

Webequie Supply Road Project

Webequie First Nation

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APPENDIX C-1: BACKGROUND STUDIES

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WEBEQUIE
SUPPLY ROAD



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C.1 Introduction

Various road/transportation studies that have been conducted in the Webequie First Nation/McFaulds Lake region over recent years including:

- Winter Road Re-Alignment Study (Neegan Burnside Ltd., 2008);
- Cliffs Ferroalloys Black Thor Mine Integrated Transportation System (Northern Policy Institute, October 2015);
- Noront Resources Eagle's Nest Mine Access Road (Noront, 2013);
- All-Season Community Road Study (Webequie First Nation/Nibinamik First Nation/Neskantaga First Nation/Eabametoong First Nation, 2016); and
- All-Season Community Road Study – Phase 2 (Webequie First Nation/Nibinamik First Nation/Neskantaga First Nation/Eabametoong First Nation, 2017).

These studies provide context for the development of the Webequie Supply Road and have contributed inspiration to Webequie First Nation for the planning and development of the supply road, with the overarching goal being to bring socio-economic opportunities and prosperity to the community. These studies served as the foundation for the identification and initial assessment of alternatives for the proposed Webequie Supply Road. Background information from these studies is summarized below.

C.1.1 Winter Road Re-Alignment Study (2008)

On behalf of four First Nations (Marten Falls, Eabametoong, Neskantaga, Nibinamik and Webequie), the Matawa First Nations Tribal Council commissioned a study to examine realigning selected sections winter roads for approximately 200 km, with particular attention to addressing safety, environmental and operational issues related to major water/wetland crossings, steep hills, sharp curves and other deficiencies and sensitivities. **Figure C.1.1** shows the winter roads under consideration in the vicinity of the Webequie Supply Road study area. The work included the following scope:

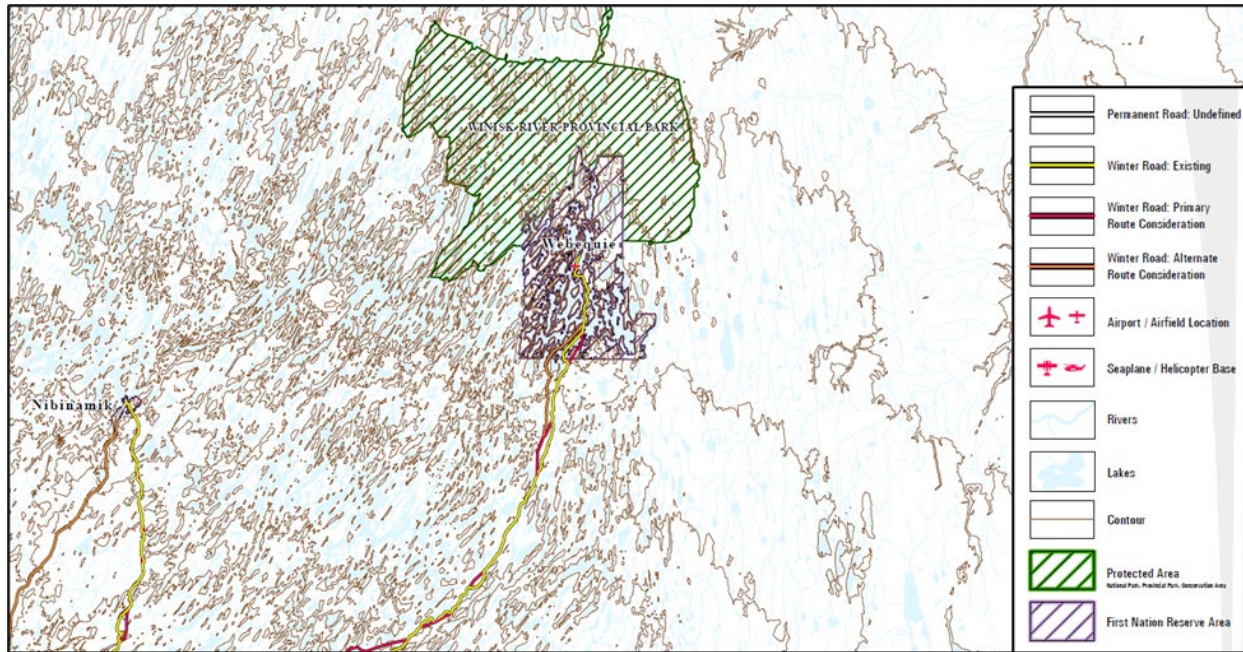
- Realignment of the full length of the Marten Falls winter road to follow a route along the east side of the Ogoki River (approximately 120 km);
- Realignment of the existing Eabametoong winter road to circumvent Opikeigen Lake and Ozhiski Lake (approximately 67 km);
- Realignment of the Neskantaga winter road to circumvent the western crossing of Kabania Lake (approximately 13 km);
- An assessment of the improvement needs for the entire winter road systems for all five First Nation communities in the study area (approximately 675 km), including the identification and assessment of additional areas for potential realignment; and
- Consideration of upgrading standards to all-season roads, where applicable.

