APPLICATION TO CONSTRUCT A RAILWAY LINE
PURSUANT TO SECTION 98 OF THE
CANADA TRANSPORTATION ACT (1996, c.10)

CANADIAN PACIFIC RAILWAY COMPANY

EXPANSION OF CP'S VANCOUVER INTERMODAL FACILTIY:
CP LOGISTICS PARK: VANCOUVER

August 4, 2022

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I. APPLICATION OVERVIEW

A) **Definitions and Industry Terms**: The following terms shall have the meaning assigned:

"**Act**" means the *Canada Transportation Act* S.C. 1996 c. 10.

"**Agency**" means the Canadian Transportation Agency.

"**Application**" means this application pursuant to section 98 of the *Canada Transportation Act*.

"**IAA**" means the *Impact Assessment Act*, S.C. 2019, c. 28, s. 1

"**CP**" means Canadian Pacific Railway Company.

B) Name, Primary Contact Information

1. This Application is made by Canadian Pacific Railway Company ("**CP**") in respect to greenfield construction adjacent to CP's existing Vancouver Intermodal Facility.

2. For any questions of a technical nature, please contact:

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3. For all other matters, please direct your inquires to Cameron Greaves.

C) Approval Sought

4. CP hereby applies to the Canadian Transportation Agency (the "**Agency**") pursuant to section 98 of the *Canada Transportation Act* S.C. 1996 c. 10 (the "**Act**") for an order approving the expansion of CP's existing Vancouver Intermodal Facility onto adjacent CP owned land in furtherance of the greenfield construction proposed by CP in establishing a logistics park and the underlying construction of a railway line contemplated therein, (the

"**Logistics Park Project**"). The Logistics Park Project is required to facilitate the movement of goods to and from Canada, via the Port of Vancouver, as such need arises in connection with CP's common carrier obligation.

5. Section 98 of the Act states:

a) A railway company shall not construct a railway line without the approval of the Agency.

b) The Agency may, on application by the railway company, grant the approval if it considers that the location of the railway line is reasonable, taking into consideration requirements for railway operations and services and the interests of the localities that will be affected by the line.

c) Approval is not required where construction of the railway line is within the right of way of an existing railway line; or within 100 metres of the centerline of an existing railway line for a distance of no more than 3 km.

The test for the Agency to apply under section 98 is whether or not "**the location of the railway line is reasonable**". All factors and evidence must relate back to the question of whether the "location of the railway line is reasonable".

6. CP submits that, for the reasons set out herein, the **location of the Logistics Park Project is reasonable** taking into consideration:

a) CP already owns the required land and has for years;

b) The area is the preferred site for the development when the other options are considered;

c) The proximity of the lands to the Port of Vancouver and the ability to integrate the site into CP's existing rail operations;

d) There are minimal sensitive receptors;

e) There are minimal crossing impacts with the new line (road or utility);

f) Other federal and provincial government initiatives in support of transportation infrastructure in the lower mainland of British Columbia, in proximity to the project site, specifically the Burrard Inlet Road and Rail Improvement Project and the Pitt

Meadows Road and Rail Improvement Project (both funded in part by the National Trade Corridor Fund) and the expansion of Provincial highways;

7. Accordingly, CP requests the Agency grant an order approving the construction of the Logistics Park Project, subject to any conditions that the Agency deems appropriate.

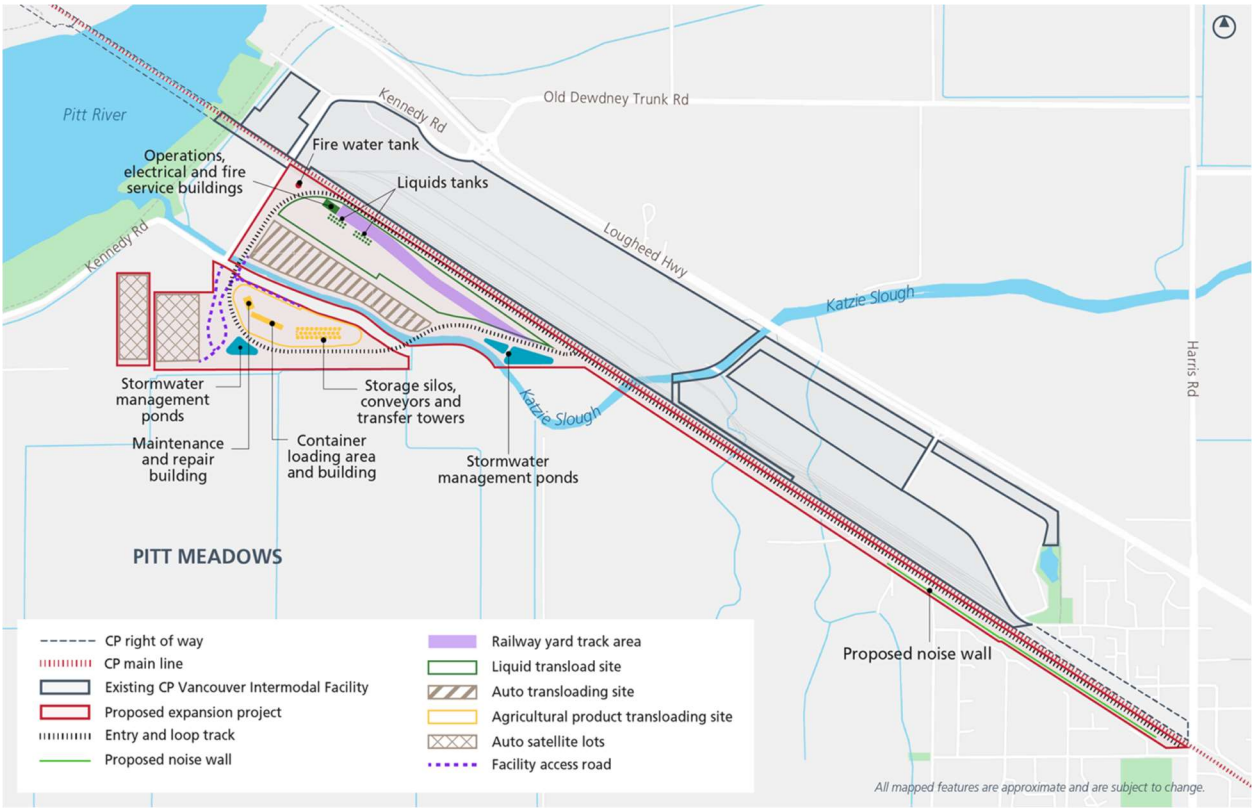
D) <u>Consideration of other approvals</u>

8. CP specifically considered whether or not an environmental assessment was required for the Logistics Park Project pursuant to the *Impact Assessment Act* S.C. 2019, c. 28, s. 1 and the *Physical Activities Regulation* SOR/2019-285. As the Logistics Park Project is neither 50 hectares in size, nor an increase of 50% (or more) to an existing railyard, an assessment is not required.

9. Sections 54 and 55 of the *Physical Activities Regulations* state*:*

> 54 The construction, operation, decommissioning and abandonment of either of the following:
>
> a. a new railway line that is capable of carrying freight or of carrying passengers between cities and requires a total of 50 km or more of new right-of-way;
>
> b. *a new railway yard with a total area of 50 ha or more*.
>
> 55 The *expansion of an existing railway yard, if the expansion would result in an increase of its total area by 50% or more and a total area of 50 ha or more*.

10. As further set out in the figure below, CP's existing Vancouver Intermodal Facility has a footprint measuring 89 hectares in size. The Logistics Park Project contemplates a project site measuring 41 hectares in size. As 41 hectares is less than 50% of the existing VIF Yard and is also less than 50 hectares, the thresholds in the *Physical Actives Regulations* are not met; with the consequence that an environmental assessment under the *Impact Assessment Act* is not required for the Logistics Park Project.



11. The Logistics Park Project has been considered by the Minister of the Environment and Climate Change prior to this Application in response to correspondence from the Katzie First Nation and the City of Pitt Meadows. The Katzie First Nation and the City of Pitt Meadows sought to have the Logistics Park Project designated under the *Impact Assessment Act*. In November 2021, the Minister determined that the Logistics Park Project would not be designated under the *Impact Assessment Act*.

12. However, to consider environmental matters arising in connection with the Logistics Park Project, CP completed an Environmental Effects Evaluation, a copy of which is attached in Appendix 3-1.

13. CP has considered other federal approvals in connection with the Logistics Park Project: including approval from:

    a. the Department of Fisheries and Oceans pursuant the *Fisheries Act* R.S.C., 1985, c. F-14 for activities adjacent to and across the Katzie and Cook sloughs; and

    b. Transport Canada pursuant to the *Navigable Waters Act* R.S.C., 1985, c. N-22 for the crossing over Katzie Slough and work at the Cook Slough.

E) Description of the proposed railway line construction and operations

14. By way of overview CP is proposing to construct a logistics facility that includes facilities for: (i) Agricultural Product Transload; (ii) Automotive Transload; (iii) Liquids Transload; (iv) Satellite Auto Lot; (v) Railway support infrastructure; (vi) common site infrastructure; and (vii) other infrastructure. These components are summarized below, and described in more detail in Appendix 2-1. Drawings of the above components are included in Appendix 2-3.

