



Public Consultation Summary and Consideration Report

April 25, 2019

Overview of the proposed project

A Project Application has been submitted to the Vancouver Fraser Port Authority by Summit Earthworks to develop the 'Derwent Way Soil Transfer and Barge Facility' located on the corner of Derwent Way and Salter St. in New Westminster.

Soil excavation and removal is often necessary when commercial and industrial sites are redeveloped. The removed soils may need to be remediated before it is repurposed and is therefore sent to a treatment facility that can remediate the soil, so it can either be reused or disposed of properly.

The proposed project is for a transfer facility that would be receiving waste soil from development sites in Metro Vancouver primarily located in Vancouver, Richmond and New Westminster. The received soils may contain contamination but would not contain hazardous waste. The soil would not be stored or treated onsite; it would be temporarily stockpiled before being transloaded to a permanent treatment / disposal facility.

The proposed transfer facility would be constructed with a lined, paved, and covered temporary soil storage area, a sound barrier wall on the western boundary (with a tree hedge) will minimize any noise otherwise transmitted to the neighboring properties, a truck wheel wash station, a water treatment system, a scale house, and barge infrastructure.

Pending permit approval, construction of the proposed facility would occur during the daytime hours on weekdays and would follow the port authority's standard hours of construction which are Monday to Saturday 7am – 8 pm, excluding holidays. Summit Earthworks anticipates construction work hours primarily to be Monday to Friday between 7am – 4:30pm. Industry best practices would be followed during construction along with measures to reduce noise and dust. Lighting would be added as needed and would be directed down onto the site. Traffic related impacts from construction of this proposed facility are expected to be minimal and trucks would only use designated truck routes. Construction would be expected to begin shortly after permit approval, for a duration of approximately 6 months.

Once construction has been completed, the Derwent Way Transfer and Barge Facility would facilitate the transfer of inbound waste soil via trucks to the transfer facility to be stored temporarily prior to transport to an off-site treatment / disposal facility. Trucks would access the proposed site from Salter St. with a maximum of 60 trucks arriving at the proposed facility daily.

Community Engagement

Details of notification methods:

Activity	Audience	Timing
Public Notice flyer was delivered via neighbourhood mail by Canada Post.	2,316 residential, commercial and industrial residents surrounding the proposed transfer facility location were notified. (see map in Appendix B)	Canada Post delivered May 12 th , 2017. Public Notice feedback period was May 12 th , 2017 – June 2 nd , 2017.
Website updated with link from the Public Notice for residents to see and to view Summit’s company website	Available for all 2,316 residents who received the flyer.	Posted on website from May 12 th – 2017 – June 2 nd , 2017.

Details of the consultation materials produced:

Materials produced for the above activates included:

- Public Notice Flyer sent to residents in area (Appendix A)

Level of public participation

There was a total of 60 interactions from residents as part of the public consultation:

- 57 emails were received
- 3 phone calls were received

Summary of feedback received

Responses received during the public notice feedback period covered a wide range of key topics as well as general opposition. To answer the questions and/or comments, they have been categorized into the following themes:

- Dust (37 comments received)
- Soil (24 comments received)
- Traffic and Roadways (52 comments received)
- Noise (15 comments received)
- General Comments (8 comments received)

