap, 6" Reinforced	33 Sq. Yds.
Excavation	13 Cu. Yds.
Embankment	9 Cu. Yds.

Area : 9.1 acres
Q₂₅ : 168 c.f.s.



STA. 144+66
60" x 288' CONDUIT

HOL-39-(13.22-13.62)



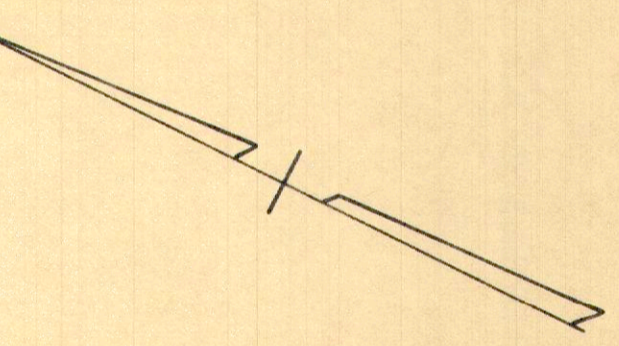
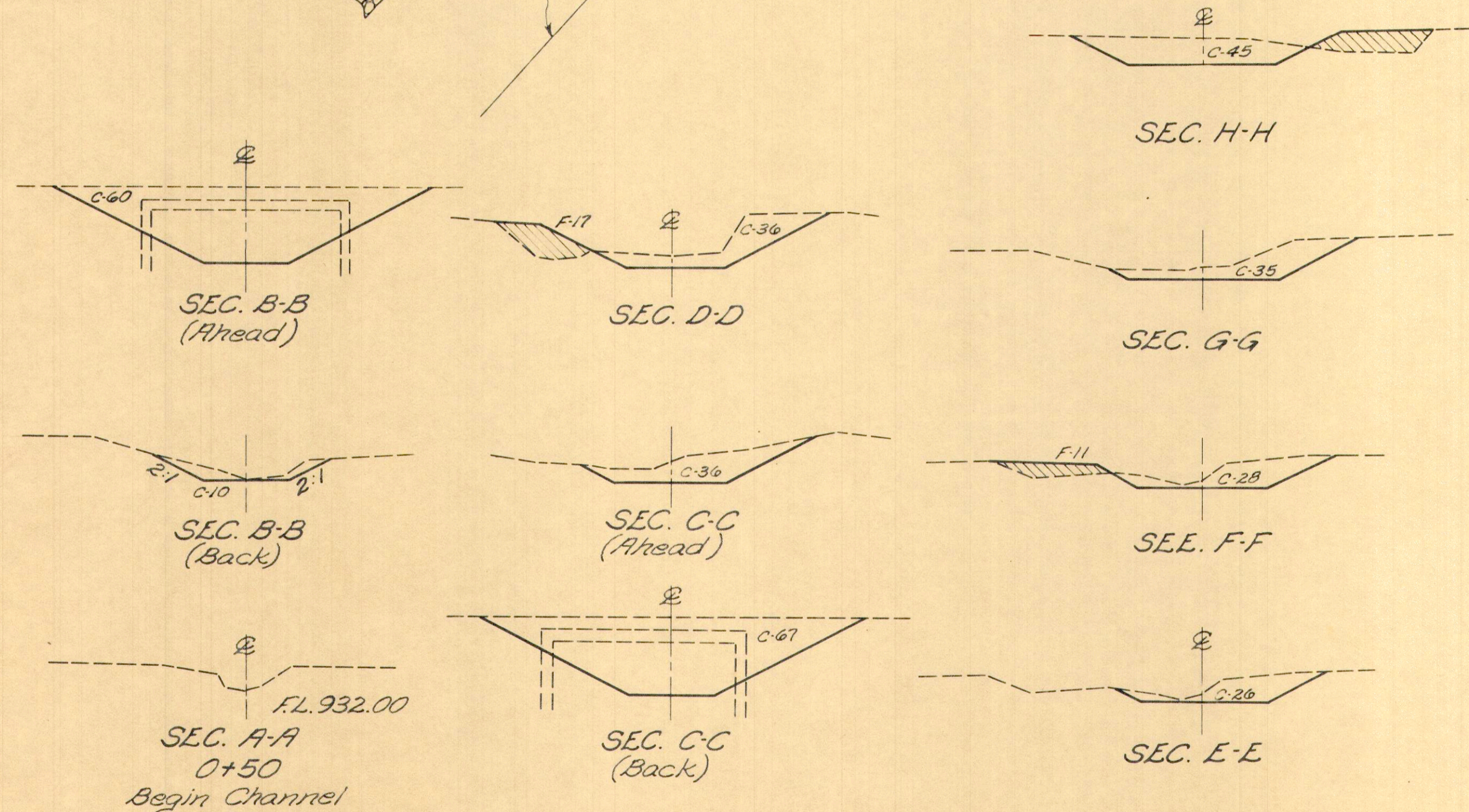
PLAN
Scale In Feet
0 5 10

