S-176(1)

FED. RD. DIVISION	STATE	F.A.S. PROJECT	FISCAL YEAR
2	OHIO	S-176(1)	1946

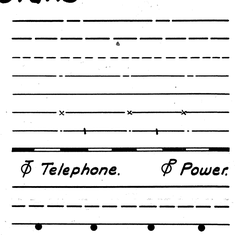
1 / 47

HARRISON COUNTY
S.H. 923 SEC. F(PT).
HAS-646-2.84

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
SCIO-ANNAPOLIS-EAST ROAD
S.H. 923 SEC. F(PT)
HARRISON COUNTY
STOCK & NORTH TOWNSHIPS

CONVENTIONAL SIGNS

COUNTY LINE
TOWNSHIP LINE
SECTION LINE
CORPORATION LINE
PROPERTY LINE
FENCE LINE
CENTER LINE
STEAM RAILROAD
POLE LINE
DRAIN PIPE (NEW)
DRAIN PIPE (OLD)
GUARD RAIL (NEW)



INDEX OF SHEETS

TITLE SHEET	SHEET	1
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CROSS SECTIONS	"	14-31
STRUCTURES 20'SPAN & UNDER	"	32-46
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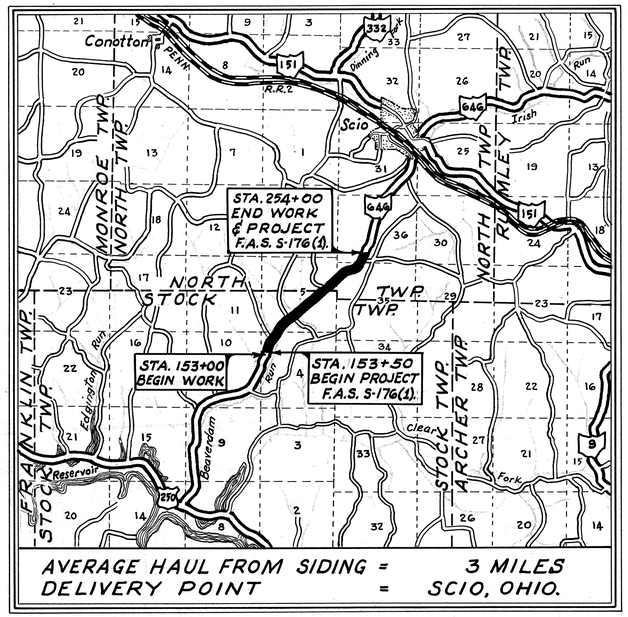
LINE DATA

~WORK LENGTHS~

BEGIN WORK ..... STA. 153+00
END WORK ..... STA. 254+00
NET LENGTH OF WORK ..... = ... 10100 LIN.FT. OR 1.912 MILES.

~PROJECT LENGTHS~

BEGIN PROJECT ..... STA. 153+50
END PROJECT ..... STA. 254+00
NO ADDITIONS OR DEDUCTIONS
NET LENGTH OF PROJECT ..... = ... 10050 LIN.FT. OR 1.903 MILES.



LOCATION PLAN

Scale 1" = 1 Mile

PORTION TO BE IMPROVED
FEDERAL HIGHWAYS
STATE HIGHWAYS
OTHER ROADS

SCALES

PLAN	1" = 100'
PROFILE HORIZONTAL	1" = 100'
PROFILE VERTICAL	1" = 10'
CROSS SECTIONS	1" = 10'

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

I hereby 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.

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

Approved E.R. McCullough
Date 4-18-47 Acting Resident Deputy Director.

Approved E.R. McCullough
Date 4-18-47 Division Deputy Director.

Approved _____
Date Chief Engineer, Bureau of Maintenance.

Approved G.R. Teague
Date 6-3-47 Chief Engineer Bureau of Bridges & R.R. Crossings.

Approved George J. Thrommer
Date 7/23/47 Chief Engineer Bureau of Location & Design.

Approved _____
Date First Ass't. Director & Chief Engineer.

Approved Murray D. Shaffer
Date 7-23-47 Director of Highways.

CONSTRUCTION BUREAU
NOV 23 1956
GROUND PHOTOLAB

RECOMMENDED FOR APPROVAL DATE

DISTRICT ENGINEER.
PUBLIC ROADS ADMINISTRATION
FEDERAL WORKS AGENCY

APPROVED DATE

DIVISION ENGINEER.
PUBLIC ROADS ADMINISTRATION
FEDERAL WORKS AGENCY

364

FILE Nº	HARRISON COUNTY S.H. 923
	SEC. F(PT)
	DATE OF LETTING
	CONTRACT Nº

* Recommended for Approval by PRA 2-21-47

STANDARD DRAWINGS

*G 8-07	2-1-47	*I-15 Nº 4	2-1-47	S.B.C.-45	11-20-45
*I-1-2-3-4-5.	2-20-45	*I-15 Nº 5	2-1-47	*S-27 P.C.-2	12-1-41
*I-8 C.B. 1-2 A&B.	12-15-41	*I-15 Nº 6	2-1-47	*S-27 P.C.-3	2-20-45
*I-8 C.B. 1-3 & 1-4.	12-15-41	*I-15 Nº 7	2-1-47		
		*I-15 Nº 9	2-1-47		
*I-15 Nº 1	3-1-47	*L-3	2-1-47		
*I-15 Nº 3	2-1-47	L.B.C.-45	6-14-45		

SUPPLEMENTAL SPECIFICATIONS

T-110	Rev. 8-3-36.

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	S-176(1)	1946

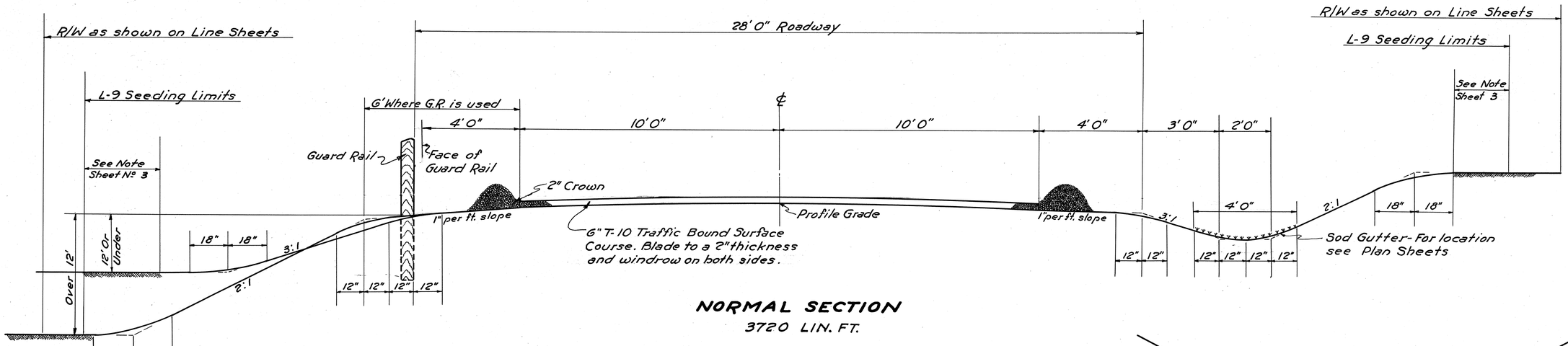
2
47

HARRISON COUNTY
S.H. 923 SEC. F (PT.)

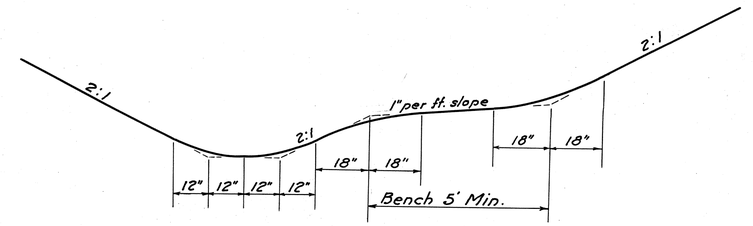
TYPICAL SECTIONS

TYPE T-10

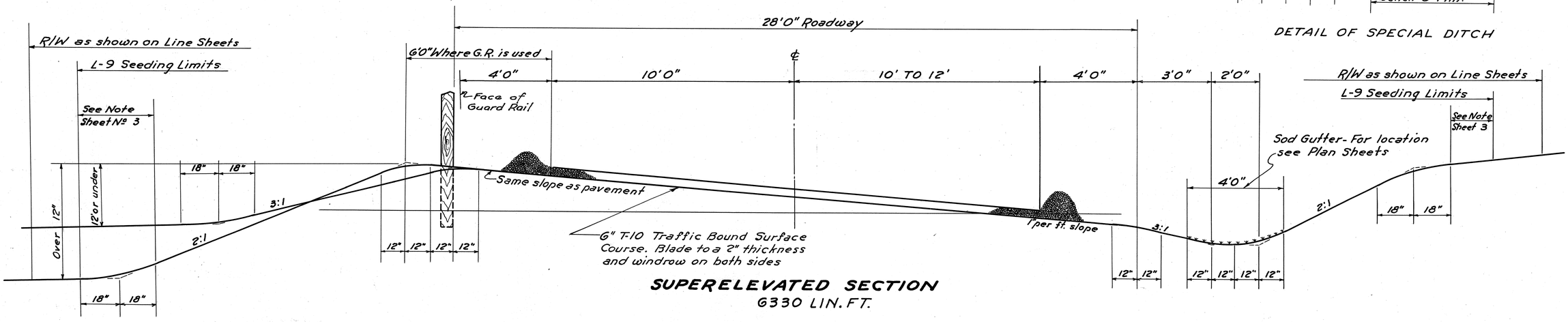
SCALE ½" = 1'0"



NORMAL SECTION
3720 LIN. FT.



DETAIL OF SPECIAL DITCH



SUPERELEVATED SECTION
6330 LIN. FT.

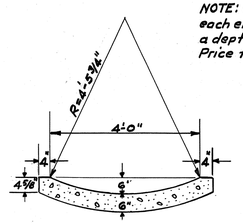
DETAILS & GENERAL NOTES

FED. RD. DIVISION	STATE	F.A.S. PROJECT	FISCAL YEAR
2	OHIO	S-176 (1)	1946

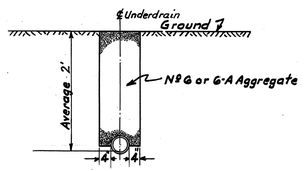
3
47

HARRISON COUNTY
S.H. 923 SEC. F(Pt).

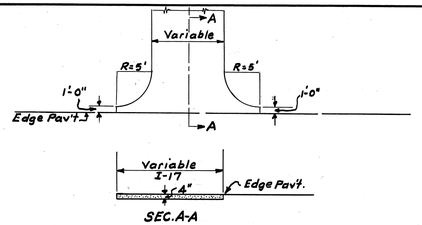
NOTE: Cut-off walls shall be placed at each end of each run of paved gutter, to a depth of 1'-2" below bottom of gutter. Price to be included per lin.ft. of gutter.



DETAIL OF PAVED GUTTER

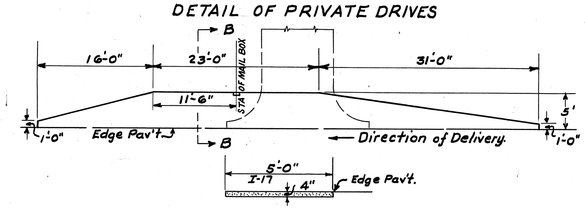


DETAIL OF PIPE UNDERDRAIN

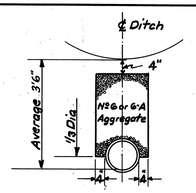


SEC. A-A

DETAIL OF PRIVATE DRIVES



DETAIL OF MAIL BOX APPROACH



DETAIL OF ROADWAY DRAINAGE UNDER DITCH

CURVES:- Superelevated curves shall be built without crown. The crown shall be worked out of the pavement in that portion between the beginning of the transition and the point where the superelevation equals twice the crown.

BERMS AND SLOPES:- Berms and slopes shall be finished in accordance with the typical sections except where otherwise shown in the cross sections. While the cross sections as drawn show straight lines and angles, in construction all corners shall be rounded as shown on the typical sections.

TREES:- Payment for removal of trees and stumps shall be included in bid item E-1 Excavation, in accordance with Sec. E-1.02. Approximately (40) trees and stumps 12" or more in diameter are to be removed.

FIELD HOUSE:- The contractor shall provide a suitable "Field Office" for the exclusive use of the engineer and inspectors assigned to this project. This office shall have a minimum of 120 sq. ft. of floor space and so arranged, equipped and lighted that the State employees will have a convenient place for making the necessary records, etc., and have a safe place for storage of equipment, plans and necessary supplies. The contractor shall have a telephone installed and maintained during construction of this project. When the work is in progress during cold weather, the office shall be heated to a temperature of at least seventy (70°) degrees fahrenheit (See Section S-0.01 (b) of the Construction and Material Specifications).

EMBANKMENT:- In lieu of the requirements for full width construction under E-1.05 the embankment, where traffic is maintained, may be placed in part width construction.

UTILITY ADJUSTMENT:- Any and all work required for Public or Private Utilities will be done by the respective owners and the contractor shall co-operate with the utility companies by arranging his work in such a manner that needless conflicts will be avoided.

PAVED GUTTERS:- Paved gutters shall be constructed of stone, broken concrete, or brick to a minimum thickness of 8" or of new concrete to a minimum thickness of 6". When constructed of material other than new concrete, the material shall be grouted in place. The new concrete shall be Class "E".

SEEDING AREAS:- The area of seeding, Item L-9, is estimated to extend 10 feet beyond the slope limits or to the right of way line if it is less than 10 feet beyond the limits of work. Additional areas have been indicated on the cross sections for seeding the existing road where it will no longer remain in use. Prior to seeding, these old road areas shall be scarified and leveled over. Payment for this work shall be included in the price bid for seeding. Areas unnecessarily disturbed by the contractor, in the opinion of the Engineer, beyond the limits estimated, shall be seeded at the contractors expense.

COMPACTION:- Compaction will not be required on the top (4) inches of the area to be seeded.

TOP SOIL:- The finished depth of topsoil under sodded areas shall be 2" inches.

SOD:- Sod in ditches shall be laid transversely to the center line and in unbroken lengths.

DESIGN SPEED:- Estimated design speed for this project is 40 miles per hour.

I-17 GRADING REQUIREMENTS:- The grading requirement for material passing the Nº 200 mesh sieve, as specified in Sec. I-17.02 is hereby modified as follows:-

Passing 200 Mesh ~ 0% To 20%,

provided compaction is obtained in accordance with Sec. I-17.02.

TRAFFIC:- The contractor shall maintain traffic at all times in accordance with the requirements of Sec. G-8.07. The item of "Maintaining Traffic" shall include furnishing lights, signs, barricades and watchmen necessary to secure the flow of traffic twenty four (24) hours daily.

SUMMARY OF QUANTITIES

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	S-176 (1)	1946

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HARRISON COUNTY
S. H. 923 ~ SEC. F (PT.)

STRUCTURES - 20' SPAN AND UNDER (S)

Ref. No.	Station	Detailed on Sheet No.	Removals: Portions of Existing Structure Cu. Yds.	Removals: Dispose of Pipe 15" and Under Lin. Ft.	Removals: Dispose of Pipe over 15" Lin. Ft.	Removals: Store Pipe 15" and Under Lin. Ft.	Removals: Store Pipe over 15" Lin. Ft.	Excavation: Structure Cu. Yds.	Excavation: Channel Cu. Yds.	Concrete: Class "C" Cu. Yds.	Concrete: Class "E" Cu. Yds.	Reinf. Steel Lbs.	Pipe for Roadway Culverts - Lin. Ft.: 15"	24"	30"	36"	48"	Catch Basins - Each: Std. 1-2 A	1-2 A Mod.	Std. 1-3	Dowel Holes Lin. Ft.	Riprap Sq. Yds.
1-S	154+59	32		45				10			0.7		95						1			5
2-S	157+39.7	33						1			1.1	13	105								6	5
3-S	163+26.5	34						15			5.0						61					10
4-S	168+22	Removal	1.0	22																		
5-S	170+54	34		20				10			0.7		66					1				5
6-S	172+85	Removal		19																		
7-S	175+21	35		24				15			0.7		73					1				5
8-S	177+19.8	36						15			1.7	13		70							6	5
9-S	179+19	Removal	0.4			24																
10-S	179+70	35						15			0.7		63					1				
11-S	185+81	37, 38						63	27	57.4		7751										
12-S	193+50	39						95	77	43.9		5469										
13-S	202+14	40	8.0				26	40	10		5.0						78					10
14-S	211+93	41			46			30	3		2.2			71								9
15-S	216+50	41						15			0.7		57					1				4
16-S	219+47	Removal				23																
17-S	223+60	42	5.0		28			15	8		2.7				59							15
18-S	235+54	43	3.0				63	10	80		2.2			70								13
19-S	240+00	44				48		25			0.7		57					1				
20-S	243+52	Removal	0.3			42																
21-S	244+50	45						35			1.1			52						1		37
22-S	246+18	Removal	2.3				49															
23-S	250+91							15	52		2.5	13				80					6	17
Total to Recap				130		137			317		27.7							5				
Total to Summary			20		74		138	424		101.3		13,259	516	263	59	80	139		1	1	18	140

APPROACHES (A)

Total of Sheet No.	Pipe for Driveways Lin. Ft. 12"	15"	36"	I-17 Cu. Yds.	T-10 Cu. Yds.	12" Pipe Removed and Stored Lin. Ft.
6	28			34		
7	74			56		
8	28	126		80		
9		22	30	31		24
10		22		29	*16	
Total to Recap						24
Total to Summary	130	170	30	*230		

* This quantity carried to Pavement Calculations.
* 230 + 15% for compaction = 265 cu.yds. carried to Gen. Summary.

GUTTER

Total of Sheet No.	Paved Lin. Ft.	Sq. Yds. Sod	Sq. Yds. Topsoil
8	253	63	63
9		116	116
10		376	376
Total to Sum.	253	555	555

GUARD RAIL

Total of Sheet No.	Lin. Ft.
6	448
7	800
8	290
9	350
10	944
Total to Sum.	2832

PIPE UNDERDRAIN

Total of Sheet No.	Lin. Ft. 6" Pipe	6" Outlet
7	18	10
8	10	10
10	92	10
Total to Sum.	120	30

ROADWAY DRAINAGE (D)

Total of Sheet No.	Pipe Lin. Ft. 6"	12"	Outlet Lin. Ft. 6"	Class "E" Conc. Cu. Yds.	Std. 1-2 A C.B. Each	8" Pipe Removed & Disposed of-L.F.
8	816		60	0.7		
9	1243	530			1	300
10	741					
Total to Recap				0.7	1	300
Total to Sum.	2800	530	60			

EARTHWORK & SEEDING (E)

Station From	Station To	Roadway Excavation Cu. Yds.	Channel Excavation Cu. Yds.	Embankment Cu. Yds.	Embankment + 15% Cu. Yds.	Seeding Sq. Yds.
153+00	167+00	345		17,672	20,323	10,901
167+00	221+00	37,851	1412	34,319	39,467	50,788
221+00	254+00	22,229		19,105	21,970	33,311
Total to Recap			1412			
Totals		60,425		71,096	81,760	95,000

Borrow = 81,760 - (60,425 + 1412) = 19,923 Cu. Yds.

RECAP TABLE

Total of Table No.	Pipe Removed and Disposed of-15" & Under Lin. Ft.	Pipe Removed and Stored 15" & Under Lin. Ft.	Class "E" Conc. Cu. Yds.	Std. No. 1-2 A Catch Basins Each	Channel Excav. Cu. Yds.
A		24			
D	300		0.7	1	
E					1412
S	130	137	27.7	5	317
Total to Sum.	430	161	28.4	6	1729

SUMMARY OF QUANTITIES

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	S-176 (1)	1946

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HARRISON COUNTY
S. H. 923 - SEC. F (PT.)

PAVEMENT CALCULATIONS

Begin Pavement Sta. 153+50
End Pavement Sta. 254+00
No additions or deductions
Net Length of Pavement = 10050 Lin. Ft.

Pavement volume : 10050 x 20 x 0.5 ÷ 27 = 3722 Cu. Yds.
Add for Road Approach Rt. and Lt. Sta. 249+30 = 16 Cu. Yds.
Add for Curve Widening (98+74+96+169 x 6 ÷ 36) = 73 Cu. Yds.
Total T-10 Pavement = 3811 Cu. Yds.

WATER CALCULATION

Total Embankment = 71,096 Cu. Yds.

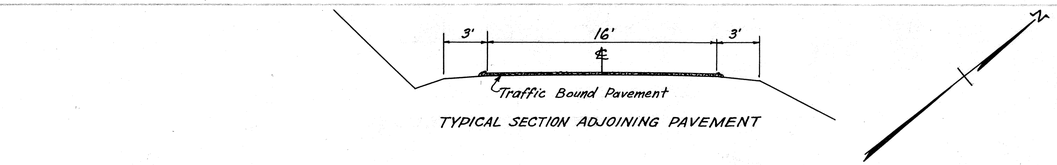
Water = 71,096 x 5 ÷ 1000 = 355 M. Gals.

GENERAL SUMMARY

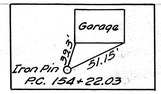
ITEM	QUANTITY	UNIT	DESCRIPTION
			ROADWAY
E-1	60,425	Cu. Yds.	Roadway Excavation.
E-3	1,729	Cu. Yds.	Channel Excavation.
E-4	19,923	Cu. Yds.	Borrow.
E-11	355	M. Gals.	Water.
E-12	161	Lin. Ft.	Pipe Removed and Stored, 15" and Under.
E-12	138	Lin. Ft.	Pipe Removed and Stored, Over 15".
E-12	430	Lin. Ft.	Pipe Removed and Disposed of, 15" and Under.
E-12	74	Lin. Ft.	Pipe Removed and Disposed of, Over 15".
I-1	130	Lin. Ft.	12" Pipe for Driveways.
I-1	170	Lin. Ft.	15" Pipe for Driveways.
I-1	30	Lin. Ft.	36" Pipe for Driveways.
I-3	2,800	Lin. Ft.	6" Roadway Drainage, including Porous Backfill as per Plan.
I-3	530	Lin. Ft.	12" Roadway Drainage, including Porous Backfill as per Plan.
I-3	60	Lin. Ft.	6" Outlets for Roadway Drainage.
I-4	120	Lin. Ft.	6" Pipe Underdrains.
I-4	30	Lin. Ft.	6" Pipe Outlets for Underdrains.
I-8	6	Units	Standard No. 1-2 A Catch Basins.
I-8	1	Unit	No. 1-2 A Catch Basin, Modified as per Plan.
I-8	1	Unit	Standard No. 1-3 Catch Basin.
I-10	140	Sq. Yds.	Riprap, Type "A", Grout Filled.
I-14	253	Lin. Ft.	Paved Gutter: as per plan
I-15	2,832	Lin. Ft.	Guard Rails, Woven Wire Type, 2 tapes, standard strength
I-17	265	Cu. Yds.	Side Approaches, Mail Box Turnouts and Berm Material.
L-2	555	Sq. Yds.	Topsoil Furnished and Placed, 2" thickness
L-9	95,000	Sq. Yds.	Seeding and Protecting, Type "A".
L-10	555	Sq. Yds.	Sodding.
T-110	1,500	Cu. Yds.	Traffic Compacted Surface Course for Maintaining Traffic.
M-10	30	Tons	Calcium Chloride for Maintaining Traffic.
			PAVEMENT
T-10	3,811	Cu. Yds.	Traffic Bound Surface Course, No. 46 Aggregate.
			STRUCTURES - 20' SPAN AND UNDER
E-2	424	Cu. Yds.	Excavation for Structures.
S-1	101.3	Cu. Yds.	Concrete for Structures, Class "C".
S-1	28.4	Cu. Yds.	Concrete for Structures, Class "E".
S-4	13,259	Lbs.	Reinforcing Steel.
S-22	20	Cu. Yds.	Removal of Portions of Existing Structures.
S-23	18	Lin. Ft.	Dowel Holes.
S-27	516	Lin. Ft.	15" Pipe for Roadway Culverts.
S-27	263	Lin. Ft.	24" Pipe for Roadway Culverts.
S-27	59	Lin. Ft.	30" Pipe for Roadway Culverts.
S-27	80	Lin. Ft.	36" Pipe for Roadway Culverts.
S-27	139	Lin. Ft.	48" Pipe for Roadway Culverts.

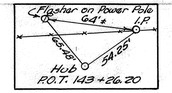
FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR	SHEET	TOTAL SHEETS
2	OHIO	S-176(1)	1946	6	47

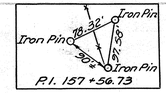
HARRISON COUNTY
S.H. 923 - SEC. F (PT)

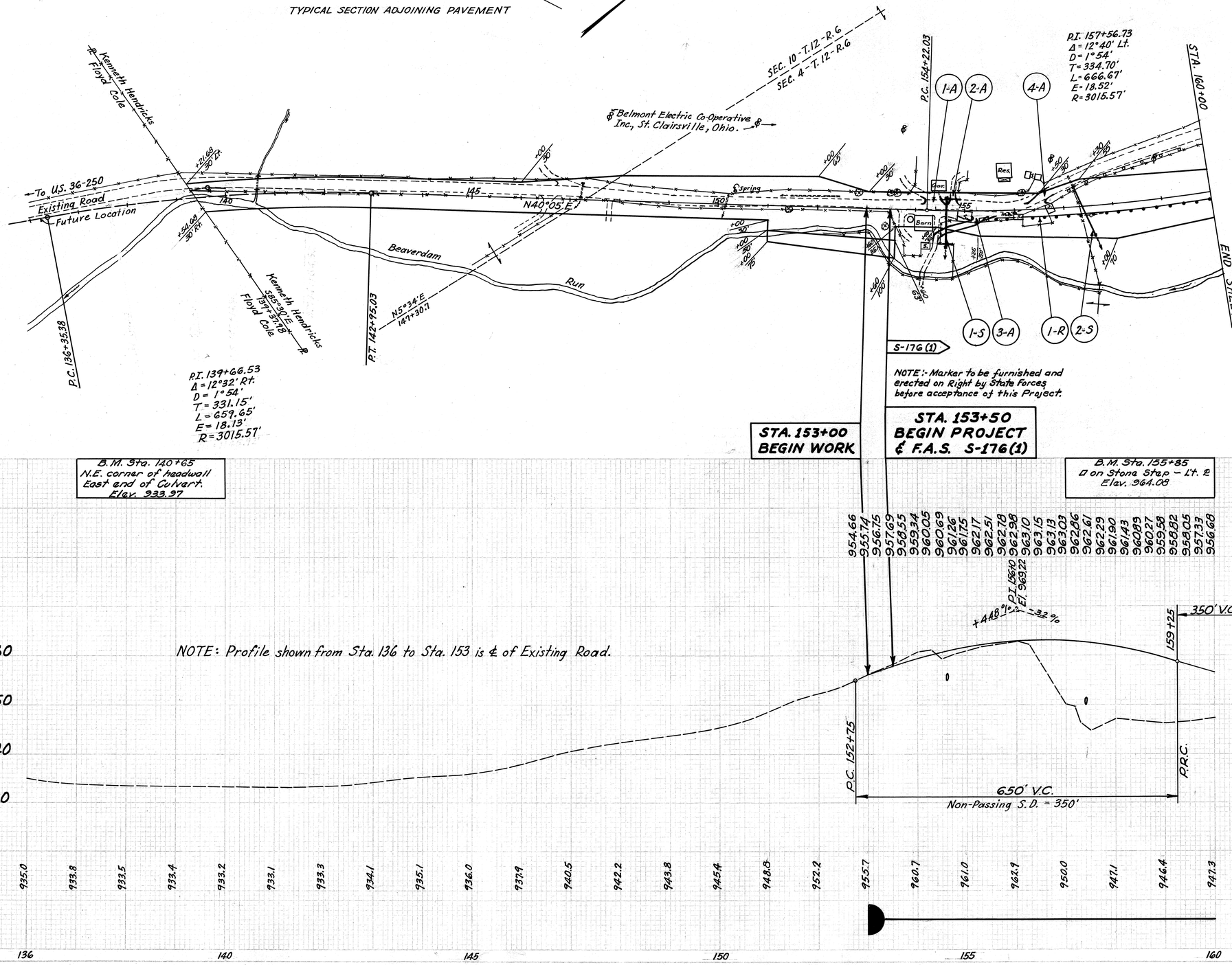


TYPICAL SECTION ADJOINING PAVEMENT









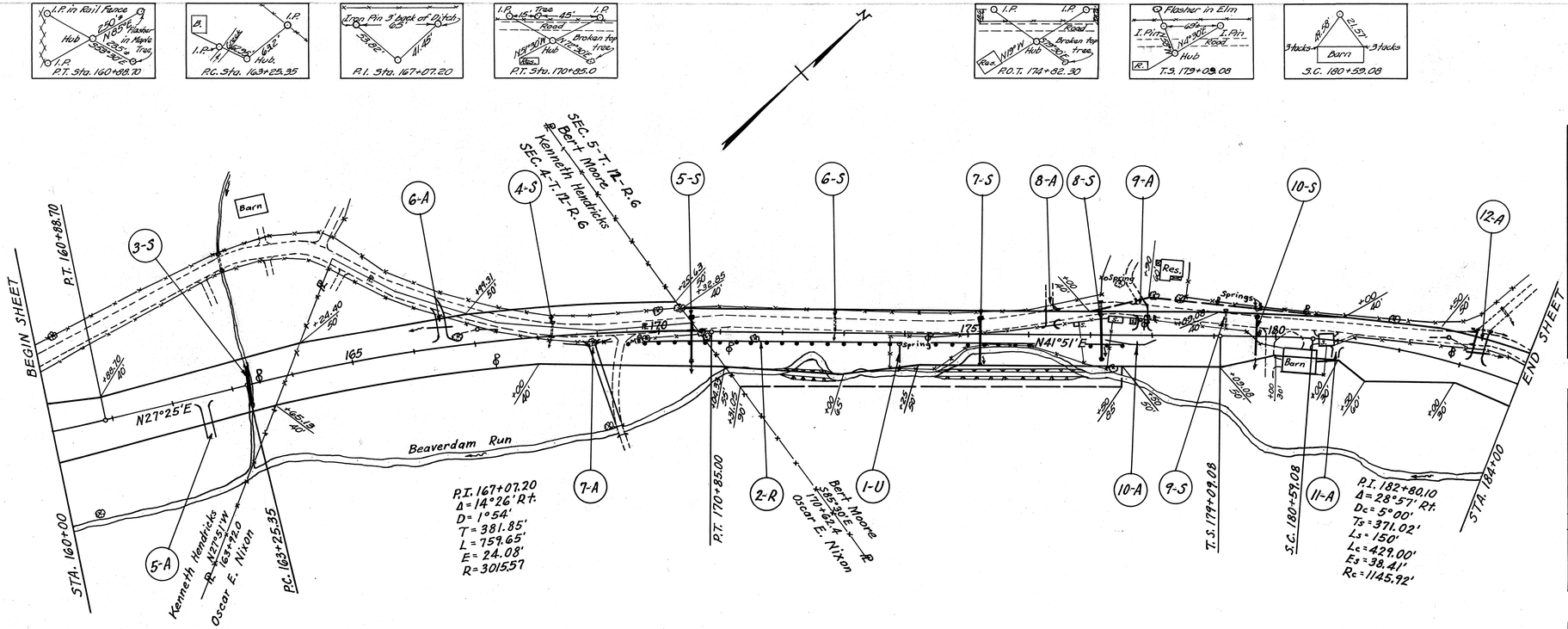
APPROACHES							
Ref. No.	Station	Side ℄	Pipe Lin. Ft. 12"		I-17 Cu. Yds.		
1-A	154+50	Lt.			4		
2-A	154+75	Lt.	28		3		
3-A	155+75	Rt.			20		
4-A	156+50	Lt.			7		
Totals			28		34		

STRUCTURES - 20' SPAN AND UNDER								
Ref. No.	Station	See Sheet	Removals Type	Size	Length	New Work Type	Size	Length
1-S	154+59	32	V.S.P.	12"	45'	Pipe	15"	95'
2-S	157+39.7	33				Pipe	15"	105'

GUARD RAIL					
Ref. No.	From Sta.	To Sta.	Side ℄	Lin. Ft.	
1-R	155+54	160+00	Rt.	448	
Total				448	

REG. NO. DIVISION	STATE	PROJECT	FISCAL YEAR	SHEET NO. / TOTAL SHEETS
2	OHIO	S-176(1)	1946	7 / 47

HARRISON COUNTY
S.H. 923 - SEC. F (PT.)

