

Speedvale Underpass Connection ***Trans Canada Trail to Riverside Park***

Public Open House
September 13, 2018

Council Direction November 2017

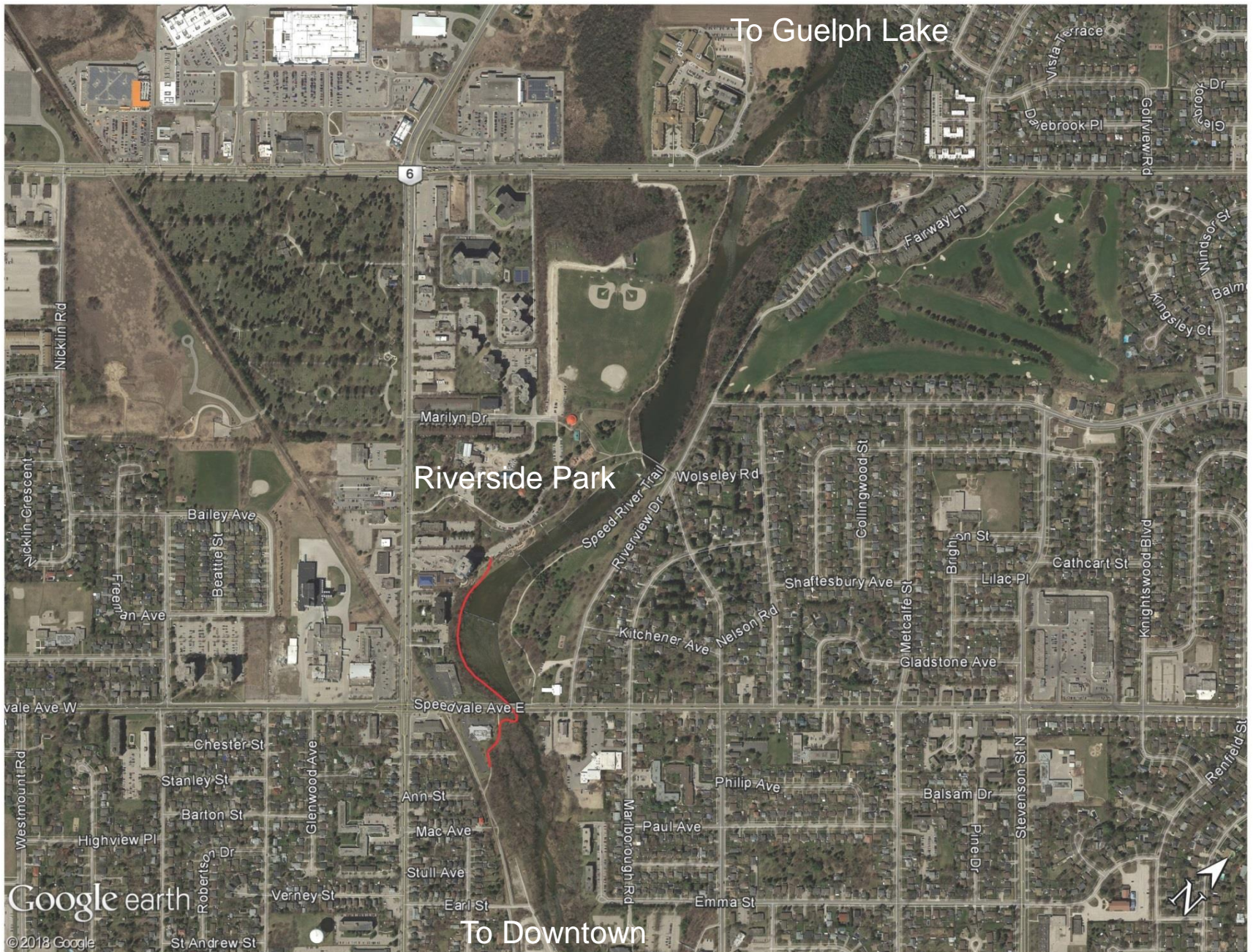
“That staff be directed to report back to Council in 2018 on alternative trail design options within the identified study area on the west side of the river. Alternative trail design options will have no minimum design criteria and will comply with the Official Plan, Zoning By-law and provincial legislation.”