QUANTITIES

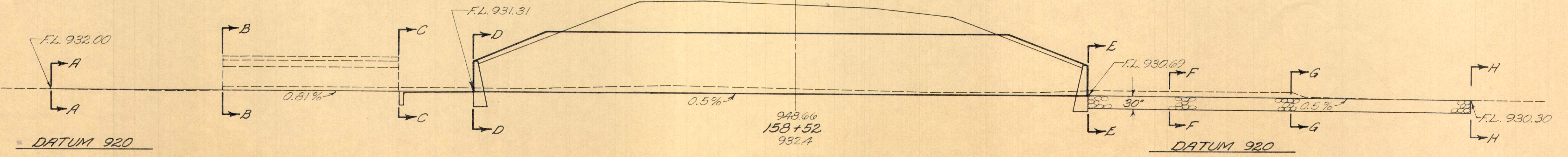
- 144" Conduit, Type A with Class B Bedding, gage 7-5
- Concrete Masonry
- Riprap, 6" Reinforced
- Dumped Rock Channel Protection
- Existing Structure Removed
- Excavation
- Embankment

- 124 Lin. Ft.
- 38.14 Cu. Yd.
- 44 Sq. Yds.
- 153 Cu. Yds.
- Lump Sum
- 206 Cu. Yds.
- 8 Cu. Yds.

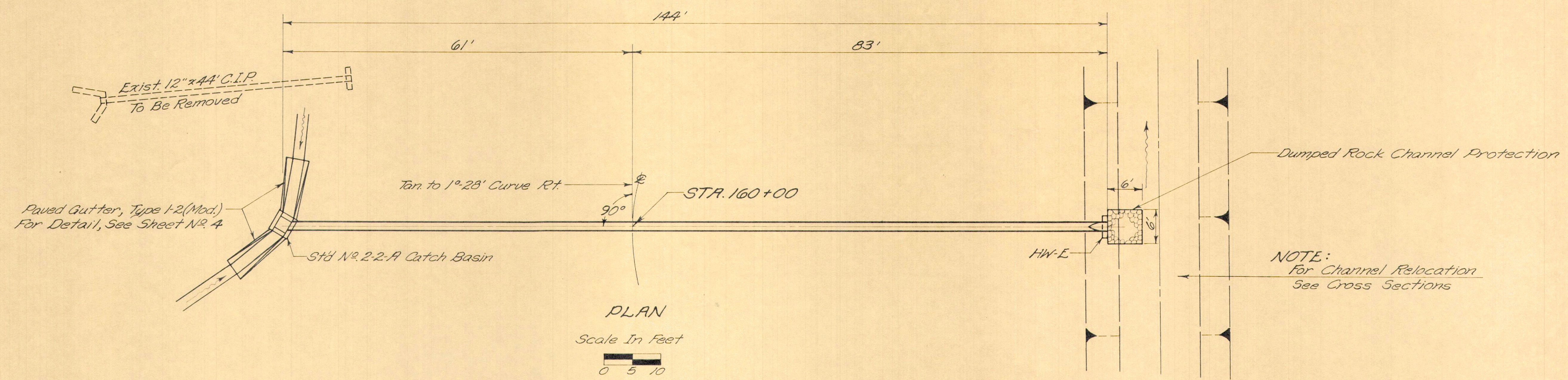
Area : 746 acres
Q₂₅ : 820 c.f.s.