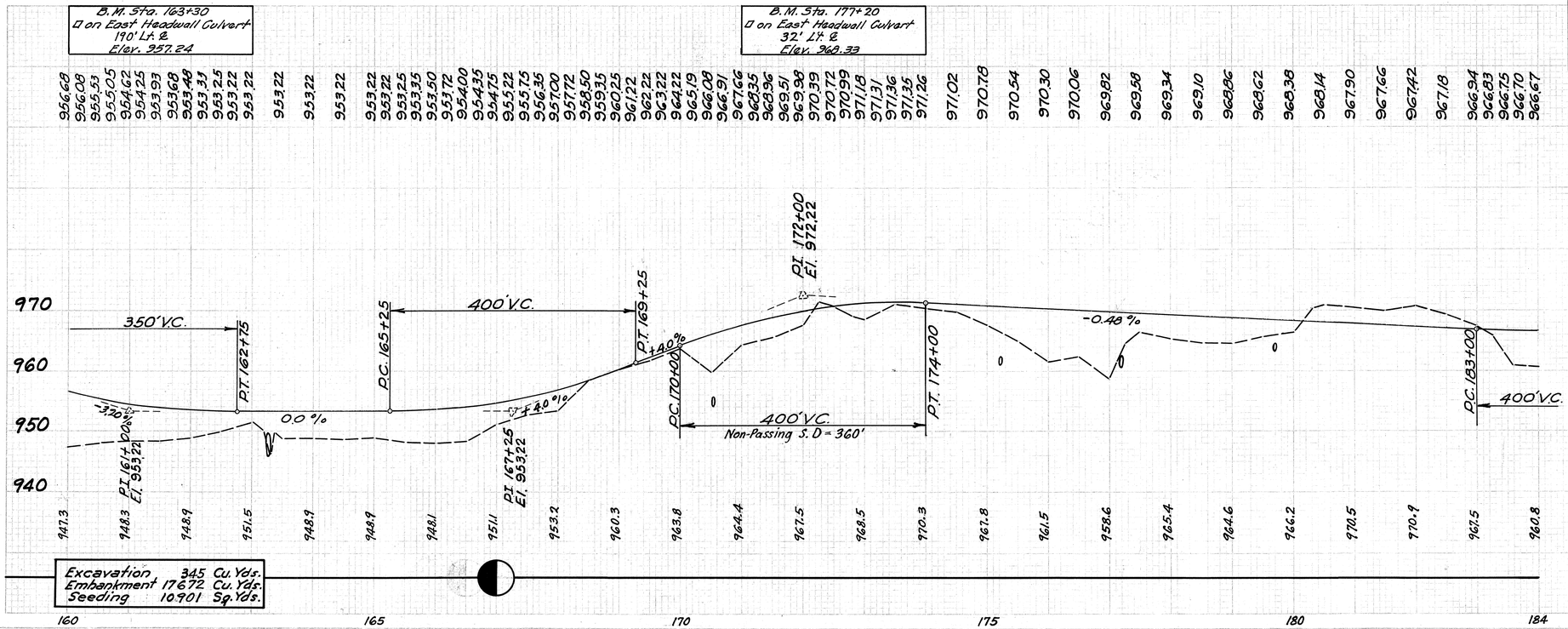


APPROACHES							
Ref. No.	Station	Side ℄	Pipe Lin. Ft. 12"		I-17 Cu. Yds.		
5-A	162+50	Rt.			9		
6-A	166+50	Lt.	40		8		
7-A	168+85	Rt.			20		
8-A	176+35	Lt.			3		
9-A	177+80	Lt.			4		
10-A	177+80	Rt.			3		
11-A	181+00	Rt.			2		
12-A	183+25	Lt.	34		7		
Totals			74		56		

STRUCTURES - 20' SPAN AND UNDER								
Ref. No.	Station	See Sheet	Removals Type	Size	Length	New Work Type	Size	Length
3-S	163+26.5	34				Pipe	48"	61'
4-S	168+22		V.S.P.	12"	22'			
5-S	170+54	34	V.S.P.	8"	20'	Pipe	15"	66'
6-S	172+85		V.S.P.	8"	19'			
7-S	175+21	35	C.M.P.	10"	24	Pipe	15"	73'
8-S	177+19.8	36				Pipe	24"	70'
9-S	179+19		C.M.P.	12"	24'			
10-S	179+70	35				Pipe	15"	63'

GUARD RAIL				
Ref. No.	Station From	Station To	Side ℄	Lin. Ft.
2-R	169+49	177+50	Rt.	800
Total				800

PIPE UNDERDRAIN					
Ref. No.	Station From	Station To	See Sheet	6" - Lin. Ft. Pipe	Outlet
1-U	173+90		47	18	10
Totals				18	10

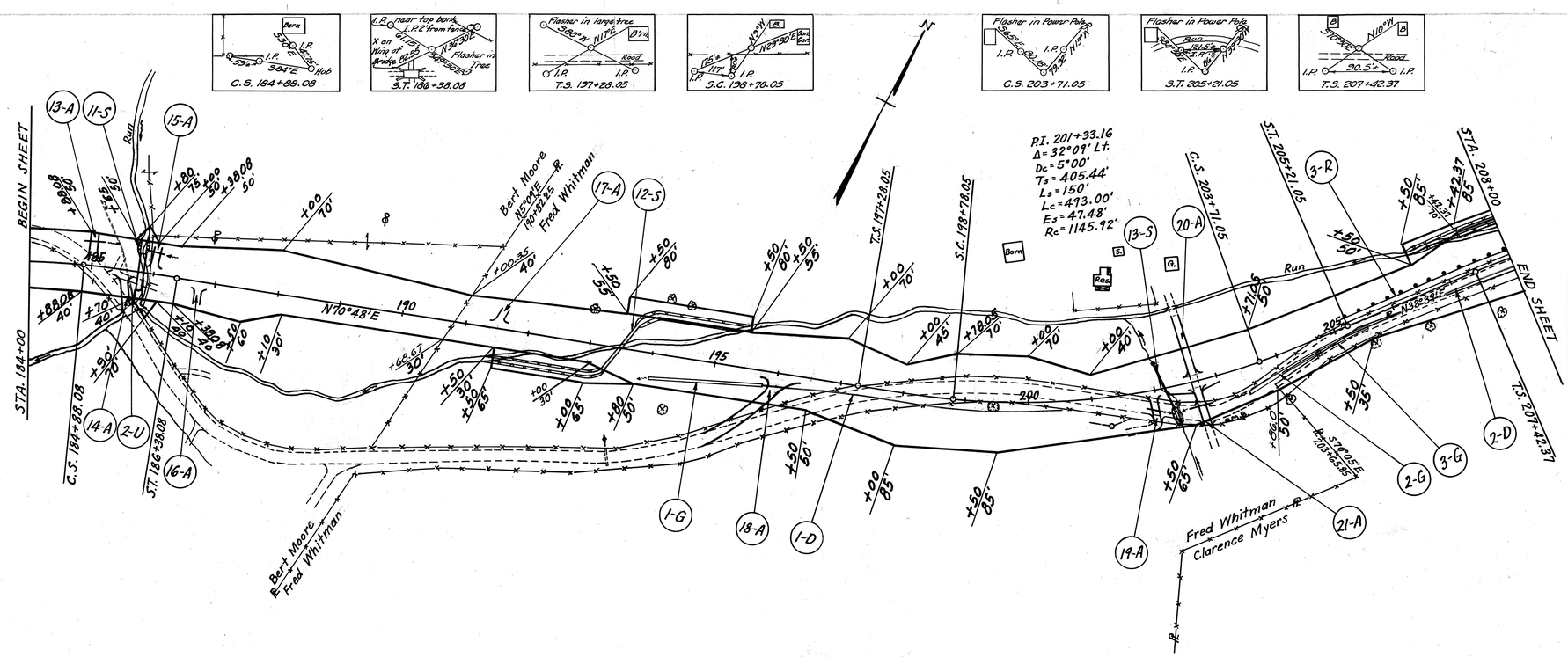


Excavation	345	Cu. Yds.
Embankment	17672	Cu. Yds.
Seeding	10.901	Sq. Yds.

FED. AID DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	S-176(1)	1946

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HARRISON COUNTY
S.H. 923-SEC. F (PT.)



APPROACHES

Ref. No.	Station	Side ℄	Pipe Lm. Ft. 12"	Pipe Lm. Ft. 15"	I-17 Cu. Yds.
13-A	185+00	Lt.		30	8
14-A	185+50	Rt.			8
15-A	186+00	Lt.		24	4
16-A	186+75	Rt.			3
17-A	191+50	Lt.			3
18-A	196+00	Rt.		36	23
19-A	201+95	Rt.	28		5
20-A	202+65	Lt.			15
21-A	202+65	Rt.		36	11
Totals			28	126	80

STRUCTURES - 20' SPAN AND UNDER

Ref. No.	Station	See Sheet	Removals Type	Removals Size	Removals Length	New Work Type	New Work Size	New Work Length
11-S	185+81	37,38				LBC	8'x4'	59'6"
12-S	193+50	39				SBC	5'x4'	95'
13-S	202+14	40	C.M.P.	36"	26'	Pipe	48"	78'

GUARD RAIL

Ref. No.	Station From	Station To	Side ℄	Lin. Ft.
3-R	205+10	208+00	Lt.	290
Total				290

PIPE UNDERDRAIN

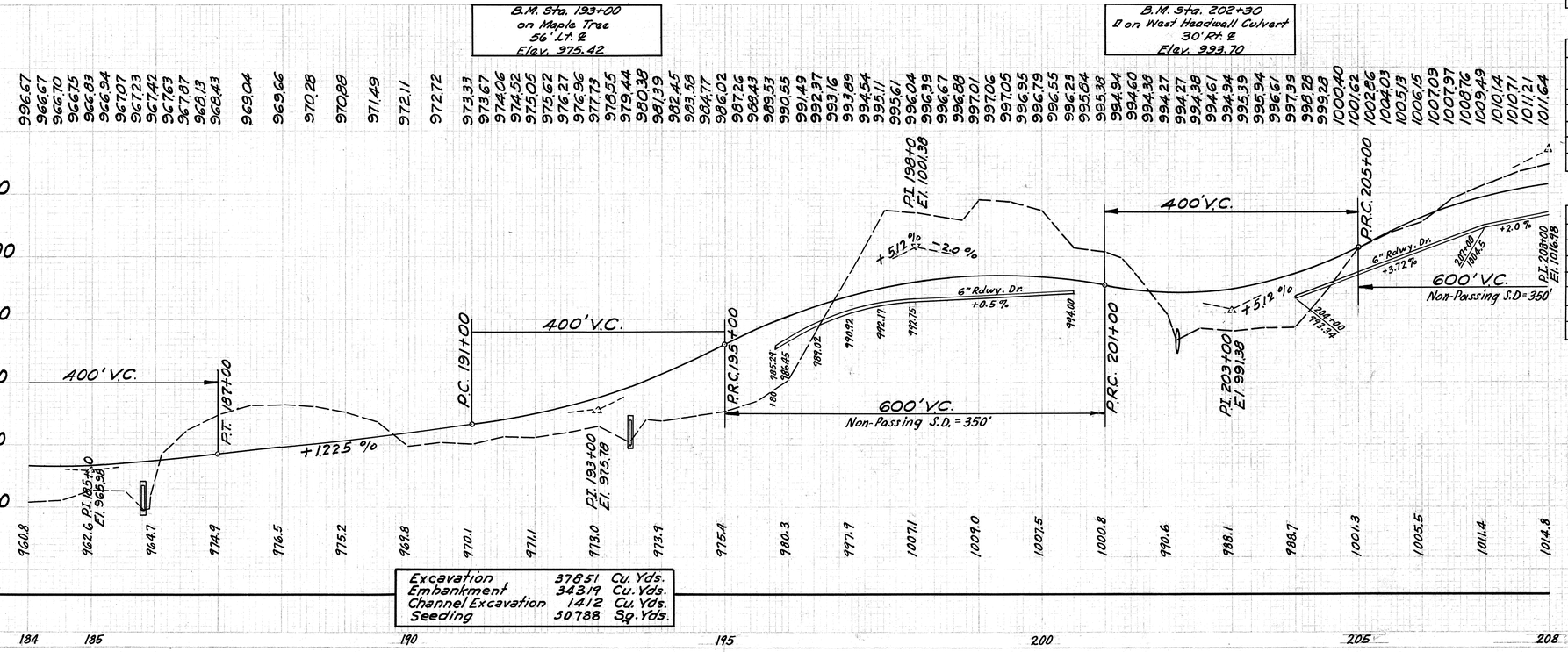
Ref. No.	Station From	Station To	Side ℄	6"-Lin. Ft. Pipe	6"-Lin. Ft. Outlet
2-U	185+68		Rt.	10	10
Totals				10	10

ROADWAY DRAINAGE

Ref. No.	Station From	Station To	Side ℄	See Sheet	Pipe-L.F. 6"	Outlet-L.F. 6"	Conc. Cu. Yds.
1-D	195+80	200+50	Rt.	21	434	40	0.7
2-D	204+00	208+00	Rt.		382	20	
Totals					816	60	0.7

GUTTER

Ref. No.	From Sta.	To Sta.	Side ℄	Paved-Lin. Ft.	Sod-S.Y.	Topsoil-S.Y.
1-G	194+00	195+80	Rt.	181		
2-G	203+40	204+10	Rt.	72		
3-G	204+10	205+50	Rt.		63	63
Totals				253	63	63

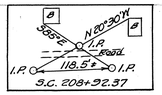


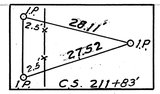
Excavation	37851	Cu. Yds.
Embankment	34319	Cu. Yds.
Channel Excavation	1412	Cu. Yds.
Seeding	30788	Sq. Yds.

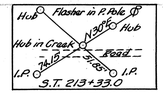
FED. ROAD DIVISION	STATE	PROJECT	FISCAL YEAR
5	OHIO	S-176(1)	1946

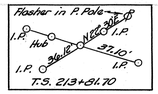
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47

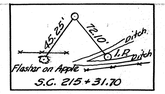
HARRISON COUNTY
S.H. 923 - SEC. F (P.T.)

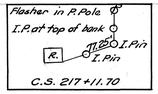


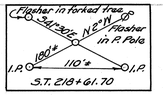


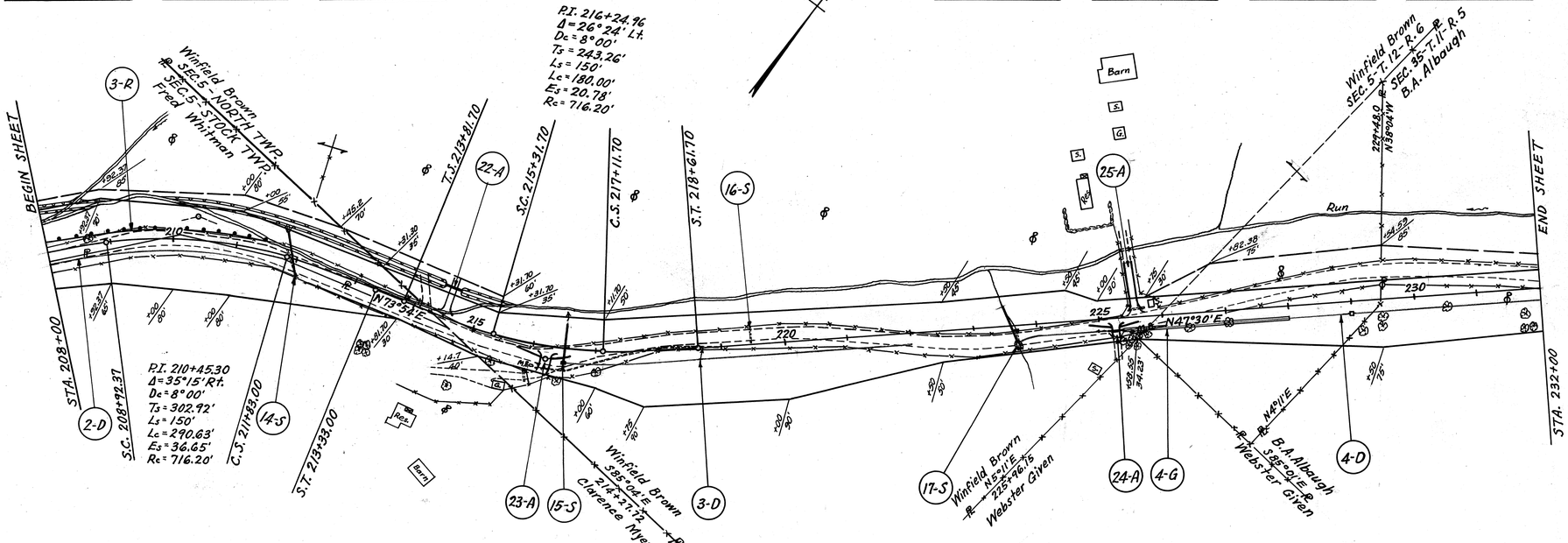












APPROACHES

Ref. No.	Station	Side ℄	Pipe Lin. Ft. 15"	Pipe Lin. Ft. 36"	I-17 Cu. Yds.	12" C.M.P. Removed and Stored Lin. Ft.	
22-A	214+50	Lt.		30	8		
23-A	216+25	Rt.			6		
24-A	225+30	Rt.	22		5		
25-A	225+50	Lt.			12	24	
Totals			22	30	31	24	

STRUCTURES - 20' SPAN AND UNDER

Ref. No.	Station	See Sheet	Removals Type	Removals Size	Removals Length	New Work Type	New Work Size	New Work Length
14-S	211+93	41	V.S.P.	18"	46'	Pipe	24"	71'
15-S	216+50	41				Pipe	15"	57'
16-S	219+47		C.M.P.	12"	23'			
17-S	223+60	42	V.S.P.	18"	28'	Pipe	30"	59'

GUARD RAIL

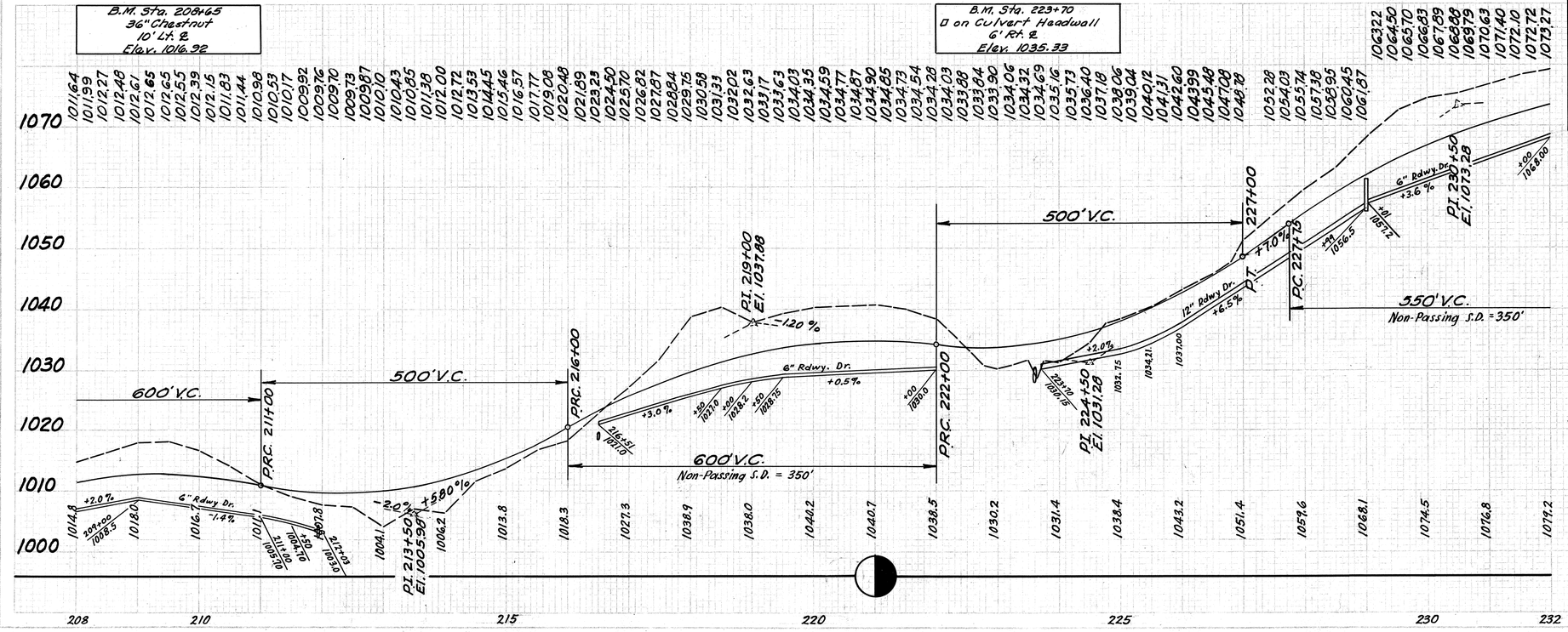
Ref. No.	Station From	Station To	Side ℄	Lin. Ft.
3-R	208+00	211+43	Lt.	350
Total				350

GUTTER

Ref. No.	Station From	Station To	Side ℄	Topsoil Sq. Yds.	Sod Sq. Yds.
4-G	225+40	228+00	Rt.	116	116
Total				116	116

ROADWAY DRAINAGE

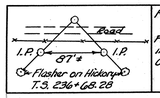
Ref. No.	Station From	Station To	Side ℄	Pipe Lin. Ft. 6"	Pipe Lin. Ft. 12"			Std. I-2 A C.B. Each	8" V.S.P. Removed & Disposed of-Lin. Ft.	
2-D	208+00	212+03	Rt.	392						
3-D	216+51	222+00	Rt.	552					300	
4-D	223+70	232+00	Rt.	299	530			1		
Totals				1243	530			1	300	

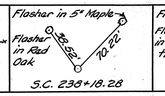


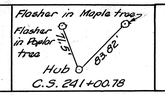
FED. RD. DIV.NO.	STATE	PROJECT	FISCAL YEAR
2	OHIO	S-176(1)	1946

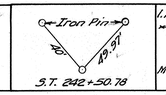
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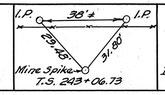
HARRISON COUNTY
S.H. 923 - SEC. F (PT.)

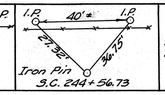


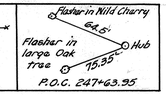


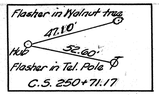


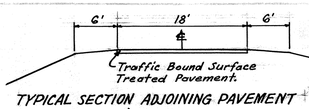


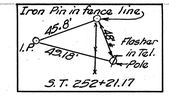


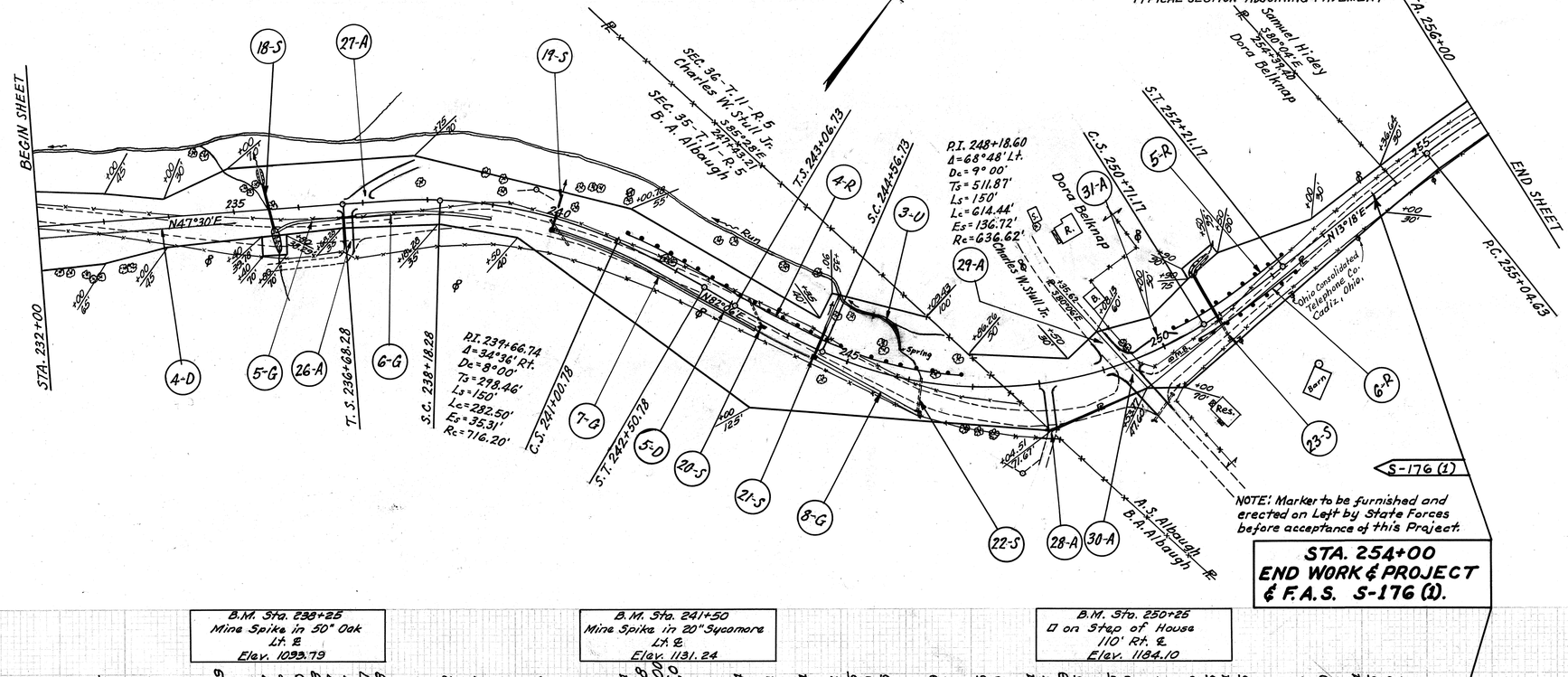








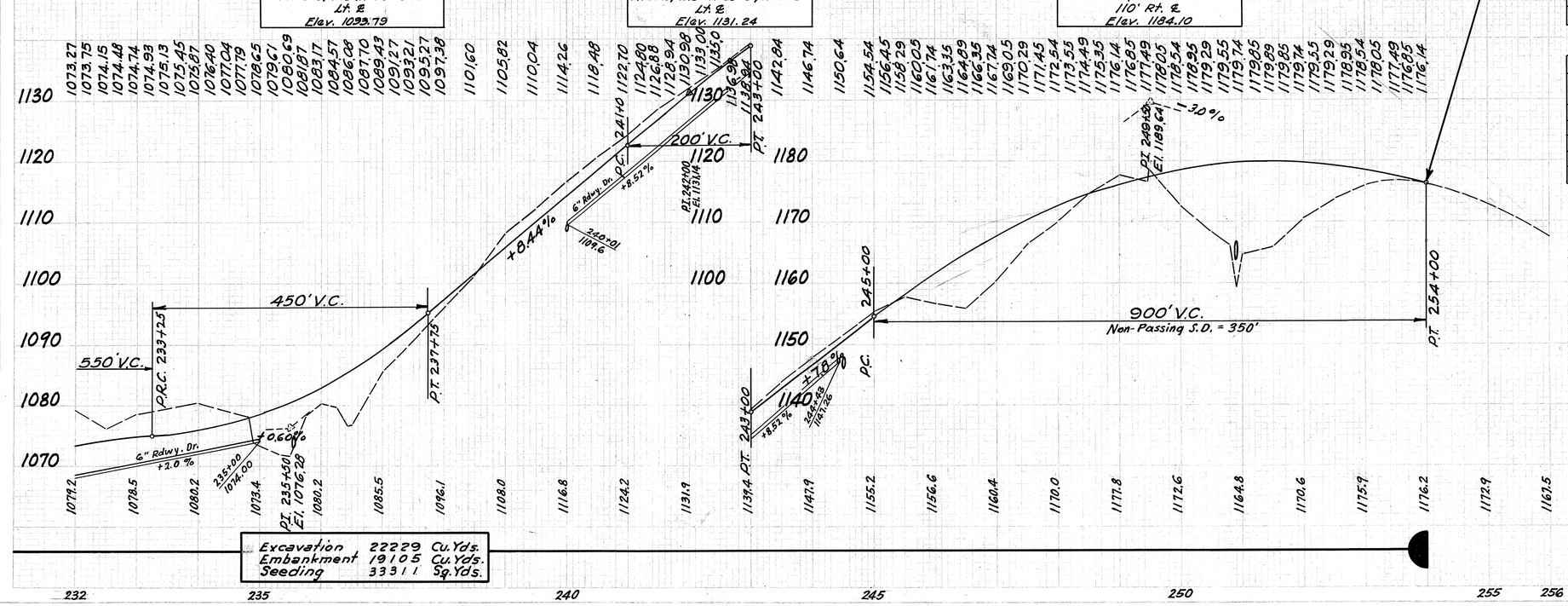




B.M. Sta. 238+25
Mine Spike in 50" Oak
Lt. ℄
Elev. 1093.79

B.M. Sta. 241+50
Mine Spike in 20" Sycamore
Lt. ℄
Elev. 1131.24

B.M. Sta. 250+25
□ on Step of House
110' Rt. ℄
Elev. 1184.10



Excavation	22229	Cu. Yds.
Embankment	19105	Cu. Yds.
Seeding	33311	Sq. Yds.

