SUMMARY OF QUANTITIES

FED. RD. DIST. NO.	STATE	FEDERAL AID PROJECT	FISCAL YEAR	38 / 39
10	OHIO	666 (1) S(3)	1938	

ASHTABULA COUNTY
S.H. 2 SEC. M(PT.)
LAKE COUNTY
S.H. 2 SEC. G(PT.)

STRUCTURES 20' SPAN & UNDER

Item Number	Sheet No.	Excav.	Concrete 1-5½ Cu. Yds.	Pipe for Culvert Lin. Ft. 15"	21"	Pipe For Storm Sewer (Ft.) 12"	I-8 M.H. No. 1 Complete Each.	12" Pipe Removed & Stored Lin. Ft.	Removal of Exist. Masonry Cu. Yds.
1-C	7	28.0	0.1	42⅔					0.6
2-C	8	26.0		42⅔					
3-C to 5-C	9	70.0	0.1	42⅔	43.4	4.0	1	16	6.4
6-C to 7-C	10	57.0		85⅓					
8-C	11	36.0		42⅔					
		217.0	0.2	256	43.4	4.0	1	16	7.0

I-13 CONCRETE SIDEWALK

Sheet Number	4" Concrete Sidewalk Sq. Ft.	6" Concrete Sidewalk Sq. Ft.
7	3988	320
8	5440	960
9	5280	1120
10	5205	960
11	5402	960
12	2134	640
Total	27409	4960

MONUMENT BOX & BENCH-MARK ASSEMBLY

Item Numbers	Sheet Numbers	Monument Box	Bench Mark
1-M to 2-M, 1-B	7	2	1
1-M to 3-M, 1-B	8	3	1
1-M to 4-M, 1-B	9	4	1
1-M to 2-M	10	2	1
1-M & 1-B	11	1	1
1-M, 1-B.	12	1	1
Total		13	6

TRENCH REINF. I-7

Item Number	Sheet Number	Reinforcing Steel Lbs.
1-R	7	689
1-R.	8	643
1-R & 2-R	9	1562
1-R & 2-R	10	1286
1-R.	11	827
Total		5007

INLETS PARTIALLY REM. & CAPPED AS DIRECTED

Item Number	Sheet Number	Number
1-F	8	1
1-F	10	1
Total		2

STORM SEWER

Item Number	Sheet No.	Pipe for Storm Sewer Lin. Ft. 12"	18"	21"	I-8-1 Curb Inlets No. 2	No. 4	I-8-1 Ditch Inlets No. 1	I-8 M.H. Complete Each No. 1	Conc. 1-5½ Cu. Yds.
1-D to 9-D	7	1484	632		6	2			0.9
1-D to 17-D	8	2487			12	1	5		
1-D to 16-D	9	1915	383		11	2	1		1.8
1-D to 13-D	10	2216	130		13	1	1		0.9
1-D to 18-D	11	2402		300	14		1	2	1.0
1-D to 4-D	12	592			4				
Totals		11096	1145	300	60	6	8	2	4.6

TREE & STP. REMOVAL

Item Number	Sheet Number	Number
1-T to 18-T	7	18
1-T to 14-T	8	14
1-T to 21-T	9	21
1-T to 11-T	10	11
1-T to 2-T	11	2
1-T to 18-T	12	18
Total =		84

PRIVATE DRIVE & ROAD APPROACHES

Item Number	Sheet Number	Aggregate Cu. Yds.
1E to 9E	7	71.0
1E to 20E	8	66.0
1E to 20E	9	81.0
1E to 18E	10	60.0
1E to 19E	11	63.0
1E to 9E.	12	27.0
Total		368

