



Working together with our community

Public Hearing – December 1, 2019

Subject: ZNPL2019253 – An application has been received to rezone a parcel of land from Agricultural Zone (A) and Hazard Lands Zone (HL) to Extractive Industrial Zone (MX) to permit the establishment of a sand and gravel pit. The resource will be removed from below the water line. LIVINGSTON EXCAVATION AND TRUCKING INC. and agent MHBC has put forth the application affecting the lands described as 259 Windham East Quarter Line Road.

Report Number: PD 20-65
Division: Planning and Development
Department: Planning
Purpose: For Information

Executive Summary:

An application has been received to rezone a parcel of land from Agricultural Zone (A) and Hazard Lands (HL) to Extractive Industrial Zone (MX) to permit the establishment of a sand and gravel pit. It is proposed to remove the aggregate from below the waterline. The applicant has applied to the Ministry of Natural Resources and Forestry to allow the extraction to occur below the waterline.

The applicant has provided a planning justification report, traffic report, archaeological assessment, noise impact report, natural environment report and a hydrogeological report. The reports generally suggest that the proposed sand and gravel pit will not adversely affect the general area, environment and water resources. Further, the noise report states that the proposed berms will ensure the noise will be within the provincial limit to the surrounding receptors. The gravel trucks will use the existing approved haul route, prohibiting trucks from going west towards the residential cluster along 14th Street West.

This report is being presented as part of the statutory public meeting required by the Planning Act. A subsequent report will be brought forward, containing a recommendation for Council consideration.

Site Features and Land Use:

Livingston Excavating and Trucking Inc. owns approximately 39 ha of land, of which 36 ha is currently licensed under the Aggregate Resources Act for a Category 7, Class B (above water) pit. The proposed development aims to achieve a Category 1, Class A

(below water) pit license to permit extraction below the water table. The remainder of the applicant's property includes an existing barn that will remain on-site. The following land uses surround the proposed operation:

- **To the south:** Rural residential uses and agricultural uses. On the south side of 14th Street West, there is a cluster of rural residences.
- **To the west:** Solar farm and agricultural uses.
- **To the east:** Existing Dufferin Aggregates gravel pit (underwater extraction) and rural residences
- **To the north:** Agricultural uses, inclusive of farm residences and farm buildings.

The subject land comprises mostly agricultural lands with a small portion of hazard lands adjacent to a municipal drainage system at the northern property boundary. According to the Planning Justification Report prepared by MHBC, dated July 2019, two archaeological sites are waiting for a Stage 4 Archaeological Assessments. An Environmental Study prepared by Biologic dated June 17th, 2019, identified several endangered or threatened species and wildlife habitats.

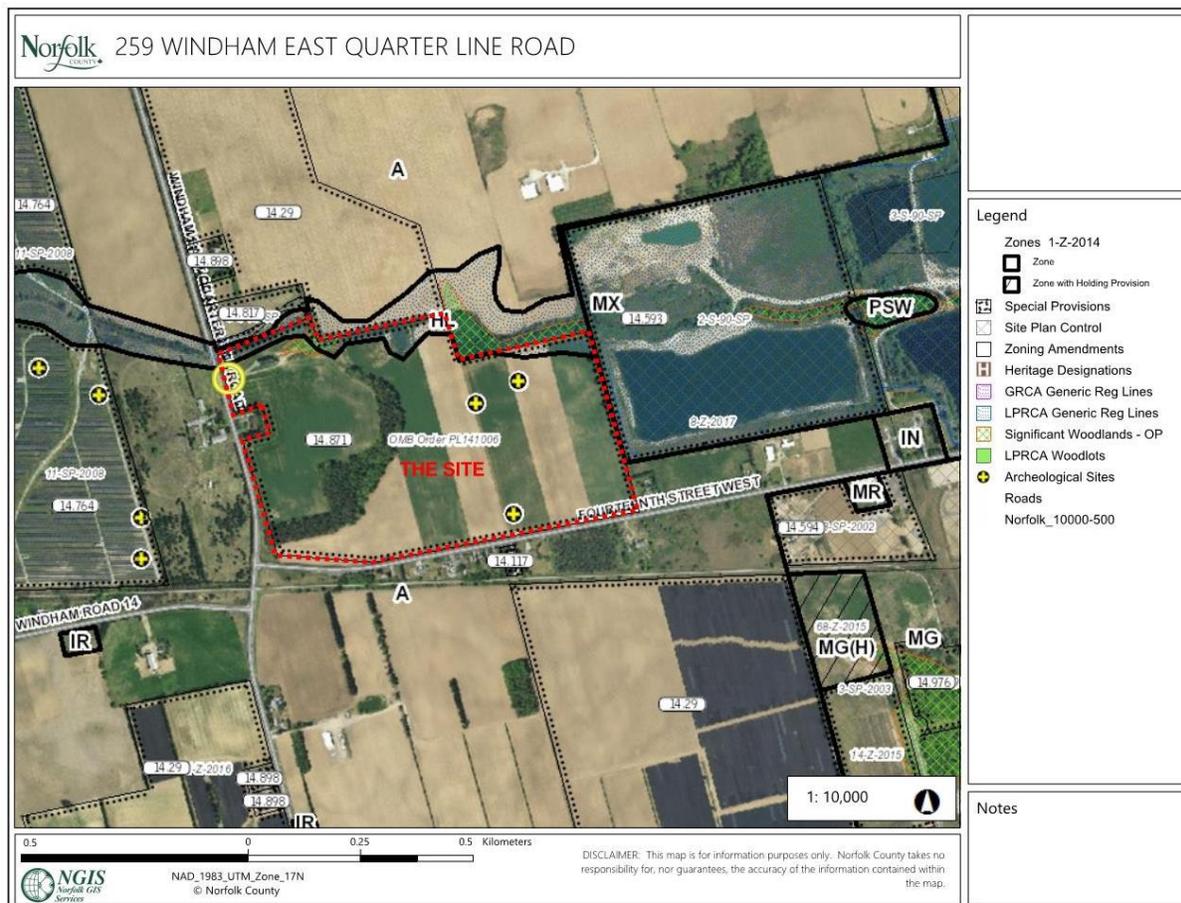


Figure 1: The subject site and surrounding areas.

