

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
HOL-39-15.04
HOLMES COUNTY
HARDY TOWNSHIP

S-170-(3)

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		1/68

HOLMES COUNTY
HOL-39-15.04

CONVENTIONAL SIGNS

COUNTY LINE	-----
TOWNSHIP LINE	-----
SECTION LINE	-----
CORPORATION LINE	-----
CENTER LINE	-----
PROPERTY LINE	-----
POLE LINE	-----
FENCE LINE	-----
RAILROADS	-----
GUARD RAIL	-----
DRAIN PIPE	-----

Telephone ♂ Electric ♂

New Old

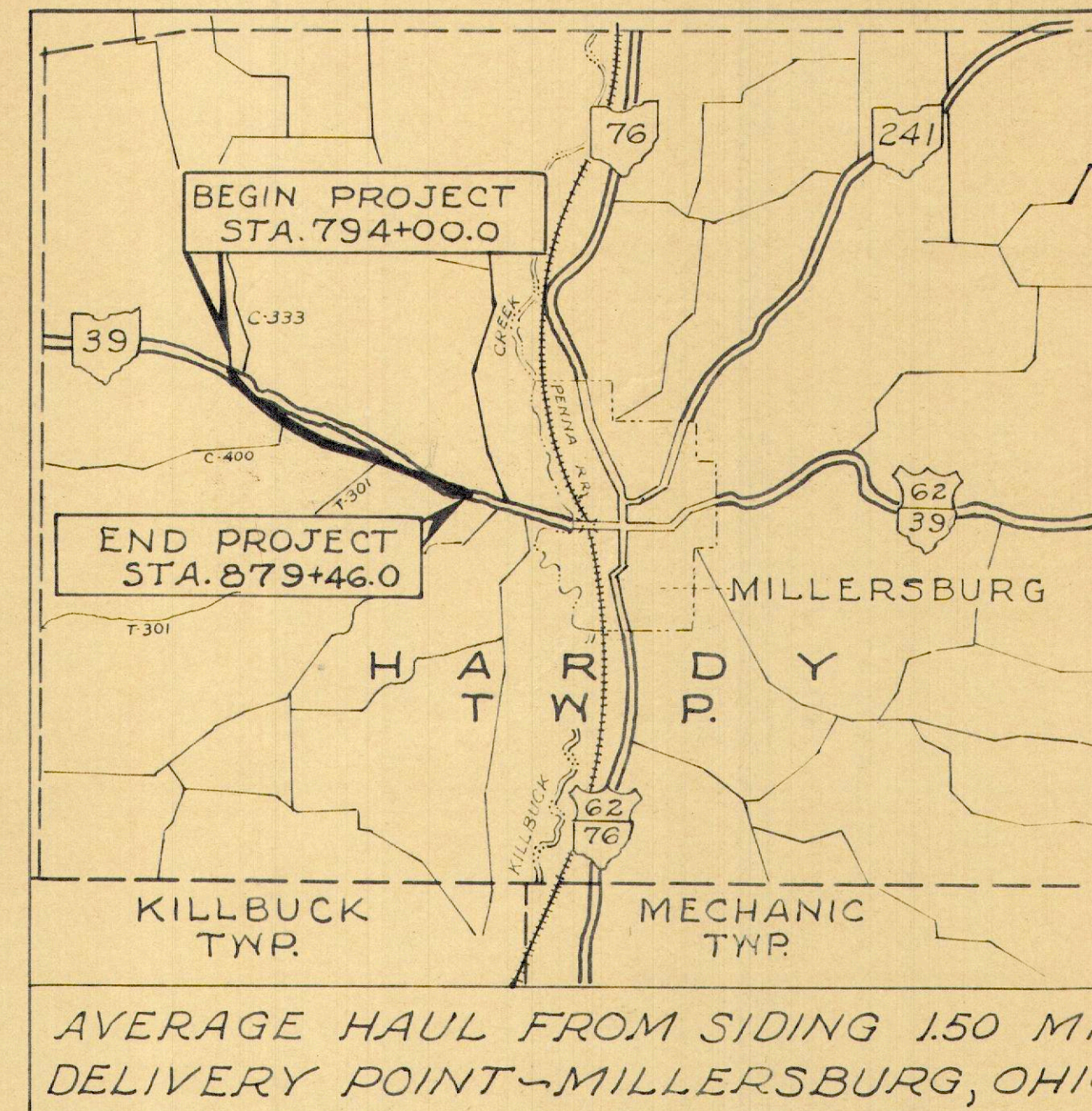
New Old

INDEX OF SHEETS

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LINE DATA

BEGIN PROJECT	STA. 794+00.0
END PROJECT	STA. 879+46.0
NO ADDITIONS OR DEDUCTIONS	
NET LENGTH OF PROJECT	8546.00 LIN. FT. OR 1.618 MILES
ADD FOR WORK :-	
STA. 793+00.0 TO STA. 794+00.00	100.00 LIN. FT.
APPROACH --- STA. 846+00 LT.	337.23 LIN. FT.
APPROACH --- STA. 849+60 RT.	336.76 LIN. FT.
STA. 879+46.0 TO STA. 880+00.00	54.00 LIN. FT.
TOTAL	827.99 LIN. FT.
NET LENGTH OF WORK	9373.99 LIN. FT. OR 1.775 MILES



LOCATION PLAN

SCALE IN MILES

PORTION TO BE IMPROVED

FEDERAL ROADS

STATE ROADS

OTHER ROADS

SCALE IN FEET

PLAN

PROFILE-HORIZONTAL

PROFILE-VERTICAL

CROSS SECTIONS

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 here by approve these plans and declare that the making of this improvement will not require the closing to traffic of the highway and that provisions for the maintenance and safety of traffic will be as set forth in these 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

DR-1	1-3-55	L-3A	4-1-50	AS-1-54	7-5-62
G-7.07	6-1-56	RI-1	7-15-58	FSB-1-62	1-15-63
HY-E	2-1-63	T-35	1-2-63	CS-1-54	4-1-63
I-8 CB-2-2A	2-1-63	FACI-1	3-8-63	A-1-54	12-1-54
I-14G	1-22-52	FACI-2	3-8-63	P-1-54	2-2-59
I-15 N#1	11-15-60	I-1	11-15-60		
I-15 N#2-A	8-17-60				
L-1	4-1-50				
L-3	4-1-50				

SUPPLEMENTAL SPECIFICATIONS

S-101	7-12-62

FILE No	HOLMES COUNTY HOL-39-15.04 Date of Letting ----- 19-- Contract No
---------	--

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

APPROVED:

DIVISION ENGINEER

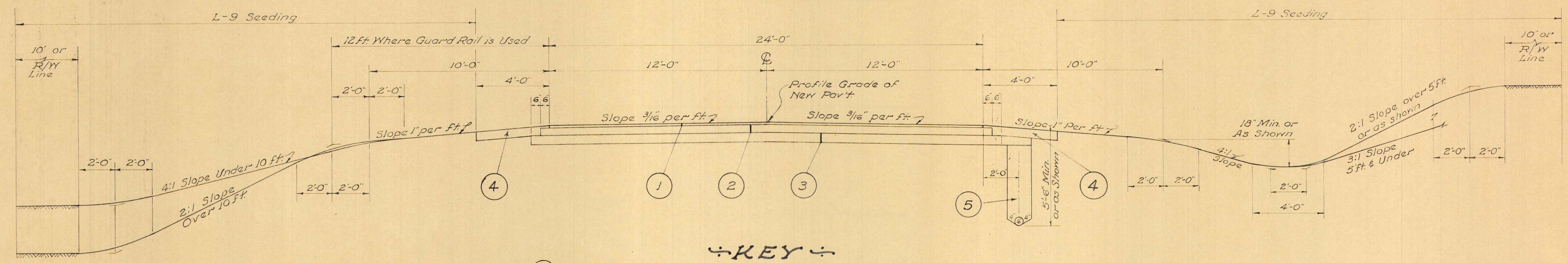
DATE

TYPICAL SECTION TYPE -T-35 ON B-21

SCALE - $\frac{3}{8}'' = 1'-0''$

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

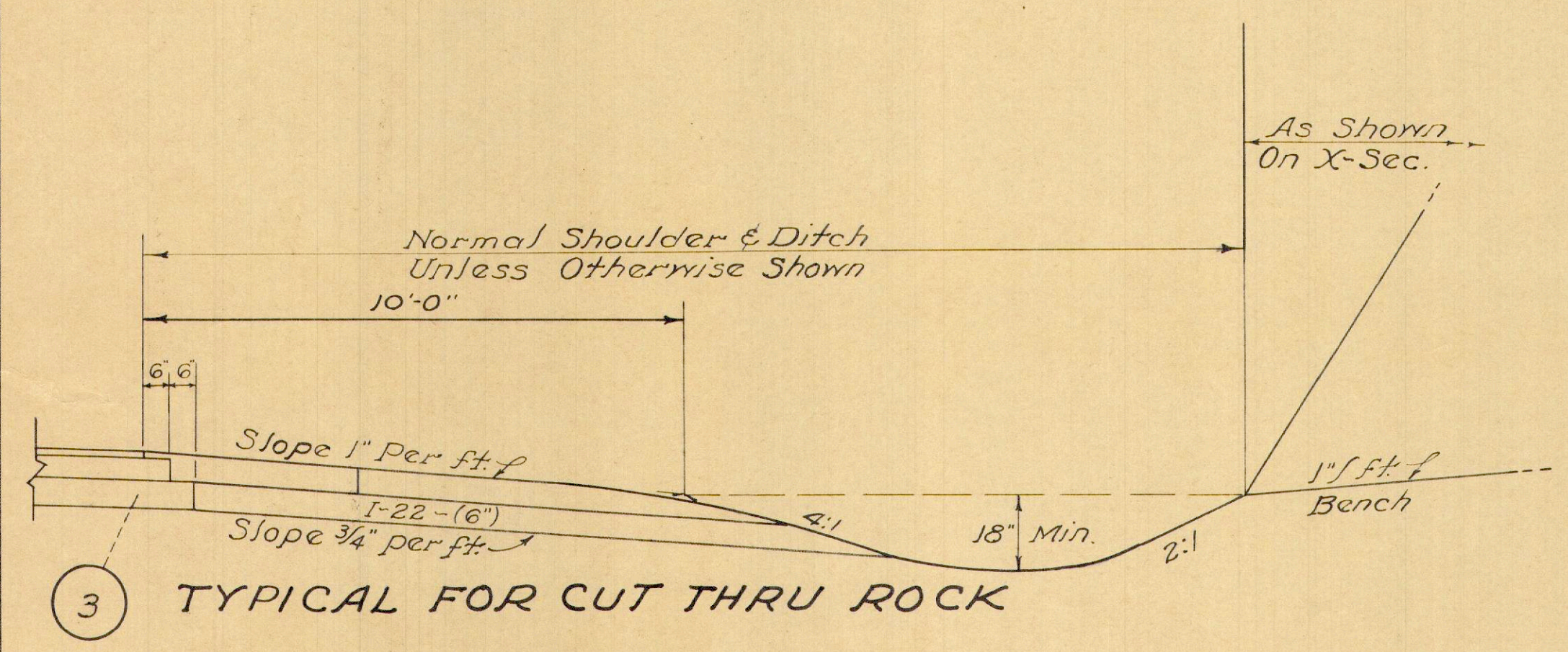
2
68
HOL-39-15.04



÷ KEY ÷

- 1 - ITEM - T-35 $\frac{3}{4}$ " Asphaltic Concrete Surface Course Type "C" (70-85)
- 2 - ITEM - B-21 $\frac{3}{5}$ " Waterproofed Aggregate Base Course
- 3 - ITEM - I-22-6" Subbase
- 4 - ITEM - I-18-6" Crushed Aggregate Shoulders, Stabilized With Calcium Chloride. (See note in proposal)
- 5 - ITEM - I-1 - 6" Pipe, Class I-3

*Thicknesses shown are "designed" thicknesses as described in Sections T-35.01 and B-21.01.

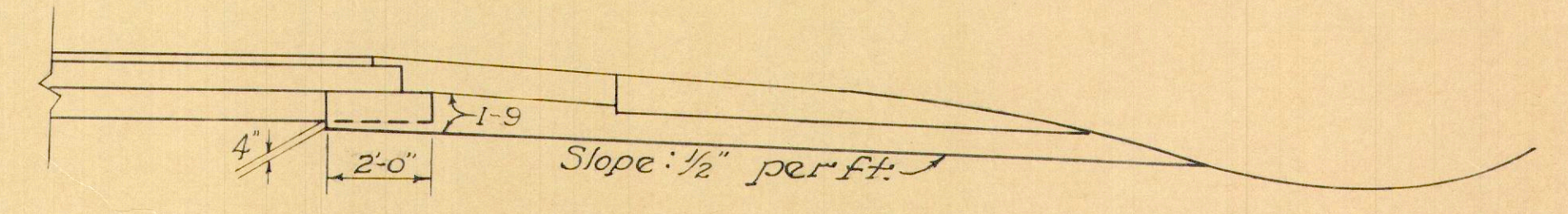


TYPICAL FOR CUT THRU ROCK

SUBBASE DRAINAGE-ROCK CUT

STA. 802+00 TO STA. 809+50 LT. = 750 L.F.
 STA. 802+00 TO STA. 805+50 RT. = 350 L.F.
 STA. 815+00 TO STA. 818+00 LT. = 300 L.F.
 TOTAL 1400 L.F.

ITEM I-22-Est. Quant., (1400x6.2 ov. E.A.)÷27 = 322 C.Y.
 (Quant. Carried to Sh.# 5)



STONE UNDERDRAIN DETAIL

No 2 Stone Under-drains shall be placed at (50) foot intervals on each side of normal crowned sections and at (25) foot intervals on the low side only of super-elevated sections, except where subbase is extended thru shoulder in rock cut and where Item I-1 Class I-3 Drains have been provided. Additional I-9 under-drains may be required and shall be constructed at locations determined by the Engineer. An estimated quantity of 4500 lin. ft. has been included in the General Summary for Item I-9. (Sh.#7)

LOCATION PLAN

STATE ROUTE 39-SEC.15.04

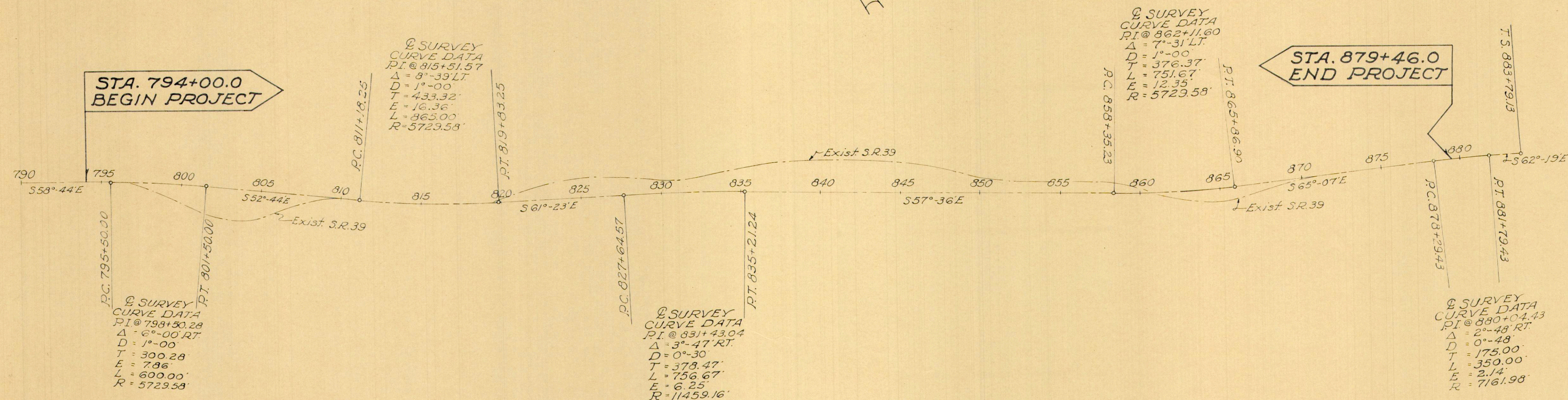
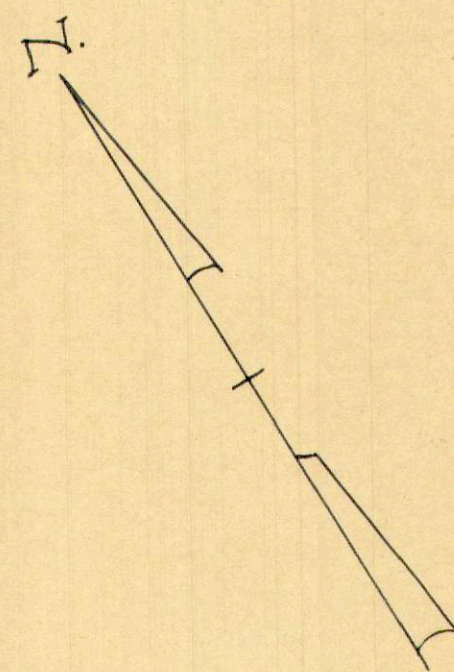
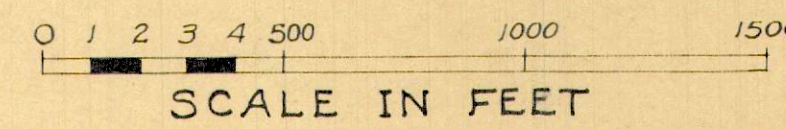
HARDY TOWNSHIP

HOLMES COUNTY- OHIO

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

3
68

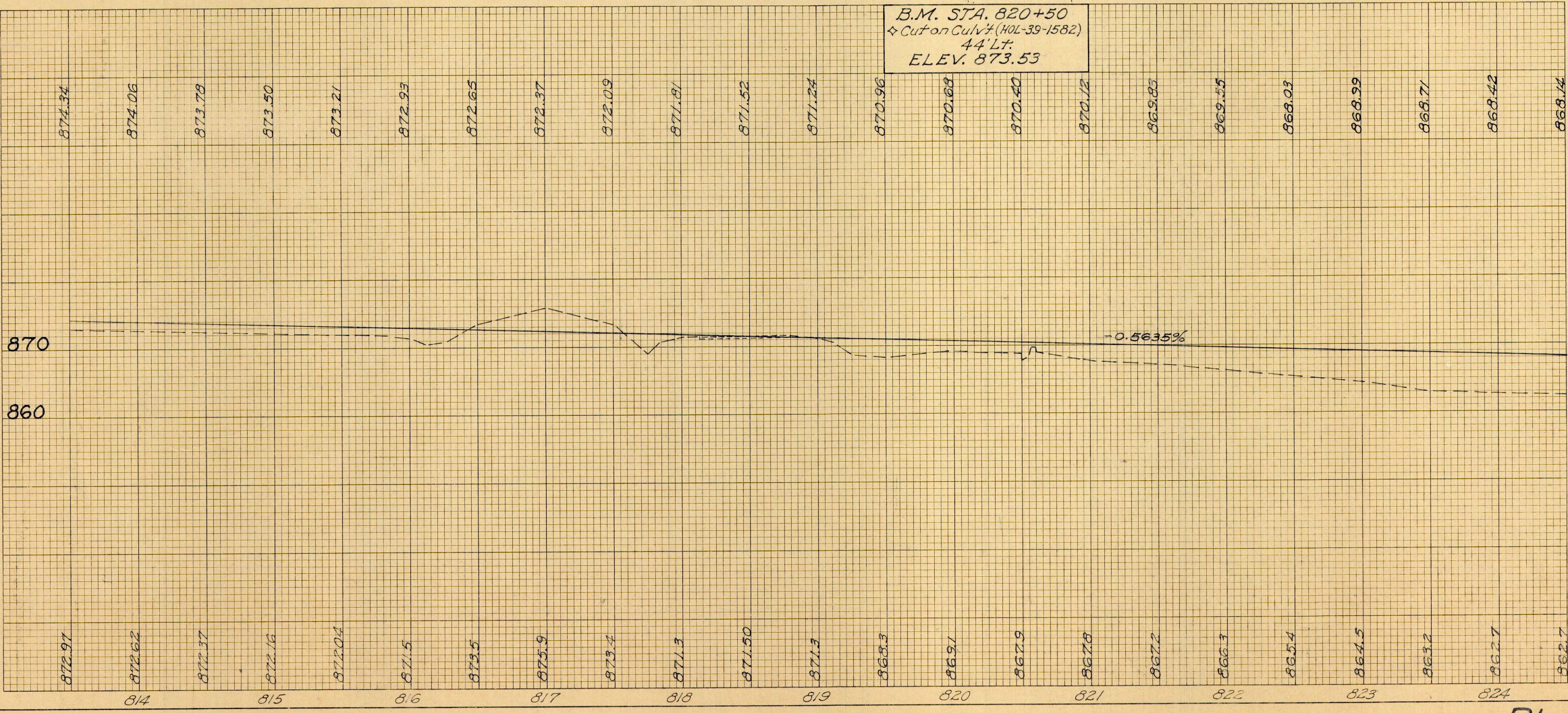
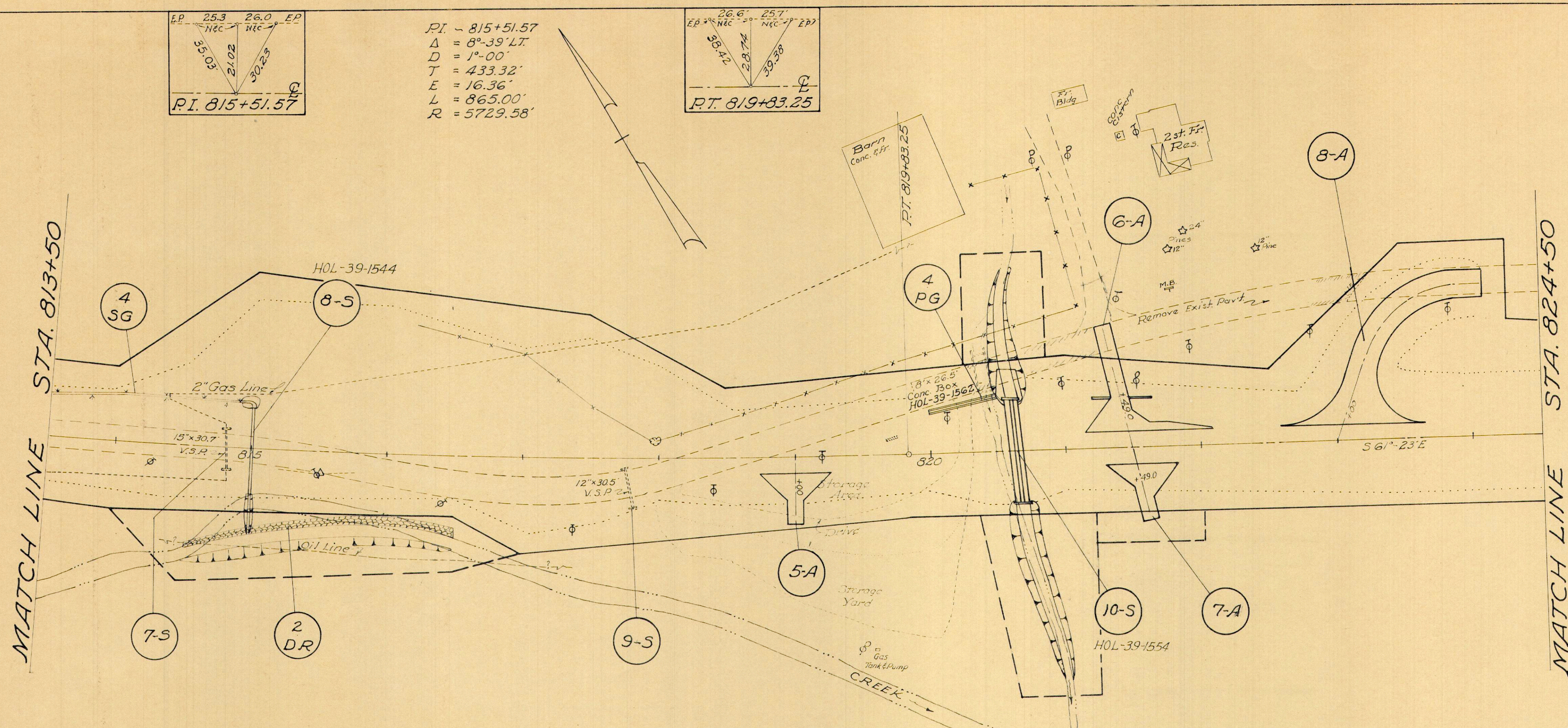
HOL-39-15.04