APPROACHES

Ref. No.	Station	Side ℄	Pipe Lin. Ft. 15"	I-17 Cu. Yds.	T-10 Cu. Yds.	
26-A	236+75	Rt.	22	5		
27-A	237+00	Lt.		16		
28-A	248+10	Rt.		5		
29-A	249+30	Lt.			12	
30-A	249+30	Rt.			4	
31-A	249+90	Lt.		3		
Totals			22	29	16	

STRUCTURES - 20' SPAN AND UNDER

Ref. No.	Station	See Sheet	Removals Type	Removals Size	Removals Length	New Work Type	New Work Size	New Work Length
18-S	235+54	43	C.M.P.	18"	63'	Pipe	24"	70'
19-S	240+00	44	C.M.P.	15"	48'	Pipe	15"	57'
20-S	243+52		C.M.P.	15"	42'			
21-S	244+50	45				Pipe	24"	52'
22-S	246+18		C.M.P.	24"	49'			
23-S	250+91	46				Pipe	36"	80'

GUARD RAIL

Ref. No.	Station From	Station To	Side ℄	Lin. Ft.
4-R	241+10	246+76	Lt.	560
5-R	250+25	252+36	Lt.	208
6-R	250+62	252+36	Rt.	176
Total				944

GUTTER

Ref. No.	Station From	Station To	Side ℄	Topsoil Sq. Yds.	Sod Sq. Yds.
5-G	235+63	236+65	Rt.	46	46
6-G	236+85	239+00	Rt.	94	94
7-G	240+01	243+50	Rt.	153	153
8-G	244+51	246+25	Rt.	83	83
Total				376	376

ROADWAY DRAINAGE

Ref. No.	Station From	Station To	Side ℄	Pipe-Lin.Ft. 6"	
4-D	232+00	235+00	Rt.	300	
5-D	240+01	244+43	Rt.	441	
Total				741	

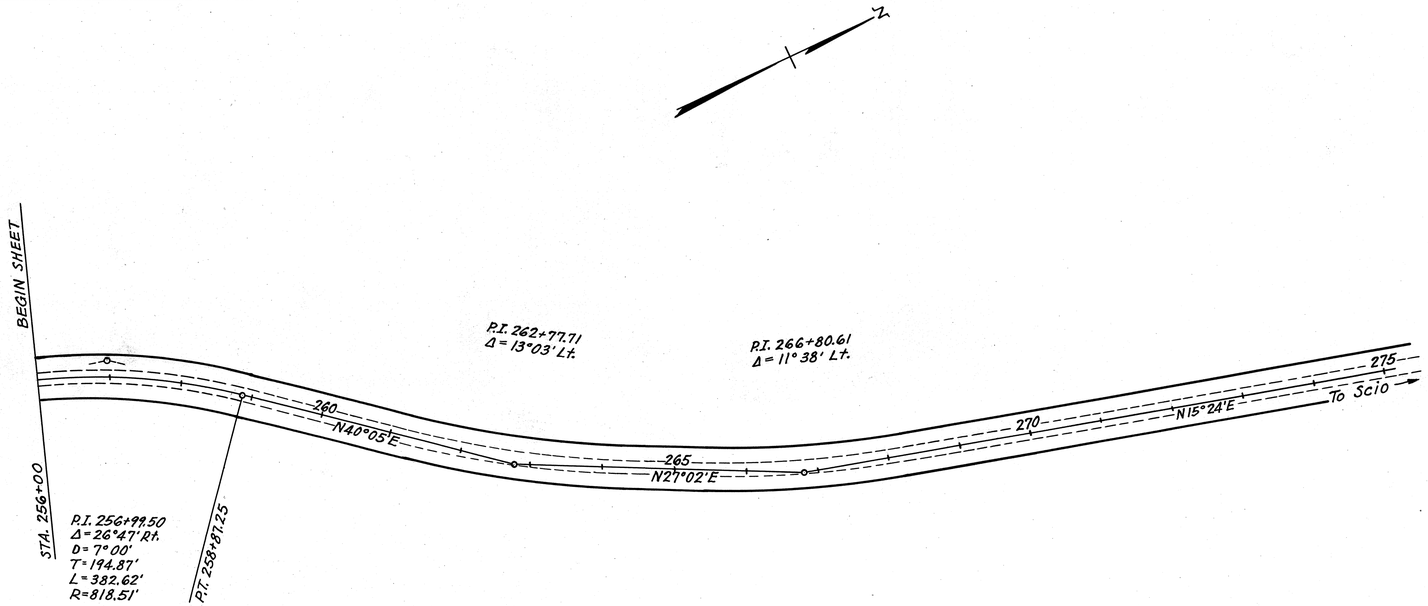
PIPE UNDERDRAIN

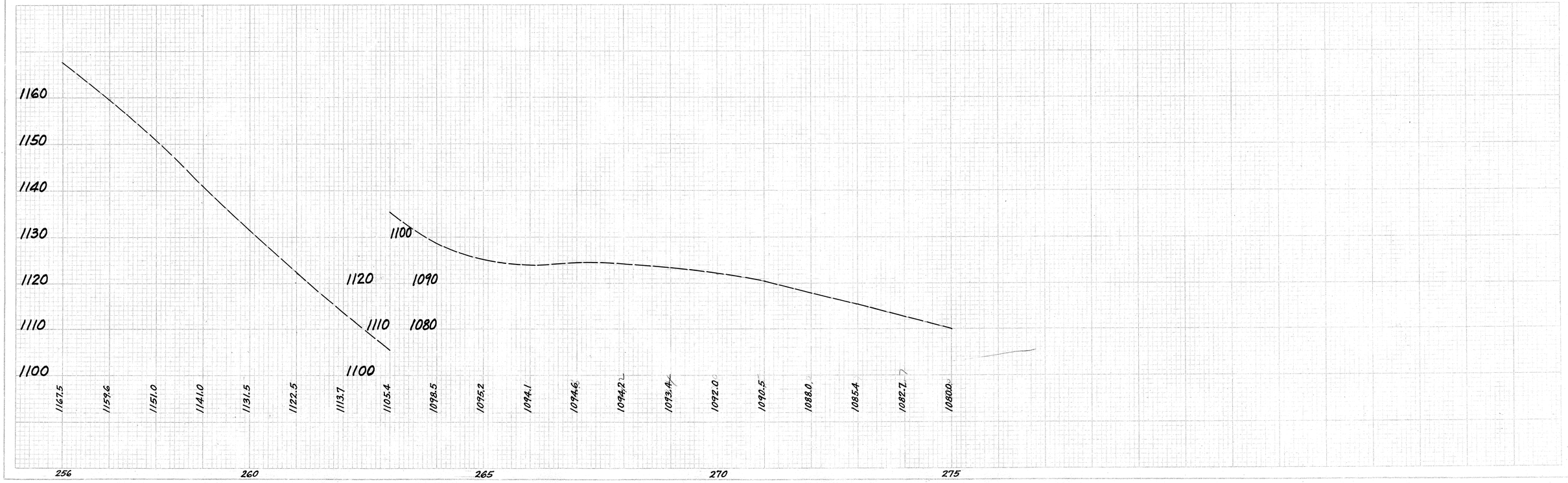
Ref. No.	Station From	Station To	Side ℄	See Sheet	6"-Lin.Ft. Pipe	6"-Lin.Ft. Outlet
3-U	244+84	245+11	Lt.	47	92	10
Totals					92	10

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
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HARRISON COUNTY
S.H. 923-SEC. F (Pt.)





FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
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HARRISON COUNTY
S.H. 923 SEC. F(PT.)

CURVE TABLES

P.C. 154+22.03			D = 1°54 LT.		P.T. 160+88.70		
LEFT					RIGHT		
Edge of Pavement	Deduct Crown	Width	STATION	PROFILE GRADE	Width	Add Super.	Edge of Pavement
956.47	0.17	10'	153+22.03	956.64	10'	0.00	956.47
956.58			+25	956.75		0.01	956.59
957.52			+50	957.69		0.07	957.59
958.38			+75	958.55		0.12	958.50
959.17			154+00	959.34		0.21	959.38
959.80			P.C. +22.03	959.97		0.27	960.07
959.88			+25	960.05		0.27	960.15
960.52			+50	960.69		0.34	960.86
961.09			+75	961.26		0.40	961.49
961.58			155+00	961.75			961.98
962.00			+25	962.17			962.40
962.34			+50	962.51			962.74
962.61			+75	962.78			963.01
962.81			156+00	962.98			963.21
962.93			+25	963.10			963.33
962.98			+50	963.15			963.38
962.96			+75	963.13			963.36
962.86			157+00	963.03			963.26
962.69			+25	962.86			963.09
962.44			+50	962.61			962.84
962.12			+75	962.29			962.52
961.73			158+00	961.90			962.13
961.26			+25	961.43			961.66
960.72			+50	960.89			961.12
960.10			+75	960.27			960.50
959.41			159+00	959.58			959.81
958.65			+25	958.82			959.05
957.88			+50	958.05			958.28
957.16			+75	957.33			957.56
956.51			160+00	956.68			956.91
955.91			+25	956.08			956.31
955.60			+38.70	955.77		0.40	956.00
955.36			+50	955.53		0.37	955.73
954.88			+75	955.05		0.30	955.18
954.64			P.T. +88.70	954.81		0.27	954.91
954.45			161+00	954.62		0.24	954.69
954.08			+25	954.25		0.17	954.25
953.76			+50	953.93		0.10	953.86
953.51			+75	953.68		0.04	953.55
953.39	0.17	10'	+88.70	953.56	10'	0.00	953.39

P.C. 163+25.35			D = 1°54 RT		P.T. 170+85.00		
LEFT					RIGHT		
Edge of Pavement	Add Super.	Width	STATION	PROFILE GRADE	Width	Deduct Crown	Edge of Pavement
953.16	0.00	10'	162+25.35	953.33	10'	0.17	953.16
953.15			+50	953.25			953.08
953.18			+75	953.22			953.05
953.25			163+00	953.22			953.05
953.34			+25	953.22			953.05
953.34	Obtained Graph.		P.C. +25.35	953.22			953.05
953.41			+50	953.22			953.05
953.45	0.40		+75	953.22			953.05
953.45	0.40		164+00	953.22			953.05
953.45	0.40		+25	953.22			953.05
953.45	0.40		+50	953.22			953.05
953.45	0.40	10'	+75	953.22	10'	0.17	953.05

Continued

P.C. 163+25.35			D = 1°54 RT		P.T. 170+85.00		
Continued							
LEFT					RIGHT		
Edge of Pavement	Add Super.	Width	STATION	PROFILE GRADE	Width	Deduct Crown	Edge of Pavement
953.45	0.40	10'	165+00.00	953.22	10'	0.17	953.05
953.45			+25	953.22			953.05
953.48			+50	953.25			953.08
953.58			+75	953.35			953.18
953.73			166+00	953.50			953.33
953.95			+25	953.72			953.55
954.23			+50	954.00			953.83
954.58			+75	954.35			954.18
954.98			167+00	954.75			954.58
955.45			+25	955.22			955.05
955.98			+50	955.75			955.58
956.58			+75	956.35			956.18
957.23			168+00	957.00			956.83
957.95			+25	957.72			957.55
958.73			+50	958.50			958.33
959.58			+75	959.35			959.18
960.48			169+00	960.25			960.08
961.45			+25	961.22			961.05
962.45			+50	962.22			962.05
963.45			+75	963.22			963.05
964.45			170+00	964.22			964.05
965.42	0.40		+25	965.19			965.02
966.27			+50	966.08			965.91
967.03			+75	966.91			966.74
967.32	Obtained Graph.		P.T. +85.00	967.22			967.05
967.72			171+00	967.66			967.49
968.32			+25	968.35			968.18
968.88			+50	968.96			968.79
969.35			+75	969.51			969.34
969.53	0.00	10'	+85.00	969.70	10'	0.17	969.53

T.S. 179+09.08 S.C. 180+59.08			D = 5°00 RT.		C.S. 184+88.08 S.T. 186+38.08		
LEFT					RIGHT		
Edge of Pavement	Add Super.	Width	STATION	PROFILE GRADE	Width	Deduct Crown	Edge of Pavement
968.77	0.00	10'	178+84.08	968.94	10'	0.17	968.77
968.72			179+00	968.86			968.69
968.72			T.S. +09.08	968.82			968.65
968.72			+25	968.74			968.57
968.73	Obtained Graph.		+50	968.62			968.45
968.79			+75	968.50			968.33
968.82			180+00	968.38			968.21
968.85			+25	968.26			968.09
968.85			+50	968.14			967.97
968.83			S.C. +59.08	968.10			967.93
968.81			+75	968.02			967.85
968.73	1.00		181+00	967.90			967.73
968.61			+25	967.78			967.61
968.49			+50	967.66			967.49
968.37			+75	967.54			967.37
968.25			182+00	967.42			967.25
968.13			+25	967.30			967.13
968.01			+50	967.18			967.01
967.89			+75	967.06			966.89
967.77			183+00	966.94			966.77
967.66			+25	966.83			966.66
967.58	1.00	10'	+50	966.75	10'	0.17	966.58

Continued

T.S. 179+09.08 S.C. 180+59.08			D = 5°00 RT.		C.S. 184+88.08 S.T. 186+38.08		
Continued							
LEFT					RIGHT		
Edge of Pavement	Add Super.	Width	STATION	PROFILE GRADE	Width	Deduct Crown	Edge of Pavement
967.53	1.00	10'	183+75.00	966.70	10'	0.17	966.53
967.50	1.00		184+00	966.67			966.50
967.50	1.00		+25	966.67			966.50
967.53	1.00		+50	966.70			966.53
967.57			+75	966.75			966.58
967.58			C.S. +88.08	966.79			966.62
967.58			185+00	966.83			966.66
967.58			+25	966.94			966.77
967.60	Obtained Graph.		+50	967.07			966.90
967.64			+75	967.23			967.06
967.70			186+00	967.42			967.25
967.78			+25	967.63			967.46
967.82			S.T. +38.08	967.75			967.58
967.89			+50	967.87			967.70
968.02			+75	968.13			967.96
968.26	0.00	10'	187+00	968.43	10'	0.17	968.26

T.S. 197+28.05 S.C. 198+78.05			D = 5°00 LT.		C.S. 203+71.05 S.T. 205+21.05		
LEFT					RIGHT		
Edge of Pavement	Deduct Crown	Width	STATION	PROFILE GRADE	Width	Add Super.	Edge of Pavement
993.80	0.17	10'	197+03.05	993.97	10'	0.00	993.80
994.37			+25	994.54			994.40
994.44			T.S. +28.05	994.61			994.50
994.94			+50	995.11			995.04
995.44			+75	995.61			995.67
995.87			198+00	996.04			996.21
996.22			+25	996.39			996.73
996.50			+50	996.67			997.17
996.71			+75	996.88			997.50
996.73			S.C. +78.05	996.90			997.53
996.84			199+00	997.01			997.72
996.89			+25	997.06			997.86
996.88			+50	997.05		1.00	997.88
996.78			+75	996.95			997.78
996.62			200+00	996.79			997.62
996.38			+25	996.55			997.38
996.06			+50	996.23			997.06
995.67			+75	995.84			996.67
995.21			201+00	995.38			996.21
994.77			+25	994.94			995.77
994.43			+50	994.60			995.43
994.21			+75	994.38			995.21
994.10			202+00	994.27			995.10
994.10			+25	994.27			995.10
994.21			+50	994.38			995.21
994.44			+75	994.61			995.44
994.77			203+00	994.94			995.77
995.22			+25	995.39			996.22
995.77			+50	995.94		1.00	996.77
996.33			C.S. +71.05	996.50			997.26
996.44			+75	996.61			997.38
997.22			204+00	997.39			998.04
998.11			+25	998.28			998.78
999.11			+50	999.28			999.59
1000.23			+75	1000.40			1000.54
1001.45			205+00	1001.62			1001.61
1002.50			S.T. +21.05	1002.67			1002.49
1002.69	0.17	10	+25	1002.86	10	0.00	1002.69

T.S. 207+42.37 S.C. 208+92.37			D = 8°00' RT.		C.S. 211+83.00 S.T. 213+33.00		
LEFT					RIGHT		
Edge of Pavement	Add Super	Width	STATION	PROFILE GRADE	Width	Deduct Crown	Edge of Pavement
1009.79	0.00	10'	207+17.37	1009.96	10.00	0.17	1009.79
1010.01			+25	1010.14	10.08		1009.97
1010.50			T.S. +42.37	1010.56	10.25		1010.39
1010.71			+50	1010.71	10.33		1010.54
1011.39			+75	1011.21	10.58		1011.04
1012.01			208+00	1011.64	10.83		1011.47
1012.60			+25	1011.99	11.08		1011.82
1013.11			+50	1012.27	11.33		1012.10
1013.56			+75	1012.48	11.58		1012.31
1013.82			S.C. +92.37	1012.57	11.75		1012.40
1013.92			209+00	1012.61	11.83		1012.44
1014.08			+17.37	1012.65	12.00		1012.48
1014.13			+25	1012.65			1012.48
1014.18			+50	1012.65			1012.48
1014.10			+75	1012.55			1012.38
1013.95			210+00	1012.39			1012.22
1013.74	1.76		+25	1012.15			1011.98
1013.42	1.76		+50	1011.83			1011.66
1013.03	1.76		+75	1011.44			1011.27
1012.60			211+00	1010.98			1010.81
1012.17			+25	1010.53			1010.36
1011.73			+50	1010.17			1010.00
1011.60			+58.00	1010.08	12.00		1009.91
1011.32			+75	1009.92	11.83		1009.75
1011.20			C.S. +83.00	1009.86	11.75		1009.69
1010.96			212+00	1009.76	11.58		1009.59
1010.62			+25	1009.70	11.33		1009.53
1010.40			+50	1009.73	11.08		1009.56
1010.29			+75	1009.87	10.83		1009.70
1010.28			213+00	1010.10	10.58		1009.93
1010.40			+25	1010.43	10.33		1010.26
1010.48			S.T. +33.00	1010.55	10.25		1010.38
1010.69			+50	1010.85	10.08		1010.68
1010.83	0.00	10'	+57.35	1011.00	10.00	0.17	1010.83

Obtained Graph.

EXTRA AREA 98 SQ.YDS.

CURVE TABLES

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	S-176(1)	1946

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HARRISON COUNTY
S.H. 923 SEC. F(PT.)

T.S. 213+81.70 S.C. 215+31.70 — D = 8°00 LT. — C.S. 217+11.70 S.T. 218+61.70

LEFT			STATION	PROFILE GRADE	RIGHT		
Edge of Pavement	Deduct Crown	Width			Width	Add Super	Edge of Pavement
1010.83	0.17	10.00	213+57.35	1011.00	10'	0.00	1010.83
1011.21		10.18	+75	1011.38			1011.25
1011.37		10.24	T.S. +81.70	1011.54			1011.41
1011.83		10.43	214+00	1012.00			1012.06
1012.55		10.68	+25	1012.72			1013.09
1013.36		10.93	+50	1013.53			1014.20
1014.28		11.18	+75	1014.45			1015.39
1015.29		11.43	215+00	1015.46			1016.65
1016.40		11.68	+25	1016.57			1017.92
1016.71		11.75	S.C. +31.70	1016.88			1018.21
1017.60		11.93	+50	1017.77			1019.27
1017.95		12.00	+56.70	1018.12			1019.60
1018.91			+75	1019.08		1.76	1020.67
1020.31			216+00	1020.48			1022.07
1021.72			+25	1021.89			1023.48
1023.06			+50	1023.23			1024.82
1024.33			+75	1024.50			1026.09
1024.90		12.00	+86.70	1025.07		1.76	1026.66
1025.53		11.87	217+00	1025.70			1027.22
1026.06		11.75	C.S. +11.70	1026.23			1027.63
1026.65		11.62	+25	1026.82			1028.10
1027.70		11.37	+50	1027.87			1028.81
1028.67		11.12	+75	1028.84			1029.44
1029.58		10.87	218+00	1029.75			1030.04
1030.41		10.62	+25	1030.58			1030.65
1031.16		10.37	+50	1031.33			1031.25
1031.49		10.25	S.T. +61.70	1031.66			1031.51
1031.85		10.12	+75	1032.02			1031.85
1032.15	0.17	10.00	+86.70	1032.32	10	0.00	1032.15

Obtained Graph. Obtained Graph.

EXTRA AREA 74 SQ. YDS.

T.S. 236+68.28 S.C. 238+18.28 — D = 8°00 RT. — C.S. 241+00.78 S.T. 242+50.78

LEFT			STATION	PROFILE GRADE	RIGHT		
Edge of Pavement	Add Super.	Width			Width	Deduct Crown	Edge of Pavement
1081.70	0.00	10'	235+75.00	1081.87	10.00	0.17	1081.70
1083.01			236+00	1083.17	10.00		1083.00
1084.45			+25	1084.57	10.00		1084.40
1085.59			+43.28	1085.66	10.00		1085.49
1086.10			+50	1086.08	10.07		1085.91
1087.40			T.S. +68.28	1087.25	10.25		1087.08
1087.94			+75	1087.70	10.32		1087.53
1089.90			237+00	1089.43	10.57		1089.26
1091.95			+25	1091.27	10.82		1091.10
1094.14			+50	1093.21	11.07		1093.04
1096.40			+75	1095.27	11.32		1095.10
1098.71			238+00	1097.38	11.57		1097.21
1100.40			S.C. +18.28	1098.93	11.75		1098.76
1100.99			+25	1099.49	11.82		1099.32
1102.60			+43.28	1101.04	12.00		1100.87
1103.19	1.76		+50	1101.60			1101.43
1105.30			+75	1103.71			1103.54
1107.41			239+00	1105.82			1105.65
1109.52			+25	1107.93			1107.76
1111.63			+50	1110.04			1109.87
1113.74			+75	1112.15			1111.98
1115.85			240+00	1114.26			1114.09
1117.96			+25	1116.37			1116.20
1120.07	1.76		+50	1118.48		0.17	1118.31
1122.18			+75	1120.59			1120.45
1122.19			+75.78	1120.66	12.00		1120.46
1124.20			241+00	1122.70	11.76		1122.59
1124.20			C.S. +00.78	1122.77	11.75		1122.60
1126.16			+25	1124.80	11.52		1124.71
1128.10			+50	1126.88	11.27		1126.83
1130.00			+75	1128.94	11.02		1128.96
1131.87			242+00	1130.98	10.78		1131.08
1133.74			+25	1133.00	10.53		1133.20
1135.62			+50	1135.00	10.28		1135.33
1135.62			S.T. +50.78	1135.06	10.28		1135.34
1137.50			+75	1136.98	10.04		1137.47
1137.80	0.00	10'	+78.75	1137.27	10.00		1137.80

Obtained Graph. Obtained Graph.

EXTRA AREA 96 SQ. YDS.

T.S. 243+06.73 S.C. 244+56.73 — D = 9°00 LT. — C.S. 250+71.17 S.T. 252+21.17

LEFT			STATION	PROFILE GRADE	RIGHT		
Edge of Pavement	Deduct Crown	Width			Width	Add Super.	Edge of Pavement
1137.80		10.00	242+78.75	1137.27	10.00	0.00	1137.80
1139.38		10.21	243+00	1138.94			1139.60
1139.81		10.28	T.S. +06.73	1139.46			1140.05
1141.25		10.46	+25	1140.89			1141.72
1143.13		10.70	+50	1142.84			1143.86
1145.00		10.95	+75	1144.79			1146.00
1146.89		11.19	244+00	1146.74			1148.10
1148.77		11.44	+25	1148.69			1150.22
1150.64		11.69	+50	1150.64			1152.30
1151.03		11.75	S.C. +56.73	1151.16			1152.78
1152.52		11.93	+75	1152.59			1154.35
1152.98		12.00	+81.73	1153.11			1154.83
1154.41			245+00	1154.54			1156.35
1156.28	0.17		+25	1156.45		1.98	1158.26
1158.12			+50	1158.29			1160.10
1159.88			+75	1160.05			1161.86
1161.57			246+00	1161.74			1163.55
1163.18			+25	1163.35			1165.16
1164.72			+50	1164.89			1166.70
1166.18			+75	1166.35			1168.16
1167.57			247+00	1167.74			1169.55
1168.88			+25	1169.05			1170.86
1170.12			+50	1170.29			1172.10
1171.28			+75	1171.45			1173.26
1172.37			248+00	1172.54			1174.35
1173.38			+25	1173.55			1175.36
1174.32			+50	1174.49			1176.30
1175.18			+75	1175.35			1177.16
1175.97			249+00	1176.14			1177.95
1176.68			+25	1176.85			1178.66
1177.32			+50	1177.49			1179.30
1177.88			+75	1178.05			1179.86
1178.37			250+00	1178.54			1180.35
1178.78			+25	1178.95			1180.76
1179.07		12.00	+46.17	1179.24		1.98	1181.05
1179.12		11.96	+50	1179.29			1181.10
1179.34		11.75	C.S. +71.17	1179.51			1181.24
1179.38		11.71	+75	1179.55			1181.25
1179.57		11.46	251+00	1179.74			1181.20
1179.68		11.21	+25	1179.85			1181.04
1179.72		10.96	+50	1179.89			1180.80
1179.68		10.71	+75	1179.85			1180.49
1179.57		10.46	252+00	1179.74			1180.12
1179.41		10.25	S.T. +21.17	1179.58			1179.80
1179.38		10.21	+25	1179.55			1179.72
1179.16		10.00	+46.17	1179.33			1179.37
1179.12		10.00	+50	1179.29			1179.29
1178.78		10.00	+75	1178.95			1178.82
1178.37	0.17	10.00	253+00	1178.54	10.00	0.00	1178.37

Obtained Graph. Obtained Graph.

EXTRA AREA 169 SQ. YDS.

DIVISION	STATE	PROJECT	FISCAL YEAR	
2	OHIO	S-176(1)	1946	14 47

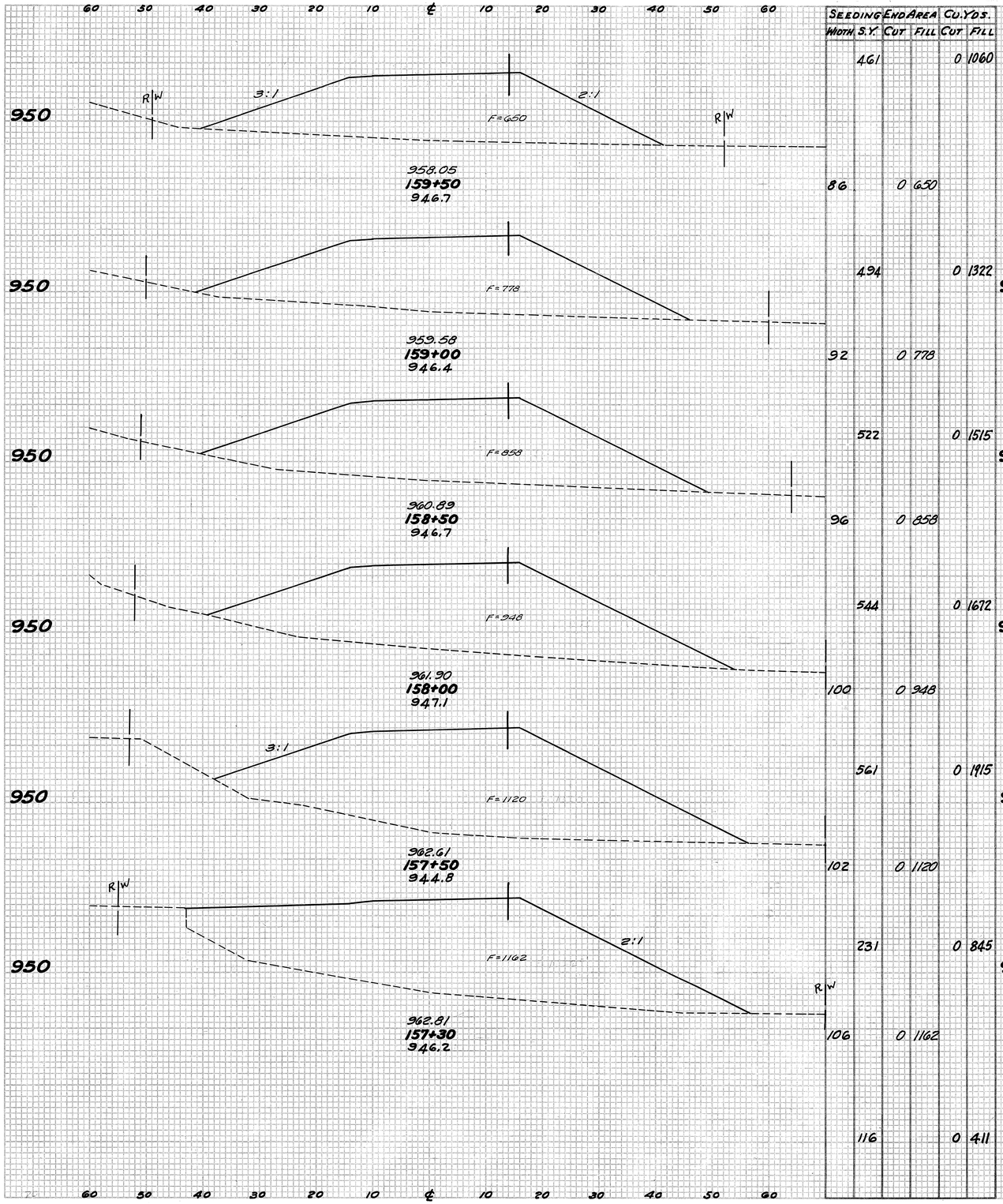
HARRISON COUNTY
S.H. 923 SEC. F (Pt.)

