E:\ODOT\ProjectData\D12\103884_GEA-608\Design\Roadway\EngData\Pavement Calcs\GEA-608_Pavement Calcs_Stage 2.xlsx

GEA-608-3.09
PID 103884
EDG Project No. 17-00350-010
Pavement Quantity Calculations - Pre-Final

Calc by: SAC 02/07/2018
Check by: BJB 9/5/19
Update by: RMS 12/11/19 (Revise Item 209's to reflect note 9)

Pavement Legend Number (see Typical Sections) =>

CALCULATION ROW	STATION TO	STATION FROM	SIDE	LENGTH L	AVERAGE PAVEMENT WIDTH P	AVERAGE WIDENING WIDTH W	PAVEMENT SURFACE AREA AP = L x P	PAVEMENT WIDENING AREA AW = L x W	SALVAGED PAVEMENT AREA AS = AP - AW	8	13	14	7	5	6	2a	2b	2b	1	1	3	4	11	15	17 / 19
										204	209	209	254	301	304	407			441		441	441	609	617	875
										10000	60501	72050	01000	46000	20000	20000			50101		50300	50301	26000	10101	10000
										SUBGRADE COMPACTION	LINEAR GRADING, AS PER PLAN	PREPARE SUBGRADE FOR SHOULDER PAVING	PAVEMENT PLANING, ASPHALT CONCRETE (0.5" TYP.)	6" ASPHALT CONCRETE BASE, PG64-22	6" AGGREGATE BASE	NON-TRACKING TACK COAT (MILLED ASPHALT SURFACE) (AVE. RATE = 0.085 GAL/SY)	NON-TRACKING TACK COAT (NEW ASPHALT) (AVE. RATE = 0.055 GAL/SY)	NON-TRACKING TACK COAT (NEW ASPHALT) (AVE. RATE = 0.055 GAL/SY)	1.50" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG70-22M, AS PER PLAN	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG70-22M, AS PER PLAN (FOR SAFETY EDGE)	1.00" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448), PG64-22	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448), PG64-22, AS PER PLAN (VARIABLE DEPTH, 4" MAX)	CURB, TYPE 6	COMPACTED AGGREGATE, AS PER PLAN	LONGITUDINAL JOINT ADHESIVE
										SQ YD	MILE	MILE	SQ YD		CU YD	GALLON			CU YD		CU YD	CU YD	FT	CU YD	LB
										[W + (#)] x L / 9	L / 5280	L / 5280	AS / 9	[6 x (AW + (# x L))] / (12 x 27)	[6 x (AW + (# x L))] / (12 x 27)	[0.085 x AS) / 9	[0.055 x (AP+AW)] / 9	(See Other Calcs)	(1.50 x AP) / (12 x 27)	[(2.5 x 5) x L] / (2 x 12 x 12 x 27)	(1.00 x AW) / (12 x 27)	(See Other Calcs)	L	[(1 x 24) x L] / (12 x 12 x 27)	L x # / 4
	All calculations are based on centerline of construction.							See Notes at Bottom of Calc Sheet =>		(2)	(9)	(9)	(3)	(4)	(5)	(6)	(7)	(8)		(10)		(8)		(9) (11)	
																									# = 2
	SR 608 - WEST SIDE																								CL &
						(CADD)				# = (18 / 12)				# = (4 / 12)	# = (10 / 12)										SHOULDER
1	192+50.00	193+00.00	LEFT	50.00	15.97	3.92	798.50	196.00	602.50	30.11			66.94	3.94	4.40	5.69	6.08		3.70	0.08	0.60				25
														# = (0 / 12)	# = (6 / 12)										
2	193+00.00	193+35.00	LEFT	35.00	17.04	4.91	596.40	171.85	424.55	24.93			47.17	3.18	3.51	4.01	4.69		2.76		0.53		35.00		18
3	193+35.00	193+95.00	LEFT	60.00	18.25	5.97	1095.00	358.20	736.80	49.80			81.87	6.63	7.19	6.96	8.88		5.07		1.11		60.00		30
4	193+95.00	198+50.00	LEFT	455.00	19.00	6.62	8645.00	3012.10	5632.90	410.51			625.88	55.78	59.99	53.20	71.24		40.02		9.30		455.00		228
														# = (4 / 12)	# = (10 / 12)										
5	198+50.00	211+40.00	LEFT	1290.00	19.00	6.17	24510.00	7959.30	16550.70	1099.37			1838.97	155.36	167.30	156.31	198.42		113.47	2.07	24.57				645
						(CADD)				# = (18 / 12)				# = 0	# = [(6)/12]										