CENTER LINE MONUMENT ASSEMBLIES WILL BE SET ON CENTER LINE DURING CONSTRUCTION AT THE FOLLOWING STATIONS:

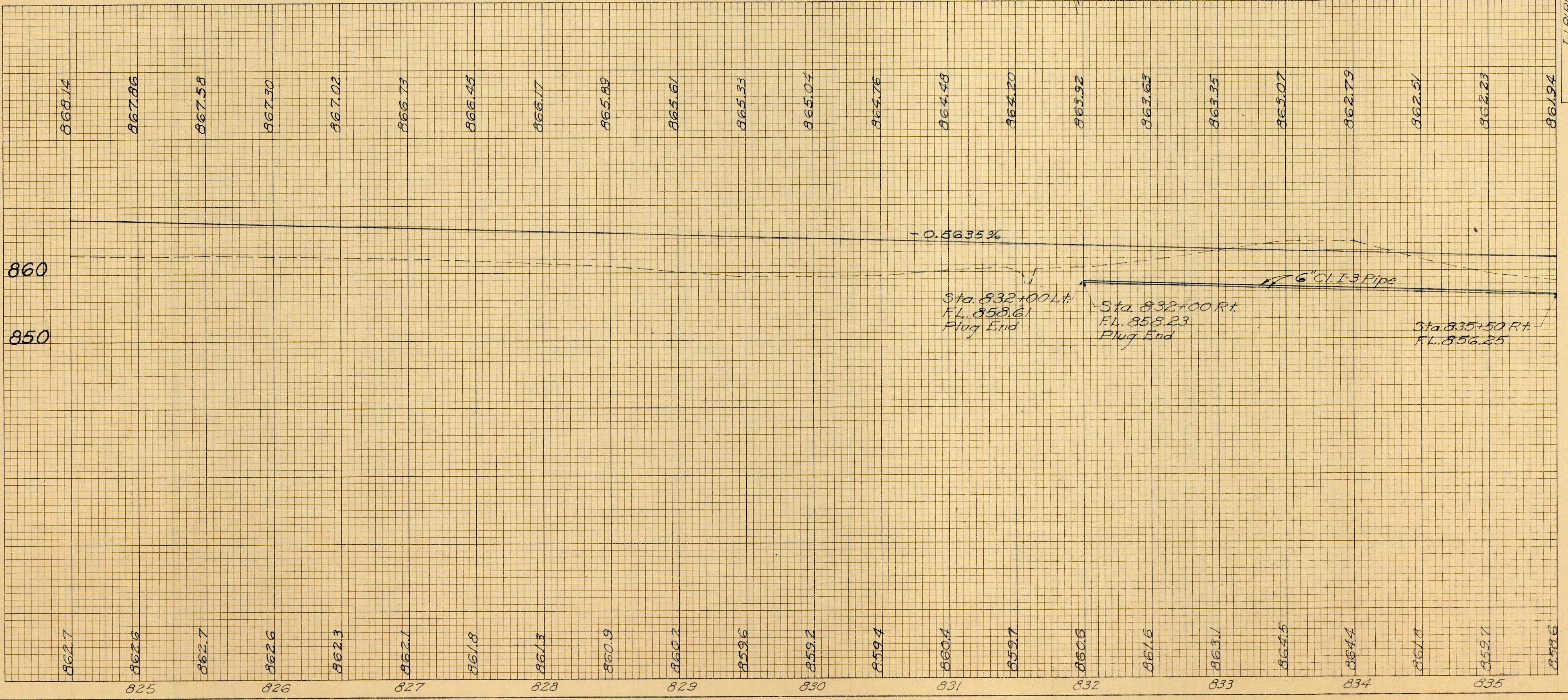
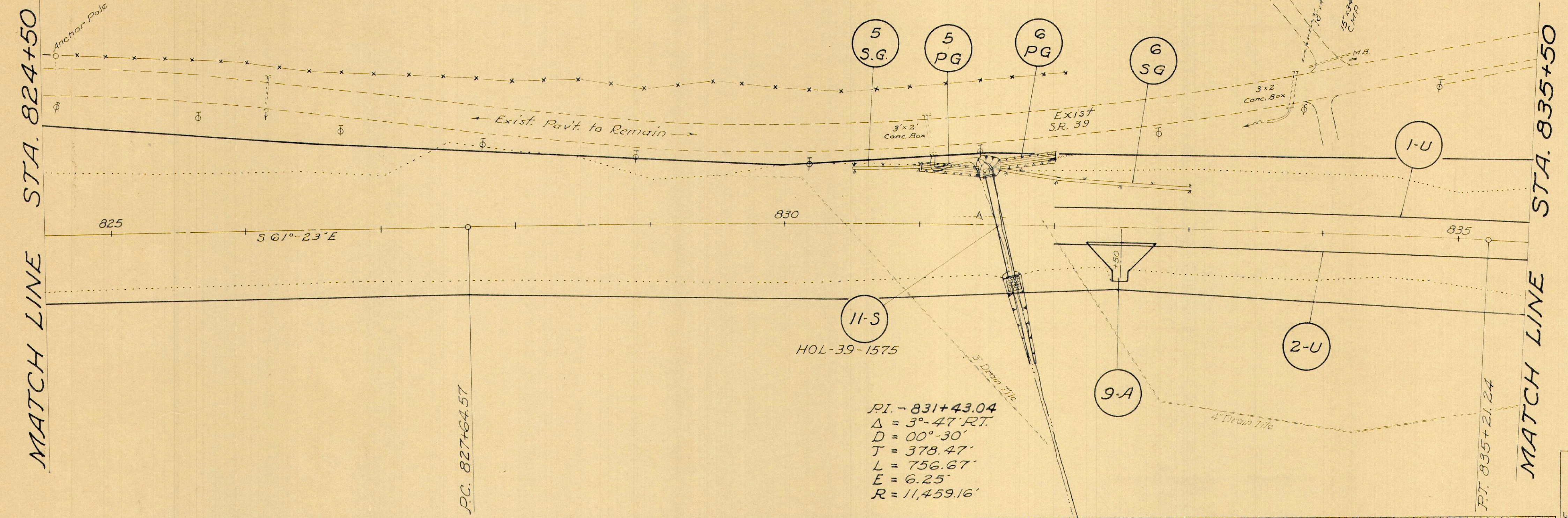
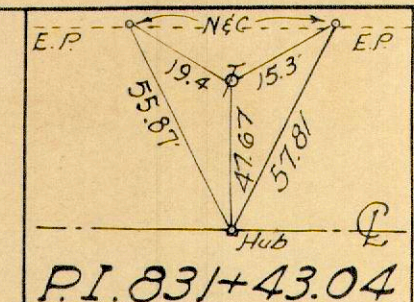
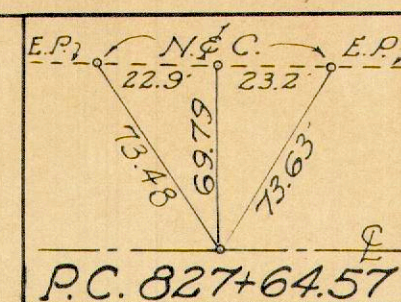
STATION	794+00	STATION	858+35.23 (P.C.)
"	795+00.0 (P.C.)	"	862+00
"	801+50.0 (P.T.)	"	865+86.90 (P.T.)
"	806+00	"	872+00
"	811+18.25 (P.C.)	"	878+29.43 (P.C.)
"	815+50		
"	819+83.25 (P.T.)		
"	824+00		
"	827+64.57 (P.C.)		
"	835+21.24 (P.T.)		
"	841+00		
"	847+00		
"	853+00		

NOTE :- One (1) Monument (assembly) shall be placed at each station shown herein.
 I-8 Monument Assemblies = 18 each.
 (Quant. Carried to Sh.# 6)



REF. NO.	STATION TO STATION	SIDE	B-19 AGG. BASE C.Y.	T-30 PRIME COAT GAL.	T-35 ASPHALT CONC. SURFACE C.Y.	1-10 RIPRAP 6\"	1-10 DUMP ROCK CHAIN PROTECT. 15\"	CLASS-A 53\" ASPHALT CONC. 1\" MIN. CURB MET. JOINT 2\" MIN. JOINT	TYPE-1 PAVED GUTTER L-10 SODDING 1-2 MASONRY EXC. CHAM	E-9 EXIST. PAVT. RIGID FLEX S.Y.	E-8 EXIST. PAVT. RIGID FLEX S.Y.	S-24 EXIST. STRUCT. STRUCT. UNDER	S-22 EXIST. STRUCT. UNDER	E-12 EXIST. STRUCT. UNDER	SEE SHEET NO.	
5-A	813+00	RT.	12.3												34	
6-A	821+49	LT.	25.8	70	9.7	4.4									35	
7-A	821+49	RT.	14.2												34	
8-A	823+00	LT.	91.3	180	25										36	
7-S	814+82	C													11	
8-S	815+00	E													49	
9-S	817+80	RT.													11	
10-S	820+64	E													50	
4-SG	813+50 TO 814+95	LT.														
4-PG	820+00 TO 820+47	LT.														
2-DR	814+50 TO 816+50	RT.														
EXISTING PAVT. REMOVAL 819+95 TO 823+15																
EXISTING PAVT. REMOVAL 813+50 TO 819+95																
TOTALS			143.6	250	34.7	66	91	44	47	114	3.8	548	136	308	6.0	61

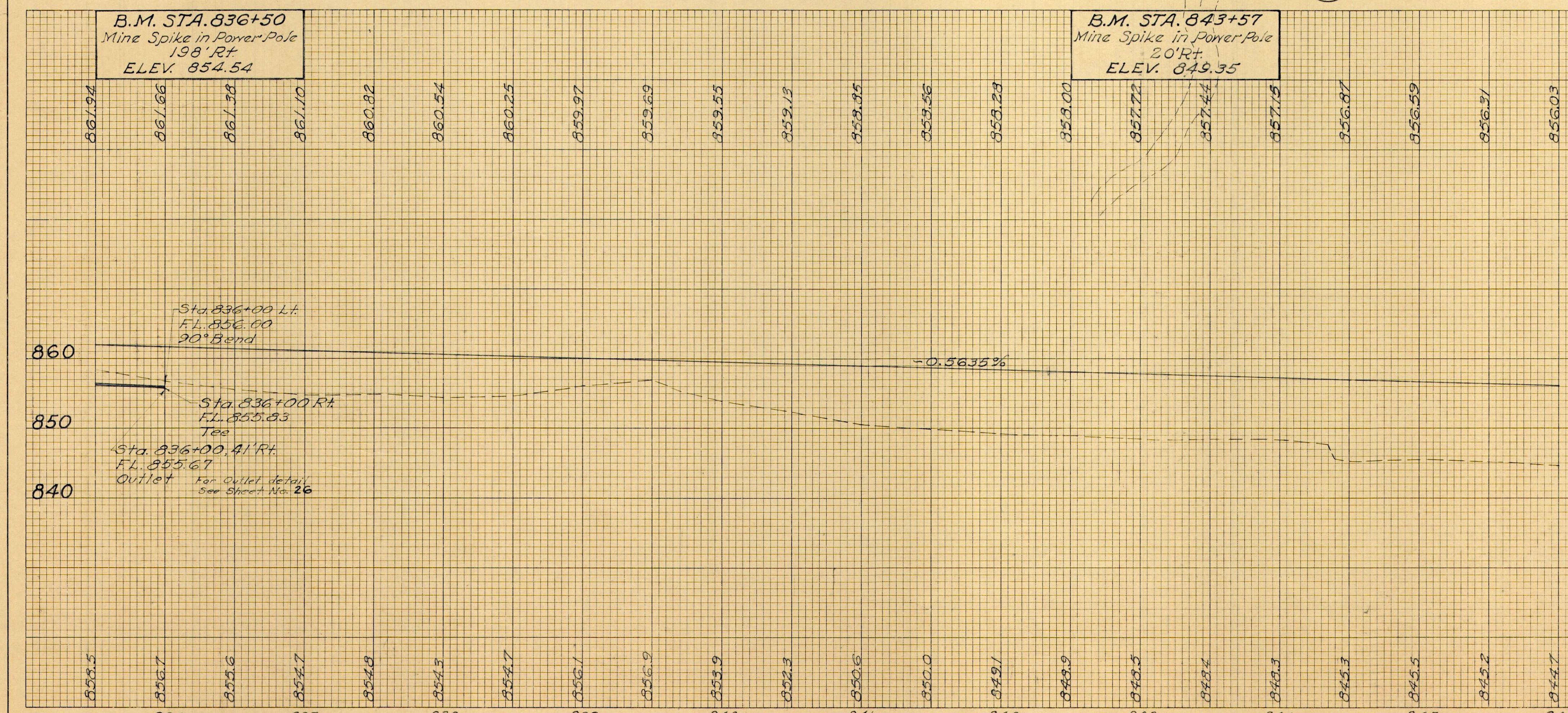
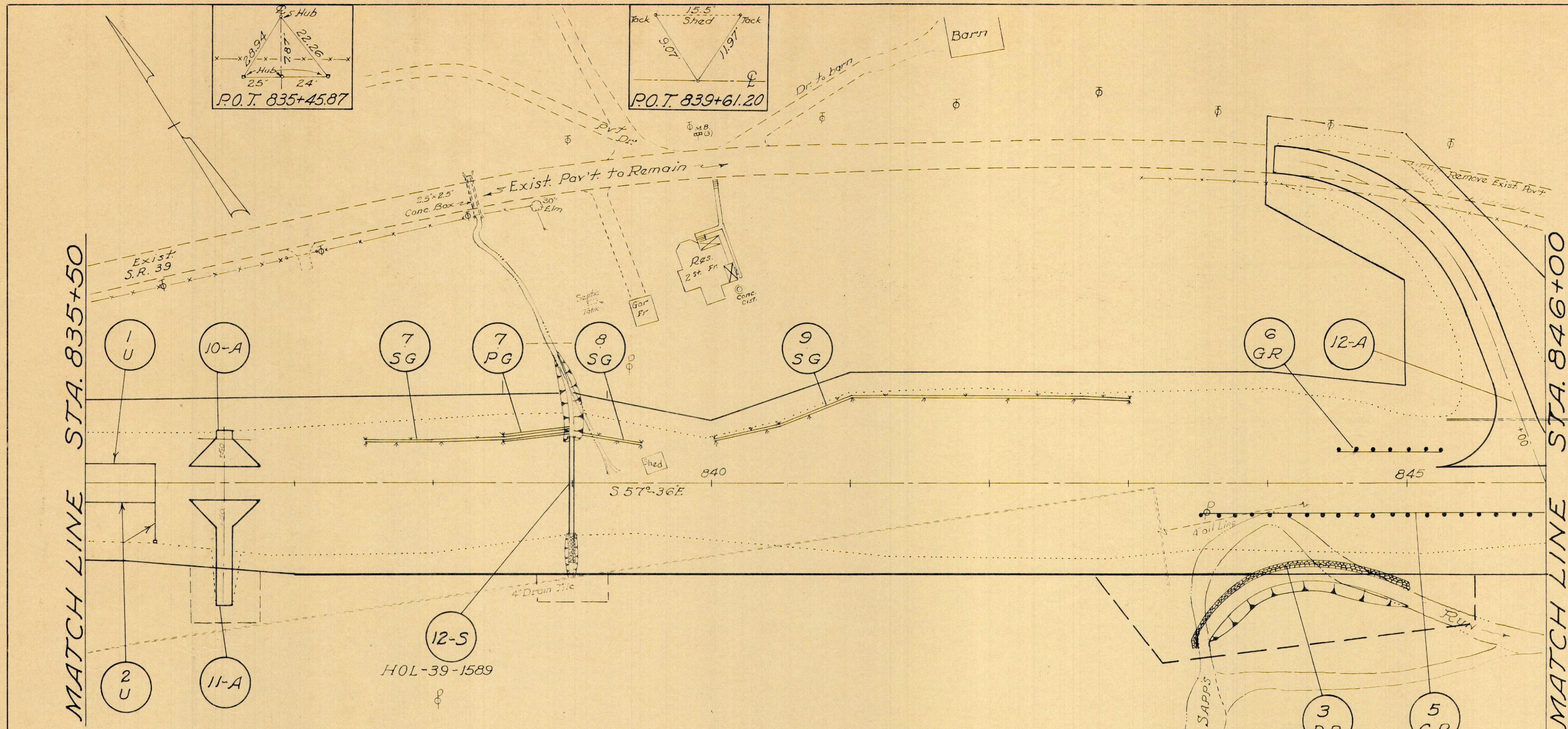
PLAN & PROFILE -- STA. 813+50 TO STA. 824+50



REF. NO.	STATION TO STATION	SIDE	R-10 ACGR BASE	1-2 MASONRY	F-3 CHAN. EXCH.	1-10 RIP. RAP 6" REINF'D	1-10 DUMP TRUCK CHAIN PROTECT	CLASS	60"x30" ELLIP. CONC. MANHOLE OR 60"x40" CONC. METAL ARCH (P.C. 10'x10')	TYPE 1 PAVED GUTTER	7-10 SODDING
			C.Y.	C.Y.	C.Y.	S.Y.	C.Y.	L.F.	L.F.	L.F.	S.Y.
9-A	832+50	RT.	10								34
11-S	831+59	℄			9	17	14				51
5-SG	830+50 TO 831+00	LT.									34
6-SG	831+57 TO 833+00	LT.									96
5-PG	831+00 TO 831+43	LT.									43
6-PG	831+57 TO 832+00	LT.									15
1-U	832+00 TO 835+50	LT.						350			43
2-U	832+00 TO 835+50	RT.						350			15
TOTALS			10	19	9	17	14	700	78		86
											160

PLAN & PROFILE -- STA. 824+50 TO STA. 835+50

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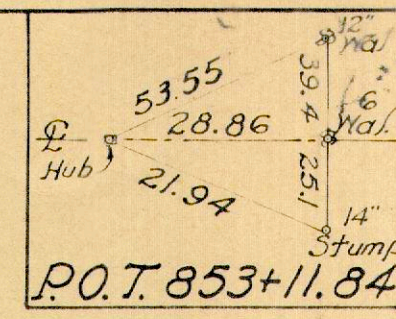
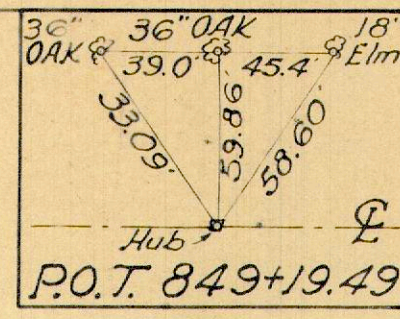


