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# AIRD & BERLIS LLP

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Barristers and Solicitors

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August 6, 2014

BY EMAIL

Our File No. 121234

Wendy Cooke, Deputy City Clerk  
City of Barrie  
70 Collier Street, Box 400  
Barrie, ON L4M 4T5

Dear Ms. Cooke:

**Re: 2014 DC By-law & 2014 DC Background Study  
(No. 2013-032)**

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Our office acts for North American Development Group, SmartCentres, Osmington Inc., and Penady (Barrie) Ltd. (the "Non-Residential Landowners") in respect of the City of Barrie's 2014 DC Background Study and proposed 2014 DC By-law.

We had previously written to the City's Deputy Treasurer on July 4, 2014, to provide an initial written submission to City Staff concerning the 2014 DC By-law and the 2014 DC Background Study. In that letter, we indicated that our clients had retained professional consultants to assist with a review of the 2014 DC Background Study and that a further written submission would be forthcoming in advance of the General Committee meeting on August 11.

I attach to this letter three memoranda from the Non-Residential Landowners' professional consultants:

1. The first memorandum is from Altus Group and was provided to City Staff on or about July 30, 2014. Altus' 15-page analysis raises a number of questions regarding the City's assumptions and methodology and also points out factual inconsistencies between the 2014 DC Background Study and other publicly-available reports produced by both the City and the County of Simcoe. To date, none of the issues raised in Altus' memorandum has been responded to by City Staff or the City's consultants.
2. The second memorandum is from LEA Consulting Ltd. and focuses on the transportation components of the City's 2014 DC Background Study. The prime concern with the City's transportation-related DCs is the inability to determine the reasons behind the substantial increases over the City's 2012 DC Background Study. Despite only being separated by 18 months, the City's 2014 DC Background Study uses a completely different list of road projects that are grouped differently, measured differently, and are implemented using a varying range of dates. Until the sources of

the increased costs are capable of being pinpointed, the Non-Residential Landowners have no basis to accept or support the City's proposed DC increases.

3. The third memorandum is also from LEA Consulting Ltd. and focuses on the servicing components of the City's 2014 DC Background Study. Once again, LEA raises legitimate questions concerning the level of charges associated with planned improvements to the City's surface water treatment plant, the City's various water supply projects, and the City's wastewater pollution control plant. These issues predominately arise from an inability to identify the City's rationale for not allocating benefits either to existing development or to post-period.

The foregoing memoranda demonstrate that there is a disconnect between the information that is publicly available to the Non-Residential Landowners and the information used to justify the significant non-residential DC increases proposed by the 2014 DC Background Study. Had appropriate stakeholder consultation taken place (inclusive of the Non-Residential Landowners), this disconnect might have been avoided.

As will be pointed out by individual non-residential developers, including members of our client group, the consequences of imposing a significant increase in non-residential DCs without proper justification will be severe. In addition to causing an Ontario Municipal Board hearing, non-residential development projects that are budgeted based on the City's very recent 2013 DC By-law (which was to apply until 2018) will be forced to incur unanticipated increases at levels that will threaten their viability. These increases will certainly discourage future job-creating investment in the City.

The Non-Residential Landowners accordingly renew their request that the report on the proposed 2014 DC By-law be deferred to permit appropriate consultation, including meetings with stakeholders and their professional consultants, to ensure that the information coming before Council is accurate. The discrepancies noted in the three attached memoranda are simply too great for the Non-Residential Landowners to accept the conclusions reached by City Staff and their consultants. Through stakeholder consultation, some (if not all) of these discrepancies can be addressed, resulting in a DC By-law that accurately reflects the City's growth-related needs in a manner that does not unfairly burden existing taxpayers or the proponents of new development.

If a deferral is not granted, then the Non-Residential Landowners strongly encourage the City to explore alternatives to passing a new City-wide DC By-law that would be effective immediately. For example, area-specific DCs can be used to address growth-related infrastructure needs in the annexed secondary plan areas. This approach could bridge the time to 2018 when the City-wide DC By-law is scheduled to be reviewed. Alternatively, the new 2014 DC By-law can be adopted and brought into force for the annexed lands immediately, but the in-force date for the City's developed areas can be phased-in to allow for better transition between DC regimes.

Representatives of my office and my clients will be in attendance at the August 11 General Committee meeting should any member of City Staff or City Council wish to further discuss matters raised in this letter.

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Yours very truly,

AIRD & BERLIS LLP



Patrick J. Harrington  
PJH/mk

Enclosures

cc: S. Bishop, North American Development Group  
T. Pierce, SmartCentres  
B. Keast, Osmington Inc.  
H. Kersey, Penady (Barrie) Ltd.

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July 30, 2014

Memorandum to: Alison Gallant / Michael Jerney  
City of Barrie

From: Daryl Keleher, Director  
Altus Group Economic Consulting

**Subject: Barrie DC Review**  
**Our File: P-4977**

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We have been retained by City Core Developments (Harmony Village) and a group of non-residential developers in the City of Barrie (including SmartCentres, Penady Barrie Ltd. (Mady), Osmington Inc., and North American Development Group), to be collectively known as “the Barrie Developers Group”, to review the City of Barrie 2014 Development Charges Background Study. This memo presents our questions regarding the DC Study.

