Environmental and Ecological Planning Advisory Committee Report

2nd Meeting of the Environmental and Ecological Planning Advisory Committee January 17, 2019

Committee Room #5

Attendance

PRESENT: S. Levin (Chair), E. Arellano, A. Boyer, R. Doyle, A. Duarte, C. Dyck, S. Hall, B. Krichker, I. Mohamed, K. Moser, R. Trudeau and I. Whiteside and H. Lysynski (Secretary)

ABSENT: P. Ferguson and S. Sivakumar

ALSO PRESENT: J. Ackworth, C. Creighton, T. Koza and J.

MacKay

The meeting was called to order at 5:00 PM

1. Call to Order

1.1 Disclosures of Pecuniary Interest

That it BE NOTED that no pecuniary interests were disclosed.

2. Scheduled Items

2.1 Wonderland Road Class Environmental Assessment Study

That, the following actions be taken with respect to the Wonderland Road Class Environmental Assessment Study:

- a) the <u>attached</u> presentation from J. Johnson, Project Manager, Dillon Consulting, was received; and,
- b) the <u>attached</u> Notice of Public Information Centre, was received.
- 2.2 (ADDED) Back to the River Environmental Impact Statement

That the Environmental and Ecological Planning Advisory Committee heard a verbal presentation from M. Does with respect to the Back To the River Environmental Impact Statement.

3. Consent

3.1 1st Report of the Environmental and Ecological Planning Advisory Committee

That it BE NOTED that the 1st Report of the Environmental and Ecological Planning Advisory Committee, from its meeting held on December 13, 2018, was received.

3.2 Municipal Council resolution adopted at its meeting held on December 18, 2018, with respect to the 12th Report of the Environmental and Ecological Planning Advisory Committee

That it BE NOTED that the Municipal Council resolution adopted at its meeting held on December 18, 2018, with respect to the 12th Report of the Environmental and Ecological Planning Advisory Committee, was received.

4. Sub-Committees and Working Groups

4.1 3900 Scotland Drive and Other Properties

That the <u>attached</u> Working Group comments with respect to the application by John Aarts Group, relating to the property located at 3900 Scotland Drive and other properties BE FORWARDED to C. Lowery, Planner II, for consideration; it being noted that the Environmental and Ecological Planning Advisory Committee received and reviewed a Notice of Planning Application, with respect to this matter.

4.2 ReThink Zoning Working Group comments

That the <u>attached</u> Working Group comments with respect to the ReThink Zoning Draft Terms of Reference BE FORWARDED to J. Adema, Planner II, for consideration.

4.3 Springbank Dam Working Group Comments

That it BE NOTED that the Working Group comments reviewed by S. Levin, S. Hall and B. Krichker, relating to the Forks of the Thames and the Springbank Dam Decommissioning Environmental Impact Study, were received.

4.4 Back to the River Environmental Impact Study Working Group Comments

That the <u>attached</u> Working Group comments relating to the Forks of the Thames and Springbank Dam Decommissioning Environmental Impact Statements BE FORWARDED to the Civic Administration for consideration.

5. Items for Discussion

5.1 Proposed April 11, 2019 Meeting Date

That consideration of moving the April 18, 2019 Environmental and Ecological Planning Advisory Committee to April 11, 2019 BE POSTPONED to the next meeting.

5.2 Notice of Planning Application - Official Plan Amendment - Victoria Park Secondary Plan

That it BE NOTED that the Notice of Planning Application for the Victoria Park Secondary Plan, from M. Knieriem, Planner II, was received.

5.3 Natural Heritage Inventory for the Meadowlily Woods Environmentally Significant Area

That it BE NOTED that the Environmental and Ecological Planning Advisory Committee held a discussion with respect to the Natural Heritage Inventory for the Meadowlily Woods Environmentally Significant Area.

6. Deferred Matters/Additional Business

6.1 (ADDED) Wetland Working Group Update

That it BE NOTED that the Environmental and Ecological Planning Advisory Committee heard a verbal update from the Wetland Working Group.

6.2 (ADDED) Byron Gravel Pit Secondary Plan

That the following actions be taken with respect to the Byron Gravel Pit Secondary Plan:

- a) the Civic Administration BE ADVISED that a portion of the Byron Gravel Pit be preserved for species-at-risk, specifically bank swallows and cliff swallows; it being noted that bank swallows are a threatened species and the swallows and their habitat are protected under the *Endangered Species Act*; and,
- b) the Environmental and Ecological Planning Advisory Committee BE CIRCULATED on any environmental work undertaking as part of the Byron Gravel Pit Secondary Plan.
- 6.3 (ADDED) Dingman Creek Subwatershed Stakeholder Meeting Update
 That it BE NOTED that the Environmental and Ecological Planning
 Advisory Committee (EEPAC) heard a verbal update from B. Krichker,
 EEPAC Representative, relating to the Dingman Creek Subwatershed
 Stakeholder meeting.
- 6.4 (ADDED) 2019 Shifting the Paradigm Forum

That it BE NOTED that the Environmental and Ecological Planning Advisory Committee (CAC) approved an expenditure of up to \$175.00 for R. Trudeau to attend the 2019 Shifting the Paradigm Forum - Growing Health Landscapes Conference; it being noted that the EEPAC has sufficient funds in its 2019 budget for these expenditures.

7. Adjournment

The meeting adjourned at 7:29 PM.



Wonderland Road Improvements

Class Environmental Assessment Study

Environmental & Ecological Planning Advisory Committee

Purpose of this meeting:

To introduce the project and solicit participation from committee members throughout the EA process







