



Fermor Avenue Bridge Rehabilitation and Roadworks

Open House, December 13, 2016



WE WANT TO HEAR FROM YOU!

Ask questions, give us your thoughts & ideas, fill out an exit survey, and tell us what you think!

Fermor Avenue Bridge Rehabilitation and Roadworks

WELCOME

The purpose of today's open house is to provide project information and obtain your feedback and input regarding the Fermor Avenue Bridge Rehabilitation and Roadworks.

Representatives from the project team are here to answer your questions and address any concerns you might have.

Large scale versions of the drawings can be found on the central tables.

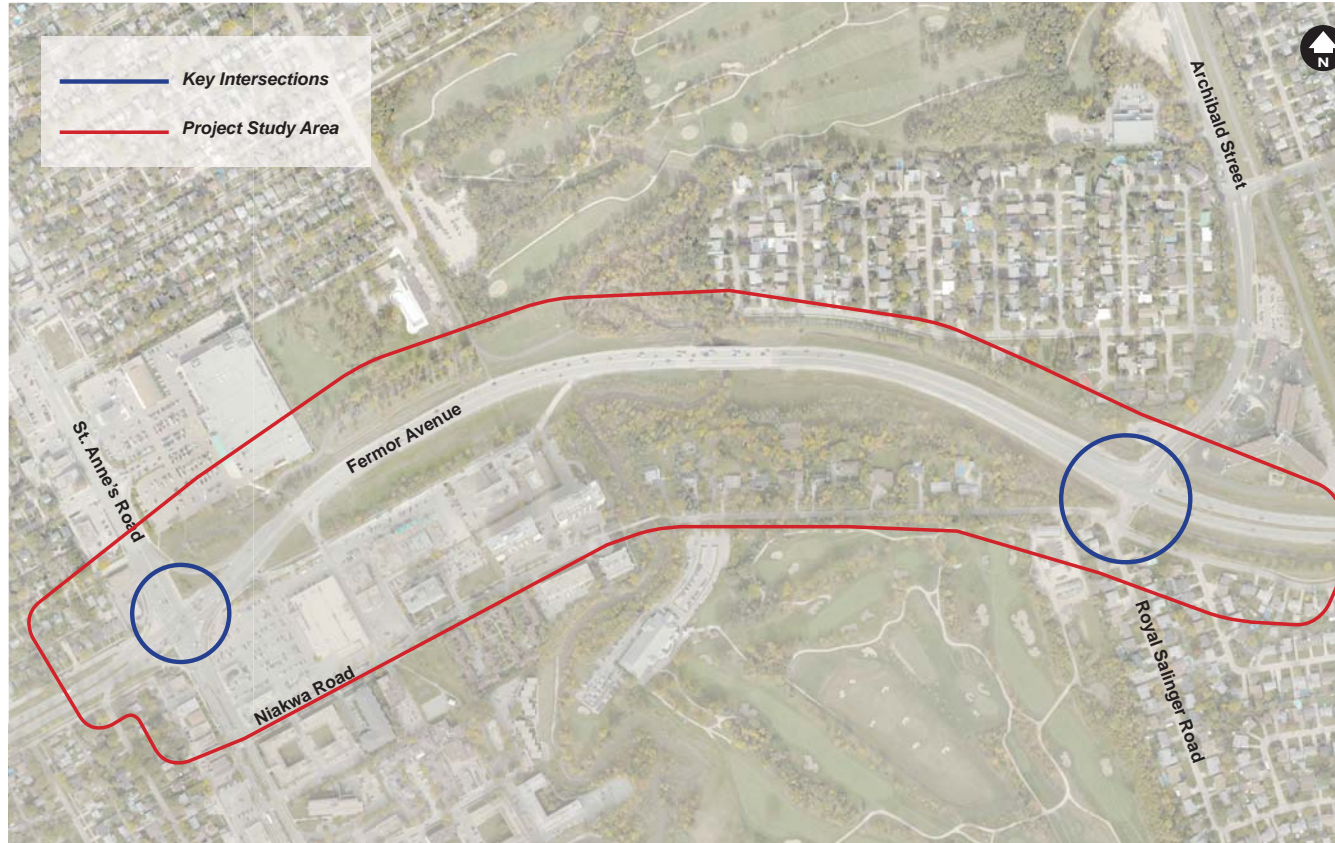
We want to hear from you on the proposed:

- Bridge rehabilitation;
- Intersection improvements;
- Changes to Alpine access;
- Pedestrian & cyclist underpass and all-season crossing of Seine River; and,
- Pedestrian & cyclist network improvements & connections

All open house materials and the exit survey are posted on the project website.

www.winnipeg.ca/fermor





Fermor Avenue Bridge Rehabilitation and Roadworks
PROJECT NEED & BACKGROUND

Why is this project needed?

- Fermor Avenue between St. Anne's Road and Archibald Street was originally constructed in 1953 along with the bridge over the Seine River
- Widened to four lanes in 1969
- Rehabilitated and strengthened in 1984 to support heavier vehicles.

The existing concrete pavement on this section of Fermor Avenue has generally reached the end of its life and needs to be replaced.

The existing bridge deck is rated in fair to poor condition and needs major rehabilitation work to provide a 75 year design life for the bridge.

What roadway improvements are being considered?

A comprehensive rehabilitation of Fermor Avenue and the Seine River bridge will allow for improvements to the roadway including:

- Reducing access points around the Fermor and St. Anne's intersection
- Less abrupt curves
- Longer exit/acceleration lanes to Alpine Avenue and Seagrim Road
- Modifications to the intersection of Fermor Avenue and Archibald Street to address the proximity of the intersection of Niakwa Road and Royal Salinger Road

How are pedestrians and cyclists being considered in this project?

