EXCELLENCE IN ENVIRONMENTAL CONSULTING SERVICES

XCG File #3-1950-04-01

November 12, 2008

TECHNICAL MEMORANDUM NO. 1

PROJECTED FUTURE SERVICE POPULATION AND AVERAGE DAY WASTEWATER FLOWS VICTORIA HARBOUR WWTP CLASS EA

Prepared for:

TOWNSHIP OF TAY
250 Park St.
Victoria Harbour, Ontario
L0K 2A0

Attention: Mr. Jamey Adams

Prepared by:

XCG CONSULTANTS LTD.
2620 Bristol Circle
Suite 300
Oakville, Ontario
L6H 6Z7

XCG Consultants Ltd.
2620 Bristol Circle
Suite 300
Oakville, ON
L6H 6Z7
Tel: (905) 829-8880
Fax: (905) 829-8890
toronto@xcg.com

TABLE OF CONTENTS

TABLES

APPENDICES

1. INTRODUCTION

1.1 Background

The Victoria Harbour Wastewater Treatment Plant (WWTP), constructed in 1982, services the community of Victoria Harbour in the Township of Tay (the Township). The WWTP is an extended aeration plant with tertiary filtration, with final effluent discharging to Sturgeon Bay of Georgian Bay. The rated average day flow capacity of the works is 2,364 m^3/d. The plant was constructed with provision for future expansion to an average day flow capacity of 4,728 m^3/d utilizing the conventional activated sludge process.

The Victoria Harbour WWTP is currently operating at approximately 75 percent of its rated average day flow capacity. To meet the servicing requirements of future growth in the service area, the Victoria Harbour WWTP may have to be expanded beyond its existing rated capacity. As such, this project is a "Schedule C" activity under the Municipal Class Environmental Assessment (Class EA) process. XCG Consultants Ltd. and R.J. Burnside & Associates Ltd. have been retained by the Township to provide engineering services for the Class EA of the Victoria Harbour WWTP.

This Technical Memorandum (TM) presents the preliminary future average day flow (ADF) projections for various design years for the Victoria Harbour WWTP service are based on planning projections for growth within the Township.

1.2 Objectives

The objectives of this TM are to:

1. Identify existing and future residential and non-residential wastewater servicing needs;
2. Identify potential future septage generation rates for the Township; and
3. Determine projected average day flow (ADF) values for the Victoria Harbour WWTP service area for two design years, namely 2031 and Build-out.

2. EXISTING AND FUTURE SERVICING NEEDS

2.1 Residential Population

The existing and projected future residential service population for the Victoria Harbour WWTP service area is presented in Table 2.1. Two future design years were selected, namely 2031 and Build-out.

The existing service population is based on 2008 Municipal Property Assessment Corporation (MPAC) data provided by the Township, and 2001 Census information for the Township.

The projected service populations are based on residential unit growth projections provided by Watson & Associates Economists Ltd. (Watson) on behalf of the Township (see Appendix A). The projected service populations shown in Table 2.1 are based on a constant person per unit (PPU) value of 2.65 for new growth, with no decline in the population within the existing service area. Therefore, these population projections are slightly different than those shown in Appendix A, as Waton's population projections are based on a variable PPU value due to an assumed decrease in the population within the existing service area.

The projected service populations do not include an allowance for future servicing of Waubaushene at the Victoria Harbour WWTP.

Table 2.1 Existing and Projected Residential Population for the Victoria Harbour WWTP Service Area

Parameter	Year		
	2008	2031	Build-out
No. of Residential Units	1,332 (1)	1,895 (2)	2,776 (3)
Service Population based on a PPU value of 2.65	3,530 (4)	5,022	7,357

Notes:

1. Based on 2008 residential property information from MPAC, provided by the Township. The total includes 1,137 permanent residential properties, and 195 seasonal residential properties.
2. As per Watson's growth projections (see Appendix A). For the purposes of this assessment, seasonal residential populations were assumed to be equivalent to permanent residential populations.
3. Based on a current summary of residential units in the development process, as obtained from the Township, including Approved Draft Plans of Subdivision (472 lots), Proposed Draft Plans of Subdivision Not Approved (382 lots), and Vacant Lands Designated for Residential (590 lots).
4. Based on a PPU value of 2.65 for 2008.

