

Appendix C

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**Sanitary Study**



Legend

- Sanitary Sewer Manholes
- ▶ Sanitary Sewers
- Combined Sewer Manholes
- ▶ Combined Sewers
- Dual Manholes
- Street Centreline
- ▭ Parcels



1:7,162

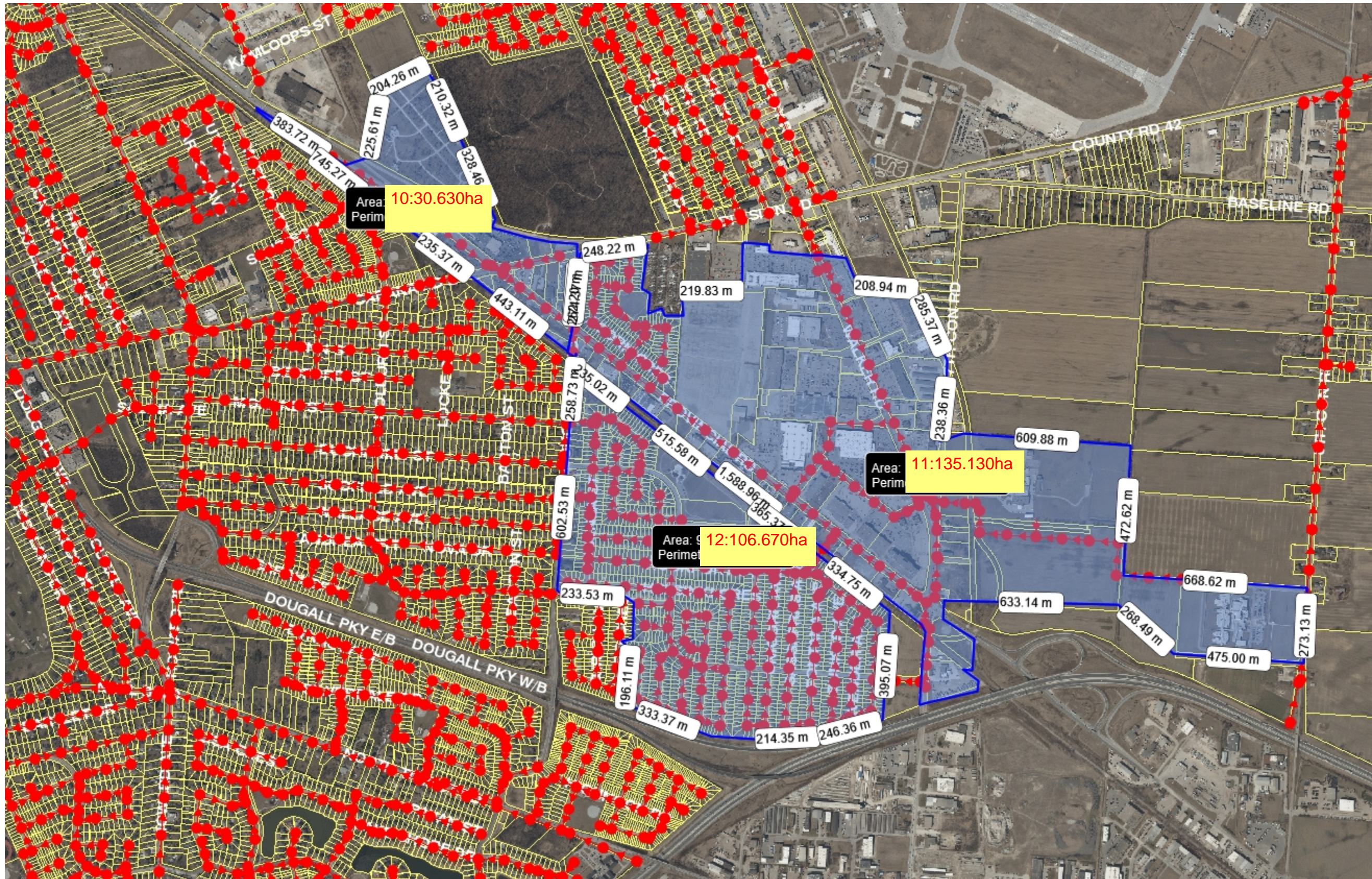
363.8 0 181.91 363.8Meters

Notes



Legend

- Sanitary Sewer Manholes
- Sanitary Sewers
- Combined Sewer Manholes
- Combined Sewers
- Dual Manholes
- Street Centreline
- Parcels



1: 14,324

727.6 0 363.82 727.6 Meters

Notes

**6TH CONCESSION ROAD PROPOSED APARTMENT BUILDING  
SANITARY SEWER DESIGN SHEET (Ultimate D.A Design)**

Land Use	Population Density Code	AVERAGE DAILY PER CAPITA FLOW PEAK EXTRANEIOUS FLOW	0.0042 L/s/c 363 L/cap/day 0.156 L/ha/s	According To City Windsor development manual = 0.0042 L/s/cap = 0.0042x24x60x60 = 363 L/cap/day	Project : 6TH CONCESSION ROAD PROPOSED APARTMENT BUILDING
Residential	50 Persons/ha	VELOCITY RANGE	0.75 m/s to 3 m/s	MOE HARMON PEAKING FACTOR	Client : PAWAN
Commercial	74 Persons/ha	MINIMUM PIPE SIZE	200 mm	M = 1 + 14/ 4+P^0.5	
Industrial	62 Persons/ha			P = DESIGN POPULATION, IN THOUSANDS	
Institutional	22 Persons/ha			M = PEAKING FACTOR	