## **WATER & SEWER**

### **Debenture Repayment – SWTP and WPCC Expansion in DC Reserve Fund Statements**

Figure 1 shows the debt servicing payments made through the DC reserve fund over the 2010-2012 period.

- For the Surface Water Treatment Plan (SWTP) project, 44% of the repayment was made through the DC, and the remaining 56% was made through water rate funds. This share is based on 2011 and 2012 City staff reports (FIN006-11 and FIN006-12).
- Similarly, based on the payments paid to date for the Water Pollution Control Centre (WPCC), the DC payment share for that debenture is 60%, with the remaining 40% coming from sewer rates.



Figure 1

**Debt Servicing Charges 2010-2012, as per DC Reserve Fund Statement**

	Total Funding	DC Share	Other Funding	DC Share	Source of Other Funding
		<i>Dollars</i>		<i>Percent</i>	
<b>2010</b>					
Debt Servicing Charges: WPCCE Expansion	3,549,992	2,150,000	1,399,992	60.6%	Sewer Rate
<b>2011</b>					
Debt Servicing Charges: WPCCE Expansion	5,923,484	3,554,090	2,369,394	60.0%	Wastewater Rate
Debt Servicing Charges: SWTP	3,347,256	1,472,792	1,874,464	44.0%	Water Rate
<b>2012</b>					
Debt Servicing Charges: WPCCE Expansion	5,915,739	3,549,443	2,366,296	60.0%	Wastewater
Debt Servicing Charges - SWTP	4,401,785	1,930,440	2,471,345	43.9%	Water <sup>1</sup>

<sup>1</sup> 2012 DC Reserve Fund Statement says source is "Wastewater", but this is assumed to be a typo  
Source: Altus Group Economic Consulting based on City's 2010-2012 DC Reserve Fund Statements

### SWTP Debenture Repayment in DC Study

We have identified two key issues with how the SWTP debenture costs have been included in the DC calculation – first, there are costs scheduled to be incurred after the population forecast horizon of the DC study, and second, the DC share of debenture repayment do not match the City’s planned repayment structure as outlined in City staff reports and other financial documents.

- The timing of the debt for the SWTP included in the DC Study is based on a 2051/2052 horizon, while the forecast horizon in Appendix A is 2031, and it appears that all principal repayment and interest costs are for the full payback of the debentures. However, on page 6-4 of the DC Study, the net residential growth-related capital costs are divided by an “18-Year Gross Population” value of 74,334 persons. The horizon on the debt repayment costs should match the population forecast horizon, so there should be a significant post period benefit allocation for debentures with payback periods after 2031. The City’s 2009 DC Study allocated a significant proportion of debt repayment costs to post period benefit.
- Based on a 2% discount rate, it appears that 100% of debt repayment costs have been included in the DC. Therefore, it does not appear that the 56% repayment share through water rates has been accounted for.

If we limited the inclusion of debt repayment costs for the SWTP to only those within the 2031 horizon, and to only the 44% DC share, the residential share of capital costs included in the DC falls from \$154.6 million to \$38.6 million, and the DC rate would decrease by \$4,876 per single-detached unit (or \$3,007 per large apartment unit).



Figure 2

**Comparison of Debenture Costs in DC Study - Water with Repayment Schedule from By-laws**

	DC Study - Discounted	2011 & 2012 Debenture Issues (Discounted by 2% per annum)		Difference
		2014-2051/52	2014-2031	
<i>Dollars</i>				
<u>2011 SWTP Debenture Issue</u>				
Principal	46,767,253	46,235,426	15,901,360	
Interest	70,888,702	70,282,755	50,914,823	
Total	117,655,955	116,518,182	66,816,183	
<u>2012 SWTP Debenture Issue</u>				
Principal	45,593,586	43,468,428	16,281,102	
Interest	48,220,635	51,240,574	37,084,848	
Total	93,814,221	94,709,002	53,365,949	
	DC Study - 100% Share and 2051/52 Horizon	Adjusted - 2031 Horizon	Adjusted - 44% DC Share and 2031 Horizon	Difference
<i>Dollars</i>				
Total Costs	211,470,176	120,182,132	52,880,138	(158,590,038)
Residential Share	154,613,885	87,869,726	38,662,679	(115,951,206)
<i>Dollars per Capita</i>				
DC per Capita	2,077	1,181	519	(1,558)
<i>Dollars per Single-Detached Unit</i>				
DC per SDU	6,502	3,695	1,626	(4,876)

Source: Altus Group Economic Consulting based on City of Barrie 2014 DC Background Study and 2011/2012 Debenture By-laws

According to the City’s website, the boundaries of the area to benefit from the Surface Water Treatment Plant includes large portions of the City’s existing area, which would seem to justify a significant benefit to existing allocation. Figure 3 shows the boundaries of the service area of the SWTP – this map would seem to justify the application of a significant benefit to existing share to the project costs.

