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FED. RD. DIST. NO.	STATE	PROJECT	FISCAL YEAR
10	OHIO		1940

1/11

CHAMPAIGN COUNTY
S.H. 188 SEC. H & O
Mechanicsburg (Pt.)

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
URBANA-WEST JEFFERSON ROAD
CHAMPAIGN COUNTY
S.H. 188 ~ SEC. H, O & MECHANICSBURG (PT.)
GOSHEN TOWNSHIP & VILLAGE OF MECHANICSBURG
NET LENGTH OF PROJ 15,024.93 LIN. FT. 2.845 MILES.

LINE DATA

Begin Project Sta. 24+88
End Project Sta 175+35
Gross Length of Project 15047 Lin. Ft.
Deduction Station Equations
Sta. 47+09.55 = Sta. 47+11.21 1.66 Lin. Ft.
Sta. 84+63.67 = Sta. 84+65.38 1.71 Lin. Ft.
Deduct for R.R. Crossing 18.70 Lin. Ft.

Total Deductions 22.07 Lin. Ft.
Net length of Project 15024.93 Lin. Ft.
or 2.845 miles

CONVENTIONAL SIGNS

Township Line
Section Line
City or Village Line
Railroads
Center Line
County Line

STANDARD CONSTRUCTION DRAWINGS

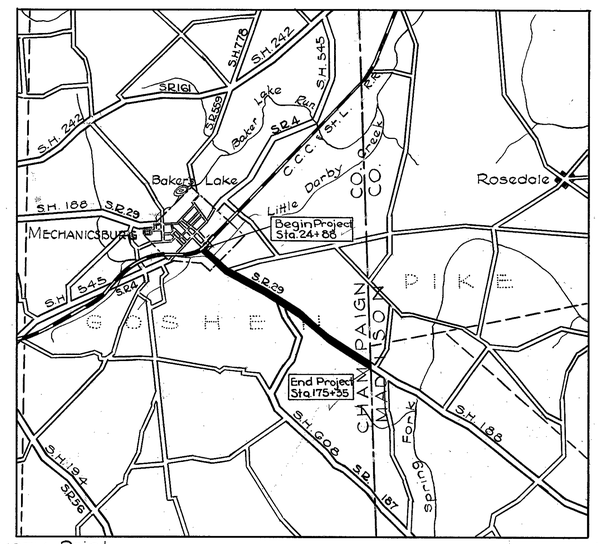
Drawing No.	Date Revised
G-7.07	10-1933
I-8 C.B. 1-2 & 2-2	11-24-39

INDEX OF SHEETS

Title Sheet	Sheet No. 1
Typical Sections & General Notes	" " 2
Plan & Profile	" " 3
Alignment	" " 4
Profile	" " 5
Superelevation Tables, Steps & Culvert Details	" " 6
Cross Sections	" " 7 to 10
Summaries	" " 11

SUPPLEMENTAL SPECIFICATIONS

B-136 August 11, 1938
T-136 August 11, 1938



Delivery Point
Mechanicsburg
C.C.C. & St. L. R.R.

Average Haul
2 miles

LOCATION PLAN

Portion To Be Improved
State Highways
Other Roads

SCALES

Plan 1" = 300 & 1" = 100'
Profile 1" = 30' & 1" = 10'

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

I hereby approve these plans and declare that the making of this improvement will not require the closing of the Highway to traffic.

The Right-of-Way necessary for this improvement will be provided by the State of Ohio.

Approved: [signature]
Date: 5-7-40 Resident Division Deputy Director

Approved: _____
Date: _____ Chief Engineer, Bureau of Maintenance

Approved: [signature] P.E. 25
Date: 5-31-40 Chief Engineer, Bureau of Location & Right-of-Way

Approved: [signature]
Date: 6-1-40 First Asst. Director & Chief Engineer.

Approved: [signature]
Date: 6-1-40 Director of Highways

Approved for the Village of Mechanicsburg
Howard Moore Mayor Date June 17, 1940

CONSTRUCTION BUREAU
MAY 28 1956
GROUND PHOTOLAB

File No.	CHAMPAIGN CO. S.H. 188 Secs H & O.
289	Date of Letting _____
	Contract No. _____

FED. RD. DIST. NO.	STATE	PROJECT	FISCAL YEAR
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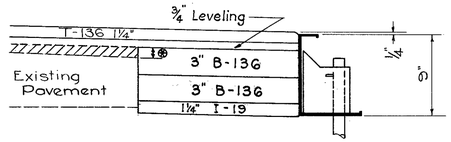
CHAMPAIGN COUNTY
S.H.188 SEC'S. MECH.(PT.) H&O

TYPICAL SECTIONS

TYPE T-136

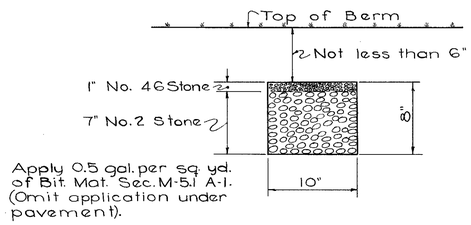
FORM AND COURSE DETAIL



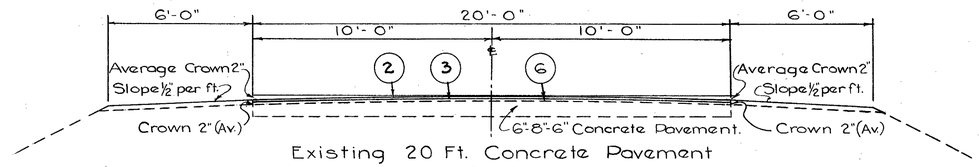
⊛ *Variable depth to be not less than ¼". Where this dimension exceeds 1", the shaded portion of the leveling course shall be spread and compacted in a separate operation.*

The forms shall be braced so as to prevent lateral movement.

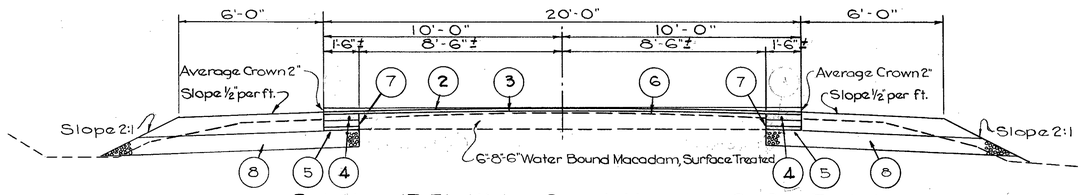
DETAIL OF STONE UNDERDRAIN



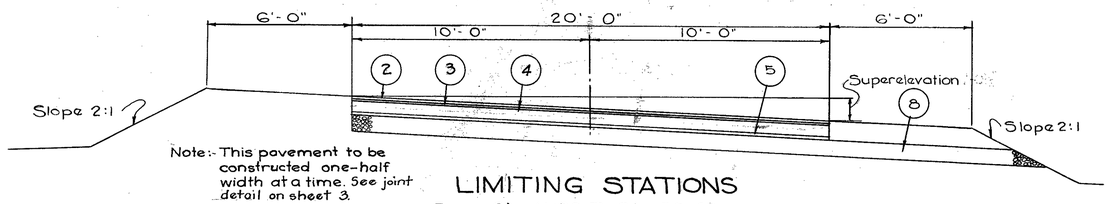
a. Hand tamp lightly the No. 2 stone to a finished depth of 7" before placing the No. 46 stone.
b. Hand tamp lightly the No. 46 stone to a finished depth of 1" before applying the bituminous material.
c. In the application of bit. mat. see that trench is covered full width forming an impervious mat.



