

# Welcome!

## KLO Bridge replacement and roundabout: info session

### PURPOSE

To provide an overview of the design of the KLO Bridge, roundabout and surrounding improvements

To communicate future construction activities and detour information





## LAND ACKNOWLEDGMENT

We acknowledge that our community is located on the traditional, ancestral, unceded territory of the syilx/Okanagan people. We are grateful to have the opportunity to work, create and live on these Okanagan lands.

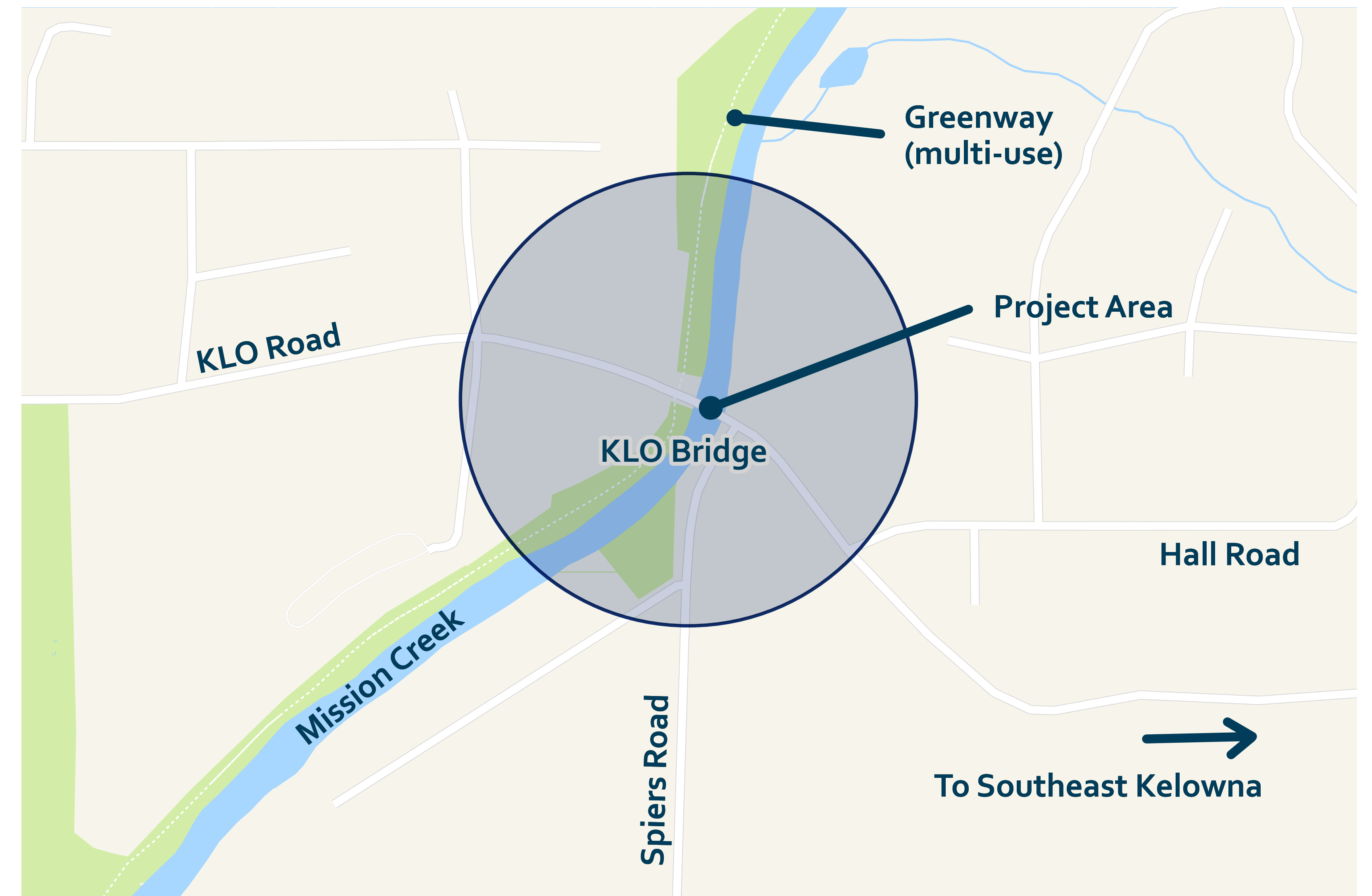
# KLO Bridge: A gateway to southeast Kelowna

Southeast Kelowna is a rural neighbourhood that is predominantly orchards and farms, suburban neighbourhoods and a gateway to forestry operations and major tourist destinations.

