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MEMORANDUM

To: Ruth Prince

From: Craig Binning & Carolyn Brown

Date: May 6, 2016

Re: Review & Update of Guidelines for Sewer & Water Extension
Projects

Hemson Consulting Ltd. was retained by the Town of The Blue Mountains in July 2015 to review and update the existing Affordability Guidelines related to the extension of municipal sewer and water services.

The following memorandum provides an outline and discussion of the existing affordability guideline policy governing the Town's decisions on which water and sewer extension projects are financially feasible. Historical practice in The Blue Mountains is reviewed with reference to how the guidelines have been used in the past. Approaches to funding sewer and water extensions are discussed, including Capital Connection Charges, Development Charges, utility rates, property taxes and Public-Private Partnerships. Finally, a new approach to determining affordability is proposed for the Town's consideration in developing a new policy guideline.

A. INTRODUCTION & BACKGROUND

At the Council Meetings of May 5 and 11, 2015, Council considered Report No. CPSPW.15.037 "Hoover/Teskey Sanitary Servicing Project". Council directed staff to retain a consultant to review and assist in the redevelopment of an affordability guideline. It is the intent of Council and staff that the new guidelines identify clear

and defensible limits of affordability and suggest alternative approaches to project financing if the limit or threshold is exceeded.

B. CURRENT MUNICIPAL SEWER & WATER EXTENSION GUIDELINES

The Town's Official Plan provides for the following:

“that municipal servicing capacity will ultimately be made available for all existing development within the applicable Service Districts.”

In an effort to provide municipal water and sewer servicing to all Service Districts, the Town has been extending servicing infrastructure into privately serviced or unserved areas. A recent example of this infrastructure extension is along Arlberg Crescent, which is discussed further in Section C.

The cost of extending municipal servicing can be extensive and the Town seeks to recover the majority of costs from benefitting land owners. In 2006, the Town established a policy entitled “Guidelines for Municipal Sewer and Water Extension Projects”, which specifies an amount that may be charged to each property to ensure that any infrastructure works undertaken by the Town are affordable and not overly burdensome to local residents and businesses. The guideline policy includes the following provisions:

- All projects should be deemed to be affordable for both the Town and benefitting property owners;
- The combination of all Town-wide projects will not cause the Town to exceed an appropriate debt level (i.e. – 80% of its debt limit);
- A full range of funding and financing tools will be reviewed for each project, including combinations of government grants, user fees, property owner payments, reserves, long term debt financing, developer funding/financing, taxation, etc; and
- Benefitting owners will be given payment options. At least one option will allow the property owner to pay not more than an affordable threshold amount annually based on current costs (i.e. approximately \$1,500 <sic 2006\$>) over an extended term.

C. MUNICIPAL BEST PRACTICES & HISTORICAL PRACTICE

Similar practices in comparable municipalities were reviewed in an attempt to set a precedence, provide a best practices summary and identify alternative options for the Town's consideration. The findings indicate that the Town of The Blue Mountains is unique in the use of an official affordability guideline document that is applied to all water and sewer infrastructure extension projects.

After surveying several comparable municipalities, it was found that affordability is often determined on a case-by-case basis and that the viability and value of a project is determined by considering the necessity of the works, available funding sources, and the end cost to benefitting property owners.

While there are often no formalized definitions of “affordability”, every effort is made by the surveyed municipalities to ensure that the financing of required infrastructure is economical for benefitting property owners. Measures of affordability are determined on a project-specific basis, and alternative funding sources are often identified in advance of the approval of an extension project to ensure that costs borne by existing property owners are reasonable. While there is no particular definition or test of reasonableness, the approval processes are consultative and include discussion with stakeholders, developers and members of the public. This ensures that those impacted understand the true benefits derived from the works and why the funding source is needed.

Once the cost per unit is determined, payment options are provided to ensure that financing requirements are not overly onerous. Options include paying a one-time lump sum payment, or annualizing payments over a number of years, subject to the municipality's interest rate. The selected option is based on consultation between property owners and the municipality, and is influenced by the length of time required to fully fund the infrastructure works.

Annual payments are often spread over a number of years to ease the annual burden on homeowners, however, depending on the total project costs, these payments may exceed \$1,500 per year. This specific amount outlined in the Town's policy guidelines is limiting and may be causing the Town to finance extension projects over much longer periods of time, thereby increasing the overall cost of the works.