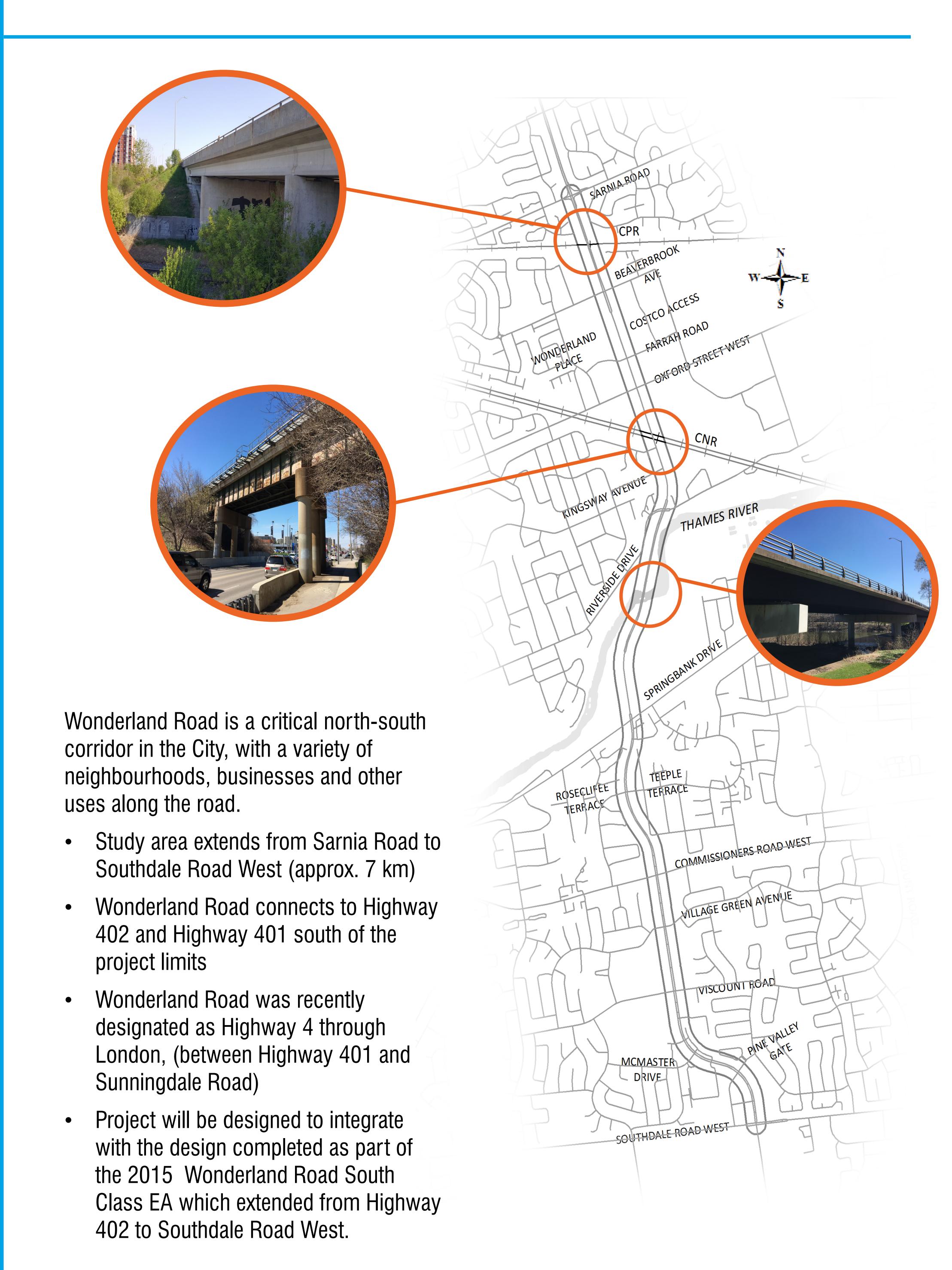
PROBLEM AND OPPORTUNITY STATEMENT

Recognizing the important role Wonderland Road has in the City of London as a key north-south transportation corridor, the 2030 Transportation Master Plan identified the need to widen Wonderland Road from four to six lanes, from Sarnia Road to Southdale Road as a strategic improvement. The City initiated a Schedule C Municipal Class Environmental Assessment (EA) (2000, as amended) to confirm the need for the widening and to identify the opportunity for additional improvements along the corridor. The outcome of the study will provide the basis for implementing an optimized corridor that addresses multi-model transportation needs, servicing, urban design and accessibility.





STUDY AREA





STUDY PROCESS

The study is following the requirements of a Schedule 'C' Municipal Class Environmental Assessment (EA) (2000, as amended) process and will build on the recommendations of the London Plan, Transportation Master Plan, Cycling Master Plan and other relevant studies.



Notice of Study Commencement

• May 2017



Pop-up Events

 July 2017 at Westmount Mall & Springbank Gardens Community Centre



Corridor Walk

 Team members delivered project information cards to businesses along Wonderland Road Aug, 2017



Pop-up Event

Sept. 2017 at Western University

Phase 1

Problem/ Opportunity

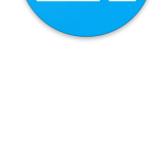
- Identify problems/ opportunities to be addressed in the planning and design process
- Confirm the need for improvements
- Prepare a "Problem Statement"



Phase 2

Alternative Solutions

- Document existing and future conditions
- Develop alternative solutions
- Consult with review agencies and the public



Public Information Centre #1

January 2019



Public Information Centre #2

Mid to late 2019

Phase 3

Design Options for Preferred Solution

- Identify design options for the preferred solution
- Evaluate design options and select a preferred design
- Impact assessment of the preferred design



Publish ESR for 30-Day Public Review

Late 2019

Phase 4

Environmental Study Report (ESR)

 Document the decision-making process for public and agency review



Construction Start

Potentially 2023 subject to council approval and permitting

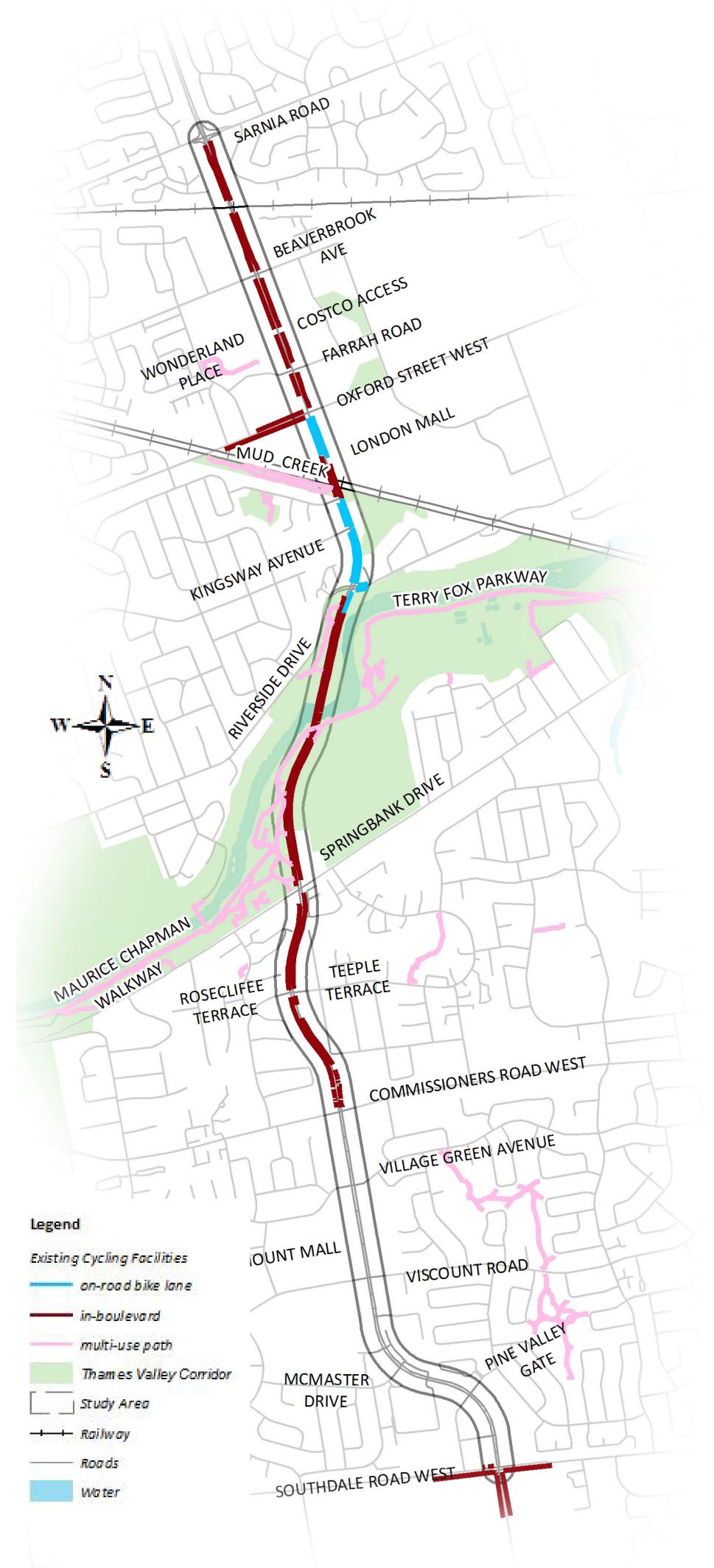
Phase 5

Implementation

- Design and construction Phase
- Project must be designed and constructed as outlined in the ESR



EXISTING CONDITIONS: RECREATION & ACTIVE TRANSPORTATION



- Existing sidewalks along both sides of Wonderland Road for the length of the corridor
- Much of the corridor has separated "inboulevard" cycling facilities on both sides of the road
- No cycling facilities on Wonderland Road from Commissioners Road West to Southdale Road West
- Wonderland Road is an important access point to the Thames Valley Parkway
- Wonderland Gardens recreation venue located north of Springbank Drive.