Table 2.2 presents the projected future average day residential wastewater flows to the Victoria Harbour WWTP based on the population projections presented in Table 2.1, and the 2004 to 2007 average per capita flow of 550 L/cap/d. These projected average day residential wastewater flows are considered to be conservative, since they are based on the historic average per capita flow of 550 L/cap/d, which includes contributions from collection system inflow and infiltration (I/I).

Table 2.2 Projected Residential ADF for the Victoria Harbour WWTP Service Area

Parameter	Year	
	2031	Build-out
Projected Flow for a Service Population based on a PPU value of 2.65	2,762 m^3/d	4,046 m^3/d

Notes:

All projected residential wastewater flows based on an historic per capita flow rate of 550 L/cap/d, based on operational data from 2004 to 2008.

2.2 Non-Residential Land Uses

Future wastewater flows from commercial, industrial, and institutional sources were estimated based on the growth projections to 2031 from Watson (see Appendix A). To estimate the non-residential flows to Build-out, it was assumed that the projected increases from 2028 to 2031 were proportional to the increase in projected service population, and that this trend would continue to Build-out. A summary of these projected flows is presented in Table 2.3.

Table 2.3 Projected Non-Residential ADF for the Victoria Harbour WWTP Service Area

Parameter	Year	
	2031	Build-out
Commercial (1)	33 m^3/d	59 m^3/d
Industrial (2)	3 m^3/d	12 m^3/d
Institutional (3)	7 m^3/d	16 m^3/d
Extraneous Flow Allowance (4)	10 m^3/d	12 m^3/d
Total Projected Non-Residential Wastewater Flows	53 m^3/d	99 m^3/d

Notes:

1. Based on 130% of the square footage growth projected by Watson (see Appendix A), and 30 m^3/ha/d of wastewater flow for commercial development (MOE, 1985).
2. Based on 130% of the square footage growth projected by Watson (see Appendix A), and 55 m^3/ha/d for heavy industry (MOE, 1985).
3. Based on the square footage growth projected by Watson (see Appendix A), and 5 $m^3/1{,}000\ m^2$/d (MOE, 1985).
4. Based on 0.10 L/s/ha (MOE, 1985).

2.3 Septage Flows

The existing and projected future number of residential units without sewage servicing in the Township of Tay are presented in Table 2.4. These estimates are

based on 2001 Census data, a summary of new water and sewer service connections in the Township from 2001 to 2007, and residential growth estimates from Watson (see Appendix A).

Table 2.4 Existing and Projected Number of Un-serviced Residential Units in the Township of Tay

Parameter	Year		
	2008 (1)	2031 (2)	Build-out (2)
No. of Un-serviced Residential Units in Urban Areas	724	773	897
No. of Residential Units in Rural Areas	2,075	2,204	2,231
Total No. of Un-serviced Residential Units	2,799	2,977	3,128

Notes:

1. Based on 2001 Census data, as broken down by Township staff based on urban and rural areas, and serviced and un-serviced residential units. An allowance for growth of un-serviced residential units in the urban areas from 2001 to 2008 of 44 new properties is included, as based on a summary of new service connections provided by the Township.
2. Based existing un-serviced residential units, and growth projections for rural and urban un-serviced residential units from Watson (see Appendix A).

Table 2.5 presents the projected design average day septage flows to the Victoria Harbour WWTP for two scenarios:

- Scenario 1: septage will be accepted only at the Victoria Harbour WWTP; and
- Scenario 2: septage will be equally split between the Victoria Harbour and Port McNicoll WWTP's.

Both scenarios assume that all of the septage from un-serviced residential units in the Township will be accepted at the Township's WWTP's. It was also assumed that each residential unit is equipped with a 1,000 imperial gal septic tank that would be pumped out every 4 years.

Table 2.5 Projected Septage ADF to the Victoria Harbour WWTP

Parameter	Year	
	2031	Build-out
Projected Total Septage Generated per Year (1)	3,383 m^3/yr	3,555 m^3/yr
Scenario 1 – All septage to Victoria Harbour WWTP	9.3 m^3/d	9.7 m^3/d
Scenario 2 – Septage split between the Victoria Harbour and Port McNicoll WWTP's	4.6 m^3/d	4.9 m^3/d

Notes:

1. Based on each un-serviced residential unit in the Township being equipped with a 1,000 imperial gal septic tank requiring pump-out every 4 years.

