

Burnaby Refinery Pipelines Overview



September 21, 2016



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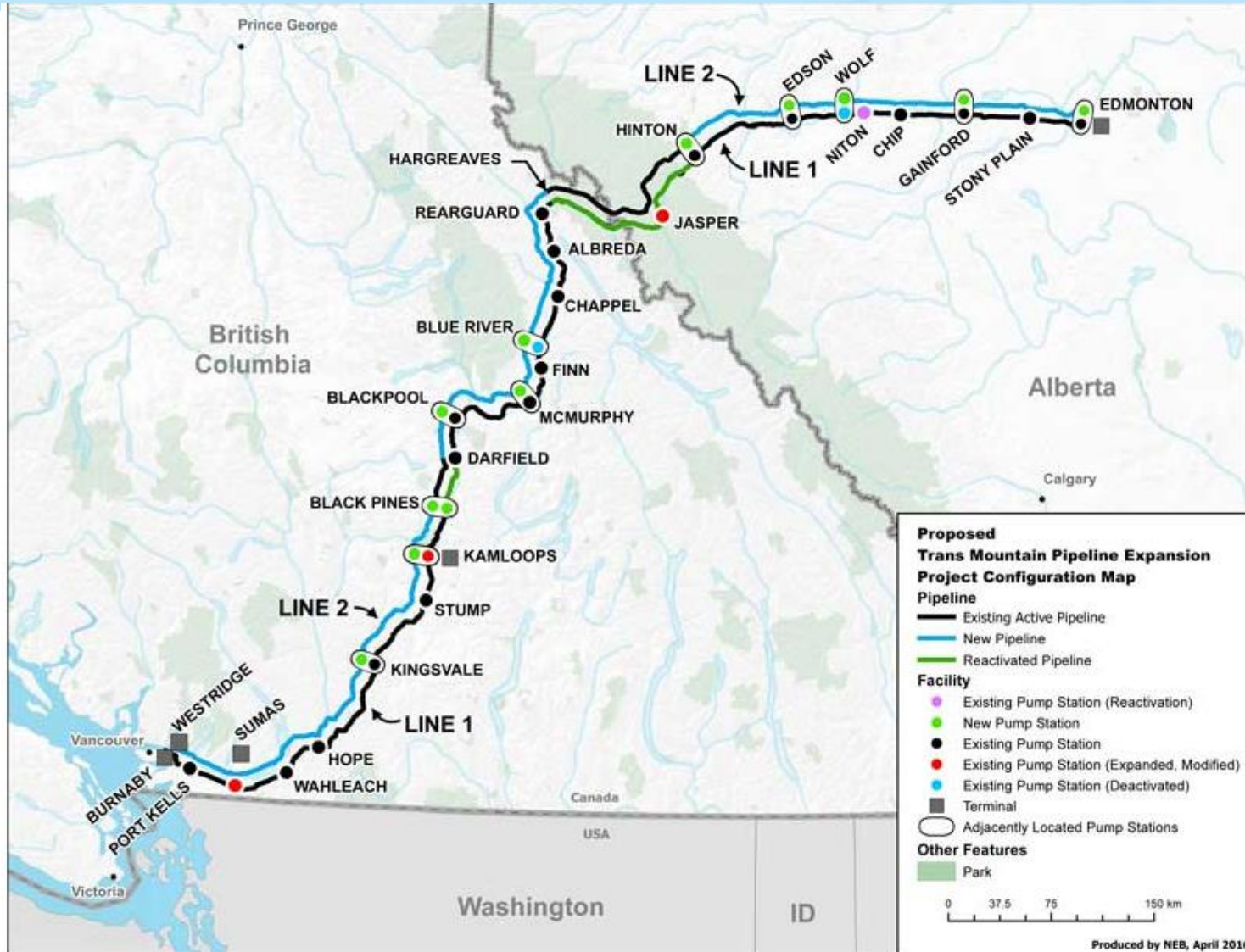
Pipelines and the Burnaby Refinery