15. The Agricultural Product Transload component of the Logistics Park Project, includes the following:

a) Railway Loop Track with capacity to unload 1 x 8500' unit train;
b) Rail car Unloading Area with capacity to unload 147 car unit train in 24 hours;
c) Conveyances with centralized dust collection systems;
d) Ability to accept specialized commodities;
e) Twenty-nine hopper-bottom silos, 35'-10" dia x 77'-3" tall (1,250 tonne capacity);
f) Six container filling stations; containers remain on truck chasses;
g) Truck container queuing areas;
h) Office and Administration buildings including staff locker/washroom/lunchroom;
i) Facilities;
j) Entrance and Exit gate entrances and kiosks;
k) Staff parking area;
l) Maintenance building; and
m) Area lighting.

16. The Automotive Transload component of the Logistics Park Project, includes the following:

a) Unloading Tracks – 2 auto tracks: each 12 rail car spots;
b) Paved unloading ramp area;
c) Paved truck loading area;
d) Paved auto parking area;
e) Office and Administration buildings including staff locker/washroom/lunchroom Facilities;
f) Entrance and Exit gate entrances and kiosks;
g) Staff parking area; and
h) Area lighting.

17. The Liquids Transload component of the Logistics Park Project includes the following:

a) 24 x 500 m3 (500,000 L) Liquid storage tanks (7.32 m D x 12.2 m H);
b) Secondary containment for all tanks;
c) Unloading Racks - 4 unloading tracks: each with 7 or 8 railcar spots;
d) Direct to Truck Unloading Area - 2 direct to truck unload tracks: each with 20 railcar spots;
e) Firefighting infrastructure;
f) Office and Administration buildings including staff locker/washroom/lunchroom facilities;
g) Electrical Building;
h) Fire Systems Building;
i) Equipment Maintenance Building;
j) Bill Of Lading Building;
k) Entrance and Exit gate entrances and kiosks;
l) Staff parking area;
m) 2 -Tank to truck loading areas, each with 3 lanes;
n) Truck queuing area for direct to truck loading and tank loading areas;
o) Railcar unloading and truck loading pumps;
p) Additive Tank Systems;
q) Area lighting; and
r) 2,156 m3 (2,156,500 L) Fire water tank (13.75m D x 12.2 m H).

18. The Satellite Auto Lot component of the Logistics Park Project, includes the following:

a) Paved truck loading area;
b) Paved auto parking area;
c) Office and Administration buildings;
d) Entrance and Exit gate entrances and kiosks;
e) Staff parking area; and
f) Area lighting.

19. Railway support infrastructure required in connection with the Logistics Park Project, includes the following:

a) 1 Receiving and departure track (measuring approximately 2291 metres in length);
b) 6 Receiving sort tracks (measuring approximately 3495 metres in length);
c) 6 Departure sort tracks (measuring approximately 2913 metres in length);
d) 7 Liquids staging tracks (measuring approximately 2573 metres in length);
e) 2 Pullback tracks (measuring approximately 2582 metres in length); and
f) Area lighting.

20. Common site infrastructure required in connection with the Logistics Park Project, includes the following:

a) Potable water utility line;
b) Firewater utility line;
c) Sanitary sewer utility line;
d) Natural gas utility line;
e) Telecommunications connection;
f) Electrical connection; and
g) Stormwater collection, conveyance, water quality and quantity management infrastructure.

21. Other infrastructure required in connection with the Logistics Park Project, includes the following:

a) Private extension to Kennedy road;
b) CP Logistics Park: Vancouver access road;
c) 3 railway bridges, crossing Katzie Slough;
d) 3 roadway bridges, crossing Katzie Slough, the Agricultural Products loop track and the un-named ditch within the Auto Satellite Lot;
e) Fencing, gates, access control, and security systems;
f) An internal road network;
g) Rail retaining wall within the existing CP right of way, supporting additional facility tracks between Harris Road, and just west of the multiple track railway bridge over Katzie Slough within the CP right of way;
h) Noise wall running west of Harris Road, parallel to Advent Road;
i) Noise wall running west of the facility parallel to Kennedy Road;
j) Noise wall running west of Katzie Slough along the eastern boundary of the facility.

F) <u>Planned timelines</u>

22. Pending approval from the Agency, construction is proposed to commence in 2026 and will include the following estimated project milestones:

a) Late 2020 – First Round of Public Engagement;
b) June 2021 – Second Round of Public Engagement;
c) Early 2022 – Third Round of Public Engagement;
d) August 2022 – Section 98 Application filed;
e) Agency Decision;
f) Early 2023 – Final Investment Decision;
g) 2023 – Commencement of preload work;

h) 2024 - Detailed Design Finalized;
i) 2026 – Commencement of Construction; and
j) 2028 – Commencement of Operations.

23. CP may elect to develop the Project in phases as business demand dictates.

24. Given the soft ground conditions present in the Project area, the Logistics Park Project will require extensive preloading.

25. Preloading is anticipated to take three years including one year to bring the material to the site and a further two years for the ground to consolidate.

26. If developed in its entirety following preloading, it is currently estimate that construction of the facility will take two years.

27. The specific methods of construction are detailed in the Facility Construction Report, attached as Appendix 2-4.

28. For the purpose of the construction plan and the Environmental Effects Evaluation, it was assumed that the CP Logistics Park Vancouver would be developed in its entirety for facility opening, so as to better consider impacts to the community (as it represents the highest potential impacts on the community) and is considered a more conservative approach.

G) <u>Services that will be operated</u>

29. Following construction, the CP Logistics Park Vancouver will be a multi-modal, multi-commodity transloading center designed to meet the needs of the shipping community for decades to come. It will feature three primary operations, described as follows.

30. Firstly, an Agricultural hub where Canadian agricultural products would be received by rail and transloaded to shipping containers for distribution around the world. The major elements of this hub include a loop track, an enclosed railcar dumper building, grain silos and a container loading building.

31. Secondly, an automotive lot that will receive by rail, North American-made automobiles destined for local dealerships. The automotive lot is specifically designed to accommodate the projected growth in electric vehicle demand. The major elements of this lot are rail unloading tracks, truck loading lanes, and vehicle staging stalls.

32. Finally, a liquids transloading area is for the transloading of transportation fuels and other liquid commodities, mainly to serve demand in Metro Vancouver. It includes two fixed unloading pods and two direct railcar-to-truck loading lanes.

II. LOCATION OF THE RAILWAY LINE

A) Location of the Railway Line and all proposed infrastructure in relation to their surroundings and proximity to different localities

33. The Logistics Park Project will be wholly located in the City of Pitt Meadows, British Columbia on fee simple land owned by CP.

34. The Logistics Park Project will be constructed near the western terminus of CP's transcontinental mainline, between approximately Mile 109.3 and 107.35 of CP's Cascade Subdivision. The direct proximity to CP's mainline will allow efficient and quick access to ports as well as the receipt of product from the interior of the continent.

35. CP has acquired all of the lands required for the Logistics Park Project and has owned them in fee simple for some time. CP acquired the underlying lands for the Project in 2012 and 2018 respectively. No lands were expropriated from adjacent landowners. No additional lands are anticipated to be required for the Logistics Park Project.

36. See Appendix 2-3 D for Plan and Profile and Typical Design information for the Logistics Park Project track infrastructure.

37. The CP Logistics Park is proposed for a location that is zoned agricultural and the surrounding properties are also zoned agricultural (Appendix 1-6 Pitt Meadows Land Use Map). There are personal residences located on some of the neighbouring agricultural parcels and the potential impacts on these neighbors has been fulsomely assessed through the Environmental Effects Evaluation (Appendix 3-1), completed in support of the Logistics Park Project.

38. The facility approach tracks are located east of the facility and are within CP's existing right-of-way. As a component of the Logistics Park Project, this track infrastructure will be constructed adjacent to an existing low-density residential area, which are principally detached homes. Our records indicate that the earliest homes were constructed in 1920 and have continued until as recently as 2020. CP has operated through this corridor since before the first homes were constructed. CP added noise wall mitigation to the facility's design to address concerns shared with CP by these homeowners during CP's engagement process. There are no anticipated changes to land values given the presence of neighbouring intermodal operations for over two decades.

39. Other potential impacts on these neighbours was fulsomely assessed through the Environmental Effects Evaluation and specific mitigation measures, including robust noise mitigation, included as part of the Project.

