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# 1 Environmental Screening Review Summary

The Surrey Langley SkyTrain Project (SLS or Project) is a 16 kilometre (km) extension of the Expo Line along Fraser Highway from King George SkyTrain Station in the City of Surrey to 203 Street in Langley City Centre.

In 2020, the Province of British Columbia announced its intention to deliver the full 16-km Surrey Langley SkyTrain Project in a single stage by securing federal funding, which it did in July 2021. To provide clarity and transparency, the Province is in the process of conducting a robust Environmental Screening Review (ESR) to study the potential effects of the Project during construction and operation, and to determine appropriate mitigation measures. The ESR has been informed by baseline assessments of the Fraser Highway corridor, relevant environmental regulations and policies, reviews of similar transportation projects, and feedback from First Nations, stakeholders, and members of the public. This summary provides an overview of the ESR-related feedback received to date, preliminary findings of the identified Screening Elements, and next steps to complete the ESR.

## 1.1 What We Heard

Extensive engagement with First Nations, stakeholders, and the public has generated feedback, which has helped to inform the ESR. Based on feedback during previous SLS public engagement, most respondents (93%) considered that the ESR process is sufficiently comprehensive. The planned SLS route will interact with municipal green spaces, parks, watercourses, and occur adjacent to existing residences and businesses. Most comments pertained to how the Project may affect environmental and human receptors, and how the Project intends to avoid or mitigate potential effects. Interests include a wide range of environmental topics, such as: the protection of trees, wildlife, and fish habitat; noise; and minimizing effects on environmentally sensitive areas.

## 1.2 What We Did

A final ESR Terms of Reference (TOR) for the 16-km Project outlines a number of environmental values or Screening Elements. Screening Elements include noise and vibration, fisheries and aquatics, and vegetation and wildlife resources. Based on feedback from community engagement, an analysis of the potential effects to the visual landscape from the Project has been added. A final ESR TOR is available at this [link](#).

For each Screening Element, the following processes were used:

- Determine baseline conditions;
- Identify potential Project-related effects; and
- Propose mitigation measures to eliminate or reduce potential effects.

Environmental baseline studies were completed between 2019 and 2021. ESR reporting is in progress and is expected to be complete later in 2022. Engagement with First Nations and stakeholders on preliminary results is underway and a final ESR report will be available in due course.

Preliminary findings to date include:

### **1.2.1 Air Quality and Greenhouse Gases**

- Construction-related emissions of Criteria Air Contaminants (CAC) and Greenhouse Gases (GHG) are expected to be temporary, reversible, and will be offset by air quality improvements within 3 years of Project operation; and
- CAC and GHG emission reductions during SLS operation will be due primarily to the displacement of buses and vehicles (powered by internal combustion engines) by an electrically powered SkyTrain system.

### **1.2.2 Noise and Vibration**

- Potential noise and vibration levels during the Project's construction and operation phases were predicted through detailed modelling;
- Some temporary impacts may occur during construction, particularly in areas that require impact pile driving. In urban and commercial areas of the Project, potential noise and vibration effects can be reduced through the installation of piles by drilling;
- No perceptible vibration is anticipated during the operation of the SkyTrain; and
- Recommended noise mitigation measures during Project construction and operation include the setting of noise level thresholds for monitoring purposes, the use of hardened steel rail, and other noise mitigation, should they be required.

### **1.2.3 Contaminated Sites**

- Due to the Project's location on a developed urban roadway, some previous commercial and industrial operations have been determined to be Areas of Potential Environmental Concern (APECs);
- Additional investigations will occur prior to construction on properties that will be acquired fee simple for the Project;
- Properties that are APECs will be managed to address potential effects to receptors, including appropriate soil and groundwater management measures; and
- Contaminated materials encountered or generated during construction will be managed in accordance with legislation and Project requirements.

### **1.2.4 Fisheries and Aquatics**

- The design of the Project has avoided direct effects on instream fish habitat and has minimized direct effects on riparian habitat;
- The design includes a clear span crossing of the Serpentine River;
- Recommended mitigations to prevent damage to fish and fish habitat during construction includes the use of timing windows and setbacks, and riparian planting/enhancement/restoration with native species;
- Engagement with regulators on permitting requirements to ensure best management practices are followed; and
- As such, adverse effects are expected to be minor.

### **1.2.5 Vegetation and Wildlife Resources**

- Project effects on wildlife and vegetation during construction are expected to be minor, temporary and reversible;
- Vegetation removal will be limited and habitat will be restored with plantings;
- Trees located within the Project footprint consist primarily of smaller size street trees that will be replaced in consideration of municipal bylaws;
- Key mitigations during construction should include: minimizing vegetation clearing, working outside of bird nesting windows and managing invasive weeds, in accordance with best practices; and
- Mitigation for operation includes design to prevent “flythroughs” as well as lighting specifications to limit the potential for bird strikes during operation of the SkyTrain.

### **1.2.6 Archaeology and Heritage**

- To date, an Archaeological Overview Assessment (AOA), and several field programs for Archaeological Impact Assessment (AIA) have been conducted with participation from First Nations;
- Additional AIA field work will be completed this summer; and
- It is expected that, by applying recommended mitigations, effects on archaeological resources will be low. Mitigation measures during construction will align with AIA recommendations and will include implementing a chance find procedure.

### **1.2.7 Land Use**

- The Project’s land use impacts include property requirements as well as temporary changes during construction;
- The Project will engage with property owners prior to and during construction to minimize potential construction effects on existing land uses; and
- Measures to maintain land use functions during construction and restore like-for-like functionality following construction are expected to mitigate effects on land use.

### **1.2.8 Transportation and Access**

- Important planning considerations during construction include: keep people and goods moving, maintain access to services, and facilitate business operations;
- Temporary impacts to commuters are expected during construction of structural foundations and utility relocations, but will otherwise be limited; and
- Recommended mitigations during construction include: managing traffic to minimize disruption to all road users; providing public notifications of construction details and impacts well in advance and maintaining functional access to properties through extensive and ongoing communication and cooperation between the Province, the Project Contractor, and stakeholders (e.g., businesses and property owners).

### **1.2.9 Visual Landscape**

- The Project effects on the visual landscape are changes to local views in residential, commercial and public areas;

- Modelling has been used to generate renderings of Project structures superimposed on existing views;
- Design mitigation includes minimizing the number of Project guideway crossings of Fraser Highway; and
- Recommended mitigations to integrate the Project into the existing area include: integrating and enhancing public realms in station design, using visual buffers, incorporating architectural finishes and landscaping at station; and preserving views, where possible.

### **1.3 Next Steps**

The ESR Report will include recommendations for environmental management during the Project's phases of construction and operation. Once the ESR Report conclusions are complete, the draft Construction Environmental Management Plan (CEMP) Framework will be provided for public review later in 2022. The CEMP Framework will identify environmental requirements, performance objectives and mitigation measures for the Project Contractor to adhere to during construction.