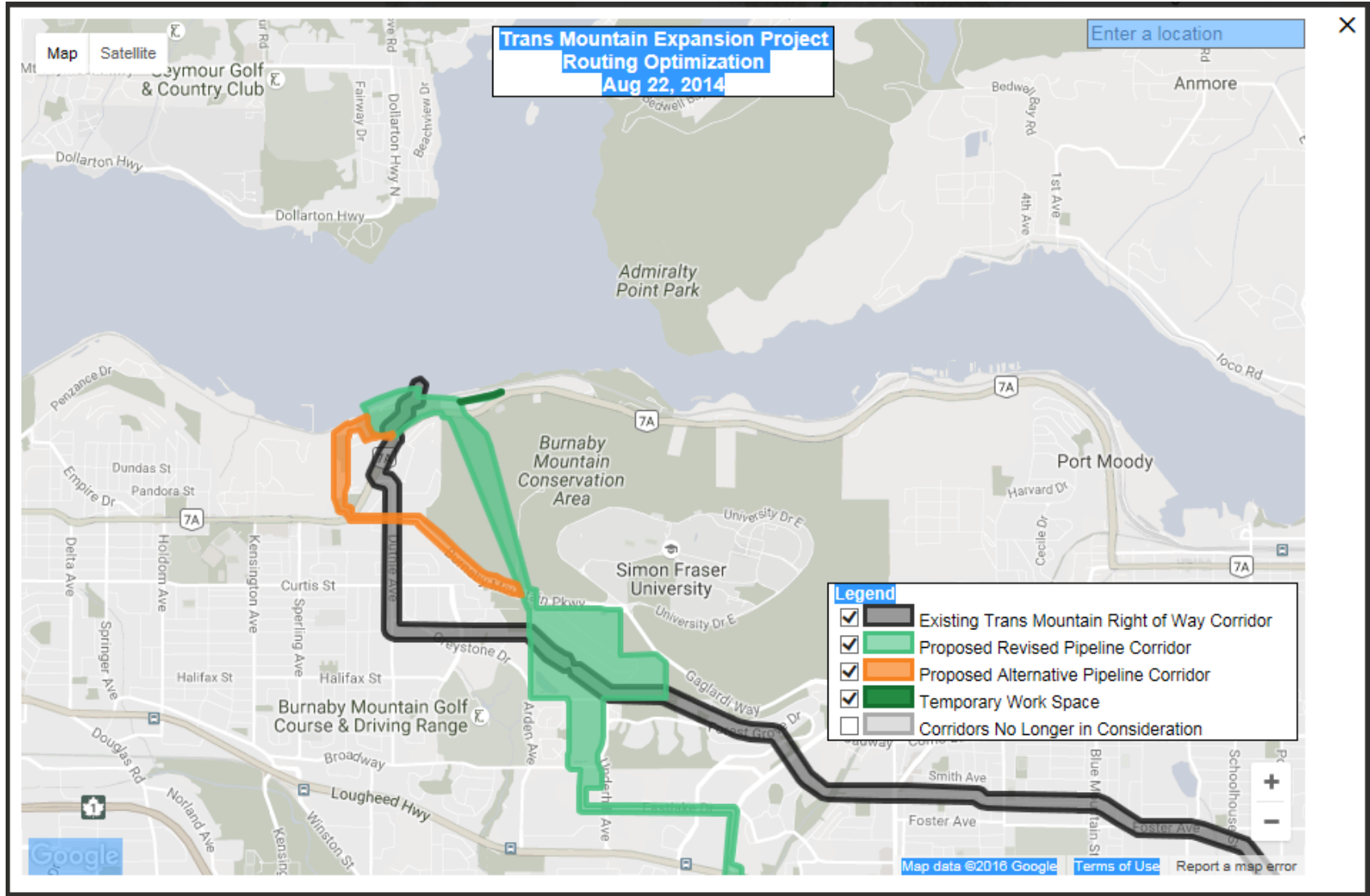


- Chevron Burnaby Refinery key pipelines
 - TransMountain supplies crude oil to Burnaby
 - KinderMorgan jet pipeline supplies the airport
 - Park pipelines move products between manufacturing and distribution (Area 2 to Area 1)
 - Crude pipeline between Kinder Morgan and the Refinery crude tanks
- Pipelines in Burnaby are regulated by the BC Oil and Gas Commission (BCOGC)
- TransMountain pipeline crosses provincial boundaries is regulated by the National Energy Board (NEB)