6	211+40.00	212+97.13	LEFT	157.13	19.00	5.69	2985.47	894.07	2091.40	125.53			232.38	16.56	18.01	19.75	23.71		13.82		2.76		157.13		79
7	212+97.13	213+62.13	LEFT	65.00	19.00	3.97	1235.00	258.05	976.95	39.51			108.55	4.78	5.38	9.23	9.12		5.72		0.80		65.00		33
8	213+62.13	217+50.00	LEFT	387.87	19.00	4.10	7369.53	1590.27	5779.26	241.34			642.14	29.45	33.04	54.58	54.75		34.12		4.91		387.87		194
						(CADD)				# = (18 / 12)				# = (4 / 12)	# = (10 / 12)										
9	217+50.00	218+61.12	LEFT	111.12	19.00	5.63	2111.28	625.61	1485.67	88.03			165.07	12.27	13.30	14.03	16.73		9.77	0.18	1.93				56
10	218+61.12	219+26.12	LEFT	65.00	19.00	6.14	1235.00	399.10	835.90	55.18			92.88	7.79	8.39	7.89	9.99		5.72	0.10	1.23				33
11	219+26.12	222+50.00	LEFT	323.88	19.00	6.74	6153.72	2182.95	3970.77	296.53			441.20	42.42	45.42	37.50	50.95		28.49	0.52	6.74				162
12	222+50.00	224+00.00	LEFT	150.00	19.00	5.21	2850.00	781.50	2068.50	111.83			229.83	15.40	16.79	19.54	22.19		13.19	0.24	2.41				75
13	224+00.00	226+50.00	LEFT	250.00	19.00	2.82	4750.00	705.00	4045.00	120.00			449.44	14.60	16.91	38.20	33.34		21.99	0.40	2.18				125
															# = (18 / 12)										
14	226+50.00	231+25.00	LEFT	475.00	19.00	2.37	9025.00	1125.75	7899.25	204.25			877.69	23.78	34.04	74.60	62.03		41.78	0.76	3.47				238
															# = (10 / 12)										
15	231+25.00	238+38.00	LEFT	713.00	19.00	2.46	13547.00	1753.98	11793.02	313.72			1310.34	36.88	43.48	111.38	93.51		62.72	1.15	5.41				357
														# = (0 / 12)	# = (6 / 12)										
16	238+38.00	239+49.70	LEFT	111.70	19.00	2.06	2122.30	230.10	1892.20	44.18			210.24	4.26	5.30	17.87	14.38		9.83		0.71		111.70		56
17	239+49.70	240+73.28	LEFT	(See SR 608 & Burton-Windsor Intersection (West Side), below)																					
																									# = 1
					(CADD)					# = (0 / 12)				# = (0 / 12)	# = (0 / 12)										CL ONLY
18	240+73.28	249+19.44	LEFT	846.16	13.72	0.00	11609.32	0.00	11609.32	0.00	0.160	0.160	1289.92	0.00	0.00	109.64	70.95		53.75	1.36	0.00			5.223	212
19	249+19.44	249+84.44	LEFT	65.00	12.42	0.00	807.30	0.00	807.30	0.00	0.012	0.012	89.70	0.00	0.00	7.62	4.93		3.74	0.10	0.00			0.401	16
20	249+84.44	252+72.55	LEFT	288.11	12.78	0.00	3682.05	0.00	3682.05	0.00	0.055	0.055	409.12	0.00	0.00	34.77	22.50		17.05	0.46	0.00			1.778	72
21	252+72.55	253+37.55	LEFT	65.00	12.95	0.00	841.75	0.00	841.75	0.00	0.012	0.012	93.53	0.00	0.00	7.95	5.14		3.90	0.10	0.00			0.401	16
22	253+37.55	259+00.00	LEFT	562.45	12.98	0.00	7300.60	0.00	7300.60	0.00	0.107	0.107	811.18	0.00	0.00	68.95	44.61		33.80	0.90	0.00			3.472	141
23	259+00.00	265+00.00	LEFT	600.00	12.75	0.00	7650.00	0.00	7650.00	0.00	0.114	0.114	850.00	0.00	0.00	72.25	46.75		35.42	0.96	0.00			3.704	150
24	265+00.00	266+25.00	LEFT	125.00	12.97	0.00	1621.25	0.00	1621.25	0.00	0.024	0.024	180.14	0.00	0.00	15.31	9.91		7.51	0.20	0.00			0.772	31
25	266+25.00	266+50.00	LEFT	25.00	12.89	0.00	322.25	0.00	322.25	0.00	0.005	0.005	35.81	0.00	0.00	3.04	1.97		1.49	0.04	0.00			0.154	6
																									# = 1
	SR 608 - EAST SIDE																								SHOULDER
						(CADD)				# = (18 / 12)				# = (4 / 12)	# = (10 / 12)										ONLY