Historical Practice

While the Town of The Blue Mountains relies upon the Affordability Guidelines in measuring affordability, the funding of water and sewer infrastructure extension projects is still considered on a case-by-case basis. Historical practice for several projects was reviewed, specifically for the Hoover/Tesky Wastewater Servicing project, the Arlberg Crescent Sanitary Sewer Servicing Extension, and Lake Drive Water & Wastewater Service Extension. In all cases, the project costs were determined and apportioned to benefitting property owners. Once the capital charges had been calculated for each owner, payment options were proposed to ensure that the annual fee required from each property owner was in line with the \$1,500 per unit, as suggested by the Affordability Guidelines. If costs were determined to be too high, the project was not approved by Council.

1. Hoover/Teskey Wastewater Servicing Project

In 2009, the Town initiated background research and an Environmental Assessment process for the Thornbury, Lora Bay, Camperdown and Clarksburg Service Areas to determine water and wastewater servicing needs. As these areas had been identified as full service areas in the Official Plan, it was the Town's intention to extend linear servicing infrastructure to those areas that were not yet connected to the system. This included installing servicing infrastructure along Hoover Lane and Teskey Drive.

The process was highly consultative with benefitting property owners engaged from the beginning phases in 2009. Public Information Centres were held in September and October of 2009 for Council to receive public input on the project. Letters and information correspondence were sent to residents in November 2012 and October 2013 to keep residents informed of the process and to provide cost estimates. Two additional Public Information Centres were held in 2014, which included design concepts and updated cost estimates. Feedback submitted on behalf of the property owners identified concerns with the true benefit of the works (as many residents were using private septic systems), affordability, and that the proposed system would be inferior to the existing septic facilities currently on site.

In addressing the issue of affordability, many payment options were calculated and presented to Council. Once cost estimates were established for the works, a servicing cost per unit was calculated, which was estimated to be just over \$22,000. Options were provided to benefitting property owners to pay this amount upfront, or to finance the servicing costs over 15, 20, or 25 years in an effort to reduce the annual costs. In keeping with the requirements of the Affordability Guidelines, the annual 15-year financing term resulted in an annual cost of \$1,764 per unit per

year. Over a 20-year financing term, the costs were reduced to \$1,541, which was determined to be within the range of the affordability threshold of \$1,500 per year.

In May 2014, staff outlined three payment options; over a 15-year financing term (\$1,764/year), over a 20-year term (\$1,541/year), or to finance the servicing and private costs (of the required grinder pump) over a financing term of 15 or 20 years. This third option resulted in an annual cost of more than \$2,000 per unit, however the financing of a \$4,000 grinder pump was optional for residents. Staff's concluding recommendation to the Town was to utilise a 20-year repayment term for servicing costs, resulting in an annual cost to benefitting property owners of \$1,541 per year. Following further discussion, Council voted against moving forward with the servicing project as the price was deemed unaffordable.

2. Arlberg Crescent Sanitary Sewer Servicing Extension

In April 2015, the Council of the Town of The Blue Mountains approved an extension of the municipal sanitary sewer servicing system to 18 properties located on Arlberg Crescent in the Craighleith Service Area. These properties were previously connected only to the municipal water system and relied upon aging septic systems for sanitary servicing. Many property owners on Arlberg Crescent expressed support for the extension works.

The total cost of the extension works was calculated at \$418,000. It was agreed that homeowners would be responsible for the costs of decommissioning existing septic systems, installing service lines from property lines to homes, and for the maintenance of required grinder pumps.

The Town calculated two financing options for consideration by Council. Option A required funding of \$41,075 from the Town's Water Reserve Fund and the remaining costs would be shared among the 18 benefitting property owners, resulting in a cost of \$25,096 to each. This was proposed to be financed over 20 years and, with interest, would cost each property owner \$1,865 per year. Option B would rely upon contributions of \$41,075 from the Water Reserve Fund and \$44,498 from the Wastewater Reserve Fund in order to reduce costs for benefitting property owners to \$22,624. When financed over 15 years, a cost of \$1,665 per year would result.

Council approved staff's recommendation to proceed with Option A. This option was recommended as it required no contribution from the Town's Wastewater Reserve Fund and would be less costly to the Town. Furthermore, the \$1,865 was determined to be in line with the Affordability Guidelines if the \$1,500 threshold were indexed to 2015 dollars.

3. Lake Drive Water & Wastewater Service Extension

The Lake Drive Water & Wastewater Service Extension project involved the extension of water and wastewater servicing along Lake Drive into the Lora Bay Service Area, which is to be fully serviced under the Town's Official Plan. The financing arrangement of the extension project was determined based on the total construction costs reduced by available revenues, including the Town's contribution from taxes, a provincial grant, and Lora Bay water and wastewater development charge reserve funds. The net recoverable costs were shared over 37 benefitting properties on Lake Drive to determine a cost per unit.