The study included extensive consultation with First Nations, regulatory agencies and other stakeholders (e.g., forestry companies and outfitters). Based on the consultation program results and completed assessments, alternative solutions to identified deficiencies in the winter road system included: improvements to winter road standards, (i.e., realignment, widening, crossing improvements), including the development of engineering design criteria related to traffic volumes, operating speeds, lane configuration and vertical and horizontal alignment constraints; or upgrading of the roads to all-season standards (i.e., realignment to higher ground (along eskers) and construction of permanent structures at water crossings).



The study results also included cost estimates for the construction of 332 km of winter road realignment, constructed to all-season road standards (\$75,000 - \$200,000 per kilometre, yielding total costs of \$35,754,000 for road work and \$16,850,000 for construction of permanent bridge structures).

Figure C.1.1: Matawa Winter Road Realignment Study - Webequie Local Study Area



Source: Winter Road Realignment Study (Draft). Neegan Burnside Ltd., 2008.

C.1.2 Cliffs Ferroalloys Black Thor Mine and KWG Resources Transportation Links (2011)

In 2011, Cliffs Natural Resources, later referred to as Cliffs Ferroalloys (“Cliffs”), announced its intention to move forward with permitting and development of the Black Thor Chromite Mine in the McFaulds Lake Ring of Fire area, a very large and promising mineralized zone proven to contain high grade ferrochrome deposits; however, by 2015, citing many regulatory, financial and logistical challenges, Cliffs removed itself from further development of their Ring of Fire project. Interests in the Cliffs properties were sold to Noront Resources.

Prior to the sale, Cliffs had conducted a number of studies as part of its Environmental Impact Statement and Environmental Assessment process. From those studies, Cliffs developed an Integrated Transportation System (ITS) that optimized all-season road connection of the Black Thor mine assets and facilities with the provincial highway system and the CN Rail system at Highway 584 near Nakina, Ontario (refer to green dashed line in **Figure C.1.2**). The all-season road option was preferred over a heavy rail system from a cost, constructability and First Nations community benefits perspective. The corridor for the all-season road was selected following optimization that minimized constructability challenges, minimized costs, and minimized environmental impacts, while providing potential opportunities for First Nations connection to the provincial highway system at Nakina.