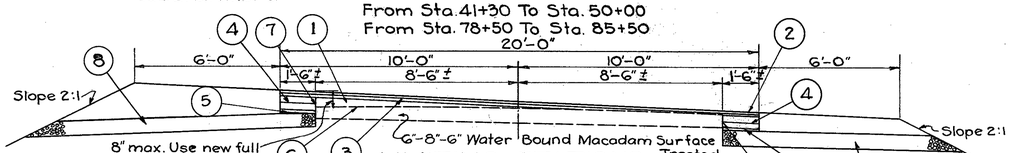
LIMITING STATIONS
From Sta 24+88 To Sta 40+00



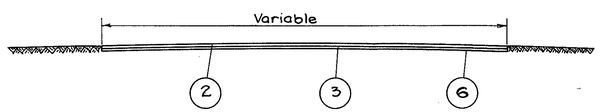
LIMITING STATIONS
From Sta. 50+00 To Sta. 77+00
From Sta. 87+00 To Sta. 175+35



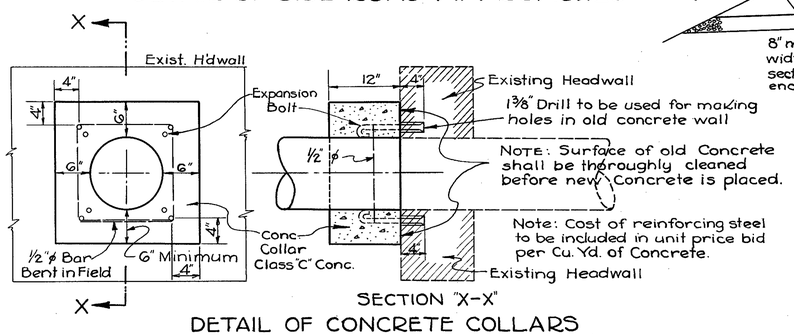
LIMITING STATIONS
From Sta. 41+30 To Sta. 50+00
From Sta. 78+50 To Sta. 85+50



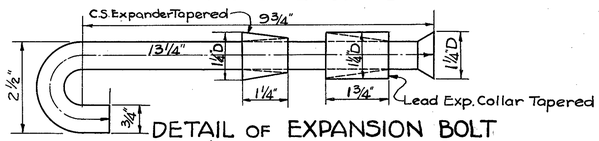
LIMITING STATIONS
From Sta. 40+00 To Sta. 41+30
From Sta. 77+00 To Sta. 78+50
From Sta 85+50 To Sta 87+00



DETAIL OF SIDE ROAD APPROACHES



DETAIL OF CONCRETE COLLARS FOR PIPE EXTENSIONS



DETAIL OF EXPANSION BOLT

1. Item B-136 Variable Thickness Tar Concrete Wedge Course laid in courses not to exceed 3" in thickness.
2. Item T-136 1¼" Tar Concrete Surface Course Type "A".
3. Item B-136 ¾" Minimum thickness Tar Concrete Leveling Course.
4. Item B-136 6" tar concrete base course laid in two 3" courses.
5. Item I-19 1¼" Insulation Course.
6. Item T-30 Bituminous Prime Coat using Bituminous Material Sec. M-5.12 AE.3 applied at the rate of 0.15 gal. per sq. yd. and sand cover 4 to 7 lbs. per sq. yd. of grading & quality suitable to the Engr.
7. Item E-10 Sealing (only) edge of existing pavement using Bituminous Material Sec. M-5.12 AE.3. applied at the rate of 0.15 gal. per sq. yd.
8. Item I-9 8" × 10" Stone Underdrains (French Drain) No. 2 as per plan.

COMPACTION SUBGRADE:- Loosening and watering of subgrade in cuts, according to Sec. E-1.11 will not be required if density requirements can be met by additional rolling

PRIME COAT :- The necessity for using prime coat, item T-30 will be determined by the engineer before the contractor orders the material for this item.

TRAFFIC:- Traffic shall be maintained at all times to the satisfaction of the Division Engineer. The Item of maintaining traffic shall include furnishing lights, signs, barricades and watchmen necessary to secure the unimpeded flow of traffic twenty-four hours daily.

SANDING:- Bituminous Prime Coat Item T-30 of Bituminous Material Sec. M-5.12 AE.3 shall not be ordered by the Contractor until rate of application has been determined by the Engineer. The prime coat shall be applied by distributor or by brooms at the rate determined by the Engineer, and sand cover, 4 to 7 lb. per sq. yd of grading & quality suitable to the Engineer. After the Bituminous Material is applied all material not required to give a uniform coating to the surface shall be swept into all cracks and open joints before the sand cover is placed. Payment for sand cover is included in the price bid per gallon for Bituminous Material.

SHOULDERS AND SLOPES:- Item E-1, roadway excavation (unclassified), and Item E-4 Borrow, shall include the thorough compaction of Earthwork and the final operation of grading necessary to finish the Shoulders and Slopes to approximately the lines indicated on the Typical Sections. The use of a template and fine hand grading will not be required.

EMBANKMENT:- Watering embankment, benching, and density requirements as referred to in paragraph E-1.05 of the General Specifications, will not be required on this project except between sta. 41+30 and 50+00 & between sta. 78+50 and 85+50.

EARTHWORK:- All suitable material resulting from Roadway Excavation (Unclassified) together with the necessary Borrow, shall be used to construct the roadway shoulders as indicated on the typical sections or as directed by the Engineer.

FORMS:- Side forms set to line and grade established by the Engineer will be required for widened & new sections.

PROFILE:- The profile of the Tar Concrete Surface Course shall be approximately 2" above that of the existing pavement.

PAVEMENT:- The designed depths of the Bituminous Concrete Courses shown on the plans are subject to adjustment according to the ratio of volume to weight as indicated in the specification for the item.

PAVEMENT REMOVAL:- Pavement Removal Item shall include only removal of bituminous patches and excessive crack filler from existing concrete pavement.

ROAD APPROACHES:- County and Township road approaches not to be surfaced beyond R/W Line.

DITCH CONSTRUCTION:- The Engineer may require the Contractor to construct ditches at the toe of slopes, & grade same to drain. This excavation will be used to reduce borrow & will be paid for as part of the Borrow Quantities.

APPROVAL OF EQUIPMENT:- Equipment for placing and finishing base course, leveling course & surface course shall not be used unless approved by the Chief Engineer of Construction or his duly appointed representative.

SUPERELEVATION
Curves shall be superelevated with tar concrete leveling course laid in courses not more than 3" in depth.

FED RD DIST NO.	STATE	PROJECT	FISCAL YEAR
10	OHIO		1940

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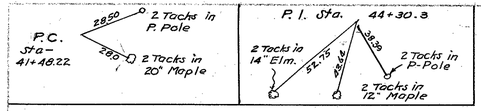
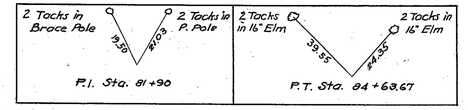
CHAMPAIGN COUNTY
SH 188 SEC MECH(PT) H&O