Work to Date 2018

- Interdepartmental coordination
- Consulted other municipalities
- Consulted Grand River Conservation Authority
- Retained consultant to explore options on north and south side
- Preliminary Design and Assessment of New Trail Alignments
August 2018
- 10 new trail alignments south side, 5 north side evaluated *August 2018*
- Trail alignments presented to Accessibility Advisory Committee
[August 21, 2018](#)
- Retaining Wall Structural Advice Report *August 2018*

Work to Date 2018

- All trail alignments were evaluated under the following criteria:
 - Technical
 - Social/Cultural
 - Natural Environment
 - Economic
 - Policy
- The majority of the new trail alignments evaluated has issues with:
 - Official Plan Compliance
 - [Natural Heritage System](#)
 - Zoning By-Law Compliance
 - [Floodplain Lands](#)
 - Constructability
 - [Existing slope and existing retaining wall stability](#)



Three Components to Project

- Trail segment south of Speedvale Avenue to downtown
- Trail underpass at proposed new bridge
- Trail segment north of Speedvale Avenue to Riverside Park

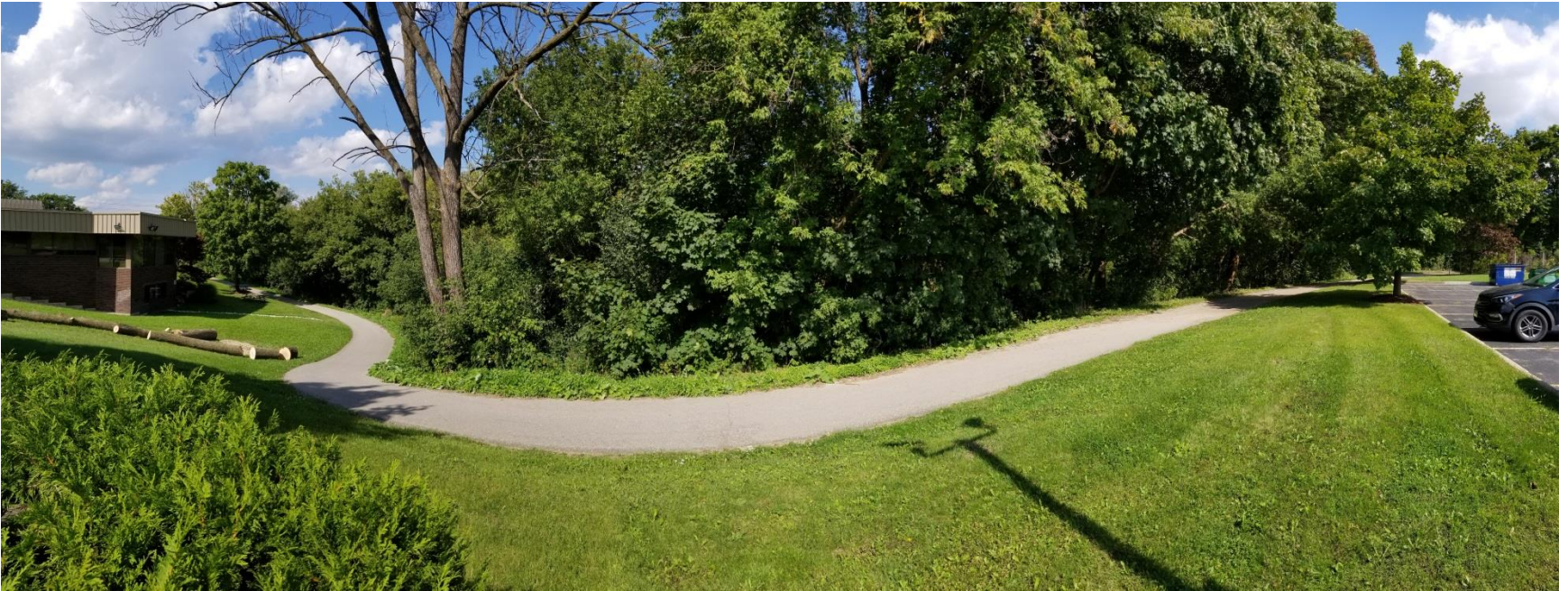


North of Speedvale
Avenue to Enabling Garden
(Riverside Park)

