



**G.W.P. 5670-10-00**

## **HIGHWAY 17 PLANNING STUDY**

From 2.2 km east of Highway 531 to 8.0 km east of Highway 630

**PLANNING, PRELIMINARY DESIGN  
AND CLASS ENVIRONMENTAL ASSESSMENT STUDY**

## **TRANSPORTATION ENVIRONMENTAL STUDY REPORT**

**August 2014**



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## HIGHWAY 17 PLANNING STUDY

From 2.2 km east of Highway 531 to 8.0 km east of Highway 630

G.W.P. 5670-10-00

**Planning, Preliminary Design and Class Environmental Assessment Study**

**Prepared for the Ministry of Transportation Ontario by AECOM**

**Prepared By:**



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Fred Leech  
Consultant Environmental Planner



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Consultant Assistant Environmental Planner

**Reviewed By:**



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Consultant Project Manager



THE PUBLIC RECORD

A copy of this document has been submitted to the following office of the Ministry of the Environment to be placed in the Public Record:

Ministry of the Environment  
North Bay Area Office  
191 Booth Road, Unit 16 & 17  
North Bay, ON P1A 4K3

This Transportation Environmental Study Report is available for a minimum 30-day public review period commencing on Monday August 25, 2014 at the review location listed below during regular business hours. The report is also available on the study website at: [www.highway17routeplanning.ca](http://www.highway17routeplanning.ca) (click middle section).

Township of Bonfield Clerk’s Office 365 Highway 531, Bonfield (705) 776-2641	Municipality of Calvin Clerk / Administration Office 1355 Peddlers Drive, RR 2, Mattawa (705) 744-2700
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Township of Papineau-Cameron Clerk / Administration Office 4861 Highway 17 West, Mattawa (705) 744-5610	Ministry of Transportation Ontario Northern Region 447 McKeown Avenue, Security Desk North Bay, ON P1B 9S9
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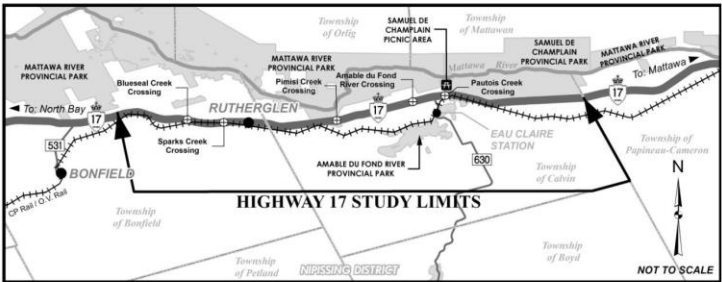
Mattawa Public Library 370 Pine Street, Mattawa (705) 744-5550	Bonfield Public Library 365 Highway 531, Bonfield (705) 776-2396
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Ce document hautement spécialisé n’est disponible qu’en anglais en vertu du règlement 411/97, qui en exempte l’application de la Loi sur les services en français. Pour de l’aide en français, veuillez communiquer avec le ministère des Transports, Bureau des services en français au : 905-704-2045 ou 905-704-2046.

NOTICE OF FILING OF TRANSPORTATION ENVIRONMENTAL STUDY REPORT  
Highway 17 Planning Study  
From 2.2 km east of Highway 531 easterly to 8.0 km east of Highway 630  
G.W.P. 5670-10-00

THE STUDY

The Ontario Ministry of Transportation retained AECOM to undertake a Class Environmental Assessment to identify a recommended plan for a four-lane Highway 17 within the study limits with access restricted to interchange locations. The study developed and evaluated a range of reasonable alternatives, including improvements to the existing highway, new highway routes and / or combinations of the two and has identified a Preferred Plan. The study limits are shown on the key plan.



The Preferred Plan includes:

- Widening and realignment of Highway 17 from Highway 531 to the east study limit
- Use of existing Highway 17 as a service road except from just east of Highway 630 to west of Pautois Creek where the existing highway will be decommissioned;
- Interchanges at Rutherglen Line, Highway 630 and Boundary Road;
- Grade separations at Trout Pond Road and Trunk Road; and
- A cul-de-sac at McNutt Road.

THE PROCESS

The study has followed the approved environmental planning process for Group ‘A’ projects under the Class Environmental Assessment for Provincial Transportation Facilities (2000) with agency and public consultation throughout. A Transportation Environmental Study Report (TESR) has been prepared to document the study process, the highway planning alternatives considered and the Preferred Plan including environmental protection measures and commitments for future action with regard to implementation of the project.