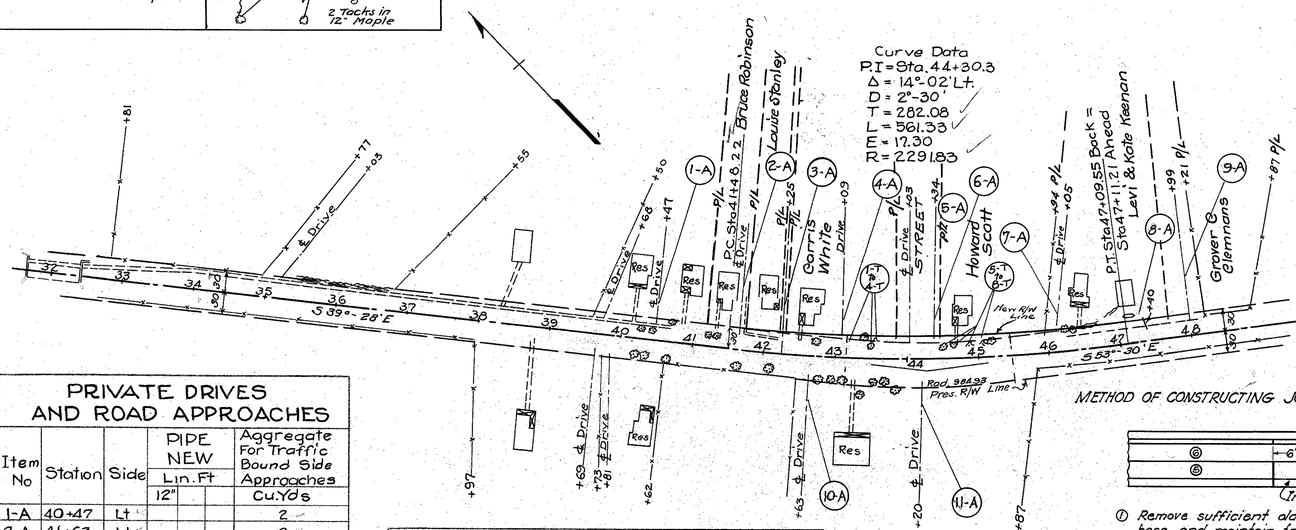


SURVEY No. 5054

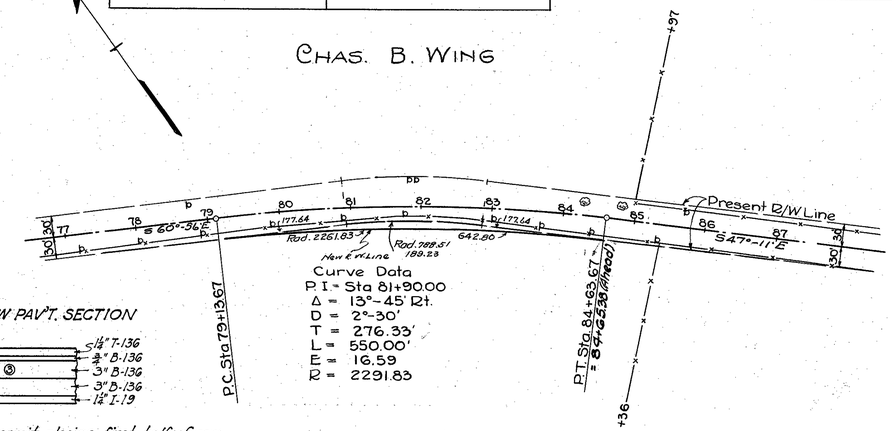
GOSHEN TOWNSHIP

SURVEY No. 6809





CHAS. B. WING



FRED OWEN

PRIVATE DRIVES AND ROAD APPROACHES

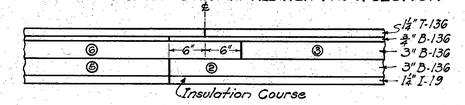
Item No	Station	Side	PIPE NEW Lin. Ft 12"			Aggregate For Traffic Bound Side Approaches Cu.Yds
1-A	40+47	Lt				2
2-A	41+63	Lt				2
3-A	42+25	Lt				3
4-A	43+09	Lt				4
5-A	44+03	Lt				2
6-A	44+34	Lt	56			4
7-A	46+05	Lt				1
8-A	47+40	Lt				4
9-A	47+99	Lt				1
10-A	42+63	Rt				3
11-A	44+20	Rt				1
Totals			56			27

TREE AND STUMP REMOVALS

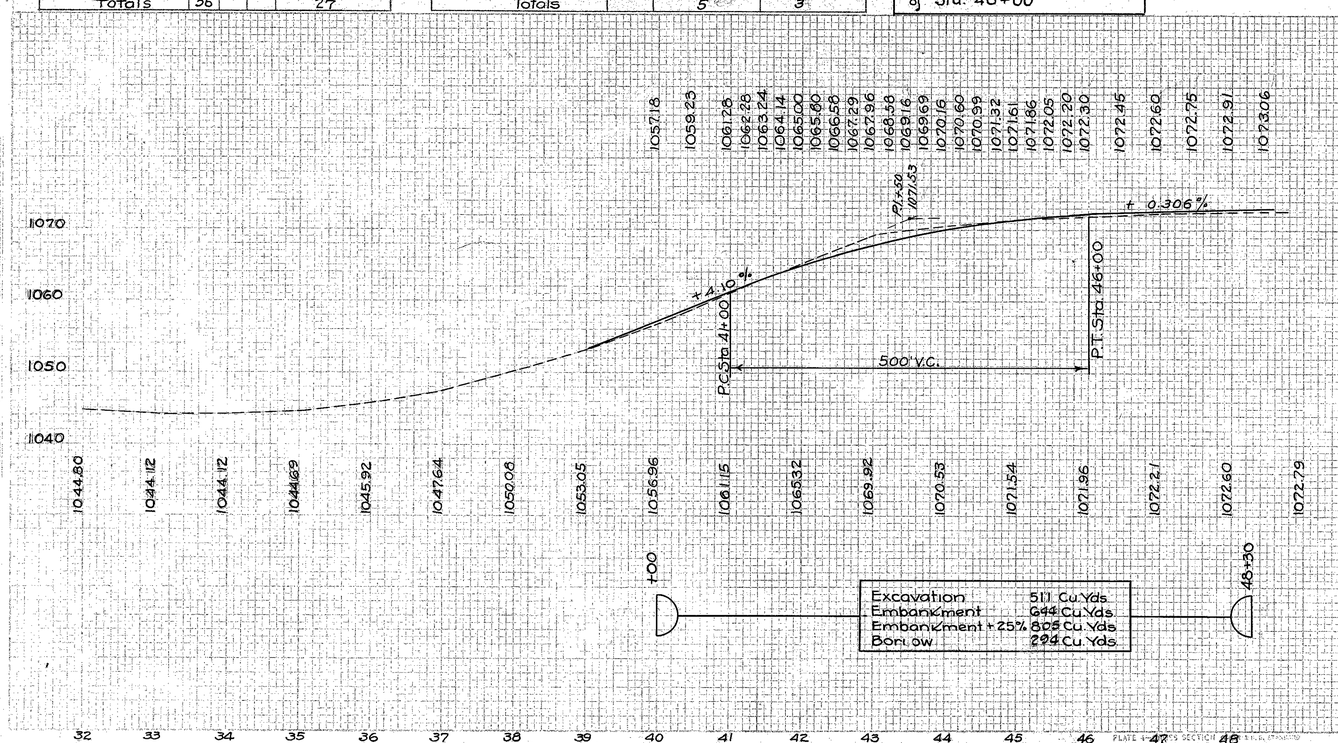
Item No.	Station From	Station To	Side	Trees Units 8"-15"	Trees Units 15"-24"	Stumps Units 8"-15"
1-T to 4-T	42+73	43+23	Lt	2	1	1
5-T to 8-T	44+51	45+05	Lt	1	1	2
Totals				5		3

