

# **ONLINE PUBLIC INFORMATION CENTRE (PIC)**

# Highway 7 Widening from Angeline Street to Highway 35, City of Kawartha Lakes Detail Design and Environmental Assessment Study (GWP 4065-20-00)

The purpose of this online PIC is to provide stakeholders and the public with an introduction to the study and an opportunity to review and comment on the proposed works, anticipated environmental effects and proposed mitigation measures.

The Ministry of Transportation (MTO) has retained WSP to undertake this study.

As part of this online PIC, you will have a chance to review:

A description of the Detail Design project

An overview of previous studies completed, including Preliminary Design

The steps in the Environmental Assessment (Class EA) process

Existing conditions in the study area

A description of the Recommended Plan, including proposed construction staging

Measures to mitigate environmental impacts

Next steps

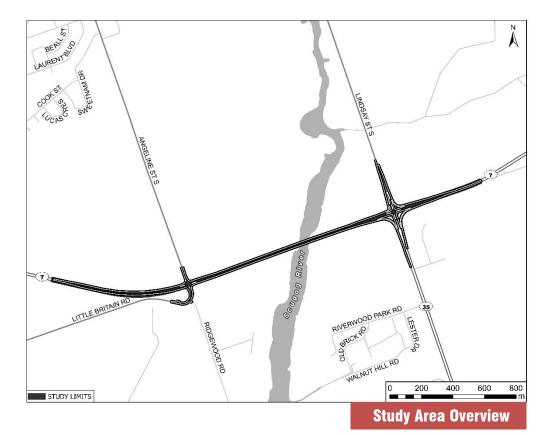
We encourage you to share your opinions with us and submit any questions or comments via the project website Contact page. A member of the Project Team will respond to you directly.



The Ministry of Transportation (MTO) has retained WSP to undertake the Detail Design for the widening of Highway 7 from approximately 900 m west of Angeline Street to approximately 700 m east of Highway 35, in the City of Kawartha Lakes.

The scope of work includes:

- Widening of Highway 7 from two lanes to four lanes, separated by a flush median;
- Lane transitions from two to four lanes at the east and west ends of the project limits;
- · Resurfacing of the existing pavement;
- Intersection improvements (including traffic signal upgrades) at Angeline Street/Little Britain Road and at Highway 35 (including reconstruction of the existing channelized ramps and construction of a new channelized ramp in the northwest quadrant); and
- Utility relocations, landscape planting, culvert replacements and drainage works, as required.









#### **PRELIMINARY DESIGN**

### Highway 7 and Highway 35, Preliminary Design and Class Environmental Assessment Study, GWP 69-99-00 (2010)

In June 2010, MTO completed a Preliminary Design and Environmental Assessment (EA) study for improvements to the Highway 7 corridor from 0.9 km west of the junction of Kawartha Lakes Road 18 easterly to 2.0 km east of the junction of Kawartha Lakes Road 36, and Highway 35 from the Highway 7/35/7B West intersection northerly to Colborne Street West, in the City of Kawartha Lakes. The purpose of the study was to develop a long-term vision to guide transportation planning within the Highway 7 and Highway 35 corridors over a 20-year planning horizon. The study was documented in a Transportation Environmental Study Report (TESR) which received environmental approval in 2010.

The Preliminary Design EA Approved Plan for the Highway 7 study area included the following main components to be implemented over a 20-year horizon based on Initial Stage and Long-Term plans:

- · Resurfacing, pavement rehabilitation, and pavement widening
- · Median modifications
- Intersection geometric / operational improvements
- · Modifications to fronting / service roads
- · Horizontal and vertical profile changes

- Drainage improvements
- · Illumination and traffic signals
- Structural rehabilitation / removal / replacements
- · Consideration of future truck lay-by locations
- Protection for a future interchange at the Highway 7 Angeline Street intersection.

The widening and rehabilitation of the Highway 7 Scugog River Bridge, located within this Detail Design study area limits, was recommended under a separate Preliminary Design and Environmental Assessment study (WP 4264-04-00). Due to the condition of the bridge, this project has already been implemented, including the widening of Highway 7 on the approaches to the bridge.







# PRELIMINARY DESIGN — ENVIRONMENTAL CONCERNS AND COMMITMENTS

The 2010 Preliminary Design and EA Study provided a summary of potential and direct and indirect environmental effects associated with the Recommended Plan, mitigation measures and commitments to future work.

