

CALCULATIONS

LAKE COUNTY
LAK-20-6.65

GENERAL SUMMARY

ITEM	TOTAL	UNIT	DESCRIPTION
BUILDING REMOVALS			
202	Lump		Parcel No. 34WD; Removal of one commercial sign with wiring
202	Lump		Parcel No. 35WD; Removal of two brick entrance signs with wiring. One sign with concrete base. One lightpost with concrete base & wiring
202	Lump		Parcel No. 36WD, T; Removal of one 1 1/2 story frame residence with basement
202	Lump		Parcel No. 37 WD, T; Removal of three metal poles with concrete bases
202	Lump		Parcel No. 44 WD; Removal of one sign with concrete base
202	Lump		Parcel No. 45WD, T; Removal of two steel signs with concrete bases. One, 8'x4' sign with concrete base and wiring.
202	Lump		Parcel No. 47WD; Removal of one sign with concrete base
202	Lump		Parcel No. 49 WD, T; Removal of one sign with concrete base
202	Lump		Parcel No. 50 WD; Removal of one sign with concrete base
202	Lump		Parcel No. 60T; Removal of two steel light poles with concrete bases and wiring. One sign with concrete base
202	Lump		Parcel No. 63WD; Removal of one sign with concrete base and steel post
202	Lump		Parcel No. 76WD; Removal of one sign with concrete base
202	Lump		Parcel No. 77WD, T; Removal of one sign with concrete base
202	Lump		Parcel No. 82WD; Removal of two signs with concrete bases and wiring
202	Lump		Parcel No. 89 WD, T; Removal of one sign with concrete base

STOCKBRIDGE
V= 2589.4 x 0.1458 + 27 = 13.98 C.Y.
MIDDLESEX RD.
V= 2148.6 x 0.1458 + 27 = 11.60 C.Y.
BRENTWOOD DR.
V= 781.3 x 0.1458 + 27 = 4.22 C.Y.

TOTAL ITEM 402 ASPHALT CONCRETE TO GENERAL SUMMARY = 1476.61 C.Y.
= 1477 C.Y.

ITEM 301 BITUMINOUS AGGREGATE BASE
U.S. 20 MAINLINE
V= [(134,240 + 38,280) - (512 + 140,160)] 0.4583 + 27 = 540.59 C.Y.
[(15,348 + 47,544 + 36,000 + 130,800 + 7020) - (11,316 + 29,740 + 97,160 + 1280 + 1144)] 0.5417 + 27 = 1927.49 C.Y.
S.R. 306 EX U.S. 20
V= 1123 x 0.5417 + 27 = 22.53 C.Y.
DARTMOOR RD.
V= 2809.0 x 0.5417 + 27 = 56.36 C.Y.
STOCKBRIDGE
V= 2589.4 x 0.5417 + 27 = 51.95 C.Y.
BRENTWOOD
V= 781.3 x 0.5417 + 27 = 15.68 C.Y.
U.S. 20 MAINLINE
V= LEVELING COURSE (SEE SH. 72) = 127.01 C.Y.
MIDDLESEX
V= 2148.6 x 0.5417 + 27 = 43.11 C.Y.

TOTAL ITEM 301 BITUMINOUS AGGREGATE BASE TO GENERAL SUMMARY = 2784.72 C.Y.
= 2785 C.Y.

ITEM 203 SUBGRADE COMPACTION
SEE ITEM 301 (5 1/2") MAINLINE
A= 32,488 + CURB (7008 x 2.5) = 50,008 S.F.
SEE ITEM 301 (6 1/2") MAINLINE
A= 96,072 + 2809 (DART.) + 2589.4 (STOCK) + 2148.6 (MID.) - 2544 (BRENT.) + CURB (252 - 142.32 + 7224 + 43.14 + 59.35 + 34.08) 2.5 = 119,750.62 S.F.
A= (50,008 + 119,750.62) + 9 = 18,862.07 S.F.
= 18,862 S.F.

ITEM 407 TACK COAT
V= [278.376 + 1400 + 2604.5 + 512 + 1280 + 1144] 0.1 + 9 = 3170.18 GAL.
= 3171 GAL.

