

# Welcome!

## Yellowhead Trail: St. Albert Trail to 97 Street

## Preliminary Design

Thank you for your participation  
and interest in this project!

# Engagement Opportunities

## Community Drop-in Event (today)

- + Learn about the neighbourhood specific plans for Sherbrooke, Prince Charles and Dovercourt and the overall changes along Yellowhead Trail
- + Ask questions and provide feedback
- + Displays and survey are also available online

## Public Online Event

June 14, 2023  
6:30 – 7:30 p.m.

- + Learn about the design and overall changes along Yellowhead Trail
- + Register at [edmonton.ca/YellowheadSATto97Street](https://edmonton.ca/YellowheadSATto97Street)



↑ SCAN ME

## Online Survey

May 25 to  
June 21, 2023

- + Visit: [edmonton.ca/YellowheadSATto97Street](https://edmonton.ca/YellowheadSATto97Street)

# Yellowhead Trail Freeway Conversion

Yellowhead Trail as a freeway:

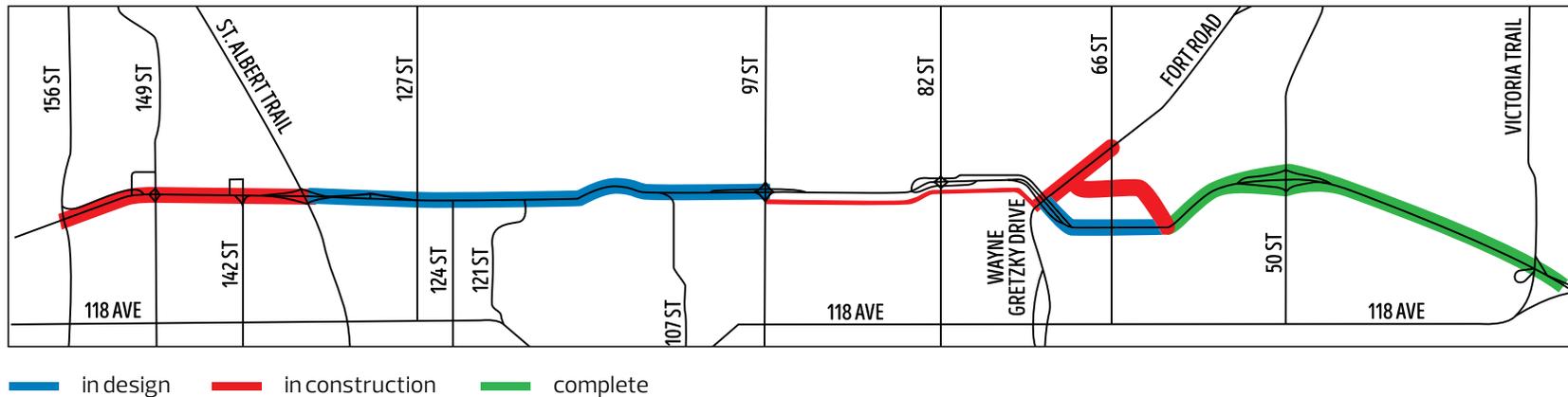
- + Three lanes of free-flow traffic in each direction
- + No traffic signals or direct accesses
- + 80 km/h target speed limit
- + Drivers enter and exit Yellowhead Trail at interchanges or from new parallel service roads
- + Improved safety, improved traffic flow and reduced travel time

# Project Lifecycle



- + 2021 – Concept plan complete
- + 2023 – Design complete/construction begins
- + 2027 – Construction completion

## Yellowhead Trail Freeway Conversion Program Map (2023)



# Design Highlights

## The design includes:

- + Removal of all traffic signals and direct accesses to Yellowhead Trail
- + Two new interchanges: one at 127 Street and one at 121 Street (previously referred to as the 115 Street interchange)
- + New roadway connections from 121 Street and 107 Street to the 121 Street interchange to provide access to Yellowhead Trail
- + New service roads parallel to Yellowhead Trail to manage traffic flow
- + New shared-use path on the south side of Yellowhead Trail from 142 Street to 107 Street
- + Shifting Yellowhead Trail centreline to the north approximately 18 metres from where it is now to make room for 127 Street interchange

The preliminary design includes the following changes since the Concept Planning Study (2021):