Speedvale Avenue Bridge

South of Speedvale
Avenue to Downtown

South of Speedvale Avenue



South of Speedvale Avenue



Speedvale Avenue Bridge



Speedvale Avenue Bridge



North of Speedvale Avenue

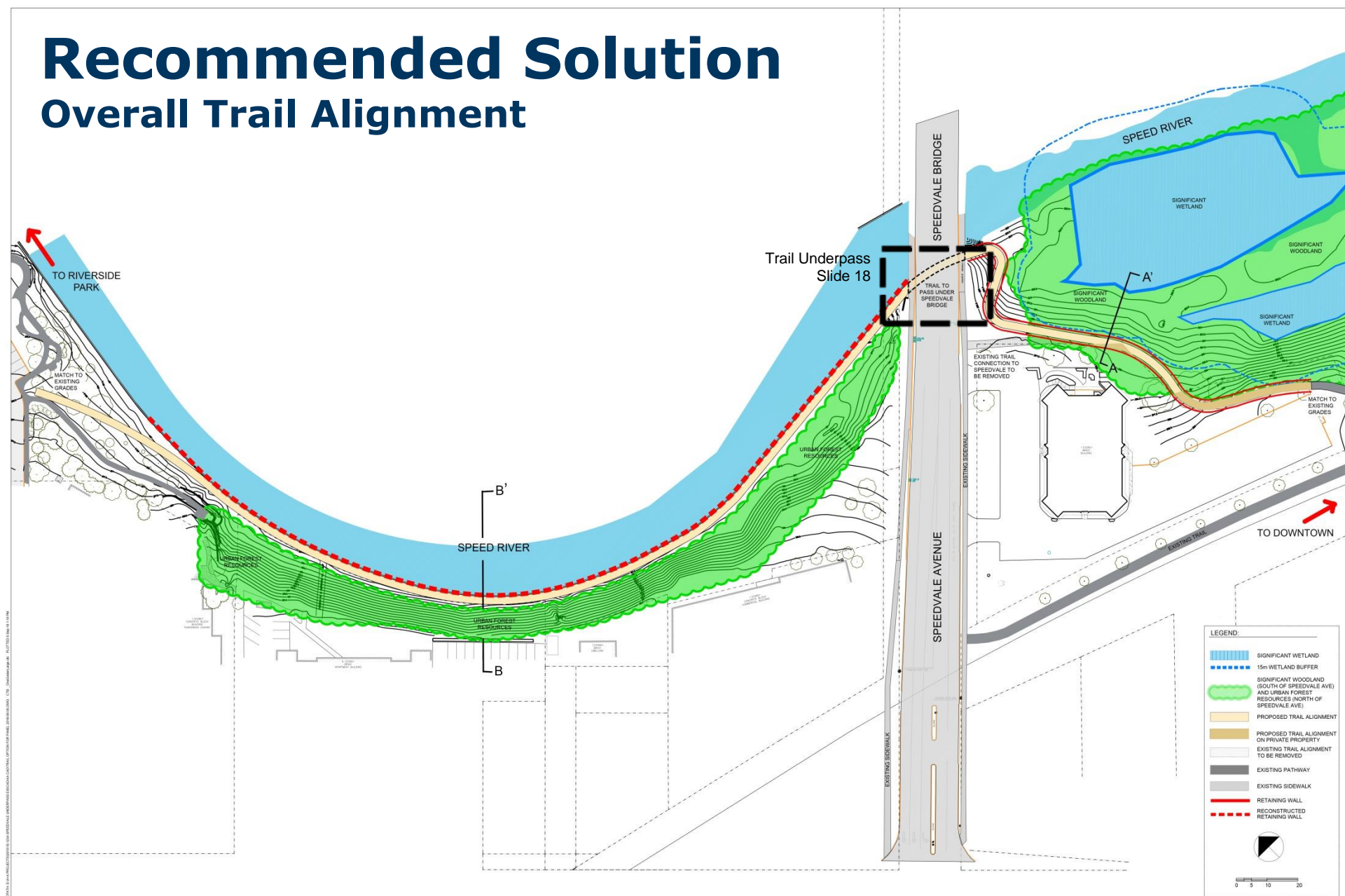


North of Speedvale Avenue



Recommended Solution

Overall Trail Alignment

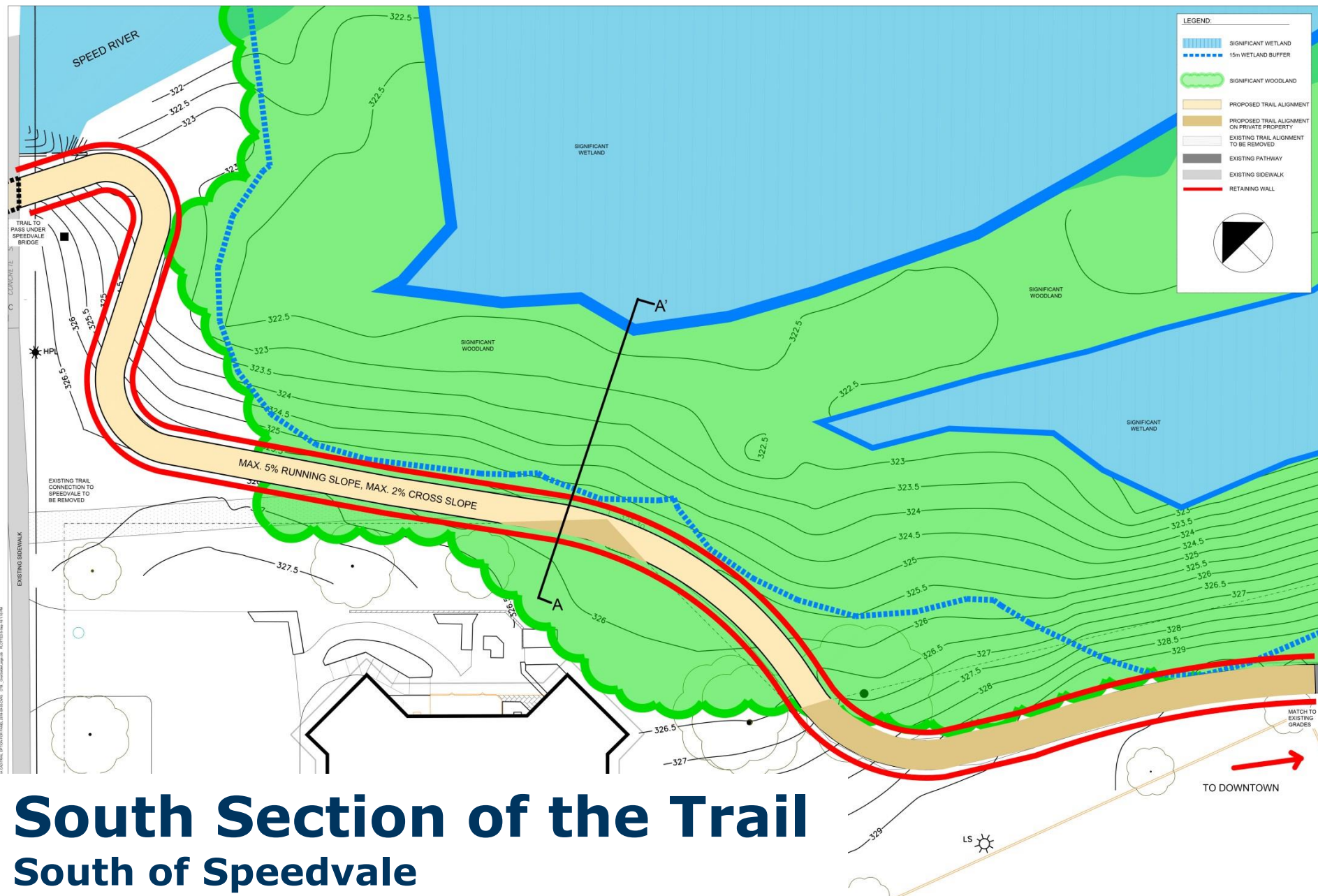


Recommended Solution South of Speedvale Avenue

- Trail approximately 140 linear metres
- 2.5 metre wide asphalt surface
- Maximum 5% trail slope