	SEEDING WIDTH S.Y.	END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
Sta. 154+50 – Drive Lt. I-17 Aggr. = 4 Cu. Yds.	42	0	115		
Zero Drive Area @ 154+40	131			19	73
	52	42	43		
	133			40	28
	44	44	18		
	300			64	68
BEGIN F.A.S.-S-176(1)	64	25	55		
BEGIN WORK	10	0	0		
	102	0	1057		
	220			0	681
	96	0	782		
	464			0	972
Sta. 156+50 – Drive Lt. I-17 Aggr. = 7 Cu. Yds.	71	0	268		
	171			2	147
	52	4	50		
	261			6	68
	42	2	23		
	(226)				(498)
Zero Drive Area 155+50	178			3	75
	22	1	58		
	172			10	148
Sta. 154+75 – Drive Lt. 12" Pipe = 28 Lin. Ft. I-17 Aggr. = 3 Cu. Yds.	40	10	102		
Sta. 154+75 – Drive Lt.					(5)
	114	5	100		

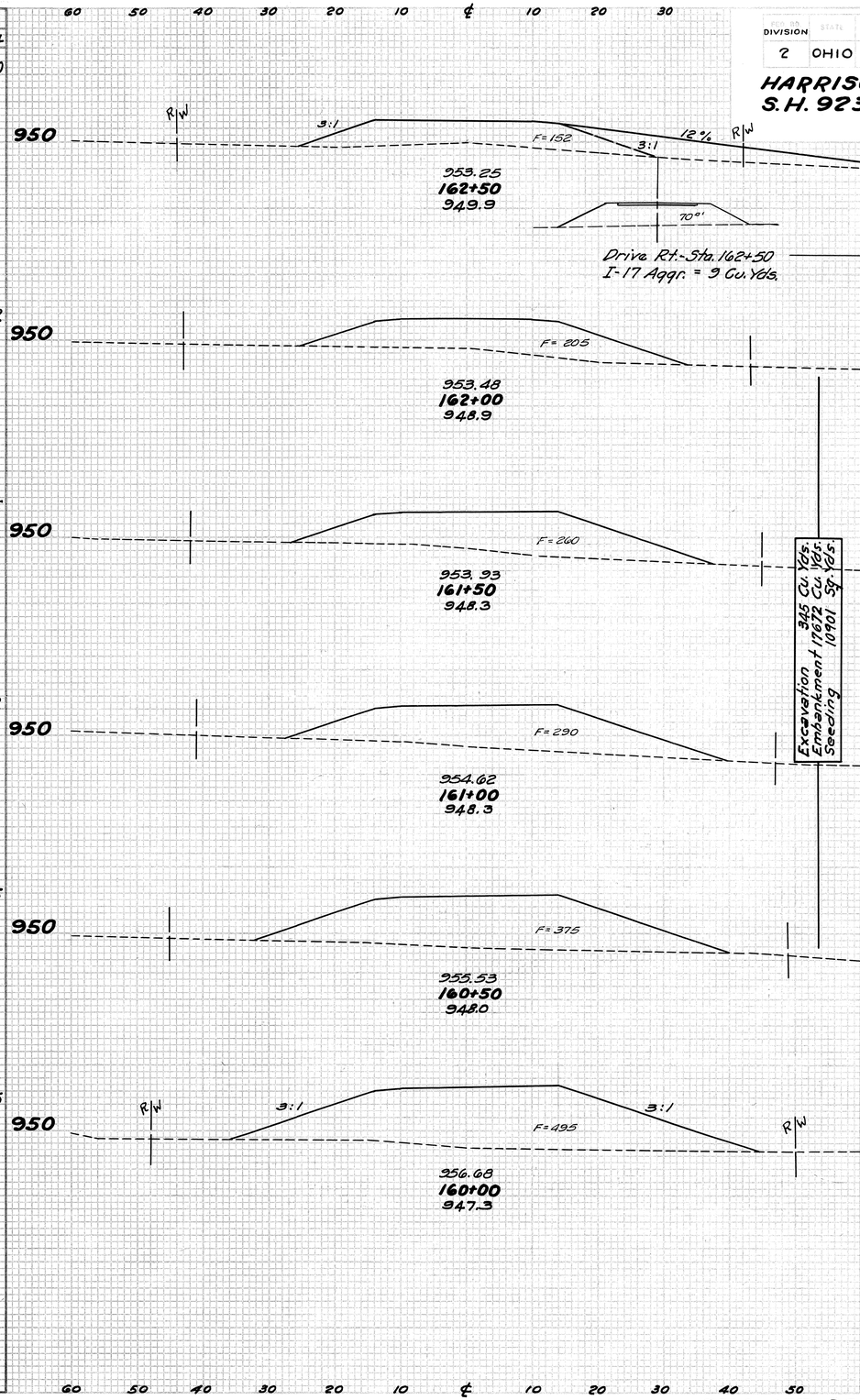
STA. 151+00 TO STA. 157+20

DIVISION 2 | STATE OHIO | S-176(1) | 1946 | 15 / 47

HARRISON COUNTY
S.H. 923 SEC. F (Pt.)



SEEDING WIDTH	S.Y.	END AREA CUT	END AREA FILL	CU.YDS. CUT	CU.YDS. FILL
	461			0	1060
86		0	650		
	494			0	1322
92		0	778		
	522			0	1515
96		0	858		
	544			0	1672
100		0	948		
	561			0	1915
102		0	1120		
	231			0	845
106		0	1162		
	116			0	411

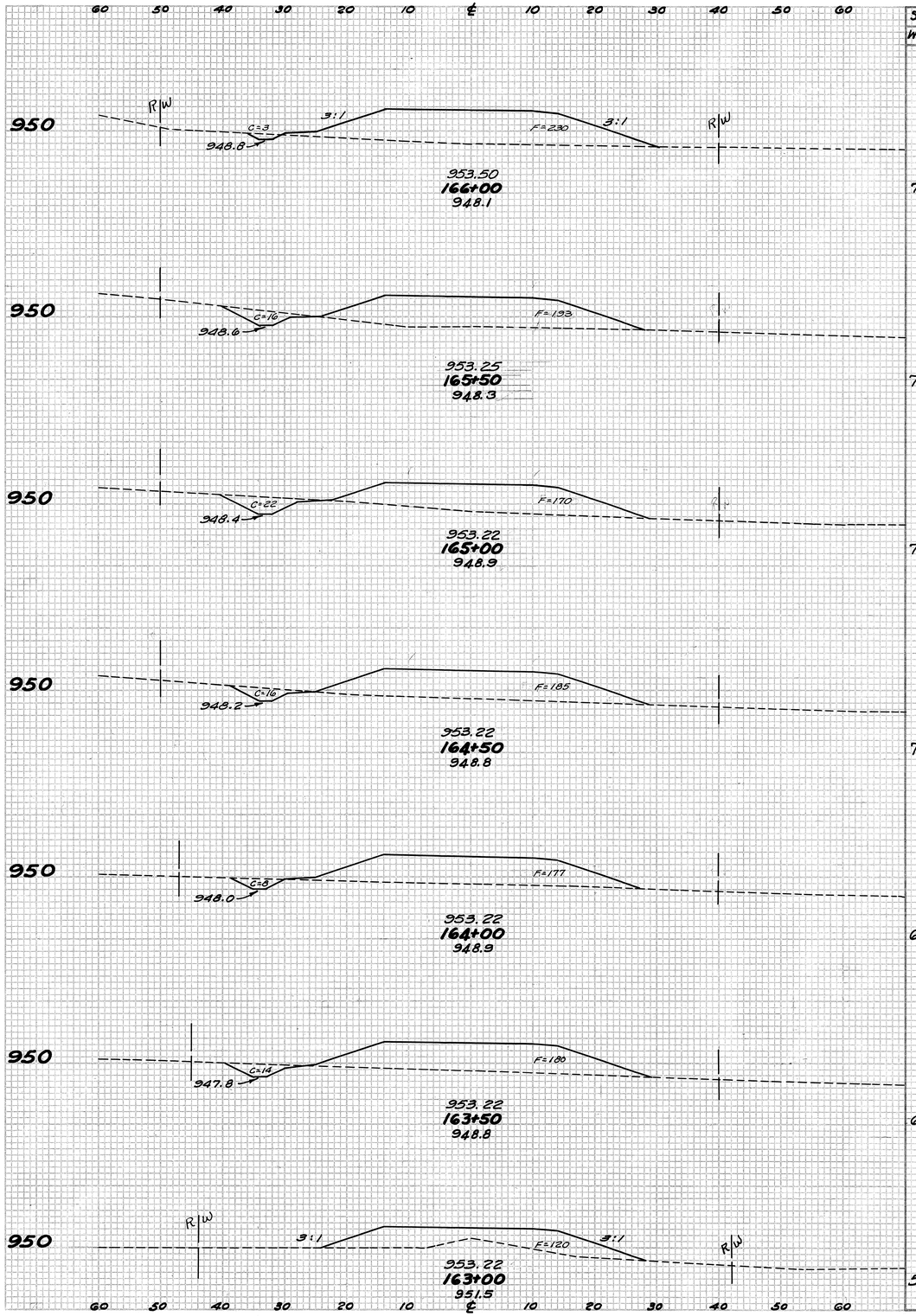


SEEDING WIDTH	S.Y.	END AREA CUT	END AREA FILL	CU.YDS. CUT	CU.YDS. FILL
56		0	152		
	(117)				(78)
	325			0	331
61		0	205		
	350			0	431
65		0	260		
	367			0	509
67		0	290		
	394			0	616
75		0	375		
	431			0	806
80		0	495		

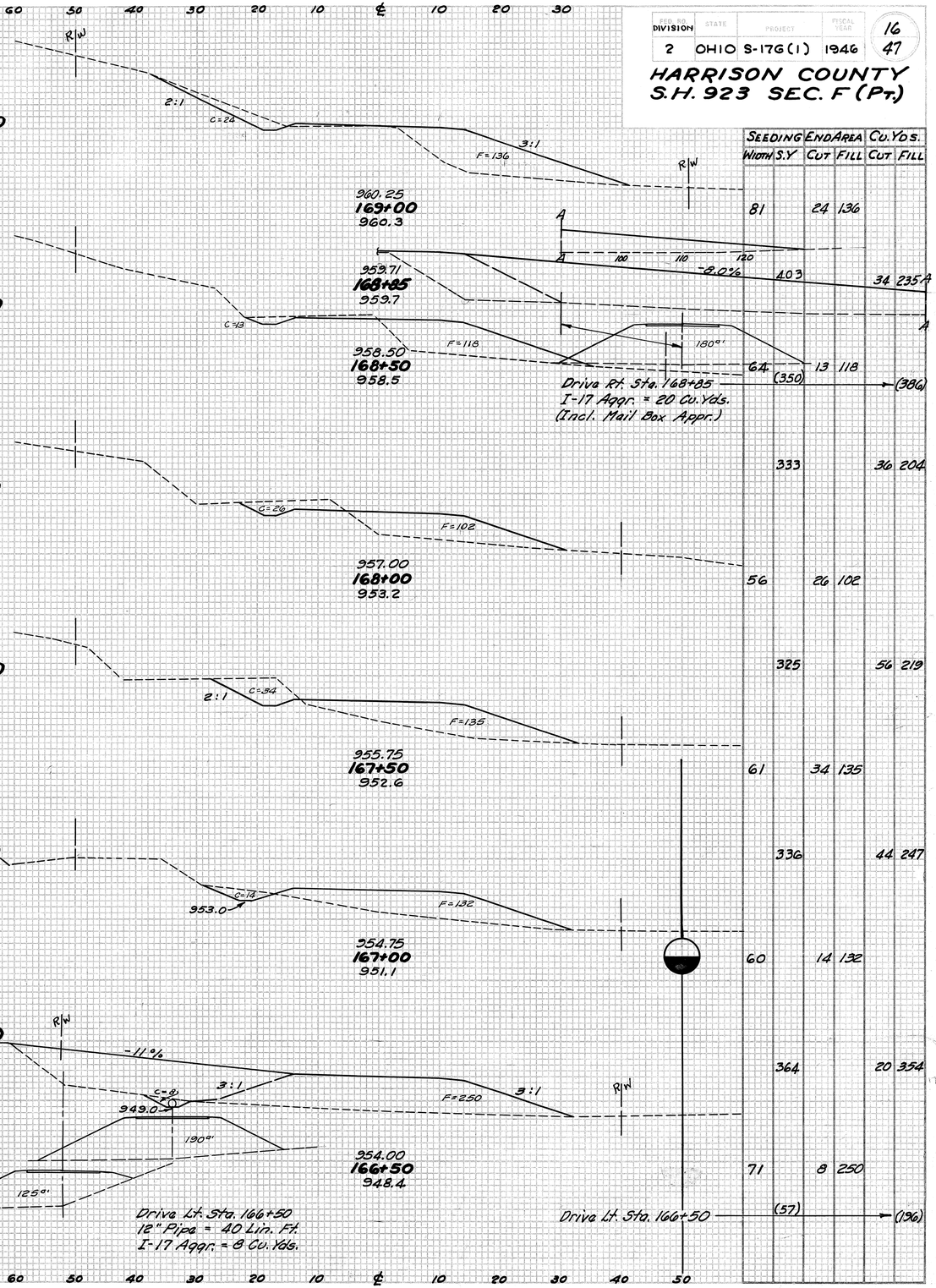
STA. 157+30 TO STA. 162+50

FED. NO. DIVISION	STATE	PROJECT	FISCAL YEAR	
2	OHIO	S-176(1)	1946	16 47

HARRISON COUNTY
S.H. 923 SEC. F (Pt.)



Width	Seeding S.Y.	End Area Cut	End Area Fill	Cu. Yds. Cut	Cu. Yds. Fill
	394			10	444
71		3	230		
	394			18	392
71		16	193		
	403			35	336
74		22	170		
	403			35	329
71		16	185		
	389			22	335
69		8	177		
	383			20	331
69		14	180		
	331			13	278
50		0	120		
	294			0	252



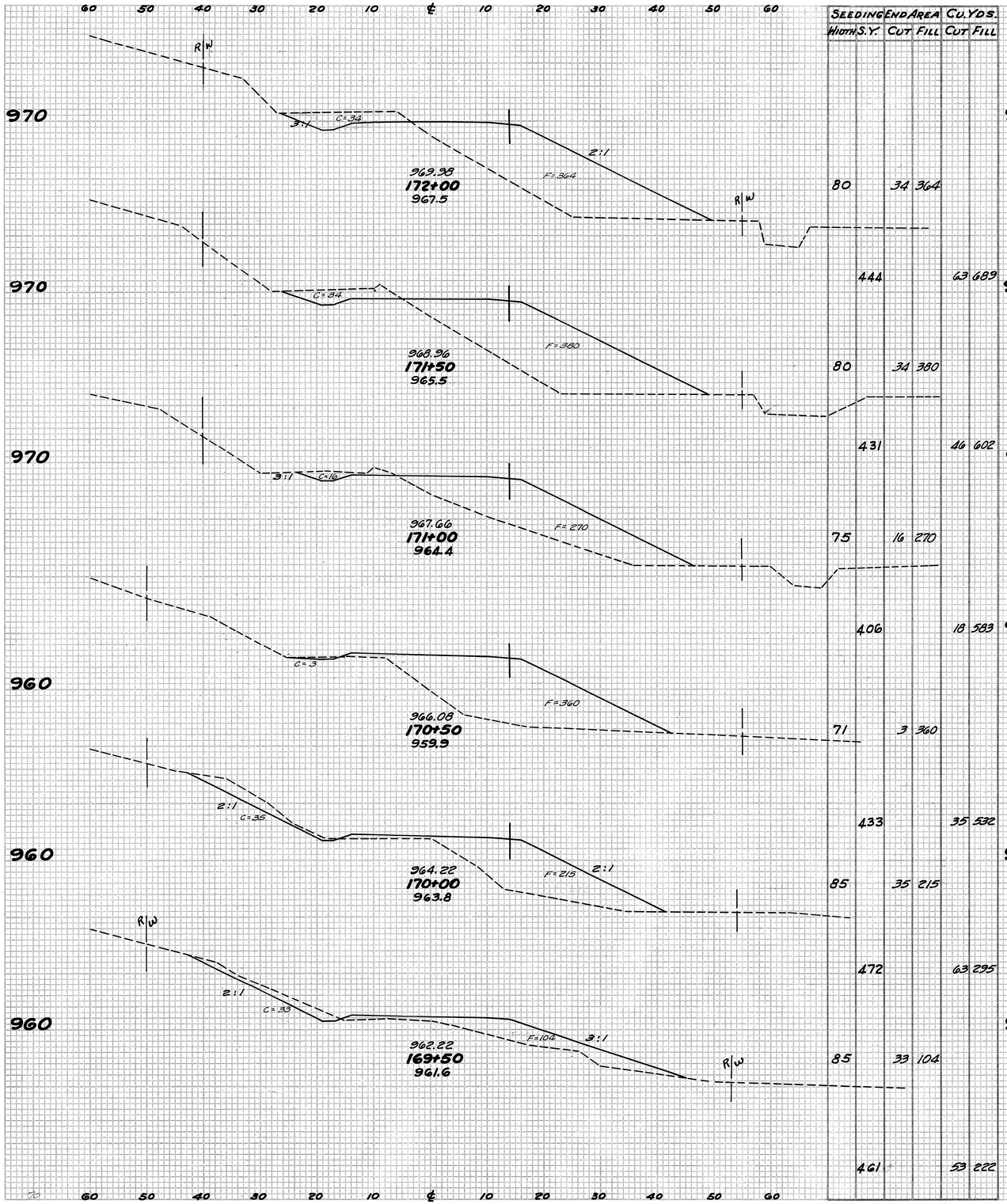
Width	Seeding S.Y.	End Area Cut	End Area Fill	Cu. Yds. Cut	Cu. Yds. Fill
81		24	136		
	403			34	235
64		13	118		
	(350)				(386)
	333			36	204
56		26	102		
	325			56	219
61		34	135		
	336			44	247
60		14	132		
	364			20	354
71		8	250		
	(57)				(196)

Drive Lt. Sta. 166+50

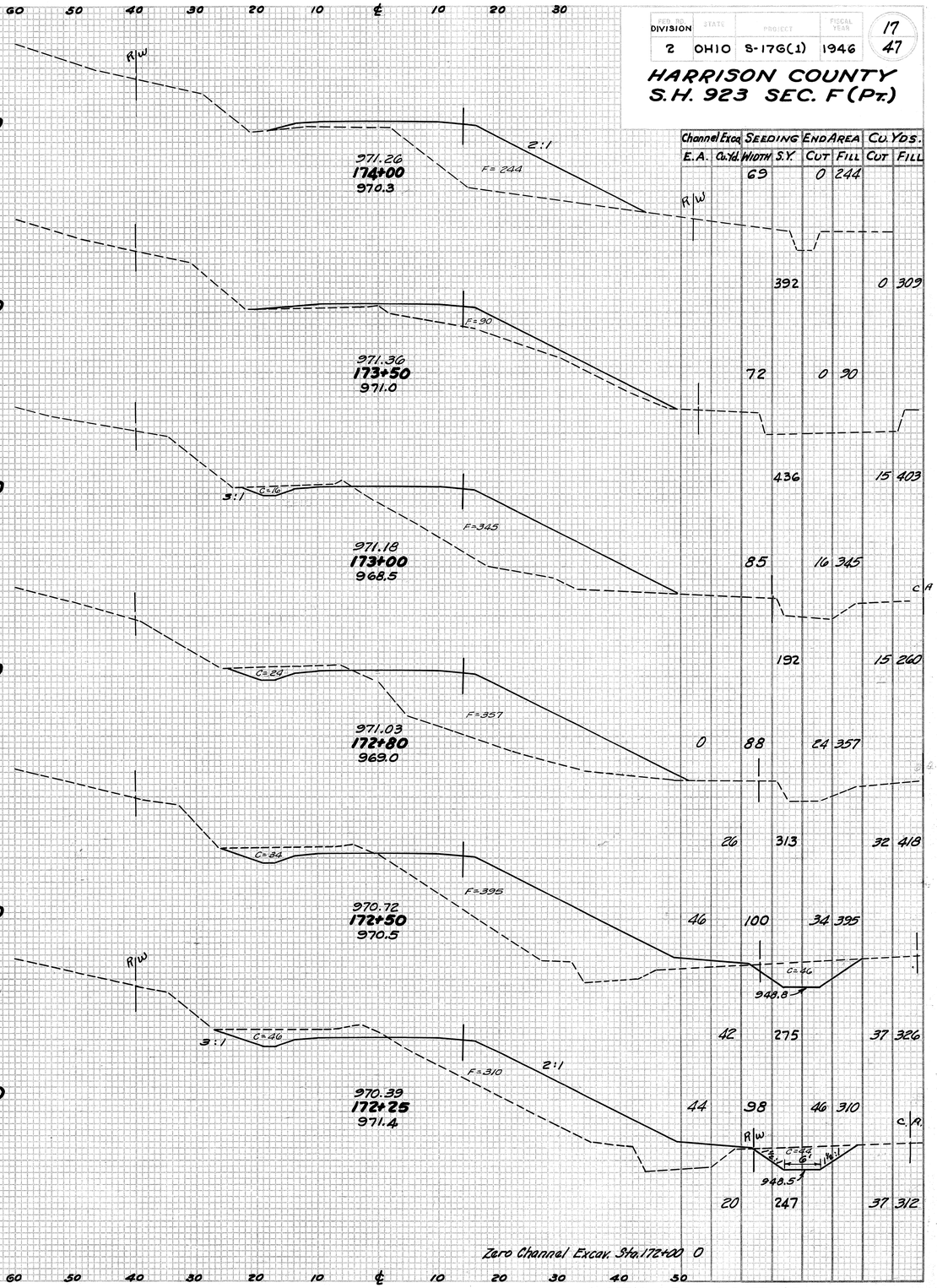
STA. 163+00 TO STA. 169+00

DIVISION	STATE	PROJECT	FISCAL YEAR	
2	OHIO	S-176(1)	1946	17 / 47

HARRISON COUNTY
S.H. 923 SEC. F (Pt.)



Seeding Width	S.Y.	End Area Cut	Fill	Cu. Yds. Cut	Fill
80	34	364			
	444			43	689
80	34	380			
	431			46	602
75	16	270			
	406			18	583
71	3	360			
	433			35	532
85	35	215			
	472			63	295
85	33	104			
	461			53	222



Channel Excav. E.A.	Cu.Yd.	Seeding Width	S.Y.	End Area Cut	Fill	Cu. Yds. Cut	Fill
		69		0	244		
			392			0	309
		72		0	90		
			436			15	403
		85		16	345		
			192			15	260
0		88		24	357		
		26	313			32	418
		46	100	34	395		
		42	275			37	326
		44	98	46	310		
			20	247		37	312

Zero Channel Excav. Sta. 172+00 0

STA. 169+50 TO STA. 174+00

DIVISION 2 | STATE OHIO | PROJECT S-176(1) | FISCAL YEAR 1946 | 18 / 47

HARRISON COUNTY
S.H. 923 SEC. F (Pt.)

Station	Channel Excav. E.A.	Channel Excav. Cu.Yd.	Seeding Width	Seeding S.Y.	End Area Cut	End Area Fill	Cu. Yds. Cut	Cu. Yds. Fill
960 F=304				199			5	203
969.70 177+25 964.6					S.A.			
			72		0	304		
960 F=477				204			0	362
969.82 177+00 958.6								
Zero Channel Excav. 177+00	0		75		0	477		
			20	444			0	886
960 F=480								
Sta. 176+35 – Drive Lt. I-17 Aggr. = 3 Cu. Yds.								
970.06 176+50 962.2								
952.8	22		85		0	480		
			45	461			0	922
960 F=516								
970.30 176+00 961.5					S.A.			
952.4	27		81		0	516		
960 3:1 F=488			55	458			0	930
970.54 175+50 965.0								
C=32 952.0			32	84	0	488		
			46	458			0	844
960 F=424								
970.78 175+00 967.8								
C=18 951.6			18	81	0	424		
960 R W 3:1 F=87 2:1								
971.02 174+50 969.9					C.A.			
Zero Channel Excav. 174+50	0		50		0	87		
			331		0	306		

Station	Seeding Width	Seeding S.Y.	End Area Cut	End Area Fill	Cu. Yds. Cut	Cu. Yds. Fill
970 R W 2:1 C=108						
967.90 181+00 970.5						
Sta. 181+00 – Drive Rt. I-17 Aggr. = 2 Cu. Yds.						
	52		108	0		
		303			213	8
970 Barn 3:1 C=122 F=3 Basement						
968.14 180+50 970.9						
	57		122	9		
		127			86	6
970 Barn C=178 F=8 Basement						
968.7						
968.24 180+30 970.4						
	57		110	8		
		195			85	45
970 C=23 F=73						
968.4						
968.38 180+00 966.2						
S.A.						
	60		43	73		
		361			77	181
970 C=20 F=123						
967.5						
968.62 179+50 965.7						
	70		40	123		
		428			69	297
970 C=33 F=198						
967.7						
968.86 179+00 964.6						
	84		35	198		
		469			74	387
970 C=43 F=220						
967.9						
S.A. 960 Slope Agreement.						
969.10 178+50 964.7						
	85		45	220		
		486			82	384
970 C=44 F=195						
968.1						
960 Sta. 177+80 – Drive Lt. I-17 Aggr. = 4 Cu. Yds.						
969.34 178+00 965.4						
Sta. 177+80 – Mail Box Appr. Rt. I-17 Aggr. = 3 Cu. Yds.						
	90		44	195		
		447			51	306
970 R W C=11 F=135 3:1 R W						
960 969.58 177+50 966.4						
	71		11	135		

STA. 174+50 TO STA. 181+00

DIVISION	STATE	PROJECT	YEAR	SHEET
2	OH10	S-176(1)	1946	19 47

HARRISON COUNTY
S.H. 923 SEC. F (Pt.)

Seeding Width	Seeding S.Y.	End Area Cut	End Area Fill	Cu. Yds. Cut	Cu. Yds. Fill
	394			12	528
72		3	310		
	316			11	430
70		12	270		
	263			27	205
65		30	47		
				(19)	
	174			32	23
60		40	2		
	372			188	2
74		163	0		
	428			336	0
80		200	0		
	458			336	0
85		163	0		
	381			251	0

960 — 966.67 — 184+00 — 960.8 — R/W — 3:1 — 961.7 — C=3 — F=310 — 3:1

960 — 966.73 — 183+60 — 960.9 — 3:1 — 962.0 — C=12 — F=270

960 — 966.83 — 183+25 — 963.9 — 72" — C=30 — 965.0 — F=47 — 3:1

Road Approach Lt. 183+25
12" Pipe = 34 Lin. Ft.
I-17 Aggr. = 7 Cu. Yds.

Appr. Lt. - Sta. 183+25 → (19)

970 — 966.94 — 183+00 — 967.5 — C=40 — F=2

970 — 967.18 — 182+50 — 969.4 — C=163

970 — 967.42 — 182+00 — 970.9 — C=200

970 — 967.66 — 181+50 — 970.0 — R/W — C=163 — R/W

970 — 969.04 — 187+50 — 976.4 — R/W — 2:1 — C=575

970 — 968.43 — 187+00 — 974.9 — C=450 — R/W

Sta. 186+75 - Driva Rt.
I-17 Aggr. = 3 Cu. Yds.

970 — 967.87 — 186+50 — 972.2 — C=210 — 3:1 — F=3

970 — 967.30 — 186+10 — 968.3 — 2:1 — 965.0 — C=140 — F=38

Sta. 186+00 - Driva Lt.
15" Pipe = 24 Lin. Ft.
I-17 Aggr. = 4 Cu. Yds.

960 — 967.36 — 185+92 — 961.9 — 3:1 — C=10 — 961.5 — F=234

960 — 967.07 — 185+50 — 962.6 — 36" — 6% — F=230 — C=8 — 960.5

Drive Rt. Sta. 185+50 → (44)
I-17 Aggr. = 8 Cu. Yds.

960 — 966.83 — 185+00 — 962.6 — 72" — 10% — F=208 — C=6 — 961.0

Drive Lt. Sta. 185+00
15" Pipe = 30 Lin. Ft.
I-17 Aggr. = 8 Cu. Yds.

Drive Lt. - Sta. 185+00 (GT) → (55)

960 — 966.70 — 184+50 — 961.0 — R/W — 3:1 — C=10 — 961.4 — F=260 — 3:1 — R/W

Seeding Width	Seeding S.Y.	End Area Cut	End Area Fill	Cu. Yds. Cut	Cu. Yds. Fill
108		575	0		
	553			949	0
91		450	0		
	433			611	3
65		210	3		
	311			259	30
75		140	38		
	150			50	91
S/A					
75		10	234		
	327			14	361
65		8	230		
	386			13	406
74		6	208		
	400			15	433
70		10	260		

STA. 181+50 TO STA. 187+50

DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	S-176(1)	1946

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47

HARRISON COUNTY
S.H. 923 SEC. F (Pt.)

	Channel Exca. E.A.	Channel Exca. CU.YD.	SEEDING WIDTH	SEEDING S.Y.	END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
970.27 192+50 971.9			72	406			12	370
			40	66			3	190
975.05 192+00 971.1			61	381			3	337
			26	71			0	174
974.06 191+50 971.2			24	350			0	268
Zero Channel Excav. 191+50		0		55			0	115
				303			0	231
973.33 191+00 970.1				54			0	134
				314			56	182
972.72 190+50 970.3				59			60	63
				331			130	117
972.11 190+00 969.8				60			80	63
				347			219	69
971.49 189+50 973.7				65			157	12
				392			442	11
970.88 189+00 975.2				76			320	0
				433			676	0
970.28 188+50 976.1				80			410	0
				447			793	0
969.66 188+00 976.5				81			446	0
				525			945	0

	Channel Exca. E.A.	Channel Exca. CU.YD.	SEEDING WIDTH	SEEDING S.Y.	END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
Zero Channel 195+50		0						
				37				
986.02 195+00 975.4				40		86	20	545
			74					
983.58 194+50 974.6				506			31	956
				40		96	14	487
				65		517		22 803
981.39 194+00 973.9				30		90	10	380
				244			18	332
980.38 193+75 974.0				86		28	338	
				250			25	289
979.44 193+50 970.2				94		26	287	
				483	C.A.		33	460
977.73 193+00 973.0				38		80	10	210

For remainder of Channel excavation - Sta. 193+00 to 194+00 (See 12-9).

Sta. 191+50 - Field Drive Lt. I-17 Aggr. = 3 Cu. Yds.

STA. 188+00 TO STA. 195+00

DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	S-176(1)	1946

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47

HARRISON COUNTY
S.H. 923 SEC. F (Pt.)

Seeding Width S.Y.	End Area Cut	End Area Fill	Cu. Yds. Cut	Cu. Yds. Fill
		R/W		
658			1894	0
107	890	0		
619			1583	0
116	820	0		
628			1033	56
110	360	60		
578			463	352
98	140	320		
497			143	781
(361)			(385)	
81	14	524		
433			22	957
75	10	510		
447			28	977

Seeding Width S.Y.	End Area Cut	End Area Fill	Cu. Yds. Cut	Cu. Yds. Fill
		R/W		
433			730	0
94	480	0		
594			1259	0
120	880	0		
700			1810	0
132	1075	0		
733			2101	0
132	1194	0		
378			1083	0
140	1145	0		
375			1065	0
130	1155	0		

1000
990
980
1000
990
980
1000
1000
1000
1000
1000

996.04 198+00 1007.1
995.11 197+50 1007.2
993.89 197+00 997.9
992.37 196+50 989.7
990.55 196+00 980.3
988.43 195+50 977.0
996.23 200+50 1007.4
996.79 200+00 1007.5
997.05 199+50 1008.7
997.01 199+00 1009.0
996.88 198+75 1005.9
996.67 198+50 1006.2

C=890 C=820 C=360 C=140 C=90 C=524 C=480 C=880 C=1075 C=1194 C=1145 C=1155

2:1 3:1 F=60 F=320 F=524 F=510 0=14 C=90 El. 990.0 998.0 Zero this area at Sta. 196+25

Drive Rt. Sta. 196+00
15" Pipe = 36 Lin. Ft.
I-17 Aggr. = 23 Cu. Yds.