As can be seen in Table 2.5, the projected average day septage volumetric flows to the Victoria Harbour WWTP are less than 0.5% of the volumetric flows from the residential service population (see Table 2.2). Therefore, accepting septage at the Victoria Harbour WWTP will not have a significant impact on the future design ADF.

It should be noted, however, that although septage represents only a small fraction of the total volumetric flow to the plant, due to its high strength, it can represent significant loadings to the biological process. In addition, since it is likely that tank pump-outs would only occur between May and October, the daily volume of septage accepted during those months may be higher than those shown in Table 2.5.

For design purposes, Scenario 1 septage flows will be used to represent daily septage flows to the Victoria Harbour WWTP. Therefore, future septage receiving requirements of the Victoria Harbour WWTP will be sized to accept up to 9.3 m^3/d of septage to 2031, and up to 9.7 m^3/d to Build-out. It is understood that the Port McNicoll WWTP was designed with the capability to accept up to 18 m^3/d of septage. Therefore, each plant will have sufficient capacity to accept the projected total average daily flow of septage.

2.4 Water Treatment Plant Residuals

The Victoria Harbour Water Treatment Plant (WTP) serves the communities of Victoria Harbour, Port McNicoll, Midland Bay Woods, Bayberry Estates and Waubaushene. The plant is located at 45 Lighthouse Cres. in Victoria Harbour. The WTP currently serves approximately 7,000 people.

Filter backwash wastewater is discharged by the WTP into the sanitary sewer, and is collected in PS No. 1 where it is pumped to the Victoria Harbour WWTP. According to Township staff, backwash wastewater from the WTP has been discharged into the sanitary sewer system for at least 10 years.

Based on average raw and treated water flows from 2006 to June 2008, it is estimated that the WTP currently discharges an average of 147 m^3/d of wastewater into the sanitary sewer system, which is equivalent to 42 L/cap/d, based on the existing Victoria Harbour WWTP service population.

Based on information provided by the Township, the existing WTP will be expanded in the future, from its existing capacity of 7,848 m^3/d to 11,924 m^3/d, which will result in an increase in the total volume of filter backwash wastewater discharged into the sanitary sewer.

It is understood that the ability to decant from the backwash wastewater holding tank may be re-established at the WTP. This could potentially result in a reduction in the volume of backwash wastewater discharged to the sanitary sewer. However, to be conservative, for the purposes of this assessment it was assumed that the existing backwash wastewater discharge procedures would continue.

The existing volume of filter backwash wastewater is included in the historic per capita wastewater flow of 550 L/cap/d. Since a per capita flow of 550 L/cap/d was used to project wastewater flows for future growth, an allowance for an increase in the volume of filter backwash wastewater discharged into the sanitary sewer is included in the residential flow projections presented in Section 2.1. This allowance assumes that future growth in the WTP service area will be proportional to the future growth in the Victoria Harbour WWTP service area.

2.5 Overall Future Servicing Needs

Table 2.6 presents the future projected ADF values to 2031 and Build-out based on the projected residential, industrial, and septage flows presented in Sections 2.1 to 2.3.

Table 2.6 Projected ADF Values to 2031 and Build-out

Parameter	Year	
	2031	**Build-out**
Service Population	5,022	7,357
Residential ADF (1)	2,762 m^3/d	4,046 m^3/d
Non-residential ADF	53 m^3/d	99 m^3/d
Septage ADF	9.3 m^3/d	9.7 m^3/d
Total Projected ADF	**2,824 m^3/d**	**4,155 m^3/d**

Notes:

1. Based on a constant PPU value of 2.65 for new growth, with no decline in the population within the existing service area.

3. SUMMARY OF PROJECTED SERVICING NEEDS

Table 3.1 presents the future service population and wastewater flows based the Township's Official Growth Plan.

As can be seen in Table 3.1, the projected 2031 and Build-Out average wastewater flows exceed the existing Victoria Harbour WWTP ADF capacity of 2,364 m^3/d. As a result, additional wastewater servicing capacity must be provided to accommodate planned growth in the community.

