

# DEVELOPMENT CHARGES BACKGROUND STUDY

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Township of East Zorra-Tavistock



**HEMSON** Consulting Ltd.

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## **EXECUTIVE SUMMARY**

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Hemson Consulting Ltd. was retained by the Township of East Zorra-Tavistock to complete a Development Charges (DC) Background Study. This Background Study provides the basis and background required to update the Township's development charges to accurately reflect the future servicing needs of new development.

### **STUDY CONSISTENT WITH DEVELOPMENT CHARGES LEGISLATION**

- This study calculates development charges for the Township of East Zorra-Tavistock in compliance with the provisions of the *Development Charges Act, 1997 (DCA)* and its associated regulation *O. Reg. 82/98*.
- The Township's current Development Charges By-Law 2009-27, expires on August 11, 2014. Council must pass a new by-law in order to continue to levy development charges.
- The Township must continue implementing development charges to help fund capital projects related to development throughout East Zorra-Tavistock so that development continues to be serviced in a fiscally responsible manner. The calculated changes to the development charges rates are required in order to reflect the revised costs associated with new infrastructure requirements.
- The DCA and O. Reg. 82/98 require that a development charges background study be prepared in which development charges are determined with reference to:
  - A forecast of the amount, type and location of residential and non-residential development anticipated in the Township;
  - The average capital service levels provided in the Township over the ten year period immediately preceding the preparation of the background study;

- A review of future capital projects, including an analysis of gross expenditures, funding sources, and net expenditures incurred or to be incurred by the Township to provide for the expected development, including the determination of the DC eligible and non-DC-eligible components of the capital projects; and
- An examination of the long-term capital and operating costs for the capital infrastructure required for each service to which the development charges by-law would relate.
- This report identifies the capital costs attributable to the development that is forecast to occur in the Township. The costs are apportioned to types of development (residential, non-residential) in a manner that reflects the increase in the need for each service

#### **ALL SERVICES WITH DEVELOPMENT-RELATED COSTS INCLUDED IN THE ANALYSIS**

- The following services have been included in the development charge analysis:
  - Fire Protection
  - Parks and Recreation
  - Public Works: Buildings and Fleet
  - General Government (Growth Studies)
  - Roads and Related Infrastructure
- The development charges discussed in this report are calculated on a Township-wide uniform basis.

#### **DEVELOPMENT FORECAST**

- The forecasts of population, households and employment are based on the East Zorra-Tavistock forecasts in the Oxford County Population, Households and Employment Forecasts and Employment Lands Study dated March 5, 2014. The report was prepared by Watson & Associates Economists Ltd.
- The Township is forecast to add approximately 206 new households in the 10-year planning period from 2014-2023. This translates into a population of 566 in the newly constructed units. In the same ten-year time frame, it is

anticipated that the Township will see an increase of 168 new employees that will be accommodated in 9,852 square metres of new non-residential building space.

- Population, household and employment forecast numbers are provided in Appendix A for reference only.
- The following is a summary of the projected growth for the Township:

#### Development Forecast

Growth Forecast	2013 Estimate	Ten-year Growth	2023 Estimate
<b>Residential</b>			
Total Occupied Dwellings	2,555	206	2,761
Total Population			
Census	6,882	252	7,134
<i>Population In New Dwellings</i>		566	
<b>Non-Residential</b>			
Employment	2,690	168	2,858
Non-Residential Building Space (sq.m.)		9,852	

#### **THE TOWNSHIP HAS AN EXTENSIVE DEVELOPMENT-RELATED CAPITAL PROGRAM FOR THE PROVISION OF ELIGIBLE SERVICES**

- Township staff, in collaboration with Hemson Consulting, has developed a development-related capital program identifying projects that are required to service anticipated development. The development-related capital programs for all eligible services are based on a ten-year planning period from 2014 to 2023.

- The gross cost of the Township’s development-related capital program amounts to \$9.33 million and provides for a wide range of infrastructure additions. Of the \$9.33 million, approximately \$1.62 million has been identified as eligible for recovery through development charges over the 2014–2023 planning period.
- No grants, subsidies, and other recoveries have been identified to offset the total cost of the capital program. The net municipal cost remains the same as the gross cost in the amount of \$9.33 million.
- The DCA requires that development-related net capital costs for general services be reduced by 10 per cent when calculating the applicable development charges for these services. The 10 per cent share of development-related net capital costs not included in the development charges calculations must be funded from non-development charges sources. In total, \$23,600 is identified as the required 10 per cent reduction.
- Non-development charges funding for replacement portions of the capital program and for portions of development-related capital projects that benefit existing development have been identified. Replacement or benefit to existing shares amount to \$7.12 million.
- A share of the capital program is deducted for portions of projects that relate to development in the post-2023 period, which will be considered for recovery in future development charges studies subject to service level considerations. In total, \$516,400 falls within this definition.
- Available DC reserve funds have been identified in each capital program to fund development-related infrastructure and amount to \$41,300. Additionally, \$6,500 has been notionally added to the reserves to account for non-statutory exemptions.
- The following is a summary of the development-related capital program for all eligible services:

### Summary of Capital Forecast

<b>Service</b>	<b>Net Municipal Cost (\$000)</b>	<b>Total DC Eligible Costs for Recovery (\$000)</b>
<b>1.0 FIRE PROTECTION SERVICES</b>	\$925.7	\$292.2
<b>2.0 PARKS AND RECREATION</b>	\$805.0	\$463.7
<b>3.0 PUBLIC WORKS: BUILDINGS AND FLEET</b>	\$485.0	\$157.0
<b>4.0 GENERAL GOVERNMENT</b>	\$55.0	\$41.0
<b>5.0 ROADS AND RELATED</b>	\$7,057.0	\$670.8
<b>TOTAL</b>	<b>\$9,327.7</b>	<b>\$1,624.8</b>

- Details regarding the capital programs for each individual service are provided in Appendix B for general services and Appendix C for roads and related services in this report.

#### **DEVELOPMENT CHARGES ARE CALCULATED WITH REFERENCE TO THE DCA**

- Development charge rates have been established under the parameters and limitations of the DCA. This study provides the rationale and basis for the calculated rates.
- A Township-wide uniform cost approach is used to calculate development charges for all services and is discussed in the main report.
- The calculated charges are the maximum charges the Township may adopt. Lower charges can be approved; however, this will require a reduction in the capital plan and reduced service levels or financing from other sources, most likely property taxes.
- The fully calculated residential charges are recommended to vary by unit type, reflecting the difference in occupancy patterns expected in various unit



types and the associated differences in demand that would be placed on Township services.

- The following is a summary of the fully calculated development charges:

### Calculated Residential Development Charges

Service	Adjusted Charge Per Capita	Residential Charge By Unit Type (1)				Percentage of Charge
		Singles & Semis	Rows & Other Multiples	Apartments 2+ Bedrooms	Apartments Bachelor or 1 Bedroom	
Fire Protection Services	\$428.46	\$1,208	\$943	\$686	\$514	17.5%
Parks And Recreation	\$830.00	\$2,340	\$1,826	\$1,328	\$996	34.0%
Public Works: Buildings And Fleet	\$242.60	\$684	\$534	\$388	\$291	9.9%
General Government	\$52.09	\$147	\$115	\$83	\$63	2.1%
<b>General Services Charge</b>	<b>\$1,553.15</b>	<b>\$4,379</b>	<b>\$3,418</b>	<b>\$2,485</b>	<b>\$1,864</b>	<b>63.5%</b>
Roads And Related	\$891.30	\$2,513	\$1,961	\$1,426	\$1,070	36.5%
<b>TOTAL CHARGE PER UNIT</b>	<b>\$2,444.45</b>	<b>\$6,892</b>	<b>\$5,379</b>	<b>\$3,911</b>	<b>\$2,934</b>	<b>100.0%</b>
(1) Based on Persons Per Unit Of:		2.82	2.20	1.60	1.20	

### Calculated Non-Residential Development Charges

Service	Adjusted Charge per Square Metre	Percentage of Charge
Fire Protection Services	\$8.27	27%
Parks And Recreation	\$0.00	0%
Public Works: Buildings And Fleet	\$4.67	15%
General Government	\$1.02	3%
<b>General Services Charge</b>	<b>\$13.96</b>	<b>45%</b>
Roads And Related	\$17.16	55%
<b>TOTAL CHARGE PER SQUARE METRE</b>	<b>\$31.12</b>	<b>100%</b>

**NEWLY CALCULATED RATES ARE HIGHER THAN CURRENT RATES**

- The fully calculated residential charge for a single or semi-detached unit in East Zorra-Tavistock is \$6,892, which represents a 35 per cent increase from the Township's current charge of \$5,110.
- The Township is not currently levying development charges on non-residential industrial development. However, a charge exists for all other forms of non-residential development. The calculated charge of \$31.12 per square metre represents a 117 per cent increase from the Township's current charge of \$14.34.

**DEVELOPMENT CHARGES BY-LAW PRACTICES AND COLLECTION POLICIES**

- As required under the DCA, the Township should codify any rules regarding application of the by-laws and any exemptions within the development charges by-law proposed for adoption.
- The proposed draft by-law sets out the rules to determine development charges applicable in any particular case. Rules for exemptions are also outlined in the proposed draft by-law.
- It is recommended that Council adopt the development-related capital program included in this background study, subject to annual review through the Township's normal capital budget process.

## I INTRODUCTION

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The *Development Charges Act, 1997 (DCA)* and its associated *Ontario Regulation 82/98 (O. Reg. 82/98)* allow municipalities in Ontario to recover development-related capital costs from new development. The Township of East Zorra-Tavistock Development Charges Background Study is presented as part of a process to establish a development charges by-law that complies with this legislation.

The Township of East Zorra-Tavistock is experiencing some residential growth pressure and is also an attractive location for a variety of non-residential development. The anticipated growth in dwelling units in East Zorra-Tavistock will increase the demand on all Township services. The Township wishes to implement development charges to fund capital projects related to growth in East Zorra-Tavistock so that development continues to be serviced in a fiscally responsible manner.

When a development charges by-law is proposed, the *DCA* and *O. Reg. 82/98* require that a development charges background study be prepared in support of the proposed changes with reference to:

- A forecast of the amount, type and location of development anticipated in the Township;
- The average capital service levels provided in the Township over the ten-year period immediately preceding the preparation of the background study;
- A review of future capital projects, including an analysis of gross expenditures, funding sources, and net expenditures incurred, or to be incurred, by the Township or its local boards to provide for the expected development, including the determination of the growth and non-development-related components of the capital projects; and
- An examination of the long-term capital and operating costs for the capital infrastructure required for each service to which the development charges by-laws would relate.

This study identifies the development-related net capital costs attributable to development that is forecast to occur in the Township. The costs are apportioned to

types of development (residential and non-residential) in a manner that reflects the increase in the need for each service attributable to each type of development. The study therefore calculates development charges for each type of development.

The *DCA* provides for a period of public review and comment regarding the calculated development charges. This process includes considering and responding to comments received by members of the public about the calculated charges. Following completion of this process, and in accordance with the *DCA* and Council's review of this study, it is intended that Council will pass new development charges for the Township.

The remainder of this study sets out the information and analysis upon which the calculated development charges are based.

Section II designates the services for which the development charges are calculated and the areas within the Township to which the development charges will apply. It also briefly reviews the methodologies that have been used in this background study.

Section III presents a summary of the forecast residential and non-residential development which is expected to occur within the Township over a ten-year planning period from 2014 to 2023.

Section IV summarizes the ten-year historic average capital service levels that have been attained in the Township, which form the basis for the development charges calculations.

In Section V, the development-related capital forecast that has been developed by various Township departments is reviewed.

Section VI summarizes the calculation of applicable development charges and the resulting calculated development charges by class and type of development. This section also provides a comparison of calculated total development charges rates for the Township with rates currently being levied.

Section VII provides a discussion of other issues and considerations including by-law rules and policies, and the Township's local service definitions.

## **II THE METHODOLOGY USES A TOWNSHIP-WIDE APPROACH TO ALIGN DEVELOPMENT-RELATED COSTS AND BENEFITS**

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Several key steps are required when calculating any development charge, however, specific circumstances arise in each municipality which must be reflected in the calculation. In this study, we have tailored our approach to accommodate the Township of East Zorra-Tavistock. The approach to the calculated development charges is focused on providing a reasonable alignment of development-related costs with the development that necessitates them. This study uses a Township-wide approach for most services provided by the Township of East Zorra-Tavistock. The Background Study provides an update to the historic service levels and the cost of providing future development-related capital infrastructure.

### **A. TOWNSHIP-WIDE DEVELOPMENT CHARGES ARE PROPOSED**

The DCA provides municipalities with flexibility to define services that will be included in the development charges by-laws, provided that its other provisions, as well as those of *O. Reg. 82/98*, are met. The DCA also requires that the by-laws designate the areas within which DCs shall be imposed. The development charges may apply to all lands in a municipality or to other designated development areas as specified in the by-laws.

For both general and roads and related services, a range of capital infrastructure is available throughout the Township, and all East Zorra-Tavistock residents and employees have access to this infrastructure. As new development occurs, new infrastructure will be needed in order to maintain overall service levels in the Township. A widely accepted method of sharing the development-related capital costs for such Township services is to apportion them over all anticipated growth.

The following services are included in the Township-wide development charges calculations:

- Fire Protection Services;
- Parks and Recreation;
- Public Works: Buildings and Fleet;
- General Government; and
- Roads and Related Infrastructure.

These services form a reasonable basis in which to plan and administer the Township-wide development charges. It is noted that the analysis of each of these services examines the individual capital facilities and equipment that constitute it. The resulting development charges for these services would be imposed against all development anywhere in the Township.

## **B. KEY STEPS WHEN DETERMINING DEVELOPMENT CHARGES FOR FUTURE DEVELOPMENT-RELATED PROJECTS**

Several key steps are required when calculating development charges for future development-related projects. They are summarized below.

### **1. Development Forecast**

The first step in the methodology requires that a development forecast be prepared for the ten-year study period from 2014 to 2023. The forecast of the future residential and non-residential development used in this study is based on the *Oxford County Population, Households and Employment Forecasts and Employment Lands Study* dated March 5, 2014.

For the residential portion of the forecast, the total growth in occupied dwellings determines the need for additional facilities and provides the foundation for the development-related capital forecast.

The non-residential portion of the forecast estimates the amount of building space to be developed in the Township over the planning periods. The forecast is based on the projected increase in employment levels and the anticipated amount of new building space required to accommodate it.

### **2. Service Categories and Historic Service Levels**

The *DCA* states that the increase in the need for service attributable to anticipated development:

... must not include an increase that would result in the level of service exceeding the average level of that service provided in the municipality over the 10-year period immediately preceding the preparation of the background study...(s. 5. (1) 4.)

Historic ten-year average service levels thus form the basis for the development charges calculation. A review of the Township's capital service levels for buildings, land, vehicles, equipment and others has therefore been prepared as a reference for the calculation so that the portion of future capital projects that may be included in

the development charges can be determined. The historic service levels used in this study have been calculated based on the period from 2004 to 2013.

### **3. Development-related Capital Forecast and Analysis of Net Capital Costs to Be Included in the Development Charges**

A development-related capital forecast has been prepared by Township staff as part of the study. The forecast identifies development-related projects and their gross and net costs, after allowing for capital grants, subsidies or other contributions as required by the DCA s.5.(2). The capital forecast provides another cornerstone upon which development charges are based. The DCA requires that the increase in the need for service attributable to the anticipated development may include an increase:

... only if the council of the municipality has indicated that it intends to ensure that such an increase in need will be met. (s. 5. (1) 3.)

S. 5. (1) 4. and s. 5. (2). require that the development charges be calculated on the lesser of the historic ten-year average service levels or the service levels embodied in the future plans of the Township. The development-related capital forecast prepared for this study ensures that development charges are only imposed to help pay for projects that have been or are intended to be purchased or built in order to accommodate future anticipated development. It is not sufficient in the calculation of development charges merely to have had the service in the past. There must also be a demonstrated commitment to continue to emplace facilities or infrastructure in the future. In this regard, *Ontario Regulation 82/98, s. 3* states that:

For the purposes of paragraph 3 of subsection 5 (1) of the Act, the council of a municipality has indicated that it intends to ensure that an increase in the need for service will be met if the increase in service forms part of an official plan, capital forecast or similar expression of the intention of the council and the plan, forecast or similar expression of the intention of the council has been approved by the council.

For some projects in the development-related capital forecast, a portion of the project may confer benefits to existing residents. As required by the DCA, s. 5. (1) 6., these portions of projects and their associated net costs are the funding responsibility of the Township from non-development charges sources. The amount of financing for such non-growth shares of projects is also identified as part of the preparation of the development-related capital forecast.

There is also a requirement in the DCA to reduce the applicable development charges by the amount of any “uncommitted excess capacity” that is available for a

service. Such capacity is available to partially meet future servicing requirements. Adjustments are made in the analysis to meet this requirement of the Act.

Finally, when calculating development charges, the development-related net capital costs must be reduced by ten per cent for all services except engineered services, such as roads and related and protection services, such as fire (DCA, s. 5. (1) 8). The ten per cent discount is applied to the other services, e.g. Parks and Recreation, and the resulting financing responsibility from non-development charges sources is identified.

#### **4. Attribution to Types of Development**

The next step in the determination of development charges is the allocation of the development-related net capital costs between the residential and the non-residential sectors. In the Township of East Zorra-Tavistock, the allocation is based on the projected changes in population in new dwelling units and employment over the forecast planning period.

The residential component of the development charges is applied to different housing types based on average occupancy factors. The non-residential component is applied on the basis of gross building space in square metres.

#### **5. Final Adjustment**

The final determination of the development charges results from adjustments made to development-related net capital costs for each service and sector resulting from a cash flow analysis that takes account of the timing of projects and receipt of development charges. Interest earnings or borrowing costs are therefore accounted for in the calculation as allowed under the DCA.



### **III DEVELOPMENT FORECAST**

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The *Development Charges Act (DCA)* requires the Township to estimate “the anticipated amount, type and location of development” for which development charges may be imposed. The development forecast must cover both residential and non-residential development and be specific enough with regards to quantum, type, location and timing of development to allow the Township to prepare a reasonable development-related capital program.

The forecasts are based on the *Oxford County Population, Households and Employment Forecasts and Employment Lands Study* dated March 5, 2014. The report was prepared by Watson & Associates Economists Ltd.

A ten year development forecast, from mid-year 2014 to mid-year 2023, has been used for all the development charges eligible services in the Township.

In the ten-year planning horizon of 2014-2023, it is anticipated that the Township will add 206 new residential units, which can accommodate a population of 566 in these new dwelling units. Overall, population growth, which considers declines in the existing community, is estimated at 252 people over ten years. In the same planning horizon, it is anticipated that the Township will see a total GFA growth of 9,852 square metres of new non-residential building space with an accompanying employment growth of 168 from 2014-2023.

As provided in the County-wide forecast document, population, household and employment forecast numbers are provided from 2014 to 2031 in Appendix A for reference. However, they have not been used to calculate development charges for the Township.

Table 1 provides a summary of the residential and non-residential growth forecast used in this analysis.

TABLE 1

**TOWNSHIP OF EAST ZORRA-TAVISTOCK  
SUMMARY OF RESIDENTIAL AND NON-RESIDENTIAL  
DEVELOPMENT FORECAST**

Growth Forecast	2013 Estimate	Ten-year Growth	2023 Estimate
<b>Residential</b>			
Total Occupied Dwellings	2,555	206	2,761
Total Population			
Census	6,882	252	7,134
<i>Population In New Dwellings</i>		566	
<b>Non-Residential</b>			
Employment	2,690	168	2,858
Non-Residential Building Space (sq.m.)		9,852	

## **IV HISTORIC CAPITAL SERVICE LEVELS**

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The *DCA and O. Reg. 82/98* require that the development charges be set at a level no higher than the average service level provided in the Township over the ten-year period immediately preceding the preparation of the background study, on a service-by-service basis.

For services considered in this study the legislative requirement is met by documenting service levels for the preceding ten years: in this case, for the period from 2004 to 2013. Typically, service levels are measured as a ratio of inputs per capita or inputs per population or household and employment.

*O. Reg. 82/98* requires that, when defining and determining historic service levels, both the quantity and quality of service be taken into consideration. In most cases, the service levels are initially established in quantitative terms. For example, service levels for buildings are presented in terms of square feet per unit. The qualitative aspect is introduced by considering the monetary value of a facility or service. In the case of buildings, for example, the cost would be shown in terms of dollars per square foot to replace or construct a facility of the same quality. This approach helps to ensure that the development-related capital facilities that are to be charged to new growth reflect not only the quantity (number and size) but also the quality (value or cost) of services provided by the Township in the past. Both the quantitative and qualitative aspects of service levels used in the current analysis are based on information provided by Township staff. This information is generally based on historical records and the Township's and surrounding municipalities' experience with costs to acquire or construct similar facilities, equipment and infrastructure.

Table 2 summarizes service levels for all services included in the development charges calculations. Appendices B and C provide detailed historical inventory data upon which the calculation of service levels is based.

TABLE 2

**TOWNSHIP OF EAST ZORRA-TAVISTOCK  
SUMMARY OF AVERAGE HISTORIC SERVICE LEVELS 2004 - 2013**

Service	2004 - 2013 Service Level Indicator
<b>1.0 FIRE PROTECTION SERVICES</b>	<b>\$695.80 per population &amp; employment</b>
Buildings	\$297.99 per population & employment
Land	\$66.84 per population & employment
Vehicles	\$257.55 per population & employment
Furniture And Equipment	\$73.42 per population & employment
<b>2.0 PARKS AND RECREATION</b>	<b>\$2,254.83 per capita</b>
Indoor Recreation Facilities	\$1,268.90 per capita
Parkland Development	\$119.22 per capita
Park Facilities	\$268.29 per capita
Park Equipment	\$598.42 per capita
<b>3.0 PUBLIC WORKS: BUILDINGS AND FLEET</b>	<b>\$373.81 per population &amp; employment</b>
Buildings	\$164.10 per population & employment
Land	\$25.43 per population & employment
Furniture And Equipment	\$5.81 per population & employment
Fleet	\$178.47 per population & employment
<b>4.0 GENERAL GOVERNMENT</b>	<b>N/A</b>
<b>5.0 ROADS AND RELATED</b>	<b>\$11,739.62 per population &amp; employment</b>
Roads	\$3,699.39 per population & employment
Bridges & Culverts	\$7,910.75 per population & employment
Traffic Signals	\$0.00 per population & employment
Sidewalks	\$129.48 per population & employment
Rail Grade Separations	\$0.00 per population & employment

## **V DEVELOPMENT-RELATED CAPITAL FORECAST**

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The DCA requires that the Council of a municipality express its intent to provide future capital facilities at the level incorporated in the development charges calculation. As noted above in Section II, *Ontario Regulation 82/98, s. 3* states that:

For the purposes of paragraph 3 of subsection 5 (1) of the Act, the council of a municipality has indicated that it intends to ensure that an increase in the need for service will be met if the increase in service forms part of an official plan, capital forecast or similar expression of the intention of the council and the plan, forecast or similar expression of the intention of the council has been approved by the council.

### **A. DEVELOPMENT-RELATED CAPITAL FORECAST IS PROVIDED FOR COUNCIL'S APPROVAL**

Based on the growth forecasts summarized in Section III and detailed in Appendix A, Township staff, in collaboration with the consultant has developed a development-related capital forecast which sets out those projects that are required to service anticipated growth. For all eligible services, the capital plan covers the ten-year period from 2014 to 2023.

