





# **Connaught Park Noise Attenuation**

September 2021





#### **Pre-construction Conditions**









### **Preliminary Design**









### **KEV Large Berm Option**

- An initial large berm option was considered in order to maximize on site soil reuse and potentially provide secondary benefits such as noise reduction and sight line improvements to nearby residents.
- Upon further review, the large berm option does not provide meaningful noise reductions and presents conflicts with trees, utilities, and pathways.









#### **Current Status**

As per community commitments and the contract, a noise study was required to inform the final design.

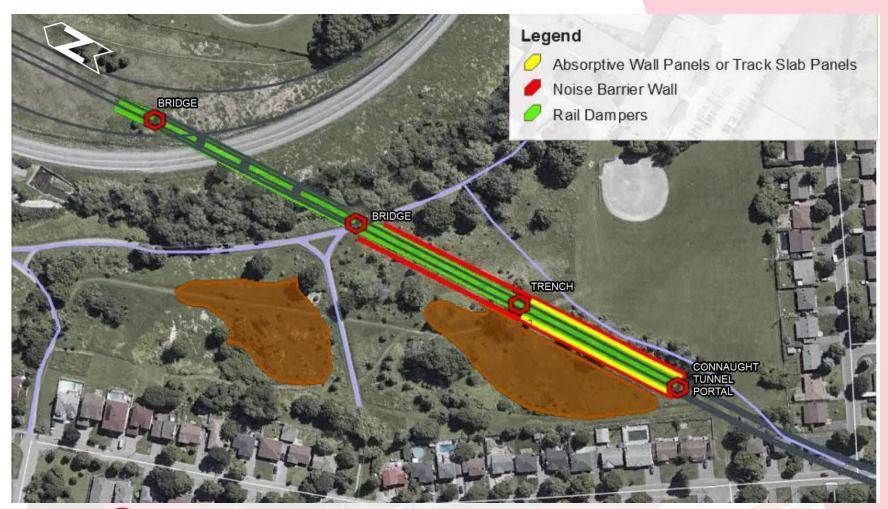
- Key factors for the analysis included:
  - Existing noise levels based upon Stage 1 operations;
  - Operational train speeds and vehicle characteristics; and,
  - Detailed track designs and alignments.
- The output from the study confirm that additional mitigations are required in order to meet City and provincial standards.
- The option of building large berms was considered as a possible solution for noise mitigation; however, this option is not effective.







### **Engineered Elements**









### **Engineered Elements**



**Noise Walls** 



**Acoustical Wall Panels** 

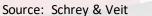


**Rail Dampers** 













#### **Current Functional Site Design**









### **Proposed Conifers**



White Pine



Common Larch



White Spruce



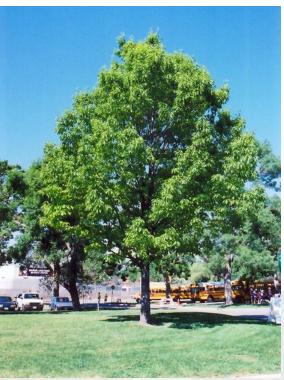




### **Proposed Deciduous**







Common Hackberry



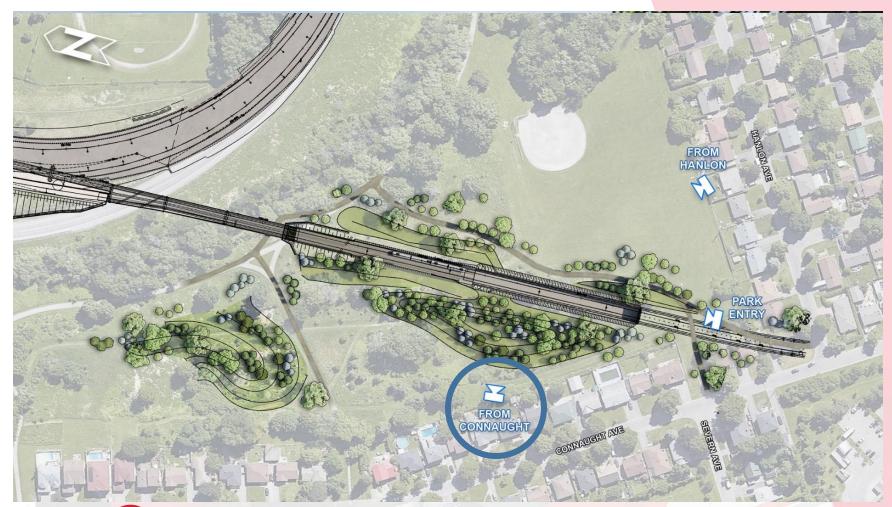
Accolade Elm







### From Connaught - Initial









### From Connaught - Year 1









### From Connaught – Year 15









#### From Hanlon - Initial









#### From Hanlon - Year 1









#### From Hanlon – Year 15









#### From Park Entrance - Initial









### Ittawa From Park Entrance – Year 1









## Ittawa From Park Entrance – Year 15







### Ittawa Noise Attenuation Wall Options



















### Park Entrance – With Vines









#### **KEV Construction Schedule**

#### To be completed in 2021

- Connaught watermain relocations - October

#### To be completed in 2022

- Connaught Avenue Realignment September
- Split Structure/Fly Over July

#### To be completed 2023

- Connaught Cut and Cover - September







#### **Next Steps**

#### **Community Feedback**

- Type of Wall
- Extent of Vine Planting
- Comments and preferences submitted by Oct. 19th

#### **Community Engagement**

- Next PAC
- Public Information Session







### Thank-you



