

Pavement Legend Number (see Typical Sections) =>

STATION	SIDE	LENGTH L	AVERAGE PAVEMENT WIDTH P	AVERAGE WIDENING WIDTH W	AVERAGE PAVEMENT REMOVAL WIDTH (CADD MEASURED), PR	PAVEMENT SURFACE AREA AP = L x P	PAVEMENT WIDENING AREA AW = L x W	SALVAGED PAVEMENT AREA AS = AP - AW	202	202	1	5	6	7	8	9	10	11	12	16	16			
									23000	23000	10000	01000	46000		20001	20000		50101		50300		609	609	
									PAVEMENT REMOVED	PAVEMENT REMOVED, ASPHALT (9)	SUBGRADE COMPACTION	PAVEMENT PLANING, ASPHALT CONCRETE (3" TYP.)	3" ASPHALT CONCRETE BASE, PG64-22	5" ASPHALT CONCRETE BASE, PG64-22	6" AGGREGATE BASE, AS PER PLAN	NON-TRACKING TACK COAT, (MILLED ASPHALT), (AVE. RATE = 0.085 GAL/SY)	NON-TRACKING TACK COAT, (NEW ASPHALT), (AVE. RATE = 0.055 GAL/SY)	1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22, AS PER PLAN	1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22, AS PER PLAN	1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448) (VARIABLE THICKNESS)	COMBINATION CURB AND GUTTER, TYPE 2	CURB, TYPE 6	
TO	FROM	FT	FT	FT	FT	SQ FT	SQ FT	SQ FT	SQ YD	SQ YD	SQ YD	SQ YD	CU YD	CU YD	GALLON	CU YD	CU YD	CU YD	CU YD	FT	FT			
<i>All calculations based on centerline of construction.</i>									<i>See Notes Below =></i>															
									$\frac{PR \times L}{9}$	$\frac{PR \times L}{9}$	$\frac{[W + (\#)] \times L}{9}$	$\frac{AS}{9}$	$\frac{[3 \times (AW + (\# \times L))]}{(12 \times 27)}$	$\frac{[5 \times (AW + (\# \times L))]}{(12 \times 27)}$	$\frac{[6 \times (AW + (\# \times L))]}{(12 \times 27)}$	$\frac{[0.085 \times AS]}{9}$	$\frac{[0.055 \times (AP+AW)]}{9}$	$\frac{[1.25 \times AP]}{(12 \times 27)}$	$\frac{[1.50 \times AP]}{(12 \times 27)}$	$\frac{[1.75 \times AP]}{(12 \times 27)}$	(See Other Calcs)	L	L	
											(1)	(2)	(3)	(3)	(4)	(5)	(6)			(7)				
											$\frac{AW + (\#)}{9}$		$\frac{5 \times [(AW + (4 / 12 \times S))]}{(12 \times 27)}$	$\frac{6 \times (AW+(\#\#) + (10/ 12 \times S))}{(12 \times 27)}$										
37	SR 687 & GOVERNERS AVE. INTERSECTION				S (CADD)	= Shoulder Length	(CADD)	(CADD)	(CADD)		$\frac{AW + (\#)}{9}$		$\frac{5 \times [(AW + (4 / 12 \times S))]}{(12 \times 27)}$	$\frac{6 \times (AW+(\#\#) + (10/ 12 \times S))}{(12 \times 27)}$							(CADD)			
	166+50.79	167+77.49	LEFT	(North Approach)	54.30		4487.17	3146.68	1340.47	167.33	414.32	148.94	48.84	69.89	12.66	46.65	17.31				232.88			
38	SR 687 & ARMANDALE AVE. INTERSECTION (to Sta. 49+70 Armandale Ave.)						2339.66	1399.06	940.60	15.29	155.45	104.51	21.59	25.91	8.88	22.85	9.03			12.64				
39	SR 687 & FLEETWOOD AVE. INTERSECTION						4827.35	4827.35		468.66	571.30		74.50	95.22		59.00	18.62			26.07		125.73		
40	180+14.36	181+07.89	RIGHT	(South Approach)			4909.09	4909.09		425.92	583.06		75.76	97.18		60.00	18.94			26.52		135.39		