- + A separate pedestrian bridge crossing Yellowhead Trail at the new 127 Street interchange to improve the north-south connection
- + The new interchange at 121 Street has a direct on-ramp instead of an eastbound loop ramp
- + Changing the 121 Street interchange from an underpass to an overpass, with Yellowhead Trail going over 121 Street. This change:
  - + Improves drainage design by eliminating need for a large storage tank
  - + Reduces overall construction costs
- + Secondary access to Hagmann is no longer provided from the 121 Street interchange. A right-in access is provided from the 127 Street westbound off-ramp
- + Number of traffic lanes and their configuration within the project limits were optimized

# Preliminary Design

Rendering of 127 Street interchange



Rendering of 121 Street interchange



# Dovercourt Open Space, Landscaping and Active Transportation Plan

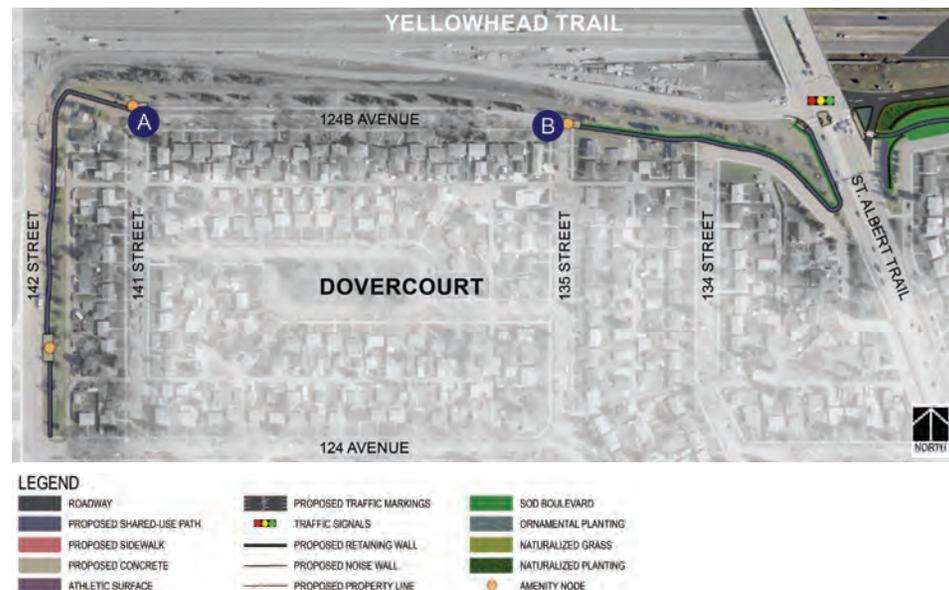
## What We Heard: Spring 2022 Community Engagement

- + General support for addition of shared-use path, small-scale amenities and select additional plantings along berm
- + Open space envisioned for walking, biking, children's play and dog walking
- + Desire to include fruit-bearing trees/shrubs, native vegetation, additional garbage cans, fitness equipment, off-leash dog areas, benches and gathering spaces
- + Consider safety in pathway design

This feedback informed the proposed neighbourhood design.

## Dovercourt – Proposed Neighbourhood Design Includes:

- + Maintaining recently constructed sidewalk on the north side of 124B Avenue and adding new sections of shared-use path to connect to 142 Street and to St. Albert Trail
- + An illuminated combined active mode facility that provides both a shared-use path and an on-street bike lane and maintains existing boulevard trees
- + Additional tree plantings on the existing berm and two small amenity nodes



