



June 14, 2021

Township of Greater Madawaska
19 Parnell Street
PO Box 180
Calabogie, Ontario
K0J 1H0
C/O
Greenview Environmental Management

**Attention: Tyler Peters, P.Eng.
Project Manager**

Re: Ferguson Lake Road Preliminary Design Brief

WSP has been retained by Greenview Environmental Management to complete the preliminary and detailed design of the Ferguson Lake Road Reconstruction Project. With direction from Township Council, a 60km/hr design speed has been accommodated South of the bridge over Constant Creek and a 70km/hr design speed has been accommodated North of the bridge. Improved signage and pavement markings will be included to assist the travelling public with identifying this shift in allowable speed along the corridor.

Location:

The southern construction limit is approximately 250m South of Campground Sideroad and the northern limit is the intersection of Ferguson Lake Road and Kennelly Mountain Road creating a project length of 5.7km. A 1.1km section of recently rehabilitated roadway in the middle of the project limits will be subject to platform widening to provide 1.0m partially paved shoulders.

Purpose:

The purpose of this project is to completely rehabilitate the roadway with improvements to drainage, granular base, and driving surface throughout the corridor to provide a safe and smooth platform for the travelling public.

The Township has identified this as a high-priority project due to existing road conditions with advancing deterioration, anticipated increases in traffic related to residential development, and relatively heavy truck traffic related to timber harvesting. Strengthening of the roadway structure will be provided as a result with recommendations provided through a geotechnical investigation and analysis.

Project Snapshot:

The road design will be in accordance with the Geometric Design Guide for Canadian Roads, Transportation Association of Canada (TAC), June 2017 and the Ministry of Transportation Ontario (MTO) Supplement, May 2020 as applicable and relevant.



The work of this contract will include:

- In-Place Processing of existing surface treatment and gravel base to 150mm depth
- Horizontal and vertical alignment improvements – 60km/hr and 70km/hr design speeds
- Widening of the roadway platform – 3.3m lanes with 1.0m partially paved shoulders throughout
- Super-elevation provided – Maximum 6.0% throughout
- Strengthening of the road surface, base and sub-base with Hot Mix Asphalt, Granular 'A' and 'B'
- Improved ditching and drainage throughout
 - Crossing and entrance culvert replacements
- Improved roadside safety (guiderail) and side slopes where feasible
- Relocation of utilities as required
- Adherence to newly established legal property boundaries

Traffic Impact:

Annual Average Daily Traffic (AADT) has been provided by the Township as 280 vehicles with 15% Truck Traffic. It has been identified by the Township that significant increases to Traffic are anticipated in the near future.

Construction Staging:

It is anticipated that traffic will generally be maintained with construction staged through single lane, short term, daytime lane closures causing relatively short delays to motorists throughout the project. Access to local driveways will be maintained and notice provided in advance of any work.

Construction Schedule:

It is anticipated that construction will require one full construction season, starting in May 2022 and be completed in the fall of 2022.

WSP is approved by MTO to perform preliminary and detailed design of arterial highways and roads for construction tendering. This project is being designed and reviewed by no fewer than two (2) licensed Professional Engineers with established experience in the province of Ontario.

Andrew Mansfield, P.Eng., PMP
Manager, Highways