Pedestrian and cycling needs in this area have been examined as part of this study, including:

- Provide all-season access and reduce potential impacts on the river bottom forest via a protected multi-purpose lane will be integrated with the new Fermor Avenue bridge deck, and will connect to the existing pathways
- A grade-separated underpass for pedestrians & cyclists will also be provided to link the Niakwa Trail to Niakwa Road, and facilitate connections to the larger network
- Crossing safety improvements will be integrated into Fermor Avenue at St. Anne's and Archibald,
- A new multi-use path on the east side of Pebble Beach Road south to Willowlake Crescent.

Fermor Avenue Bridge Rehabilitation and Roadworks PUBLIC ENGAGEMENT PROCESS

PROJECT TIMELINE

Here are some of the stakeholders we've talked to so far:

- Residents within the Study Area
 - Local businesses
 - Safeway
 - Niakwa Country Club
 - Bike Winnipeg
- Functional Transit Winnipeg
 - Save Our Seine
 - Old St. Vital Biz
- Winnipeg Trails Association
- Active Transportation Advisory Committee
 - Louis Riel School Division
- Franco Manitoban School Division
 - Various City departments

**SPRING 2016
PROJECT START**

**SUMMER & FALL
2016
STAKEHOLDER
MEETINGS**

WE ARE HERE

December 13, 2016 Open House

GOALS

- Inform & communicate project details
- Receive input on preliminary design

OUTCOMES

- Analyze feedback
- Refine preliminary design
- Provide input for detailed design

**LATE FALL 2016
OPEN HOUSE**

**WINTER 2017
SUBMISSION OF
PRELIMINARY
DESIGN REPORT**

... 14 Stakeholder meetings

GOALS

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City of Winnipeg, ESNL Strategy

City of Winnipeg Natural Habitat Inventory

The areas immediately adjacent to the Seine River provide quality habitat for a variety of plant & wildlife species. River bottom forests near the bridge have been designated as Class B and Class C Natural Habitat under the City of Winnipeg's Ecological Significant Natural Lands (ESNL) Strategy. This area is also prone to riverbank erosion and stability issues, and flooding.

Potential impacts to this area are minimized or avoided by reducing disturbance to as little as possible, avoiding areas with riverbank erosion & stability issues, and utilizing retaining walls to avoid slopes intruding into river bottom forest areas. Potential significant impacts on the habitat area by raising the pedestrian pathways & bridge out of the flood area are avoided by providing an alternative all-season pedestrian & cyclist river crossing as part of a protected multi-use path on the Fermor Avenue bridge structure.

An environmental review and fish habitat assessment were undertaken as a part of this project.

The environmental review and fish habitat assessment help the project team determine how the project may affect the surrounding environment. Some of the potential environmental effects identified include:



- Release of debris/materials or silt/soil into watercourses
- Loss or alteration of riparian zone vegetation
- Introduction or spread of invasive plant species

These effects can result in things like changing water chemistry, loss of terrestrial riparian habitat for wildlife, and alteration or loss of habitat areas used by fish.



Various design & construction methods have been examined to reduce or eliminate potential environmental impacts. These include erosion control methods, reducing potential disturbance to aquatic habitat by conducting the bulk of bridge work during winter months, avoiding disturbance in areas with riverbank stabilization issues, and use of retaining walls to minimize potential disturbance of river bottom forest areas.



Existing Context

- Congestion at intersections
- Disconnected pedestrian and cyclist network
- Lack of safe pedestrian and cycling crossings of Fermor
 - Unsafe merge lanes
 - Missing acceleration lanes
 - Unsafe exit locations
- Poor road and bridge conditions
- Riverbank stability and erosion issues

Fermor Avenue Bridge Rehabilitation and Roadworks
FERMOR EXISTING CONTEXT



Exits onto access roads too close to intersection

Unsafe high speed right turn from westbound Fermor onto northbound St. Anne's, no merge lane

