Welcome

Thank you for taking the time to attend our open house about the Fraser Grain Terminal Project. Fraser Grain Terminal Ltd. is working with the port authority to ensure that community interests are considered as part of the Project and Environmental Review process.

At this event you can

• Find out more about the proposed Project
• View the Project information materials
• Meet with members of the project team
• Provide your feedback and find out how to stay informed

How to Participate

The Application Review Public Comment Period will run from **15 November 2017 to 12 December 2017**.

Visit FraserGrainTerminal.ca to

• Read our application and technical studies
• Complete an online feedback form
• Sign up for Project updates

CONTACT US

PHONE 866-302-8872
EMAIL comments@frasergrainterminal.ca

This open house provides important information about the project and the assessments conducted as part of the Project and Environmental Review process.
About the Project

The facility will be used to ship bulk grain products including wheat, barley, oil seeds, pulses and other specialty grains. The throughput for this proposed Project is 3.5 million tonnes per annum (Mt/a) bringing the total capacity for the terminal to 4 Mt/a with the 0.5Mt/a from the existing joint venture grain facility currently operating at the site. The facility will receive approximately 80 bulk vessels per year (approx. 1-2 vessels per week), including Panamax, Supramax and Handy-size vessels.

The new facility will:

- Have a modern design that minimizes noise and dust from grain handling operations
- Replace a derelict manufacturing warehouse on vacant port land that has not been used for more than two years
- Support Canadian trade
- Provide jobs for B.C. workers

ABOUT FGT

Fraser Grain Terminal Ltd. is a Canadian family-owned and operated grain company with more than 100 years of experience in agribusiness and locations across Canada. Serving more than 10,000 Canadian farmers and producers, we market grain to over 40 countries.
We want to help address two major constraints in getting Canadian grain to overseas customers today – limited rail capacity in western Canada, and a shortage of port industrial land for grain handling.

Our new facility will support Canadian farmers, increase efficiency in grain exports and build strong business relationships with customers around the world. Since 2014, exports of grain and specialty crops have increased, with India and China becoming increasingly important destinations for Canadian products.

By consolidating bulk grain handling in a state-of-the-art facility, we can:

- Help increase efficiency and reduce bottlenecks in the grain supply chain
- Be a good neighbour to adjacent residents and businesses by using modern technology to effectively manage dust and noise
Conceptual Design

New construction on the site will include:

1. Unloading station and transfer tower with fully enclosed conveying equipment and a built-in dust suppression system
2. 34 above-ground steel storage bins (24 x 3,000 t and 10 x 500 t)
3. Travelling ship loader with telescopic cascading spout to reduce dust during vessel loading, replacing existing ship loader fitted with older technology
4. Semi-loop rail track
5. Realignment of an existing rail track
6. Extension to three existing holding tracks in an area to the north east of the main grain facility site to reduce shunting during unloading
7. Container loading facility and storage yards
8. Rail and truck loading facility
9. An administration building and maintenance shop

THE PROJECT SITE
The property that the project site will occupy is made up of three areas:

- The FGT lease area made up of the former Bekaert site and lease land exchanged with FSD
- An area adjacent to the FGT area leased by FSD
- A portion of the Port Authority Rail Yard (PARY)
Air Quality

**Scope of the Assessment**

The Environmental Air Assessment compares baseline data to future predictions of air emissions, with and without the Project, to determine if there are any potential effects on local air quality.

A Level 2 environmental air assessment was required as part of the port authority review process. As part of this assessment the Project team:

- Reviewed existing conditions
- Completed an emissions inventory
- Completed an air dispersion modelling assessment

Air quality effects were modelled based on equipment and operations of the new facility. Air quality impacts from the proposed facility design and operations were predicted using an air dispersion model at many points (receptor locations) within a 20 km by 20 km study area. Sensitive receptors included the nearest business, residence, park, schools, child care facilities, seniors’ facilities, and hospitals.

Emissions from the following sources were included in this air assessment:

- Fugitive Dust
- Rail
- Marine
- Non-road Equipment
- On-road Vehicles
- Electricity

**Key Findings**

Predicted air quality impacts on the surrounding community are low and remain well below the ambient air quality objectives for the region. Air contaminants did not exceed the ambient air quality objectives beyond the facility fenceline. The assessment found that estimated particulate matter emissions were less in 2020 when the Project is operational compared to existing conditions as measured in 2015.

