
TO:	GENERAL COMMITTEE
SUBJECT:	DUCKWORTH STREET NEW TRANSMISSION WATERMAIN AND RIGHT OF WAY EXPANSION – BELL FARM ROAD TO ST. VINCENT STREET
WARD:	1 AND 2
PREPARED BY AND KEY CONTACT:	D. JAMES, P. Eng. SENIOR PROJECT ENGINEER (Ext. 4444)
SUBMITTED BY:	R. SUTTON, P. Eng. DIRECTOR OF ENGINEERING
GENERAL MANAGER APPROVAL:	D. FRIARY GENERAL MANAGER OF INFRASTRUCTURE AND GROWTH MANAGEMENT (ACTING)
CHIEF ADMINISTRATIVE OFFICER APPROVAL:	M. PROWSE, CHIEF ADMINISTRATIVE OFFICER

RECOMMENDED MOTION

1. That the construction funding for the Duckworth Street New Transmission Watermain and Right Of Way Expansion, Bell Farm Road to St. Vincent Street be advanced from 2019 and 2020 to 2018 and 2020, be approved.

PURPOSE & BACKGROUND

2. The purpose of this staff report is to secure sufficient funds to advance the construction of a portion of the project, Duckworth Street between St. Vincent Street and Melrose Avenue as the existing road surface has failed on the southern portion of the roadway.
3. This project includes reconstruction and widening of Duckworth Street between Bell Farm Road and St. Vincent Street including road and sidewalk reconstruction, buffered bike lanes, installation of new transmission watermain and water services, replacement of sanitary sewer and sanitary laterals, replacement of storm sewer system, upgrades to street lighting system, replacement of the traffic signal systems at Duckworth Street /Codrington Street, at Duckworth Street /Wellington Street /Steel Street, at Duckworth Street /Grove Street, and at Duckworth Street /Rose Street /Bernick Drive.
4. The Class Environmental Assessment process was approved by Council in 2015 (ENG009-15) recommending the scope of the road reconstruction works and the Water Storage and Distribution Master Plan prepared in 2013 identified the need for a 300 mm watermain on Duckworth Street from Bell Farm Road to St. Vincent Street for Zone 2N reinforcement.
5. Detailed design was initiated in 2016 and the 60% design has been reviewed and is proceeding to the 90% level and utility relocation design has been initiated. Property acquisitions are currently underway.
6. The present Capital Plan includes utility relocations in 2018 and construction in two phases; the southern portion in 2019 and the northern portion in 2020.

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7. The road surface failure requires attention as soon as possible. There are two options to address the problem: undertake removal and replacement of the failed surface asphalt as soon as possible; or advance the construction of the southern portion Duckworth reconstruction to 2018.

ANALYSIS

8. The option to remove and replace the asphalt can be completed in a relatively short time frame however this asphalt would be removed in 2019 during the first phase of construction. The estimated cost of the remedial asphalt is \$235,000.
9. As there are minimal property requirements and no utility relocation in the road in the southern portion of the project, the majority of the works (road, sewers and watermain) could be undertaken in 2018. The work could start in August. There are some 'throw away' costs with this option related to curb and driveway work and some temporary storm and watermain connections. There would be additional disruption to the property owners as the sidewalk construction would be delayed until after the utility relocations, most likely in 2020 when driveways would be repaved from the curb to the property line. The extra construction cost plus engineering cost is estimated as \$91,000.

ENVIRONMENTAL MATTERS

10. There are no environmental matters related to the recommendation.

ALTERNATIVES

11. The following alternative is available for consideration by General Committee:

Alternative #1 General Committee could not approve the recommendation requiring immediate remedial asphalt replacement on Duckworth Street and maintain the current schedule of construction in 2019 and 2020.

This alternative is not recommended as the 'throw away' cost exceeds the additional cost of the recommended alternative.

FINANCIAL

12. The total approved budget for this project is \$1,551,000 consisting of \$351,000 for design in 2016, \$450,000 for property acquisition in 2017, and \$750,000 for utilities in 2018.
13. In addition, the 2018 - 2027 Capital Plan includes forecasted construction costs of \$4,354,100 in 2019 and \$4,354,100 in 2020 respectively.
14. If the recommended motion is approved as written; construction costs currently forecasted for 2019 and 2020 will be advanced to 2018 and 2019 and spending approval will be granted (current classification as forecasted does not permit spending) resulting in an \$8,708,200 increase to the approved capital budget and an overall approved budget for the project amounting to \$10,259,200.

15. The table below represents the current and proposed funding plan for the Duckworth Street New Transmission Watermain and Expansion project under the recommended motion:

Funding Source	Current	Proposed	Change
DC Reserves	\$204,280	\$204,280	\$0
DC Reserves - Tax	\$292,500	\$3,211,130	\$2,918,630
DC Reserves – Water	\$153,600	\$1,592,320	\$1,438,720
Tax Capital Reserve	\$228,900	\$3,076,470	\$2,847,570
Wastewater Capital Reserve	\$545,000	\$1,239,000	\$694,000
Water Capital Reserve	\$126,720	\$936,000	\$809,280
Total	\$1,551,000	\$10,259,200	\$8,708,200

16. The City's 2018 Budget and Business Plan highlights that a number of the City's capital reserves are either over committed or nearing fully committed. Granting spending approval and advancing the timing of construction for this project will place additional pressure on reserves in the near term while also committing the use of these funds outside the prioritization process. There is a risk that approving funding for this project will result in funds not being available for other priorities or potentially the need to incur more debt.
17. Recognizing the potential for cash flow implications from advancing project timing; Engineering staff considered whether any projects in the affected timeframe could be deferred. However, in delivery of the 2018 Capital Plan, Engineering has been progressing on all projects which precludes deferral at this time.

LINKAGE TO 2014-2018 STRATEGIC PLAN

18. The recommendation(s) included in this Staff Report support the following goals identified in the 2014-2018 Strategic Plan:
- ☒ Vibrant Business Environment
 - ☒ Responsible Spending
 - ☒ Inclusive Community
 - ☒ Well Planned Transportation
19. The recommended motion aims to address the existing pavement deficiency in the most economical way possible.