

Welcome



Welcome to the Open House for the City of Winnipeg's

Lyndale Drive Retaining Wall Study

We want to hear from you. Please feel free to:

- View the recommended design concepts and information presented
- Ask questions and talk with study representatives
- Show support for your preferred concepts. Provide feedback on concepts

About the Study

This study is a continuation of riverbank assessment and stabilization projects for the Lyndale Drive Park area.

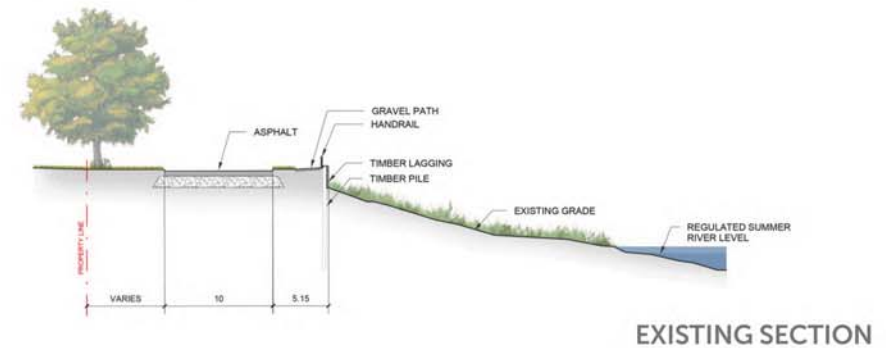
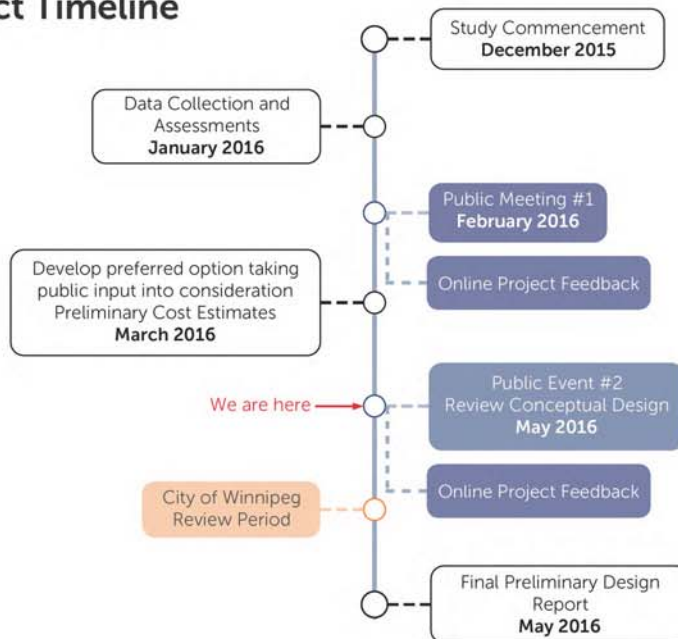
The section of Lyndale Drive between Claremont Avenue and Gauvin Street has had a history of riverbank instabilities. Ongoing riverbank movements and deterioration of the retaining wall will pose a risk to the road, dike, sewers, and other infrastructure at the top of the riverbank.

Study Considerations

The project consists of an engineering study and preliminary design exercise. Based on public input from Public Meeting #1, the following are important design considerations:

- Safety and Accessibility
- Riverbank Stabilization
- Bikes and Pedestrians
- Local Traffic and Parking Impacts
- Cost
- Construction Process (road blockages, traffic, etc.)
- Maintenance (snow clearing, mowing, trash pick-up)
- Appearance (Plantings, Materials, Views)
- Environmental Impacts

Project Timeline



RIVERBANK INSTABILITY - MONCK TO TACHE

The three preliminary design options developed were evaluated on the following criteria:

CRITERIA & DESCRIPTION

Pedestrian Experience	Cyclist Experience	Aesthetics	Neighbourhood Impacts	Project Management
<ul style="list-style-type: none"> ▪ Walkway width ▪ Shared multi-use pathway vs. pedestrian only ▪ Lower bank trail accessibility ▪ Access points and proximity to river ▪ Visibility and safety 	<ul style="list-style-type: none"> ▪ Upper pathway shared with pedestrians ▪ Cycling on roadway (AT) ▪ Lower trail for slower/recreation cycling ▪ Connectivity and Linkages 	<ul style="list-style-type: none"> ▪ Hand rail design ▪ Retaining wall design ▪ Naturalized landscapes ▪ Views from roadway and paths ▪ Public seating options ▪ Maintenance requirements and ease 	<ul style="list-style-type: none"> ▪ City boulevard ▪ Road construction ▪ Construction Process: <ul style="list-style-type: none"> ▪ noise and traffic; ▪ duration and extent of disturbance; ▪ local traffic and parking. 	<ul style="list-style-type: none"> ▪ Feasibility ▪ Costs ▪ Schedule risk (river level) ▪ Duration ▪ Season for construction