Multiple public information sessions were held to review construction details and the costs to benefitting property owners. Opportunities were provided for members of the public to ask questions, voice concerns, and address Council directly regarding the details of the project, potential issues of affordability, and financing options proposed.

The resulting cost per unit, including all capital charges totaled \$19,967. Two payment options were provided to residents to bring the costs in line with the Town's Affordability Guidelines. Homeowners were given the option to pay the full amount upfront, or to finance the payments over a 15-year term at \$1,712 per year plus 5 per cent interest to the Town, which would be added to the tax bill. This was determined by Council to be in line with the Affordability Guidelines and satisfied the benefitting property owners.

These examples of historical practice show some flexibility in the interpretation of the Affordability Guidelines and willingness of Town Council to approve costs that may be slightly higher than the \$1,500 annual threshold of affordability, following consultation and engagement with stakeholders.

D. APPROACHES TO FUNDING SEWER AND WATER SERVICES

In Ontario, municipalities have a number of different approaches or tools available to fund sewer and water servicing infrastructure. This section provides a high level summary of the cost recovery tools that are available to fund capital works. The Town may use any combination of the tools described below. It is important to note that the Town may use debt as a financing method but would still be required to use these funding tools to make payments on the debenture. Subsequent sections of this memo will discuss implementation of the most applicable funding tools and the impact on end users.

1. Capital Connection Charges

Costs related to construction may be recovered through Capital Connection Charges, which can be levied under the *Municipal Act* for existing residents and businesses. A Capital Connection Charge can be levied in a variety of ways, however the most common basis for the charges are property front metres, property area or household type (eg. single detached, townhome/row or apartment). The Town of The Blue Mountains does not distinguish based on property frontage or area, but rather views all units as a single units and levies a uniform charge to all benefitting units. The Town may allow a resident to spread payments over a 10, 20 or even a 30-year time period.

These types of charges can be levied against all lands – developed and undeveloped. If Connection Charges are only imposed on developed lands, an area-specific Development Charge by-law should also be enacted to recover monies from future benefitting lands.

The Town of The Blue Mountains currently uses Capital Connection Charges to fund the extension of water and sewer servicing infrastructure, often combined with other revenue sources. It is highly likely that this approach will continue to be the most appropriate tool for the Town.

2. Development Charges

Development Charges (DCs) may be imposed to fund capital costs required due to the increased need for services arising from development. Historically, the Town has used DCs extensively to fund “development-related” capital costs. However, development charges cannot fund the portion of the costs that benefit existing residents. Development charge rates were last updated in 2014 and will be reviewed again in 2019.

Although DCs are not directly applicable to the extension of services into existing developed areas, there can be opportunities to leverage works being funded through DCs for the extension of services if the DC-funded works are in proximity to an existing area that would benefit from the extension of services.

3. Sewer and Water User Rates

The sewer and water user rates fund both current operating costs and ongoing repair and replacement of wastewater and water-related infrastructure. The Town may finance a portion of the capital works through long-term debentures and fund the annual debt payments (principal and interest combined) through utility rates.

There are different options and approaches to recovering capital costs via utility rates. These include fully recovering costs through uniform utility rates to a “capital recovery

surcharge” levied against all users, or differentiated rates for defined areas based on servicing needs.

It is possible to use utility rate revenues over the short or medium term to mitigate the initial costs of extending services, with the expectation that, over time, the benefitting landowners will pay back the share of works supported through rates. This approach may be helpful in addressing issues of affordability.

Some municipalities levy a “capital recovery surcharge” on the water and sewer billing to fund capital costs associated with upgrading or extending municipal services. Often the surcharge is expressed as a flat rate per account, or per service/meter size, and the revenue collected is used to fund the necessary works (pay the associated debenture or repay the reserve used to fund the works initially). The surcharge would be applied for a set period of time, say 10 or 15 years, and is usually consistent with the financing timeframe used to fund the works. Typically, the surcharge only applies to properties within the benefitting area of the associated works. This approach can be used in tandem with capital cost recovery charges to be applied against current vacant properties that will also benefit from the works.

4. Federal and Provincial Grants

Historically, the Town has had some success in securing grant funding from higher orders of government to assist in funding capital projects, such as in the case of the infrastructure extension along Highway 26. The Town will continue to seek financial assistance from upper levels of government, where available, to fund capital works.

5. Reserves

It is at the Town’s discretion whether to use any of the existing Wastewater and Water Reserves to fund these capital works. The use of reserve funds is governed by municipal by-laws, which permit the monies to “be used to fund expenditures related to studies, replacement, enhancement, construction, expansion and acquisition of capital assets for the treatment, storage and distribution of” water or wastewater. This general provision allows the Town to use these funds for infrastructure extension projects, if desired.