 - [Accessibility for Ontarians with Disabilities Act](#) *compliant as a minimum and* [City of Guelph Facility Accessibility Design Manual](#) *compliant where possible*
- Retaining walls with guard required to reduce impact to natural heritage system

Recommended Solution South of Speedvale Avenue (cont.)

- Requires natural heritage system mitigation
 - *Significant Woodland restoration*
 - *Wetland buffer restoration*
 - *Shoreline restoration*
- Endangered Species Act authorization
 - [Butternut removal and compensation](#)
- Compliant with current City Official Plan and zoning bylaws provided natural heritage mitigation measures are implemented



Typical Trail Cross Section A-A'

South of Speedvale

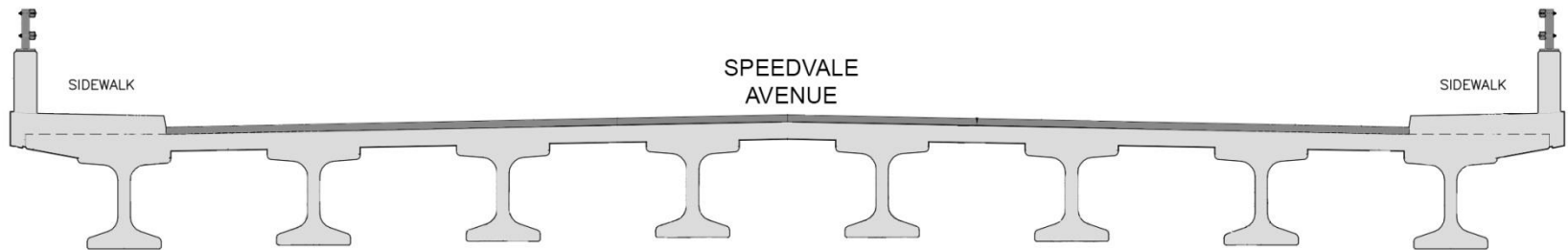


Solution at Bridge

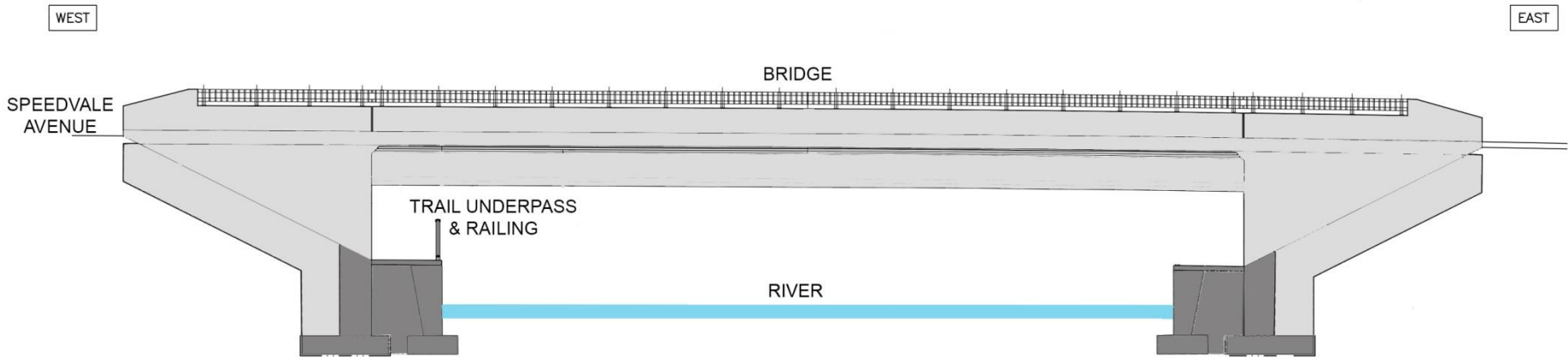
- Trail approximately 20 linear metres
- Passes under the bridge structure
- 2.5 metre wide concrete surface
 - *Final trail width to be determined during detailed bridge design*
- AODA compliant trail slopes
 - [Accessibility for Ontarians with Disabilities Act](#) *compliant and*
[City of Guelph Facility Accessibility Design Manual](#) *compliant*
- Guard at edge of river