Discussion:

Public Information Session: The applicant organized a public information meeting on March 9, 2020, to present the proposal of below water gravel extraction with an annual extraction limit of 150,000 tonnes. The public information meeting provided information on the new proposal and explained how various measures would mitigate potential impacts to the natural environment, water resources and surrounding residents. MHBC Planning was in attendance as the proponent's agent and was available to answer technical questions in relation to the proposal.

Water Wells: A Hydrogeologic Assessment prepared by Groundwater Science Corp., dated May 2019, concludes that based on the setting, scale of groundwater level changes and separation distance between the extraction site and local water wells, there is no significant potential for negative impact to local water supplies. The report recommends a well monitoring program and groundwater interference plan to ensure all water supplies are protected.

Ministry of Environment, Conservation and Parks has reviewed the application and recommended a door to door well survey to be completed to assess the existing groundwater users and available drawdown in private wells located within 500 m of the site boundary. Additional site-specific geologic and hydrogeologic data representative of the proposed pit design is required for validating the aggregate extraction below water level.

Noise: A Noise Impact Assessment was prepared by HGC dated May 31, 2019, to assess potential noise impacts from the proposed pit on surrounding residential receptors. The Mitigation measures are suggested to comply with MECP noise guidelines for surrounding sensitive land uses and include the following key features:

- All mobile construction equipment MECP Guidelines NPC-115, "sound levels due to construction equipment";
- Strategic hours of operation for extraction works;
- The processing plant is located in the north-east corner, surrounded by 6 metres high stockpiles with periodic operations.
- Noise attenuation berms will be constructed along the east, south and west boundaries of the site, and along the southern boundary of the main processing area.

Traffic: A Traffic Impact Study prepared by R.C. Spencer & Associates dated April 2019 indicates that the proposed pit will use the existing entrance/exit currently approved for the current class B sand and gravel pit. According to the report, trucks will travel eastward on Fourteenth Street West on the existing haul route which has sufficient capacity to accommodate both the roadway growth and traffic generated from the pit.

The right-of-way of Fourteenth Street West does not have any sidewalk, and the shoulder is relatively narrow. The TIS also did not provide any recommendations on pedestrian safety. The Engineering department will require a TIS to be reviewed during the Site Plan Stage.

Archaeological Sites: The Subject Site has a high Cultural Heritage Value. A Stage 1 and 2 Archaeological Assessment identified nine (9) archaeological locations, two (2) of which were determined to warrant a Stage 3 Archaeological Assessment. Timmins Martelle Heritage Consultants Inc. completed the Stage 3 Archaeological Assessment in 2018. The Stage 3 Archaeological Assessment recommended that the two sites undergo a Stage 4 Archaeological Assessment if development is proposed within these areas. No site disturbance will be permitted in these defined areas until a Stage 4 Assessment is completed. A 20 metres buffer is proposed between the aggregate extraction and protected archaeological sites. Ministry of Tourism, Culture and Sports confirmed that the provincial requirements had been satisfied.

Natural Heritage: A Natural Environment Level 1 and 2 Technical Report was prepared by Biologic dated June 17th, 2019. The following features are identified inside the property and to adjacent lands as being significant:

- Endangered or threatened species habitat (butternut);
- Potential specialized habitat for wildlife (potential amphibian habitat); and
- Fish habitat (off-line agricultural pond).

The report identifies that there will be no direct impacts to these features, and indirect impacts can be mitigated by a 30 metres setback with marker posts from the municipal drain, which is located to the north to provide a buffer to these features. The silt fencing shall be installed according to the Guidelines for Erosion and Sediment Control for Urban Construction Sites and other Provincial standards. A spills plan should be incorporated into the Site Plan. The report further recommended for rehabilitation plan to diversify the natural heritage features.

Site Plan Control: According to the By-Law 2014-97, development classes requiring Site Plan Approval include all development in industrial zones. A Site Plan Application will be required if the proposed Zoning Amendment Application is approved.

Circulation Comments:

The technical comments received from Departments and Agencies are attached within Appendix A and form part of this information report. Key issues identified through circulation comments include a door to door survey request by MECP to assess the existing groundwater users and available drawdown in private wells located within 500 m of the site boundary.

Regard For Public Input:

Public input has been received for this application. Key issues and concerns reflected in the public comments include:

- Impact of increased traffic;
- Public safety on the road;
- Noise and dust;
- Impact of existing water wells in the immediate areas;

- Storm run-off from the subject site;
- Decreased value of the property.

Detailed submissions are attached within Appendix B and form part of this information report.

Planning Considerations:

It is owner's responsibility to be aware of and comply with all relevant federal or provincial legislation, municipal by-laws or other agency approvals.

Provincial Policy Statement, 2020

The Provincial Policy Statement provides policy direction on matters of provincial interest related to land use planning and development. The PPS provides for appropriate development while protecting resources of provincial interest, public health and safety, and the quality of the natural and built environment.

Section 2.3.6.1 of PPS-2020 states that planning authorities may only permit non-agricultural uses in prime agricultural areas for extraction of minerals, petroleum resources and mineral aggregate resources.

Section 2.5.4 further clarifies that on prime agricultural land, extraction of mineral aggregate resources is permitted as an interim use provided that the site will be rehabilitated back to an agricultural condition. Complete rehabilitation to an agricultural condition is not required if the subject site is outside of a specialty crop area, and there is a substantial quantity of mineral aggregate resources below the water table warranting extraction, or the depth of planned extraction in a quarry makes restoration of pre-extraction agricultural capability unfeasible.

