



The Meadoway

**Multi-use Trail Class
Environmental Assessment**

Public Information Centre 3

October 23rd, 2019



The Meadoway
COMMUNITY POWERED GREEN SPACES

Presented by: Corey Wells

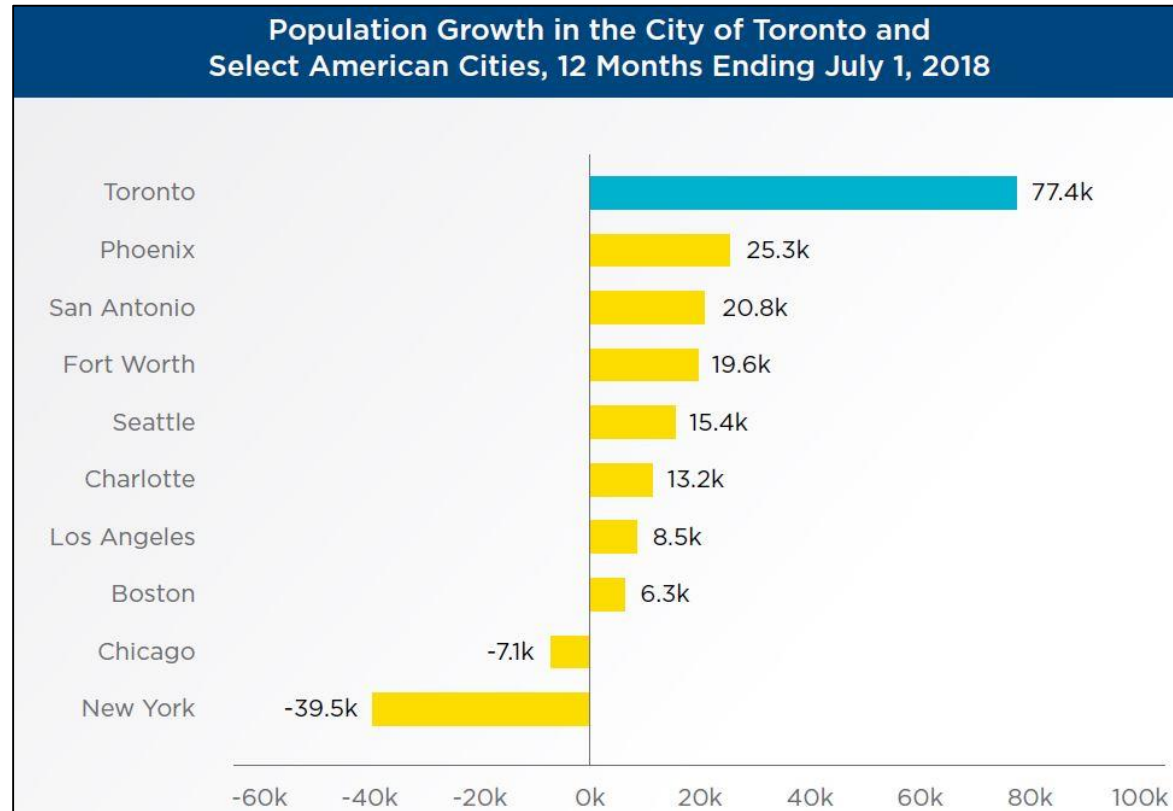
A project of:



**Toronto and Region
Conservation
Authority**

Toronto's Current (and future) Context

- Population Growth



Toronto Foundation – Vital Signs 2019

Toronto's Current (and future) Context

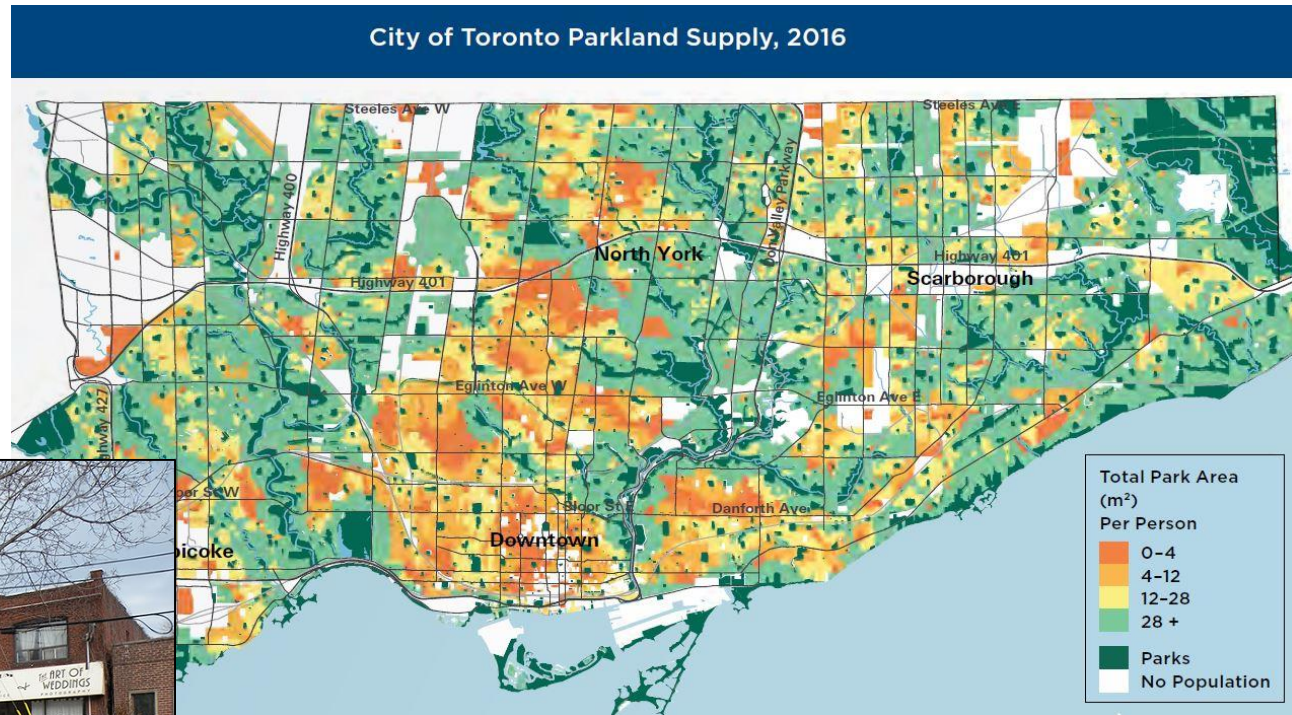
- Population Growth
- Transportation



@TO_Cycling

Toronto's Current (and future) Context

- Population Growth
- Transportation
- Access to healthy, greenspace



Reimagining Corridors – Untapped Potential

The Gattineau Hydro Corridor in Scarborough – The Future Meadoway





PARCEL 4228
DATE-AUG. 28-75
EGLETON EMB



The Meadoway – Community Powered Greenspaces

- Builds off of the success of the SCBT
- Restores 200 ha of meadow and completes over 16 linear km of multi-use trail
- Establishes a full link between downtown Toronto and Rouge National Urban Park



