

FINANCIAL MANAGEMENT COMMITTEE

TO: MAYOR AND COUNCILLORS

SUBJECT: SU: MAJOR ENGINEERING PROJECTS

RECOMMENDATION:

THAT the report titled "SU: Major Engineering Projects" dated March 4, 2025, of the Financial Management Committee meeting, be received for information.

REPORT

The Financial Management Committee, at its meeting held on March 5, 2025, received and adopted the <u>attached</u> report providing a status update (SU) on select Engineering projects.

On behalf of the Financial Management Committee,

Councillor S. Dhaliwal Chair

Councillor A. Gu Vice Chair





TO: FINANCIAL MANAGEMENT COMMITTEE (FMC)

FROM: GENERAL MANAGER ENGINEERING

SUBJECT: SU: MAJOR ENGINEERING PROJECTS

PURPOSE: To provide an update on select Engineering Projects.

RECOMMENDATION

THAT the report titled "SU: Major Engineering Projects" dated March 4 2025, be received for information.

1.0 POLICY SECTION

The advancement of these projects aligns with the community pillar of the Burnaby Strategic Plan and is further supported by the Burnaby Transportation Plan and various Asset Management Plans.

2.0 BACKGROUND

The Engineering Department has identified the following projects for regular Committee updates. These projects were selected to represent a broad cross section of the engineering annual work plan and correspond with public interest.

- 1. Marine Drive: Greenall Avenue to Strathearn Avenue
- 2. Sidewalk Expansion Program Alpha Secondary School
- 3. Sidewalk Expansion Program 6th Street
- 4. Burnaby Lake Pedestrian Bridge Overpass
- 5. SFU Evacuation Route
- 6. Burnaby Lake Southeast Greenway Section 1

Throughout a project lifecycle, engineering projects progress through several phases. In the interest of annual reporting, these phases can be summarized into design and construction.

- **1. Design**: In this phase, the design is developed to a level of detail suitable for construction. General tasks include preliminary design, environmental and regulatory permitting, interested parties' engagement, detailed design, and construction procurement.
- **2. Construction**: In this phase, the plans developed in the design phase are carried out by the successful contractor. Throughout construction, the City monitors construction progress and liaises with interested parties.

Upon completion of a successful project, the new assets are handed over to the Infrastructure and Public Works divisions to operate and administer the programs and/or services.

3.0 GENERAL INFORMATION

The following is a visual representation of the schedules of major Engineering projects identifying the development phases outlined in Section 2.0:

	2024			2025			2026			2027				2028				Est. Construction			
Project Name	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Complete
Marine Drive: Greenall Avenue to Strathearn Avenue																					Q2 2027
Sidewalk Expansion Program - Alpha Secondary School																					Q4 2025
Sidewalk Expansion Program - 6th Street																					Q2 2025
Burnaby Lake Pedestrian Bridge Overpass																					Q4 2025
SFU Alternate Access Route																					Q4 2024
Burnaby Lake Southeast Greenway																	П	П	Г	П	Q4 2026



3.1 Marine Drive: Greenall Avenue to Strathearn Avenue

Background and Scope: This project will bring Marine Drive from Greenall Avenue to Strathearn Avenue to the urban street standard, including curb and gutter, sidewalk on both sides of the road, bus route pavement, new bus stops, intersection upgrades, new streetlights, boulevard, and street trees as required.

Phase 1 Section of Marine Drive from Boundary to Greenall (Completed) has lane widths of 3.5m that meet Transportation Association of Canada (TAC) standards and Burnaby design criteria. Phase 2 and 3 Sections from Greenall to Strathearn have lane widths of 3.9m.

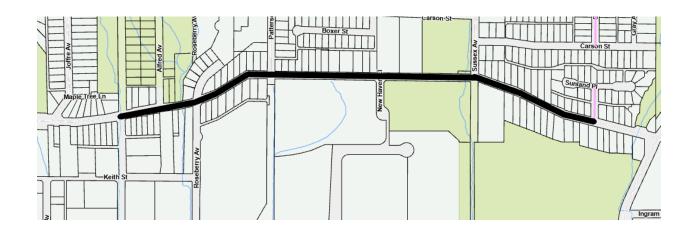
Solid Waste & Recycling (SWR) collection will remain on Marine Drive due to the limited lane access for collection vehicles.

Schedule: The design phase of the project is complete, with the exception of a recent Traffic Department request for a signal at Patterson Ave and additional preducting at other intersections for future Rectangular Rapid-Flashing Beacons (RRFB) crosswalks. The tender for the utilities work has been executed (\$2.9M), and we are now awaiting Council approval to award the contract. Construction for utilities is anticipated to start in Q2 2025. Additionally, a separate tender for the roadworks will be anticipated to be issued in Q4 2025. Overall, the project remains on schedule.

Total estimated value including design and overhead: \$13,100,000

Spent to date: \$243,000

Percentage completion to date: 2%



3.2 Sidewalk Expansion Program: Alpha Secondary School Sidewalk **Improvements**

Background and Scope: Project scope includes new sidewalks, curb and gutter, front boulevard with street trees, utility upgrades, IT communication conduit, and streetlight upgrades.