Mitigation Measures for all themes of questions/concerns

Theme	Mitigation Measure(s)
Dust	<p>The following dust mitigation measures will be applied during construction to prevent dispersal onto nearby vegetation and drainages and for air quality:</p> <ul style="list-style-type: none"> • On site watering during surface grading for periods of no rain for seven days. Avoid overwatering to reduce the risk of runoff into drainages. • On site water can cease when a crust forms on surface areas, e.g., soil piles, and there is no visual evidence of dust. • To reduce the potential for dust kick-up from construction vehicles, Summit shall implement best environmental practice from <i>Best Practices for the Reduction of Air Emissions from Construction and Demolition Activities</i> and <i>Best Environmental Practices for Highway Maintenance Activities</i>. <p>The following measures will be applied during facility operation to minimize dust generation on site and vicinity:</p> <ul style="list-style-type: none"> • The proposed facility will have a wheel wash station to prevent soil being tracked across the site and deposited on nearby roads. • Trucks hauling in/out of the proposed facility will typically be using bed covers while in transit. • A wind barrier will be installed along the western property boundary (lock block wall, berm, fence and trees). • A roof will be installed over the soil stockpile area. • Soil stockpile height of no more than 5 m. • Occasional watering of stockpiles or application of dust suppression material. • Minimal drop distance of soil loads onto the barges. A telescopic loading spout and variable speed conveyor would be used. • Low vehicle speed while driving or maneuvering on facility roads. • Summit site vehicles will be subject to regular maintenance (such as wheeled loader, etc.); • Newer-model vehicles with more stringent emission controls will be used on site. • Unnecessary idling will be avoided during downtime or queuing. • Maintaining smooth traffic flow through the site including truck queues and efficient weigh scale procedures. • Use of low-sulfur diesel fuel for on-site equipment.

- Moistening of soils may be performed to reduce dust generation.

Soil All soil prior to being accepted into the proposed facility will have analytical data sent to Summit confirming it is acceptable as per the British Columbia Ministry of Environment provincial regulations (e.g., Contaminated Sites Regulation, Hazardous Waste Regulation). The proposed facility will not accept hazardous material. The temporary soil storage area will have an impermeable liner that has containment walls and a cover that will collect precipitation for on-site treatment prior to discharge.

Traffic and Roadways A Traffic Impact Study was completed for evaluation of the intersections in the surrounding area. Trucks hauling into the proposed facility will operate on existing “truck routes” as per The City of New Westminster’s Truck Routes map. No trucks will be hauling down residential streets to access the proposed site.

Noise During construction and operations of the proposed facility controls will be put into place to reduce noise pollution. These includes machinery being kept in good mechanical working order and not idling when not necessary. Soil storage area will be covered and a sound barrier along the western boundary of the property installed below the railway sightline.

General Comments As much vegetation will be retained as possible; however, the construction of the proposed facility will see the majority of trees removed onsite. To offset the loss, approximately 50 Swedish Columnar aspen trees will be planted as well as shrubs. These trees and shrubs would also serve to provide an aesthetic visual barrier, and a wind barrier to reduce dispersion of dust or particulate from the site.

If vegetation clearing is planned during the breeding season (April 1 to July 31), a pre-clearance nest survey will be completed immediately prior to any vegetation clearing. If active nests are detected at that time clearing will be halted. All clearing would occur under appropriate permits.

Dust

Question / Comment	Answer
Effect of dust emission from proposed project on human health	Soil handling, equipment and vehicle exhaust were taken into consideration in the Air Assessment Report (link), as was road dust from truck transportation.

Effect on Air Quality from Proposed Project

To address dust emissions from the facility and effects on the local community and workers, Summit shall implement measures to reduce dust during construction and operation. For example, trucks will include load bed covers to cover the soil while in transit and a tree barrier along the western boundary of the property will be planted to mitigate fugitive dust from moving off site. The proposed facility will also have a wheel wash station to prevent soil being tracked across the site and deposited on nearby roads. Other mitigation measures to reduce dust emissions are presented in the preceding section under Soil and Dust Mitigation.

The Air Assessment reported that the amount of additional particulate matter emitted by 15 to 60 trucks per day is a small increment over the current emissions from present industrial activity and truck traffic through the area. Handling of soils (dumping and shoveling), may result in a slight increase in airborne particulate matter (PM) concentrations and dust deposition southwest of the proposed facility; however routine air monitoring / sampling will be conducted to ensure that operations do not result in exceedances of the Metro Vancouver ambient air quality objectives.

An assessment of potential exposure to contaminants due to project-related changes in air quality was conducted as part of the Air Assessment. This report considered the impact of vehicle exhaust, road dust, marine emissions, material handling, wind erosion, and contaminated soils. Parks and schools nearby were also taken into consideration in the report. Air emissions estimates from the proposed facility and impacts of air emissions on public health and nearby residents are discussed in detail in the report ([link](#)).

