

**Region of Waterloo**  
**Engineering and Environmental Services**  
**Design and Construction**

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**To:** Planning and Works Committee  
**Meeting Date:** September 12, 2023  
**Report Title:** Project Approval for Scheifele Bridge Replacement, Northfield Drive at Conestogo River, Township of Woolwich

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**1. Recommendation**

That the Regional Municipality of Waterloo:

- a) Approve the recommended project design concept for Scheifele Bridge Replacement, Northfield Drive at Conestogo River, Township of Woolwich, as described in Report EES-DCS-23-008, dated September 12, 2023.
- b) Direct staff to file the Notice of Completion for this Class Environmental Assessment Study and place the Environmental Study Report on the public record for a period of 30 days.

**2. Purpose / Issue:**

Seek Council approval for the design concept and to file a notice of completion. The design concept includes providing paved shoulders for buggies and cyclists on both sides of the bridge and a sidewalk with a concrete barrier separating pedestrians from traffic on the east side of the bridge.

**3. Strategic Plan:**

This project supports Strategic Focus Area 2—Sustainable Transportation. It will offer residents more choice in active transportation and improve road safety for this crossing of the Conestogo River.

**4. Report Highlights:**

- The new bridge will be wider to accommodate all modes of travel including motorists, cyclists, pedestrians and buggies, and will have a lifespan of approximately 75 years.
- The new bridge will be constructed slightly to the west of the existing Scheifele Bridge to maintain two-way traffic during construction.

- The new bridge includes the following:
  - two vehicle lanes;
  - paved shoulders for buggies and cyclists on both sides of the bridge; and
  - a sidewalk with a concrete barrier separating pedestrians from traffic on the east side of the bridge.
- The funding for the detailed design and construction are included in the 2023 ten-year capital plan.
- This project will help with climate mitigation with the installation of cycling facilities and a pedestrian facility on the bridge to allow for active transportation.

More information is provided in the appendices.

## **5. Background:**

Scheifele Bridge, on Regional Road 22 (Northfield Drive) over the Conestogo River, must be replaced to address its deteriorating condition.

Currently, Scheifele Bridge is a two-lane structure with a narrow sidewalk on one side as well as narrow shoulders lacking adequate space to separate cyclists and buggies crossing the Conestoga River from vehicles.

There are modest volumes of buggies and pedestrians and a significant number of cyclists crossing Scheifele Bridge.

There are plans to install a trunk watermain on Northfield Drive and Sawmill Creek Road, to upgrade municipal water supply to the Villages of Conestogo and St. Jacobs. These plans will be considered in the design for the new Scheifele Bridge.

## **6. Communication and Engagement with Area Municipalities and the Public**

**Area Municipalities:** Township of Woolwich staff were part of the project team that developed the recommended alternatives.

### **Public:**

Public consultation included three occasions where project information was posted to the Region's EngageWR website and residents were asked to provide feedback online.

Letters were delivered to applicable agencies and property owners within the Village of Conestogo and adjacent areas at various stages of the Environmental Study to provide project information and engagement opportunities. Engagement information was also included on signs at the bridge and ads in local newspapers.

In-person meetings or phone conversations were coordinated with area residents and the Mennonite community.

Project comments and feedback included 52 recorded contributions from over 1700 visits to the EngageWR website.

Feedback from the public included both support for and concerns regarding the proposed bridge replacement. The main themes raised by the public and Mennonite Community included:

- maintaining travel access between Waterloo and Conestogo during construction;
- providing safe travel for pedestrians, cyclists and buggies;
- controlling speeds across the bridge;
- protecting wetland areas to the west of the bridge;
- providing safe travel for pedestrians, cyclists and buggies north and south of the bridge on Northfield Drive outside of the limits of the bridge replacement project.

## **7. Financial Implications:**

The Region's approved 2023-2032 Transportation Capital Program includes a total budget of \$23,451,600 (\$487,700 in 2023 and \$22,963,900 in 2024-2027) for the Scheifele Bridge Replacement (Project #05954) to be funded from levy supported debentures (47%, \$11,006,500), Transportation Capital Reserve (40%, \$9,352,400), Canada Community Building Reserve Fund (13%, \$3,092,700).

## **8. Conclusion / Next Steps:**

Subject to Regional Council approval of the recommended design concept, staff will file a Notice of Study Completion on the public record for a 30-day review period. After the review period, staff will meet with affected landowners for minor property acquisition(s), start detailed design, and coordinate required utility relocations, with construction planned from 2025 to 2027.