REF. NO.	STATION TO STATION	SIDE	B-19 AGGR. BASE	T-30 PRIME COAT	T-35 ASPHALT CONC. SURF.	GUARD RAIL STEEL BEAM (DEEP)	I-10 DUMP ROCK CHAN. PROTECT.	I-1 PIPE	I-3 PIPE SHEET	SODDING	MASONRY	E-3 CHAN. EXAM.	PAVED GUTTER TYPE	REMOVE-EXIST. PAVT. RIGIDITY	SEE SHEET NO.
10-A	836+50	L.I.	9.6					CL. F-4	CL. J-1						34
11-A	836+50	R.I.	20.7					CL. F-4	CL. J-1						34
12-A	846+00	L.I.	166.0	326	45.2			CL. F-4	CL. J-1						36
12-S	839+00	R.						CL. F-4	CL. J-1	10	1.2	105			52
7-SG	837+50 TO 838+50	L.I.						CL. F-4	CL. J-1	67					
8-SG	839+03 TO 839+50	L.I.						CL. F-4	CL. J-1	32					
9-SG	840+00 TO 843+00	L.I.						CL. F-4	CL. J-1	203					
7-PG	838+50 TO 838+97	L.I.						CL. F-4	CL. J-1	16					
1-U	835+50 TO 836+00	L.I.						CL. F-4	CL. J-1						
2-U	835+50 TO 836+00	R.I.						CL. F-4	CL. J-1						
3-DR	843+50 TO 845+00	R.I.						CL. F-4	CL. J-1						
EXIST. PAVT. REMOVAL															
845+10 TO 846+00															27
5-GR	843+49.65 TO 846+00	R.I.				250.35									
6-GR	844+50 TO 845+25	L.I.				75.00									
TOTALS			196.3	326	45.2	325.35	110	92	36	70	100	46	10	2	
										328	1.2	177	47	30	
															106.92

PLAN & PROFILE -- STA. 835+50 TO STA. 846+00

EXISTING BRIDGE DATA
 TYPE: Conc. Beam
 SPAN: 40' (1) - (Clear)
 ROADWAY: C.T.C. = 19'-8" Width % 22'-6"
 LOADING: 15 Ton - H-15
 SKEW: Tan. 35° L.F.
 CONDITION: Poor
 LOCATED: 160' Ft. Downstream
 TO BE REMOVED -- Yes
 BRIDGE N^o HOL-39-1610

PROPOSED STRUCTURE
 TYPE: Continuous Reinforced Conc.
 Slab with Capped Pile Piers & Abut
 SPANS: 28'-35'-28' % Bearings
 ROADWAY: 44'-0" 1/2 Guard-rail
 LOAD FREQUENCY: C.F.-130 (57)
 SKEW: 30° L.F.
 YEARNING SURFACE: 1" Mono. Conc.
 APPROACH SLABS: A3-J-54 (25 long)
 ALIGNMENT: Tangent
 BRIDGE N^o HOL-39-1606

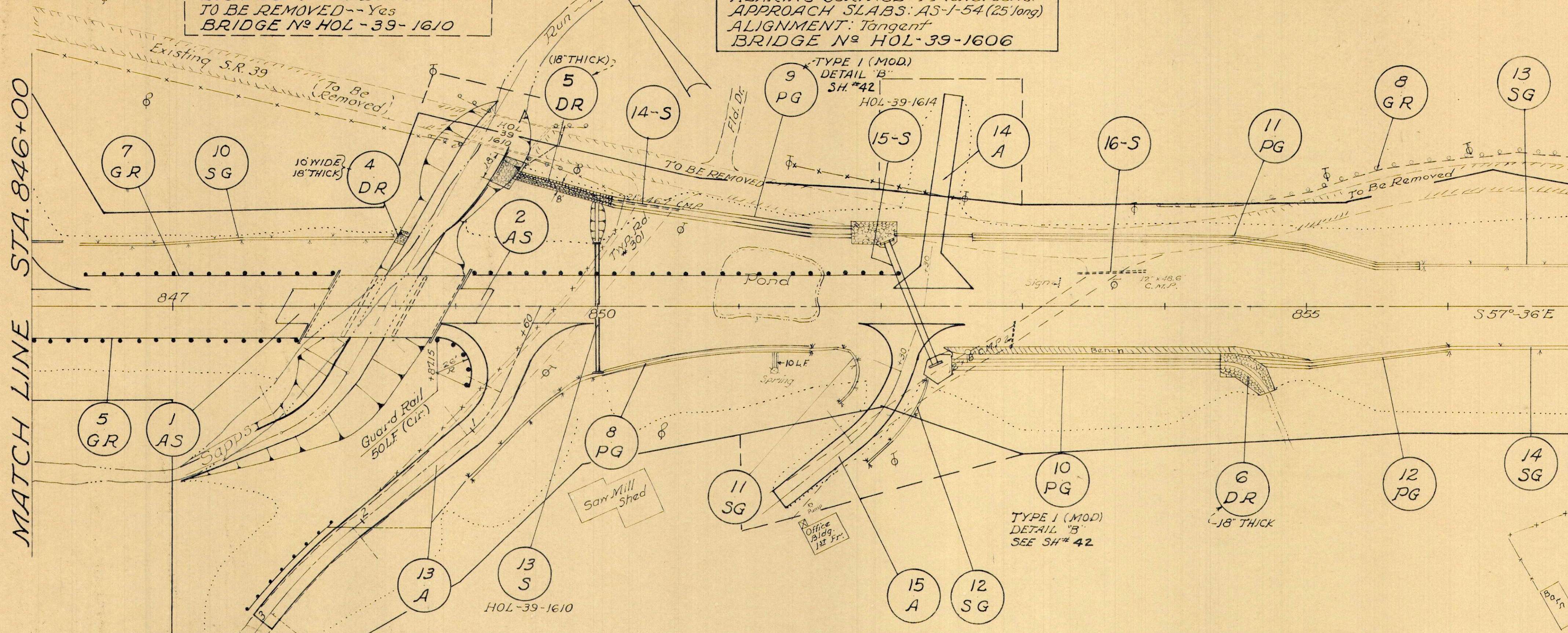


FED. RD. DIVISION	STATE	PROJECT	14 68
2	OHIO		

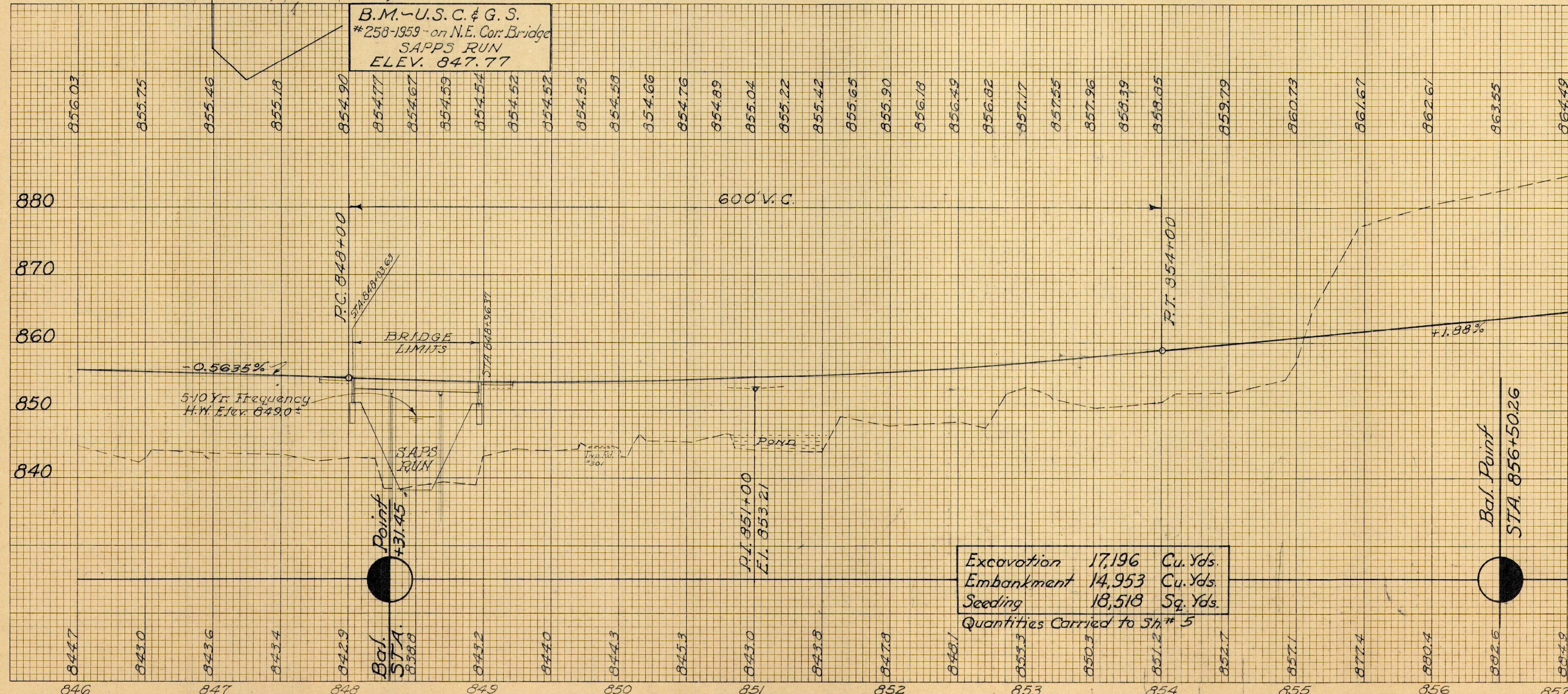
HOL-39-15.04

MATCH LINE STA. 846+00

MATCH LINE STA. 857+00



B.M. - U.S.C. & G.S.
 #258-1959 - on N.E. Cor. Bridge
 SAPP'S RUN
 ELEV. 847.77

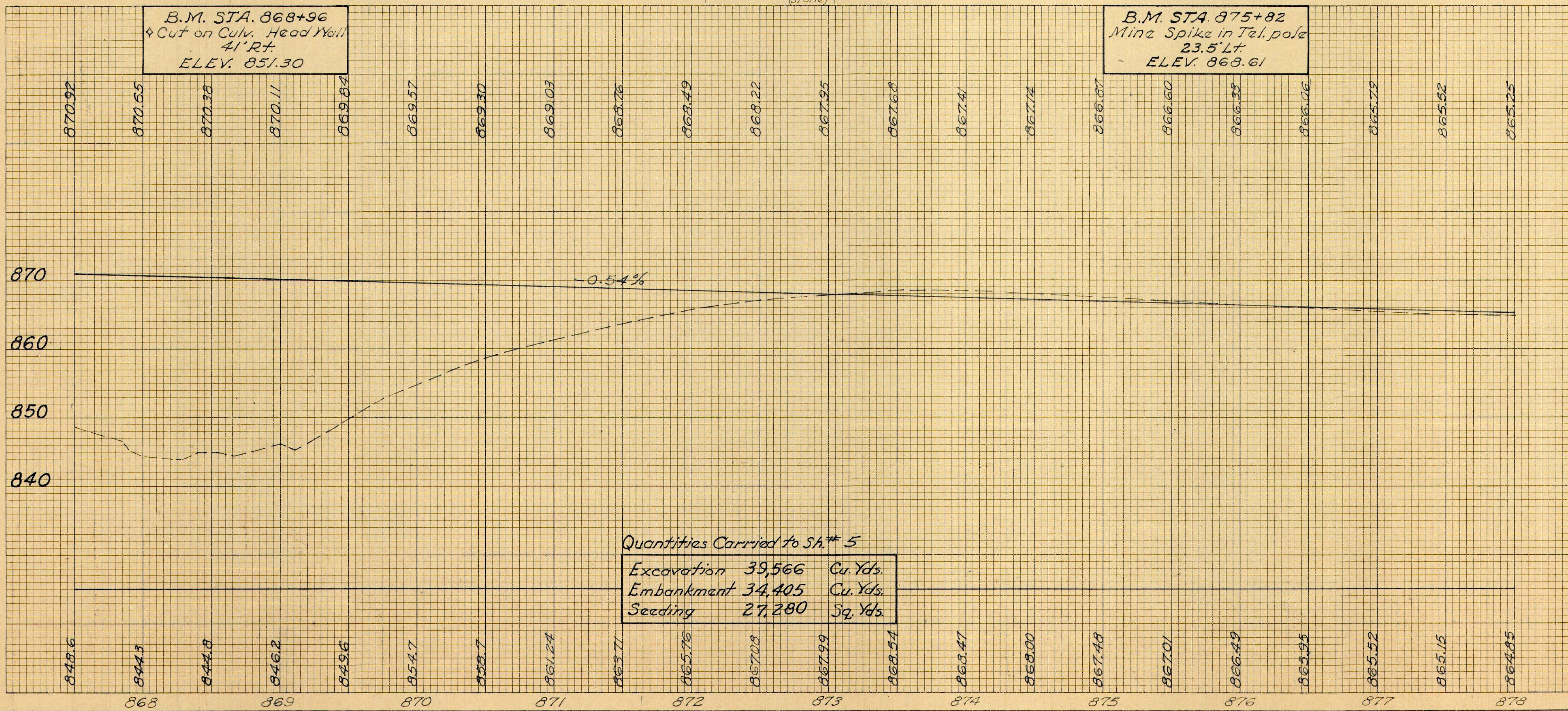
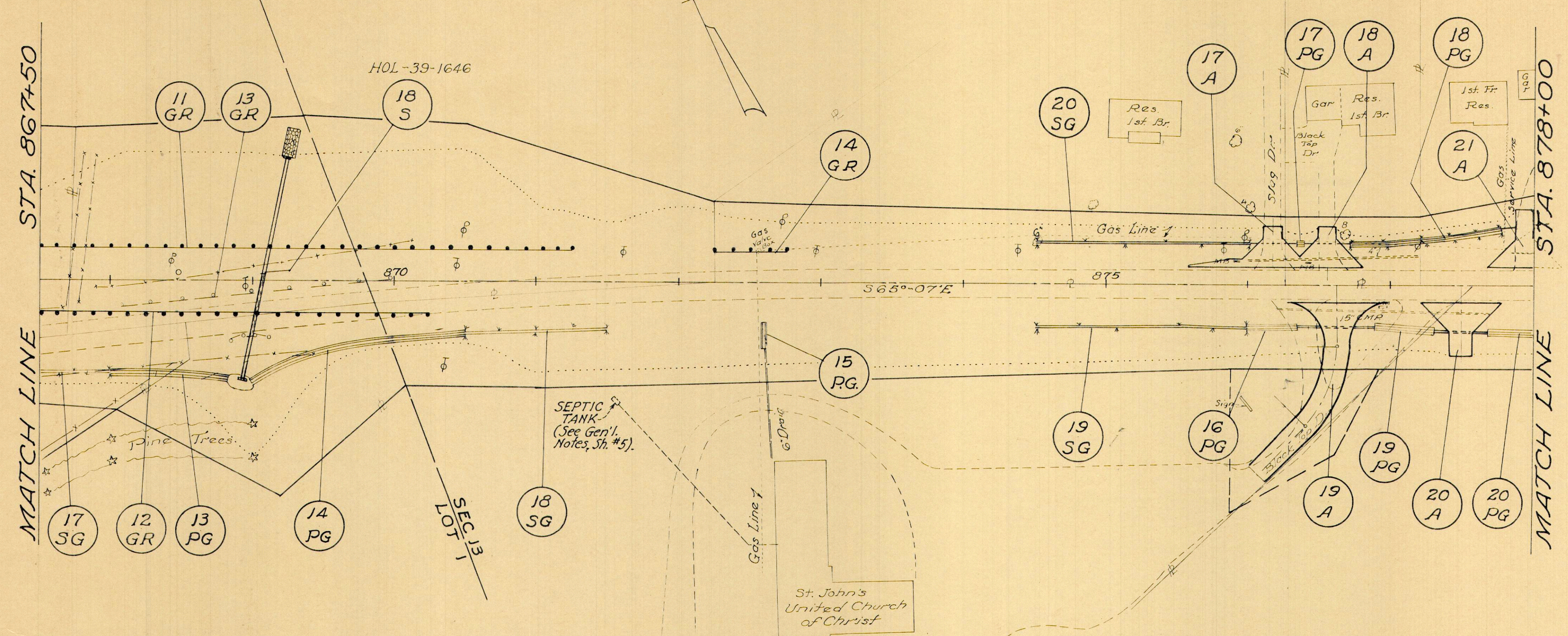
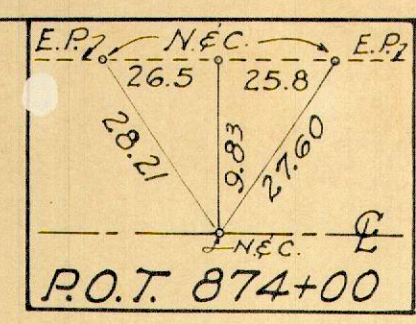


Excavation 17,196 Cu. Yds.
 Embankment 14,953 Cu. Yds.
 Seeding 18,518 Sq. Yds.
 Quantities Carried to Sh# 5

REF. NO.	STATION TO STATION	SIDE	B-19 AGG BASE C.Y.	T-90 PRIME COAT G.A.L.	T-35 ASPHALT CONC. SURF. C.Y.	I-7 REINF. CONC. APPR. SLABS S.Y.	I-8 MONU. RESET EACH	I-10 RIP-RAP REINF'D. PROTECT. 6" S.Y.	I-10 DUMP ROCK CHAN. C.Y.	CL. F-4 L.F.	I-1 PIPE CL. A-1 L.F.	CL. A-1 L.F.	CL. A-1 L.F.	PAVED GUTTER TYPE I MOD L.F.	L-10 SODDING L.F.	I-2 MASONRY C.Y.	E-3 CHAN. EXC. C.Y.	STEEL BEAM (DEEP) STP. L.F.	CL.R. L.F.	I-15 GUARD RAIL RIGID FLEX. S.Y.S.Y.	I-15 GUARD RAIL RIGID FLEX. S.Y.S.Y.	F-8 EXIST. PIPE OVER 15" UNDER 15" L.F.	F-12 PIPE OVER 15" UNDER 15" L.F.	REMOVE & DISPOSE	SEE SHEET NO.
13-A	846+00 TO 851+50	RT.	145	125	17.3					56															37
14-A	852+30 TO 857+00	RT.	72	48	6.6																				38
13-S	850+00 TO 850+35	S.						10	15																53
14-S	852+22 TO 852+43	L.T.						26	46																54
12-S	852+43 TO 852+63	L.T.																							14
10-SG	846+32 TO 848+58	LT.																							37
11-SG	851+50 TO 851+80	RT.																							38
12-SG	855+80 TO 857+00	LT.																							53
13-SG	856+00 TO 857+00	RT.																							54
4-DR	848+58 TO 848+66	LT.																							14
5-DR	849+32 TO 850+10	LT.																							14
6-DR	854+48 TO 854+78	RT.																							14
7-GR	846+00.00 TO 847+87.15	RT.																							14
8-GR	846+37.65 TO 852+12.85	LT.																							14
9-GR	853+94.00 TO 857+00.00	LT.																							14
EXIST. PART. REMOVAL	846+00 TO 851+50	L.T.																							
EXIST. PART. REMOVAL	854+50 TO 857+00	L.T.																							
EXIST. PART. REMOVAL	851+50 TO 854+50	S.																							
EXIST. PART. REMOVAL	847+82.63 TO 848+03.63	S.																							
EXIST. PART. REMOVAL	848+96.37 TO 849+21.37	S.																							
MONUMENT RESET (BRIDGE)			253	173	23.9	133.4	1	36	139	56	92	94	94	617	362	798	2.5	8	814.17	315	264	771	67	47	
TOTALS																									

PLAN & PROFILE -- STA. 846+00 TO STA. 857+00

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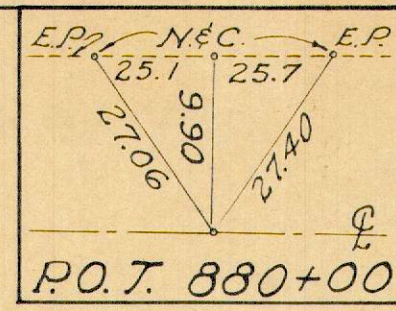


Quantities Carried to Sh.# 5
 Excavation 39,566 Cu. Yds.
 Embankment 34,405 Cu. Yds.
 Seeding 27,280 Sq. Yds.