CONNECTIONS



NATURAL
ENVIRONMENT
& EDUCATION



TRANSPORTATION



RECREATION



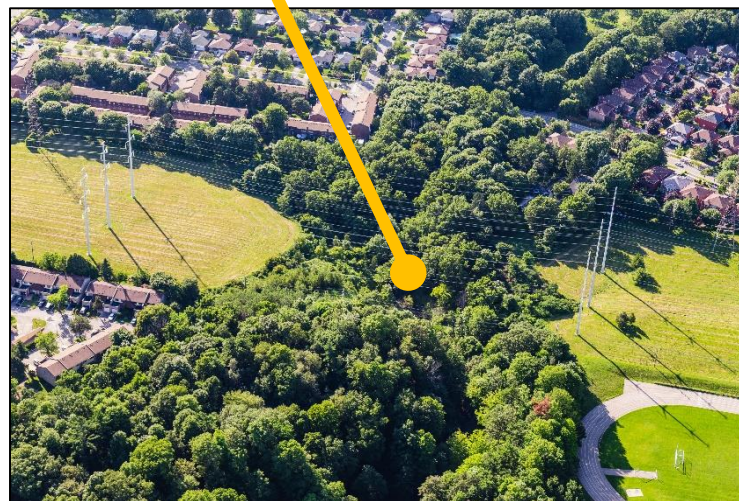
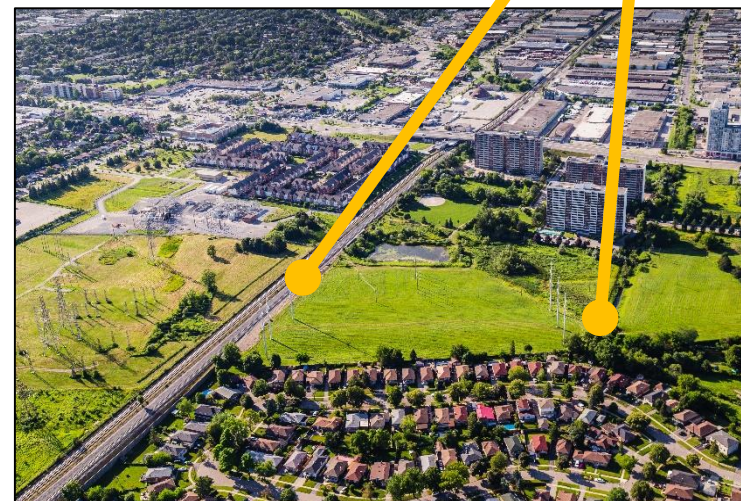
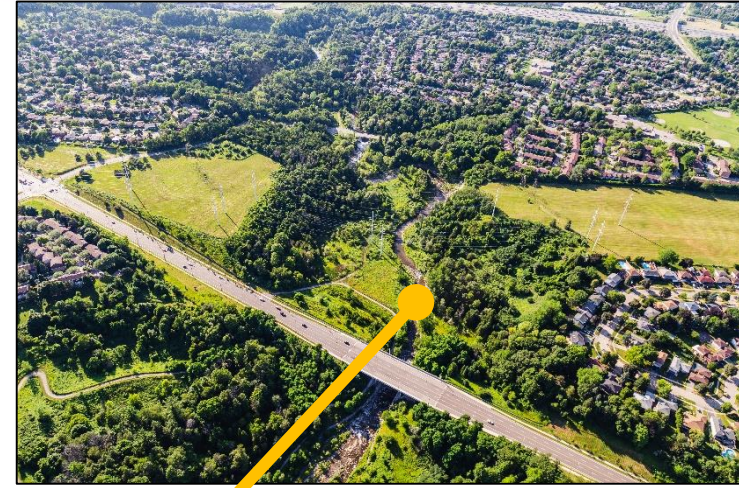
COMMUNITY
& PUBLIC
REALM



BLUEPRINT
FOR
REVITALIZATION

Focus Areas and Trail “Anchors”

- 16 linear kilometre corridor
- 7 sections - 3 “**Incomplete**” → Focus of Class EA
- Hydraulic and geofluvial assessments determined optimal bridge crossings = trail “anchors”



Preferred Trail Alignments

- Preferred alignments remain within the hydro corridor (Section 3 and 5)
- Section 6 routes south of 401 Hwy via UTSC and utilizes dedicated bike lane on Conlins Rd.

S5 - Scarborough Golf Club – Neilson Rd.



S3 - Kennedy Rd. – Thomson Memorial



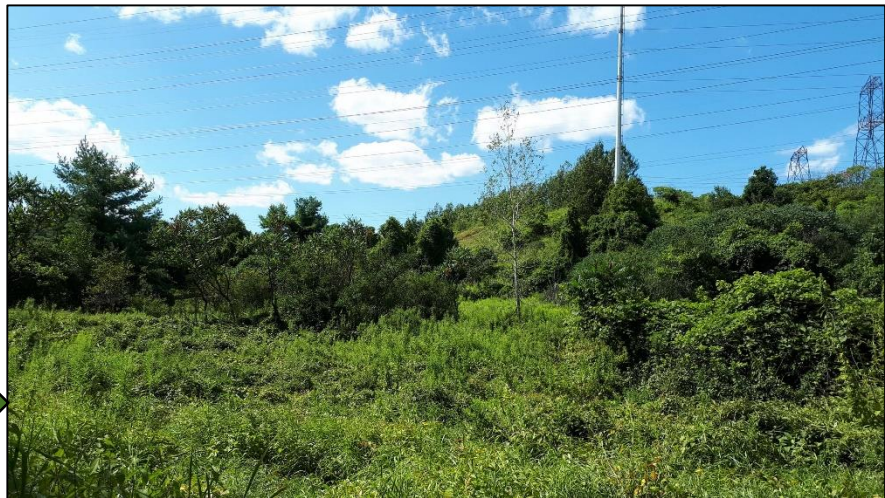
S6 - Neilson Rd. – Conlins Rd.