Table 3.1 Projected ADF Flows to the Victoria Harbour WWTP

Parameter	Current	Projected	
	2008	2031	Build-Out
Service Population	3,530	5,022	7,357
ADF	1,800 m^3/d	2,824 m^3/d	4,155 m^3/d
Total Projected ADF as % of Existing Rated ADF Capacity	76%	119%	175%

4. REFERENCES

MOE (1985). Guidelines for the Design of Sanitary Sewage Systems.

APPENDIX A

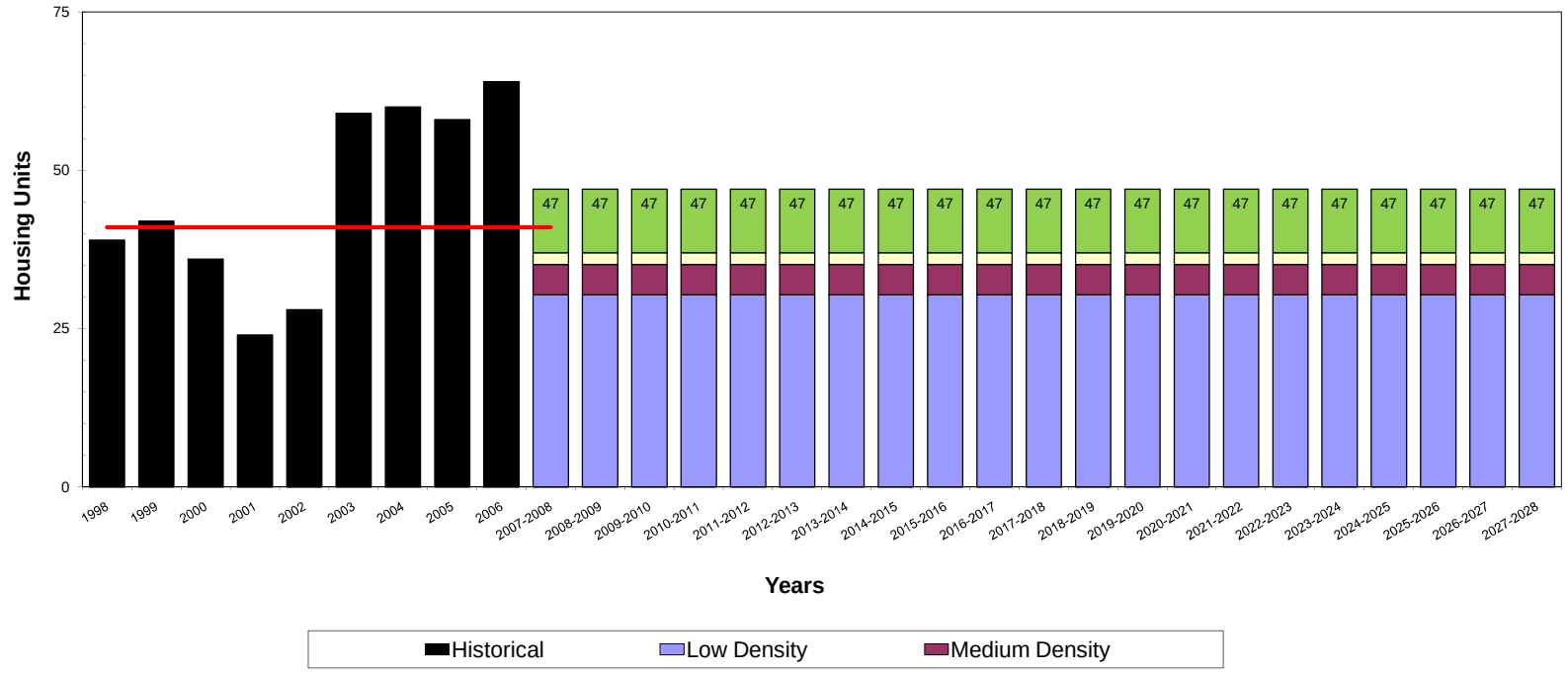
TOWNSHIP OF TAY GROWTH PROJECTIONS
WATSON & ASSOCIATES ECONOMISTS LTD.
JUNE 2008

