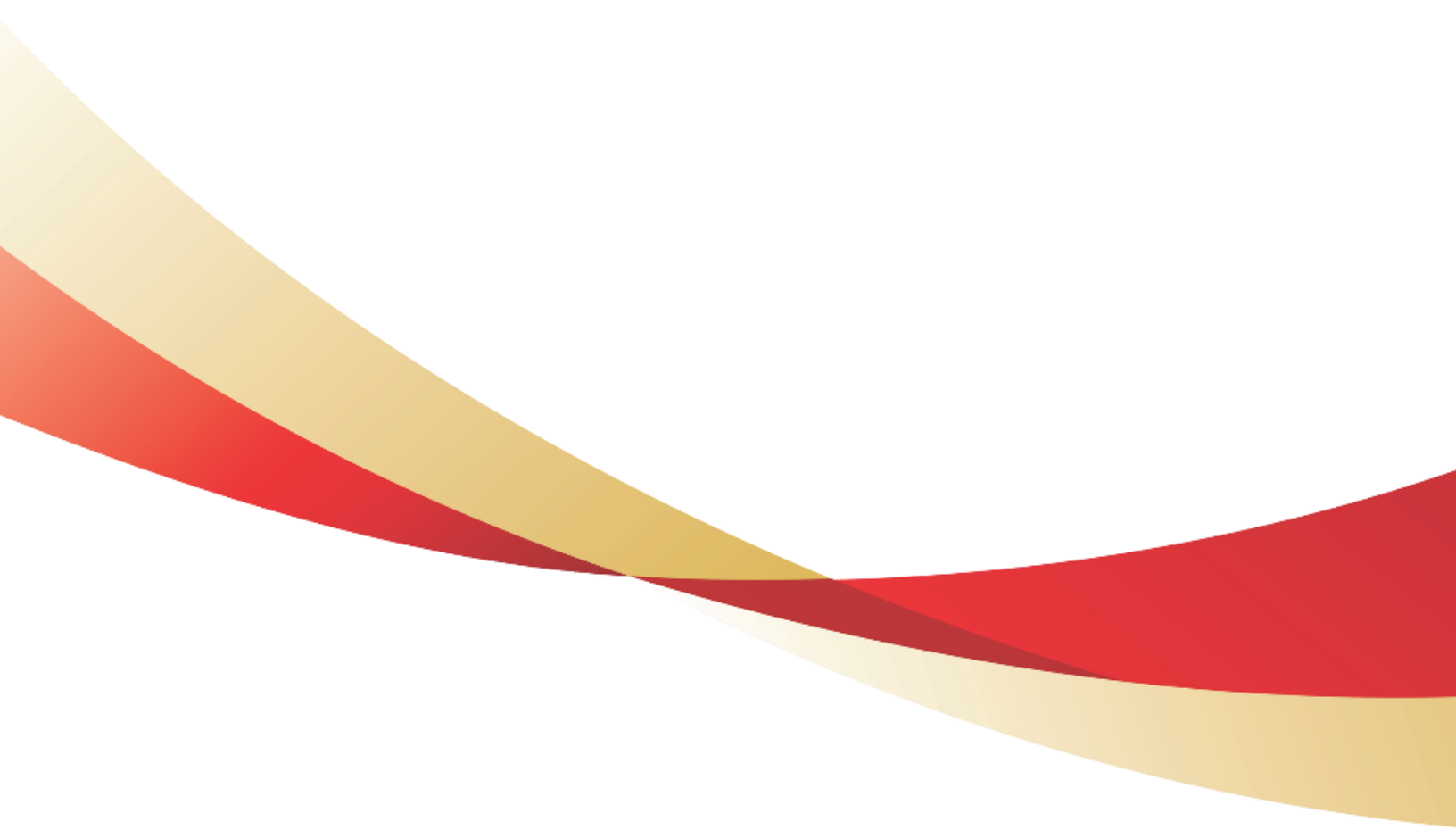


# Appendix F

## Rail Operations Plan





# **Rail Operations Plan**

**(Preliminary)**

## **East L Yard**

## Introduction

Canadian Pacific is a transcontinental railway in Canada and the United States with direct links to major ports on the west and east coasts. CP provides North American customers a competitive rail service with access to key markets in every corner of the globe. CP is growing with its customers, offering a suite of freight transportation services, logistics solutions and supply chain expertise.

The preliminary Operating Plan for the Project is based upon information available to-date and represents CP's current understanding of rail transportation market trends and intentions. This Plan outlines present day rail operations for service to South Shore customers as well as proposed changes resulting from the expansion of the East L Yard. Specific details of this plan may be adjusted in the future in order to adapt to changing circumstances and to ensure we continue to meet specific future customer service needs and volumes. Work on L30 and L31 is part of the Commissioner Rail Expansion as defined in the BIRRIP funding agreement (within the wider National Trade Corridor Fund project), Commissioner Street Rail being a CP Delivery Component, as defined in the funding agreement in place between CP and the VFPA.