B) <u>History of CP in Pitt Meadows</u>

40. Our records indicate that construction of CP's adjacent Vancouver Intermodal Facility commenced in 1995, in accordance with applicable laws then in existence. Then, as now, construction commenced with preloading the soil so that civil and other works could be built on CP's right of way and other land holdings. An overview of CP's historical operations in Pitt Meadows is summarized as follows:

a) Construction of the transcontinental mainline initiated in Port Moody heading eastward in 1879, including through the area which is now Pitt Meadows. Following the last spike which joined Canada from coast-to-coast on November 7th, 1885, regular transcontinental train service commenced in the summer of 1886. Over the ensuing decades, the Canadian Pacific mainline through Pitt Meadows supported national efforts, including the war efforts, helped to build Canada into the great trading Nation it is and transformed over time to meet the changing needs of the Canadian economy.

b) In addition to the to the transition from steam power to diesel-electric power which occurred through the middle part of the 20th Century, this mainline has witnessed great transitions in what is moving by rail, from passenger trains to goods moving in box cars, to today's highly efficient bulk and intermodal unit trains.

c) Beginning in the 1960's, recognizing the importance of greater Vancouver to the future success of the railway, CP began securing strategic land holding on the north side of the transcontinental mainline in Pitt Meadows.

d) In the early 1990's, recognizing the shift to moving goods in intermodal shipping containers, CP began planning and design work on the Vancouver Intermodal Facility. In accordance with applicable laws in force at the time, the placement of preload materials for the new facility commenced in the fall of 1995. Pre-load and construction on the facility occurred through the balance of the 1990's and the initial Phase opened thereafter.

e) Subsequent phases of development have included expansion of the main intermodal area, development of a material storage area, the introduction of an automotive unloading service and the construction of a cross dock facility.

C) Alternative locations, criteria and rationale

41. As part of CP's planning for the Logistics Park Project, a comparative site evaluation considering alternative locations was prepared to determine if there was another site which would have substantially lower impacts than the site proposed for Project (adjacent to CP's existing Vancouver Intermodal Facility).

42. There were six potential parcels identified for evaluation in addition to the lands owned by CP adjacent to CP's existing Vancouver Intermodal Facility.

43. The physical requirements for each site was:

a) A location west of Mission Bridge and east of Port Coquitlam Railyard (to optimize existing rail infrastructure and rail operations; and to facilitate CP's operations in the Port of Vancouver);
b) Minimum of 40 ha with a minimum length of 1,250 m;
c) Parallel and adjacent to the existing mainline; and
d) Flat topography (slope less than or equal to 0.5%).

44. As a second step in the evaluation of these seven parcels, each site was evaluated for potential impacts on:

a) Existing Infrastructure:
   i. Utility crossings;
   ii. Road crossings;
   iii. Access to truck routes;
   iv. Access to regional road networks; and
   v. Access to emergency services.

b) Biophysical Environment:
   i. Presence of watercourses or wetlands; and
   ii. Ecological attributes.

c) Socio-Economic Environment:
   i. Distance from zoned residential areas;
   ii. Proximity to community amenities;
   iii. Archaeology and cultural resources; and
   iv. Presence of Crown tenures and water access.

45. The results of the Comparative Site Evaluation showed that none of the other six potential locations would have substantially lower impacts than the location owned by CP adjacent

to the existing Vancouver Intermodal Facility and in many cases the impacts where projected to be higher. The below table contains a summary of our findings from the Comparative Site Evaluation we undertook.

Site	Existing Infrastructure					Biophysical		Socio-economic			
	Utility Crossings	Road Crossings	Access to Truck Routes	Access to Regional Road Network	Access to Emergency Services	Watercourse or Wetland	Ecological Attributes	Residential	Community Amenity	Cultural Resources	Crown / Water
CPLPV	No constraints	No constraints	No constraints	Moderate constraints	Moderate constraints	Moderate constraints	Moderate constraints	No constraints	No constraints	Moderate constraints	Moderate constraints
Broadway Business Park, Port Coquitlam	Substantial constraints	Substantial constraints	No constraints	Moderate constraints	No constraints	Moderate constraints	No constraints	Moderate constraints	Moderate constraints	Moderate constraints	Moderate constraints
North of CP Facility, Pitt Meadows	Substantial constraints	Substantial constraints	No constraints	No constraints	Moderate constraints	Moderate constraints	Moderate constraints	No constraints	No constraints	Substantial constraints	Moderate constraints
Southeast CP Facility McTavish, Pitt Meadows	Moderate constraints	Moderate constraints	Moderate constraints	Substantial constraints	Moderate constraints	Moderate constraints	Moderate constraints	Moderate constraints	No constraints	Substantial constraints	Moderate constraints
North of CP Facility, Harris, Pitt Meadows	Substantial constraints	Substantial constraints	No constraints	No constraints	Moderate constraints	Moderate constraints	Moderate constraints	Moderate constraints	Substantial constraints	Substantial constraints	No constraints
West of Lougheed Highway, Maple Ridge	Substantial constraints	Substantial constraints	No constraints	Moderate constraints	Moderate constraints	Substantial constraints	Substantial constraints	Moderate constraints	Moderate constraints	Moderate constraints	Substantial constraints
South of Lougheed Highway, Mission	Moderate constraints	Moderate constraints	No constraints	Moderate constraints	Moderate constraints	Substantial constraints	Substantial constraints	No constraints	Moderate constraints	Moderate constraints	Substantial constraints

46. See Appendix 1-5 for the entirety of CP's Comparative Site Evaluation Report.

D) Maps and Plans

47. Maps and plans for the Logistics Park Project can be found in Appendix 1-4 and Appendix 2-3.

III. RAILWAY OPERATIONS AND SERVICES

A) Infrastructure, ground alterations and construction activities

48. As further set out in the Appendix 2-4) Facility Construction Report, the Logistics Park Project contemplates the following infrastructure, ground alteration and construction activities:

a) Site Preparation. Initial site preparation activities will include surveying, geotechnical investigations, staging work, protection of existing utilities, vegetation removal, soil stripping, excavation, and grading. Existing vegetation, predominately feedstock grass and farmed blueberries, will be removed from the site. Tree clearing will be required between Harris Road and Advent Road. After completion of archaeological investigations and with archaeological monitoring in place where appropriate, topsoil will be either stripped and removed or left in place, depending on final engineering requirements.

b) Preload Placement and Settlement.

i. The initial phase of construction is the preload placement and settlement period when ground improvements will be made. Activities will include preparing the site, placing preload aggregate (permanent) and surcharge fill (removed following settlement period), and monitoring settlement of the preload for a period of approximately 2 years. Geotechnical conditions at the site necessitate preloading to consolidate the soft soils that underlay the Project area and limit long-term settlement prior to construction of Project components. Preload materials are expected to be delivered to the Project area by using the local road network.

ii. In several locations, retaining walls will be required adjacent to the CP right-of-way property line. Where retaining walls and preload areas coincide, there will be a requirement to surcharge fill above the finished height of the retaining walls. Flexible, mechanically stabilized earth (MSE) retaining walls will be constructed, preloaded with surcharge fill, and left to settle. Retaining wall construction will include:

- common excavation;
- retaining wall foundation work including timber pile installation;
- MSE wall construction (wire mesh face, tie back straps, aggregate backfill);
- installation of drainage infrastructure (pipes, manholes, catch basins, culverts);
- preload and surcharge fill placement with temporary lock-block retaining structures.

iii. Much of the Project area in the North Lot and South Lot require preloading. The entire site will be preloaded with surcharge fill, left to settle, and then the surcharge will be removed in the subsequent construction phase. Overall, the preload phase of the Project includes:

- access construction;
- site facilities and laydown construction;
- environmental control measures installation;
- existing structure demolition;
- vegetation clearing and grubbing;
- topsoil stripping where needed, with salvage where possible;
- common / sub-excavation;
- temporary stormwater drainage infrastructure installation; and
- preload and surcharge fill placement.

iv. During preload settlement phase, stormwater will be retained within the preload footprint using berms around the top perimeter of the preload / surcharge within the North and South Lots. Stormwater collected will be discharged via infiltration and evaporation during this phase.

v. Temporary retaining structures are required to enable placement of preload and surcharge fill at the locations of the future rail and road bridge abutment locations for the Katzie Slough and the irrigation ditch crossings. These temporary structures will be constructed using lock-block structures for easy removal during the subsequent construction phase.

c) Facility Construction.

i. Construction of the Logistic Park Project will encompass the work that occurs after the preload and surcharge settlement is complete. Generally,

this includes: surcharge fill removal; road, rail, and bridge construction; and transload site developments.

ii. The CP right-of-way will be utilized to construct the Project's rail tracks (supporting manifest and unit trains). To support rail construction, surcharge fill will be removed, and the rail-related infrastructure will be constructed, including rail retaining structures, Katzie Slough rail bridge structure, noise wall barriers, track, and wayside signal infrastructure. Ground improvements along sections of the right-of-way will include timber pile and stone column installations.

iii. The North and South Lots will house the 3 transload subsites: the auto transload and auto satellite subsite, liquids transload subsite, and agricultural transload subsite. These lots will also be used for temporary construction facilities, laydown, and staging areas. Several activities will be common across the 3 transload subsites and will include construction of:

- Trenching for conduit and pipe network installation for site services (utilities);
- Asphalt paving and gravel surfacing of trafficked areas;
- Excavation and construction of stormwater infrastructure (i.e., ponds and ditches);
- Track construction; and
- Site lighting foundation installation and pole hoisting.

d) Preload (Surcharge) Removal.

Of the preload and surcharge material placed onsite to provide ground improvements, only surcharge fill will be removed; surcharge material not suitable for re-use onsite will be excavated and disposed of offsite. Where feasible, a portion of the surcharge will be processed onsite to produce granular products to support construction of site infrastructure. This may include production of clear crush drain rock, pipe and foundation bedding, road base, and sub-ballast. Mobile crushing and screening plants will be used to produce these materials.

e) Cook Slough Modifications.