41	SR 687 & BRUNNERDALE AVE. INTERSECTION						1801.36	0.00	1801.36			200.15			17.01	11.01	6.95			9.73		125.73	(CADD)	
42	186+87.61	187+30.00	LEFT	(Northwest Quadrant)			2659.62	866.88	1792.74	19.64	107.00	199.19	13.38	17.83	16.93	21.55	10.26			14.37		64.10		
43	ARMENDALE AVE. & YOST ST. INTERSECTION						1407.98	1407.98		30.63	179.29		13.04	29.88		8.60	5.43			7.60		82.26		
44	ARMENDALE AVE. & SR 687 INTERSECTION						971.76	971.76			130.82		9.00	21.80		5.94	3.75			5.25		82.26		
45	BRUNNERDALE AVE. & SR 687 INTERSECTION						1700.84	633.87	1066.97		20.24	80.91	118.55	9.78	13.49	10.08	14.27	6.56		9.19		62.88		
46	YOST ST. CUL-DE-SAC			(CADD)			(CADD)	(CADD)			$\frac{AW+(18/12 \times L)}{9}$		$\frac{[3 \times (AW+(4/12 \times L))]}{(12 \times 27)}$	$\frac{[6 \times (AW+(10/12 \times L))]}{(12 \times 27)}$		$\frac{0.055 \times AP}{9}$								
47	9+84.00	11+04.36	BOTH	318.16	<= cul-de-sac perimeter		8177.57	6515.16	1662.41	47.87	776.93	184.71	61.31	125.56	15.70	49.97				37.86				
	11+04.36	11+93.17	BOTH							212.44														
Notes:									(1) As per CMS 204.03: include 18" beyond the edge of surface pavement or include the width of the curb & gutter.															
									(2) Pavement planing quantities for contract payment comprise of the pavement surface between the saw cut lines. No planing in full depth replacement areas as per MOT sequence notes.															
									(3) For non-curbed section, include for 4" step.															
									(4) a. For curbed section, account for aggregate base beneath the proposed curb (6" width) or curb & gutter (30" width), whichever is present.															
									(4) b. For non-curbed section, include for 10" step.															
									(5) For planed pavement surface only.															
									(6) One layer for areas of resurfaced pavement. Two layers for areas of new pavement or for pavement widening.															
									(7) Variable depth "Leveling Course" quantities are calculated on other work sheets and carried here to these calcs.															
									(8) Add 160 LF of curb for between DR-12 and DR-13															
									(9) Pavement removed, asphalt differentiation provided for information only. Quantity is included in Pavement Removed pay item.															
									(CADD) Indicates length or area as measured graphically from the computer design drawing.															
									((#)) For subgrade compaction in the intersections, add [(30"/12) x (length of curb & gutter)] or [(18"/12) x (length of curb)].															
									(7)															
SUBTOTALS									3478.38	664.39	12638.87	6839.25	139.10	1328.59	2074.15	581.33	1550.18	572.30	65.74	833.78	158.05	4718.07	677.04	
TOTALS CARRIED TO GENERAL SUMMARY									4143	12639	6839	1468	2074	2132	638	992	4718	677						

