

# SUMMARY OF QUANTITIES

FED. RD. DIST. NO.	STATE	FED. AID PROJECT	FISCAL YEAR
10	OHIO	5-A(4)	1940

64  
64

LAKE COUNTY  
S.H. 2 SEC. Q (PT.)

## CALCULATIONS

B-20 WATERBOUND MACADAM BASE COURSE - 5" THICK  
TOTAL AREA = 1373.6 Sq. Yds.  
WATERBOUND MACADAM BASE COURSE ~  
COARSE AGGREGATE = 1373.6 x 5 x 0.30 TONS = 206 TONS  
WATERBOUND MACADAM BASE COURSE ~  
SCREENINGS = 1373.6 x 5 x 0.13 TONS = 89.3 TONS

T-30 BITUMINOUS PRIME COAT - USING 0.35 GAL. RT-3 (M5.15)  
PER SQ. YD.  
TOTAL AREA = 1373.6  
BITUMINOUS PRIME COAT = 1373.6 x  $\frac{35}{100}$  GAL. = 481 GAL.

T-31 BITUMINOUS SURFACE TREATMENT  
TOTAL AREA = 1373.6 Sq. Yds.  
BITUMINOUS SURFACE TREATMENT ~  
BITUMINOUS MATERIAL = 1373.6 x  $\frac{43}{100}$  GAL. = 591 GAL.  
BITUMINOUS SURFACE TREATMENT ~  
AGGREGATE NO. 46 = 1373.6 x  $\frac{4}{10}$  x  $\frac{79}{2000}$  = 19.2 TONS

T-50 2 1/2" HOT-MIXED, HOT-LAID ASPHALTIC CONCRETE  
SURFACE COURSE - TYPE B  
FULL WIDTH NEW PAV'T. (SHEET #2) 7154 x 22 x 1/2 x 5.5 = 17487.5 Sq. Yds.  
WIDENING & RESURFACE (SHEET #2) 8705.59 x 22 x 1/2 x 5.5 = 21,280.3 Sq. Yds.  
SHEET #54 1130.5 Sq. Yds.  
  
TOTAL 39898.3 Sq. Yds.

B-50 AREA OF BASE & LEVELING COURSES  
FULL WIDTH NEW BASE = 7154 x 22 x 1/2 Sq. Yd. = 17487.5 Sq. Yds.  
RESURFACING = 8705.59 x 2 x 1/2 Sq. Yd. = 1934.6 Sq. Yds.  
STA. 432+25 TO 439+0 AV. WIDTH 2.8 =  $\frac{2.8 \times 675}{9}$  = 210.0 Sq. Yds.  
STA. 445+25 TO 452+0 AV. WIDTH 2.3 =  $\frac{2.3 \times 675}{9}$  = 172.5 Sq. Yds.  
STA. 461+75 TO 465+50 AV. WIDTH 2.0 =  $\frac{2.0 \times 375}{9}$  = 83.3 Sq. Yds.  
STA. 501+0 TO 502+50 AV. WIDTH 2.0 =  $\frac{2.0 \times 150}{9}$  = 33.3 Sq. Yds.  
SHEET #54 220.5 Sq. Yds.  
  
TOTAL AREA 20,141.7 Sq. Yds.

B-50 3" HOT-MIXED, HOT-LAID, ASPHALTIC CONCRETE  
BASE COURSE -  
AREA (ABOVE) = 20,141.70 x  $\frac{3}{36}$  Cu. Yds. = 1678.5 Cu. Yds.

B-50 2 1/2" HOT-MIXED, HOT-LAID, ASPHALTIC CONCRETE  
LEVELING COURSE -  
AREA (ABOVE) 20,141.7 x  $\frac{5}{2}$  x  $\frac{1}{36}$  Cu. Yds. = 1398.7 Cu. Yds.  
EXTRA LEVELING @ 200 CY/MILE = 200 x 1.648 CY. = 329.6 Cu. Yds.  
  