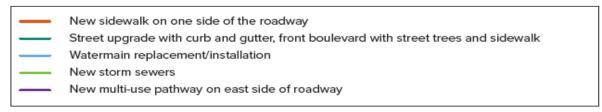
Schedule: This project is currently under construction and will be completed by the end of 2025. Works on Venables St (Willingdon Ave to Alpha Ave), Alpha Ave (Parker St to Hastings St), Frances St (Beta Ave to Delta Ave) is near completion. Construction continues on Pender St, Beta Ave, and Delta Ave. An Archaeology monitoring plan has been implemented which satisfies the requirements of the Indigenous Relations and Reconciliation department and the local First Nations.

<u>Total estimated value including design and overhead</u>: \$12,500,000

Spent to date: \$3,714,000

Percentage completion to date: 55%





3.3 Sidewalk Expansion Program: 6th Street

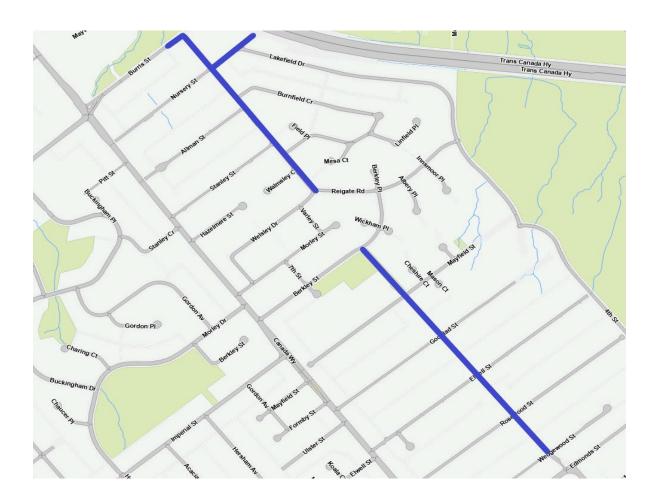
Background and Scope: Project scope includes new sidewalks, curb and gutter, retaining walls, front boulevard with street trees, multi-use path from Burris Street to Nursery Street, IT communication conduit, and streetlight upgrade.

Schedule: Sites 1 and 2 are currently under construction with Site 3 being completed. The area along 6th Street between Nursery Street and Burris Street was delayed allowing the First Nations the opportunity to conduct a Post Impact Assessment. This preliminary study was undertaken to determine the potential presence of undocumented archeological sites within the area. On October 10, 2024, the Post Impact Assessment was completed and work commenced under a Chance Find Management Plan. The project is expected to be completed in early Q2 2025 pending BC Hydro works to relocate hydro poles, this is causing a delay in completing areas of sidewalks and retaining walls. Due to archaeological delays staff anticipate an additional \$700,000 of design and construction incurred costs.

Total estimated value including design and overhead: \$8,078,000

Spent to date: \$6,236,000

Percentage completion to date: 85%



3.4 Burnaby Lake Pedestrian Bridge Overpass

Background and Scope: The pedestrian-cyclist overpass and associated pathways will support multiple regional initiatives and strengthen the broader regional active transportation network. This includes improving connectivity with Metro Vancouver's Central Valley Greenway system and TransLink's Major Bikeway Network. This project was identified as part of the City's Transportation Plan.

Schedule: Civil, architectural, structural and electrical design is 100% complete (\$3.0M). Construction activities on the North and South abutments have commenced and base concrete is poured. Temporary engineering works to move and install the bridge super-structure over Highway 1 is being finalized. Bridge super-structure is being fabricated offsite at a local facility in Surrey, BC. A stipulated price contract (\$24.0M) with the construction managers will be signed by Q1 2025. The project is on schedule to achieve substantial completion by Q4 2025.

Total estimated value including design and overhead (construction): \$27,000,000

Spent to date: \$6,057,000

Percentage completion to date: 25%



3.5 SFU Alternate Access Route

Background and Scope: Design and construction of a 4.0-meter paved emergency route to connect Simon Fraser University (SFU) and Mintara Restaurant parking lot in Burnaby Mountain Park. This emergency route is designed to allow downhill evacuation for users of all ages, abilities, and ambulance usage. The project also includes the installation of a Fortis gas line, communication conduits and electric supply conduits for future use from University Drive to the restaurant. Current design iterations consider limited ground disturbance to minimize archaeological and urban forest impacts.

Schedule: Tender closed on May 30, 2024, and lowest bid amount was 25% higher than the designers estimate of \$2,000,000. Construction started in August 2024. The project completed in Q4 2024 with minor deficiencies to be completed in Q1 2025.

Total estimated value including design and overhead: \$2,500,000

Spent to date: \$2,359,000

Percentage completion to date: 99%

5.0 FINANCIAL CONSIDERATIONS

Funding for these major Engineering projects is included in the 2024-2028 Capital Plan.

Respectfully submitted,

May Phang, P. Eng., General Manager Engineering

REPORT CONTRIBUTORS

This report was prepared by:
Louise Huang, P.Eng., Senior Manager Engineering Projects
Fernando Imola, P.Eng., Engineer Project Management
Amer Nawaz, P.Eng., Senior Engineer Project Management
Chris Whitlock, P.Eng., Senior Engineer Project Management
Ghazi Razvi, P.Eng., Senior Engineer Project Management
Dakshin Gunawardana, Senior Manager, Engineering Business Operations
Chris Stacey, P.Eng., Director Engineering Projects