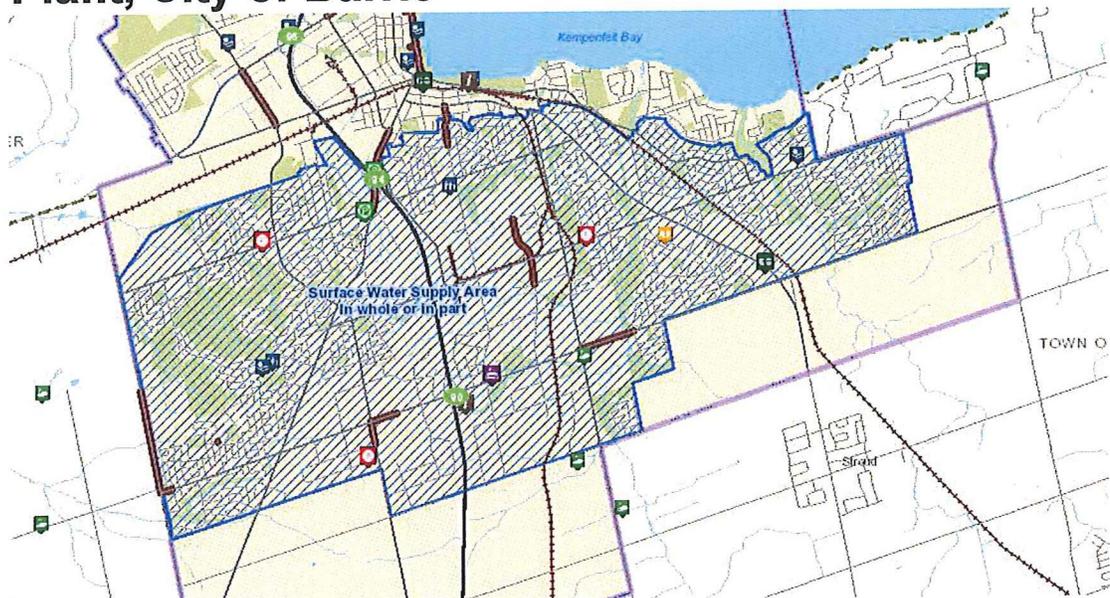
According to the City’s response to our preliminary inquiry on this issue, the BTE allocation was applied in the 2008 DC Study because “the 2008 DC Study only considered the portion of growth related to residential growth within the Former City...the Annexed Lands were not addressed in that study.” The allocation to BTE was applied in the 2008 DC Study, but according to the City’s response was actually more akin to a post period benefit deduction, with the annexed lands being the purpose of that deduction.



However, this does not explain why the City staff reports talk about only “44% of financing costs for the SWTP are eligible to be funded from Development Charges”, or why the DC reserve fund statements show the non-DC share paid for by user rates charged to existing water users. If it was known in 2008 that the BTE/PPB share was to eventually be funded through DCs imposed on the annexed lands, we would have expected the City’s staff reports to note as much, or the City’s funding approach to not rely on existing homeowners for funding when it was not a project that benefitted them. The City’s approach of the project being 100% DC eligible is also not consistent with the City map showing the benefitting area of the SWTP, which covers significant portions of the existing City.

Figure 3

### Benefitting Area of Surface Water Treatment Plant, City of Barrie



Source: City of Barrie

According to the October 2013 Water Supply report, “the combined surface water and groundwater supply will be sufficient to service growth projections to the year 2031”. Given the difference between the capacity of the City’s groundwater and surface water supply with that of projected maximum demand, it appears there will be capacity in 2031 to accommodate future growth –



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therefore, the works may service growth beyond 2031 and therefore a post period benefit allocation may be appropriate.

The Water Supply report goes on to discuss the service area for the SWTP:

*...the City's current groundwater supply is sufficient to service Zones 1, 2N and 3N until 2031. However, the current surface water supply is not sufficient to meet maximum day demands from Zones 2S and 3S (including the annexed lands) until the year 2031.*

Based on the map on page 7 of the Water Report, the boundaries of Zones 2S and 3S match the boundaries of the SWTP supply area shown on the map in Figure 3 in this memo. Therefore, the SWTP will be required to service both the annexed lands and the parts of Zones 2S and 3S in the former City boundaries, and there should be a benefit to existing allocation to account for the existing City area the plant will serve.

### **Wastewater – Facilities Related Debt**

Similar to the above issue regarding the calculation of DC eligible debt costs for the SWTP project, there also appear to be issues with how the facilities related debt for wastewater has been included in the DC calculation.

- According to recent DC reserve fund statements, only 60% of WPCC debt was paid for through development charges. Based on the detail from the debenture by-laws for each of WPCC Green Fund (\$2 million principal) and the WPCC (\$75 million principal), it appears that 100% of the debt repayment costs for wastewater facilities are incorporated into the DC calculation.
- According to City Staff Report ENG029-08, the Oro Biosolids facility debt was to be 90% funded through DCs. Based on the debenture by-laws for the Oro Biosolids facility, the DC Study appears to incorporate 100% of the associated debt repayment costs.

We have applied these revised DC factors to the Wastewater Facilities Related Debt DC calculation from the 2014 DC Study. Based on our calculations, the residential DC share of wastewater debenture costs should decrease from \$89.9 million to \$59.2 million. This would reduce the proposed DC rates by \$1,288 per single-detached unit (or \$795 per large apartment unit).

We would also like to see any post-2031 debt repayment costs removed from the calculation of the DC (though those impacts are not shown in Figure 4, and are minor compared to those identified in the SWTP discussion).