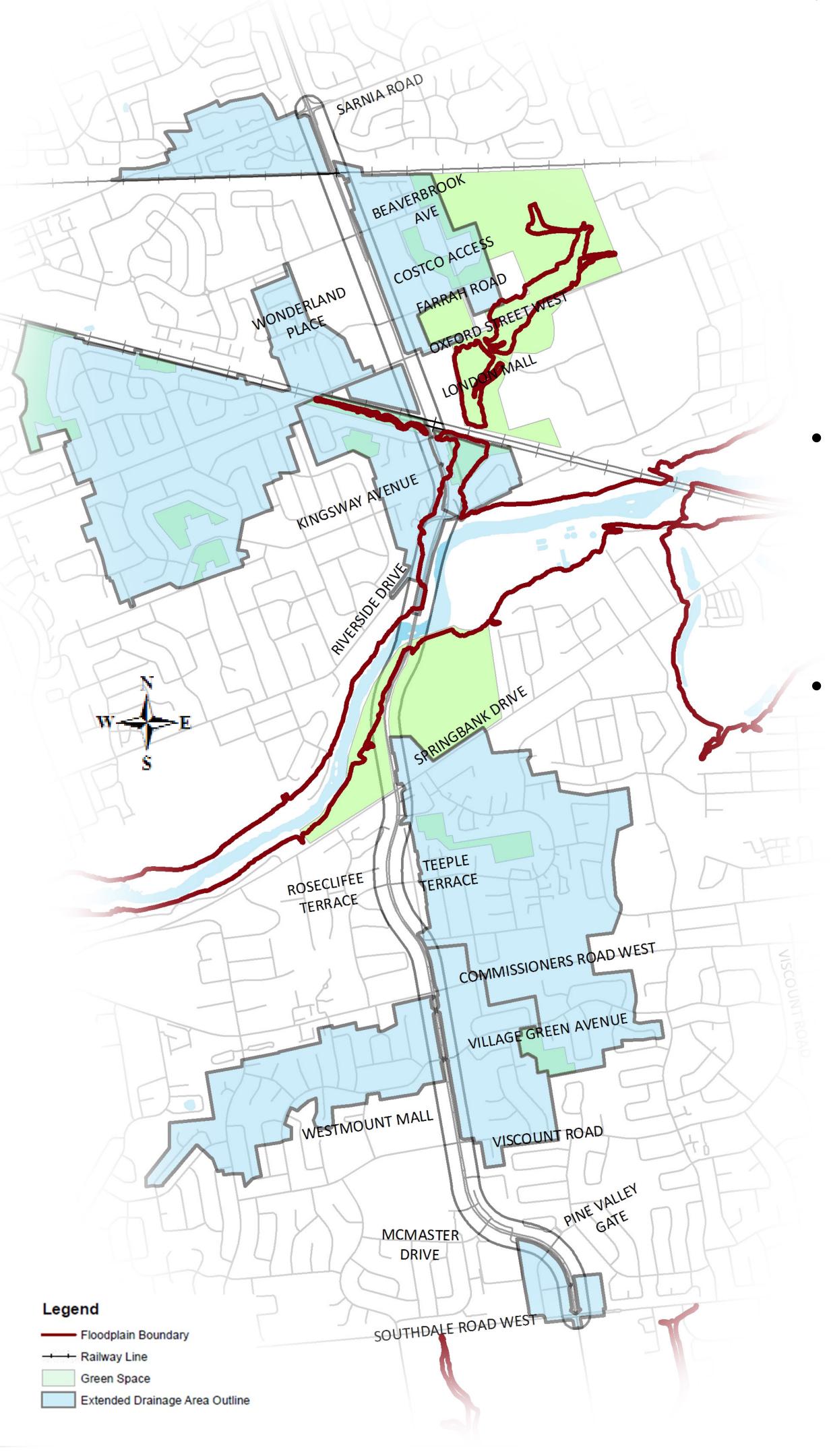








EXISTING CONDITIONS: DRAINAGE



- Upper Thames River Conservation Authority Watershed, in the subwatersheds of:
 - Medway Creek
 - Mud Creek
 - Central London
 - Dingman Creek.
- Corridor serviced with a combination of local storm sewers, trunk storm sewers and large urban drainage systems.
 - Drainage of surface water runoff along Wonderland Road is primarily facilitated through catch basins and storm sewers with some sections utilizing drainage ditches.



Wonderland Road - February 2017



Storm Outlet to Mud Creek



WHAT APPROACHES ARE BEING CONSIDERED TO IMPROVE THE CORRIDOR?

Possible Planning Solutions	Description	Key Considerations	Does it Address the Problems and Opportunities
Do Nothing Output Do Nothing	No capital improvements. Continue operation and maintenance of the four-lane roadway		
Address traffic signal timing	Revise traffic signal timing at intersections along the corridor to improve traffic flow	Traffic signal synchronization is like a web: if you change the timing in one direction, it will affect all the intersections surrounding it, causing a ripple effect Traffic signal timings are regularly reviewed along Wonderland Road and across the City. Modifications were made in 2018. There are limitations to signal optimization alone, including roadway capacity constraints.	
Transportation Demand Management (TDM)	Reduce periods of peak traffic demands by shifting the timing of travel and increasing alternative modes of travel (transit, cycling, walking)	TDM policies included in the City's Transportation Master Plan are being implemented throughout the City	Implementation ongoing through other City programs
Increase Capacity Line Capacity	Widen Wonderland Road from 4 to 6 through lanes throughout the corridor	Consistent with City's long-term transportation planning network Analysis completed shows the majority of the corridor is forecasted to meet or exceed capacity by 2034 if not widened	Consistent with the Transportation Master Plan and addresses Problems/ Opportunities

Based on the results of the analysis the recommendations include:

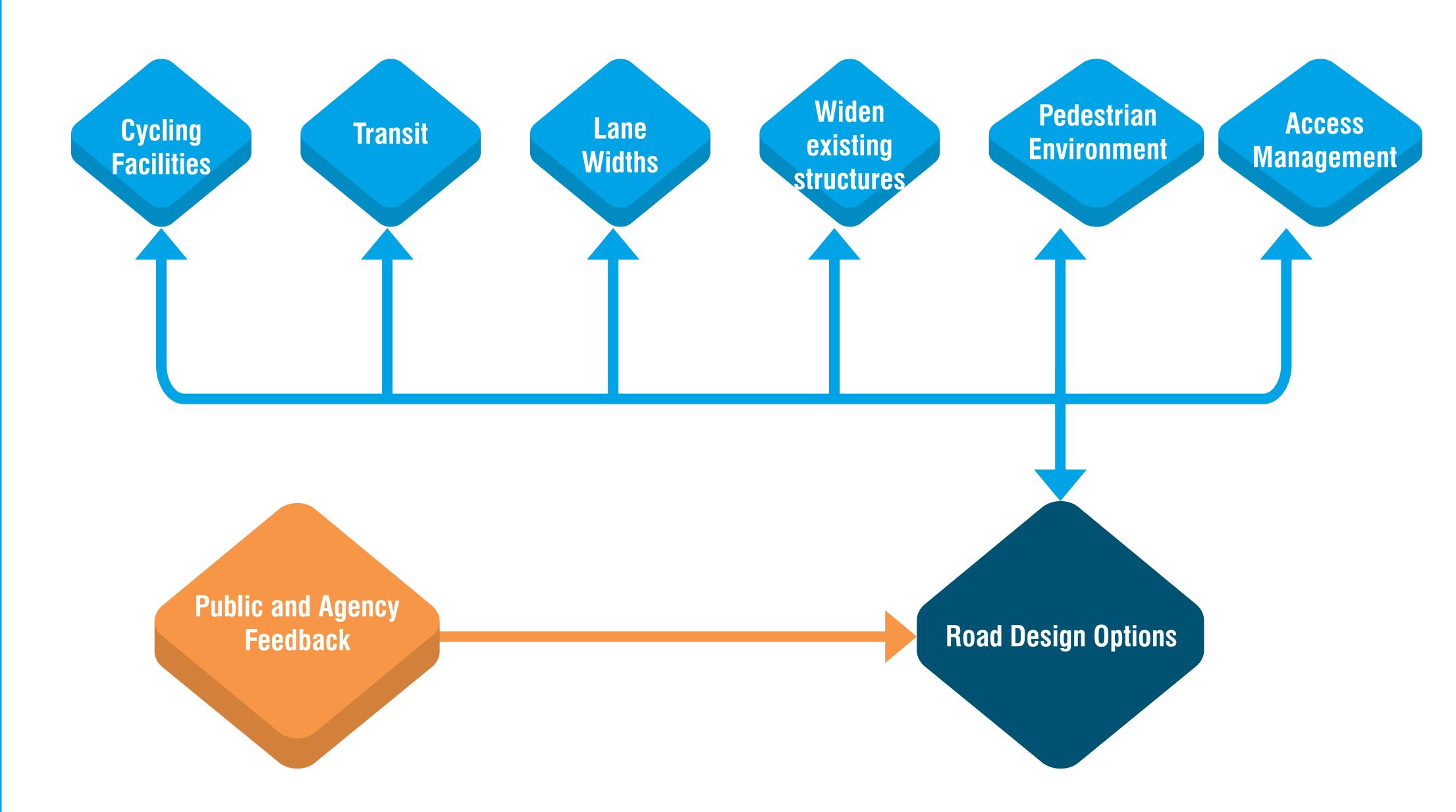
- Continue to monitor traffic signal synchronization and optimize as required. This will be completed while the planning and design for 6 lanes is underway and could involve the reconstruction of intersections only.
- Widen Wonderland Road to six lanes through the corridor. The widening would be completed in phases, starting as early as 2023, subject to Council approval.

