Appendix II Update on Watermain and Sanitary Sewer Upgrades in Downtown Brampton, City of Brampton, Wards 1, 3, 4 and 5

OPTION	RECOMMENDATION	ASSUMPTIONS	SCHEDULE	COST		BENEFITS	RISKS AND CHALLENGES
				CITY	REGION	-	
1 - NO WORK; WAIT FOR DECISION ON LRT No temporary watermain, wastewater or roadworks until LRT decision then permanent watermain, wastewater and permanent roadworks	 Not recommended All work will have to wait until LRT project proceeds. This option has lowest capital burden up front but highest risk. 	 The LRT will proceed in the future (on Main Street). Full funding will be required and in place prior to proceeding. 	 Dependent on LRT implementation. 10 years to completion after funding. 	On going maintenance costs will be incurred and will increase with time.	On-going maintenance cost will be incurred and will increase with time	 Deferred capital expenditure. Minimize throw away expenditures. No disruption to the downtown. 	 High risk of failure of existing infrastructure. Legal and third-party risks. Servicing for development required. Roads will continue to deteriorate. No ability to upgrade any other utilities in the area (hydro, gas, telecom) Uncertainty in timing for LRT project. No improvement to existing conditions for Downtown.
2 – TEMPORARY ROAD WORKS ONLY; NO W/WW WORKS UNTIL LRT DECISION Temporary roadwork only. No watermain or wastewater works until LRT decision. Then, permanent watermain and wastewater works	 Not recommended Lower initial capital cost does not outweigh the risk of aging infrastructure 	 The LRT will proceed in the future (on Main Street). Full funding will be required and in place prior to proceeding. 	 Summer 2020 for roadworks. Permanent infrastructure will proceed with LRT. 	Estimated \$550,000 for road work (tax- based funds)	On-going maintenance cost will be incurred; will increase with time (rate- based funds)	 Deferred capital expenditure for Region's work Minimized throw- away expenditures Temporary improvement to road. Includes modified pavement markings. 	 Highest risk of failure to existing infrastructure. Legal and third-party risks. Newly paved road may be subject to watermain repair work. Servicing for development required Temporary road is throw-away cost. No ability to upgrade any other utilities in the area (hydro, gas, telecom) BIA/ public may not be satisfied with this temporary solution. It causes disruption downtown but has no servicing benefit until LRT project proceeds. Subject to City's Council approval.
3 – PROCEED WITH TEMPORARY ROAD AND TEMPORARY W/WW WORKS Design and construction of temporary watermain and wastewater works and temporary roadworks	 Option is recommended Some capital cost impact but manages bigger liability risk of the watermain. 	 That the LRT will proceed in the future. Full funding will be required to proceed. 	 1-year duration for design. 1.5 years for construction. 	Estimated \$550,000 for road work (tax- based funds)	\$5.5M - \$7M for W/WW works (rate- based funds)	 Manages risk of failure of all Region/City infrastructure Combined construction activity. Full road closures may not be required. 	 All work is an economical throw-away option as it would not suit the needs of an LRT. Construction will create disruption to the downtown. Full road closure may expedite construction. On-street parking will be lost for duration of construction. 2021 decision on LRT could result in a throw-away cost for design efforts. Concerns by Public/BIA and businesses regarding disruption to downtown for temporary solution. No ability to upgrade any other utilities in the area (hydro, gas, telecom)

Options for Region of Peel's Water and Wastewater Infrastructure and City's Roadworks in Downtown Brampton

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Reimagined Project	4 – NO LRT; PERMANENT ROAD AND PERMANENT W/WW WORKS Design and construction watermain and wastewater works and permanent roadworks	Recommended only if LRT will <u>not</u> be completed in the future	•	This option assumes that the LRT will not come up Main Street and/or deferred indefinitely Option is the same as previous Downtown Reimagined Project	•	2 years for design Subject to other Utility involvement 1.5-2 years for construction.	Estimated \$30M+ (tax- based funds)	Estimated \$20M+ (rate- based funds)	•	Eliminates risk of failure of infrastructure. Allows for the full implementation of the Downtown Reimagined.	 Highest capital cost burden for both Region and City. All utilities must be involved in order to implement a permanent solution. Construction will create severe disruptions to the downtown, including traffic and businesses. Full road closures will likely be required.
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