Figure 4

<b>Adjustment to Wastewater Services - Facilities Related Debt DC Calculation, City of Barrie</b>						
	DC Study (Discounted)			Adjustment to DC Share	Revised DC Eligible Costs	Difference
	Principal	Interest	Total			
		<i>Dollars</i>		<i>Percent</i>	<i>Dollars</i>	
WPCC Green Fund	1,646,163	385,628	2,031,791	60%	1,219,074.60	(812,716)
Oro Biosolids	16,981,982	7,221,446	24,203,428	90%	21,783,085	(2,420,343)
WPCC	56,086,992	28,273,633	84,360,625	60%	50,616,375	(33,744,250)
WPCC Debt - Balance to be Issued	10,483,917	1,871,753	12,355,670	60%	7,413,402	(4,942,268)
<b>Total</b>	<b>85,199,054</b>	<b>37,752,460</b>	<b>122,951,514</b>		<b>81,031,937</b>	<b>(41,919,577)</b>
				<i>Percent</i>		
Residential Share (73.1%)			73.1%		73.1%	
				<i>Dollars</i>		
Residential Growth-Related Costs			89,895,525		59,246,188	(30,649,337)
				<i>Population</i>		
18-Year Gross Population			74,434		74,434	
				<i>Dollars per Capita</i>		
DC per Capita			1,207.72		795.96	(411.77)
				<i>Dollars per Unit</i>		
DC per Single-Detached Unit (3.13 PPU)			3,780.17		2,491.34	(1,288.83)

Source: Altus Group Economic Consulting based on City of Barrie 2014 DC Background Study

## Phosphorus Removal and Biosolids Handling

We would like to understand the rationale behind the 36% benefit to existing allocation for the Phosphorus Removal and Biosolids Handling project.

## Watermain Projects

Based on the project list on page 5-46 of the DC Study, many of the watermain projects smaller than the 400mm local service threshold in the local service policy. We would like to understand why these are deemed to be DC eligible when they do not appear to meet the local service policies of the City.

## ROADS

The Barrie Developers Group has also retained LEA Consulting to review the roads capital program in the City's DC Study, and a memo containing technical comments will be forthcoming. However, we have several preliminary questions on the calculation of the roads DC.





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### **Off-Road Pathways**

We would like to understand the nature of the “off road pathway” projects, and whether these projects would be better allocated to the Parks and Recreation DC capital program.

### **South Operations Facility**

We would like to understand why there is no benefit to existing allocation for the South Operations Facility at the First Responders Campus (page 5-31 of the DC Study). This treatment is not consistent with that of the Police Services components of the First Responders Campus, all of which have a 72% or 90% benefit to existing share allocation.

### **No Post Period Benefit for Projects Scheduled Late in Planning Period**

The roads capital program has a significant number of projects scheduled for the end of the 18-year DC horizon (or 2027-2031), yet there is no post period allocation to these projects (mostly projects numbered 20-131). If there is any capacity on these roads in 2031, then a post period benefit allocation should be applied.

### **Property Acquisition Costs**

In the City of Barrie 2012 DC Study property acquisition costs were included in the charge through a separate line item with a \$71.6 million gross cost. The 2014 DC Study does not include a separate line item for property acquisition. Have these costs been incorporated into the project costs for the various separate projects?

If so, we would like to understand the assumptions behind the included property costs. We would also like to understand what the City’s annual expenditure are for road property acquisition.

### **Road Unit Costs**

The 2012 DC Study included \$395 million in gross costs for roads projects, while the 2014 DC Study included \$969 million in gross costs. We would like to understand what road projects were included in the \$395 million, to see what the cost increases were for specific projects between 2012 and 2014.

We would also like data on the assumed unit costs for any road projects, particularly the new road segments, interchanges, or road widening projects included in the 2014 DC Study.



## Cost Increases over FIA Report

There are a number of projects identified in the DC Study that have significantly higher costs than in the City's Fiscal Impact Assessment (FIA) report. On average, costs for these works have increased by 30% since the FIA Report, or added nearly \$64 million in costs to the DC Study. Figure 6 shows the projects with significant cost increases.

Figure 6

### Comparison of DC projects with Projects Identified in FIA report - Projects with Significant Difference in Net Capital Cost