The recommended design options were selected to reflect the public's concerns and feedback in the following ways:

Improved Riverbank Stability

All Options include permanent riverbank stabilization using rockfill columns and new riprap erosion protection along the shoreline.

Options 1 & 2 – infilling of slope eliminates the wall and handrail, but increases the degree of riverbank stabilization required.

Option 3 – gabion wall structure with handrail reduces fill on the riverbank and also the degree of stabilization works required.

Long-Term Solution

All Options are designed to satisfy long-term riverbank stability requirements to preserve the park and top of bank infrastructure. New riprap along the shoreline will provide erosion protection to prevent future loss of bank and instability. Rockfill columns will result in a permanent improvement to riverbank stability. The gabion wall structure will be selected to satisfy a design life of 75 years.

Pedestrians & Cyclists

Option 1 - includes an upper sidewalk with a lower bank gravel trail.

Option 2 & Option 3 - include an upper hard surface multi-use path with a lower bank gravel trail.

All Options - roadway width remains consistent at 10m to easily accommodate cyclists.

Community-Oriented Site

All Options provide opportunities to enjoy and use the riverbank that include walking and running, recreational and commuter cycling, dog walking, canoe launching, public seating and access to winter River Trail. East and west connections from the lower bank trail will improve connectivity along Lyndale Drive.

The recommended design options were selected to reflect the public's concerns and feedback in the following ways:

Hand Rail & Fencing

Option 1 & Option 2 - gradual vegetated in-filled slope is designed to public safety standards and do not require a railing.

Option 3 will require a handrail along the top of the wall for safety reasons.

Naturalized Riverbank

All Options include naturalized riverbank consisting of perennial grasses, hardy shrubs and wildflowers approved by City Naturalist. Plants that enhance riverbank stabilization.

Improve Connections

Lower bank trail at the east and west ends (Monck Street and Gauvin Street) will connect to the upper pathway and roadway in the future.

Access to River

All Options include gravel surface lower bank trail meeting the City of Winnipeg's Accessibility Design standards.

Option 3 - lower bank river trail as close to the riverbank as functionally possible.

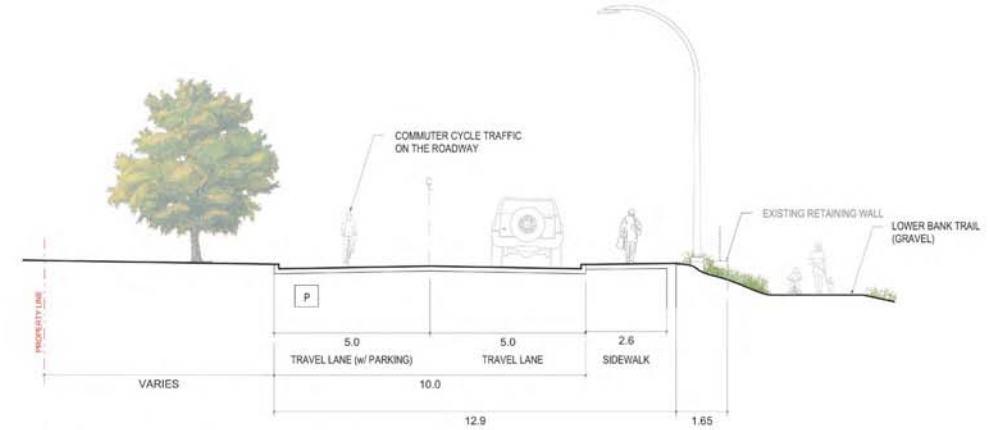
Option 3 - gabion structures allows for informal seating along lower riverbank.

Common to **All Options** is the addition of limestone blocks at the river edge to allow for fishing, canoe or kayak launching point.