The TESR has been placed on the public record at the Ministry of Environment (MOE) for a 30-day review period beginning **Monday August 25, 2014**. Copies of the document have also been placed at the following locations and on the project website, [www.highway17routeplanning.ca](http://www.highway17routeplanning.ca):

<b>Ministry of the Environment</b> North Bay Office 191 Booth Road (Units 16 & 17) North Bay, ON P1A 4K3	<b>Ministry of Transportation</b> Northeastern Region Office 447 McKeown Avenue, 1st Floor Security/Information Desk North Bay, Ontario P1B 9S9	
<b>Township of Bonfield Clerk's Office</b> 365 Highway 531, Bonfield	<b>Municipality of Calvin Clerk / Administration Office</b> 1355 Peddlers Drive, RR 2, Mattawa	<b>Township of Papineau-Cameron Clerk / Administration Office</b> 4861 Highway 17 West, Mattawa
<b>Bonfield Public Library</b> 365 Highway 531, Bonfield	<b>Mattawa Public Library</b> 370 Pine Street, Mattawa	<b>Ministry of Transportation</b> 447 McKeown Avenue, North Bay

Interested stakeholders are encouraged to review the TESR and provide comments by **Friday October 3, 2014**. If, after review and consultation with the MTO’s consultant and staff, you have serious unresolved concerns, you have the right to request that the Minister of Environment (77 Wellesley Street West, 11<sup>th</sup> Floor, Ferguson Block, Toronto, ON M7A 2T5), issue a Part II Order (Bump-Up) for the project. This would lead to the preparation of an Individual Environmental Assessment. A copy of the Part II Order request should be forwarded to MTO and AECOM at the addresses below. If there are no outstanding concerns after **Friday October 3, 2014**, the project will be considered to have met the requirements of the *Class EA*.

COMMENTS

To obtain additional information, provide comments or to be placed on the mailing list, please contact:

Ms. Brenda Jamieson, P. Eng. Consultant Project Manager AECOM 300 Water Street Whitby, ON L1N 9J2 Phone: 905-668-9363 Toll-free: 1-800-668-1983 Fax: 905-668-0221 E-mail: <a href="mailto:Brenda.Jamieson@aecom.com">Brenda.Jamieson@aecom.com</a>	Mr. Dheera Kantiya, M.Eng., P.Eng. Project Manager Ministry of Transportation, Northeastern Region 447 McKeown Avenue, 4 <sup>th</sup> Floor North Bay, Ontario P1B 9S9 Phone: 705-497-5260 Toll-free: 1-800-461-9547 Fax: 705-497-5208 E-mail: <a href="mailto:Dheera.Kantiya@ontario.ca">Dheera.Kantiya@ontario.ca</a>
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If you have any accessibility requirements in order to participate in this project please contact one of the Project Team members listed above. Information will be collected in accordance with the *Freedom of Information and Protection of Privacy Act*. With the exception of personal information, all comments will be part of the public record.

Des renseignements sont disponibles en français en composant 1-800-668-1983 poste 2202, David LeBlanc (Courriel: [David.LebLANC@aecom.com](mailto:David.LebLANC@aecom.com)).



# Executive Summary

## Project Overview

This Transportation Environmental Study Report (TESR) documents the Planning, Preliminary Design and Class Environmental Assessment (EA) Study completed by the Ministry of Transportation (MTO) to identify a preferred plan for Highway 17 from Bonfield easterly through the Municipality of Calvin to improve future traffic operations and enhance highway safety. The study limits extend from approximately 2.0 km east of Highway 531 to the boundary road between the Municipality of Calvin and the Township of Papineau-Cameron, a distance of approximately 23 km, passing through parts of the Township of Bonfield, the Municipality of Calvin and the Township of Papineau-Cameron.

The study followed the approved environmental planning process for Group ‘A’ projects under the *Class Environmental Assessment (EA) for Provincial Transportation Facilities* (2000), which is approved under the *Ontario Environmental Assessment Act* (OEAA) for the planning and design of provincial highway projects. The EA planning process complied with provincial and federal environmental legislation and included consideration of the natural, socio-economic and cultural environment.

A range of reasonable alternatives, including improvements to the existing highway, highway realignments and combinations of the two as well as interchange alternatives, were developed and evaluated to identify the preferred plan. Engineering, environmental and property requirements were established, including mitigation measures to avoid, reduce or negate environmental effects.

**Section 1** of this TESR provides an overview of the project while **Section 2** provides further details regarding the Environmental Assessment (EA) process which was used to carry out the study.

## Transportation Needs and Opportunities

Highway 17 traverses northern Ontario, providing a strategic link in the Trans-Canada Highway. Besides providing for basic travel needs for residents as well as visitors to the area, the subject section of Highway 17 provides a transportation corridor for long haul trucks between Northern Ontario/ Western Canada and Southeastern Ontario/ Eastern Canada. Within the study limits, Highway 17 is primarily a two lane highway with limited access restrictions and access in both directions provided via private driveways and local roadways.