6. Developer Co-operation: Front-Ending

When proposed infrastructure works include a significant development component, such as when servicing is provided to vacant lands, municipalities have the option to seek developer co-operation in the upfront financing of all or a share of the cost of the works. Front-ending agreements are typically used to service large residential developments with few landowners. Given that the issue at hand is the extension of services into largely developed areas, this funding tool is likely not applicable.

7. Public Private Partnerships (P3)

Larger municipalities have achieved some success at entering into P3 agreements for the delivery and operation of wastewater and water infrastructure. Typically, to attract private sector interest, the project needs to be of significant size and cost to ensure a reasonable expected return on investment. It is not anticipated that the works in question or the anticipated scenarios will be of a sufficient scope to be considered for P3's.

E. AFFORDABILITY

Affordability should be viewed from different perspectives, including affordability for the Town and benefitting land-owners of the proposed works. Each perspective is important and the determination of affordability for these two groups may differ depending on the nature and cost of the works.

From the perspective of individual property owners, affordability is a difficult concept to define in a general, or universal way, while being meaningful to individual land owners that are likely to have a range of financial circumstances. This is even more challenging in the context of this analysis as consideration is being given to the cost of providing one particular service, the extension of municipal services, without the broader context of housing costs and affordability. As such, the proposed policy is structured as a guideline, or approach, that can be applied to each specific project where the measure of affordability will likely vary from one project to the next and financial capacity from one land owner to the next.

1. Affordability: Town's Fiscal Position

The Town has financial constraints and multiple demands on limited fiscal capacity. The Town is advised to:

- Continue to use debt in a responsible way. The Town does not exceed appropriate limits if debt is used to fund works. Currently, the Town is utilizing less than 20% of the Provincial calculated debt limit.
 - Based on a debt financing interest rate of between 5%-7%, and a financing term of between 10-20 years, the Town could issue between \$30-\$50 million in new debt.
- Consider full range of funding tools, including strategic use of reserve funds.

- Make every effort to access any available government funding.
- Consider legal limitations of all options.
- Consider fairness and equity:
 - Amongst land owners within the benefiting area of the proposed works; and
 - Broader town-wide tax/rate payers.
- Ensure that decision and implementation processes are transparent and equitable.

It is recommended that the Town:

- Establish a debt policy guideline that directs when debt may be considered, types of eligible projects, appropriate financing terms (number of years) by type of project/infrastructure, and limits (potentially lower than Provincial annual repayment limit); and
- Examine the use of debt for the funding of municipal service extension projects in the context of existing and anticipated (medium and long term) debt as part of a long-range financial plan.

2. Affordability: Land Owner's Financial Perspective

- Benefitting land owners will be financially impacted:
 - Analysis should give consideration to the full financial impact of the extension of service – both public and private – recognizing that the Town can only directly control the terms of the public costs.
 - Different land owners will be impacted differently:
 - Measures of affordability and the process of quantifying for specific land owners; and
 - Approaches of allocating costs between land owners and land uses.
- Funding alternatives should always be considered:
 - Provide option to pay 100% of the costs upfront vs. payment options over a period of years (interest included).

- Establish rules on how and when property owners must make payments and connect to the services:
 - Mandatory vs. Optional (with rules).

3. **Affordability: Analytical Framework**

- The determination of affordability for both the Town and land owners will vary from one project to the next based on a number of factors, including:
 - Project costs
 - Size of benefitting land:
 - number of existing units (residential and non-residential); and
 - potential future development (including anticipated timing of development).
 - Demographic and financial profile of the benefitting land owners.
- It is recommended that the Town give consideration to the establishment of an analytical framework (Excel based) that can be used to quantify costs, allocations to benefitting landowners, payments (under different options), and measures of affordability.

F. MEASURES AND RANGES OF AFFORDABILITY

As noted above, it is difficult to establish specific measures of affordability related to funding the extension of water and sewer servicing infrastructure, that can be applied uniformly to all areas within a municipality. However, it is recognized that the Town would like to establish parameters or measures of affordability to assist in the extension of municipal servicing into specific areas, as determined by the Official Plan.

An approach to examining affordability, from the perspective of the land owner, would be to examine the cost of extending services in relation to the average or median household income in the Town of The Blue Mountains. The table below provides information from the 2011 Census on the 2010 median and average household income in the Town.