Speedvale Bridge

Trail Underpass



TYPICAL SECTION



ELEVATION

Recommended Solution North of Speedvale Avenue

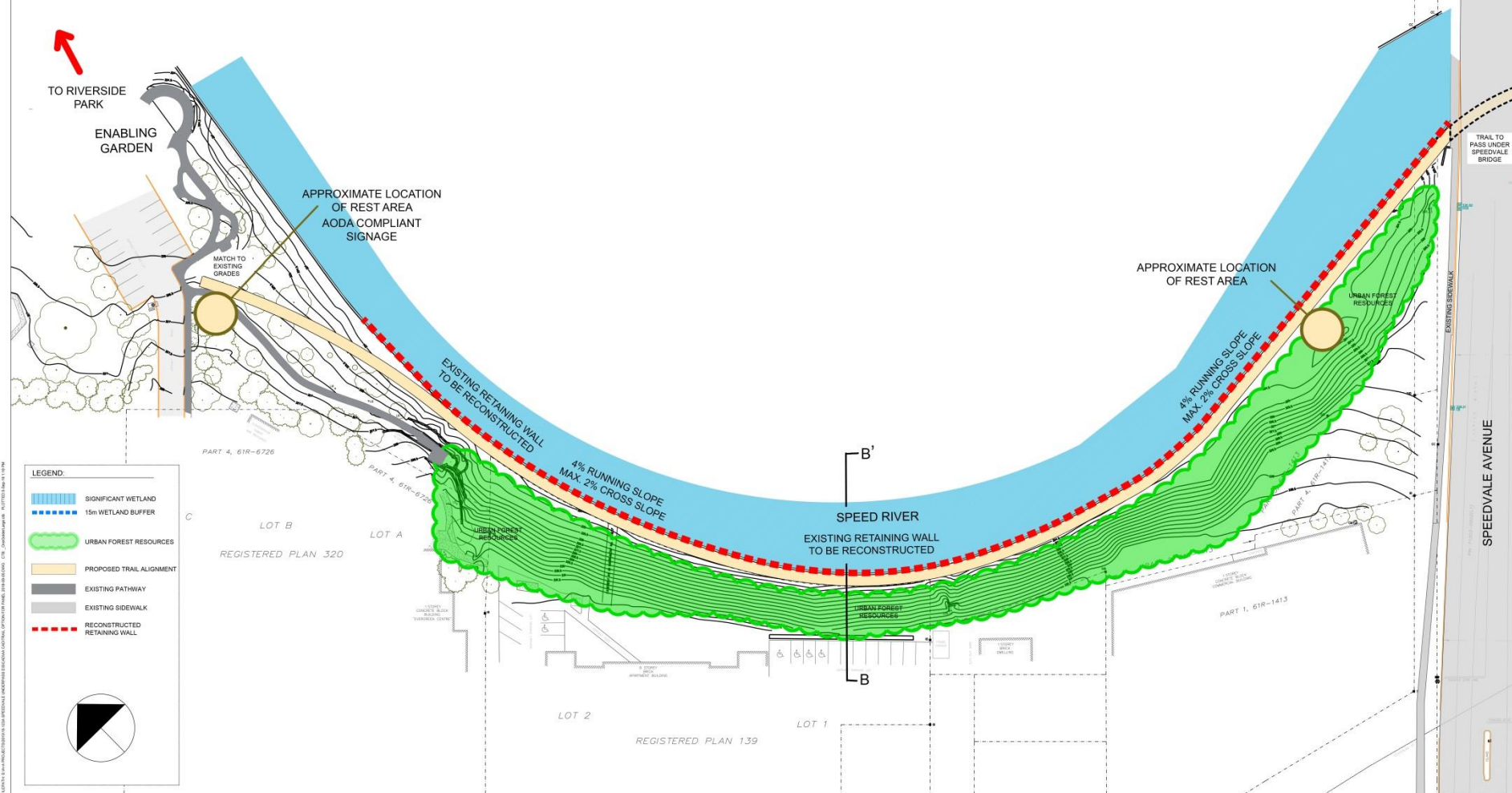
- Trail approximately 340 linear metres
- 2.5 metre wide asphalt surface,
- Maximum 4% trail slope
 - [Accessibility for Ontarians with Disabilities Act](#) *compliant and*
[City of Guelph Facility Accessibility Design Manual](#) *compliant*
- Remove existing retaining wall along Speed River
- Construct approximately 250 linear metres of new, taller retaining wall with guard
 - *Up to 2 metres taller in some locations*
 - *Based on engineering consultant's assessment*

