April 16, 2016 Information Request:

Please provide the documentation from ISL (the previous consultant) that speaks to the 50% contingency in the Financial Impact Analysis.

In response to Mayor Frank's April 16, 2019 Information Request noted above, please find attached the following:

- 1. Pages 6 & 31 of the Bremner & Colchester: FIA of Recommended Community Design Concepts Final Report (March 2016)
- 2. March 2, 2016 email from ISL Engineering to the County's Finance Department & PDS confirming contingency for roads in the range of 40% 50%. (this percentage was not noted specifically in the FIA however was confirmed in the March 2, 2016 email from ISL)

In summary - based on the above, ISL assumed the following contingency for the infrastructure identified through the Bremner Growth Management Strategy:

- 75% contingency included in Offsite Utilities cost estimates
- 50% contingency included in Onsite Utilities cost estimates
- 40-50% contingency included in for all road cost estimates

The entire Bremner & Colchester: FIA of Recommended Community Design Concepts – Final Report (March 2016) can be found on the County's website using the following link:

https://www.strathcona.ca/files/files/at-pds-fia colchesterbremner.pdf

Sincerely,

Stacy L. Fedechko, RPP, MCIP Director, Planning and Development Services



- ▶ Inflation: All projections of revenues, expenditures and assessment, along with corresponding impacts, are presented in base year (2013) dollars.⁵
- ▶ 2013 Financial Information: The County's 2013 operating budget detail (by account code) was used as the basis for seeding the County's fiscal impact analysis with Base Year data. This data was used to identify the County's various revenue and expenditure streams by municipal service area.
- ▶ Municipal Mill Rates: The analysis is limited to an examination of the fiscal impacts on municipal property tax rates. Base Year (2013) municipal tax rates were used in the analysis. It was assumed that the current splits in municipal mill rates would remain in place over the forecast period.
- ▶ Population Growth: The same annual population forecasts were applied for the Bremner and Colchester recommended community design concepts. Using the population forecasts developed for the County for the Bremner Growth Management Strategy (three community design concepts), it was assumed that Colchester would capture the same annual growth projected for the Bremner lands, to build-out of the Colchester recommended concept. It is projected that Bremner (recommended concept) would be fully built out at the end of 2054, and Colchester (recommended concept) would build out at the end of 2048.
- ▶ Projected Development in Bremner and Colchester: The development parameters for each recommended community design concept were defined by Urban Strategies. Assessment projections were developed with the assistance of Strathcona County's Assessment Branch. It was assumed that the rate of development would be similar for both concepts. See Appendix A for detail regarding the development statistics defined for the Bremner and Colchester recommended community design concepts.
- ▶ Projected Capital Requirements to Service Bremner and Colchester: The County developed projections of future 'soft' capital requirements to service the Bremner and Colchester recommended community design concepts and the associated annual lifecycle costs to maintain these additional assets. Information on how these projects would be funded was also provided, and incremental operating impacts associated with new infrastructure were identified. See Appendix B for a summary of the soft capital projections prepared by the County.
 - Projected road and utility servicing costs associated with servicing the Bremner and Colchester recommended community design concepts are based on analysis undertaken by ISL Engineering and Land Services Ltd. (ISL). Assumptions regarding phasing of infrastructure, funding of infrastructure construction and lifecycle costs to maintain the infrastructure that would be the responsibility of the County were made by the County and Applications Management Consulting Ltd. See Appendix C for a summary of the assumptions regarding road and utility servicing requirements.

⁵ Where costs are provided in 2014 real dollars (ISL infrastructure estimates) or adjustments to cost figures been made, it is assumed that any inflation impacts are negligible and that the stated costs are representative in real dollars terms (2013 \$).

⁶ Table 6.5 (Recommended Community Design Concept Statistics) in both Bremner Growth Management Strategy and Colchester Growth Management Strategy.