Begin Drive - Sta. 195+00

Excavation 378.51 Cu.Yds.
Embankment 34.39 Cu.Yds.
Channel Exc. 14.12 Cu.Yds.
Seeding 507.88 Sq.Yds.

R/W

12" 4'0" 4'9" 4½" 4½" 12" 1'9" SECTION El. 984.0 END VIEW HEADWALL

Plain Conc. Headwall Class 'E' Conc. 0.7 Cu. Yds.

22' 195+80 196 ℄ Paved Gutter 6" Roadway Drainage 15" Drive Pipe PLAN

F.L. 15" Drive Pipe - 980.8
F.L. 6" R'dway. Drge. 985.29
Drive Pipe R'dway. Drge. Headwall Gutter SECTION

DETAILS OF HEADWALL TO BE CONSTRUCTED AT END OF DRIVE PIPE AND ROADWAY DRAINAGE - STA. 195+80

STA. 195+50 TO STA. 200+50

DIVISION	STATE	PROJECT	FISCAL YEAR	22
2	OHIO	S-176(1)	1946	47

HARRISON COUNTY
S.H. 923 SEC. F (Pt.)

Seeding	End Area	Cu. Yds.	
Width	S.Y. Cut	Fill Cut	Fill
64	225	0	0
175		247	
62	308	0	

Drive Rt. Sta. 202+65
15" Pipe = 36 Lin. Ft.
I-17 Aggr. = 11 Cu. Yds.
(Incl. M.B. Aggr.)

Drive Lt. Sta. 202+65

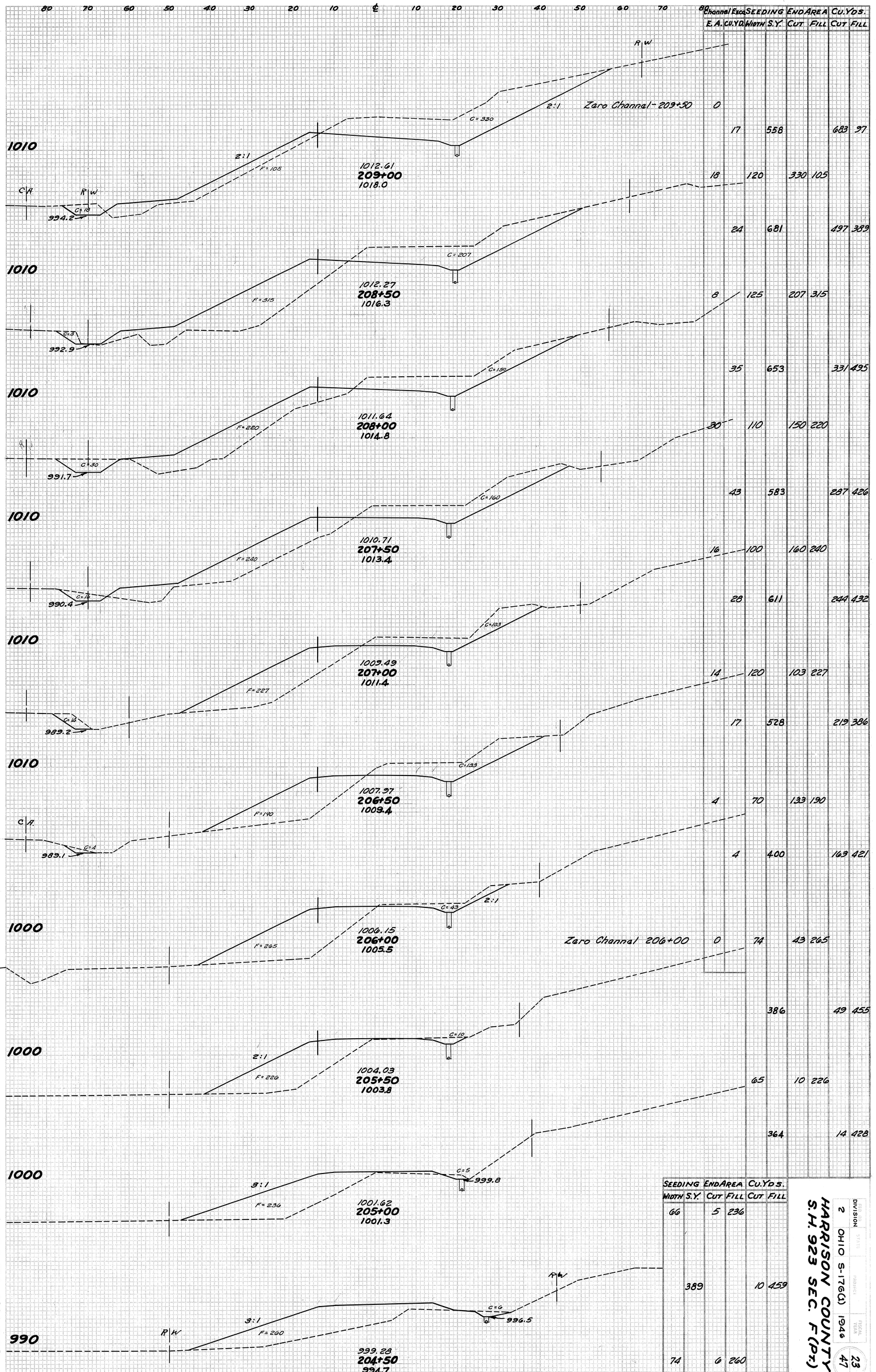
Drive Rt. Sta. 201+95
12" Pipe = 28 Lin. Ft.
I-17 Aggr. = 5 Cu. Yds.

~ Section For Drives Only.

Drive Lt. Sta. 202+65
I-17 Aggr. = 15 Cu. Yds.

Station	Elevation
997.39	
204+00	
988.7	
995.94	
203+50	
988.5	
994.94	
203+00	
988.1	
994.47	
202+65	
988.3	
994.38	
202+50	
988.5	
994.26	
202+12	
986.7	
994.27	
202+00	
990.6	
994.60	
201+50	
997.1	
994.94	
201+25	
999.8	
995.38	
201+00	
1000.8	

STA. 201+00 TO STA. 204+00



Channel E.A.	Channel CU.YD.	Seeding Width	Seeding S.Y.	End Area Cut	End Area Fill	Cu.Yds. Cut	Cu.Yds. Fill
	0						
		17	558			683	97
		18	120	330	105		
		24	681			497	389
		8	125	207	315		
		35	653			331	495
		30	110	150	220		
		43	583			287	426
		16	100	160	240		
		28	611			244	432
		14	120	103	227		
		17	528			219	386
		4	70	133	190		
		4	400			163	421
	0		74	43	265		
			386			49	455
		65		10	226		
			364			14	428
			389			10	459
		74		6	260		

Seeding Width	Seeding S.Y.	End Area Cut	End Area Fill	Cu.Yds. Cut	Cu.Yds. Fill
66		5	236		

DIVISION 2 OHIO S-176(1) 1946

HARRISON COUNTY S.H. 923 SEC. F(Pt.)

SHEET NO. 23 47

DIVISION	STATE	PROJECT	FISCAL YEAR	24
2	OHIO	S-176(1)	1946	47

HARRISON COUNTY
S.H. 923 SEC. F (Pt.)

Sta.	Channel Exca. E.A.	Channel Exca. Cu.Yd.	Seeding Width	Seeding S.Y.	End Area Cut	End Area Fill	Cu.Yds. Cut	Cu.Yds. Fill
1010 1002.4			89	339			0	281
1009.73 212+50 1007.3			50	60	0	160		
1010 1001.2			76	350			0	333
1009.76 212+00 1007.8			32	66	0	200		
1010 1000.1			53	472			163	398
1010.17 211+50 1009.1			25	104	176	230		
1010 999.0			44	628			371	407
1010.98 211+00 1011.1			22	122	225	210		
1010 997.8			48	717			586	343
1011.83 210+50 1014.1			30	136	408	160		
1010			28	633			767	148
1012.39 210+00 1016.1	Zero Channel Exca. 210+00 →	0	92	420	0			
1010				481			767	0
1012.65 209+50 1018.1			81	408	0			

Sta.	Channel Exca. E.A.	Channel Exca. Cu.Yd.	Seeding Width	Seeding S.Y.	End Area Cut	End Area Fill	Cu.Yds. Cut	Cu.Yds. Fill
1020 1003.2				306			0	202
1017.77 215+50 1016.8	Zero Channel Exca. 215+50 →	0	54		0	80		
1020 1008.1			30	322			0	174
1015.46 215+00 1013.8			32	62	0	108		
1010 1006.9			57	286			0	218
1013.53 214+50 1011.6	Drive Lt. Sta. 214+50 →		(83)				→	(74)
			30	41	0	127		
1010 1005.8			63	267			0	206
1012.00 214+00 1006.2			38	55	0	95		
1010 1004.7			72	306			0	185
1010.85 213+50 1007.0			40	55	0	105		
1010 1003.5			80	325			0	230
1010.10 213+00 1004.1			46	62	0	143		

Drive Lt. Sta. 214+50
36" Pipe = 30 Lin. Ft.
I-17 Aggr. = 8 Cu. Yds.

STA. 209+50 TO STA. 215+50

PED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR	25 / 47
2	OHIO	S-176(1)	1946	

HARRISON COUNTY
S.H. 923 SEC. F (Pt.)

Width	Seeding S.Y.	End Area Cut	End Area Fill	Cu.Yds. Cut	Cu.Yds. Fill
	694			1491	0
130		920	0		
	717			1674	0
128		888	0		
	647			1374	0
105		596	0		
	547			681	60
92		140	65		
	417			135	169
58		6	118		
	317			6	237
56		0	138		

1030 — R\|W — 1031.33 — 218+50 — 1040.4 — 2:1 — C=920

1030 — 1029.75 — 218+00 — 1038.9 — C=888

1030 — 1027.87 — 217+50 — 1032.0 — C=596

1030 — 1025.70 — 217+00 — 1027.3 — 3:1 — F=65 — C=140 — 2:1

1020 — 1023.23 — 216+50 — 1022.6 — F=118 — C=6 — 1023.0

Sta. 216+25 – Drive Rt. I-17 Aggr. = 6 Cu. Yds. (Incl. Mail Box Appr.)

1020 — R\|W — 3:1 — F=138 — R\|W — 1020.48 — 216+00 — 1018.3

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60

Width	Seeding S.Y.	End Area Cut	End Area Fill	Cu.Yds. Cut	Cu.Yds. Fill
	406			556	6
75		373	0		
	486			799	0
100		490	0		
	583			1046	0
110		640	0		
	653			1319	0
125		785	0		
	683			1436	0
121		766	0		
	669			1348	0
120		690	0		

1030 — R\|W — 1034.73 — 221+50 — 1040.1 — C=373 — 2:1

1040 — 1034.90 — 221+00 — 1040.7 — C=490

1040 — 1034.77 — 220+50 — 1040.5 — C=640

1040 — 1034.35 — 220+00 — 1040.2 — C=785

1040 — R\|W — 1033.63 — 219+50 — 1039.2 — C=766 — R\|W

1040 — 1032.63 — 219+00 — 1038.0 — C=690 — 2:1

50 40 30 20 10 ℄ 10 20 30 40 50 60

STA. 216+00 TO STA. 221+50

DIVISION 2 | STATE OHIO | PROJECT S-176(1) | FISCAL YEAR 1946 | 26 / 47

HARRISON COUNTY
S.H. 923 SEC. F (Pt.)

	Seeding Width	Seeding S.Y.	End Area Cut	End Area Fill	Cu.Yds. Cut	Cu.Yds. Fill
1030 1035.16 / 224+00 / 1031.4		289			42	172
	52		22	108		
1030 1034.69 / 223+75 / 1031.5		151			30	92
	57		43	90		
1030 1034.06 / 223+25 / 1030.9		328			77	183
	61		40	108		
1030 1033.84 / 222+75 / 1030.9		342			81	202
	62		48	110		
1030 1033.85 / 222+65 / 1032.1		68			19	37
	61		57	92		
1030 1033.88 / 222+50 / 1033.8		102			34	54
	61		67	102		
1030 1034.28 / 222+00 / 1038.5		367			272	100
	71		227	6		
1050 1048.78 / 227+00 / 1051.4		556			413	3
	108		219	1		
1050 1047.48 / 226+81 / 1047.6		220			141	1
	100		182	2		
1040 1045.48 / 226+50 / 1045.7		307			170	1
	78		115	0		
1040 1042.60 / 226+00 / 1043.2		408			134	0
	69		30	0		
1040 1040.12 / 225+50 / 1040.4		292			46	9
Drive Lt. 225+50		(187)			(63)	
Drive Lt. Sta. 225+50 I-17 Aggr. = 12 Cu.Yds.	36		20	10		
1040 1038.06 / 225+00 / 1038.4		206			37	81
Drive Rt. Sta. 225+30 15" Pipe = 22 Lin. Ft. I-17 Aggr. = 5 Cu.Yds. (Incl. Mail Box Appr.)		(4)				
	38		20	13		
1030 1037.18 / 224+75 / 1037.7		106			23	7
	38		30	2		
1030 1036.40 / 224+50 / 1034.4		125			25	37
	52		23	78		

STA. 222+00 TO STA. 227+00

SEEDING WIDTH	SEEDING S.Y.	END AREA CUT	END AREA FILL	CU.YDS. CUT	CU.YDS. FILL
	517			897	0
94		504	0		
	581			930	0
115		500	0		
	653			959	0
120		536	0		
	678			1046	0
124		594	0		
	711			1267	1
132		774	1		
	742			1337	3
135		670	2		
	711			968	6
121		375	4		
	647			595	6
112		268	3		
	567			458	5
92		227	2		

SEEDING WIDTH	SEEDING S.Y.	END AREA CUT	END AREA FILL	CU.YDS. CUT	CU.YDS. FILL
	364			58	601
89		62	323		
	58			18	47
60		78	40		
	183			115	24
40		110	0		
	222			255	0
40		165	0		
	289			384	0
64		250	0		
	428			574	0
90		370	0		
	506			765	0
92		456	0		
	511			853	0
92		465	0		

CONT. NO. DIVISION	STATE	PROJECT	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
2	OHIO	S-176(1)	1946	27	47

HARRISON COUNTY
S.H. 923 SEC. F (Pt.)

1070 — 1072.10 — 231+50 — 1078.4 — C=494 — 2:1 — R/W — S/A — 1/2" per foot

1070 — 1070.63 — 231+00 — 1076.8 — C=450 — C=50

1070 — 1068.88 — 230+50 — 1075.2 — C=481 — C=55

1070 — 1066.83 — 230+00 — 1074.5 — C=357 — C=37

1070 — 1064.50 — 229+50 — 1072.4 — C=728 — C=46 — F=1

1070 — 1061.87 — 229+00 — 1068.1 — C=620 — C=50 — F=2 — Std. I-2A C.B.

1060 — 1058.95 — 228+50 — 1063.0 — C=353 — C=22 — F=4

1060 — 1055.74 — 228+00 — 1059.6 — C=248 — C=28 — F=3

1050 — 1052.28 — 227+50 — 1055.5 — C=202 — 2:1 — R/W — C=26 — 1/2" per foot — F=2

1070 — 1078.29 — 234+90 — 1073.9 — C=62 — 2:1 — 3:1 — F=323 — R/W

1070 — 1078.05 — 234+83 — 1078.1 — C=78 — 3:1 — F=40

1070 — 1077.04 — 234+50 — 1079.0 — C=110 — R/W

1070 — 1075.87 — 234+00 — 1080.2 — C=165

1070 — 1075.13 — 233+50 — 1079.5 — C=250 — 1" per foot

1070 — 1074.74 — 233+00 — 1078.5 — C=370 — S/A — R/W — 1" per foot

1070 — 1074.15 — 232+50 — 1076.1 — C=456 — 3/4" per foot

1070 — 1073.27 — 232+00 — 1079.2 — C=407 — S/A — R/W — C=38 — 1/2" per foot

STA. 227+50 TO STA. 234+90

DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	S-176(1)	1946

28
47

HARRISON COUNTY
S.H. 923 SEC. F (Pt.)

	SEEDING	END AREA		CU. YDS.	
	WIDTH	S.Y.	CUT	FILL	CUT	FILL
1089.43 237+00 1085.5		333			13	307
Dr. Lt. Sta. 237+00		(439)				(404)
	60		0	188		
Drive Rt. Sta. 236+75 I-17 Aggr. = 5 Cu. Yds. 15" Pipe = 22 Lin. Ft.						(5)
1086.08 236+50 1076.8		378			0	674
	76		0	540		
1084.57 236+25 1079.8		189			0	356
	60		0	230		
1083.17 236+00 1080.2		151			1	156
	49		2	108		
1081.87 235+75 1078.3		144			19	110
	55		40	129		
1080.69 235+50 1071.7		153			21	245
	55		5	400		
1079.82 235+30 1072.0		144			8	329
	75		16	488		
1114.26 240+00 1116.8		503			319	122
	86		175	55		
1110.04 239+50 1112.1		411			280	88
	62		127	40		
1105.82 239+00 1108.0		331			201	72
	57		90	38		
1101.60 238+50 1101.2		325			150	114
	60		72	85		
1097.38 238+00 1096.1		331			93	177
	59		28	106		
Seeding of existing road area on Rt. Sta. 234+75 to Sta 238+50						(850)
	331				39	231
1093.21 237+50 1090.6						
	60		14	144		

Excavation 22229 Cu.Yds.
Embankment 19105 Cu.Yds.
Seeding 33311 Sq.Yds.

Zero Area and End Drive Lt. 238+00

STA. 235+30 TO STA. 240+00

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	S-176(1)	1946

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47

HARRISON COUNTY
S.H. 923 SEC. F (Pt.)

	Seeding Width	S.Y.	End Area Cut	Fill	Cu. Yds. Cut	Fill
1138.94 243+00 1139.4						
		850			981	91
1135.00 242+50 1135.4						
		151	460	33		
		808			741	116
1130.38 242+00 1131.9						
		140	340	92		
		764			583	178
1126.88 241+50 1128.7						
		135	290	100		
		725			472	222
1122.70 241+00 1124.2						
		126	220	140		
		683			389	241
1118.48 240+50 1120.8						
		95	170	77		
		597			343	182
1142.84 243+50 1143.8						
		155	600	65		
		875			1121	61
1146.74 244+00 1147.9						
		142	611	1		
		717			937	4
1150.64 244+50 1151.6						
		116	401	3		
		786			609	263
1154.54 245+00 1155.2						
		167	256	281		
		783			237	730
1158.29 245+50 1157.6						
		115	0	507		
		611			0	1016
1161.74 246+00 1156.6						
		105	0	590		
		508			0	1024

STA. 240+50 TO STA. 246+00

DIVISION	STATE	PROJECT	FISCAL YEAR	
2	OHIO	S-176(1)	1946	30 / 47

HARRISON COUNTY
S.H. 923 SEC. F(Pt.)

	SEEDING WIDTH	SEEDING S.Y.	END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
1176.14 / 249+00 / 1177.8		222			72	0
Seeding of existing road area on Rt. Sta. 246+00 to Sta. 249+50 → (414)	78		90	0		
1174.49 / 248+50 / 1174.5		383			120	19
Sta. 248+10 – Drive Rt. I-17 Aggr. = 5 Cu. Yds.	60		40	20		
1172.54 / 248+00 / 1170.0		361			50	150
	70		14	142		
1170.29 / 247+50 / 1166.2		394			13	384
	72		0	273		
1167.74 / 247+00 / 1160.4		394			0	663
	70		0	450		
1164.89 / 246+50 / 1155.9		411			0	894
	78		0	516		
1179.74 / 251+00 / 1164.8		617			0	2019
	107		0	1070		
	104				0	385
1179.68 / 250+91 / 1159.4						
	102		0	1240		
1179.60 / 250+80 / 1166.1						
	118		0	814		
1179.29 / 250+50 / 1168.2						
	91		0	814		
1178.54 / 250+00 / 1172.6						
	307		0	839		
Sta. 249+90 – Mail Box Appr. Lt. I-17 Aggr. = 3 Cu. Yds.	93		0	697		
Sta. 249+30 – Road Appr. Lt. T-10 Par't. = 12 Cu. Yds.	508				0	997
	90		0	380		
Sta. 249+30 – Road Appr. Rt. T-10 Pav't. = 4 Cu. Yds.	422				8	405
1177.49 / 249+50 / 1178.7	62		2	57		
1176.98 / 249+30 / 1178.3	130		18	21		
	55		40	0		

STA. 246+50 TO STA. 251+00

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	S-176(1)	1946

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47

HARRISON COUNTY
S.H. 923 SEC. F (Pt.)

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60

1170

RW

RW

1176.14
254+00
1176.2

END WORK & PROJECT

F=16

C=7

1170

1177.49
253+50
1176.9

F=12

F=79

3:1

1170

1178.54
253+00
1175.9

3:1

3:1

F=234

1170

1179.29
252+50
1173.8

2:1

2:1

F=576

1170

RW

1179.74
252+00
1170.6

2:1

F=1110

2:1

RW

1170

1179.89
251+50
1166.0

Seeding Width	S.Y.	End Area Cut	End Area Fill	Cu. Yds. Cut	Cu. Yds. Fill
10		0	0		
	114			6	15
31		7	16		
	183			7	88
35		1	79		
	278			1	290
65		0	234		
	414			0	749
84		0	575		
	553			0	1560
115		0	1110		

60 50 40 30 20 10 ℄ 10 20 30 40 50

1170

256+00
1167.5

1170

255+50
1170.6

1170

255+00
1172.9

1170

254+50
1174.7

Seeding Width	S.Y.	End Area Cut	End Area Fill	Cu. Yds. Cut	Cu. Yds. Fill

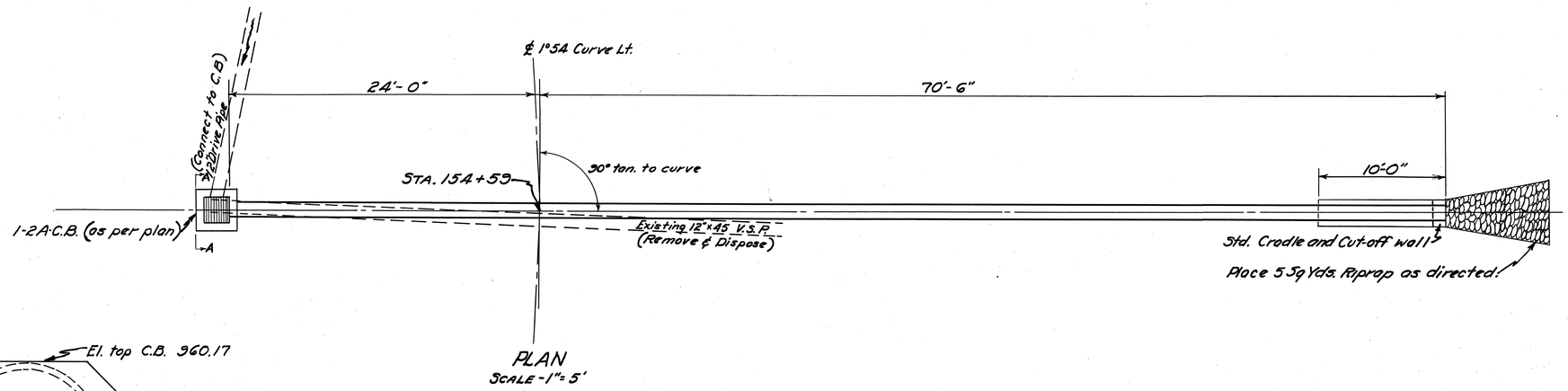
70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60

STA. 251+50 TO STA. 256+00

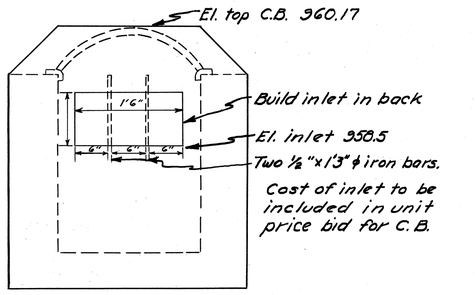
FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	S-176(1)	1946

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47

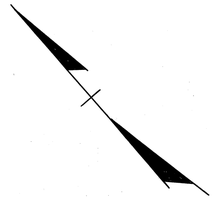
HARRISON COUNTY
S.H. 923 SEC. F(Pt)



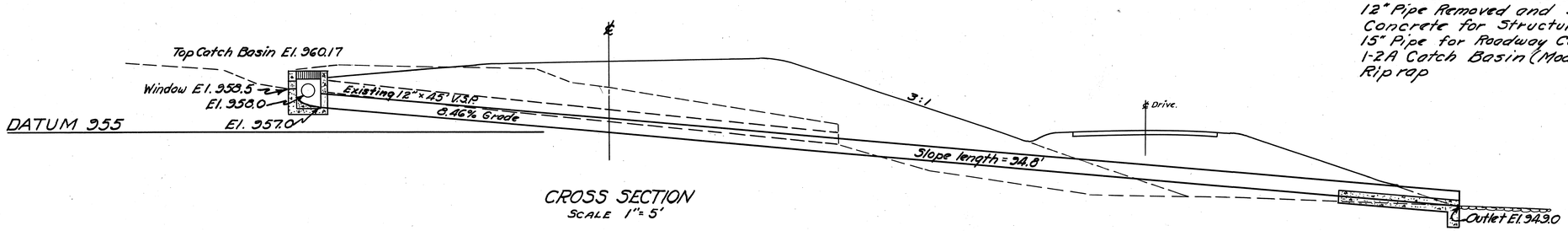
PLAN
SCALE - 1" = 5'



SECTION A-A
1-2A CATCH BASIN (MOD.)
SCALE 1"=1'-0"



960.90
154+59
958.8



CROSS SECTION
SCALE 1" = 5'

STRUCTURE DATA

Type: Pipe Culvert.
Size: 15" x 95'
WORK REQUIRED - Remove and dispose of existing 12" x 45' V.S.P. Build new pipe culvert with Std. Cradle and Cut-off wall at outlet end. Build 1-2A Catch Basin at inlet end with inlet in the back. Connect 12" Drive pipe To Catch Basin, as shown. Riprap outlet end as shown.

STANDARD DRAWINGS

Pipe Culverts	S-27 P.C. 2 & 3
Catch Basins	I-B C.B 1-2A & B

ESTIMATED QUANTITIES

Excavation for Structures	10. Cu. Yds.
12" Pipe Removed and Disposed of	45 Lin. Ft.
Concrete for Structures "Class E"	0.7 Cu. Yds
15" Pipe for Roadway Culverts	95. Lin. Ft.
1-2A Catch Basin (Modified)	1. Each
Riprap	5. Sq Yds.

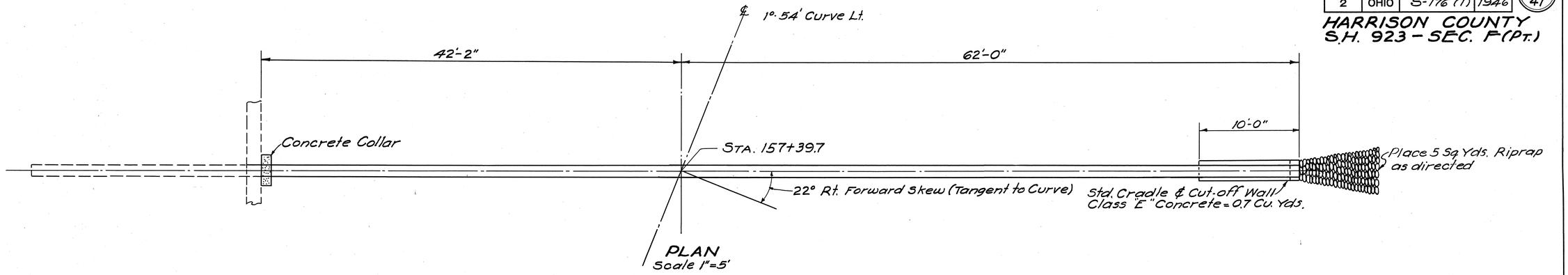
1-S

STA. 154+59
15" x 95' PIPE CULVERT

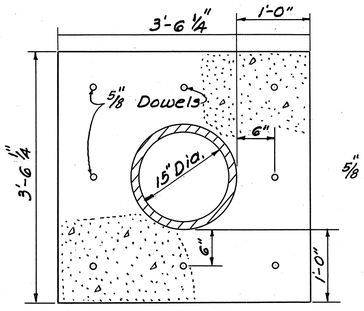
FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	S-176 (1)	1946

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47

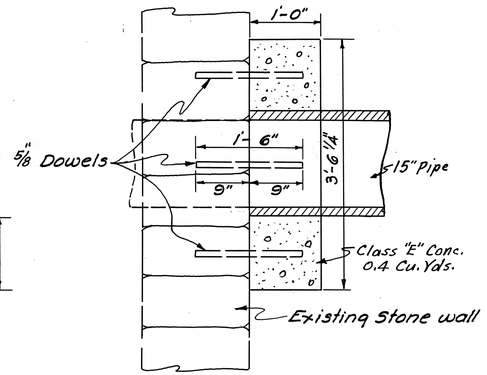
HARRISON COUNTY
S.H. 923 - SEC. F (PT.)



PLAN
Scale 1"=5'



FRONT VIEW COLLAR



SIDE VIEW COLLAR

STRUCTURE DATA

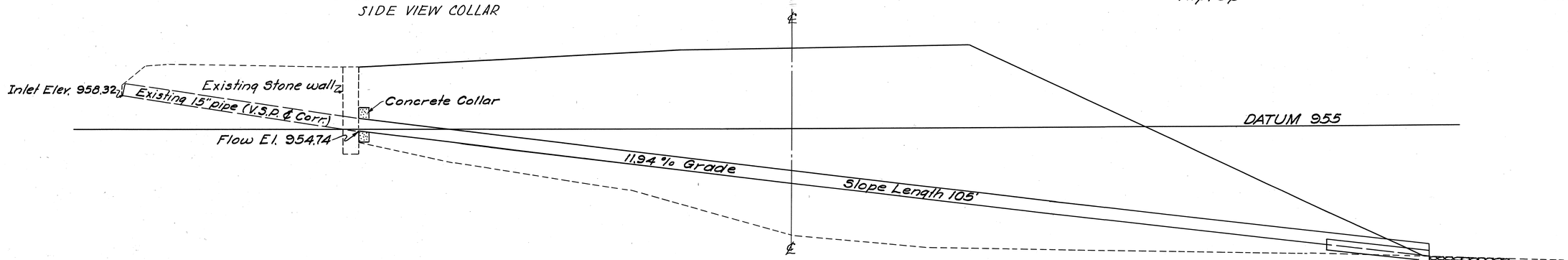
TYPE - Pipe Culvert.
SIZE - 15" x 105' - Skew: 22° R.F.
WORK REQUIRED - Build new 15" x 105' pipe culvert with Std. Cradle and Cut-off wall at outlet end. Construct concrete collar at inlet end and tie the collar to existing stone wall with dowels as shown. Riprap outlet as shown.