## Yellowhead Trail: St. Albert Trail to 97 Street

### Proposed Design – 141 Street Amenity Area (Map Location A)

Plan view of the proposed design for the 141 Street amenity area



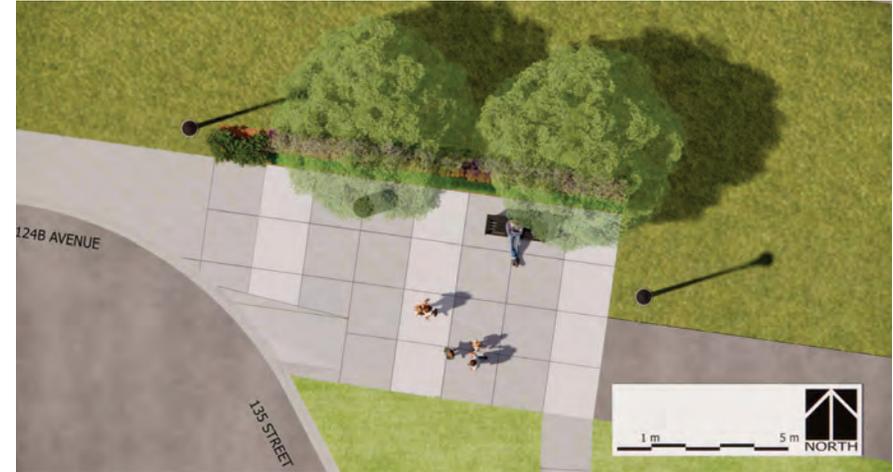
Rendering of the proposed design for the 141 Street amenity area



- + Connects to 141 Street and shared-use path and is the transition to the on-street shared bike path along 124B Avenue
- + Connects to a shared-use path along 142 Street
- + Focused as a community gathering place
- + Includes benches, plantings and waste receptacle

### Proposed Design – 135 Street Amenity Area (Map Location B)

Plan view of the proposed design for the 135 Street amenity area



Rendering of the proposed design for the 135 Street amenity area



- + Connects to 135 Street and shared-use path and is the transition to the on-street bike path along 124B Avenue
- + Focused as a community gathering place
- + Includes benches, plantings and waste receptacle

# Sherbrooke Open Space, Landscaping and Active Transportation Plan

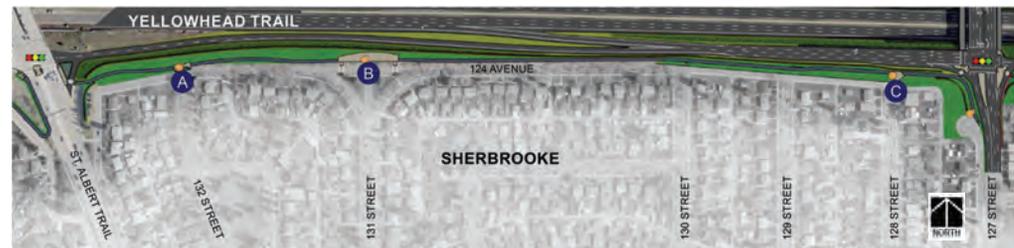
## What We Heard: Spring 2022 Community Engagement

- + General support for a curving noise wall, shared-use path and removal of the berm to provide more usable green space
- + General support for few new amenities
- + General support for adding new trees and plantings to screen noise wall
- + Open space envisioned for walking, jogging, biking, sitting/relaxing, outdoor play and dog walking
- + Desire to include benches, seating, picnic tables, garbage receptacles, community garden and fenced off-leash dog area
- + Consider safety and clear sightlines in pathway design

This feedback informed the proposed neighbourhood design.

## Sherbrooke – Proposed Neighbourhood Design Includes:

- + Removal of the existing berm and vegetation along Yellowhead Trail to accommodate the new eastbound service road
- + New noise wall of varying height with a new lower berm along Yellowhead Trail
  - + The top of the new noise wall will be at the same elevation as the top of the existing noise wall
- + Maintenance of the boulevard trees along 124 Avenue and addition of the new trees and landscaping, where possible
- + New illuminated shared-use path between St. Albert Trail and 127 Street



LEGEND		
ROADWAY	PROPOSED TRAFFIC MARKINGS	SOD BOULEVARD
PROPOSED SHARED-USE PATH	TRAFFIC SIGNALS	ORNAMENTAL PLANTING
PROPOSED SIDEWALK	PROPOSED RETAINING WALL	NATURALIZED GRASS
PROPOSED CONCRETE	PROPOSED NOISE WALL	NATURALIZED PLANTING
ATHLETIC SURFACE	PROPOSED PROPERTY LINE	AMENITY NODE

**Yellowhead Trail: St. Albert Trail to 97 Street**

**Proposed Design – 132 Street Amenity Area**  
(Sherbrooke Map Location A)

Plan view of the proposed 132 Street amenity area



Renderings of the proposed 132 Street amenity area (Sherbrooke Map A location)



- + Connects to 132 Street and the shared-use path
- + Focused as a community gathering place
- + Includes benches, plantings and waste receptacles