- Refinery at full operation consumes 55,000 bpd primarily utilizing TransMountain pipeline. Since 1954
- Refinery has some limited capacity to source crude by rail and/or truck. Not currently in use
- Supplies ~40% of jet fuel to Vancouver Airport via Kinder Morgan pipeline
- Chevron operates the product pipelines in Confederation park and the crude oil pipeline from KinderMorgan to our Area 2 tanks.
- TransMountain and the Jet pipeline are operated by KinderMorgan







National Energy Board

Office national de l'énergie

Trans Mountain Expansion Project Status

Spring 2016

Summer 2016

Fall 2016

Winter 2016

December 2016 GIC Decision

Option 1: Approve with recommended conditions

- NEB issues certificate
- Detailed route process begins (see [Pipeline Regulation in Canada: A Guide for Landowners and the Public](#), Chapter 4)

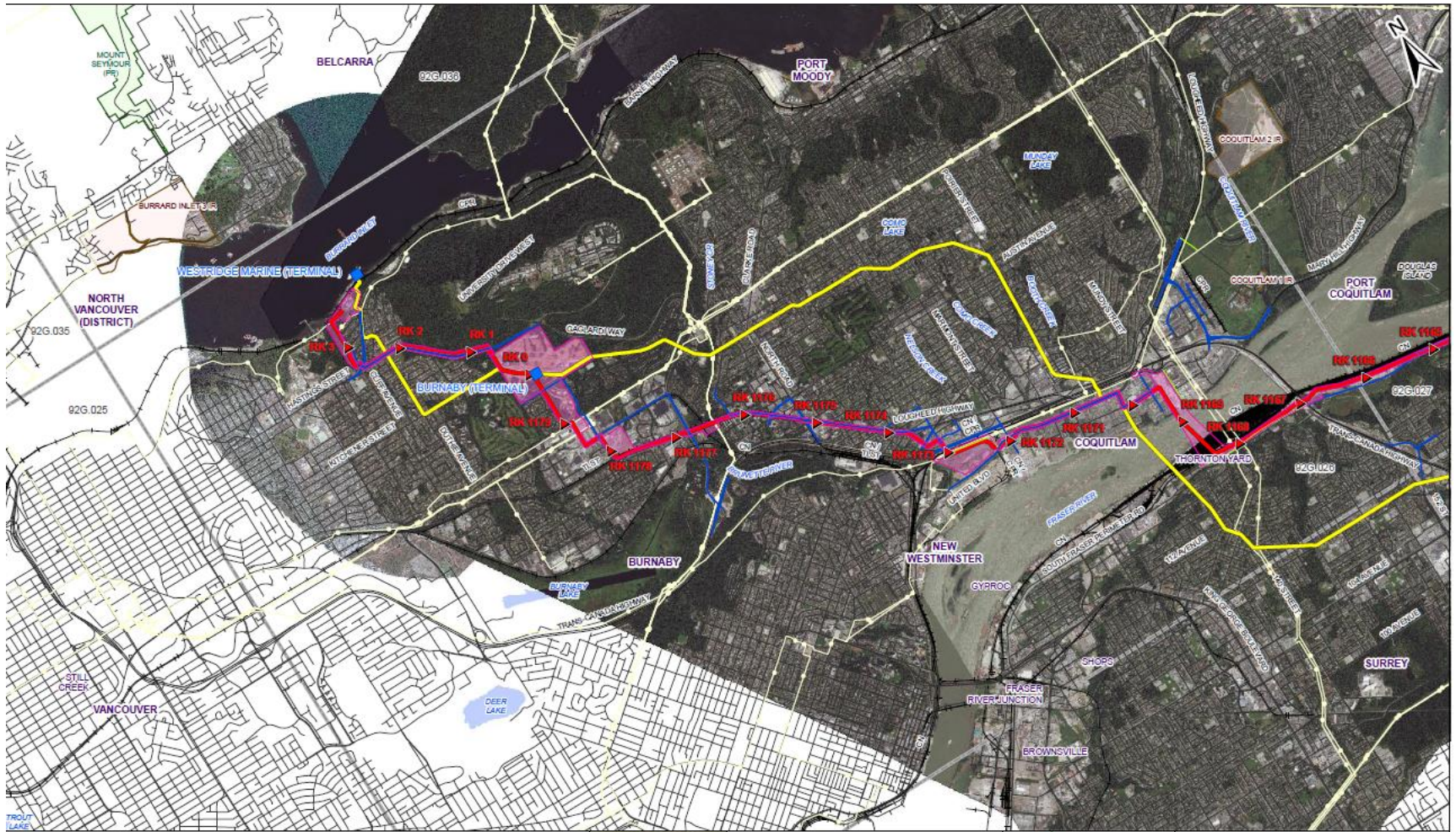
Option 2: Refers back to NEB for reconsideration







