B-50 BASE COURSE

Station From	Station To	Side	Length	Width	Thickness	Cu. Yds.
0-362.63	0-350	Lt.	12.63	1.0	.2917	.1
0-362.63	0-350	Rt.	12.63	1.0	.2917	.1
0-350	4+40	ALL	790.0	19.0	.2588	143.9
4+40	10+74	Lt.	634.0	1.0	.2917	6.8
4+40	10+74	Rt.	634.0	3.5	.2917	24.0
10+74	10+78	ALL	4.0	19.0	.2588	0.7
10+78	22+00	Lt.	1122.0	1.0	.2917	12.1
10+78	22+00	Rt.	1122.0	3.5	.2917	42.4
22+00	39+00	ALL	1700.0	19.0	.2588	309.6
39+00	40+90	Lt.	190.0	1.0	.2917	2.1
39+00	40+90	Rt.	190.0	3.5	.2917	7.2
40+90	40+94	ALL	4.0	19.0	.2588	0.7
40+94	49+00	Lt.	806.0	1.0	.2917	8.7
40+94	49+00	Rt.	806.0	3.5	.2917	30.5
49+00	54+72	ALL	572.0	19.0	.2588	104.2
54+72	71+38	Lt.	1666.0	1.0	.2917	18.0
54+72	71+38	Rt.	1666.0	1.0	.2917	18.0
71+38	71+42	ALL	4.0	19.0	.2588	0.7
71+42	74+75	Lt.	333.0	1.0	.2917	3.6
71+42	74+75	Rt.	333.0	1.0	.2917	3.6
74+75	81+98.43	ALL	723.43	19.0	.2588	131.7
0-462.63 to 0-362.63 Sheet No.3						10.2
Replace Defective Pavement (estimated)						
350 x 3/36						29.2
Total					=	908.1

I-12 TYPE 4-A CONCRETE CURB

Sta. 0-362.63 to Sta. 81+98.43 =	8561.06 Lin. Ft. Lt.
Sta. 0-362.63 to Sta. 81+98.43 =	+ 8561.06 Lin. Ft. Rt.
	17122.12 Lin. Ft.
Deductions	
Sta. 0+250 to Sta 2+50 Intersection	
County Line Road (See detail Sheet No.5)	500.00 Lin. Ft.
Sta. 51+16.24 Wheeler Creek Road.	60.00 Lin. Ft.
60 I-8-1 No.2 Inlets @ 4.08 =	244.80 Lin. Ft.
6 I-8-1 No.4 Inlets @ 6.44 =	38.64 Lin. Ft.
Total Deductions	843.44 Lin. Ft.
Total Curb	17122.12 Lin. Ft.
Deductions	843.44 Lin. Ft.
Net Length Curb	16278.68 Lin. Ft.

TOTAL B-50 BASE
(908.1 + 10.0) x 1.10 = 1010 Cu. Yds.

TOTAL B-50 LEVELING
(1228.42 + 4.8) x 1.10 = 1357 Cu. Yds.

(See Sheet 2 for explanatory note)

B-50 LEVELING COURSE

As per Typical Section No.1 = 2752 Lin. Ft.	
2752 x 15.50 x 0.125 ÷ 27	* 197.46 Cu. Yds.
2752 x 4.50 x .25 ÷ 27	* 114.67 Cu. Yds.
As per Typical Section No.2 = 2011.63 Lin. Ft.	
2011.63 x 17 x 0.125 ÷ 27	* 159.59 Cu. Yds.
2011.63 x 2 x .25 ÷ 27	* 37.25 Cu. Yds.
As per Typical Section No.3 = 379.43 Lin. Ft.	
379.43 x 19 x 0.2083 ÷ 27	* 556.63 Cu. Yds.
Replacement of Defective Pavement (Est.) 3.50 Sq. Yds.	
350 x (2½ ÷ 36) =	* 24.30 Cu. Yds.
Transition Sta. 0-362.63 Sheet No.3	* 8.50 Cu. Yds.
Wedge Section (Estimated)	* 130.00 Cu. Yds.
Total Quantities marked thus *	1228.42 Cu. Yds.