**128 Street and 130 Street amenity area design**

Renderings of the design between 129 Street and 130 Street (with no roadway narrowing)



Renderings of the proposed design between 129 Street and 130 Street (with roadway narrowing)



Renderings of the design between 128 Street and 129 Street (with no roadway narrowing)



Renderings of the proposed design between 128 Street and 129 Street (with roadway narrowing)



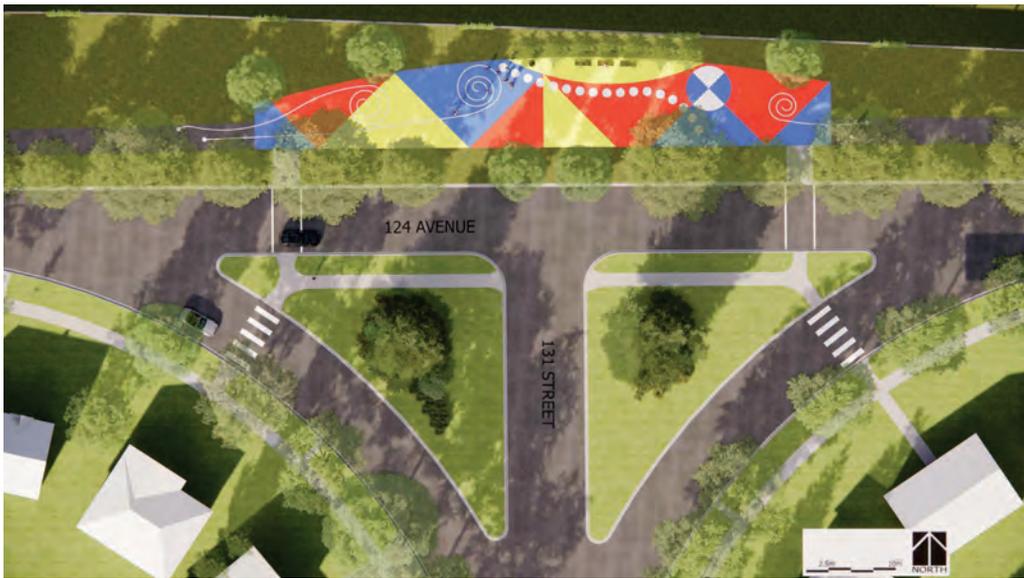
- + Narrowed 124 Avenue:
  - + provides traffic calming
  - + allows for a widened boulevard to increase opportunity for landscaping along the shared-use path and to screen noise wall from the neighbourhood side
- + improves the pathway user's experience
- + requires one traffic lane in each direction and parking restrictions (no parking) in this roadway section

# Sherbrooke Open Space, Landscaping and Active Transportation Plan

The images below show the proposed design for what is possible for the 131 Street amenity area.

## Proposed Design – 131 Street Amenity Area (Sherbrooke Map Location B)

Plan view of the proposed design for the 131 Street amenity area



- + Provides a gathering area and green space with no changes to 124 Avenue or 131 Street.
- + Includes benches, plantings, informal play surfacing and waste receptacles
- + Includes select tree removals for utility work

Renderings of the proposed design for the 131 Street amenity area



## Yellowhead Trail: St. Albert Trail to 97 Street

### Alternate Design – 131 Street Amenity Area (Sherbrooke Map Location B)

Plan view of alternate design for the 131 Street amenity area



Renderings of alternate design for the 131 Street amenity area



- + Provides a gathering area, and increases green space through the realignment of 124 Avenue
- + Includes benches, new landscape plantings and waste receptacles
- + Introduces traffic calming for this section of 124 Avenue
- + Includes select tree removals for utility work

edmonton.ca/[YellowheadSATto97Street](#)

### Proposed Design – 128 Street Amenity Area (Sherbrooke Map Location C)

Plan view of the proposed design for the 128 Street amenity area



Rendering of the proposed design for the 128 Street amenity area



- + Connects to 128 Street and shared-use path
- + Focused as a community gathering place
- + Includes benches, plantings and waste receptacles

# Prince Charles Open Space, Landscaping and Active Transportation Plan

## What We Heard: Spring 2022 Community Engagement

- + General support for a curving noise wall and shared-use path
- + Space envisioned for sitting/relaxing, biking and gathering
- + Desire to include benches, seating and picnic tables, garbage receptacles, a small off-leash dog area, community concession stand, dirt trails, shelter, Indigenous interpretive signage
- + Maintain existing vegetation and create space for recreation amenities

This feedback informed the proposed neighbourhood design.