Improvements in air quality are primarily due to the use of best available technologies for dust suppression and emissions control including:

- New travelling ship loader with a cascading type telescoping loading spout that allows loading without repositioning and reduces ship engine running time
- Enclosed grain handling terminal design
- Reduced drop heights and speed of conveyors that minimize grain breakage and dust creation
- Cartridge type air filters to control dust emissions
- Truck and rail car loading spouts

**AIR DISPERSION MODELLING**

Air dispersion models are used to assess air quality impacts from sources of air emissions. Inputs to the model include:

- Meteorological data (e.g. winds)
- Geophysical data (terrain and land use type)
- Air emission sources (e.g. dust from material handling)
- Receptor locations (points in the model where ambient air concentrations are predicted)
Noise

Assessment of how the proposed development will affect noise levels experienced by the adjacent community

Scope of the Assessment

For the Environmental Noise Assessment, the Project team:

- Reviewed existing conditions at nearby residential receivers
- Using noise modelling, compared the existing noise environment and the future noise environment with the Project operating at full capacity
- Performed a noise impact assessment

Existing noise levels were measured using four noise level meters installed at community locations in Surrey and New Westminster. Noise measurements were taken on two occasions during March and April 2016, capturing the noise emissions for a range of site activities adjacent to the Project site at Fraser Surrey Docks including the unloading of steel, agricultural products and container ships.

Key Findings

With the implementation of FGT’s low noise initiatives, for most residential locations in proximity of the Project, total noise level is predicted to increase less than 1 dBA with a maximum increase of approximately 2 dBA with the facility operating at full capacity. On average, an increase of less than 3 dB will generally go unnoticed, if the same change in noise level occurs over an extended period of time. Non-Project related noise is the dominant source in the local area, particularly traffic from Highway 17.

The Project design incorporates the following low noise initiatives:

- All filter unit fans are to be fitted with silencers
- Fully enclosed conveyors use low noise polyethylene rollers and operate at low speeds (2.54 m/s)
- Addressing rail squeal with improved track layouts and greasing of tracks
- Limit loading in the container yard to daytime/weekday operation only

THE ACTIVITIES AT THE SITE CAN BE GROUPED INTO THREE BROAD CATEGORIES

- Shipping material from the site
- Receiving material from rail cars at the site
- Loading activities, including loading of containers, trucks and railcars

The shipping and receiving operations can occur at any time of day and will occasionally occur on weekends. Loading activities at the site will only occur during daytime hours and only on weekdays.
View and Shade

Scope of Assessment

Visual impacts were assessed using a 3-D model to analyze the proposed siting, massing and height of the Project on public and private views for the surrounding community. Potential shade impacts were also studied.

The Project team used the following information for this assessment:

- Site existing ground contours
- Site aerial photos, at-grade site photos
- CAD drawings of existing and proposed facilities
- Rendering perspectives of proposed facilities
- Plans for new equipment, structures, and buildings
- Elevation drawings of main facility area
- Sections of proposed structures, orthophotos/satellite images in plan view of the site
- Proposed building finishes and colours
- Mapping of existing vegetation on site to be preserved and protected

Site visits were also conducted to identify viewpoints for photo simulations.

Key Findings

- Visual changes to the site will be consistent with existing industrial and transportation land uses.
- In general, the Project will have minimal impact on views, the skyline and shading of adjacent communities.
- Tall, dense vegetation to the south and south-west in the Project area and surrounding community shields most of the new infrastructure from view.
- Views from New Westminster will be similar to the port terminal facilities currently on-site.
- The Project colour scheme will integrate with existing infrastructure.

Assessment of the proposed Project’s effect on views or shading in the surrounding community and public areas should ideally obtain higher resolution views.
View and Shade

Existing Conditions

A. AT PORT ROYAL PARK
   IN QUEENSBOROUGH
   (LOOKING SOUTHEAST)

B. AT WESTMINSTER QUAY
   NEAR RIVER MARKET
   (LOOKING SOUTH)

C. ALONG RIVER ROAD
   (LOOKING WEST)

D. ALONG RIVER ROAD
   NEAR STEGAVIK COURT
   (LOOKING NORTHEAST)

Photo-simulations
Scope of Assessment

ROAD – Existing traffic volumes combined with the predicted traffic volumes, once the terminal is in operation, were used to evaluate the current roadway network, including the changes associated with new access to the site. The study focussed on operations at the following intersections and transportation corridors:

- Two interchange terminals at the Highway 17 and Tannery Road Interchange
- Timberland Road Split
- Robson Road/Plywood Road
- Driveway from the FGT site at Robson Road
- Robson Road
- Elevator Road

RAIL – Detailed plans and rail protocols were analysed for rail operations under typical conditions to transport 4 million tonnes per year of product.

MARINE TRAFFIC – Detailed plan was developed to describe proposed vessel design, vessel traffic levels, and anchorage requirements and includes berthing/unberthing procedures.

Key Findings

- Overall impact of the proposed Project on current conditions within Fraser Surrey Port Lands will be minimal.
- Traffic analyses show no capacity issues occurring when rail crossings are not blocked and some delays when crossings are blocked.
- Longer blockages at rail crossings will occur overnight when road volumes are lowest so minimal impact is expected on the road network.
- The Project includes rail improvements within the Port Authority Rail Yard that will minimize the time that rail crossings are blocked. Adverse affects on road traffic are not anticipated.

