



transportation
investment
corporation

Monthly Status Report

Reporting Period: July 2021

1. Introduction

1.1 Project Overview

The Broadway Subway Project (“BSP” or “the Project”) is a 5.7-kilometre Advanced Light Rapid Transit (ALRT or SkyTrain) extension to the existing Millennium Line SkyTrain system from its current terminus at VCC-Clark Station to a new western terminus station at Arbutus Street and West Broadway. The Project scope includes:

- 700 m of elevated guideway extending west from the existing VCC-Clark Station
- 5 km of underground tunnel
- 6 new underground stations:
 - Great Northern Way – Emily Carr Station;
 - Mount Pleasant Station;
 - Broadway – City Hall Station – designed to integrate with the Canada Line Broadway-City Hall Station;
 - Oak – VGH Station;
 - South Granville Station;
 - Arbutus Station – designed to allow for a future phase of investment to connect rapid transit to UBC.

The Broadway Subway is scheduled to open in 2025.

Additional information and updates about the Project can be found on the Project’s website at <https://www.broadwaysubway.ca/>.

1.2 Project Delivery

Transportation Investment Corporation, a provincial Crown corporation, is delivering and overseeing this \$2.827 billion Project. The Project is being delivered under B.C.’s Community Benefits Agreement and the skilled trades workforce will be provided by B.C. Infrastructure Benefits Inc.

Broadway Subway Project Corporation (BSPC) has been selected as the design-build contractor.









The Broadway Subway Project is a key part of the rapid transit program in Metro Vancouver’s Mayors’ Council 10-Year Vision. The Vision is funded by the governments of B.C. and Canada, TransLink, and City of Vancouver. Once constructed, the Broadway Subway will be integrated with the regional transit network and operated and maintained by TransLink.

1.3 Project Goals

Based on the mandate and results of consultation, seven primary goals have been identified for the Project:

- **Transportation:** Fast, reliable, and efficient service that meets current and future capacity needs and integrates with the regional transit network and other modes of transportation.
- **Financial:** Affordable and cost-effective.
- **Environment:** Attracts new riders and reduces vehicle kilometres travelled.
- **Urban Development:** Supports current and future land use development along the Broadway Corridor and integrates with the surrounding neighbourhoods through high-quality urban design.
- **Economic Development:** Creates jobs and facilitates the efficient movement of goods and services during operation.
- **Social and Community:** Safe, secure, and accessible service that improves access to rapid transit for all, while managing impacts on heritage and archaeology.
- **Deliverability:** Constructible and operable.

2. Project Dashboard

		Objectives	Project Status	Comments
Project Delivery	Scope	Project delivered within the approved scope.		<ul style="list-style-type: none"> The Project includes the delivery of a primarily tunneled extension to the existing Millennium Line SkyTrain system from VCC-Clark Station to a new station at Arbutus Street and is on track.
	Schedule	Project delivered within the approved schedule.		<ul style="list-style-type: none"> The start of piling activities are delayed at some construction locations. A recovery plan is being implemented by BSPC.
	Budget	Project delivered within the approved budget of \$2.827 billion.		<ul style="list-style-type: none"> Project spending for the month of July 2021 was \$20.5 million. Total Project spending to date is \$501.8 million and the Project is forecast to be delivered within budget.
	Safety	Take every reasonable step to ensure that work is performed safely and in compliance with all applicable safety regulations, and in accordance with government policy.		<ul style="list-style-type: none"> A project specific health and safety plan has been developed and is being implemented. Regular project site visits are being performed to oversee health and safety performance. A communicable disease plan has been developed and is being implemented.
	Quality	Implement and maintain an effective Quality Management System.		<ul style="list-style-type: none"> The Province continues to review BSPC's quality documentation submittals. Quality system auditing of select work activities and processes by BSPC and the Province continues.
	Environmental	Ensure work is performed in an environmentally responsible manner.		<ul style="list-style-type: none"> Site specific environmental workplans have been developed for 6 of the 7 anticipated construction sites and are being implemented for locations under active construction. Weekly monitoring reports are being provided to give updates on implementation of environmental mitigation. Small spills that occurred during July have been addressed in a timely and appropriate manner.
	Design and Construction	Provide design and technical oversight, coordinate and manage activities on site, and conduct compliance reviews.		<ul style="list-style-type: none"> Piling is complete at Mount Pleasant. Pre-work in advance of excavation has begun. The Main Street sanitary line relocation is substantially complete. Main Street is now fully open to vehicle traffic. Traffic has been diverted to the South side of Broadway at Oak-VGH station in anticipation of piling work. Installation of temporary utilities on the south side of Broadway has begun at Granville station.
	Community Benefits	Work collaboratively with BC Infrastructure Benefits Inc. (BCIB) to successfully implement the Community Benefits Agreement (CBA).		<ul style="list-style-type: none"> Ongoing coordination with BCIB. Province/BSPC/BCIB in ongoing discussions for permitting and future BCIB resource requirements.