T-30 BITUMINOUS PRIME COAT

Station From	Station To	Length	Width	Sq. Yds.
4+40	10+74	634	14.5	1021.44
10+78	22+00	1122	14.5	1807.67
39+00	40+90	190	14.5	306.11
40+94	49+00	806	14.5	1298.56
54+72	71+38	1666	17.0	3146.89
71+42	74+75	333	17.0	628.00
0-462.63	0-362.63	(estimated)		100.00
0-65 to 0-100 (See Detail Sheet No. 5)		35	16.0	62.22
0-362.63 to 0-350		12.63	17.0	23.86
Total				8395.75

8395.75 Sq. Yds @ .20 Gal. per Sq. Yd = 1679 Gal.

E-10 SEALING EDGES & ENDS EXIST. PAVEMENT

EDGES

Station From	Station To	Lin. Ft.
0-362.63	0-350	12.63
4+40	10+74	634.00
10+78	22+00	1122.00
39+00	40+90	190.00
40+94	49+00	806.00
54+72	71+38	1666.00
71+42	74+75	333.00
Total		4763.63
4763.63 x 2 Sides =		9527.26

ENDS

0-350	End	17.0
0-65 (See Detail Sheet No. 3)		16.0
4+40	End	14.5
10+74		14.5
10+78		14.5
22+00		14.5
39+00		14.5
40+90		14.5
40+94		14.5
49+00		14.5
54+72		17.0
71+38		17.0
71+42		17.0
74+75		17.0
81+98.43		19.0
Total Ends.		236.0
Total Edges.		9527.3
Grand Total Lin. Ft.		9763.3

T-50 SURFACE COURSE

Sta. 0-362.63 to 81+98.43 = 8561.06 Lin. Ft.		
8561.06 x 19 ÷ 9 =	18075.4	Sq. Yds.
Sta. 0-362.63 Transition Sh. No. 3	122.2	Sq. Yds.
Intersection Sta. 0+00 to 0-65 Sh. 5	115.6	Sq. Yds.
Total	18,311.2	Sq. Yds.

E-8 REMOVAL OF EXIST. PAVEMENT.

Station From	Station To	Side	Length	Average Width Ft.	Sq. Yds.
0-350	4+40	ALL	790	20.0'	1755.6
4+40	10+74	Lt.	634	5.5'	387.4
10+74	10+78	ALL	4	20.0'	8.9
10+78	22+00	Lt.	1122	5.5'	685.1
22+00	39+00	ALL	1700	20.0'	3777.8
39+00	40+90	Lt.	190'	5.5'	116.1
40+90	40+94	ALL	4'	20.0'	8.9
40+94	49+00	Lt.	806	5.5'	492.6
49+00	54+72	ALL	572	20.0'	1271.1
54+72	71+38	Rt & Lt.	1666	1.5	555.3
71+38	71+42	ALL	4'	20.0'	8.9
71+42	74+75	Rt & Lt.	333	1.5	111.0
74+75	81+98.43	ALL	723.43	20.0'	1607.6
0-362.63	0-350	Rt & Lt.	12.63	1.5	4.2
0+00 Intersection (See Detail Sheet No. 5)					317.0
82+00 Transition (See Detail Sheet No. 12)					118.6
Defective Areas. Estimated					+350.0
Total Existing Pavement Removed					11576.7

B-11 INSULATION COURSE

Station From	Station To	Side	Lin. Ft.	Av. Width Feet.	Sq. Yds.
0-362.63	0-350	Lt.	12.63	1.0	1.4
0-362.63	0-350	Rt.	12.63	1.0	1.4
0-350	4+40	ALL	790.0	19.0	1667.8
4+40	10+74	Lt.	634.0	1.0	70.4
4+40	10+74	Rt.	634.0	3.5	246.6
10+74	10+78	ALL	4.0	19.0	8.4
10+78	22+00	Lt.	1122.0	1.0	124.7
10+78	22+00	Rt.	1122.0	3.5	436.3
22+00	39+00	ALL	1700.0	19.0	3588.9
39+00	40+90	Lt.	190.0	1.0	21.1
39+00	40+90	Rt.	190.0	3.5	73.9
40+90	40+94	ALL	4.0	19.0	8.4
40+94	49+00	Lt.	806.0	1.0	89.6
40+94	49+00	Rt.	806.0	3.5	313.4
49+00	54+72	ALL	572.0	19.0	1207.6
54+72	71+38	Lt.	1666.0	1.0	185.1
54+72	71+38	Rt.	1666.0	1.0	185.1
71+38	71+42	ALL	4.0	19.0	8.4
71+42	74+75	Lt.	333.0	1.0	37.0
71+42	74+75	Rt.	333.0	1.0	37.0
74+75	81+98.43	ALL	723.43	19.0	1527.2
0+0 to 0-65 (See detail Sheet No. 5)		Rt.	65.0	16.0	115.6
0-462.63 to 0-362.63 Sheet No.3					122.2
Replace Defective Pavement (Estimated)					350.0
Total					10,427.5