The following design features were included in the project to mitigate effects on air quality:

- Proposed stockpile area will be sunken below ground level, contained and covered, which would reduce the potential for airborne particulates to leave the site.
- During periods of wind over 20 km/h or dry and windy periods, stockpiles could be sprayed to reduce the potential for airborne PM to leave the covered facility.
- The proposed facility will have a fence and barrier trees placed along the property's western boundary to mitigate fugitive dust from moving off site.
- A truck wash would be in place to remove dirt from the wheels and truck bed before leaving the proposed facility.

As per recommendations from the Air Assessment, Summit shall conduct periodic air sampling west of the property once the facility is operational to ensure air quality objectives are not exceeded. The sampling is recommended to assess how well the mitigation measures are working at the proposed facility.

Additional measures to address impacts to air quality can be found in the Construction Environmental Management Plan and the Air Assessment Report ([link](#)).

Soil

Question / Comment	Answer
Transportation of contaminated soil through neighbourhood.	<p>The purpose of the proposed transfer site would be to receive contaminated soils and transfer them via barge to a facility where the soils would be remediated for reuse or disposal. The trucks would bring soil from various excavations within Metro Vancouver. Some of the properties may have been former industrial or commercial sites and the soils could contain residuals from manufacturing, refueling, underground storage tanks, etc.</p> <p>The truck route is limited to Derwent Way and Salter Street, with a single access point off Salter Street and would avoid residential neighborhoods. Mitigation measures such as using covered trucks (to prevent soil release during transport), and wheel wash stations (to remove excess sediment from truck wheels when leaving the proposed site) would be in place during regular proposed facility operations.</p>
Description of soil accepted at facility	<p>Soil would originate from various excavations on properties within Metro Vancouver. Some of the properties may have been former industrial or commercial sites and the soils could contain residual contamination from manufacturing, refueling, underground storage tanks, etc. The proposed facility would receive the contaminated soils and transfer them via barge to a facility where the soils would be bioremediated or disposed. Compost, organic matter and wood waste would not be accepted at the proposed facility.</p> <p>By law, soils destined for the proposed facility would be required to undergo testing <u>before</u> leaving the originating excavation site. Only soils that have been proven to meet the criteria of the BC Contaminated Sites Regulation would be accepted at the facility. Soils containing substances in concentrations that are considered to be dangerous to life, health, property,</p>

or the environment when transported would not be accepted as they are considered hazardous under provincial regulations.

Does “less hazardous” soil make you sick over time?

Soils containing substances in concentrations that are considered to be dangerous to life, health, property, or the environment when transported would not be accepted at the proposed facility as they are considered hazardous under provincial regulations.

This proposed facility would accept soil from industrial properties which includes sands and gravels devoid of organics. The soil being brought to the proposed transfer facility would not contain substances considered to be hazardous. These soils may contain metal or hydrocarbon contamination, but only soils that meet provincial criteria under the BC Contaminated Sites Regulation would be accepted at the facility. The soils accepted at the facility would be unlikely to exceed Metro Vancouver ambient air quality objectives for air emissions, nor would airborne emissions concentrations be expected to exceed human health exposure limits.

Summit has implemented facility design aspects to ensure environmental protection and minimized risk to human health:

- 1) a soil stockpile area that is covered and below ground level to reduce dust transfer to residents or businesses.
- 2) The area will have an impermeable liner, containment walls and a water infiltration treatment system to capture and treat precipitation/water from the site before it is discharged to onsite stormwater drainage systems (ie. ditches);
- 3) Truck wheel wash to avoid dust and dirt transfer outside of the sites;
- 4) Covered barge loading conveyor with spill trays to reduce dust and sediment to the surrounding environment;
- 5) Loading spout from conveyor to barge for minimized drop height to reduce dust and sediment to the surrounding environment;
- 6) Tree row and fencing on the west boundary to act as a wind barrier and reduce dust; as well as provide aesthetic relief;
- 7) Periodic air quality monitoring to ensure that local air quality is within BC air quality objectives, and
- 8) Other mitigations such as water spraying of soil stock piles to reduce dust transfer to local residents and business.