WHAT OPTIONS ARE BEING DEVELOPED?

Wonderland Road is intended to be built to a high standard of streetscape and urban design throughout the corridor.

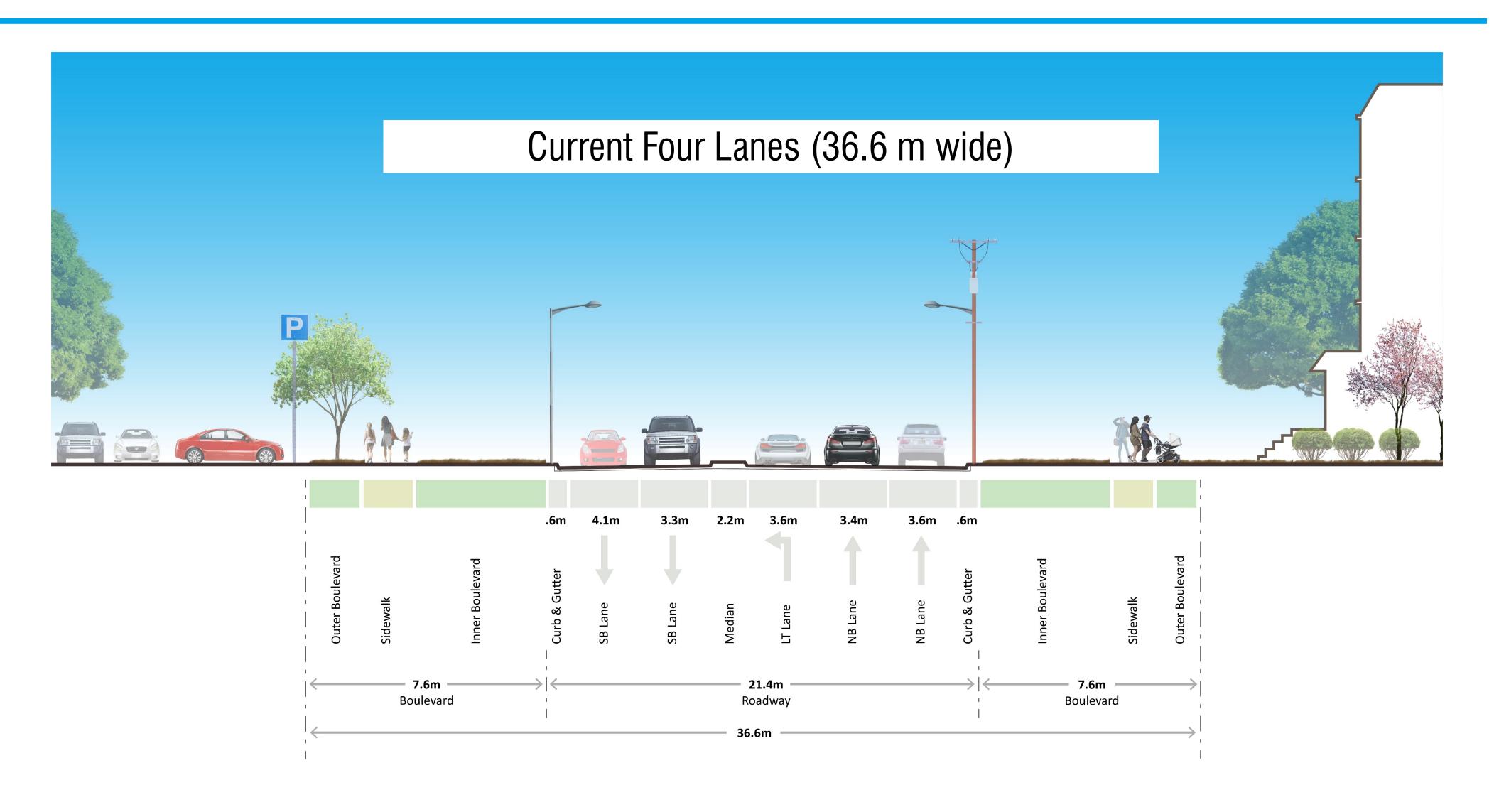
Over the next several months, the study team will develop and evaluate designs for six-laning the corridor. The options will be developed and analyzed based on:

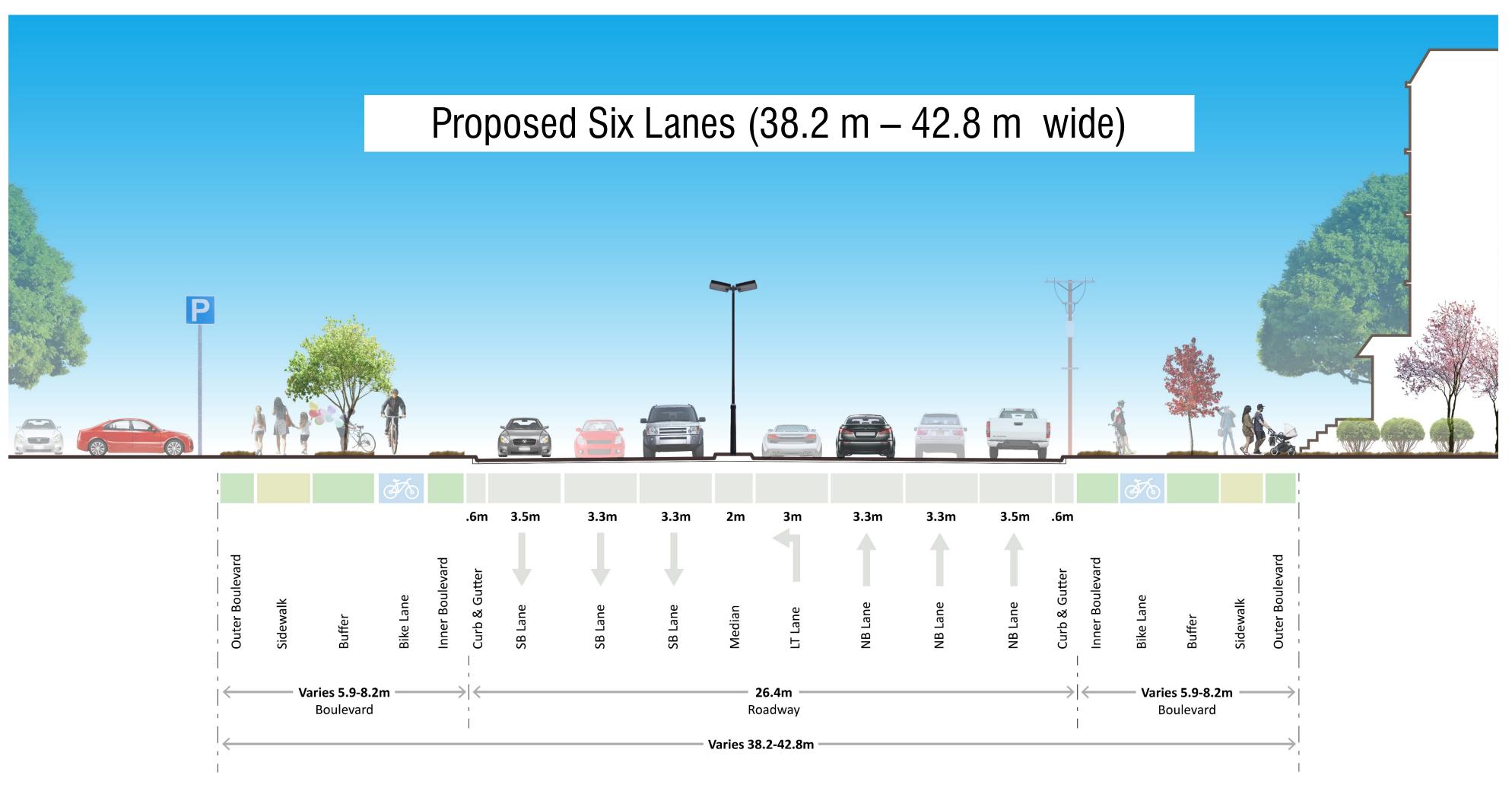
- What is the <u>optimal width</u> of the roadway elements within the corridor (lane widths, cycling facilities, pedestrian amenities, utility requirements, trees, noise barriers, etc.)?
- <u>How should the road be widened</u> widen to the east, widen to the west, widen symmetrically along both sides?
- What intersection improvements are required, including timing of traffic signals?
- How should existing <u>drainage issues</u> along the corridor be addressed?
- What <u>unique elements</u> should be planned for the main street section (CNR structure to Beaverbrook Ave.) to support the pedestrian-oriented area?