Cook Slough parallels the CP mainline for approximately 400 m, east of Katzie Slough, and is located partially within the CP right-of-way and partially on private land to the south. Construction of 4 tracks to support the Project will affect Cook

Slough. Engineering and environmental design for the Cook Slough modifications is underway with several design alternatives under consideration. Upon selection of the Cook Slough modification design, the CEMP will be updated to incorporate design specific details and mitigation measures.

f) Drainage and Stormwater Management.

Surface and stormwater drainage will be managed through surface grading, installation and maintenance of subsurface drains, culvert installation, ditch construction, and construction of stormwater ponds. New surface water outlets on the north and south side of Katzie Slough will be installed, along with oil-water and oil-grit separators as needed. An engineered stormwater management system will be in place, including ditches, culverts, and stormwater ponds.

A separate network of stormwater pipes and catch basins will direct stormwater from areas where liquids are loaded and unloaded through coalescing oil-water separators before entering stormwater ponds. Surface runoff from adjacent properties that flows toward the Project area will be collected in perimeter ditches and diverted to the original point of discharge (i.e., the existing location of discharge to watercourses prior to Project construction) into either Cook Slough, Katzie Slough, or the unnamed ditch between the eastern and western auto satellite lots.

g) Roadways and Truck Queuing Zones

Roadways and truck queuing zones within the Project footprint will be constructed by placing a granular base and sub-base, followed by asphalt pavement. Where elevated roadways will be built, embankment sub-grade material will be placed first, and truck queuing will occur off public roadways within the Project area.

h) Roadways and Railway Bridges and Retaining Structures.

i. The following 3 road bridges will be constructed:

- Road bridge no. 1, crossing the agricultural products loop track, will consist of a cast-in-place box culvert on a pipe pile foundation.

- Road bridge no. 2, extending the terminal access road across Katzie Slough to the automobile and liquids transload subsites, will consist of a single cell, concrete box, stringer-style bridge. The main portion

of the bridge will be supported by concrete piles located above the banks of Katzie Slough.

- Road bridge no. 3 will connect the eastern and western auto satellite lots across the unnamed ditch and will consist of a single cell, concrete box, stringer-style bridge. This bridge will extend free span across the unnamed ditch and will be supported by abutments founded on pipe piles.

ii. Construction of the road bridges may require dewatering. The approach embankments for road bridges no. 1 and no. 2 will be constructed of expanded polystyrene fill, sitting on a geogrid-reinforced embankment. The embankments will be stabilized by retaining wall. Ground improvements will be completed as needed (e.g., stone columns, constrained modulus columns, geo-piers, timber piles). Bridge decks will be cast-in-place (poured) concrete.

iii. Three railway bridges will be constructed across Katzie Slough, all of which are designed to be free-span crossings, with no intermediate piers constructed within Katzie Slough. The bridge abutments will be founded on pipe piles that will be driven into the ground above the high-water mark. Construction of the railway bridges will include installation of railway ballast and tracks. Riprap protection will be installed to protect the bridge abutments from scour.

iv. Railway retaining walls are required at several locations; all railway retaining walls will be MSE (granular backfill reinforced with geogrid, and either wire mesh with aggregate facing or pre-cast concrete facing). Where soils are soft, MSE walls will be constructed on wooden piles; where soils are subject to liquefaction, MSE walls will be constructed on stone columns.

i) Railway Tracks

Construction of the railway tracks will include constructing railway embankments, laying track bed, and installing ballast, ties, continuous welded rail, and communications equipment.

j) Site Servicing

Site-servicing infrastructure will be installed for power and communications lines, potable water, firewater, sanitary sewers, and natural gas. Site-servicing infrastructure will include underground pipes and tie-ins to existing infrastructure (i.e., potable water, firewater, sanitary sewers, natural gas) and connections to existing overhead and buried infrastructure (power and communication lines). Sanitary and firewater piping will be affixed to the crossings over Katzie Slough. Construction of site servicing will involve excavation of trenches, placement of bedding, pipe and conduit installation, backfill, and pulling of cables after conduits are installed (for utilities).

k) Construction of Transload Infrastructure

i. Transload infrastructure will be constructed for agricultural, auto, and liquids product transload subsites. All subsites will require the placement of a granular base and sub-base, asphalt or concrete pavement, installation of site lighting, installation of a security kiosks and administration buildings; and installation of buried site service utilities (potable water, sanitary sewer, electrical and communication lines, and natural gas).

ii. Site-specific activities to support construction of the agricultural transload subsite will include deeper excavations to allow for the unloading pit and conveyor shaft tunnel; this will require dewatering and potentially shoring. Silo foundations will be supported by piles and a concrete ring footing. Silos and conveyance systems will be assembled and installed in place following construction of the foundations.

iii. The liquids transload subsite will require construction of an isolated stormwater management network for potential contaminant capture and discharge as well as concrete containment berms and foundation construction for the tank pods. This subsite will require fabrication and assembly of the tank pods, internal pipe networks, rail unloading racks, truck-loading racks, control infrastructure, and fire suppression infrastructure. The tanks are anticipated to be pile supported. Site-specific buildings will include an administration building, foam building, motor control centre building, and loading and security kiosks. The liquids transload facility will include at-grade yard road crossings.

l) Site Restoration

Following construction, a vegetative cover will be re-established over disturbed parts of the Project area and adjacent ROW areas. A separate management plan will be created to guide any Project-related habitat compensation works anticipated to occur outside the Project area.

B) <u>Operational activities</u>

49. Following completion of construction, rail operations at the Logistics Park Project site will include freight rail service. Railway operational details at the Logistics Park Project site are summarized as follows (as further described Appendix 2-1 Facility Design Criteria Appendix 2-5 Facilities Operations Report);

a) Train Operations. The Logistics Park Project site will support manifest operations at the liquids and auto sub-sites, and unit train operations at the agricultural products sub-site.

b) Manifest Trains. At least two dedicated yard or terminal switchers are likely required to complete the switching activities needed to cycle a manifest car through the terminal. A typical manifest car cycle through the terminal is detailed in the following sections.

i. Arrival. Mixed manifest trains / cars will arrive into the Arrival/Departure track and will be dropped by CP. Handbrakes will be applied. CP motive power will escape using the north end connection.

ii. Arrival Sort. Railway cars will be immediately removed from the Arrival/Departure track, by a terminal switcher, utilizing one of two pullback tracks. When the outbound portion of the agricultural product track blocks the west pullback, the east pullback track will be used. Railway cars will be pulled back from the arrival track, and sorted into commodity specific tracks in the Arrival Sort tracks. It is assumed that arriving manifest trains will not arrive on site with a block of railway cars completely mixed, but will arrive naturally blocked by origin or commodity, with some degree of mixing occurring as a result of bunching of traffic on the CP network, and at upstream terminals. Intra-facility switching will become significantly congested if the cars do not arrived consistently blocked.

iii. Sub-Site Switching. Loaded railway cars will be moved from the Arrival Sort tracks to each of the manifest served sub-sites by a terminal switcher. Loaded liquids cars will be placed in the Liquids Staging track, prior to

being moved to the Unloading Rack tracks or the Direct to Truck Unloading tracks. Empty liquids cars will be switched from the Unloading Rack tracks or the Direct to Truck Unloading tracks back to the Liquids Staging Tracks. Any spot in the Unloading Rack will be capable of unloading any liquids product (diesel, ethanol, gasoline). A dedicated liquids area switcher will likely be required to move railway cars between the Rack and the Liquids Staging tracks. Auto racks, once switched into the Auto Unloading tracks, will not need to be switched to unload the vehicles. Switching into the Auto Unloading tracks will require particular attention to the direction the vehicles headlights are facing within the auto racks, as the vehicles cannot be backed out of the auto racks, and all headlights of vehicles within an Auto Rack must be pointed the same direction. Auto Racks must be blocked into groups of 3 cars with the headlights pointed in the same direction, as vehicles can only be driven through 3 Auto Racks when being unloaded.

iv. Departure Sort. Empty / unloaded railway cars from each of the manifest served sub-sites (liquids and autos), will be sorted into destination specific blocks to eliminate wholesale sorting of cars at downstream classification yards.

v. Departure. Railway cars ready for departure will be moved from the Departure Sort tracks to the Departure track via either the east pullback track or the series of intermediate crossovers midway along the Arrival / Departure track. CP mixed manifest trains will arrive, and pull the trains eastbound or westbound.

vi. Railway Car Inspection. Certified car inspection is assumed not to occur at this facility for manifest traffic. Pre departure inspection will occur via standing or roll by inspection. No yard inspection roadways are present on Receiving / Departure Track, due to space constraints in the existing CP Right-of-Way.

vii. Repair in Place (RIP). No repair in place operations are assumed to occur at this facility, given the proximity of the facility to the CP Port Coquitlam yard, and the lack of available space to provide trackage or facilities for Repair in Place activities.