Does contaminated soil contain e. coli or other bacteria

Bacteria exist in all soils, but E. coli is typically associated with manure or fecal waste. These materials (manure, fecal waste) would not be accepted at this proposed facility. This proposed facility plans to accept soil from the

that are common to exist in dry soils? development of historical industrial properties which includes sands and gravels devoid of organics.

Concerns with odour The soil accepted at the proposed transfer facility is unlikely to generate odour. This proposed facility would not accept compost or organic matter. The soil accepted at the proposed transfer site is typically coming from construction sites involving excavation and are comprised of sands and gravels. An example is a former industrial area that has been zoned for residential and now a developer is building condominiums on that site. The soils are excavated to make way for parking and possibly contain residue from the former industrial activities.

Would proposed facility accept other materials then contaminated soil? i.e., wood waste? The soil being brought to the proposed transfer facility would not contain substances considered to be hazardous. This facility is intended as a temporary holding facility to facilitate loading soil on to a barge for bioremediation. The bio-remediated soil would be repurposed for structural fill, e.g., used for foundations and site preparation; therefore, wood waste or organics, would not be accepted as they are detrimental to structural/foundation integrity.

How would soil be contained? The proposed operation would include placing the soil into a temporary sunken holding area with an impermeable liner that has containment walls and a cover to divert or capture any precipitation for on-site treatment prior to discharge.

Measures used if contaminated soil spills in water or surrounding area As per provincial requirements, a Contingency and Spill Response Plan was developed to address spill response procedures, and outline industry best practices that would be followed at this proposed facility in the event of an accidental spill to the surrounding environment.

While unlikely, if a spill were to occur into the water the area would be contained and reported as per the BC Spill Reporting Regulation. The BC Emergency Management program and the Vancouver Fraser Port Authority would be notified, and the spill would be remediated.

In addition to the above noted measures, the following features have been incorporated into the design to avoid spill incidents:

- The soil would be transferred by truck to a contained, lined, covered area within the proposed transfer facility.
- The proposed site is bermed and sloped so that precipitation (rain, snow melt) that falls on the site is collected and treated before being discharged. Soils that may be tracked on the proposed site would be

captured by the treatment system or swept up and placed in the temporary containment area.

- Trucks and truck wheels would be washed before leaving the proposed site. Equipment dedicated to working on the proposed site would not leave.
- The barge loading conveyor would be covered and includes spill collection trays. Soil spills outside the conveyor would be minimized using appropriate conveyor design (stainless steel conveyor cover, dust suppression spray, conveyor idlers, conveyor return idler, conveyor head chute and telescopic loading spout) and best management practices (limited volumes per load of soil transported to reduce spilling,).
- When it rains or snows, any surface water on the proposed site including the upland portion of the barge conveyor would be directed to a treatment system on the property.
- The barge hauling would only occur when the forecast does not call for heavy winds.

Traffic and Roadways

Question / Comments	Answers
Volume concerns on Ewen Ave, Howes St. and Derwent Way	<p>Trucks would only travel along city-designated truck routes – roads designed to carry trucks.</p> <p>Trucks from this proposed project would only utilize truck routes (Ewen Avenue is not a truck route.) Existing truck routes are shown on the City of New Westminster’s Truck Routes map (link).</p> <p>Trucks would access the proposed site via Salter Street.</p>
Safety concerns through residential area and roadway	Trucks <u>would not</u> route through residential local routes. The main truck route would travel through Annacis Island where it is all zoned as industrial. Information on road safety can be found in the City of New Westminster’s Master Transportation Plan provided online (link).
How would the maximum allowable 60 trucks per day be monitored?	The facility would have a truck manifest, and all loads would be pre-approved and accepted based on the daily volume limits. Furthermore, the proposed site footprint cannot accommodate more than 60 trucks per day.

What evaluation have been done to find out whether the roadways are able to handle extra traffic?

A Traffic Impact Study was undertaken to evaluate the performance of intersections in the vicinity of the proposed site.