Section 2.5.3 states that progressive and final rehabilitation shall be required to accommodate subsequent land uses, to promote land use compatibility, to recognize the interim nature of extraction, and to mitigate negative impacts to the extent possible. Final rehabilitation shall also take surrounding land use and approved land use designations into consideration.

Planning Comments: PPS allows the extraction of mineral aggregate resources in Prime Agricultural Lands with certain conditions and requirements which will be checked through a conformity analysis.

Section 2.0 of PPS-2020 provides direction on wise use and management of Natural Resources including natural heritage and water. Relevant policies include:

Natural Heritage

- Development and site alteration shall not be permitted in fish habitat except in accordance with provincial and federal requirements.

- Development and site alteration shall not be permitted in habitat of endangered species and threatened species, except in accordance with provincial and federal requirements.
- Development and site alteration shall not be permitted on adjacent lands to the natural heritage features and areas identified in policies 2.1.4, 2.1.5, and 2.1.6 unless the ecological function of the adjacent lands has been evaluated and it has been demonstrated that there will be no negative impacts on the natural features or on their ecological functions.

Water

- Identifying water resource systems consisting of ground water features, hydrologic functions, natural heritage features and areas, and surface water features including shoreline areas, which are necessary for the ecological and hydrological integrity of the watershed.
- Implementing necessary restrictions on development and site alteration to protect, improve or restore vulnerable surface and ground water, sensitive surface water features and sensitive ground water features, and their hydrologic functions.
- Planning for efficient and sustainable use of water resources, through practices for water conservation and sustaining water quality
- Ensuring stormwater management practices minimize stormwater volumes and contaminant loads, and maintain or increase the extent of vegetative and pervious surfaces.

Planning Comments: *The Planning Justification Report states that within the licenced boundary, outside of the extraction limit and adjacent lands, there is a fish habitat located within the Class D Agricultural Drain (Petite Drain). There is a habitat for endangered and threatened species (butternut) within the licence boundary and outside of the extraction limit. Natural Heritage and Endangered Species, on or adjacent lands, and their appropriate setbacks will need to be further investigated through SAR screening process of MECP. The applicant is advised to contact SAROntario@ontario.ca to start the process.*

A Hydrogeologic Assessment has been prepared by Groundwater Science Corp. The report assessed any potential adverse effects on private wells as a result of the proposed pit. The report's recommendation and Ministry of the Environment, Conservation and Parks' comments will be considered for future recommendations.

Section 2.6, related to Cultural Heritage and Archaeology, states that development and site alteration shall not be permitted on lands containing archaeological resources or areas of archaeological potential, unless significant archaeological resources have been conserved.

Planning Comments: *The Planning Justification Report states that Stage 1 and Stage 2 Archaeological Assessment identified nine (9) archaeological locations and two (2) of which were determined to warrant a Stage 3 Archaeological Assessment. A Stage 3*

Archaeological Assessment has been conducted on these two areas and recommended a Stage-4 Assessment. No site disturbance in these defined areas is permitted until a further Archaeological Assessment is completed. The Ministry of Tourism Culture and Sport confirmed that the provincial requirements had been satisfied. The Archaeological protection plan and appropriate buffer will be further verified and considered for future recommendations.

Section 3.1 related to Natural Hazards states that development shall generally be directed, in accordance with guidance developed by the Province (as amended from time to time), to areas outside of hazardous lands adjacent to river, stream and small inland lake systems which are impacted by flooding hazards and/or erosion hazards.

Planning Comments: *An existing municipal drain is within the designated Hazard Land at the north side of the subject Land. The proposal includes a 30 meter setback between the extraction limit and the water channel. The recommendations of Natural Environment Report prepared by BioLogic dated June 17th, 2019 will be further analyzed for future recommendations.*

Note: Endangered and threatened species and their habitat are protected under the provinces Endangered Species Act, 2007 (ESA). The Act prohibits development or site alteration within areas of significant habitat for endangered or threatened species without demonstrating that no negative impacts will occur.

Please be advised that it is owner's responsibility to be aware of and comply with all relevant federal or provincial legislation, municipal by-laws or other agency approvals.

Norfolk County Official Plan

The subject lands are designated Agricultural and Hazard lands in the Norfolk County Official Plan. A small portion of the subject lands is also significant woodland. The proposed aggregate extraction below the water level is located mostly within the 'Agricultural Land' and a small area in the 'Hazard Land', outside of the significant woodlands.

Lands within the Agricultural Area accommodates numerous rural resource activities, including agriculture, aggregate resource extraction, resource-based and lifestyle uses, and related and compatible uses as directed by Norfolk County Official Plan. The extraction of aggregate, mineral or petroleum resources is permitted in agricultural lands, in accordance with the following Policies:

1. Section 7.2.1 related to permitted use in agricultural lands states that The extraction of aggregate, mineral or petroleum resources shall be permitted in accordance with the Aggregate Resources Act, the Mining Act or the Oil, Gas and Salt Resources Act, as appropriate, subject to the policies of Section 4.6(Natural Resources) of this Plan.
2. Section 4.6.1 (i) states that new pits and quarries or expansion of legally existing pits or quarries in Aggregate Resource Areas identified on Schedule "J"

(appendix D) shall be permitted without an amendment to this Plan. New pits and quarries or the expansion of legally existing pits or quarries shall require an amendment to the Zoning By-law.