E:\ODOT\ProjectData\D12\103884_GEA-608\Design\Roadway\EngData\Pavement Calcs\GEA-608_Pavement Calcs_Stage 2.xlsx

GEA-608-3.09
PID 103884
EDG Project No. 17-00350-010
Pavement Quantity Calculations - Pre-Final

Calc by: SAC 02/07/2018
Check by: BJB 9/5/19
Update by: RMS 12/11/19 (Revise Item 209's to reflect note 9)

Pavement Legend Number (see Typical Sections) =>

CALCULATION ROW	STATION		SIDE	LENGTH L	AVERAGE PAVEMENT WIDTH P	AVERAGE WIDENING WIDTH W	PAVEMENT SURFACE AREA AP = L x P	PAVEMENT WIDENING AREA AW = L x W	SALVAGED PAVEMENT AREA AS = AP - AW	SUBGRADE COMPACTION	LINEAR GRADING, AS PER PLAN	PREPARE SUBGRADE FOR SHOULDER PAVING	PAVEMENT PLANING, ASPHALT CONCRETE (0.5" TYP.)	6" ASPHALT CONCRETE BASE, PG64-22	6" AGGREGATE BASE	NON-TRACKING TACK COAT (MILLED ASPHALT SURFACE) (AVE. RATE = 0.085 GAL/SY)	NON-TRACKING TACK COAT (NEW ASPHALT) (AVE. RATE = 0.055 GAL/SY)	NON-TRACKING TACK COAT (NEW ASPHALT) (AVE. RATE = 0.055 GAL/SY)	1.50" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG70-22M, AS PER PLAN	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG70-22M, AS PER PLAN (FOR SAFETY EDGE)	1.00" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448), PG64-22	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448), PG64-22, AS PER PLAN (VARIABLE DEPTH, 4" MAX)	CURB, TYPE 6	COMPACTED AGGREGATE, AS PER PLAN	LONGITUDINAL JOINT ADHESIVE
										8	13	14	7	5	6	2a	2b	2b	1		3	4	11	15	17 / 19
										204	209	209	254	301	304	407			441		441	441	609	617	875
										10000	60501	72050	01000	46000	20000	20000			50101		50300	50301	26000	10101	10000
	TO	FROM		FT	FT	FT	SQ FT	SQ FT	SQ FT	SQ YD	MILE	MILE	SQ YD		CU YD	GALLON			CU YD		CU YD	CU YD	FT	CU YD	LB
										[W + (#)] x L / 9	L / 5280	L / 5280	AS / 9	[6 x (AW + (# x L))] / (12 x 27)	[6 x (AW + (# x L))] / (12 x 27)	[0.085 x AS] / 9	[0.055 x (AP+AW)] / 9	(See Other Calcs)	(1.50 x AP) / (12 x 27)	[(2.5 x 5) x L] / (2 x 12 x 12 x 27)	(1.00 x AW) / (12 x 27)	(See Other Calcs)	L	[(1 x 24) x L] / (12 x 12 x 27)	L x # / 4
	All calculations are based on centerline of construction.							See Notes at Bottom of Calc Sheet =>		(2)	(9)	(9)	(3)	(4)	(5)	(6)	(7)	(8)		(10)		(8)		(9) (11)	
26	192+50.00	193+35.00	RIGHT	85.00	16.70	4.24	1419.50	360.40	1059.10	54.21			117.68	7.20	7.99	10.00	10.88		6.57	0.14	1.11				21
27	193+35.00	195+25.00	RIGHT	190.00	19.00	6.55	3610.00	1244.50	2365.50	169.94			262.83	24.22	25.98	22.34	29.67		16.71	0.31	3.84				48

E:\ODOT\ProjectData\D12\103884_GEA-608\Design\Roadway\EngData\Pavement Calcs\GEA-608_Pavement Calcs_Stage 2.xlsx

GEA-608-3.09
PID 103884
EDG Project No. 17-00350-010
Pavement Quantity Calculations - Pre-Final