Key commitments carried forward to this Detail Design study are summarized below.

**Preliminary Design Commitments (from 2010 Study)** 

Issues / Concerns Potential Effects	Commitments for Mitigation / Protection / Monitoring
Fisheries and Aquatic Ecosystems • Potential for harmful alteration, disruption or destruction of fish habitat	<ul> <li>Minimize fill within the channels area and habitat</li> <li>Incorporate habitat diversity into the final structure/culvert design</li> <li>Apply standard and site specific sediment and erosion control measures to ensure no impacts to downstream or adjacent areas of fish habitat</li> <li>Avoid potential disturbance to fish spawning activity during construction by implementing timing constraints for in-water works</li> </ul>
<ul><li>Erosion and Sediment</li><li>Control</li><li>Erosion of and sedimentation to watercourses</li></ul>	<ul> <li>Ensure standard temporary erosion and sedimentation control practices are followed during construction</li> <li>Develop long-term stormwater management measures during detail design</li> <li>Install enhanced grassed swales alongside roadside ditches and permanent rock flow checks, where warranted by site conditions.</li> </ul>
<ul> <li>Vegetation and Wildlife</li> <li>Vegetation / vegetation community and wildlife / wildlife habitat impacts</li> </ul>	<ul> <li>Minimize vegetation clearing and grubbing, and maintain existing forest cover when possible.</li> <li>Establish clearing timing constraints outside bird nesting periods.</li> <li>Establish appropriate buffers and protective exclusion measures, such as barriers / fences to ensure vegetation adjacent to the right-of-way is protected from mechanical damage.</li> <li>Ensure that the Contractor does not destroy the active nests (nests with eggs or young birds), or wound or kill birds, of species protected under the Migratory Birds Convention Act, 1994 and/or Regulations under that Act.</li> </ul>
<ul> <li>Species at Risk</li> <li>Potential disturbance to Barn Swallow and Eastern Meadowlark, Least Bittern and Tri-colour bat, Blanding's Turtle and Snapping Turtle habitat</li> </ul>	<ul> <li>Minimize encroachment into hayfield habitat and vegetation removals to minimize impacts on Bobolink and Eastern Meadowlark habitat.</li> <li>Implement exclusion measures during construction to prevent wildlife entry into or nesting within the work zone.</li> </ul>



# PRELIMINARY DESIGN - ENVIRONMENTAL CONCERNS AND COMMITMENTS

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Issues / Concerns / Potential Effects	Commitments for Mitigation / Protection / Monitoring
<ul> <li>Land Use / Traffic</li> <li>Inconvenience of traffic delays and interruption in access for residents, farmers, business owners and motorists travelling through the study area.</li> </ul>	<ul> <li>Stage construction activities to avoid/minimize traffic delays to residents, farmers, business owners and motorists travelling through the study area to the extent possible.</li> <li>Ensure no temporary road closures will be necessary within the study area during construction.</li> <li>Ensure that two lanes of traffic are maintained at all times along Highway 7 and Highway 35 during construction peak hours, and at all times in sections that will be widened to 4-5 lanes.</li> <li>Maintain access and egress to residences, farms and businesses at all times during construction. Maintain access and egress for emergency response vehicles and school buses along Highway 7 and 35 at all times during construction.</li> </ul>
<ul> <li>Air Quality</li> <li>Construction emissions can contribute pollution, including dust, and can create a nuisance.</li> </ul>	<ul> <li>Include requirements in the construction contract package to minimize the emission of pollutants, including dust, to the atmosphere and to ensure the use of dust suppressants to combat dust, where appropriate.</li> </ul>
<ul><li>Property Requirements</li><li>Property requirements and impacts on businesses.</li></ul>	Minimize impacts to businesses and property impacts to the extent possible.
<ul> <li>Contaminants and Waste</li> <li>Contamination of surface water during construction.</li> </ul>	<ul> <li>Store construction material, excess material, construction debris and empty containers away from watercourses.</li> <li>Conduct equipment refuelling, maintenance and repair a sufficient distance from the watercourses to prevent the entry of contaminants to the watercourse. Contain and clean up spills quickly and effectively.</li> </ul>
Archaeological & Heritage     Resources     All works are anticipated to take place within already disturbed areas of the right-of-way.	<ul> <li>Should any human remains be encountered during construction, such construction activity shall cease, and the proponent shall immediately contact the following: Ontario Provincial Police, the Registrar of the Cemeteries Regulation Unit of the Ministry of Government Consumer Services, and the Ministry of Heritage, Sport, Tourism and Culture Industries.</li> </ul>
<ul><li>Noise</li><li>Noise from construction, equipment and vehicles.</li></ul>	<ul> <li>Include general noise control measures in the contract package where noise sensitive areas are located including: maintaining equipment in an operating condition that prevents unnecessary noise and restricting the idling of equipment to the minimum necessary to perform the specified work.</li> </ul>
<ul><li>Agricultural</li><li>Impacts to nearby agricultural uses.</li></ul>	<ul> <li>Avoid impacts to prime agricultural areas/land, the tiled drainage systems and the municipal drain to the extent possible.</li> <li>Ensure that if any tile drains and tile outlets and fences are damaged during construction they will be repaired to the same condition or better. Maintain access to agricultural land during construction at all times and minimize</li> </ul>