Partners / Stakeholders	Indigenous Groups	Continue to build and maintain a positive collaborative working relationship.	●	<ul style="list-style-type: none"> • The Province continues to engage with the Indigenous Groups in relation to the Project and cultural recognition. • Continued Project-specific agreement discussions with Indigenous Groups.
	Third Parties	Continue to build and maintain positive relationships with Project Partners and other third parties.	●	<ul style="list-style-type: none"> • Engage third parties to ensure successful implementation of executed agreements.
	Public and Stakeholder Engagement	Continue to build and maintain positive relationships with the community and other stakeholders.	●	<ul style="list-style-type: none"> • Ongoing engagement with local businesses, stakeholders, residents, and the public continued in the month.

Status	Description
●	Managing critical issues, negotiating resolution; action required immediately
●	Managing some issues, negotiating resolution; action required in the near term
●	On track; no action required

3. Project Documents and Achievements to Date

Project Delivery	Project Planning and Development	<ul style="list-style-type: none"> • Business Case released (2018). • Cost Report released (2018). • Project Overview released (2018). • Risk Report released (2018). • Strategic Options Whitepaper released (2018).
	Environmental	<ul style="list-style-type: none"> • Environmental technical studies complete (2017-2018). • Environmental Socio-Economic Report complete (2020). • BSPC Construction Environmental Management Plan finalized (2021). • Site Specific Environmental Workplans developed for 6 of 7 site locations (2021).
	Design and Construction	<ul style="list-style-type: none"> • Geotechnical studies complete (2016-2017). • Reference concept design complete (2018). • Traffic modelling complete (2017-2019). • Geotechnical Subsurface Baseline Report complete (2019). • Geotechnical investigations commenced (2020). • Building abatement complete (2021). • Building demolitions at station sites complete (2021). • Bulk excavation commenced at Great Northern Way – Emily Carr (2021). • Piling complete at Mount Pleasant Station (2021).
	Province/Other Works	<ul style="list-style-type: none"> • Tunnel Boring Machine power – BC Hydro (2019). • Propulsion Power Substations including upgrade to dedicated power at VCC-Clark Station – BC Hydro (2019). • Utility relocate at Main Street – TELUS (2019). • Utility relocates at Great Northern Way – TELUS/FortisBC/BC Hydro (2019). • Civil construction and utility relocate at Arbutus and Cambie – TELUS (2020). • Trolley overhead relocations of bus routes 14, 16, and 17 – Coast Mountain Bus Company (2020).

		<ul style="list-style-type: none"> • Trolley overhead removals of trolley infrastructure on Broadway – Coast Mountain Bus Company (2020). • Utility relocate at Cambie – FortisBC (2020). • Electrical duct utility relocate at South Granville and Arbutus – City of Vancouver (2021).
	Community Benefits	<ul style="list-style-type: none"> • Received BCIB Contractor and BCIB Subcontractor Agreements from BCIB for inclusion in the RFP (2019). • Received BSP appendix to CBA (2019/2020). • Execution of the BCIB Contractor Agreement (2020). • Granted subcontractor permits (2020-2021). • BCIB labour supply ongoing for the Project (2021).
Partners/ Stakeholders	Third Parties	<ul style="list-style-type: none"> • Memorandum of Understanding – City of Vancouver (2017). • Memorandum of Understanding – TransLink (2018). • Canada Line Amending Agreement – InTransit BC Phase 1 (2019). • South Granville Station Integration Agreement – PCI (2019). • Vancouver Municipal Agreement – City of Vancouver (2020). • Metro Vancouver Accommodation Agreement (2020). • Broadway Subway Project Support Agreement – TransLink (2020). • Canada Line Amending Agreement – InTransit BC Phase 2 (2020). • Integration Agreement – TransLink (2020). • Great Northern Way Station Integration Agreement – PCI (2020).
	Indigenous Groups	<ul style="list-style-type: none"> • Capacity Agreement for the Environmental and Socio-Economic Review (2018). • Contracting and employment requirements finalized (2020).
	Public and Stakeholder Engagement	<ul style="list-style-type: none"> • Phase 1 and 2 engagement (led by TransLink and City of Vancouver)