CROSS SECTION
Scale In Feet
0 5 10



STA. 158+52
144" x 124' CONDUIT



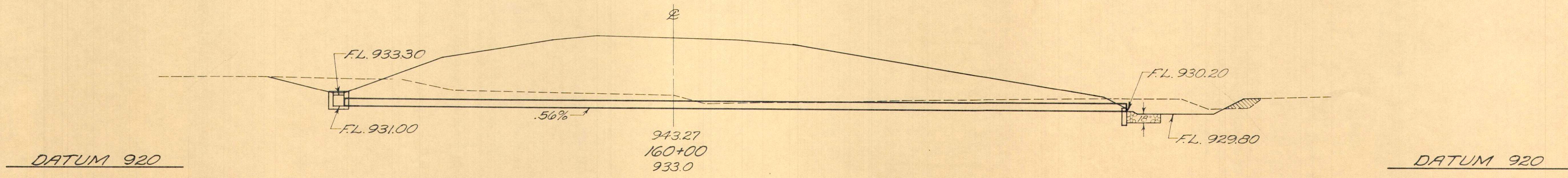
PLAN
Scale In Feet
0 5 10

NOTE:
For Channel Relocation
See Cross Sections

QUANTITIES

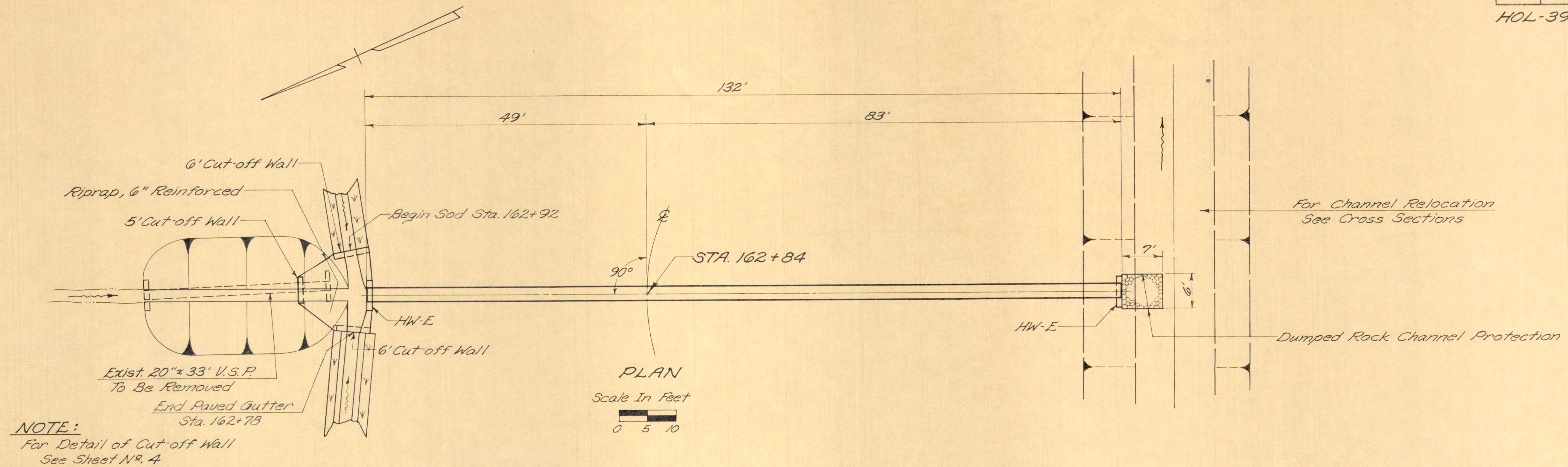
21" Conduit, Type B with Class B Bedding, 706.02 Class III or 706.08	144 Lin. Ft.
Concrete Masonry	36 Cu. Yds.
Std No. 2-2-A Catch Basin	1 Each
Paved Gutter, Type 1-2 (Mod.)	20 Lin. Ft.
Dumped Rock Channel Protection	2 Cu. Yds.
12" Pipe Removed	44 Lin. Ft.

Area : 4 acres
Q₂₅ : 17 c.f.s.



CROSS SECTION
Scale In Feet
0 5 10

STA. 160+00
21" x 144' CONDUIT

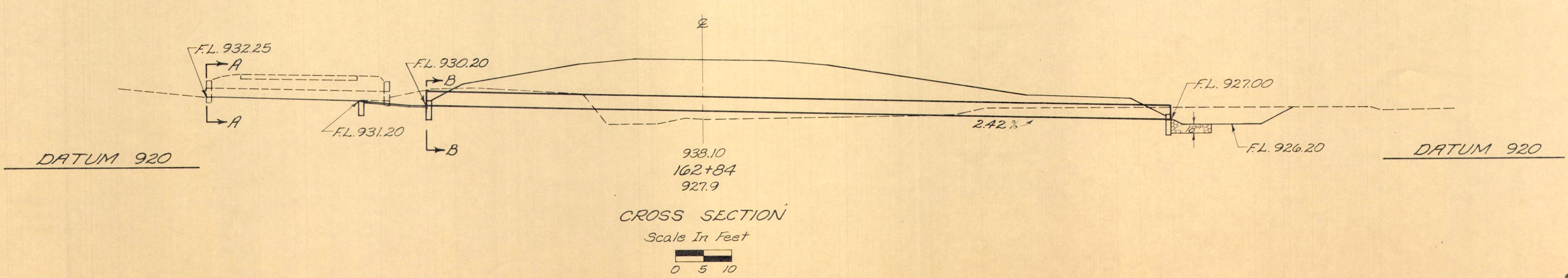
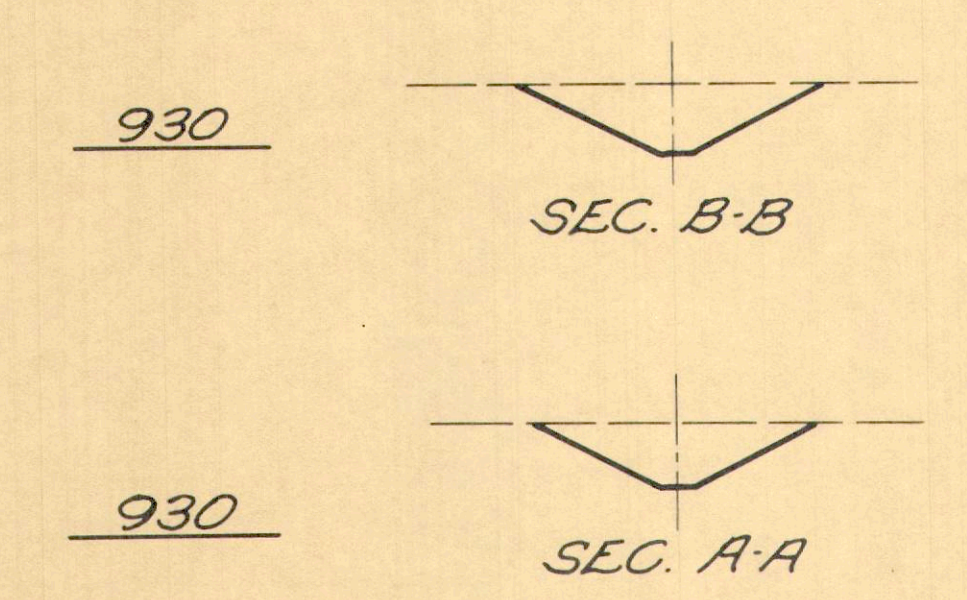