ITEM 407 COVER AGGREGATE
V= 285,316.5 x 7 + 9 + 2000 = 110.96 TONS
= 111 TONS

ITEM 659 COMMERCIAL FERTILIZER
V= 8539 x 9 x 15/1000 x 2000 = 0.58 TONS
= 0.58 TONS

ITEM 609 TYPE 2 CURB & GUTTER
STA. 44+32 TO STA. 79+36
L= (3504 x 2) + MIDLAND (83.34 + 12.32 + 73.74 - 128.59) = 7048.81 L.F.
STA. 79+36 TO STA. 81+88 RT.
L= 252 + S.R. 306 (78.77 + 11.98 + 63.46 - 142.32) = 263.89 L.F.
STA. 81+88 TO STA. 118+00
L= (3612 x 2) + DARTMOOR (22 + 78.54 + 72.60 - 130) + STOCKBRIDGE (89.94 + 28.54 + 67.14 - 126.27) + MIDDLESEX (78.54 + 78.54 - 123.00) + BRENTWOOD (78.54 + 78.54 - 123.33) = 7394.32 L.F.
STA. 118+00 TO STA. 118+60 LT.
L= 60 L.F.
TOTAL LENGTH = 7048.81 + 263.89 + 7394.32 + 60.00 = 14,767.02 L.F.
= 14,767 L.F.

SUB TOTALS FROM SHEETS 17 & 18 TO GENERAL SUMMARY

	ITEM 202 PAVEMENT REMOVED	ITEM 301 BITUMINOUS AGGREGATE BASE	ITEM 304 AGGREGATE BASE	ITEM 305 8" CONCRETE BASE	ITEM 402 ASPHALT CONCRETE	ITEM 404 ASPHALT CONCRETE	ITEM 452 6" PLAIN CONCRETE	ITEM 452 8" PLAIN CONCRETE	ITEM 608 4" CONCRETE WALK	ITEM 608 CURB RAMP TYPE 1	ITEM 608 CURB RAMP TYPE 2	ITEM 609 CURB TYPE 1	ITEM 609 CURB TYPE 2
	S.Y.	C.Y.	C.Y.	S.Y.	C.Y.	C.Y.	S.Y.	S.Y.	S.F.	EA.	S.F./EA.	L.F.	L.F.
PAY'T REPL. OVER STORM SEWER	321	44.6		321	44.6	3.06							
PAY'T REPL. BEHIND CURB		48.18				9.64	11.78						
SHEET 23		3.70				0.74	56.8	2048				201	
SHEET 24		22.88				4.69	48.0	85.2	5215				363
SHEET 25		2.90				0.63	16.0	284	6000				
SHEET 26			6.02					92.5	5928				
SHEET 27		14.27	18.70			2.86	102.1	5480					57.5
SHEET 28		8.15				1.63	1858	5632					47
SHEET 29		11.88				2.37	360	5920					
SHEET 30		6.23	18.24			1.24	64.4	3638		2 EA.		125	
SHEET 31		34.45	26.57			6.89	114.7	5103					
SHEET 32		16.89	5.19			3.38	1849	35604	4				
SHEET 33		17.11	16.11			3.42	206.2	42831					
SHEET 34		0.62	11.48			0.12	260.5	3198		25 SF.		53	
SHEET 35		24.99				4.99	2233	3070		25 SF.		35	
SHEET 36		5.38				1.08	96.9	3630		1 EA./25 SF.		376	
SHEET 37		17.64	8.02			3.53	1457	2570		25 SF.		308	
SHEET 38		35.45				7.09	2553	21865		25 SF.		171	
SHEET 39		25.76				5.14	662.1	33655		2 EA.		302	
SHEET 40		53.23				10.64	204.3	3816				17.5	
SHEET 41		4.88				0.98	163.7	2640				40	
SHEET 42							11.0						
QUANTITY TO GENERAL SUMMARY	321	399	111	321	45	75	64	3189	77,284	4	125 SF. 5 EA.	2096	