		<ul style="list-style-type: none"> ○ Phase 1 engagement (December 2016 – February 2017). ○ Phase 2 engagement (May 2017 – July 2017). • Broadway Subway Project Engagement (Province-led) <ul style="list-style-type: none"> ○ Local business survey (July 2019 – December 2019). ○ Community engagement (October 2019 – December 2019). ○ Opened Community Office (Fall 2019). ○ Established 24/7 construction information line (December 2019). • Station Design Advisory Process (BSPC-led) <ul style="list-style-type: none"> ○ First engagement occurred (November-December 2020). ○ First engagement summary report released (2021). ○ Second engagement (April 29-May 12, 2021).
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4. July Highlights and Three Month Lookahead

4.1 Safety

Scope:	<ul style="list-style-type: none"> • Manage relevant Project health and safety management systems. • Oversee Project goals, objectives, and performance metrics. • Ensure health and safety roles and responsibilities are clearly defined. • Plan each Project activity to ensure the safety of workers and the public. • Coordinate health and safety activities with all relevant stakeholders. • Measure health and safety performance. • Ensure compliance with WorkSafeBC, municipalities, and government agencies. • Monitor management systems for continual improvements.
Monthly Highlights:	<ul style="list-style-type: none"> • The Province reviewed BSPC health and safety plans. • The Province performed Project site visits to observe compliance and areas of improvement. • The Province developed a communicable disease plan.
Three Month Lookahead:	<ul style="list-style-type: none"> • Continue the review of BSPC health and safety plans. • Monitor changes to COVID-19 requirements and revise associated plans. • Provide health and safety support to involved parties. • Perform regular Project site health and safety inspections. • Complete a health and safety audit of the Project.

4.2 Quality

Scope:	<ul style="list-style-type: none"> • Establish quality management Project objectives and performance measures. • Manage Project quality management activities. • Monitor relevant quality management performance metrics. • Outline relevant quality management processes and activities.
Monthly Highlights:	<ul style="list-style-type: none"> • Review and acceptance of BSPC Traffic Quality Manager. • BSPC completed quality audits focused on processes related to Bus Management systems, Document Control Management, Construction Quality Management, and Truck Management. • The Province completed a quality audit on BSPC's general Quality Management System including several quality system procedures.
Three Month Lookahead:	<ul style="list-style-type: none"> • Continued periodic review of quality documentation submissions by BSPC. • Continued BSPC and Province quality system audits and surveillances.

4.3 Environmental

Scope:	<ul style="list-style-type: none"> • Oversee delivery of measures to manage risk identified in the Environmental and Socio-Economic Review (ESR). • Review environmental submissions including the Construction Environmental Management Plan (CEMP) and Environmental Work Plans (EWPs). • Monitor CEMP implementation through review of weekly environmental monitoring reports. • Support engagement with Indigenous Groups on CEMP implementation.
Monthly Highlights:	<ul style="list-style-type: none"> • Provincial review of environmental reports and submittals. • Review and acceptance of new BSPC Environmental Manager. • Weekly meetings between the Province and BSPC environmental team. • CEMP implementation and weekly/monthly reporting. • Archeology monitoring and site specific archaeology impact assessment being undertaken by BSPC for high potential areas. • Sediment and erosion control plan submitted for GNW and pending for Mt. Pleasant. • Work underway to characterize site contamination and develop plans for appropriate management.
Three Month Lookahead:	<ul style="list-style-type: none"> • Ongoing Provincial review of environmental submissions. • On-site surveillance of environmental requirements during construction. • Continued weekly meetings with BSPC environmental team. • Begin implementation of contaminated site management plans during excavation. • BSPC to initiate construction noise monitoring. • Province to participate in first BSPC-led environmental quality audit (August). • Province-led surveillance of BSPC environmental program to begin in fall 2021.

