

# 102 AVENUE OVER GROAT ROAD BRIDGE REPLACEMENT PROJECT



New bridge design

## MARCH 2014

The existing 102 Avenue over Groat Road Bridge is 100 years old and has reached the end of its service life (lifespan). A replacement bridge will accommodate future traffic needs, site characteristics, environmental impacts, constructability and cost. The bridge will be closed for approximately 15 months beginning July 2014 for construction of the replacement bridge.

### DESIGN

The new bridge will maintain the existing four-lane traffic configuration, but with wider lanes and improved accessibility for both bikes and pedestrians.

The final project includes:

- Stabilization of both ravine slopes using soil nails.
- A new concrete bridge deck with asphalt surfacing.
- Upgrades to the drainage infrastructure.
- Safety improvements on both 102 Avenue and Groat Road.
- Accessibility for other modes of transport.
- Wider sidewalks on both sides of the bridge with enhanced barrier protection for pedestrians.
- Enhanced bike lane connectivity.
- Wider vehicle lanes to accommodate ETS buses.

### CONSTRUCTION

Prior to construction, the City will carry out visual inspections of nearby homes and businesses to assess their existing conditions. In 2013, Drainage Services installed a drainage drop shaft structure along the ravine.

In February 2014, construction began with tree removal along the Groat Ravine. This will be followed by soil nailing required to stabilize the slope underneath the bridge.

The bridge itself will be closed **July 1, 2014** and demolished, after which construction will begin on the new replacement bridge.

### WELLINGTON BRIDGE

Crews will undertake shoring work on the nearby Wellington Bridge in April 2014 in order to accommodate trucks and heavy equipment getting to the work site.

#### CONSTRUCTION TIMELINE

2013	<b>Completed</b> <ul style="list-style-type: none"><li>• <i>Drainage upgrades</i></li></ul>
2014	<b>Ongoing/Upcoming</b> <ul style="list-style-type: none"><li>• <i>Tree clearing</i></li><li>• <i>Watermain replacement</i></li><li>• <i>Shoring of Wellington Bridge</i></li><li>• <i>Soil nail installation</i></li><li>• <i>Bridge closed July 1</i></li><li>• <i>Bridge demolition</i></li><li>• <i>Bridge pilings</i></li></ul>
2014-15	<ul style="list-style-type: none"><li>• <i>Bridge abutment</i></li><li>• <i>Erection of girders</i></li></ul>
2015	<ul style="list-style-type: none"><li>• <i>Bridge deck</i></li><li>• <i>Paving and road tie-ins</i></li><li>• <i>Opening of new bridge in fall</i></li></ul>

## ROAD IMPACTS

Suggested alternate routes for the 15-month closure include 107 Avenue and 111 Avenue.

There will also be periodic closures on Groat Road, mostly during off-peak hours and weekends. These closures are required during demolition of the existing structure and erection of new bridge girders. Bridge demolition is scheduled to take place over two to three weekends, during which time Groat Road will be closed.

Parking bans and peak hour tow-away zones will also be in place along 124 Street and 138 Street between 102 Avenue and Stony Plain Road for the duration of construction.

## TRANSIT IMPACTS

Bus that currently cross the bridge will be detoured to Stony Plain Road via 124 Street. This will affect Routes 1, 14, 100 and 120. There will be a free bus shuttle service for pedestrians and ETS customers.

## RESIDENT & BUSINESS IMPACTS

Access for residents and businesses will be maintained throughout construction. Signs with general information will be posted advising how to access businesses.

## NOISE IMPACTS

There will be noise and dust from construction, but the noisiest activities are scheduled to take place during the day. Contractors are required to mitigate noise and dust during construction.

## TRAIL IMPACTS

The wooden sidewalk on the west side of Groat Road below the bridge will be closed during demolition. The closure will be coordinated with special events such as the Heritage Festival to ensure access along Groat Road is maintained.

## TREE REMOVAL & BANK STABILIZATION

Tree clearing provides the necessary room for heavy equipment to install soil nails along the Groat Ravine. This technique involves placing long steel bars into the slopes



*Current bridge*

to improve stability. The area will be re-landscaped with native trees and shrubs once the new bridge opens in fall 2015.

## OTHER PROJECTS IN THE AREA

Several neighbourhood reconstructions will occur concurrent with bridge construction from May to October:

- Grovenor (2014)
- North Glenora (2014)
- Glenora (2014-15)
- Westmount (2015)

## PUBLIC INVOLVEMENT

The City will share the final bridge design, construction details and detour information at a public meeting **Thursday, March 13, 2014** at the Royal Alberta Museum (12845 102 Avenue).

### MORE INFORMATION

If you would like to receive project bulletins and updates, fill out our sign-up form on the project webpage, go to <http://eepurl.com/PLE2z>, or scan the QR code below.

