

30 June 2021
Project: 210354

2282344 Ontario Inc
Stuart Wright
1555 Nigh Road
Fort Erie, Ontario L2A 5M4

RE: 1555 NIGH ROAD, FORT ERIE – MUNICIPAL COMPREHENSIVE REVIEW, TRANSIT AND TRANSPORTATION FEASIBILITY

2282344 Ontario Inc. retained Paradigm Transportation Solutions Limited to complete a qualitative transit and transportation assessment of the above-noted lands to support a Settlement Area Boundary expansion request as part of the ongoing Municipal Comprehensive Review of the Regional Municipality of Niagara Official Plan.

Background

The subject lands are located southwest of Nigh Road and Buffalo Road; municipal address 1555 Nigh Road. The property is currently zoned as a rural zone in the Town's Zoning By-law and lies outside the urban area designation in the Niagara Region and Town of Fort Erie Official Plans.

The lands are approximately 26 acres if are designated urban area, the property owner contemplates a development consisting of residential land uses (low, medium, and high density), mixed-uses, and park and open space and would yield about 200 new residential units. Access is proposed via two road allowances from roadway extensions of Hollywood Street and Parkside Road westerly into the subject land's internal roadway network.

Assessment

Access to Major Transportation Corridors

Access to the subject lands is facilitated by a network of roadways under the jurisdiction of the Town of Fort Erie, Niagara Region (arterial roads), and Province of Ontario. There are generally four categories of roadway hierarchy adjacent to the subject lands. These would be defined as:

- ▶ Provincial Highway (Garrison Road [west of Rosehill Road])
- ▶ Regional Arterial Road (Garrison Road [east of Rosehill Road], Dominion Road)
- ▶ Town Collector Roads (Buffalo Road, Rosehill Road; and
- ▶ Local Roads (Nigh Road, Hollywood Street and Parkside Avenue)

The roadways under the jurisdiction of the Town of Fort Erie; Buffalo Road, Rosehill Road, Nigh Road, Hollywood Street and Parkside Avenue) have a general two-lane rural cross-section and posted speed limit of 50 km/h. No sidewalks or visible cycling infrastructure is noted. The existing pavement width along Buffalo Road and Rosehill Road measures approximately 7 metres with gravel/grass covered shoulders of various width with an existing right of way of 20 metres. Nigh Road, Hollywood Street and Parkside Avenue have a reduced pavement width of between 4-5 metres with gravel/grass covered shoulders and an existing right of way of 20 metres.

Garrison Road (east of Rosehill Road) is under the jurisdiction of Niagara Region and has a five-lane urban cross-section and a posted speed limit of 60 km/h. Sidewalks are located on both sides of the roadway. Garrison Road is not classified as a cycling route under the Region's Cycling Master Plan thus no on-street cycling lanes are provided. Garrison Road (west of Rosehill Road) is under the jurisdiction of the Province of Ontario. The cross-section, lane arrangement and right of way is consistent as described under the jurisdiction of the Niagara Region. Garrison Road does not have direct access to the Queen Elizabeth Way (QEW); however the roadway does provide connections to three interchanges (Central Avenue, Concession Road and Thompson Road) all located within a span of less than 5 kilometres from the subject lands.

Dominion Road is under the jurisdiction of Niagara Region and has a two-lane urban cross-section and a posted speed limit of 60 km/h. Sidewalks are located on both sides of the roadway. Dominion Road is classified as existing cycling facility with on-road cycling lanes. The existing pavement width along Dominion Road is 10 metres with curb and gutters. The existing right-of-way is approximately 20 metres.

The QEW is under the jurisdiction of the Province of Ontario and is the only major provincial freeway that traverses Niagara Region and connects the Greater Toronto and Hamilton Area (GTHA) to the international border in south Niagara. Highway 405 and Highway 420 branch from the QEW to the Queenston Lewiston Bridge and to the Rainbow Bridge international



crossings, respectively. The subject lands are located at the most southern terminus of the QEW providing internal boarder access through the Peace Bridge.

The Welland Canal provides navigable water access to Niagara Region at numerous ports along the canal, which have wharves allowing for loading/offloading of cargo. The main port is Port Colborne. The existing ports have the capability to take delivery of bulk supplies for industrial uses, and load locally sourced aggregates for shipment to other destinations. The subject lands are somewhat proximate to the Welland Canal.

The various railways within Niagara Region allow for local shipping of freight into and out of the region. The national railways (CNR and CPR) also provide access into the US and other parts of Ontario and Canada. These railways operate numerous sidings (low-speed track sections) and yards where goods may be transferred between rolling stock and trucks, but none of these locations are equipped to handle any large volumes of intermodal containers or bulk materials. As noted in the Niagara Region Transportation Master Plan, rail in the Region operates below capacity. The subject lands are proximate to existing rail lines but some distance from the nearest current/planned transit stations in Niagara Falls and St. Catharines.

The subject lands have good access to these major transportation corridors, but some improvements would be required on roadways under the jurisdiction of the Town of Fort Erie to ensure that the public right-of-way and adjacent lands are designed to support all mobility modes equitably and efficiently and to enable people of all ages and abilities in travelling throughout the area.

Local Road Network Incorporation

The development has the potential to connect to and expand the current grid network established within the mature residential neighbourhood directly to the east of the subject lands. No conceptual plan has been developed; however, it is envisioned that at least two connections to Buffalo Road will be provided directly opposite Hollywood Street and Parkside Avenue as well as a new roadway connection to Nigh Road. The subject lands have the potential to construct a grid like network that will tie into the existing roadway network.