## **9. Attachments:**

Attachment A - Key Plan

Attachment B – Recommended Alternative Alignment #2

Attachment C – Recommended Bridge Cross Section #5 (Modified)

Attachment D – Proposed Staging Design (Maintaining 2-Way Travel)

Attachment E – Responses to Public Consultation Comments

**Prepared By:** Ken Brisbois, Project Manager, Design and Construction

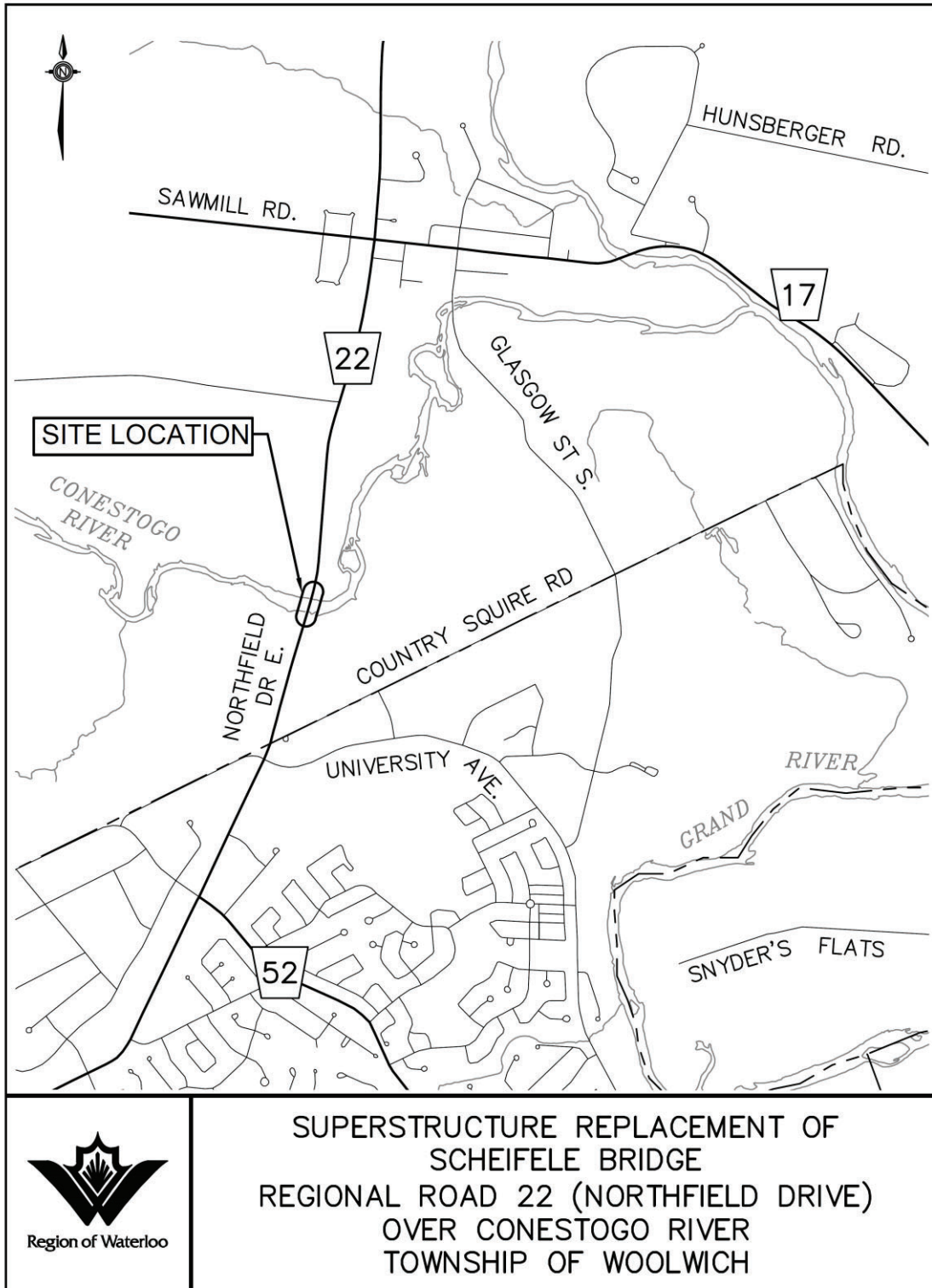
Skylar Van Kruistum, Head, Design and Construction

