

To: Council

From: Community Development

Date: December 19, 2023

Subject: Woodfibre Liquefied Natural Gas and FortisBC/Eagle Mountain Pipeline Projects Update

1. Objective:

To summarize project-related activities for the FortisBC Eagle Mountain (EGP) – Woodfibre Gas projects (WLNG) from October through November 2023:

- To review timelines for both projects, including any changes since the prior update period.
- To summarize project-related activities for the EGP –WLNG that took place October through November 2023.
- To look ahead at anticipated activities for the months of December 2023 and January 2024.
- To review District capacity impacts.

2. Project Timelines:

Project	Update
EGP	<ul style="list-style-type: none"> ➤ Construction activity timelines have been adjusted since the previous Council update (July through September 2023) provided on Oct 17, 2023. ➤ Changes to the timeline delay final site demobilization by two months on the Woodfibre site and by approximately two weeks on the BC Rail site to the end of June 2026. ➤ EGP construction activities are included in Attachment 1.
WLNG	<ul style="list-style-type: none"> ➤ WLNG construction activity timelines are unchanged since the last update. ➤ WLNG construction activities are included in Attachment 2.

All EGP and WLNG project work and associated timings are subject to the District and other regulatory bodies' approval of related permit and license applications.

3. District Project Activities: Oct 1, 2023 – Nov 30, 2023

Project	Update	Considerations
EGP	<ul style="list-style-type: none"> ➤ Provided feedback on the Environmental Assessment Certificate (EAC) Amendment Application #3 	<ul style="list-style-type: none"> ➤ EAC amended December 4, 2023, to authorize expanded construction camp area. ➤ New condition 1: FortisBC requirement for gender and cultural safety plan subject to District, Squamish Nation, and Tsleil-Waututh Nation consultation, which must have BCEAO approval prior to occupation. ➤ New condition 2: requirement for workers to reside at camp and FortisBC tracking of exceptions granted. ➤ <i>Note: District concerned with the condition 2 definition of reasonable exceptions to camp residency and limit to residency requirement only during camp operation.</i>
EGP	<ul style="list-style-type: none"> ➤ Provided feedback on the Environmental Assessment Certificate (EAC) Amendment Application #3 related to temporary workforce accommodation (the Lodge). 	<ul style="list-style-type: none"> ➤ Staff have reviewed FortisBC's revised Traffic Impact Assessment (TIA) and Traffic Management Plan (TMP) for the work camp and are compiling a deficiencies list.
EGP	<ul style="list-style-type: none"> ➤ Issued five temporary building permits and one works permit for related project works at the BC Rail Properties 	<ul style="list-style-type: none"> ➤ None.
EGP	<ul style="list-style-type: none"> ➤ Issued letter to BC Energy Regulator (BCER) concerning the EGP Effluent Discharge Permit Application ➤ Finch and Industrial storm main sewer analysis in progress 	<ul style="list-style-type: none"> ➤ In response to District concerns, BCER directed FortisBC to conduct an additional 30-day public notification period. Notification period launched November 30. ➤ Update on key considerations of storm main sewer.



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WLNG	➤ Responded to Ministry of Transportation and Infrastructure referral regarding extension provincial license agreement for use of Darrell Bay ferry terminal	➤ None.
WLNG	➤ Issued letter to EAO with feedback on EAC Amendment #3 for temporary workforce accommodation (the Floatel)	➤ None.
WLNG	➤ Issued letter to EAO with feedback concerning WLNG's Community Services and Infrastructure Management Plan	➤ None.
WLNG	➤ Confirmed with BCER lead authority and process for permitting of WLNG site structures	➤ None.
WLNG	➤ Issued one building permit, one development permit DPA-10 (Form and Character), one engineering works permit, and one noise permit for the WLNG site	➤ None.
WLNG	➤ Issued tree and soils permit for WLNG site	➤ None.
Coordinated	➤ A new District department, Major Projects – Industrial, has been established to lead the various aspects of project implementation	➤ See section 6 District Capacity Impacts.