4.4 Design and Construction

Scope:	<ul style="list-style-type: none"> • Provide technical input to the procurement processes. • Develop a design concept, technical requirements/specifications, and related technical studies for the Project. • Conduct Project related traffic operations modelling, data collection, and other related engineering services. • Conduct compliance reviews of work by BSPC. • BSPC Design and Construction Activities include: <ul style="list-style-type: none"> ○ Non-Systems Design ○ Systems Design ○ Enabling Works including site preparation, building demolitions and utility relocations ○ Construction of 6 Stations ○ Elevated Guideway Construction ○ Underground Guideway Construction by tunnel boring machine
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	<ul style="list-style-type: none"> ○ Systems Installation ○ Testing and Commissioning
<p>Monthly Highlights:</p>	<ul style="list-style-type: none"> • The Province continued review of BSPC technical submittals. • 81 BCIB Labourers are actively working on site. • BSPC continued Non-Systems and Systems Design. • BSPC continued borehole investigations along the Broadway Corridor. • Numerous traffic diversions are in place including at stations: Mt. Pleasant, Broadway – City Hall, Oak-VGH, Granville. <p><u>Great Northern Way – Emily Carr:</u></p> <ul style="list-style-type: none"> • Bulk excavation continuing. <p><u>Mt. Pleasant:</u></p> <ul style="list-style-type: none"> • Main Street sanitary line relocation and restoration is substantially complete. • Main Street has been fully reopened. • Main Street median will be reinstated at a future time so as not to impact temporary patios. Expected reinstatement in the fall. • Pile drilling is complete and the piling rig has moved down to Broadway – City Hall. <p><u>Broadway - City Hall:</u></p> <ul style="list-style-type: none"> • Piling is almost complete on the south side of the cross over block between Alberta and Yukon. <p><u>Oak – VGH:</u></p> <ul style="list-style-type: none"> • Traffic has been diverted to the south side of Broadway. • Utility works have begun on the south side of Broadway and at Laurel street. • Utility diversions in anticipation of piling have begun on the north side of Broadway. <p><u>Granville:</u></p> <ul style="list-style-type: none"> • Traffic diversion is in place for temporary utility installation on the South side of Broadway. • Temporary utility installation has begun on the South side of Broadway. • Piling to begin in approximately 3 weeks. <p><u>Arbutus:</u></p> <ul style="list-style-type: none"> • Planning is occurring for upcoming work including greenway detour, utility relocations, and piling.
<p>Three Month Lookahead:</p>	<ul style="list-style-type: none"> • The Province will continue review of BSPC technical submittals. • BSPC will continue Non-Systems Design. • BSPC will continue Systems Design. • BSPC will finalize borehole investigations along the Broadway Corridor. <p><u>Elevated Guideway</u></p> <ul style="list-style-type: none"> • Install foundations for guideway columns and bents. • Modify QLT parking lot to be able to construct guideway foundations and columns within the footprint of the parking lot. <p><u>Great Northern Way – Emily Carr:</u></p> <ul style="list-style-type: none"> • Continuing excavation and piling for Tunnel Boring Machine laydown area and station construction at Great Northern Way. • Build suspended walkway for emergency egress from Canvas building. • Relocate sanitary line at 1st Avenue and Carolina.