Recommended Solution North of Speedvale Avenue (cont.)

- Requires significant natural heritage system mitigation
 - *Focus on Speed River and floodplain*
- Requires significant input and approval from Grand River Conservation Authority
 - [Permits related to construction and fill](#)
- Requires input and approval from Department of Fisheries and Oceans
 - [Permits related to in-river retaining wall construction](#)

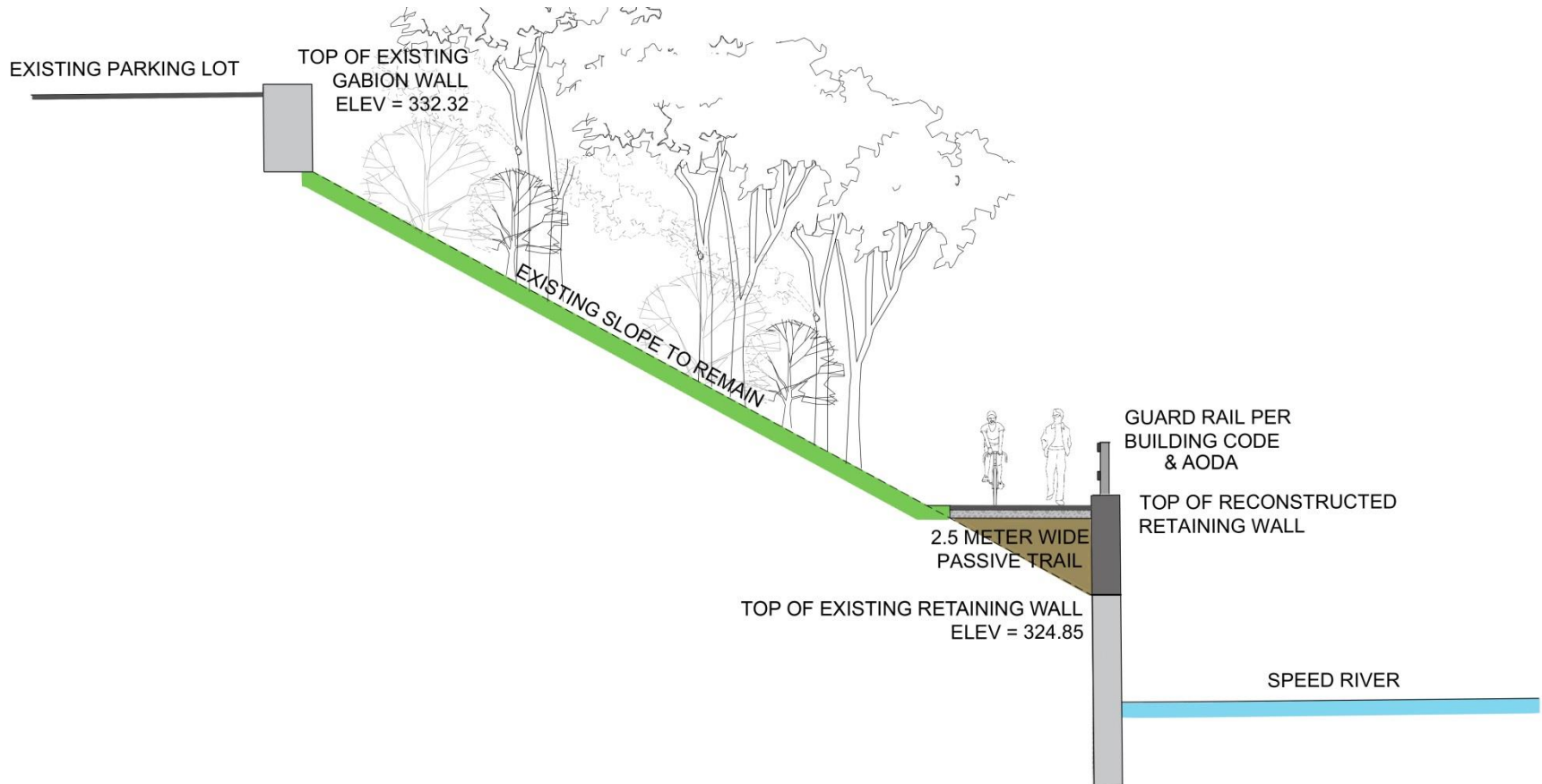
North Section of the Trail

North of Speedvale



Typical Trail Cross Section B-B'

North of Speedvale



Recommended Solution Implications

- Requires additional environmental studies pending input from reviewing agencies
- Significant capital investment:
 - *Retaining wall construction*
 - *Replace retaining wall near end of service life*
- Significant construction challenges:
 - *Location along Speed River*
 - *Existing slopes, vegetation, wetlands and infrastructure*
 - *Limited access due to slopes and natural environment*
 - *Permissions, approvals and agreements for property acquisition or easement for public use*

Recommended Solution – Next Steps

- Presentation of Recommended Solution to River Systems Advisory Committee (RSAC) (*September 19, 2018*)
- Retaining wall condition study (*on-going*)
- Speedvale Avenue bridge detailed design (*on-going*)
- Presentation to City Council (*December 2018*)