## Proposed Neighbourhood Design Includes:

- + New noise wall from 127 Street to just east of 124 Street
- + The top of the new noise wall will be at the same elevation as the top of the existing noise wall
- + New illuminated shared-use path between 127 street and 121 Street, that extends to Blatchford.
- + New open space along Yellowhead Trail between 124 Street and 127 Street that incorporates amenity/rest areas along the shared-use path
- + Existing vegetation maintained, where possible, and additional landscaping provided in select locations



## Proposed Design – 126 Street Amenity Area (Prince Charles Map Location A)

Plan view of the proposed design for 126 Street amenity area



Renderings of the proposed design for 126 Street amenity area



- + Connects to 126 Street and shared-use path
- + Focused as a community gathering place and informal play space, with small scale skateboard features
- + Includes benches, plantings and waste receptacles
- + Informal play features include game-based pavement and a small sloped skateboard feature (yellow half disc)

## Proposed Design – 125 Street Amenity Area (Prince Charles Map Location B)

Plan view of the proposed design for the 125 Street amenity area



Renderings of the proposed design for the 125 Street amenity area



- + Connects to 125 Street and shared-use path
- + Focused as a community gathering place
- + Includes benches, plantings and a waste receptacle

## Yellowhead Trail: St. Albert Trail to 97 Street

### Proposed Design – 124 Street Amenity Area (Prince Charles Map Location C)

Plan view of the proposed design for the 124 Street amenity area



Renderings of the proposed design for the 124 Street amenity area



- + Connects to 124 Street and shared-use path
- + A rest stop for people traveling along shared-use path network and a community gathering place
- + Includes bench and a waste receptacle



edmonton.ca/[YellowheadSATto97Street](#)

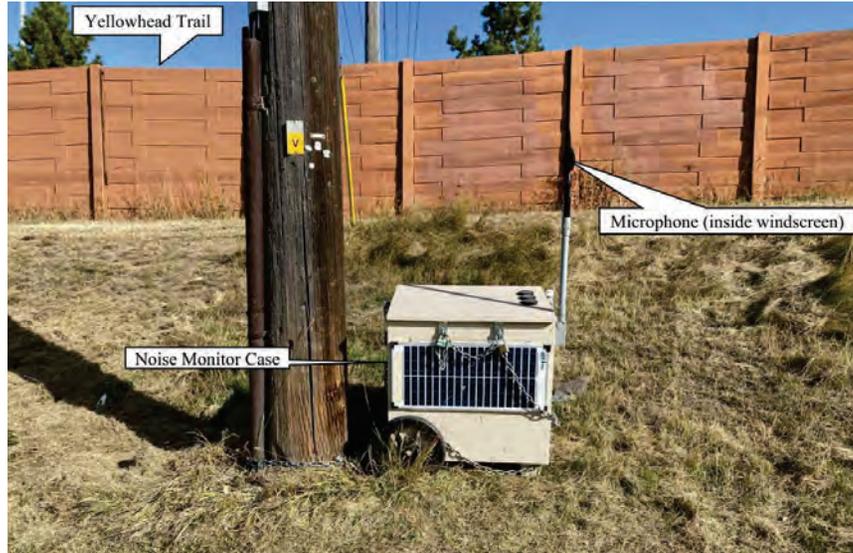
### Proposed Prince Charles Fitness Nodes



- + Gravity-based fitness and exercise equipment to leverage the force of gravity to enhance fitness and promote overall well-being
- + Three separate nodes have been identified for Prince Charles

# Noise Study and Mitigation

Image of one of the noise monitoring locations within the project limits



- + Noise monitoring along Yellowhead Trail was completed during the Concept Planning Study (2020)
- + Noise modeling was completed to determine the required noise mitigation
- + New noise wall heights in Sherbrooke and Prince Charles have been designed to match the existing top of noise wall elevations
- + Resulting new noise wall heights will vary from 3.1m to 5.3m due to the varying ground elevations and changes to the existing berms