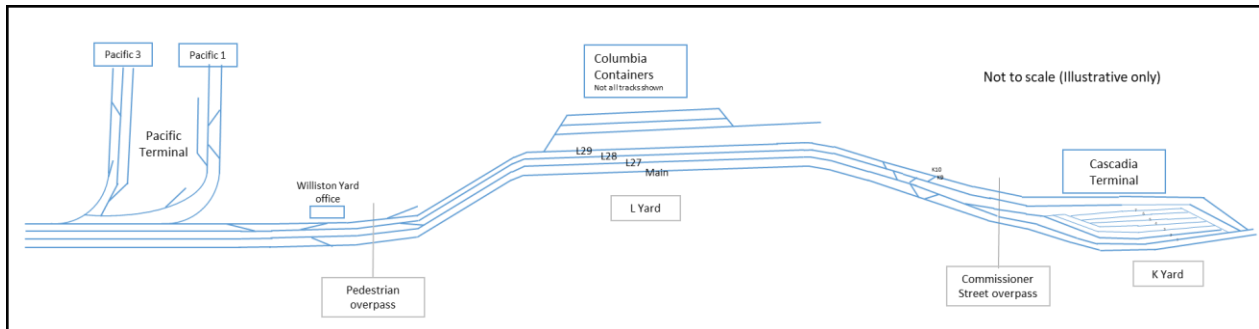
## Current East L Yard Operations

Broadly, the purpose of the East L Yard is to stage loaded rail cars for delivery to customer sites and to assemble empty rail cars into trains to leave the South Shore enroute to Port Coquitlam Yard. Current capacity within the L Yard is approximately 254 cars. CP's K Yard, situated east of the L Yard, has tracks used to queue or hold loaded grain cars and other commodities for South Shore customers.

The current track in and through the East L Yard is as follows:

- Main Track
- Track L27 – approximately 5600 feet
- Track L28 – approximately 5380 feet
- Track L29 – approximately 4300 feet

The layout of current main, yard and industrial/customer trackage is illustrated in **Figure 1**.



**Figure 1. Schematic of current track layout**

The Main Track is a through track along the south side of the East L Yard and is used by freight trains and West Coast Express (WCE) trains that operate a scheduled morning and evening commuter service during the week. There are 5 inbound WCE trains to the Waterfront Station (morning) and 5 outbound trains from the Waterfront Station (afternoon) during the Monday to Friday rush periods. *Ad hoc* WCE trains will also operate for special events (e.g., fireworks, Christmas events). WCE trains are powered by one locomotive (EMD F59PHI 4-axle, 3200 horsepower (hp)) and operate with between 3 and 10 cars per train.

WCE-scheduled trains at Waterfront Station (*i.e.*, 2.5 to 3 miles west of East L Yard) are as follows (a non-COVID schedule is shown):

Arrival time at Waterfront Station	Departure Time from Waterfront Station
640 AM	350 PM
710 AM	420 PM
740 AM	450 PM
810 AM	530 PM
840 AM	620 PM

Freight trains, road switchers and locomotive consists (lite engine) will also operate on the Main Track throughout the day as a route to maneuver around cars that have been staged or are being switched on the other East L Yard tracks. Freight train traffic is typically busier in the fall with the movement of grain. During the autumn season, up to 6 freight trains could arrive through East L Yard and 6 freight trains could depart through East L Yard each day. At other times of the year (*i.e.*, non-peak grain), there are typically 4 trains in and 4 trains out of the area per day. These trains bring rail cars to and from the South Shore grain, intermodal container and merchandise (canola oil and sugar) customers along the waterfront.

Track L27 in general, is used for all commodities arriving and departing South Shore customer terminals. The types of rail cars on the track alternate between grain and intermodal as trains bring cars to and from the South Shore from CP's Coquitlam Yard. Turning this track several times per day, about every 1.5 to 2 hours, is required to be able to spot and pull cars from the several grain, merchandise and intermodal customers supporting vessel demands. Presently, rail cars are brought to the South Shore and have to be switched on Track L27 to get them in proper sequence to be placed at the various grain, intermodal and merchandise terminals. This switching takes place throughout the day in L Yard and requires multiple moves.

Track L28 is used for loaded grain cars (approximately 80 car capacity) that are switched into a terminal dumper in cuts of 10 to 14 cars at a time. In general, cars arrive from CP's Coquitlam yard in 80 car blocks and fill the track on arrival. Any rail cars exceeding the capacity of the track are cut off at the west end of L Yard and moved to vacant space on any available track or spotted directly to customers.