Bremner Growth Mangement Strategy Future Capital - Road and Utility Servicing

Based on ISL Utility and Road Infrastructure Projections

Recommend	Recommended Concept (Real \$)	Units	Unit Cost	Cost		Construction Funding	Funding		Maintenan	Maintenance / Future Replacement	placement	-	Total County Costs	ty Costs
Off-Site					% Province	% County	% Off-Site Levies	Total	Responsibility	Annual LCC Rate (Rehab)	Useful Life (Yrs) (Replacement)	Construction (Debt) 2014-2054		LCC/Repl (PAYG) 2014-2054
Water	Off-Site No	Note 1		\$45,000,000	%0'0	0.0%	100.0%	100.0%	County	2.0%	ind, in LCC	\$		\$ 24,750,000
Wastewater	Off-Site No	Note 1		\$24,000,000	0.0%	0.0%	100.0%	100.0%	County	2.0%	incl. In LCC	s	,	\$ 13,200,000
Roads	At-Grade Intersections Service Interchange (Hwy 16/RR 224 & 223) Service Interchange (Hwy 21/Twp Rd 534)		\$3,000,000 \$60,000,000 \$85,000,000	\$9,000,000 \$120,000,000 \$85,000,000	0.0% 25.0% 25.0%	0.0%	100.0% 75.0% 75.0%	100.0% 100.0% 100.0%	Province Province Province		y	s s		
	Systems Interchange (Hwy 16/Hwy 21) Overpass Additional Hwy Lanes	2 2 44.7	v,	\$175,000,000 \$50,000,000 \$134,100,000		0.0% 0.0%	50.0% 100.0% 75.0%	100.0% 100.0% 100.0%	Province County Province	1.0%	30	w w w w		\$ 65,000,000
Total Off-Site				\$642,100,000	\$642,100,000 Phasing of construction subject to review.	uction subject to	review.					· vs	,	\$ 102,950,000
On-Site						_	% Developer	Total	Responsibility	Annual LCC Rate (Rehab)	Useful Life (Yrs) (Replacement)	Construction (Debt) 2014-2054		LCC/Repl (PAYG) 2014-2054
Water Water	Distribution Mains Reservoir	304 km 64,867 m3	\$1,317,414	\$400,494,000 \$77,840,321 \$478,334,321			100.0%	%%	The second secon	And the state of t				
Wastewater	Gravity Sewers	304 km	\$1,236,158	\$375,792,000			100.0%	100.0%	eye.					
Storm	Storm Sewers Storm Pond Area (PUL)	304 km 102 ha		\$592,800,000			100.0%	100.0%						
Storm Storm Storm	Storm Ponds Construction Storm Ponds Earthworks Storm Ponds Construction - NET	13 # ponds	\$4,246,331	\$55,202,297 (\$47,729,402) \$7,472,895			100.0%	100.0%						
Storm	Outfall Structure & Pipe	13 # ponds	\$341,314 Net of Earthworks	\$4,437,077			100.0%	100.0%				in the state of th		
Total Utilities		Note 3 FIA. Wit	FIA: Without Storm Earthworks ISt. Total: With Storm Earthworks	\$1,458,836,293 Phasing of construction subject to review. \$1,506,565,695	Phasing of constn	uction subject to	review.		County	2.0%	ind, in LCC	w	,	\$ 432,071,630
Roads	Arterial Roads (6 lane, Divided) Arterial Roads (4 lane, Divided) Collector Roads (Undivided) Local Roads (Undivided) Traffic Sienals	4 25.2 km 4 25.2 km 4 55 km 3 219 km 29 each	\$13,500,000 \$11,500,000 \$6,700,000 \$5,000,000 \$300,000	\$64,800,000 \$289,800,000 \$368,500,000 \$1,095,000,000 \$8,700,000			100.0% 100.0% 100.0% 100.0%	100.0% 100.0% 100.0% 100.0%						
Total Roads	53	3 each	\$2,000,000 FIA Total Other	\$6,000,000 \$1,832,800,000 Phasing of construction subject to review. \$30,000,000 \$1,862,800,000	Phasing of constn	uction subject to	review.		County	1.0%	30	₩.	,	\$1,176,132,822
Total On-Site (FIA)	(FIA)			\$3,291,636,293								s	,	\$1,608,204,452

1 Off-Site Utilities - Costs include 75% contingency. Land costs included in contingency. Water Option 1 assumed (various options provided, Option 1 deemed most likely)

2 Highway 16 Wildening (from 4 to 8 lanes); RR 225 to 18 R225 (ane-km)

3 Highway 21 Wildening (from 4 to 6 lanes); RR 225 to 18 R225 (ane-km)

4 La nea km

Highway 21 Wildening (from 4 to 6 lanes); Irwy 16 to 17 yes 524 (lane km)

6 Insert (18 Control of 18 Control

Stacy Fedechko

From:

Janna Widmer

Sent:

Wednesday, April 17, 2019 10:35 AM

To:

Stacy Fedechko

Subject:

FW: ISL Road Contingency

From: Hassan Shaheen [mailto:hshaheen@islengineering.com]

Sent: March-02-16 1:22 PM

To: Janna Widmer; Constance Gourley; Jay Bohachyk

Cc: 'Leah Cooke'; Tim Smith; Anna Iannucci

Subject: RE: ISL Road Contingency

Hi Jay,

The unit rates we used are order of magnitude costs for planning purposes only; they can be assumed to include a contingency of 40-50 %.

Hope that is what you are looking for.

Hassan

Hassan Shaheen, P.Eng. | General Manager Transportation Planning ISL Engineering and Land Services Ltd.

From: Janna Widmer [mailto:Janna.Widmer@strathcona.ca]

Sent: Wednesday, March 02, 2016 10:44 AM

To: Hassan Shaheen < hshaheen@islengineering.com ; Constance Gourley < cc: 'Leah Cooke' < lcooke@urbanstrategies.com ; Tim Smith tsmith@urbanstrategies.com ; Anna lannucci

<aiannucci@urbanstrategies.com>
Subject: FW: ISL Road Contingency

Hassan can you answer Jays question below?

Thank you

Janna

From: Jay Bohachyk

Sent: March-02-16 10:43 AM

To: Janna Widmer

Subject: ISL Road Contingency

Hi Janna,

When looking at the ISL inputs, the assumptions page water/wastewater included a 50% contingency for on-site and 75% contingency for off-site. The information provided for roads did not stipulate something similar, but I feel like I remember conversations in which they indicated a margin of error of +/- 50% on their cost estimates. Would you be able to confirm if this is true, and if not, what the margin would be?

Thanks,

Jay Bohachyk

Long-Term Financial Planning Advisor Financial Planning (780) 464-8118 (direct) (780) 464-8170 (fax) jay.bohachyk@strathcona.ca



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