temporary traffic delays to facilitate construction to the extent possible.



# MINARY DESIGN — ANALYSIS AND EVALUATION

The 2010 Preliminary Design and EA Study included an analysis and evaluation of alternatives for the Highway 7 corridor improvements. The study determined there was a need to widen Highway 7 to provide four lanes with intersection improvements within the 20-year horizon period to address an increase in traffic and improve safety in the study area. Alternatives were developed for both corridor and intersection improvements which were then evaluated in detail based on the Evaluation Component Categories shown below.

An extensive evaluation of alternatives was completed as part of the Preliminary Design and no new alternatives were developed during Detail Design. The recommended plans presented as part of this PIC are based on the EA Approved Plan.

#### **Corridor Improvement Alternatives**

Alternative 1: Widen equally on both sides

Alternative 2: Widen on north side only

Alternative 3: Widen on south side only.

Preferred Alternative: Widening Highway 7 equally on both sides as it results in the least impact to private property.

Highway 7 and Angeline Street Intersection Improvement Alternatives

Alternative 1: Revise the right turn lane geometry

**Alternative 2:** Construct right turn channel

Preferred Alternative: Provide a parallel right turn lane treatment along Highway 7 since it requires significantly less property than a right turn channel.

Highway 7 and Highway 35 Intersection Improvement Alternatives

**Alternative 1: Construct right turn channels** 

Alternative 2: Revise the right turn lane geometry

Preferred Alternative: A right turn channel added to the northwest quadrant. The existing right turn channelization in the remaining quadrants will be reinstated.

#### **Evaluation Component Categories**

Environment

- Natural Environment (Fish, Water, Wildlife & Vegetation)
- Socio-economic Environment (Agriculture, Contaminated Sites, Residential, Commercial, Social & Recreation)
- Cultural Environment (Cultural Environment)

- •Traffic (Highway 7 Impacts, Municipal Road Impacts, Emergency Detour, Transit/Emergency Services)
- Constructability
- Safety (Road Design, Protection of Vulnerable Users)

- Capital Cost
- Life Cycle Costing





### **Highway 7 Widening From Angeline Street to Slanted Road (2017)**

In 2016, MTO retained WSP (formerly MMM Group) to complete the Detail Design and Class Environmental Assessment for the widening of Highway 7 from 400 m west of Angeline Street to 400 m south of Slanted Road. A Notice of Study Commencement was published in November 2017. The scope of the study has since been revised to include the widening of the section of Highway 7 from west of Angeline Street to east of Highway 35 only.

The Detail Design for the remainder of the study area, from east of Highway 35 to 400 m south of Slanted Road, will be completed under a separate assignment.

### **Current Study**

The purpose of the current study is to refine the EA Approved Plan, to prepare the construction contract documents, and to obtain environmental approvals for construction. This project is being carried out in accordance with the approved environmental planning process for Group 'B' projects under the MTO Class Environmental Assessment (Class EA) for Provincial Transportation Facilities (2000).

At the completion of the study, a Design and Construction Report (DCR) will be prepared and will include:

- Consultation with Indigenous communities, external stakeholders, and the public;
- Updates to the existing environmental conditions documented in Preliminary Design, as required, and a summary of additional detail design investigations undertaken;
- · Proposed design modifications to the EA Approved Plan documented in the TESR;
- A description of the detail design Recommended Plan, including highway and traffic signal design, and landscaping;
- A description of the associated environmental protection/mitigation measures included in the contract package;
- · A Summary of Environmental Concerns and Commitments Table; and
- Identification of all project approvals, licenses and permits which have or must be obtained including further commitments to be addressed during construction.