STA-687-0.91
PID 87660
Pavement Quantity Calculations (Leveling Course) - Tracings

SR 687 (Fulton Drive NW)

LEFT SIDE QUANTITIES			LEFT SAWCUT					EXISTING		PROPOSED			RIGHT SAWCUT					RIGHT SIDE QUANTITIES			
Volume CY	Volume CF	End Area SF	Exist Elev -3"	Exist Elev at Sawcut	Prop Elev -3"	Prop Elev at Sawcut	Width to Sawcut	Exist PG -3"	Exist PG Elevation	Prop PG -3"	Prop PG Elevation	Station	Width to Sawcut	Prop Elev at Sawcut	Prop Elev -3"	Exist Elev at Sawcut	Exist Elev -3"	End Area SF	Volume CF	Volume CY	
								1104.07	1104.32	1104.23	1104.48	182+00.00									
Area of "Right" sawcut situated on the left side of SR 687 centerline. See "RT Sawcut on LT" calculations.								1103.19	1103.44	1103.54	1103.79	182+25.00	Area of "Right" sawcut situated on the left side of SR 687 centerline. See "RT Sawcut on LT" calculations.								
								1102.36	1102.61	1102.93	1103.18	182+50.00									
								1101.68	1101.93	1102.40	1102.65	182+75.00									
								1100.98	1101.23	1101.94	1102.19	183+00.00									
								1100.96	1101.21	1101.57	1101.82	183+25.00									
								1100.92	1101.17	1101.44	1101.69	183+35.00									
								1100.48	1100.73	1101.27	1101.52	183+50.00									
		0.00					1100.41	1100.66	1101.06	1101.31	183+75.00							0.00			
0.00	0.00	0.00	1100.64	1100.89	1100.56	1100.81	22.00	1100.53	1100.78	1100.92	1101.17	184+00.00	0.99	1101.17	1100.92	1100.78	1100.53	0.19	2.41	0.09	
0.00	0.00	0.00	1100.65	1100.90	1100.55	1100.80	22.00	1100.56	1100.81	1100.90	1101.15	184+05.00	1.29	1101.15	1100.90	1100.80	1100.55	0.23	1.05	0.04	
0.00	0.00	0.00	1100.72	1100.97	1100.54	1100.79	22.00	1100.64	1100.89	1100.86	1101.11	184+25.00	2.50	1101.10	1100.85	1100.86	1100.61	0.30	5.26	0.19	
0.00	0.00	0.00	1100.69	1100.94	1100.56	1100.81	24.00	1100.71	1100.96	1100.88	1101.13	184+50.00	4.00	1101.09	1100.84	1100.91	1100.66	0.36	8.25	0.31	
0.00	0.00	0.00	1100.92	1101.17	1100.69	1100.94	24.00	1100.83	1101.08	1100.98	1101.23	184+75.00	5.51	1101.14	1100.89	1101.04	1100.79	0.28	7.94	0.29	
0.00	0.00	0.00	1101.09	1101.34	1100.87	1101.12	24.00	1101.02	1101.27	1101.16	1101.41	185+00.00	7.01	1101.30	1101.05	1101.23	1100.98	0.25	6.51	0.24	
0.00	0.00	0.00	1101.26	1101.51	1101.13	1101.38	24.00	1101.22	1101.47	1101.41	1101.66	185+25.00	8.52	1101.53	1101.28	1101.41	1101.16	0.51	9.46	0.35	
0.00	0.00	0.00	1101.52	1101.77	1101.46	1101.71	24.00	1101.58	1101.83	1101.75	1102.00	185+50.00	9.82	1101.84	1101.59	1101.61	1101.36	1.13	20.51	0.76	
0.28	7.50	0.60	1101.83	1102.08	1101.88	1102.13	24.00	1101.94	1102.19	1102.16	1102.41	185+75.00	10.59	1102.24	1101.99	1101.97	1101.72	1.43	31.99	1.18	
0.94	25.50	1.44	1102.20	1102.45	1102.32	1102.57	24.00	1102.32	1102.57	1102.61	1102.86	186+00.00	11.36	1102.68	1102.43	1102.37	1102.12	1.76	39.88	1.48	
1.44	39.00	1.68	1102.63	1102.88	1102.77	1103.02	24.00	1102.79	1103.04	1103.05	1103.30	186+25.00	12.14	1103.11	1102.86	1102.75	1102.50	2.19	49.33	1.83	
1.33	36.00	1.20	1103.11	1103.36	1103.21	1103.46	24.00	1103.33	1103.58	1103.50	1103.75	186+50.00	12.91	1103.54	1103.29	1103.24	1102.99	1.94	51.52	1.91	
0.56	15.00	0.00	1103.75	1104.00	1103.66	1103.91	24.00	1103.87	1104.12	1103.94	1104.19	186+75.00	13.68	1103.97	1103.72	1103.72	1103.47	1.71	45.58	1.69	
0.00	0.00	0.00	1103.99	1104.24	1103.84	1104.09	24.00	1104.09	1104.34	1104.13	1104.38	186+85.22	14.00	1104.15	1103.90	1103.92	1103.67	1.61	16.97	0.63	