Track L29 is typically used for empty grain cars that are returned from the grain terminal after dumping. Cars are placed in this track after unloading and are set up for the full track to be pulled back to CP's Coquitlam yard.

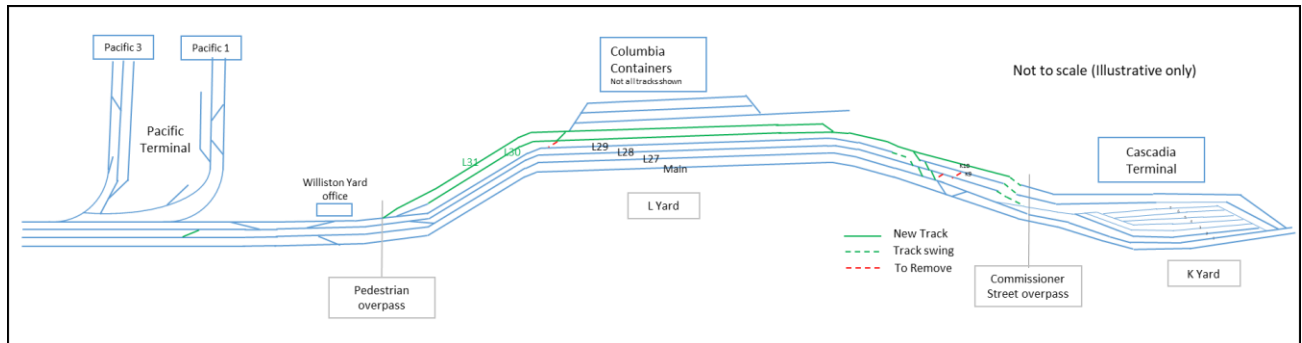
Train volumes in and through the East L Yard vary with the ebb and flow of the Canadian economy and seasonal peaks in imports and exports (e.g., intermodal imports, grain exports). Train movements in the East L Yard are powered by standard 4-axle yard locomotives (2200 Horsepower (HP)) for switching. This is the main form of locomotive used at the Port. Standard six-axle road units (4400 HP) operate on the main track.

Train speeds in and through the East L Yard are dependent on train type. Passenger train (i.e., WCE) speed both eastward and westward on the Main Track through the East L Yard is 40 miles per hour (mph). Freight train speed on the Main Track could be 35 mph eastward and westward, however trains are normally yarding into tracks and travelling at slower yard track speeds. Freight operations in the East L and K Yards do not exceed 15 mph. Coupling speed of cars is 4 mph.

All operations related to the East L Yard fall under CP's Vancouver Terminal Area. Operations are led by Service Area Managers based in Coquitlam Yard and by local officers with the responsibility for CP's operations in the Vancouver Terminal. The trackage within the East L Yard is designated as *Other Than Main Track* in accordance with Canadian Rail Operating Rules - Rule 105. Radio communications systems are implemented to ensure safe rail operations in the Yard.

## Expected Operations Following Project Implementation

The following provides a description of how CP intends to operate and utilize the yard tracks to service the South Shore terminals following construction of the Project. A schematic of the proposed layout of current main, yard and industrial/customer trackage is illustrated in **Figure 2**. The future layout provides additional track footage of 9600 feet or capacity for 160 additional rail cars.



**Figure 2.** Schematic of future track layout

The proposed track in and through the East L Yard is as follows:

- Main Track
- Track L27 – approximately 5600 feet
- Track L28 – approximately 5260 feet
- Track L29 – approximately 4180 feet
- Track L30 – approximately 5200 feet
- Track L31 – approximately 4300 feet
- New K Lead - approximately 350 feet

The construction of Tracks L30 and L31 provide functional operating tracks that create additional car capacity and free up other existing tracks for added South Shore capacity. The additional capacity creates the potential for single customer blocks of cars for the South Shore customers to queue in Tracks L27 and L28 avoiding further switching and resulting in more efficient service for CP’s customers.

Track L31 will be multi-use (as all yard tracks are) and generate several key benefits. Specifically, Track L31 will serve as an independent switch lead for switching customer terminal sites on the north side of the track right of way. Short or long train lengths will be able to use the Track L31 to switch customers from and the track will also provide additional capacity for staging cars as required for all South Shore customers.

With the alignment and reconfiguration of L30 at the east end, a new connection to K yard will be created providing an isolated route to L30/L31. The crossovers and track connections at the east end of East L Yard and the west end of K Yard effectively adds one functional long track in

this area maintaining access to L27 – L29 and providing additional capacity and routing alternatives.