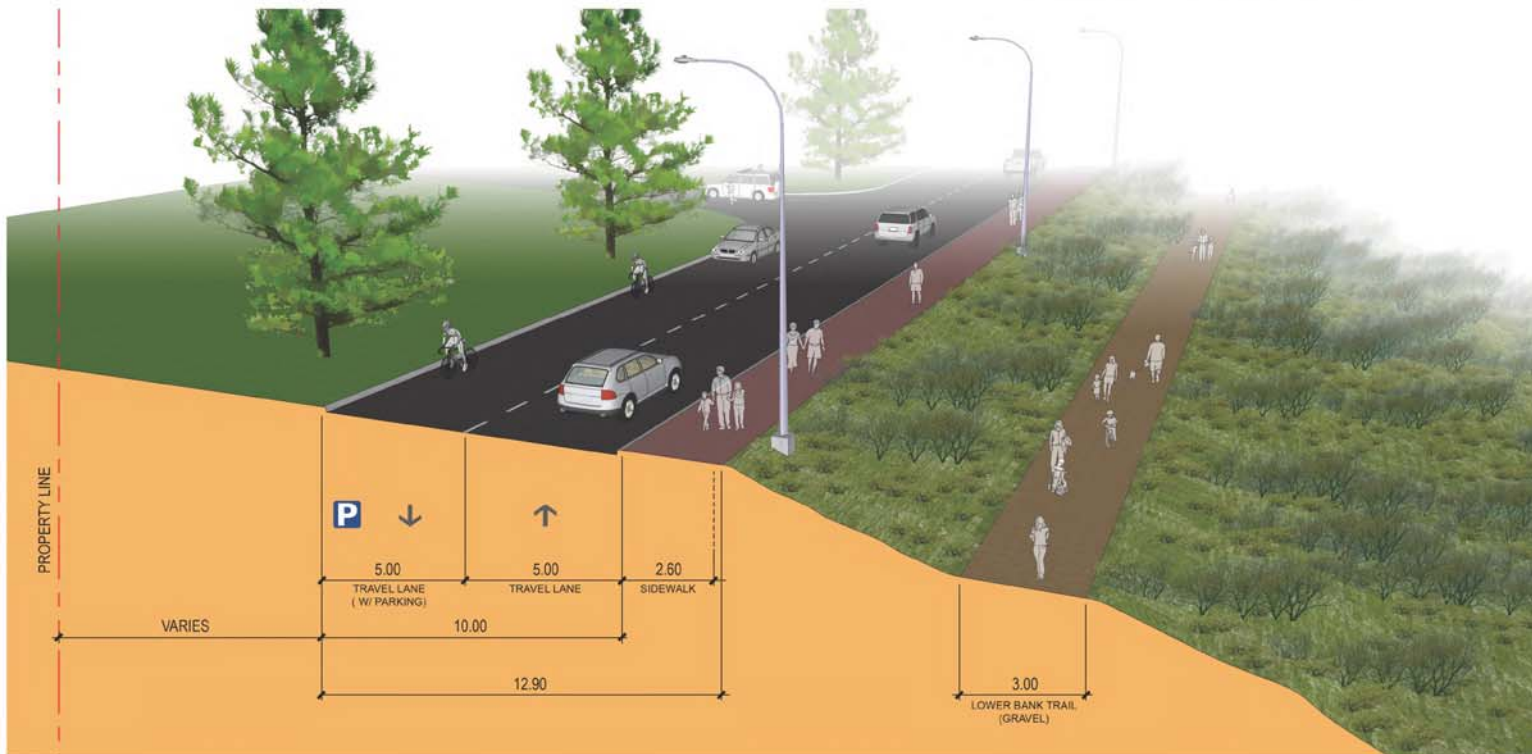
Safety

All Options have been designed with Crime Prevention Through Environmental Design (CPTED) best practices in mind. The cantilevered upper pathway design option initially shown was abandoned based on public feedback as a possible safety concern. Lower bank trail is designed for visibility from roadway and upper pathway.