4. Anticipated Activities: December 1, 2023 – January 31, 2023

Project	Anticipated Activities
EGP	<ul style="list-style-type: none"> • Completion of Traffic Impact Assessment (TIA) and Traffic Control Management Plan (TCMP) for Council review of TUP for laydown yard and work camp. • Public hearing for laydown yard and work camp TUPs. • Issuance decision of DPA1 following TUP decision for work camp. • District response to Ministry of Water, Land and Resource Stewardship regarding Land Act Map Reserve 17 referral. • Issuance decision for Noise Exemption Permit for tunnelling operations at BC Rail site. • Ongoing processing of building and engineering works permits. • Development of project-related agreements. • Monitoring of project impacts and effectiveness of mitigations.
WLNG	<ul style="list-style-type: none"> • Completion of Traffic Impact Assessment (TIA) and Traffic Control Management Plan (TCMP) review. • Public Hearing and Council presentation for TUP application for Floatel for decision. • Council presentation of Marine Traffic Management and Monitoring Plan (MTMMP) for feedback submission to WLNG. • Council presentation of Emergency Response Plan (ERP) for feedback submission to WLNG. • Ongoing processing of building and work permits. • Issuance DPA-1 Marine and Terrestrial for WLNG site.
Coordinated	<ul style="list-style-type: none"> • Staff will continue to provide project oversight for the District and engage with FortisBC and WLNG staff in joint monthly Technical Working Group meetings. The Technical Working Group is modifying its Terms of Reference to include technical, project impacts, and issues management discussions. • Staff will continue to work with other project regulators to coordinate regulatory processes and compliance-related activities.

5. District Capacity Impacts:

- The District's 2024-2028 financial plan included capacity funding from FortisBC and Woodfibre LNG to support the creation of a new project department, Major Projects – Industrial, to administer regulatory requirements, interface with project proponents and

regulators, and support District communications efforts and community resiliency planning for the EGP and WLNG Construction Projects.

- This new department will ensure that existing District priorities and current workstreams are not impacted by either Project and that the District maintains its commitments and legislated requirements to provide equitable service levels for all businesses and residents.
- The District is currently in the process of setting up related operations and processes, including related staffing.

6. Attachments:

1. [FortisBC Eagle Mountain Pipeline Project \(EGP\) construction timeline](#)
2. [Woodfibre Liquefied Natural Gas \(WLNG\) construction timeline](#)
3. [Fortis EGP and WLNG Activity Updated 11-30-2023](#)

Approved for Agenda:

Linda Glenday, CAO

FortisBC Eagle Mountain Pipeline Project
Construction Timelines as of November 23, 2023 as provided by FortisBC

Woodfibre Site Activities	Revised		Depleted	
	Start	Finish	Start	Finish
Mobilize, set up offices, raise and grade portal area	Aug 28, 2023	Nov 8, 2023	Aug 28, 2023	Oct 24, 2023
Establish power and water connections, water treatment plant	Aug 29, 2023	Nov 2, 2023	Aug 29, 2023	Sep 5, 2023
Install 5.0MVA@12.47kV Power Service at WLNG and Plant Substation-Portal	Oct 4, 2023	Oct 15, 2023	Oct 5, 2023	Oct 10, 2023
Tree clearing	Sept 7, 2023	Oct 19, 2023	Aug 30, 2023	Nov 8, 2023
Develop Quarry Dump Site-Install Portal Mesh/Mesh Anchors in Head Wall	Sept 8, 2023	Nov 16, 2023	Sep 7, 2023	Nov 16, 2023
Drill & Blast Starter Tunnel	Dec 5, 2023	Jan 3, 2024	Oct 17, 2023	Dec 21, 2023
Install all Hard Rock TBM surface support	Jan 4, 2024	Jan 19, 2024	Nov 17, 2023	Jan 10, 2024
Assemble Hard Rock TBM and Walk to the Face	Jan 20, 2024	Mar 18, 2024	Jan 11, 2024	Mar 18, 2024
Tunneling Hard Rock TBM launch	Mar 28, 2024		Mar 19, 2024	
Launch Hard Rock TBM and Excavate first 150m	Mar 28, 2024	Apr 17, 2024	Mar 19, 2024	Apr 8, 2024
Hard Rock TBM All stop		Aug 1, 2025	Jul 17, 2025	
Disassemble and completely remove Hard Rock TBM to Woodfibre	Aug 3, 2025	Sept 19, 2025	Jul 18, 2025	Aug 17, 2025
Bedrock tunnel complete		Sept 21, 2025	Sep 21, 2025	
Clean Rock Tunnel and Prep for Pipeline Installation	Oct 23, 2025	Nov 25, 2025	Oct 23, 2025	Nov 14, 2025
Backfill Pipelines in Hard Rock Tunnel with Acid Rock from Bulkhead	Mar 4, 2026	Apr 28, 2026	Feb 19, 2026	Apr 11, 2026
Demobilize Woodfibre Shops and Offices	June 19, 2026	June 24, 2026	Apr 12, 2026	Apr 16, 2026