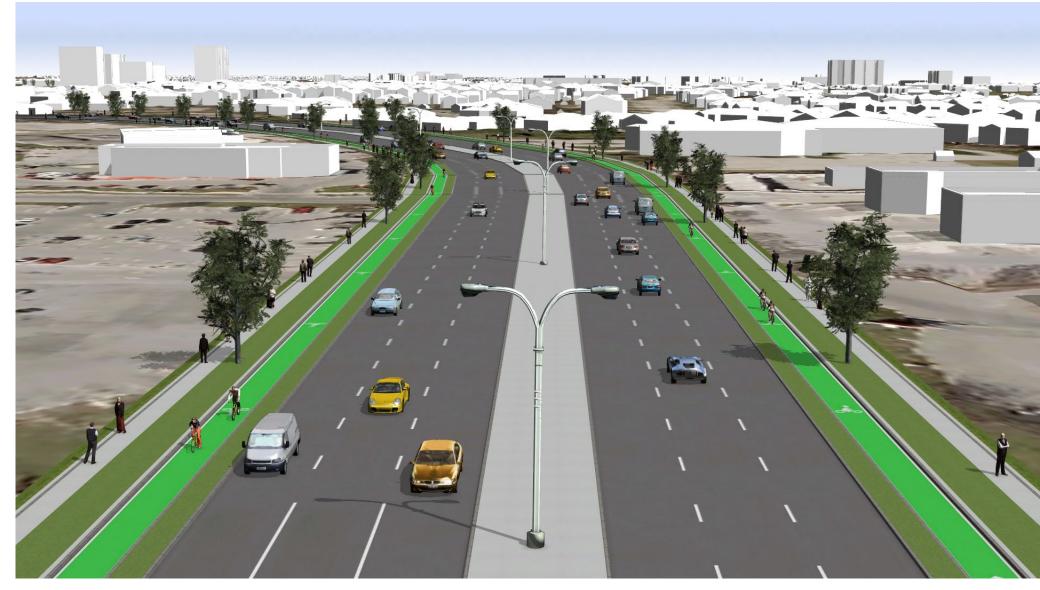


WHAT WOULD SIX-LANES ON WONDERLAND LOOK LIKE? SOUTHDALE ROAD TO COMMISSIONERS ROAD





In-boulevard bike lanes recommended throughout corridor.



Artistic depiction of six-lanes — Looking North from Southdale Road



GUY LOMBARDO BRDIGE ALTERNATIVES

- Constructed in 1977
- Five-span steel box girder bridge
- Terry Fox Parkway (pedestrian pathway part of the Thames Valley Parkway)
 passes under the bridge, along the south bank of the Thames River
- Currently has four lanes of traffic, sidewalks and multi use pathway
- Aesthetics of the bridge are important
- Woodland Cemetery to the southeast

Alternatives to accommodate the widening are being developed and include:

- Maintain existing bridge:
 - Traffic, cyclists, pedestrians on existing bridge
 - Requires shared cycling lanes across the bridge
- Modify existing bridge and construct one new pedestrian bridge (one side):
 - Traffic on existing bridge
 - Northbound cyclists and pedestrians on existing bridge
 - Southbound cyclists and pedestrians on new bridge
- Maintain existing bridge and construct two new pedestrian bridges (one on each side):
 - Traffic on existing bridge
 - Cyclists and pedestrians on two new bridges









Next Steps

Review comments provided at and following this event

Develop
design
options along
the corridor

Evaluate options and select a recommended design

Public Information Centre #2 (anticipate late 2019)

Environmental Study Report available for 30-day public review period



THANK YOU

The input of EEPAC is important to the outcome of this project. Please provide comments, attend PICs and ask questions throughout the study!



Key Contacts

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Project Manager
Dillon Consulting Limited

519.438.1288 x 1222

WonderlandRoad@Dillon.ca 519.661.CITY (2489) x 5806

Ted Koza, P.Eng.

Transportation Design
Engineer
City of London
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Getinvolved.london.ca



Kelates to 5 PM Delegation





Wonderland Road Improvements Notice of Public Information Centre

The City of London is undertaking a Class Environmental Assessment (EA) process to plan for long-term improvements to the Wonderland Road corridor, from Sarnia Road to Southdale Road. Wonderland Road is a critical north-south corridor in the City, with a variety of neighbourhoods, businesses and other uses along the road. This study is recommending Wonderland Road be widened to six lanes, as well as providing various improvements to how pedestrian, cyclist, transit and other users should be accommodated along the corridor.

Two drop-in Public Information Centres will be held on **Wednesday**, **January 30 and Thursday**, **January 31**, as outlined below. The purpose of the information sessions is to share the rationale and vision for six lanes on Wonderland Road, and gather public feedback. The same information will be shared at both sessions.

The project team will consider public input as the design for the recommended widening is developed in the coming months.

Public Information Centre 1				
Date:	Wed. January 30, 2019	Thurs. January 31, 2019		
Time:	4 p.m. to 7 p.m.	4 p.m. to 7 p.m.		
Location:	Civic Garden Complex 625 Springbank Drive, London	Bostwick Community Centre 501 Southdale Road .W, London		
Format:	Informal drop-in session			

Your feedback is important to us and we want your help in designing the Wonderland Road of the future. If you are unable to attend either session, visit the project website after January 30 to review the materials presented, provide your input and/or request to be added to the mailing list. Feedback can also be provided to either of the study team members listed below.

Project website: getinvolved.london.ca/DiscoverWonderland

Study contacts:

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Transportation Design Engineer
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Tel: 519.661.CITY (2489) x 5806
tkoza@london.ca

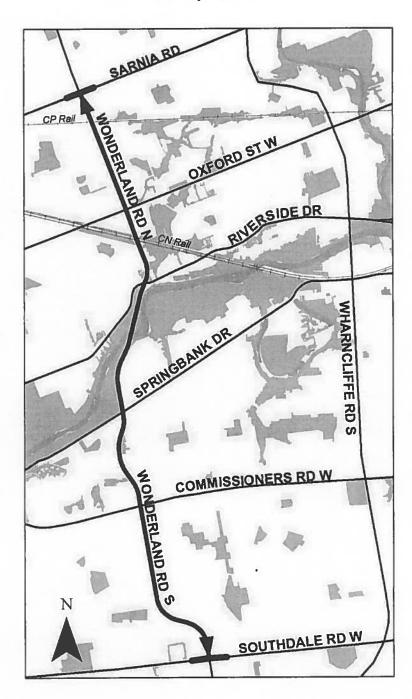
Jason Johnson, P.Eng.
Project Manager
Dillon Consulting Limited
Tel: 519.438.1288 x 1222
WonderlandRoad@dillon.ca

Personal information collected on this subject is collected under the authority of the *Municipal Act*, 2011 and will be used by members of Council and City of London staff in their review of this matter. Any written submission including names and contact information will be made available to the public. Questions about this collection should be referred to the City Clerk, at 519-661-CITY (2489) ext. 4937.





Wonderland Road Improvements Class Environmental Assessment Study Study Limits



From: s.levin s.levin

Sent: Thursday, December 27, 2018 6:57 PM **To:** Lysynski, Heather < <u>hlysynsk@London.ca</u>> **Subject:** 39000 Scotland Drive (EEPAC)

For the next agenda

Provided the proponent provides a set back of at least 50 m from the wooded areas as per the Planning Justification Report, EEPAC agrees no additional field work is required.

EEPAC COMMENTS ON THE ReTHINK ZONING DRAFT TERMS OF REFERENCE

Document dated October 31, 2018

Reviewed by: C. Dyck, S. Hall, S. Levin, January, 2019

EEPAC notes there is nothing in the draft document referring to the natural heritage system.