TOTAL B-50 LEVELING COURSE = 1728.3 Cu. Yds.

T-71 9-7-7-9 REINFORCED PORTLAND CEMENT  
CONCRETE PAVEMENT  
STA. 406+31.97 TO STA. 564+91.56 = 15859.6 LIN. FT.  
AREA = 15859.6 x 2 x 11 x 1/2 Sq. Yds. = 38767.9 Sq. Yds.  
SHEET #54 851.3 Sq. Yds.  
  
TOTAL 39619.2 Sq. Yds.

I-19 1/4" INSULATION COURSE  
SAME AS B-50 20,141.7 Sq. Yds.

I-11 STONE CURB  
STA. 406+31.97 TO STA. 564+91.56 = 15859.6 LIN. FT.  
LENGTH = 15859.6 x 2 L.F. = 31719.2 LIN. FT.  
SHEET #63 695.1 LIN. FT.

GROSS 32414.3 LIN. FT.  
DEDUCTIONS (SHEET #63) 3277.4 LIN. FT.  
DEDUCT FOR C.B.'S - 98 @ 3' = 294.  
NET LENGTH 28842.9 LIN. FT.

E-11 WATER  
40447 x 10 = 406 M. GALS.  
SUBGRADE = 58 M. GALS.  
TOTAL 464 M. GALS.

## GENERAL SUMMARY

ITEM NO.	ROADWAY	QUANTITY	UNIT
E-1	ROADWAY EXCAVATION (UNCLASSIFIED)	36345	CU. YDS.
E-4	BORROW (CONTRACTOR TO FURNISH)	16630	CU. YDS.
E-11	WATER	464	M. GAL.
I-2	10" PIPE FOR STORM SEWERS	27	LIN. FT.
I-2	12" PIPE FOR STORM SEWERS	6419	LIN. FT.
I-2	15" PIPE FOR STORM SEWERS	2646	LIN. FT.
I-2	21" PIPE FOR STORM SEWERS	1863	LIN. FT.
I-2	24" PIPE FOR STORM SEWERS	2891	LIN. FT.
I-2	12" PIPE FOR STORM SEWERS UNDER PAV'T.	1751	LIN. FT.
I-2	27" PIPE FOR STORM SEWERS UNDER PAV'T.	70	LIN. FT.
I-2	18" PIPE FOR STORM SEWERS	91	LIN. FT.
I-5	21" x 12" Y PIPE SPECIALS FOR STORM SEWERS	1	EACH
I-2	27" PIPE FOR STORM SEWERS	851	LIN. FT.
I-8	STANDARD NO. 1-2 CATCH BASIN	1	EACH
I-8	STANDARD NO. 7 SIDE DITCH CATCH BASIN	4	EACH
I-8	CATCH BASIN NO. 13-X (SEE DETAIL)	98	EACH
I-8	SPECIAL MANHOLE AS PER PLAN	42	EACH
I-8	STANDARD NO. 1 MANHOLES	23	EACH
S-1	CONCRETE FOR HEADWALLS - CLASS "E"	128	CU. YDS.
I-17	TRAFFIC BOUND SIDE APPROACHES (60% NO. 4 AND 40% NO. 7)	4278	CU. YDS.
I-1	8" PIPE FOR DRIVEWAYS	144	LIN. FT.
I-1	12" PIPE FOR DRIVEWAYS	316	LIN. FT.
I-13	4" CONCRETE SIDEWALKS	73009	SQ. FT.
E-8	REMOVAL OF EXISTING SIDEWALK	978	SQ. FT.
E-9	REMOVAL OF TREES AND STUMPS	227	EACH
E-8	REMOVAL OF EXISTING PAVEMENT	14600	SQ. YDS.
E-10	SEALING ONLY OF PAVEMENT AND BASE EDGE	53595	LIN. FT.
E-3	CHANNEL EXCAVATION	33.2	CU. YDS.
E-12	PIPE REMOVED AND STORED (10")	259	LIN. FT.
S-22	REMOVAL OF EXISTING STRUCTURES - LEACHING BASINS - INLET & HEADWALL	LUMP	LUMP
I-2	30" PIPE FOR STORM SEWERS	689	LIN. FT.
I-15	GUARD RAIL REMOVED AND STORED	78	LIN. FT.
M-10	CALCIUM CHLORIDE FOR TEMPORARY TRAFFIC LANES	25	TONS
T-110	AGGREGATE FOR TEMPORARY TRAFFIC LANES	3000	CU. YDS.
I-13	CONCRETE STEPS 20" TREAD, 7" RISE	217	LIN. FT.
I-10	RIPRAP - TYPE "A" (USING SALVAGE MATERIAL)	150	SQ. YD.
S-22	RIPRAP - REMOVE AND SALVAGE	5	CU. YD.
E-2	STRUCTURE EXCAVATION (UNCLASSIFIED)	43	CU. YD.
I-15	GUARD RAIL; STANDARD STRENGTH FLEXIBLE STEEL PLATE TENSION TYPE I-15.03 OR STEEL BEAM TYPE I-15.05	1856	LIN. FT.
S-22	REMOVAL OF EXISTING STRUCTURES - 3 CULVERTS WITH HEADWALLS	LUMP	LUMP