c) Unit Trains

i. Arrival. A unit train of agri-product will arrive on the in-go side of the unloading pit. (At this stage, movement around the loop track is assumed to be clockwise although technically either direction is possible.) CP crews will disembark from the train. A "loading tower" will take over train control and advance the train using Locotrol. Motive power will not be removed from the train consist as unloading times will be under 24 hours for a unit train.

ii. Unloading. Grain cars will be progressed through the unloading area via Locotrol – a remotely controlled locomotive pacesetter. No separate car indexer will be provided. Car doors will be opened using automated traversing rider style car gate openers to allow car gates to be opened without stopping car progression. Grain cars will be bottom unloaded into an unloading pit discharging onto a belt feeder. Cars can be progressed either way around the loop, although operations have been envisioned with unloading happening clockwise around the loop.

iii. Departure. Upon unloading of the train, it will fully occupy the track on the out-go side of the unloading pit. CP crews will re-take control of the train, and ultimately depart the facility in an eastbound direction.

iv. Locomotive Fuelling. Locomotive fuelling facilities for unit trains are not currently included in the facility scope due to space constraints.

v. Certified Car Inspection. Inspection roadways are not currently included in the facility scope due to space constraints in the existing CP right of way.

vi. Repair In Place (RIP). No repair in place operations are assumed to occur at this facility, given the proximity of the facility to the CP PoCo yard, and the lack of available space to provide trackage or facilities for Repair in Place activities.

d) Liquids.

i. Direct to Truck Loading from Rail. Empty liquids trucks will arrive at the facility, clear the inbound entry kiosk, and queue at the designated direct to truck loading area. Loaded railway cars will be positioned on the direct to truck loading track. Railway cars will be unloaded direct to a semi-style fuel tanker truck parked adjacent to the track using a mobile gantry style liquids transloader. The loaded liquids truck will then depart the facility.

ii. Load to Truck from Storage Tank. Loaded railway cars will be positioned on the Unloading Rack tracks. Any car can be positioned at any spot on the unloading rack. Railway cars will be unloaded, with the product pumped to a commodity specific tank. Empty fuel trucks will arrive at the facility, clear the inbound entry kiosk, in the appropriate lane prior to the truck loading racks. Trucks will be filled at the truck loading racks with fuel product delivered via pipe from a storage tank. The loaded fuel truck will then depart the facility.

e) Autos. After arrival, railway auto rack cars will be prepared to allow for vehicle unloading. Auto rack car doors will be opened, and bridge plates will be placed between each auto rack to allow vehicles to be driven through contiguous auto racks. Vehicles will be unloaded from auto racks using mobile variable height vehicle ramps parked on the paved unloading pads. Unloaded vehicles will be parked in a parking spot on site or moved immediately to a load line in preparation for loading onto a semi-truck style auto hauler. Semi-truck style auto haulers enter the facility and maneuver to the head end of the appropriate load line. Vehicles are then loaded onto the Semi-truck style auto hauler, which then exits the site.

f) Agricultural Products

i. Pulse crops will be unloaded from railcars into a hopper positioned in an unloading pit beneath the railcar. Railcars will move continuously at a low velocity of approximately 0.2 mph over the dump pit. Agricultural products will be conveyed to storage silo's where they will be stored based on crop type and crop grade. Agricultural products will be reclaimed from the storage silos and loaded into shipping containers. Empty containers will be brought to the site from the storage stockpile located at the Vancouver Intermodal Facility, just north of the proposed site. Empty containers will be loaded onto road legal chassis and terminal tractor or shuttle truck via reach stacker or top lifter at the Vancouver Intermodal Facility Site. The containers will be transported to the Agricultural products sub-site via Kennedy Road, the Private Extension to Kennedy Road, and the CPLPV Access Road. Vehicles will clear the inbound gate and kiosk and queue at the Inbound Container Staging area. Empty containers on chasses will be driven and positioned at a loading bay for filling. Container inspection and lining, will be completed prior to container filling. Required documentation will be completed concurrently with filling where possible. Batch weighing

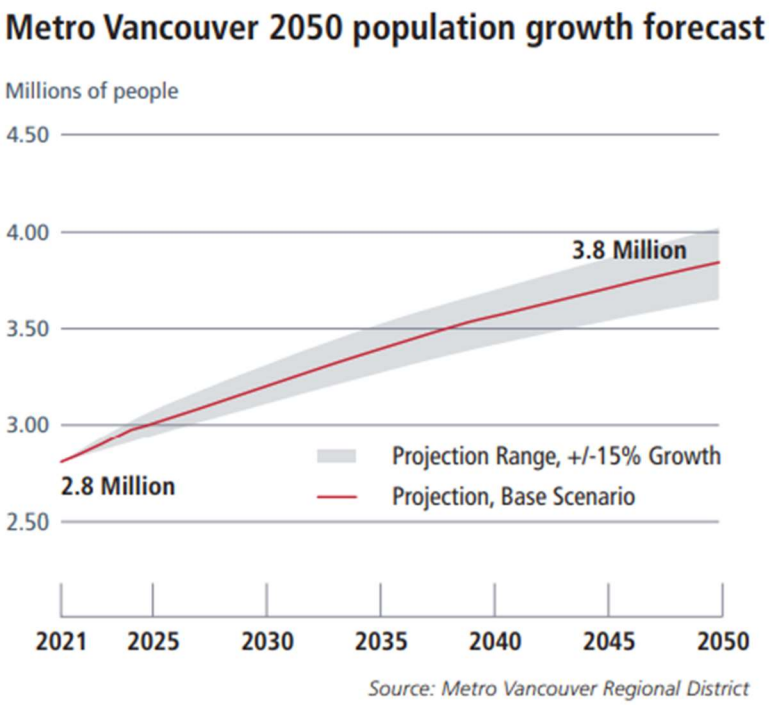
of product before loading into containers will ensure allowable truck axle load restrictions are met.

ii. After filling, loaded containers will depart the agricultural products area for the Vancouver Intermodal Facility. Weigh systems at the gate may be used to verify axle loads are within allowable road limits.

g) Truck and Gate Operations. Each sub-site is responsible for their own truck and gate operations. Generally trucks will need to be checked in on arrival, and directed to an unloading area, which will differ for each sub-site. Trucks will require checkout prior to departing each sub-site. There is no common gate for all facilities.

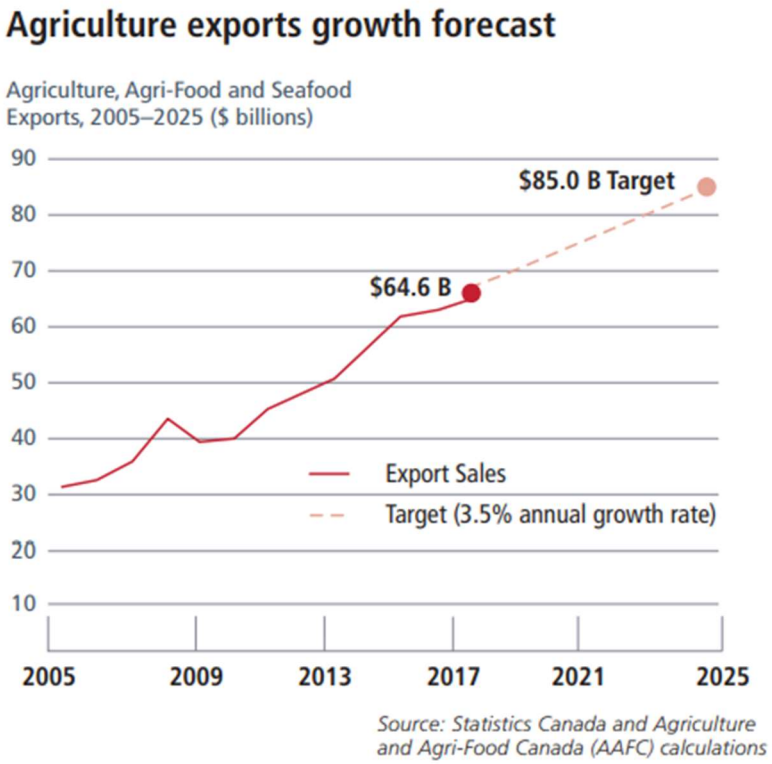
C) <u>Railway Services</u>

50. Growth is projected in Metro Vancouver's population, with over 1 million residents anticipated to move to the area over the next 30 years. More infrastructure capacity is needed to continue to supply the growing regional market. As a class 1 railway, CP is a common carrier, servicing the needs of the national economy and all shippers. The existing CP transload facilities in the Lower Mainland are nearing capacity, and BC's ports are growing to handle increasing demand. The purpose of the Project is to expand CP's ability to serve customers, help maintain a fluid supply chain, and meet the needs of communities with a modern facility built to current environmental and safety standards.



51. This Project is being designed to alleviate capacity constraints and increase the efficiency of Canada's trade network by reducing the number of empty containers in circulation. It will also provide suppliers with additional capacity in the event of disruptions and outages, further securing Canadian access to global supply chains. Locally, CP will create and sustain jobs while helping to build greater confidence in Canada's economy.

52. CP has experienced significant growth in agricultural exports and is subject to a federally legislated requirement to take active steps toward increasing the movement of agricultural products. CP believes that providing producers with expanded, innovative market opportunities is critical. A key goal of the Project is to give agricultural producers an alternative to the bulk export model that currently supports the vast majority of agricultural exports from BC by providing shipping options for containers with smaller volumes of select products.