EEPAC recommends the following wording be included in the Terms of Reference:

- a. In setting zoning, the city shall:
- give highest priority to the protection of the natural heritage system;
- demonstrate a comprehensive natural heritage system approach;
- improve species at risk policies, and not rely only on the Endangered Species Act, 2007
- reference to the provincial Natural Heritage Reference Manual dated April 2010 which provides recommended criteria and approaches for being consistent with the PPS

At a minimum, add to section 2.2

- protect the natural heritage system and avoid hazard lands

EEPAC also notes

- that the Green Framework is only mentioned once and there are no outcomes related to it in section 2.3.
- Phase 2 does not include the current OS zoning the focus seems exclusively on built form.
- Section 4.2 does not include expertise in environmental planning and ecology as one of the requirements of the consulting firm.
- There is no ecologist on the Steering Committee
- The Lower Thames and Kettle Creek C.As are not included in the list of stakeholders on page 15, nor is Nature London

EEPAC also notes that there is no mention of climate change and urban design. Many cities are moving to incorporate the projected outcomes of climate change into building designs both to mitigate against and adapt to changing weather patterns and to address the urban heat island effect that will worsen with higher temperatures in coming years. Although EEPAC recognizes that urban design is not necessarily included in zoning, not including the heat island effect and its impact on urban life seems to be a glaring omission.

EEPAC recommends

- b. there should be a review of the OS zoning perhaps to include a "Natural Heritage Zone" distinct from other "park-like" OS zones in the current zoning by law
- c. The RFP or other similar document for consulting services include expertise in environmental planning and ecology
- d. An ecologist be a member of the Steering Committee or at a minimum, be included at the table when related matters are included on the agenda. An ecologist should also be asked for an opinion when the tender documents for consulting services are reviewed
- e. The Lower Thames and Kettle Creek C.As and Nature London also be included as stakeholders
- f. The zoning project include a climate change mitigation lens in its work

ONE RIVER MASTER PLAN ENVIRONMENTAL ASSESSMENT

Forks EIS and Springbank Dam Decommissioning EIS (Matrix Solutions, Dec. 2018)

Received at EEPAC at its December 12, 2018 meeting

Reviewed by S. Hall, B. Krichker, S. Levin

EEPAC would like to acknowledge that the Environmental Impact Study (EIS) Report for the One River Master Plan Springbank Dam Decommissioning Municipal Class Environmental Assessment (EA) Study, Schedule 'B' for the Thames River prepared by Matrix Solution Inc. is well prepared report that provides:

- comprehensive evaluations of the existing ecological/environmental system conditions;
- assessments of viable solution alternatives; and
- the preferred project alternative of the partial Springbank Dam Decommissioning.

EEPAC would also like to acknowledge that the Environmental Impact Study (EIS) Report for the One River Master Plan Forks of the Thames Municipal Class Environmental Assessment (EA) Study, Schedule 'B' for the Thames River prepared by Matrix Solution Inc. is a well prepared report that provides:

- comprehensive evaluations of the existing ecological/environmental system conditions;
- assessments of viable solution alternatives

HIGHLIGHTS

Note there is no EIS material provided for the area between the Dam Study Area and this Study Area.

Recommendation 1: EEPAC feels the Master Plan is incomplete without additional information on the area between the Dam study Area and the Forks Study Area. An EIS would provide additional helpful information for any future projects including the proposed new pathway and access points.

p. iv of Forks EIS

Matrix combined information gathered from the ecological field studies with relevant information from previous background studies to characterize the natural heritage setting and identify significant features within the Study Area. The results of the significance and sensitivity analysis indicated the presence of several natural heritage features and functions, including Significant Valleylands, Significant Wildlife Habitat (SWH), fish and aquatic habitat, and Species at Risk (SAR) within the Study Area.

Eight species were identified as potentially occurring within the Study Area, and four species were confirmed (Figure 5.1).

SARA (Federal) would only apply to SAR migratory birds, fish, and mussels for this project.

Under ESA (Ontario) Permits related to habitat destruction of threatened or endangered species would require an Overall Benefit Permit.

RECOMMENDATION 2: Even if an Overall Benefit Permit is not required, the City should demonstrate that this project provides an overall benefit, not just no net loss.

FORKS EIS

DETAILED COMMENTS (highlighting is **ed.**, *italics are materials taken from the document*)

p. 19.

Detailed hydraulic and geomorphic characterization for the Thames River in the Master Plan Study Area is provided in "River Characterization Report" (Matrix 2018). Field assessments and hydraulic modelling have been completed to evaluate sediment movement, bedform evolution, and channel hydraulics under a range of flow conditions to understand the current aquatic habitat condition and how it may adjust over time with changes in the flow regime.

At EEPAC's most recent meeting slides showed the impact of a much freer flowing river on the development of new sand bars etc. Will it also have an impact at the Forks?

RECOMMENDATION 3: EEPAC be provided with this Matrix report for review.

iv-v

Strategic accessibility, monitoring, and signage is recommended during the detailed design phase to direct the public away from any sensitive areas within the Thames River. No SAR or Species of Conservation Concern are expected to be directly impacted by the design; however, it is important to **direct access to the river away from sensitive areas** to avoid any indirect impacts from the public. It is recommended that consultation and permitting/approvals discussion with the appropriate regulatory authorities be conducted before any construction work is commenced

RECOMMENDATION 4: EEPAC agrees with the recommendation for consultation and permitting discussions but would extend that discussion to include the locating of any access points and new pathways. It is unclear to EEPAC if the access points and additional pathway construction shown in the proposed preferred alternative are actually necessary or would increase risk to sensitive species and their habitats as there is no information is this or the Dam EIS.

p. 24

The majority of land use within the immediate vicinity of the Study Area is urban, and local surface runoff is largely conveyed to the river through existing urban drainage infrastructure (i.e., sewer systems and outfalls). Within the Study Area, there are seven outfalls, including **two sanitary**. With the exception of one outfall along the western bank of the South Thames River, all outfalls are located along the eastern banks.

Are these outfalls subject to sanitary system overflows and if so, wouldn't it be a good idea to address these first? Is there information on the number of system overflows? Page 42, Table 4.5 indicates that substantial pollution is likely. It seems counterintuitive to invite residents and visitors to an area subject to sanitary system overflows following rain events.

RECOMMENDATION 5: The City address sanitary overflows at the Forks prior to completing any of the proposed projects in this location.

Figure 4.3/4.4 notes lots of Manitoba Maple and some dog strangling vine as well as periwinkle and garlic mustard.

RECOMMENDATION 6: EEPAC would appreciate knowing how much funding will be provided to remove and remediate non-natives and invasives. Given the location in a highly urbanized setting, EEPAC asks the city to consider that the money would be better spent on invasive species management in ESAs and Significant Woodlands.

p. 44

The SWH assessment identified three candidate seasonal concentration areas of animals

- turtle overwintering habitat
- bat maternity colonies
- snake hibernacula

Candidate turtle overwintering habitat is located within the Project Site. Turtle species utilize large, deep pools to overwinter. These pools are a critical part of the turtle's habitat and life cycle. Several turtle species have been documented within the Study Area; however, it has not been confirmed whether or not these turtles are utilizing the large, deep pool located at the Forks of the Thames River.

Should this be done? If so, when and by who?

Hibernacula for snakes can be present within any ecosite which contains burrows, rock crevices, and other naturalized areas below the frost line. There are rock crevices along the eastern shoreline of the Thames river, which may host snake species. Spring and fall congregation studies should occur to confirm snake hibernacula.

When would the studies be done and by who? It is possible the gabion baskets are hibernacula! The EIS on page iv indicated that the gabion baskets would be removed:

The removal of the gabion baskets along the eastern edge of the river will improve the connection between the aquatic and terrestrial environment, as well as provide more stable slope conditions along the bank.

5.2.2 Specialized Habitats of Wildlife

One confirmed specialized habitat of wildlife was identified during the SWH assessment, which included turtle nesting areas.

Two turtle nesting areas were identified by UTRCA staff within 1 km of the Study Area.

This was noted in the Dam EIS as well. Given the one Km can be towards the Dam, it is important that the UTRCA species at risk biologist be involved in the decision and detail design.

RECOMMENDATION 7: Consultation prior to detail design be carried out with the Species at Risk Ecologist at the UTRCA who specializes in turtle and snake species at risk

FISH/MUSSEL SAR SPECIES AND THEIR HABITAT

As noted on page 39:

The fish compositions will change throughout the year during spawning migrations within the Thames River. It is therefore important to consider spring and fall spawning timing windows to ensure that larger fish species are not impeded from accessing spawning grounds.

It does not appear to be any assessment of the mussel / fish relationship given that mussels rely on certain fish species to carry their eggs/larvae.

Page 46 here and in the Dam EIS, it is suggest that there is a likelihood of other species at risk being present in the study area. Given the comment on page 39, EEPAC suggests it is a **high** likelihood one or more of these other SAR species are present where there is suitable habitat.

RECOMMENDATION 8: An Overall Benefit Permit be obtained for these projects. If not required, the projects should demonstrate an overall benefit.