Calc by: SAC 02/07/2018
Check by: BJB 9/5/19
Update by: RMS 12/11/19 (Revise Item 209's to reflect note 9)

Pavement Legend Number (see Typical Sections) =>

CALCULATION ROW	STATION		SIDE	LENGTH L	AVERAGE PAVEMENT WIDTH P	AVERAGE WIDENING WIDTH W	PAVEMENT SURFACE AREA AP = L x P	PAVEMENT WIDENING AREA AW = L x W	SALVAGED PAVEMENT AREA AS = AP - AW	SUBGRADE COMPACTION	LINEAR GRADING, AS PER PLAN	PREPARE SUBGRADE FOR SHOULDER PAVING	PAVEMENT PLANING, ASPHALT CONCRETE (0.5" TYP.)	6" ASPHALT CONCRETE BASE, PG64-22	6" AGGREGATE BASE	NON-TRACKING TACK COAT (MILLED ASPHALT SURFACE) (AVE. RATE = 0.085 GAL/SY)	NON-TRACKING TACK COAT (NEW ASPHALT) (AVE. RATE = 0.055 GAL/SY)	NON-TRACKING TACK COAT (NEW ASPHALT) (AVE. RATE = 0.055 GAL/SY)	1.50" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG70-22M, AS PER PLAN	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG70-22M, AS PER PLAN (FOR SAFETY EDGE)	1.00" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448), PG64-22	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448), PG64-22, AS PER PLAN (VARIABLE DEPTH, 4" MAX)	CURB, TYPE 6	COMPACTED AGGREGATE, AS PER PLAN	LONGITUDINAL JOINT ADHESIVE
										8	13	14	7	5	6	2a	2b	2b	1		3	4	11	15	17 / 19
										204	209	209	254	301	304	407			441		441	441	609	617	875
										10000	60501	72050	01000	46000	20000	20000			50101		50300	50301	26000	10101	10000
	TO	FROM		FT	FT	FT	SQ FT	SQ FT	SQ FT	SQ YD	MILE	MILE	SQ YD		CU YD	GALLON			CU YD		CU YD	CU YD	FT	CU YD	LB
										[W + (#)] x L / 9	L / 5280	L / 5280	AS / 9	[6 x (AW + (# x L))] / (12 x 27)	[6 x (AW + (# x L))] / (12 x 27)	[0.085 x AS) / 9	[0.055 x (AP+AW)] / 9	(See Other Calcs)	(1.50 x AP) / (12 x 27)	[(2.5 x 5) x L] / (2 x 12 x 12 x 27)	(1.00 x AW) / (12 x 27)	(See Other Calcs)	L	[(1 x 24) x L] / (12 x 12 x 27)	L x # / 4
	All calculations are based on centerline of construction.							See Notes at Bottom of Calc Sheet =>		(2)	(9)	(9)	(3)	(4)	(5)	(6)	(7)	(8)		(10)		(8)		(9) (11)	
						(CADD)				# = (18 / 12)				# = 0	# = [(6)/12]										
28	195+25.00	198+11.36	RIGHT	286.36	19.00	5.92	5440.84	1695.25	3745.59	236.09			416.18	31.39	34.05	35.38	43.61		25.19		5.23		286.36		72
29	198+11.36	198+25.00	RIGHT	13.64	20.50	6.76	279.62	92.21	187.41	12.52			20.82	1.71	1.83	1.77	2.27		1.29		0.28		13.64		3
30	198+25.00	199+52.39	RIGHT	127.39	22.00	9.05	2802.58	1152.88	1649.70	149.33			183.30	21.35	22.53	15.58	24.17		12.97		3.56		127.39		32
31	199+52.39	200+58.96	RIGHT	(See SR 608 & Nauvoo Intersection (East Side), below)																					
						(CADD)				# = (18 / 12)				# = (4 / 12)	# = (10 / 12)										