3. Applications for Official Plan and/or Zoning By-law amendments, as referenced in section 4.6.1 (i) shall be reviewed on the basis of the following:
 - the feasibility of aggregate extraction proposed;
 - compatibility with the surrounding land uses;
 - impact of the proposed haulage routes;
 - potential impact on groundwater quality and quantity, Provincially Significant Features, Natural Heritage Features, and the broad natural environment;
 - rehabilitation plans;
 - potential impacts to cultural heritage resources;
 - matters raised by the Province or the appropriate Conservation Authority;
 - whether approval will be granted under the Aggregate Resources Act.
4. Where extraction is proposed below the water table, the following criteria shall be satisfied:
 - a hydrogeological study shall be conducted for aggregate operations that intend to use groundwater resources to wash their aggregate and will use greater than 50,000 litres per day during this washing process;
 - a substantial quantity of mineral aggregate is located below the water table warranting extraction below the water table;
 - other alternatives have been considered by the applicant and have been found unsuitable. Other alternatives include resources on land committed to future urban uses, and resources in the Rural Area where rehabilitation to agricultural uses is possible; and
 - in those areas remaining above the water table following extraction, agricultural rehabilitation shall be maximized.
5. Rehabilitation of mineral aggregate extraction sites shall be required in accordance with the requirements of the Aggregate Resources Act.
6. In the Agricultural Area, complete agricultural rehabilitation is not required if:
 - extraction is permitted below the water table;
 - other alternatives have been considered and found unsuitable; and
 - agricultural rehabilitation in remaining areas is maximized.

Planning Comments: *Norfolk County Official Plan permits the extraction of aggregate resources in the subject lands. Schedule 'J' of the Official Plan delineates the subject land as an Aggregate Resource Area. No Additional Official Plan Amendment will be required for the extraction of Aggregate Resources below the water table. The Zoning By-law amendment will be reviewed with the criteria provided in section 4.6.1.*

Section 7.3 related to 'Hazard Land' designation does not include aggregate resource extraction as a permitted use. However, Section 4.6.1 (i) provides direction on new pits and quarries or expansion as per Schedule 'J' of the Official Plan; No Official Plan Amendment will be required. However, a Zoning By-Law amendment will be required to permit the extraction of aggregate resources on Hazard Lands.

Norfolk County Zoning By-Law 1-Z-2014

The subject lands are zoned Agricultural and Hazard Lands in the Norfolk County Zoning By-law 1-Z-2014. The proposed aggregate extraction below the water level is located mostly within the 'Agricultural Land' and a small area in the 'Hazard Land' in Norfolk County Zoning By-Law 1-Z-2014. The Hazard Lands are mostly kept as a buffer area between the extraction limit and the municipal drain at the northern side of the subject lands.

There is a special Provision (14.871) with the agricultural land which is a result of the OMB decision for the Category 7, Class B pit that is currently licensed on the site. The site-specific provisions states:

In addition to the uses permitted in the 'A' Zone, notwithstanding the definition of pit or quarry nothing contained herein shall prohibit the levelling or removal of any hill, provided:

- a) It is for the purpose of extending, increasing or improving the lands for agricultural purposes;
- b) No excavation takes place below the average grade of the land surrounding the hill; and
- c) There is a hill to be leveled. [OMB decision April 10, 2015].

Planning Comments: *This Special Provision will no longer exist if the proposed Zoning By-Law amendment is approved.*

The Proposed zoning changes include:

1. A zoning change from Agriculture Zone (A) to Extractive Industrial Zone (MX)
2. A zoning change from Hazard Lands Zone (HL) to Extractive Industrial Zone (MX)

Permitted use in Extractive Industrial Zone (MX) includes sand and gravel pit, stone quarry and plants for concrete, cement, asphalt with the following setback parameters for any structures:

- Minimum front yard: 13 m
- Minimum exterior side yard: 13 m
- Minimum interior side yard: 4.5 m
- Minimum rear yard: 9 m
- Minimum separation from a dwelling on an adjacent lot: 13 m

- Maximum building height: 11 m

Consultation(s):**Planning Advisory Committee Recommendation:**

The Norfolk Planning Advisory Committee (PAC) is responsible for reviewing policy related planning matters. The proposed development application was not circulated to the PAC and therefore no comments regarding this development application are available at this time.

Strategic Plan Linkage:

This report aligns with the 2019-2022 Council Strategic priority 'Optimal Place for Business'.

Explanation: Norfolk County will be a willing partner to business by setting the stage for local supply and business related to resource extraction.

Recommendation(s):

That Report PD 20-65, Public Hearing report for ZNPL2019253 be received for information;

AND THAT any comments received as part of the statutory public meeting be considered in a future recommendation staff report.

Attachment(s):

Maps 1 to 4

Appendix A Circulation Comments

Appendix B Public Submissions

Appendix C Planning Justification Report Prepared by MHBC, dated July, 2019

Appendix D Schedule J – Natural Resources

Submitted By:

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Reviewed By:

Tricia Givens, M.Sc.(PL), MCIP, RPP
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Planning and Development Division
519-426-5870ext. 1893

Prepared By:

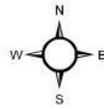
Mohammad Alam, MPL, MUD, MCIP, RPP
Senior Planner
Planning and Development Division
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MAP 1

