



Disraeli Bridges

REHABILITATION

Public Consultation

April 2008

Why are the Bridges being rehabilitated?

The Disraeli Bridges Rehabilitation Project includes the bridge over the Red River and the overpass crossing over the CP Rail mainline. A Condition Assessment found numerous deficiencies that need rehabilitation or upgrading in order to achieve a further 75 year service life and to meet current design standards. These needs include: rehabilitation of the concrete piers and abutments, replacement of the bearings for improved performance, blasting and metal coating of girders for added protection against future corrosion, and replacement of the bridge deck, including sidewalks, expansion joints, and barriers.

The design and performance of the new bridge deck will improve the primary surface for vehicle, bicycle and pedestrian traffic and will protect the underlying girders and substructures from the effects of winter de-icing salts.

Deck replacement will also enable some redesign of and improvements to the bridge's roadway geometry, roadside safety measures, and pedestrian and cyclist accessibility.

The project will also include upgrades such as:

- upgrades to area roadways, intersections, medians, signing, lighting and traffic signals to improve traffic flow, access and safety
- new and upgraded bus stops and rest areas
- aesthetic enhancements to improve and unify the pedestrian environment and feature the heritage of the neighbouring communities
- pedestrian and cyclist accessibility and safety improvements.

What do we know about the surrounding communities and their views?

Individuals, businesses and organizations closest to the bridges and most reliant on them for personal transportation needs will be affected by the project, as will customers seeking access to businesses, social service organizations, students travelling to and from their schools, and commuters from the northeast quadrant of the city who use the bridge. More area residents than average in Winnipeg rely on public transit, walking, and cycling, rather than driving, and these residents, too, will be affected.

A Community Profile Impact Study covering the neighbourhoods of Chalmers, Glen Elm, Point Douglas, Munroe West, Kildonan Drive, and Rossmere found that the Disraeli Freeway is viewed as a utilitarian bridge – a means for crossing over the rail line and Red River – but isn't considered part of the adjacent communities. Hope was expressed that the project contribute to the community, by:

- better linking with surrounding communities' amenities,
- making pedestrian experiences more comfortable and safe,
- reflecting the history of Point Douglas and Elmwood,
- looking at ways to open up access within Point Douglas,
- and thinking about how the Disraeli Freeway can serve, if not as a catalyst for growth, then at least be planned so it is not an obstacle to future land development opportunities.

Following the study, a Stakeholder Advisory Committee (SAC) was established, representing the surrounding communities and affected sectors.

What is the role of Stakeholder Advisory Committee (SAC) in the public consultation process?

Public consultation is a collaborative effort bringing together those with an interest in or who are affected by a project, so they can work together, share information, and provide feedback as part of the project planning and decision-making process. While expertise is brought by consultants, “local knowledge” is also vitally important. The goal is a plan that is technically sound, reflects the needs of the community and city, is cost-effective, environmentally responsible and safe, and is generally understood and accepted by most of those affected.

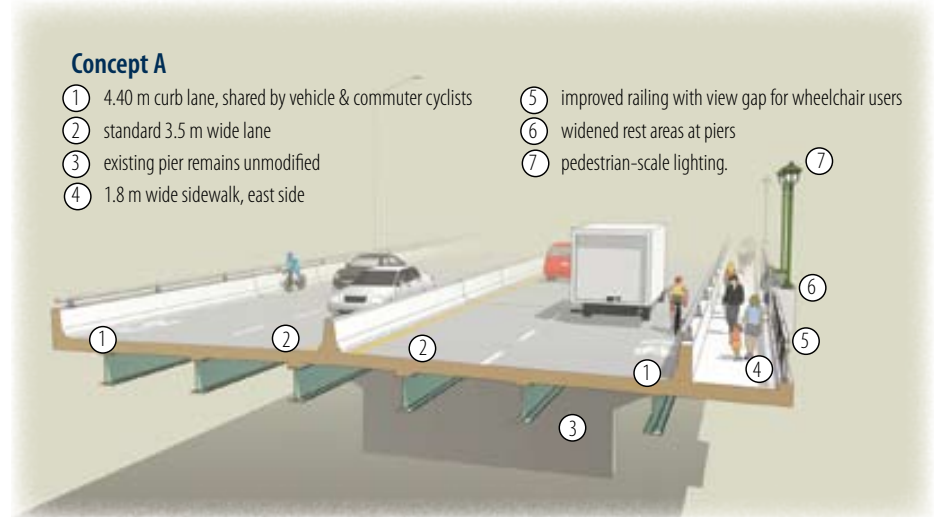
SAC members have worked closely with City public works representatives and engineering consultants at a series of meetings to:

- gain solid background information relating to the bridges, surrounding roads and neighbouring communities
- discuss and consider the engineering consultants’ conceptual bridge design study
- consult with the organizations they represent and share feedback on community values, ideas and concerns
- discuss other conceptual bridge design options of potential value for the project and surrounding communities.

The SAC planning process concluded with three concepts prioritized for public input:

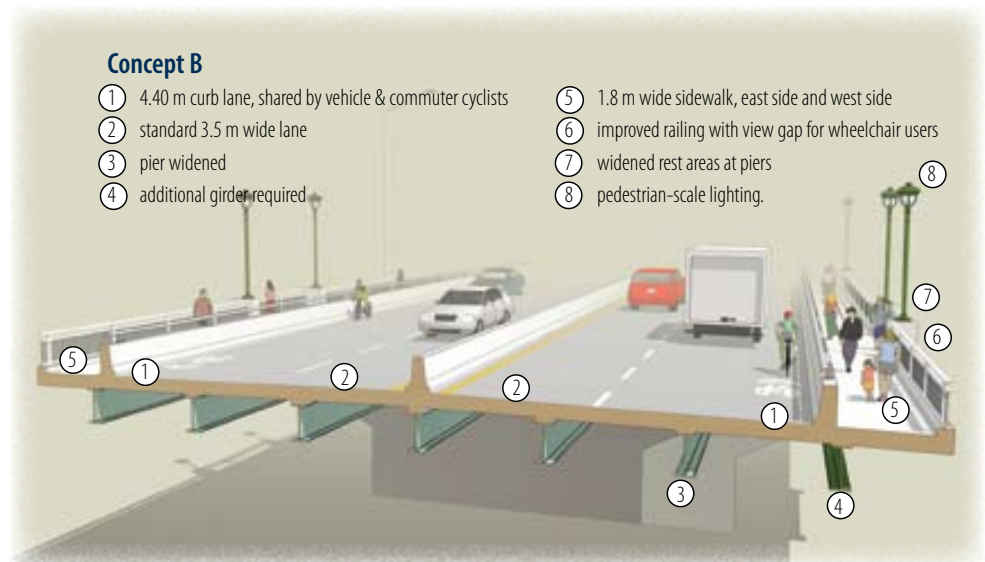
Concept A - \$125 Million:

A 4-lane divided roadway option in accordance with current City practice for a rehabilitated structure, this option provides basic rehabilitation for the structures with a proposed deck width of 20 metres. There are two 4.4 metre shared vehicle and cyclist curb lanes and one 1.8 metre sidewalk on the east side. In this concept, pedestrians use under-bridge crossings, the crossing at Dearborn Avenue and the overpass at Argyle School to cross to the other side. Modification of piers or abutments is not required. Due to property constraints west of existing structures, the west limit of the new structures would remain at the same location as the west edge of the existing bridge and overpass. Any future widening of the structures would take place to the east.



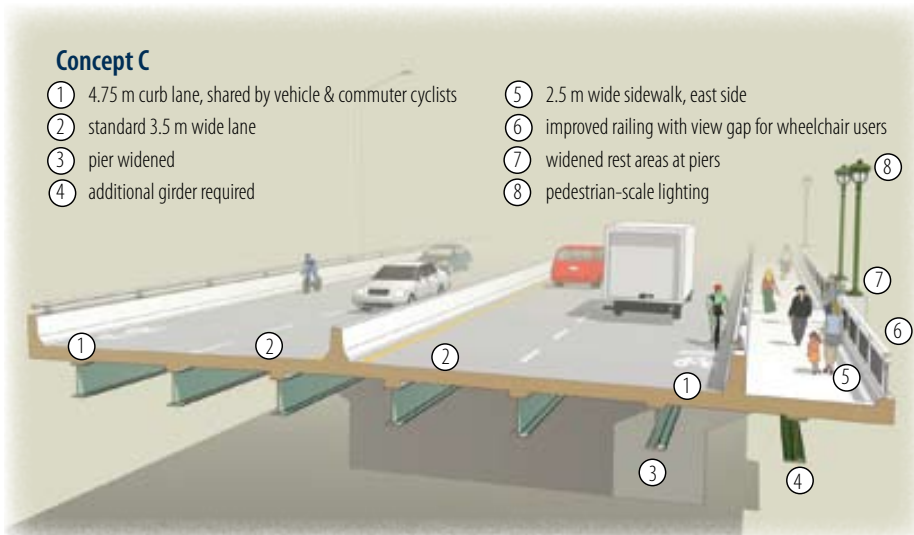
Concept B - \$160 M:

Similar to Concept A, with 4.4 metre shared vehicle and cyclist curb lanes, but the deck would be widened to 22.1 metres to accommodate a second 1.8 metre wide sidewalk on the west side. With two sidewalks, pedestrians would not have to cross the roadway or go under the bridge to reach the other end, enhancing pedestrian accessibility and security. This option requires piling as well as modifications and widening of the land-based piers and abutments and additional girder lines supporting the wider deck.

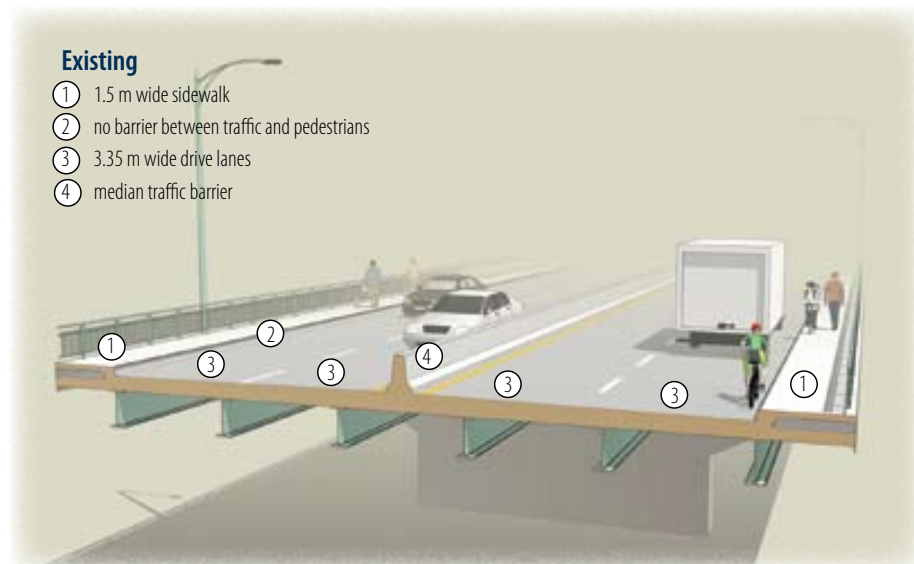


Concept C - \$160 M:

Feedback from the SAC sparked a new concept that is a variation of concept B. It is a 4-lane divided roadway, which requires the deck to be widened to 21.9 metres, includes only one sidewalk widened from 1.8 to 2.5 metres, and would increase vehicle and cyclist shared curb lanes from 4.4 to 4.75 metres. With this concept, the widened sidewalk provides more accommodation for pedestrians and recreational users. As with Concept A, the sidewalk would be located along the east edge. This option also requires piling and modifications and widening of the land-based piers and abutments, and additional girder lines supporting the wider deck.



Other concepts considered featured a wider deck structure to accommodate a 4 lane and 6-lane divided roadway, or a new 6-lane twin structure. These options rated lower in the evaluation process, since they would require either additional girder lines, construction of new land piers and modifications to existing river piers, or new abutments and piers, all of which would mean much higher costs. As well, the Condition Assessment indicates that neither full bridge replacement nor additional traffic capacity is required.



(Note: Project concept costs are estimates)

Important answers to questions you might have...

Why is it a rehabilitation project and not a new bridge?

