

FED. RD. DIST. NO.	STATE	FED. AID PROJECT	FISCAL YEAR
10	OHIO	388-D	1926

# SUMMARY OF QUANTITIES

GEA-44-(8.88-10.92) I-C-H-324 SEC. E  
GEAUGA COUNTY

NO. STATION	TYPE	SIZE	LENGTH	EXCAVATION CU. YDS.	CONCRETE			STEEL LBS.	VIT. SEWER PIPE					RIP RAP SQ. YDS.				
					1-2-3 1/2 CU. YDS.	1-2 1/2-4 CU. YDS.	1-3-5 CU. YDS.		24" LIN. FT.	18" LIN. FT.	15" LIN. FT.	12" LIN. FT.	10" LIN. FT.					
<b>STRUCTURES UNDER 20 FT.</b>																		
1	5+67	Pipe	24"	42'	25	3.5		8.2	105	42								Build Stan. 24" x 42' V.S.P. Culvert. Remove old stone box.
2	11+48	Arch	12' Span	68'	120 Rock		249.7											Build Stan. 12' Arch, special headwalls.
3	24+66	Pipe	24"	30'	18	3.5		5.8	105	30								Build Stan. 24" x 30' V.S.P. Culvert. Remove old pipe.
4	36+02	"	15"	30'	10	2.3		3.6	70			30						Build Stan. 15" x 30' V.S.P. Culvert. Remove old pipe.
5	37+11	Side Road	12"	30'	10	2.6		3.0	60			30						Build Stan. 12" x 30' V.S.P. Side Road Culvert. Remove old pipe.
6	43+09	Pipe	15"	30'	10	2.3		3.6	70			30						Build Stan. 15" x 30' V.S.P. Culvert. Remove old pipe.
7	56+00	"	12"	30'	10	3.0		3.0	98			30	230					Build Stan. 12" x 30' V.S.P. Culvert. Remove old 8" pipe.
8	63+53	"	12"	30'	10	2.0		3.0	65			30						Build Stan. 12" x 30' V.S.P. Culvert. Remove old 10" x 20 1/2' C.I.P.
9	71+51	"	18"	34'	18	2.7		4.9	80	34								Build Stan. 18" x 34' V.S.P. Culvert. Remove old 12" x 19 1/2' pipe
10	74+84	"	15"	32'	12	2.3		3.9	70			32						Build Stan. 15" x 32' V.S.P. Culvert. Remove old 12" x 20' C.I.P.
11	85+50	Box	3' x 3'	30'	60	14.4			679									Build Stan. 3' x 3' x 30' Conc. Box Culvert. Remove old 2 1/2' x 1 1/2' x 20 1/2' box.
12	89+03 1/2	Side Road	15"	32'	13	2.9		3.9	65			32						Build Stan. 15" x 32' V.S.P. Side Road Culvert. Remove old 10" x 24' pipe Lt.
13	89+03 3/4	Side Road	15"	32'	12	2.9		3.9	65			32						Build Stan. 15" x 32' V.S.P. Side Road Culvert. Remove old 12" pipe Rt.
14	94+55	old pipe			1													Remove and Abandon.
15	98+21	Pipe	24"	42'	20	3.5		8.2	105	42								Build Stan. 24" x 42' V.S.P. Culvert. Remove old 2' x 1 1/2' x 21' Stone Box.
<b>TOTALS</b>					120 Rock 229 Earth	47.9	249.7	55.0	1637	114	34	156	90	230				

## ROADWAY

- R-1 Excavation 14,168 Cu. Yds. ✓
- R-3 Finishing berms, slopes & ditches 10,790.7 Lin. Ft. ✓
- M-B Pavement 3" Bituminous Top 19,212.2 Sq. Yds. ✓
- M-W Pavement 4" Water-Bound Base 20,411.2 Sq. Yds. ✓
- M-W Pavement 4" Water-Bound Base 20,411.2 Sq. Yds. ✓

**SUMMARY OF  
10" V. S. PIPE**

From Station	To Station	Side of Road	Lin. Ft.
16+10	19+90	Lt.	380
16+10	20+60	Rt.	450
39+90	42+04	Lt.	214
Total			1044

**SUMMARY OF  
4" DRAIN TILE**

4" Drain tile to be placed as directed by engineer.  
500' Lin. Ft.

**SUMMARY OF  
EXTRA PAVEMENT**

Sta. 0+00 28.8 Sq. Yds. ✓

**SUMMARY OF  
TYPE B GUARD RAIL**

From Station	To Station	Side of Road	Lin. Ft.
5+50	5+74	Right	24
5+50	5+74	Left	24
10+85	12+05	Right	120
10+85	11+81	Left	96
13+53	14+25	Right	72
14+45	16+45	Right	200
13+53	16+41	Left	288
19+60	20+00	Left	40
97+21	98+81	Right	160
97+85	98+49	Left	64
Total			1088

**SUMMARY OF  
LOOSE STONE FOR APPROACHES**

Station	Side of Road	Cu. Yds.
37+11	Lt.	7.4
89+03	Rt.	7.4
89+03	Lt.	7.4
Total		22.2

**SUMMARY OF  
PIPE FOR PRIVATE DRIVES**

Station	10"	12"	18"	Station	10"	12"	18"
2± Rt.		16		64+15 Lt.	16		
3+60 Lt.		16		65+40 Rt.	16		
8+90 Lt.		16		70+90 Lt.	16		
14+35 Rt.		16		73+10 Lt.	16		
20+33 Lt.	16			73+95 Rt.	16		
29+19 Lt.		16		80+90 Lt.	16		
30+23 Rt.	16			90+13 Rt.		16	
41+30 Rt.	16			92+08 Rt.	16		
42+12 Lt.	16			93+82 Lt.		16	
47+77 Rt.	16			95+95 Lt.	16		
57+59 Rt.	16			102+00 Rt.	16		
59+22 Lt.	16						
Total Lengths				192 144 32			

**SUMMARY OF  
EXCAVATION & EMBANKMENT**

From Station	To Station	Exc.	Cubic Yards			
			Emb.	Emb+%	% added	Waste
0+00	3+50	216	180	216		20
3+50	6+27	298	248	298		20
6+27	9+61	713	594	713		20
9+61	21+00	5888	5019	5772	15	116
21+00	34+17	1303	1086	1303		20
34+17	37+20	185	154	185		20
37+20	46+47	423	353	423		20
46+47	52+79	679	566	679		20
52+79	57+15	511	426	511		20
57+15	64+58	538	448	538		20
64+58	69+08	231	193	231		20
69+08	72+92	272	227	272		20
72+92	81+42	668	557	668		20
81+42	86+54	452	377	452		20
86+54	92+90	387	323	387		20
92+90	97+61	420	350	420		20
97+61	107+30	984	808	984		22
Totals		14,168	11,909	14,052		116