	FIA Report		DC Study Net Capital Costs	Difference
	Total 2012 - 2031 Net Capital Costs	Adjusted Timing (2014- 2031 Only)		
	<i>Dollars</i>			<i>Percent</i>
<b>Roads</b>				
<u>New Roads:</u>				
Big Bay Point Road - Bryne Drive to East of Fairview Road	14,295,665	14,295,667	15,729,000	10.0%
<u>Roads Widened with Additional Through Lanes and AT:</u>				
Dunlop Street West - Ferndale Drive North to Barrie City Limits	7,075,234	7,075,234	8,437,000	19.2%
Dunlop Street West - Anne street to Cedar Pointe Drive	21,561,855	21,561,856	22,854,000	6.0%
Essa Road - Fairview Road to Highway 400 S-E/W Ramp	12,573,204	12,573,203	13,673,000	8.7%
Big Bay Point Road - East of Fairview Road to Huronia Road Ph 1	2,580,000	2,580,000	7,099,000	175.2%
Big Bay Point Road - East of Fairview Road to Huronia Road Ph 2	4,510,984	4,510,984	7,099,000	57.4%
Mapleview Drive - Huronia Road to Country Lane	7,500,000	7,125,000	14,226,000	99.7%
Tiffin Street - Lakeshore to Ferndale Drive	30,754,473	30,754,474	33,272,000	8.2%
Lakeshore / Tollendal - Tiffin to Bay Lane	12,733,702	12,733,703	15,143,000	18.9%
<u>Roads Widened with Tw o-Way Left Turn Lane Only and AT:</u>				
Bayview Drive - Little Avenue to Big Bay Point Road	6,126,139	6,126,139	8,077,000	31.8%
Big Bay Point Road - Loon Avenue to Dean Avenue	8,814,795	8,814,797	10,383,000	17.8%
Blake Street - Collier Street to Shanty Bay Road	7,957,343	7,957,343	9,298,000	16.8%
Welham Road - Big Bay Point Road to Mapleview Drive East	5,482,759	5,208,622	7,189,000	38.0%
Welham Road, Truman, Hamilton - Huronia to Big Bay Point Road	5,434,744	5,434,744	6,511,000	19.8%
Bradford - High to Tiffin	12,210,689	12,210,688	19,137,000	56.7%
Little Avenue - Fairview Road to Yonge	16,785,590	16,785,592	19,538,000	16.4%
Penetanguishene Road - Steel Street to Barrie City Limits	6,873,385	6,873,387	9,056,000	31.8%
Miller Drive - Dunlop Street West to Edgehill Drive	5,768,748	5,768,747	7,376,000	27.9%
Hart Drive - Dunlop Street West to Vespra Street	3,433,634	3,433,634	5,295,000	54.2%
Dyment Road - Vespra Street to Tiffin Street	3,238,961	3,238,960	4,788,000	47.8%
Saunders Road - Bayview Drive to Huronia Road	4,560,216	4,560,216	5,963,000	30.8%
<u>Roads Widened for Cycling Only</u>				
Huronia Road - Yonge Street to Herrell Avenue	1,976,134	1,976,133	9,535,000	382.5%
<u>Roads Widened with Additional Through Lanes and Cycling:</u>				
Huronia Rd - Lockhart Road to McKay Road	2,578,599	2,578,600	6,527,000	153.1%
Essa Road - Former City Limits to Trans-Canada Pipeline	5,799,070	5,509,117	7,258,000	31.7%
<b>Total</b>		<b>209,686,840</b>	<b>273,463,000</b>	

Source: Altus Group Economic Consulting based on City of Barrie 2014 DC Study and Barrie Fiscal Impact Analysis Report



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## **Sidewalk Infill**

Project #233 in the roads DC capital project list is for Sidewalk Infill projects and has a gross cost of \$17.4 million, of which 5% is allocated as benefit to existing. Based on Figure 7-3 of the Active Transportation Master Plan, these infill sidewalk works seem to be for the building of sidewalks in existing areas of the City without full sidewalk access, which do not appear to be intensification areas. Therefore, this project is not growth-related and should be removed from the DC Study.

## **STORMWATER**

### *Retrofits for Existing Ponds*

Based on the description of the project, it would appear that the “Provision for Retrofit for Existing Ponds” is for the upgrade of an existing stormwater facilities, and yet no benefit to existing allocation has been made to the \$14.7 million project cost. If the project is addressing existing issues for stormwater ponds that serve existing development, the BTE share should be significantly higher, or the project should not be included in the DC calculation.

## **LIBRARY**

### **Salem & Hewitt Branch Libraries**

The Salem & Hewitt branch libraries each have a cost of \$5.8 million in the February 2014 Fiscal Impact Assessment report, while in the 2014 DC Study, the Salem Branch has a cost of \$9.8 million (the Hewitt branch still has a cost of \$5.8 million in the DC Study). We would like to understand why the Salem Branch cost has increased so significantly since the publication of the FIA report.

## **PARKS AND RECREATION**

### **Lighting Existing Soccer**

There are three projects on page 5-5 of the DC Study that are for “Lighting Existing Soccer” fields, with a combined cost of \$812,000, none of which is allocated to existing benefit despite these apparently being existing playing fields used by existing residents.



### Additional Parkland Needs

The \$23.4 million for “Additional Parkland Needs” is vague and is a very costly item, and represents nearly 41% of all parkland development costs across the City. We would like to understand how the \$23.4 million cost was determined, and why such a large proportion of the overall parkland costs cannot be specified.

### South East and South West Recreation Facilities

We would like to understand the size of the building and site for the two recreation facilities included in the DC, and the cost split between building and land, to understand the unit costs of each.

### Changes in Size of Developed Parkland

We have found several parks with larger areas in the 2014 DC Study than in the City’s 2012 DC Study. Figure 7 compares the sizes of parks between the 2012 and 2014 DC studies. We would like the City to confirm the correct sizes of each of the parks listed below.