FortisBC Eagle Mountain Pipeline Project
Construction Timelines as of November 23, 2023 as provided by FortisBC

BC Rail Site	Revised		Depleted	
Activities	Start	Finish	Start	Finish
Tunneling Contractor Mobilization to BC Rail	Aug 28, 2023		Aug 28, 2023	N/A
Set-up offices, raise and grade portal area	Aug 28, 2023	Dec 15, 2023	Sep 11, 2023	Dec 15, 2023
Establish Power and Water Connections, Water Treatment Plant	Dec 6, 2023	Jan 6, 2024	Sep 22, 2023	Dec 13, 2023
Initial Assemble Soft Ground TBM and Test	Dec 19, 2023	Apr 2, 2024	Dec 18, 2023	Apr 3, 2024
Commence Soft Ground Tunnel	Apr 3, 2024		Apr 4, 2024	N/A
Excavation and Grout Interference Chamber	Sept 3, 2025	Sept 18, 2025	Aug 18, 2025	Nov 18, 2025
Mine interface Reach 20m	Oct 8, 2025	Oct 24, 2025	Sep 22, 2025	Oct 7, 2025
Soft ground tunnel complete		Oct 24, 2025	N/A	Oct 7, 2025
Remove Piping in Soft Ground Tunnel (ventilation remains)	Nov 18, 2025	Dec 8, 2025	Oct 8, 2025	Oct 29, 2025
Remove Soft Ground TBM and Cutter Head from Tunnel	Nov 18, 2025	Dec 8, 2025	Oct 30, 2025	Nov 20, 2025
Clean Soft Ground Tunnel and Prep for Pipe	Dec 9, 2025	Dec 29, 2025	Nov 21, 2025	Dec 9, 2025
Install Pipes and Cathodic Protection. Perform Pre-test	Dec 30, 2025	Feb 26, 2026	Dec 10, 2025	Feb 20, 2026
Final Hydrotest on Both Pipelines	May 28, 2026	June 3, 2026	May 14, 2026	May 21, 2026
Install upper half concrete bulkhead	Apr 29, 2026	May 2, 2026	Apr 13, 2026	Apr 16, 2026
Soft Ground Tunnel and Interface Zone Backfill	May 5, 2026	May 27, 2026	Apr 17, 2026	Apr 21, 2026
Demobilize Remaining Surface Support from BC Rail	June 1, 2026	June 5, 2026	Jun 3, 2026	Jun 8, 2026
Tunnel Contractor Demobilization from BC Rail Site	June 24, 2026		Jun 8, 2026	N/A

Woodfibre LNG key construction activities for 2023 and 2024
Provided by Woodfibre LNG on 12-05-23

Activity	Forecasted Date
Site Preparation	September 1, 2023
Start of Rough Grading	November 14, 2023
Sediment Pond Installation	December 2, 2023
Clearing and Grubbing, tree removal	December 6, 2023
Material Offloading Facility (MOF)	December 8, 2023
Floatel Mooring construction begins (piling activity; all in water works must be completed by January 31, 2024)	December 8, 2023
Shoreline Demolition	December 8, 2023
Soil Improvements	December 10, 2023
Start of Outside Battery Limits Construction on Site	February 13, 2024
Start of Inside Battery Limits Construction on Site	August 14, 2024
First Module Arrive at Site	October 8, 2024
Complete Material Offloading Facility (MOF) Installation	December 20, 2024