Trucks would only travel along city-designated truck routes – roads designed to carry trucks. Existing truck routes are shown on the City of New Westminster’s Truck Routes map ([link](#)). Trucks travelling on municipal roads would be required to comply with all applicable signage and regulations.

Concern for potential collisions between trucks and trains at the Salter Street rail crossing.

Summit Earthworks has consulted with SRY Rail and the City of New Westminster. The adjacent rail spur is a very low volume track. By law, trucks will not be permitted to stop on the railway tracks, and it is not expected that trucks would be queuing onto Derwent Way. See response below.

Concern that trucks will be queuing onto the roads waiting to enter the site.

Trucks are to be contained within the proposed site, with no staging allowed on adjacent roadways. We do not anticipate trucks to spill onto Derwent Way. There will be a maximum of 60 trucks per day or about 8 inbound and 8 outbound trips per hour.

Noise

Questions / Comments	Answers
<p>Concerns with noise pollution generating from proposed facility and truck traffic</p>	<p>The peak truck traffic, as indicated above, would result in only a marginal increase over the hourly baseline daytime noise level.</p> <p>Mitigation controls would be put into place during construction and during operations to utilize noise-minimizing methods. For example, idling equipment would be shut off, minimum engine speeds would be used, and equipment and machinery would be kept in good condition with noise control features. A 2.5 m high noise barrier wall (soil berm and fence) will be constructed along the southwest property boundary, adjacent to the existing SRY rail spur. The soil stockpile area will also be constructed below ground height and covered which would further reduce noise to residential areas. Construction would occur only during the VFPA's standard work hours, 7am-430pm Monday to Friday.</p>

General Comments

Questions / Comments	Answers
<p>Facility aesthetics</p> <p>Effects on wildlife and vegetation on the proposed site during construction and operations of the facility. i.e., owls, eagles, salmon, and vegetation.</p>	<p>The soil berms, lock block walls and fence combined with the shrubs planted on the soil berms are being constructed/planted on the western perimeter of the proposed site with the intent to provide an acoustic and visual buffer from stockpiles to neighbouring properties to the west of the proposed site. Selected shrubs would grow to approximately 1 – 3 m tall. In addition, approximately 50 Swedish columnar aspen trees would be planted on the western perimeter of the proposed site. This particular tree species can grow to 15 m in height and 3 m in width. Furthermore, the proposed temporary storage area is proposed to be below the current ground level and will be covered, further buffering noise, dust and visibility of the stockpiles from beyond the property boundary.</p> <p>A Biophysical Report was prepared for the Project, which includes an assessment of habitat values for fish, wildlife and vegetation. The report is found on the port authority’s website here: https://www.portvancouver.com/wp-content/uploads/2016/12/2018-05-28-Biophysical-Assessment-and-Veg-Plan-REV-3.pdf.</p> <p>The site is located on industrial zoned land and is bordered by existing industrial business and the Southern Railway of BC (SRY) rail line. The site does provide habitat value for wildlife and fish, though it is limited. The site does have riparian habitat where mature trees are growing and majority of these would be retained.</p> <p>At the proposed site, the banks of the Fraser River are predominantly rip-rapped to protect the Derwent Way bridge abutment from scour, and only a small portion of the river mudflats are visible at low tide. The lack of natural shoreline and limited intertidal habitat (sedges, rushes and reed canary grass) suggests that the fish habitat is of lower value in this vicinity (as defined by the former Fraser River Estuary Management Program. See link).</p> <p>To address effects of the project on the terrestrial habitat value at the site, the following measures are planned:</p> <ul style="list-style-type: none"> Swedish columnar aspen trees are proposed for planting adjacent to the barge conveyor to offset tree and vegetation removal during site preparation. Most trees along the Fraser River shoreline would be retained within a 10 m buffer; except where the proposed barge conveyor would be constructed.