One of the recommendations contained in this background study is for Council to adopt the development-related capital forecast developed for the purposes of the development charges calculation. It is assumed that future capital budgets and forecasts will continue to bring forward the capital projects presented here as they will be needed to service the anticipated growth in the Township. It is, however, acknowledged that changes to the forecast presented here may occur through the Township's normal capital budget process.

### **B. THE DEVELOPMENT-RELATED CAPITAL FORECAST**

A summary of the development-related capital forecast for all eligible services is presented in Table 3. The table shows that the gross cost of the Township's capital forecast is estimated to be \$9.33 million. No subsidies have been identified to offset the cost of various projects. As a result, \$9.33 million is identified as the total municipal cost and is brought forth to the development charges calculation.

The largest capital program belongs to Roads and Related at 75.7 per cent of the total municipal costs. This capital program totals \$7.06 million and recovers for various road related projects.

TABLE 3

**TOWNSHIP OF EAST ZORRA-TAVISTOCK  
SUMMARY OF DEVELOPMENT-RELATED CAPITAL PROGRAM  
FOR ALL SERVICES 2014 - 2023  
(in \$000)**

Service	Gross Cost	Grants/ Subsidies	Municipal Cost	Total Net Capital Program									
				2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
<b>1.0 FIRE PROTECTION SERVICES</b>	<b>\$925.7</b>	<b>\$0.0</b>	<b>\$925.7</b>	<b>\$245.0</b>	<b>\$50.0</b>	<b>\$303.8</b>	<b>\$3.8</b>	<b>\$3.8</b>	<b>\$303.8</b>	<b>\$3.8</b>	<b>\$3.8</b>	<b>\$3.8</b>	<b>\$3.8</b>
1.1 Buildings, Land & Furnishings	\$417.3	\$0.0	\$417.3	\$71.2	\$46.2	\$0.0	\$0.0	\$0.0	\$300.0	\$0.0	\$0.0	\$0.0	\$0.0
1.2 Equipment	\$338.4	\$0.0	\$338.4	\$3.8	\$3.8	\$303.8	\$3.8	\$3.8	\$3.8	\$3.8	\$3.8	\$3.8	\$3.8
1.3 Vehicles	\$170.0	\$0.0	\$170.0	\$170.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
<b>2.0 PARKS AND RECREATION</b>	<b>\$805.0</b>	<b>\$0.0</b>	<b>\$805.0</b>	<b>\$220.0</b>	<b>\$65.0</b>	<b>\$65.0</b>	<b>\$65.0</b>	<b>\$65.0</b>	<b>\$65.0</b>	<b>\$65.0</b>	<b>\$65.0</b>	<b>\$65.0</b>	<b>\$65.0</b>
2.1 Indoor Recreation Facilities	\$100.0	\$0.0	\$100.0	\$100.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
2.2 Parkland & Park Facilities	\$445.0	\$0.0	\$445.0	\$49.0	\$44.0	\$44.0	\$44.0	\$44.0	\$44.0	\$44.0	\$44.0	\$44.0	\$44.0
2.3 Trail Development	\$50.0	\$0.0	\$50.0	\$50.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
2.4 Debenture Payments	\$210.0	\$0.0	\$210.0	\$21.0	\$21.0	\$21.0	\$21.0	\$21.0	\$21.0	\$21.0	\$21.0	\$21.0	\$21.0
<b>3.0 PUBLIC WORKS: BUILDINGS AND FLEET</b>	<b>\$485.0</b>	<b>\$0.0</b>	<b>\$485.0</b>	<b>\$235.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$250.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>
3.1 Buildings, Land & Furnishings	\$375.0	\$0.0	\$375.0	\$125.0	\$0.0	\$0.0	\$0.0	\$0.0	\$250.0	\$0.0	\$0.0	\$0.0	\$0.0
3.2 Recovery of Land Acquisition Debenture	\$110.0	\$0.0	\$110.0	\$110.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
<b>4.0 GENERAL GOVERNMENT</b>	<b>\$55.0</b>	<b>\$0.0</b>	<b>\$55.0</b>	<b>\$5.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$15.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$35.0</b>
4.1 Growth Related Studies	\$55.0	\$0.0	\$55.0	\$5.0	\$0.0	\$0.0	\$0.0	\$15.0	\$0.0	\$0.0	\$0.0	\$0.0	\$35.0
<b>5.0 ROADS AND RELATED</b>	<b>\$7,057.0</b>	<b>\$0.0</b>	<b>\$7,057.0</b>	<b>\$1,259.0</b>	<b>\$1,142.0</b>	<b>\$582.0</b>	<b>\$582.0</b>	<b>\$582.0</b>	<b>\$582.0</b>	<b>\$582.0</b>	<b>\$582.0</b>	<b>\$582.0</b>	<b>\$582.0</b>
5.1 Roads Projects	\$7,057.0	\$0.0	\$7,057.0	\$1,259.0	\$1,142.0	\$582.0	\$582.0	\$582.0	\$582.0	\$582.0	\$582.0	\$582.0	\$582.0
5.2 Debentures	\$1,320.0	\$0.0	\$1,320.0	\$132.0	\$132.0	\$132.0	\$132.0	\$132.0	\$132.0	\$132.0	\$132.0	\$132.0	\$132.0
<b>TOTAL</b>	<b>\$9,327.7</b>	<b>\$0.0</b>	<b>\$9,327.7</b>	<b>\$1,964.0</b>	<b>\$1,257.0</b>	<b>\$950.8</b>	<b>\$650.8</b>	<b>\$665.8</b>	<b>\$1,200.8</b>	<b>\$650.8</b>	<b>\$650.8</b>	<b>\$650.8</b>	<b>\$685.8</b>

The \$925,700 capital program for Fire Protection Services recovers for the new Tavistock Fire Station, which is a replacement and expansion. In addition, the program also includes the acquisition of land and development of the new Hickson Fire Hall expansion. Additional equipment and vehicles are also included. The cost for each category amounts to \$338,400 and \$170,000, respectively.

Of this \$9.33 million net capital cost, 8.6 per cent, or \$805,000 is related to Parks and Recreation. The largest item in the Parks and Recreation capital program is the development of various parkland and park facilities. Additional funding of \$210,000 is made for the debt recovery of Tavistock Park.

The Public Works capital program included a provision for a new public works shed, land acquisition as well as a new vehicle. The program amounts to \$485,000.

The remainder of the Township's development-related capital program is associated with General Government and relates to the provision of development-related studies. In total, the program amounts to \$55,000 over the next ten years. Two development charge studies have been included in the program as well as recreation and community improvement plan studies.

The capital forecast incorporates those projects identified to be related to development anticipated in the next ten years. It is not implied that all of these costs are to be recovered from new development by way of development charges (see the following Section VI). Portions of the capital forecast may be related to the replacement of existing facilities, shares of projects that benefit the existing population, or growth anticipated to occur beyond the 2014 – 2023 planning period. In addition to these reductions, the amounts shown in Table 3 have not been reduced by ten per cent for various general services as required by s. 5 (1) of the DCA.

After these reductions, the remaining development-related capital costs are brought forward to the development charges calculation. Further details on the capital plans for each individual service category are available in Appendix B for general services and Appendix C for Roads and Related services.

**C. DEVELOPMENT CHARGES ARE CALCULATED IN ACCORDANCE WITH THE DEVELOPMENT CHARGES ACT**

This section summarizes the calculation of development charges for each service category and the resulting total development charge by type of development. For all

services, the calculation of the “unadjusted” per capita (residential) and per square metre (non-residential) charges is reviewed. Adjustments to these amounts resulting from a cash flow analysis that accounts for interest earnings and borrowing costs are also discussed.

For residential development, an adjusted total per capita amount is applied to different housing types on the basis of average occupancy factors. For non-residential development, the calculated development charges rates are based on gross floor area (GFA) of building space.

It is noted that the calculation of the development charges does not include any provision for exemptions required under the DCA, for example, the exemption for enlargements of up to 50 per cent on existing industrial buildings. Such legislated exemptions, or other exemptions which Council may choose to provide, will result in a loss of development charges revenue for the affected types of development. Any such revenue loss may not be offset by increasing other portions of the calculated charge.

#### **D. DEVELOPMENT CHARGES CALCULATION**

A summary of the “unadjusted” residential and non-residential development charges for all Township-wide services is presented in Table 4. Further details of the calculation for each individual general service category are available in Appendix B and Appendix C for Roads and Related services.

##### **1. Unadjusted Residential and Non-Residential Development Charge Rates**

The capital forecast for all eligible services incorporates those projects identified to be related to development anticipated in the next ten years. However, not all of the capital costs are to be recovered from new development by way of development charges. Table 4 demonstrates that \$7.12 million of the capital forecast relates to replacement of existing capital facilities or to shares of projects that provide benefit to the existing community. These portions of capital costs would have to be funded from property taxes and other non-development charges revenue sources.

An additional share of \$47,800 has been identified as available DC reserves collected from previous DC by-laws and revenue losses from prior exemptions. This portion has been netted out of the chargeable capital costs. Another share of the forecast, \$516,400, is either attributable to growth beyond the 2023 period (and can therefore



TOWNSHIP OF EAST ZORRA-TAVISTOCK  
SUMMARY OF UNADJUSTED RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES  
10-YEAR CAPITAL PROGRAM FOR ALL SERVICES

10 Year Growth in Population in New Units	566
10 Year Growth in Square Metres	9,852

Service	Net Municipal Cost (\$000)	Replacement & Benefit to Existing (\$000)	Required Service Discount (\$000)	Available DC Reserves (\$000)	Post-2023 Benefit (\$000)	Total DC Eligible Costs for Recovery (\$000)	Residential Share		Non-Residential Share	
							%	(\$000)	%	(\$000)
<b>1.0 FIRE PROTECTION SERVICES</b>	\$925.7	\$361.4	\$0.0	\$20.3	\$251.8	\$292.2	75%	\$219.2	25%	\$73.06
Unadjusted Development Charge Per Capita								\$387.23		\$7.42
Unadjusted Development Charge Per Sq.M										
<b>2.0 PARKS AND RECREATION</b>	\$805.0	\$314.5	\$18.1	\$8.7	\$0.0	\$463.7	100%	\$463.7	0%	\$0.00
Unadjusted Development Charge Per Capita								\$819.27		\$0.00
Unadjusted Development Charge Per Sq.M										
<b>3.0 PUBLIC WORKS: BUILDINGS AND FLEET</b>	\$485.0	\$55.0	\$0.0	\$8.4	\$264.6	\$157.0	75%	\$117.7	25%	\$39.25
Unadjusted Development Charge Per Capita								\$208.03		\$3.98
Unadjusted Development Charge Per Sq.M										
<b>4.0 GENERAL GOVERNMENT</b>	\$55.0	\$0.0	\$5.5	\$8.5	\$0.0	\$41.0	75%	\$30.8	25%	\$10.26
Unadjusted Development Charge Per Capita								\$54.36		\$1.04
Unadjusted Development Charge Per Sq.M										
<b>5.0 ROADS AND RELATED</b>	\$7,057.0	\$6,384.3	\$0.0	\$1.8	\$0.0	\$670.8	75%	\$503.1	25%	\$167.70
Unadjusted Development Charge Per Capita								\$888.89		\$17.02
Unadjusted Development Charge Per Sq.M										
<b>TOTAL</b>	<b>\$9,327.7</b>	<b>\$7,115.2</b>	<b>\$23.6</b>	<b>\$47.8</b>	<b>\$516.4</b>	<b>\$1,624.8</b>		<b>\$1,334.5</b>		<b>\$290.3</b>
Unadjusted Development Charge Per Capita								<b>\$2,357.78</b>		
Unadjusted Development Charge Per Sq.M										<b>\$29.46</b>

only be recovered under future development charges studies) or represents a service level increase in the Township.

The *DCA*, s. 5 (1) 8, requires that development-related net capital costs for “soft” services be reduced by 10 per cent in calculating the applicable development charges for these services. The 10 per cent share of development-related net capital costs not included in the development charges calculations must be funded from non-development charges sources. In total, about \$23,600 is identified as the required 10 per cent reduction.

The remaining \$1.62 million is carried forward to the development charges calculation as a development-related cost. Of the development-related cost, \$1.33 million has been allocated to new residential development, and \$290,300 has been allocated to new non-residential development. This results in an unadjusted charge of \$2,358 per capita and \$29.46 per square metre for the provision of Township-wide services.

## **2. Adjusted Residential and Non-Residential Development Charge Rates**

Final adjustments to the “unadjusted” development charges rates are made through a cash flow analysis. The analysis, details of which are included in Appendix B for general services, and Appendix C for roads and related services, considers the borrowing cost and interest earnings associated with the timing of expenditures and development charges receipts for each service category. Table 5 summarizes the results of the cash flow adjustments for the residential development charges rates. As shown, the adjusted per capita rate increases by \$86, from \$2,358 per capita to \$2,444 per capita after the cash flow analysis. Table 5 also provides the calculated rates by residential unit with the total charge per unit ranging from a high of \$6,892 for a fully serviced single or semi-detached unit to a low of \$2,934 for a small apartment. Rows and other multiples are calculated at \$5,379 per unit, and the development charge per unit for large apartments with two bedrooms or more is \$3,911.

The non-residential charge also experiences an increase after cash flow considerations from \$29.46 to \$31.12 per square metre. This is displayed on Table 6.

TOWNSHIP OF EAST ZORRA-TAVISTOCK  
TOWN-WIDE DEVELOPMENT CHARGES  
RESIDENTIAL DEVELOPMENT CHARGES BY UNIT TYPE

Service	Unadjusted Charge Per Capita	Adjusted Charge Per Capita	Residential Charge By Unit Type (1)				Percentage of Charge
			Singles & Semis	Rows & Other Multiples	Apartments 2+ Bedrooms	Apartments Bachelor or 1 Bedroom	
Fire Protection Services	\$387.23	\$428.46	\$1,208	\$943	\$686	\$514	17.5%
Parks And Recreation	\$819.27	\$830.00	\$2,340	\$1,826	\$1,328	\$996	34.0%
Public Works: Buildings And Fleet	\$208.03	\$242.60	\$684	\$534	\$388	\$291	9.9%
General Government	\$54.36	\$52.09	\$147	\$115	\$83	\$63	2.1%
<b>General Services Charge</b>	<b>\$1,468.90</b>	<b>\$1,553.15</b>	<b>\$4,379</b>	<b>\$3,418</b>	<b>\$2,485</b>	<b>\$1,864</b>	<b>63.5%</b>
Roads And Related	\$888.89	\$891.30	\$2,513	\$1,961	\$1,426	\$1,070	36.5%
<b>TOTAL CHARGE PER UNIT</b>	<b>\$2,357.79</b>	<b>\$2,444.45</b>	<b>\$6,892</b>	<b>\$5,379</b>	<b>\$3,911</b>	<b>\$2,934</b>	<b>100.0%</b>
(1) Based on Persons Per Unit Of:			2.82	2.20	1.60	1.20	

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TABLE 6

TOWNSHIP OF EAST ZORRA-TAVISTOCK  
TOWN-WIDE DEVELOPMENT CHARGES  
NON-RESIDENTIAL DEVELOPMENT CHARGES PER SQUARE METRE

Service	Non-Residential Charge		Percentage of Charge
	Unadjusted Charge per Square Metre	Adjusted Charge per Square Metre	
Fire Protection Services	\$7.42	\$8.27	27%
Parks And Recreation	\$0.00	\$0.00	0%
Public Works: Buildings And Fleet	\$3.98	\$4.67	15%
General Government	\$1.04	\$1.02	3%
<b>General Services Charge</b>	\$12.44	\$13.96	45%
Roads And Related	\$17.02	\$17.16	55%
<b>TOTAL CHARGE PER SQUARE METRE</b>	<b>\$29.46</b>	<b>\$31.12</b>	<b>100%</b>

**E. COMPARISON OF 2014 NEWLY CALCULATED DEVELOPMENT CHARGES WITH CHARGES CURRENTLY IN FORCE IN EAST ZORRA-TAVISTOCK**

Tables 7 and 8 present a comparison of the newly calculated residential and non-residential development charges with currently imposed development charge rates. It demonstrates that the residential development charge rate for a single or semi-detached unit increases by \$1,782 per unit, or 35 per cent.

Currently, the Township of East Zorra-Tavistock does not levy development charges on non-residential industrial development, but does levy a charge for all other non-residential development. The proposed rate for non-residential development increases by \$16.78 per square metre or 117 per cent. Council is to determine if a non-residential development charge should apply to industrial development within the Township.

**TOWNSHIP OF EAST ZORRA-TAVISTOCK  
COMPARISON OF CURRENT AND CALCULATED  
SINGLE/SEMI DETACHED UNIT DEVELOPMENT CHARGES**

Service	Current Residential Charge / Unit	Calculated Residential Charge / Unit	Difference in Charge	
Fire Protection Services	\$720	\$1,208	\$488	68%
Parks And Recreation	\$1,297	\$2,340	\$1,043	80%
Public Works: Buildings And Fleet	\$954	\$684	(\$270)	-28%
General Government	\$56	\$147	\$91	163%
<b>General Services Charge</b>	<b>\$3,027</b>	<b>\$4,379</b>	<b>\$1,352</b>	<b>45%</b>
Roads And Related	\$2,083	\$2,513	\$430	21%
<b>TOTAL CHARGE PER UNIT</b>	<b>\$5,110</b>	<b>\$6,892</b>	<b>\$1,782</b>	<b>35%</b>

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TABLE 8

**TOWNSHIP OF EAST ZORRA-TAVISTOCK  
COMPARISON OF CURRENT AND CALCULATED  
NON-RESIDENTIAL DEVELOPMENT CHARGES**

Service	Non-Residential (\$/Square Metre)			
	Current Non-Residential Charge	Calculated Non-Residential Charge	Difference in Charge	
Fire Protection Services	\$2.58	\$8.27	\$5.69	221%
Parks And Recreation	\$0.00	\$0.00	\$0.00	n/a
Public Works: Buildings And Fleet	\$3.43	\$4.67	\$1.24	36%
General Government	\$0.23	\$1.02	\$0.79	343%
General Services Charge	\$6.24	\$13.96	\$7.72	124%
Roads And Related	\$8.10	\$17.16	\$9.06	112%
<b>TOTAL CHARGE PER SQUARE METRE</b>	<b>\$14.34</b>	<b>\$31.12</b>	<b>\$16.78</b>	<b>117%</b>

## **VI LONG-TERM CAPITAL AND OPERATING COSTS**

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This section provides a brief examination of the long-term capital and operating costs for the capital facilities and infrastructure to be included in the development charges by-law. This examination is required as one of the features of the *Development Charges Act, 1997*.

### **A. NET OPERATING COSTS FOR THE TOWN'S SERVICES TO INCREASE OVER THE FORECAST PERIOD**

Table 9 summarizes the estimated increase in net operating costs that the Township will experience for additions associated with the planned capital program. The estimated changes in net operating costs are based on the financial information from the Township (additional details are included in Appendix E).

As shown in Table 9, by 2023 the Township's net operating costs are estimated to increase by about \$153,900. The most significant portion of this increase relates to the buildings, land and fleet projects in the Public Works capital program. The new fire hall addition and acquisition of a new tanker are also projected to impact on the annual operating budget.

### **B. LONG-TERM CAPITAL FINANCING FROM NON-DEVELOPMENT CHARGES SOURCES TOTALS \$7.14 MILLION**

As discussed in Section VI, Table 9 also summarizes the components of the development-related capital forecast that will require funding from non-development charges sources. Of the \$9.33 million net capital forecast, about \$7.14 million will need to be financed from non-development charges sources over the next 10 years. This includes about \$23,600 in respect of the 10 per cent discount required by the DCA for "soft" services and about \$7.12 million for shares of projects related to capital replacement and for non-growth shares of projects that provide benefit to the existing community. In addition, \$516,400 in interim financing may be required for projects related to service level increases and to growth in the post-2023 period. It is likely that most of these monies could be recovered from future development charges as the by-laws are revisited at least every five years.



**TOWNSHIP OF EAST ZORRA-TAVISTOCK  
SUMMARY OF LONG TERM CAPITAL AND  
OPERATING COST IMPACTS FOR ALL SERVICES  
(in thousands of constant dollars)**

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Total
<b>Net Operating Impacts (1)</b>											
Fire Protection Services	\$30.0	\$30.0	\$30.0	\$30.0	\$30.0	\$40.0	\$40.0	\$40.0	\$40.0	\$40.0	\$350.0
Parks and Recreation	\$6.6	\$8.6	\$10.5	\$12.5	\$14.4	\$16.4	\$18.3	\$20.3	\$22.2	\$24.2	\$153.8
Public Works and Fleet	\$23.5	\$23.5	\$23.5	\$23.5	\$23.5	\$48.5	\$48.5	\$48.5	\$48.5	\$48.5	\$360.0
Roads and Related	\$4.0	\$8.0	\$12.0	\$16.4	\$20.8	\$25.2	\$29.6	\$34.0	\$37.6	\$41.2	\$228.8
<b>NET OPERATING IMPACTS</b>	<b>\$64.1</b>	<b>\$70.1</b>	<b>\$76.0</b>	<b>\$82.4</b>	<b>\$88.7</b>	<b>\$130.1</b>	<b>\$136.4</b>	<b>\$142.8</b>	<b>\$148.3</b>	<b>\$153.9</b>	<b>n/a</b>
<b>Long-term Capital Impact (1)</b>											
Total Net Cost	\$1,964.0	\$1,257.0	\$950.8	\$650.8	\$665.8	\$1,200.8	\$650.8	\$650.8	\$650.8	\$685.8	\$9,327.7
Net Cost From Development Charges	\$621.9	\$182.9	\$102.4	\$89.8	\$99.3	\$138.0	\$89.8	\$89.8	\$89.8	\$121.3	\$1,624.8
Prior Growth Share from DC Reserve Balances (2)	\$42.1	\$0.2	\$0.2	\$0.2	\$4.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$47.8
Portion for Post-2023 Development (3)	\$14.6	\$0.0	\$0.0	\$0.0	\$0.0	\$501.8	\$0.0	\$0.0	\$0.0	\$0.0	\$516.4
<b>Funding From Non-DC Sources</b>											
Discount Portion	\$7.3	\$1.3	\$1.3	\$1.3	\$2.8	\$1.3	\$1.3	\$1.3	\$1.3	\$4.8	\$23.6
Replacement	\$1,278.1	\$1,072.6	\$847.0	\$559.6	\$559.6	\$559.6	\$559.6	\$559.6	\$559.6	\$559.6	\$7,115.2
<b>FUNDING FROM NON-DC SOURCES</b>	<b>\$1,285.4</b>	<b>\$1,073.9</b>	<b>\$848.3</b>	<b>\$560.9</b>	<b>\$562.4</b>	<b>\$560.9</b>	<b>\$560.9</b>	<b>\$560.9</b>	<b>\$560.9</b>	<b>\$564.4</b>	<b>\$7,138.8</b>
<b>TOTAL NET OPERATING &amp; CAPITAL IMPACTS</b>	<b>\$1,349.5</b>	<b>\$1,143.9</b>	<b>\$924.3</b>	<b>\$643.2</b>	<b>\$651.1</b>	<b>\$690.9</b>	<b>\$697.3</b>	<b>\$703.6</b>	<b>\$709.2</b>	<b>\$718.2</b>	<b>n/a</b>

Notes:

- (1) See Appendix E
- (2) Existing development charge reserve fund balances collected from growth prior to 2014 are applied to fund initial projects in development-related capital forecast
- (3) Post 2023 development-related net capital costs may be eligible for development charge funding in future DC by-laws

## **VII OTHER ISSUES AND CONSIDERATIONS**

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### **A. DEVELOPMENT CHARGES ADMINISTRATION**

Many of the administrative requirements of the *DCA* will be similar to those presently followed by the Township in terms of collection practices. However, changes will likely be required in the use of and reporting on the new development charges. In this regard:

- It is recommended that the present practices regarding collection of development charges and by-law administration continue to the extent possible;
- As required under the *DCA*, the Township should codify any rules regarding application of the by-laws and any exemptions within the development charges by-laws proposed for adoption;
- It is recommended that the Township continue to report policies consistent with the requirements of the *DCA*;
- It is recommended that Council adopt the development-related capital forecast included in this background study, subject to annual review through the Township's normal capital budget process.