32	200+58.96	201+60.00	RIGHT	101.04	19.00	8.24	1919.76	832.57	1087.19	109.35			120.80	16.04	16.98	10.27	16.82		8.89	0.16	2.57				25
						(CADD)				# = (18 / 12)				# = 0	# = [(6)/12]										
33	201+60.00	204+10.00	RIGHT	250.00	19.00	8.00	4750.00	2000.00	2750.00	263.89			305.56	37.04	39.35	25.97	41.25		21.99		6.17		250.00		63
						(CADD)				# = (18 / 12)				# = (4 / 12)	# = (10 / 12)										
34	204+10.00	208+88.00	RIGHT	478.00	19.00	6.74	9082.00	3221.72	5860.28	437.64			651.14	62.61	67.04	55.35	75.19		42.05	0.77	9.94				120
						(CADD)				# = (18 / 12)				# = 0	# = [(6)/12]										
35	208+88.00	212+97.13	RIGHT	409.13	19.00	6.56	7773.47	2683.89	5089.58	366.40			565.51	49.70	53.49	48.07	63.91		35.99		8.28		409.13		102
36	212+97.13	213+62.13	RIGHT	65.00	19.00	6.66	1235.00	432.90	802.10	58.93			89.12	8.02	8.62	7.58	10.19		5.72		1.34		65.00		16
37	213+62.13	216+62.00	RIGHT	299.87	19.00	6.65	5697.53	1994.14	3703.39	271.55			411.49	36.93	39.71	34.98	47.00		26.38		6.15		299.87		75
						(CADD)				# = (18 / 12)				# = (4 / 12)	# = (10 / 12)										
38	216+62.00	218+61.12	RIGHT	199.12	19.00	7.50	3783.28	1493.40	2289.88	199.12			254.43	28.88	30.73	21.63	32.25		17.52	0.32	4.61				50
39	218+61.12	219+26.12	RIGHT	65.00	19.00	7.96	1235.00	517.40	717.60	68.32			79.73	9.98	10.58	6.78	10.71		5.72	0.10	1.60				16
40	219+26.12	221+65.00	RIGHT	238.88	19.00	7.29	4538.72	1741.44	2797.28	233.31			310.81	33.72	35.94	26.42	38.38		21.01	0.38	5.37				60
						(CADD)				# = (18 / 12)				# = 0	# = [(6)/12]										
41	221+65.00	225+60.00	RIGHT	395.00	19.00	6.44	7505.00	2543.80	4961.20	348.48			551.24	47.11	50.76	46.86	61.41		34.75		7.85		395.00		99
						(CADD)				# = (18 / 12)				# = (4 / 12)	# = (10 / 12)										
42	225+60.00	226+50.00	RIGHT	90.00	19.00	6.35	1710.00	571.50	1138.50	78.50			126.50	11.14	11.97	10.75	13.94		7.92	0.14	1.76				23
															# = (18 / 12)										
43	226+50.00	231+25.00	RIGHT	475.00	19.00	6.62	9025.00	3144.50	5880.50	428.56			653.39	61.16	71.43	55.54	74.37		41.78	0.76	9.71				119
															# = (10 / 12)										
44	231+25.00	238+00.00	RIGHT	675.00	19.00	6.49	12825.00	4380.75	8444.25	599.25			938.25	85.29	91.54	79.75	105.15		59.38	1.09	13.52				169
45	238+00.00	238+50.00	RIGHT	50.00	21.50	9.31	1075.00	465.50	609.50	60.06			67.72	8.93	9.39	5.76	9.41		4.98	0.08	1.44				13
						(CADD)				# = (18 / 12)				# = 0	# = [(6)/12]										
46	238+50.00	239+79.26	RIGHT	129.26	24.00	12.08	3102.24	1561.46	1540.78	195.04			171.20	28.92	30.11	14.55	28.50		14.36		4.82		129.26		32