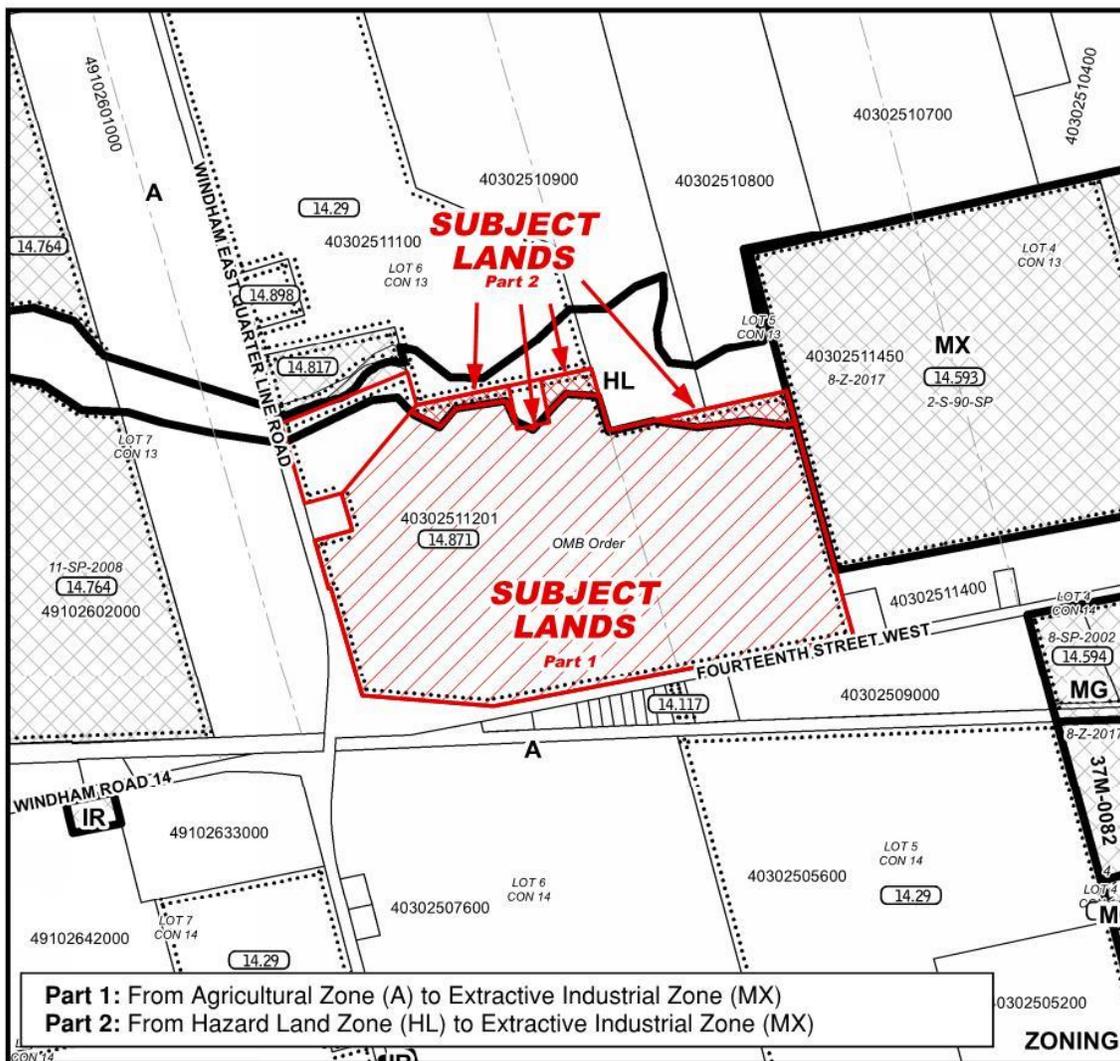
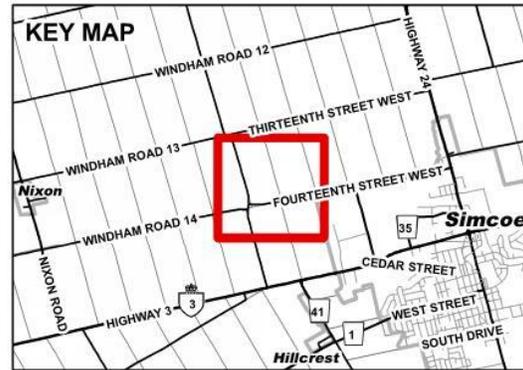
File Number: ZNPL2019253

Geographic Township of

WINDHAM

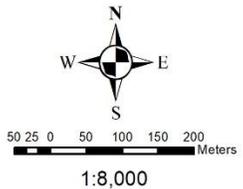


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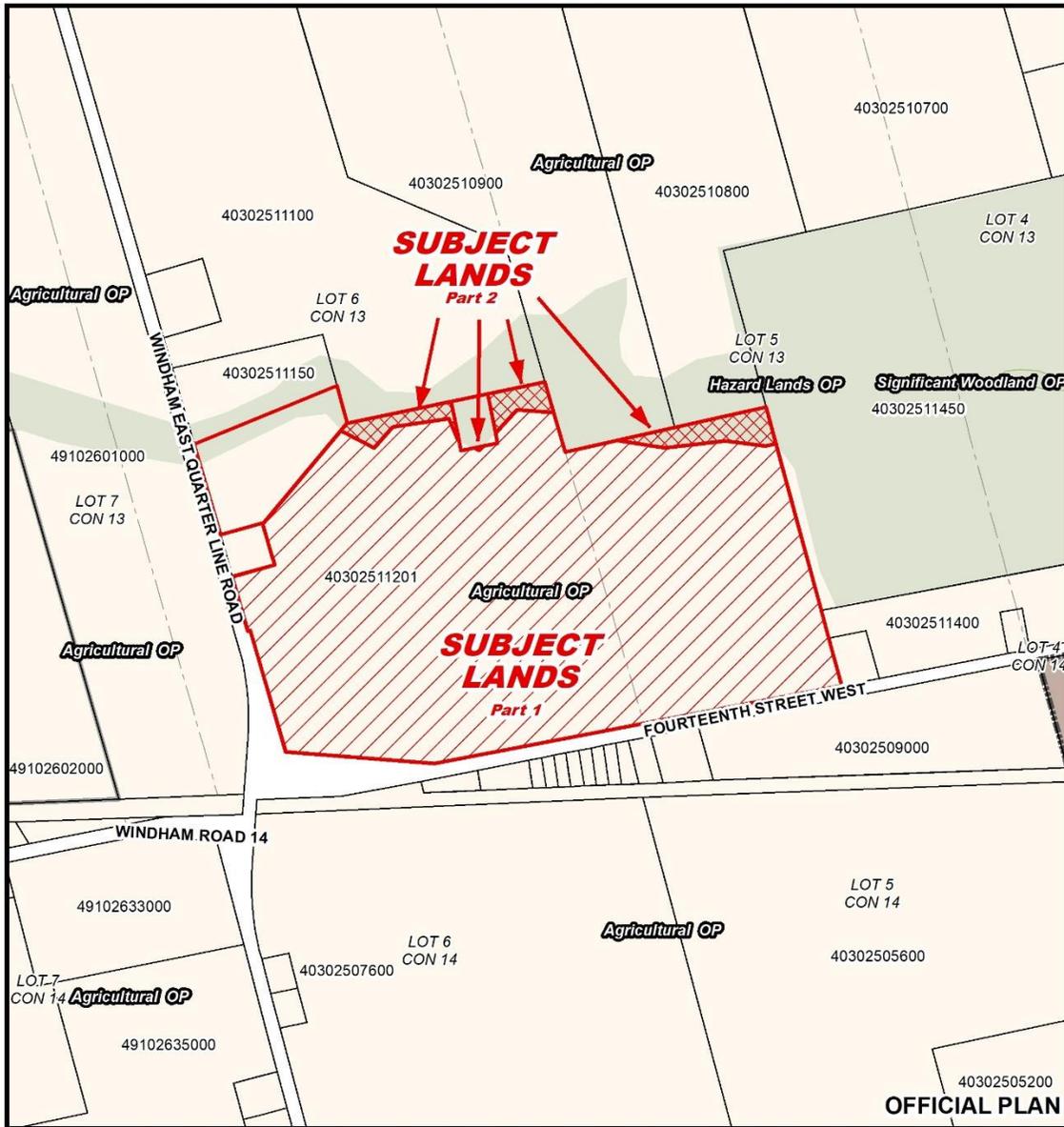