NOTE:
For Detail of Cut-off Wall See Sheet No. 4

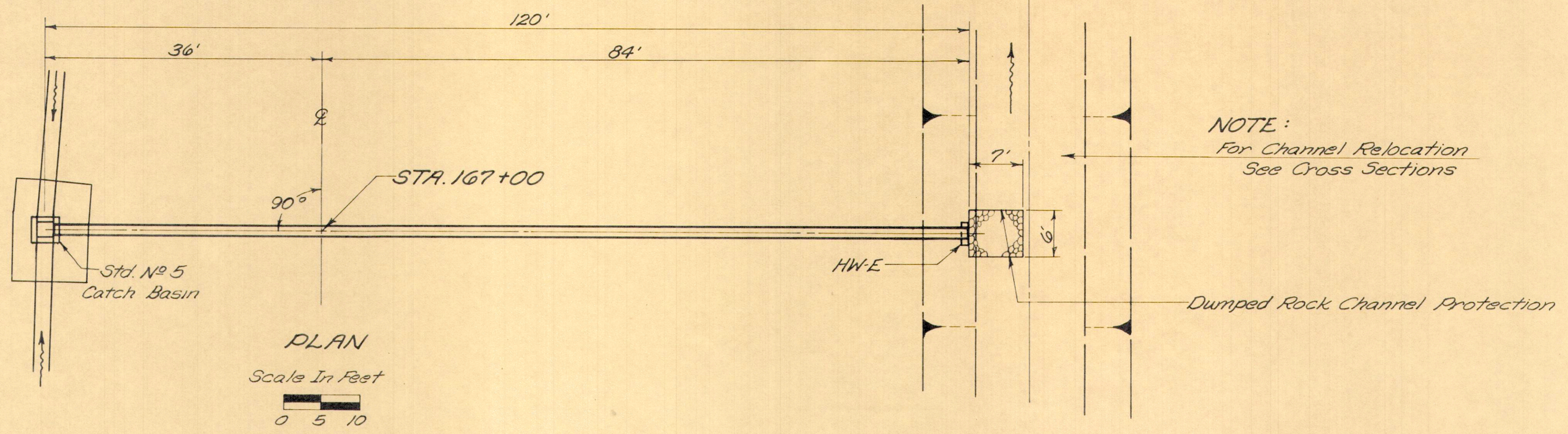
QUANTITIES

30" Conduit, Type A with Class B Bedding	706.02 or 706.08	132 Lin. Ft.
Concrete Masonry		1.02 Cu. Yds.
Riprap, 6" Reinforced		16 Sq. Yds.
Dumped Rock Channel Protection		2 Cu. Yds.
Excavation		46 Cu. Yds.

Area: 12 acres
Q25: 36 c.f.s.