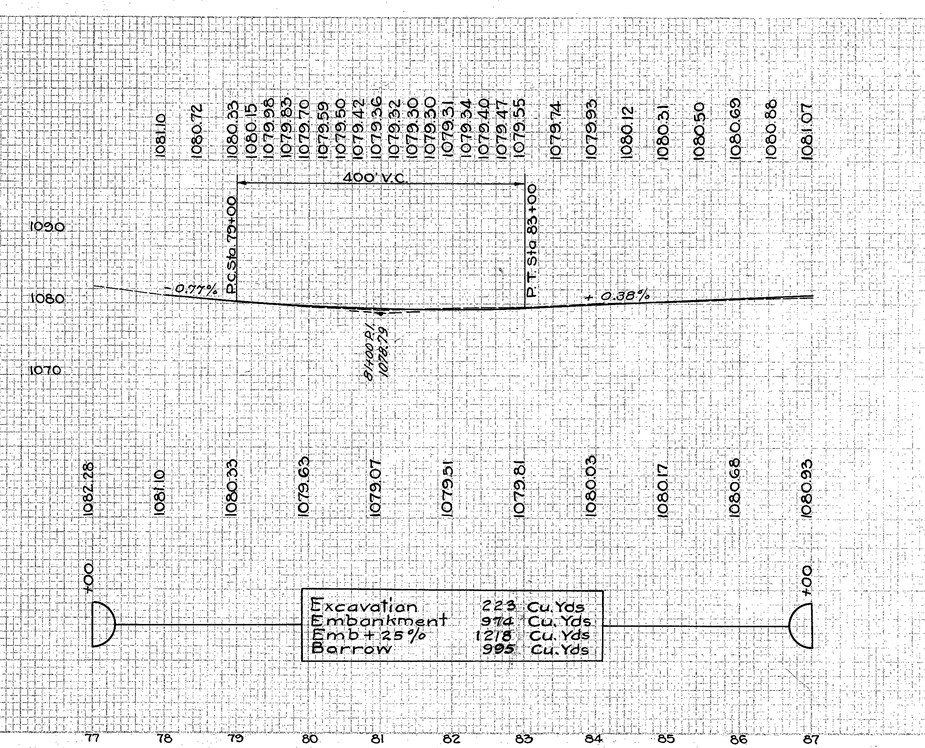
B.M. Elev. 1058.00
Top of Monument Left of Sta. 40+00

METHOD OF CONSTRUCTING JOINT IN ALL NEW PAV'T. SECTION



1. Remove sufficient old pavement to permit placing first half of new base and maintain traffic on remaining portion plus aggregate widening.
2. Spread and compact first half of first 3" base course to a point 6" beyond the center line.
3. Spread and compact first half of second 3" base course to a point 6" short of the ℄.
4. Maintain traffic on new half of base and remove remaining old pavement.
5. Spread and compact second half of first 3" base course.
6. Spread and compact second half of second 3" base course.
7. Spread and compact leveling and surface courses, lapping as shown AFTER both sides of both base courses are compacted.





FED. RD. DIST. NO.	STATE	PROJECT	FISCAL YEAR
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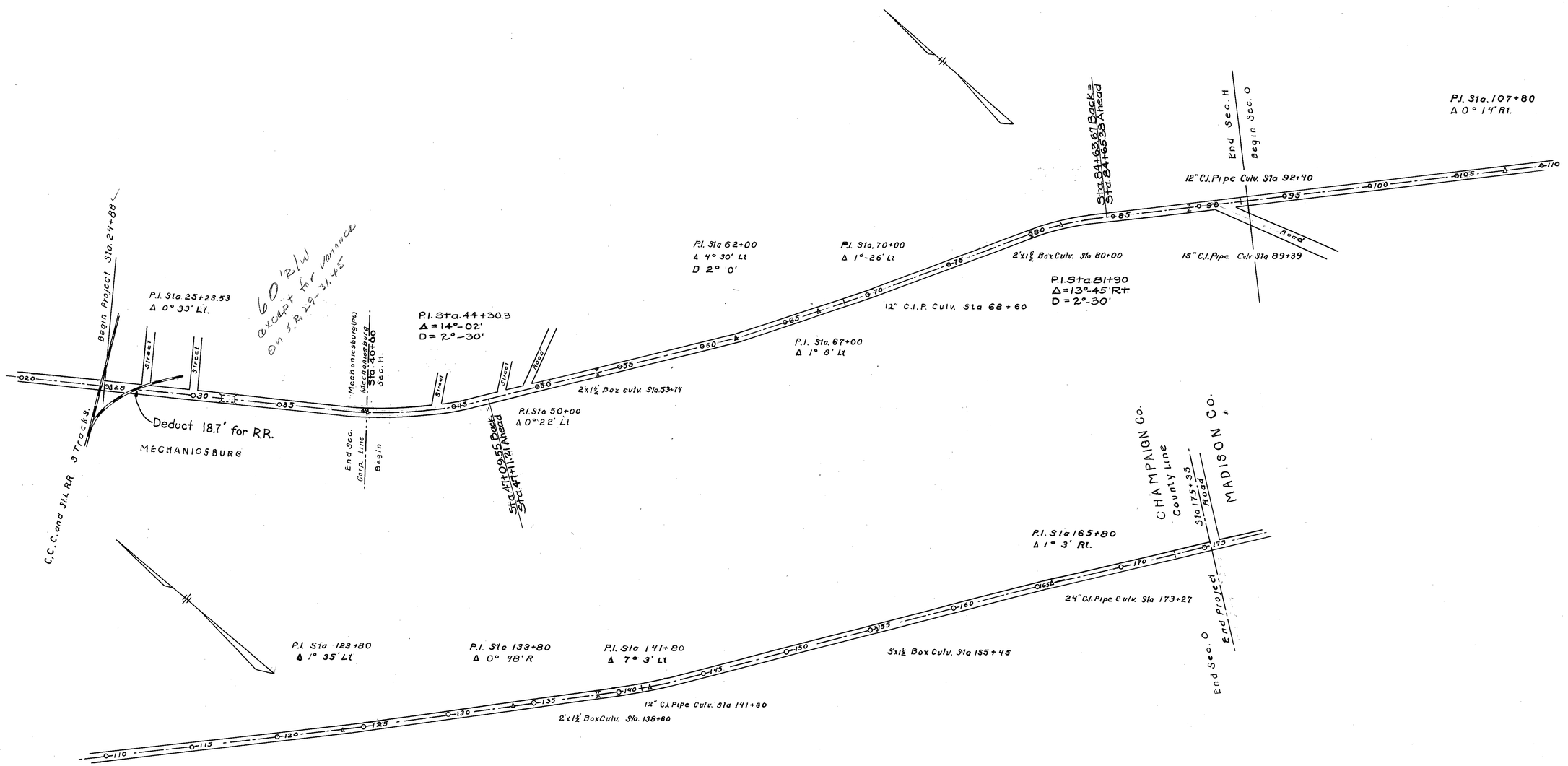
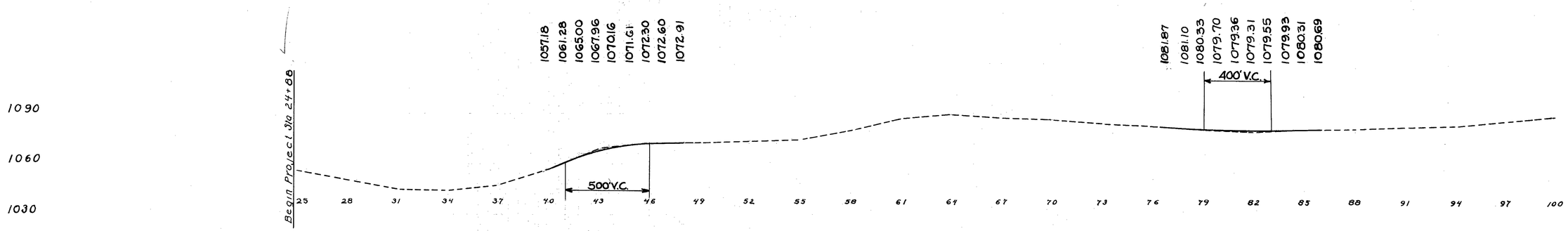
CHAMPAIGN COUNTY
SH 188 SEC'S MECH. (PT) H&O