### **B. LOCAL SERVICE DEFINITIONS**

The following provides the definition of "local service" under the *DCA* for a number of services provided by the County of Oxford and its area municipalities. The purpose of establishing these definitions is to determine the eligible capital costs for inclusion in the development charges calculation for the County and its area municipalities. The functions or services deemed to be local in nature are not to be included in the determination of the development charges rates. The provision of local services is considered to be a direct developer responsibility under s.59 of the *DCA* and will (or may) be recovered under other agreement(s) with the landowner or developer. The issue of "local services" is being specifically considered for the services of:

1. Roads and Related Services
2. Water Services
3. Wastewater Services
4. Stormwater Services
5. Parkland Development

**1. Roads and Related Services**

- **Collector Roads**

- The local component of a collector road internal to a development is a direct developer responsibility under s.59 of the DCA as a local service. The oversized share of a collector road internal to a development is development charge recoverable.
- Collector roads external to a development are a local service if the works are within the area to which the plan relates and, therefore, a direct developer responsibility under s.59 of the DCA. Otherwise, the works are included in the DC calculation to the extent permitted under s.5(1) of the DCA.

- **Arterial Roads**

- New arterial roads and arterial road improvements are included as part of road costing funded through development charges. Only the oversized component would be recovered through development charges and local road equivalent costs are considered to be a local service.

- **Local Roads**

- Local roads, as defined by the municipalities' engineering standards, are local services and a direct developer responsibility under s.59 of the DCA.

- **Subdivision/Site Entrances and Related**

- Entrances and all related costs (including, but not limited to: signalization, turn lanes, utilities and extensions, etc.), no matter the class of road, are a local service and a direct developer responsibility under s.59 of the DCA..

- **Streetlights**

- Streetlights internal to a development or site are a direct developer responsibility through local service provisions (s.59 of the DCA).

- Streetlights external to a development but related to the subject lands are a direct developer responsibility through local service provisions (s.59 of the DCA).
- New streetlights in other areas related to development may be included in the DC calculation to the extent permitted under S. 5(1) of the DCA.
- **Sidewalks**
  - Sidewalks internal to a development or site are a direct developer responsibility through local service provisions (s.59 of the DCA).
  - Sidewalks external to a development but required and related to the subject lands are a direct developer responsibility through local service provisions (s.59 of the DCA).
  - New sidewalks in other areas related to development are included in the DC calculation to the extent permitted under s.5(1) of the DCA.
- **Bike or Transit Lanes**
  - Bike or transit lanes, where requested, internal to a development or site are a direct developer responsibility through local service provisions (s.59 of the DCA).
  - Bike or transit lanes external to a development but required and related to the subject lands are a direct developer responsibility through local service provisions (s.59 of the DCA).
  - New bike or transit lanes in other areas related to development are included in the DC calculation to the extent permitted under s.5(1) of the DCA.
- **Noise Abatement Measures**
  - Noise abatement measures internal to a development are a direct developer responsibility through local service provisions (s.59 of the DCA).
  - Noise abatement measures external to a development but required and related to, or mitigate impacts from, the development of the subject lands, are a direct developer responsibility through local service provisions (s.59 of the DCA).
- **Street Tree Planting**

- Street tree planting, as required in the Engineering Standards, is considered a local area service and a direct responsibility of the developer.
- **Land Acquisition for Road Allowances**
  - Land acquisition for planned road allowances within development lands is a dedication under the *Planning Act* provisions.
  - Land acquisition for planned road allowances outside of development lands, and that is not a dedication under the *Planning Act*, is included in the DC calculation to the extent permitted under s.5(1) of the *DCA*.
  - Additional land acquisition for bridges or grade separations (beyond normal dedication requirements) is to the extent eligible as identified and included, if applicable, in the Development Charges Background Study.
- **County Roads**

The definition of a “local service” with respect to County roads is as follows:

- All improvements to a County road to facilitate development are considered local services to be paid by the developer unless they fall into one of the following categories:
- The improvement is designated as required for traffic flow improvement for an area greater than the development, is defined as a road improvement required by the County, and is identified through the Class Environmental Assessment process or the County Transportation study. Such an improvement would be listed in the Development Charges Background Study
- The improvement is designated as required by County of Oxford staff to serve a greater area than the development and is identified in the 5 year Capital Works forecast and is listed in the Development Charges Background Study.
- The improvement is designated as required by County of Oxford staff to serve a greater area than the development and is identified in the capital works forecast or similar County financial documents, and is listed in the development charges study.

## 2. **Water Services**

The definition of a “local service” with respect to water services is as follows:

- All growth-related water supply, storage, treatment facilities and booster pumping stations will be included in the development charges calculation, unless specifically noted otherwise in the Development Charges Background Study.
- Watermains within the development that are larger than 250 mm are to be included in the development charges calculation. The amount of cost contribution for watermains within a development shall be calculated using tendered unit prices and shall be the difference between the cost of the actual pipe diameter and the cost of a 250mm pipe diameter including a 10% engineering fee. Only watermain and valves will be included in the calculation. Any costs related to the depth of pipe are the responsibility of the developer.
- Watermains 250mm and under are deemed to be a local service and are a direct funding responsibility of the developer.
- Connections to trunk mains and pumping stations to service specific areas are to be a direct developer responsibility. Watermains will generally be required to be carried to a property line or external to the subdivision to connect to an existing watermain as a local service as a direct funding responsibility of the developer.
- Trunk watermains, generally outside the development area, identified by a Class Environmental Assessment, Servicing Study or by County staff will be included in the development charges calculation.

### **3. Wastewater Services**

The definition of a “local service” with respect to wastewater services is as follows:

- All sanitary sewage treatment facilities are to be included in the development charges calculation, unless specified otherwise in the Development Charges Background Study.
- Major sanitary trunk sewers, external to the development and major pumping stations serving more than one development are to be included in the development charges calculation. These services will be identified through a Class Environmental assessment, Servicing Study or by County staff.
- Sewer collectors 250mm and under are deemed to be a local service and are a direct funding responsibility of the developer. Sanitary sewers larger than 250mm that also service upstream properties will have cost sharing calculated on the tendered unit prices and shall be the difference between the cost of the actual pipe diameter and the cost of a 250mm pipe including a 10%

engineering fee. All other appurtenances with respect to oversizing and any costs related to the depth of pipe are the responsibility of the developer.

- Connections to collectors and pumping stations to service specific areas are to be a direct developer responsibility. The cost of continuing the last run of a sewer upstream past the last manhole to property line is the responsibility of the developer as a local service.
- Local pumping stations serving a small localized area (which may include more than one development property) are local services to be paid by the developer on a flow area or proportional basis. Local pumping stations will not be included in the list of projects in the Development Charges Background Study and therefore not eligible for development charges funding or credits.
- Any oversizing costs for other developers on a local pumping station will be negotiated as part of the development agreement for the particular developer.

#### **4. Stormwater Management Services**

- The costs of stormwater management facilities internal to subdivision and related to a plan of subdivision are considered to be a local service under the DCA and the associated costs are not included in the development charges calculation. Local SWM facilities would typically include:
  - Stormwater management facilities servicing local drainage areas;
  - Storm sewer oversizing associated with local drainage areas; and
  - Storm sewer works on existing roads.
- New stormwater facilities in other areas, which may or may not be associated with DC eligible road infrastructure, may be included in the development charge calculation.
- Master drainage planning studies or similar non-development specific studies may be included in the DC calculation.

#### **5. Parkland Development**

- For the purpose of parkland development, local services include the requirement for the owner to undertake preparation of the park plan, retaining necessary consultants to prepare design and grading plans for the park, prior to development. In addition, the owner is required to provide stripping and stockpiling, leveling, topsoiling, seeding and stormwater servicing including all appurtenances (consistent with the plan), fencing the

property perimeter, and provide municipal water and wastewater services to the lot line. These requirements are part of the conditions of s.51 and 53 *Planning Act* agreements. The municipality also requires the owner to dedicate parkland or provide cash-in-lieu, consistent with the *Planning Act* provisions. All of these costs are deemed a direct responsibility of the developer and have not been included in the development charge calculation.

- With respect to other parkland development costs, the municipal policy is to include all other components of parkland development in the DC calculation, including parking, park furniture, signage, landscaping and walkways and multi-purpose trails, in addition to the necessary fields, diamonds, playground equipment, lighting, irrigation and field houses.



**APPENDIX A**

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***DEVELOPMENT FORECAST***

## APPENDIX A

### DEVELOPMENT FORECAST

This appendix provides the details of the development forecast that was used to prepare development charges for the Township of East Zorra-Tavistock. The forecast method and the key assumptions are discussed and the results are provided in a series of tables.

The forecasts of population, households and employment are based on the Zorra-Tavistock forecasts in the *Oxford County Population, Households and Employment Forecasts and Employment Lands Study* dated March 5, 2014 (Oxford County Forecasts). The report was prepared by Watson & Associates Economists Ltd.

#### A. FORECAST METHOD & DATA SOURCES

The *Development Charges Act (DCA)* requires the Township to estimate “the anticipated amount, type and location of development” for which development charges may be imposed. The development forecast must cover both residential and non-residential development and be specific enough with regards to quantum, type, location and timing of development to allow the Township to prepare a reasonable development-related capital program. A ten-year development forecast, from 2014 to 2023, has been used for all development charge eligible services in the Township. As part of the County-wide forecast, population, household and employment forecast numbers from 2014 to 2041 are included for reference purposes. Figures beyond 2023 have not been used to calculate the development charges in this study.

The definition of population used for the purposes of the development charges study incorporates population recorded in the Census (“Census population”). This definition does not include the Census net under-coverage (about 2.4 per cent of the Census population), which represents those who were missed by the Census.

Employment figures used in the study represent Statistics Canada place of work data. Place of work data record where people work rather than their place of residence. Following the County growth forecast work, employment is categorized as primary, commercial/population-related, work at home, institutional, industrial, and other. However, employment figures have been adjusted to incorporate employees with no

fixed address which, and for the purposes of the development charge calculations, is considered to require building floorspace for its activities.

Development charges are levied on residential development as a charge per new unit. Therefore, for the residential forecast, a projection of both the *population growth* as well as the *population in new housing units* is required.

- The population growth has been used in this study to determine the need for additional facilities and the foundation for the development-related capital program.
- When calculating the development charge, however, the development-related net capital costs are spread over the total additional population that occupy new housing units. This population in new units represents the population from which development charges will be collected.

Development charges are levied on non-residential development as a charge per unit of gross floor area (GFA). As with the residential forecast, the non-residential forecast requires both a projection of employment growth as well as a projection of new floor space associated with that growth.

## **B. FORECAST RESULTS**

The Township's historical population, households, and employment from 2001 to 2013 are provided in Tables A.1-A.2. Average household sizes and activity rates are also provided. Historical growth levels shown in the tables are used to determine the average service levels attained in the Township over the last ten years (2004-2013).

Historical data indicates the Township's population has decreased from 7,145 in 2003 to 6,882 in 2013, an approximate decrease of 263 people or a loss of 4 per cent. The decrease in population occurred as a result of an alteration to the existing boundary of the Township. However, it is estimated that the population will increase during the forecast period and beyond. In particular, the number of households has decreased slightly over the same period, while employment has increased by 68 jobs. The majority of new housing constructed since 2002 (94 per cent) has taken the form of single and semi-detached units

Tables A.4 and A.5 summarize the population and household forecast for the Township between 2014 and 2031 as set out in the *Oxford County Forecasts*. The Township is forecast to grow by 252 persons, 206 households, and 168 jobs over the period from 2014 to 2023. The higher rate of household growth compared to population growth is predicated on a slight decline in occupancy levels in existing housing units.

The housing unit forecast is also shown in Table A.7. Population growth in new units is estimated by applying the following persons per unit (PPU) to the housing unit forecast: 2.82 for single and semi-detached units; 2.20 for rows and other multiples; and 1.30 for apartments. The PPU estimates are estimated based upon the occupancy patterns of similar unit types constructed in the Township in recent years (see Table A.3). The population growth in new units is forecast at 566 over the ten year period.

Employment forecasts used in the development charges study are also based on the *Oxford County Forecasts*. Employment figures in the *Oxford County Forecast* account for employment by place of work. For development charge purposes, the forecasts have been adjusted to incorporate employees with no fixed address. Employment in the Township is expected to increase by 6 per cent over the ten-year period rising from 2,690 in 2013 to 2,858 in 2023. This represents a net increase of 168 jobs (see Tables A.4 and A.5).

The development charges calculation for non-residential development is based on floor space. Approximately 9,852 square metres of floor space are forecast to be added in the 2014 to 2023 planning period. Table A.8 provides a breakdown of the non-residential floor space forecast by type.

### **C. FORECAST TABLES**

The forecast results are presented in eight tables:

Table A.1: Provides the historical population, household, and employment forecasts annually from 2001-2013;

Tables A.2: Summarizes 2002-2013 historical housing completion and building permit data by unit type;

Table A.3: Sets out the historical population and households by period of construction based on a special Census data tabulation by Statistics Canada;

Tables A.4 and A.5: Provide the forecast of population, households and housing units, and employment from 2011-2041;

Tables A.6 and A.7: Provide the housing unit forecast by unit type: singles/semis, rows/other multiples, and apartments as well as the potential population in new housing units from 2014-2031;

Table A.8: Displays the estimated increase in non-residential gross floor area (GFA) in square metres that will be constructed to accommodate the forecast new employment.

## TOWNSHIP OF EAST ZORRA-TAVISTOCK 2014 DEVELOPMENT CHARGES STUDY

TABLE A.1  
Historic Population, Dwellings & Employment

Mid-Year	Census Population <sup>2</sup>	Growth	Total Occupied Dwellings	Growth	HH Size	Growth Forecast Employment Numbers	No Fixed Address Employment	Employment Used for DC Calculations	Growth	Activity Rate <sup>1</sup>
<b>2001</b>	<b>7,238</b>		<b>2,500</b>		<b>2.90</b>	<b>2,445</b>	<b>245</b>	<b>2,690</b>		<b>37.2%</b>
2002	7,191	-47	2,530	30	2.84	2,393	262	2,655	-35	36.9%
2003	7,145	-46	2,561	31	2.79	2,342	280	2,622	-33	36.7%
2004	7,099	-46	2,592	31	2.74	2,292	299	2,591	-31	36.5%
2005	7,053	-46	2,624	32	2.69	2,243	319	2,562	-29	36.3%
<b>2006<sup>3</sup></b>	<b>7,008</b>	<b>-45</b>	<b>2,656</b>	<b>32</b>	<b>2.64</b>	<b>2,195</b>	<b>340</b>	<b>2,535</b>	<b>-27</b>	<b>36.2%</b>
2007	6,973	-35	2,627	-29	2.65	2,204	355	2,559	24	36.7%
2008	6,938	-35	2,598	-29	2.67	2,213	370	2,583	24	37.2%
2009	6,904	-34	2,570	-28	2.69	2,222	386	2,608	25	37.8%
2010	6,870	-34	2,542	-28	2.70	2,231	403	2,634	26	38.3%
<b>2011</b>	<b>6,836</b>	<b>-34</b>	<b>2,515</b>	<b>-27</b>	<b>2.72</b>	<b>2,240</b>	<b>420</b>	<b>2,660</b>	<b>26</b>	<b>38.9%</b>
2012	6,859	23	2,535	20	2.71	2,253	422	2,675	15	39.0%
2013	6,882	23	2,555	20	2.69	2,266	424	2,690	15	39.1%
2004-2013		-263			-6				68	

Source: Watson & Associates Economists Ltd, 2013

Note 1: Activity Rate represents the ratio between total employment and Census population.

Note 2: Census Population does not include Census net undercoverage of roughly 2.4%.

Note 3: Note historic values have been adjusted for boundary changes

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**TOWNSHIP OF EAST ZORRA-TAVISTOCK 2014 DEVELOPMENT CHARGES STUDY**


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**TABLE A.2**  
**Historic Residential Building Permits**

Year	Building Permits			
	Singles/Semis	Rows	Apts.	Total
2002	23	0	1	24
2003	22	0	2	24
2004	27	0	0	27
2005	11	0	0	11
2006	20	0	0	20
2007	28	0	0	28
2008	25	0	0	25
2009	22	0	0	22
2010	36	0	0	36
2011	13	0	0	13
2012	21	0	13	34
2013	21	0	0	21
<b>Total</b>	<b>269</b>	<b>0</b>	<b>16</b>	<b>285</b>
Average '02-'13	22	0	1	24
Average '08-'13	23	0	2	25

**Historic Building Permits - Shares By Unit Type**

Mid-Year	Building Permits			
	Singles/Semis	Rows	Apts.	Total
2002	96%	0%	4%	100%
2003	92%	0%	8%	100%
2004	100%	0%	0%	100%
2005	100%	0%	0%	100%
2006	100%	0%	0%	100%
2007	100%	0%	0%	100%
2008	100%	0%	0%	100%
2009	100%	0%	0%	100%
2010	100%	0%	0%	100%
2011	100%	0%	0%	100%
2012	62%	0%	38%	100%
2013	100%	0%	0%	100%
<b>Total</b>	<b>94%</b>	<b>0%</b>	<b>6%</b>	<b>100%</b>

Source: Statistics Canada, Building Permit Data and Watson & Associates Economists, Ltd.

## TOWNSHIP OF EAST ZORRA-TAVISTOCK 2014 DEVELOPMENT CHARGES STUDY

TABLE A.3  
Historic Households by Period of Construction Showing Household Size

	Period of Construction										Pre 2001	2001-2011	Total
	Pre 1945	1946-1960	1961-1970	1971-1980	1981-1985	1986-1990	1991-1995	1996-2000	2001-2005	2006-2011			
<b>Singles/Semis</b>													
Household Populat	2,305	595	765	630	145	445	450	230	160	365	5,565	525	6,090
Households	785	225	225	265	55	185	145	65	60	150	1,950	210	2,160
Household Size	2.94	2.64	3.40	2.38	2.64	2.41	3.10	3.54	2.67	2.43	2.85	2.50	2.82
<b>Rows</b>													
Household Populat	0	0	0	0	0	0	0	0	0	0	0	0	0
Households	0	0	0	0	0	0	0	0	0	0	0	0	0
Household Size	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Apartments</b>													
Household Populat	45	0	0	0	35	55	30	0	0	0	165	0	165
Households	45	0	0	0	35	55	20	0	0	0	155	0	155
Household Size	1.00	0.00	0.00	0.00	1.00	1.00	1.50	0.00	0.00	0.00	1.06	0.00	1.06
<b>All Units</b>													
Household Populat	2,350	595	765	630	180	500	480	230	160	365	5,730	525	6,255
Households	830	225	225	265	90	240	165	65	60	150	2,105	210	2,315
Household Size	2.83	2.64	3.40	2.38	2.00	2.08	2.91	3.54	2.67	2.43	2.72	2.50	2.70

Source: Statistics Canada, 2011 National Household Survey Special Run.



