

COMPUTATIONS FOR CAPACITIES OF SANITARY SEWER																	HALIFAX REGIONAL MUNICIPALITY										
OPAL RIDGE (JOB # 20-7306)																	DATE: January 14, 2025										
*Select areas and populations from Table 2 & 3, SDMM Wastewater Report, dated September 7, 2018																											
	MANHOLE NUMBER		AREA		DENSITY									PIPE CAPACITY													
Location	U/S Manhole	D/S Manhole	Development Area (Ha)	Cumulative Development Area (Ha)	Land Use	Single Units	Cumulative Single Units	Multi Units	Cumulative Multi Units	SDMM Population*	Cumulative SDMM Population*	Cumulative Design Population	Peaking Factor	Dry Weather Peak Flow (L/s)	Infiltration (L/s)	Total Peak Flow, Q (L/s)	Pipe Diameter (m)	Slope (%)	Manning's N	Full Capacity (Qfull) (L/s)	Q/Qfull	Dry Q/Qfull	VV/full	Dry VV/full	Full Velocity (m/s)	Partial Velocity (m/s)	Dry Partial Velocity (m/s)
To Peddars Way (Route 1)																											
Opalridge Drive	MHOPS01	MHOPS02	0.95	0.95	Res/Comm.		0		0	148.75	148.75	149	4.2	2.71	0.26	2.97	0.200	0.56	0.01	31.91	0.093	0.085	0.626	0.608	1.02	0.64	0.62
	MHOPS02	MHBHS01	0.87	1.82	Residential		0		0		148.75	149	4.2	2.71	0.51	3.21	0.200	0.56	0.01	31.91	0.101	0.085	0.640	0.608	1.02	0.65	0.62
	MHBHS01	MHBHS02	0.87	2.69	Residential		0	571	571		148.75	1434	3.7	22.98	0.75	23.73	0.200	1.42	0.01	50.81	0.467	0.452	0.983	0.974	1.62	1.59	1.58
	MHBHS02	MHBHS03	0.02	2.71	Residential		0		571		148.75	1434	3.7	22.98	0.75	23.73	0.200	0.50	0.01	30.15	0.787	0.762	1.107	1.101	0.96	1.06	1.06
	MHBHS03	Pipe A*		2.71	Residential		0		571		148.75	1434	3.7	22.98	0.75	23.73	0.200	1.84	0.01	57.84	0.410	0.397	0.950	0.942	1.84	1.75	1.74
Area 1-1 & 1-2*	Pipe A*		12.97	15.68	Residential		0		571	1558.08	1706.83	2992	3.4	44.71	4.36	49.07	0.300	0.43	0.013	63.41	0.774	0.705	1.104	1.083	0.90	0.99	0.97
Area 1-3*	Pipe B*		2.34	18.02	Residential		0		571	148.24	1855.07	3140	3.4	46.68	5.01	51.69	0.300	0.41	0.013	61.92	0.835	0.754	1.119	1.098	0.88	0.98	0.96
Area 1-4*	Pipe C*		0.75	18.77	Residential		0		571	48.96	1904.03	3189	3.4	47.33	5.21	52.54	0.300	0.65	0.013	77.96	0.674	0.607	1.073	1.048	1.10	1.18	1.16
Area 1-5*	Pipe D*		12.01	30.78	Residential		0		571	679.28	2583.31	3868	3.3	56.18	8.55	64.73	0.300	0.51	0.013	69.06	0.937	0.814	1.137	1.114	0.98	1.11	1.09
Area 1-6*	Pipe E*		0.38	31.16	Residential		0		571	20.16	2603.47	3888	3.3	56.44	8.66	65.09	0.375	0.55	0.013	130.02	0.501	0.434	1.000	0.964	1.18	1.18	1.13
Area 1-7*	Pipe F*		0.78	31.94	Residential		0		571	38.88	2642.35	3927	3.3	56.94	8.87	65.81	0.375	0.46	0.013	118.91	0.553	0.479	1.025	0.989	1.08	1.10	1.06
Area 1-8*	Pipe G*		0.34	32.28	Residential		0		571	20.88	2663.23	3948	3.3	57.20	8.97	66.17	0.375	0.94	0.013	169.98	0.389	0.337	0.937	0.901	1.54	1.44	1.39
Area 1-9*	Pipe H*		0.37	32.65	Residential		0		571	20.88	2684.11	3969	3.3	57.47	9.07	66.54	0.375	1.07	0.013	181.36	0.367	0.317	0.923	0.886	1.64	1.52	1.46
Area 1-10*	Pipe I*		3.92	36.57	Residential		0		571	218.16	2902.27	4187	3.3	60.25	10.16	70.41	0.375	0.92	0.013	168.17	0.419	0.358	0.955	0.916	1.52	1.45	1.40
Area 1-11*	Pipe J*		0.51	37.08	Residential		0		571	24.48	2926.75	4212	3.3	60.56	10.30	70.86	0.375	1.01	0.013	176.20	0.402	0.344	0.945	0.907	1.60	1.51	1.45