Figure 7

**Difference in Park Areas, 2012 and 2014 City of Barrie DC Studies**

Parkland Areas	2012 DC	2014 DC	Difference
	Study	Study	
	<i>Acres</i>		
Barrie Community Sports Park	91.96	120.88	28.92
Georgian Fields	11.69	14.33	2.64
Harvie Park	2.04	2.48	0.44
H.G. Robertson Park	2.11	3.27	1.16
St. Vincent Park	1.90	2.17	0.27
Steel St. Park (Cook)	2.49	2.78	0.29
Surrey Park	2.17	5.79	3.62
Allandale Station Park	31.80	38.63	6.83
Centennial	18.55	28.09	9.54

Note: 2014 DC Study breaks out developed parkland from natural areas, but those have been combined for this table to be consistent with treatment in 2012 DC Study

Source: Altus Group Economic Consulting based on City of Barrie 2012 and 2014 DC Background Studies



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## **Allendale Replacement & Expansion**

In the City's FIA report, the BTE share for the Allendale Replacement & Expansion Recreation facility was shown to be 100%, while in the DC Study, the BTE share is only 84%, with 16% of costs allocated to the DC. Please explain the discrepancy between the two reports.

## **PARAMEDICS**

### **Cost of Stations Increased Significantly over 2011 Simcoe and 2013 Orillia DC Studies**

The City of Barrie shares the provision of paramedic services with Simcoe County and the City of Orillia. The County's 2011 DC Study, and the City of Orillia's 2013 DC Study each contained many of the same projects as the City of Barrie's 2014 DC Study, with each jurisdiction only recovering a share of the combined cost (26.23% of which is Barrie's responsibility).

However, if we take Barrie's share of costs shown in their 2014 DC Study and apply the City's share of 26.23% to extrapolate what the total gross cost of each station is, the total costs for a number of these paramedic stations have increased significantly compared to the County's 2011 DC Study and Orillia's 2013 DC Study.

On average, the total costs have increased by an average of 29% since the County's 2011 DC Study and the City of Orillia 2013 DC Study (both of which have fairly consistent costs) and upwards of 130% in the case of the Barrie Central paramedic station. We would like to understand why the costs have increased so significantly over the past 2-3 years (or one year when compared to the Orillia DC Study).

Figure 8 compares the costs of these paramedic stations in the Simcoe County and Orillia DC studies with those from the City of Barrie DC Study.



Figure 8

**Comparison of Paramedic Station Costs in Simcoe County 2011 DC Study, Orillia 2013 DC Study and Barrie 2014 DC Study**

Station	2011 Simcoe County DC Study & 2013 Orillia DC Study			2014 Barrie DC Study			
	Building Cost	Land Cost	Total Cost (Building & Land)	Gross Costs (City's Share Only)	Barrie Share Percent	Total Cost Dollars	Cost Increase Percent
	<i>Dollars</i>						
Alliston	1,540,000	440,000	1,980,000	562,077	26.23%	2,142,878	8.2%
Beeton	840,000	136,500	976,500	322,611	26.23%	1,229,931	26.0%
Barrie Hub	9,286,000	1,087,730	10,373,730	3,212,570	26.23%	12,247,693	18.1%
Bradford	1,344,000	241,290	1,585,290	715,938	26.23%	2,729,462	72.2%
Midland	1,344,000	103,250	1,447,250	464,424	26.23%	1,770,583	22.3%
Orillia	2,520,000	150,000	2,670,000	919,000	26.23%	3,503,622	31.2%
Barrie South	476,000	79,590	555,590	289,000	26.23%	1,101,792	98.3%
Barrie Central	476,000	79,590	555,590	335,000	26.23%	1,277,164	129.9%
	17,826,000	2,317,950	20,143,950			26,003,126	29.1%

Note: Alliston and Beeton do not appear to be in the City of Orillia's 2013 DC Study, but are in the Simcoe County 2011 DC Study

Source: Altus Group Economic Consulting based on City of Barrie 2014 DC Background Study, City of Orillia 2013 DC Study and Simcoe County 2011 DC Background Study

### Inconsistent List of Stations

For the most part, the list of stations in the Simcoe County 2011 DC Study and City of Barrie 2014 DC Study are consistent. However, there are a few stations in the City of Barrie DC Study that are not found in the City of Orillia's 2013 DC Study (Alliston Station and Beeton Station being two examples of projects not in Orillia 2013 DC Study). We would like to ensure that these works have not been completed. If these works have been completed (or have funding earmarked for them), these works should be removed from the calculation of the DC rates in the City's DC Study.

### PROTECTION

#### Training Facility

There are two projects under "Fire Facilities" on page 5-34 of the DC Study:

- Training Facility (with Station #5) – timing 2018-2020 – gross cost \$11.5 million
- Training Facility (with Station #5) – timing 2019-2021 – gross cost \$2.8 million.

The descriptions provided in the DC Study are the same and the timing of each project overlaps – what is the difference between these two projects?



## **Benefit to Existing for Additional Facility Space at First Responders Campus**

There are two separate BTE rates applied to different components of the Additional Facility Space at First Responders Campus. Projects 19 and 20 have a BTE share of 72%, while for projects 23 and 24, the BTE share is 90%. We would like to understand why different BTE shares have been applied to different components of the Police Services share of these facility/land costs.

## **PARKING**

### *Allandale GO Station Parking Lot*

The DC capital program for parking includes provision for an \$8.3 million parking lot at the Allandale GO station. Does this cost represent the municipal share only? If not, is there any expectation of funding from the provincial or federal government?