# Proposed Noise Wall Features

- + Emphasis on pedestrian comfort and improved sightlines
- + Design incorporates vandal-resistant transparent panels to reduce the wall's visual height
- + Yellowhead Trail side wavy pattern to be consistent with the patterns of the walls already constructed to the west and east
- + Neighbourhood-facing grass pattern visually reduces wall's sense of length
- + Vine plantings and hangers used on select sections to visually soften the noise wall where other vegetation cannot be added

Renderings of the Noise Wall Features



# Dovercourt: Neighbourhood Traffic Concerns

## Risky Driving Behaviours (Street Labs Update)

Since the temporary closure of 142 Street and changes to access management for Yellowhead Trail, residents have expressed concerns about drivers **speeding and shortcutting** on 124 Avenue.

Speeding (combined with a higher traffic volume) increases both the chance of crashes between drivers and people walking, biking and rolling, as well as the likelihood of severe injuries or fatalities.

In response, the following actions were taken:

- + Yellowhead Trail Project Update engagement (May 2022)
- + Vision Zero Street Labs introductory meeting (June 2022)
- + Online survey to determine main concerns (July/August 2022)
- + In-person engagement session (August 11, 2022)
- + Design solutions and implementation (September 2022):
  - + A traffic diverter (using adaptable barriers) was added to restrict westbound vehicles from entering 124 Avenue at St. Albert Trail
  - + Speed humps on 124 Avenue between 135 Street to 142 Street were reviewed, but not installed as it was determined that further monitoring was needed.
- + Transition from Street Lab to Neighbourhood Traffic Management Plan (December 2022)

## Access/Egress from St. Albert Trail

Since 2021, residents have expressed concerns about the access/egress from Dovercourt to St. Albert Trail due to **heavy traffic and congestion**.

The City has determined that two full traffic signals should be added to increase safety for drivers leaving and entering via St. Albert Trail at Dovercourt Avenue and 122 Avenue. Funding for the signals was approved in December 2022.

Image of a traffic diverter



# Dovercourt/Sherbrooke: Neighbourhood Traffic Management Plan

## Risky Driving Behaviours

After a traffic diverter was installed, traffic counts showed traffic had been reduced by over 90% near St. Albert Trail and by ~50% west of 135 Street! While traffic has dropped, the following additional measures are needed to reduce speeding and traffic volume:

- + Three new speed humps on 124 Avenue between 135 Street and 142 Street (Summer 2023)
- + Conversion of the temporary traffic diverter to the permanent one at 124 Avenue and St. Albert Trail (2024)

## Traffic Signals

Based on feedback and technical review, existing pedestrian signals will be converted to full traffic signals at Dovercourt Avenue and 122 Avenue along St. Albert Trail in summer 2023.

Pending constructability review, the following will be introduced to further improve resident's safety after installation:

- + Dovercourt:
  - + one raised crosswalk on Dovercourt Avenue (2024)
  - + three new speed humps on 122 Avenue (2023)
- + Sherbrooke:
  - + one raised crosswalk on 122 Avenue (2024)
  - + two new speed humps on 122 Avenue (2023)

# Proposed Neighbourhood Traffic Management Plan



Existing Signals



# 2023 Construction Activities

## Building Demolition

- + Several buildings will be demolished north of Yellowhead Trail between 129 Street and 121 Street starting in May

## Detour Roads

- + Temporary detour roads will be constructed this summer and fall along 127 Street and Yellowhead Trail to allow for construction of the new 127 Street interchange
- + 127 Street at Yellowhead Trail will be temporarily realigned, interim traffic signals and streetlights will be installed



- Detour Road – Westbound
- Detour Road – Eastbound
- Detour Road – Northbound
- Detour Road – Southbound
- Temporary Traffic Light
- Temporary Noise Wall Removal

**Note:** The detour road will require removal of a section of the existing noise wall, west of 127 Street.

## Bridge and Wall Foundations

- + Piling and foundation work at the 127 Street and 121 Street interchange locations will take place in summer 2023 and into 2024

## Utility Work

- + Utility related construction will occur within the project area from spring to fall and includes relocation and construction of underground gas, power, telecommunication, sanitary, storm and water lines.