MTO is committed to provide and maintain a safe and efficient transportation system throughout Ontario. Highway 17 within the study limits has been characterized as having several issues/ concerns that require the attention of MTO. These issues/ concerns are defined in general terms as including the need to improve highway safety and provide the additional highway traffic capacity that will be required for the long range (20-year) planning horizon.

The need for improvements to the major highways in Northern Ontario is driven by both the policy direction and the anticipated future demand. It is reasonable to expect that the overall transportation demand on Highway 17, despite moderate historical growth, will intensify significantly as a result of the Growth Plan for Northern Ontario justifying the potential need for additional capacity within the corridor. In addition, an improved corridor will itself be a significant economic stimulant for development.

As part of the province’s long term planning vision, Highway 17 is to be converted to a fully access controlled facility adequate for meeting the anticipated future transportation demand and maintaining its provincial and interprovincial role and function.

Further details regarding the role and function of Highway 17 as part of the provincial highway system and existing and future transportation needs and opportunities are provided in **Section 3**.

## Existing Environmental Conditions

To support the development of the recommended alternative, existing conditions and constraints in the study area were inventoried (primarily from secondary sources augmented by field reconnaissance) so as to identify significant areas within the study limits and in order to determine a highway corridor within which alternative methods of carrying out the undertaking (alternative widening/ realignment designs) could be generated.

Key environmental conditions and constraints within the study area include:

- three provincial parks: Samuel de Champlain, Mattawa River (waterways class), and Amable du Fond River (waterway class and living legacy site);
- Pimisi Roadside Picnic Area;
- OVR / CPR rail line, Trans Canada pipeline and Union Gas spur pipeline;
- hamlet of Rutherglen and its associated residential development, two churches and a cemetery;
- highway oriented businesses along existing Highway 17 (gas station, restaurant, outfitter);
- the Columbia Forest Products plant;
- private entrances onto existing Highway 17;
- tourist-related facilities/ businesses (cabins, campgrounds, marinas, recreational areas);
- other rural residential and commercial development, including farm structures;
- aggregate sites and designated aggregate removal areas;
- waste management sites;
- Mattawa River, Amable du Fond River, the lakes and watercourses draining into them, and associated fish habitat and spawning areas;
- significant wildlife habitat (fish spawning areas, ungulate wintering yards and significant bird nesting sites) and wildlife movement;
- Provincially Significant Wetlands (PSWs);
- environmental protection area (Rutherglen Moraine Shoreline and Kame ANSI); and
- recreational trails (snowmobiles, canoes, hiking trails, etc).

Further details regarding the key features in the study area are provided in **Section 4**.

## Alternatives and Evaluation

Alternatives (to the undertaking) were identified which could address the transportation needs for the study area. A screening level evaluation of these alternatives was completed and presented in the Study Design Report. The recommended alternative, which was presented at PIC #1, includes:

- segments of widening/ improving the existing highway, including service roads in some areas
- segments of realigned highway



A single highway corridor was identified based on the physical constraints and environmental conditions identified within the study area.

The generation of highway planning alternatives within the selected highway corridor considered physical constraints and environmental conditions. In the Rutherglen and Amable du Fond areas, widening of the existing highway is not possible due to physical constraints and environmental conditions. Therefore, realignment alternatives were generated for these two areas while widening alternatives were generated for the Pimisi Bay and Pautois Creek areas.

The evaluation of highway planning alternatives was completed on a comparative basis for each of the four highway realignment and widening alternative areas (with associated interchanges and service roads). The comparative evaluation identified a recommended highway planning alternative for each highway realignment and widening area according to the potential impacts to:

- Natural Environment Factors
- Socio-Economic/ Land Use Factors
- Cultural Factors
- Transportation Factors
- Cost and Constructability Considerations

Interchanges are proposed at three locations: Rutherglen Line; Highway 630; and Boundary Road. Alternative configurations for each interchange location were generated and comparatively evaluated using the same criteria developed to assess highway planning alternatives in order to identify a recommended configuration at each location.

Further details regarding the generation, assessment and evaluation of alternatives to the undertaking and alternative methods for the undertaking (planning alternatives) are documented in **Section 5**.

**Consultation/ Engagement**

The study included an extension stakeholder consultation and engagement program. Key elements of the consultation program were:

- Newspaper notices and mailouts;
- External communications with stakeholders, including departments, ministries, agencies, First Nations Groups, municipalities and members of the public;
- Municipal and agency meetings;
- Municipal Council presentations;
- Three Public Information Centres (PICs) held at key points during the study;
- A study newsletter for each PIC;
- Project Website to provide information and receive inquiries from the public; and
- Direct contact with the Project Team via mail, email, phone and meetings.