## TOWNSHIP OF EAST ZORRA-TAVISTOCK 2014 DEVELOPMENT CHARGES STUDY

TABLE A.4  
Population, Household & Employment Forecast Summary

Mid-Year	Census Population	Singles & Semis	Rows & Other Multiples	Apartments	Total Occupied Dwellings	Growth Forecast Employment Numbers	No-Fixed Address	Employment Used for DC Calculations	HH Size	Activity Rate
2011	6,836	2,280	65	170	2,515	2,240	420	2,660	2.72	38.9%
2012	6,859	2,300	65	170	2,535	2,253	422	2,675	2.71	39.0%
2013	6,882	2,320	65	170	2,555	2,266	424	2,690	2.69	39.1%
2014	6,905	2,340	65	170	2,575	2,279	426	2,705	2.68	39.2%
2015	6,928	2,360	65	170	2,595	2,292	428	2,720	2.67	39.3%
2016	6,950	2,380	65	170	2,615	2,305	432	2,737	2.66	39.4%
2017	6,978	2,400	67	170	2,637	2,321	435	2,756	2.65	39.5%
2018	7,006	2,420	69	170	2,659	2,337	438	2,775	2.63	39.6%
2019	7,034	2,440	71	170	2,681	2,353	441	2,794	2.62	39.7%
2020	7,062	2,460	73	170	2,703	2,369	444	2,813	2.61	39.8%
2021	7,090	2,480	75	170	2,725	2,385	447	2,832	2.60	39.9%
2022	7,112	2,496	77	170	2,743	2,396	449	2,845	2.59	40.0%
2023	7,134	2,512	79	170	2,761	2,407	451	2,858	2.58	40.1%
2024	7,156	2,528	81	170	2,779	2,418	453	2,871	2.58	40.1%
2025	7,178	2,544	83	170	2,797	2,429	455	2,884	2.57	40.2%
2026	7,200	2,560	85	170	2,815	2,440	458	2,898	2.56	40.2%
2027	7,219	2,573	89	170	2,832	2,450	459	2,909	2.55	40.3%
2028	7,238	2,586	93	170	2,849	2,460	461	2,921	2.54	40.4%
2029	7,257	2,599	97	170	2,866	2,470	463	2,933	2.53	40.4%
2030	7,276	2,612	101	170	2,883	2,480	465	2,945	2.52	40.5%
2031	7,295	2,625	105	170	2,900	2,490	467	2,957	2.52	40.5%

Source: Watson &amp; Associates Economists Ltd., 2013

Note: Growth Forecast Employment Numbers derived from the 2013 Population, Household and Employment Forecasts and Employment Lands Study by Watson &amp; Associates

TABLE A.5  
Forecast Population & Household Growth Summary

Mid-Year	Census Pop'n Growth	Total Occupied Dwellings Growth	Employment by POW Growth
2011	-34	-27	26
2012	23	20.0%	15
2013	23	20	15
2014	23	20	15
2015	23	20	15
2016	22	20	17
2017	28	22	19
2018	28	22	19
2019	28	22	19
2020	28	22	19
2021	28	22	19
2022	22	18	13
2023	22	18	13
2024	22	18	13
2025	22	18	13
2026	22	18	14
2027	19	17	12
2028	19	17	12
2029	19	17	12
2030	19	17	12
2031	19	17	12
2014-2023	252	206	168
2014-2031	413	345	267

Source: Watson &amp; Associates Economists Ltd., 2013

## TOWNSHIP OF EAST ZORRA-TAVISTOCK 2014 DEVELOPMENT CHARGES STUDY

TABLE A.6  
Growth in Households by Unit Type

Mid-Year	Singles & Semis	Rows & Other Multiples	Apartments	Total New HH
2014	20	0	0	20
2015	20	0	0	20
<b>2016</b>	<b>20</b>	<b>0</b>	<b>0</b>	<b>20</b>
2017	20	2	0	22
2018	20	2	0	22
2019	20	2	0	22
2020	20	2	0	22
<b>2021</b>	<b>20</b>	<b>2</b>	<b>0</b>	<b>22</b>
2022	16	2	0	18
2023	16	2	0	18
2024	16	2	0	18
2025	16	2	0	18
<b>2026</b>	<b>16</b>	<b>2</b>	<b>0</b>	<b>18</b>
2027	13	4	0	17
2028	13	4	0	17
2029	13	4	0	17
2030	13	4	0	17
<b>2031</b>	<b>13</b>	<b>4</b>	<b>0</b>	<b>17</b>
2014-2023	192	14	0	206
2014-2031	305	40	0	345

Source: Watson & Associates Economists Ltd., 2013

TABLE A.7  
Forecast Population in New Households by Unit Type\*

Mid-Year	Singles & Semis	Rows & Other Multiples	Apartments	Total Population in New HH
2014	56	0	0	56
2015	56	0	0	56
<b>2016</b>	<b>56</b>	<b>0</b>	<b>0</b>	<b>56</b>
2017	56	4	0	60
2018	56	4	0	60
2019	56	4	0	60
2020	56	4	0	60
<b>2021</b>	<b>56</b>	<b>4</b>	<b>0</b>	<b>60</b>
2022	45	4	0	49
2023	45	4	0	49
2024	45	4	0	49
2025	45	4	0	49
<b>2026</b>	<b>45</b>	<b>4</b>	<b>0</b>	<b>49</b>
2027	37	9	0	46
2028	37	9	0	46
2029	37	9	0	46
2030	37	9	0	46
<b>2031</b>	<b>37</b>	<b>9</b>	<b>0</b>	<b>46</b>
2014-2023	538	28	0	566
2014-2031	858	85	0	943

\*Based on PPU's

2.82

2.20

1.30

## TOWNSHIP OF EAST ZORRA-TAVISTOCK 2014 DEVELOPMENT CHARGES STUDY

TABLE A.8  
Non-Residential Space Forecast

## Employment Density

Primary Employment	100.0 m <sup>2</sup> per employee
Commercial/Population-Related Employment	50.0 m <sup>2</sup> per employee
Work at Home Employment	- m <sup>2</sup> per employee
Institutional Employment	50.0 m <sup>2</sup> per employee
Industrial Employment	110.0 m <sup>2</sup> per employee

Mid-Year	Primary Employment			Commercial/Population Related Employment			Work at Home Employment			Institutional Employment			Industrial Employment			Total Employment		
	Employment Used for DC Calculations	Emp Growth	Space (m <sup>2</sup> )	Employment Used for DC Calculations	Empl Growth	Space (m <sup>2</sup> )	Employment Used for DC Calculations	Empl Growth	Space (m <sup>2</sup> )	Employment Used for DC Calculations	Empl Growth	Space (m <sup>2</sup> )	Employment Used for DC Calculations	Empl Growth	Space (m <sup>2</sup> )	Employment Used for DC Calculations	Empl Growth	Space (m <sup>2</sup> )
<b>2011</b>	<b>248</b>			<b>509</b>			<b>520</b>			<b>486</b>			<b>897</b>			<b>2,660</b>		
2012	249	1	123	512	3	166	523	3	0	491	5	234	901	4	415	2,675	15	938
2013	250	1	100	515	3	150	526	3	0	495	4	200	904	3	330	2,690	15	780
2014	251	1	100	518	3	150	529	3	0	499	4	200	907	3	330	2,705	15	780
2015	252	1	100	521	3	150	532	3	0	503	4	200	910	3	330	2,720	15	780
<b>2016</b>	<b>255</b>	<b>3</b>	<b>274</b>	<b>525</b>	<b>4</b>	<b>195</b>	<b>535</b>	<b>3</b>	<b>0</b>	<b>508</b>	<b>5</b>	<b>257</b>	<b>914</b>	<b>4</b>	<b>484</b>	<b>2,737</b>	<b>17</b>	<b>1,210</b>
2017	256	1	126	531	6	305	538	3	0	512	4	193	918	4	396	2,756	19	1,020
2018	257	1	100	537	6	300	541	3	0	516	4	200	922	4	440	2,775	19	1,040
2019	258	1	100	543	6	300	544	3	0	520	4	200	926	4	440	2,794	19	1,040
2020	259	1	100	550	7	350	547	3	0	524	4	200	930	4	440	2,813	19	1,090
<b>2021</b>	<b>262</b>	<b>3</b>	<b>316</b>	<b>557</b>	<b>7</b>	<b>367</b>	<b>550</b>	<b>3</b>	<b>0</b>	<b>529</b>	<b>5</b>	<b>273</b>	<b>933</b>	<b>3</b>	<b>355</b>	<b>2,832</b>	<b>19</b>	<b>1,311</b>
2022	262	0	33	561	4	183	553	3	0	533	4	177	937	4	415	2,845	13	808
2023	263	0	33	564	3	150	556	3	0	536	3	150	941	4	440	2,858	13	773
2024	263	0	33	567	3	150	559	3	0	539	3	150	945	4	440	2,871	13	773
2025	263	0	33	570	3	150	562	3	0	542	3	150	949	4	440	2,884	13	773
<b>2026</b>	<b>264</b>	<b>0</b>	<b>33</b>	<b>574</b>	<b>4</b>	<b>181</b>	<b>565</b>	<b>3</b>	<b>0</b>	<b>546</b>	<b>4</b>	<b>188</b>	<b>954</b>	<b>5</b>	<b>583</b>	<b>2,898</b>	<b>14</b>	<b>985</b>
2027	264	0	18	577	3	169	568	3	0	548	2	112	956	2	187	2,909	12	486
2028	264	0	0	580	3	150	571	3	0	550	2	100	958	2	220	2,921	12	470
2029	264	0	0	583	3	150	574	3	0	552	2	100	960	2	220	2,933	12	470
2030	264	0	0	586	3	150	577	3	0	554	2	100	962	2	220	2,945	12	470
<b>2031</b>	<b>265</b>	<b>1</b>	<b>134</b>	<b>590</b>	<b>4</b>	<b>203</b>	<b>580</b>	<b>3</b>	<b>0</b>	<b>557</b>	<b>3</b>	<b>133</b>	<b>965</b>	<b>3</b>	<b>310</b>	<b>2,957</b>	<b>12</b>	<b>780</b>
2014-2023		13	1,282		49	2,450		30	0		41	2,050		37	4,070		168	9,852
2014-2031		15	1,533		75	3,753		54	0		62	3,083		61	6,690		267	15,059

Source: Hemson Consulting, Ltd., 2014

APPENDIX B

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*GENERAL SERVICES TECHNICAL APPENDIX*

**APPENDIX B****GENERAL SERVICES TECHNICAL APPENDIX  
INTRODUCTION AND OVERVIEW**

This appendix provides the detailed analysis undertaken to establish the development charge rates for each of the general services.

The appendix is divided into four sub-sections for the following general services:

- B.1 Fire Protection Services
- B.2 Parks and Recreation
- B.3 Public Works: Buildings and Fleet
- B.4 General Government

Every sub-section contains a set of three tables, with the exception of General Government, providing the background data and analysis undertaken to arrive at the calculated development charge rates for that particular service. The following is an overview of the content and purpose of each of the tables:

**TABLE 1 HISTORIC SERVICE LEVELS**

Table 1 provides the data utilized to determine the 10-year historic service level. The *DCA* and *Ontario Regulation 82/98* (*O. Reg. 82/98*) require that the development charges be set at a level no higher than the average service level provided in the Township over the 10-year period immediately preceding the preparation of the background study, on a service by service basis. For the purpose of this study, the historical inventory period has been defined as 2004–2013.

*O. Reg. 82/98* requires that, when defining and determining historical service levels, both quantity (number and size) and quality (value or cost) of service be taken into consideration. In most cases, the service levels are initially established in quantitative terms. For example, service levels for buildings are presented in terms of square feet per unit. The qualitative aspect is introduced by the consideration of the monetary value of a facility or service. In the case of buildings, for example, the cost would be shown in terms of dollars per square foot to replace or construct a facility of the same quality. This approach helps to ensure that the growth-related capital facilities to be charged to new growth reflect not only the quantity but also the quality of service provided historically

by the Township. Both the quantitative and qualitative aspects of service levels used in the present analysis are based on information provided by Township staff and the consultant. This information is generally based on historical records and experience with costs to acquire or construct similar facilities, equipment and infrastructure.

The final page of Table 1 shows the calculation of the maximum allowable, net of uncommitted excess capacity. The “maximum allowable” is defined as the 10-year historic service level (expressed as \$/capita or \$/population plus employment) multiplied by the forecast increase in net population growth (or net population plus employment) over the planning period. The resulting value is the amount of capital infrastructure that must be constructed for that particular service in order to maintain the 10-year historic service level.

There is also a requirement in the *DCA* to consider “excess capacity” within a municipality’s existing infrastructure that may be available to partially meet the future servicing requirements. If Council has expressed an intention that, before or at the time the capacity was created, the cost of providing the capacity would be paid for by new development, it is considered “committed excess capacity” under the *DCA* and the associated capital is eligible for recovery. If uncommitted excess capacity exists, the calculated maximum will be reduced by this amount.

**TABLE 2            2014–2023 GROWTH-RELATED CAPITAL BUDGET & CALCULATION OF DEVELOPMENT CHARGES**

The *DCA* requires the Township Council to express its intent to provide future capital facilities at the level incorporated in the development charges calculation. Based on the growth forecasts as provided in Appendix A, Township staff, in collaboration with the consultant, have developed a growth-related capital forecast setting out those projects that are required to service anticipated growth for the 10-year period from 2004–2013.

To determine the growth-related share of the program, the project costs are reduced by any “prior growth” and “replacement” shares. A prior growth share relates to a portion of a facility that is being constructed to alleviate an existing deficiency and service growth that has already occurred. In many situations, existing development charges reserve funds will be used to fund the prior growth share.

A replacement share is when a new facility will in part provide servicing for a municipal facility that is demolished, redeployed or will otherwise not be available to serve its former function. The replacement share of the capital program is not deemed to be

growth-related and is therefore removed from the development charges calculation. Finally, in calculating development charges, the growth-related net capital costs must be reduced by 10 per cent for all services except fire and police and engineered services (DCA, s.5.(1)8.). The 10 per cent discount is applied to the other services. The result is the discounted growth-related net capital costs that are eligible for recovery against growth over the period 2014–2023.

The capital program less any prior growth and replacement shares yields the net growth-related program. Although deemed growth-related, not all of the net growth-related capital program may be recoverable from development charges in the period 2014–2023. For some services, a portion of the capital program will service growth that will not occur until beyond 2023. This portion of the capital program is deemed “pre-built” service capacity and is to be considered as committed excess capacity to be recovered under future development charges.

The capital costs associated with pre-built service capacity are removed from the capital program to produce the growth-related capital program for the period 2014–2023. In all cases, as required, this amount is equal to or less than the maximum allowable as calculated on the final page of Table 1.

### **Calculation of the Unadjusted Development Charges Rates**

The section below the capital program provides the calculation of the unadjusted development charges rates. The term “unadjusted” development charge is used to distinguish the charge that is calculated prior to cash flow financing consideration. The cash flow analysis is shown in Table 3.

The first step in the determination of the unadjusted development charges rate is the allocation of the growth-related net capital costs between the residential and the non-residential sectors. For all services except parks and recreation, the growth-related costs have been allocated 75 per cent to residential and 25 per cent to non-residential based on changes in population and employment over the planning period and other considerations.

The growth-related costs associated with parks and recreation services have been allocated 100 per cent to residential services because the need for these services is driven by residential development.

The residential growth-related costs are then divided by the forecast population in new housing units resulting in the unadjusted residential development charge on a per capita basis. The non-residential growth-related costs are divided by the forecast increase in non-residential gross floor area (GFA) yielding a charge per square metre of new non-residential GFA.

### **TABLE 3      CASH FLOW ANALYSIS**

A cash flow analysis is also undertaken to account for the timing of projects and receipt of development charges. Interest earnings or borrowing costs, therefore, are accounted for in the calculation as allowed under the *DCA*. Based on the growth forecast, the analysis calculates the development charge rate required to finance the net development-related capital spending plan, including provisions for any borrowing costs or interest earnings on the reserve funds. The cash flow analysis is designed so that the closing cash balance at the end of the planning period is as close to nil as possible.

In order to determine appropriate development charge rates reflecting borrowing and earnings necessary to support the net development-related funding requirement, assumptions are used for the inflation rate and interest rate. An inflation rate of 2 per cent is used for the funding requirements, an interest rate of 5.5 per cent is used for borrowing on the funds, and an interest rate of 3.5 per cent is applied to positive balances.

Table 3 displays the results of the cash flow analysis and provides the adjusted or final per capita residential and per square metre (of GFA) non-residential development charges.



**APPENDIX B.1**

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***FIRE PROTECTION  
SERVICES***

## APPENDIX B.1

### FIRE PROTECTION

The East Zorra-Tavistock Fire Department currently operates three volunteer-based fire stations in Hickson, Innerkip and Tavistock. The stations provide the necessary fire and emergency services that ensure the health and safety of the Township's residents.

#### **TABLE 1        HISTORIC SERVICE LEVELS**

The current value of the total fire services capital infrastructure includes building, land, vehicles, furniture and equipment. The total space provided at the fire stations, as of 2013, is approximately 14,400 square feet and is valued at approximately \$2.88 million. The land used for the stations and structures occupy roughly 2.23 hectares of land which is valued at \$670,500. The department owns nine vehicles with a total replacement value that amounts to \$2.46 million. In addition, station furniture, equipment and personal firefighting equipment amounts to \$764,800.

The current value of the capital infrastructure including fire stations, land, personal firefighter fighting equipment, vehicles, furniture and equipment is approximately is \$6.77 million and has provided East Zorra-Tavistock with a 10-year average historical service level of \$695.79 per population plus employment. The calculated maximum allowable to be recovered through development charges is \$292,200.

No legislated 10 per cent reduction is required for Fire Protection Services. Committed excess capacity in the amount of \$113,600 has been identified and is deemed to be committed, and therefore not reduced from the funding envelope. As such, the maximum funding envelope of \$292,200 is brought forward to the development charge calculation.

#### **TABLE 2        2014–2023 GROWTH-RELATED CAPITAL PROGRAM**

The capital program for Fire Protection Services includes debenture payments related to the construction of the Tavistock Fire Hall. The acquisition of land and the expansion of the Hickson Fire Hall are forecast to occur in 2015 at a combined cost of \$325,000. In addition, the capital program also includes the acquisition of various firefighting equipment and a new tanker in the amount of \$338,400 and \$170,000, respectively.

The gross cost of the fire 2014–2023 growth-related capital program totals \$925,700. Of this gross cost, an amount of \$361,400 is deemed to benefit existing residents. The Fire Protection Services development charges reserve amounts to \$16,900 and an additional \$3,400 is netted off to account for prior non-statutory discounts. A further \$251,800 has been deemed as a post-period benefit. The remaining \$292,200, being equal to the maximum allowable funding envelope, will be fully included in the development charges as the Fire Protection Service is not required to be discounted.

The growth-related cost is allocated 75 per cent, or \$219,200, to new residential development, and 25 percent, or \$73,100, to non-residential development. This yields unadjusted development charges of \$387.23 per capita and \$7.42 per square metre.

### TABLE 3 CASH FLOW ANALYSIS

After cash flow consideration, the calculated residential charge increases to \$428.46 per capita and the non-residential charge increases to \$8.27 per square metre. The following table summarizes the calculation of the Fire Protection Services development charges.

<b>FIRE PROTECTION SERVICES SUMMARY</b>						
10-year Hist.	2014 - 2023		Unadjusted		Adjusted	
Service Level	Development-Related Capital Program		Development Charge		Development Charge	
per capita	Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$695.79	\$925,726	\$292,232	\$387.23	\$7.42	<b>\$428.46</b>	<b>\$8.27</b>

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APPENDIX B.1  
TABLE 1 - PAGE 1

TOWNSHIP OF EAST ZORRA-TAVISTOCK  
INVENTORY OF CAPITAL ASSETS  
FIRE PROTECTION SERVICES

BUILDINGS Branch Name	# of Square Feet										UNIT COST (\$/sq.ft.)
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
Hickson Fire Station #1	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	\$200
Innerkip Fire Station #2	4,560	4,560	4,560	4,560	4,560	4,560	4,560	4,560	4,560	4,560	\$200
Tavistock Fire Station #3	3,600	5,232	5,232	5,232	5,232	5,232	5,232	5,232	5,232	5,232	\$200
<b>Total (sq.ft.)</b>	<b>12,760</b>	<b>14,392</b>	<b>14,392</b>	<b>14,392</b>	<b>14,392</b>	<b>14,392</b>	<b>14,392</b>	<b>14,392</b>	<b>14,392</b>	<b>14,392</b>	
<b>Total (\$000)</b>	<b>\$2,552.0</b>	<b>\$2,878.4</b>	<b>\$2,878.4</b>	<b>\$2,878.4</b>	<b>\$2,878.4</b>	<b>\$2,878.4</b>	<b>\$2,878.4</b>	<b>\$2,878.4</b>	<b>\$2,878.4</b>	<b>\$2,878.4</b>	

LAND Branch Name	# of Hectares										UNIT COST (\$/ha)
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
Hickson Fire Station #1	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	\$250,000
Innerkip Fire Station #2	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	\$250,000
Tavistock Fire Station #3	0.20	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	\$350,000
<b>Total (ha)</b>	<b>1.30</b>	<b>2.23</b>	<b>2.23</b>	<b>2.23</b>	<b>2.23</b>	<b>2.23</b>	<b>2.23</b>	<b>2.23</b>	<b>2.23</b>	<b>2.23</b>	
<b>Total (\$000)</b>	<b>\$345.0</b>	<b>\$670.5</b>	<b>\$670.5</b>	<b>\$670.5</b>	<b>\$670.5</b>	<b>\$670.5</b>	<b>\$670.5</b>	<b>\$670.5</b>	<b>\$670.5</b>	<b>\$670.5</b>	

VEHICLES Type of Collection	# of Vehicles										UNIT COST (\$/item)
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
Tanker	3	3	3	3	3	3	3	3	3	3	\$270,000
Pumper	3	3	3	3	3	3	3	3	3	3	\$300,000
Rescue	3	3	3	3	3	3	3	3	3	3	\$250,000
<b>Total (#)</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>9</b>	
<b>Total (\$000)</b>	<b>\$2,460.0</b>	<b>\$2,460.0</b>	<b>\$2,460.0</b>	<b>\$2,460.0</b>	<b>\$2,460.0</b>	<b>\$2,460.0</b>	<b>\$2,460.0</b>	<b>\$2,460.0</b>	<b>\$2,460.0</b>	<b>\$2,460.0</b>	

FURNITURE AND EQUIPMENT	Total Value of Furniture and Equipment (\$)										UNIT COST (\$/item)
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
Equipment for vehicles	\$256,700	\$256,700	\$256,700	\$256,700	\$256,700	\$256,700	\$256,700	\$256,700	\$256,700	\$256,700	n/a
Station Furniture and Equipment	\$32,100	\$32,100	\$32,100	\$32,100	\$32,100	\$32,100	\$32,100	\$32,100	\$32,100	\$32,100	
Personal Firefighter Equipment (pagers, clothing etc.)	54	57	57	57	57	57	57	57	57	63	\$4,000
Shared Firefighter Equipment (SCBA etc.)	24	26	28	30	32	34	36	38	39	40	\$5,600
<b>Total (\$000)</b>	<b>\$639.2</b>	<b>\$662.4</b>	<b>\$673.6</b>	<b>\$684.8</b>	<b>\$696.0</b>	<b>\$707.2</b>	<b>\$718.4</b>	<b>\$729.6</b>	<b>\$735.2</b>	<b>\$764.8</b>	

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APPENDIX B.1  
TABLE 1 - PAGE 2

TOWNSHIP OF EAST ZORRA-TAVISTOCK  
CALCULATION OF SERVICE LEVELS  
FIRE PROTECTION SERVICES

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Historic Population	7,099	7,053	7,008	6,973	6,938	6,904	6,870	6,836	6,859	6,882
Historic Employment	2,591	2,562	2,535	2,559	2,583	2,608	2,634	2,660	2,675	2,690
Population + Employment	9,690	9,615	9,543	9,532	9,521	9,512	9,504	9,496	9,534	9,572

INVENTORY SUMMARY (\$000)

Buildings	\$2,552.0	\$2,878.4	\$2,878.4	\$2,878.4	\$2,878.4	\$2,878.4	\$2,878.4	\$2,878.4	\$2,878.4	\$2,878.4
Land	\$345.0	\$670.5	\$670.5	\$670.5	\$670.5	\$670.5	\$670.5	\$670.5	\$670.5	\$670.5
Vehicles	\$2,460.0	\$2,460.0	\$2,460.0	\$2,460.0	\$2,460.0	\$2,460.0	\$2,460.0	\$2,460.0	\$2,460.0	\$2,460.0
Furniture And Equipment	\$639.2	\$662.4	\$673.6	\$684.8	\$696.0	\$707.2	\$718.4	\$729.6	\$735.2	\$764.8
<b>Total (\$000)</b>	<b>\$5,996.2</b>	<b>\$6,671.3</b>	<b>\$6,682.5</b>	<b>\$6,693.7</b>	<b>\$6,704.9</b>	<b>\$6,716.1</b>	<b>\$6,727.3</b>	<b>\$6,738.5</b>	<b>\$6,744.1</b>	<b>\$6,773.7</b>

SERVICE LEVEL (\$/pop+emp)											Average Service Level
Buildings	\$263.36	\$299.37	\$301.62	\$301.97	\$302.32	\$302.61	\$302.86	\$303.12	\$301.91	\$300.71	\$297.99
Land	\$35.60	\$69.73	\$70.26	\$70.34	\$70.42	\$70.49	\$70.55	\$70.61	\$70.33	\$70.05	\$66.84
Vehicles	\$253.87	\$255.85	\$257.78	\$258.08	\$258.38	\$258.62	\$258.84	\$259.06	\$258.02	\$257.00	\$257.55
Furniture And Equipment	\$65.96	\$68.89	\$70.59	\$71.84	\$73.10	\$74.35	\$75.59	\$76.83	\$77.11	\$79.90	\$73.42
<b>Total (\$/pop+emp)</b>	<b>\$618.80</b>	<b>\$693.84</b>	<b>\$700.25</b>	<b>\$702.23</b>	<b>\$704.22</b>	<b>\$706.07</b>	<b>\$707.84</b>	<b>\$709.61</b>	<b>\$707.37</b>	<b>\$707.66</b>	<b>\$695.79</b>