8/6/2019

MAP 2
File Number: ZNPL2019253
Geographic Township of WINDHAM



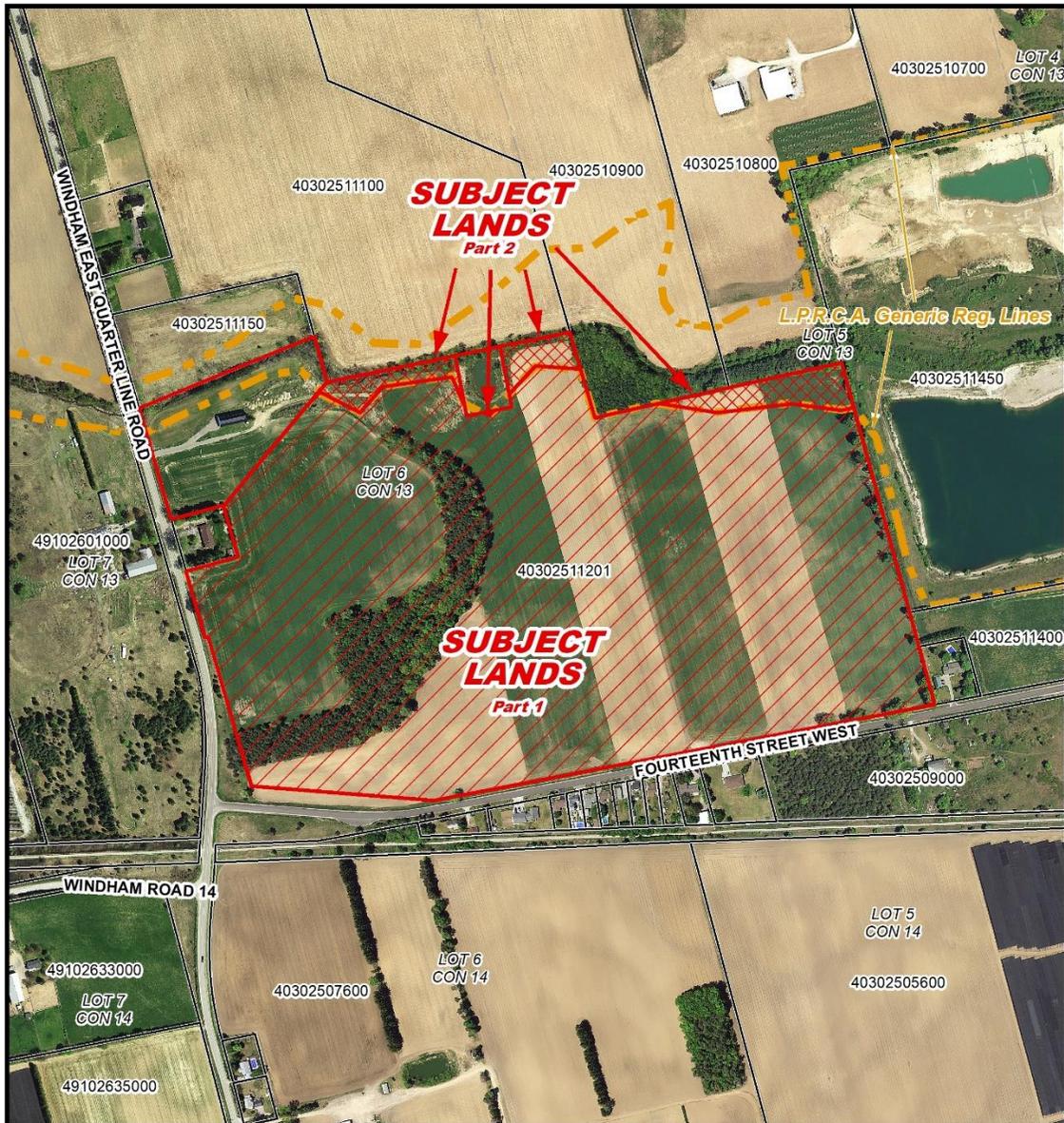
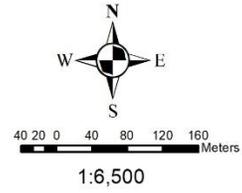
A north arrow is located in the top right corner of the map frame, pointing North (N), South (S), East (E), and West (W). Below the north arrow is a scale bar marked in meters, with increments of 50, 100, 150, and 200. The scale is labeled "1:8,000".



MAP 3

File Number: ZNPL2019253

Geographic Township of WINDHAM



8/6/2019

APPENDIX A

Circulation Comments

Building & Bylaw

Reviewed – The Building Department has reviewed the development application ZNPL2019253 and has no comment at this time.