C.1.3 Noront Resources Eagle's Nest Mine Access Road (2103)

In 2013, Noront Resources prepared a draft Environmental Assessment/Environmental Impact Statement for their proposed Eagle's Nest nickel/copper/platinum mine in the McFaulds Lake area. As previously noted, the Noront draft EIS/EAR was not completed, nor was it circulated to provincial agencies for comment, but comments from federal agencies were received by Noront. On August 28, 2019, the Impact Assessment Act came into force, replacing the Canadian Environmental Assessment Act, 2012. As a result, the comprehensive study, which was being conducted under the former Canadian Environmental Assessment Act, was terminated per the transitional provisions of the Impact Assessment Act. At present, the EIS/EAR is on hold/pause until there is more certainty about a potential all-season road. The Noront environmental assessment examined access alternatives, as follows:

- Alternative road routes that would connect the mine to the provincial highway system:
 - North-South connection through Nakina via Highway 584;
 - Eastern connection to the DeBeers Victor diamond mine; potential port facilities at the Attawapiskat First Nation; and connection to the James Bay coast winter road, with connection to rail facilities in Moosonee; and
 - East-West connection to the Pickle Lake Road (previously Highway 808) and Highway 599 near Pickle Lake.

This analysis identified few advantages of the Eastern connection to the Attawapiskat First Nation and the James Bay coast winter road over the more significant advantages of the East-West and North-South road options. The comparative analysis of the East-West and North-South alternatives identified the Pickle Lake/Highway 599 connection near Pickle Lake, Ontario as the preferred route for several key reasons:

- Interconnection to a trans-modal transportation facility with rail interconnection, at Savant Lake, for transportation of concentrate to processing facilities located in the south;
- Overall lower costs and shorter construction period;
- Potential for several First Nations to connect to the road, providing interconnection to the provincial highway system, the end of geographic isolation and potential economic development opportunities;
- Fewer major watercourse crossings (lower cost and potential environmental effects); and
- No traversing of provincial parks.

Alternative road types between Eagle's Nest and Highway 599/Pickle Lake Road were considered:

- All-season road;
- Combined winter road/all-season road;
 - Winter road connection between Eagle's Nest and Webequie Junction south of the Webequie First Nation;
 - All-season road between Webequie Junction and Pickle Lake Road/Highway 599; and
 - Slurry pipeline between Eagle's Nest and Webequie Junction to transport concentrate to load-out facilities at Webequie Junction.

An all-season road connecting to the Pickle Lake Road (previously Highway 808), connecting to a trans-modal load-out facility on Highway 599 near Savant Lake, Ontario, at the CN Rail corridor, was selected as the preferred alternative for the following reasons:

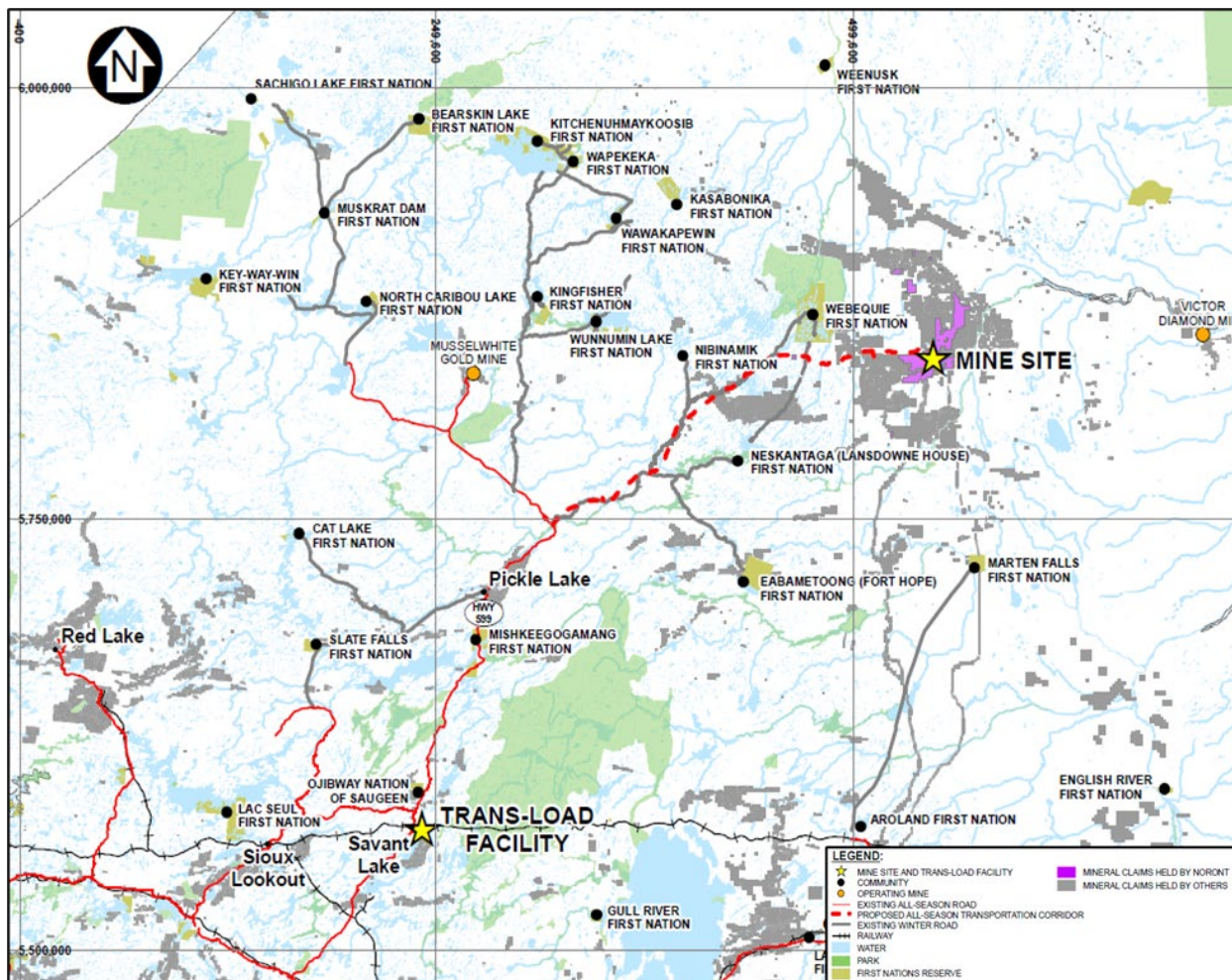
- Capacity to accommodate higher truck traffic volumes along the entire roadway throughout the year than winter road only, or winter road/all-season road combination;



- Lower environmental effects as a result of permanent structures, compared to annual construction disturbance with a winter road; and
- Higher reliability for concentrate haul and the delivery of goods and services.

In identifying route alternatives for the Eagle’s Nest mine access road, it was intended to maximize use of existing winter road corridors to minimize additional clearing and environmental effects. The preferred alignment was selected by optimizing constructability, environmental effects and costs. Following the existing winter road alignment, with some revisions to enhance constructability, is considered a significant advantage over the establishment of a new corridor. The preferred all season road corridor identified in the 2013 EIS/EAR is shown on **Figure C.1.3**. As noted previously, the federal comprehensive study under Canadian Environmental Assessment Act (CEAA), 2012 for Noront’s Eagle’s Nest Mine project was terminated and, when the impact assessment process is reactivated, that project will exclude consideration of an all-season road connection to the provincial highway network, as it has been assumed that this will be developed by others based on the Province of Ontario’s pledges of funding for infrastructure (mainly roads) in the Ring of Fire area. The current status of the Eagle’s Nest Mine project can be found on Noront’s website (<http://norontresources.com>).

Figure C.1.3: Noront 2013 Proposed Eagle’s Nest All-Season Transportation Corridor



Source: Noront Eagle’s Nest Project Federal/Provincial Environmental Impact Statement/Environmental Assessment Report – Executive Summary (Draft Copy) (Noront, December 20, 2013)

In addition to providing the least cost, least impact route from Highway 599/Pickle Lake Road into the Eagle's Nest mine site, with the addition of connecting community lateral access roads, the selected mine site access road also provided potential all-season access to the provincial highway system for Webequie First Nation and other First Nations proximate to the proposed road, including the Nibinamik, Neskantaga and Eabametoong First Nations.