	<ul style="list-style-type: none"> • Suspend and protect various utilities within the excavation. • Install noise walls at key locations. <p><u>Mt. Pleasant:</u></p> <ul style="list-style-type: none"> • Repairing siding at adjacent buildings. • Shallow excavation, girder, and decking install. • Bulk excavation. <p><u>Broadway - City Hall:</u></p> <ul style="list-style-type: none"> • Piling program continuing. • Procure girder and decking installer for BCH, Oak-VGH, Granville, and Arbutus stations. • Shallow excavation, girder, and decking install. • Bulk excavation. <p><u>Oak – VGH:</u></p> <ul style="list-style-type: none"> • Utility relocation from south side to north side of Broadway. • Start piling program. • Shallow excavation, girder, and decking install. <p><u>Granville:</u></p> <ul style="list-style-type: none"> • Installation of temporary utilities on South side of Broadway. • Start piling program. <p><u>Arbutus:</u></p> <ul style="list-style-type: none"> • Arbutus greenway to be relocated. • Start piling program.
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4.5 Indigenous Groups

Scope:	<ul style="list-style-type: none"> • Consultation and engagement with Indigenous Groups on the Environmental and Socioeconomic Review and other Project materials as well as cultural recognition at stations.
Monthly Highlights:	<ul style="list-style-type: none"> • Province continued to share Project updates and materials with Indigenous Groups. • Province continued discussions with Indigenous Groups on art and cultural recognition. • BSPC typically holds monthly progress meetings with the Indigenous Groups focusing on procurement opportunities and employment but was not able to do so with all Indigenous Groups this month. BSPC expects progress meetings with all Indigenous Groups to resume in August.
Three Month Lookahead:	<ul style="list-style-type: none"> • Ongoing information sharing, issues identification and resolution, and identification of Project-related opportunities for Indigenous Groups by the Province. • Engagement with Indigenous Groups related to art and cultural recognition. • BSPC will work with Indigenous Groups to identify training programs that support Project employment and update labour forecasting.

4.6 Third Parties

Scope:	<ul style="list-style-type: none"> • Engage with TransLink, the City of Vancouver, PCI, InTransit BC, and other third parties during the Project implementation phase. • TransLink Agreement. <ul style="list-style-type: none"> ○ Broadway Subway Project Support Agreement. • Municipal Agreement. <ul style="list-style-type: none"> ○ Vancouver Municipal Agreement with the City of Vancouver. • Agreements with InTransit BC and TransLink for technical integration of the new Millennium Line Broadway-City Hall Station with the existing Canada Line Broadway-City Hall Station. <ul style="list-style-type: none"> ○ Canada Line Amending Agreement – InTransit BC Phase 1 (between TransLink and InTransit BC). ○ Canada Line Amending Agreement - InTransit BC Phase 2 (between TransLink and InTransit BC). ○ Integration Agreement with TransLink. • PCI Agreements. <ul style="list-style-type: none"> ○ South Granville Station Integration Agreement with PCI. ○ Great Northern Way Station Integration Agreement with PCI. • Accommodation Agreement with Metro Vancouver.
Monthly Highlights:	<ul style="list-style-type: none"> • Continued to engage third parties to ensure successful implementation of executed agreements.
Three Month Lookahead:	<ul style="list-style-type: none"> • Meetings, planning, and coordination activities to ensure implementation of signed agreements. • Oversight of integration. • Coordination of interface between BSPC and third parties.