Based on its existing condition and the City's plans for it, rehabilitation is the most cost-effective plan for the Disraeli Bridge and Overpass. The existing deck does need to be replaced, but the remainder of the bridge can be rehabilitated to good condition, providing an additional service life of 75 years. Replacement of the deck also offers the opportunity to upgrade safety, and pedestrian and cyclist accommodation. The City intends to invest more resources and amenities in future reconstruction of the Louise Bridge, which is the better bridge to most fully accommodate cyclists and pedestrians, due to better linkages with the Marconi Trail and Waterfront Drive to The Forks.

Why aren't we building a 6 lane bridge?

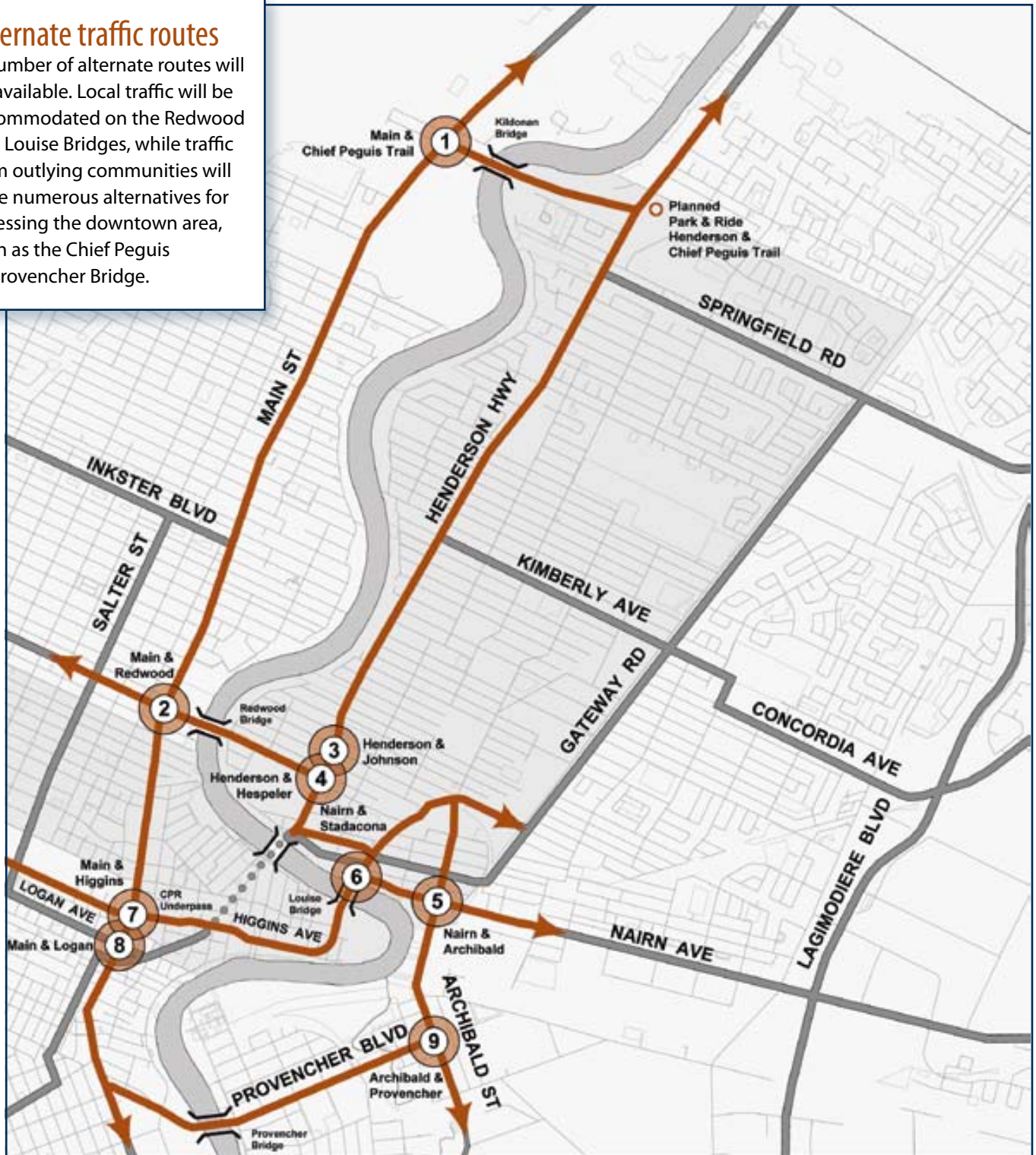
Traffic flow at rush hour is currently limited at each end by intersection congestion at Henderson/Hespeler and Main/Disraeli. Based on traffic analysis of existing and projected traffic volumes, the Disraeli has the capacity to handle future traffic over the next 20 years. Although these are reasonable estimates, it is difficult to project much beyond this time. Widening or twinning can be considered in the future if the need arises.

