This northern Ontario resident would like to help design a route for mineral extraction from the Ring of Fire.80468 I wrote the following details in a six-part interpretation in favor of a rail corridor that eventually connects regional communities to the existing east/west rail system in northern Ontario.

80468 Schedual 1

History of Roads

The route may require modifications severe enough that a re-examination of alternatives may need to be authorized. One bonus is that quarry sites can be situated far apart if we consider that rail efficiency had been designed to transport aggregate. As an infrastructure project, hwy 11-17 east of Thunder Bay used millions of tons of crushed gravel. Announced for 2010, the costs are a large portion of the \$512M federal/provincial funding for this and related efforts completed in 2015. 750,000m3 of course stone was used to upgrade 14.5 km of highway. Along this route, two sites where choosen to manufacture the enormous volume. The greatest producer set up within meters of the Hwy construction. That operation wasn't monitored at the time and I'm affraid it was unlikely there was a connection the provincial electric power grid a stones throw away. In 1993, studies were carried out in a Provincial Highways Class Environmental Assessment for the project to go ahead (see citation). The EA should have recognized the extent of the polution in my opinion, generated by the diesel gen-sets used to provide the mechanical power to produce stone. Is this something that might be over-look again? A site that has good prospects to produce rock should also have the means to provide electricity from water. When the corridor is addressed, it will become appearent that where the energy comes from doesn't mean that power needs to be generated on site.

{APA. Northern Ontario Business magazine.(2015).staff:highway travel will expeditious.(page 1).retrieved from https://www.northernontariobusiness.com/advertising-features/highway-11-17-four-laning-371290}

80468 Schedual 2

A Path for Eagle Nest Extraction

Even if production from the mineral deposits are routed for further processing through Nakina, the James bay lowlands present challenges. Industrial might is set upon a vast boggy plain accroding to Ian Ross. (see citation). The key to a practical design would be for a rail corridor which follows higher ground. We have the power to base our plans on stone, not in it. The Reef Lake area to the west has an elevation of over 350 meters with its con-course emptying at sea-level. Preference for a starting point should begin along the CNR line between Armstrong and Pickle Lake because engineering aspects strongly support this as a viable construction corridor that follows high elevations on the Canadian Shield. Of course it would remain prudent to make allowances for indiscretions where the terrain hasn't proven. Redundancy's may exist even if a well laid path for road(s) may fail because such advance had been done prematurely where in fact an in-appropriate routes are choosen. The result can often be that some damage irreversible. But today modern equipment is a saving grace on the realization that quarry sites can be situated farther apart if where advantaged by the rolling efficiency built on rail transfer. The public opinion should be, and just may be that, even if there is snow on the roof, it that doesn't mean no one is at home. After-all, skepticisim is money making branding at every magic show in Vegas.

{APA.Northern Ontario Business magazine(2010).Ian Ross:Study begins on the James Bay Railroad.(p.1)(line 6).retrieved from https://www.northernontariobusiness.com/industry-news/transportation/study-begins-on-james-bay-railroad-366865}

80468 Schedual 3

Rail or Gravel

The railroad has been welcomed by native communities for years. It opened support networks.

Spure lines can access way-side gravel deposits with the stability and production that exceeds vehicular road beds poorly designed for future use. A perminant pack of a rail-bed has a 20 foot wide base and constitutes a far less foot-print then any truck road. Particularly on corners where roads need a wide base.

Rail roads require narrow bridges compared to most truck roads. So there would be a good deal less material produced and transported for construction.

Metal wheels have far less resistance to carry loads. So you get more bang for the buck. Concrete ties can be pulled up and moved.

The gravel used on rail beds is coarse stone. So it demands less refining at a crusher. Sometimes rain settles on bush roads where it creates those pot-holes evident in mechanical failure.

One or maybe two men can frieght large commodities opposite of multiple truck drivers. Should an autonomus vehicles take over, this will only ad to the fact that it is easier to make electricity on the genious of modern technology. The principal boundries should also consider that unlike designs of the past, a road to the ROF does not yet interact with other existing corridor traffic routes.

80468 Schedual 4

Airstrip at Armstrong

How we move forward on the initiative will be measured gradually by introducing a lessor harm to the wild life. A logical approach would not be using little, if any dynamite to forge ahead. Instead, the geography possesses scattered resources when in fact the retreating ice-age split chasms into the landscape.

These natural occurances are what should direct the avenues between the best gravel deposits and the shortest routes for relocating production material. A staging area for the start of the northern excursion should begin at the existing CN east-west rail corridor. At the northern extent of hwy 527 lies the town of Armstrong and the large rail yard would be an ideal location to load frieght and equipment west to an initial starting point. The air-strip east of the townsite would also aid in landing supplies in proximaty of the rail service. It is here, between Armstrong and Pickle Lake that a geo physical analysis will result in a path northward. Animals have adapted in the past and we've no choice but to expect them to adapt. At buffalo jump Alberta, pioneers prized the greatest set of horns.

80468 Schedual 5

The EA Observations

Navigating water ways has always had an impact on the wildlife. Likewise, bushroads demand taking an elogical approach wherein construction is an antagonist to land use dispearency. In the past, every railroad uses less resources and has historically been a stable base beyond any means acheivable compared to gravel roads. Low impact rail service permits less traffic and fewer instances for corridor traffic. Environmentally Sensitive Areas ESA's, as defined by the MTO as being disturbances from human activities (see citation), are not the cause of the declining Polar Bear population. Climate change did that. I feel that is the local indegenous inhabitants who are best positioned to anylize the risks of reshaping the landscape. The Alaska pipeline was forced through -40C in winter months, but in all probability the Caribou still laugh about it to this day.

Part one Section 2.4 as a Group D project

{APA. Class Environmental Assessment for Provincial Transportation Facilities.(1997).Appendage 5.(p.3)retrieved from: http://www.mto.gov.on.ca/english/highway-bridges/pdfs/environmental-assessment-2000.pdf}

80468 Schedual 6

Gaining Permissions

The earliest contrivance for pushing the road north will be putting aside the economic viability that might eventually be extended to first nations communities. The unity that geographic continuity offers, will improve the lives of the people by networking support. Fewer funds will be spent on winter road maintenace. An example being that today, ice roads north and west from Mosanne are alotted \$1.8 M for annual expenditures. New routes because of Covid 19, need to come fast and be cost effective. Therefore, a tipping point remains in that no single environmental factor should be paramount. Resolution must only be steared by efficent means that connects anticipated aid through branches which will intersect the new road south.