TOWNSHIP OF EAST ZORRA-TAVISTOCK  
CALCULATION OF MAXIMUM ALLOWABLE  
FIRE PROTECTION SERVICES

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2004 - 2013	\$695.79
Net Population + Emp. growth 2014 - 2023	420
Maximum Allowable Funding Envelope	\$292,232
Less: Uncommitted Excess Capacity	\$0
Less: 10% Legislated Reduction	\$0
<b>Discounted Maximum Allowable Funding Envelope</b>	<b>\$292,232</b>

Excess Capacity Calculation	
Total Value of Inventory in 2013	\$6,773,700
Inventory Using Average Service Level	\$6,660,102
Excess Capacity	\$113,598
Excess Capacity:	Committed

**TOWNSHIP OF EAST ZORRA-TAVISTOCK  
DEVELOPMENT-RELATED CAPITAL PROGRAM  
FIRE PROTECTION SERVICES**

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs			
					Replacement & BTE Shares	0% Reduction		Available DC Reserves	2014-2023	Post 2023	
<b>1.0 FIRE PROTECTION SERVICES</b>											
<b>1.1 Buildings, Land &amp; Furnishings</b>											
1.1.1 Tavistock Firehall debenture	2014	\$ 46,163	\$ -	\$ 46,163	\$ 37,000	\$ -	\$ 9,163	\$ 9,163	\$ -	\$ -	
1.1.2 Tavistock Firehall debenture	2015	\$ 46,163	\$ -	\$ 46,163	\$ 37,000	\$ -	\$ 9,163	\$ -	\$ 9,163	\$ -	
1.1.3 Hickson Property Acquisition (fire share)	2014	\$ 25,000	\$ -	\$ 25,000	\$ -	\$ -	\$ 25,000	\$ 11,155	\$ 13,845	\$ -	
1.1.4 Hickson Fire Hall Expansion/Addition	2019	\$ 300,000	\$ -	\$ 300,000	\$ -	\$ -	\$ 300,000	\$ -	\$ 48,213	\$ 251,787	
Subtotal Buildings, Land & Furnishings		\$ 417,326	\$ -	\$ 417,326	\$ 74,000	\$ -	\$ 343,326	\$ 20,318	\$ 71,222	\$ 251,787	
<b>1.2 Equipment</b>											
1.2.1 Communication Equipment Replacement	2016	\$ 300,000	\$ -	\$ 300,000	\$ 287,390	\$ -	\$ 12,610	\$ -	\$ 12,610	\$ -	
1.2.2 Equipment (Bunker Gear, SCBA, PPE, Pagers, etc.) for 4 FF	Various	\$ 38,400	\$ -	\$ 38,400	\$ -	\$ -	\$ 38,400	\$ -	\$ 38,400	\$ -	
Subtotal Equipment		\$ 338,400	\$ -	\$ 338,400	\$ 287,390	\$ -	\$ 51,010	\$ -	\$ 51,010	\$ -	
<b>1.3 Vehicles</b>											
1.3.1 New Tanker (2013)	2014	\$ 170,000	\$ -	\$ 170,000	\$ -	\$ -	\$ 170,000	\$ -	\$ 170,000	\$ -	
Subtotal Vehicles		\$ 170,000	\$ -	\$ 170,000	\$ -	\$ -	\$ 170,000	\$ -	\$ 170,000	\$ -	
<b>TOTAL FIRE PROTECTION SERVICES</b>		\$ 925,726	\$ -	\$ 925,726	\$ 361,390	\$ -	\$ 564,336	\$ 20,318	\$ 292,232	\$ 251,787	

<b>Residential Development Charge Calculation</b>		
Residential Share of 2014 - 2023 DC Eligible Costs	75%	\$219,174
10-Year Growth in Population in New Units		566
Unadjusted Development Charge Per Capita		<b>\$387.23</b>
<b>Non-Residential Development Charge Calculation</b>		
Non-Residential Share of 2014 - 2023 DC Eligible Costs	25%	\$73,058
10-Year Growth in Square Metres		9,852
Unadjusted Development Charge Per Square Metre		<b>\$7.42</b>

2014 - 2023 Net Funding Envelope	\$292,232
Uncommitted Reserve Fund Balance	
Balance as at December 31, 2012	\$16,931
Lost Revenue for 2009 Industrial/LTC Discount	\$3,386

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TABLE 3 - PAGE 1

**TOWNSHIP OF EAST ZORRA-TAVISTOCK  
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE  
FIRE PROTECTION SERVICES  
RESIDENTIAL DEVELOPMENT CHARGE  
(in \$000)**

<b>FIRE PROTECTION SERVICES</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>TOTAL</b>
OPENING CASH BALANCE	\$0.0	(\$120.0)	(\$111.6)	(\$105.4)	(\$86.5)	(\$66.2)	(\$84.9)	(\$63.4)	(\$40.2)	(\$20.8)	
<b>2014 - 2023 RESIDENTIAL FUNDING REQUIREMENTS</b>											
- Fire Services: Debenture	\$0.0	\$6.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	<b>\$6.9</b>
- Fire Services: Non Inflated	\$140.8	\$2.9	\$12.3	\$2.9	\$2.9	\$39.0	\$2.9	\$2.9	\$2.9	\$2.9	<b>\$212.3</b>
- Fire Services: Inflated	\$140.8	\$9.8	\$12.8	\$3.1	\$3.1	\$43.1	\$3.2	\$3.3	\$3.4	\$3.4	<b>\$226.1</b>
<b>NEW RESIDENTIAL DEVELOPMENT</b>											
- Population Growth in New Units	56	56	56	60	60	60	60	60	49	49	<b>566</b>
<b>REVENUE</b>											
- DC Receipts: Inflated	\$24.0	\$24.5	\$25.0	\$27.3	\$27.8	\$28.4	\$29.0	\$29.5	\$24.6	\$25.1	<b>\$265.2</b>
<b>INTEREST</b>											
- Interest on Opening Balance	\$0.0	(\$6.6)	(\$6.1)	(\$5.8)	(\$4.8)	(\$3.6)	(\$4.7)	(\$3.5)	(\$2.2)	(\$1.1)	<b>(\$38.4)</b>
- Interest on In-year Transactions	(\$3.2)	\$0.3	\$0.2	\$0.4	\$0.4	(\$0.4)	\$0.5	\$0.5	\$0.4	\$0.4	<b>(\$0.6)</b>
<b>TOTAL REVENUE</b>	<b>\$20.8</b>	<b>\$18.2</b>	<b>\$19.1</b>	<b>\$21.9</b>	<b>\$23.5</b>	<b>\$24.4</b>	<b>\$24.8</b>	<b>\$26.5</b>	<b>\$22.8</b>	<b>\$24.3</b>	<b>\$226.1</b>
CLOSING CASH BALANCE	(\$120.0)	(\$111.6)	(\$105.4)	(\$86.5)	(\$66.2)	(\$84.9)	(\$63.4)	(\$40.2)	(\$20.8)	\$0.1	

<b>2014 Adjusted Charge Per Capita</b>	<b>\$428.46</b>
----------------------------------------	-----------------

<b>Allocation of Capital Program</b>	
Residential Sector	75.0%
Non-Residential Sector	25.0%
<b>Rates for 2014</b>	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

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**TOWNSHIP OF EAST ZORRA-TAVISTOCK  
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE  
FIRE PROTECTION SERVICES  
NON-RESIDENTIAL DEVELOPMENT CHARGE  
(in \$000)**

<b>FIRE PROTECTION SERVICES</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>TOTAL</b>
OPENING CASH BALANCE	\$0.00	(\$41.53)	(\$40.43)	(\$36.42)	(\$30.31)	(\$23.57)	(\$29.87)	(\$22.23)	(\$11.86)	(\$5.72)	
<b>2014 - 2023 NON-RESIDENTIAL FUNDING REQUIREMENTS</b>											
- Fire Services: Debenture	\$0.0	\$2.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	<b>\$2.3</b>
- Fire Protection Services: Non Inflated	\$46.9	\$1.0	\$4.1	\$1.0	\$1.0	\$13.0	\$1.0	\$1.0	\$1.0	\$1.0	<b>\$70.8</b>
- Fire Protection Services: Inflated	\$46.9	\$3.3	\$4.3	\$1.0	\$1.0	\$14.4	\$1.1	\$1.1	\$1.1	\$1.1	<b>\$75.4</b>
<b>NEW NON-RESIDENTIAL DEVELOPMENT</b>											
- Growth in Square Metres	780	780	1,210	1,020	1,040	1,040	1,090	1,311	808	773	<b>9,852</b>
<b>REVENUE</b>											
- DC Receipts: Inflated	\$6.5	\$6.6	\$10.4	\$9.0	\$9.3	\$9.5	\$10.2	\$12.5	\$7.8	\$7.6	<b>\$89.4</b>
<b>INTEREST</b>											
- Interest on Opening Balance	\$0.0	(\$2.3)	(\$2.2)	(\$2.0)	(\$1.7)	(\$1.3)	(\$1.6)	(\$1.2)	(\$0.7)	(\$0.3)	<b>(\$13.3)</b>
- Interest on In-year Transactions	(\$1.1)	\$0.1	\$0.1	\$0.1	\$0.1	(\$0.1)	\$0.2	\$0.2	\$0.1	\$0.1	<b>(\$0.2)</b>
<b>TOTAL REVENUE</b>	<b>\$5.4</b>	<b>\$4.4</b>	<b>\$8.3</b>	<b>\$7.1</b>	<b>\$7.8</b>	<b>\$8.1</b>	<b>\$8.7</b>	<b>\$11.5</b>	<b>\$7.3</b>	<b>\$7.4</b>	<b>\$75.9</b>
CLOSING CASH BALANCE	(\$41.5)	(\$40.4)	(\$36.4)	(\$30.3)	(\$23.6)	(\$29.9)	(\$22.2)	(\$11.9)	(\$5.7)	\$0.5	

<b>2014 Adjusted Charge Per Square Metre</b>	<b>\$8.27</b>
----------------------------------------------	---------------

<b>Allocation of Capital Program</b>	
Residential Sector	75.0%
Non-Residential Sector	25.0%
<b>Rates for 2014</b>	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



**APPENDIX B.2**

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***PARKS AND RECREATION***

## APPENDIX B.2

### PARKS AND RECREATION

The Township of East Zorra-Tavistock has an array of indoor recreation facilities and outdoor parks. The various park facilities in the Township provide residents with facilities such as soccer pitches, baseball diamonds, tennis courts and playgrounds. The Township also maintains park land and trails.

#### TABLE 1 HISTORIC SERVICE LEVELS

The Township's inventory of indoor recreation capital infrastructure includes three buildings — the Innerkip Community Centre, the Tavistock & District Recreation Centre and the Tavistock Memorial Hall. The buildings, land and equipment associated with these facilities are valued at \$8.84 million. The total value of outdoor sports facilities including soccer pitches, baseball diamonds, tennis courts and playgrounds is \$1.94 million and the replacement value of developing the Township's 17.5 ha of parkland and 1.5 kilometres of trails is \$827,500 and \$26,500, respectively. Park equipment, which includes vehicles and equipment, various outdoor buildings and parking lots, adds another \$4.89 million to the inventory.

The total value of all parks and recreation assets is \$16.52 million and the Township has a 10-year average historic service level of \$2,255.89 per capita (Page 5). Parks and Recreation has a committed excess capacity equivalent to \$996,300. However, the calculated excess capacity is deemed to be committed, and as a result, no reduction is made to the maximum allowable funding envelope of \$568,500.

Finally, Parks and Recreation is a service for which development-related capital costs must be reduced by 10 per cent under the DCA. The resulting net maximum allowable funding envelope brought forward to the development charges calculation is reduced to \$511,600.

#### TABLE 2 2014–2023 GROWTH-RELATED CAPITAL PROGRAM

The 2014–2023 growth-related capital program is comprised of the purchase of land for the Hickson indoor recreation facility in 2014 and various parkland and trail improvements throughout the planning period. In addition, the program includes the recovery for the remaining payments related to the construction of Tavistock Park. The cost of the land acquisition for the Hickson facility amounts to \$100,000, and the

various parkland and trail development amounts to \$445,000 and \$50,000, respectively. Finally the payments for Tavistock Park total \$210,000 between 2014 and 2023.

An amount of \$314,500 has been identified as a benefit to existing share and is reduced from the total eligible DC costs.

A mandatory ten per cent reduction has been applied to the Parks and Recreation projects in the capital program in the amount of \$18,100. In addition, \$8,700 is available in the DC reserve fund, and as such, the discounted growth-related cost carried forward to the development charges calculation is \$463,700.

The total discounted growth-related capital costs for the 2014–2023 period are allocated in full to residential development, yielding an unadjusted development charge of \$819.27 per capita.

**TABLE 3 CASH FLOW ANALYSIS**

After cash flow consideration, the calculated residential charge increases to \$830.00 per capita.

<b>PARKS AND RECREATION SUMMARY</b>						
10-year Hist.	2014 - 2023		Unadjusted		Adjusted	
Service Level	Development-Related Capital Program		Development Charge		Development Charge	
per capita	Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$2,255.89	\$805,000	\$463,705	\$819.27	\$0.00	<b>\$830.00</b>	<b>\$0.00</b>

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TOWNSHIP OF EAST ZORRA-TAVISTOCK  
INVENTORY OF CAPITAL ASSETS  
PARKS AND RECREATION  
INDOOR RECREATION FACILITIES

BUILDINGS Facility Name	# of Square Feet										UNIT COST (\$/sq. ft.)
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
Innerkip Community Centre	2,870	2,870	2,870	2,870	2,870	2,870	2,870	2,870	2,870	2,870	\$175
Tavistock & District Recreation Centre	35,100	35,100	35,100	35,100	35,100	35,100	35,100	35,100	35,100	35,100	\$175
Tavistock Memorial Hall	4,832	4,832	4,832	4,832	4,832	4,832	4,832	4,832	4,832	4,832	\$175
<b>Total (sq.ft.)</b>	<b>42,802</b>	<b>42,802</b>	<b>42,802</b>	<b>42,802</b>	<b>42,802</b>	<b>42,802</b>	<b>42,802</b>	<b>42,802</b>	<b>42,802</b>	<b>42,802</b>	
<b>Total (\$000)</b>	<b>\$7,490.4</b>	<b>\$7,490.4</b>	<b>\$7,490.4</b>	<b>\$7,490.4</b>	<b>\$7,490.4</b>	<b>\$7,490.4</b>	<b>\$7,490.4</b>	<b>\$7,490.4</b>	<b>\$7,490.4</b>	<b>\$7,490.4</b>	

LAND Facility Name	# of Hectares										UNIT COST (\$/ha)
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
Innerkip Community Centre	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70	\$250,000
Tavistock & District Recreation Centre	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	\$350,000
Tavistock Memorial Hall	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	\$350,000
<b>Total (ha)</b>	<b>3.40</b>	<b>3.40</b>	<b>3.40</b>	<b>3.40</b>	<b>3.40</b>	<b>3.40</b>	<b>3.40</b>	<b>3.40</b>	<b>3.40</b>	<b>3.40</b>	
<b>Total (\$000)</b>	<b>\$1,020.0</b>	<b>\$1,020.0</b>	<b>\$1,020.0</b>	<b>\$1,020.0</b>	<b>\$1,020.0</b>	<b>\$1,020.0</b>	<b>\$1,020.0</b>	<b>\$1,020.0</b>	<b>\$1,020.0</b>	<b>\$1,020.0</b>	

FURNITURE & EQUIPMENT Facility Name	Total Value of Furniture & Equipment (\$)									
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Innerkip Community Centre	\$40,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$75,000	\$75,000	\$75,000	\$75,000
Tavistock & District Recreation Centre	\$150,000	\$160,000	\$160,000	\$160,000	\$160,000	\$160,000	\$175,000	\$175,000	\$175,000	\$175,000
Tavistock Memorial Hall	\$60,000	\$70,000	\$70,000	\$70,000	\$70,000	\$70,000	\$80,000	\$80,000	\$80,000	\$80,000
<b>Total (\$000)</b>	<b>\$250.0</b>	<b>\$280.0</b>	<b>\$280.0</b>	<b>\$280.0</b>	<b>\$280.0</b>	<b>\$280.0</b>	<b>\$330.0</b>	<b>\$330.0</b>	<b>\$330.0</b>	<b>\$330.0</b>

TOWNSHIP OF EAST ZORRA-TAVISTOCK  
 INVENTORY OF CAPITAL ASSETS  
 PARKS AND RECREATION  
 PARKLAND DEVELOPMENT

DEVELOPED PARKLAND Park Name	# of Hectares of Developed Area										UNIT COST (\$/ha)	
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013		
Matika Subd Park - Innerkip	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	\$25,000
Innerkip Park	5.10	5.10	5.10	5.10	5.10	5.10	5.10	5.10	5.10	5.10	5.10	\$50,000
Hickson Park	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	\$50,000
Tavistock Queens Park	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	\$50,000
Bender Park - Tavistock	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	\$25,000
Optimist Park	4.40	4.40	4.40	4.40	4.40	4.40	4.40	4.40	4.40	4.40	4.40	\$50,000
<b>Total (ha)</b>	<b>17.50</b>	<b>17.50</b>	<b>17.50</b>	<b>17.50</b>	<b>17.50</b>	<b>17.50</b>	<b>17.50</b>	<b>17.50</b>	<b>17.50</b>	<b>17.50</b>	<b>17.50</b>	
<b>Total (\$000)</b>	<b>\$827.5</b>	<b>\$827.5</b>	<b>\$827.5</b>	<b>\$827.5</b>	<b>\$827.5</b>	<b>\$827.5</b>	<b>\$827.5</b>	<b>\$827.5</b>	<b>\$827.5</b>	<b>\$827.5</b>	<b>\$827.5</b>	

TRAILS Park Name	Km of Trails										UNIT COST (\$/km)
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
Paved - Unlit	-	-	-	-	-	-	0.50	1.30	1.30	0.70	\$15,000
Paved - Lit	-	-	-	-	-	-	-	-	-	0.80	\$20,000
<b>Total (km)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.50</b>	<b>1.30</b>	<b>1.30</b>	<b>1.50</b>	
<b>Total (\$000)</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$7.5</b>	<b>\$19.5</b>	<b>\$19.5</b>	<b>\$26.5</b>	

TOWNSHIP OF EAST ZORRA-TAVISTOCK  
 INVENTORY OF CAPITAL ASSETS  
 PARKS AND RECREATION  
 PARK FACILITIES

SOCCER PITCHES Park Name	# of Soccer Pitches										UNIT COST (\$/unit)	
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013		
<b>Minor - Unlit</b>												
Soccer Fields	3	3	3	3	3	3	3	3	3	3	3	\$20,000
Soccer Fields - Optimist Park	2	2	2	2	2	2	2	2	2	2	2	\$20,000
<b>Total (#)</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	
<b>Total (\$000)</b>	<b>\$100.0</b>	<b>\$100.0</b>	<b>\$100.0</b>	<b>\$100.0</b>	<b>\$100.0</b>	<b>\$100.0</b>	<b>\$100.0</b>	<b>\$100.0</b>	<b>\$100.0</b>	<b>\$100.0</b>	<b>\$100.0</b>	

BASEBALL DIAMONDS Park Name	# of Baseball Diamonds										UNIT COST (\$/unit)	
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013		
<b>Major - Lit</b>												
Hickson	1	1	1	1	1	1	1	1	1	1	1	\$200,000
Innerkip	2	2	2	2	2	2	2	2	2	2	2	\$200,000
Tavistock - Optimist	1	1	1	1	1	1	1	1	1	1	1	\$200,000
Tavistock - Queen's	1	1	1	1	1	1	1	1	1	1	1	\$200,000
<b>Minor - Unlit</b>												
Unlit Ball Diamonds	2	2	2	2	2	2	2	2	2	2	2	\$100,000
<b>Total (#)</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>	
<b>Total (\$000)</b>	<b>\$1,200.0</b>	<b>\$1,200.0</b>	<b>\$1,200.0</b>	<b>\$1,200.0</b>	<b>\$1,200.0</b>	<b>\$1,200.0</b>	<b>\$1,200.0</b>	<b>\$1,200.0</b>	<b>\$1,200.0</b>	<b>\$1,200.0</b>	<b>\$1,200.0</b>	

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TOWNSHIP OF EAST ZORRA-TAVISTOCK  
INVENTORY OF CAPITAL ASSETS  
PARKS AND RECREATION  
PARK FACILITIES

TENNIS COURTS Park Name	# of Tennis Courts										UNIT COST (\$/unit)	
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013		
Major - Lit												
Tennis Courts	2	2	2	2	2	2	2	2	2	2	2	\$75,000
<b>Total (#)</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	
<b>Total (\$000)</b>	<b>\$150.0</b>	<b>\$150.0</b>	<b>\$150.0</b>	<b>\$150.0</b>	<b>\$150.0</b>	<b>\$150.0</b>	<b>\$150.0</b>	<b>\$150.0</b>	<b>\$150.0</b>	<b>\$150.0</b>	<b>\$150.0</b>	

PLAY GROUNDS Park Name	# of Playgrounds										UNIT COST (\$/unit)	
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013		
Play Structures	4	5	5	5	5	5	5	5	5	5	6	\$75,000
<b>Total (#)</b>	<b>4</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>6</b>	
<b>Total (\$000)</b>	<b>\$300.0</b>	<b>\$375.0</b>	<b>\$375.0</b>	<b>\$375.0</b>	<b>\$375.0</b>	<b>\$375.0</b>	<b>\$375.0</b>	<b>\$375.0</b>	<b>\$375.0</b>	<b>\$375.0</b>	<b>\$450.0</b>	

OTHER Park Name	# of Facilities										UNIT COST (\$/unit)	
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013		
Volleyball Court	1	1	1	1	1	1	1	1	1	1	1	\$10,000
Lawn Bowling - Innerkip	1	1	1	1	1	1	1	1	1	1	1	\$25,000
Basketball Court - Innerkip	-	-	-	-	-	-	1	1	1	1	1	\$5,000
<b>Total (#)</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	
<b>Total (\$000)</b>	<b>\$35.0</b>	<b>\$35.0</b>	<b>\$35.0</b>	<b>\$35.0</b>	<b>\$35.0</b>	<b>\$35.0</b>	<b>\$40.0</b>	<b>\$40.0</b>	<b>\$40.0</b>	<b>\$40.0</b>	<b>\$40.0</b>	

TOWNSHIP OF ZORRA EAST-TRAVISTOCK  
INVENTORY OF CAPITAL ASSETS  
PARKS AND RECREATION  
PARK VEHICLES, EQUIPMENT & OUTDOOR BUILDINGS

VEHICLES AND EQUIPMENT Description	# of Vehicles and Equipment										UNIT COST (\$/unit)	
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013		
Park Tractor	3	3	3	3	3	3	3	3	3	3	3	\$20,000
<b>Total (#)</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	
<b>Total (\$000)</b>	<b>\$60.0</b>	<b>\$60.0</b>	<b>\$60.0</b>	<b>\$60.0</b>	<b>\$60.0</b>	<b>\$60.0</b>	<b>\$60.0</b>	<b>\$60.0</b>	<b>\$60.0</b>	<b>\$60.0</b>	<b>\$60.0</b>	