	Total Household Income		After-Tax Household Income	
	Median	Average	Median	Average
All Households	\$66,248	\$90,258	\$59,014	\$74,614
1 person Households	\$39,385	\$51,478	\$34,004	\$42,040
2+person Households	\$84,109	\$104,001	\$74,082	\$86,158

It is proposed that the after-tax household income be used in the affordability measure for the purpose of this policy as each benefitting landowner will be required to pay for the cost of servicing extensions with available after tax income.

As shown above, there are notable differences between the median and average household incomes, with the median being lower. It is recommended that the median household income be used in the analysis in an effort to remain conservative in the determination of a general affordability threshold.

Additionally, the data shows notable differences in household income between 1 person households and those with 2 or more persons. It is recommended that the after-tax household income for “all households” be used as the affordability measure in an attempt to reflect the capacity of the majority of Town residents.

The per household cost, including financing, of extending the municipal services (as determined using the analytical framework) can be compared against the median after-tax household income as means of measuring affordability.

The following measures of affordability are proposed for consideration:

- If the annual household cost of extending services is equal to, or less than 5% of the median after-tax household income, the project would be considered affordable.
- If the annual household cost of extending services is greater than 5% but less than 10% of the median after-tax household income, the project would require additional analysis to determine affordability:
 - Consideration of local support of servicing extension;

- Estimating if household income in the subject area is likely higher, or lower, than the Town median;
 - Consideration of other factors, for example health and safety, that may impact the necessity of the works;
 - If the project is to proceed, it may require additional financial support from the Town.
- If the annual household cost of extending services is equal to, or greater than 10% of the median after-tax household income, the project would be deemed unaffordable.

Applying the principle outline above would result in the following measures:

	Medium Household Income	Share of Household Income		Maximum Service Extension Charge ¹
		%	\$/year	\$/unit
Affordable	\$59,000	5%	\$2,950	\$36,770
Unaffordable	\$59,000	10%	\$5,900	\$73,540

¹ Calculated assuming a 20-year financing with a 5% annual interest rate.

G. SUMMARY OF PAYMENT OPTIONS

Sections 9, 11 and Part XII of the *Municipal Act, 2001*, as amended, and the associated Regulations, allow municipalities to impose fees and charges to fund the cost of providing water and wastewater services. The Town currently allows property owners two payment options when water and sewer services are extended:

1. 100% of costs paid upfront; or
2. Costs financed and paid over a defined period (typically 15-20 years) with equal annual payments, including the recovery of financing costs.

It is recognized that being connected to the municipal water and sanitary sewer system may increase property values. The increase, if realized, does not occur until the point at which a property is sold. In an effort to recognize that some home owners might be restricted in their ability to financially leverage the potential increase in property value arising from the service extension, the Town may wish to consider including a payment deferral option.

3. Deferral of Payment Until Property Sold

- Payment of the cost of service extension deferred until property is sold or 10 years following construction – whichever occurs first;
- Deferred payment must be a lump sum payment and include financing costs;
- Town should set a maximum amount of costs that can be deferred:
 - i. Set limit as total dollar value or share of total cost;
 - ii. Limit total amount of deferrals, for all projects, as a share of Town's debt;
 - iii. If Town is at or near the debt limit, as per the Town's own long-term debt policy, the deferral payment option should not be made available.
- As an additional comment, an individual property owner that has fully or largely paid-off the mortgage on their property could use a reverse mortgage, second mortgage, or similar asset based financing tool, to self-finance the cost of the connection based on the anticipated increase in property value arising from the extension of municipal servicing.

4. Area Rating

The Town could choose to fund all or a share of the costs through area rating. Under this approach the cost would be spread out amongst all benefitting property owners and funded from a surcharge, or area rate, likely on the water and sewer billing, over a defined period of time. The benefitting landowners would still pay for the cost of the extension of servicing but this approach could allow the Town manage the timeframe over which the costs are recovered and the way in which the works are financed.

H. FINDINGS & RECOMMENDATIONS

Preliminary recommendations based on the findings of our analysis are outlined below.

- When funding the extension of municipal water and sewer infrastructure, affordability is best measured on a case by case basis.
- Guidelines should be in place to develop a standardized method for determining affordability that involves consideration of individual projects,

the ability of Town residents to pay for the works, as well as consultation with affected property owners.

- To attempt to determine a standard maximum amount that is defined as “affordable” is limiting for the municipality, especially in circumstances with truly necessary and costly infrastructure extensions.
- A measure of determining whether or not a specific project is affordable is based on household income data, which is updated every year as part of the Census, will continue to ensure that infrastructure works supported by the Town are not overly onerous financially to residents and businesses.
- If a Town reserve is to be used to support a specific project to address affordability concerns, the maximum level of reserve contribution should be established as a percentage of the project cost and not exceed a certain per cent of the average per property cost or contribution.