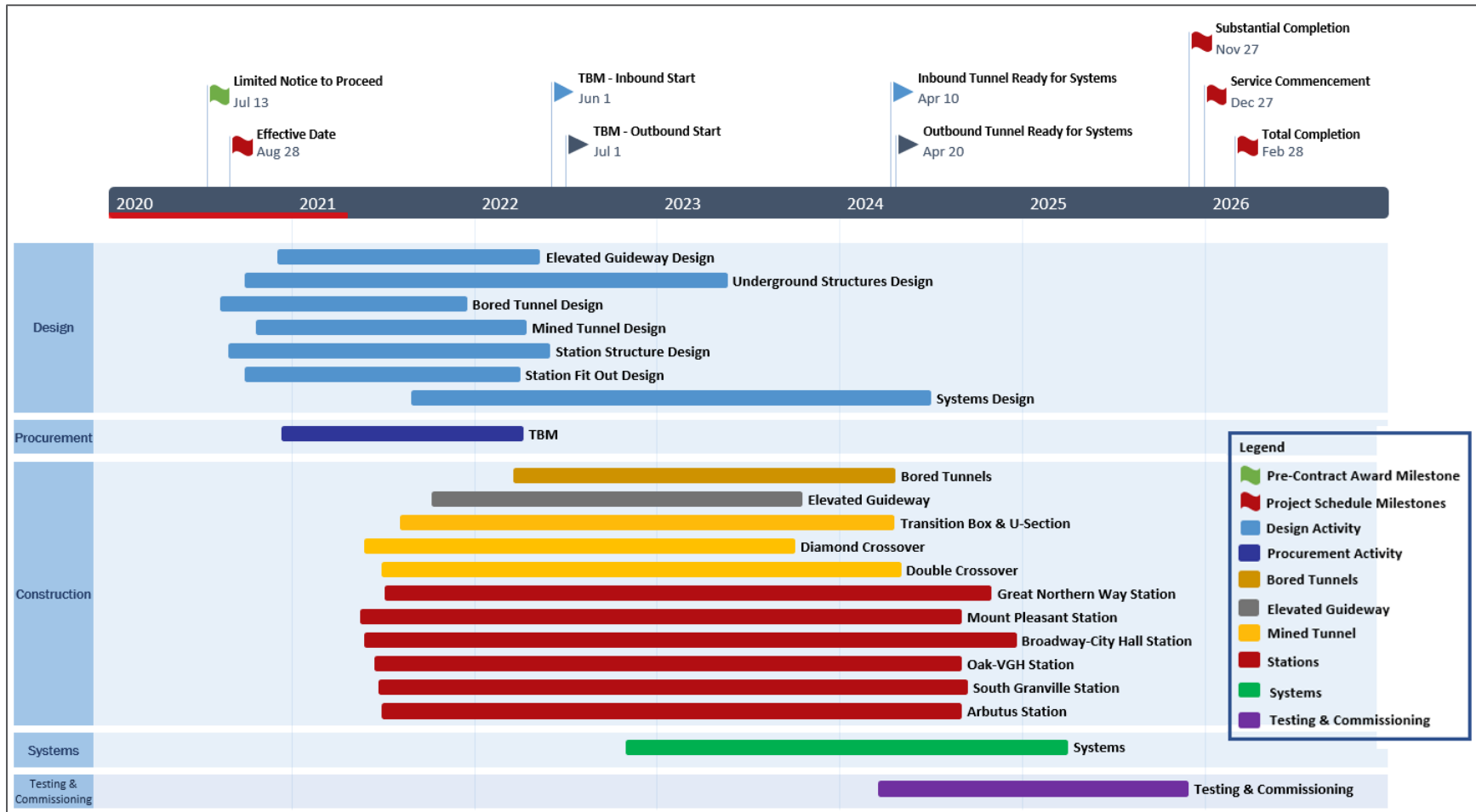
4.7 Public and Stakeholder Engagement

Scope:	<ul style="list-style-type: none"> • Manage ongoing public and stakeholder communications and community and business relations.
Monthly Highlights:	<ul style="list-style-type: none"> • Announced first artists selected to create station art on July 28, 2021. • Distributed construction notifications, responded to public and stakeholder enquiries, and met with businesses and stakeholders – all materials available on website. • Responded to 61 public inquiries.
Three Month Lookahead:	<ul style="list-style-type: none"> • Provide progress updates for completion of the Main Street sewer relocation; start of excavation for the traffic deck at Mount Pleasant; start of traffic deck piling at Oak-VGH. • Establish traffic and health precinct stakeholder advisory/liaison groups. • Inform the community of the finalized station designs.

- Ongoing meetings and correspondence with local businesses, residents, and key stakeholders, construction notifications, and responses to public enquiries.

5. Schedule

The following schedule depicts the estimated deliverables, milestones, and timelines from the design to commissioning phase of the Project.



6. Project Photos

Great Northern Way-Emily Carr Station: Progressing with site excavation work



Mount Pleasant Station: Progressing with the installation of piles



Main and 8th Utility Relocation Work: backfilling the excavation with the Main and Broadway intersection



Broadway City Hall Station: Completion of demolition activities



Oak-VGH Station: Hydrovac work to relocate utilities for construction



South Granville Station: Progressing with the start of utility relocation work