Area 1-12*	Pipe K*		0.45	37.53	Residential		0		571	12.96	2939.71	4224	3.3	60.73	10.42	71.15	0.375	1.83	0.013	237.18	0.300	0.256	0.873	0.837	2.15	1.88	1.80
Area 1-13*	Pipe L*		0.85	38.38	Residential		0		571	51.12	2990.83	4276	3.3	61.37	10.66	72.03	0.375	1.93	0.013	243.57	0.296	0.252	0.870	0.833	2.21	1.92	1.84
Area 1-14*	Pipe M*		2.85	41.23	Residential		0		571	203.32	3194.15	4479	3.3	63.94	11.45	75.39	0.375	0.78	0.013	154.84	0.487	0.413	0.993	0.951	1.40	1.39	1.33
Area 1-15*	Pipe N*		0.63	41.86	Residential		0		571	35.01	3229.16	4514	3.3	64.38	11.63	76.00	0.375	6.10	0.013	433.02	0.176	0.149	0.752	0.717	3.92	2.95	2.81
Area 1-16*	Pipe O*		7.81	49.67	Residential		0		571	405.51	3634.67	4919	3.3	69.43	13.80	83.22	0.500	6.94	0.013	994.70	0.084	0.070	0.606	0.574	5.07	3.07	2.91
Area 1-17*	Pipe P*		0.33	50.00	Residential		0		571	19.5	3654.17	4939	3.2	69.67	13.89	83.56	0.500	8.56	0.013	1104.72	0.076	0.063	0.589	0.558	5.63	3.31	3.14
Area 1-18*	Pipe Q*		0.90	50.90	Residential		0		571	46.08	3700.25	4985	3.2	70.24	14.14	84.37	0.500	1.58	0.013	474.62	0.178	0.148	0.754	0.715	2.42	1.82	1.73
Area 1-19*	Pipe R*		0.42	51.32	Residential		0		571	24.41	3724.66	5009	3.2	70.54	14.26	84.79	0.500	2.39	0.013	583.73	0.145	0.121	0.712	0.674	2.97	2.12	2.01
Area 1-20*	Pipe S*		0.40	51.72	Residential		0		571	24.4	3749.06	5034	3.2	70.84	14.37	85.20	0.375	6.57	0.013	449.39	0.190	0.158	0.769	0.729	4.07	3.13	2.97
To Highway 111 (Route 2)																											
Morado Lane	MHMDS04	MHMHS03	0.74	0.74	Residential	5	5	75	75			186	4.2	3.35	0.20	3.55	0.200	1.15	0.01	45.72	0.078	0.073	0.593	0.583	1.46	0.86	0.85
	MHMHS03	MHMDS02	0.36	1.10	Residential	11	16		75			222	4.1	3.99	0.31	4.29	0.200	0.84	0.01	39.08	0.110	0.102	0.656	0.642	1.24	0.82	0.80
	MHMDS02	MHMDS01	0.19	1.29	Residential	10	26		75			256	4.1	4.56	0.36	4.92	0.200	0.71	0.01	35.93	0.137	0.127	0.699	0.684	1.14	0.801	0.78
	MHMDS01	MHOPS03	0.66	1.94	Residential		26	104	179			490	4.0	8.46	0.54	9.00	0.200	1.20	0.01	46.71	0.193	0.181	0.772	0.759	1.49	1.15	1.13
Opalridge Drive	MHOPS03	MHOPS04	0.23	2.17	Residential		26	320	499			1210	3.7	19.67	0.60	20.27	0.200	1.57	0.01	53.42	0.379	0.368	0.931	0.923	1.70	1.58	1.57
	MHOPS04	MHOPS05	1.31	3.48	Residential		26	0	499			1210	3.7	19.67	0.97	20.63	0.200	0.65	0.01	34.37	0.600	0.572	1.045	1.033	1.09	1.14	1.13
Morado Lane	MHMDS05	MHMDS06	0.12	0.12	Residential	8	8		0			27	4.4	0.51	0.03	0.54	0.200	4.18	0.01	87.17	0.006	0.006	0.277	0.270	2.77	0.77	0.75
	MHMDS06	MHMDS07	0.85	0.98	Residential	6	14	126	126			330	4.1	5.82	0.27	6.09	0.200	0.69	0.01	35.42	0.172	0.164	0.747	0.738	1.13	0.84	0.83
	MHMDS07	MHMDS08	0.20	1.18	Residential	4	18		126			344	4.1	6.05	0.33	6.37	0.200	0.69	0.01	35.42	0.180	0.171	0.757	0.746	1.13	0.85	0.84
	MHMDS08	MHMDS09	0.08	1.25	Residential		18		126			344	4.1	6.05	0.35	6.40	0.200	0.67	0.01	34.90	0.183	0.173	0.760	0.749	1.11	0.84	0.83
	MHMDS09	MHMDS10	0.14	1.39	Residential		18		126			344	4.1	6.05	0.39	6.43	0.200	0.60	0.01	33.03	0.195	0.183	0.775	0.760	1.05	0.81	0.80
	MHMDS10	MHMDS11	0.10	1.49	Residential		18		126			344	4.1	6.05	0.41	6.46	0.200	0.66	0.01	34.64	0.187	0.175	0.765	0.750	1.10	0.84	0.83
	MHMDS11	MHOPS05	0.06	1.55	Residential		18	104	230			578	3.9	9.88	0.43	10.31	0.200	1.69	0.01	55.43	0.186	0.178	0.765	0.754	1.76	1.35	1.33
		from MHOPS04		3.48			26		499																		