Outdoor Buidlings Description	# of Square Feet										UNIT COST (\$/sq.ft.)
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
Innerkip Pavillions	10,000	10,000	10,000	10,000	10,000	10,000	10,000	11,200	11,200	11,200	\$125
Hickson Pavillion	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	9,600	\$125
Tavistock Pavillion	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	7,400	7,400	\$125
<b>Total (#)</b>	<b>21,600</b>	<b>21,600</b>	<b>21,600</b>	<b>21,600</b>	<b>21,600</b>	<b>21,600</b>	<b>21,600</b>	<b>22,800</b>	<b>28,200</b>	<b>28,200</b>	
<b>Total (\$000)</b>	<b>\$2,700.0</b>	<b>\$2,700.0</b>	<b>\$2,700.0</b>	<b>\$2,700.0</b>	<b>\$2,700.0</b>	<b>\$2,700.0</b>	<b>\$2,700.0</b>	<b>\$2,850.0</b>	<b>\$3,525.0</b>	<b>\$3,525.0</b>	

Other Parks Buidlings Description	# of Square Feet										UNIT COST (\$/sq.ft.)
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
Storage Shed	6,739	6,739	6,739	6,739	6,739	6,739	6,739	6,739	6,739	7,699	\$60
<b>Total (#)</b>	<b>6,739</b>	<b>6,739</b>	<b>6,739</b>	<b>6,739</b>	<b>6,739</b>	<b>6,739</b>	<b>6,739</b>	<b>6,739</b>	<b>6,739</b>	<b>7,699</b>	
<b>Total (\$000)</b>	<b>\$404.3</b>	<b>\$404.3</b>	<b>\$404.3</b>	<b>\$404.3</b>	<b>\$404.3</b>	<b>\$404.3</b>	<b>\$404.3</b>	<b>\$404.3</b>	<b>\$404.3</b>	<b>\$461.9</b>	

Parking Lots Description	# of Hectares										UNIT COST (\$/unit)
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
Paved	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	\$550,000
Gravel	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	1.04	1.04	\$300,000
<b>Total (#)</b>	<b>1.84</b>	<b>1.84</b>	<b>1.84</b>	<b>1.84</b>	<b>1.84</b>	<b>1.84</b>	<b>1.84</b>	<b>1.84</b>	<b>2.00</b>	<b>2.00</b>	
<b>Total (\$000)</b>	<b>\$792.0</b>	<b>\$792.0</b>	<b>\$792.0</b>	<b>\$792.0</b>	<b>\$792.0</b>	<b>\$792.0</b>	<b>\$792.0</b>	<b>\$792.0</b>	<b>\$840.0</b>	<b>\$840.0</b>	



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**TOWNSHIP OF EAST ZORRA-TAVISTOCK  
CALCULATION OF SERVICE LEVELS  
PARKS AND RECREATION**

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Historic Population	7,099	7,053	7,008	6,973	6,938	6,904	6,870	6,836	6,859	6,882

**INVENTORY SUMMARY (\$000)**

Indoor Recreation Facilities	\$8,760.4	\$8,790.4	\$8,790.4	\$8,790.4	\$8,790.4	\$8,790.4	\$8,840.4	\$8,840.4	\$8,840.4	\$8,840.4
Parkland Development	\$827.5	\$827.5	\$827.5	\$827.5	\$827.5	\$827.5	\$827.5	\$827.5	\$827.5	\$827.5
Trails	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$7.5	\$19.5	\$19.5	\$26.5
Park Facilities	\$1,785.0	\$1,860.0	\$1,860.0	\$1,860.0	\$1,860.0	\$1,860.0	\$1,865.0	\$1,865.0	\$1,865.0	\$1,940.0
Park Equipment	\$3,956.3	\$3,956.3	\$3,956.3	\$3,956.3	\$3,956.3	\$3,956.3	\$3,956.3	\$4,106.3	\$4,829.3	\$4,886.9
<b>Total (\$000)</b>	<b>\$15,329.2</b>	<b>\$15,434.2</b>	<b>\$15,434.2</b>	<b>\$15,434.2</b>	<b>\$15,434.2</b>	<b>\$15,434.2</b>	<b>\$15,496.7</b>	<b>\$15,658.7</b>	<b>\$16,381.7</b>	<b>\$16,521.3</b>

**SERVICE LEVEL (\$/capita)**

**Average  
Service  
Level**

Indoor Recreation Facilities	\$1,234.03	\$1,246.33	\$1,254.33	\$1,260.63	\$1,266.99	\$1,273.23	\$1,286.80	\$1,293.21	\$1,288.87	\$1,284.56	\$1,268.90
Parkland Development	\$116.57	\$117.33	\$118.08	\$118.67	\$119.27	\$119.86	\$120.45	\$121.05	\$120.64	\$120.24	\$119.22
Trails	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1.09	\$2.85	\$2.84	\$3.85	\$1.06
Park Facilities	\$251.44	\$263.72	\$265.41	\$266.74	\$268.09	\$269.41	\$271.47	\$272.82	\$271.91	\$281.89	\$268.29
Park Equipment	\$557.31	\$560.94	\$564.55	\$567.38	\$570.24	\$573.05	\$575.89	\$600.69	\$704.09	\$710.10	\$598.42
<b>Total (\$/capita)</b>	<b>\$2,159.34</b>	<b>\$2,188.32</b>	<b>\$2,202.37</b>	<b>\$2,213.42</b>	<b>\$2,224.59</b>	<b>\$2,235.54</b>	<b>\$2,255.70</b>	<b>\$2,290.62</b>	<b>\$2,388.35</b>	<b>\$2,400.65</b>	<b>\$2,255.89</b>

**TOWNSHIP OF EAST ZORRA-TAVISTOCK  
CALCULATION OF MAXIMUM ALLOWABLE  
PARKS AND RECREATION**

<b>10-Year Funding Envelope Calculation</b>	
10 Year Average Service Level 2004 - 2013	\$2,255.89
Net Population Growth 2014 - 2023	252
Maximum Allowable Funding Envelope	\$568,484
Less: Uncommitted Excess Capacity	\$0
Less: 10% Legislated Reduction	\$56,848
<b>Discounted Maximum Allowable Funding Envelope</b>	<b>\$511,636</b>

<b>Excess Capacity Calculation</b>	
Total Value of Inventory in 2013	\$16,521,290
Inventory Using Average Service Level	\$15,525,035
Excess Capacity	\$996,255
Excess Capacity:	Committed

TOWNSHIP OF EAST ZORRA-TAVISTOCK  
DEVELOPMENT-RELATED CAPITAL PROGRAM  
PARKS AND RECREATION

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					Replacement & BTE Shares	10% Reduction		Available DC Reserves	2014-2023	Post 2023
<b>2.0 PARKS AND RECREATION</b>										
<b>2.1 Indoor Recreation Facilities</b>										
3.1.1 Hickson Land Purchase	2014	\$ 100,000	\$ -	\$ 100,000	\$ -	\$ -	\$ 100,000	\$ 8,745	\$ 91,255	\$ -
Subtotal Indoor Recreation Facilities		\$ 100,000	\$ -	\$ 100,000	\$ -	\$ -	\$ 100,000	\$ 8,745	\$ 91,255	\$ -
<b>2.2 Parkland &amp; Park Facilities</b>										
2.2.1 New Basketball Court - Innerkip	2014	\$ 5,000	\$ -	\$ 5,000	\$ -	\$ 500	\$ 4,500	\$ -	\$ 4,500	\$ -
2.2.2 Various Innerkip Park Improvements	various	\$ 100,000	\$ -	\$ 100,000	\$ 75,000	\$ 2,500	\$ 22,500	\$ -	\$ 22,500	\$ -
2.2.3 Various Hickson Park Improvements	various	\$ 90,000	\$ -	\$ 90,000	\$ 67,500	\$ 2,250	\$ 20,250	\$ -	\$ 20,250	\$ -
2.2.4 Tavistock Park Improvements (Pavilion)	various	\$ 250,000	\$ -	\$ 250,000	\$ 172,000	\$ 7,800	\$ 70,200	\$ -	\$ 70,200	\$ -
Subtotal Parkland & Park Facilities		\$ 445,000	\$ -	\$ 445,000	\$ 314,500	\$ 13,050	\$ 117,450	\$ -	\$ 117,450	\$ -
<b>2.3 Trail Development</b>										
2.3.1 Innerkip Estates trail	2014	\$ 50,000	\$ -	\$ 50,000	\$ -	\$ 5,000	\$ 45,000	\$ -	\$ 45,000	\$ -
Subtotal Trail Development		\$ 50,000	\$ -	\$ 50,000	\$ -	\$ 5,000	\$ 45,000	\$ -	\$ 45,000	\$ -
<b>2.4 Debenture Payments</b>										
2.4.1 Tavistock Park Debenture Payment	Various	\$ 210,000	\$ -	\$ 210,000	\$ -	\$ -	\$ 210,000	\$ -	\$ 210,000	\$ -
Subtotal Debenture Payments		\$ 210,000	\$ -	\$ 210,000	\$ -	\$ -	\$ 210,000	\$ -	\$ 210,000	\$ -
<b>TOTAL PARKS AND RECREATION</b>		<b>\$ 805,000</b>	<b>\$ -</b>	<b>\$ 805,000</b>	<b>\$ 314,500</b>	<b>\$ 18,050</b>	<b>\$ 472,450</b>	<b>\$ 8,745</b>	<b>\$ 463,705</b>	<b>\$ -</b>

Residential Development Charge Calculation		
Residential Share of 2014 - 2023 DC Eligible Costs	100%	\$463,705
10-Year Growth in Population in New Units		566
Unadjusted Development Charge Per Capita		<b>\$819.27</b>
Non-Residential Development Charge Calculation		
Non-Residential Share of 2014 - 2023 DC Eligible Costs	0%	\$0
10-Year Growth in Square Metres		9,852
Unadjusted Development Charge Per Square Metre		<b>\$0.00</b>

2014 - 2023 Net Funding Envelope	\$511,636
Uncommitted Reserve Fund Balance Balance as at December 31, 2012	\$8,745

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TABLE 3

**TOWNSHIP OF EAST ZORRA-TAVISTOCK  
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE  
PARKS AND RECREATION  
RESIDENTIAL DEVELOPMENT CHARGE  
(in \$000)**

<b>PARKS AND RECREATION</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>TOTAL</b>
OPENING CASH BALANCE	\$0.0	(\$130.0)	(\$122.0)	(\$112.8)	(\$98.9)	(\$83.3)	(\$66.0)	(\$46.8)	(\$25.8)	(\$13.5)	
<b>2014 - 2023 RESIDENTIAL FUNDING REQUIREMENTS</b>											
- Parks And Recreation Debenture: Non Inflated	\$21.0	\$21.0	\$21.0	\$21.0	\$21.0	\$21.0	\$21.0	\$21.0	\$21.0	\$21.0	<b>\$210.0</b>
- Parks And Recreation: Non Inflated	\$152.0	\$11.3	\$11.3	\$11.3	\$11.3	\$11.3	\$11.3	\$11.3	\$11.3	\$11.3	<b>\$253.7</b>
- Parks And Recreation: Inflated	\$173.0	\$32.5	\$32.8	\$33.0	\$33.2	\$33.5	\$33.7	\$34.0	\$34.2	\$34.5	<b>\$474.4</b>
<b>NEW RESIDENTIAL DEVELOPMENT</b>											
- Population Growth in New Units	56	56	56	60	60	60	60	60	49	49	<b>566</b>
<b>REVENUE</b>											
- DC Receipts: Inflated	\$46.5	\$47.4	\$48.4	\$52.8	\$53.9	\$55.0	\$56.1	\$57.2	\$47.7	\$48.6	<b>\$513.6</b>
<b>INTEREST</b>											
- Interest on Opening Balance	\$0.0	(\$7.2)	(\$6.7)	(\$6.2)	(\$5.4)	(\$4.6)	(\$3.6)	(\$2.6)	(\$1.4)	(\$0.7)	<b>(\$38.4)</b>
- Interest on In-year Transactions	(\$3.5)	\$0.3	\$0.3	\$0.3	\$0.4	\$0.4	\$0.4	\$0.4	\$0.2	\$0.2	<b>(\$0.6)</b>
<b>TOTAL REVENUE</b>	<b>\$43.0</b>	<b>\$40.5</b>	<b>\$42.0</b>	<b>\$46.9</b>	<b>\$48.8</b>	<b>\$50.8</b>	<b>\$52.9</b>	<b>\$55.0</b>	<b>\$46.5</b>	<b>\$48.1</b>	<b>\$474.6</b>
CLOSING CASH BALANCE	(\$130.0)	(\$122.0)	(\$112.8)	(\$98.9)	(\$83.3)	(\$66.0)	(\$46.8)	(\$25.8)	(\$13.5)	\$0.1	

<b>2014 Adjusted Charge Per Capita</b>	<b>\$830.00</b>
----------------------------------------	-----------------

<b>Allocation of Capital Program</b>	
Residential Sector	100.0%
Non-Residential Sector	0.0%
<b>Rates for 2014</b>	
Inflation Rate:	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

## **APPENDIX B.3**

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### ***PUBLIC WORKS: BUILDINGS AND FLEET***

## APPENDIX B.3

### PUBLIC WORKS: BUILDINGS AND FLEET

The Public Works Department in the Township of East Zorra-Tavistock is responsible for the design and construction of the Township's network of public roads and related infrastructure, as well as their maintenance. This section deals with the buildings associated with providing these services, related furniture and equipment, and municipal fleet of the Public Works operations. Further information regarding Roads and Related infrastructure construction is included in Appendix C.

#### TABLE 1 HISTORIC SERVICE LEVELS

The ten-year historic inventory of capital assets for Public Works includes approximately 14,100 square feet of building space with a replacement value of \$2.00 million. The 2.70 hectares of land associated with the Public Works buildings are valued at \$675,000 and the various furniture and equipment related to the buildings amounts to \$65,000. Finally, the 13 major Public Works vehicles add an additional \$1.82 million to the value of the capital assets.

The current value of the public works buildings, their associated land, fleet and equipment is approximately \$4.56 million. The historic capital inventory yields a 10-year average service level of \$373.80 per population plus employment. The calculated maximum allowable funding envelope to be included in the development charges calculation is \$157,000. A committed excess capacity in the amount of \$977,500 has been identified for the service. The amount is deemed to be committed, and as such, the amount is not reduced from the funding envelope. Under the *Development Charges Act*, 1997, services related to a highway as defined in subsection 1(1) of the *Municipal Act*, 2001, need not to be reduced by the legislated 10 per cent (as with other general services). The services and capital assets of Public Works: Buildings and Fleet are considered to be related to a highway, and as such, the maximum allowable of \$157,000 is not required to be reduced by ten per cent and therefore the full amount is brought forward to the development charges calculation.

#### TABLE 2 2014–2023 GROWTH-RELATED CAPITAL PROGRAM

The 2014–2023 growth-related capital budget provides for the purchase of land in Hickson and the construction of a new shed in Innerkip with a cost of \$125,000 and \$250,000, respectively. The acquisition of a new backhoe in the amount of \$110,000 is

also included in the capital program. The total gross cost of the capital program is \$485,000.

Of the total gross cost, \$55,000 is deemed to benefit the existing population and no ten per cent reduction is identified for this service. The Public Works development charges reserve amounts to \$7,000 and an additional \$1,400 is netted off to account for prior non-statutory discounts. A further \$264,600 has been identified as a post-period share beyond the funding cap. As a result, \$157,000 is carried forward to the development charges calculation.

Of the discounted growth-related capital cost, 75 per cent, or \$117,700, is allocated to new residential development and 25 per cent or \$39,200, is allocated to non-residential development. This yields unadjusted development charges of \$208.03 per capita and \$3.98 square metre.

**TABLE 3 CASH FLOW ANALYSIS**

After cash flow consideration, the calculated charges increase to \$242.60 per capita and \$4.67 per square metre.

<b>PUBLIC WORKS: BUILDINGS AND FLEET SUMMARY</b>						
10-year Hist.	2014 - 2023		Unadjusted		Adjusted	
Service Level	Development-Related Capital Program		Development Charge		Development Charge	
per pop & emp	Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$373.80	\$485,000	\$156,996	\$208.03	\$3.98	<b>\$242.60</b>	<b>\$4.67</b>

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TOWNSHIP OF EAST ZORRA-TAVISTOCK  
INVENTORY OF CAPITAL ASSETS  
PUBLIC WORKS: BUILDINGS AND FLEET

BUILDINGS Facility Name	# of Square Feet										UNIT COST (\$/sq.ft.)	
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013		
Hickson Road Shop	7,137	7,137	7,137	7,137	7,137	7,137	7,137	7,137	7,137	7,137	7,137	\$150
Salt Shed	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	\$150
Tavistock PW Shed	1,792	1,792	1,792	1,792	1,792	1,792	1,792	1,792	1,792	1,792	-	\$150
Hickson PW Storage Yard Buildings	-	-	-	-	-	-	-	-	-	-	2,500	\$150
New Tavistock Shed	-	-	-	-	-	-	-	-	-	-	3,224	\$116
<b>Total (#)</b>	<b>10,129</b>	<b>10,129</b>	<b>10,129</b>	<b>10,129</b>	<b>10,129</b>	<b>10,129</b>	<b>10,129</b>	<b>10,129</b>	<b>10,129</b>	<b>10,129</b>	<b>14,061</b>	
<b>Total (\$000)</b>	<b>\$1,519.4</b>	<b>\$1,519.4</b>	<b>\$1,519.4</b>	<b>\$1,519.4</b>	<b>\$1,519.4</b>	<b>\$1,519.4</b>	<b>\$1,519.4</b>	<b>\$1,519.4</b>	<b>\$1,519.4</b>	<b>\$1,519.4</b>	<b>\$2,000.6</b>	

LAND Facility Name	# of Hectares										UNIT COST (\$/ha)	
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013		
Hickson Road Shop/Salt Shed	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	\$250,000
Tavistock PW Shed	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	-	\$350,000
Hickson PW Storage Yard Buildings	-	-	-	-	-	-	-	-	-	-	2.20	\$250,000
<b>Total (ha)</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<b>2.70</b>	
<b>Total (\$000)</b>	<b>\$195.0</b>	<b>\$195.0</b>	<b>\$195.0</b>	<b>\$195.0</b>	<b>\$195.0</b>	<b>\$195.0</b>	<b>\$195.0</b>	<b>\$195.0</b>	<b>\$195.0</b>	<b>\$195.0</b>	<b>\$675.0</b>	

FURNITURE AND EQUIPMENT Description	Total Value of Furniture and Equipment (\$)									
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Shop Furniture & Equipment	\$50,000	\$50,000	\$50,000	\$55,000	\$55,000	\$55,000	\$55,000	\$55,000	\$65,000	\$65,000
<b>Total (\$000)</b>	<b>\$50.0</b>	<b>\$50.0</b>	<b>\$50.0</b>	<b>\$55.0</b>	<b>\$55.0</b>	<b>\$55.0</b>	<b>\$55.0</b>	<b>\$55.0</b>	<b>\$65.0</b>	<b>\$65.0</b>

FLEET	# of Vehicles										UNIT COST (\$/ha)
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
Pickup Trucks	2	2	2	2	3	3	3	3	4	4	\$30,000
Graders	2	2	2	2	2	2	2	2	2	2	\$325,000
Dump Trucks	3	3	3	3	3	3	3	3	3	3	\$300,000
Loaders/Tractors	2	2	2	2	2	2	2	2	2	2	\$15,000
Chipper	-	-	-	1	1	1	1	1	1	1	\$35,000
Utility Truck	-	-	-	-	-	-	-	-	1	1	\$80,000
<b>Total (#)</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>11</b>	<b>11</b>	<b>11</b>	<b>13</b>	<b>13</b>	
<b>Total (\$000)</b>	<b>\$1,640.0</b>	<b>\$1,640.0</b>	<b>\$1,640.0</b>	<b>\$1,675.0</b>	<b>\$1,705.0</b>	<b>\$1,705.0</b>	<b>\$1,705.0</b>	<b>\$1,705.0</b>	<b>\$1,815.0</b>	<b>\$1,815.0</b>	

TOWNSHIP OF EAST ZORRA-TAVISTOCK  
CALCULATION OF SERVICE LEVELS  
PUBLIC WORKS: BUILDINGS AND FLEET

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Historic Population	7,099	7,053	7,008	6,973	6,938	6,904	6,870	6,836	6,859	6,882
Historic Employment	<u>2,591</u>	<u>2,562</u>	<u>2,535</u>	<u>2,559</u>	<u>2,583</u>	<u>2,608</u>	<u>2,634</u>	<u>2,660</u>	<u>2,675</u>	<u>2,690</u>
Total Historic Population & Employ	9,690	9,615	9,543	9,532	9,521	9,512	9,504	9,496	9,534	9,572

## INVENTORY SUMMARY (\$000)

Buildings	\$1,519.4	\$1,519.4	\$1,519.4	\$1,519.4	\$1,519.4	\$1,519.4	\$1,519.4	\$1,519.4	\$1,519.4	\$2,000.6
Land	\$195.0	\$195.0	\$195.0	\$195.0	\$195.0	\$195.0	\$195.0	\$195.0	\$195.0	\$675.0
Furniture And Equipment	\$50.0	\$50.0	\$50.0	\$55.0	\$55.0	\$55.0	\$55.0	\$55.0	\$65.0	\$65.0
Fleet	\$1,640.0	\$1,640.0	\$1,640.0	\$1,675.0	\$1,705.0	\$1,705.0	\$1,705.0	\$1,705.0	\$1,815.0	\$1,815.0
<b>Total (\$000)</b>	<b>\$3,404.4</b>	<b>\$3,404.4</b>	<b>\$3,404.4</b>	<b>\$3,444.4</b>	<b>\$3,474.4</b>	<b>\$3,474.4</b>	<b>\$3,474.4</b>	<b>\$3,474.4</b>	<b>\$3,594.4</b>	<b>\$4,555.6</b>

## SERVICE LEVEL (\$/pop &amp; emp)

											Average Service Level
Buildings	\$156.80	\$158.02	\$159.21	\$159.39	\$159.58	\$159.73	\$159.86	\$160.00	\$159.36	\$209.00	\$164.10
Land	\$20.12	\$20.28	\$20.43	\$20.46	\$20.48	\$20.50	\$20.52	\$20.53	\$20.45	\$70.52	\$25.43
Furniture And Equipment	\$5.16	\$5.20	\$5.24	\$5.77	\$5.78	\$5.78	\$5.79	\$5.79	\$6.82	\$6.79	\$5.81
Fleet	\$169.25	\$170.57	\$171.85	\$175.72	\$179.08	\$179.25	\$179.40	\$179.55	\$190.37	\$189.62	\$178.47
<b>Total (\$/pop &amp; emp)</b>	<b>\$351.33</b>	<b>\$354.07</b>	<b>\$356.74</b>	<b>\$361.35</b>	<b>\$364.91</b>	<b>\$365.26</b>	<b>\$365.57</b>	<b>\$365.88</b>	<b>\$377.00</b>	<b>\$475.92</b>	<b>\$373.80</b>

TOWNSHIP OF EAST ZORRA-TAVISTOCK  
CALCULATION OF MAXIMUM ALLOWABLE  
PUBLIC WORKS: BUILDINGS AND FLEET

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2004 - 2013	\$373.80
Net Population & Employment Growth 2014 - 2023	420
Maximum Allowable Funding Envelope	\$156,996
Less: Uncommitted Excess Capacity	\$0
<b>Discounted Maximum Allowable Funding Envelope</b>	<b>\$156,996</b>

Excess Capacity Calculation	
Total Value of Inventory in 2013	\$4,555,550
Inventory Using Average Service Level	\$3,578,014
Excess Capacity	\$977,536
Excess Capacity:	Committed