Alternative Design Concepts

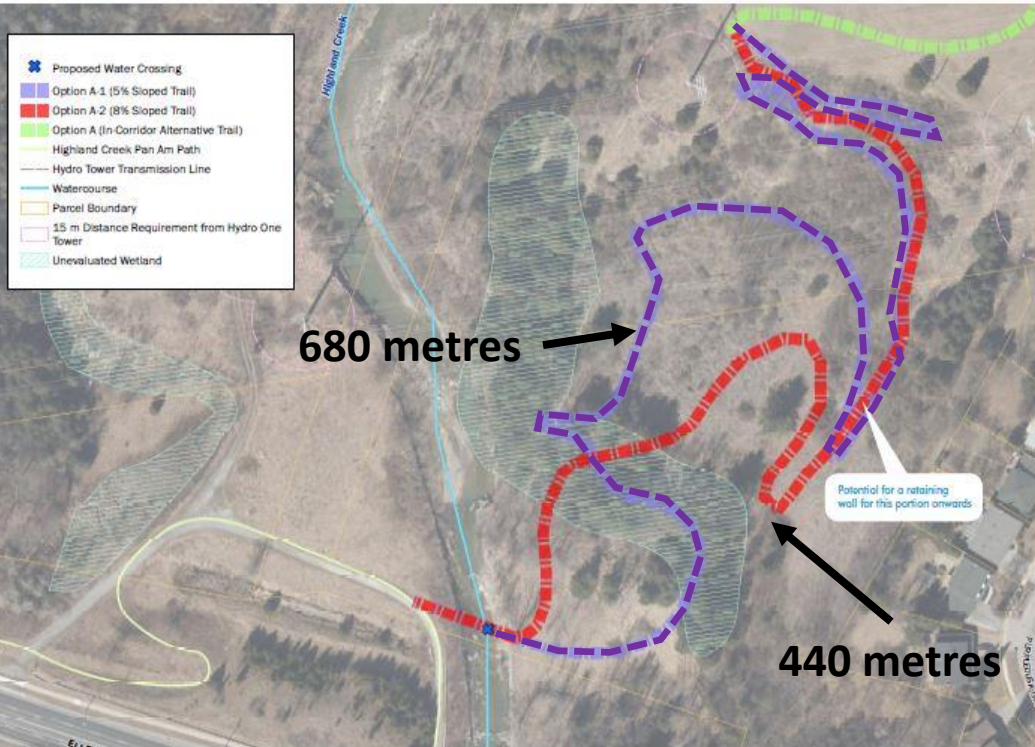
“Alternative methods of implementing the preferred trail alignment”

Section 5 – Highland Creek East Slope



Section 6 – Chartway Blvd

Section 5: Highland Creek Alignment Design Concepts



OBJECTIVES	OPTION A-1: 5% Grade	OPTION A-2: 8% Grade
Provide a positive user experience	✓	✓
Protect and enhance natural features		✓
Maintain a safe environment for all potential trail users	✓	
Be good neighbours	✓	✓
Be cost effective		✓
PROPOSED PREFERRED		OPTION A-2

✓ = Best meets the project objective

Option A-2 is the Proposed Preferred:

- Minimizes impacts to valley slope and vegetation due to smaller footprint
- Lower capital costs due to simplified construction and maintenance/operation requirements
- Opportunity for restoration and invasive species management
- Accessibility enhancements such as rest nodes, trail signage, and wayfinding

Making Trails Accessible for All Users

While the majority of The Meadowway trails will be relatively flat, the proposed preferred at Highland Creek will need to travel along 8% grades (in some portions) to reduce ecological impacts. To optimize access for all users, trail design will consider: rest areas at key locations, proper signage, maintaining a slope <5% (where feasible), and other safety features.