29.15 CY <= SR 687 Left Side subtotal, carried to subtotals below

SR 687 Right Side subtotal, carried to subtotals below => 28.93

Project Totals

- 29.15 CY from SR 687 Left Side subtotal (above)
- 28.93 CY from SR 687 Right Side subtotal (above)
- 69.68 CY from "RT Sawcut on LT" calcs
- 30.29 CY From Brunnerdale calcs

158.05 CY Total Leveling Course (Carry to Pavement Quantities Calculations)

SR 687 (Fulton Drive NW) - "RT Sawcut on LT" calculations

"LEFT SIDE" QUANTITIES								RIGHT SAWCUT (Left of Crown)					LEVELING (RT Sawcut on LT)				RIGHT SAWCUT (Right of Crown & Left of Centerline)					EXISTING		PROPOSED		
Volume CY	Volume CF	End Area SF	Exist Elev -3"	Exist Elev at Sawcut	Prop Elev -3"	Prop Elev at Sawcut	Width to Sawcut	Exist Elev -3"	Exist Elev at Sawcut	Prop Elev -3"	Prop Elev at Sawcut	Width Sawcut	Exist Elev -3"	Exist Elev at Crown	Prop Elev -3"	Prop Elev at Crown	Exist Elev -3"	Exist Elev at Sawcut	Prop Elev -3"	Prop Elev at Sawcut	Width btwn Crown & Sawcut	Exist PG -3"	Exist PG Elevation	Prop PG -3"	Prop PG Elevation	Station
		0.00																				1106.53	1106.78	1105.85	1106.10	181+50.00
																						1105.20	1105.45	1105.00	1105.25	181+75.00
2.80	75.59	6.05	1102.65	1102.90	1103.11	1103.36	20.50	1103.80	1104.05	1103.93	1104.18	1.50										1104.07	1104.32	1104.23	1104.48	182+00.00
6.16	166.22	7.25	1102.00	1102.25	1102.42	1102.67	20.14	1102.93	1103.18	1103.23	1103.48	1.86										1103.19	1103.44	1103.54	1103.79	182+25.00
9.04	244.21	12.29	1101.31	1101.56	1101.96	1102.21	20.65	1102.14	1102.39	1102.68	1102.93	1.35										1102.36	1102.61	1102.93	1103.18	182+50.00
11.72	316.32	13.02	1100.88	1101.13	1101.58	1101.83	21.88	1101.73	1101.98	1102.22	1102.47	0.12										1101.68	1101.93	1102.40	1102.65	182+75.00
12.88	347.81	14.81	1100.65	1100.90	1101.28	1101.53	22.00						1101.02	1101.27	1101.80	1102.05	1101.02	1101.27	1101.83	1102.08	1.19	1100.98	1101.23	1101.94	1102.19	183+00.00
11.05	298.45	9.07	1100.75	1101.00	1101.06	1101.31	22.00						1100.61	1100.86	1101.46	1101.71	1100.56	1100.81	1101.51	1101.76	2.50	1100.96	1101.21	1101.57	1101.82	183+25.00
3.52	95.05	9.94	1100.66	1100.91	1100.99	1101.24	22.00	1100.66	1100.91	1100.99	1101.24	22.00	1100.53	1100.78	1101.35	1101.60	1100.48	1100.73	1101.40	1101.65	3.08	1100.92	1101.17	1101.44	1101.69	183+35.00
5.43	146.49	9.59	1100.56	1100.81	1100.85	1101.10	22.00						1100.45	1100.70	1101.20	1101.45	1100.39	1100.64	1101.25	1101.50	3.99	1100.48	1100.73	1101.27	1101.52	183+50.00
7.09	191.32	5.71	1100.55	1100.80	1100.66	1100.91	22.00						1100.46	1100.71	1101.02	1101.27	1100.41	1100.66	1101.05	1101.30	5.49	1100.41	1100.66	1101.06	1101.31	183+75.00
																						1100.53	1100.78	1100.92	1101.17	184+00.00
																						1100.56	1100.81	1100.90	1101.15	184+05.00