STA. 162+84
30" x 132' CONDUIT

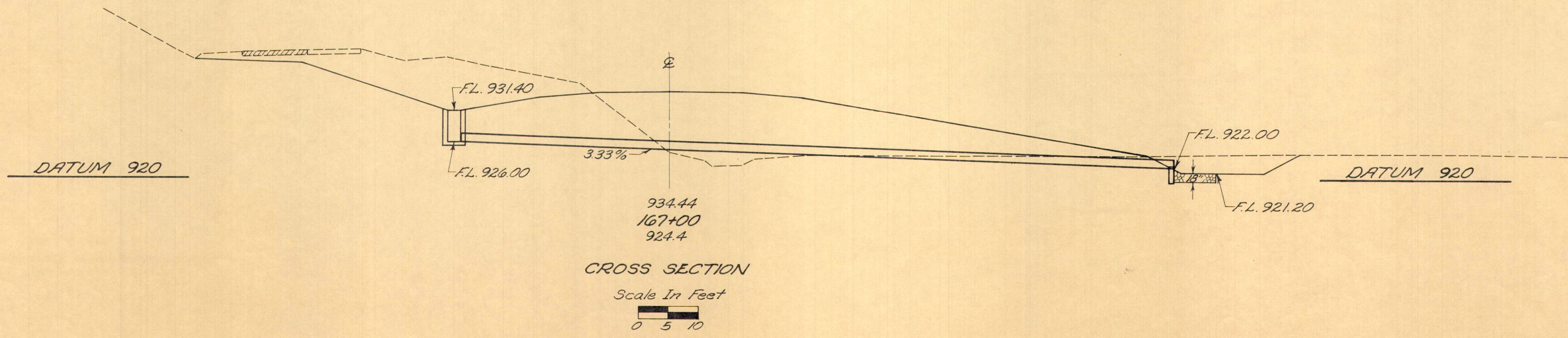


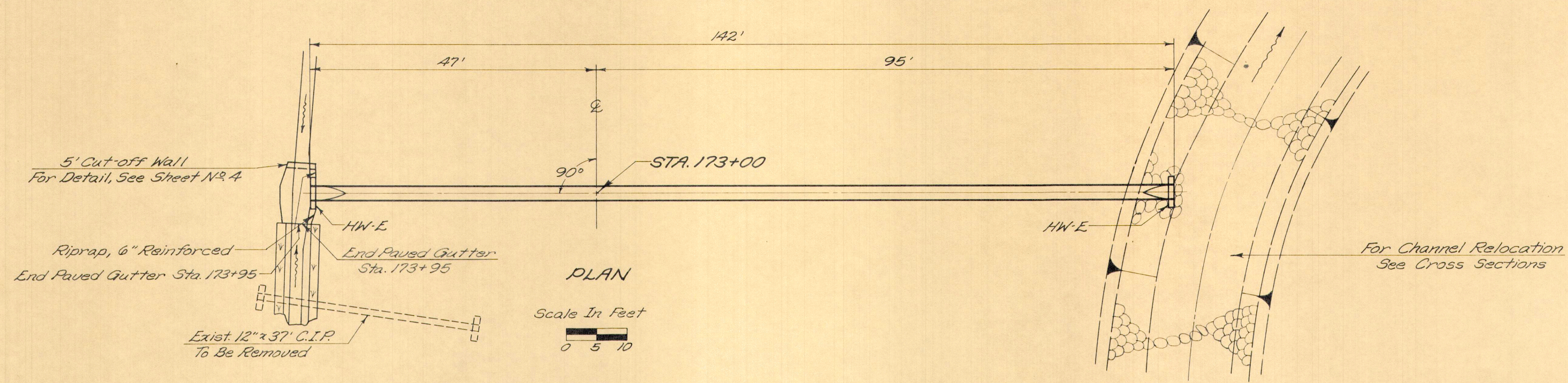
QUANTITIES

18" Conduit, Type B with Class B Bedding
Concrete Masonry
Std No 5 Catch Basin
Dumped Rock Channel Protection

120 Lin. Ft.
0.30 Cu. Yds.
1 Each
2 Cu. Yds.

Area: 4 acres
Q₂₅: 17 c.f.s.

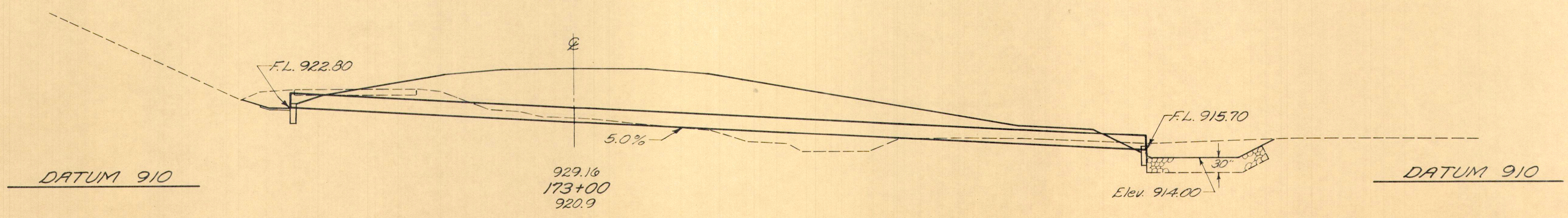




QUANTITIES

30" Conduit, Type A with Class B Bedding, 706.02 or 706.08	142	Lin. Ft.
Concrete Masonry	1.02	Cu. Yds.
12" Pipe Removed	37	Lin. Ft.
Riprap, 6" Reinforced	6	Sq. Yds.

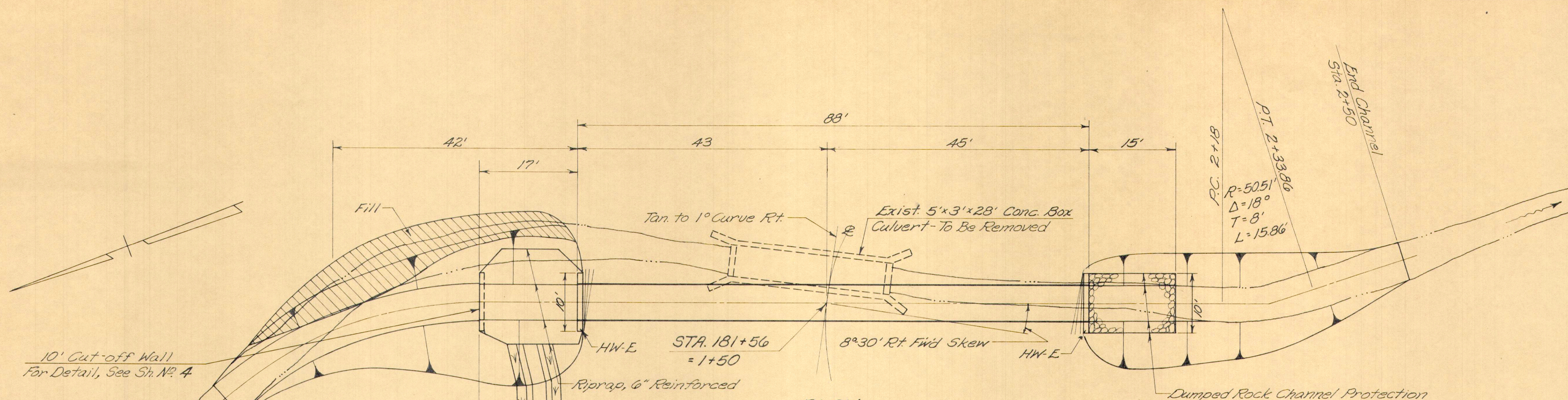
Area: 15 acres
Q₂₅: 36 c.f.s.