- Pending Council Approval
 - Additional environmental studies
 - Detailed retaining wall and trail design
 - Construction timing based on end of retaining wall service life

Interim On-Road Solution

- On-road crossing
- Relocate traffic signal and cross-walk
 - Maximum distance between stop bar in front of fire station and proposed relocated cross walk is 55 meters
- Realign existing trail in east Riverside Park to relocated cross-walk
- Improve trail accessibility south of Speedvale Avenue
 - *Reduce existing 18% trail slope to 4% trail slope*
 - ([Accessibility for Ontarians with Disabilities Act](#) minimum and [City of Guelph Facility Accessibility Design Manual](#) compliant)

Interim On-Road Solution

Overall Trail Alignment

Typical Trail Cross Section C-C'

Interim On-Road Solution

South of Speedvale



Interim On-Road Crossing

- Maintains on-road crossing
- Reduces crossing distance between north and south sections of existing trails by approximately 30 meters

Interim On-Road Solution – Next Steps

- Presentation of Interim Solution to River Systems Advisory Committee (RSAC) (*September 19, 2018*)
- Detailed Speedvale Bridge design (*on-going*)
- Presentation to City Council (*December 2018*)
- Pending Council Approval
 - Revised environmental impact study
 - Detailed trail design
 - Construction timing based on bridge and road reconstruction

Questions?