## **RESIDENTIAL ONLY QUESTIONS**

### **Use of 2031 and Build-Out Populations**

On tables 6-1 through 6-3 of the DC Study, various forecast periods are used in the calculation of the DC rates:

- In table 6-1, the area specific DC for the former City is based on an 18-year gross population of 35,150 persons (2014-2031);
- In table 6-2, the area specific DC for the Secondary Plan Areas is based on a build-out population forecast of 44,672 persons;
- In table 6-3, the municipal-wide DC, which combines the former City and Secondary Plan areas is based on a 2014-2031 forecast of 74,434 persons.

The denominator used in table 6-3 for municipal-wide DC calculation should be consistent with the combined denominators used in tables 6-1 and 6-2, or 79,822 persons. Alternatively, for categories that fall under services shown in table 6-3, post period benefit allocations should be applied to ensure that the 'numerator' in each category reflects each respective denominator used.



## **NON-RESIDENTIAL ONLY QUESTIONS**

### **Floor Space per Worker (FSW) Factors**

We would like to understand the assumptions behind the industrial factor of 1,065 ft<sup>2</sup> per worker used to convert industrial jobs into industrial GFA for the purposes of forming the 'denominator' of the non-residential DC rate. In many jurisdictions across Ontario, the industrial FSW factors are over 1,200 ft<sup>2</sup> per worker, and upwards of 1,500 ft<sup>2</sup> per worker in some cases.

### **Conversion of Industrial Employment to GFA**

On page A-11, the 7,583 new industrial jobs forecast between 2014 and 2031 is projected to generate 7,848,700 ft<sup>2</sup> of industrial floor space. However, this equates to a FSW factor of 1,035 ft<sup>2</sup> per worker, when the assumption shown in the footnote to the table is 1,065 ft<sup>2</sup> per worker. If we applied the 1,065 ft<sup>2</sup> per worker to the 7,583 industrial jobs instead, we get 8,075,895 ft<sup>2</sup> of industrial space. This apparent error results in the DC rates for non-residential being overstated.

## **GENERAL QUESTIONS**

### ***DC Commitments***

Page 4-7 of the DC Study shows the City has \$10.7 million in DC commitments, which have been deducted from the ending 2013 DC reserve fund balance to come up with an adjusted balance at the end of 2013. We would like to understand what projects make up this \$10.7 million to ensure that these works are not being recovered through the calculated DC rates.



Project No. 9186

Phase 260

Date 31 July 2014

From G.M. (Joe) Johnson

To Terry Wallace

C.C. Daryl Keleher

Subject: **Barrie 2014 D. C. Review, Roads Component**

## 1.0 Introduction

With the limited time available, I have focused on a comparison of the Gross Capital Cost Estimates in the 2012 and 2014 D. C. Studies. The two studies were prepared using different Transportation Analyses [2012 – a Reed Voorhees Study, and 2014, a Genivar Study]. A direct comparison of projects is not possible as the 2012 study groups projects by implementation year, in 5-year increments, and provides almost no information on the type of project (e.g. new road, widening, re-construction, etc.), while the 2014 study uses a completely different list of projects, groups them by type of project, and provides varying year-ranges over which projects are to be implemented. The 2012 study breaks down the roads into about 120 segments, while the 2014 study has about 340 segments. In general, the 120 segments in 2012 do not match with any of the segments in 2014. The same length of road may have been broken down into smaller segments in 2014, plus there are obviously more road segments and projects added in 2014.

## 2.0 Requirements

We will need to know from the City:

- 2.1 If property acquisition costs are included in the gross capital cost estimate for 2014 for each road segment, as this is not clear from the D. C. Study?
- 2.2 Any unit costs used for different types of road improvement, including – if appropriate – property acquisition costs, listed separately.
- 2.3 Which projects have been removed from the 2014 D. C. Study which were included in the 2012 study, but have since been funded (and presumably commenced)?
- 2.4 Which projects have been added since 2012?
- 2.5 Which projects are in the annexed lands?

## 3.0 Reasons for increases in Gross Capital Cost Estimates from 2012-2014

1. Two years of inflation (unit rates have been requested by Altus and can be compared with 2012 unit rates when obtained from the City of Barrie, as long as the unit-rate methodologies are similar, and an adequate break-down is provided).
2. 2014 includes extension of the road network into the secondary plan area. The 2012 study included only arterials and major collectors located in existing developed areas.
3. Two additional interchanges with Hwy 400 have been added in 2014.
4. Active transportation alternatives have been added to road widening projects and road reconstruction projects.
5. Provision of cycling has been added to road widening projects.

6. There is a category for **roads widened for cycling only** in the 2014 study. These projects **could** all be additional to those identified in 2012. As the 2012 study does not explicitly identify road widening for bicycles only, a direct comparison is not possible.
7. **Roads Improved in Intensification Corridors for A.T. & Streetscape** appears to be a new category in 2014, with no direct comparison in 2012. These projects **may** all be new.
8. **Roads Re-striped with Reduction in Through Lanes for Cycling and/or TWLTL** appears to be a new category with no direct comparison in 2012. These projects **may** all be new.
9. **Roads with Bike Lane Striping Added** appears to be a new category with no direct comparison in 2012. These projects **may** all be new.
10. **Bicycle Boulevards** appears to be a new category with no direct comparison in 2012. These projects **may** all be new.
11. The following categories are almost certainly new, since the 2012 DC Study states that only major road requirements located in existing developed areas are included in the 2012 DC Program. They are as follows:
  - Sidewalks/boulevards pathways and other cycling facilities/off road pathways
  - Sidewalk infill
  - Boulevard Pathways and other Cycling Facilities
  - Off-Road Pathways
  - Bridges
  - Streetlights

Of these 6 categories, the last 2 may have parallels in the 2012 Study. Bridges are not separately listed in the DC Roads tables for 2012, but there are some bridges and bridge works embedded with the road projects. Street lighting may have been included in some DC projects in 2012, but no separate projects for streetlighting have been identified in that study.