Primary access to the area is via KLO Road, a two-lane arterial road that crosses Mission Creek via the KLO Bridge.

KLO Bridge sees around 15,000 vehicles cross the bridge in a typical weekday and roughly 1,200 vehicles per hour during the afternoon peak hour (~4 p.m. to 5 p.m.) (*City of Kelowna traffic data, 2021 and 2023*).

The existing bridge was built in 1949 and is at the end of its useful service life at 75-years old.



# Replacing the KLO Bridge and improving the surrounding area

Built in 1949, the KLO Bridge is nearing the end of its service life. While the structure is still safe for travellers, replacement is needed due to:

**Aging infrastructure:** The bridge has reached the end of its service life (75 years).

**Low bridge height:** The existing height of the bridge does not accommodate for high flood waters.

**In-stream concrete piers:** Existing in-stream bridge piers obstruct flow of Mission creek and can cause collection of large debris.

**Limited pedestrian or cycling facilities:** Limited pedestrian and cycling facilities on the bridge (currently accommodates pedestrian crossing at the south side, only).

**Safety concerns at Mission Greenway trail crossing:** The at-grade trail crossing on the west end of the bridge is a safety and operational challenge due to volume of traffic and travel speeds.

**Challenging intersection for motorists to make turn maneuver at Spiers Road and KLO Road:** Unsatisfactory in terms of sightlines, traffic control and traffic operation.



*Low bridge height and concrete pile, in-stream*



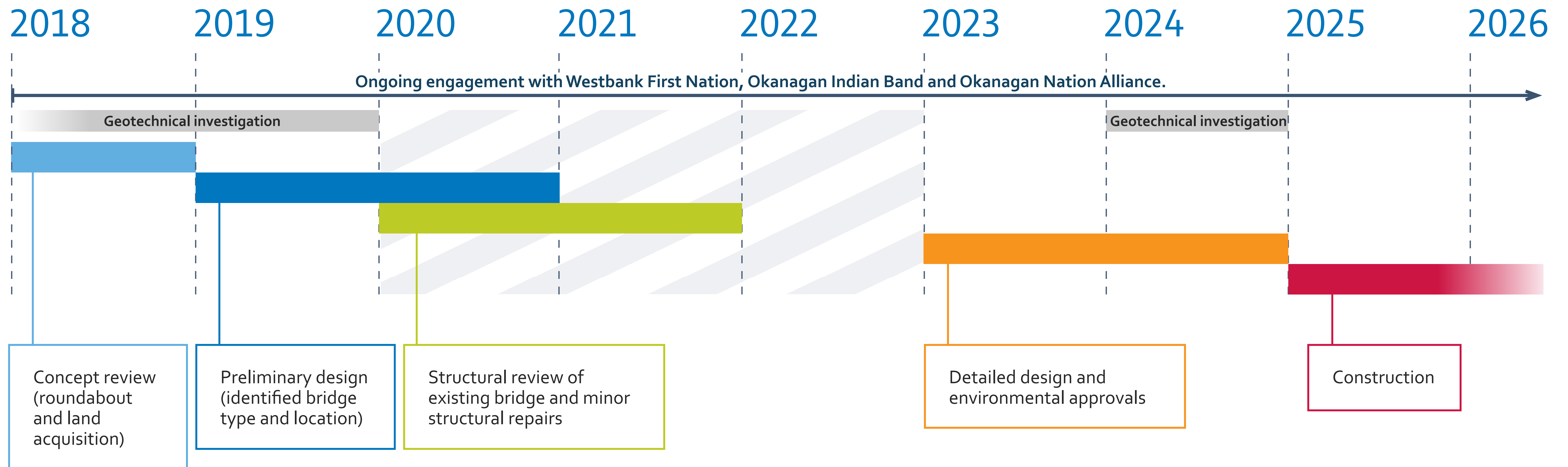
*Concrete pile creates barrier for in-stream debris*



*At-grade Greenway trail crossing with pedestrian flashers*

# Project timeline

The City of Kelowna has been working on the KLO Bridge replacement and roundabout for several years.



 Project paused due to COVID-19

# Existing conditions

The following figure shows the existing conditions of the project area.



# Project area design (aerial)

The following image shows the new design of the KLO Bridge project area.