LOCATION				DESIGN DATA					SEWER DATA										PROFILE				
STREET OR EASEMENT	Area Included	From Node	To Node	DESIGN AREA SERVED (ha)		LOTS/UNITS	DESIGN POPULATION (PERSONS)		PEAKING FACTOR	MAXIMUM FLOW			Dia. (m) Actual	Dia. (mm)	Type	Manning's "n"	Slope (%)	Length (m)	Capacity (L/s)	Velocity (m/s)	Ratio (%)	Upstream Elevation	Downstream Elevation
				INCREMENT	TOTAL		INCREMENT	TOTAL		INFILTRATION (L/s)	SEWAGE (L/S)	TOTAL SEWAGE AND INFILTRATION (L/s)										Invert (m)	Invert (m)
6TH CONESSION ROAD	A1	PROPOSED BUILDING	SPAGO CRES JUNCTION	0.840	0.840	27	95	95	4.25	0.131	1.69	1.82	0.250	250	PVC	0.013	0.39%	104.83	37.142	0.76	4.90	187.467	187.058
HOLBURN STREET / ZURICH ROAD	A1+A2	MH 7S4615	MH 7S4661	8.810	9.650	120	441	535	3.96	1.505	8.90	10.40	0.250	250	PVC	0.013	0.39%	75.02	37.142	0.76	28.01	186.756	186.463
HOLBURN STREET / PROVIDENEC CRESCENT	A1+A2+A3	MH 7S3990	MH 7S3989	16.960	26.610	180	848	1383	3.70	4.151	21.53	25.68	0.300	300	PVC	0.013	0.30%	46.00	52.972	0.75	48.47	183.885	183.747
HOLBURN PARK	A4	MH 7S4732	MH 7S3987	2.200	2.200		0	0	0.00	0.343	0.00	0.34	0.300	300	PVC	0.013	0.34%	25.70	56.393	0.80	0.61	183.402	183.315
MARLO CRT/ HOLBURN STREET	A1-A5	MH 7S3987	MH 7S3986	8.180	36.990	90	409	1792	3.62	5.770	27.27	33.04	0.300	300	PVC	0.013	0.34%	57.50	56.393	0.80	58.59	183.256	183.061
HOLBURN STREET/NOVA STREET	A1-A6	MH 7S3071	MH 7S10150	9.230	46.220	66	462	2254	3.54	7.210	33.56	40.77	0.300	300	PVC	0.013	0.25%	96.02	48.357	0.68	84.32	181.076	180.836
HOLBURN STREET/WALLACE AVENUE	A1-A7	MH 7S10150	MH 7S2596	6.560	52.780	56	328	2582	3.50	8.234	37.93	46.16	0.300	300	PVC	0.013	0.25%	101.02	48.357	0.68	95.46	180.838	180.585
HOLBURN STREET/SCOFIELD AVENUE	A1-A8	MH 7S2596	MH 7S2599	6.470	59.250	49	324	2905	3.45	9.243	42.16	72.93	0.375	375	PVC	0.013	0.34%	127.03	102.247	0.93	71.33	180.598	180.166
HOLBURN STREET/DUCHARME	A1-A9	MH 7S2602	MH 7S2603	9.590	68.840	49	480	3385	3.40	10.739	48.31	59.05	0.450	450	PVC	0.013	0.24%	78.02	139.691	0.88	42.27	179.997	179.810
WEST PROVINCIAL RD	A10	MH 7S3087	MH 7S3086	30.630	30.630		2267	2267	4.25	4.778	40.43	45.20	0.300	300	PVC	0.013	0.37%	126.10	58.828	0.83	76.84	181.844	181.377
EAST PROVINCIAL RD	A11	MH 7S3647	MH 7S3086	135.130	135.130		9666	9666	3.18	21.080	128.99	150.07	0.600	600	PVC	0.013	0.15%	107.12	237.836	0.84	63.10	180.899	180.738
6TH CONESSION ROAD / PROVINCIAL	A10,A11	MH 7S3086	MH 7S3085	0.000	165.760		0	11932	3.05	25.859	152.67	178.53	0.675	675	PVC	0.013	0.08%	65.22	237.785	0.66	75.08	180.720	180.668
6TH CONESSION ROAD / MORAND STREET	A10-A12	MH7S10157	MH7S10158	106.670	272.430		5531	17463	2.82	42.499	207.04	249.54	0.750	750	PVC	0.013	0.56%	138.80	833.208	1.89	29.95	180.924	180.147
MORAND ST TRUNK SEWER	A1-A13	MH 7S2603	MH 7S2604	9.348	350.618		467	21315	2.71	54.696	242.83	297.53	0.900	900	PVC	0.013	0.06%	126.52	443.491	0.70	67.09	179.610	179.534



Design By:	Kolja Nikac		
PROJECT NO:	21-150	6TH CONCESSION ROAD PROPOSED APARTMENT BUILDING	Checked:
			G.S.