E:\ODOT\ProjectData\D12\103884_GEA-608\Design\Roadway\EngData\Pavement Calcs\GEA-608_Pavement Calcs_Stage 2.xlsx

GEA-608-3.09
PID 103884
EDG Project No. 17-00350-010
Pavement Quantity Calculations - Pre-Final

Calc by: SAC 02/07/2018
Check by: BJB 9/5/19
Update by: RMS 12/11/19 (Revise Item 209's to reflect note 9)

Pavement Legend Number (see Typical Sections) =>

CALCULATION ROW	STATION		SIDE	LENGTH L	AVERAGE PAVEMENT WIDTH P	AVERAGE WIDENING WIDTH W	PAVEMENT SURFACE AREA AP = L x P	PAVEMENT WIDENING AREA AW = L x W	SALVAGED PAVEMENT AREA AS = AP - AW	SUBGRADE COMPACTION	LINEAR GRADING, AS PER PLAN	PREPARE SUBGRADE FOR SHOULDER PAVING	PAVEMENT PLANING, ASPHALT CONCRETE (0.5" TYP.)	6" ASPHALT CONCRETE BASE, PG64-22	6" AGGREGATE BASE	NON-TRACKING TACK COAT (MILLED ASPHALT SURFACE) (AVE. RATE = 0.085 GAL/SY)	NON-TRACKING TACK COAT (NEW ASPHALT) (AVE. RATE = 0.055 GAL/SY)	NON-TRACKING TACK COAT (NEW ASPHALT) (AVE. RATE = 0.055 GAL/SY)	1.50" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG70-22M, AS PER PLAN	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG70-22M, AS PER PLAN (FOR SAFETY EDGE)	1.00" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448), PG64-22	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448), PG64-22, AS PER PLAN (VARIABLE DEPTH, 4" MAX)	CURB, TYPE 6	COMPACTED AGGREGATE, AS PER PLAN	LONGITUDINAL JOINT ADHESIVE
										204	209	209	254	301	304	407			441		441	441	609	617	875
										10000	60501	72050	01000	46000	20000	20000			50101		50300	50301	26000	10101	10000
	TO	FROM		FT	FT	FT	SQ FT	SQ FT	SQ FT	SQ YD	MILE	MILE	SQ YD		CU YD	GALLON			CU YD		CU YD	CU YD	FT	CU YD	LB
										[W + (#)] x L / 9	L / 5280	L / 5280	AS / 9	[6 x (AW + (# x L))] / (12 x 27)	[6 x (AW + (# x L))] / (12 x 27)	[0.085 x AS) / 9	[0.055 x (AP+AW)] / 9	(See Other Calcs)	(1.50 x AP) / (12 x 27)	[(2.5 x 5) x L] / (2 x 12 x 12 x 27)	(1.00 x AW) / (12 x 27)	(See Other Calcs)	L	[(1 x 24) x L] / (12 x 12 x 27)	L x # / 4
	All calculations are based on centerline of construction.							See Notes at Bottom of Calc Sheet =>		(2)	(9)	(9)	(3)	(4)	(5)	(6)	(7)	(8)		(10)		(8)		(9) (11)	
47	239+79.26	240+72.92	RIGHT	(See SR 608 & Burton-Windsor Intersection (East Side), below)																					
										# = (18 / 12)				# = 0	# = [(6)/12]										
48	240+72.92	249+19.44	RIGHT	846.52	19.00	9.50	16083.88	8041.94	8041.94	1034.64			893.55	148.92	156.76	75.95	147.44		74.46		24.82		846.52		212
49	249+19.44	249+84.44	RIGHT	65.00	19.00	9.50	1235.00	617.50	617.50	79.44			68.61	11.44	12.04	5.83	11.32		5.72		1.91		65.00		16
50	249+84.44	250+62.00	RIGHT	77.56	19.00	9.50	1473.64	736.82	736.82	94.80			81.87	13.64	14.36	6.96	13.51		6.82		2.27		77.56		19
