

Memorandum

To: Mayor Johnstone and Members of Council Date: February 12th, 2025

From: Kwaku Agyare-Manu File No: 09.1870.01
Deputy Director, Engineering (EDMS#2654702)
Services

Subject: Project Update – West End Sewer Separation and Watermain Rehabilitation

PURPOSE

To provide Council with an update on the project schedule, budget and other works related to the ongoing work on the West End Sewer Separation, Green Infrastructure and Watermain Rehabilitation Project.

BACKGROUND

To reduce combined sewer overflows into the Fraser River, decrease urban flooding due to climate change and improve the quality of water into the Fraser River from the West End neighbourhood, the City is advancing with the next priority phase of the annual sewer separation program by separating combined sewers in the **16th street, 18th street and 20th street catchments** from 2024 to 2027. The project area is bounded by 10th avenue, 14th street, 5th avenue and 20th streets.

The scope of work includes:

1. Installation of 8.4 kilometres of storm sewers;
2. Replacement of 3.3 kilometres of water mains;
3. Installation of 24 infiltration bulges (rain gardens);
4. Installation of 3 permanent flow monitoring stations;
5. Installation of traffic calming bulges (concurrent with infiltration bulges);
6. Temporary and permanent patching of utility trenches per the recently approved Pavement Restoration Policy

The Project is being implemented with the support of a Consultant Project Manager. The Project Team is comprised of staff in the Engineering Department and consultants responsible for project design, execution, tracking, and close-out. The Project is governed by a Steering Committee, with the Directors of Engineering and Finance serving as Project Sponsors, who provide oversight and direction to the Project.

DISCUSSION

Procurement

Through an innovative competitive Request for Proposal (RFP) process, staff awarded a multi-year, multi-phase construction contract to Sandpiper Contracting LLP (“Sandpiper”). The contract guaranteed Sandpiper the scope for the 16th Street catchment, with an option to negotiate the remainder of the project scope based on performance and competitive unit pricing. Sandpiper has met all performance expectations by exceeding all schedule and budget targets while maintaining a high-quality standard. Based on this, the project team shared “Issued for Tender” drawings for all remaining work for pricing. Sandpiper has provided pricing for all remaining project scope, demonstrating that all applicable unit rates will be held from the 16th Street catchment for the remainder of the project scope. Following negotiations and a detailed pricing review, staff has awarded the remainder of the project scope to Sandpiper.

Project Schedule

The Project remains on schedule, with forecast completion of all work by March 2027. Sandpiper completed the installation of all storm mains for the sewer separation scope of 16th Street catchment; 16th St catchment watermain installation is approaching completion as Sandpiper finishes installation of water services and tie-ins. Concurrently, they are proceeding with the Rain Gardens in the 16th Street catchment and prelocates for the 18th Street storm main scope. High-level project milestones can be found in Table 1 below.

Table 1: Project Milestones

Project Milestone	Start	End
Project Planning/Pre-Design	December 2022	September 2023
Design		
16 th Street Catchment	October 2023	July 2024
18 th Street Catchment	November 2023	July 2024
20 th Street Catchment	January 2024	July 2024
Construction		
16 th Street Catchment	April 2024	July 2025
18 th Street Catchment	February 2025	April 2026
20 th Street Catchment	April 2026	March 2027

Due to the nature of open trench construction work, weather delays will present the highest and most unpredictable schedule risk. The project schedule anticipates sequential construction for the three catchment areas. Construction durations for each catchment include several months of schedule contingency during downtime due to unfavourable weather conditions. In the event

of prolonged delays, Sandpiper has confirmed the ability to move to a concurrent construction methodology for multiple catchments to ensure overall project completion by March 2027. Staff have reviewed and assessed the associated traffic impacts of this option and determined this to be the most appropriate risk mitigation strategy for potential schedule delays.

Reconciliation/Archaeology

Given the historical developments within the Project area and the results of the Preliminary Field Reconnaissance (PFR) and Archaeological Overview Assessment (AOA) showing extensive past and recent disturbance, it was determined that an Archaeological Impact Assessment (AIA) was required. The Archaeological Consultant (“Kleanza”) applied for a Heritage Permit from the province in January 2024 to complete the AIA. In May 2024, the Archaeology Branch required Kleanza to revise and resubmit the application. It is anticipated the permit will be issued in February/March 2025.

Kleanza has been continuing with regular spot checks, the implementation of a Chance Find Management Procedure, and photo documentation of all construction and excavation work.

Public Engagement/Community Impact

In accordance with the Project Communication Plan, the following activities have been completed to ensure clear and consistent communication is provided to the community. Note that these activities are being completed both by Staff and Sandpiper, who are contractually obligated to maintain updates on construction as it progresses through individual streets and neighbourhoods.

By Staff:

- Notified other utilities within the project area of the project scope and coordinated construction activities as required;
- Continued updates to the City’s website on ongoing project activities, as required;
- Distributed mail-outs to the West End neighbourhood with high-level project details (August 2023 and March 2024);
- Met with the West End Neighborhood Association (March 27, 2024) to present the Project and answer any questions from the Association and community.
- Funding boards announcing the Project and collaboration with Provincial and Federal Organizations.
- Consistently addressing questions from the community and updating the Communication Log to ensure all questions are answered in a timely manner.
- Updating the City’s website and project page.

By Sandpiper:

- Installed signage in proximity to the project location to further notify the public;
- Distributed more detailed mail-outs to residents and businesses proximate to the immediate construction works.

As the Project progresses, staff will continue to adhere to the communication plan, notify the neighbourhood at different stages of construction, and ensure that the traffic management and construction plans have minimal impact on the neighbourhood.

FINANCIAL IMPLICATIONS

The overall budget for the Project is \$38M, of which \$10,459,782 will be provided through the Investing in Canada Infrastructure Program (ICIP) – Green Infrastructure – Environmental Quality Stream grant. Table 2 illustrates a high-level breakdown of the budget per scope and catchment.

Table 2: High Level Breakdown of Project Budget

Scope	Budget (\$)	Spend to Date (\$)
6 th Ave	\$3,472,397	\$1,689,964
16 th St	\$12,924,510	\$5,701,160
18 th St	\$6,960,800	\$197,461
20 th St	\$6,276,963	\$187,607
Indirects (Archaeology, PM, etc.)	\$2,554,200	\$1,098,215
Contingency	\$5,846,133	-
Total	\$38,035,003	\$8,874,407

This Project is funded through the Approved 2024-2028 West End Sewer Separation BU in the Sewer Capital plan, and the West End Water Rehabilitation BU in the Water Capital plan. Thus far, the Project remains on budget with forecasted costs staying within the \$38M overall budget.

CONCLUSION

This memo provides Council with information related to the ongoing work on the West End Sewer Separation and Watermain rehabilitation project and sets the baseline for future project schedules and cost updates. Through the archaeological assessments and ongoing work, we continue to learn and commit to meaningful reconciliation and building relationships with the local first nations, the urban indigenous community, and the people whose lands we are on.

Staff look forward to sharing further updates with Council as major milestones and activities are undertaken.