STANDARD DRAWINGS

Pipe Culverts	S-27	P.C. 2 & 3

ESTIMATED QUANTITIES

Excavate for Structures	1 Cu. Yd.
Concrete for Structures, Class "E"	1.1 Cu. Yds.
Reinforcing Steel	13 Lbs.
Dowel Holes	6 Lin. Ft.
15" Pipe for Roadway Culverts	105 Lin. Ft.
Riprap	5 Sq. Yds.



CROSS SECTION
Scale 1"=5'

962.73
157+39.7
944.6

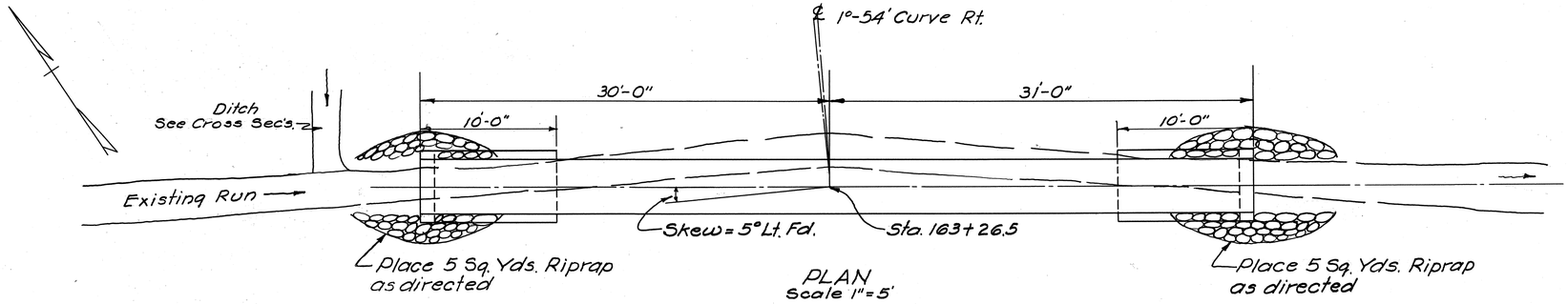
2-S

STA. 157+39.7
15" x 105' PIPE CULVERT

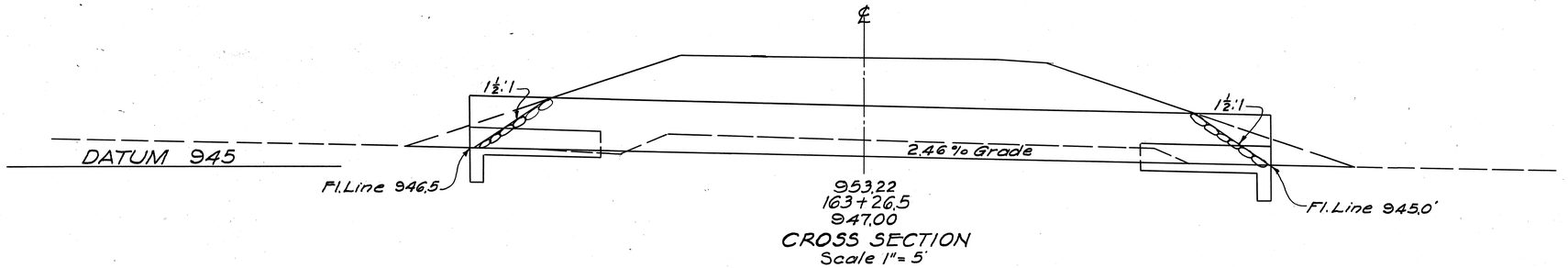
FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	S-176 (1)	1946

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HARRISON COUNTY
S.H. 923-SEC. F (Pt.)



PLAN
Scale 1" = 5'



CROSS SECTION
Scale 1" = 5'

STRUCTURE DATA
TYPE - Pipe Culvert
SIZE - 48" x 61' - Skew: 5° L.F.
WORK REQUIRED - Build new 48" x 61' pipe culvert with Std. Culvert ends on Lt. & Rt. Riprap inlet and outlet as directed.
Drainage Area = 175 Acres.
Estimated Run-off = 75 c.f.s.

REFERENCE DRAWINGS

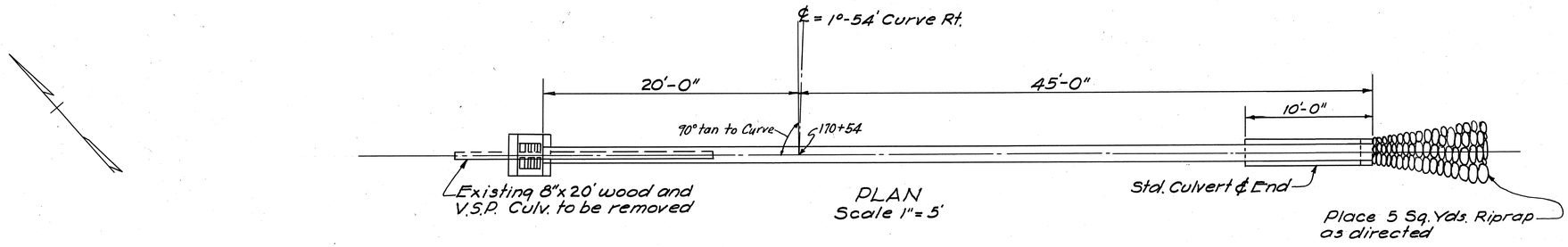
Pipe Culverts	S-27 P.C. 2 & 3

ESTIMATED QUANTITIES

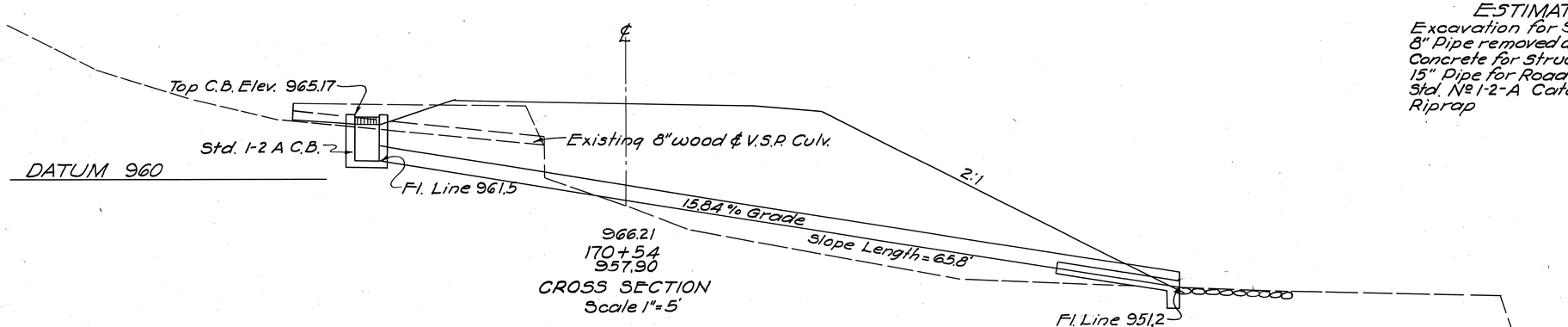
Excavation for Structures	15 Cu. Yds.
Concrete for Structures, Class "E"	5 Cu. Yds.
48" Pipe for Roadway Culvert	61 Lin. Ft.
Riprap	10 Sq. Yds.

3-S

STA. 163+26.5
48" x 61' PIPE CULVERT



PLAN
Scale 1" = 5'



CROSS SECTION
Scale 1" = 5'

STRUCTURE DATA
TYPE - Pipe Culvert
SIZE - 15" x 66'
WORK REQUIRED - Remove existing 8" x 20' culvert. Build new pipe culvert with Std. 1-2-A C.B. on Lt. and Std. culvert end on Rt. Riprap outlet as directed.

REFERENCE DRAWINGS

Pipe Culverts	S-27 P.C. 2 & 3
Catch Basins	1-8 C.B. 1-2 A & B.

ESTIMATED QUANTITIES

Excavation for Structures	10 Cu. Yds.
8" Pipe removed and disposed of	20 Lin. Ft.
Concrete for Structures, Class "E"	0.7 Cu. Yds.
15" Pipe for Roadway Culvert	66 Lin. Ft.
Std. No. 1-2-A Catch Basin	1 Each
Riprap	5 Sq. Yds.

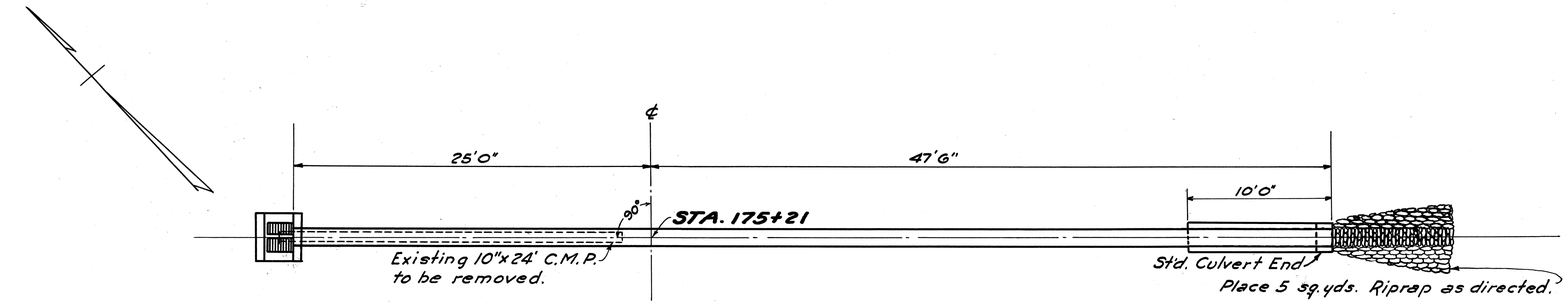
5-S

STA. 170+54
15" x 66' PIPE CULVERT

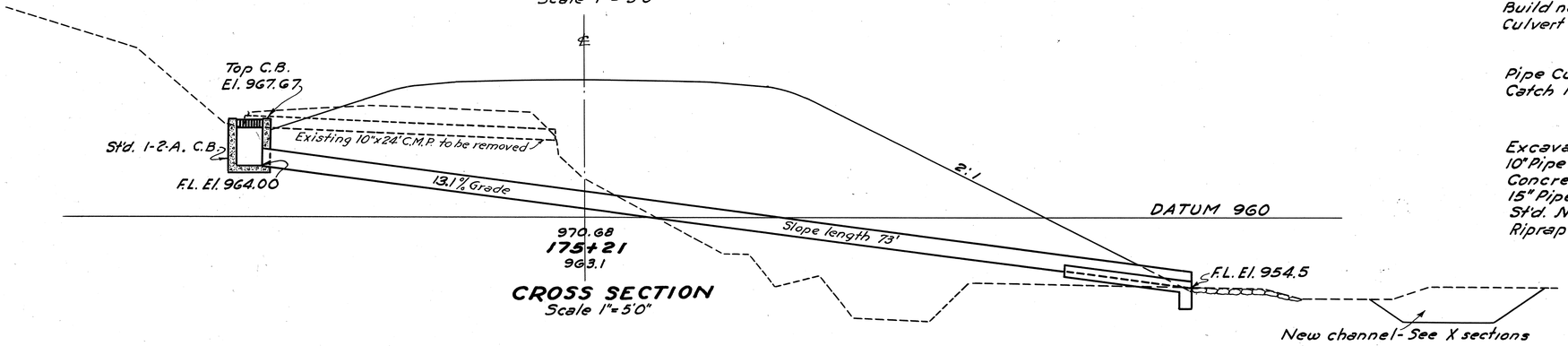
FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	S-176(1)	1946

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HARRISON COUNTY
S.H. 923 SEC. F (Pt.)



PLAN
Scale 1"= 5'0"



CROSS SECTION
Scale 1"=5'0"

STRUCTURE DATA

TYPE:- Pipe Culvert
SIZE:- 15"x 73'0"
WORK REQUIRED:- Remove existing 10"x 24' C.M.P. Culvert. Build new pipe culvert with Std. 1-2-A. C.B. on Lt. and Std. Culvert End on Rt. Riprap outlet as directed.

REFERENCE DRAWINGS

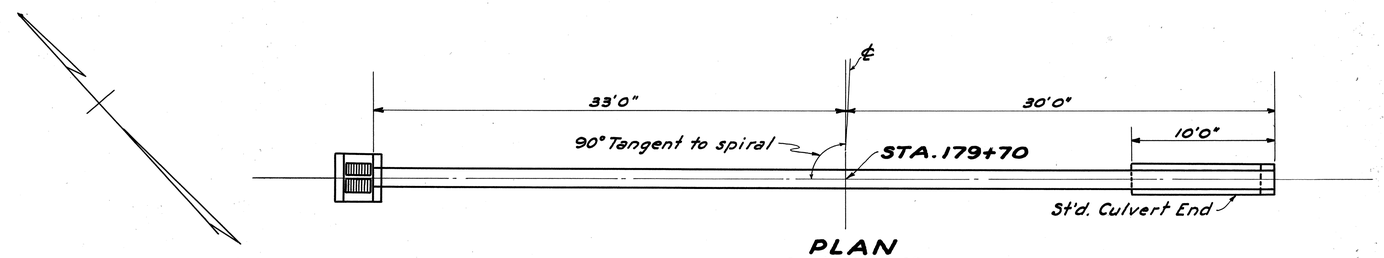
Pipe Culverts	S-27 PC 2&3
Catch Basins	I-8 C.B 1-2-A&B

ESTIMATED QUANTITIES

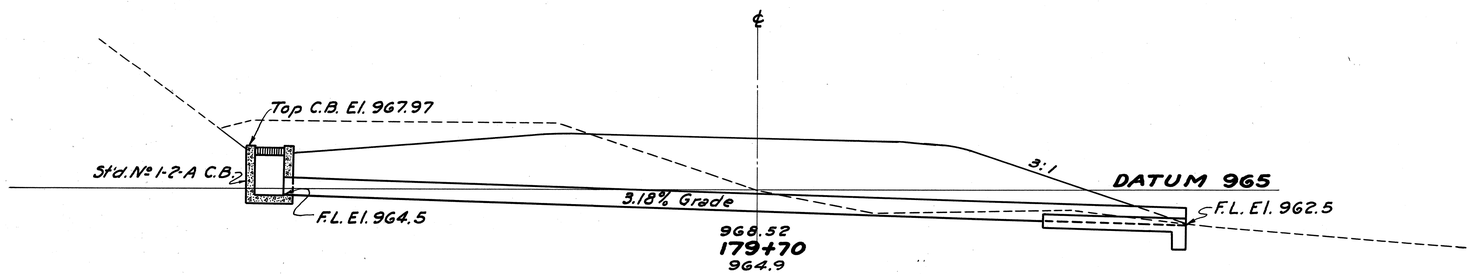
Excavation for Structure	15 Cu.Yds.
10" Pipe removed and disposed of	24 Lin. Ft.
Concrete for Structure, Class "E"	0.7 Cu.Yds.
15" Pipe for Roadway Culvert	73 Lin. Ft.
Std. No 1-2-A. Catch Basin	1 Each
Riprap	5 Sq.Yds.

STA. 175+21
15"x73' PIPE CULVERT

7-S



PLAN
Scale 1"= 5'0"



CROSS SECTION
Scale 1"=5'0"

STRUCTURE DATA

TYPE:- Pipe Culvert
SIZE:- 15"x 63'0"
WORK REQUIRED:- Build new Pipe Culvert with Std. No 1-2-A C.B. on Lt. and Std. Culvert End on Rt.

REFERENCE DRAWINGS

Pipe Culverts	S-27 PC 2&3
Catch Basins	I-8 C.B. 1-2A & B

ESTIMATED QUANTITIES

Excavation for Structures	15 Cu.Yds.
Concrete for Structures, Class "E"	0.7 Cu.Yds.
15" Pipe for Roadway Culverts	63 Lin.Ft.
Std. No 1-2-A Catch Basin	1 Each

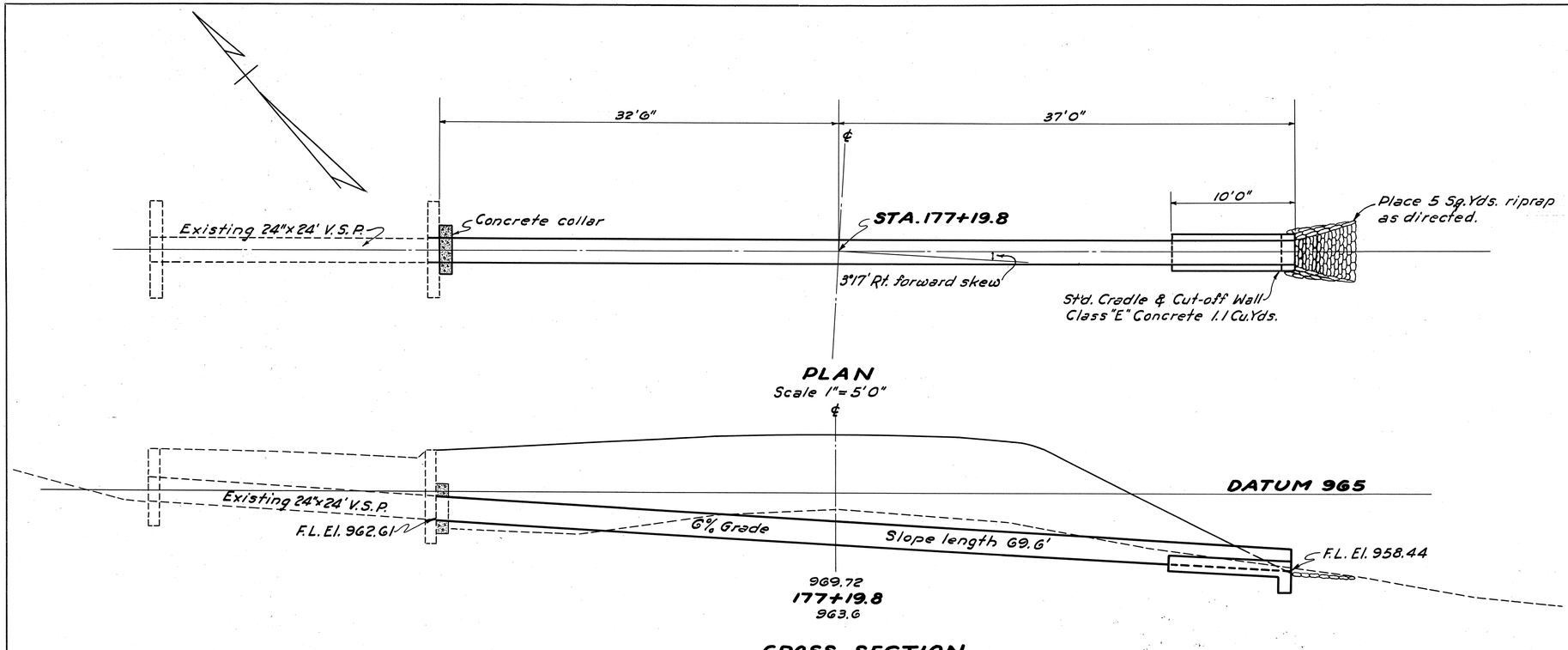
STA. 179+70
15"x63' PIPE CULVERT

10-S

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	S-176(1)	1946

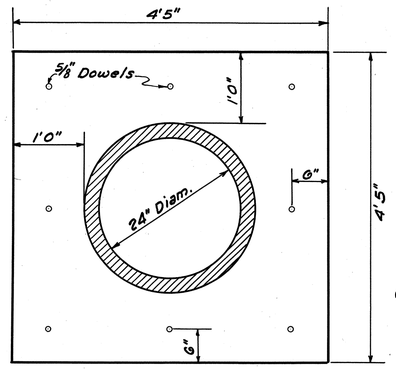
36
47

HARRISON COUNTY
S.H. 923 SEC. F (Pt.)

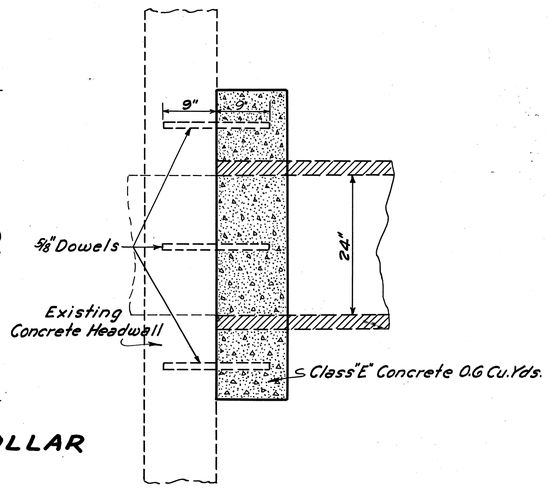


PLAN
Scale 1"=5'0"

CROSS SECTION
Scale 1"=5'0"



FRONT VIEW CONCRETE COLLAR
Scale 1"=1'0"



SIDE VIEW OF COLLAR
Scale 1"=1'0"

STRUCTURE DATA

TYPE:- Pipe Culvert
SIZE:- 24"x 70'0" - Skew = 3°17' R.F.
WORK REQUIRED:- Build new 24"x 70' pipe culvert with Std. Cradle and Cut-off Wall at outlet end. Construct concrete collar at inlet end and tie the collar to existing concrete headwall with dowels as shown. Riprap outlet as shown.

REFERENCE DRAWINGS

Pipe Culverts	S-27 PC 2&3

ESTIMATED QUANTITIES

Excavation for Structures	15 Cu.Yds.
Concrete for Structures, Class "E"	1.7 Cu.Yds.
Reinforcing Steel	13 Lbs.
Dowel Holes	6 Lin.Ft.
24" Pipe for Roadway Culverts	70 Lin.Ft.
Riprap	5 Sq.Yds.

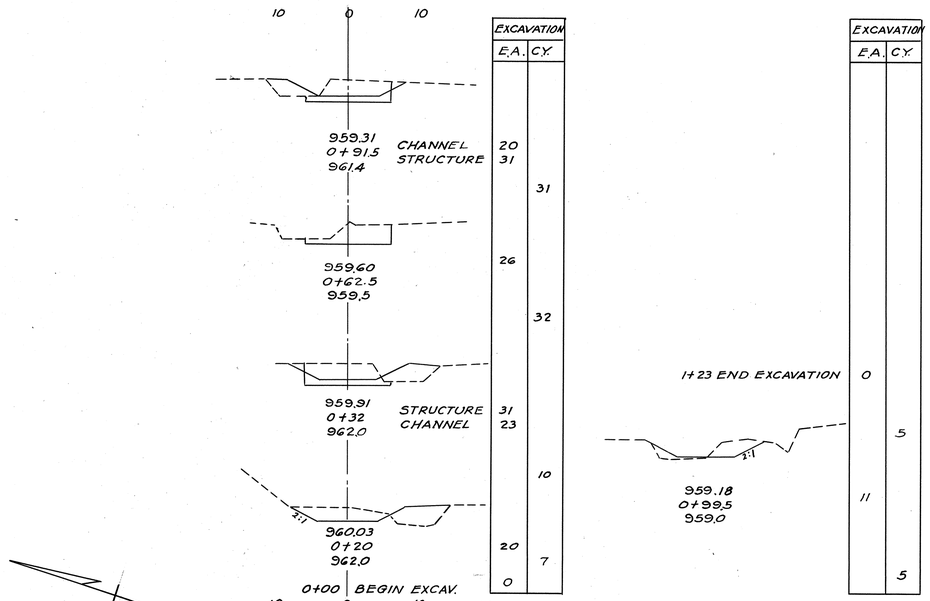
STA. 177+19.8
24"x 70' PIPE CULVERT

8-S

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	S-176(1)	1946

37
47

HARRISON COUNTY
S.H. 923-SEC. F(Pt.)



STRUCTURE DATA

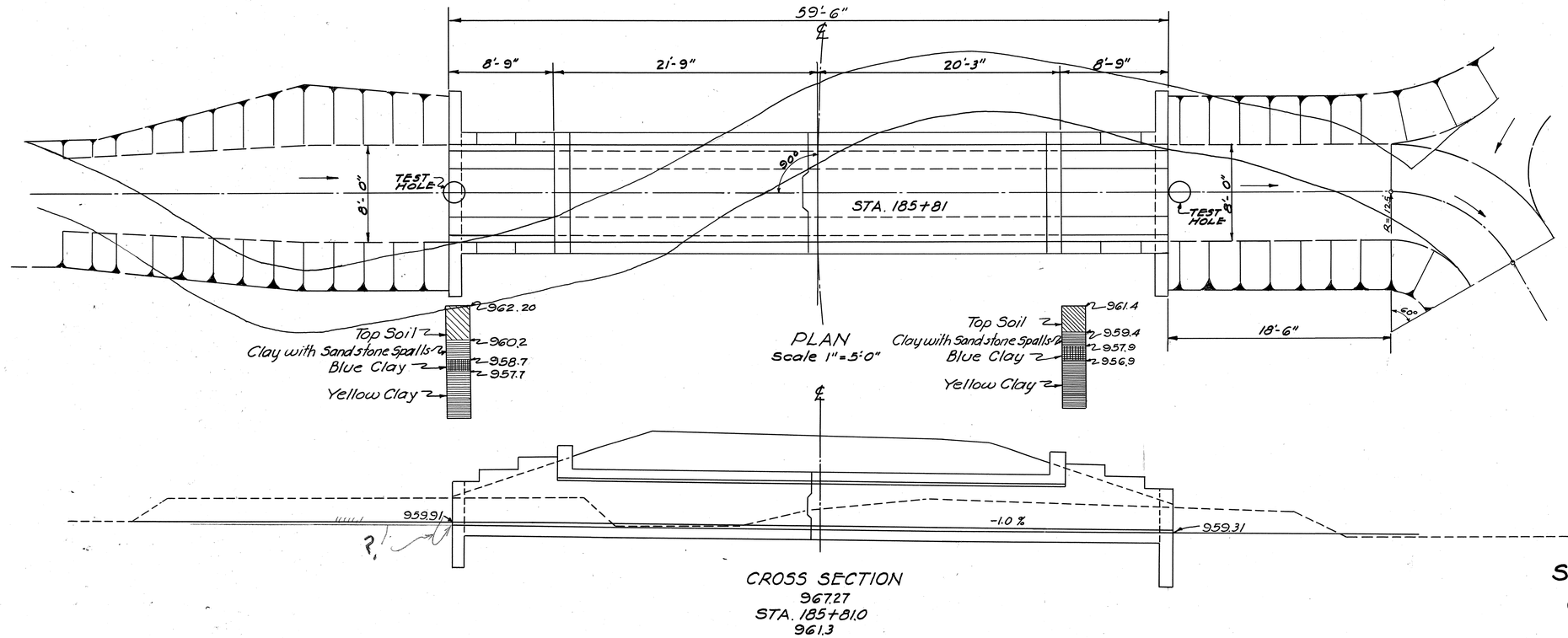
TYPE-Large Box Culvert.
SIZE-8'-0"x 4'-0"x 59'-6"
WORK REQUIRED- Build new Large Box Culvert.
Excavate inlet and outlet channels as shown

REFERENCE DRAWINGS

L.B.C.- 45 Sheets 1 & 2

ESTIMATED QUANTITIES

Structure Excavation	63 Cu. Yds.
Channel Excavation	27 Cu. Yds.
Structure Concrete (Class "C")	57.4 Cu. Yds.
Reinforcing Steel	7751 Lbs.
Drainage Area	900 Acres
Run-off	219 C.F.S.



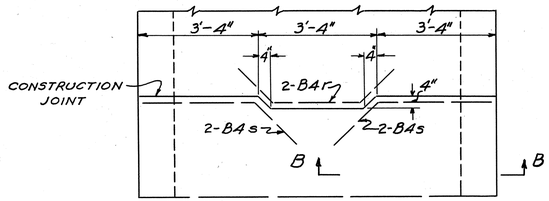
11-S

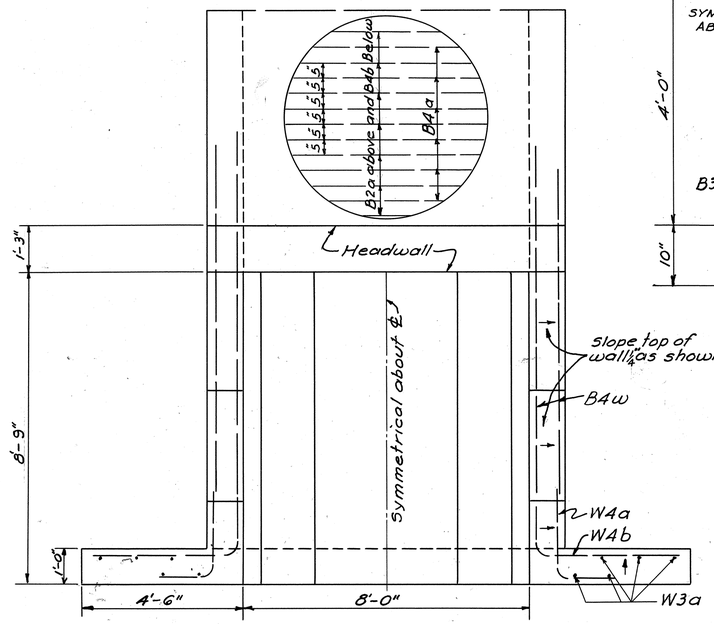
STA. 185+81
8'x 4'x 59'-6" LARGE BOX CULV.

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	S-176(1)	1946

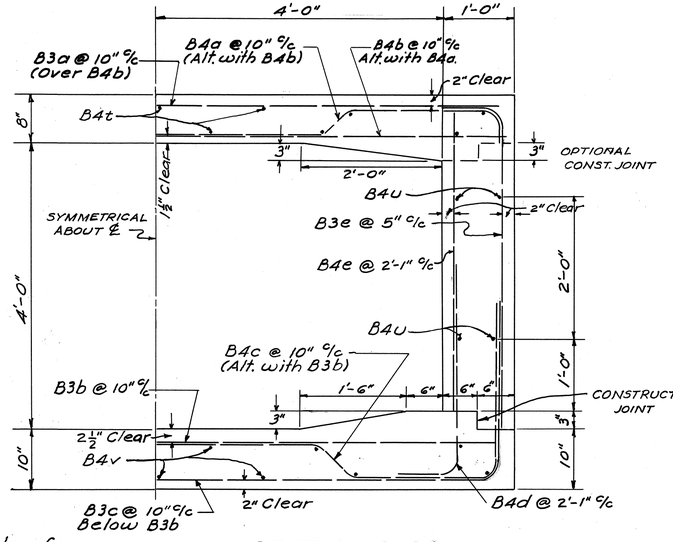
38/47

HARRISON COUNTY
S.H. 923-SEC. F(PT.)