Fire & Rescue Services

Reviewed – No comments or concerns.

Financial Services Treasurer/Manager

Reviewed – No Comment at This Time.

Forestry & Cemeteries Manager

Reviewed – No comments from Forestry at this time.

GIS Division

Reviewed – No Comment at This Time.

L.P.R.C.A.

Reviewed – LPRCA staff has now had an opportunity to review the submitted application, ARA license site plan and the operation, mitigation and rehabilitation plans, as described in the July 2019 Planning Justification Report & Aggregate Resources Act Summary Statement , and can advise LRCA has no comments or concerns regarding this proposal.

Zoning Administrator

Reviewed – No Comment at This Time.

Development Engineering

Reviewed – Development Engineering has reviewed application ZNPL2019253 and have the following comments:

1. A Traffic Impact Study (TIS) will be required at time of Site Plan submission. TIS to follow Appendix J – TIS Guidelines as per Norfolk County's ISMP.
2. A Stormwater Management Report, as per Norfolk County Design Criteria, will be required at time of Site Plan submission.
3. A legal and adequate outlet will need to be established/confirmed by the applicant.
4. A Functional Servicing Report, as per Norfolk County Design Criteria, will be required at time of Site Plan submission.
5. The following plans will be required at time of Site Plan submission:
 - a) concept plan,
 - b) grading plan,
 - c) siltation and erosion control plan,
 - d) general plan of services, etc.

6. Long Point Regional Conservation Authority (LPRCA) approval will be required.
7. Further Development Engineering comments will be provided at time of Site Plan submission.

Emergency Medical Services Manager

Reviewed – No comments received.

Public Works & Environmental Services

Reviewed – No comments received.

Ministry of the Environment, Conservation and Parks

Reviewed – We have completed our review of the information provided in support of the ARA licence application made by Livingston Excavating and Trucking for lands known as the “Emerson Pit” and provide the following comments for your consideration:

The purpose of the review was to assess potential for impact on the existing groundwater receptors in terms of (a) water quantity and/or quality interference; (b) effect on vertical and lateral hydraulic gradients; and (c) reduction in groundwater contribution to stream baseflow, if any associated with the proposal to extract below the water table. The site is currently licenced for above-water table extraction. The site is surrounded by the Simcoe Pit licenced to permit below-water table extraction to the east and agricultural and residential uses to the north, south and west. According to our GIS database, municipal water supply wells (Northwest Wells #2 and #3) are located about 1.6 km to east and the Cedar Street municipal wellfield (having 5 wells and one surface water source) is located 3 km to the southeast of the site. The overburden groundwater aquifer in the area is used for crop irrigation and private domestic water supply. It is proposed that extraction will extend from the ground surface (elevation 228 masl) to an elevation of about 213.5.0 masl - 8.5 m below the assessed water table elevation of 222 masl.

Comments:

1. Section 3.5, Private Water Wells and Local Groundwater Use:

A desktop review of the Ministry’s water well database was completed in order to identify existing groundwater users. A door to door survey to confirm actual well locations and their completion details, and to identify private wells which may not be part of the Ministry’s database does not appear to have been completed. A door to door survey should be conducted to update the existing private water supply wells/receptors within 500 m of the site boundary. The survey should also include inspection of private wells, subject to the owner’s permission, to confirm well construction details (type of well, depth, well screen, pumping installation, water table depth and available drawdown). A site plan showing the private well locations within 500 m of the site boundary should be provided following the door to door survey.

2. Section 3.6, Previous Assessments:

It appears that three monitoring wells were installed on the subject site in 2012 with their installation details provided in Appendix A as water well record 7189053. The borehole logs of MW1, MW2 and MW3 were missing and should be provided. The use of source water reports (Tier III studies) to assess/characterize site specific geologic and hydrogeologic conditions is deemed unreasonable as these reports provide background information on a regional scale.

3. Section 4.2, Water level Monitoring:

As per Table 3, water levels were monitored in 3 overburden monitoring wells (MW1, MW2 and MW3) drilled to a depth of about 6 m below ground, one drilled well to a depth of about 15 m and three drive point piezometers. Out of three overburden monitoring wells, MW3 was found consistently dry. The overburden groundwater across the site was assessed to flow from west to east. Considering the size of the property, extraction depth profile provided on Drawing 3 of 3 and review of the available monitoring well network and their construction details, the existing monitoring network does not appear to be adequate in providing spatial lateral and vertical coverage for characterizing the geologic framework and flow regime. The water level in the drive-point piezometers is unlikely to represent the overburden aquifer conditions because water level fluctuations at drive-points are influenced by surface water in the Petite Drain.

4. Section 5, Hydrogeologic Setting:

According to this section, the sand and gravel deposits at the site are underlain by a till sequence. The till sequence deemed as an aquitard, extends to the bedrock. The interpreted site-specific geologic setting is not supported by geologic cross-sections provided in Figures 8 and 9. As outlined above, the available monitoring network does not provide adequate spatial coverage and the existing monitoring wells are too shallow to confirm or support the interpreted geologic vertical profile. The distribution of the confining layer across the site remain unverified and its hydraulic characteristics remain unassessed. The depth or thickness of the overburden aquifer, and distribution of the aquitard across the site and its thickness should be assessed to ensure that the groundwater in the bedrock aquifer remains confined. In order to validate the consultant's conceptual geologic model, additional monitoring wells on the subject site are required to (a) confirm the overburden aquifer thickness; (b) confirm the continuity of the till layer across the site; and (c) determine the elevation and thickness of the till layer beneath the sand and gravel.

It is reported that groundwater will flow from the site toward the Petite Drain. The support for this statement is unclear because (a) the flow is indicated as going

east; (b) the Petite Drain is located along the northern property boundary; and (c) the below water table aggregate extraction is likely to create an inward lateral gradient toward the pit. Contrary to the interpretation, the inward hydraulic gradient from Petite Drain toward the site has the potential to negatively impact the groundwater contribution to Petite Drain's recharge. The impact on Petite Drain flow as a result of induced changes in the lateral hydraulic gradient due to the below water table extraction and its quantification should be assessed.

