

MUSKINGUM COUNTY
TOWNSHIP ROADS NO. 47 & 60

SUMMARY OF QUANTITIES											Item	Quantity	Unit	Description
See Sheet Number														
10	11	12	18	19	20	23	24	25	26					ROADWAY
21		18									E-12	39	Lin. Ft.	Pipe Removed, 15 Inch and under
										20	I-8	20	Each	Monument Assemblies
1350	1941	373	250	278							I-15	4,192	Lin. Ft.	Guard Rail, Wire Cable Type (2 Cables) or Woven Wire Type (2 Tapes)
Lump											Special	Lump	Lump	Relocating Existing Power Lines.
Lump				Lump							Special	Lump	Lump	Relocating Existing Telephone Lines
DRAINAGE														
					15	11	119				E-2	145	Cu. Yds.	Excavation for Structures, Unclassified
					914		2				E-3	916	Cu. Yds.	Channel Excavation
36	60										I-1	96	Lin. Ft.	12 inch Pipe for Driveways
		40									I-1	40	Lin. Ft.	18 inch Pipe for Driveways
55											I-3	55	Lin. Ft.	8 inch Pipe for Roadway Drainage
										11	I-10	11	Cu. Yds.	Dumped Rock Channel Protection.
						0.82	1.02	1.72			S-1	3.56	Cu. Yds.	Concrete for Structures
								Lump			S-24	Lump	Lump	Removal of Existing Structure
						138					S-27	138	Lin. Ft.	24 inch Pipe for Roadway Culvert
							74				S-27	74	Lin. Ft.	30 inch Pipe for Roadway Culvert
								94			S-27	94	Lin. Ft.	48 inch Pipe for Roadway Culvert
2.37											Special	2.37	Cu. Yds.	No. 6 Aggregate for Spring Drain
PAVEMENT														
26.73	1997	9.67									I-18	*56.43	Cu. Yds.	* Stabilized Crushed Aggregate For Surface Course and Approaches

* Carried to Pavement Calculation Table below.

ITEM E-11 WATER			
See Sheet Number	For Item	Calculations	Item E-11 Water M. Gals.
	E-1	70,411 @ 5 gallons per cu. yd.	352,06
	I-18	904.71 @ 8 gallons per cu. yd.	7.24
		TOTAL	359.30

ITEM E-9 REMOVAL OF TREES		
See Sheet Number	Station to Station	E-9
	TOWNSHIP ROAD NO. 47	
10, 11, 12	50+00 to 73+42.95	Lump
	TOWNSHIP ROAD NO. 60	
18, 19	57+80 to 63+00	Lump
	TOTAL	Lump

EROSION PROTECTION				
See Sheet Number	Station to Station	L-9 Seeding and Protecting Sq. Yds.	L-9 Commercial Fertilizer Tons	L-9 Agricultural Liming Materials Tons
	TOWNSHIP ROAD NO. 47			
13	50+00 to 73+42.95	22,821	2.05	10.25
	TOWNSHIP ROAD NO. 60			
20	57+80 to 63+00	3,984	0.36	1.80
	TOTALS	26,805	2.41	12.05

EXCAVATION AND EMBANKMENT				
See Sheet Number	Station to Station	E-1 Roadway Excavation (Unclassified) Cu. Yds.	E-1 Embankment Cu. Yds.	
	TOWNSHIP ROAD NO. 47			
13	50+00 to 73+42.95	3,468	65,619	
	TOWNSHIP ROAD NO. 60			
20	57+80 to 63+00	1,589	4,792	
	TOTALS	5,057	70,411	

GENERAL SUMMARY			
Item	Quantity	Unit	Description
ROADWAY			
E-1	5,057	Cu. Yds.	Roadway Excavation, Method "A" Unclassified.
E-1	70,411	Cu. Yds.	Roadway Embankment, Method "A"
E-9	Lump	Lump	Removal of Trees
E-11	359.30	M. Gals.	Water
E-12	39	Lin. Ft.	Pipe Removed, 15 inch and under
I-8	20	Each	Monument Assemblies
I-15	4,192	Lin. Ft.	Guard Rail, Wire Cable Type (2 Cables) or Woven Wire Type (2 Tapes)
L-9	26,805	Sq. Yds.	Seeding and Protecting
L-9	2.41	Tons	Commercial Fertilizer
L-9	12.05	Tons	Agricultural Liming Materials
Special	Lump	Lump	Relocating Existing Power Lines
Special	Lump	Lump	Relocating Existing Telephone Lines
Special	Lump	Lump	Maintaining Traffic
DRAINAGE			
E-2	145	Cu. Yds.	Excavation for Structures, Unclassified
E-3	916	Cu. Yds.	Channel Excavation
I-1	96	Lin. Ft.	12 inch Pipe for Driveways
I-1	40	Lin. Ft.	18 inch Pipe for Driveways
I-3	55	Lin. Ft.	8 inch Pipe for Roadway Drainage
I-10	11	Cu. Yds.	Dumped Rock Channel Protection
S-1	3.56	Cu. Yds.	Concrete for Structures
S-24	Lump	Lump	Removal of Existing Structure
S-27	138	Lin. Ft.	24 inch Pipe for Roadway Culvert
S-27	74	Lin. Ft.	30 inch Pipe for Roadway Culvert
S-27	94	Lin. Ft.	48 inch Pipe for Roadway Culvert
Special	2.37	Cu. Yds.	No. 6 Aggregate for Spring Drain
PAVEMENT			
I-18,	904.71	Cu. Yds.	Stabilized Crushed Aggregate For Surface Course and Approaches

PAVEMENT CALCULATIONS		
Station to Station	Description, Calculation, etc.	I-18-G" Stabilized Crushed Aggregate Cu. Yds.
	TOWNSHIP ROAD NO. 47	
50+00 to 73+42.95	$8,342.95 \times 16 \times 0.5 \div 27$	694.21
	TOWNSHIP ROAD NO. 60	
57+80 to 63+00	$520.00 \times 16 \times 0.5 \div 27$	154.07
Carried from Summary of Quantities		56.43
	TOTAL	904.71

REVISION	DATE	DESCRIPTION	BY
U. S. ARMY ENGINEER DISTRICT, HUNTINGTON CORPS OF ENGINEERS HUNTINGTON, W. VA.			
DRAWN BY:	LICKING RIVER DILLON RESERVOIR PROJECT RELOCATION OF TOWNSHIP ROAD NO. 47 SECTION I (MT-47-1) READJUSTMENT OF TOWNSHIP ROAD NO. 60 SECTION I (MT-60-1)		
TRACED BY:			
CHECKED BY: <i>SEW</i>			
SUBMITTED BY: <i>ELMER S. BARRETT</i>			
ELMER S. BARRETT ASSOCIATES			
RECOMMENDED BY: <i>James S. Barrett</i>	APPROVED: <i>J. S. Barrett</i>	DATE: AUGUST 1959	
CHIEF ENG. DIV.	COL. C. E. DISTRICT ENGINEER		
ELMER S. BARRETT ASSOCIATES CONSULTING ENGINEERS CHILLICOTHE, OHIO		SCALE:	SPEC. NO.
		DRAWING NUMBER	
		027f-UD10-68/9	
		SHEET 9 OF 26	