69.68 CY <= SR 687 "Rt Sawcut on LT" subtotal, carried to Project Totals on SR 687 (Fulton Drive) calcs.

STA-687-0.91

PID 87660

Pavement Quantity Calculations (Leveling Course) - Tracings

Calc by: RMS 01/2019

Check by: SAC 06/24/2020

Update by: SAC 10/28/2020

Brunnerdale

LEFT SIDE QUANTITIES			LEFT SAWCUT					EXISTING		PROPOSED			RIGHT SAWCUT					RIGHT SIDE QUANTITIES		
Volume CY	Volume CF	End Area SF	Exist Elev - 3"	Exist Elev at Sawcut	Prop Elev - 3"	Prop Elev at Sawcut	Width to Sawcut	Exist PG - 3"	Exist PG Elevation	Prop PG - 3"	Prop PG Elevation	Station	Width to Sawcut	Prop Elev at Sawcut	Prop Elev - 3"	Exist Elev at Sawcut	Exist Elev - 3"	End Area SF	Volume CF	Volume CY
--	--	0.00	1102.77	1103.02	1102.77	1103.02	14.00	1103.18	1103.43	1103.18	1103.43	195+40.50	13.00	1103.30	1103.05	1103.30	1103.05	0.00	--	--
0.00	0.00	0.00	1102.67	1102.92	1102.67	1102.92	14.31	1103.01	1103.26	1103.01	1103.26	195+50.00	13.00	1103.15	1103.15	1103.15	1102.90	1.63	7.72	0.29
0.00	0.00	0.00	1102.06	1102.31	1102.06	1102.31	15.45	1102.40	1102.65	1102.41	1102.66	195+85.00	13.00	1102.45	1102.20	1102.44	1102.19	0.06	29.57	1.10
0.00	0.00	0.00	1101.95	1102.20	1101.95	1102.20	15.94	1102.24	1102.49	1102.24	1102.49	196+00.00	13.41	1102.28	1102.03	1102.26	1102.01	0.13	1.49	0.06
0.00	0.00	0.00	1101.26	1101.51	1101.26	1101.51	17.57	1101.73	1101.98	1101.74	1101.99	196+50.00	14.77	1101.75	1101.50	1101.57	1101.32	1.33	36.58	1.35
0.00	0.00	0.00	1101.26	1101.51	1101.26	1101.51	18.00	1101.61	1101.86	1101.64	1101.89	196+63.26	15.13	1101.65	1101.40	1101.57	1101.32	0.61	12.83	0.48
0.00	0.00	0.00	1101.52	1101.77	1101.52	1101.77	17.88	1101.43	1101.68	1101.48	1101.73	197+00.00	16.13	1101.47	1101.22	1100.85	1100.60	5.00	102.97	3.81
0.00	0.00	0.00	1100.94	1101.19	1100.94	1101.19	18.00	1101.59	1101.84	1101.52	1101.77	197+50.00	17.00	1101.50	1101.25	1101.24	1100.99	2.21	180.26	6.68
0.00	0.00	0.00	1101.31	1101.56	1101.31	1101.56	18.09	1101.94	1102.19	1101.84	1102.09	197+99.16	17.00	1101.82	1101.57	1101.70	1101.45	1.02	79.39	2.94
0.00	0.00	0.00	1101.95	1102.20	1101.95	1102.20	17.83	1102.53	1102.78	1102.47	1102.72	198+50.00	17.00	1102.45	1102.20	1102.27	1102.02	1.53	64.82	2.40
0.00	0.00	0.00	1103.14	1103.39	1103.14	1103.39	19.27	1103.34	1103.59	1103.37	1103.62	199+00.00	17.00	1103.35	1103.10	1102.51	1102.26	7.14	216.75	8.03
0.00	0.00	0.00	1103.65	1103.90	1103.65	1103.90	19.30	1103.79	1104.04	1103.87	1104.12	199+26.06	17.00	1103.85	1103.60	1104.08	1103.83	0.00	93.03	3.45

0.00 CY <= Brunnerdale Left Side subtotal, carried to subtotals below

Brunnerdale Right Side subtotal, carried to subtotals below => 30.29

0.00 CY from Brunnerdale Left Side subtotal (above)

30.29 CY from Brunnerdale Right Side subtotal (above)

30.29 CY Brunnerdale total, carried to Project Totals on SR 687 (Fulton Drive) calcs