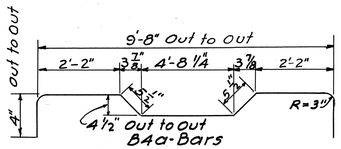


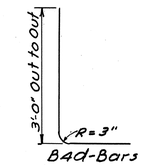


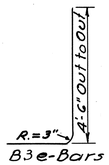
PART PLAN
Scale: 1"=2'-0"

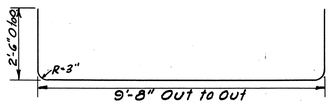


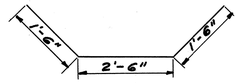
SECTION B-B
Scale: 1"=1'-0"

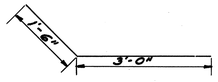


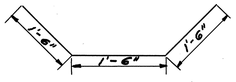


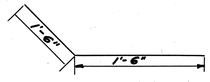


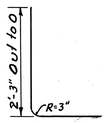


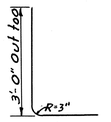


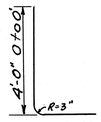


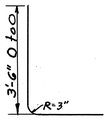


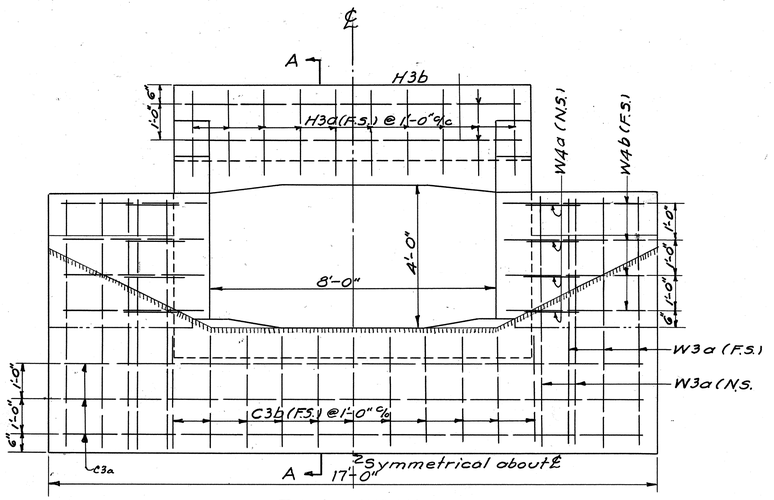




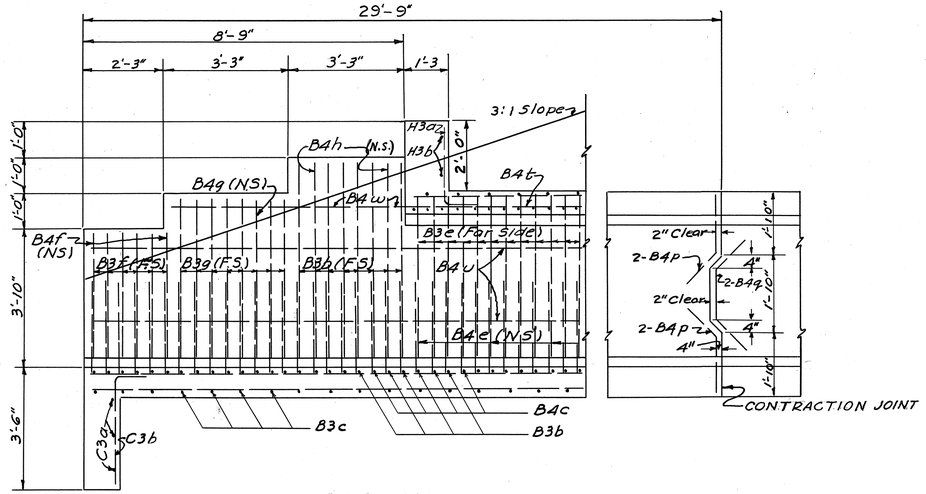








END VIEW
Scale: 1"=2'-0"



SECTION A-A
Scale: 1"=2'-0"

STEEL LIST

Mark	Size	Shape	Number	Length	Weight
B4a	5/8" ϕ	B	51	10'-3"	545
B4b	"	S	50	9'-6"	496
B4c	"	B	72	14'-9"	1108
B4d	"	B	58	4'-3"	257
B4e	"	S	42	4'-0"	175
B4f	"	S	8	3'-6"	29
B4g	"	S	4	4'-6"	19
B4h	"	S	8	5'-6"	46
B4p	"	B	8	3'-0"	25
B4q	"	B	4	4'-6"	19
B4r	"	B	4	5'-6"	23
B4s	"	B	8	4'-6"	36
B4t	"	S	26	20'-6"	536
B4u	"	S	16	29'-3"	489
B4v	"	S	26	29'-3"	794
B4w	"	S	8	9'-0"	75
B3a	½" ϕ	S	51	9'-6"	324
B3b	"	S	71	9'-6"	451
B3c	"	B	72	14'-3"	685
B3e	"	B	202	6'-3"	843
B3f	"	S	24	3'-9"	60
B3g	"	S	32	4'-9"	102
B3h	"	S	32	5'-9"	123
C3a	½" ϕ	S	6	16'-6"	66
C3b	"	B	22	4'-0"	59
H3a	"	B	20	3'-3"	43
H3b	"	S	4	9'-6"	25
W3a	½" ϕ	S	20	7'-0"	94
W4a	5/8" ϕ	B	16	5'-0"	84
W4b	"	B	16	5'-0"	84
RE-3	½" ϕ		2	4'-0"	5
RE-4	5/8" ϕ		2	4'-6"	9
				TOTAL	7751

11-S

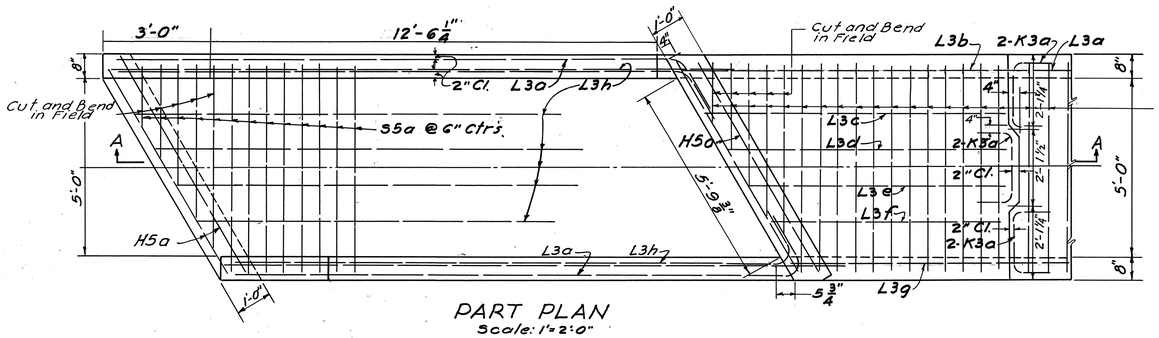
STA. 185+81
8'x4'x59'-6" LARGE BOX CULV.

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	S-176 (1)	1946

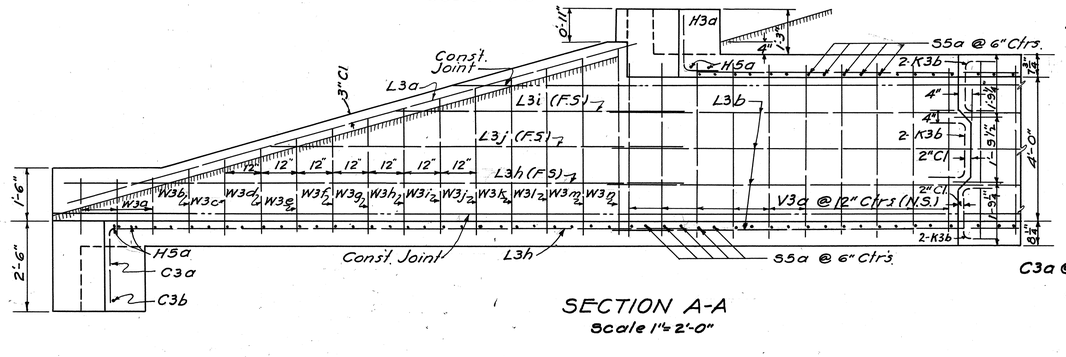
39/47

HARRISON COUNTY
S.H. 923 - SEC. F (PT.)

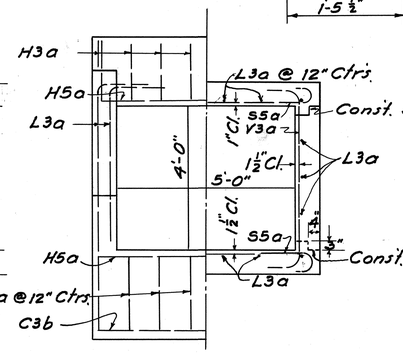
	EXCAVATION	
	E.A.	C.Y.
969.3 1+58.5 END EXC. 972.7	38	
		36
969.57 1+31 CHANNEL STR. 972.7	32	
	32	
		47
969.92 0+93 973.4	35	
		2
969.94 0+90 970.4	9	
		4
970.04 0+78 970.2	7	
		3
970.09 0+73 972.5	25	
		39
970.42 0+36 CHANNEL STR 973.4	32	
	32	
		41
1½:1 1:1 970.7 0+0 BEGIN EX. 973.5	30	
10 0 10		



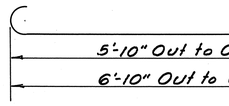
PART PLAN
Scale: 1"=2'-0"

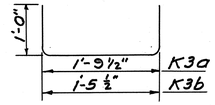


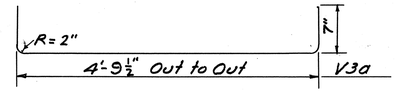
SECTION A-A
Scale 1"= 2'-0"

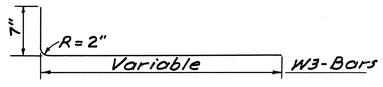


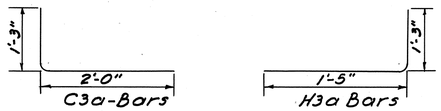
HALF-END VIEW
HALF SECTION
Scale: 1"=2'-0"

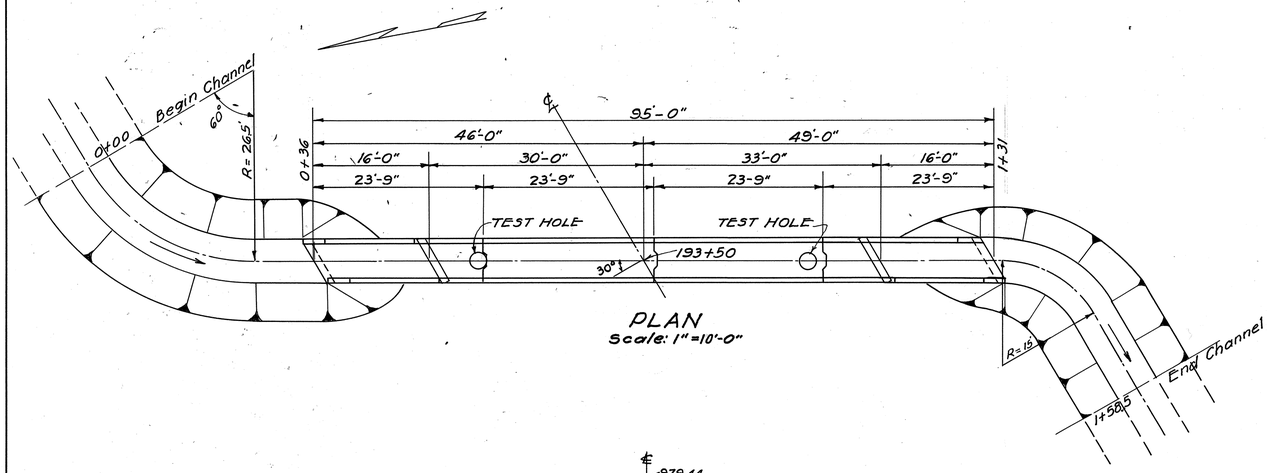




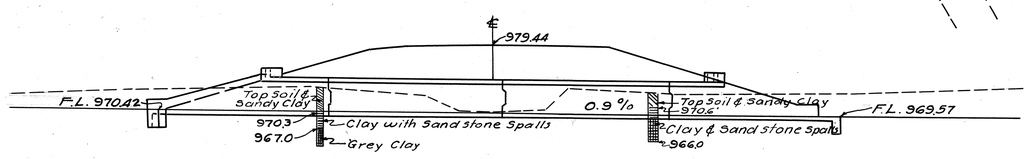








PLAN
Scale: 1"=10'-0"



979.44
193+50
970.2
Scale: 1"=10'-0"

STRUCTURE DATA

TYPE – Small Box Culvert
SIZE – 5'x 4'x 95'-0" – Skew: 30° L.F.
WORK REQUIRED – Build new 5'x 4'x 95'-0" Small Box Culvert and excavate inlet and outlet Channel as shown

REFERENCE DRAWINGS

Small Box Culverts S.B.C. – 45 Sheets 1 & 2

ESTIMATED QUANTITIES

Structure Excavation	95 Cu. Yds.
Channel Excavation	77 Cu. Yds.
Concrete Structures (Class "C")	43.9 Cu Yds.
Reinforcing Steel	5469 Lbs.

STEEL LIST

Mark	Size	Shape	Number	Length	Weight
S5a	3/4 ϕ	B	322	7'-2"	3460
V3a	1/2" ϕ	B	128	5'-10"	499
W3a	"	B	12	1'-11"	15
W3b	"	"	4	2'-2"	6
W3c	"	"	4	2'-5"	7
W3d	"	"	4	2'-8"	7
W3e	"	"	4	2'-11"	8
W3f	"	"	4	3'-3"	9
W3g	"	"	4	3'-6"	9
W3h	"	"	4	3'-9"	10
W3i	"	"	4	4'-01"	11
W3j	"	"	4	4'-4"	12
W3k	"	"	4	4'-7"	12
W3l	"	"	4	4'-11"	13
W3m	"	"	4	5'-2"	14
W3n	"	"	4	5'-6"	15
L3a	"	S	36	23'-3"	559
L3b	"	"	10	9'-0"	60
L3c	"	"	4	8'-3"	22
L3d	"	"	4	7'-6"	20
L3e	"	"	4	7'-0"	19
L3f	"	"	4	6'-6"	17
L3g	"	"	10	5'-9"	38
L3h	"	"	16	17'-9"	190
L3i	"	"	4	8'-0"	21
L3j	"	"	4	11'-6"	31
L3o	"	B	8	17'-0"	91
H5a	3/4" ϕ	"	8	6'-10"	82
H3a	1/2" ϕ	"	16	2'-6"	27
C3a	"	"	16	3'-1"	33
C3b	"	S	2	6'-10"	9
K3a	"	B	36	2'-8"	64
K3b	"	"	36	2'-4"	56
RE5	3/4" ϕ	S	2	5'-0"	15
				Total	5469

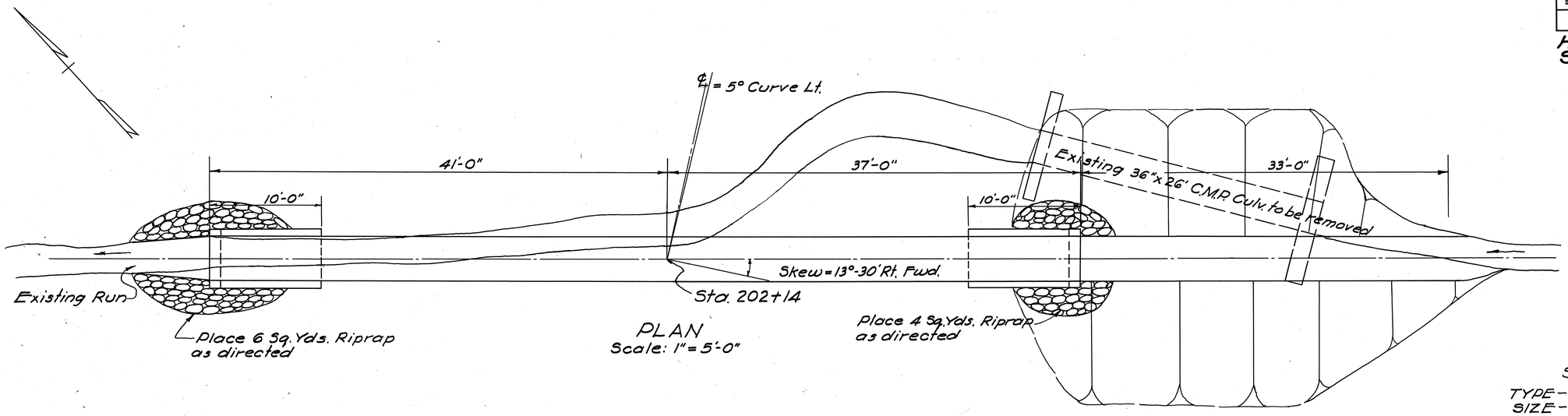
12-5

STA. 193+50
5'x 4'x 95'-0" SMALL BOX CULVERT

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	S-176(1)	1946

40
47

HARRISON COUNTY
S.H. 923 - SEC. F(PT.)



PLAN
Scale: 1" = 5'-0"

STRUCTURE DATA

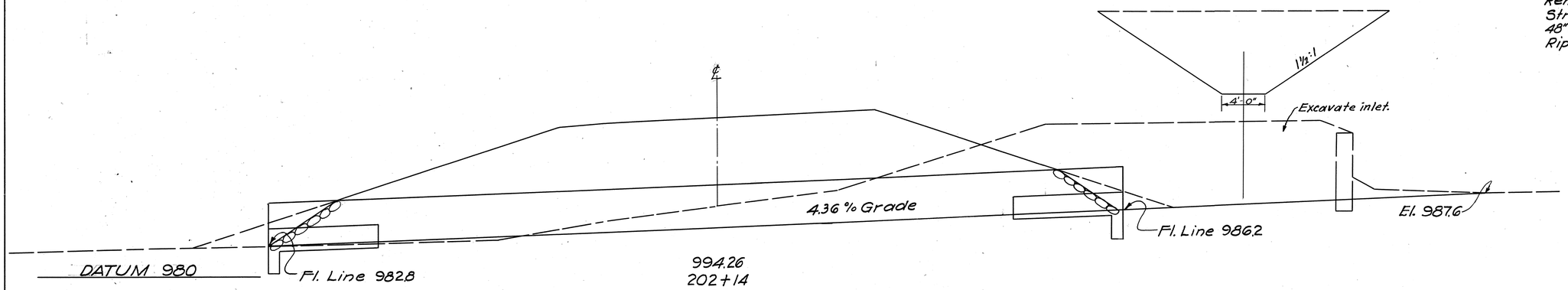
TYPE - Pipe Culvert
SIZE - 48" x 78' - Skew: 13°30' R.F.
WORK REQUIRED - Remove existing 36"x26' C.M.P. Culv. and headwalls. Build new pipe culvert with Std. culvert ends on Lt. and Rt. Excavate inlet channel and riprap inlet and outlet as directed.
Drainage Area = 140 Acres
Estimated Run-off = 75 c.f.s.

REFERENCE DRAWINGS

Pipe Culverts S-27-P.C. 2 & 3

ESTIMATED QUANTITIES

Excavation for Structures	40 Cu. Yds.
Channel Excavation	70 Cu. Yds.
36" Pipe Removed and Stored	26 Lin. Ft.
Concrete for Structures Class "E"	5 Cu. Yds.
Removal of portions of Existing Structure	8 Cu. Yds.
48" Pipe for Roadway Culvts.	78 Lin. Ft.
Riprap	10 Sq. Yds.



994.26
202+14
986.50

CROSS SECTION
Scale: 1" = 5'-0"

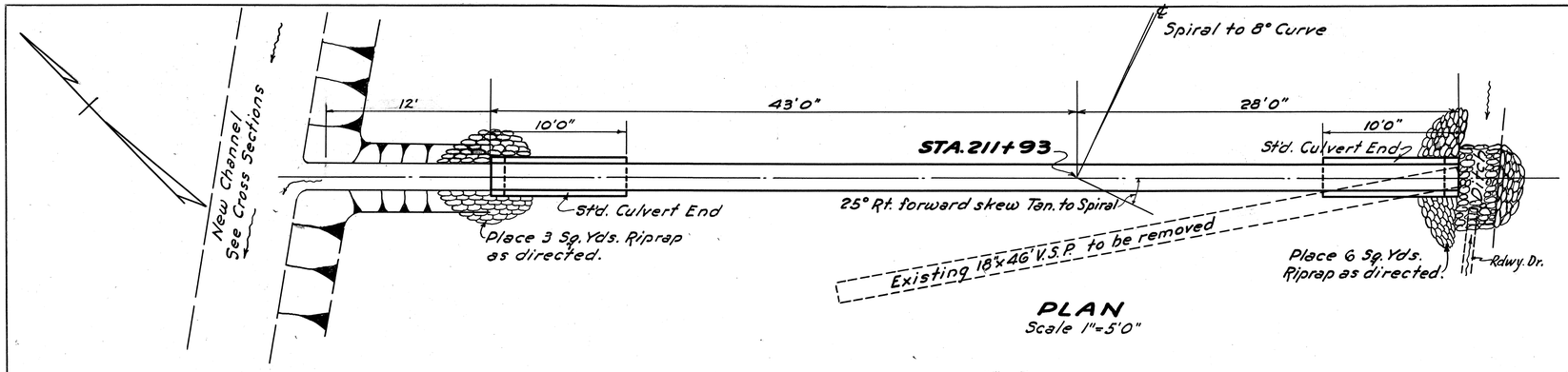
13-S

STA. 202+14
48"x 78' PIPE CULVERT

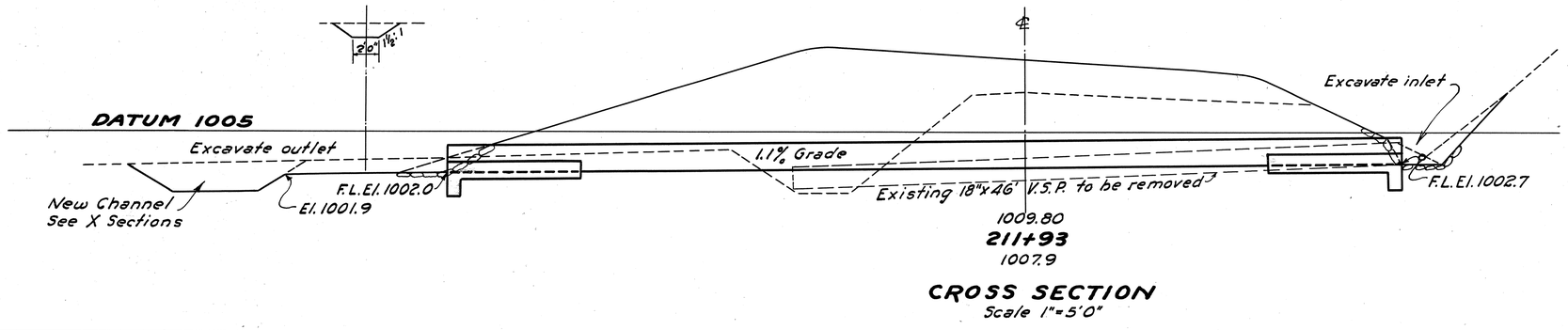
FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	S-176(1)	1946

41
47

HARRISON COUNTY
S.H. 923 SEC. F (PT.)



PLAN
Scale 1"=5'0"



CROSS SECTION
Scale 1"=5'0"

STRUCTURE DATA

TYPE:- Pipe Culvert
SIZE:- 24"x71'0". SKEW: 25° Right Forward Tan. to Spiral.
WORK REQUIRED:- Remove existing 18"x46' V.S.P. Culvert.
Build new pipe culvert with Std. Culvert Ends on Rt. & Lt.
Excavate inlet and outlet channel. Dr. Area = 25 Ac.
Riprap inlet and outlet as directed. Est. Runoff = 15 c/s

REFERENCE DRAWINGS

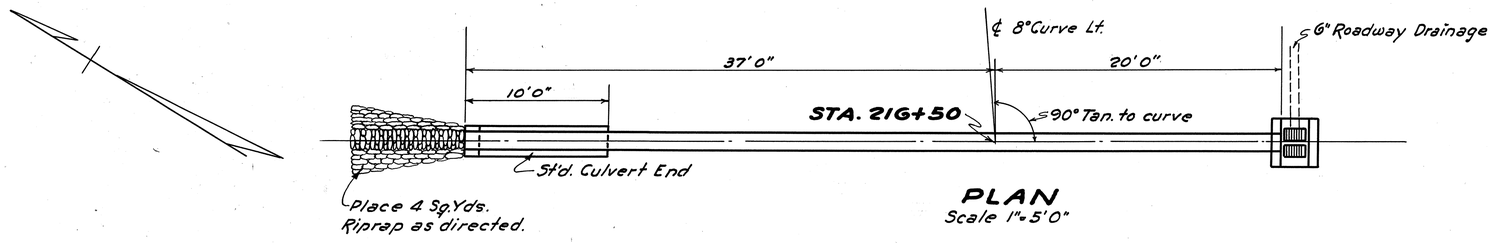
Pipe Culverts	S-27 P.C. 2&3

ESTIMATED QUANTITIES

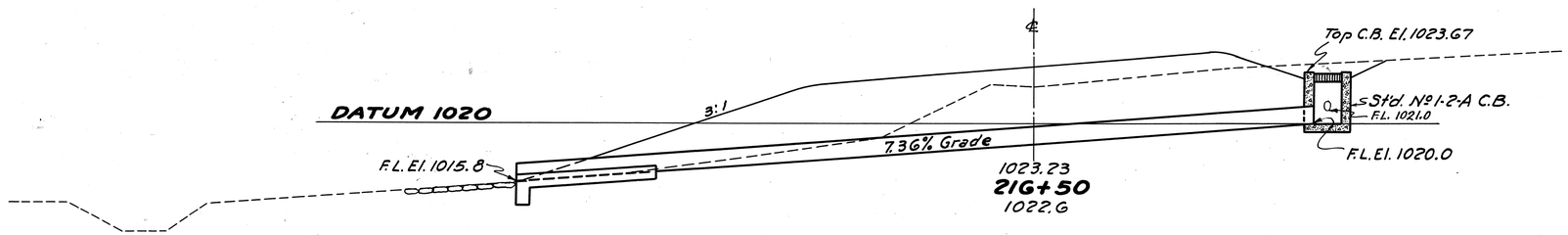
Excavation for Structures	30 Cu. Yds.
Channel Excavation	3 Cu. Yds.
18" Pipe Removed and Disposed of	46 Lin. Ft.
Concrete for Structures, Class "E"	2.2 Cu. Yds.
24" Pipe for Roadway Culverts.	71 Lin. Ft.
Riprap	9 Sq. Yds.

STA. 211+93
24"x 71'0" PIPE CULVERT

14-S



PLAN
Scale 1"=5'0"



CROSS SECTION
Scale = 1"= 5'0"

STRUCTURE DATA

TYPE:- Pipe Culvert
SIZE:- 15"x 57'0"
WORK REQUIRED:- Build new Pipe Culvert with Std. Culvert End on Lt. and Std. No 1-2-A C.B. on Rt. Riprap outlet as directed. Connect Roadway Drainage to Catch Basin.

REFERENCE DRAWINGS

Pipe Culverts	S-27 P.C. 2&3
Catch Basins	I-8 C.B. 1-2-A&B

ESTIMATED QUANTITIES

Excavation for Structures	15 Cu. Yds.
Concrete for Structures, Class "E"	0.7 Cu. Yds.
15" Pipe for Roadway Culverts	57 Lin. Ft.
Std. No 1-2-A Catch Basin	1 Each
Riprap	4 Sq. Yds.

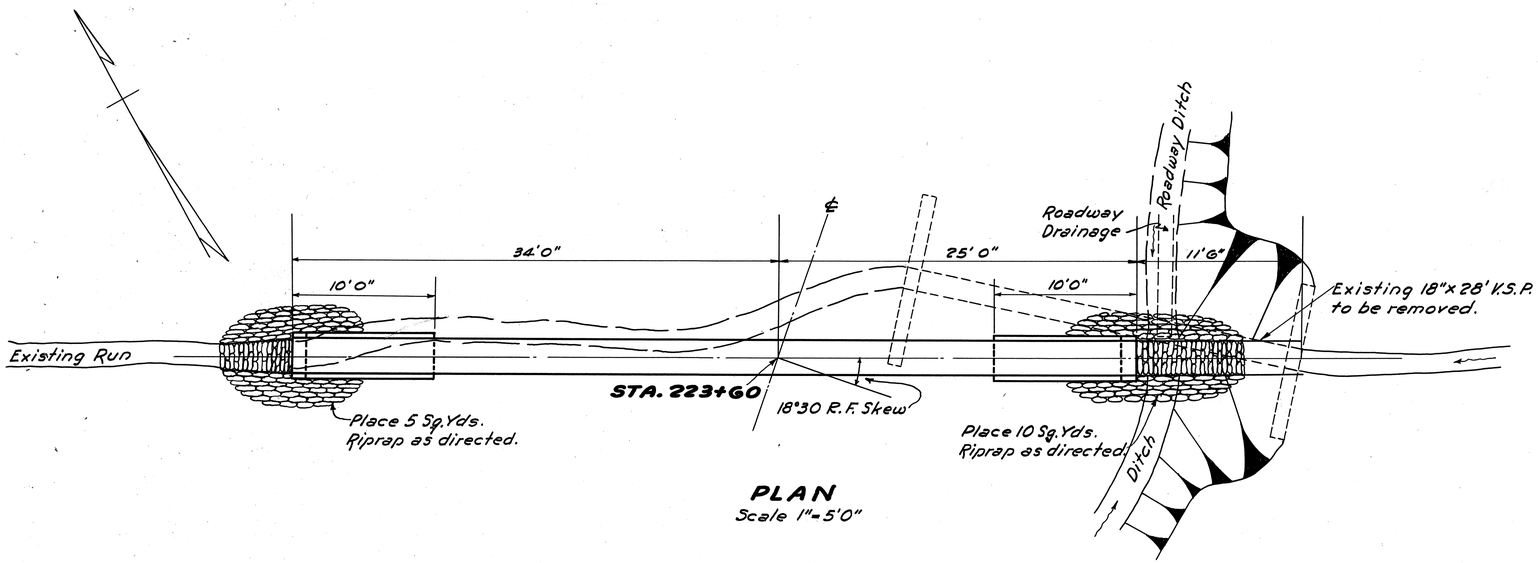
STA. 216+50
15"x 57'0" PIPE CULVERT

15-S

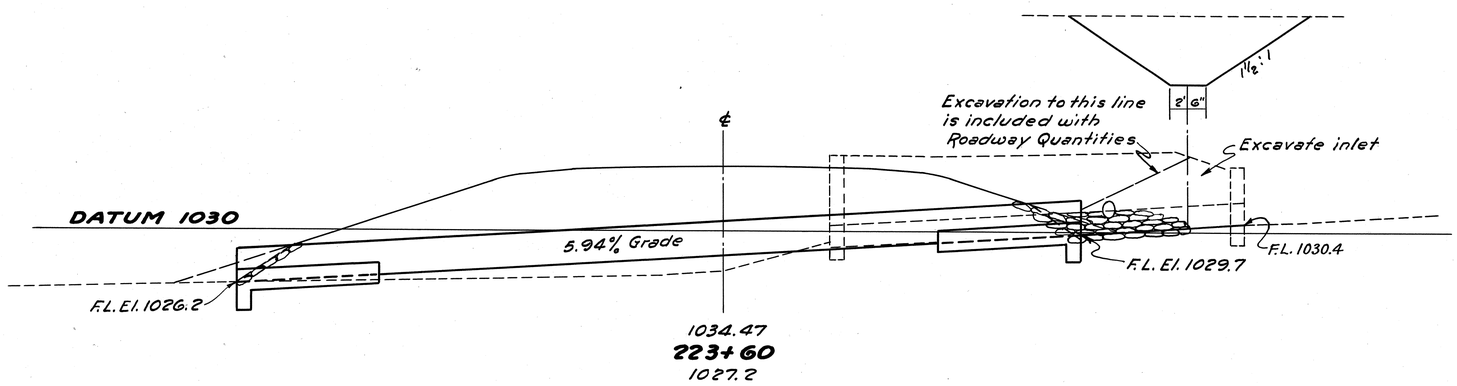
FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	S-176 (1)	1946

42
47

HARRISON COUNTY
S.H. 923 SEC. F (Pt.)