Highland Creek Valley Slope



5% Grade Trail Example

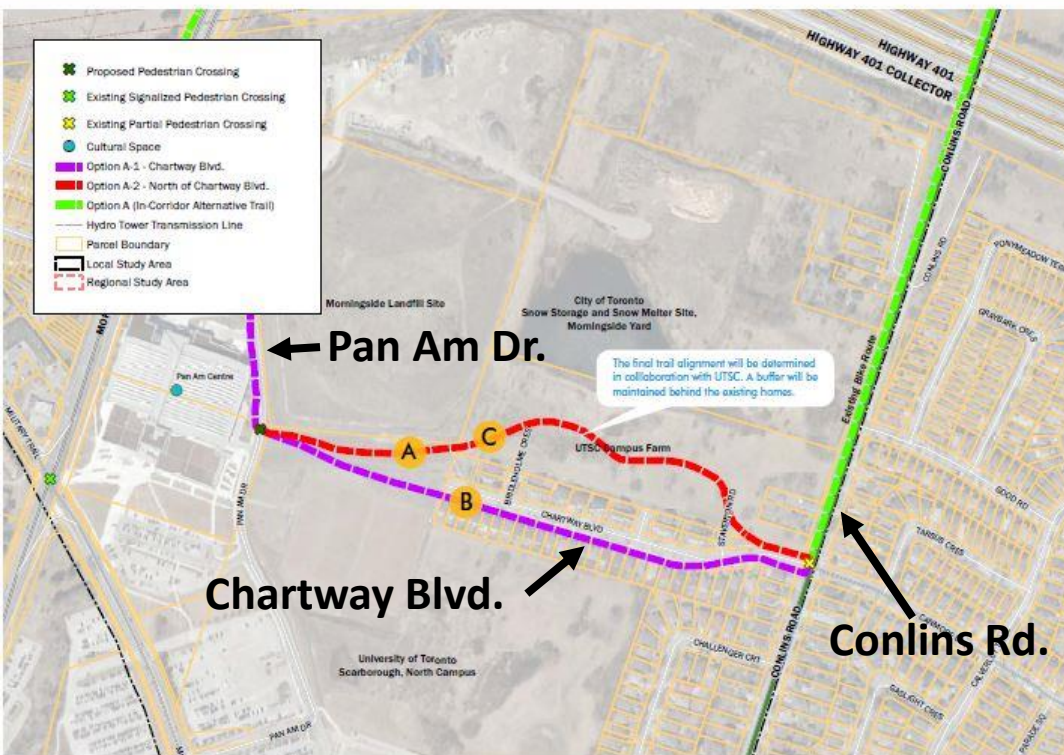


10% Grade Trail Example



Example of Rest Area in Lower Don

Section 6: Chartway Blvd. Alignment Design Concepts



OBJECTIVES	OPTION A-1:	OPTION A-2:
Provide a positive user experience		✓
Protect and enhance natural features	✓	✓
Maintain a safe environment for all potential trail users		✓
Be good neighbours	✓	✓
Be cost effective		
PROPOSED PREFERRED		OPTION A-2

✓ = Best meets the project objective

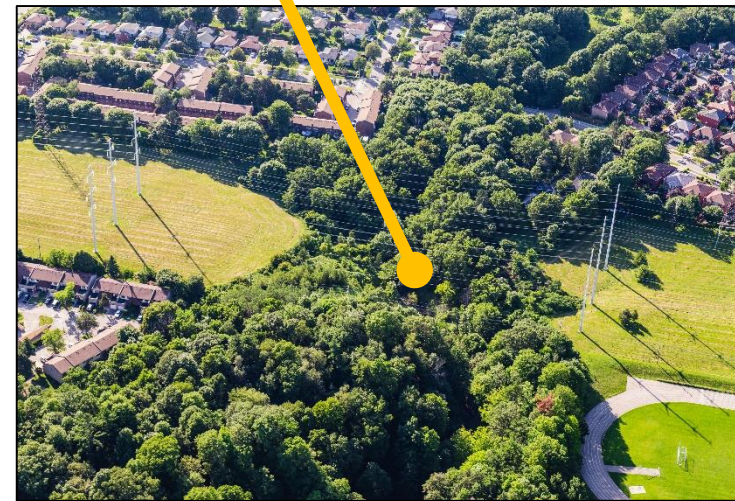
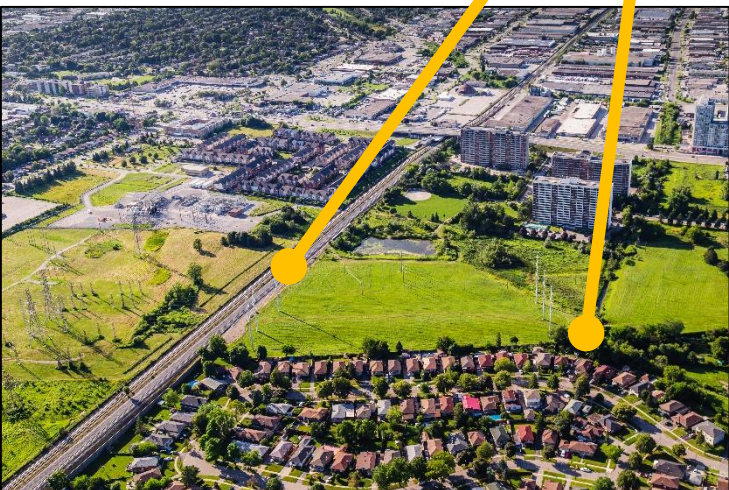
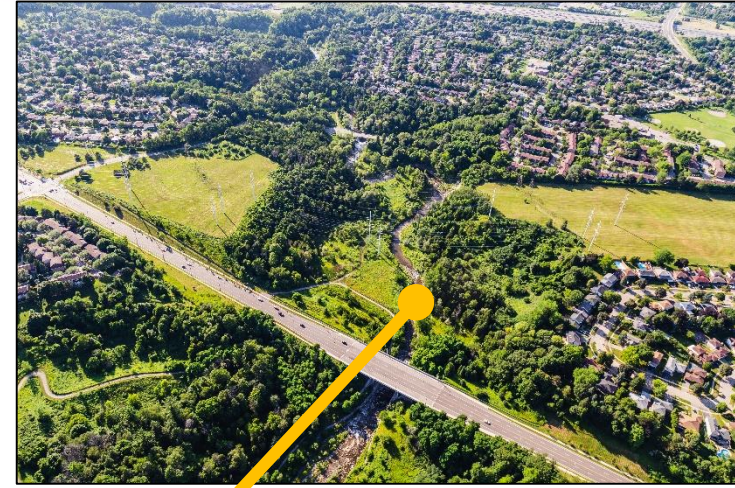
Option A-2 is the Proposed Preferred:

- Maximizes connection to urban greenspace, as routed north of Chartway Blvd. away from residential properties
- Improves safety by removing users from the residential street
- Increases opportunity for education and community stewardship
- Minimizes potential impacts to adjacent neighbours with vegetated buffer between trail and homes



Pedestrian Bridge Crossings

- TTC/GO Stouffville Rail Corridor
- Southwest Tributary of Highland Creek
- Milliken Branch of Highland Creek
- Ellesmere Ravine



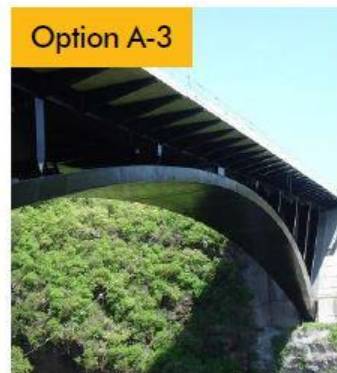
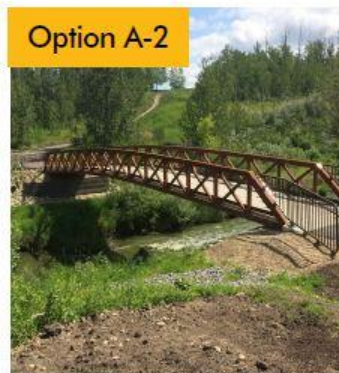
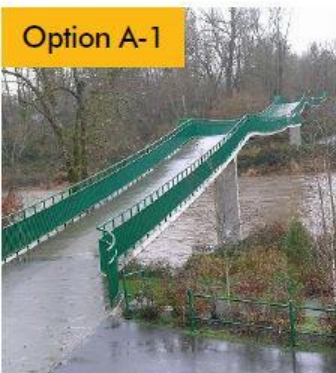
Ellesmere Ravine



Section 6:

Ellesmere Ravine Pedestrian Water Crossing

Design Concepts



Stress-Ribbon Bridge
(Source: Michael Goff)

- Single span bridge comprised of suspension cables embedded in a concrete deck
- This complex design is uncommon in Canada, making it an expensive structure to design and build

3-Span Steel Girder Bridge
(Source: Rapid-Span)

- Common bridge type that uses steel or concrete beams (girders) as the means of supporting a deck
- Two concrete piers constructed within the ravine are required in order to provide structural support

Arch Bridge
(Source: Demathieu and Bard)

- Bridge comprised of a structural arch with piers and support structures (abutments) built within the ravine
- Arch bridges provide a unique aesthetic but require larger abutments, increasing costs and impacts to the ravine

OBJECTIVES	OPTION A-1	OPTION A-2	OPTION A-3
Provide a positive user experience	✓		
Protect and enhance natural features	✓	✓	
Maintain a safe environment for all potential trail users		✓	✓
Be good neighbours	✓	✓	
Be cost effective		✓	
PROPOSED PREFERRED		OPTION A-2	