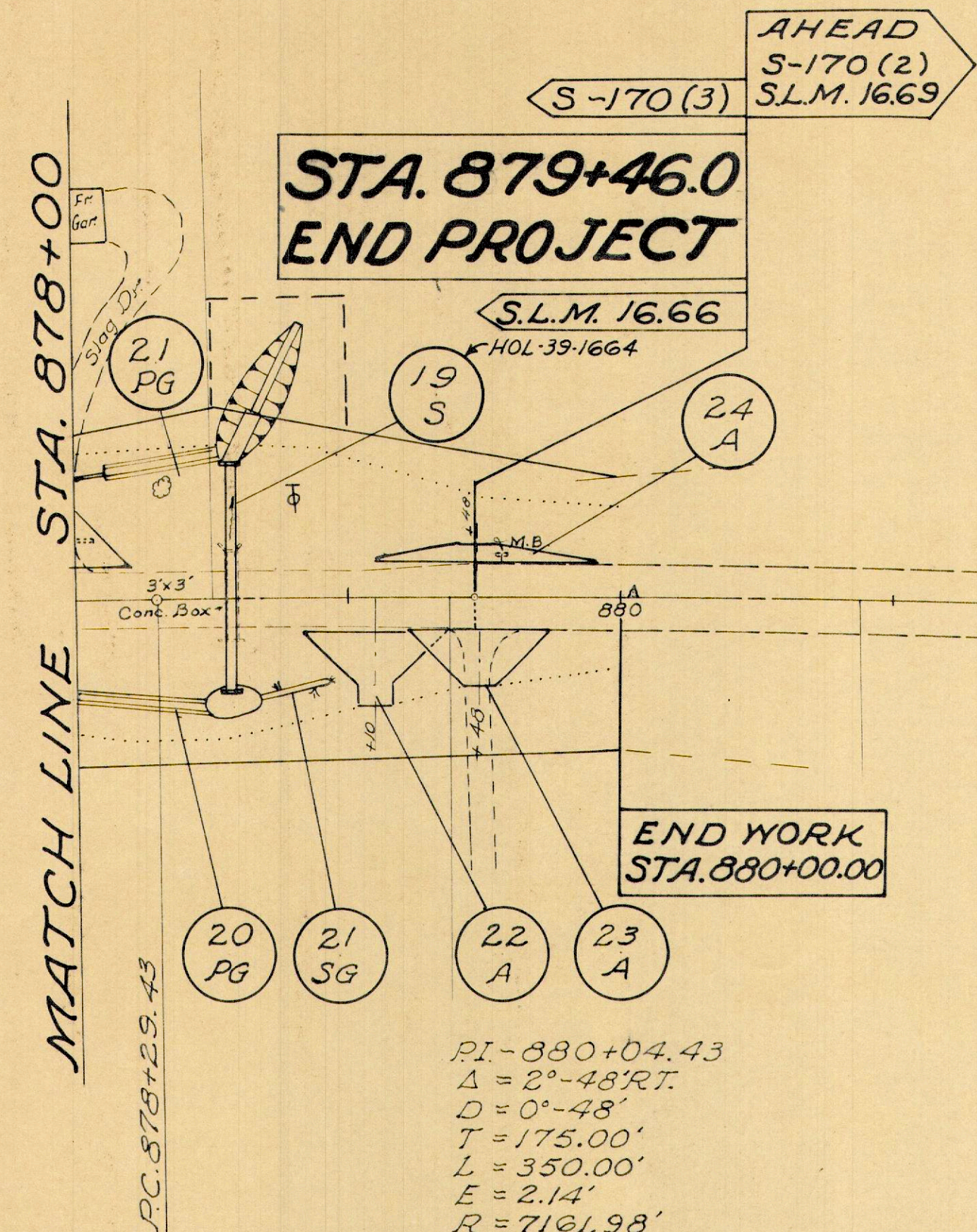
REF. NO.	STATION TO STATION	SIDE	B-19 AGGR BASE C.Y.	T-30 PRIME COAT G.A.L.	T-35 ASPHALT CONC SURF C.Y.	GUARD RAIL STEEL BEAM (DEEP) L.F.	T-10 RIP RAP 6" REIN-F.D. S.Y.	T-10 DUMP ROCK CHAIN PROTECT. C.Y.	I-1 PIPE CL. F4 L.F.	I-1 PIPE CL. F4 L.F.	I-1 PIPE CL. M-6 (18" 30" L.F.	L-10 SODDING S.Y.	MASONRY L-2 C.Y.	PAVED GUTTER TYPE L.F.	EXIST. PART. RIGID S.Y.	I-15 GUARD RAIL L.F.	S-22 POINT EXIST. STRUCT. C.Y.	E-12 PIPE UNDER L.F.	E-12 PIPE OVER L.F.	SEE SHEET NO.
17-A	876+18	LT	15.0	35	4.8				32											40
18-A	876+65	RT	11.4	31	4.3				34											40
19-A	876+63	RT	71.0	140	20.0					50										41
20-A	877+50	RT	23.5	32	4.6					38										41
21-A	877+94	LT	16.7	29	4.0															40
18-S	869+07.40	§					16	15			160									56
17-SG	867+50 TO 868+00	RT																		
18-SG	870+50 TO 871+50	RT																		
19-SG	874+50 TO 876+00	RT																		
20-SG	874+50 TO 876+02	LT																		
17-PG	868+00 TO 868+83	RT																		
18-PG	869+03 TO 870+50	RT																		
15-PG	872+60 (Church Drain)	RT																		
16-PG	876+00 TO 876+38	RT																		
17-PG	876+34 TO 876+41	LT																		
18-PG	876+24 TO 877+79	LT																		
19-PG	876+88 TO 877+32	RT																		
20-PG	877+69 TO 878+00	RT																		
11-GR	867+50 TO 871+25	LT				375														
12-GR	867+50 TO 870+25	RT				275														
13-GR	869+08 TO 869+90	LT				50														
14-GR	872+25 TO 872+75	LT																		
EXIST. PAVEMENT REMOVAL 871+75 TO 876+00																				
TOTALS			1376	267	377	700	16	15	66	36	88	160	460	10	481	750	190	3	291	46

PLAN & PROFILE -- STA. 867+50 TO STA. 878+00

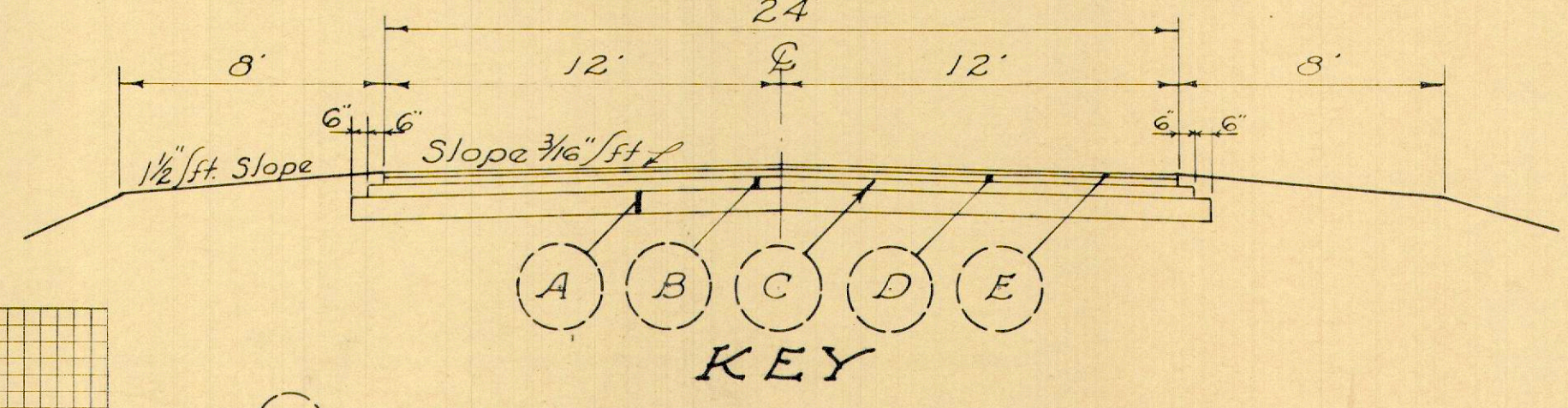
NOTE: Marker shall be furnished and erected on Left by State Forces before acceptance of this improvement.



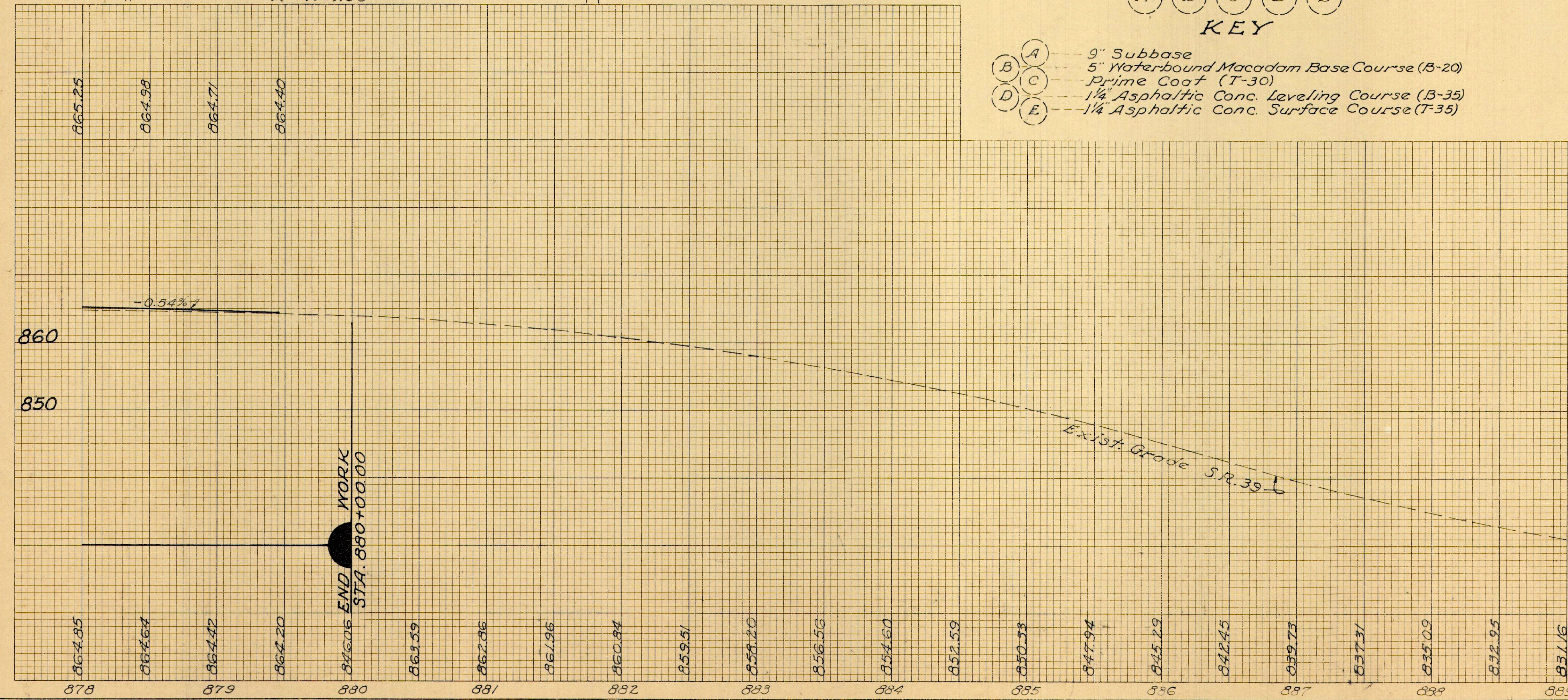
PI = 892+20.33
 $\Delta = 22^\circ 41' LT$
 $D_c = 1^\circ 30'$
 $T_s = 841.20'$
 $L_s = 150'$
 $L_c = 1362.22'$
 $E_c = 76.34'$
 $\theta_s = 1125^\circ$



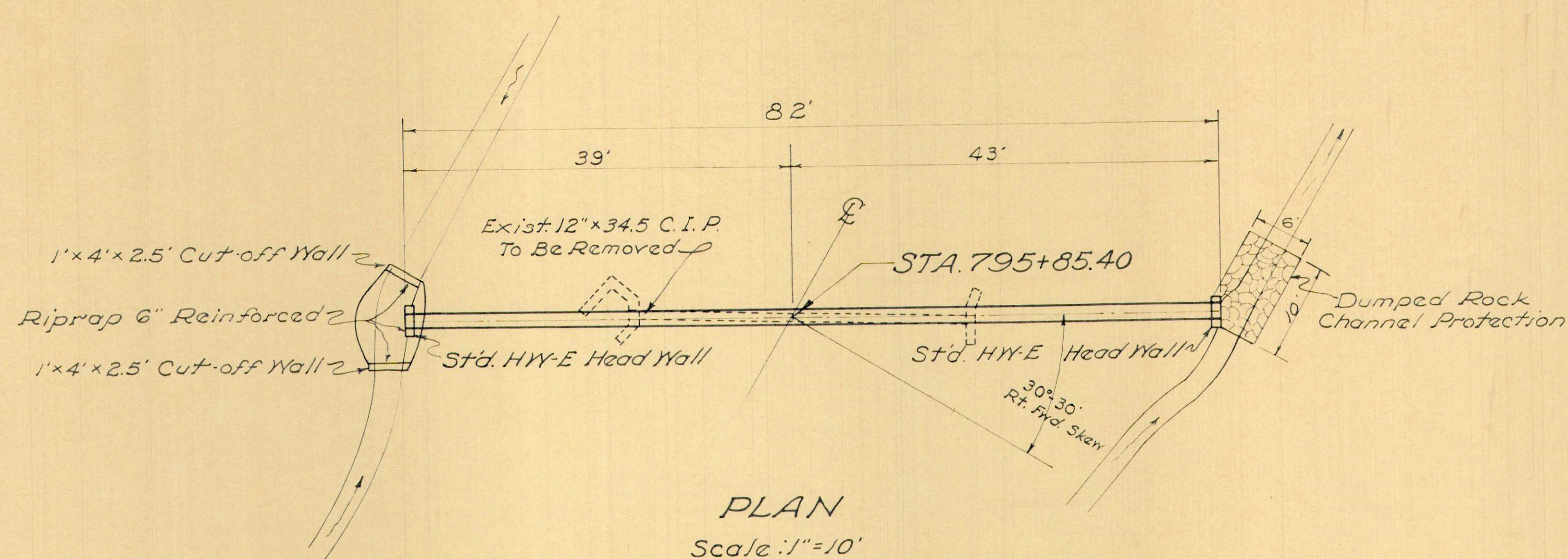
TYPICAL SECTION OF ADJOINING PAY'T.



- KEY**
- (A) 9" Subbase
 - (B) 5" Water-bound Macadam Base Course (B-20)
 - (C) Prime Coat (T-30)
 - (D) 1 1/4" Asphaltic Conc. Leveling Course (B-35)
 - (E) 1 1/4" Asphaltic Conc. Surface Course (T-35)



REF. NO.	STATION TO STATION	SIDE	B-19 AGGR. BASE C.Y.	T-30 PRIME COAT GAL.	T-35 ASPHALT CONC. SURF. C.Y.	F-10 RIP RAP 6" REINF. PROTECT. SY.	F-10 DUMP ROCK CHAIN C.Y.	AS'CLAN M-64(D) L.F.	I-J PIPE	CHANN'L EXCAV. E-3 C.Y.	MASONRY 1-2 C.Y.	PAVED GUTTER TYPE L.F.	REMOVE & DISPOSE S-24 EXIST. SURF. USE E.A.	E-8 EXIST. PAV'T RIGID S.Y.	SEE SHEET NO.
22-A	879+10	RT.	16.0	28	4.0										41
23-A	879+46	RT.	10.3	29	4.0										40
24-A	879+46	LT.	4.3	13	1.8										17
19-S	878+57	C.				22	11	84							57
21-SG	878+67 TO 878+55	RT.											LUMP		
20-PG	878+00 TO 878+47	RT.													
21-PG	878+22 TO 878+55	LT.													
	EXIST. PAV'T REMOVAL 878+00 TO 879+46														
TOTALS			30.6	70	9.8	22	11	84							

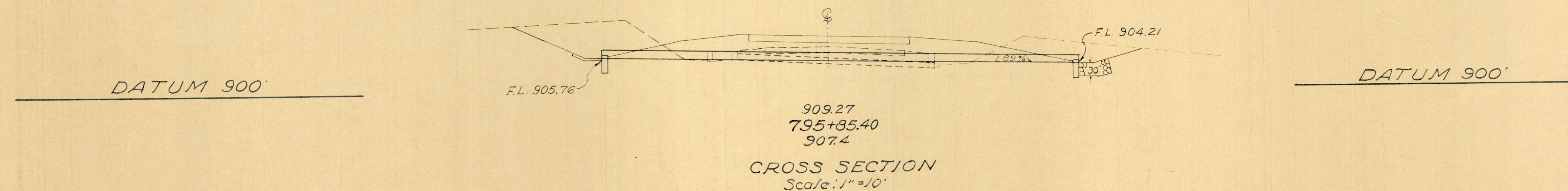


PLAN
Scale: 1"=10'

ESTIMATED QUANTITIES

18" Pipe, Class A-1, Sec. M-6.6 (a) or Sec. M-6.8 (b)	82 Lin. Ft.
Masonry	0.6 Cu. Yds.
12" Pipe Removed	3.5 Lin. Ft.
Removal of Portions of Existing Structures	3.0 Cu. Yds.
Riprap, 6" Reinforced	8.0 Sq. Yds.
Dumped Rock Channel Protection	6.0 Cu. Yds.

Area: 4 acres
Q25: 10 c.f.s.

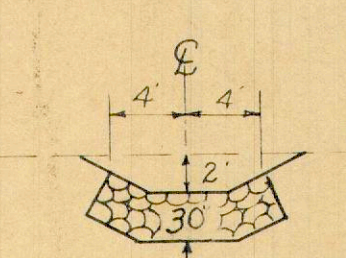


CROSS SECTION
Scale: 1"=10'

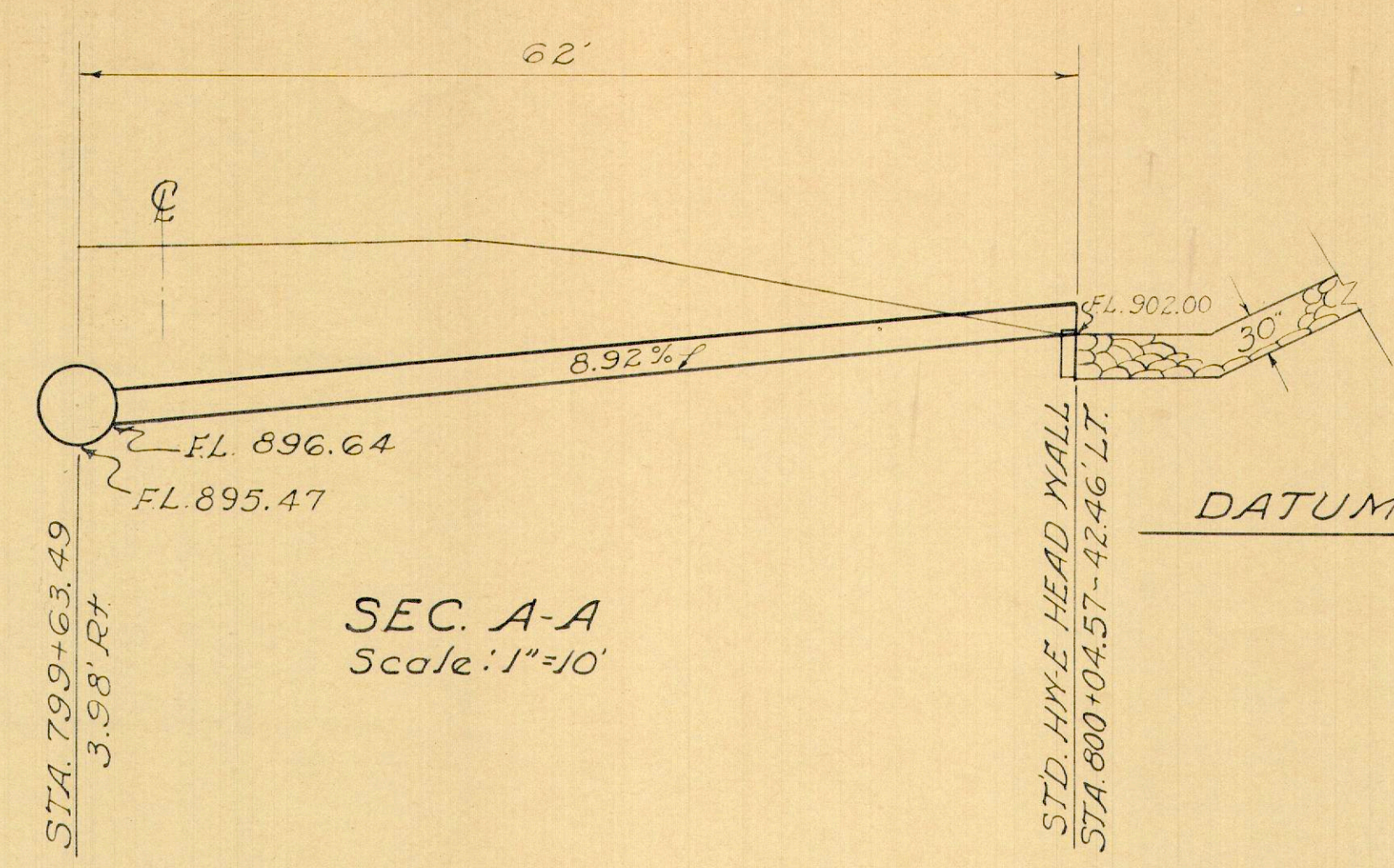
1-S

STA. 795+85.40
18"x82' PIPE CULVERT

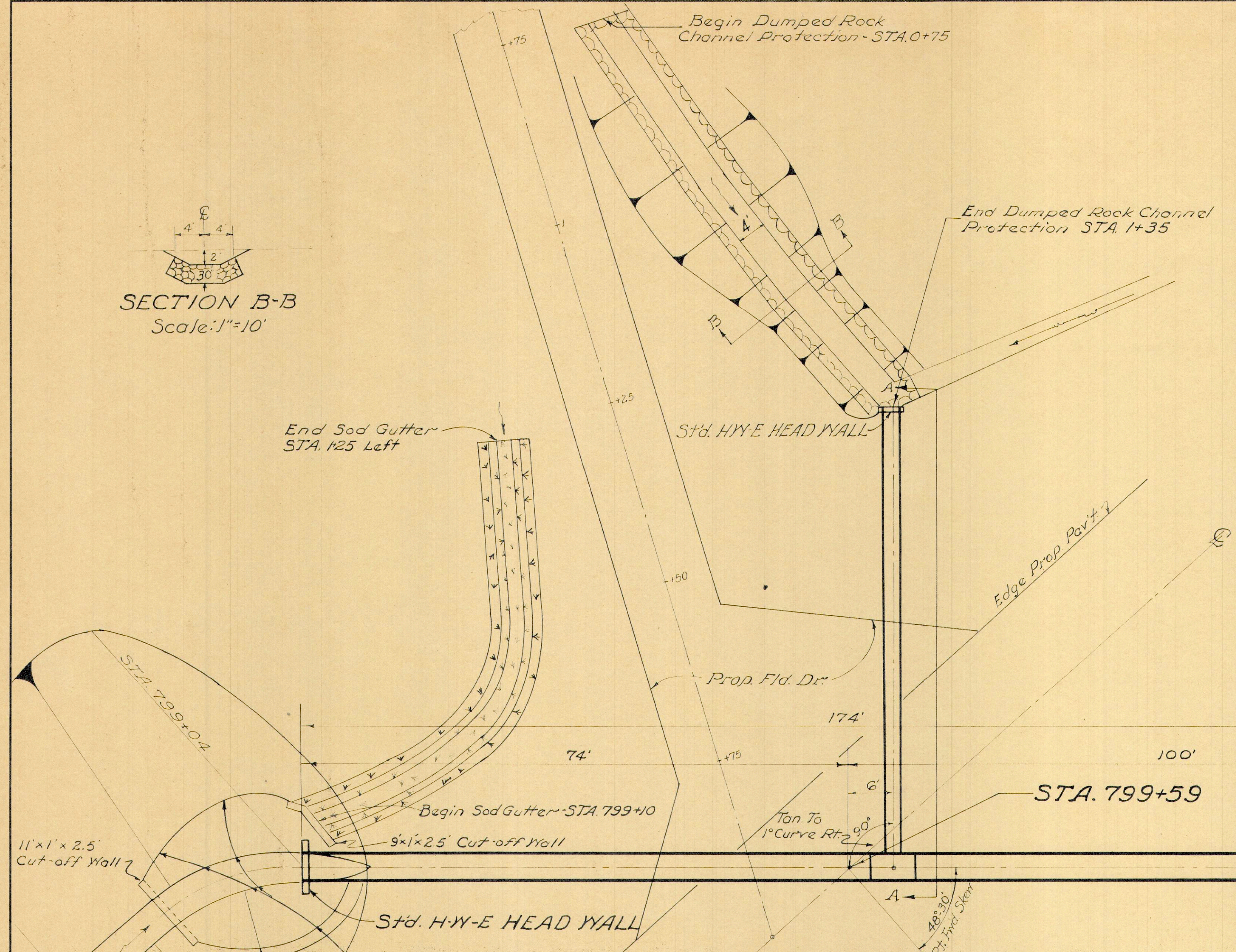
SECTION B-B
Scale: 1"=10'