Unsafe merge, no acceleration lane, vehicle conflicts

Poor pedestrian and cycling crossings

Unsafe access and exit to Fermor

Pedestrian cut through traffic

Unsafe merge, no acceleration lane, too close to bridge

Lack of pedestrian and cycling connection to the north

Poor pedestrian and cyclist connection

River bottom forest areas

Flooding of pedestrian and cycling paths

Road and bridge deck in poor condition

Riverbank stability and erosion issues

Poor pedestrian and cyclist crossing

Confusing intersection

AM traffic congestion

East bound left turn congestion

No acceleration lane

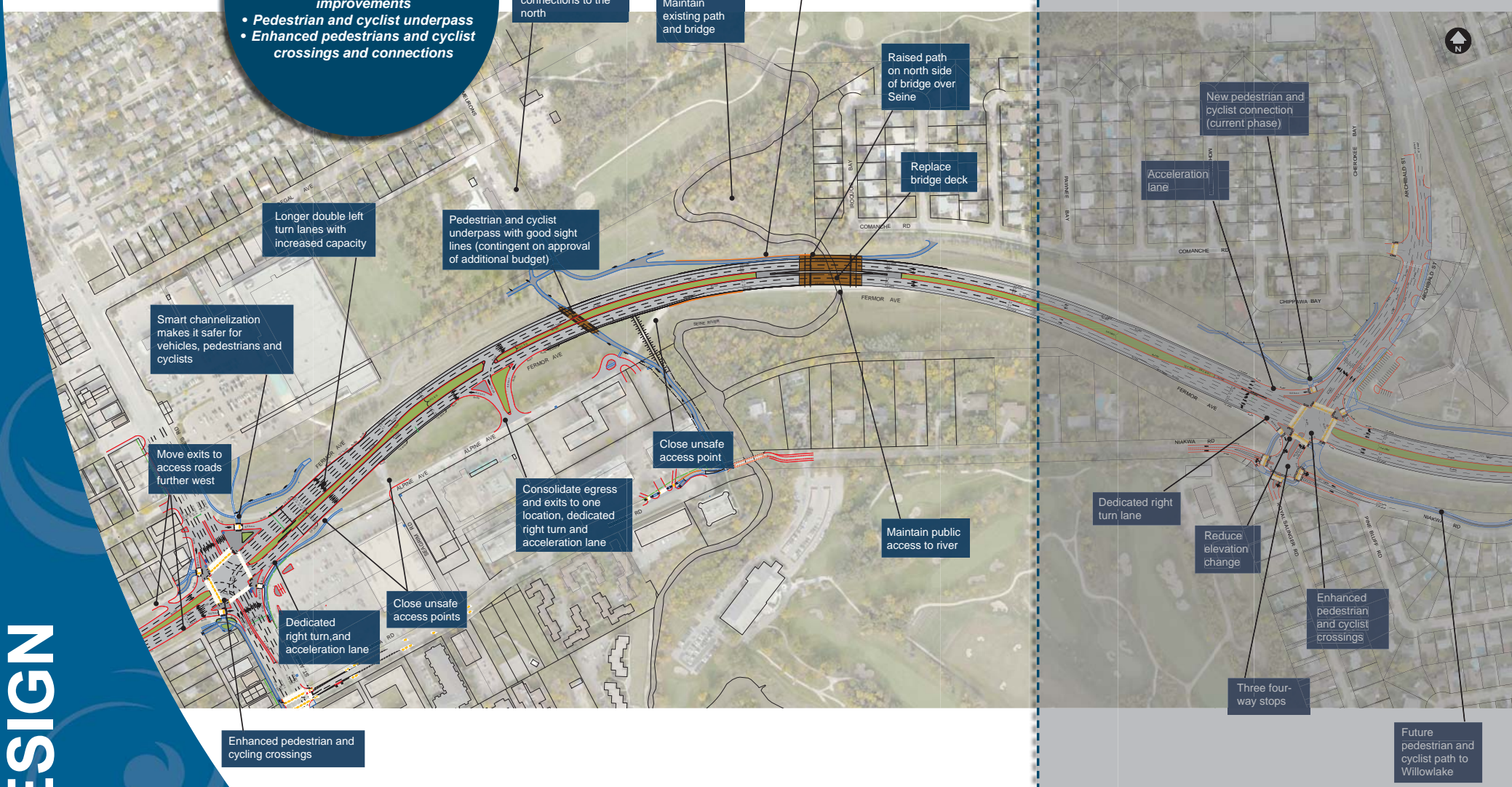
Elevation changes

Lack of pedestrian and cycling connections

Left turn conflicts at north bound Archibald and Comanche

- Design Elements**
- Rehabilitation of bridge
 - Intersection improvements
 - Smart channels for safety improvements
 - Pedestrian and cyclist underpass
 - Enhanced pedestrians and cyclist crossings and connections

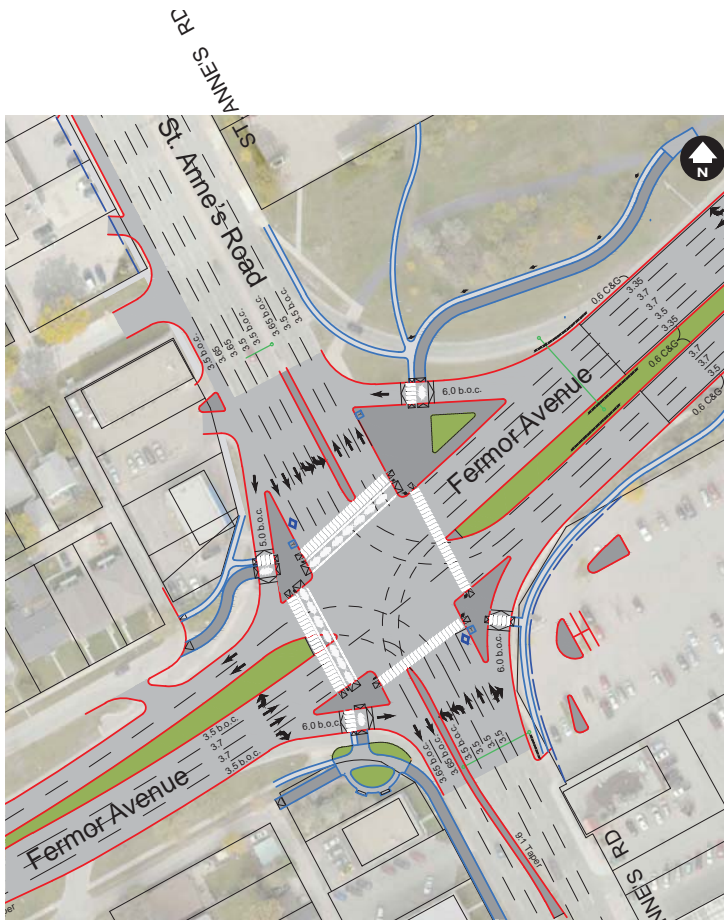
FERMOR Avenue Bridge Rehabilitation and Roadworks
FERMOR PRELIMINARY DESIGN



Design elements to the east of the dashed line are part of a future phase

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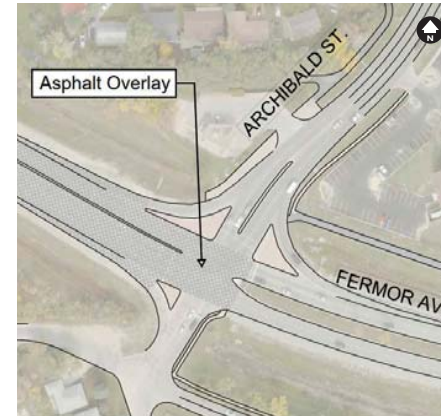
Fermor Avenue Bridge Rehabilitation and Roadworks INTERSECTION IMPROVEMENTS