The DCR will be available on the project website for a 30-day public review period. Following the public review period, the project can proceed to construction.



Confirm Design and Construction Staging Alternatives from Preliminary Design

Refine Detail Design, Identify Impacts and Develop the Mitigation Strategy

February 2021

**Existing Conditions** 

Online Public Information Centre

Finalize Recommended Plans and Prepare Design and Construction Report

March 2021

Submit DCR for a 30-day Review Period

Construction tendering and start of work

**WE ARE** 

HERE



### Highway 7

- Within the City of Kawartha Lakes, Highways 7 serves a significant amount of local commuter, tourist and commercial traffic and is designated as a Controlled Access Highway.
- Highway 7 is a major east-west transportation facility that forms part of the designated Trans-Canada Highway system.
- Highway 7 currently operates as a two-lane highway with 3.5 m wide lanes and 2.5 m wide gravel shoulders within the study area.

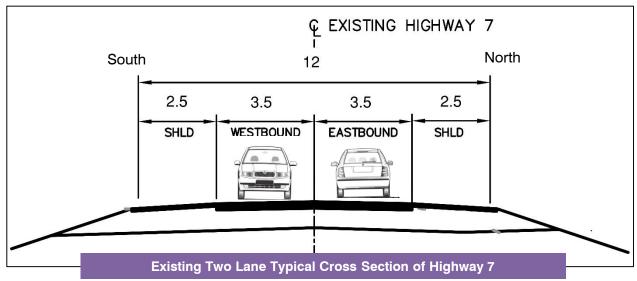
### **Existing Intersections**

# Highway 7 and Kawartha Lakes Road 4 (Angeline Street) Intersection

 Currently this intersection operates under traffic signal control, with dedicated right-turn lanes on the east and west approaches and dedicated leftturn lanes on 3 approaches.

### **Highway 7 and Highway 35 Intersection**

 Currently this intersection operates under traffic signal control, with channelized right-turn lanes in all directions except for the northwest quadrant. There are dedicated left turn lanes on all approaches.





**Existing Highway 7 and Highway 35 Intersection** 



# **EXISTING ENVIRONMENTAL CONDITIONS**

#### Vegetation

- Vegetation in the project limits is characterized by early successional meadows and mid-aged forests that are disturbance-tolerant.
- A Tree Inventory was completed for the study in 2020 and confirmed that no federally or provincially protected plant species are located within or adjacent to the study area.

#### Wildlife and Species at Risk

- The study area contains habitat that supports a variety of wildlife species.
- Turtle nesting habitat was confirmed at the Scugog River Bridge during 2016 field investigations.
- Rock Pigeon was observed nesting under the Scugog River Bridge. Rock Pigeon is not a migratory bird species.
- Species at Risk (SAR) birds and turtles may be present within the study area based on the habitat present; however, no SAR or provincially significant plant species were observed during the 2016 field investigations.

### **Migratory Birds**

 Ten bird species were recorded during the 2016 field investigations. The birds observed are expected for the site conditions and are common and widespread throughout this part of Ontario.







#### Fish and Fish Habitat

- There are two watercourses within the study area: the Scugog River and a tributary to the Scugog River, as shown on the map below.
- The Scugog River is fish-bearing and represents significant habitat for fish and fish spawning.
- The Scugog River Tributary does not contain direct fish habitat.
- No records of aquatic SAR have been identified within the watercourses.

#### **Natural Heritage Features**

- There are two natural heritage features located within and adjacent to the study area:
  - An unnamed Significant Woodland is located along the eastern shore of the Scugog River, bisected by Highway 7.
  - The O'Donnell Landing Provincially Significant Wetland (PSW) Complex is located approximately 0.6 km south of the Scugog River Bridge.
     O'Donnell's Landing PSW Complex is regionally significant for fish spawning and rearing habitats.