✓ = Best meets the project objective

Option A-2 is the Proposed Preferred:

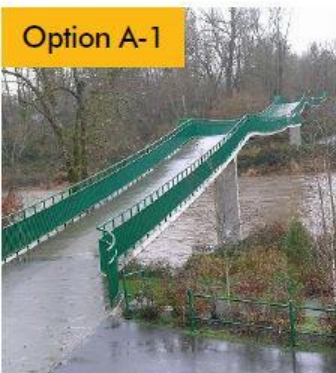
- Maximizes users' interaction with ravine via unobstructed design and future opportunities for viewing platforms
- Accessible for all users (compliant with Accessibility for Ontarians with Disabilities Act)
- A common bridge structure simplifies design, construction, maintenance, and overall costs
- Construction of support piers will have short-term impacts to a localized area of ravine habitat

Note: Pictures shown above are examples of bridge types only

Section 6:

Ellesmere Ravine Pedestrian Water Crossing

Design Concepts

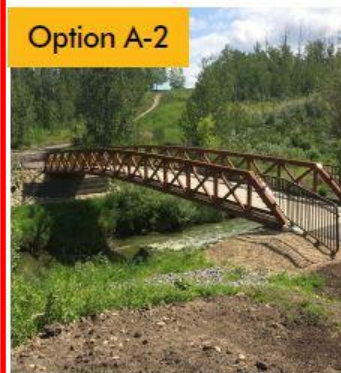


Option A-1

Stress-Ribbon Bridge

(Source: Michael Goff)

- Single span bridge comprised of suspension cables embedded in a concrete deck
- This complex design is uncommon in Canada, making it an expensive structure to design and build

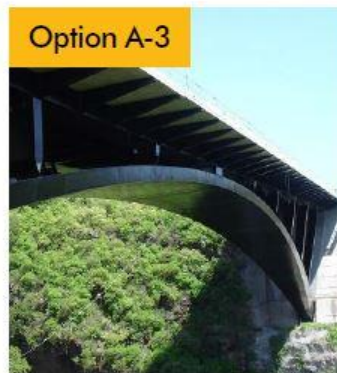


Option A-2

3-Span Steel Girder Bridge

(Source: Rapid-Span)

- Common bridge type that uses steel or concrete beams (girders) as the means of supporting a deck
- Two concrete piers constructed within the ravine are required in order to provide structural support



Option A-3

Arch Bridge

(Source: Demathieu and Bard)

- Bridge comprised of a structural arch with piers and support structures (abutments) built within the ravine
- Arch bridges provide a unique aesthetic but require larger abutments, increasing costs and impacts to the ravine

OBJECTIVES	OPTION A-1	OPTION A-2	OPTION A-3
Provide a positive user experience	✓		
Protect and enhance natural features	✓	✓	
Maintain a safe environment for all potential trail users		✓	✓
Be good neighbours	✓	✓	
Be cost effective		✓	
PROPOSED PREFERRED		OPTION A-2	

✓ = Best meets the project objective

Option A-2 is the Proposed Preferred:

- Maximizes users' interaction with ravine via unobstructed design and future opportunities for viewing platforms
- Accessible for all users (compliant with Accessibility for Ontarians with Disabilities Act)
- A common bridge structure simplifies design, construction, maintenance, and overall costs
- Construction of support piers will have short-term impacts to a localized area of ravine habitat