										# = (18 / 12)				# = (4 / 12)	# = (10 / 12)										
51	250+62.00	252+72.55	RIGHT	210.55	19.00	9.50	4000.45	2000.23	2000.22	257.34			222.25	38.34	40.29	18.89	36.67		18.52	0.34	6.17				53
52	252+72.55	253+37.55	RIGHT	65.00	19.00	9.50	1235.00	617.50	617.50	79.44			68.61	11.84	12.44	5.83	11.32		5.72	0.10	1.91				16
53	253+37.55	265+00.00	RIGHT	1162.45	19.00	9.50	22086.55	11043.28	11043.27	1420.77			1227.03	211.68	222.44	104.30	202.46		102.25	1.87	34.08				291
54	265+00.00	266+25.00	RIGHT	125.00	17.10	7.60	2137.50	950.00	1187.50	126.39			131.94	18.36	19.52	11.22	18.87		9.90	0.20	2.93				31
55	266+25.00	266+50.00	RIGHT	25.00	14.85	5.35	371.25	133.75	237.50	19.03			26.39	2.63	2.86	2.24	3.09		1.72	0.04	0.41				6
	SR 608 - INTERSECTIONS									AW + (##) / 9				[6 x (AW + (###))] / (12 x 27)	[6 x (AW + (#####))] / (12 x 27)					[(2.5 x 5) x LS] / (2 x 12 x 12 x 27)					
	SR 608 & Nauvoo Road Intersection (East Side)																								
			LC (CADD)	= Curb Length	LS (CADD)	= Shoulder Length	(CADD)	(CADD)																	
56	199+52.39	200+23.58	59.49		7.42		3153.50	904.79	2248.71	111.68			249.86	16.80	17.42	21.24	24.80		14.60	0.01	2.79		59.49		
57	(Southeast Quadrant)																								
			LC (CADD)	= Curb Length	LS (CADD)	= Shoulder Length	(CADD)																		
58	200+23.58	200+58.96	0.00		83.81		1633.60	466.71	1166.89	65.83			129.65	9.16	9.94	11.02	12.84		7.56	0.13	1.44				
59	(Northeast Quadrant)																								
	SR 608 & Burton-Windsor Road Intersection (West Side)																								
			LC (CADD)	= Curb Length	LS (CADD)	= Shoulder Length	(CADD)	(CADD)																	
60	239+49.70	240+25.31	84.65		0.00		2727.92	506.38	2221.54	70.37			246.84	9.38	10.16	20.98	19.77		12.63		1.56		84.65		
	(Southwest Quadrant)																								
			LC (CADD)	= Curb Length	LS (CADD)	= Shoulder Length	(CADD)																		
61	240+25.31	240+73.28	0.00		77.72		1740.19	0.00	1740.19	12.95	0.000	0.015	193.35	0.48	1.20	16.44	10.63		8.06	0.12	0.00				
	(Northwest Quadrant)																								
	SR 608 & Burton-Windsor Road Intersection (East Side)																								
			LC (CADD)	= Curb Length	LS (CADD)	= Shoulder Length	(CADD)	(CADD)																	
62	239+79.26	240+23.88	32.63		10.62		1813.50	411.10	1402.40	52.89			155.82	7.68	8.08	13.24	13.59		8.40	0.02	1.27		32.63		
	(Southeast Quadrant)																								
			LC (CADD)	= Curb Length	LS (CADD)	= Shoulder Length	(CADD)																		
63	240+23.88	240+72.92	13.56		27.36		1503.45	339.41	1164.04	44.53			129.34	6.45	6.83	10.99	11.26		6.96	0.04	1.05		13.56		
	(Northeast Quadrant)																								