Project Traffic

<table>
<thead>
<tr>
<th></th>
<th>Daily</th>
<th>Weekly</th>
<th>Monthly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marine vessels*</td>
<td>1 – 2</td>
<td>6 - 9</td>
<td></td>
</tr>
<tr>
<td>Trains</td>
<td>1</td>
<td>7 – 8</td>
<td>30 - 34</td>
</tr>
<tr>
<td>Container trucks</td>
<td>196</td>
<td>980</td>
<td>4,120</td>
</tr>
<tr>
<td>Passenger vehicles</td>
<td>122</td>
<td>460</td>
<td>2,020</td>
</tr>
</tbody>
</table>

*Vessel traffic will likely spread evenly through the year with a potential seasonal summer slow down
Lighting

Review of proposed exterior lighting including the locations, types, orientation and level of illumination

Scope of Assessment

A Lighting Plan was developed for the Project including all proposed lighting at the terminal. The exterior lighting plan includes:

- Roadway lights
- Floodlights
- Lighting controls

The exterior lighting plan was assessed for general lighting design, light trespass and light pollution.

Key Findings

- The terminal lighting design for proposed operation is consistent with industry best practice and minimizes the potential for adverse lighting effects to adjacent communities.
- Project-related light trespass and sky-glow effects will be minimal, due to distance to local residences and effective lighting design.
- Light sources in the container area, shipping area and on the walkway to the ship loading area have the most potential for light trespass and will be aimed downward and away from residences.
- At night, exterior lighting will be operated at exterior-emergency levels and full lighting will only be turned on when required for night-time operations.
Scope of Assessment

Terrestrial and aquatic species, including birds, fish and species at risk, and their habitats were assessed for potential Project-related effects through desktop review and site visits.

The following biophysical components were evaluated:

- Vegetation
- Birds
- Mammals
- Amphibians and reptiles
- Aquatic Habitat
- Fish
- Species at risk

Key Findings

- The site has been highly modified by industrial and transportation activities associated with previous development and has little native vegetation.
- Wildlife habitat limited primarily to species tolerant of human activity.
- With appropriate mitigation in place and good work practices, most construction effects on vegetation and terrestrial habitat are likely to be short in duration and localized to the immediate vicinity of the work.
- With adherence to water quality guidelines, best management practices and recommended mitigation, the Project activities are unlikely to cause significant adverse effects to fish and fish habitat.
- New rail track that parallels Elevator Rd overlaps with critical habitat for the federally-listed plant streambank lupine. No streambank lupine plants were found during field assessments in 2015 and 2017. A permit under the Species At Risk Act will be required to construct this portion of the new rail track.
Construction

Our Goal
We are committed to keeping our neighbours informed during construction and minimizing disruptions for nearby residents and businesses as much as possible. Pending permit approval, we will finalize the construction timeline. Construction is scheduled to take approximately 24 months and is scheduled to begin once demolition of two buildings is complete. Proposed construction start date is January 2018.

What to expect
A project permit (PER No. 17-035) for demolition was approved in June 2017 and all documents are available on the port authority’s website.

Construction activities include:
- Site preparation
- Concrete works and pouring
- Steel welding
- Piling

We anticipate that regular hours of work for construction will be 7:00 a.m. to 5:00 p.m. Monday to Friday. The port authority standard hours of construction are 7:00 a.m. to 8:00 p.m. Monday to Saturday.

Affected communities will be notified in advance of any works commencing on site as well as particularly noisy operations including the nature and duration of the activities.

Construction Environmental Management Plan (CEMP)
The CEMP provides mitigation measures and monitoring for construction-related activities that could impact the environment or the surrounding community. Measures are included to manage dust, noise, air and water quality, sediment, spills and hazardous material.

We will share more information with the community as it becomes available, and welcome any questions or comments.

Spill prevention, emergency response, and hazardous materials management

A Spill Prevention, Emergency Response and Hazardous Materials Handling Plan was developed in accordance with industry best practices, regulatory requirements and port authority guidance. This plan includes:

- An inventory of hazardous materials anticipated to be handled or stored on site during normal operations
- Procedures for:
  - emergency response to reportable spills
  - spill prevention, containment and clean-up plan for hydrocarbon products (including fuel, oil and hydraulic fluid) and any other deleterious substances
  - training, communications and procedures for emergency response, spill tracking and reporting, records of facilities inspections
- Reference to appropriate spill containment and clean-up supplies available on site at all times
- Commitment that all personnel working on the Project will be familiar with the spill prevention, containment and clean-up plan
- Guidance for plan updates

Stormwater Pollution Prevention

The Stormwater Pollution Prevention Plan outlines the management of stormwater run off for daily terminal operations considering local climate, water capture and treatment systems.

A Stormwater Pollution Prevention Plan was developed in accordance with industry best practices and port authority guidance. This plan includes:

- Identification of potential pollutant sources
- Good housekeeping on-site, and preventive maintenance of machinery
- Containment and reduction of potential stormwater contaminants
- Outline of treatment method on-site
- Implementation and monitoring, including commitment to adaptive management and continuous improvement
- Commitment that all personnel working on the Project will be familiar with the Stormwater Pollution Prevention Plan