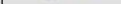












- GIC may refer the report back to NEB, and ask it to reconsider the recommendation, or any of the terms and conditions set out in the report, before GIC makes a decision

Option 3: Denies Project

- NEB dismisses application
- END





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|---|--|--|--|---|--|---|--|---|--|---|--|---|--|
| LEGEND | | ACCESS MANAGEMENT ROADS | |  AS TOWNSHIP/BC 20K GRID | |  PARKS/PROTECTED AREAS | |  1 0 1 KILOMETRES | |  TRANS MOUNTAIN | | TRANS MOUNTAIN PIPELINE | |
|  PROPOSED LINE 2 PIPELINE CORRIDOR | |  EXISTING MAJOR ACCESS | |  INDIAN RESERVES | |  NATIONAL PARK - NP | |  | |  KINDER MORGAN | | TRANS MOUNTAIN EXPANSION PROJECT | |
|  LINE 2 REFERENCE KILOMETER | |  EXISTING SECONDARY ACCESS | |  POWER LINE (MAIN) | |  ECOLOGICAL RESERVE - ER | |  | |  | | PROPOSED LINE 2 PIPELINE CORRIDOR | |
|  LINE 2 REFERENCE LINE | |  NEW PERMANENT ACCESS | |  RAILWAY | |  NATURAL AREAS - NA | |  | |  | | ROUTE MAPS - BRITISH COLUMBIA | |
|  TMPL LINE 1 | |  NEW TEMPORARY ACCESS | |  BASE ROADS | |  PROTECTED AREAS - PA | |  | |  | | WORK IN PROGRESS | |