## Storm Tunnel Construction

- + A large storm sewer tunnel will be constructed along the south side of Yellowhead Trail, from 131 Street to 121 Street
- + The tunnel will prevent flooding of the underpasses along Yellowhead Trail at St. Albert Trail, 127 Street, and CN/Via Rail during heavy rainfall events
- + In 2023, the entry and exit shafts will be constructed near 121 Street and the intersection near 124 Avenue and 131 Street, respectively

### Yellowhead Trail Exit and Entry Access Maps



**Note:** Construction of the exit shaft near 131 Street, along 124 Avenue, will require removal of a section of the existing noise wall, to access the area from the existing St. Albert Trail eastbound on-ramp.

**Note:** Tree removals that are required to proceed with construction work are noted on the following board.

# 2023 Construction Activities

## Tree Removal

- + Select trees were removed in April and will continue in May/June 2023 to accommodate construction, including
  - + Tree stands north and south of existing noise wall in Sherbrooke and Prince Charles
  - + Select trees along south side of Hagmann Estate Industrial Area
- + The project team worked closely with the City's Urban Forestry Team to minimize number of trees removed and to ensure remaining trees are protected during construction
- + New trees and naturalization plantings will be added following construction

TREE REMOVAL: ST. ALBERT TRAIL TO 127 STREET

TREE REMOVAL: 127 STREET TO 121 STREET



TREE REMOVAL: 121 STREET TO 107 STREET



- Spring 2023 Removals
- Future Removals

# 97 Street Active Transportation Improvements

- + The existing sidewalk on the west side of 97 Street from 124 Avenue to 125A Avenue will be widened to a 3.5m shared-use path; curb ramps will be reconstructed.
- + Bus stop #1199 (for bus routes 9 and 103) on the bridge will be removed to provide more space for people who walk, bike and wheel
- + The sidewalk on the southeast side of 97 Street will be extended around the eastbound on-ramp to connect with the alley behind the 96 Street cul-de-sac; curb ramps will be reconstructed



LEGEND		
ROADWAY	PROPOSED TRAFFIC MARKINGS	SOD BOULEVARD
PROPOSED SHARED-USE PATH	TRAFFIC SIGNALS	ORNAMENTAL PLANTING
PROPOSED SIDEWALK	PROPOSED RETAINING WALL	NATURALIZED GRASS
PROPOSED CONCRETE	PROPOSED NOISE WALL	NATURALIZED PLANTING
ATHLETIC SURFACE	PROPOSED PROPERTY LINE	AMENITY NODE

# Climate and Resilience

Climate Resilient Edmonton: Adaptation Strategy and Action Plan is Edmonton's Climate Change Adaptation Plan. The strategy outlines how the City of Edmonton will plan and invest resources to increase our communities' climate resilience, minimize the exposure of people and assets to the impacts of climate change and take advantage of new opportunities as they arise.

The Strategy and Action Plan suggests that climate resilience of infrastructure be considered in order to meet a new climate future. This includes:

- + Placement of utility infrastructure
- + Permeable materials for hard structures
- + Integration of cooling stations and potable water
- + Design of bridges and buildings
- + Policies that advance climate proofing in new neighbourhoods
- + Vegetation and green spaces

A climate and resiliency lens was applied to the design and construction materials and methods considered for the Yellowhead Trail: St. Albert Trail to 97 Street project.

## Climate

### Emissions Study

- + An Air Quality Assessment study was conducted by RWDI Air Inc. to assess emissions along Yellowhead Trail (2022-2023)
- + The study is being finalized and results will be shared when available

## Resilience

### Infrastructure

- + 4.2km of new shared-use paths and 1.7 km of new sidewalks will be built to encourage more walking, biking and wheeling
- + Drought resistant landscaping will be planted that does not require irrigation
- + Number of new trees will be planted to provide shade and cooling areas
- + Stormwater storage designed for 1:100 year storm events will manage and minimize flooding
- + Recycled materials from onsite sources will be used in the pavements

- + Topsoil and clay materials will be re-used where possible within the project area, to minimize hauling of material offsite
- + Wide boulevards will provide additional landscaping and snow storage
- + Landscaping designed with ecosystem changes in mind

### Climate Variable Assessed



Image source: Climate Resilient Edmonton Adaptation Strategy and Action Plan

# What's Next

- + Your feedback will be used to help us finalize the preliminary design
- + A public information session will be held in Spring 2024 to share the detailed design and construction updates
- + Construction will take place between 2023 to 2027

Thank you for your patience during construction!