## PROJECT DETAILS

Estimated construction cost: ~\$17M

Total project cost: ~\$23M

Estimated construction start: 2025

Estimated construction end: 2026

Phase: Design and construction



# Features of project area design

Bridge elevation to be raised to accommodate extreme flooding events

Greenway access under proposed bridge **removes at grade road crossing**

Bike lanes added to enhance cyclist safety

Connect to existing sidewalk to provide **pedestrian connection** to greenway and east of bridge crossing

Bridge to accommodate **watermain and sanitary sewer** facilities

Separated multi-use pathways on the bridge connect the Greenway to parking

Existing **bridge** to be **removed** including central piers in creek

Property has been purchased by City and will be **dedicated park** and riparian area with future considerations for **trail network**

Future **water system upgrades** (booster station and pressure reducing valve)  
Future consideration for **washroom facility**

Proposed **public parking area**

Maintain **bus stop** locations

**Roundabout** to improve traffic flow and safety

Existing **parking area** to be **maintained**



# Design rendering (looking north)

Overall view of Greenway, KLO Bridge and roundabout looking north towards parking lot



# Design renderings

*Approaching the bridge from the west on KLO Road*



*Roundabout looking towards Spiers Road and KLO Road.*



*Entering roundabout from east and looking towards new bridge with Spiers Road on left*



*Increased bridge height and Mission Greenway multi-use pathway access under new bridge.*



# KLO Bridge: past, present and future

## PAST



### The original A-Truss bridge over Mission Creek.

In 1948, the old wooden KLO Bridge was destroyed by surging waters from Mission Creek.

## PRESENT



The present day bridge was built in response to the washed out bridge in 1949.

## FUTURE



The new KLO Bridge has been designed with added climate resiliency to accommodate for a 1 in 200-year extreme flooding event.

### FEATURES

- Span length: 35m
- Height: 361.0m (increase of ~2.7m)
- Concrete box girder bridge with concrete deck
- Underpass for greenway trail
- Clearspan bridge to improve creek function and aquatic habitat