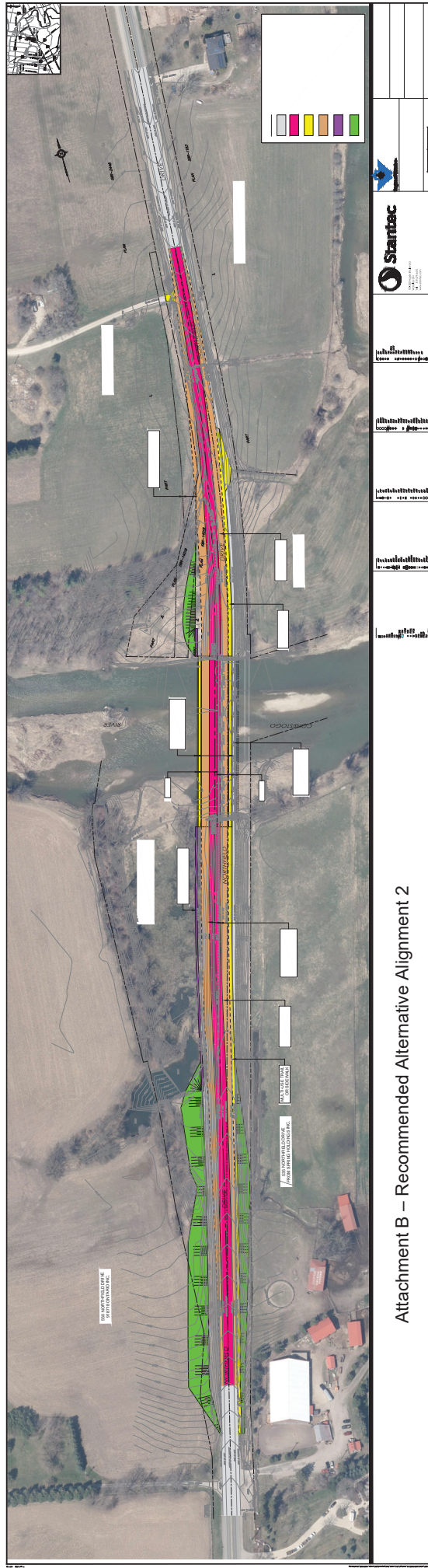
**Reviewed By:** Phil Bauer, Director, Design and Construction