E:\ODOT\ProjectData\D12\103884_GEA-608\Design\Roadway\EngData\Pavement Calcs\GEA-608_Pavement Calcs_Stage 2.xlsx

GEA-608-3.09
PID 103884
EDG Project No. 17-00350-010
Pavement Quantity Calculations - Pre-Final

Calc by: SAC 02/07/2018
Check by: BJB 9/5/19
Update by: RMS 12/11/19 (Revise Item 209's to reflect note 9)

Pavement Legend Number (see Typical Sections) =>

CALCULATION ROW	STATION		SIDE	LENGTH L	AVERAGE PAVEMENT WIDTH P	AVERAGE WIDENING WIDTH W	PAVEMENT SURFACE AREA AP = L x P	PAVEMENT WIDENING AREA AW = L x W	SALVAGED PAVEMENT AREA AS = AP - AW	SUBGRADE COMPACTION	LINEAR GRADING, AS PER PLAN	PREPARE SUBGRADE FOR SHOULDER PAVING	PAVEMENT PLANING, ASPHALT CONCRETE (0.5" TYP.)	6" ASPHALT CONCRETE BASE, PG64-22	6" AGGREGATE BASE	NON-TRACKING TACK COAT (MILLED ASPHALT SURFACE) (AVE. RATE = 0.085 GAL/SY)	NON-TRACKING TACK COAT (NEW ASPHALT) (AVE. RATE = 0.055 GAL/SY)	NON-TRACKING TACK COAT (NEW ASPHALT) (AVE. RATE = 0.055 GAL/SY)	1.50" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG70-22M, AS PER PLAN	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG70-22M, AS PER PLAN (FOR SAFETY EDGE)	1.00" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448), PG64-22	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448), PG64-22, AS PER PLAN (VARIABLE DEPTH, 4" MAX)	CURB, TYPE 6	COMPACTED AGGREGATE, AS PER PLAN	LONGITUDINAL JOINT ADHESIVE
										204	209	209	254	301	304	407			441		441	441	609	617	875
										10000	60501	72050	01000	46000	20000	20000			50101		50300	50301	26000	10101	10000
	TO	FROM		FT	FT	FT	SQ FT	SQ FT	SQ FT	SQ YD	MILE	MILE	SQ YD		CU YD	GALLON			CU YD		CU YD	CU YD	FT	CU YD	LB
										[W + (#)] x L / 9	L / 5280	L / 5280	AS / 9	[6 x (AW + (# x L))] / (12 x 27)	[6 x (AW + (# x L))] / (12 x 27)	[0.085 x AS) / 9	[0.055 x (AP+AW)] / 9	(See Other Calcs)	(1.50 x AP) / (12 x 27)	[(2.5 x 5) x L] / (2 x 12 x 12 x 27)	(1.00 x AW) / (12 x 27)	(See Other Calcs)	L	[(1 x 24) x L] / (12 x 12 x 27)	L x # / 4
	All calculations are based on centerline of construction.									See Notes at Bottom of Calc Sheet => (2)	(9)	(9)	(3)	(4)	(5)	(6)	(7)	(8)		(10)		(8)		(9) (11)	
	SR 608 - CURB TAPERS									AW / 9				[6 x (AW)] / (12 x 27)	[6 x (AW)] / (12 x 27)										
							(CADD)	(CADD)																	
64	195+25.00		RIGHT				18.00	18.00	0.00	2.00				0.33	0.33	0.00	0.22		0.08		0.06				
65	201+60.00		RIGHT				18.00	18.00	0.00	2.00				0.33	0.33	0.00	0.22		0.08		0.06				
66	204+10.00		RIGHT				18.00	18.00	0.00	2.00				0.33	0.33	0.00	0.22		0.08		0.06				
67	208+88.00		RIGHT				18.00	18.00	0.00	2.00				0.33	0.33	0.00	0.22		0.08		0.06				
68	211+40.00		LEFT				18.00	18.00	0.00	2.00				0.33	0.33	0.00	0.22		0.08		0.06				
69	214+60.00		LEFT				18.00	18.00	0.00	2.00				0.33	0.33	0.00	0.22		0.08		0.06				
70	216+62.00		RIGHT				18.00	18.00	0.00	2.00				0.33	0.33	0.00	0.22		0.08		0.06				
71	221+65.00		RIGHT				18.00	18.00	0.00	2.00				0.33	0.33	0.00	0.22		0.08		0.06				
72	225+60.00		RIGHT				18.00	18.00	0.00	2.00				0.33	0.33	0.00	0.22		0.08		0.06				
73	238+38.00		LEFT				18.00	18.00	0.00	2.00				0.33	0.33	0.00	0.22		0.08		0.06				
74	250+62.00		RIGHT				18.00	18.00	0.00	2.00				0.33	0.33	0.00	0.22		0.08		0.06				
	BURTON-WINDSOR CURB TAPERS																								
75	9+30.74		RIGHT				6.36	6.36	0.00	0.71				0.12	0.12	0.00	0.08		0.03		0.02				
SUBTOTALS										11088.12	0.489	0.504	21302.80	1554.97	1680.56	1810.73	2165.92	1147.00	1264.23	16.74	251.10	611.00	4426.76	15.905	4793.97
TOTALS CARRIED TO GENERAL SUMMARY										**11088**	**0.5**	**0.5**	**21303**	**1555**	**1681**	**5124**			**1281**		**251**	**611**	**4427**	**16**	**4794**

Notes:
(1) Full depth sawcut and removal of existing pavement is to be included in the cost for Item 203 Excavation, as per CMS 203.04E
(2) As per CMS 204.03: include 18" beyond the edge of surface pavement.
(3) Pavement planing quantities for contract payment comprise of the pavement surface between the saw cut lines.
(4) For non-curbed section, include for 4" step.
(5) a. For non-curbed section, include for 10" step.
(5) b. For curbed section, account for aggregate base beneath the proposed curb (6" width).
(6) For planed pavement surface only.
(7) One layer for areas of resurfaced pavement. Two layers for areas of new pavement or for pavement widening.
(8) Variable depth "Leveling Course" quantities and associated tack coat are calculated on other work sheets and carried here to these calcs.
(9) Applies to safety edge construction. Applies only to resurfacing shoulders. Not applicable to curb sections.
(10) Estimated dimensions of wedge for safety edge: 2.5" high x 5" wide. Applies to widened pavement and resurfacing shoulders. Not applicable to curb sections.
(11) Estimated dimensions: 0.5" depth x 12" width. See General Notes.
(CADD) Indicates length or area as measured graphically from the computer design drawing.
(##) For subgrade compaction in the intersections, add [(18"/12) x (length of curb)] and [(18"/12) x (length of shoulder edge)].
(###) For asphalt concrete base in the intersections, add [(0"/12) x (length of curb)] and [(4"/12) x (length of shoulder edge)].
(####) For aggregate base in the intersections, add [(6"/12) x (length of curb)] and [(10"/12) x (length of shoulder edge)].