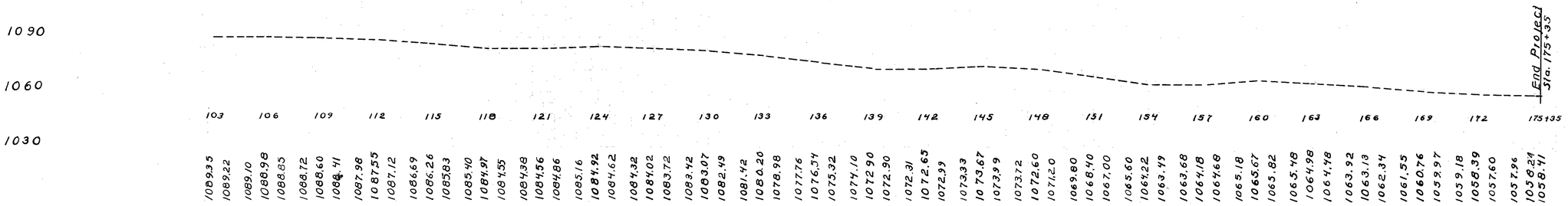
ALIGNMENT

Scale 1" = 300'



PROFILE





NOTE – Proposed profile grade to be approximately 2" above existing profile grade

FED. RD. DIST. NO.	STATE	PROJECT	FISCAL YEAR
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CHAMPAIGN COUNTY
S.H. 188 SEC MECH (PT.) H & O.

SUPERELEVATION TABLE

P.C. Sta. 41+48.22 — P.T. Sta. 47+09.55 Back = 47+11.21 Ahead
D= 2°-30' Lt.

LEFT		CENTER		RIGHT	
Elev. Of Edge	Width	Station	Grade Elev.	Width	Elev. Of Edge
1056.94	10'	39+98.22	1057.11	10'	1056.94
1057.01		40+00	1057.18		1057.01
1058.04		40+25	1058.21		1058.11
1058.24		40+30	1058.41		1058.33
1058.94		40+47	1059.11		1059.16
1059.06		40+50	1059.23		1059.31
1060.09		+75	1060.26		1060.64
1061.11		41+00	1061.28		1061.94
1062.11		+25	1062.28		1063.10
1062.31		+30	1062.48		1063.32
1063.00		+48.22	1063.17		1064.04
1063.07		+50	1063.24		1064.11
1063.57		+64	1063.74		1064.61
1063.97		+75	1064.14		1065.01
1064.15		+80	1064.32		1065.19
1064.83		42+00	1065.00		1065.87
1065.63		+25	1065.80		1066.67
1065.80		+30	1065.97		1066.84
1066.41		+50	1066.58		1067.45
1066.78		+68	1066.95		1067.82
1067.12		+75	1067.29		1068.16
1067.26		+80	1067.43		1068.30
1067.79		43+00	1067.96		1068.83
1068.02		+09	1068.19		1069.06
1068.41		+25	1068.58		1069.45
1068.53		+30	1068.70		1069.57
1068.99		+50	1069.16		1070.03
1069.52		+75	1069.69		1070.56
1069.61		+80	1069.78		1070.65
1069.99		44+00	1070.16		1071.03
1070.04		+03	1070.21		1071.08
1070.35		+20	1070.52		1071.39
1070.43		+25	1070.60		1071.47
1070.50		+30	1070.67		1071.54
1070.56		+34	1070.73		1071.60
1070.82		+50	1070.99		1071.86
1071.15		+75	1071.32		1072.19
1071.21		+80	1071.38		1072.25
1071.44		45+00	1071.61		1072.48
1071.69		+25	1071.86		1072.73
1071.72		+30	1071.89		1072.76
1071.88		+50	1072.05		1072.92
1072.03		+75	1072.20		1073.07
1072.04		+80	1072.21		1073.08
1072.13		46+00	1072.30		1073.17
1072.14		+05	1072.31		1073.18
1072.20		+25	1072.37		1073.24
1072.22		+30	1072.39		1073.26
1072.28		+50	1072.45		1073.32
1072.35		+75	1072.52		1073.39
1072.37		+80	1072.54		1073.41
1072.43		47+00	1072.60		1073.47
1072.46		+09.55	1072.63		1073.50
1072.51		+25	1072.68		1073.53
1072.52		+30	1072.69		1073.52
1072.58		+50	1072.75		1073.51
1072.66		+75	1072.83		1073.32
1072.72		+95	1072.89		1073.11
1072.74		48+00	1072.91		1073.07
1072.81		+25	1072.98		1072.92
1072.83		+30	1073.00		1072.91
1072.89		+50	1073.06		1072.91
1072.92		+58.55	1073.09		1072.92

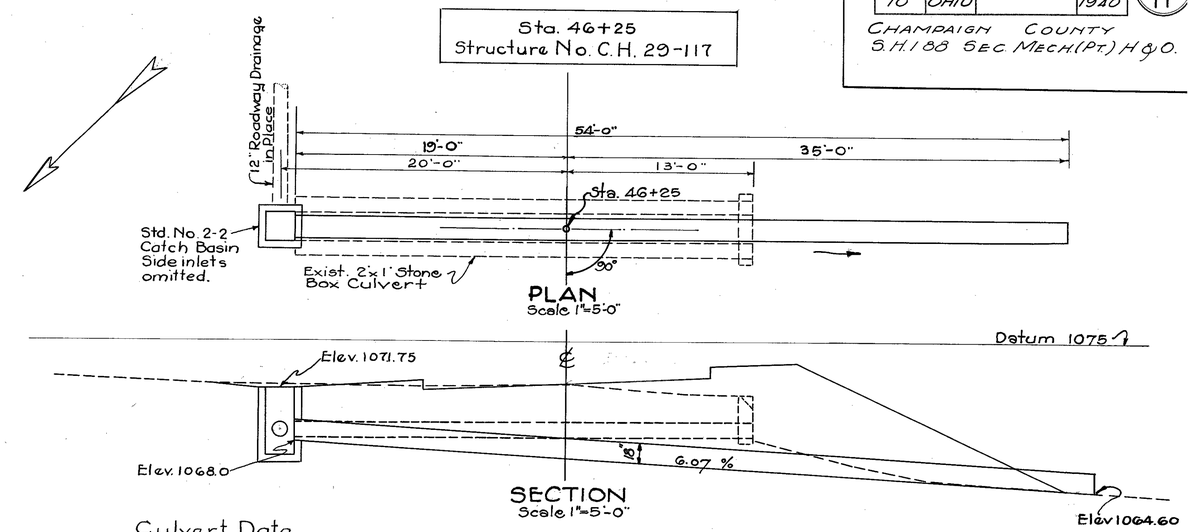
Back

SUPERELEVATION TABLE

P.C. Sta. 79+13.67 — P.T. Sta. 84+63.67 Back = 84+65.38 Ahead
D= 2°-30' Rt.