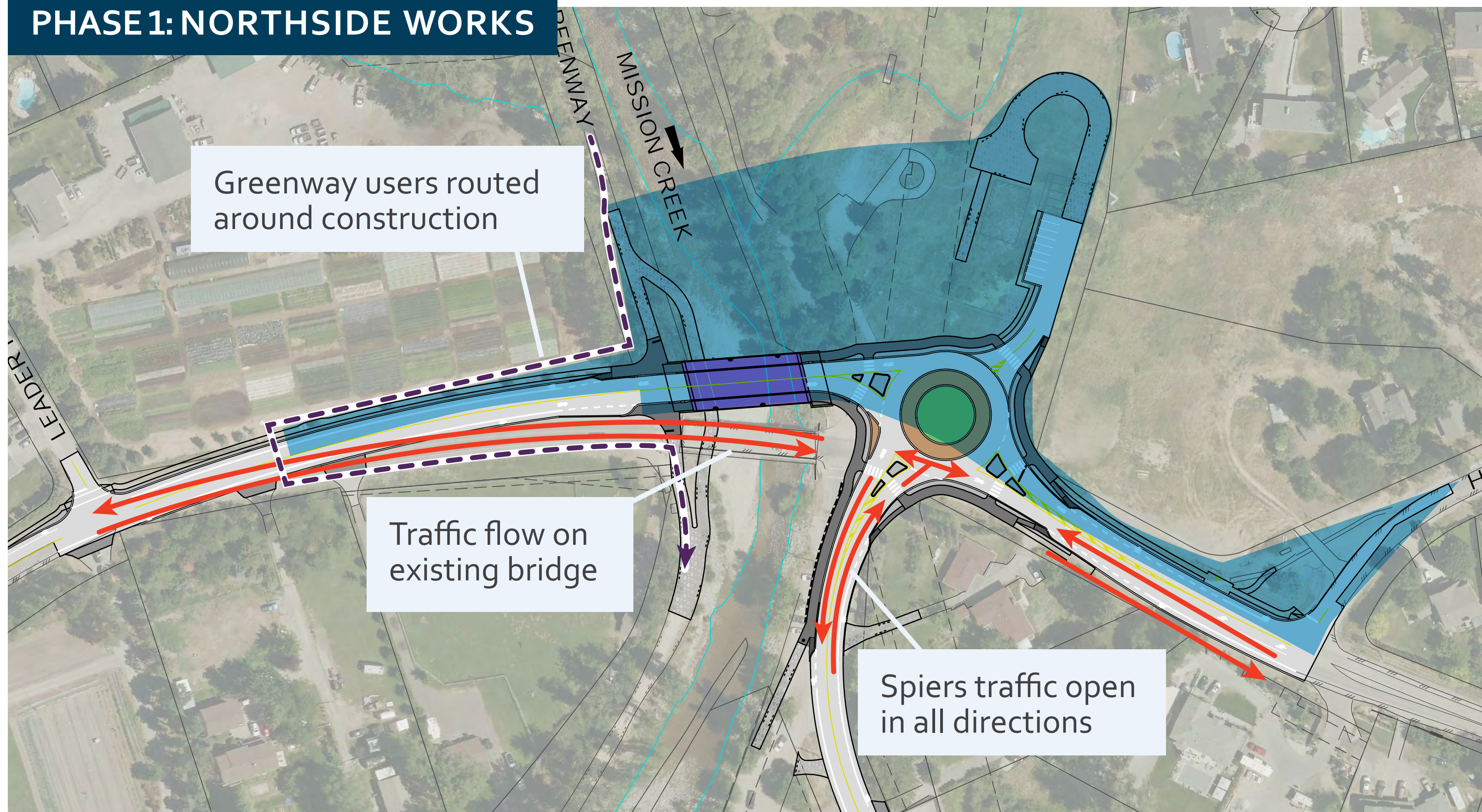
# Construction phasing and timeline

## EARLY WORKS: PREPARATION FOR CONSTRUCTION

Date	Proposed works	Traffic and Greenway Impacts
Fall 2024	FortisBC gas transmission main replacement FortisBC Electric, Telus and Rogers to relocate portions of their aerial and underground infrastructure	Potential for single lane alternating traffic. Traffic control will be present to direct flow.

