

6th Ave W - 2100 Block - Culvert 9C Replacement

21P.5

Priority Score: **63.00**

Project Type: Replacement

Growth Related?: No

Estimated Useful Life (years): 80

Priority Level: High

Department: Public Works and Engineering

Staff Contact: Chris Webb

Cash Flow Projection:	2023	2024	2025
Studies			
In House Engineering	\$ 15,000		
Design or Engineering	\$ 65,000	\$ 10,000	\$ 10,000
Communication / Signage			
Construction / Contractor	\$ 650,000		
Materials			
Equipment/Misc			
Contingency	\$ 70,000		
Total	\$ 800,000	\$ 10,000	\$ 10,000

Costs Incurred to 2021 Year End

Impact on Operating Budget \$ 0 \$ 0

Total Project Budget: \$ 820,000

Schedule:

Construction Start Date: 02/05/2023

Substantial Completion or
purchase date: 12/31/2023

Funding Sources:

Tax Levy	\$ 140,000
Water Rates	\$ 150,000
Waste Water Rates	\$ 150,000
Reserves	\$ 360,000
Please Select	\$ 0
Capital Reserve	\$ 0

Description and Rationale:

This box culvert under 6th Avenue West has reached the end of its useful service life. The culvert has a very low Bridge Condition Index (BCI) rating of 8 (scale is 0 to 100) with critical structural elements having failed. A reduced load rating has been imposed due to its condition.

While the culvert is under a road with very low traffic counts (near the terminus of the 6th Avenue West road), heavy City and emergency services vehicles, such as snow removal equipment and fire pumper trucks, are not permitted to cross or park on the structure. Alternate service delivery arrangements have been made in the interim until the reduced load rating can be eliminated

The replacement of this culvert was included with the reconstruction of 6th Avenue West from 21st St W to the northern road terminus but the advanced state of culvert deterioration has resulted in a more urgent need for the culvert to be replaced presently while the remainder of the project may be deferred to a future year (beyond 5 years). Storm water peak flows have been controlled effectively by an upstream SWM pond in Georgian Bluffs resulting in significantly less flooding in the area.



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Justification for Matrix Values

Score 0 - 5

Justification / Rationale for Rating

People	How many people will be directly impacted by the project?	1	This project will impact a small number of residents
Health and Safety	What is the risk to the health and safety of the public or Staff if the project does not proceed?	4	This culvert is critically deficient and currently has a reduced load rating due to its poor condition. Heavy vehicles are not permitted to cross.
Legislation	Is the project required for legislative/regulatory compliance?	4	The City has minimum maintenance standards it is required to meet. Structure is critically deficient. It must be replaced (closing/removal not practical).
Asset Management	Is the project a high priority for replacement in the asset management plan.	5	Culvert replacement is identified in our Asset Management Plan. This project has a high probability of complete failure with high consequences.
Operational Performance	If the project proceeds (or fails to proceed), what will be the impact on operational performance? Comment on any impact on operating costs, staff time and maintenance.	4	Impact and risks to deliver City services is a possibility if this project does not proceed. Higher maintenance costs are required due to the culvert's condition. Financial savings will be achieved once project is completed (special arrangements not required).
Financing	Can the cost of investment be leveraged or are there partnership funds available?	0	Tax, water and wastewater funded.
Environment	Does the project address needs impacted by climate change?	3	The culvert is undersized and this may cause increased flooding. The project will prevent further detriment due to climate change.
Socio-Economic Factors	To what degree does the project support diversity and inclusion Initiatives?	4	This project will maintain an existing public space.
Strategic Plan	Does the project help to meet a Key Result in the Strategic Plan?	3	This project does not help meet a key result in the strategic plan.
Public Input	Has the project been identified through public engagement?	3	This project has been identified through unsolicited feedback and a public consultation process.