From the Webequie First Nation perspective, this corridor provided community benefits. The community would have all-season access to the provincial highway system with the addition of a community lateral connection from the Webequie Junction directly north to the Webequie reserve lands and the airport. In addition, the community would have potential year-round economic development opportunities related to the transportation of goods and services between the Webequie Airport and the Eagle's Nest mining facility.

C.1.4 All-Season Community Road Study (2016)

Webequie was one of four First Nations that directed the All-Season Community Road Study (ASCRS) that was completed in June 2016. Neskantaga, Nibinamik and Eabametoong were the other participating First Nations. The purpose of this study was to examine options for interconnecting these First Nations communities to the provincial highway system for the purposes of providing community social and economic benefits.

Many alternatives were examined, including those previously preferred by Noront Resources, Cliffs and KWG Resources. In addition to previously identified alternative corridors, the four First Nations chose to examine other alternatives that prioritized inter-community connections, minimized environmental impacts and maximized community benefits.

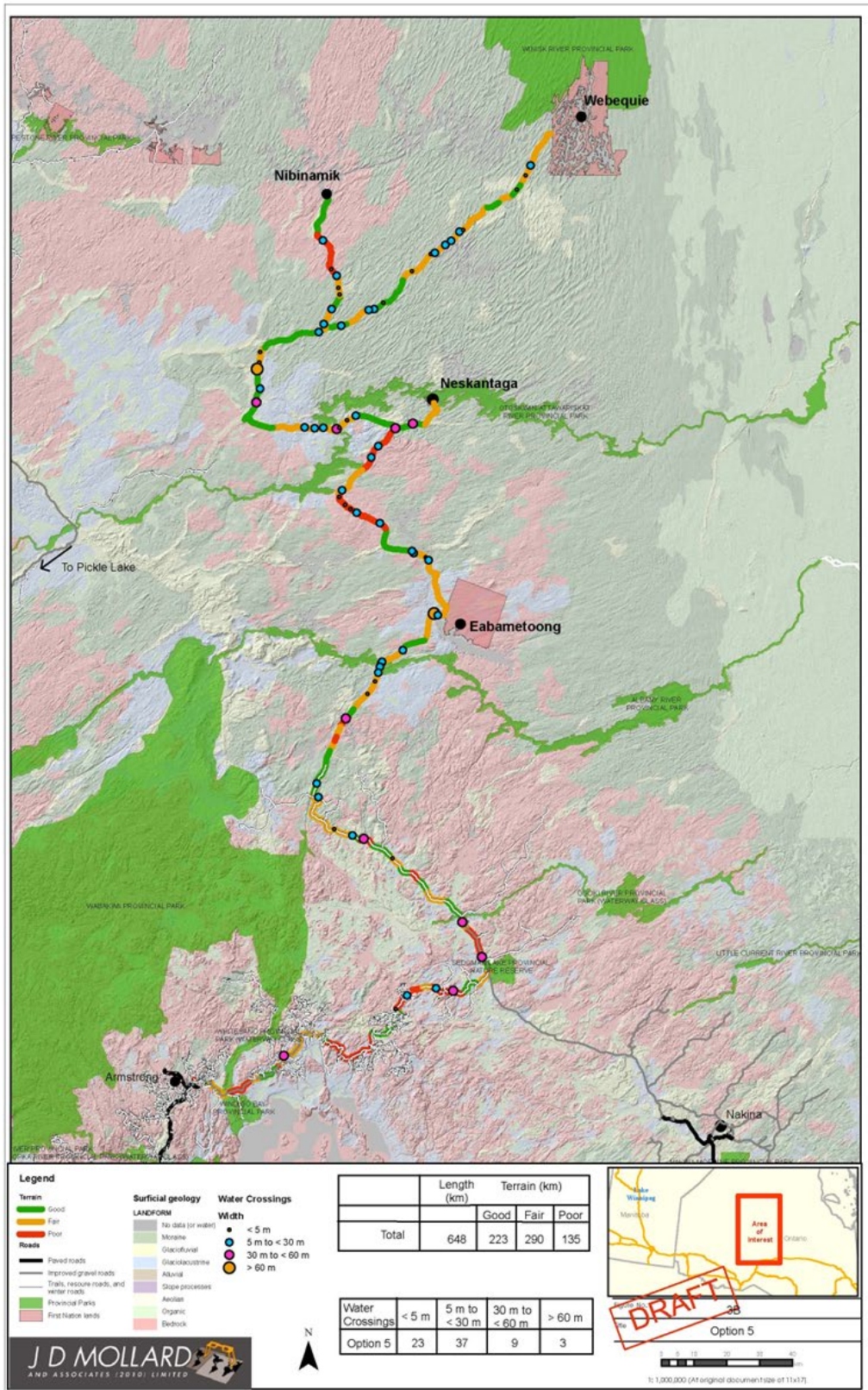
Following community engagement and multi-criteria assessment, a preferred corridor was identified for further study. The preferred corridor, shown on **Figure C.1.4**, generally followed an east-west orientation and included input from First Nations land users to avoid areas of cultural and environmental significance.