TOWNSHIP OF EAST ZORRA-TAVISTOCK  
DEVELOPMENT-RELATED CAPITAL PROGRAM  
PUBLIC WORKS: BUILDINGS AND FLEET

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					Replacement & BTE Shares	0% Reduction		Available DC Reserves	2014-2023	Post 2023
<b>3.0 PUBLIC WORKS: BUILDINGS AND FLEET</b>										
<b>3.1 Buildings, Land &amp; Furnishings</b>										
3.1.1 Hickson PW Land Purchase	2014	\$ 125,000	\$ -	\$ 125,000	\$ -	\$ -	\$ 125,000	\$ 8,373	\$ 116,627	\$ -
3.1.2 Innerkip PW Shed	2019	\$ 250,000	\$ -	\$ 250,000	\$ -	\$ -	\$ 250,000	\$ -	\$ -	\$ 250,000
Subtotal Buildings, Land & Furnishings		\$ 375,000	\$ -	\$ 375,000	\$ -	\$ -	\$ 375,000	\$ 8,373	\$ 116,627	\$ 250,000
<b>3.2 Vehicles and Fleet</b>										
3.2.1 New Backhoe	2014	\$ 110,000	\$ -	\$ 110,000	\$ 55,000	\$ -	\$ 55,000	\$ -	\$ 40,369	\$ 14,631
Subtotal Vehicles and Fleet		\$ 110,000	\$ -	\$ 110,000	\$ 55,000	\$ -	\$ 55,000	\$ -	\$ 40,369	\$ 14,631
<b>TOTAL PUBLIC WORKS: BUILDINGS AND FLEET</b>		<b>\$ 485,000</b>	<b>\$ -</b>	<b>\$ 485,000</b>	<b>\$ 55,000</b>	<b>\$ -</b>	<b>\$ 430,000</b>	<b>\$ 8,373</b>	<b>\$ 156,996</b>	<b>\$ 264,631</b>

Residential Development Charge Calculation		
Residential Share of 2014 - 2023 DC Eligible Costs	75%	\$117,747
10-Year Growth in Population in New Units		566
Unadjusted Development Charge Per Capita		<b>\$208.03</b>
Non-Residential Development Charge Calculation		
Non-Residential Share of 2014 - 2023 DC Eligible Costs	25%	\$39,249
10-Year Growth in Square Metres		9,852
Unadjusted Development Charge Per Square Metre		<b>\$3.98</b>

2014 - 2023 Net Funding Envelope	\$156,996
Uncommitted Reserve Fund Balance	
Balance as at December 31, 2012	\$6,977
Lost Revenue for 2009 Industrial/LTC Discount	\$1,395

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**TOWNSHIP OF EAST ZORRA-TAVISTOCK  
 CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE  
 PUBLIC WORKS: BUILDINGS AND FLEET  
 RESIDENTIAL DEVELOPMENT CHARGE  
 (in \$000)**

<b>PUBLIC WORKS: BUILDINGS AND FLEET</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>TOTAL</b>
OPENING CASH BALANCE	\$0.0	(\$107.0)	(\$98.8)	(\$89.8)	(\$79.1)	(\$67.4)	(\$54.7)	(\$41.0)	(\$26.3)	(\$13.6)	
<b>2014 - 2023 RESIDENTIAL FUNDING REQUIREMENTS</b>											
- Public Works (New Projects): Non Inflated	\$117.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$117.7
- Public Works (New Projects): Inflated	\$117.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$117.7
<b>NEW RESIDENTIAL DEVELOPMENT</b>											
- Population Growth in New Units	56	56	56	60	60	60	60	60	49	49	566
<b>REVENUE</b>											
- DC Receipts: Inflated	\$13.6	\$13.9	\$14.1	\$15.4	\$15.8	\$16.1	\$16.4	\$16.7	\$13.9	\$14.2	\$150.1
<b>INTEREST</b>											
- Interest on Opening Balance	\$0.0	(\$5.9)	(\$5.4)	(\$4.9)	(\$4.4)	(\$3.7)	(\$3.0)	(\$2.3)	(\$1.4)	(\$0.7)	(\$31.8)
- Interest on In-year Transactions	(\$2.9)	\$0.2	\$0.2	\$0.3	\$0.3	\$0.3	\$0.3	\$0.3	\$0.2	\$0.2	(\$0.5)
<b>TOTAL REVENUE</b>	<b>\$10.7</b>	<b>\$8.3</b>	<b>\$8.9</b>	<b>\$10.7</b>	<b>\$11.7</b>	<b>\$12.7</b>	<b>\$13.7</b>	<b>\$14.7</b>	<b>\$12.7</b>	<b>\$13.7</b>	<b>\$117.8</b>
CLOSING CASH BALANCE	(\$107.0)	(\$98.8)	(\$89.8)	(\$79.1)	(\$67.4)	(\$54.7)	(\$41.0)	(\$26.3)	(\$13.6)	\$0.1	

<b>2014 Adjusted Charge Per Capita</b>	<b>\$242.60</b>
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<b>Allocation of Capital Program</b>	
Residential Sector	75.0%
Non-Residential Sector	25.0%
<b>Rates for 2014</b>	
Inflation Rate:	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

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TABLE 3 - PAGE 2

**TOWNSHIP OF EAST ZORRA-TAVISTOCK  
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE  
PUBLIC WORKS: BUILDINGS AND FLEET  
NON-RESIDENTIAL DEVELOPMENT CHARGE  
(in \$000)**

<b>PUBLIC WORKS: BUILDINGS AND FLEET</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>TOTAL</b>
OPENING CASH BALANCE	\$0.00	(\$36.63)	(\$34.88)	(\$30.79)	(\$27.30)	(\$23.41)	(\$19.20)	(\$14.46)	(\$8.13)	(\$4.10)	
<b>2014 - 2023 NON-RESIDENTIAL FUNDING REQUIREMENTS</b>											
- Public Works (New Projects): Non Inflated	\$39.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	<b>\$39.2</b>
- Public Works (New Projects): Inflated	\$39.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	<b>\$39.2</b>
<b>NON-RESIDENTIAL SPACE GROWTH</b>											
- Growth in Square Metres	780	780	1,210	1,020	1,040	1,040	1,090	1,311	808	773	<b>9,852</b>
<b>REVENUE</b>											
- DC Receipts: Inflated	\$3.6	\$3.7	\$5.9	\$5.1	\$5.3	\$5.4	\$5.7	\$7.0	\$4.4	\$4.3	<b>\$50.4</b>
<b>INTEREST</b>											
- Interest on Opening Balance	\$0.0	(\$2.0)	(\$1.9)	(\$1.7)	(\$1.5)	(\$1.3)	(\$1.1)	(\$0.8)	(\$0.4)	(\$0.2)	<b>(\$10.9)</b>
- Interest on In-year Transactions	(\$1.0)	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	<b>(\$0.2)</b>
<b>TOTAL REVENUE</b>	<b>\$2.6</b>	<b>\$1.8</b>	<b>\$4.1</b>	<b>\$3.5</b>	<b>\$3.9</b>	<b>\$4.2</b>	<b>\$4.7</b>	<b>\$6.3</b>	<b>\$4.0</b>	<b>\$4.1</b>	<b>\$39.3</b>
CLOSING CASH BALANCE	(\$36.6)	(\$34.9)	(\$30.8)	(\$27.3)	(\$23.4)	(\$19.2)	(\$14.5)	(\$8.1)	(\$4.1)	\$0.1	

<b>2014 Adjusted Charge Per Square Metre</b>	<b>\$4.67</b>
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<b>Allocation of Capital Program</b>	
Residential Sector	75.0%
Non-Residential Sector	25.0%
<b>Rates for 2014</b>	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

**APPENDIX B.4**

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***GENERAL GOVERNMENT***

## APPENDIX B.4

### GENERAL GOVERNMENT

The DCA allows the cost of development-related studies to be included in the calculation of the development charges as long as they are permitted under the legislation. Consistent with s.5(1)7 of the DCA, the eligible development-related capital costs for the provision of studies and permitted general government expenditures are reduced by ten per cent when calculating the development charges.

#### **TABLE 1      2014–2023 GROWTH-RELATED CAPITAL PROGRAM**

Table 1 provides a list of growth-related studies the Township of East Zorra-Tavistock anticipates undertaking during the 2014–2023 period. Two development charges studies in the amount of \$5,000 and \$15,000, are included in capital program in 2014 and 2019. In addition, a recreation study for \$25,000 and a community improvement plan for \$10,000 are included in the capital program. The 2014-2023 period capital program totals \$55,000.

No benefit to existing shares has been identified for this service. The legislated ten per cent discount amounts to \$5,500 and the funds that are available in the DC reserves total \$7,100 and an additional \$1,400 is netted off to account for prior non-statutory discounts. The remaining amount of \$41,000 is eligible for development charges funding in the 2014-2023 planning period. This amount is included in the development charge calculation.

As identified in Table 1, 75 per cent, or \$30,800 of the growth-related cost is allocated to new residential development, and 25 per cent, or \$10,300, to non-residential development. This yields unadjusted development charges of \$54.36 per capita and \$1.04 per square metre.

#### **TABLE 2      CASH FLOW ANALYSIS**

After cash flow considerations, the calculated residential rate decreases to \$52.09 per capita and the non-residential rate decreases to \$1.02 per square metre. The following table summarizes the calculation of the General Government development charges.

<b>GENERAL GOVERNMENT SUMMARY</b>					
2014 - 2023		Unadjusted		Adjusted	
Development-Related Capital Program		Development Charge		Development Charge	
Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$55,000	\$41,026	\$54.36	\$1.04	\$52.09	\$1.02

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TABLE 1

TOWNSHIP OF EAST ZORRA-TAVISTOCK  
DEVELOPMENT-RELATED CAPITAL PROGRAM  
GENERAL GOVERNMENT

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					Replacement & BTE Shares	10% Reduction		Available DC Reserves	2014-2023	Post 2023
<b>4.0 GENERAL GOVERNMENT</b>										
<b>4.1 Growth Related Studies</b>										
4.1.1 Development Charges Study	2014	\$ 5,000	\$ -	\$ 5,000	\$ -	\$ 500	\$ 4,500	\$ 4,500	\$ -	\$ -
4.1.2 Development Charges Study	2018	\$ 15,000	\$ -	\$ 15,000	\$ -	\$ 1,500	\$ 13,500	\$ 3,974	\$ 9,526	\$ -
4.1.3 Recreation Study	2023	\$ 25,000	\$ -	\$ 25,000	\$ -	\$ 2,500	\$ 22,500	\$ -	\$ 22,500	\$ -
4.1.3 Tavistock Community Improvement Plan	2023	\$ 10,000	\$ -	\$ 10,000	\$ -	\$ 1,000	\$ 9,000	\$ -	\$ 9,000	\$ -
Subtotal Growth Related Studies		\$ 55,000	\$ -	\$ 55,000	\$ -	\$ 5,500	\$ 49,500	\$ 8,474	\$ 41,026	\$ -
<b>TOTAL GENERAL GOVERNMENT</b>		<b>\$ 55,000</b>	<b>\$ -</b>	<b>\$ 55,000</b>	<b>\$ -</b>	<b>\$ 5,500</b>	<b>\$ 49,500</b>	<b>\$ 8,474</b>	<b>\$ 41,026</b>	<b>\$ -</b>

<b>Residential Development Charge Calculation</b>		
Residential Share of 2014 - 2023 DC Eligible Costs	75%	\$30,770
10-Year Growth in Population in New Units		566
Unadjusted Development Charge Per Capita		<b>\$54.36</b>
<b>Non-Residential Development Charge Calculation</b>		
Non-Residential Share of 2014 - 2023 DC Eligible Costs	25%	\$10,257
10-Year Growth in Square Metres		9,852
Unadjusted Development Charge Per Square Metre		<b>\$1.04</b>

Uncommitted Reserve Fund Balance	
Balance as at December 31, 2012	\$7,062
Lost Revenue for 2009 Industrial/LTC Discount	\$1,412

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**TOWNSHIP OF EAST ZORRA-TAVISTOCK  
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE  
GENERAL GOVERNMENT  
RESIDENTIAL DEVELOPMENT CHARGE  
(in \$000)**

<b>GENERAL GOVERNMENT</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>TOTAL</b>
OPENING CASH BALANCE	\$0.0	\$3.0	\$6.1	\$9.4	\$13.1	\$9.1	\$12.9	\$17.0	\$21.2	\$25.0	
<b>2014 - 2023 RESIDENTIAL FUNDING REQUIREMENTS</b>											
- General Government: Non Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$7.1	\$0.0	\$0.0	\$0.0	\$0.0	\$23.6	<b>\$30.8</b>
- General Government: Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$7.7	\$0.0	\$0.0	\$0.0	\$0.0	\$28.2	<b>\$36.0</b>
<b>NEW RESIDENTIAL DEVELOPMENT</b>											
- Population Growth in New Units	56	56	56	60	60	60	60	60	49	49	<b>566</b>
<b>REVENUE</b>											
- DC Receipts: Inflated	\$2.9	\$3.0	\$3.0	\$3.3	\$3.4	\$3.5	\$3.5	\$3.6	\$3.0	\$3.1	<b>\$32.3</b>
<b>INTEREST</b>											
- Interest on Opening Balance	\$0.0	\$0.1	\$0.2	\$0.3	\$0.5	\$0.3	\$0.5	\$0.6	\$0.7	\$0.9	<b>\$4.1</b>
- Interest on In-year Transactions	\$0.1	\$0.1	\$0.1	\$0.1	(\$0.1)	\$0.1	\$0.1	\$0.1	\$0.1	(\$0.7)	<b>(\$0.4)</b>
<b>TOTAL REVENUE</b>	<b>\$3.0</b>	<b>\$3.2</b>	<b>\$3.3</b>	<b>\$3.7</b>	<b>\$3.7</b>	<b>\$3.9</b>	<b>\$4.0</b>	<b>\$4.3</b>	<b>\$3.8</b>	<b>\$3.3</b>	<b>\$36.0</b>
CLOSING CASH BALANCE	\$3.0	\$6.1	\$9.4	\$13.1	\$9.1	\$12.9	\$17.0	\$21.2	\$25.0	\$0.1	

<b>2014 Adjusted Charge Per Capita</b>	<b>\$52.09</b>
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<b>Allocation of Capital Program</b>	
Residential Sector	75.0%
Non-Residential Sector	25.0%
<b>Rates for 2014</b>	
Inflation Rate:	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



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TABLE 2 - PAGE 2

**TOWNSHIP OF EAST ZORRA-TAVISTOCK  
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE  
GENERAL GOVERNMENT  
NON-RESIDENTIAL DEVELOPMENT CHARGE  
(in \$000)**

<b>GENERAL GOVERNMENT</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>TOTAL</b>
OPENING CASH BALANCE	\$0.00	\$0.81	\$1.66	\$3.04	\$4.26	\$2.89	\$4.22	\$5.69	\$7.41	\$8.69	
<b>2014 - 2023 NON-RESIDENTIAL FUNDING REQUIREMENTS</b>											
- General Government: Non Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$2.4	\$0.0	\$0.0	\$0.0	\$0.0	\$7.9	<b>\$10.3</b>
- General Government: Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$2.6	\$0.0	\$0.0	\$0.0	\$0.0	\$9.4	<b>\$12.0</b>
<b>NON-RESIDENTIAL SPACE GROWTH</b>											
- Growth in Square Metres	780	780	1,210	1,020	1,040	1,040	1,090	1,311	808	773	<b>9,852</b>
<b>REVENUE</b>											
- DC Receipts: Inflated	\$0.8	\$0.8	\$1.3	\$1.1	\$1.1	\$1.2	\$1.3	\$1.5	\$1.0	\$0.9	<b>\$11.0</b>
<b>INTEREST</b>											
- Interest on Opening Balance	\$0.0	\$0.0	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.2	\$0.3	\$0.3	<b>\$1.4</b>
- Interest on In-year Transactions	\$0.0	\$0.0	\$0.0	\$0.0	(\$0.0)	\$0.0	\$0.0	\$0.0	\$0.0	(\$0.2)	<b>(\$0.1)</b>
<b>TOTAL REVENUE</b>	<b>\$0.8</b>	<b>\$0.8</b>	<b>\$1.4</b>	<b>\$1.2</b>	<b>\$1.2</b>	<b>\$1.3</b>	<b>\$1.5</b>	<b>\$1.7</b>	<b>\$1.3</b>	<b>\$1.0</b>	<b>\$12.2</b>
CLOSING CASH BALANCE	\$0.8	\$1.7	\$3.0	\$4.3	\$2.9	\$4.2	\$5.7	\$7.4	\$8.7	\$0.2	

<b>2014 Adjusted Charge Per Square Metre</b>	<b>\$1.02</b>
----------------------------------------------	---------------

<b>Allocation of Capital Program</b>	
Residential Sector	75.0%
Non-Residential Sector	25.0%
<b>Rates for 2014</b>	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

## APPENDIX C

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### ROADS AND RELATED *INFRASTRUCTURE* *TECHNICAL APPENDIX*

## APPENDIX C

### ROADS AND RELATED INFRASTRUCTURE

This appendix sets out the Township's 2014–2023 growth-related roads and related capital program required in order to service the needs of new residential and non-residential development in the Township. The cost, quantum and timing of the projects included in the forecast have been provided by Township staff. In accordance with s.5.(1)7. of the *DCA*, there is no legislated percentage reduction in the eligible growth-related capital cost for the provision of roads and related infrastructure. The Township's Public Works Department is responsible for the design and construction of the Township's network of public roads and related infrastructure.

#### **TABLE 1      2004-2013 HISTORIC SERVICE LEVELS**

Table 1 demonstrates that the Township's current road infrastructure comprises of 221 kilometres of urban and rural roads. The service level also includes 29 bridges, and 16 culverts as well as 23 kilometres of sidewalks.

The total inventory of capital assets has a full replacement value of \$112.91 million. This produces a 10-year historical service level of \$11,739.61 per population and employment. The resulting maximum allowable funding envelope is \$4.93 million. Roads and Related services has a committed excess capacity equivalent to \$541,400. The calculated excess capacity is deemed to be committed, and as a result, no reduction is made to the funding envelope.

#### **TABLE 2      2014 – 2023 DEVELOPMENT-RELATED CAPITAL PROGRAM**

Table 2 provides the calculation of the net growth-related costs to be included in the development charges. The total gross cost of the roads and related capital program is \$7.06 million. No grants or subsidies are expected for the identified growth-related projects.

Approximately \$6.38 million is identified as benefit to existing shares and will require funding from other Township sources. In addition, roads and related development charges reserve amounts to \$1,500 and an additional \$300 is netted off to account for prior non-statutory discounts. The remaining \$670,800 is considered to benefit growth in the 2014-2023 period and is carried forward to the development charges calculation.

The cost is allocated 75 per cent to residential and results in an unadjusted per capita development charge of \$888.89. The non-residential share is 25 per cent and the resulting unadjusted charge is \$17.02 per square metre.

**TABLE 3 CASH FLOW ANALYSIS**

Table 3 presents the cash flow analysis. As a result of the cash flow, the residential charge increases to \$891.30 per capita, and the non-residential charge increases to \$17.16 per square metre.

<b>ROADS AND RELATED SUMMARY</b>					
2014 - 2023		Unadjusted		Adjusted	
Development-Related Capital Program		Development Charge		Development Charge	
Total	Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$7,057,000	\$670,819	\$888.89	\$17.02	\$891.30	\$17.16

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TABLE 1 - PAGE 1

TOWNSHIP OF EAST ZORRA-TAVISTOCK  
INVENTORY OF CAPITAL ASSETS  
ROADS AND RELATED

ROADS Type of Road	# of Kilometres										UNIT COST (\$/km)
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
Collectors - Rural	195.9	195.9	195.9	195.9	195.9	195.9	201.9	201.9	201.9	201.9	\$150,000
Collectors - Urban	18.6	18.6	18.6	18.6	18.6	18.6	18.6	18.6	18.6	18.9	\$300,000
<b>Total (km)</b>	<b>214.5</b>	<b>214.5</b>	<b>214.5</b>	<b>214.5</b>	<b>214.5</b>	<b>214.5</b>	<b>220.5</b>	<b>220.5</b>	<b>220.5</b>	<b>220.8</b>	
<b>Total (\$000)</b>	<b>\$34,965.0</b>	<b>\$34,965.0</b>	<b>\$34,965.0</b>	<b>\$34,965.0</b>	<b>\$34,965.0</b>	<b>\$34,965.0</b>	<b>\$35,865.0</b>	<b>\$35,865.0</b>	<b>\$35,865.0</b>	<b>\$35,955.0</b>	

BRIDGES & CULVERTS Description	# of Bridges & Culverts										UNIT COST (\$/unit)
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
Bridges	29	29	29	29	29	29	29	29	29	29	\$2,600,000
Culverts	16	16	16	16	16	16	16	16	16	16	\$10,000
<b>Total (#)</b>	<b>45</b>	<b>45</b>	<b>45</b>	<b>45</b>	<b>45</b>	<b>45</b>	<b>45</b>	<b>45</b>	<b>45</b>	<b>45</b>	
<b>Total (\$000)</b>	<b>\$75,560.0</b>	<b>\$75,560.0</b>	<b>\$75,560.0</b>	<b>\$75,560.0</b>	<b>\$75,560.0</b>	<b>\$75,560.0</b>	<b>\$75,560.0</b>	<b>\$75,560.0</b>	<b>\$75,560.0</b>	<b>\$75,560.0</b>	

SIDEWALKS Description	# of Kilometres										UNIT COST (\$/km)
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
Sidewalks	19.3	19.3	19.3	19.3	19.3	19.3	20.4	23.3	23.3	23.3	\$60,000
<b>Total (km)</b>	<b>19.3</b>	<b>19.3</b>	<b>19.3</b>	<b>19.3</b>	<b>19.3</b>	<b>19.3</b>	<b>20.4</b>	<b>23.3</b>	<b>23.3</b>	<b>23.3</b>	
<b>Total (\$000)</b>	<b>\$1,158.0</b>	<b>\$1,158.0</b>	<b>\$1,158.0</b>	<b>\$1,158.0</b>	<b>\$1,158.0</b>	<b>\$1,158.0</b>	<b>\$1,224.0</b>	<b>\$1,398.0</b>	<b>\$1,398.0</b>	<b>\$1,398.0</b>	

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TOWNSHIP OF EAST ZORRA-TAVISTOCK  
CALCULATION OF SERVICE LEVELS  
ROADS AND RELATED

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Historic Population	7,099	7,053	7,008	6,973	6,938	6,904	6,870	6,836	6,859	6,882
Historic Employment	2,591	2,562	2,535	2,559	2,583	2,608	2,634	2,660	2,675	2,690
Total Historic Population & Employment	9,690	9,615	9,543	9,532	9,521	9,512	9,504	9,496	9,534	9,572

INVENTORY SUMMARY (\$000)