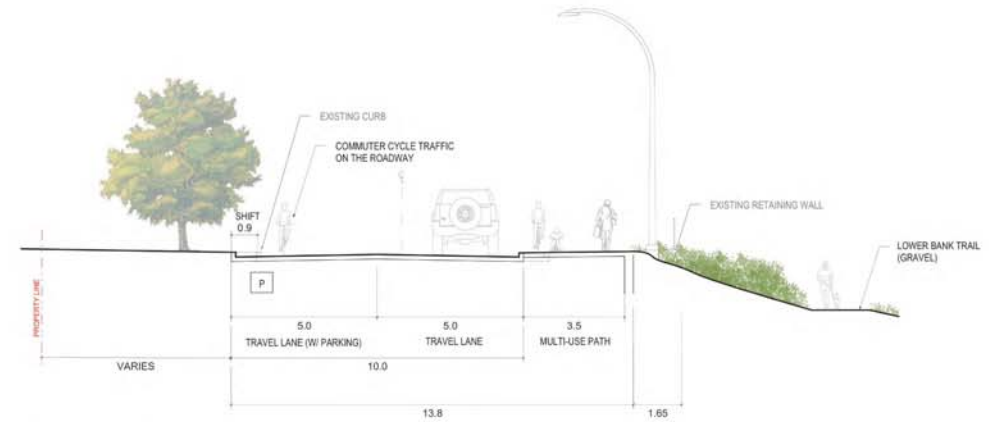
- Least impact – no road shift
- Curb on north side of road does not move
- In-filled gradual vegetated slope - naturalized bank of shrubs, grasses, trees
- No railing required
- Sidewalk narrowed – 2.6m pedestrian only sidewalk
- Accessible lower bank trail with gravel surface
- Lower trail higher to roadway, less flood prone
- 10m roadway width accommodates commuter cyclists



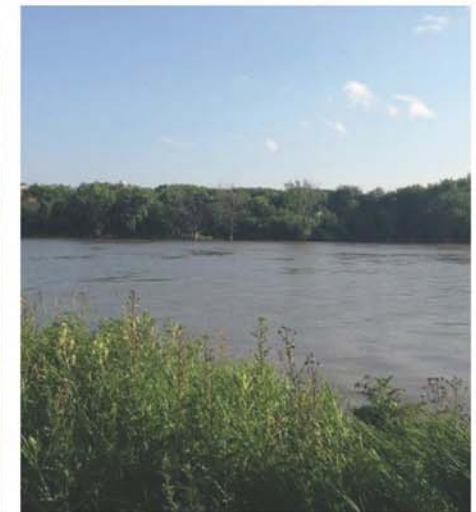
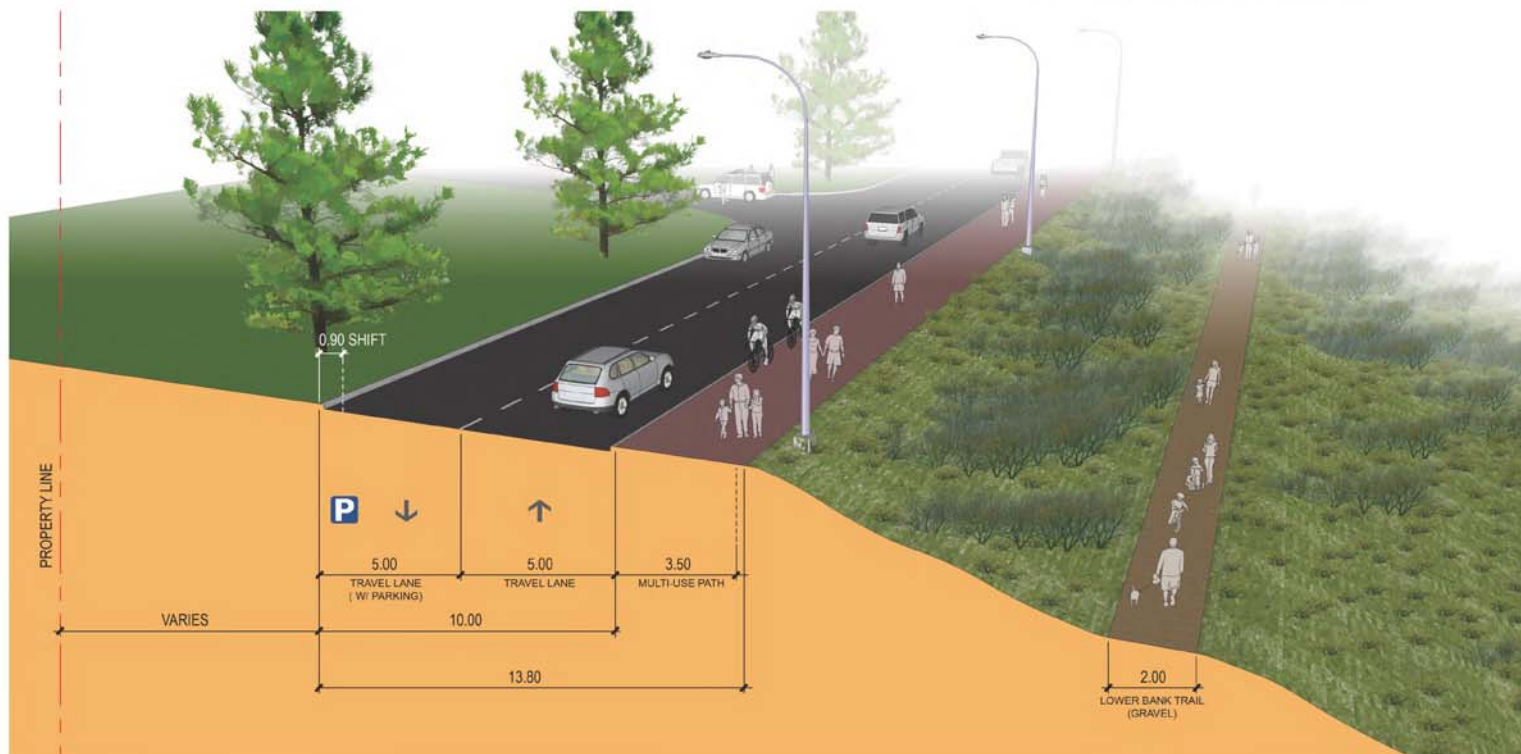
Proposed Concept #1 Section