- Site clearing would be avoided if there are bird nests eggs or chicks. A pre-clearance nest survey would be completed immediately prior to (within 72 hours) any vegetation clearing to be in legal compliance the BC Wildlife Act and the Migratory Bird Convention Act, 1994 within the breeding bird period (April 1 and July 31). All clearing would occur under appropriate permits. No nests of eagles, herons or gyrfalcons were found during the time of the biophysical site visit. These nests are protected year-round.

Additional measures for wildlife and vegetation protection management during construction are detailed in the Construction Environmental Management Plan and include best management practices such as proper waste management, sediment and erosion control, consideration of construction materials used, and reporting of identified wildlife on proposed site.

Summit also developed management plans for in-water construction (marine works, water quality, fish and wildlife), in addition to a Stormwater Pollution Prevention Plan and Contingency and Spill Response Plan ([link](#)). Furthermore, Summit plans to consult with Fisheries and Oceans Canada through a Request for Review to seek advice regarding the marine-related infrastructure and activities.

To mitigate for short-term construction effects on fish during installation of the barge conveyor (i.e., during pile installation activities), Summit would implement several measures, including but not limited to:

- Use of best practices for pile driving and related operations
- Isolation or use of silt curtains for sediment control.
- Installation of oil containment booms during construction.
- Conducting in-water work within the window of least risk for the Fraser River Estuary, which is June 16 – February 28.

<http://www.dfo-mpo.gc.ca/pnw-ppe/measures-mesures/measures-mesures-eng.html>.

Appendix A – Public Notice Flyer



May 12, 2017

Public Notice

Dear Neighbor:

Summit Earthworks invites you to provide comment to a proposed soil transfer and barge facility located to the east of Derwent way and south of Salter Street in New Westminster, within the Vancouver Fraser Port Authority's jurisdiction. We will be compiling responses that we have received within 15 business days from the date of this letter.

The proposed facility would receive and transfer waste soil from development sites primarily located in Vancouver, Richmond and New Westminster. Waste soil would only be accepted at this facility if it is confirmed to not contain hazardous waste. The soil would be received by trucks for temporary short term storage on the site and be loaded onto a barge to be transported to a soil treatment facility in Mission, BC. Trucks would access the site from Salter Street and a maximum of 60 trucks would arrive at the facility daily.

The proposed facility would be constructed to have a lined and paved temporary soil storage area, a perimeter wall with a tree hedge and sound barrier, truck wheel wash station, a water treatment system, and a floating barge ramp.



Site Location Aerial Photograph

The facility would operate 6 days a week, Monday to Saturday, between the hours of 7:00 am and 4:30 pm. In addition to the limited work hours, the facility would be equipped with a sound barrier to minimize noise transmitted to the neighboring properties.



Construction of the facility would occur during daytime hours on weekdays and would follow Vancouver Fraser Port Authority standard hours of construction (Monday to Saturday 7:00am – 8:00pm). An effort would be made to retain the trees present on site during the construction and to add new trees at the property boundary to improve the look of the site. One of the initial construction activities would be the construction of the sound barrier along the property boundary adjacent to Derwent Way. This sound barrier would limit sound transmission during construction and facility operation. Activities with the potential for noise during construction, such as pile driving in the water lot, would be limited in duration and would utilize noise-minimizing methods such as pile vibration rather than hammer install. Dust control methods would be employed to minimize dust generation. If lighting is to be used during construction, it would be directed to the ground around the work space and not emitted to where it is not needed. Traffic-related impacts from construction are expected to be minimal.

The port authority is currently reviewing the project permit application. Pending permit approval, construction is anticipated to begin in Summer 2017 and be completed by Summer 2018.

For more information regarding the port authority's review of this project, please visit <http://www.portvancouver.com/development-and-permits/status-of-applications/>.