53. The Logistics Park Project will have economic and environmental benefits at the local, provincial, and national level. It will also provide an efficient use of land, which is an important consideration in an area with intense competition for land to support a diversity of users. The proposed approach for designing, constructing, and operating the Project is consistent with the Regional Industrial Lands Strategy Report (Metro Vancouver 2020), which highlights the emerging industrial lands crisis in the Lower Mainland which has been precipitated by a constrained land supply and increasing pressures on existing industrial lands. CP's objective is to expand an existing facility rather than initiating new development in a new area. In addition, CP is responding to population growth and continued growth in global trade, which have driven increased demand for scarce industrial space, particularly for logistics facilities.

54. The Logistics Park Project economic benefits include:

a) Bolstering supply chain resiliency and capacity and strengthening Canada's competitiveness in the world market;
b) Helping Canadian producers access markets in Vancouver and abroad, supporting trade and economic development;
c) Giving Canadian farmers the flexibility to ship products abroad, including specialty GMO-free products, in custom amounts;

d) Supporting Canadian and provincial trade goals by adding capacity for trade with Asia;
e) Increasing Canada's economic competitiveness by improving the efficiency of railways;
f) Creating 150 to 250 full-time, direct construction and operation-phase jobs and hundreds of additional jobs through indirect employment growth; and
g) Contributing to provincial and local government tax revenues.

55. Environmental benefits will accrue through the reduction of greenhouse gases by a modal shift in the transportation of goods from trucks to rail. This shift from truck to rail is in line with Canada's commitment to Transportation 2030 (Transport Canada 2021). The Project will provide benefits to support this shift by:

a) Reducing the number of truck movements on regional highways and reducing greenhouse gas emissions by moving more goods by rail;
b) Increasing shipping and supply chain efficiency by reducing the number of empty containers shipped to Asia from Canada;
c) Adding a modernized auto lot with electric vehicle charging stations, helping suppliers meet demand for electric vehicles in BC.

56. Noted community benefits revolve around jobs and CP property taxes that will contribute to the City of Pitt Meadows' capital and operating budget by:

a) Providing approximately 150 to 250 direct jobs as well as contracting opportunities for local residents and businesses;
b) Creating hundreds of jobs during construction and supporting indirect employment throughout the community; and
c) Contributing towards property taxes annually once the Project is complete.

IV. ENGAGEMENT

A) Consultation

57. CP has undertaken consultations regarding the Logistics Park Project with the following stakeholders:

a) Indigenous Communities
b) Government Representatives
c) Adjacent Landowners and Local Residents
d) Trade associations, key shippers and the broader business community

58. CP has also met with and continues to have an ongoing dialogue with Indigenous communities (see section below).

B) Indigenous Communities Consultation

59. CP recognizes that the proposed Project is in the Traditional Territory of Indigenous communities who have occupied the land since time immemorial. CP acknowledges Indigenous communities' right to practice and protect their cultures, identities, traditions, and customs on their land. In addition, CP encourages cultural awareness and diversity and recognizes and respects sites, places, structures, and objects that are culturally or traditionally significant to Indigenous communities. Acknowledging and respecting Indigenous communities as environmental stewards of the land aligns with CP's Indigenous Relations Approach (CP n.d.).

60. CP's approach to engaging Indigenous communities followed the Agency's proposed engagement framework for applicants constructing a railway line (CTA 2019). Specifically, CP:

a) Engaged with Indigenous communities prior to submission of the Environmental Effects Evaluation (EEE) to discuss the Project.
b) Shared information and sought to understand potential impacts of the Project
c) Sought to identify appropriate mitigation measures for issues and concerns raised through engagement.

61. Indigenous communities that have potential interests within the Project area were identified through searches of the BC Consultative Areas database as well as the federal Aboriginal and Treaty Rights Information System (ATRIS). Member communities of the Stó:lö Nation were engaged collectively through the People of the River Referrals Office. The following Indigenous communities and groups were engaged (presented in alphabetical order):

Chawathil First Nation
Cheam First Nation
Cowichan Nation Alliance
Cowichan Tribes
Halalt First Nation
Hul'qumi'num Treaty Group
Hwlitsum First Nation
Katzie First Nation
Kwantlen First Nation
Kwaw-kwaw-Apilt First Nation
Kwikwetlem First Nation
Lyackson First Nation

Matsqui First Nation
Métis Nation British Columbia
Musqueam Indian Band
Penelakut Tribe
Seabird Island Band
Semiahmoo First Nation
Shxwhá:y Village
Shxw'ow'hamel First Nation
Soowahlie First Nation
Sq'éwlets First Nation
Stó:lō Nation, including:
    Aitchelitz First Nation
    Leq'á:mel First Nation
    Popkum First Nation
    Skawahlook First Nation
    Skowkale First Nation
    Skwah First Nation
    Squiala First Nation
    Sumas First Nation
    Tzeachten First Nation
    Yakweakwioose First Nation
Stz'uminus First Nation
Ts'uubaa-asatx Nation
Tsawwassen First Nation
Yale First Nation.

62. In support of the Government's honor and duty to consult, CP has contacted and engaged each of the Indigenous communities identified above for the purpose of sharing and exchanging information as well as to assess potential infringements to aboriginal rights within their respective traditional territories resulting from the CP Logistics Park Vancouver Project.

63. Ongoing Project information meetings have been convened with several of the Indigenous communities expressing interest in the Project. These have included meetings held in person on Indigenous reserves (prior to the emergence of COVID-19), and virtual meetings facilitated on a virtual collaboration platform such as Teams or Zoom.

64. As indicated in the appended Engagement summary (Appendix 4-2), in additional to in-person and virtual meetings CP has provided written project updates to the Indigenous communities which haven't requested direct engagement.

65. The communications with Indigenous communities have highlighted the following items:

a) Katzie slough is critical to Indigenous communities and the Lower Fraser River watershed. The Lower Fraser River Watershed is viewed as a holistic ecosystem and developments along the river are felt more each year within local Indigenous communities, specifically, disappearing fish stocks. As such, Indigenous communities requested that all fish and fish habitat Project impacts be avoided, and where impacts cannot be avoided recommend a focus on habitat mitigation, offsetting, and accommodation measures in consultation or partnership with the Indigenous communities.

b) Discussions were had around the assessment of Current Use of Lands and Resources for Traditional Purposes include more than just present-day information. The consideration of present-day use only does not enable consideration for the development that has already taken place in the region and impacted Indigenous communities.

c) The Project location is a culturally important area to Indigenous communities. It is significant for cultural connections and knowledge and, to date, has been developed without reflecting Indigenous connection.

d) Infrastructure and related Projects are not stopping or slowing during the COVID-19 pandemic, which has resulted in increased workloads of Indigenous communities.

e) Baseline data of the environment should be considered prior to residential, commercial, and industrial activities taking place in Indigenous communities' Traditional Territory. The baseline reports prepared speak to 150 years of development without Indigenous consent. Suggested CP consider pre-contact environmental conditions of the Project's location to understand impacts to the lands and waters, and seek to minimize damage based on this knowledge.

66. CP will advise prospective contractors that it would be preferable to employ Indigenous peoples and subcontract Indigenous companies in the construction of the CP Logistic Park Vancouver. Communication with First Nation and Métis communities will continue throughout the construction phase of the Project.

67. CP will submit a complete Record of Engagement with Indigenous Communities (including copies of all correspondence) directly to the Agency's Indigenous Engagement

Team to assist the agency in discharging the Crown's Duty to Consult. At the request of the First Nations communities CP's has had communications with, this detailed record has been submitted in confidence.

C) Government Representatives

68. Together with the public information sessions CP participated in, CP has met with elected representatives from all levels of government concerning the CP Logistics Park: Vancouver project. Details of this engagement are included in Appendix 4-5.

D) Adjacent Landowners and Local Residents

69. Appendix 1-4 contains a map that identifies adjacent owners to the Logistics Park Project site.

70. The majority of adjacent landowners are agricultural users whose ongoing operations will not be adversely be impacted when considering the mitigations CP has proposed.

71. CP has attempted to engage with adjacent landowners through each round of engagement. Prior to each round, CP sent postcards to all residences and businesses in Pitt Meadows, totalling approximately 7,100 addresses. During the third round of engagement, CP hand delivered additional postcards to landowners adjacent to proposed a noise wall and visual barrier. During three rounds of engagement, CP met privately with seven neighbours who reached out and requested a meeting to ask questions and provide their input or feedback.

72. In total, CP received and responded to well over 100 emails, comments, and questions received by the project team by email, comment forms, or in public meetings.

73. CP has also published a Project website, to better connect with the local community, share Project information and updates and receive feedback.

74. A summary of consultation and communications with community members including adjacent landowners is provided in Appendix 4-5.