Fermor and St. Anne's Improvements

Proposed Fermor and St. Anne's Improvements

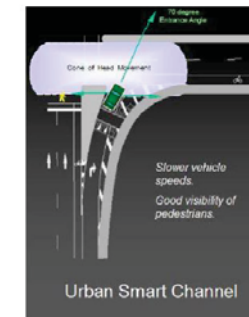
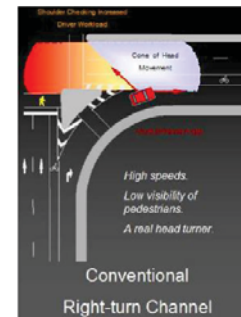
- Dedicated right turn lanes with 'smart channels' to increase safety for all uses;
- Enhanced safety & physical improvements for pedestrian & cyclist crossing of the intersection;
 - Relocation or redesign of access points in close proximity to the intersection;
 - Dedicated acceleration lane for northbound right turn St. Anne's onto east-bound Fermor;
 - Longer left turn lanes and increased capacity on Fermor Ave in both directions; and,
 - Redesign of bus stop areas to accommodate longer articulated transit buses.



Fermor and Archibald Improvements - Asphalt Overlay

Major intersection improvements based on the traffic study are shown here.

The project team has included various other improvements to turning movements, pedestrian and cyclist crossings, and private approaches.



Conventional channel vs. Smart channel, Ottawa Pedestrian Plan

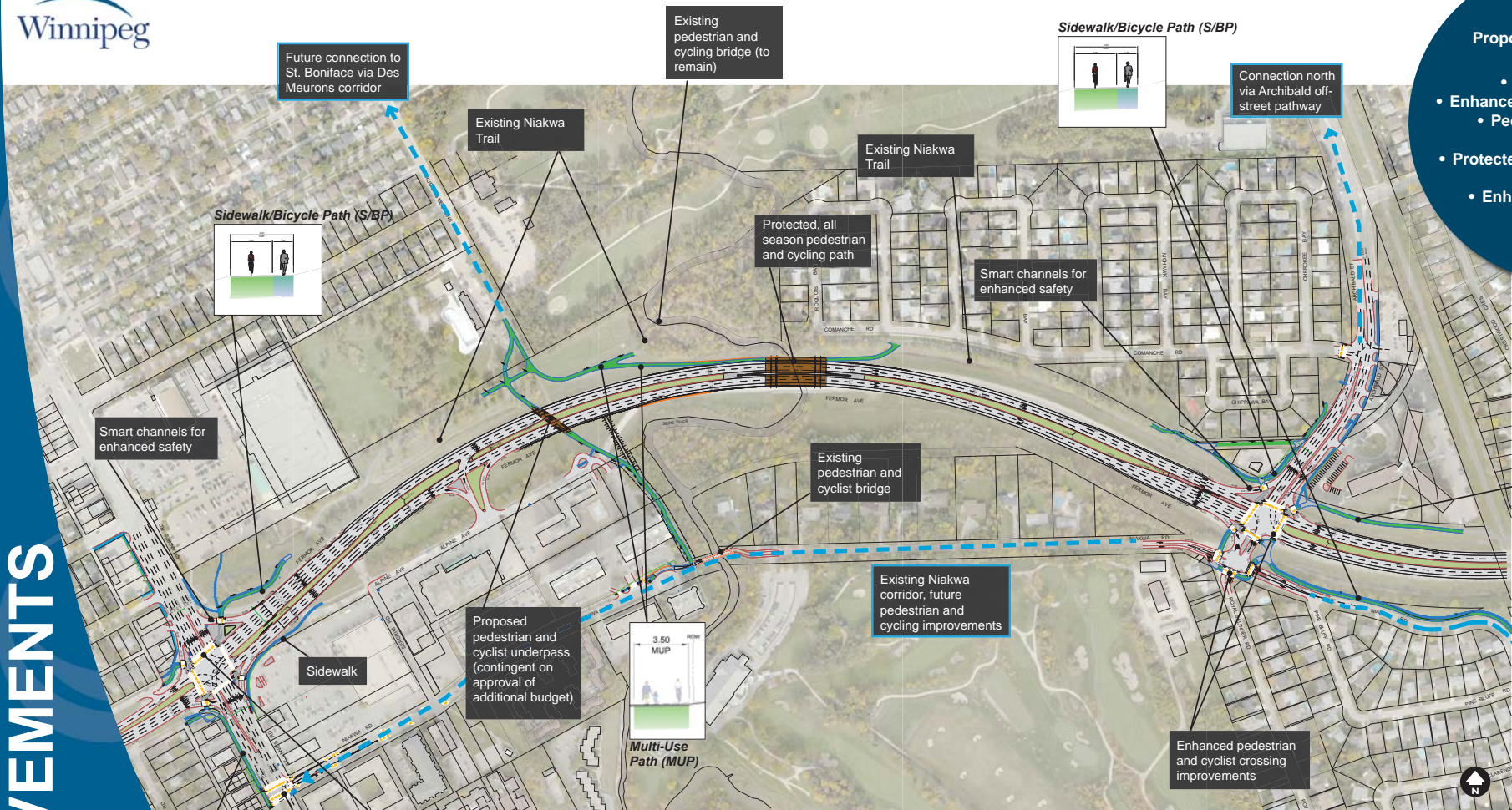


Example of a smart channel

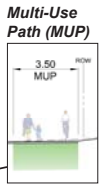
Ferrom Avenue Bridge Rehabilitation and Roadworks PEDESTRIAN & CYCLING NETWORK & IMPROVEMENTS