## PAVEMENT

T-50	2 1/2" HOT-MIXED, HOT-LAID ASPHALTIC CONC. SURFACE COURSE - TYPE "B"	39898.3	SQ. YDS.
B-50	HOT-MIXED, HOT-LAID ASPHALTIC CONC. LEVELING COURSE	1728.3	CU. YDS.
B-50	HOT-MIXED, HOT-LAID ASPHALTIC CONC. BASE COURSE	1678.5	CU. YDS.
B-20	WATERBOUND MACADAM BASE COURSE - SCREENINGS	89.3	TONS
I-11	6" x 16" SANDSTONE CURB, BEREA AMHERST OR EQUAL	28843	LIN. FT.
T-70	6" PORTLAND CEMENT CONCRETE PAVEMENT	22420	SQ. YDS.
T-71	9-7-7-9 REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT	39619.2	SQ. YDS.
B-71	8" REINFORCED PORTLAND CEMENT CONCRETE BASE COURSE	524.5	SQ. YDS.
T-30	BITUMINOUS PRIME COAT SEC. M-5.15 RT-3	481	GAL.
T-31	BITUMINOUS SURFACE TREATMENT - (SEC. M-5.16, RT-6)	591	GAL.
T-31	BITUMINOUS SURFACE TREATMENT - (NO. 46 AGGREGATE)	192	TONS
B-20	WATERBOUND MACADAM BASE COURSE - COARSE AGGREGATE	206	TONS
I-19	1/4" INSULATION COURSE	20142	SQ. YDS.

## GENERAL SUMMARY (CONT'D)

ITEM NO.	ROADWAY CONTINUED	QUANTITY	UNIT
E-305	SEEDING & PROTECTING SHOULDERS SLOPES AND DITCHES	42,170	SQ. YDS.
L-9	10-6-4 COMMERCIAL FERTILIZER (FIGURE AT THE RATE OF 20 LBS./1000 SQ. FT.)	7591	LBS.
L-7	12" RIPRAP FOR TREE PROTECTION	190.5	SQ. YDS.
L-8	AGGREGATE FOR TREE ROOT AERATION	233	CU. YDS.
L-17	PRUNING EXISTING TREES 6"	9	EACH
L-17	PRUNING EXISTING TREES 12"	8	EACH
L-17	PRUNING EXISTING TREES 20"	7	EACH
L-17	PRUNING EXISTING TREES 30"	21	EACH
L-17	PRUNING EXISTING TREES 36"	30	EACH