E) Stakeholder and Public Consultation

75. Beginning in April 2020 (the "**pre-announcement period**") CP initiated engagement with key stakeholders to solicit early feedback on CP's proposed project in advance of the public project announcement and to begin to understand the interests of the localities

a) City of Pitt Meadows
b) City of Port Coquitlam
c) Department of Fisheries and Oceans

d) Transport Canada
e) Canada Ministry of Agriculture
f) Canada Ministry of Environment
g) Vancouver Fraser Port Authority
h) Greater Vancouver Gateway Council
i) MP Marc Dalton
j) MP Ron McKinnon
k) BC Ministry of Transportation and Infrastructure
l) Agricultural Land Commission
m) MLA Mike Farnworth
n) MLA Lisa Beare

76. Following the public announcement of the project on December 2, 2020, CP conducted three rounds of public engagement to engage directly with members of the community and understand their interests and concerns. These engagement periods occurred:

a) Round 1 (December 2020 to January 2021);
b) Round 2 (June 2021); and
c) Round 3 (January to February 2022).

77. Throughout the process, CP listened to the concerns of the community and, where able, implemented changes and incorporated suggestions into the design of studies and the project itself. Some examples include:

a) Reduced the volume of the liquid tanks by 87%;
b) Added three noise walls based on results of noise assessment;
c) Added agricultural drainage criteria to stormwater analysis;
d) Added additional air quality station to described current conditions;
e) Updated air quality evaluation to meet new regulatory requirements;
f) Expanded the Regional Evaluation Area for fish, fish habitat and surface water;
g) Conducted a Human Health Risk Assessment;
h) Numerous enhancements and refinements to the EEE to make it more understandable and accessible for the public;
i) Undertook quantitative vibration modelling to better understand the potential effects of piling during the pre-construction and construction phase;
j) Modified air quality assessment methodology (for NO2) to reflect regulatory guidance released in late 2021 (after technical studies were complete) and re-running the air quality modeling undertaken; and

k) Refined the methodology used to model stormwater volumes, and support the design of stormwater and drainage infrastructure, to align with the City's requirements.

F) INTERESTS OF LOCALITIES

78. CP submits that the location of the CP Logistics Park: Vancouver project is reasonable taking into account the interests of the locality that will be affected by the project. The relevant issues related to the location of the CP Logistics Park: Vancouver project are:

a) air quality;
b) noise;
c) surface water, groundwater and drainage;
d) fish and fish habitat;
e) agriculture use;
f) transportation;
g) human health; and
h) accidents and malfunctions.

Air Quality

79. The evaluation air quality focused on criteria air contaminants (CACs), volatile organic compounds (VOCs) and greenhouse gases (GHGs). Overall, ambient air quality in the region has improved over the last decade amid population growth because of more stringent regulations and emission standards. Existing air quality in the CPLPV Project area is generally good with concentrations of CACs below relevant air quality criteria at most stations in the Fraser Valley. Greenhouse gas emissions in Metro Vancouver peaked at 18.4 million tonnes in 2000 and have declined significantly since that time. In 2015, the total GHG emissions in the region were estimated at 14.8 million tonnes and are anticipated to hold steady.

80. Estimated changes in ambient air quality during pre-construction and construction are expected to be minor relative to baseline. During operation, taking into account Project-related air emissions, ambient concentrations are still expected to remain below relevant air quality criteria at sensitive receptors with the exception of short-term, localized, exceedances of total suspended particulate during operations.

81. Because of the redistribution of current transloading activities of agricultural, automobile, and liquid products, the CPLPV Project is expected to drive an overall decrease in regional vehicle-kilometres travelled by trucks and result in a decrease of 6,185 tonnes/year of GHG emissions by 2050, as well as further reductions in regional emissions of CACs and VOCs.

82. Mitigation identified to address these potential effects on air quality include: baghouse dust collection and vapour recovery systems. Additional mitigation that will be employed during all phases to avoid or minimize emissions of CACs, VOCs, GHGs and dust will include: the use of equipment and fuel that minimizes emissions, measures to minimize the generation of fugitive dust, controls on vehicle speeds for on-site vehicles, and anti-idling policies.

83. With recommended mitigation measures in place, no significant Project-related residual or cumulative effects associated with air quality are expected.

Noise

84. Existing noise conditions reflect the current land use and are strongly influenced by transportation and agricultural activities. Baseline noise monitoring was conducted at 5 locations and baseline noise conditions at other locations were modelled using the DataKustik CadnaA software.

85. Baseline noise levels vary depending on proximity to existing railyard activity at the VIF and existing rail traffic along the CP mainline. Baseline noise levels are lowest west of the South Lot where the predominant noise source is surrounding agricultural activity, and highest adjacent to the right-of-way near Harris Road. Residences within 300 m of the CP mainline experience baseline noise that is representative of "urban residential" to "very noisy urban residential" communities.

86. Potential Project-related noise effects during pre-construction, construction and operations include a change in noise levels resulting from: use of equipment during Project pre-construction and construction; operation of trains and trucks during Project operations; and operation of transload equipment.

87. Mitigation measures to address potential noise related effects include: implementing a Construction Environmental Monitoring Plan (CEMP), post-construction noise monitoring, installation of noise walls, use of continuously welded rail, reducing vehicle speed, implementing an anti-idling policy, establishing a complaint management process, using adaptive equipment alarms, observing municipal noise bylaws where possible and notifying the public of exceptionally noisy activity.

88. With application of recommended mitigation measures Project effects on noise are expected to be effectively mitigated, and changes from existing conditions will remain within acceptable thresholds.

Surface Water, Ground Water & Drainage

89. Interactions with surface water, groundwater, and drainage were analyzed regionally and locally. The Regional Evaluation Area (REA) included all waterways, including natural channels and irrigation ditches, within the Katzie Slough watershed, which includes the McKechnie and Baynes sub-catchments and their respective pump stations; the Local Assessment Area (LEA) focused on a 1 km buffer around the Project Area. Katzie Slough is currently a diked channel with water quality and drainage influenced by pump station operation and surrounding agricultural and infrastructure land uses.

90. Existing water quality exceeds some guidelines for the protection of aquatic life. The existing groundwater table is close to the surface in the Project area (i.e., 1 m below ground surface), and a deep sand aquifer lies beneath the Project area (Aquifer No. 39). Existing groundwater quality also exceeds some guidelines.

91. The CPLPV Project has potential to affect natural and artificial drainage networks (e.g., change in water levels), surface water quality, and groundwater quantity and quality.

92. Mitigation measures identified to address these potential effects include: development of management plans (e.g., CEMP, Emergency Response Plan (including Spill Response), Stormwater Management Plan, Groundwater Monitoring Plan); measures to manage surface water flows (including runoff), limit erosion, and control sediment; measures to protect non-vegetated surfaces from erosion; measures to manage the import of materials (e.g., bringing clean aggregate) to site; and project infrastructure design.

93. With application of recommended mitigation measures in place, Project effects on surface water, ground water and drainage are anticipated to be fully mitigated with no residual effects.

Fish and Fish Habitat

94. As a result of past development, and current land use, Katzie Slough is presently a diked channel with habitat conditions influenced by pump station operation which inhibits fish access in and out of the system. Fish habitat is limited by poor water quality and riparian vegetation consisting primarily of invasive species. Fish sampling found that the majority of fish captured in Katzie Slough and Cook Slough were non-native species, and while no salmonid presence was detected, some potential over-wintering salmonid habitat was identified. While current conditions limit salmonid use of these habitats, Indigenous groups have noted the importance of the area with respect to supporting salmonid populations, and historical records that confirm the area has supported salmonid populations in the past.

95. Potential Project-related effects associated with pre-construction, construction and operational activities, include effects on fish habitat (i.e., changes in water quality, access, and the loss or disturbance of habitat) and fish health (i.e., direct mortality of eggs and fish).

96. Mitigation identified to address these potential effects include: design mitigation such as crossing of watercourses using bridges to minimize effects on fish habitat; avoiding environmentally sensitive areas where possible; implementing a CEMP to utilize best management practices, specific management plans such as Stormwater Management, Emergency Response (including Spill Prevention and Response), Erosion and Sediment Control and Water Quality Monitoring; and restoring areas temporarily impacted by construction. In addition, the permanent loss of 3,400 m2 of instream habitat and 5,775 m2 of riparian habitat will be offset.

97. With recommended mitigation measures in place, in addition to habitat offsetting, Project effects on fish and fish habitat are anticipated to be effectively mitigated. No significant Project-related residual or cumulative effects on fish and fish habitat are expected.

Agriculture Use

98. The Project Area, with the exception of the existing CP rail facilities, are within the Agricultural Land Reserve (ALR). Agricultural use in the Project Area includes blueberry and forage production with the land capability ranging from Class 2 to 4, based on improvements to drainage and irrigation infrastructure. Agricultural land users rely on an extensive series of dikes, ditches, pump stations, and other flood control works to keep the land and associated infrastructure from flooding. Many agricultural land users also rely on this water management system to supply water for agricultural uses such as irrigation and frost protection.

99. Potential Project-related effects include the loss of agricultural land, potential changes in water levels and water quality that support irrigation, and potential change in soil quantity and quality.

100. Mitigation measures derived specifically to reduce effects to agricultural use and soil have been informed by communication with agricultural producers in the region to gain a full understanding of issues and possible mitigation, as well as hydraulic modelling to support the development of site stormwater design to meet agricultural drainage criteria. General measures applied to Project design and management of other components, such as surface water; light; dust and light, will address potential effects to agriculture. Additional mitigation may include salvage of viable topsoil and establishment of an agricultural benefits fund to support enhancement of agricultural productivity in the area.