The City should show leadership in this project by providing an ecological benefit, not just no net loss.

p. 47 re Silver Shiner

Silver Shiner is designated as Threatened under the ESA, 2007 and Special concern under SARA. This aquatic species utilizes deep riffles and pools of large rivers to carry out its lifecycle. The ESA, 2007 general habitat protection identifies three categories of protection which ranges from the lowest tolerance to alteration (Category 1) to the highest tolerance to alteration (Category 3). Category 1 habitats have been identified as flowing pools, run, and riffles in occupied reaches, Category 2 has been identified as shallow, nearshore habitats, and areas with aquatic vegetation in occupied reaches, and Category 3 has been identified as floodplains and riparian edges adjacent to occupied reaches (MNRF 2018e. This species was captured within the Study Area during the two rounds of fisheries assessments in 2017. For this reason, it is assumed that this species is present within the Study Area year-round.

Neither this EIS, nor the Dam EIS indicate which category of tolerance.

RECOMMENDATION 9: The EIS clarify the category of tolerance for this species at risk

CONSTRUCTION IMPACTS

EEPAC agrees with the restrictions noted on p. 51 (see below) – however, we reiterate that the gabion baskets may be snake hibernacula depending on whether they are submerged during high water events or not.

P. 53 indicates *No negative effects are anticipated during this activity or long term if the correct mitigation measures are put in place.* However, it is unclear what the "correct" mitigation measures might be.

RECOMMENDATION 10: Greater detail as to what "correct mitigation measures" be included in the EIS prior to it being finalized. This information should be included in the EIS so that it does not get lost between now and detailed design.

- Access to the eastern bank will utilize the existing paved pathways.
- Staging and laydown areas are assumed to occur within the cleared pathways and open areas within the park.
- Vegetation removal will be limited to the eastern bank of the Project Site.
- No access or construction will be completed on the north or south banks of the project site.
- Limited in-water works will be required for construction.
- Timing of work will be coordinated to minimize disturbance to the natural environment.
- Tree preservation fencing to protect as many native trees where possible.
- Temporary wildlife exclusion fencing as required.
- Sediment and erosion control fencing to protect the Thames River.
- Planting native trees and shrubs in the softscape bank terracing areas to enhance shoreline habitat over current condition of gabion baskets.

INVASIVE AND NON-NATIVE SPECIES AND TREE PRESERVATION

p. 51 It is assumed that the ELC polygon MEMM4 (Fresh-Moist Mixed Meadow) will be permanently altered along the eastern bank during construction, and will likely become an extension of the existing Parkland (CGL_2) community. MEMM4 is currently composed of non-native and invasive species, and it is the intent of this project to replace these species with native trees and shrubs as part of the City's invasive species management objectives. The treed shoreline (SHTM1-2 community) will be protected by the design under the Tree Preservation Plan.

What about the invasives in SHTM1-1?

Re SHTM1-2 - why Manitoba Maple, a non-native species would be protected? There is also common buckthorn in the understory (p.29). Also Norway Maple is an invasive species. p. iv states that "non-native and invasive species will be removed as part of the *London Invasive Plant Management Strategy* and replaced with native trees and shrub plantings throughout the park as part of the softscape design." The question is to what extent?

MITIGATION MEASURES AND MONITORING

- Develop a monitoring plan to ensure mitigation and contingency measures are implemented and performance objectives are being met.

Who prepares the monitoring plan and when? Who cares it out?

p. 57 (re 4D) – Invasive Species Management Plan

EEPAC questions when the invasive species management plan would be drafted and by who.

RECOMMENDATION 11: EEPAC requests to be involved in the discussions leading up to the preparation of the Invasive Species Management Plan. It is our preference that all non-native and invasives be removed.

RECOMMENDATION 12: EEPAC's preference is that the Invasive Species Management Plan be drafted by Matrix now given it has done the field work with the plan and that the plan be included as a requirement for the winning bidder to implement. Money must be included in the contract budget for monitoring, and monitoring shall be carried out by an ecologist hired by the contractor to the satisfaction of the City and the UTRCA.

p. 54 indicates increased pedestrian activity and that it should be directed to the south. It is unclear how this is possible when there are pathways along the east heading north and along the Dyke. Therefore, it is unclear what areas are to be avoided and what access to the River in addition to the existing fishing dock is proposed and why.

RECOMMENDATION 13: A clear monitoring plan be developed including who does, when it begins and ends, and its objectives. This could be shown on a timeline scale given the start date is unknown.

p. 56 - 50

RECOMMENDATION 14: Before construction, information on species at risk identification including photos posted in construction trailer during construction. Ideally, this will reduce or avoid mortality

RECOMMENDATION 15: The phone number of the Species at Risk Biologist from UTRCA be posted prominently so that turtle and snake sightings can be reported. When sightings occur, work must cease until the species at risk biologist has given the go ahead for work to start up again.

MISC

- p. 11 wording of the second paragraph is unclear "... with the Technical advisory included ... (?)
- P. 14 vegetation surveys were done too late for any spring ephemerals. No clear explanation of why surveys were not done earlier.

No surveys of amphibians. No clear explanation of why not done.

SPRINGBANK DAM DECOMMISSIONING EIS

The partial Springbank Dam Decommissioning recommended alternative, in EEPAC'S opinion, represents the most effective option for improving the ecological and environmental conditions of the Thames.

p. 3

It is not accurate to say the Terms of Reference were approved by EEPAC. We have no approval authority. It would be more accurate to say EEPAC participated in the review of the Terms of Reference that were approved by the City.

I would also suggest the same is true of the UTRCA "approval." Again, I don't believe the city EIS requirements require approval by the UTRCA.

RECOMMENDATION 1: Section 2.3.2 on page 10 is an accurate description and should replace the relevant text on page 3

It appears that the earliest vegetation survey would have missed any spring ephemerals.

Figure 3.1 Benthic sampling. Why was there only one site downstream of the dam and not a second, upstream?

The presented Benthic sampling is not representative, because in accordance with Fig. 3.1, the report identified only one location. In our opinion, the Benthing Monitoring Sampling would be considered more accretive and representative to reflect the existing ecological/environmental conditions, at the minimum at other 2 locations (the upstream location and a chosen control location) if it would be monitored for this Benthic monitoring program. Also, it is not typical that this monitoring work has not being supported by the basic chemistry water quality monitoring that generally should be conducted together with the Benthic sampling.

RECOMMENDATION 2: Additional sampling be done before the EIS is accepted. Alternatively, if there is existing sampling data that would be representative, it can be used instead of additional sampling.

HIGHLIGHTS

- p. 31 figure 4.4, note garlic mustard and buckthorn concentration on the SOUTH side. Inventory also noted purple loosestrife, but no SAR.
- p. 46 Figure 5.1, entire north shore appears to be SWH!
- p. 49 anticipates no work on the north side during decommissioning. The problem is, most of the SAR are aquatic.
- p. 32, notes 7 large Norway maples.

RECOMMENDATION 3: These should be removed as part of any invasive species management plan for the study area.

A number of SAR fish mussels, and herps including Spiny Softshell

p. 44 The species indicated as potentially occurring within the Study area include Black Redhorse, Round Pigtoe, and Wavy-rayed Lampmussel. These species were not observed during the 2017 and 2018 surveys conducted by Matrix; however, **there is still likelihood** that they could be present based on previous observations as well as suitable habitats within the Study area. On page 37, the following is noted which argues that **it is highly likely one or more of these are present. This is over and above the species confirmed, Silver Shiner and Spiny Softshell (which is endangered).** Each of these species are given species and general habitat protection under the ESA, 2007.

See page 37: The species captured during the 2017 and 2018 studies represent a portion of the potential species present within the Study area. The fish compositions will change throughout the year during

spawning migrations within the Thames River; therefore, it is important to consider spring spawning timing windows to ensure that larger fish species are not impeded from accessing spawning grounds.

RECOMMENDATION 4: Any work be done under an Overall Benefit permit

p. 42

5.2.1 Seasonal Concentration Areas of Animals

The SWH assessment identified four candidate seasonal concentration areas of animals:

- turtle overwintering habitat
- Raptor wintering area
- Bat maternity colonies
- Snake hibernacula

Three of the SWH types (Raptor wintering areas, bat maternity colonies, and Snake hibernacula) are located within the northern forested valleyland within the Study area.