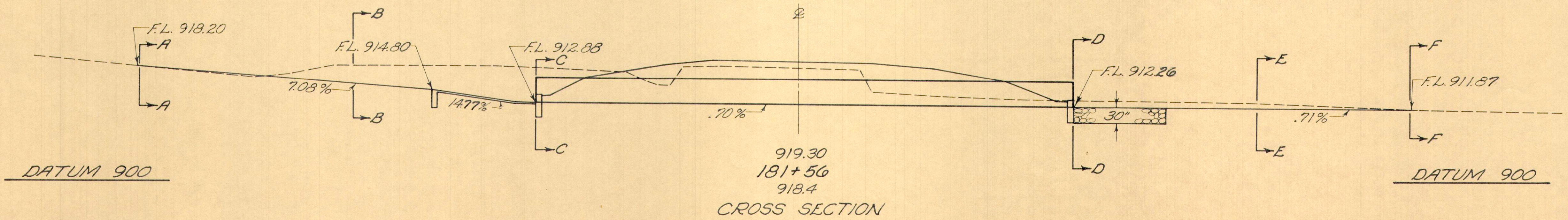
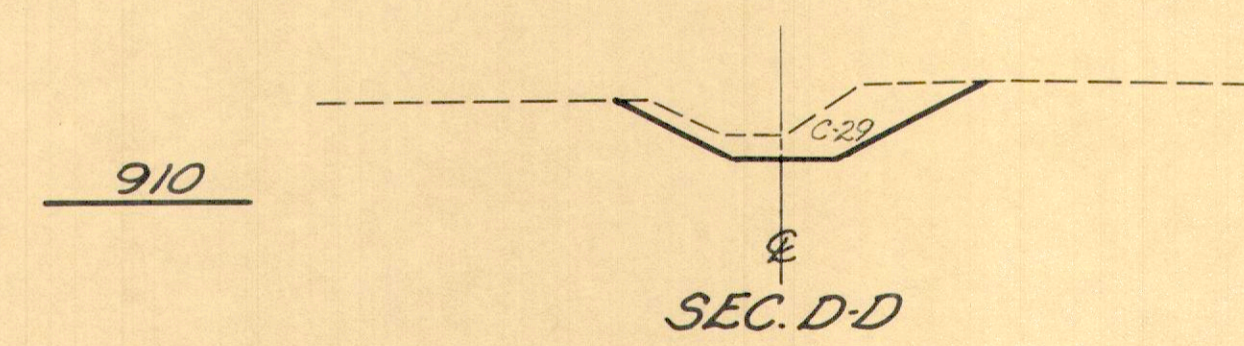
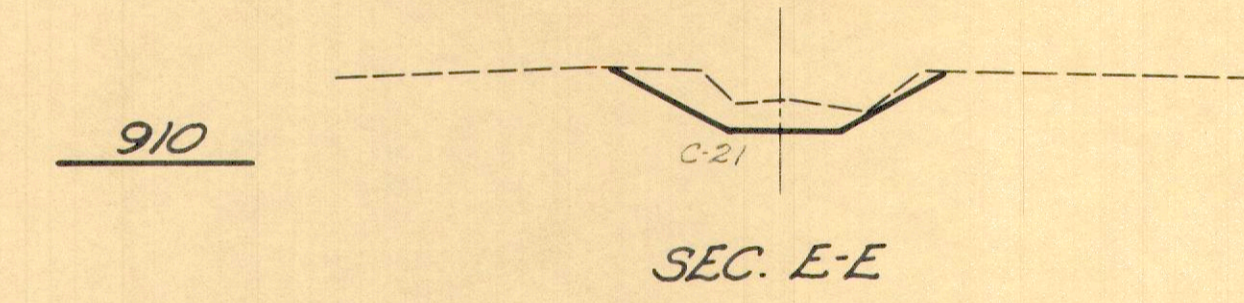
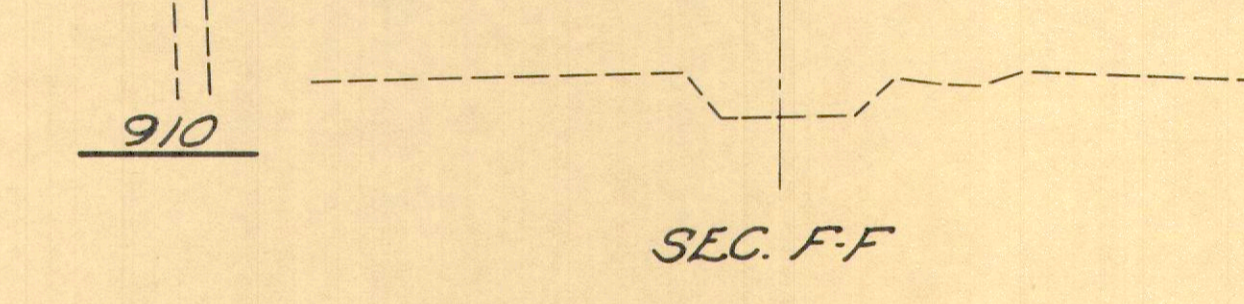