#### Legend:

Study Area

Watercourses

Approximate Location of Significant Woodland



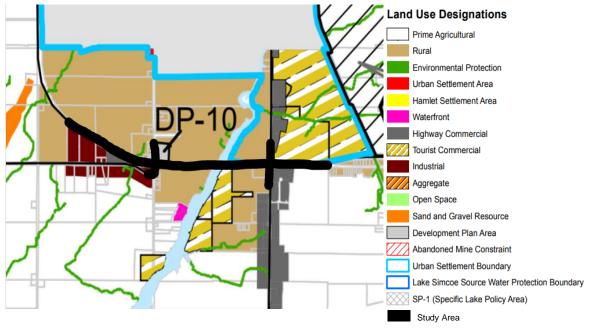
# **EXISTING ENVIRONMENTAL CONDITIONS**

#### Noise

 Noise assessments were completed by Valcoustics Canada Ltd. in 2002 and 2004. The assessments determined that the predicted increase in noise levels as a result of highway widening are <5 dBA. As such, noise mitigation measures are not warranted as a result of highway widening.

#### **Cultural Heritage**

- A Cultural Heritage Resource Assessment Report was completed as part of this study. Four properties were identified as having potential cultural heritage and value; however, all four properties are located more than 100 m from the study area and are outside of the area of impact. No further assessment is required.
- The Scugog River was identified as a cultural heritage landscape. No further assessment is required as no adverse impact to its values are anticipated as part of the works.



Official Plan (City of Kawartha Lakes Official Plan [By-law 2011, as amended], Schedule A-3)

#### **Archaeology**

- Stage 1 and 2 archaeological assessments (AAs) were conducted within the study area during Preliminary Design. Two
  archaeological sites were identified within the limits of this study, at the Scugog River Bridge and at Highway 7 and Highway 35. Both
  sites have undergone Stage 3 and Stage 4 AAs. No further archaeological assessment for this detail design study area was
  recommended.
- Additional property impacts were identified at the intersection of Little Britain Road and Highway 7 during detail design that were not
  assessed during preliminary design. A Stage 1-2 AA was completed for this additional area. No archaeological resources were found
  and no further assessment is recommended.

#### **Land Use**

- The City of Kawartha Lakes' Official Plan designates the lands in the study area around the Highway 7 and 35 intersection and Highway 7 near Angeline Street South as either rural or highway commercial.
- West of Highway 7 and Angeline Street South and south of Highway 7, lands are designated as industrial. Lands north of Highway 7 to the east of the Highway 7 and Highway 35 intersection is designated as tourist commercial.
- A portion of lands are designated as environmental protection: the Scugog River and the Scugog River tributary.

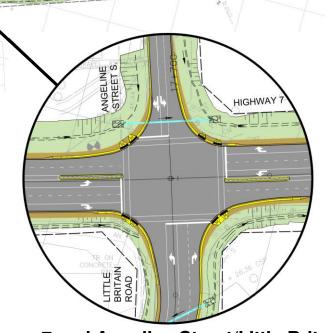


# **West of Angeline Street to Scugog River**



### Summary of construction / traffic staging:

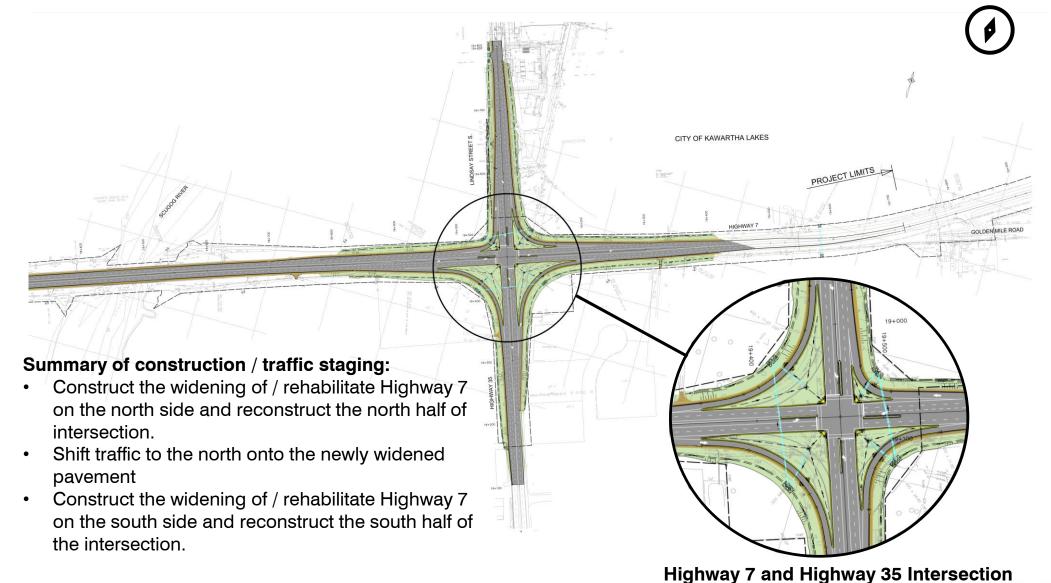
- Construct temporary shoulder strengthening on the south side of Highway 7 west of the Scugog River
- Shift traffic slightly to the south
- Construct the widening of / rehabilitate Highway 7 on the north side and reconstruct the north half of the intersection.
- Shift traffic to the north onto the newly widened pavement
- Construct the widening of / rehabilitate Highway 7 on the south side and reconstruct the south half of the intersection.