FortisBC EGP and WLNG Projects – District Activity Updates

For the period Oct 2023 – Nov 30, 2023

a. FortisBC EGP Activity Updates for Oct 2023 – Nov 2023:

Activity	Completed Activities	Upcoming Activities
Community Services and Infrastructure Management Plan	EAO Approved March 15, 2023	Tracking updates to be provided by FortisBC to Community Table for review
EA Amendment #3 Assessment – FortisBC EGP Lodge	District provided comments provided to EAO. Amendment issued on December 4	Related Management Plans to be reviewed by District
Worker Code of Conduct	District feedback provided Final version was shared by FortisBC with no further revisions to be considered	None
Communications Protocol	FortisBC provided final version	District monitoring communications protocol
TUP - Laydown / Storage Area	District review in progress	District Public hearing District Council decision
TUP - Temporary Workforce Housing	District review in progress	District Public hearing District Council decision
DPA-1 for TUP Lodge, including Access Road	Revised DPA-1 Bio-inventory received by District	District to provide feedback following review
Servicing Agreements – Lodge/ Laydown	Outstanding	District to negotiate with FortisBC, should TUP be approved
Construction Protocol Agreement	District review in progress	District staff to provide comments to Fortis
Traffic Impact Assessment	District review complete	District staff to provide feedback to proponents
Traffic Control Management Plan	District review complete	District staff to provide feedback to proponents
Finch Storm Main Design	Preliminary design provided by FortisBC	District review of preliminary design
North Crumpit Pipeline Alignment	Discussions in progress	District to await decision from other parties
Road Use Referral (Ministry of Forests)	District review in progress	District to respond to referral
Road Use Permit – NPS 24 Pipeline	Outstanding	District to review application

FortisBC EGP and WLNG Projects – District Activity Updates

For the period Oct 2023 – Nov 30, 2023

Noise Exemption Permit – Tunnel/Laydown Yard	District review in progress	District staff delegated issuance decision
Effluent Permit Application	Comments sent for Waste Discharge Permit BCER requires new 30-day public notification and consultation period	FortisBC commenced a 30-day public notification and consultation period on November 30, 2023 District outreach to notify BCER that the timing of the public consultation period is poor due to the holiday season
Building Permits	District issued 5 temporary building permits and 1 works permit for related project works at the BC Rail Properties	Ongoing District permitting activities
Complete		
Road Use Permit – Government Road water supply	District issued	District monitoring

b. WLNG Activity Updates for Oct 2023 – Nov 2023:

Activity	Completed Activities	Upcoming Activities
EA Floatel Amendment Assessment Report	District feedback provided EAO issued Amendment certificate November 1, 2023	Related Management Plans review by District
Community Services and Infrastructure Plan	District review completed and feedback submitted to EAO 11-01-23	District to await response and monitoring of impacts/mitigations
Emergency Management Plan	District review completed	District staff presentation to Council EAO/WLNG comment submission
Marine Transportation and Traffic Management Plan	District review completed	District staff presentation to Council EAO/WLNG comment submission
Traffic Impact Assessment	Received by District.	District to complete internal review Feedback to proponents
Traffic Control Management Plan	Received by District	District to complete internal review Feedback to proponents
Solid Waste/ Landfill Impact Study	Outstanding	District review
Workers Code of Conduct	Outstanding	District review

FortisBC EGP and WLNG Projects – District Activity Updates

For the period Oct 2023 – Nov 30, 2023

TUP Temporary Workforce Accommodation “Floatel”	Received by District District provided feedback Response received - in review	District to complete internal review District Public Hearing District staff presentation to Council Decision
Permitting	District issued 1 building permit, 1 development permit DPA-10 (Form and Character), 1 engineering works permit, and 1 noise permit for the WLNG site	Ongoing District permitting activities
Tree/Soil Management Permits	Received by District	District Review Underway
DPA-1 WLNG (Marine Exemption)	District issued	None
DPA-1 WLNG Site Wide DPA 1 (i.e. Riparian and Terrestrial)	District review in progress	District issuance decision
Complete		
DPA-10 Intensive Industrial	District issued	District monitoring
DPA-11 Wildfire	District issued	District monitoring