**Approved By:** Jennifer Rose, Commissioner, Engineering and Environmental Services

Mathieu Goetzke, Commissioner, Transportation Services

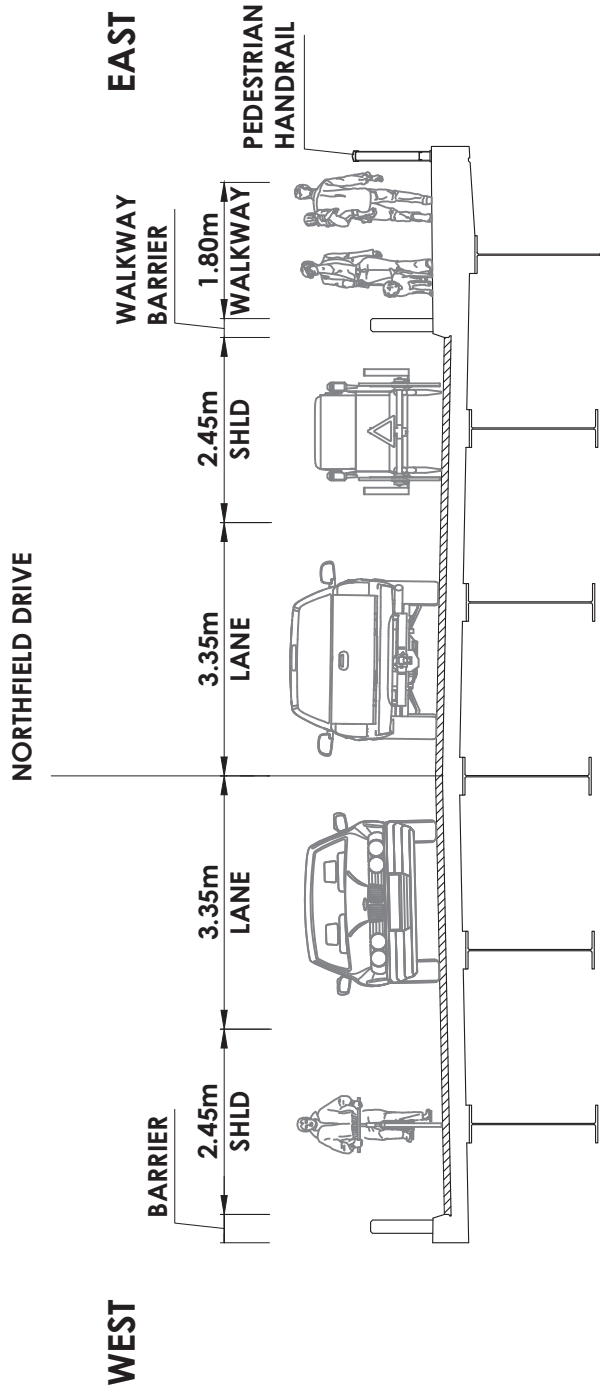
# Attachment A - Key Plan



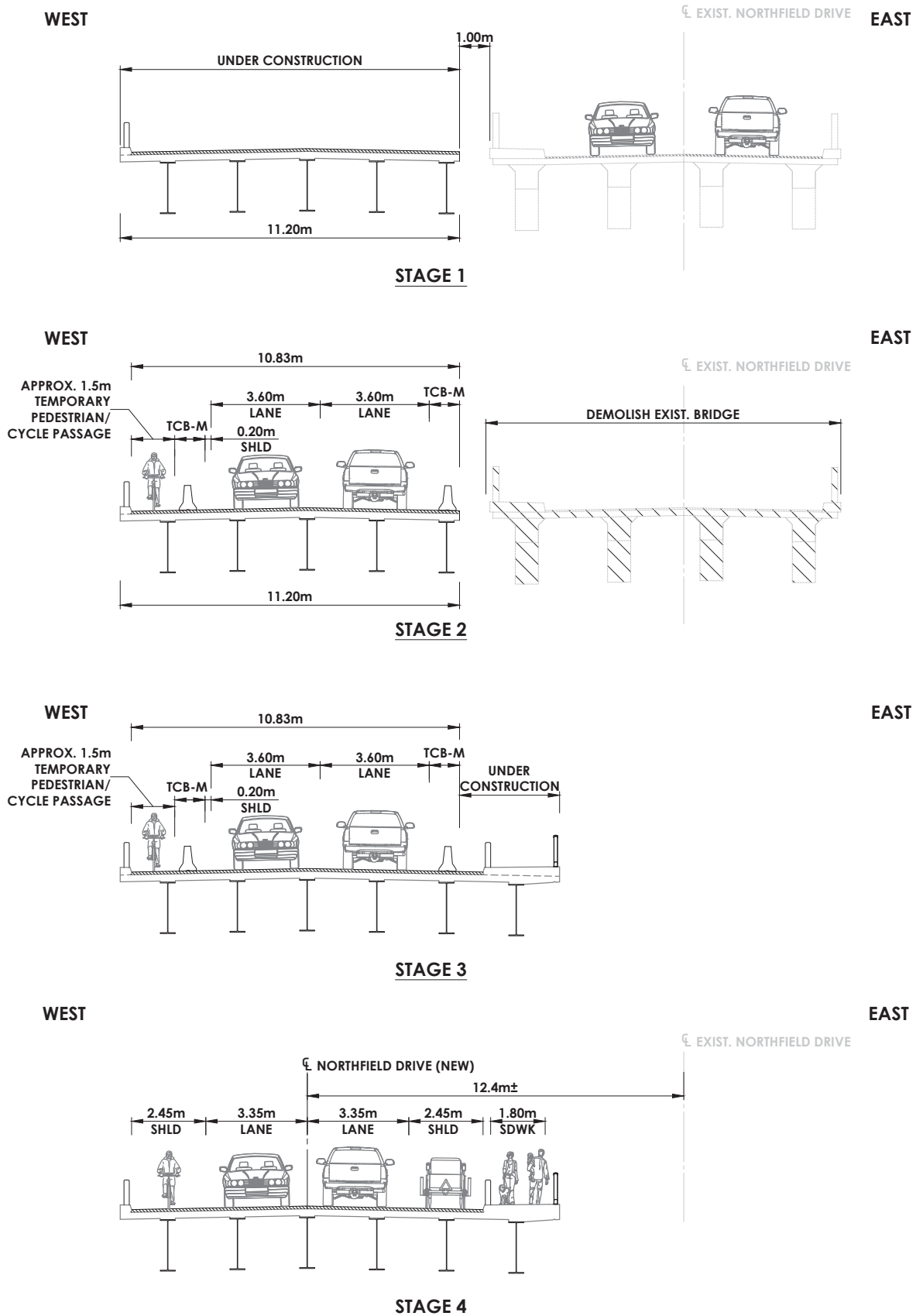


Attachment B - Recommended Alternative Alignment 2

Attachment C – Recommended Bridge Cross Section 5 (Modified)