Roads	\$34,965.0	\$34,965.0	\$34,965.0	\$34,965.0	\$34,965.0	\$34,965.0	\$35,865.0	\$35,865.0	\$35,865.0	\$35,955.0
Bridges & Culverts	\$75,560.0	\$75,560.0	\$75,560.0	\$75,560.0	\$75,560.0	\$75,560.0	\$75,560.0	\$75,560.0	\$75,560.0	\$75,560.0
Sidewalks	\$1,158.0	\$1,158.0	\$1,158.0	\$1,158.0	\$1,158.0	\$1,158.0	\$1,224.0	\$1,398.0	\$1,398.0	\$1,398.0
Rail Grade Separations	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
<b>Total (\$000)</b>	<b>\$111,683.0</b>	<b>\$111,683.0</b>	<b>\$111,683.0</b>	<b>\$111,683.0</b>	<b>\$111,683.0</b>	<b>\$111,683.0</b>	<b>\$112,649.0</b>	<b>\$112,823.0</b>	<b>\$112,823.0</b>	<b>\$112,913.0</b>

Average  
Service  
Level

SERVICE LEVEL (\$/pop & emp)

Roads	\$3,608.36	\$3,636.51	\$3,663.94	\$3,668.17	\$3,672.41	\$3,675.88	\$3,773.67	\$3,776.85	\$3,761.80	\$3,756.27	\$3,699.39
Bridges & Culverts	\$7,797.73	\$7,858.55	\$7,917.85	\$7,926.98	\$7,936.14	\$7,943.65	\$7,950.34	\$7,957.03	\$7,925.32	\$7,893.86	\$7,910.75
Sidewalks	\$119.50	\$120.44	\$121.35	\$121.49	\$121.63	\$121.74	\$128.79	\$147.22	\$146.63	\$146.05	\$129.48
Rail Grade Separations	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<b>Total (\$/pop &amp; emp)</b>	<b>\$11,525.59</b>	<b>\$11,615.50</b>	<b>\$11,703.13</b>	<b>\$11,716.64</b>	<b>\$11,730.18</b>	<b>\$11,741.27</b>	<b>\$11,852.80</b>	<b>\$11,881.11</b>	<b>\$11,833.75</b>	<b>\$11,796.18</b>	<b>\$11,739.61</b>

TOWNSHIP OF EAST ZORRA-TAVISTOCK  
CALCULATION OF MAXIMUM ALLOWABLE  
ROADS AND RELATED

20-Year Funding Envelope Calculation	
10 Year Average Service Level 2004 - 2013	\$11,739.61
Net Population & Employment Growth 2014 - 2023	420
Maximum Allowable Funding Envelope	\$4,930,636
Less: Uncommitted Excess Capacity	\$0
<b>Discounted Maximum Allowable Funding Envelope</b>	<b>\$4,930,636</b>

Excess Capacity Calculation	
Total Value of Inventory in 2013	\$112,913,000
Inventory Using Average Service Level	\$112,371,547
Excess Capacity	\$541,453
Excess Capacity:	Committed

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TABLE 2

TOWNSHIP OF EAST ZORRA-TAVISTOCK  
DEVELOPMENT-RELATED CAPITAL PROGRAM  
ROADS AND RELATED

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					Replacement & BTE Shares	0% Reduction		Available DC Reserves	2014-2023	Post 2023
<b>5.0 ROADS AND RELATED</b>										
<b>5.1 Roads Projects</b>										
5.1.1 Various Road Improvements	various	\$ 4,500,000	\$ -	\$ 4,500,000	\$ 4,164,252	\$ -	\$ 335,748	\$ 1,841	\$ 333,907	\$ -
5.1.2 SWM Facility N/W Corner Tavistock	2014	\$ 677,000	\$ -	\$ 677,000	\$ 626,489	\$ -	\$ 50,511	\$ -	\$ 50,511	\$ -
5.1.3 13th line	2015	\$ 160,000	\$ -	\$ 160,000	\$ 136,000	\$ -	\$ 24,000	\$ -	\$ 24,000	\$ -
5.1.4 Maplewood Sideroad	2015	\$ 400,000	\$ -	\$ 400,000	\$ 340,000	\$ -	\$ 60,000	\$ -	\$ 60,000	\$ -
Subtotal		\$ 5,737,000	\$ -	\$ 5,737,000	\$ 5,266,741	\$ -	\$ 470,259	\$ 1,841	\$ 468,419	\$ -
<b>5.2 Debentures</b>										
5.2.1 Innerkip Debenture (Queen St.)	2014	\$ 132,000	\$ -	\$ 132,000	\$ 111,760	\$ -	\$ 20,240	\$ -	\$ 20,240	\$ -
5.2.2 Innerkip Debenture (Queen St.)	2015	\$ 132,000	\$ -	\$ 132,000	\$ 111,760	\$ -	\$ 20,240	\$ -	\$ 20,240	\$ -
5.2.3 Innerkip Debenture (Queen St.)	2016	\$ 132,000	\$ -	\$ 132,000	\$ 111,760	\$ -	\$ 20,240	\$ -	\$ 20,240	\$ -
5.2.4 Innerkip Debenture (Queen St.)	2017	\$ 132,000	\$ -	\$ 132,000	\$ 111,760	\$ -	\$ 20,240	\$ -	\$ 20,240	\$ -
5.2.5 Innerkip Debenture (Queen St.)	2018	\$ 132,000	\$ -	\$ 132,000	\$ 111,760	\$ -	\$ 20,240	\$ -	\$ 20,240	\$ -
5.2.6 Innerkip Debenture (Queen St.)	2019	\$ 132,000	\$ -	\$ 132,000	\$ 111,760	\$ -	\$ 20,240	\$ -	\$ 20,240	\$ -
5.2.7 Innerkip Debenture (Queen St.)	2020	\$ 132,000	\$ -	\$ 132,000	\$ 111,760	\$ -	\$ 20,240	\$ -	\$ 20,240	\$ -
5.2.8 Innerkip Debenture (Queen St.)	2021	\$ 132,000	\$ -	\$ 132,000	\$ 111,760	\$ -	\$ 20,240	\$ -	\$ 20,240	\$ -
5.2.9 Innerkip Debenture (Queen St.)	2022	\$ 132,000	\$ -	\$ 132,000	\$ 111,760	\$ -	\$ 20,240	\$ -	\$ 20,240	\$ -
5.2.10 Innerkip Debenture (Queen St.)	2023	\$ 132,000	\$ -	\$ 132,000	\$ 111,760	\$ -	\$ 20,240	\$ -	\$ 20,240	\$ -
Subtotal Debentures		\$ 1,320,000	\$ -	\$ 1,320,000	\$ 1,117,600	\$ -	\$ 202,400	\$ -	\$ 202,400	\$ -
<b>TOTAL ROADS AND RELATED</b>		<b>\$ 7,057,000</b>	<b>\$ -</b>	<b>\$ 7,057,000</b>	<b>\$ 6,384,341</b>	<b>\$ -</b>	<b>\$ 672,659</b>	<b>\$ 1,841</b>	<b>\$ 670,819</b>	<b>\$ -</b>

<b>Residential Development Charge Calculation</b>		
Residential Share of 2014 - 2023 DC Eligible Costs	75%	\$503,114
10-Year Growth in Population in New Units		566
Unadjusted Development Charge Per Capita		<b>\$888.89</b>
<b>Non-Residential Development Charge Calculation</b>		
Non-Residential Share of 2014 - 2023 DC Eligible Costs	25%	\$167,705
10-Year Growth in Square Metres		9,852
Unadjusted Development Charge Per Square Metre		<b>\$17.02</b>

2014 - 2023 Net Funding Envelope	\$4,930,636
Uncommitted Reserve Fund Balance	
Balance as at December 31, 2012	\$1,534
Lost Revenue for 2009 Industrial/LTC Discount	\$307

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**TOWNSHIP OF EAST ZORRA-TAVISTOCK  
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE  
ROADS AND RELATED  
RESIDENTIAL DEVELOPMENT CHARGE  
(in \$000)**

ROADS AND RELATED	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	TOTAL
OPENING CASH BALANCE	\$0.0	(\$29.0)	(\$86.1)	(\$80.0)	(\$69.1)	(\$57.0)	(\$43.7)	(\$29.0)	(\$12.9)	(\$6.8)	
2014 - 2023 RESIDENTIAL FUNDING REQUIREMENTS											
- Roads And Related: Debentures	\$15.2	\$15.2	\$15.2	\$15.2	\$15.2	\$15.2	\$15.2	\$15.2	\$15.2	\$15.2	\$151.8
- Roads And Related: Non Inflated	\$62.9	\$88.0	\$25.0	\$25.0	\$25.0	\$25.0	\$25.0	\$25.0	\$25.0	\$25.0	\$351.3
- Roads And Related: Inflated	\$78.1	\$105.0	\$41.2	\$41.8	\$42.3	\$42.8	\$43.4	\$43.9	\$44.5	\$45.1	\$528.2
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	56	56	56	60	60	60	60	60	49	49	566
REVENUE											
- DC Receipts: Inflated	\$49.9	\$50.9	\$51.9	\$56.8	\$57.9	\$59.0	\$60.2	\$61.4	\$51.2	\$52.2	\$551.4
INTEREST											
- Interest on Opening Balance	\$0.0	(\$1.6)	(\$4.7)	(\$4.4)	(\$3.8)	(\$3.1)	(\$2.4)	(\$1.6)	(\$0.7)	(\$0.4)	(\$22.8)
- Interest on In-year Transactions	(\$0.8)	(\$1.5)	\$0.2	\$0.3	\$0.3	\$0.3	\$0.3	\$0.3	\$0.1	\$0.1	(\$0.4)
TOTAL REVENUE	\$49.1	\$47.8	\$47.3	\$52.7	\$54.4	\$56.1	\$58.1	\$60.1	\$50.6	\$52.0	\$528.2
CLOSING CASH BALANCE	(\$29.0)	(\$86.1)	(\$80.0)	(\$69.1)	(\$57.0)	(\$43.7)	(\$29.0)	(\$12.9)	(\$6.8)	\$0.1	

<b>2014 Adjusted Charge Per Capita</b>	<b>\$891.30</b>
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<b>Allocation of Capital Program</b>	
Residential Sector	75.0%
Non-Residential Sector	25.0%
<b>Rates for 2014</b>	
Inflation Rate:	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



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**TOWNSHIP OF EAST ZORRA-TAVISTOCK  
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE  
ROADS AND RELATED  
NON-RESIDENTIAL DEVELOPMENT CHARGE  
(in \$000)**

<b>ROADS AND RELATED</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>TOTAL</b>
OPENING CASH BALANCE	\$0.00	(\$12.98)	(\$35.58)	(\$29.54)	(\$26.40)	(\$22.56)	(\$18.28)	(\$12.53)	(\$1.88)	(\$0.60)	
<b>2014 - 2023 NON-RESIDENTIAL FUNDING REQUIREMENTS</b>											
- Roads And Related: Debenture Payments	\$5.1	\$5.1	\$5.1	\$5.1	\$5.1	\$5.1	\$5.1	\$5.1	\$5.1	\$5.1	<b>\$50.6</b>
- Roads And Related: Non Inflated	\$21.0	\$29.3	\$8.3	\$8.3	\$8.3	\$8.3	\$8.3	\$8.3	\$8.3	\$8.3	<b>\$117.1</b>
- Roads And Related: Inflated	\$26.0	\$35.0	\$13.7	\$13.9	\$14.1	\$14.3	\$14.5	\$14.6	\$14.8	\$15.0	<b>\$176.1</b>
<b>NON-RESIDENTIAL SPACE GROWTH</b>											
- Growth in Square Metres	780	780	1,210	1,020	1,040	1,040	1,090	1,311	808	773	<b>9,852</b>
<b>REVENUE</b>											
- DC Receipts: Inflated	\$13.4	\$13.7	\$21.6	\$18.6	\$19.3	\$19.7	\$21.1	\$25.8	\$16.2	\$15.9	<b>\$185.3</b>
<b>INTEREST</b>											
- Interest on Opening Balance	\$0.0	(\$0.7)	(\$2.0)	(\$1.6)	(\$1.5)	(\$1.2)	(\$1.0)	(\$0.7)	(\$0.1)	(\$0.0)	<b>(\$8.8)</b>
- Interest on In-year Transactions	(\$0.3)	(\$0.6)	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.2	\$0.0	\$0.0	<b>(\$0.2)</b>
<b>TOTAL REVENUE</b>	<b>\$13.1</b>	<b>\$12.4</b>	<b>\$19.8</b>	<b>\$17.1</b>	<b>\$17.9</b>	<b>\$18.6</b>	<b>\$20.2</b>	<b>\$25.3</b>	<b>\$16.1</b>	<b>\$15.9</b>	<b>\$176.3</b>
CLOSING CASH BALANCE	(\$13.0)	(\$35.6)	(\$29.5)	(\$26.4)	(\$22.6)	(\$18.3)	(\$12.5)	(\$1.9)	(\$0.6)	\$0.3	

<b>2014 Adjusted Charge Per Square Metre</b>	<b>\$17.16</b>
----------------------------------------------	----------------

<b>Allocation of Capital Program</b>	
Residential Sector	75.0%
Non-Residential Sector	25.0%
<b>Rates for 2014</b>	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

APPENDIX D

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*RESERVE FUNDS*

**APPENDIX D****DEVELOPMENT CHARGES RESERVE FUND  
UNALLOCATED BALANCES**

Table 1 shows the unallocated reserve fund balances that are available to fund the growth-related net capital costs identified in this study. All of the reserve fund balances are brought into account in the study.

As shown on Table 1, the December 31, 2013 balance was \$41,250. These balances have been used to finance the prior growth shares in the capital programs.

## APPENDIX D

## TABLE 1

**TOWNSHIP OF EAST ZORRA-TAVISTOCK  
DEVELOPMENT CHARGE RESERVE FUND BALANCE BY ACCOUNT  
YEAR ENDING DECEMBER 31, 2013**

<b>Service</b>	<b>Reserve Fund Balance as at Dec. 31, 2013</b>	<b>2014 Capital Budget Draws</b>	<b>Uncommitted Reserve Funds</b>
Fire Protection Services	\$16,931	\$0	\$16,931
Parks And Recreation	\$8,745	\$0	\$8,745
Public Works: Buildings And Fleet	\$6,977	\$0	\$6,977
General Government	\$7,062	\$0	\$7,062
Roads And Related	\$1,534	\$0	\$1,534
<b>Total Development Charge Reserves</b>	<b>\$41,250</b>	<b>\$0</b>	<b>\$41,250</b>

APPENDIX E

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*CAPITAL AND OPERATING  
COST IMPACT ANALYSIS*

APPENDIX E

TABLE 1

TOWNSHIP OF EAST ZORRA-TAVISTOCK  
 ESTIMATED NET OPERATING COST OF THE PROPOSED  
 DEVELOPMENT-RELATED CAPITAL PROGRAM  
 (in constant 2013 dollars)

	Net Cost (in 2013\$)		Estimated Operating Costs (\$000)										
			2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
<b>Fire Protection Services</b>			<b>\$30.0</b>	<b>\$30.0</b>	<b>\$30.0</b>	<b>\$30.0</b>	<b>\$30.0</b>	<b>\$30.0</b>	<b>\$40.0</b>	<b>\$40.0</b>	<b>\$40.0</b>	<b>\$40.0</b>	<b>\$40.0</b>
- Firehall Addition	\$10.00	per sq.ft.	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$10.0	\$10.0	\$10.0	\$10.0	\$10.0
- New Tanker	\$0.10	per \$1.00 of new veh	\$30.0	\$30.0	\$30.0	\$30.0	\$30.0	\$30.0	\$30.0	\$30.0	\$30.0	\$30.0	\$30.0
<b>Parks and Recreation</b>			<b>\$6.6</b>	<b>\$8.6</b>	<b>\$10.5</b>	<b>\$12.5</b>	<b>\$14.4</b>	<b>\$16.4</b>	<b>\$18.3</b>	<b>\$20.3</b>	<b>\$22.2</b>	<b>\$24.2</b>	<b>\$24.2</b>
- Provision for development-related capital works	\$0.03	per \$1.00 of new	\$6.6	\$8.6	\$10.5	\$12.5	\$14.4	\$16.4	\$18.3	\$20.3	\$22.2	\$24.2	\$24.2
		infrastructure											
<b>Public Works and Fleet</b>			<b>\$23.5</b>	<b>\$23.5</b>	<b>\$23.5</b>	<b>\$23.5</b>	<b>\$23.5</b>	<b>\$48.5</b>	<b>\$48.5</b>	<b>\$48.5</b>	<b>\$48.5</b>	<b>\$48.5</b>	<b>\$48.5</b>
- Buildings, Land and Fleet	\$0.10	per \$1.00 of new	\$23.5	\$23.5	\$23.5	\$23.5	\$23.5	\$48.5	\$48.5	\$48.5	\$48.5	\$48.5	\$48.5
		infrastructure											
<b>Roads and Related</b>			<b>\$4.0</b>	<b>\$8.0</b>	<b>\$12.0</b>	<b>\$16.4</b>	<b>\$20.8</b>	<b>\$25.2</b>	<b>\$29.6</b>	<b>\$34.0</b>	<b>\$37.6</b>	<b>\$41.2</b>	<b>\$41.2</b>
- Development-Related Roads Infrastructure	\$200	per household	\$4.0	\$8.0	\$12.0	\$16.4	\$20.8	\$25.2	\$29.6	\$34.0	\$37.6	\$41.2	\$41.2
<b>TOTAL ESTIMATED OPERATING COSTS</b>			<b>\$64.1</b>	<b>\$70.1</b>	<b>\$76.0</b>	<b>\$82.4</b>	<b>\$88.7</b>	<b>\$130.1</b>	<b>\$136.4</b>	<b>\$142.8</b>	<b>\$148.3</b>	<b>\$153.9</b>	<b>\$153.9</b>

**APPENDIX E  
TABLE 2 - PAGE 1**

**TOWNSHIP OF EAST ZORRA-TAVISTOCK  
SUMMARY OF TAX SUPPORTED FUNDING REQUIREMENTS**

<b>Net Capital Cost of Development-Related Projects</b>	<b>2014 (\$000)</b>	<b>2015 (\$000)</b>	<b>2016 (\$000)</b>	<b>2017 (\$000)</b>	<b>2018 (\$000)</b>	<b>2019 (\$000)</b>	<b>2020 (\$000)</b>	<b>2021 (\$000)</b>	<b>2022 (\$000)</b>	<b>2023 (\$000)</b>	<b>TOTAL (\$000)</b>
<b>FIRE PROTECTION SERVICES</b>											
Total Net Cost (1)	245.0	50.0	303.8	3.8	3.8	303.8	3.8	3.8	3.8	3.8	925.7
Net Cost From Development Charges (2)	187.7	13.0	16.5	3.8	3.8	52.1	3.8	3.8	3.8	3.8	292.2
Net Cost From Non-DC Sources	57.3	37.0	287.4	0.0	0.0	251.8	0.0	0.0	0.0	0.0	633.5
- Discount Portion (3)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- Available DC Reserves (4)	20.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.3
- Replacement & Benefit to Existing	37.0	37.0	287.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	361.4
- For Post 2023 Development (5)	0.0	0.0	0.0	0.0	0.0	251.8	0.0	0.0	0.0	0.0	251.8
<b>PARKS AND RECREATION</b>											
Total Net Cost (1)	220.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	805.0
Net Cost From Development Charges (2)	173.0	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	463.7
Net Cost From Non-DC Sources	47.0	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7	341.3
- Discount Portion (3)	6.8	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	18.1
- Available DC Reserves (4)	8.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.7
- Replacement & Benefit to Existing	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	314.5
- For Post 2023 Development (5)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>PUBLIC WORKS: BUILDINGS AND FLEET</b>											
Total Net Cost (1)	235.0	0.0	0.0	0.0	0.0	250.0	0.0	0.0	0.0	0.0	485.0
Net Cost From Development Charges (2)	157.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	157.0
Net Cost From Non-DC Sources	78.0	0.0	0.0	0.0	0.0	250.0	0.0	0.0	0.0	0.0	328.0
- Discount Portion (3)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- Available DC Reserves (4)	8.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.4
- Replacement & Benefit to Existing	55.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55.0
- For Post 2023 Development (5)	14.6	0.0	0.0	0.0	0.0	250.0	0.0	0.0	0.0	0.0	264.6

Notes: (1) For total development-related capital program see Appendix B and C.

(2) Share of capital program to be funded from development charges if calculated rates are fully implemented

(3) Mandatory 10% reduction for applicable services

(4) Portion of development-related capital program identified as available DC reserves (to be funded from present Development Charge reserve fund balances).

(5) Post 2023 development-related net capital costs may be eligible for development charges in future DC by-laws, but interim financing of this share may be required

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**APPENDIX E**  
**TABLE 2 - PAGE 2**

**TOWNSHIP OF EAST ZORRA-TAVISTOCK**  
**SUMMARY OF TAX SUPPORTED FUNDING REQUIREMENTS**

Net Capital Cost of Development-Related Projects	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	TOTAL
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)
<b>GENERAL GOVERNMENT</b>											
Total Net Cost (1)	5.0	0.0	0.0	0.0	15.0	0.0	0.0	0.0	0.0	35.0	55.0
Net Cost From Development Charges (2)	0.0	0.0	0.0	0.0	9.5	0.0	0.0	0.0	0.0	31.5	41.0
Net Cost From Non-DC Sources	5.0	0.0	0.0	0.0	5.5	0.0	0.0	0.0	0.0	3.5	14.0
- Discount Portion (3)	0.5	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	3.5	5.5
- Available DC Reserves (4)	4.5	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	8.5
- Replacement & Benefit to Existing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- For Post 2023 Development (5)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>ROADS AND RELATED</b>											
Total Net Cost (1)	1,259.0	1,142.0	582.0	582.0	582.0	582.0	582.0	582.0	582.0	582.0	7,057.0
Net Cost From Development Charges (2)	104.1	137.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	670.8
Net Cost From Non-DC Sources	1,154.9	1,004.4	528.4	528.4	528.4	528.4	528.4	528.4	528.4	528.4	6,386.2
- Discount Portion (3)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- Available DC Reserves (4)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	1.8
- Replacement & Benefit to Existing	1,154.7	1,004.2	528.2	528.2	528.2	528.2	528.2	528.2	528.2	528.2	6,384.3
- For Post 2023 Development (5)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>TOTAL TOWNSHIP-WIDE</b>											
Total Net Cost (1)	1,964.0	1,257.0	950.8	650.8	665.8	1,200.8	650.8	650.8	650.8	685.8	9,327.7
Net Cost From Development Charges (2)	621.9	182.9	102.4	89.8	99.3	138.0	89.8	89.8	89.8	121.3	1,624.8
Net Cost From Non-DC Sources	1,342.1	1,074.1	848.5	561.1	566.5	1,062.9	561.1	561.1	561.1	564.6	7,702.9
- Discount Portion (3)	7.3	1.3	1.3	1.3	2.8	1.3	1.3	1.3	1.3	4.8	23.6
- Available DC Reserves (4)	42.1	0.2	0.2	0.2	4.2	0.2	0.2	0.2	0.2	0.2	47.8
- Replacement & Benefit to Existing	1,278.1	1,072.6	847.0	559.6	559.6	559.6	559.6	559.6	559.6	559.6	7,115.2
- For Post 2023 Development (5)	14.6	0.0	0.0	0.0	0.0	501.8	0.0	0.0	0.0	0.0	516.4

Notes: (1) For total development-related capital program see Appendix B and C.

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(4) Portion of development-related capital program identified as available DC reserves (to be funded from present Development Charge reserve fund balances).

(5) Post 2023 development-related net capital costs may be eligible for development charges in future DC by-laws, but interim financing of this share may be required