LEFT		CENTER		RIGHT	
Elev. Of Edge	Width	Station	Grade Elev.	Width	Elev. Of Edge
1081.21	10'	77+63.67	1081.38	10'	1081.21
1081.13		+75	1081.29		1081.12
1081.05		78+00	1081.10		1080.93
1081.09		+25	1080.91		1080.74
1081.22		+50	1080.72		1080.55
1081.25		+75	1080.52		1080.35
1081.18		79+00	1080.33		1080.16
1081.09		+13.67	1080.22		1080.05
1081.02		+25	1080.15		1079.98
1080.85		+50	1079.98		1079.81
1080.70		+75	1079.83		1079.66
1080.57		80+00	1079.70		1079.53
1080.46		+25	1079.59		1079.42
1080.37		+50	1079.50		1079.33
1080.29		+75	1079.42		1079.25
1080.23		81+00	1079.36		1079.19
1080.19		+25	1079.32		1079.15
1080.17		+50	1079.30		1079.13
1080.17		+75	1079.30		1079.13
1080.18		82+00	1079.31		1079.14
1080.21		+25	1079.34		1079.17
1080.27		+50	1079.40		1079.23
1080.34		+75	1079.47		1079.30
1080.42		83+00	1079.55		1079.38
1080.51		+25	1079.64		1079.47
1080.61		+50	1079.74		1079.57
1080.71		+75	1079.84		1079.67
1080.80		84+00	1079.93		1079.76
1080.89		+25	1080.02		1079.85
1080.99		+50	1080.12		1079.95
1081.04		+63.67	1080.17		1080.00
1081.08		+75	1080.22		1080.05
1081.06		85+00	1080.31		1080.14
1080.92		+25	1080.40		1080.23
1080.70		+50	1080.50		1080.33
1080.57		+75	1080.60		1080.43
1080.54		86+00	1080.69		1080.52
1080.57		+13.67	1080.74		1080.57

Back



Culvert Data

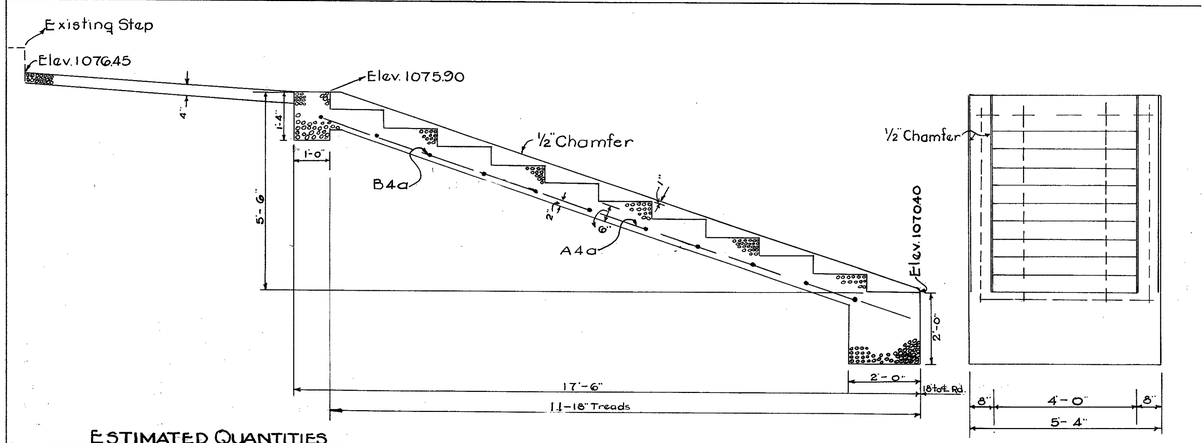
Type:- Corr. Metal Pipe Culvert. (Paved Invert Fully Coated)

Size:- 18" x 54'-0"

Work Required:- Remove old 2'x1' stone Box Culvert. Replace with 54'-0" of 18" Corr. Metal Pipe with Std. #2-2 Catch Basin on left side (Side Inlets to be omitted.)

Estimated Quantities

Excavation _____ 21 Cu. Yds.
(18" Corr. M.P. Paved Invert Fully Coated) _____ 54. Lin. Ft.
Removal Of Portions of Existing Structures _____ 11 Cu. Yds.
Std. No. 2-2 Catch Basin _____ 1 Each



ESTIMATED QUANTITIES

Reinf. Conc. Steps (Class "C") (6" Riser / 18" Tread) _____ 64. Lin Ft.
4" Concrete Sidewalk Class "C" _____ 30. Sq. Ft.

STEEL LIST					
Mark	Size	No	Length	Spacing	Weight
A4a	5/8 φ	5	17'-6"	1'-2"	91 Lbs.
B4a	5/8 φ	11	4'-10"	As Shown	55 Lbs
				Total	146 Lbs.

* Reinforcing Steel	146. Lbs.
* Excavation	7.2 Cu. Yds.
* Concrete Class "C"	3.2 Cu. Yds.
** Removal Of Existing Steps & Sidewalk	1.6 Cu. Yds.

*Included in Concrete Steps Item for payment
**To be included for payment in Unit Price bid for Item E 1 Roadway Excavation

Note:- These quantities given for estimating purposes only.

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Excavation	511 Cu.Yds.
Embankment	644 Cu.Yds.
Emb. + 25%	805 Cu.Yds.
Borrow	294 Cu.Yds.

Endfrea	Cu.Yds.																							
Cut	Fill	Cut	Fill	Cut	Fill	Cut	Fill	Cut	Fill	Cut	Fill	Cut	Fill	Cut	Fill	Cut	Fill	Cut	Fill	Cut	Fill	Cut	Fill	Cut	Fill
26	0	72	1	52	1	87	3	42	21	62	10	25	8	35	19	13	12	17	34	5	24	9	63	0	10	0	6	0	0

End Area Cut	End Area Fill	Cu. Yds Cut	Cu. Yds Fill	
				49+30 1072.90
				48+30
7	16			49+14 Side Road 1072.90
				1073.00 48+30 1072.50
		35	06	
				1072.91 47+99 1072.69 Drive Left
12	36			
		24	83	Station Equation. 47+09.55 Back = 47+11.21 Ahead = 1.66 Lin Ft. Deduction
				1072.60 47+30 1072.41
15	57			
		16	106	1072.54 46+80 1072.20
2	57			
				1072.39 46+30 1071.99
		5	90	
				1072.31 46+05 1071.95 Drive Left
3	50			
		6	72	1072.21 45+80 1072.00
4	28			
		33	36	1071.89 45+30 1071.66
31	11			
				1071.38 44+80 1071.53
		57	13	
				1070.73 44+34 1071.10 Drive Left
31	3			
				1070.67 44+30 1070.93
		53	3	Drive Right 44+20 1070.93
				1070.21 44+03 1070.60 Drive Left
26	0			Sta 43+80