Public Open House
December 13, 2016
Board 8

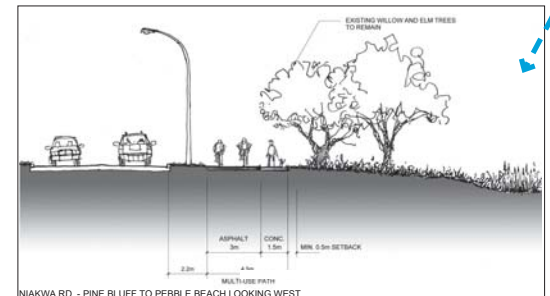


- Proposed Improvements:**
- Smart Channels
 - Enhanced intersection crossings
 - Pedestrian and cyclist underpass
 - Protected all season crossing of Seine
 - Enhanced pathways and connections

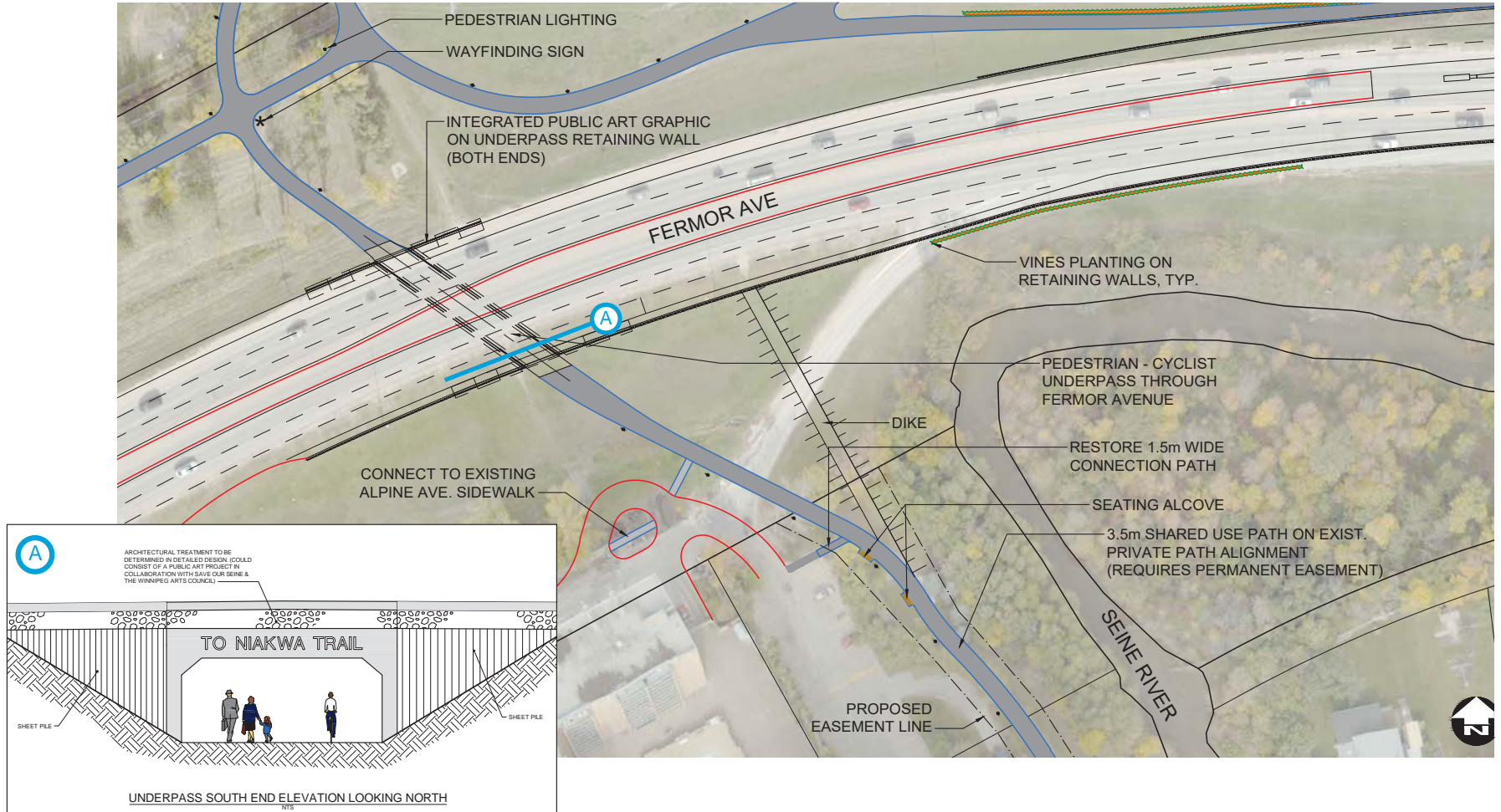


Source: Winnipeg Pedestrian and Cycling Strategies, 2014

Existing and proposed pedestrian and cyclist network near study area



Future Pebble Beach Neighborhood Greenway and connection to Willowlake Crescent and south.