# Attachment D – Proposed Staging Design (Maintaining 2-Way Travel)



## **Attachment E – Responses to Public Consultation Comments**

As part of the preliminary design process for this project, staff sought public input on the bridge replacement. Letters were delivered to all agencies and property owners within the Village of Conestogo and adjacent areas at various stages of the Environmental Study to provide project information and engagement opportunities. EngageWR information was also included on signs that were installed at the bridge location, and in newspapers ads in local papers.

Project information was available on the Region's EngageWR website, including contacts for appropriate Region of Waterloo staff and the opportunity to subscribe for project updates. The EngageWR website provided people the opportunity to participate in a public survey regarding the project.

### **Survey Summary**

The EngageWR website recorded 52 survey responses from the three Public Consultation Centres and approximately 1700+ visits to the site.

From the Engage survey polled at PCC#2, approximately 80% of the participants that answered were in favour of the recommended bridge alignment, approximately 72% of the responses support the recommended cross section of the bridge which included sidewalks on both sides of the bridge and finally an overwhelming 97% support staging the construction to maintain two-way travel during construction. After staff reviewed pedestrian usage and project cost saving potential, an option was developed which eliminated one of the previously recommended sidewalks. Participants were polled at PCC#3 whether they would be in support of installing sidewalk on only the east side of the bridge to which 75% were in favour.

### **Main Concerns Raised by the Public and Adjacent Property Owners**

Feedback from the public included concerns as well as support for the with the project teams recommended alternative. Responses to the main themes raised by the public and adjacent property owners are below:

- a) Request to maintain travel along Northfield Drive and over the bridge during construction.

The project team recognized the fact that Northfield Drive is a critical link between Waterloo and Conestogo and therefore developed an alternative which would allow two way travel across the Conestogo River by staging approximately half of the new bridge construction to the west of the existing bridge. Traffic would continue to use the existing bridge structure until Stage 1 of the new bridge is built at which time traffic would be moved over to the newly built portion and the existing bridge demolished in order to construct the second half of the new bridge under Stage 2. A final stage would see a short term closure to align the approaches and the newly built structure.

- b) Concern for the width of the new bridge structure and its ability to accommodate all modes of travel.

Respondents expressed concern regarding the lack of safety for cyclists, pedestrians and buggies on the existing bridge as the width is inadequate for these modes of transportation. The project team developed a recommended cross section which accommodates a balance for all modes of travel across the bridge and includes 3.35m driving lanes, 2.45m shoulders as well as a 1.8m sidewalk on the east side separated by a roadside concrete barrier.

- c) Concerns surrounding speed and safety along Northfield Drive and across the bridge structure.

The new bridge will allow for some geometric design corrections to improve the safety and overall ride of both of the bridge approaches as well as the bridge. The preferred alternative will provide narrower driving lanes to slow drivers down in addition to wider shoulders providing much more room for buggies, cyclists, and pedestrians to navigate across the bridge.

- d) Concern of the wetland area affected by the proposed new bridge.

Residents raised concerns regarding impacts to the natural areas surrounding the bridge due to any proposed widening.

The project team looked at various alignment options and it was determined that a staged construction to the west of the existing bridge structure would be the best alternative as it provides the ability to maintain traffic during construction while still minimizing the impacts to natural habitat surrounding the bridge.

Also, there was mention of providing a better connection to the Health Valley Trail along the Conestogo River, which crosses under the bridge near the south abutment

During detailed design a review of the trail under the bridge structure at the south abutment can be conducted regarding possible enhancements for those travelling along and/or accessing the Health Valley Trail.

- e) Concerns regarding the cross section along Northfield Drive on either side of the bridge structure.

Cyclists and Residents raised concerns over the existing cross section along Northfield Drive on either side of the bridge over Conestogo River. This section of road is beyond the scope of this project, but the feedback will be considered when planning any future projects along these areas of Northfield Drive.