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CHAMPAIGN COUNTY
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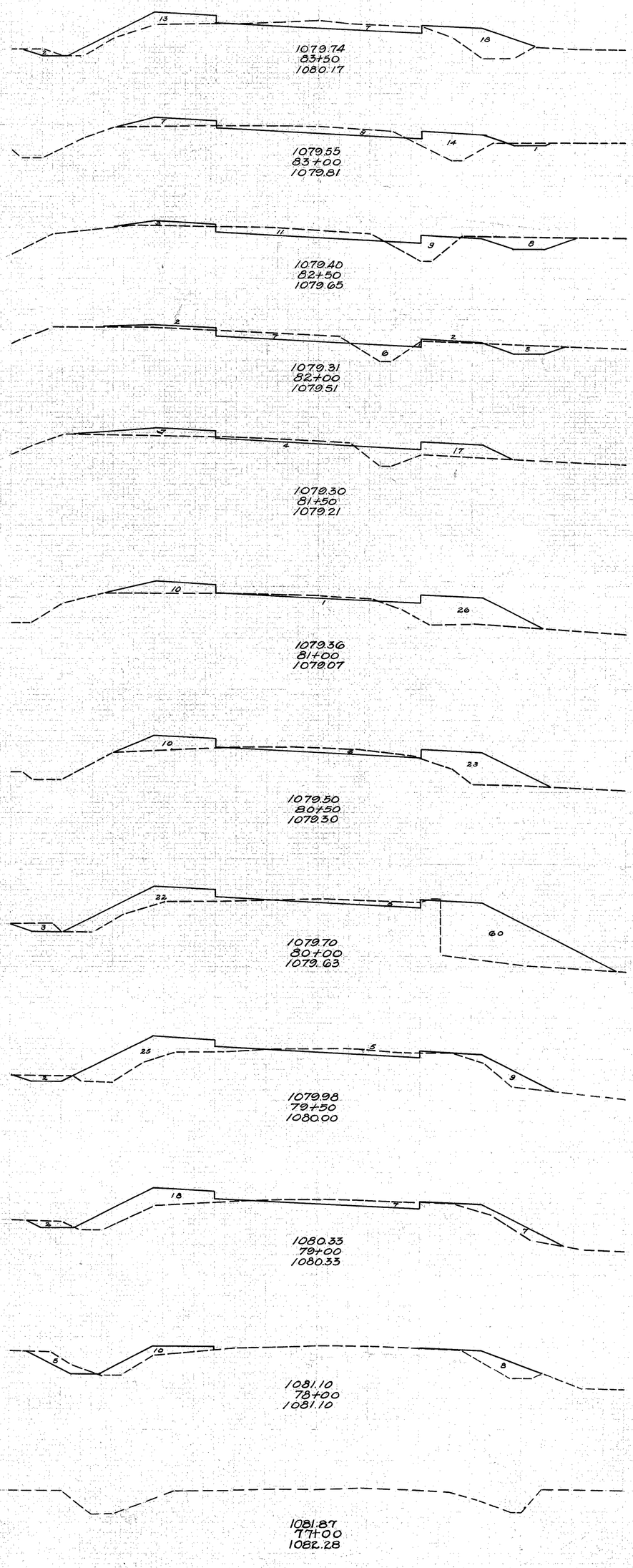
End Area Cut	End Area Fill	Cu. Yds. Cut	Cu. Yds. Fill
9	31		
		18	48
10	21		
		27	31
19	12		
		30	20
13	10		
		16	32
4	24		
		5	56
1	36		
		7	64
6	33		
		13	107
8	82		
		14	108
7	34		
		15	55
9	25		
		26	80
5	18		
		9	33
0	0		

Excavation 223 Cu. Yds.
Embankment 674 Cu. Yds.
Emb. + 2.5% 1289 Cu. Yds.
Borrow 966 Cu. Yds.



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CHAMPAIGN COUNTY
S.H. 188 SEC. MECH(PA) 7.19.0

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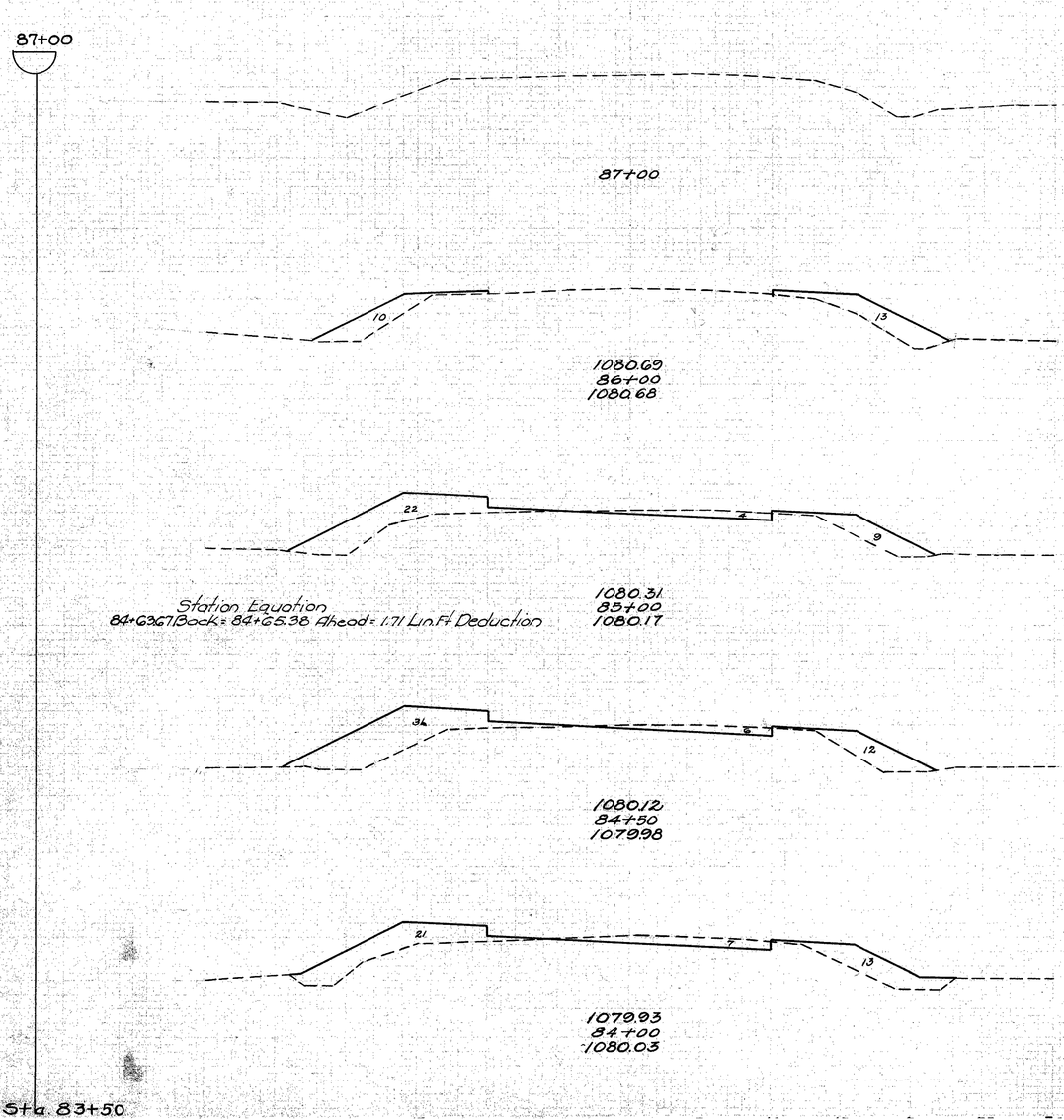
End Area		Cu. Yds.	
Cut	Fill	Cut	Fill
0	0		
		0	43
0	23		
		7	100
4	31		
		9	66
6	43		
		12	71
7	34		
		15	60
9	31		



CHAMPAIGN COUNTY
S.H. 188 SEC. NEC.(FA) H.B.O.

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OHIO	
1940	

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FED. RD. DIST. NO.	STATE	PROJECT	FISCAL YEAR
10	OHIO		1940

11
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CHAMPAIGN COUNTY
S.H 188 SEC. MECH.(PT.) H&O.