SEC. A-A
Scale: 1"=10'



PLAN
Scale: 1"=10'



Note: for Channel x-sec see Sh #35 APPR. 3-A

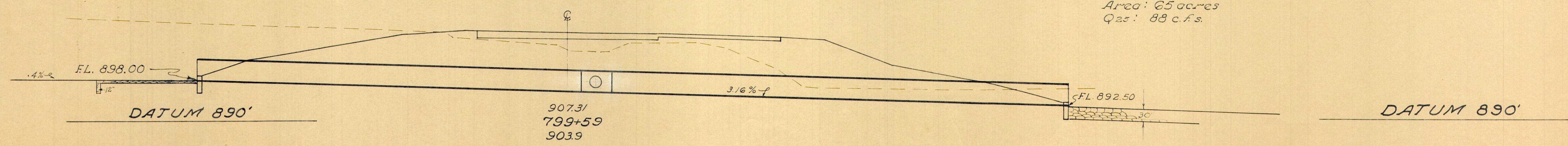
For Channel Relocation (Sta. 797+20 To Sta 799+04) See Sh. # 45

ESTIMATED QUANTITIES

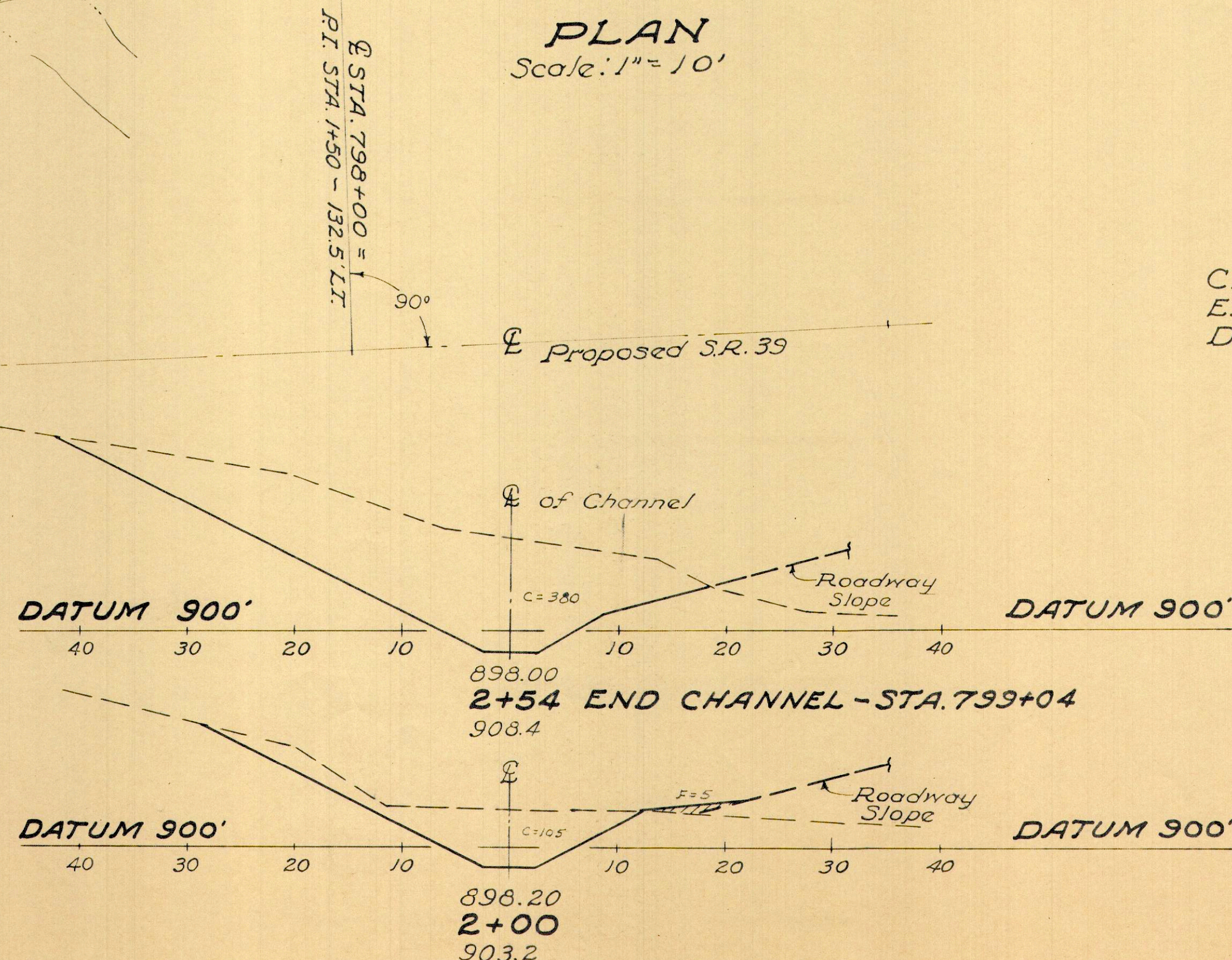
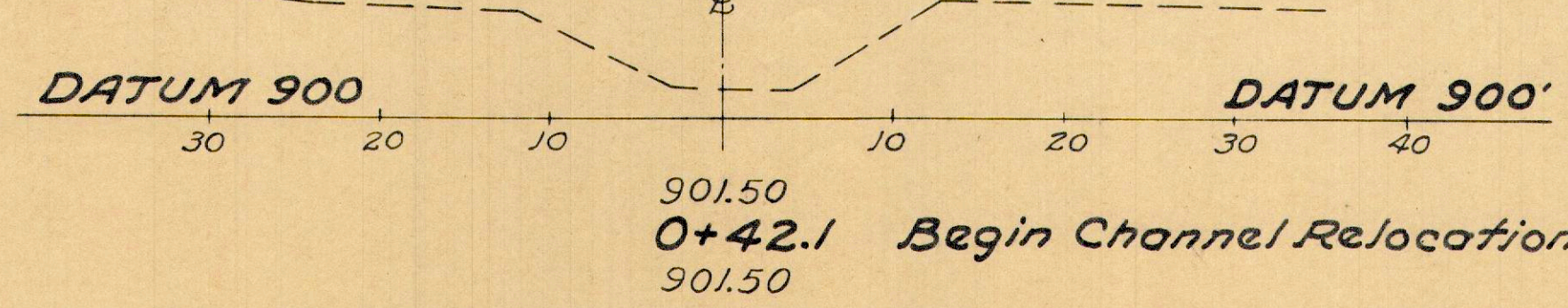
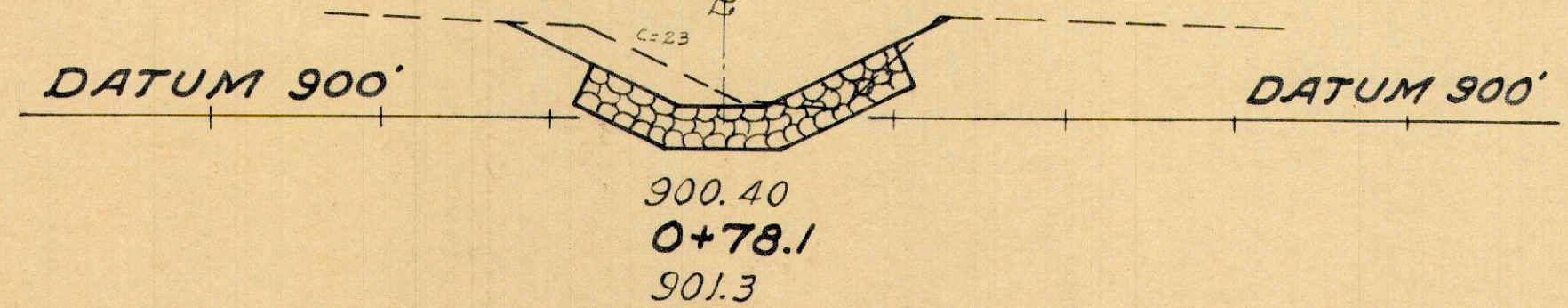
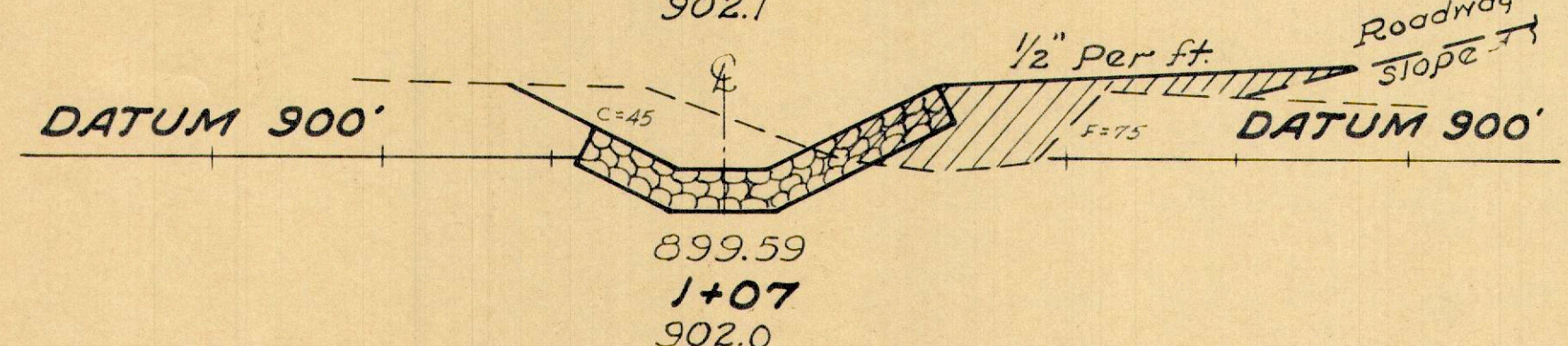
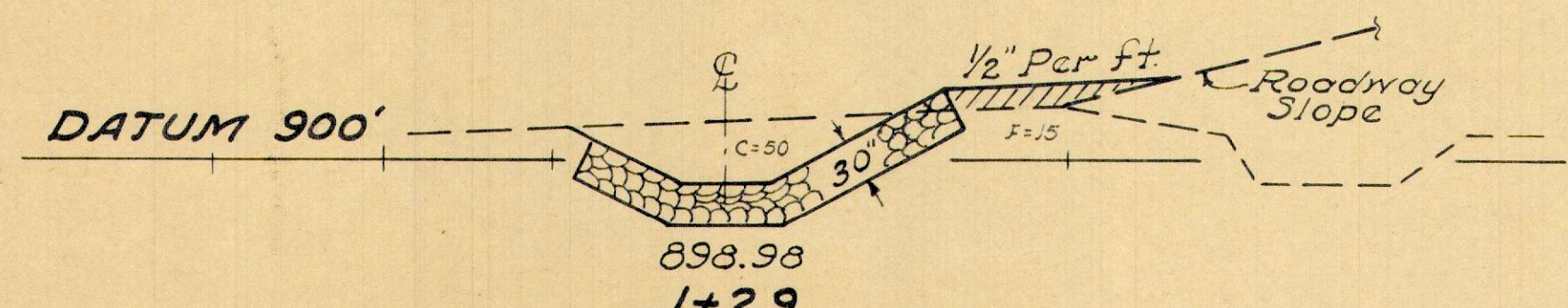
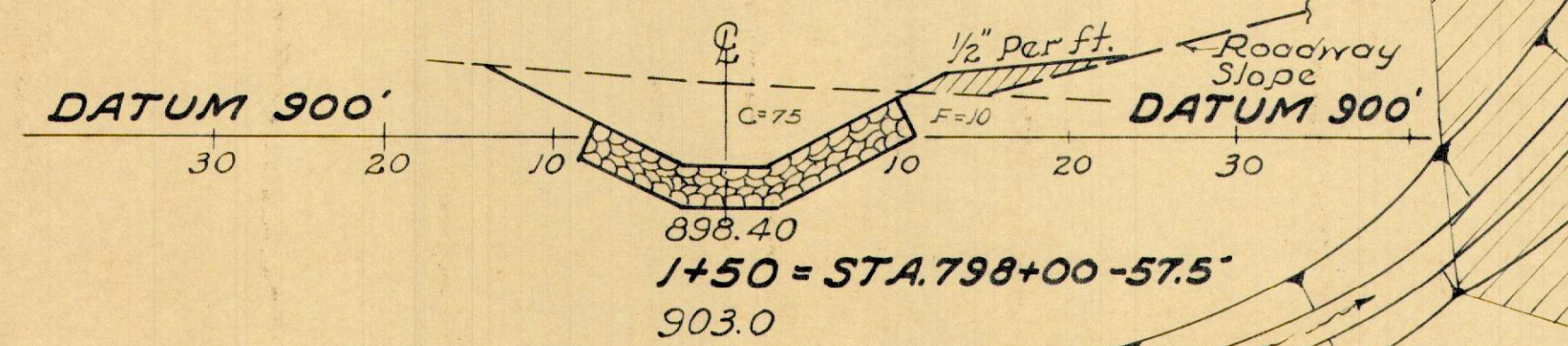
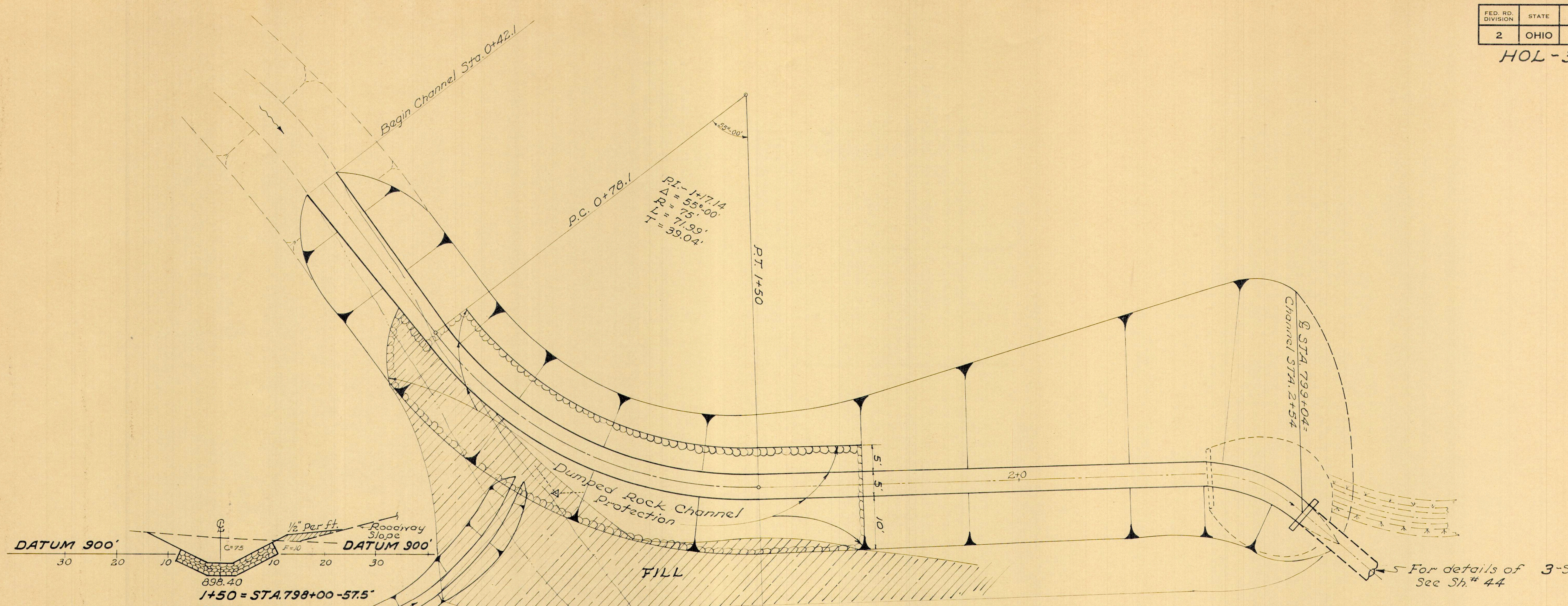
48" Pipe, Class A-1, Sec. M-6.4(d)	174 Lin. FT.
Masonry	2.1 Cu. Yds.
Riprap, 6" Reinforced	50.0 Sq. Yds.
Dumped Rock Channel Protection	38 Cu. Yds.
24" Pipe, Class A-1, Sec. M-6.4 (d)	62 Lin. FT.
Pipe Special, 48"x24" Tee, Sec. M-6.4(d)-CIA,	1 Each
Sod Gutter	42 Sq. Yds.

Area: 65 acres
Q25: 88 c.f.s.