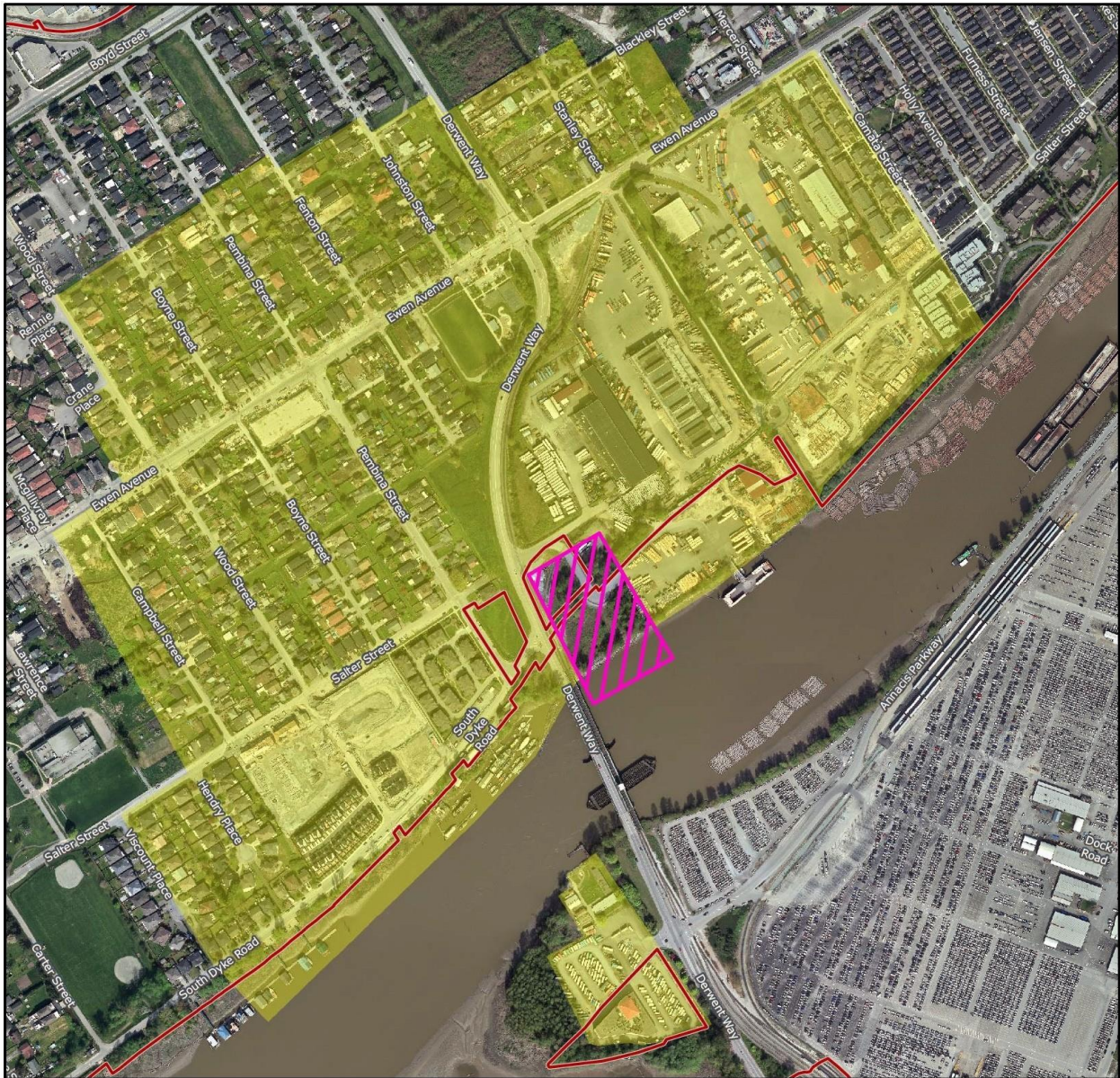
If you have comments or questions regarding the port authority's Project and Environmental Review process, you can also contact Allison Franko, Planner, at allison.franko@portvancouver.com or (604) 665-9642.

Should you have any questions or comments, please visit our website at <http://www.summitearthworks.ca/public-notice> or email us at info@summitearthworks.ca. Summit Earthworks is collecting public feedback until June 2, 2017.

Yours truly,

Myles Hargrove
Summit Earthworks Inc.

Appendix B – Public Notice Notification Area



The public notice flyers were distributed to the yellow areas as well as areas reaching beyond the highlighted zone.