Based on a high-level review, accommodating a road network does not appeared to encroach upon environmentally sensitive features. Based on this, it is highly feasible to incorporate this parcel of land into the existing local road network while considering environmental matters.

Impact to Existing Road Network

The development proposed includes a mix of residential land uses (low to high densities) and a small amount of mixed-use development. Based on professional judgement, the traffic volumes generated by this type and magnitude of development are expected to have a modest impact on the traffic operations of the surrounding road network. Site generated traffic would likely require the local roadway network to be brought up to a typical roadway standard. Localized geometric and/or traffic control improvements at the intersection of Buffalo Road and Garrison Road will likely also be required.



Vehicular traffic can likely be managed through various measures such as traffic control, appropriate level of access to the development and/or cross-sectional improvements to the local road network. However, further details of the traffic impacts will need to be assessed through a comprehensive Transportation Impact Assessment. This study will need to address the local area impacts of the site as well as the wider effects on the arterial and local road networks given the development's dependency on the intersection of Buffalo Road and Garrison Road.

Transit Service Extension

Niagara Region is made up of geographically segregated communities that share strong economic and social ties. A large portion of the Niagara's land area is rural, and residents of these areas often travel to urban centres to fulfill most of their basic daily activities. These travel patterns make effective service by public transportation a substantial challenge.

Transit service in this area is primarily provided by Fort Erie Transit (FET), which is operated by the Town of Fort Erie. The FET conventional transit service consists of 4 fixed and demand-responsive routes. Currently, FET operates all fixed routes within the subject area by way of a transit stop located at the Fort Erie Leisure Plex. This bus stop is located less than 1.0 km north of the subject lands.

The Niagara Region Transit (NRT) also provides transit service and bridge the gaps between local municipal connections to the broader regional network. The NRT conventional transit service consists of 8 fixed and demand-responsive routes. Currently, NRT Route 22 services the area by way of a transit stops at the Fort Erie Leisure Plex. Additionally, in areas with very low demand for public transportation, NRT also operates an alternative to fixed-route service by way of OnDemand service that lets riders request trips in real-time by selecting a pickup point and hub destination.

Given that the Fort Erie Leisure Plex acts as a "hub" for transit routes, it is highly unlikely the existing fixed routes would be extended into the subject lands. Rather, direct service to the subject land will likely be served by a demand-responsive transit service system and active transportation modes.

Active Transportation Extension

Niagara Region has an extensive history of bikeways network planning. The existing region-wide cycling network forms the foundation of the strategic network. The main regional arterial running to the south of the parcel of property is Dominion Road. The roadway currently provides for on-road cycling facilities to Crystal Beach in the east and Wainfleet in the west. More importantly, this cycling route provided a number of connection to adjacent cycling routes encompassing the entire Niagara Region.

To advance the Niagara bikeway network, the Region developed a Strategic Cycling Network that places short-term priority on building the connections that are most likely to be used.



Through this work it was identified that new links would emerge along Buffalo Street between Dominion Road and Garrison Road providing additional connections to the network.

Currently, there is a sidewalks network along Garrison Road and Dominion Road. If the subject lands are designated urban area, future development of the subject lands would provide an opportunity to fill gaps in the sidewalk network most notably along Buffalo Street to provide an opportunity for existing and future residents to incorporate improved active transportation amenities and supporting healthy communities.

Given the existing network in the surrounding area, it is Highly feasible to extend active transportation facilities to the parcel. This will help advance the Region’s plan for a more sustainable and multimodal transportation system.

Summary

Table 1 summarizes the findings of the qualitative transit and transportation assessment completed for the subject lands.

TABLE 1: QUALITATIVE ASSESSMENT SUMMARY – TRANSIT AND TRANSPORTATION

Criteria	Criteria Response
How well can the parcel or collection of parcels access major transportation corridor such as Provincial Highway, Regional Road, rail or marine systems?	Highly Feasible
How feasibility can a local road network be incorporated for the parcel or collection of parcels, including consideration of environmental matters?	Highly Feasible
What is the level of impact to existing road networks and level of service from the addition of the parcel or collection of parcels?	Modest Impact
What is the feasibility of extending transit services to the parcel or collection of parcels?	Low Feasibility
What is the feasibility of extending active transportation facilities to the parcel or collection of parcels?	Highly Feasible

Conclusion

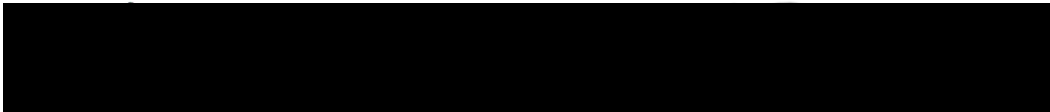
The qualitative assessment summarized in **Table 1** suggests that designating the subject lands as urban area appears suitable and appropriate from a transit and transportation perspective. The lands have good access to major transportation corridors (roads, rails, and marine systems) through Garrison Road, Dominion Road and the QEW. The subject land also offers a highly feasible option for establishing a proper local road network, a low feasibility options for extending transit service and is highly feasible in providing active transportation facilities.

Although a detailed traffic analysis has not been completed at this time, its anticipated development of the subject lands would have a modest impact on the existing road network. A transportation impact study should be conducted to determine the exact impacts once further information is known. Based on this analysis, specific measures, such as geometric design improvements or traffic control devices, can be recommended to mitigate the effects of development.

We trust that the foregoing information addresses your requirements. Please do not hesitate to contact us if we can be of further assistance.

Yours very truly,

PARADIGM TRANSPORTATION SOLUTIONS LIMITED



Adam J. Makarewicz
Dipl.T., C.E.T. MITE
Senior Project Manager

Stew Elkins
B.E.S., MITE
Vice President