In the absence of additional information from the City of Barrie at this time, it has been assumed –for the sake of clarity- that items 6-11 inclusive are additional categories of projects that have no direct comparison in 2012.

The attached table compares the gross capital costs under various sub-categories, for the 2012 and 2014 D. C. Studies.

Note the following:

- a) No reductions to the 2012 study costs have been made for projects which may have been taken out of the D. C. fund because they have been commenced/completed and funded.
- b) Highway 400 and related works
  - i) Sunnidale Road bridge over Highway 400 appears to have been removed from the 2014 D. C. Study,
  - ii) Harvie Road bridge over Hwy 400 in the 2012 study has been replaced by a full interchange in the 2014 study; similarly Duckworth St.
- c) It is assumed that property costs are included in capital construction costs for 2014.
- d) The 2012 figure for studies is the growth share only.
- e) Streetlights have not been separately accounted for in the 2012 study. They may be included in construction costs for 2012.

- f) A total of **\$123,977,600** (items 9-17 inclusive) comes from active transportation (AT) initiatives alone, while additional costs for other AT initiatives are included in the remainder of the road program in 2014. The City's Transportation Masterplan also looked at a "business-as-usual approach" alternative without most of the AT initiatives. The cost of the transportation alternative without these measures is less than the preferred alternative with AT) and would adequately serve the Annexed lands, but would not meet the City's strategic directions for new employment lands, or support growth – according to the Study!

**2012/2014 Roads D.C. Gross Capital Cost Comparison**

		2012	2014	Difference 2014-2012
1	Arterial & Collector Roads, to 2017 approx.	52,570,000.00	119,784,490.00	67,214,490.00
2	Arterial & Collector Roads, to 2018-2022 approx.	53,279,000.00	165,224,000.00	111,945,000.00
3	Arterial & Collector Roads 2023 & Beyond approx.	39,179,000.00	301,993,300.00	262,814,300.00
4	Highway 400 & Related Works	176,229,000.00	253,645,000.00	77,416,000.00
5	Major collector roads oversizing	1,166,000.00		-1,166,000.00
6	Property acquisition (presumably included in road costs for 2014)	71,160,000.00		-71,160,000.00
7	Signals	1,786,400.00	3,448,000.00	1,661,600.00
8	Studies	172,357.00	317,020.00	144,663.00
9	Roads widened for cycling only		62,788,000.00	62,788,000.00
10	Roads improved in intensification corridors for AT & Streetscape		8,683,000.00	8,683,000.00
11	Roads re-striped with reduction in through-lanes for cycling and/or TWLTL		309,900.00	309,900.00
12	Roads with bike lane striping added		322,100.00	322,100.00
13	Bicycle boulevards		2,708,000.00	2,708,000.00
14	Sidewalks/boulevard pathways and other cycling facilities/off-road pathways		725,700.00	725,700.00
15	Sidewalk infill		17,355,000.00	17,355,000.00
16	Boulevard pathway & other cycling facilities		2,543,200.00	2,543,200.00
17	Off-road pathways		28,542,700.00	28,542,700.00
18	Streetlights		889,200.00	889,200.00

**TOTAL      395,541,757.00 \*      969,278,610.00      573,736,853.00**

NOT! \*Rounding error in the 1,000's, of \$2,000



# Memorandum

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Page 1 of 1

Project No. 9186

Phase 260

Date August 5, 2014

From G.M. (Joe) Johnson

To Terry Wallace

C.C. Daryl Keleher

Subject **Barrie 2014 D.C. Review, Servicing Component**

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I conducted a quick review of Servicing (Water Services, Wastewater Services and Area Specific Capital Costs (Sections 5.4 and 5.5).

**Surface Water Treatment Plant.** It is not clear to me why improvements to the surface water treatment plant would have no benefit to existing development when the supply area includes most of the southern part of the City of Barrie (excluding the annexed areas). Also, it is strange that works planned to be carried out in 2030-2031 would not generate a post-period benefit.

**Water Supply projects – Distribution** (Former City Municipal Boundary Areas).

It seems likely that some of the smaller diameter watermain projects should either be excluded from the DC list, or that the benefit to existing should be higher by proportion than currently stated.

**Wastewater Services – Wastewater pollution control plant**

The Phosphorous removal and bio-solids handling project benefit to existing at \$21,902,400 may be modest compared to the overall capital cost of \$60,840,000, considering completion by 2019 and the current and future expected City population during the forecast period. If this project will handle requirements up to 2031, there will presumably be considerable excess unused capacity for a large part of the 12 year period between 2019 and 2031. Maybe the project should be phased.