

# PAVEMENT CALCULATIONS

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO		

3  
24

LAK-535-(0.20-0.53)  
LAKE COUNTY

## LINE DATA

Begin Project Station 27+55  
End Project Station 51+00  
Gross & Net Length Project 2345 Lin.ft. - 719 ft. = 2337.81 Lin.ft. or 442 Miles.  
TOTAL LENGTH PAVEMENT 2337.81 - 316.56 LENGTH BRIDGE & APPR. SLABS = 1,991.25 LIN.FT.

### ASPHALTIC CONCRETE SURFACE COURSE ITEM T-35

Sta. 27+55 to Sta. 37+13.72 = 958.72 x 24 = 23,009.28 ÷ 9 = 2556.58 Sq.Yds.  
Sta. 40+60.28 to Sta. 47+76.25 = 715.97 x 24 = 17,183.28 ÷ 9 = 1,909.25 Sq.Yds.  
Sta. 47+83.44 to Sta. 51+00 = 316.56 x 24 = 7,597.44 ÷ 9 = 844.16 Sq.Yds.  
Extra Area 774.00 Sq.Yds.  
Drives 197.00 Sq.Yds.  
Approach Slabs 80.00 Sq.Yds.  
Total 6,360.99 Sq.Yds.  
6360.99 ÷ 36 = 176.69 x 1.25 Use 221 Cu.Yds. 220.86 Cu.Yds.

### ASPHALTIC CONCRETE LEVELING COURSE ITEM B-35

Same as Asphaltic Concrete Surface Course 6,360.99 Sq.Yds.  
Deduct Drives 197.00 Sq.Yds.  
Total 6,163.99 Sq.Yds.  
6,163.99 Sq.Yds. ÷ 36 = 171.22 x 1.25 Use 214 Cu.Yds. 214.03 Cu.Yds.

### ASPHALTIC CONCRETE BASE COURSE ITEM B-35

1991.25 x 24.5 ÷ 9 = 5,420.63 Sq.Yds.  
Extra Area 782.00 Sq.Yds.  
TOTAL 6,202.63 Sq.Yds.  
6,202.63 x 3 ÷ 36 = 516.89 Cu.Yds.

### CRUSHED AGGREGATE BASE COURSE ITEM B-119

Sta. 27+55 to Sta. 37+13.72 = 958.72 x 25.5 ÷ 9 = 2,716.38 Sq.Yds.  
Sta. 40+60.28 to Sta. 47+76.25 = 715.97 x 25.5 ÷ 9 = 2,028.58 Sq.Yds.  
Sta. 47+83.44 to Sta. 51+00 = 316.56 x 25.5 ÷ 9 = 896.92 Sq.Yds.  
Extra Area 828.00 Sq.Yds.  
Drives 197.00 Sq.Yds.  
Total 6,666.88 Sq.Yds.  
6,666.88 Sq.Yds. ÷ 36 x 1.25 Use 926 Cu.Yds. 925.95 Cu.Yds.

### SUB BASE ITEM I-22

1991.25 x 26.5 ÷ 9 = 5,863.13 Sq.Yds.  
Extra Area 844.00 Sq.Yds.  
Total 6,707.13 Sq.Yds.  
6,707.13 Sq.Yds. ÷ 36 x 1.25 Use 1490 Cu.Yds. 1,490.47 Cu.Yds.

### BITUMINOUS TACK COAT (0.10 gallons per sq.yd.) ITEM T-30\*

Area Approach Slabs 80.00 Sq.Yds.  
80.00 Sq.Yds x 0.10 Gallons = 8.00 Gallons

### REINFORCED CONCRETE APPROACH SLAB ITEM I-7

Sta. 37+13.72 to Sta. 37+28.72 = 15 x 24 = 360 ÷ 9 = 40 Sq.Yds.  
Sta. 40+45.28 to Sta. 40+60.28 = 15 x 24 = 360 ÷ 9 = 40 Sq.Yds.  
Total 80 Sq.Yds.

### COMPACTED SUBGRADE ITEM E-1

1991.25 x 24 ÷ 9 = 5,310.00 Sq.Yd.  
Extra Area 774.00 Sq.Yd.  
Approach Slabs 80.00 Sq.Yd.  
Total Area Compacted Subgrade 6,164.00 Sq.Yd.

Use Bituminous Material Sec. M-5.5  
MS-2 or RS-1, or Sec. M-5.2 RC-1 or RC-2  
\* Note: See note in proposal.

## GENERAL SUMMARY

ITEM NO	QUANTITIES	UNIT	ROADWAY & DRAINAGE
E-1	9209	Cu.Yds.	Excavation, Roadway, as per Plan
E-8	6190	Sq.Yds.	Removal & Disposal of Existing Pavement
E-8	398	Lin.ft.	Removal & Disposal of Existing Curb
I-2	480	Lin.ft.	12' Class "A" Storm Sewers
I-2	24	Lin.ft.	12' Class "A" Storm Sewers under pavement or approaches
* I-8	8	Each	Adjust Manhole to Grade
I-8	12	Each	Standard Catchbasin No 1-2A
I-8	1	Each	Rebuild Catchbasin including furnishing & placing standard No 1 Manhole Casting
I-8	2	Each	Adjust Catchbasin to grade
I-15	845	Lin.ft.	Guard Rail Removed and Disposed of
I-16	1	Each	Abandon Catchbasin
I-16	1	Each	Abandon Curb Inlet
L-9	11,848	Sq.Yd.	Seeding & Protecting, as per Plan
L-9	1.07	Tons	Commercial Fertilizer (10-6-4)
I-8	2	Each	Adjust Monument Box to Grade
S-24	Lump	Lump	Removal of Existing Structures
I-8	2	Each	Monument Box in place
E-1	6,164	Sq.Yd.	Compacted Subgrade
E-11	38	M. Gal.	Water
T-10	500	Cu.Yd.	Traffic Compacted Surface Course For Maintaining Traffic
M-10	10	Tons	Calcium Chloride Furnished and Applied For Maintaining Traffic
<b>PAVEMENT</b>			
T-35	221	Cu.Yds.	Asphaltic Concrete Surface Course (70-80) Type "A"
B-35	214	Cu.Yds.	Asphaltic Concrete Leveling Course (70-80)
B-35	517	Cu.Yds.	Asphaltic Concrete Base Course (70-80)
B-119	926	Cu.Yds.	Crushed Aggregate Base
I-22	1490	Cu.Yds.	Sub Base
T-30	8	Gallons	Bituminous Tack Coat as per Plan
I-7	80	Sq.Yds.	Reinforced Concrete Approach Slab
<b>STRUCTURES OVER 20' SPAN</b>			
For Quantities on Bridge No La. 535-04 See Sheet No 17			
* Note:- 3 Sanitary Manholes adjusted to grade (City of Painesville)			
5 Storm Manholes adjusted to grade			
Total 8 Manholes adjusted to grade			