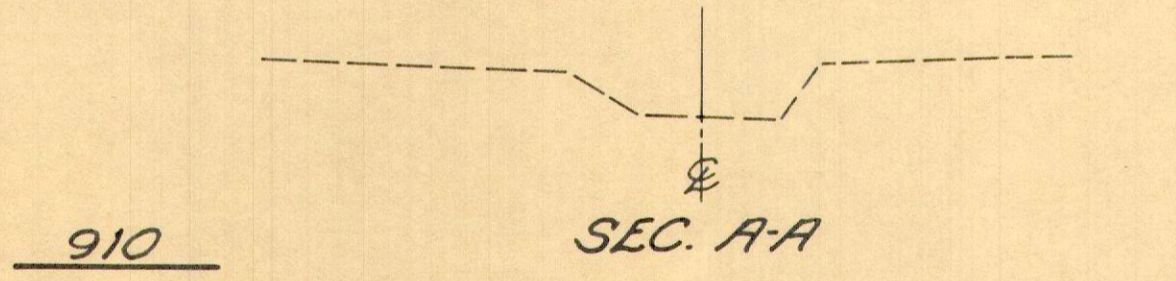
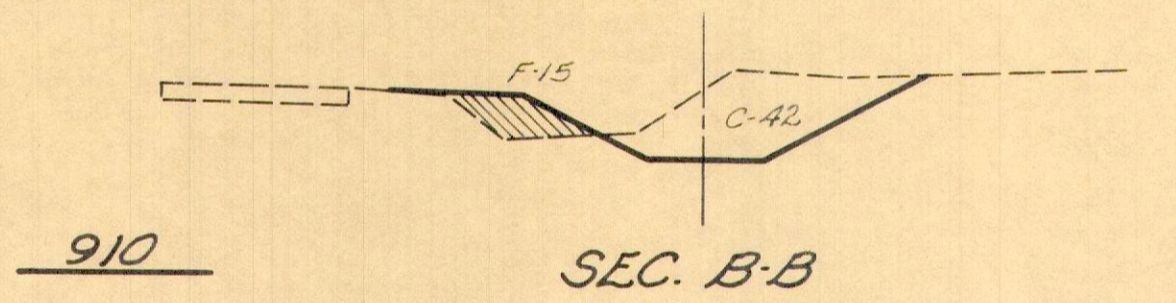
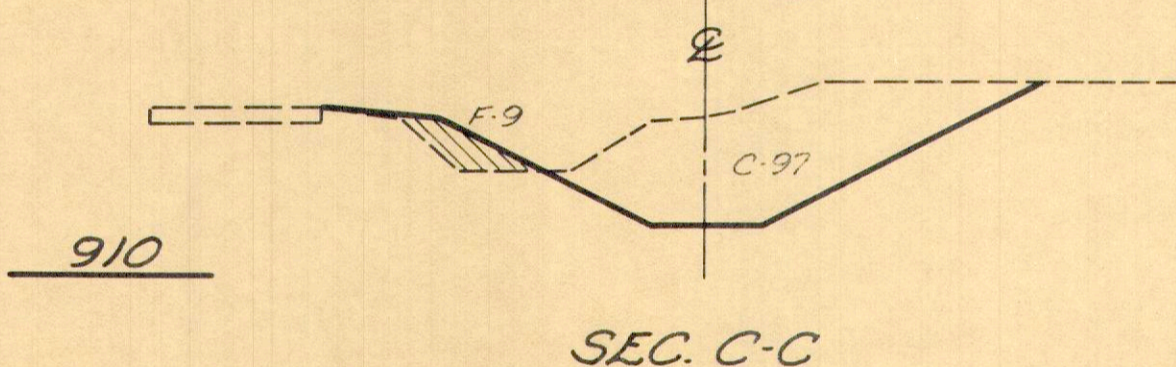
CROSS SECTION