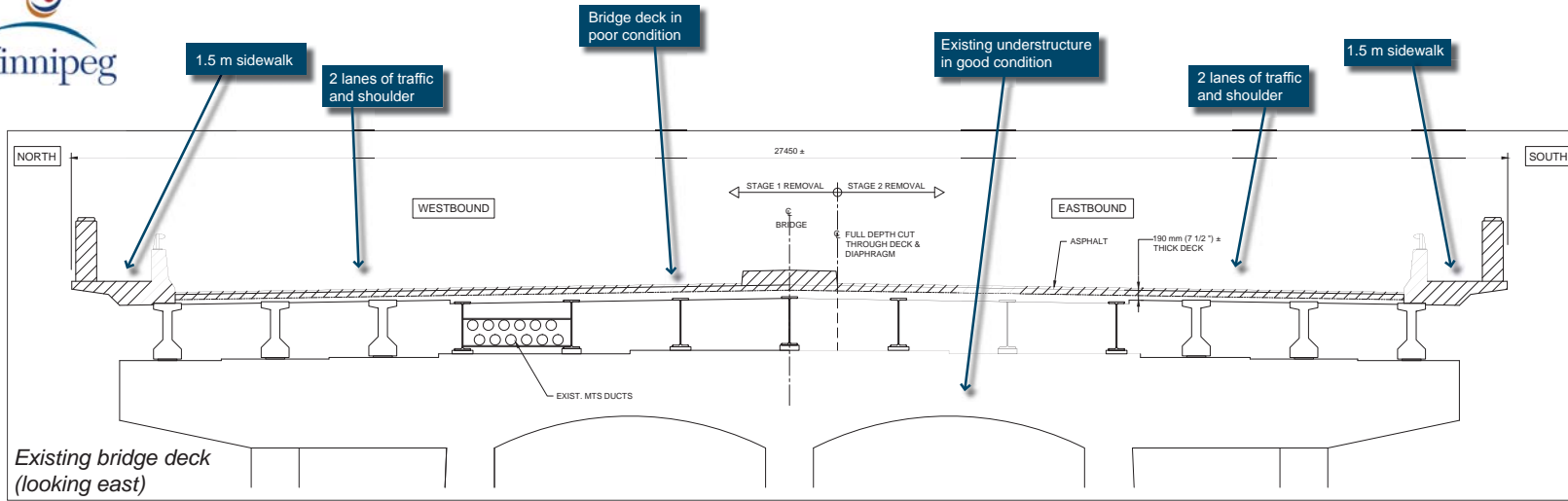


Improving pedestrian & cyclist connections across Fermor Avenue was examined as part of this study, including an overpass or underpass in several locations between St. Anne's Road and the Seine River. As part of this analysis, it was concluded that a pedestrian & cyclist underpass just west of the Seine River was the preferred location. An underpass in this location was chosen to connect Niakwa Road (a designated pedestrian & cyclist corridor) via an improved multi-use path north to the future pedestrian & cycling improvements along Rue Des Meurons, which would provide connections north to St. Boniface. The proposed pedestrian & cyclist underpass is contingent on approval of additional budget.

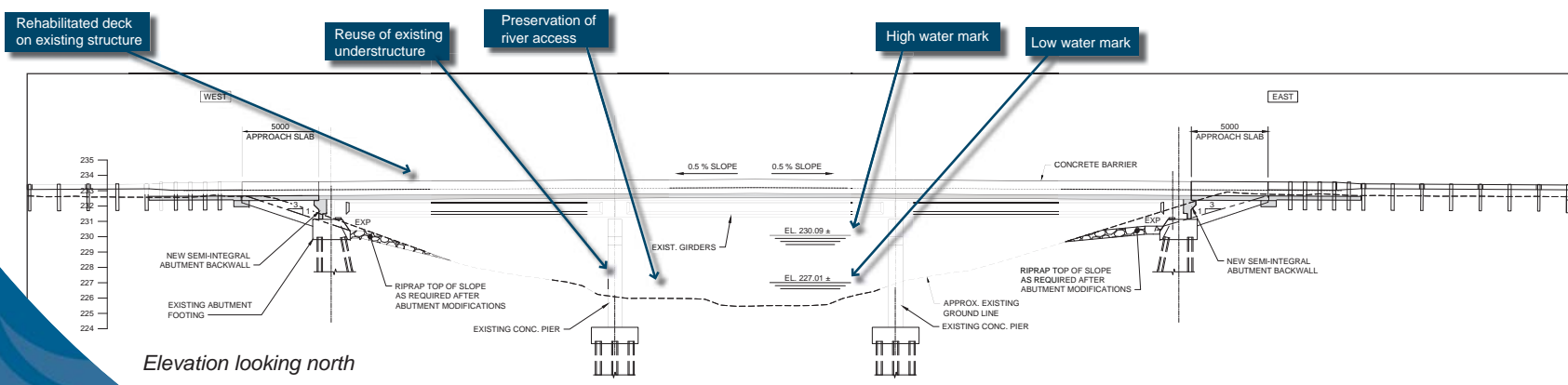
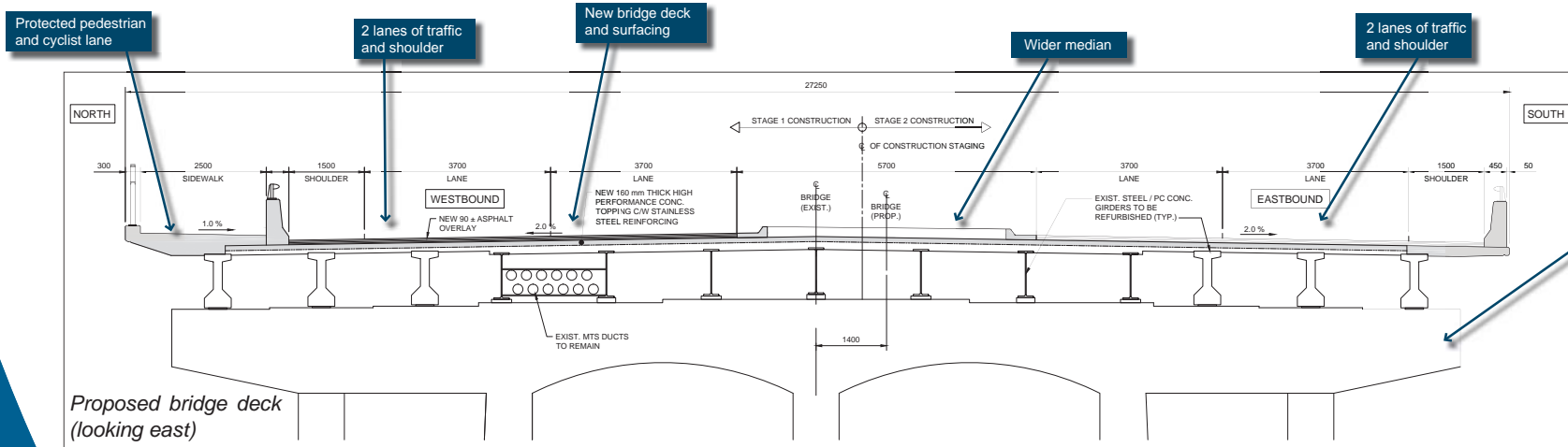
The proposed pedestrian & cyclist underpass will include:

- A minimum 3m high and 6m wide clear zone for pedestrians and cyclists in the underpass structure;
- A straight and gently sloped path to increase visibility and accessibility to the underpass, including clear sight lines from both sides of the underpass for safety;
- Lighting for night-time illumination and safety in the underpass structure and along the connecting pathways;
- An improved 3.5m wide multi-use path between Niakwa Road and the underpass, just west of the Seine River, with low level lighting and seating areas;
- Opportunities for integrating public art with the underpass structure, including on the adjoining retaining walls; and,
- Wayfinding signage.