Highway 7 and Angeline Street/Little Britain Road Intersection



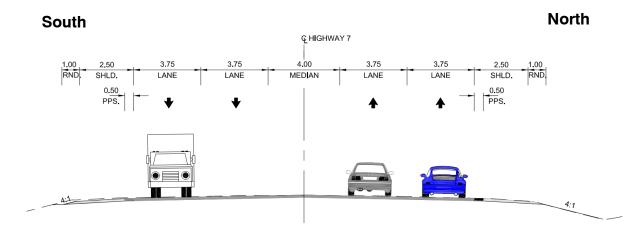
# **Scugog River to East of Highway 35**





### **Highway 7 Cross-Section**

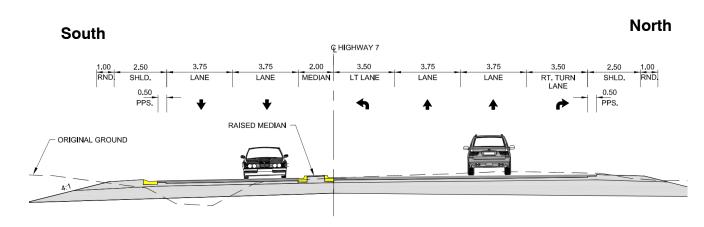
- Four 3.75 m through lanes (two eastbound and two westbound)
- 4.0 m flush median
- Two 2.5 m shoulders



**Typical Highway 7 Cross-Section** 

# Highway 7 Cross-Section at Intersection

- Four 3.75 m through lanes (two eastbound and two westbound)
- Dedicated left turn lane (eastbound and westbound directions)
- Dedicated right turn lane (eastbound and westbound directions)
- · 2.0 m raised median
- Two 2.5 m shoulders



**Typical Highway 7 Cross-Section at Intersections** 



# **ENVIRONMENTAL IMPACTS AND MITIGATION**

#### **WILDLIFE & VEGETATION**

Vegetation removals and works within and immediately adjacent to the ROW may impact wildlife habitat and species. Observed and expected species are highly tolerant of disturbance and negative impacts can be mitigated using standard mitigation measures.

- Vegetation clearing and grubbing will be minimized to the extent possible.
- Any clearing or grubbing of vegetation will be carried out outside of the breeding bird period to avoid impacts to migratory birds. If this is not possible, an avian specialist will be retained to search for active nests prior to any vegetation clearing.
- Exclusionary fencing for turtles will be installed in any work areas adjacent to the Scugog River by installing prior to the turtle nesting period (May 1) and will maintained throughout the nesting season.
- A Tree Preservation Plan will be included with contract documents to protect trees that do not require removal during construction

#### **ARCHAEOLOGY & CULTURAL HERITAGE**

Archaeological and cultural heritage assessments are being completed as part of this study. Two archaeological sites were identified and assessed during Preliminary Design. No archaeological or heritage resources are anticipated to be impacted by the work.

- An archaeological monitor will be present during construction occurring near the archaeological site the Highway 7 and Highway 35 intersection.
- In the event that human remains are encountered during construction, the Cemeteries Regulation Unit of the Ministry of Consumer Service shall be notified.
- In the event that deeply buried archaeological deposits are discovered in the course of construction, work will stop and the Ministry of Heritage, Sport, Tourism and Culture Industries shall be notified immediately.