101. No significant Project-related residual or cumulative effects on agricultural use are expected following application of mitigation.

Transportation

102. Project-related transportation focused on the regional and local road network, including connecting roads such as Harris and Kennedy roads, as well as key transportation indicators such as changes in vehicle volumes travelled and travel times, changes in transit travel times and ridership, and changes in connectivity to pedestrian and cycling access. Existing road conditions in the Project area include moderate to high levels of congestion at the Kennedy and Harris Rd intersections.

103. The City of Pitt Meadows Transportation Master Plan includes planned future works aimed at alleviating some of this congestion and the Vancouver Fraser Port Authority is undertaking the Pitt Meadows Road and Rail Improvements Project (PMRRIP) to improve safety and access and provide better traffic flow and emergency response options.

104. Modelling indicates that the Project would result in a small increase in traffic volumes within the local area during all phases and that key intersections would perform almost identically to existing conditions. The Project will also result in changes in the use of cycling, walking, or transit infrastructure. However, at the regional level, the Project would reduce the vehicle kilometres driven required to move the volume of product currently being transloaded at existing facilities in the region by over 11,000 km per day. This reduction in trucking demand reduces general demand on the regional road network and provides ancillary benefits in terms of air emissions reductions.

105. Measures proposed to mitigate effects to Transportation include: implementing a CEMP, Emergency Response Plan, Project Traffic Management Plan and a Communication and Access Management Plan; monitoring of potential queueing on Lougheed Highway; coordination with road authorities to support refinement of road operations (i.e., changing signal timing if needed); creating a staging area for construction trucks to avoid queue spillbacks on Kennedy Road; and reviewing the mid-block crossing and adjusting the placement of warning signage.

106. No significant Project-related residual or cumulative effects to transportation are expected following the application of mitigation.

Human Health

107. Human health risks associated with Project-related changes to air quality, noise, vibration, lighting, water quality and quality of traditional foods were evaluated using a Human Health Risk Assessment (HHRA) approach that identifies changes in health risk associated with changes in exposure of humans to environmental contaminants or stressors and taking into account existing human health conditions and socio-economic factors that influence human health at the regional and community level.

108. The CPLPV Project has the potential to affect people in residential areas, as well as people engaged in commercial activities (e.g., agricultural workers), recreational users (e.g., hikers, cyclists, horse riders, canoeists), or Indigenous communities engaged in traditional activities (e.g., traditional food gathering or other traditional land use activities) in the vicinity of the Project. There is potential for transient effects (i.e., infrequent, short-term and less than the period for which exposure limits are determined) to human health from Project air emissions and an associated increase in CACs and VOCs during Project operation. Project-related noise, vibration, and lighting may also potentially affect human health.

109. Potential effects to human health are indirectly minimized or eliminated by implementing mitigation for other components, such as air quality, noise, vibration, light and water quality.

110. With recommended mitigation measures in place, Project-related effects on air quality, noise, vibration, and light during the operation phase are expected to be minimized such that changes from existing conditions will remain within acceptable thresholds.

111. Measures implemented are anticipated to reduce potential effects to human health and reduce any transient sensory disturbance to outdoor recreation users or current use for traditional purposes. Following the implementation of mitigation measures, no residual effects to human health are identified during pre-construction and construction and effects during operation are expected to remain similar to existing conditions. No significant Project-related residual or cumulative effects associated with human health are expected following the application of mitigation.

Accidents and Malfunctions

112. CP has operated the safest railway in North America for the last 15 years and has a comprehensive safety framework that includes broad ranging components such as education, training, auditing, reporting and response techniques. CP endeavors to reduce the probability of Project-related accidents and malfunctions and the associated consequences that may affect people and the environment from occurring. Plausible

Project-related accidents and malfunctions include containment failures; fires or explosions; and earthworks failure.

113. The Project will be designed, constructed, and operated according to standard industry best management practices for reducing the risk of an accident or malfunction. CP will implement best management practices, including appropriate management plans, in addition to developing and following procedures for safe operations. In addition, CP will deliver training to personnel associated with emergency response during all phases of the Project. The training will focus on emergency procedures to manage potential onsite situations.

114. With the implementation of measures to avoid and respond to accidents and malfunctions, the likelihood of scenarios occurring range from Rare to Unlikely. The consequence of such events, range from Low to Moderate. The consequence of fire and explosion events, if such an event occurred and resulted in the loss of life, was considered to be a high consequence event. Accordingly, CP has made a substantial investment to ensure the design, construction and operation of the Project will reduce the likelihood of such events occurring.

G) CROSSINGS

Private Crossings

115. No new private crossings (other than facility specific private crossings as detailed in the facility drawings included in Appendix 2-3) are proposed as part of the Logistics Park Project.

Public Road Crossings

116. The Logistics Park Project contemplates four crossings of unopened road allowances: 3 crossings of the future Kennedy - McTavish Connector (two rail crossings and one road crossing) and one unopened road allowance in the southwest portion of the property (separating the satellite auto-lot from the auto carrier loading area).

117. CP has engaged in discussions with the City of Pitt Meadows about potential future alignments for Kennedy - McTavish Connector which will meet both organizations needs.

118. Further to these conversations, CP has strategically included an alignment for the future Kennedy – McTavish Connector south of the facility as shown on the facility roll plot included as Page 126 of Appendix 2-1.

Utility Crossings

119. CP's site investigations identified the following utility crossings,

Owner/Tenant	Utility										Total	
	Overhead				Underground							
	Parallel		Crossing		Parallel*		Crossing		Parallel + Crossing			
	#	Conflict	#	Conflict	#	Conflict	#	Conflict	#	Conflict	#	Conflict
BC Hydro	0	0	1	1	1	0	1	0	0	0	3	1
City of Pitt Meadows	0	0	0	0	2	2	4	4	0	0	6	6
CP	3	1	0	0	29	0	10	7	2	0	44	8
FortisBC	0	0	0	0	1	0	2	1	0	0	3	1
M&V Gasoline Co. Ltd	0	0	0	0	1	0	0	0	0	0	1	0
Rogers	0	0	0	0	1	1	0	0	0	0	1	1
Shaw	0	0	0	0	2	2	0	0	0	0	2	2
Telus	0	0	2	2	1	1	3	3	0	0	6	6
Unknown	0	0	0	0	11	0	1	0	0	0	12	0
Total	**3**	**1**	**3**	**3**	**49**	**6**	**21**	**15**	**2**	**0**		
										Grand Total	**78**	**25**

*Utilities that are present in the CP Railway ROW but do not cross under the rails are listed as parallel

119. Detailed discussions with each utility owner and the design of measures to protect each crossing will be determined during the detailed design phase of this project.

Rail Crossings

120. No new rail crossings are proposed as part of the CP Logistics Parks Vancouver.

V. CONCLUSION AND SUMMARY

121. In conclusion, CP submits that the location of the Logistic Park Project is reasonable considering the interests of the localities, the requirement for railway services and the inherent attributes of the site. CP owns the land necessary for the project and has for many years. While an environmental assessment was not required under the *Impact Assessment Act,* CP completed and Environmental Effects Evaluation and has extensively engaged with the public, accommodating their concerns through changes to the design and underlying construction methodology. This Application is supported by several technical reports, which are listed below and appended hereto.

122. The works proposed are adjacent to CP's existing Vancouver Intermodal Facility and proximate to the Port of Vancouver. The Project will leverage CP's existing infrastructure to better serve the Canadian economy and shippers at large for decades to come.

VI. APPENDICIES

Volume 1 – The Project and Location

The Application under Sec. 98

App 1-1) Table of Concordance

App 1-2) Table of Commitments

App 1-3) Overview Presentation

App 1-4) Adjacent Land Owners

App 1-5) Comparative Site Evaluation

App 1-6) City of Pitt Meadows Official Community Plan Draft

Volume 2 – Design and Operations

App 2-1) Facility Design Criteria

App 2-2) Facility Infrastructure Design Report

App 2-3) Engineering Drawing Package

a. Site Grading
b. Agricultural Transload Site
c. Liquids Transload Site
d. Track
e. Rail and Road Bridges
f. Roads
g. Drainage and Stormwater
h. Water and Sanitary Services
i. Site Electrical

App 2-4) Facility Construction Report

App 2-5) Facility Operations Report

Volume 3 – Impacts and Mitigation

App 3-1) Environmental Effects Evaluation

App 3-2) Construction Environmental Management Plan

App 3-3) CP Logistics Park: Vancouver Risk Assessment

App 3-4) Transportation Impact Study

App 3-5) Storm Water Management Report

App 3-6) Katzie Watershed Drainage Modelling Report

Volume 4 – Engagement

App 4-1) Letters of Support

App 4-2) Indigenous Engagement Report (Public Version)

App 4-3) Detailed Response to City of Pitt Meadows Comments

App 4-4) City of Pitt Meadows Comment

App 4-5) Stakeholder Engagement Report

Volume 5 – Confidential – Detailed Indigenous Engagement Records