A summary of consultation and engagement undertaken during the course of the study is provided in **Section 6**, including the input received and how it was considered.

**Preferred Plan**

On the basis of the assessment and evaluation results, the Preferred Plan for Highway 17 includes:

- Realignment of Highway 17 from Highway 531 to east of Rutherglen;
- Widening and realignment of Highway 17 from east of Rutherglen to west of Highway 630;
- Realignment of Highway 17 from west of Highway 630 to west of Pautois Creek;
- Widening of Highway 17 from west of Pautois Creek to the east study limit (just east of Boundary Road);
- Closure of existing Highway 17 from east of Highway 630 to west of Pautois Creek;
- Retention of existing Highway 17 as a service road at all other locations;
- Interchanges at Rutherglen Line, Highway 630 and Boundary Road with partial illumination provided at the ramp terminals;
- A grade separation at Trout Pond Road and Trunk Road; and
- A cul-de-sac at McNutt Road.

The cross section for the highway is a freeway with two lanes in each direction. The freeway will include a 30m median within a typical right-of-way width of 110m and have access restricted to interchanges.

The Preferred Plan is presented on the following two fold-outs. Further details regarding the Preferred Plan are presented in **Section 7** and the larger scale plates in **Appendix A**.

**Potential Environmental Effects and Proposed Mitigation Measures**

Potential environmental impacts associated with the implementation of the preferred plan include:

- 21 watercourse crossings with 14 crossings having potential for impacts to direct and/ or indirect fish habitat and 1 crossing having potential to impact aquatic species at risk;
- Approximately 295 ha of vegetation is displaced, including 18 ha of PSW, 34 ha of unevaluated wetland, 110 ha of deer wintering area and 185 ha of forest with 1 vegetative Species at Risk (SAR) present;
- Property acquisition is required from 80 properties and 33 buildings are impacted;
- Approximately 12 ha of provincial parkland is impacted;
- Approximately 61 ha of Canada Land Inventory (CLI) Class 1, 2 and 3 soils is impacted; and
- Approximately 160 ha of land with archaeological potential is affected.

Preliminary mitigation measures have been developed to address potential impacts associated with the preferred plan and are discussed in **Section 8** with additional details provided in the Appendices to this document.



**Exhibit E.1: Preferred Plan – East of Highway 531 to East of Rutherglen**

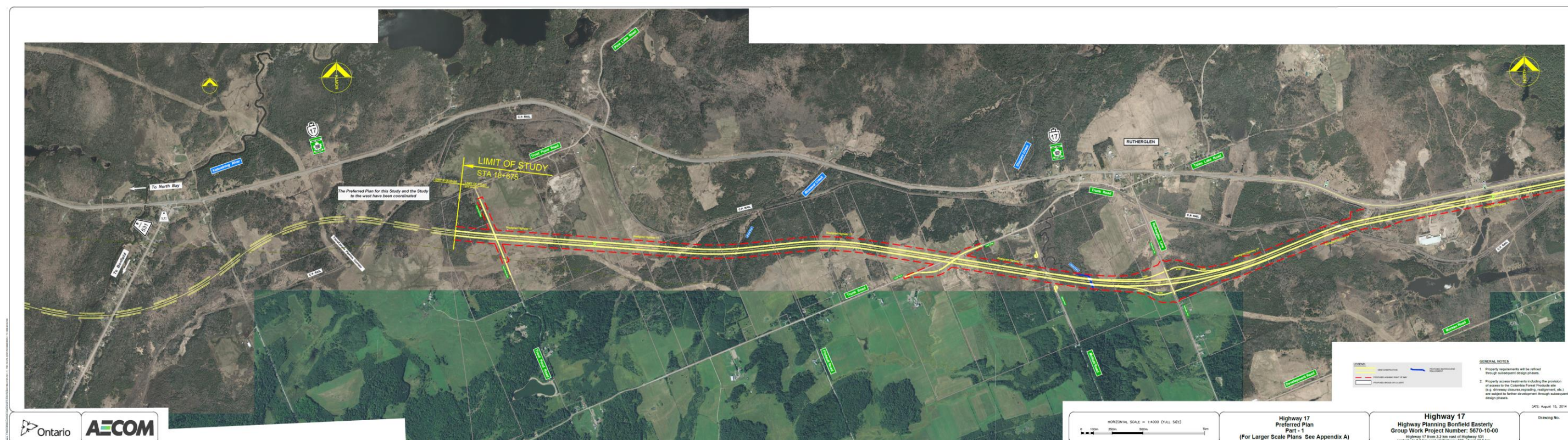




Exhibit E.2: Preferred Plan – East of Rutherglen to East of Boundary Road