Fermor Avenue Bridge Rehabilitation and Roadworks BRIDGE REHABILITATION



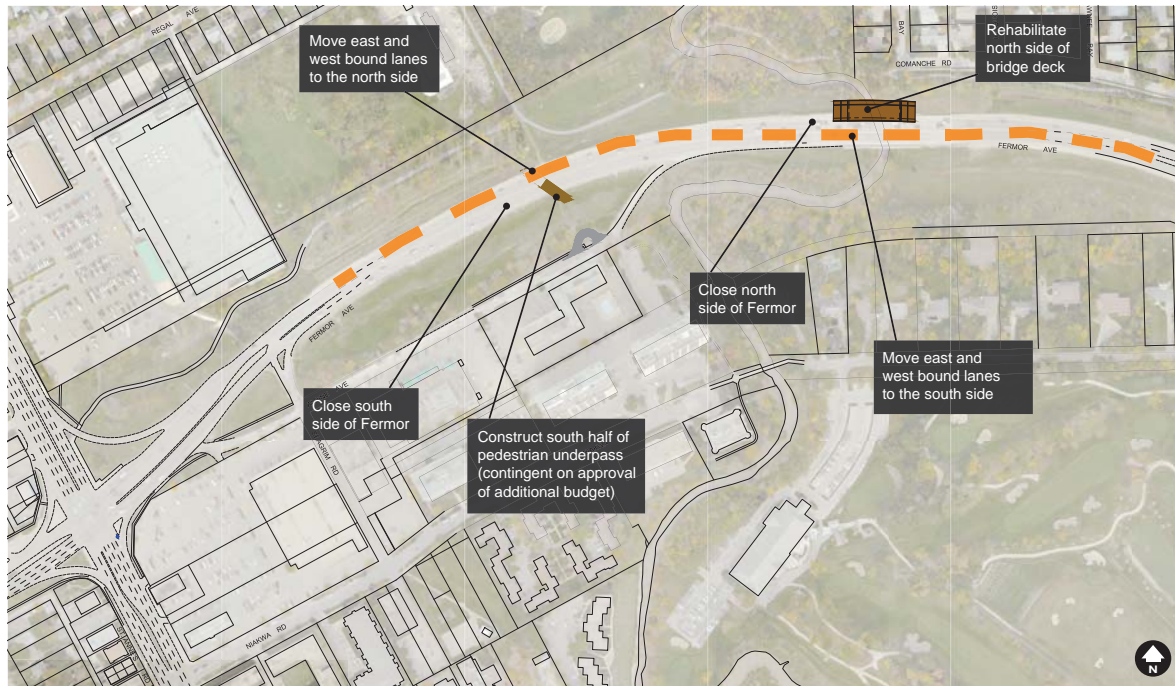
- Bridge Rehabilitation:**
- Rehabilitation of bridge deck
 - Reuse of existing understructure
 - 4 lanes of traffic
 - Wider median
 - Protected pedestrian and cyclists' lane on north side
 - Preservation of river access



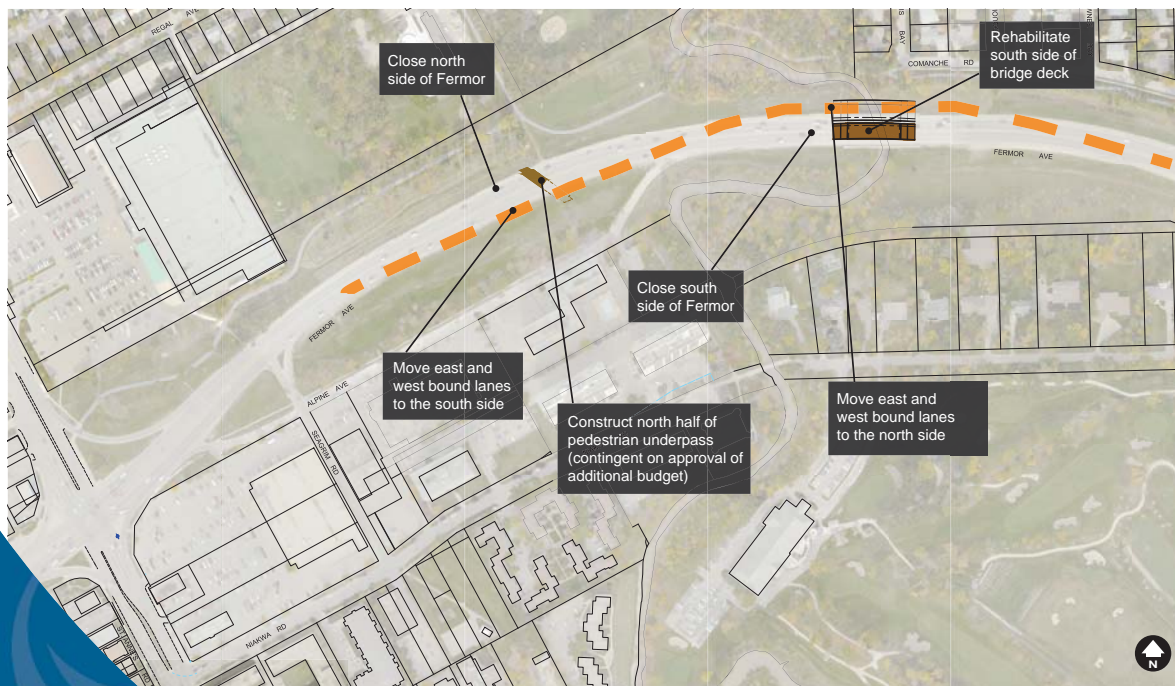
Fermor Avenue Bridge Rehabilitation and Roadworks CONCEPTUAL CONSTRUCTION PHASING



Public Open House
December 13, 2016
Board 11



Spring 2018
South pedestrian underpass construction and north side bridge deck rehabilitation



Spring 2019
North pedestrian underpass construction and south side bridge deck rehabilitation

Was a new bridge structure considered?