B-50 BASE COURSE

Sta. 0+00 to 0-65 (Intersection) = 65 Lin. Ft.
See Intersection Detail Sheet No. 5
65 x 16 x .2604 ÷ 27 = 10.0 Cu. Yds.

B-50 LEVELING COURSE

Sta. 0+00 to Sta. 0-65 (Intersection) = 65 Lin.
See Intersection Detail Sheet No. 5
65 x 16 x .125 ÷ 27 = 4.8 Cu. Yds.

T-150 SURFACE COURSE (CU. YDS)

Intersection Sta. 0-65 to Sta. 0-100	
See Detail Sheet No. 5 (estimated)	2.0 Cu. Yds.
Transition Sta. 0-362.63 to 0-462.63	
See Detail Sheet No. 3 (estimated)	7.0 Cu. Yds.
Total	9.0 Cu. Yds.

T-71 REINF. CONCRETE PAVEMENT

Net Length Sta 0-362.63 to Sta. 81+98.43 = 8561.06 Lin. Ft.

(8561.06 x 11.1667 / 9) x 2 =	21244.2 Sq. Yds.
Additions	
Sta. 0+00 Intersection (See Sheet No. 5)	463.8 Sq. Yds.
Total	21,708.1 Sq. Yds.

EXCAVATION AND EMBANKMENT

Station From	Station To	Excav. Cu. Yds.	Emb. Cu. Yds.	Emb. +20% Cu. Yds.	Borrow Cu. Yds.
0-462.63	6+00	442	814	977	535
6+00	16+00	132	1153	1384	1252
16+00	26+00	431	877	1052	621
26+00	36+00	491	955	1146	655
36+00	46+00	218	1249	1499	1281
46+00	56+00	451	1279	1537	1086
56+00	66+00	451	1650	1980	1529
66+00	76+00	473	579	695	222
76+00	82+00	257	1513	1816	1559
Totals		3346	10069	12086	8738

Excavation (above)	3346 Cu. Yds.
Deduction From Excavation Account of Curb Being Included in Pavement Removal Instead of Excavation. Sta. 0-362.63 to Sta. 0-350, Sta. 54+72 to Sta. 71+38, Sta. 71+42 - 74+75	168 Cu. Yds.
Total Excavation	3178 Cu. Yds.
Pavement Removed and Used in Wells For Tree Protection 255 x 12/36 =	85 Cu. Yds.
Aggregate For Tree Roof Aeration	553 Cu. Yds.
Total Exc., Tree Wells, Aeration	3816 Cu. Yds.
Total Emb. + 20%	12086 Cu. Yds.
Deduct Total Exc., Tree Well, Aeration	3816 Cu. Yds.
Total Net Borrow	8270 Cu. Yds.

I-14 BRICK GUTTER GROUTED SALVAGE BRICK

SHEET No.	SIDE	STATION	LIN. FT.
7	Rt - Lt	0-462.63 - 0-362.63	200

E-5 FINISHING SHOULDERS SLOPES & DITCHES

Transition Sta. 0-462.63 - Sta. 0-362.63	100.00 LIN. FT.
F.A.P. 5 (3) Sta. 0-362.63 - Sta. 0+0	362.63 LIN. FT.
F.A.P. 666 I (1) Sta. 0+00 to Sta. 81+98.43	8198.43 LIN. FT.
Total Net Length	8661.06 LIN. FT.