What caused the rusting and deterioration to the underside of the bridge/sub-structure?

The Disraeli Bridge and Overpass was built in 1960 with an open grate deck system. At that time, use of de-icing salts on roads and bridges was not common, and its effect on the life of steel and concrete structures was unknown. Direct exposure to these de-icing salts over the years caused corrosion of steel components and reinforcing steel in the concrete components.

Alternate traffic routes

A number of alternate routes will be available. Local traffic will be accommodated on the Redwood and Louise Bridges, while traffic from outlying communities will have numerous alternatives for accessing the downtown area, such as the Chief Peguis or Provencher Bridge.



Alternate Routes Map



KEY TRAFFIC MITIGATION LOCATIONS



DISRAELI CLOSURE



BRIDGE



PRIMARY ALTERNATE ROUTES

Possible Traffic Mitigation Measures

- | | | |
|--|--|---|
| <p>① Traffic Signal Optimization</p> <p>② Traffic Signal Optimization
Additional Turning Lanes
Parking Restrictions
Standby Tow Truck</p> <p>③ Traffic Signal Optimization
Turning Restrictions from Henderson</p> | <p>④ Traffic Signal Optimization
Additional Turning Lanes
Turning Restrictions from Henderson</p> <p>⑤ Traffic Signal Optimization</p> <p>⑥ Traffic Signal Optimization
Restricted Turning Lanes
Standby Tow Truck</p> | <p>⑦ Traffic Signal Optimization
Restricted Turning Lanes during Rush Hour
Parking Restrictions</p> <p>⑧ Traffic Signal Optimization
Additional Turning Lanes
Parking Restrictions</p> <p>⑨ Traffic Signal Optimization</p> |
|--|--|---|

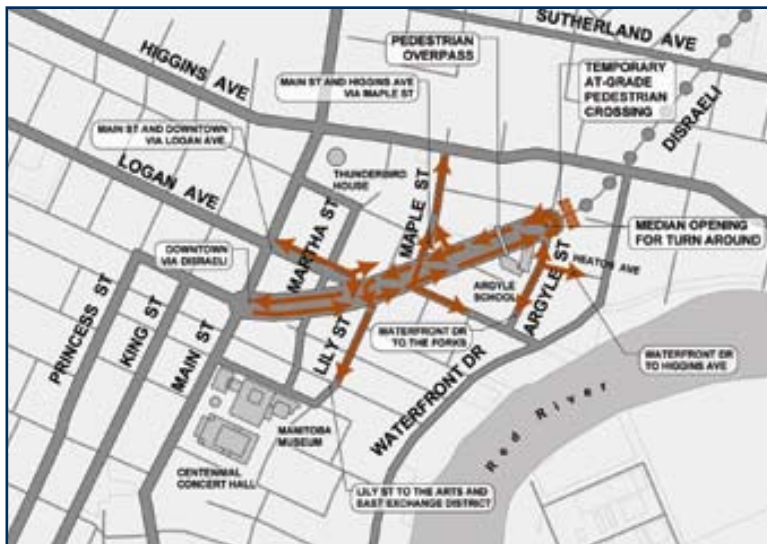
Traffic management plan

The proposed traffic management plan recommends full closure of the bridge for roughly 16 months, although work on the bridge would extend beyond this timeframe.

Why should the bridges be closed during construction?

Vibration through the deck and piers caused by traffic during construction poses significant risk. If traffic were to flow over the bridge before the concrete deck is fully set, which usually takes more than 72 hours, the result would be a lower quality roadway with possibly-inferior structural integrity, reduced service life, and higher long-term maintenance and repair costs. Therefore, even if the bridges were partly-open to traffic during construction, numerous closures would be required to pour the new deck, making for a longer construction schedule and higher project costs.