|  EXISTING SITES | |  DEACTIVATED OVERGROWN ACCESS | |  HIGHWAY | |  RECREATION AREA - RA | |  | |  | |  | |
|  PROPOSED SITES | | | |  OTHER ROADS | |  WILDERNESS AREA - WA | |  | |  | |  | |
| | | | | | |  WILDERNESS PARK - WP | |  | |  | |  | |
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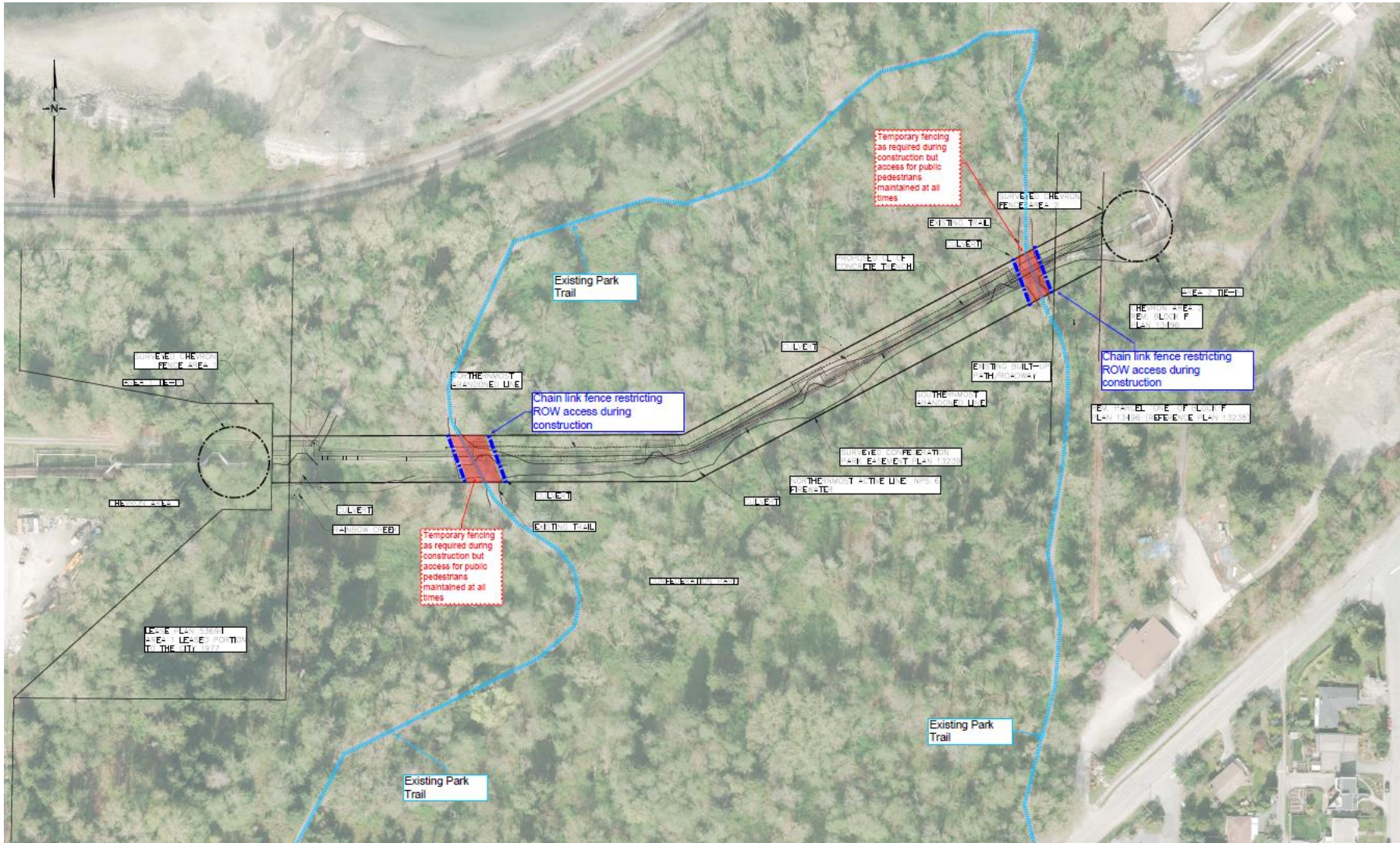
Burnaby Refinery Crude Pipeline



Jet Fuel Pipeline



Park Pipeline



Park Pipeline Update- Sept 19



- Japanese knotweed mitigation on Chevron R of W is complete. A total of 13 truck load of Japanese knotweed infested soil were disposed at Metro Vancouver approved waste site
- Abandoned pipe removal and disposal is complete
- Concrete trenches for pipelines are about 60% complete.
- Piping installation inside trenches begins Sept. 19
- To date, the city has not received calls on the construction.
- Major civil construction will continue toward end of November.
 - Piping installation will continue into Jan. 2017.
 - Electrical and Insulation will start in Oct/Nov. 2016 and plan for completion in Feb. 2017.
 - Project completion Spring 2017.