SCHEDULE 1
TAY TOWNSHIP
RESIDENTIAL GROWTH FORECAST SUMMARY

Year	Population	Households					Person	Seasonal		Total	Total
		Single Family	Multiples	Apartments	Other	Total	Per Unit (PPU)	Households	Population	Population (Seasonal @ 50%)	Households
Mid 2001	9,162	3,245	40	80	50	3,415	2.68	1,102	2,883	10,603	4,517
Mid 2006	9,748	3,640	55	90	50	3,835	2.54	1,185	3,100	11,298	5,020
Mid 2008	9,799	3,670	60	92	50	3,872	2.53	1,205	3,152	11,375	5,077
Mid 2018	10,374	3,974	108	110	50	4,242	2.45	1,305	3,414	12,081	5,547
Mid 2028	11,049	4,277	156	129	50	4,612	2.40	1,405	3,675	12,887	6,017
Mid 2031	11,224	4,368	170	134	50	4,723	2.38	1,435	3,754	13,101	6,158
Mid 2001 - Mid 2006	**586**	**395**	**15**	**10**	**0**	**420**		**83**	**217**	**695**	**503**
Mid 2006 - Mid 2008	**51**	**30**	**5**	**2**	**0**	**37**		**20**	**52**	**77**	**57**
Mid 2008 - Mid 2018	**575**	**303**	**48**	**19**	**0**	**370**		**100**	**262**	**706**	**470**
Mid 2008 - Mid 2028	**1,250**	**607**	**96**	**37**	**0**	**740**		**200**	**523**	**1,511**	**940**
Mid 2008 - Mid 2031	**1,424**	**698**	**111**	**43**	**0**	**851**		**230**	**602**	**1,725**	**1,081**

Source: Watson & Associates Economists Ltd., May, 2008
Note: Population forecast excludes the net Census undercount.
Seasonal unit growth is based on the growth between 2001 and 2006 census total dwelling units. The population is based on the low PPU of 2.62. Fifty percent of the population is included for the DC forecast, which accounts for the seasonal nature of the dwelling.

FIGURE A-1
20-YEAR HOUSING FORECAST



Source: Historical housing activity (1997-2006) based on CMHC Completions data less Statistics Canada Demolitions (2002-2006).

SCHEDULE 2
TAY TOWNSHIP
ESTIMATE OF THE ANTICIPATED AMOUNT, TYPE AND LOCATION OF DEVELOPMENT FOR WHICH DEVELOPMENT CHARGES CAN BE IMPOSED

DEVELOPMENT LOCATION	TIMING	SINGLES, SEMIS &	TOWNHOUSES	APARTMENTS	PERMANENT RESIDENTIAL UNITS	SEASONAL UNITS	TOTAL PERCENT AND SEASONAL UNITS	NET POPULATION INCREASE	SEASONAL POPULATION 50%	TOTAL POPULATION EQUVILANT	COMMERCIAL GFA S.F.	INDUSTRIAL GFA S.F.	INSTITUTIONAL GFA S.F.	TOTAL NON-RES GFA S.F.	EMPLOYMENT INCREASE
Port McNicoll	2008 -2018	74	0	0	74	40	114	60	52	112	8,953	1,200	798	10,951	25
	2008 -2028	149	0	0	149	80	229	154	105	259	13,522	2,400	1,986	17,908	39
	2008-2031	171	0	0	171	92	263	173	120	293	13,926	3,200	2,208	19,334	41
Victoria Harbour	2008 -2018	138	48	19	205	40	245	369	52	421	68,393	1,800	6,095	76,288	181
	2008 -2028	276	96	37	409	80	489	779	105	884	84,792	3,600	12,456	100,848	233
	2008-2031	318	111	43	471	92	563	891	120	1,011	89,013	4,800	14,112	107,925	247
Water Only	2008 -2018	18	0	0	18	10	28	32	13	45	4,867	1,200	434	6,501	14
	2008 -2028	36	0	0	36	20	56	69	26	95	6,015	2,400	884	9,299	19
	2008-2031	42	0	0	42	23	65	78	30	108	6,317	3,200	1,001	10,518	20
Rural	2008 -2018	73	0	0	73	10	83	114	13	127	4,187	1,800	373	6,360	49
	2008 -2028	146	0	0	146	20	166	248	26	274	5,275	3,600	775	9,650	97
	2008-2031	167	0	0	167	23	190	282	30	312	5,524	4,800	876	11,200	119
Tay Township	2008 -2018	303	48	19	370	100	470	575	131	706	86,400	6,000	7,700	100,100	269
	2008 -2028	607	96	37	740	200	940	1,250	262	1,511	109,600	12,000	16,100	137,700	388
	2008-2031	698	111	43	851	230	1,081	1,425	301	1,725	114,800	16,000	18,200	149,000	428