PLAN
Scale 1"=5'0"



CROSS SECTION
Scale 1"=5'0"

STRUCTURE DATA

TYPE:- Pipe Culvert
SIZE:- 30"x 59' 0" SKEW:- 18°30' Right Forward
WORK REQUIRED:- Remove existing 18"x 28' V.S.P. Culvert and headwalls. Build new Pipe Culvert with Std. Culvert Ends on Lt. and Rt. Excavate inlet and riprap inlet and outlet as directed.
Drainage area 35 Acres
Estimated run-off 20 C.F.S.

REFERENCE DRAWINGS

Pipe Culverts	S-27 P.C. 2 & 3

ESTIMATED QUANTITIES

Excavation for Structures	15 Cu.Yds.
Channel Excavation	8 Cu.Yds.
18" Pipe Removed and Disposed of	28 Lin.Ft.
Concrete for Structures, Class "E"	2.7 Cu.Yds.
Removal of Portions of Existing Structures	5 Cu.Yds.
30" Pipe for Roadway Culverts.	59 Lin.Ft.
Riprap	15 Sq.Yds.

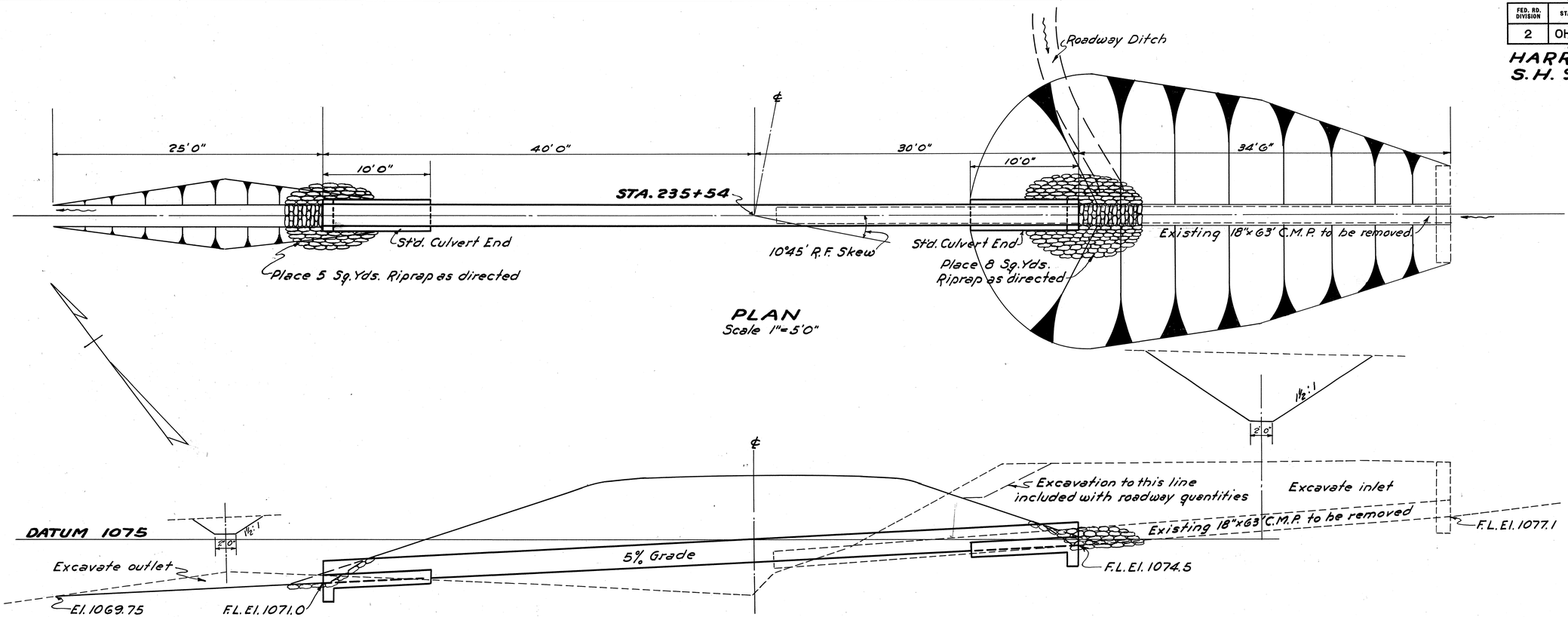
STA. 223+60
30"x 59'0" PIPE CULVERT

17-S

FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	S-176(1)	1946

43
47

HARRISON COUNTY
S.H. 923 SEC. F (Pt.)



PLAN
Scale 1"=5'0"

1080.88
235+54
1069.9

CROSS SECTION
Scale 1"=5'0"

STRUCTURE DATA

TYPE:- Pipe Culvert
SIZE:- 24"x 70'0" SKEW:- 10°45' Rt. Forward
WORK REQUIRED:- Remove existing 18"x 63' C.M.P. Culvert and Headwall. Build new Pipe Culvert with Std. Culvert Ends on Lt. & Rt. Excavate inlet and outlet and Riprap as directed.

Drainage Area 30 Acres
Estimated Run-off 15 C.F.S.

REFERENCE DRAWINGS

Pipe Culverts	S-27 P.C. 2&3

ESTIMATED QUANTITIES

Excavation for Structures	10 Cu. Yds.
Channel Excavation	80 Cu. Yds.
18" Pipe Removed and Stored	63 Lin. Ft.
Concrete for Structures, Class "E"	2.2 Cu. Yds.
Removal of Portions of Existing Structures	3 Cu. Yds.
24" Pipe for Roadway Culvert	70 Lin. Ft.
Riprap	13 Sq. Yds.

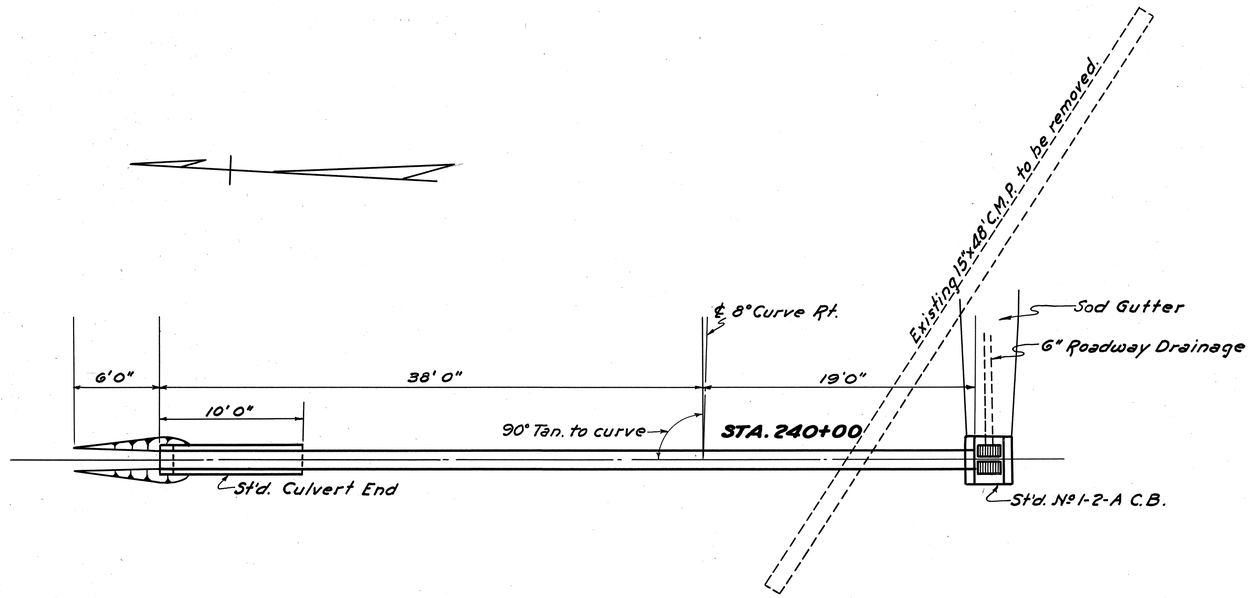
STA. 235+54
24"x 70'0" PIPE CULVERT

18-S

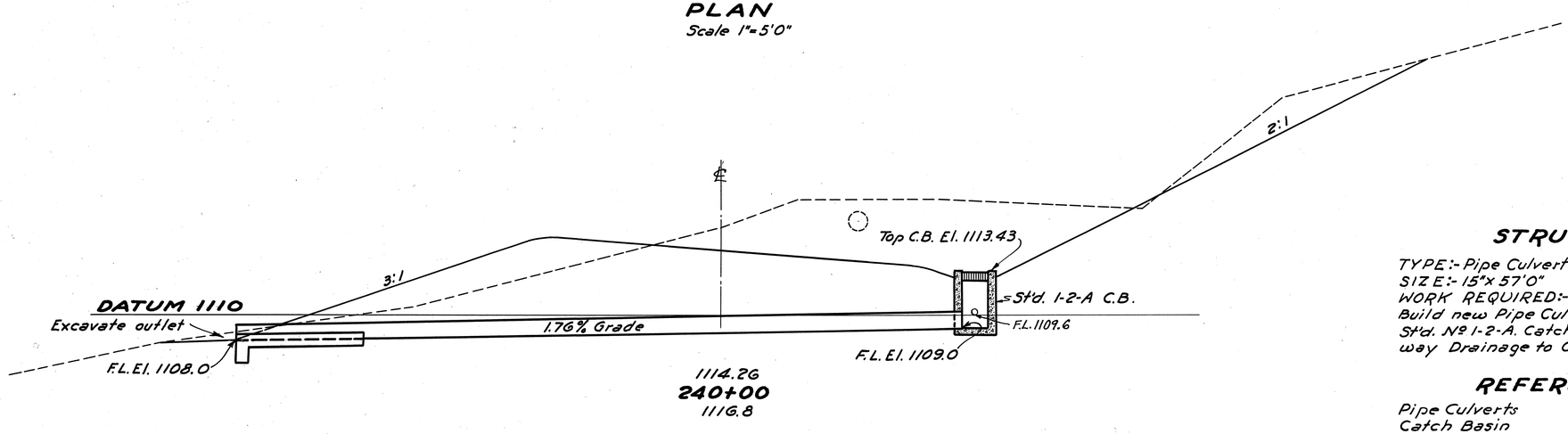
FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	S-176(1)	1946

44
47

HARRISON COUNTY
S.H. 923 SEC. F (Pt.)



PLAN
Scale 1"=5'0"



CROSS SECTION
Scale 1"=5'0"

STRUCTURE DATA

TYPE:- Pipe Culvert
SIZE:- 15"x 57'0"
WORK REQUIRED:- Remove existing 15"x48' C.M.P. Culvert Build new Pipe Culvert with Std. Culvert End on Lt. and Std. No 1-2-A. Catch Basin on Rt. Connect Gutter and Roadway Drainage to Catch Basin. Excavate outlet.

REFERENCE DRAWINGS

Pipe Culverts	S-27 P.C. 2 & 3
Catch Basin	I-8 C.B. 1-2-A & B

ESTIMATED QUANTITIES

Excavation for Structures	25 Cu. Yds.
15" Pipe Removed and Stored	48 Lin. Ft.
Concrete for Structures, Class "E"	0.7 Cu. Yds.
15" Pipe for Roadway Culverts	57 Lin. Ft.
Std. No 1-2-A Catch Basin	1 Each

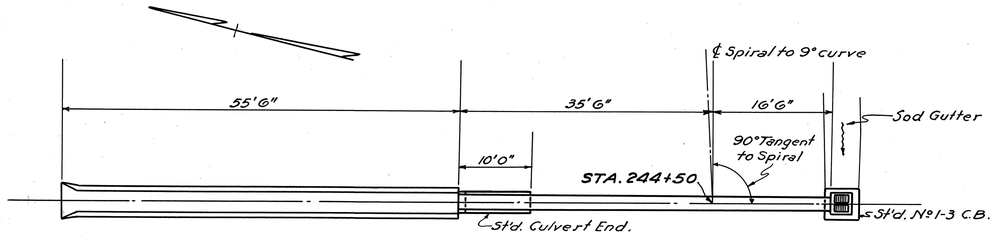
STA. 240+00
15"x 57'0" PIPE CULVERT

19-S

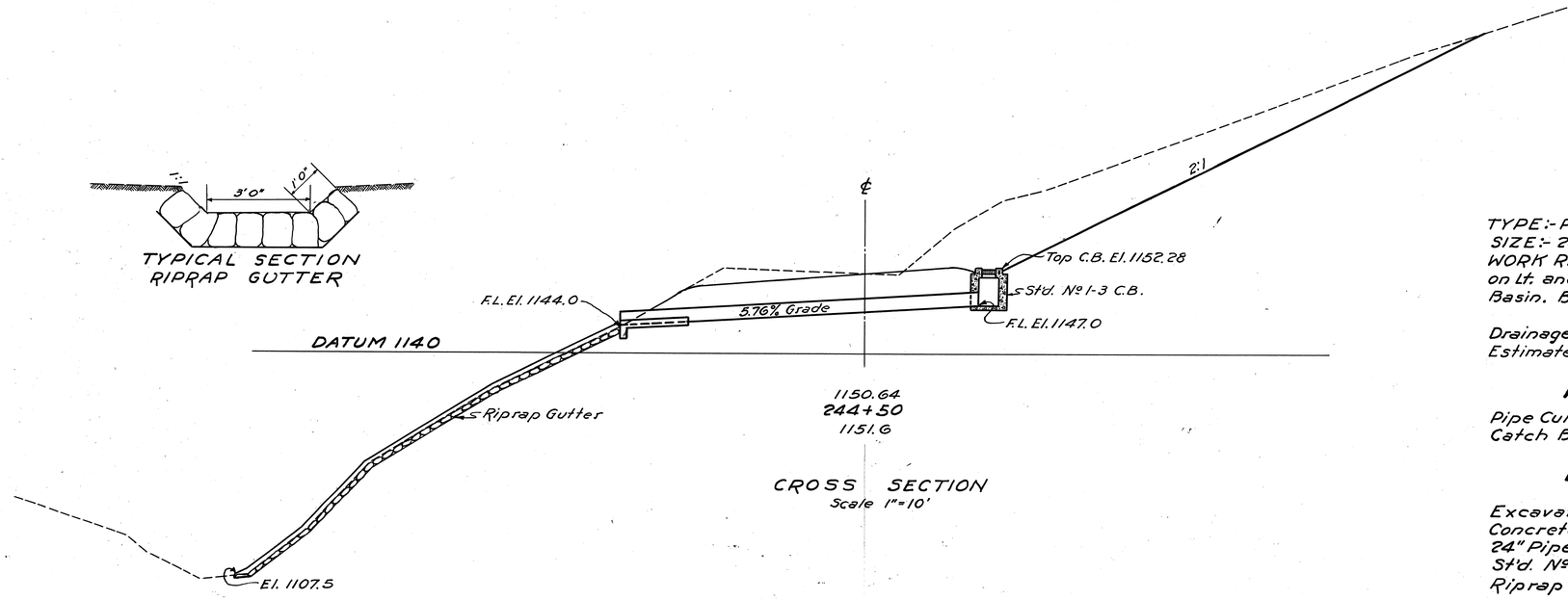
FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	S-176(1)	1946

45/47

HARRISON COUNTY
S.H. 923 SEC. F (Pt.)



PLAN
Scale 1"=10'



CROSS SECTION
Scale 1"=10'

STRUCTURE DATA

TYPE:- Pipe Culvert
SIZE:- 24"x 52'0"
WORK REQUIRED:- Build new Pipe Culvert with Std. Culvert End on Lt. and St'd. No 1-3 Catch Basin on Rt. Connect Gutter to Catch Basin. Build Riprap Gutter outlet as directed.

Drainage Area 12 Acres.
Estimated Run-off 12 C.F.S.

REFERENCE DRAWINGS

Pipe Culverts	S-27 P.C. 2 & 3
Catch Basins	I-8 C.B. 1-3 & 1-4

ESTIMATED QUANTITIES

Excavation for Structures	35 Cu. Yds.
Concrete for Structures, Class "E"	1.1 Cu. Yds.
24" Pipe for Roadway Culverts	52 Lin. Ft.
St'd. No 1-3 Catch Basin	1 Each
Riprap	37 Sq. Yds.

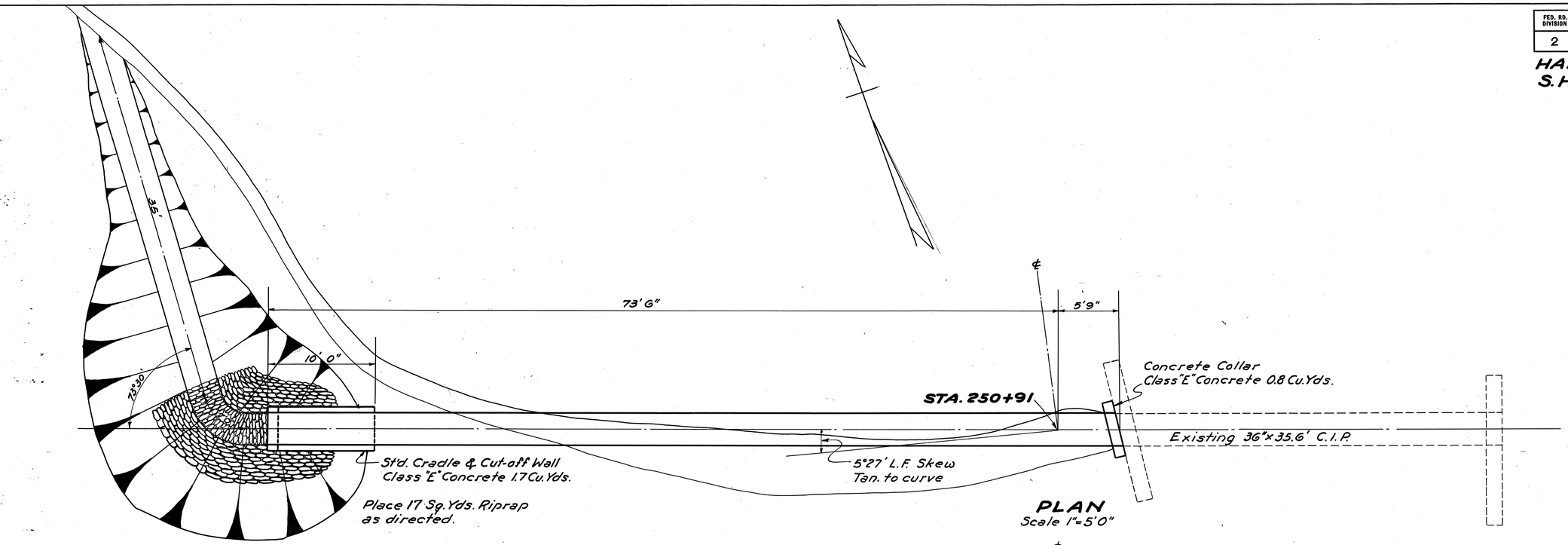
STA. 244+50
24"x52'0" PIPE CULVERT

21-S

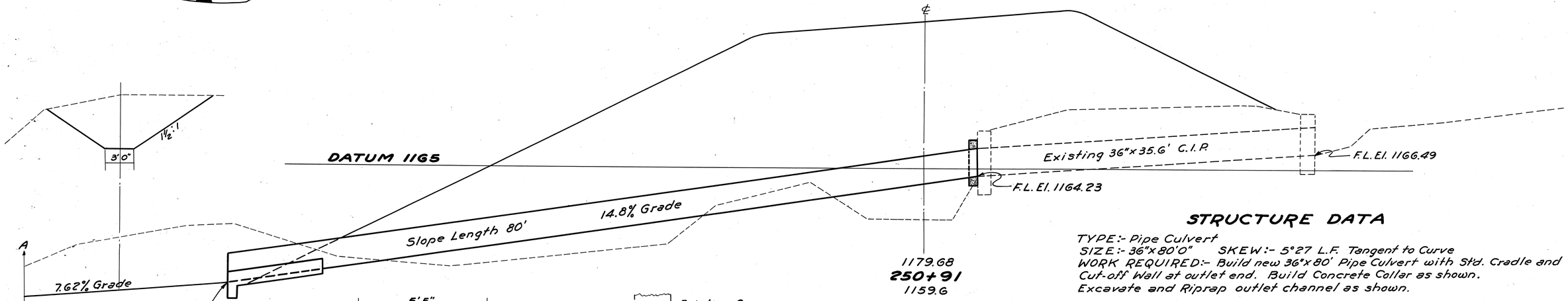
FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	S-176(1)	1946

46
47

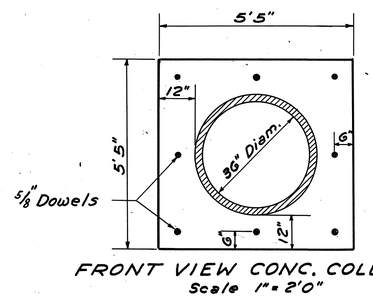
HARRISON COUNTY
S.H. 923 SEC. F (Pt.)



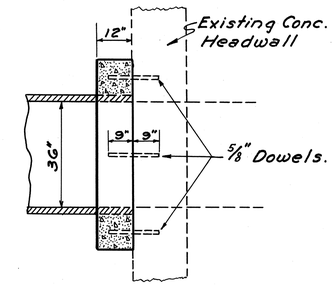
PLAN
Scale 1"=5'0"



CROSS SECTION
Scale 1"=5'0"



FRONT VIEW CONC. COLLAR
Scale 1"=2'0"



END VIEW CONC. COLLAR
Scale 1"=2'0"

STRUCTURE DATA

TYPE:- Pipe Culvert
SIZE:- 36"x80'0" SKEW:- 5°27 L.F. Tangent to Curve
WORK REQUIRED:- Build new 36"x80' Pipe Culvert with Std. Cradle and Cut-off Wall at outlet end. Build Concrete Collar as shown. Excavate and Riprap outlet channel as shown.

REFERENCE DRAWINGS

Pipe Culverts S-27 P.C. 2&3

ESTIMATED QUANTITIES

Excavation for Structures	15 Cu.Yds.
Channel Excavation	52 Cu.Yds.
Concrete for Structures, Class "E"	2.5 Cu.Yds.
Dowel Holes	6 Lin.Ft.
Reinforcing Steel	13 Lbs.
36" Pipe for Roadway Culverts	80 Lin.Ft.
Riprap	17 Sq.Yds.

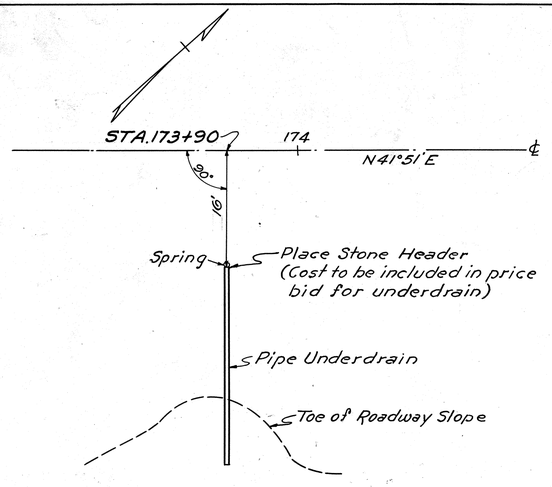
STA. 250+91
36"x80'0" PIPE CULVERT

23-S

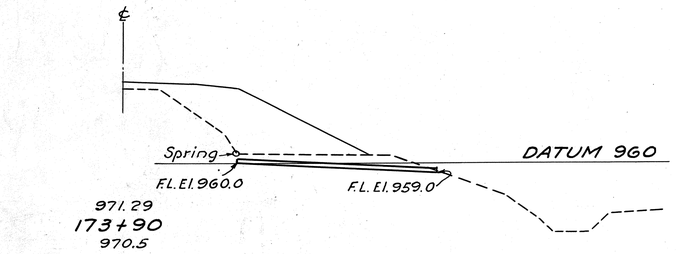
FED. RD. DIVISION	STATE	PROJECT	FISCAL YEAR
2	OHIO	S-176(1)	1946

47
47

HARRISON COUNTY
S.H. 923 SEC. F(Pt.)



PLAN
Scale 1"=10'0"



CROSS SECTION
Scale 1"=10'0"

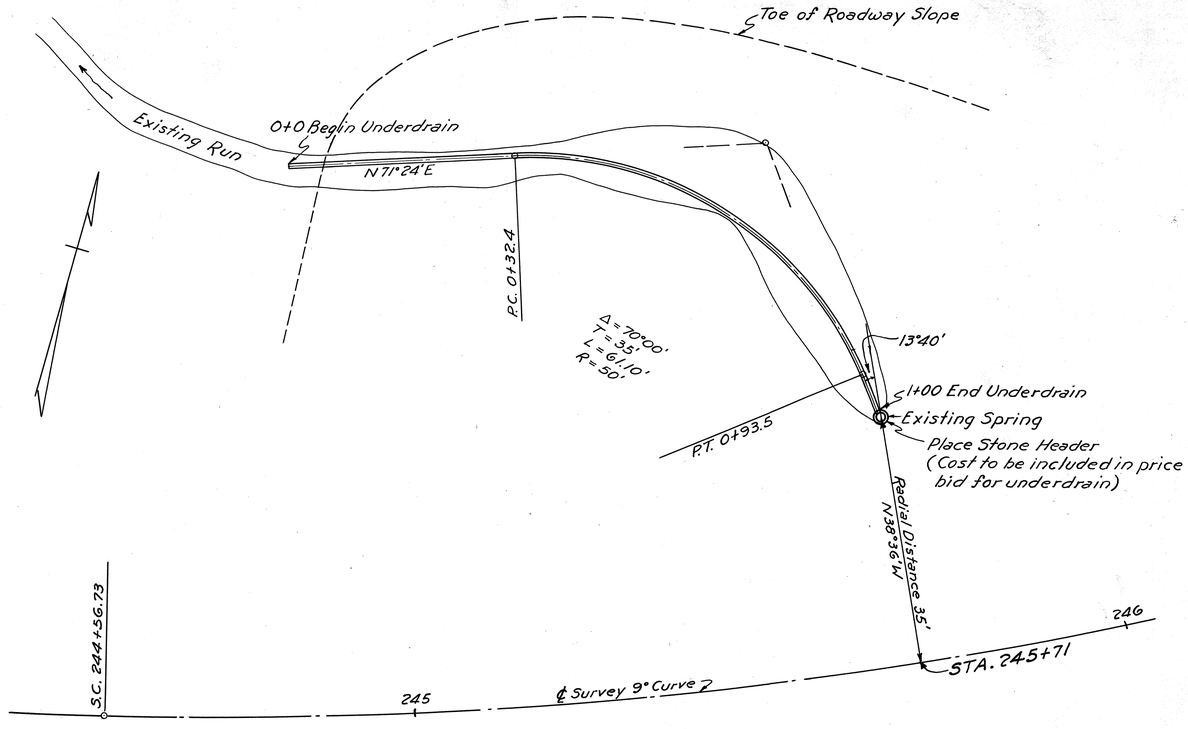
WORK REQUIRED:- Build Pipe Underdrain as shown.

ESTIMATED QUANTITIES

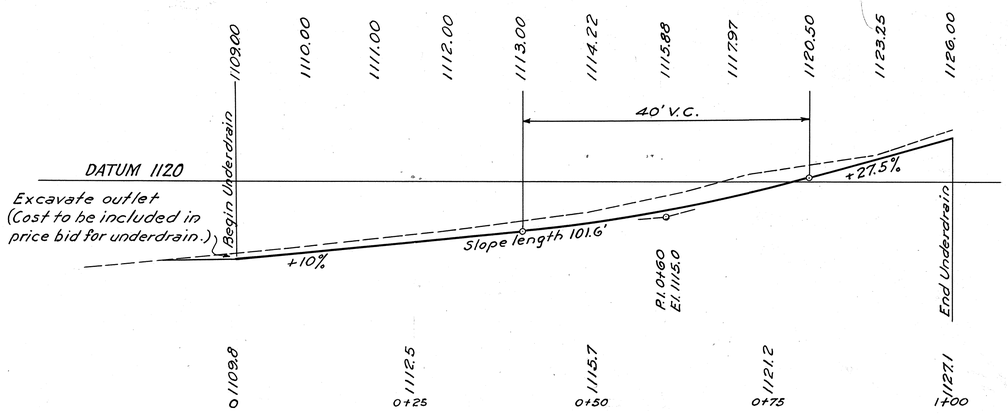
6" Pipe for Underdrain	18 Lin. Ft.
6" Pipe outlet for Underdrain	10 Lin. Ft.

STA. 173+90
6" PIPE UNDERDRAIN

1-U



PLAN
Scale 1"=10'



PROFILE
Scale 1"=10'

WORK REQUIRED:- Build Pipe Underdrain as shown.

ESTIMATED QUANTITIES

6" Pipe for Underdrain	92 Lin. Ft.
6" Pipe outlet for Underdrains	10 Lin. Ft.

STA. 244+84 TO 245+71
6" PIPE UNDERDRAIN

3-U

HARROW CO — 2 H
(19) 3 272 - 858