An extensive condition assessment of the bridge was completed as part of the preliminary design process. While the existing bridge deck is in poor condition, the underlying support structure is sound. By pursuing a major rehabilitation of the existing bridge structure, the bridge will have a design life of an additional 75 years. A new bridge is not needed at this time, and rehabilitation is a more cost-effective option.

Will access be maintained to existing businesses along Fermor Avenue?

Access to businesses along Fermor Ave and St. Anne's Road in general will be maintained. Minor adjustments during the detailed design phase and short-term temporary closures during construction may occur.

Why are the access points to Alpine Ave from Fermor proposed to be changed?

The existing vehicle access points between Fermor Ave and Alpine Ave have a variety of safety concerns. The western most access point is too close to the intersection of Fermor Ave and St. Anne's Road, and poses a high potential for vehicle accidents. The eastern most access point is too close to the Fermor Ave bridge over the Seine River for a proper acceleration lane and to allow vehicles to safely merge into traffic. Improving the double left turn lanes from westbound Fermor Ave to St. Anne's Road is challenging with the location of the central access point at Alpine Ave and Seagrim Road.

Consolidating three access points into a single access point mid-way on Alpine Ave will:

- Enable safe vehicle movements in all directions with dedicated turn and acceleration lanes,
- Preserve access to this area, and
- Allow improvements to the double left turn lanes on Fermor Ave at St. Anne's Road.

Will Transit service in the area be changed?

Winnipeg Transit routes will be largely unchanged, with the exception of minor alterations to bus stop locations. Route #16 will have

some changes due to changes in access points between Alpine Ave and Fermor Ave, and relocation of one or two bus stops on Alpine Ave.

What options are being considered for an active transportation crossing of Fermor Avenue?

There is a strong demand for improved pedestrian and cycling crossings of Fermor Avenue. Pedestrian and cycling improvements have been included in the reconstruction of the Fermor Ave and St. Anne's Road intersection, as well as at the intersection of Fermor Ave and Archibald Street. A pedestrian and cycling underpass and associated multi-use path is being proposed just west of the Seine River, connecting the Niakwa Road corridor and the future Rue Des Meurons pedestrian and cycling corridor north to St. Boniface.

What pedestrian and cycling facilities were considered as part of this project?

There are a variety of pedestrian and cycling improvements that are being included in this design. These include:

- A north-south pedestrian and cycling underpass crossing of Fermor Ave, adjacent to the pool in King George Park;
- An improved multi-use path connection between Niakwa Road pedestrian and cycling corridor, and the pedestrian and cycling underpass;
- A future pedestrian and cycling facility connecting Fermor Ave adjacent to Pebble Beach Road;
- Connections to the future Rue Des Meurons pedestrian and cycling corridor north to St. Boniface;
- A new multi-use path on the northwest corner of Archibald Street and Fermor Ave, connecting the intersection directly to the Niakwa Trail; and,
- Localized connections and intersection crossing improvements.

Will access and use of the Seine River be maintained? Will the river bottom forest be impacted?

As the underlying bridge support structure will be maintained, there will be no change in accessibility to the Seine River for summer and winter river users. Design measures, such as retaining walls, have been used to preserve the river bottom forest areas.

Will Fermor Avenue remain open during construction?

It is anticipated that, at minimum, one lane of traffic in each direction will be maintained on Fermor Ave during construction. A closure of Fermor Avenue for the project is not proposed at this time. Minor and temporary access restrictions may occur time to time during the construction period.

When will construction take place?

The preliminary design portion of the project should be completed this winter. If City Council chooses to proceed with this project and funding is approved, detailed design would occur in 2017, with construction occurring in 2018-2019.

How will the new bridge deck and road improvements be constructed?

A detailed construction phasing plan will be developed as part of the detailed design process. At present, it is proposed to close the southern bridge span (eastbound Fermor Ave) for construction, and reroute traffic onto the northern bridge span (westbound Fermor Ave). Once construction of this section of the bridge deck and pedestrian and cyclist underpass is completed, the northern bridge span would be closed for construction, and traffic rerouted onto the southern bridge span. Other road improvements could occur concurrently. Once construction is completed, both bridge spans would be open to traffic, and Fermor Ave would return to the current four lane configuration.

Why construct this project in a phased manner? Why not construct all of it at once?

The first phase of construction would include critical improvements to address traffic and maintenance issues that need to be completed in the short term. Due to finite resources, some of the other proposed improvements may not be able to be completed at the same time. A phased approach will ensure more time-sensitive aspects of this project will proceed quickly with other improvements to follow at a later date.



The feedback collected today will be analyzed and further utilized by the design team, as complete the preliminary design. We will continue to communicate with stakeholders in meetings, and through the City of Winnipeg's Major Projects webpage until the end of construction.

Thank you for attending! We want to hear from you. Please take a moment to complete and submit the exit survey.

All open house materials and the exit survey are posted on the project website.

www.winnipeg.ca/fermor



If you have any further questions, please don't hesitate to contact the public consultation team:

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