#### TRAFFIC OPERATIONS

Lane reductions/shifts are required during construction. No pedestrian and cyclist mitigation measures are proposed for the works. The pedestrian crosswalk at Angeline Street will remain open during construction.

- Lane reductions will be kept to the minimum required to complete the work.
- A traffic management plan will be implemented to minimize the impacts of closures.
- Advance signage will be provided prior to lane closures.

#### LAND USES AND PROPERTY IMPACTS

There is potential to impact agricultural uses adjacent to the study area. Widening of the highway will impact private properties.

- Impacts to prime agricultural areas/land, the tiled drainage systems and the municipal drain will be avoided.
- Access will be maintained to agricultural land and the agricultural service business during construction.
- A multi-season well survey underway to establish baseline well water conditions prior to construction.
- Property agreements between MTO and private landowners will be in place prior to construction.

#### NOISE

Noise from construction, equipment and vehicles may impact residences and businesses that are adjacent to Highway 7.

Construction equipment is to be in an operating condition that prevents unnecessary noise.

#### UTILITIES

Utilities, watermains, hydro cables and gas mains are present and may be impacted during construction.

 Impacted utilities will be relocated in advance of construction. Impacted utilities include Hydro, Bell and Cogeco

#### AIR QUALITY

There is potential for construction equipment to create dust, and other local impacts on air quality.

- Construction equipment use will be limited to prevent unnecessary idling and to minimize the emission of pollutants
- The Contractor will employ dust suppression techniques during construction





# **ENVIRONMENTAL IMPACTS AND MITIGATION**

#### FISHERIES AND AQUATIC ECOSYSTEMS

Indirect impacts to fish and fish habitat within the Scugog River and O'Donnell's Landing PSW Complex will be mitigated to prevent harm to fish habitat.

- No in-water work is required at the Scugog River Bridge crossing.
- Standard (e.g., silt fence) and site specific (e.g., silt curtain, sedimentation basins) sediment and erosion control measures will be implemented to ensure no impacts to downstream or adjacent areas of fish habitat.

#### **EROSION AND SEDIMENT CONTROL**

Disturbance during construction will increase the potential for erosion and movement of sediment into watercourses.

- Removal or disturbance of woody riparian vegetation will be minimized during construction operations in order to prevent unnecessary loss of bank stability.
- Erosion and sediment control measures will be implemented and maintained during construction in order to mitigate the transport of sediment.

#### **SPECIES AT RISK**

Bobolink and Eastern Meadowlark may be found within the general study area. Blanding's Turtle and Snapping Turtle may nest near the Scugog River

- Should any SAR be encountered during construction, the MECP SAR Biologist will be contacted. If construction activities are an immediate threat to SAR, these operations should cease immediately.
- Exclusionary fencing should be installed to prevent nesting in any work areas adjacent to the Scugog River.
- Potential impacts to SAR will be reviewed as the design is refined and if required, MECP will be consulted regarding potential impacts and mitigation requirements.



#### WASTE MANAGEMENT AND CONTAMINATION

Waste, excess materials (including salt impacted soil) and emissions have the potential to contaminate the surrounding environment during construction if not managed properly. There are known areas of soil contamination in the study area.

- Excess materials will be managed in accordance with provincial standards.
- The Contractor will be responsible for controlling the emission of dust and other pollutants and preventing them from leaving the work site.





Following this Online Public Information Centre, next steps will include:

- · Reviewing and responding to comments received;
- Refining the Detail Design and Mitigation Plan;
- Preparing the Design and Construction Report (DCR) for public review;
- Finalizing the Detail Design and preparing the contract package; and
- Submitting the project for tender.

Thank you for participating in the Online Public Information Centre. We welcome your comments. Information is being collected in accordance with the *Freedom of Information and Protection of Privacy Act*. With the exception of personal information, all comments will become part of the public record.

If you have accessibility requirements in order to participate in this project, or if you would like more information, please contact:

Ms. Karen M. Zan Consultant Project Manager (WSP)

Phone: (289) 835-2643 Email: Karen.Zan@wsp.com



Mr. Dean Pattemore
MTO Design and Construction Project Manager

Phone: 613-332-3220 ext. 215 / 1-800-267-0295 (toll-free) Email: Dean.Pattemore@Ontario.ca

We encourage you to submit any questions or comments to the contacts listed above or <a href="here">here</a> by February 26, 2021.

www.hwy7widening.com