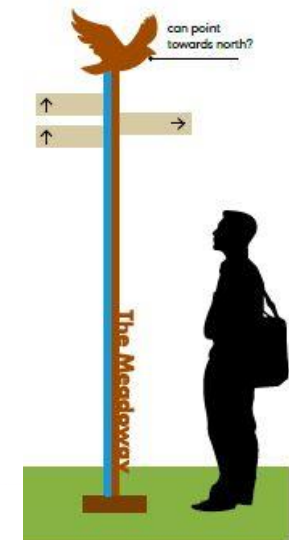
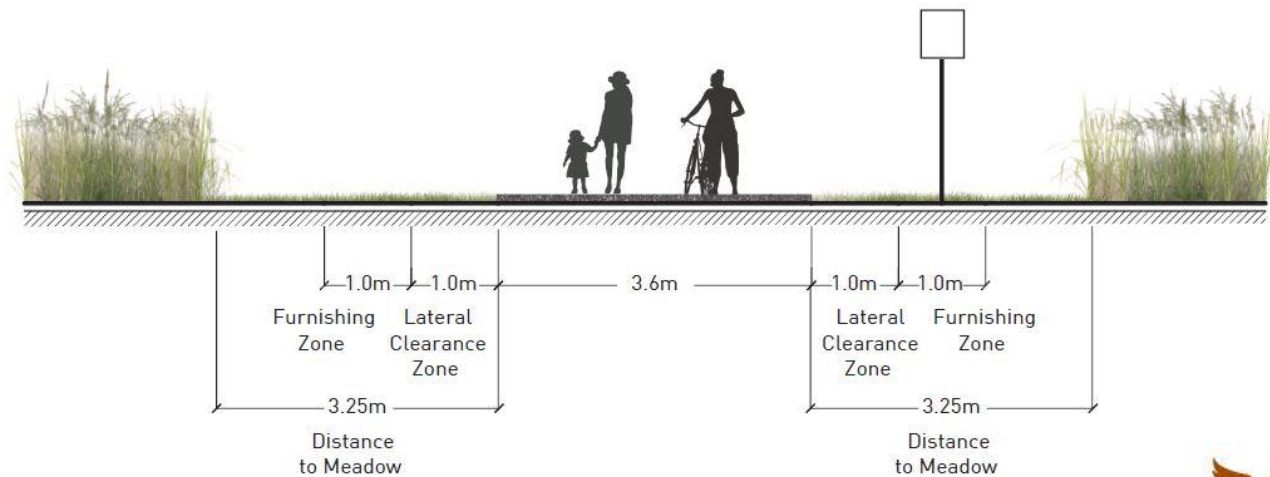
**ALL DESIGNS SUBJECT TO
HYDRO ONE INC. (HONI)
PERMITS AND APPROVALS**

Note: Pictures shown above are examples of bridge types only



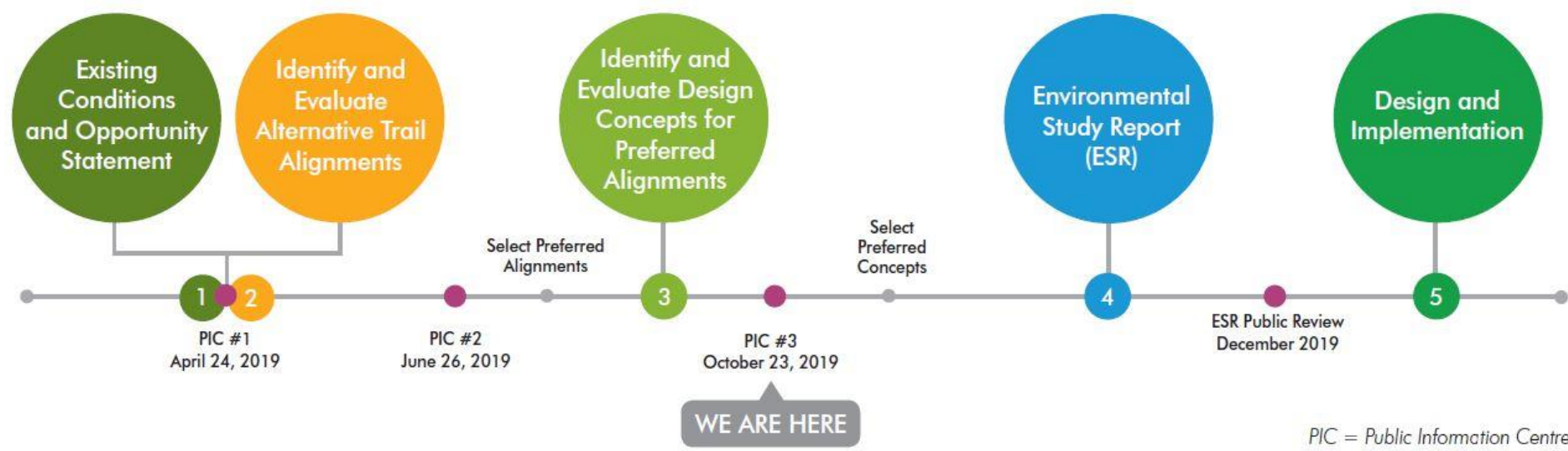
Trail Configuration, Design, and Elements

Section 1 - In-Corridor Trail





Looking Ahead



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