CROSS SECTION
Scale: 1"=10'



3-S
STA. 799+59
48"x174' PIPE CULVERT

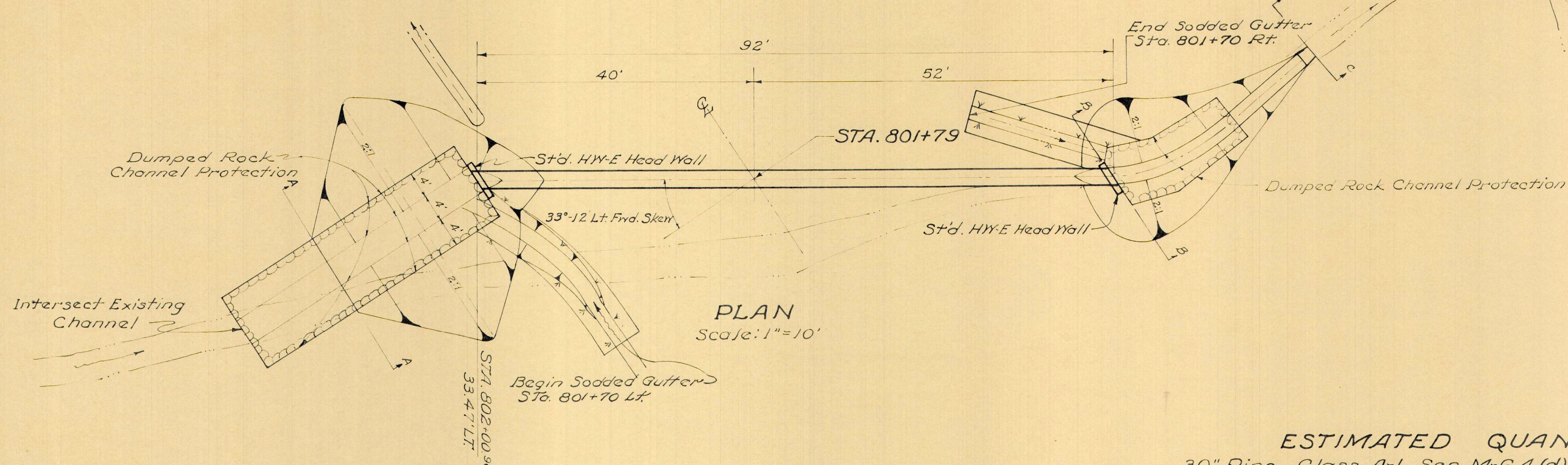
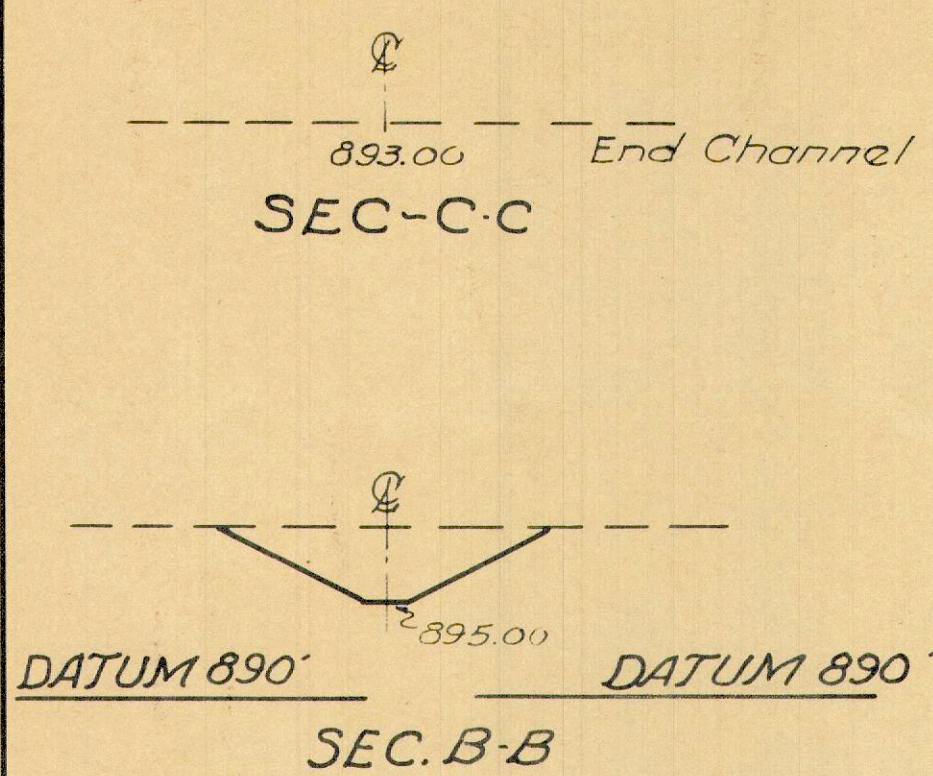


ESTIMATED QUANTITIES

Channel Excavation	791 Cu. Yds.
Embankment (Carried to Sh#19)	102 Cu. Yds.
Dumped Rock Channel Protection	176 Cu. Yds.

3-S
(PT.)

**CHANNEL RELOCATION
STA. 797+20 TO STA. 799+04**

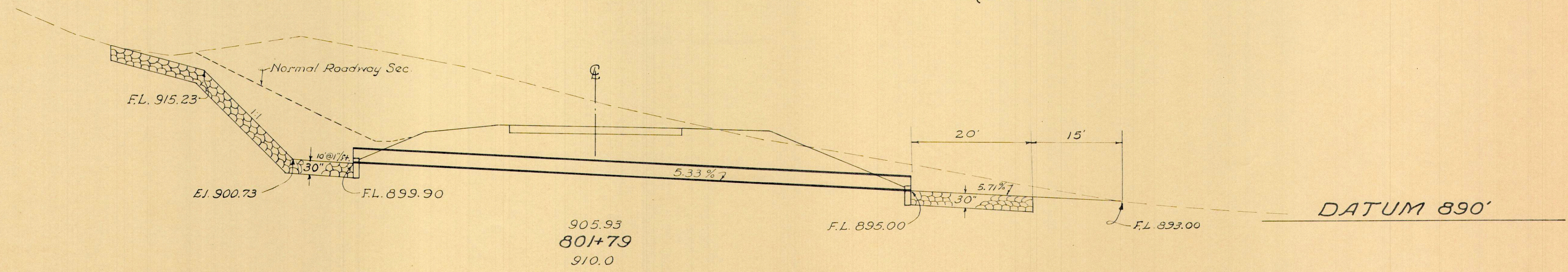
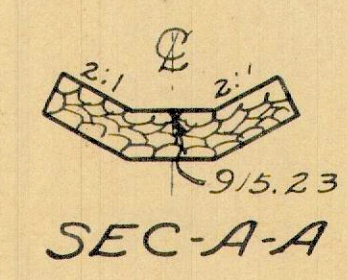


NOTE :- 200 Cu.Yds. additional Roadway Excavation required for Culvert Inlet; (Quant. Carried to Sh.# 20)

ESTIMATED QUANTITIES

30" Pipe, Class A-1, Sec.M-6.4 (d)	92	Lin. Ft.
Masonry	1.0	Cu. Yds.
Dumped Rock Channel Protection	67	Cu. Yds.
Sod Gutter	30	Sq. Yds.
Channel Excavation	26	Cu. Yds.

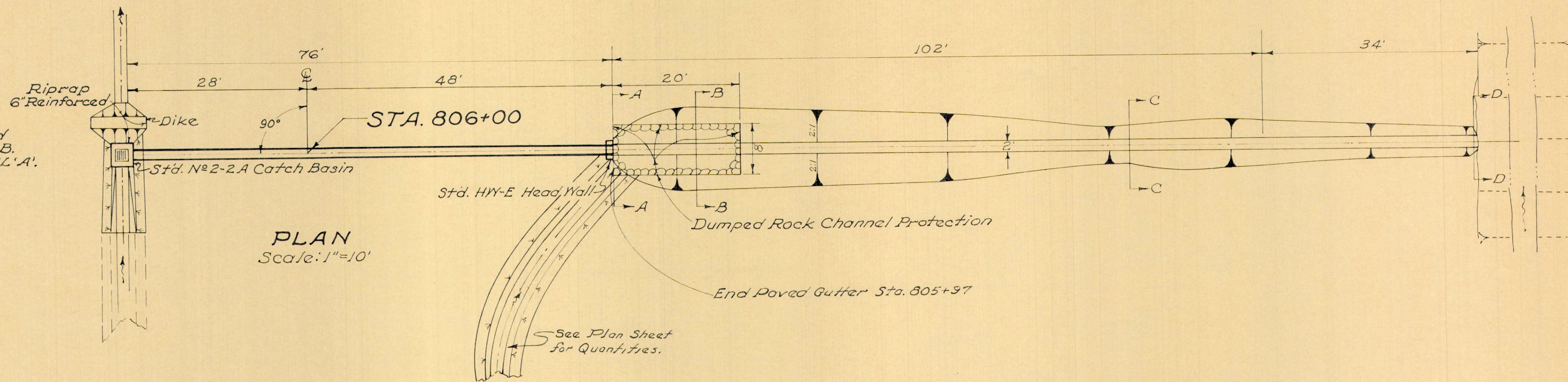
Area: 12 acres
Q25 : 29 c.f.s.



4-S

STA. 801+79
30" x 92' PIPE CULVERT

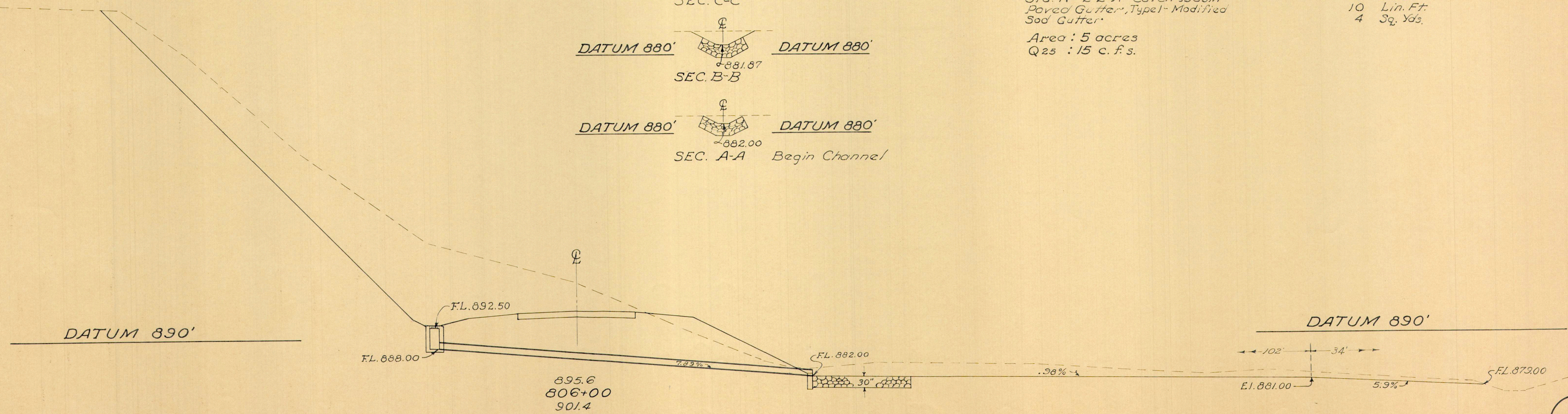
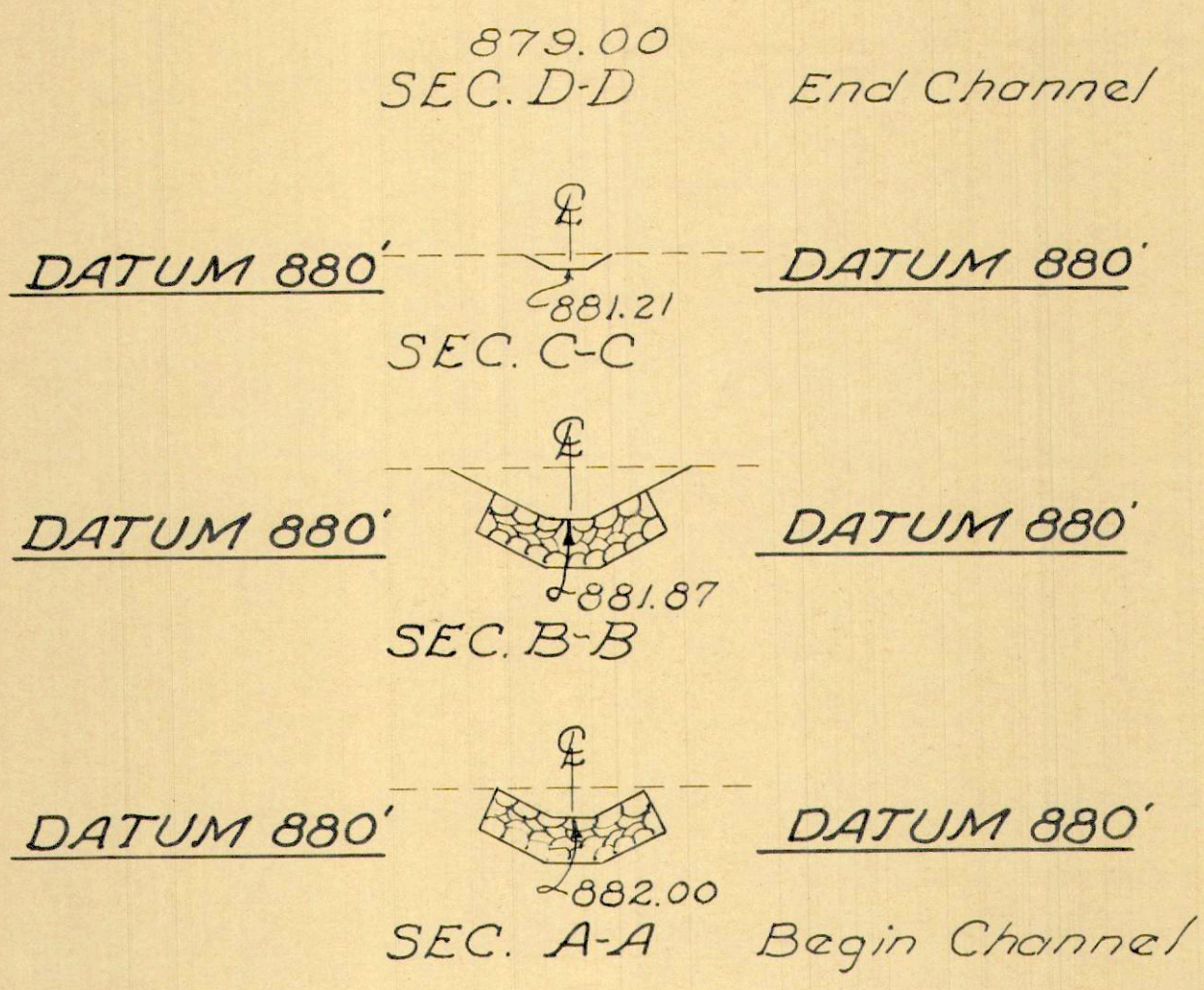
NOTE: For Detail of Warped Paved Gutter and Dike at Std. No 2-2-A C.B. See Sheet No 42 DETAIL 'A'.



PLAN
Scale: 1"=10'

ESTIMATED QUANTITIES

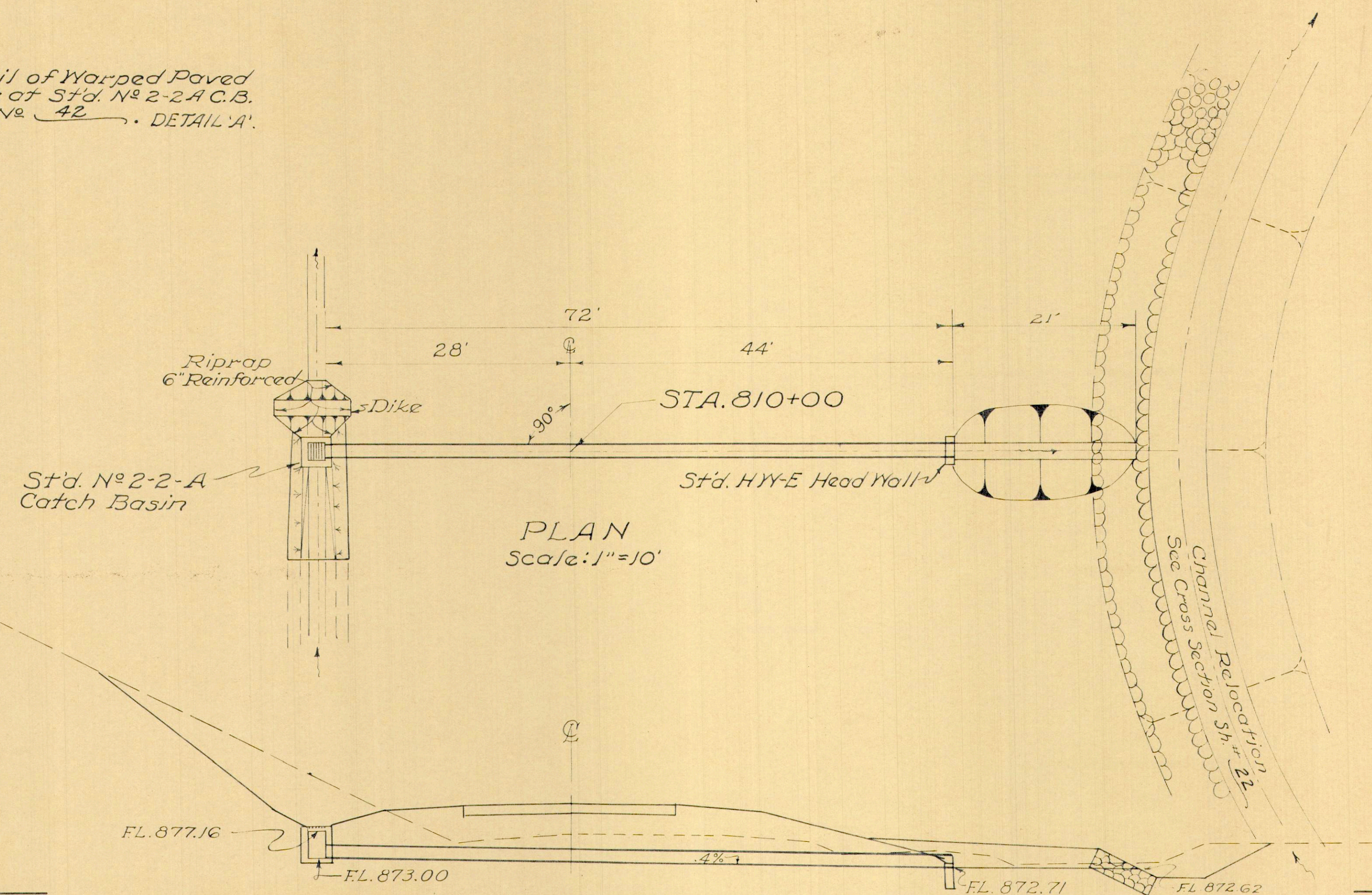
18" Pipe, Class A-1, Sec. M-6.4 (d)	76 Lin. Ft.
Masonry	0.3 Cu. Yd.
Riprap, 6" Reinforced	6 Sq. Yd.
Dumped Rock Channel Protection	15 Cu. Yd.
Channel Excavation	45 Cu. Yd.
Std. No 2-2-A Catch Basin	1 Each
Paved Gutter, Type 1-Modified	10 Lin. Ft.
Sod Gutter	4 Sq. Yds.
Area : 5 acres	
Q25 : 15 c. f. s.	



CROSS SECTION
Scale: 1"=10'

STA. 806+00
18"x76' PIPE CULVERT

NOTE: For Detail of Warped Paved Gutter and Dike at Sta. N^o 2-2-A C.B. See Sheet N^o 42. DETAIL 'A'.

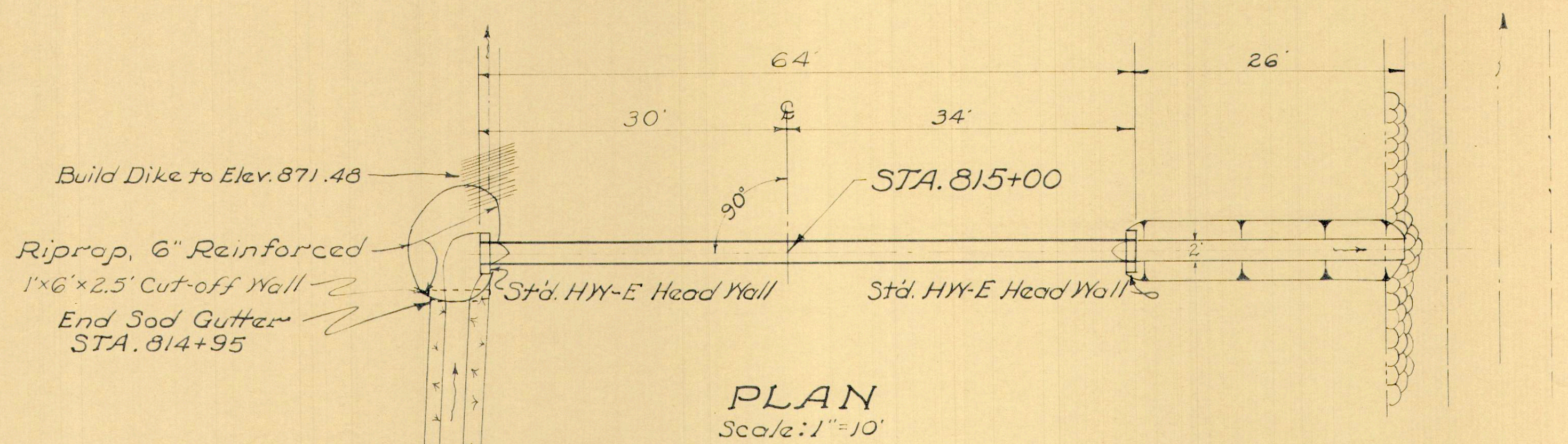


ESTIMATED QUANTITIES

18" Pipe, Class A-1	72	Lin. Ft
St'd. N ^o 2-2-A Catch Basin	1	Each
Masonry	0.3	Cu. Yds.
Riprap, 6" Reinforced	6	Sq. Yds.
Paved Gutter, Type 1, Modified	10	Lin. Ft.
Sod Gutter	4	Sq. Yds.
Area: 5 acres		
Q 25: 18 c.f.s.		