Specifically, the anticipated functions of each track under the future operating plan are as follows:

- Track L31 section used to route and stage trains to or from K Yard. Primary access to customers on the north side of the CP track right of way in the immediate area and has the potential to hold all other waterfront customer commodities;
- Track L30 used mainly for staging grain empties being returned from customer terminals (same function as Track L29 currently);
- Track L29 used to spot grain loads that will be taken to customer dumpers in smaller cuts of cars (10 to 14 cars at a time) and returned to L30;
- Track L28 used for grain cars both empty and loaded; and
- Track L27 used for intermodal cars.

The addition of L30 and L31 frees up capacity on Tracks L27 and L28 for more specific commodities and single customer blocks of cars that will result in less switching at the waterfront.

The proposed future operations support the same volume of rail traffic into and out of the South Shore area (*i.e.*, 6 trains per day in and 6 trains per day out in heavy grain season, 4 in and 4 out during slower times). With the addition of the two new tracks (*i.e.*, L30 and L31), however, the redistribution of current track function in L Yard can occur providing:

- increased capacity for trains on Tracks L27 and L28 for direct hits to terminals; and
- reduced level of switching required to split out cars to multiple customers from trains currently received on Track L27 (*i.e.*, grain, intermodal and merchandise).

Functionally the grain spotting, lifting and switching on tracks L28 and L29 will be replaced with the same volumes of work on L29 and L30 in the future. There are 86 cars of additional capacity provided by the construction of Track L30 in L Yard.

The current access to customers in the East L Yard area is over Track L29 which is the northernmost track in the CP yard. Future access to customers here will occur over Tracks L30 and L31, that will be constructed north of the current Track L29, maintaining the same service levels. With the construction of Track L31 there will be a track route and track capacity length wise (headroom) that will allow trains coming from the east a route to pull directly into on the north side of the CP East L Yard and switch customers from. It is not expected that this will be a regular process to use in spotting customer site but could happen a few times per month.

There are currently a couple of customer sites that are switched in the immediate East L yard area where Tracks L30 and L31 will be constructed. Service to these customers is not expected

to change following the new track construction. Current operations in East L Yard occur 365 days per year 24/7 with trains arriving and departing 24 hours per day. No changes to the timing of operations will occur following implementation of the proposed Project.

## **SAFETY AND ENVIRONMENTAL PROTECTION IN RAIL OPERATIONS**

Safety and environmental protection measures will continue to be integrated into the proposed East L Yard rail operations as follows:

### **Responsible Care®**

CP is a member of Responsible Care® - a commitment to continuous improvement in health, safety, and environmental performance and to openness and transparency with stakeholders. As a member company, CP is held accountable through publicly reported verification of health, safety and environmental management systems and community outreach programs. CP's corporate management system is consistent with the PLAN-DO-CHECK-ACT model of Responsible Care.

### **CP Safety Management System**

CP has a comprehensive framework in place for safety and environmental plans, policies and procedures including relevant key programs described below.

- **Emergency Response Plan** – CP's operations personnel undergo extensive training in the reporting and management of incidents whose environmental impacts may trigger a higher level of response. Operations on CP's railway network are managed, 24 hours per day 7 days per week by CP's Operations Centre who ensure that CP personnel, appropriate public emergency responders and government agencies are notified quickly of any incident. CP completes full-scale emergency response exercises with local emergency responders (e.g., municipalities, fire and police services, hospitals, schools, media organizations) as a key feature of CP's emergency preparedness.
- **Construction Safety Plans** – CP ensures that during construction projects, appropriate safety plans are in place for each specific work site. Safety plans include risk assessments, regular safety meetings, and the development of site-specific emergency plans, spill contingency plans, environmental monitoring plans, and contractor safety plans. In addition, other applicable safety and environmental protection measures are identified for the site and executed as appropriate.
- **Environmental Management Plan** – CP has developed an environmental management plan to describe the specific measures CP will take to protect the environment and cultural resources of the Project area during construction. The plan will describe how CP will manage environmental risks. This plan will be designed to meet the requirements of applicable regulatory agencies, as required.



## Summary

CP's proposed East L Yard Expansion Project will improve the efficient movement of rail cars into and out of terminals and other rail-served customers on the South Shore of the Port of Vancouver. Train volumes arriving and departing the Port are not expected to increase as a result of the proposed Project, however the proposed East L Yard expansion will allow:

- New capacity (approximately 164 rail cars) to pull through longer trains on one long track;
- Larger blocks or cars for terminal customers; and
- Reduction in switching, cutting and double/triple handling of cars and redundant train movements.

No changes to current train volumes, motive power, speeds, operations management or safety and environmental protection will occur as a result of the proposed East L Yard Expansion Project.