SUMMARY OF QUANTITIES

PAVEMENT QUANTITIES

STATION FROM	STATION TO	NET LENGTH LIN. FT.	1¼" INSULA. COURSE SQ. YDS.	WEDGE COUR. 6" MAX. DEPTH CU. YDS.	BASE COURSE WIDTH 6" DEPTH	BASE COURSE CU. YDS.	PRIME COAT-.15 GAL PER SQ. YD. (ESTIMATED WIDTH	PRIME COAT GALLONS	LEVELING COURSE ¾" MIN. DEPTH WIDTH	LEVELING COURSE AV. DEPTH	LEVELING COURSE CU. YDS.	SURFACE COURSE 1¼" DEPTH WIDTH	SURFACE COURSE CU. YDS.	REMARKS
24+88	26+47.9	159.9					20	53.3	20	¾"	7.4	20	12.3	See below for widening
26+47.9	26+66.6	18.7												R.R. Crossing
26+66.6	31+67.5	500.9					20	167.0	20	¾"	23.2	20	38.6	
31+67.5	32+39	71.5					20.08	23.9				20.08	5.5	Bridge Surface Course only
32+39	40+00	761.0					20	253.7	20	¾"	35.2	20	58.7	
40+00	41+30	130.0	43.3	7.2	3	7.2	17	36.8	20	¾"	6.0	20	10.0	
41+30	50+00	868.34	1929.6		20	321.6			20	¾"	40.2	20	67.0	Short Sta. 98.34'
50+00	77+00	2700.0	900.0		3	150.0	17	765.0	20	¾"	125.0	20	208.3	
77+00	78+50	150.0	50.0	8.4	3	8.3	17	42.5	20	¾"	6.9	20	11.6	
78+50	85+50	700.0	1555.5		20	259.3			20	¾"	32.4	20	54.0	
85+50	87+00	148.29	49.4	8.3	3	8.2	17	42.0	20	¾"	6.9	20	11.4	Short Sta. 98.29'
87+00	175+35	8835.0	2945.0		3	490.8	17	2503.2	20	¾"	409.0	20	681.3	
24+89.5	26+25.5	136.0					8.5	19.3	8.5	¾"	2.7	8.5	4.5	Widening on left
24+83.6	25+81.8	98.2					19	31.1	19	¾"	4.3	19	7.2	Widening on right
49+11	To R/W Line						Varies	34.8	Varies	¾"	4.8	Varies	8.1	S. Road Appro. Lt.
91+24	108 on & of Side Rd.						Varies	44.1	Varies	¾"	6.1	Varies	10.2	S. Road Appro. Rt.
24+88	175+35								2.55 ×	200 =	510.0			Extra Leveling Course to be used as directed by Eng.
TOTALS			7472.8	* 23.9		1245.4		4016.7			1220.1		1188.7	

* To be paid for as Leveling Course

ROADWAY QUANTITIES

STATION FROM	STATION TO	NET LENGTH LIN. FT.	EXCAVATION (UNCLASSIFIED) CU. YDS	BORROW (ESTIMATED) CU. YDS.	CUT AND SEAL EDGE OF EXIST. PAVEMENT LIN. FT.	REMOVAL OF BIT. PATCHES & EXCESSIVE CRACK FILLER SQ. YDS.	8"x10" STONE UNDERDRAINS (FRENCH DRAINS) #2 LIN. FT.	REMARKS
24+88	40+00	1512		400		160		
40+00	48+30	828.34	511	294	260			Short Sta. 98.34
48+30	77+00	2870	150	1050	5400			
77+00	87+00	998.29	223	995	600			Short Sta. 98.29
87+00	175+35	8835.0	516	7561	17670			
							700	
Totals			1400	10300	23930	160	700	

STRUCTURES 20 FT SPAN & UNDER

STATION	STRUCTURE NO.	PRESENT STRUCTURE TYPE	PRESENT SIZE	PRESENT LENGTH	PROPOSED STRUCTURE TYPE	PROPOSED SIZE	PROPOSED LENGTH	EXCAVATION STRUCTURAL CU. YDS.	CONCRETE CLASS "C" CU. YDS.	CORR. M PIPE FOR RDWY CULVERTS 12"	15"	18"	24"	REMOVAL OF EXISTING MASONRY CU. YDS.		STD. NO 2-2 CATCH BASINS EACH	EXP. BOLTS EA.	1¾"x4" Dowel Holes EA.	REMARKS
46+25	CH. 29-117	Stone Box	2'x1'	33'	C.M.P.	18"	54'-0"	21				54		11		1			
53+74	CH. 29-118	Box	2'x1.5'	31'	No Work														
68+60	CH. 29-121	C.I.P.	12"	31'	C.M.P.	12"	8' on Rt. 8' on Lt.	3	.3	16							8	8	Ext.
80+00	CH. 29-122	Conc. Box	2'x1.5'	28'	No Work														
89+39	CH. 29-125	C.I.P.	15"	28'	C.M.P.	15"	10' on Rt. 10' on Lt.	3	.3		20						8	8	Ext.
92+40	CH. 29-125A	C.I.P.	12"	28.5'	C.M.P.	12"	8' on Rt. 8' on Lt.	3	.3	16							8	8	Ext.
138+60	CH. 29-134	Conc. Box	2'x1.5'	30'	No Work														
141+30	CH. 29-135	C.I.P.	12"	36.7'	C.M.P.	12"	4' on Rt. 8' on Lt.	3	.3	12							8	8	Ext.
155+45	CH. 29-137	Conc. Box	3'x1.5'	34'	No Work														
173+27	CH. 29-141	C.I.P.	24"	30.7'	C.M.P.	24"	8' on Rt. 8' on Lt.	3	.5				16				8	8	Ext.
TOTALS								36	1.7	44	20	54	16	11		1	40	40	

GENERAL SUMMARY

ITEM	QUANTITY	UNIT	DESCRIPTION
			ROADWAY
I-13	30	SQ. FT.	4" CONCRETE SIDEWALK
I-13	64	LIN. FT.	REINFORCED CONCRETE STEPS (6" Riser, 18" Tread)
I-17	27	CU. YDS	AGGREGATE FOR TRAFFIC BOUND SIDE APPROACHES
E-9	8	EACH	REMOVAL OF TREES & STUMPS
E-1	1400	CU. YDS	EXCAVATION (UNCLASSIFIED)
E-4	10300	CU. YDS.	BORROW (CONTRACTOR TO FURNISH) ESTIMATED
E-8	160	SQ. YDS	REMOVAL OF BITUMINOUS PATCHES & EXCESSIVE CRACK FILLER (ONLY) FROM EXISTING CONCRETE PAVEMENT
E-10	23930	LIN. FT.	CUTTING & SEALING EDGE OF EXISTING PAVEMENT
I-9	700	LIN. FT.	8"x10" STONE UNDERDRAINS (FRENCH DRAINS) NO. 2
I-1	56	LIN. FT.	12" PIPE FOR DRIVEWAYS
E-11	8	M GALS	WATER
			PAVEMENT
I-19	7473	SQ. YDS	1¼" INSULATION COURSE
B-136	1246	CU. YDS	TAR CONCRETE BASE COURSE -
B-136	1244	CU. YDS	TAR CONCRETE LEVELING COURSE -
T-30	4017	GALS.	BITUMINOUS PRIME COAT SEC. M-5.12 AE 3 INCLUDING SAND COVER
T-136	1189	CU. YDS	TAR CONCRETE SURFACE COURSE, TYPE A
			STRUCTURES 20' SPAN & UNDER
E-2	36	CU. YDS.	EXCAVATION STRUCTURE, (UNCLASSIFIED)
S-1	1.7	CU. YDS	CONCRETE CLASS "C" FOR PIPE COLLARS
S-22	11	CU. YDS	REMOVAL OF PORTIONS OF EXISTING STRUCTURES
S-27	44	LIN. FT.	12" CORR. METAL PIPE FOR ROADWAY CULVERTS (Paved Invert - Fully Coated)
S-27	20	LIN. FT.	15" CORR. METAL PIPE FOR ROADWAY CULVERTS (" " " ")
S-27	54	LIN. FT.	18" CORR. METAL PIPE FOR ROADWAY CULVERTS (" " " ")
S-27	16	LIN. FT.	24" CORR. METAL PIPE FOR ROADWAY CULVERTS (Paved Invert - Fully Coated)
I-8	1	EACH	STD. NO. 2-2 CATCH BASIN
SPEC.	40	EACH	EXPANSION BOLTS As per plan or equivalent
S-23	40	EACH	1¾"x4" DOWEL HOLES
	LUMP SUM		MAINTAINING TRAFFIC