6
S

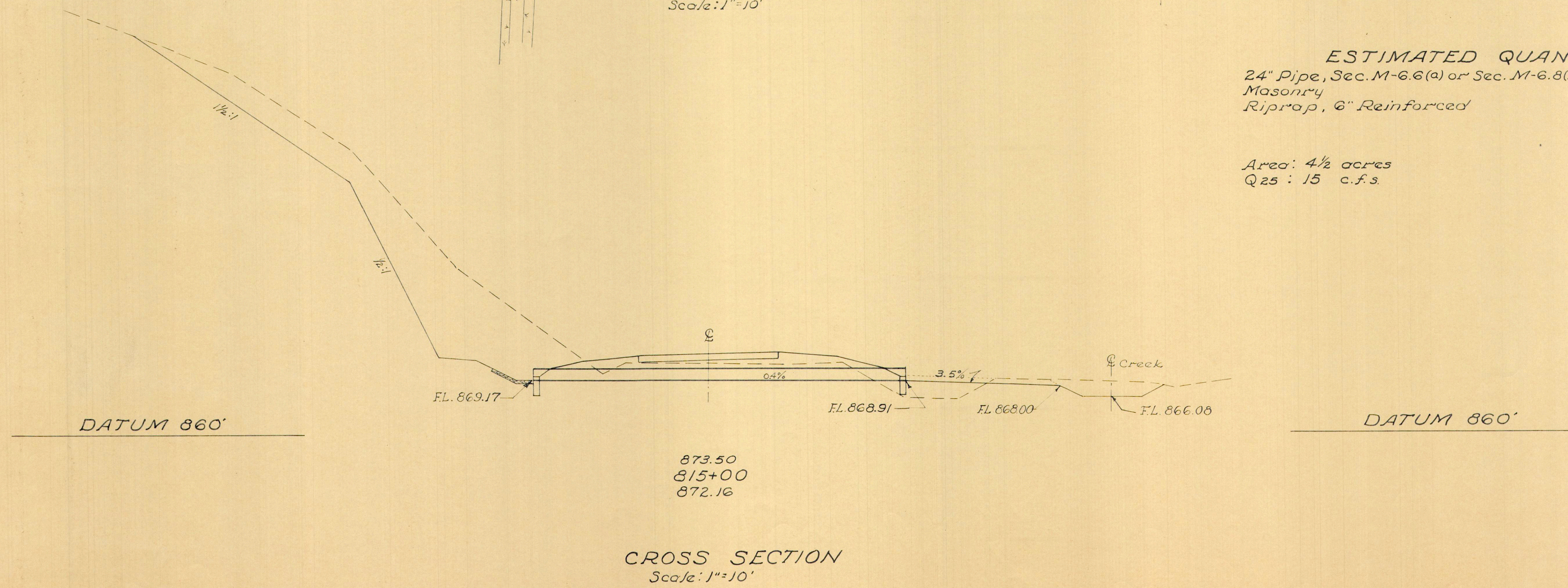
STA. 810+00
18" x 72' PIPE CULVERT



PLAN
Scale: 1"=10'

ESTIMATED QUANTITIES
 24" Pipe, Sec. M-6.6(a) or Sec. M-6.8(b), Class A1 64 Lin. Ft.
 Masonry 0.8 Cu. Yds.
 Riprap, 6" Reinforced 7 Sq. Yds.

Area: 4 1/2 acres
 Q25: 15 c.f.s.

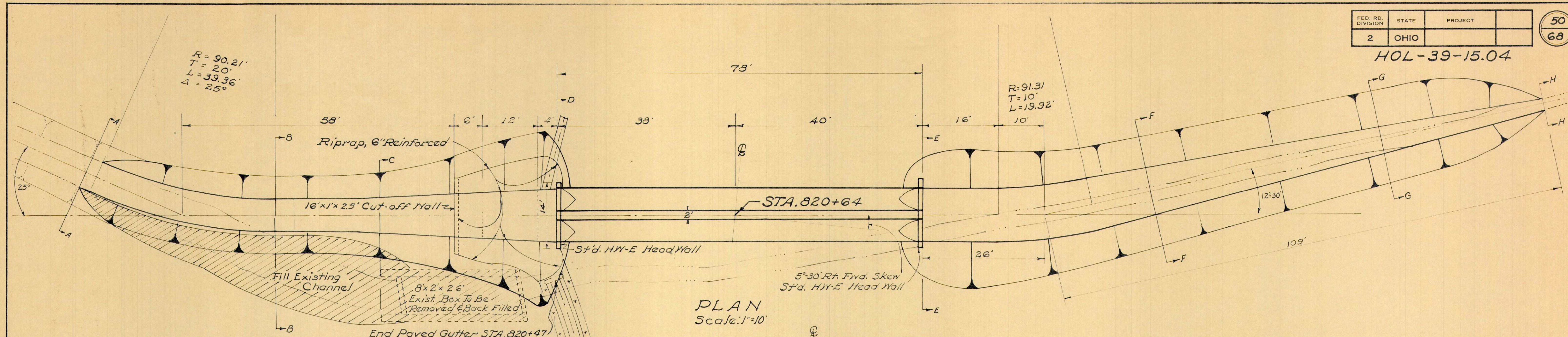


CROSS SECTION
Scale: 1"=10'

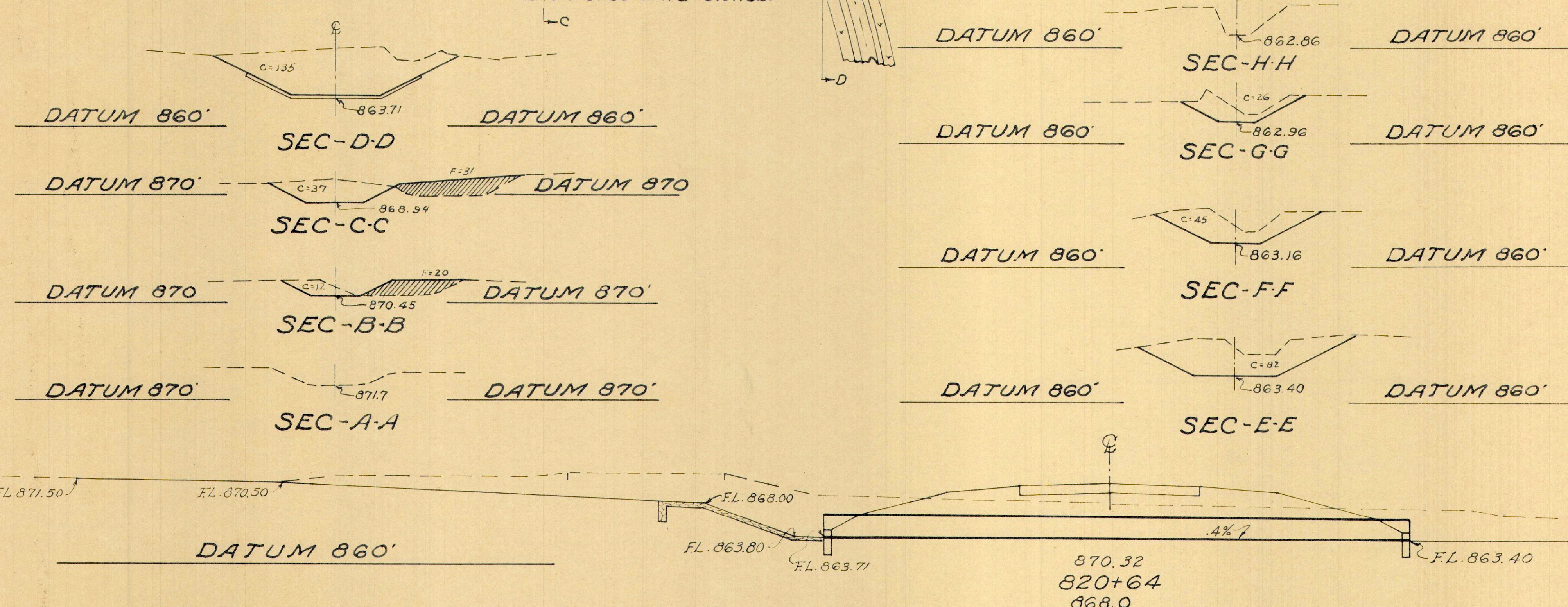
8-5

STA. 815+00
24"x64' PIPE CULVERT

HOL-39-15.04



PLAN
Scale: 1"=10'



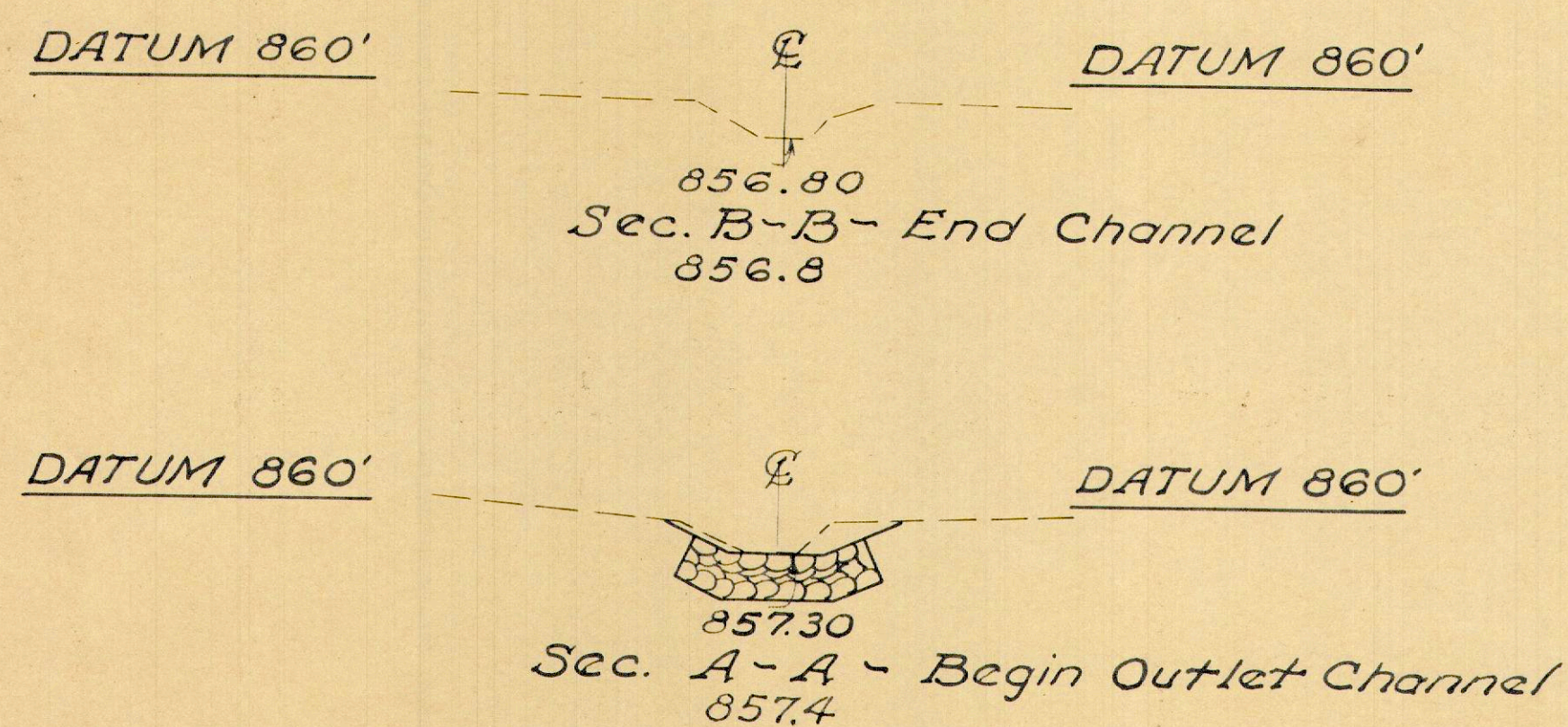
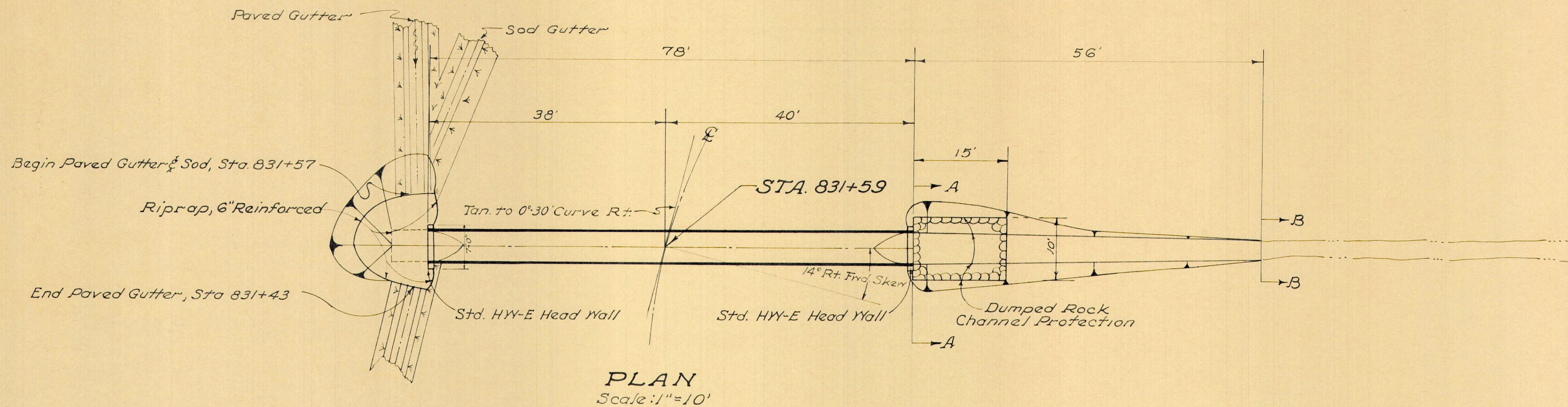
CROSS SECTION
Scale: 1"=10'

ESTIMATED QUANTITIES

- 53" x 34" Reinfd. Ellip. Conc. Pipe, Sec. M-6.7(a) or 58" x 36"
 - Paved Bit. Coated Corr. Metal Arch with Integral Base, Sec. M-6.4 (j) (d), Glass G-I
 - Masonry
 - Riprap, 6" Reinforced
 - Removal of Existing Structure
 - Channel Excavation
 - Embankment (Quant. Carried to Sta. # 2.4)
- | |
|--------------|
| 156 Lin. Ft. |
| 30 Cu. Yds |
| 59 Sq. Yds |
| Lump Sum |
| 346 Cu. Yds. |
| 56 Cu. Yds. |

Arco: 91 acres
Q 25: 117 c.f.s.

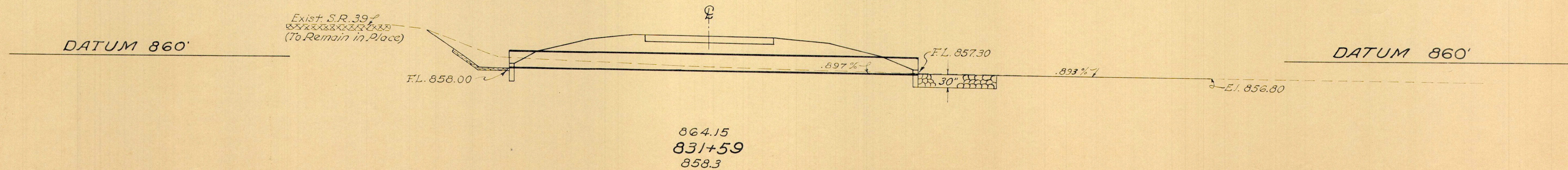
STA. 820+64
TWIN 58" x 36" x 78' CORR. METAL ARCH OR
TWIN 53" x 34" x 78' REIN. ELLIP. CONC. PIPE



ESTIMATED QUANTITIES

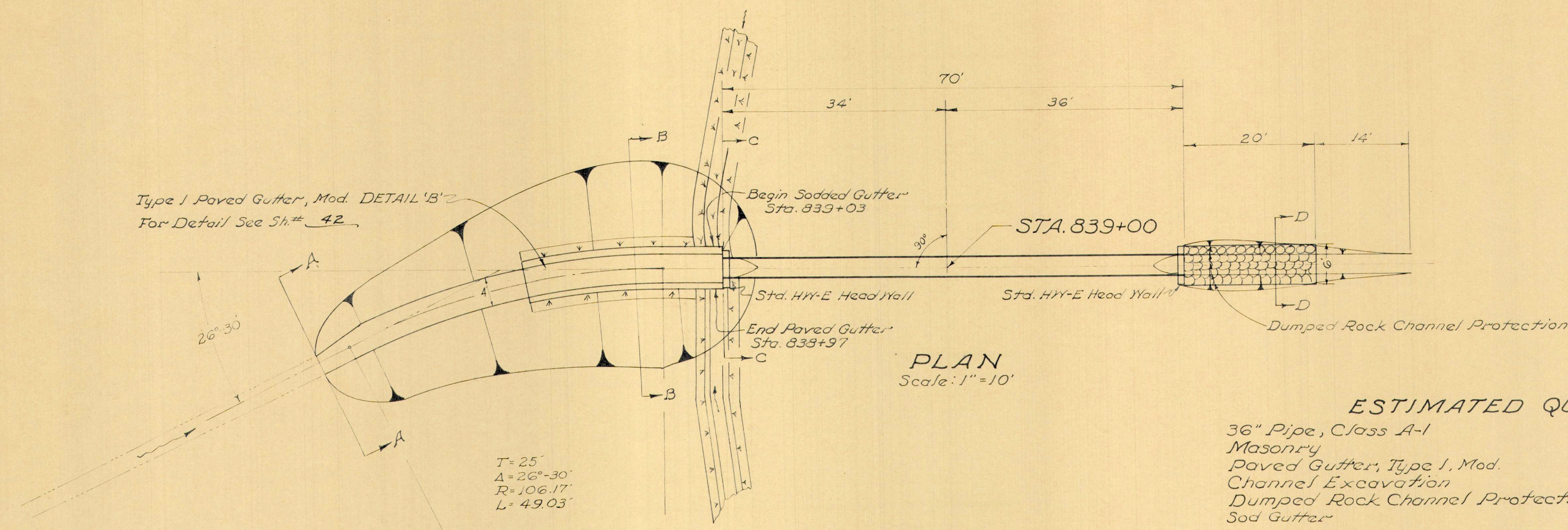
60"x38" Reinf'd. Ellip. Conc. Pipe, Sec. M-6.7(a) or 65"x40" Paved Bit.	78 Lin. Ft.
Coated Corr. Metal Arch with Integral Base, Sec. M-6.4(j) (d) Class G-1	1.9 Cu. Yds.
Masonry	17 Sq. Yds.
Riprap, 6" Reinforced	14 Cu. Yds.
Dumped Rock Channel Protection	9 Cu. Yds.
Channel Excavation	

Area: 37 acres
Q25: 62 c.f.s.



CROSS SECTION
Scale: 1"=10'

STA. 831+59
65"x40"x78' CORR. METAL ARCH
OR - 60"x38" ELLIP. CONC. PIPE

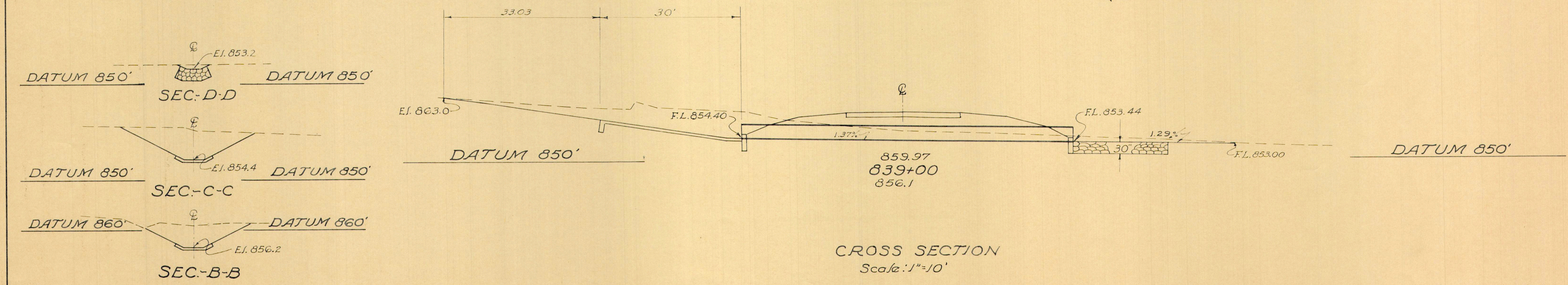


PLAN
Scale: 1"=10'

ESTIMATED QUANTITIES

36" Pipe, Class A-1	70 Lin. Ft.
Masonry	1.2 Cu. Yds.
Paved Gutter, Type I, Mod.	30 Lin. Ft.
Channel Excavation	105 Cu. Yds.
Dumped Rock Channel Protection	12 Cu. Yds.
Sod Gutter	10 Sq. Yds.

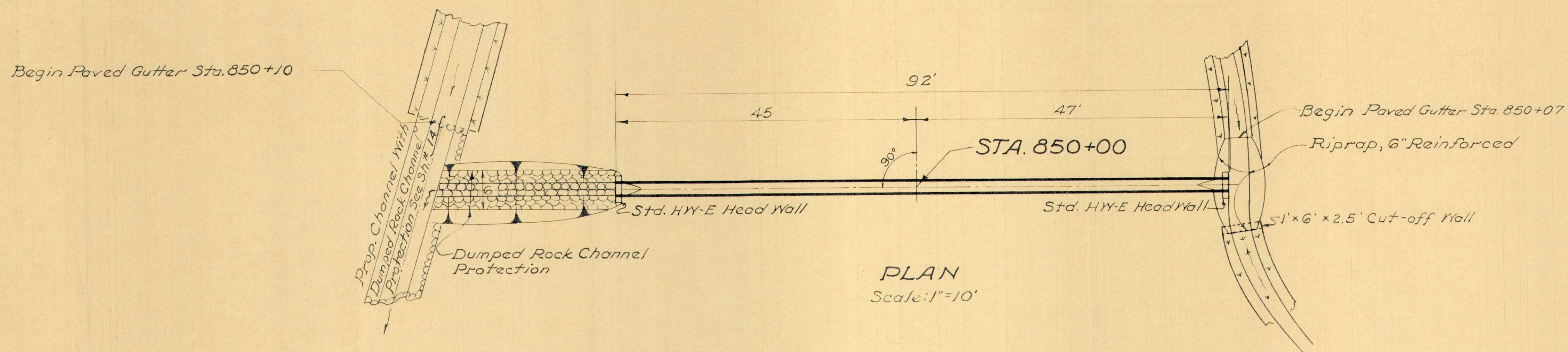
Area: 15 acres
Q₂₅: 36 c.f.s.