5. Section 8.1.2, Temporary Water Table Effects:

The long-term negative impact on either the overburden aquifer recharge, or private domestic water supply wells completed in the overburden aquifer is not expected as long-term hydraulic stress, i.e. no dewatering, on the overburden aquifer is not anticipated. However, a short-term hydraulic instability at a local scale is expected due to induced inward hydraulic gradient (inflow of groundwater) associated with the below water table extraction. The short-term hydraulic stress is not expected to cause water quantity interference in private water supply wells depending on specific well depth and available drawdown, both of which have not yet been assessed. To prevent induced water quality concerns associated with spill or equipment maintenance activities at or near the site, a prohibition should be imposed to prevent the carrying out of equipment maintenance activities and fuel storage at the site.

6. Section 8.2, Monitoring, Mitigation and Contingency Plan:

The monitoring program suggested in Section 8.2 does not appear to be consistent with what has been proposed in Section 8.1.4. In Section 8.1.4, a water level and quality monitoring at the western and southern edges of the property has been recommended without acknowledging that there is no monitoring well available or installed along the western property boundary. It is premature to comment on the scope of the groundwater quantity and quality monitoring program until technical concerns outlined with the site specific geologic and hydrogeologic characterizations are addressed.

Conclusions:

A door to door well survey should be completed to assess the existing groundwater users and available drawdown in private wells located within 500 m of the site boundary. The available geologic and hydrogeologic data is not adequate in confirming the conceptual geologic and hydrogeologic model. Additional site specific geologic and hydrogeologic data representative of the proposed pit design is required for validating the geologic and hydrogeologic regime beneath the site.

To expedite the revision of this report, technical questions arising out of the preceding comments should be directed to Mr. Abdul Quyum, the hydrogeologist responsible for this technical review. Mr. Quyum has been copied on this email so that you may contact him for any clarification of his comments.

APPENDIX B

Public Input

Thomas & Mary Kay McAleese

We received a letter for the proposed application for zoning amendment by Livingston Excavation and Trucking Inc at Part Lots 5 & 6 Concession 13 – 259 Windham East Quarter line Road.

We would like to see the additional information regarding the proposed zoning amendment. We are particularly interested in knowing how the gravel pit will affect our water, when we are living in a designated well head protected area. There is a sign posted on our road designating this as a protected water area.

We are also concerned about the heavy truck traffic, constant noise and dust that will happen if this is allowed to proceed. There are many seniors living on our road that have to walk to the community mailbox up the road, as well as a home daycare. We are concerned for everyone's safety for a road that is already an extremely busy, high traffic road to add to it with trucks going to a gravel pit

We would like to know when the public meeting will be held and how our concerns will be addressed.

Please advise if we need to send a written request now to the Clerk or not until after the public meeting has been held.

Doug and Dawn Bowslaugh

My family and I reside at We are concerned with the proposed changes to 259 Windham East Quarterline Rd. Part Lots 5 & 6 Concession 13, Geographic Township of Windham.

This property has gone through many changes over the 20 years we have lived here, from the growing of tobacco, nicely divided by hedge rows of tall pines and a small area of bush, to what it is today...open, flat and unpredictable with the changing weather. Unfortunately the changes have not been for the better. All the tree's that were removed helped protect us from blowing and drifting snow, and recently, blowing sand as there isn't much too keep it stationary. We also have issues with the way the land is graded, recently causing water from the north-side of the road to flow to the south-side drain resulting in massive flooding throughout many of our yards. For some this flooding also invades and destroys their basements. Thankfully that has yet to happen at our home but the water has covered much of our driveway threatening a potential future problem.

We had concerns when Mr. Livingston first bought the property a few years ago. His proposal at the time was to pull back the top soil, remove the sand underneath and then replace the top soil returning it to agricultural land. At that time many of the residents voiced concerns questioning Livingston's actual intentions and his ploy to use this land as a first

step to eventually converting the land to accommodate a complete underground quarry, which this proposal requests. We were assured then that an underground quarry wouldn't be allowed and now feel that we have been lied to.

We are concerned with this project for the reasons listed below:

1. Although the area in question is not within the indicated Water Protection Area at the moment (previously it was but has conveniently migrated out), our home is in the Protected Area and the fear is that the water supply for our address could seriously be compromised due to the very close proximity of this change. I feel that the town should also be concerned as the creek feeds one of the wells that the county uses. Should a proper environmental study be done by an unbiased organization to show that our concerns are or are not warranted? I understand that Mr. Livingston has had his own environmental study completed but it seems only fair to find an organization that wouldn't benefit from a favourable study complete a different study to compare results.
2. All of the houses surrounding Mr. Livingston's property draw water from shallow wells. This application will definitely affect each of our water source...both quality and quantity. We feel that it is important for us to now test our water consistently and retain copies of the results to show any documentation of change when it occurs. We are fearful that we will be the next 'Walkerton' community knowing that there is a farm in the area that could also leach into our water source once the ground has been disturbed causing more concerns and harmful bacteria.
3. Each of our homes will now also face a decrease in value living in this area. When we chose to live here we bought a quaint house in the country, and although we understand that times change, we never anticipated that we would be living in an Industrial Park. We will have issues, specifically related to this quarry and increase in traffic, when the time comes to resell...the speed of traffic from Toyotetsu alone is bad enough even though the trucks were not meant to travel this far down the concession.
4. We understand this is also protected land by the LPRCA. Are they aware of that changes that will be made and informed of how the much of the wildlife may not be able to rely on the area for water and safe travel throughout the county? If possible, could you send the contact person whom you have addressed this situation with so that we can further support them?

Please accept this email as our submission in opposition of this development. If you are willing share the above information requested please e-mail us ASAP.