Local Area Traffic Flow during Disraeli Bridges Closure



Primary Routes from Main Street - Disraeli Bridges Corridor



Henderson Highway and Hespeler Avenue Intersection to Talbot Avenue – new traffic flow and access

Moreover, traffic impacts for partly-open and fully closed options are virtually the same.

Mitigative measures are being developed to minimize impact and help downtown area traffic flow better during the project. These include traffic signal optimization, parking changes, added turning lanes/prohibitions, and special access turns for Elmwood businesses and residents immediately east of the bridge. More measures will be developed and evaluated as the project proceeds from concept form to the more detailed design phase.

What are the anticipated traffic impacts during construction?

There will be some delay during construction for local and commuter vehicle traffic, transit users, pedestrians and cyclists currently using the bridge to access downtown. Drivers will choose alternate routes at the outset of construction and initial traffic delays will regulate. Tow trucks will be on standby in the event of an accident or stalled vehicle, particularly at the Louise or Redwood Bridges, to minimize traffic delays.

How will pedestrians, cyclists, transit and emergency services be accommodated during construction?

Commuter cyclist traffic will use alternate routes to access downtown, and a pedestrian shuttle similar to the service used during closure of the Redwood Bridge will accommodate pedestrians and recreational cyclists. Transit service to all affected areas will be well managed throughout construction, mainly by re-routing on the Louise and Redwood Bridges. The City of Winnipeg Fire Paramedic Service will work with the consulting engineers to develop an emergency preparedness traffic plan.

Do future rapid transit plans include this route?

Future rapid transit plans do not use the Disraeli Bridge and Overpass. However, the design does provide accommodation at the south end of the overpass to access planned rapid transit routes for the Eastern Transit Corridor.



Open House Invitation

Please come to an Open House to learn more about the project. Chat with experts, read storyboards and view proposed project plans, alternatives, and drawings. We want to know what you think.

Tuesday April 29, 2:00 pm - 8:00 pm

Norquay Community Centre – Gym, 65 Granville St., corner of Rover Ave.

Thursday May 1, 11:00 am - 4:00 pm

MTS Centre - Atrium, 2nd floor, 300 Portage Ave.

Saturday May 3, 11:00 am - 4:00 pm

Good Neighbours Senior Centre, 755 Henderson Hwy.

Stakeholder Advisory Committee

- Elmwood/East Kildonan -

SENIORS:

Good Neighbours
Senior Centre

COMMUNITY ORGANIZATIONS:

River East Neighbourhood Network

BUSINESS:

Petal Purr-fect Floral

SCHOOLS:

Menonite Brethren
Collegiate Institute

- Point Douglas/ Exchange District -

RESIDENTS:

Point Douglas Residents Assoc.

BUSINESS:

Exchange District BIZ

SCHOOLS:

Argyle School

- Civic Centre -

ARTS:

Manitoba Centennial Centre

- Citywide -

CYCLING:

Bikes & Beyond
(for Manitoba Cycling Association)

BUSINESS:

Winnipeg Chamber of Commerce

Next Steps

After you have had a chance to read the information in this newsletter, you are invited to fill out the response coupon at the back and send it in. Public input from this newsletter, surveys and at the Open Houses will be shared with the Stakeholder Advisory Committee (SAC) members and City of Winnipeg, and will help finalize project plans.

Projected Project Timelines

Report to Public Works Department	Summer 2008
Recommendation to City Council	Fall 2008
Finalize concept and traffic management plan	Late 2008
Call for bids	Early 2009
Start construction	Late 2009
Complete construction	Late 2011

How can I have a say?

If you need more space please use a separate sheet

1. What is your opinion on the three proposed Disraeli Bridges Rehabilitation concepts?

Concept A: positive neutral negative
 Concept B: positive neutral negative
 Concept C: positive neutral negative

2. Which is your preferred rehabilitation concept? A B C

3. What leads you to say this? _____

4. Any other comments on the Disraeli Bridges Rehabilitation Project? _____

Please tell us your postal code so we can sort the results by area. Postal Code: _____

(optional) Name: _____ Address: _____ Telephone: _____

Please return within one week to Mr. Bill Ebenspanger, P. Eng., Project Manager, City of Winnipeg Public Works Department, 106-1155 Pacific Ave, Winnipeg, MB. R3E 3P1, Fax: 986-5302, e-mail: bebenspanger@winnipeg.ca