The preferred corridor/road coming out of the 2016 ASCRS did not connect to the McFaulds Lake area due to unresolved issues and concerns expressed by some participating First Nations about mining development in the Ring of Fire area.

From the Webequie First Nation perspective, the preferred alternative emerging from the 2016 ASCRS provided a number of social and economic benefits to community members as a result of connection to the provincial highway system and interconnection with other First Nations communities. However, there was additional interest in continuing to examine a supply road connection into the McFaulds Lake area, separate from the ASCRS options, and building on studies being conducted by Noront Resources. This connection between Webequie and McFaulds Lake is considered important to Webequie First Nation, as it could provide the community with economic development opportunities and community economic and social benefits above and beyond the benefits of an all-season community road to Pickle Lake.



Figure C.1.4: All-Season Community Road Study - Preferred Alternative



C.1.5 All-Season Community Road Study – Phase 2 (2017)

In 2017, the Nibinamik and Webequie First Nations continued the ASCRS on their own, to refine the preferred corridor analysis from the previous phase of the study (largely within their own traditional territories) and to continue with community engagement. The ASCRS – Phase 2 investigations involved many discussions with Nibinamik and Webequie land users, Elders and youth to refine the corridor centreline and to determine support for an east-west connection to the provincial highway system at the Pickle Lake Road. The Phase 2 study also included more extensive data collection, including field studies and gathering of more Indigenous Knowledge information. This additional information, together with input from community members, was used to identify a refined east-west all-season road corridor, which is has essentially the same purpose (connection of Webequie and Nibinamik to the provincial highway system at Pickle Lake).

In addition to defining a refined corridor, it was determined during Phase 2 that there is reasonably strong support for an all-season community road connection to the provincial highway system, but not clear and full community support for interconnection of the all-season road to mining activity in the McFaulds Lake area.

From the perspective of the Webequie First Nation, there was general community and political support for an all-season community road to the provincial highway system at the Pickle Lake Road. However, there was concern that the discussion of the all-season road did not include an extension from the community eastwards to McFaulds Lake, which was thought to provide potential for economic development opportunities with mine exploration and future mining operations.

C.1.6 References

- J.D. Mollard and Associates Limited. 2010. Webequie Supply Road: July 2020 Exploration of Potential Aggregate Development Sites.
- Neegan Burnside Ltd., 2008. Winter Road Realignment Study (Draft).
- Noront. 2013. Noront Eagle's Nest Project Federal/Provincial Environmental Impact Statement/Environmental Assessment Report – Executive Summary.
- Northern Policy Institute. 2015. "Roads, Rail and the Ring of Fire": Commentary No. 7.
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- Webequie First Nation/Nibinamik First Nation/Neskantaga First Nation/Eabametoong First Nation. 2017. All-Season Community Road Study Phase 2.