One SWH (turtle overwintering habitat) types is located within the Project Site. Turtle species utilize large, deep pools to overwinter. These pools are a critical part of the turtle's habitat and life cycle. Several turtle species have been documented within the Study area; however, it has not been confirmed whether or not these turtles are utilizing the large, deep pool beneath the Springbank Dam.

The question is where will this be captured in a to-do list for the decommissioning project? It is not noted in section 7.2 Mitigation Measures on page 53.

It is not clear what the implications are for the proposed project if the pool is being used for overwintering.

RECOMMENDATION 5: Surveys be completed prior to awarding a bid in order to determine if there are species and overwintering habitat within the pool.

5.2.2 Specialized Habitats of Wildlife

One confirmed and one candidate specialized habitat of wildlife was identified during the SWH assessment, which included turtle nesting areas. Candidate and confirmed turtle nesting areas were observed within 1 km of the Study area.

5.2.3 Habitat of Species of Conservation Concern

A total of eight SCC were confirmed within the Study area, with an additional seven SCC which were considered to have candidate SWH within the Study area. SWH applies to the ELC communities, each of the species were observed, and/or where candidate habitat exists (Table 5.2, Figure 5.1).

p. 44-45 discusses the 3 categories of general habitat protection Threatened and Endangered fish species like the Silver Shiner receive. However, there is no mention of the category in which the study area is in, nor what other areas of the Thames studied by Matrix. Carving up the EISs into tiny pieces is

contrary to ecosystem planning and is not helpful to understanding of the impacts of changes proposed by the Back to the River project. This is important because even if the proposed project impacts are monitored, it is unlikely they will be removed if the findings show a negative impact on SAR species and their habitat.

p.53 Mitigation measures

The Sediment Erosion Control plan is a critical component for the proposed work to protect the existing ecological/environmental features, functions and habitats conditions. The proposed Erosion Sediment Control Plan needs to ensure the required protection of existing natural habitats and water resources measures will be provided, as well any potential adverse impacts should be identified and proposed measures to minimize these effects be identified and listed in this EIS.

RECOMMENDATION 6: The Erosion Sediment Control Plan's major objectives and major issues needs to be incorporated in this EIS.

This page is also unclear as to dewatering requirements or coffer dam requirements for the project. These can be disruptive if the work continues through a spawning season.

RECOMMENDATION 7: The proposed dewatering procedure needs to identify in more detail what would be incorporated in the proposed protective measures to minimize the estimated potential adverse impacts, the estimated time periods that the existing environmental/ecological system may be effected from these impacts and a list of specific mitigation measures are required to be identified in EIS.

EEPAC has a number of suggested additional mitigation measures

RECOMMENDATION 8: Before construction, information on species at risk identification including photos posted in construction trailer during construction. Ideally, this will reduce or avoid mortality

RECOMMENDATION 9: The phone number of the Species at Risk Biologist from UTRCA be posted prominently so that turtle and snake sightings can be reported. When sightings occur, work must cease until the species at risk biologist has given the go ahead for work to start up again.

p. 55 (re 4D) – Invasive Species Management Plan) EEPAC questions when the invasive species management plan would be drafted and by who.

RECOMMENDATION 10: Our preference is that it be drafted by Matrix now given it has done the field work with the plan included as a requirement for the winning bidder to implement. Money must be included in the contract budget for monitoring, and monitoring shall be carried out by an ecologist hired by the contractor to the satisfaction of the City and the UTRCA.

p. 56 states no long term impacts are anticipated. The ultimate question is what would long term impacts be? Loss of species? Over what period of time? And how would changes be definitively linked to the project impacts?

RECOMMENDATION 11: The EIS should include what long term impacts might be so that any compensatory mitigation measures could be implemented at a future date and charged back to the project.

page 57 indicates there should be additional consultation with UTRCA to identify any additional studies needed for this project. It is unclear at what stage these consultations would take place and what sort of information the consultants feel is required.

RECOMMENDATION 12: The noted additional consultation with the UTRCA take place prior to finalizing the EIS.

P. 58, EEPAC would like to know why a permit is not required for other SAR species likely in the area but not found in sampling. As stated earlier, it is highly likely the other SAR species such as Wavy Ray Lampmussel and Round Pigtoe (Appendix J p. 2-3) are present. As we are unclear if the permit is species specific or not therefore, we suggest that a permit for impacts to all SAR mussel species and habitat within 1 Km be required. We assume that one permit could cover all. The challenge is that most mussels have specific fish hosts for their eggs/larvae and it would be beneficial to add to the EIS a list of all of the SAR and SCC mussels in the MNRF list and their host fish species to better identify what SAR permits should be obtained. The fisheries specialist at the UTRCA can assist in this.

To authorize and issues various permits for the City to undertake the recommended work, MNRF and DFO, generally require that the Consultant together with City staff will develop and provide some type of Mitigation and Compensation Plans associated with the proposed work to ensure all required protection of various habitats and existing ecological/environmental conditions in accordance with the applicable Federal and Provincial Acts. The magnitude and specific conditions of the recommended work, suggest that these plans would include very substantial mitigation and compensation works.

RECOMMENDATION 13: The major issues; measures and the considered locations for the Mitigation and Compensation Plans needs to include in this EIS.

RECOMMENDATION 14: In order to ensure that all proposed work and mitigation/compensation/restoration work is working, in addition to all recommended monitoring, EEPAC recommends that the post-construction monitoring also include Benthic and Basic Chemistry Water Quality Monitoring at the minimum 3 locations - upstream, immediately downstream of these works and further at the location app.100 m downstream of the proposed work.

ACCESS POINTS AND PATHWAYS

EEPAC is concerned about the additional access points and pathways on the north side of the River south of Riverside Drive and west along the River. Without any supporting EIS work, we cannot support the proposed alternative 3 at this time. We look forward to reviewing the studies that concluded such works would have no negative impacts on the natural heritage system or species at risk and their habitat.

P. 34/44 - CHIMNEY SWIFTS (FROM A MEMBER OF THE LOCAL SWIFT WATCH)

Clarification is needed as to which Study Area the draft EIS paragraph applies to; if the Dam Decommissioning Study Area (outlined in blue on the map), wording needs to be revised to indicate the burned-down chimney is not within this Study Area. A perusal of the area outlined in blue on the map does not suggest there are any potentially suitable swift chimneys extant within the area.

If the paragraph refers to the orange-outlined One-River Study Area, wording needs to be revised to indicate that there are a number of known as well as potential swift chimneys within the Study Area. Of the occupied and potential swift chimneys in the full One-River Study Area, it appears unlikely that any would be negatively affected by the decommissioning of the Springbank Dam.

Swifts roost communally in chimneys not only during the breeding season but also during spring and fall migration. (Swifts are present in London from approximately late April to early October, during which time they spend nights in chimneys. Swifts also occupy chimneys during the daytime when carrying out activities associated with nesting and the raising of a family.)

Swifts are incapable of perching (due to the design of their feet), so the statement about swifts perching on top of the chimney of an abandoned home since destroyed by fire, is presumed to be inaccurate. Swifts may well have been occupying the chimney that burned down, but, if they were, they would drop in directly and not perch on top of the chimney. Swift use of a chimney is usually confirmed by observation of an actual entry into or exit from the chimney.

It is useful to retain the observation that swifts are using the airspace above the river and its adjacent banks as a place to forage for airborne insects. It is likely that many of the insects caught by swifts in the Springbank area spent their immature stages in the river or on vegetation growing near the river. Habitat that produces food for swifts is essential to the species' survival.

Swifts will forage as far as 3 or more km from their home chimneys, so, even if there is no longer a suitable swift chimney within the blue-outlined study area, swifts are likely to continue to use this area for foraging. There are a number of known swift chimneys within the orange-outlined study area, as well as many other chimneys within that area and outside it that may well also host swifts.

When swifts first return in the spring, the airspace above the river corridor along Springbank Park is particularly significant as a foraging area.

In considering impacts on swifts of activities within the Study Area, it is important to include impacts to the habitat that produces the food on which swifts forage.

MISC

p. 48 layout of impacts. EEPAC would like to see this as a requirement for assessment of impacts for ALL projects (add to update of EMG) expressed as a matrix for each impact and its type (4 x 3 matrix)

Both direct and indirect impacts on natural heritage features and functions can occur as a result of the preferred alternative. Impacts and residual effects on natural heritage features were assessed based on the following criteria:

- Duration long or short-term
- Extent localized or expansive
- Permanent permanent or temporary
- Severity positive or negative