- City boulevard narrows - curb on roadway shifts north 0.9m
- In-filled gradual vegetated slope - naturalized bank of shrubs, grasses
- No railing required
- 3.5m multi-use path
- Accessible multi-use lower bank trail (gravel)
- 10m roadway width accommodates commuter cyclists

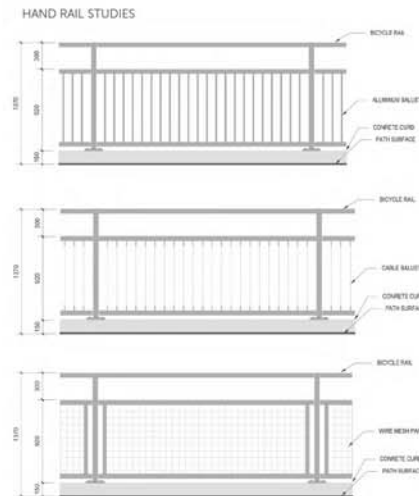


Proposed Concept #2 Section





- City boulevard narrows - curb on roadway shifts north 0.9m
- 2.3m high gabion retaining wall
- Potential to allow vines to climb the gabion wall structure
- Naturalized bank of shrubs, grasses
- Second lower gabion strip potential for public seating along trail
- Accessible lower bank trail with gravel surface at lower elevation closer to river
- 3.5m multi-use path
- 10m roadway width accommodates commuter cyclists



Proposed Concept #3 Section

Post-Project Timeline



How long will construction take?

- Construction is expected to occur over the winter of 2016-2017, with final street and surface work being completed in the summer of 2017.

What is the budget for this project?

- Past budgets forecasted \$5M for construction. More detailed cost estimates are under development as part of this study.

How will the construction process affect local traffic?

- The City will work to mitigate construction impacts as much as possible. During the slope stabilization work, the primary impact will be the need for construction equipment to access the riverbank. Residents should expect increased truck traffic, and the potential for delays when travelling through the construction areas. Temporary impacts may include partial or short term closure of some sections of Lyndale Drive along with parking restrictions.

What will be the route for construction vehicles?

- Under current City Bylaws, trucks are only required to use designated truck routes up to the closest intersection to the point of delivery. Past experience indicates that Taché Avenue will be the primary access point to the site for construction traffic.

What about the impact of heavy construction equipment and vehicles on the street?

- The City acknowledges that the presence of construction traffic in the neighborhood is not ideal. The design team will work to mitigate any impacts by limiting the traffic to certain times of the day.

When will the rest of the sidewalk or shared use trail be built?

- The sidewalk and trail will be constructed in the summer of 2017 as part of street and surface works.

Thank You



Thank you for your participation.

Please provide your comments by filling out a **Feedback Form** before you leave.

For updates on the project, please visit:

www.winnipeg.ca/LyndaleDrive

For any further questions or comments, please contact:

lyndale@htfc.mb.ca
204-944-9907