■ Construction Area   
 → Traffic Flow   
 - - - Greenway Flow

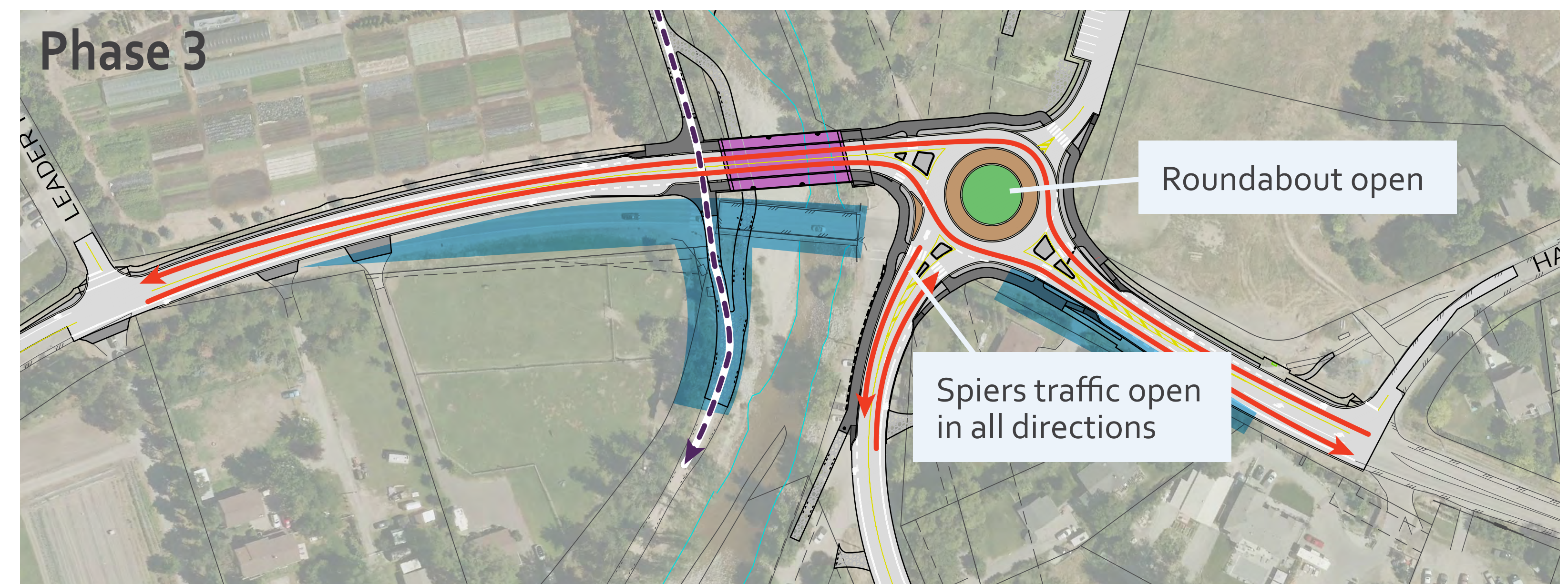
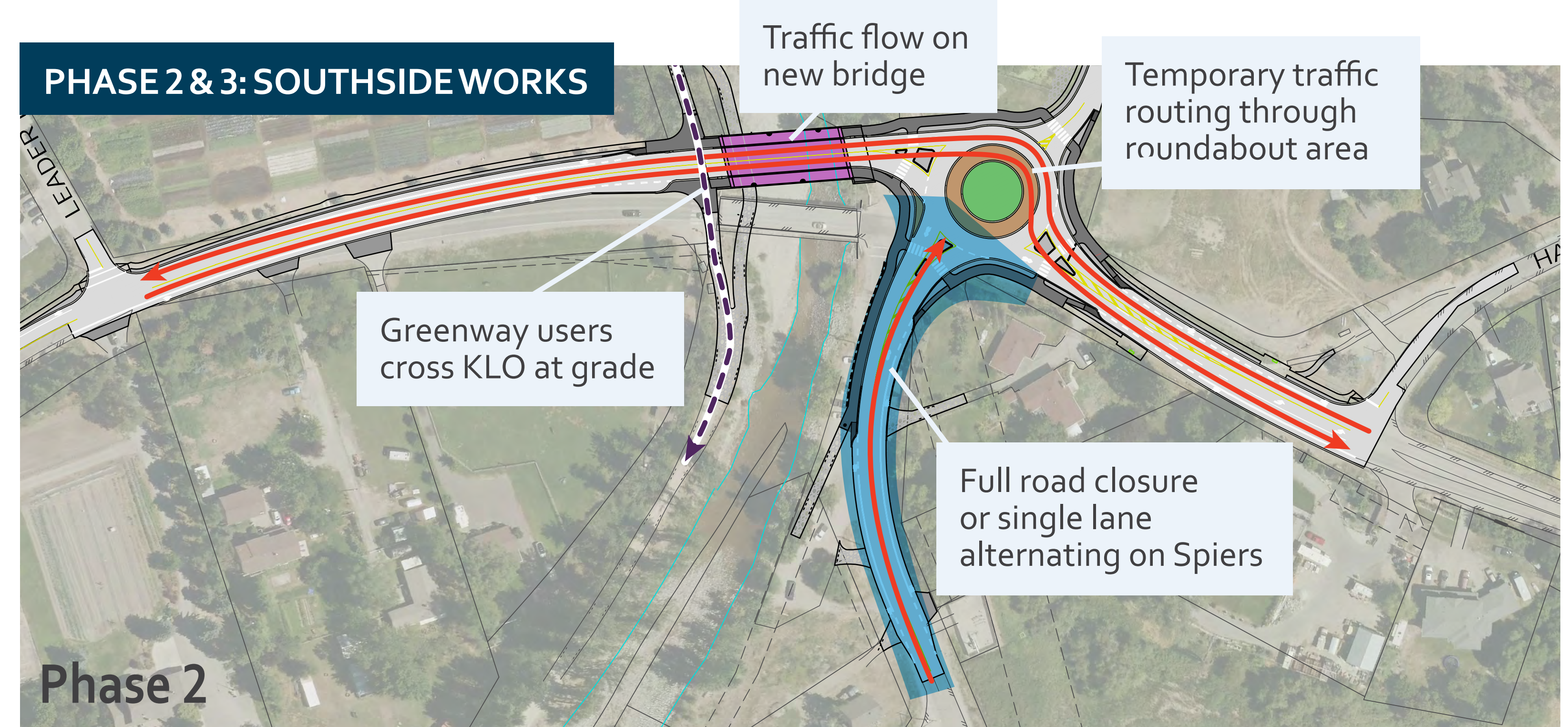
## PHASE 1: NORTHSIDE WORKS



Estimated Date	Proposed works	Traffic and Greenway Impacts
Spring 2025	Grading and riprap armoring New bridge pile installations New bridge abutments Approach fills and utilities (intermittent dependent on phasing)	All traffic will be maintained on existing road and bridge. Greenway users will be required to detour around construction site.
Summer 2025	New bridge installation	

In early 2025, construction will begin to replace KLO Bridge and install a roundabout and other improvements to the area. There will be minimal traffic disruptions and a minor detour for Greenway users. Reader boards will be on-site to communicate traffic pattern changes.

## PHASE 2 & 3: SOUTHSIDE WORKS



Estimated Date	Proposed works	Traffic and Greenway Impacts
Summer to Fall 2025	Approach fills and utilities Old bridge removal	All traffic will be rerouted to the new alignment and new bridge. Greenway users will no longer have a detour.
Summer 2026	Landscaping and wrap-up	Full road closure or single lane alternating traffic on Spiers Road (phase 2).

# Thank you!

To receive project updates, visit [kelowna.ca/subscribe](https://kelowna.ca/subscribe) and sign up for news releases. Project updates will also be available on [kelowna.ca/klobridge](https://kelowna.ca/klobridge).

## Questions?

### Contact the City of Kelowna:

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