Scale In Feet
0 5 10

STA. 173+00
30" x 142' CONDUIT



PLAN
Scale In Feet
0 5 10

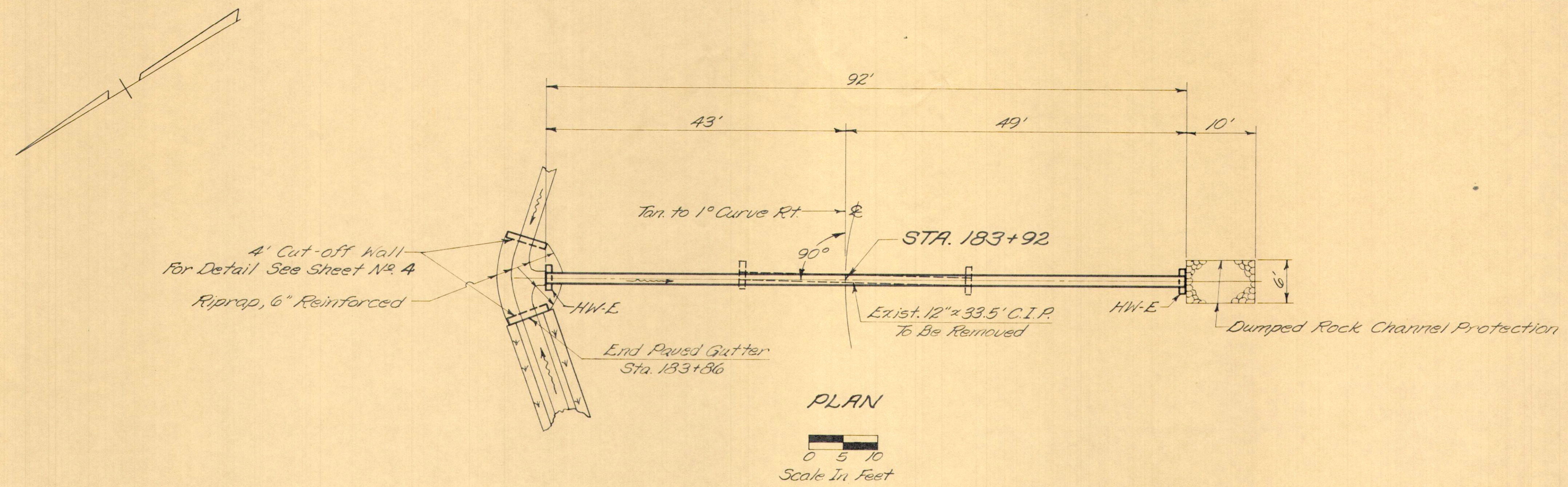


CROSS SECTION
Scale In Feet
0 5 10

QUANTITIES

48" x 76" Conduit, Type A with C.I. B Bedding, 706.04, C.I. HE II	88 Lin. Ft.
Concrete Masonry	2.62 Cu. Yd.
Existing Structure Removed	Lump Sum
Riprap, 6" Reinforced	28 Sq. Yds.
Dumped Rock Channel Protection	14 Cu. Yds.
Excavation	142 Cu. Yds.
Embankment	23 Cu. Yds.
Paved Gutter, Type 1-2	26 Lin. Ft.
Sodding	9 Sq. Yds.
Area: 74 acres	
Q25: 144 c.f.s.	

STA. 181+56
48" x 76" x 88' CONDUIT



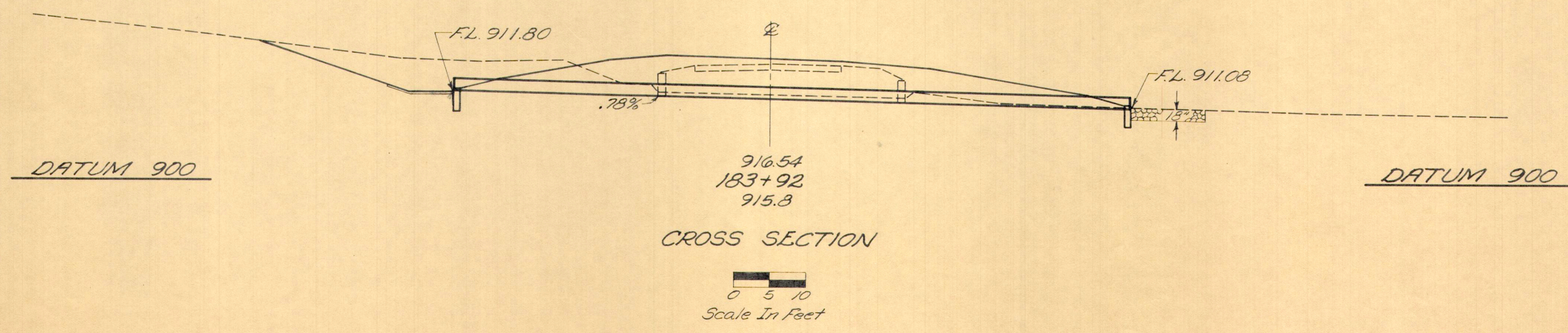
PLAN
0 5 10
Scale In Feet

QUANTITIES

21" Conduit, Type A with Class B Bedding, 706.02 or 706.08
 Concrete Masonry
 Dumped Rock Channel Protection
 Riprap, 6" Reinforced

92 Lin. Ft.
 6.72 Cu. Yds.
 3 Cu. Yds.
 10 Sq. Yds.

Area : 4 acres
 Q₂₅ : 17 c.f.s.



CROSS SECTION
0 5 10
Scale In Feet

STA. 183+92
 21" x 92' CONDUIT