SCHEDULE 10
EMPLOYMENT AND GROSS FLOOR AREA (GFA) FORECAST, 2008 TO 2031
TAY TOWNSHIP

		Activity Rate						Employment						Square Feet (Estimated) [1]			
	Permanent Pop'n	Primary	Work at Home	Industrial	Pop'n Related	Institutional	Total	Primary	Work at Home	Industrial	Pop'n Related	Institutional	Total	Industrial	Commercial	Institutional	Total
1996	10,965	0.000	0.031	0.023	0.045	0.021	0.120	0	340	255	495	225	1,315				
2001	9,162	0.001	0.044	0.023	0.046	0.020	0.134	10	405	215	420	180	1,230				
2006	9,748	0.001	0.045	0.022	0.045	0.019	0.132	11	435	219	442	181	1,287				
Mid 2008	9,799	0.001	0.045	0.022	0.052	0.019	0.139	11	441	220	510	182	1,364	220,000	204,000	127,400	551,400
Mid 2018	10,374	0.001	0.046	0.022	0.070	0.019	0.157	11	477	226	726	193	1,633	226,000	290,400	135,100	651,500
Mid 2028	11,049	0.001	0.047	0.021	0.071	0.019	0.159	12	519	232	784	205	1,752	232,000	313,600	143,500	689,100
Mid 2031	11,224	0.001	0.048	0.021	0.071	0.019	0.160	12	539	236	797	208	1,792	236,000	318,800	145,600	700,400
Incremental Change																	-
1996 - 2001	-1,803	0.001	0.013	0.000	0.001	-0.001	0.014	10	65	-40	-75	-45	-85				
2001 - Mid 2008	637	0.0000	0.0008	-0.0011	0.0062	-0.0011	0.0048	1	36	5	90	2	134				
Mid 2008 - Mid 2018	575	0.0000	0.0010	-0.0006	0.0180	0.0000	0.0184	0	36	6	216	11	269	6,000	86,400	7,700	100,100
Mid 2008 - Mid 2028	1,250	0.0000	0.0020	-0.0014	0.0190	0.0000	0.0196	1	78	12	274	23	388	12,000	109,600	16,100	137,700
Mid 2008 - Mid 2031	1,424	0.0000	0.0030	-0.0014	0.0190	0.0000	0.0206	1	98	16	287	26	428	16,000	114,800	18,200	149,000
Annual Average																	
1996 - 2001	-361	0.00022	0.00264	0.00004	0.00014	-0.00017	0.00286	2	13	-8	-15	-9	-17				
2001 - Mid 2008	91	0.00000	0.00011	-0.00015	0.00088	-0.00016	0.00069	0	5	1	13	0	19				
Mid 2008 - Mid 2018	58	0.00000	0.00010	-0.00006	0.00180	0.00000	0.00184	0	4	1	22	1	27	600	8,640	770	10,010
Mid 2008 - Mid 2028	62	0.00000	0.00010	-0.00007	0.00095	0.00000	0.00098	0	4	1	14	1	19	600	5,480	805	6,885
Mid 2008 - Mid 2031	62	0.00000	0.00013	-0.00006	0.00083	0.00000	0.00089	0	4	1	12	1	19	696	4,991	791	6,478