CROSS SECTION
Scale: 1"=10'

12-S

STA. 839+00
36" x 70' PIPE CULVERT

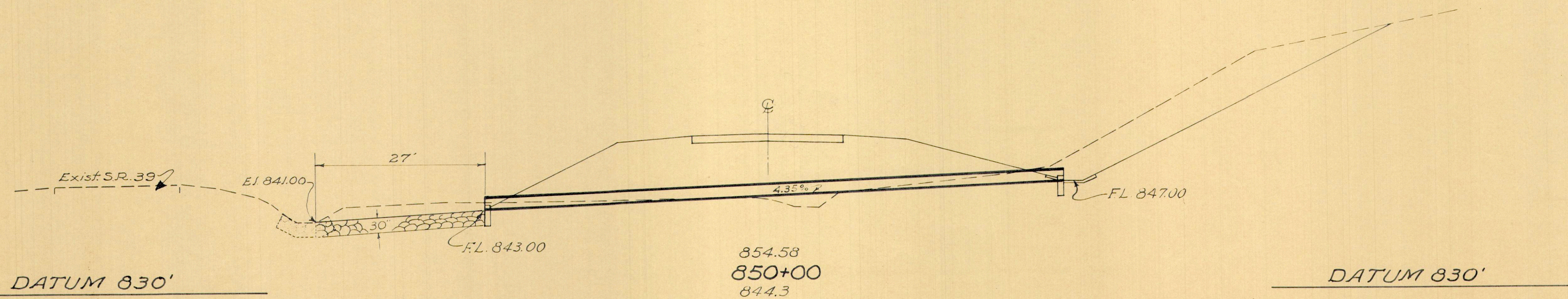


PLAN
Scale: 1"=10'

ESTIMATED QUANTITIES

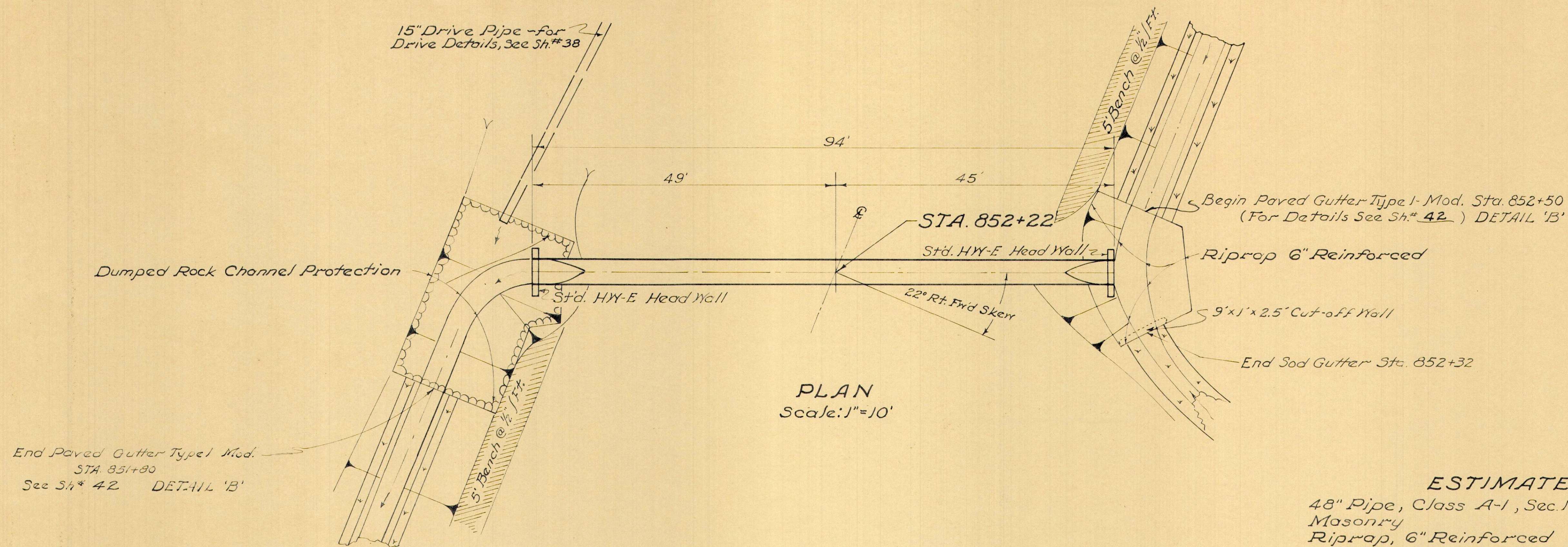
24" Pipe, Class A-1	92 Lin. Ft.
Masonry	0.8 Cu. Yds.
Channel Excavation	8.0 Cu. Yds.
Riprap, 6" Reinforced	10 Sq. Yds.
Dumped Rock Channel Protection	15 Cu. Yds.

Area : 9 acres
Q 25 : 24 cfs.



CROSS SECTION
Scale: 1"=10'

STA. 850+00
24"x92' PIPE CULVERT

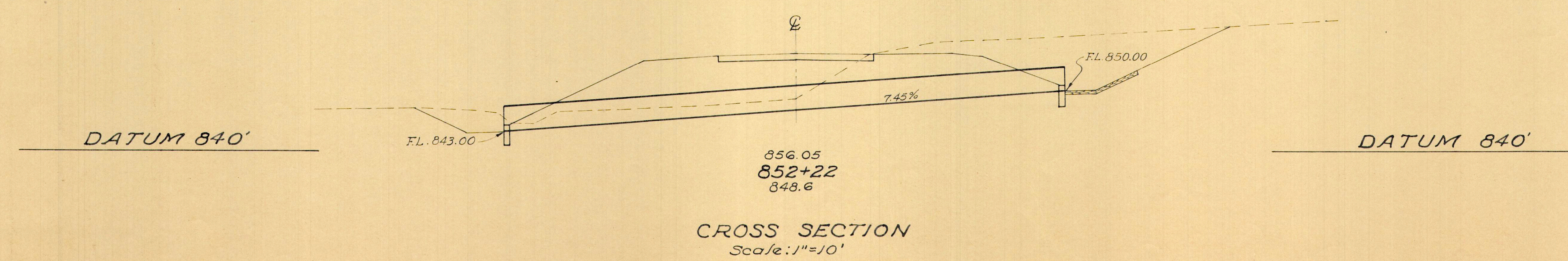


PLAN
Scale: 1"=10'

ESTIMATED QUANTITIES

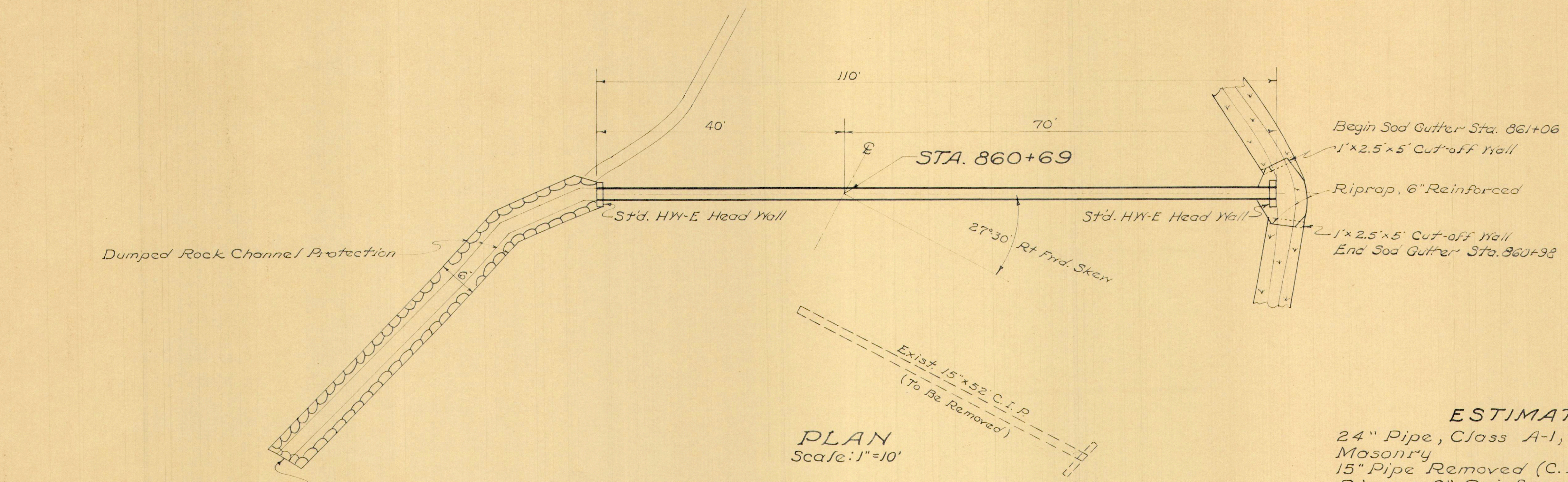
48" Pipe, Class A-1, Sec. M-6.4(d)	94 Lin. Ft.
Masonry	1.7 Cu. Yds.
Riprap, 6" Reinforced	26 Sq. Yds.
Dumped Rock Channel Protection	46 Cu. Yds.

Area: 52 acres
Q 25: 81 c.f.s.



CROSS SECTION
Scale: 1"=10'

STA. 852+22
48"x94' PIPE CULVERT

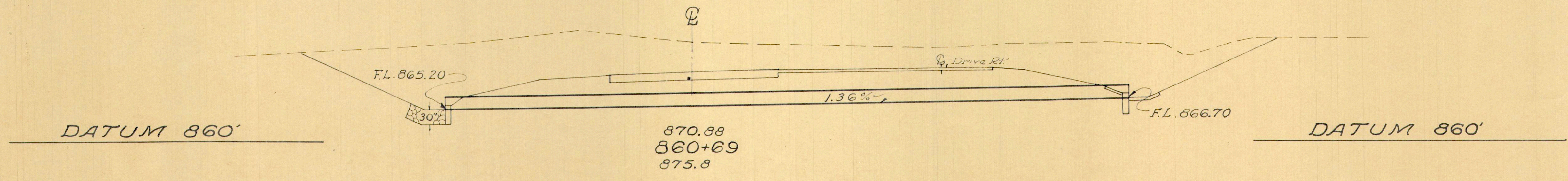


PLAN
Scale: 1"=10'

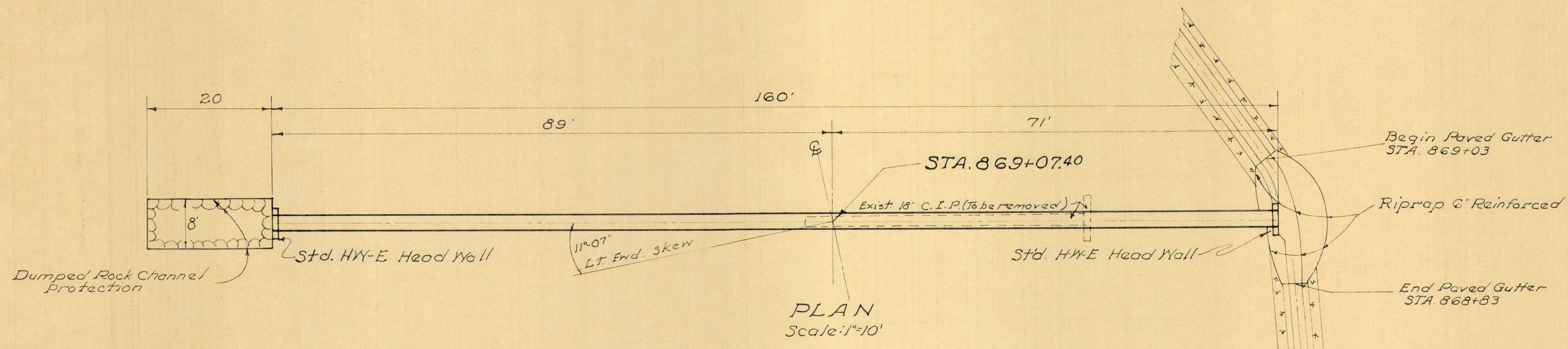
ESTIMATED QUANTITIES

24" Pipe, Class A-1, Sec. M-6.6(a) or Sec. M-6.8(b)	110 Lin. Ft.
Masonry	0.8 Cu. Yds.
15" Pipe Removed (C.I.P.)	52 Lin. Ft.
Riprap, 6" Reinforced	10 Sq. Yds.
Dumped Rock Channel Protection	38 Cu. Yds.
Removal of Portions of Existing Structures	3 Cu. Yds.

Area: 10 acres
Q25: 21 c.f.s.



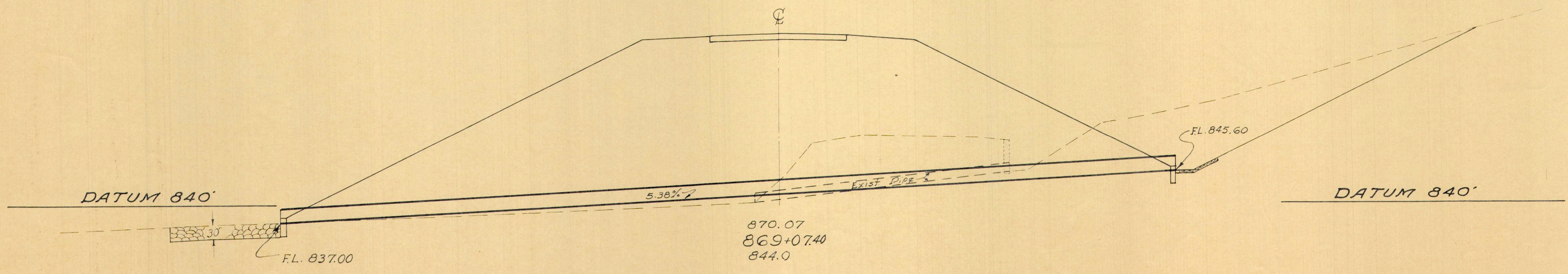
CROSS SECTION
Scale: 1"=10'



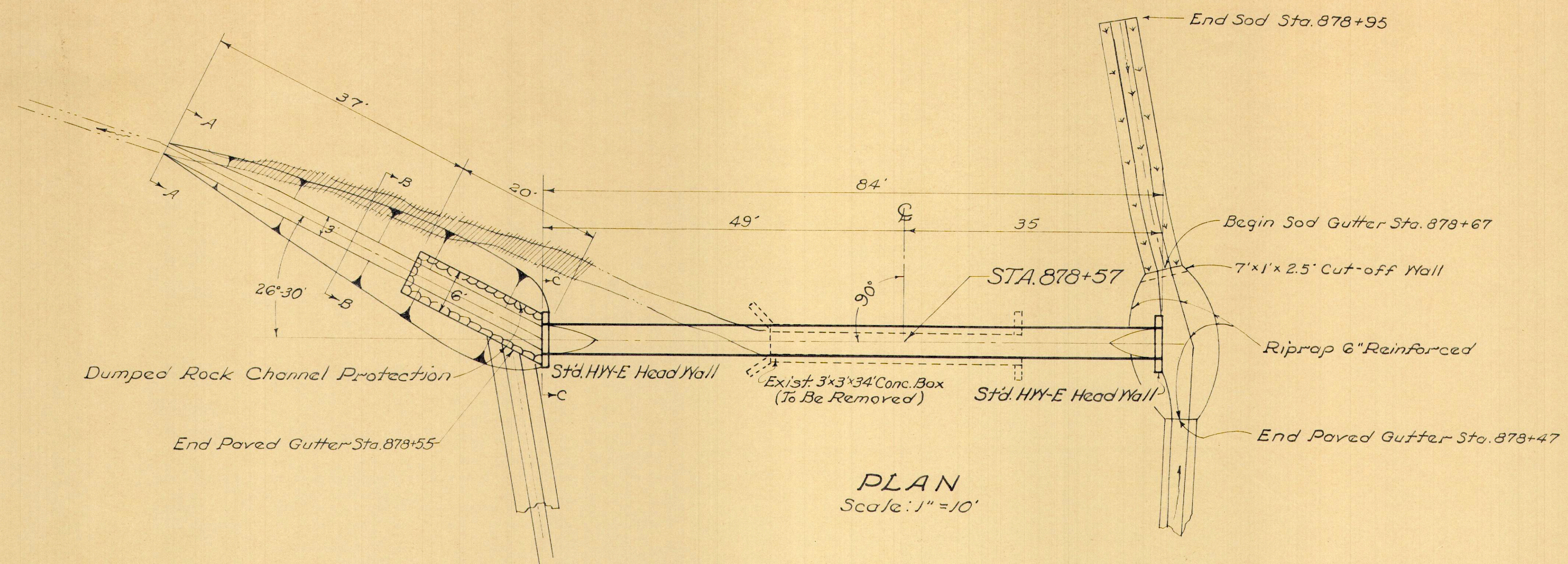
ESTIMATED QUANTITIES

30" Pipe, Class A-1, Sec. M-6.4(d), 16 gage	160 Lin. Ft.
Masonry	1.0 Cu. Yds.
Riprap, 6" Reinforced	16 Sq. Yds.
Dumped Rock Channel Protection	15 Cu. Yds.
18" Pipe Removed (C.I.P.)	46 Lin. Ft.
Removal of Portions of Exist. Structures	3 Cu. Yds.

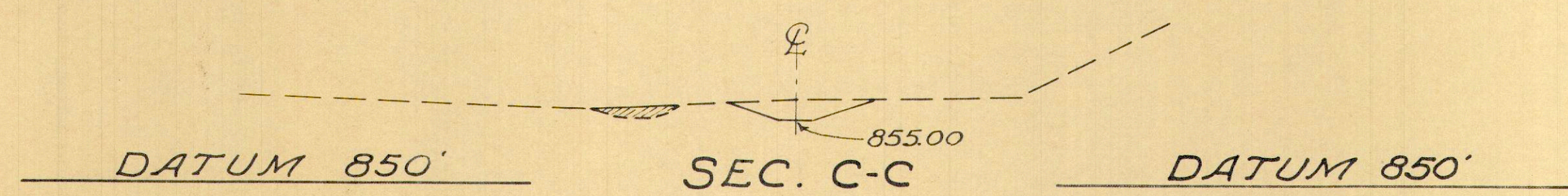
Area: 33 Acres
 Q25: 47 C.f.s.



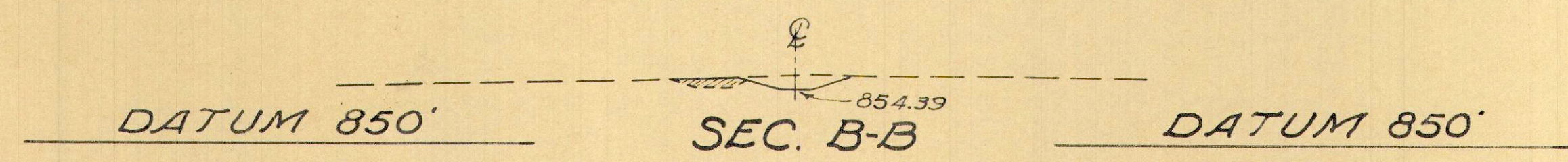
STA. 869+07.40
30" x 160' PIPE CULVERT



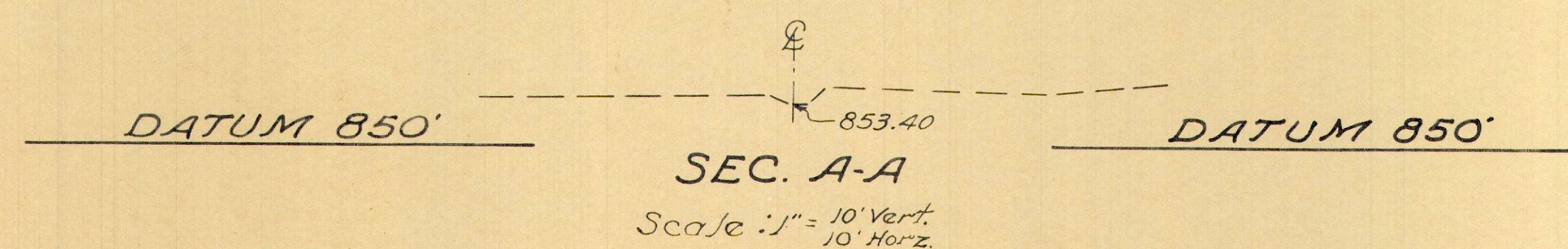
PLAN
Scale: 1"=10'



SEC. C-C

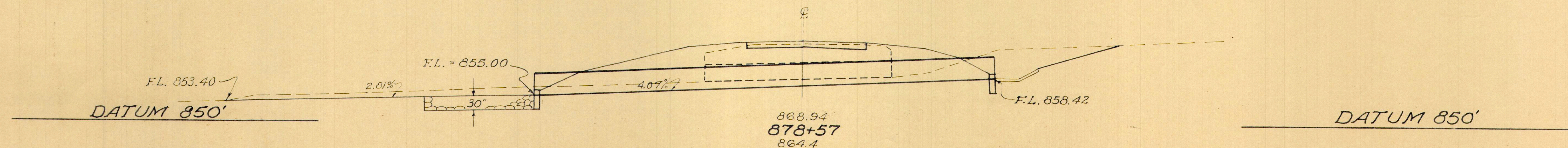


SEC. B-B



SEC. A-A

Scale: 1"=10' Vert,
10' Horz.



CROSS SECTION
Scale: 1"=10'

ESTIMATED QUANTITIES

48" Pipe, Class A-1, Sec. M-6.4(d)	84	Lin. Ft.
Masonry	1.7	Cu. Yds.
Riprap, 6" Reinforced	22	Sq. Yds.
Dumped Rock Channel Protection	11	Cu. Yds.
Removal of Existing Structure		Lump Sum
Channel Excavation	12	Cu. Yds.
Embankment (Carried to Sheet No. 32)	4	Cu. Yds.
Sod Gutter	23	Sq. Yds.

Area: 40 acres
Q25: 65 c.f.s.