Source: Watson & Associates Economists Ltd., May, 2008

1. Square Foot Per Employee Assumptions

Industrial	1000
Commercial	400
Institutional	700

SCHEDULE 6
SUMMARY OF UNITS IN THE DEVELOPMENT PROCESS
TAY TOWNSHIP

Port McNicoll

Stage of Development	Density Type			
	Low	Medium	High	Total
Registered Not Built				
% Breakdown				
Draft Plans Approved	193			193
% Breakdown	*100.0%*	*0.0%*	*0.0%*	*100.0%*
Application Under Review				0
% Breakdown				
Vacant lands designated for Residential	387			387
% Breakdown	*100.0%*	*0.0%*	*0.0%*	*100.0%*
Total	580	0	0	580
% Breakdown	*100.0%*	*0.0%*	*0.0%*	*100.0%*

SCHEDULE 6
SUMMARY OF UNITS IN THE DEVELOPMENT PROCESS
TAY TOWNSHIP

Victoria Harbour

Stage of Development	Density Type			
	Low	Medium	High	Total
Registered Not Built	152	82		234
% Breakdown	*65%*	*35%*	*0%*	*100%*
Draft Plans Approved	408			408
% Breakdown	*100.0%*	*0.0%*	*0.0%*	*100.0%*
Application Under Review	255	127		382
% Breakdown	*66.8%*	*33.2%*	*0.0%*	*100.0%*
Vacant lands designated for Residential	152	37		189
% Breakdown	*80.5%*	*19.5%*	*0.0%*	*100.0%*
Total	967	246	0	1,213
% Breakdown	*79.7%*	*20.3%*	*0.0%*	*100.0%*

SCHEDULE 6
SUMMARY OF UNITS IN THE DEVELOPMENT PROCESS
TAY TOWNSHIP

Waubaushene

Stage of Development	Density Type			
	Low	Medium	High	Total
Registered Not Built	98			98
% Breakdown	*100.0%*	*0.0%*	*0.0%*	*100.0%*
Draft Plans Approved				
% Breakdown				
Application Under Review				
% Breakdown				
Vacant lands designated for Residential	23			23
% Breakdown	*100.0%*	*0.0%*	*0.0%*	*100.0%*
Total	121	0	0	121
% Breakdown	*100.0%*	*0.0%*	*0.0%*	*100.0%*

SCHEDULE 6
SUMMARY OF UNITS IN THE DEVELOPMENT PROCESS
TAY TOWNSHIP

Waverly

Stage of Development	Density Type			
	Low	Medium	High	Total
Registered Not Built				
% Breakdown				
Draft Plans Approved	37			37
% Breakdown	*100.0%*	*0.0%*	*0.0%*	*100.0%*
Application Under Review				
% Breakdown				
Vacant lands designated for Residential	47			47
% Breakdown	*100.0%*	*0.0%*	*0.0%*	*100.0%*
Total	84	0	0	84
% Breakdown	*100.0%*	*0.0%*	*0.0%*	*100.0%*

SCHEDULE 6
SUMMARY OF UNITS IN THE DEVELOPMENT PROCESS
TAY TOWNSHIP

Rural

Stage of Development	Density Type			
	Low	Medium	High	Total
Registered Not Built	44			44
% Breakdown	*100%*	*0%*	*0%*	*100%*
Draft Plans Approved				
% Breakdown				
Application Under Review				0
% Breakdown				
Vacant lands designated for Residential				
% Breakdown				
Total	44	0	0	44
% Breakdown	*100.0%*	*0.0%*	*0.0%*	*100.0%*

SCHEDULE 6
SUMMARY OF UNITS IN THE DEVELOPMENT PROCESS
TAY TOWNSHIP

Total

Stage of Development	Density Type			
	Low	Medium	High	Total
Registered Not Built	294	82	0	376
% Breakdown	*78%*	*22%*	*0%*	*100%*
Draft Plans Approved	638	0	0	638
% Breakdown	*100.0%*	*0.0%*	*0.0%*	*100.0%*
Application Under Review	255	127	0	382
% Breakdown	*66.8%*	*33.2%*	*0.0%*	*100.0%*
Vacant lands designated for Residential	609	37	0	646
% Breakdown	*94.3%*	*5.7%*	*0.0%*	*100.0%*
Total	1,796	246	0	2,042
% Breakdown	*88.0%*	*12.0%*	*0.0%*	*100.0%*

Source: Township of Tay Planning Department, June 2008