



Municipality of Shuniah COMMITTEE OF ADJUSTMENT

NOTICE OF APPLICATION FOR CONSENT

TAKE NOTICE that under the provisions of Section 53 of The Planning Act, 1990, as amended, an application has been made to the Committee of Adjustment.

Application No.:	B24-2
Applicant:	Lakeshore Developments (Thunder Bay) Inc
Agent:	Menic Planning Services Inc.
Roll No:	58 28 020 008 95000
Property Address:	PORTION OF CNR RIGHT OF WAY KINGHORN LINE
Legal Description:	CNR ROW ML 14/ ROADWAY MCGREGOR & MCTAVISH
Zoning:	Community Residential
Purpose:	Lot Addition & Easement
Time and Date of Hearing:	Wednesday, May 29th at 5:30 p.m.
Subject to Another Planning Application:	Z2-21, Z3-22

Committee of Adjustment hearings are open to the public. You can attend either in person at council chambers, or electronically over Zoom. The Zoom log in information will be available on the agenda, once posted. Agendas can be found by selecting the date of the meeting on the following website <https://shuniah.civicweb.net/Portal/> Agendas will be posted by 4:30 p.m. on the Friday before the meeting.

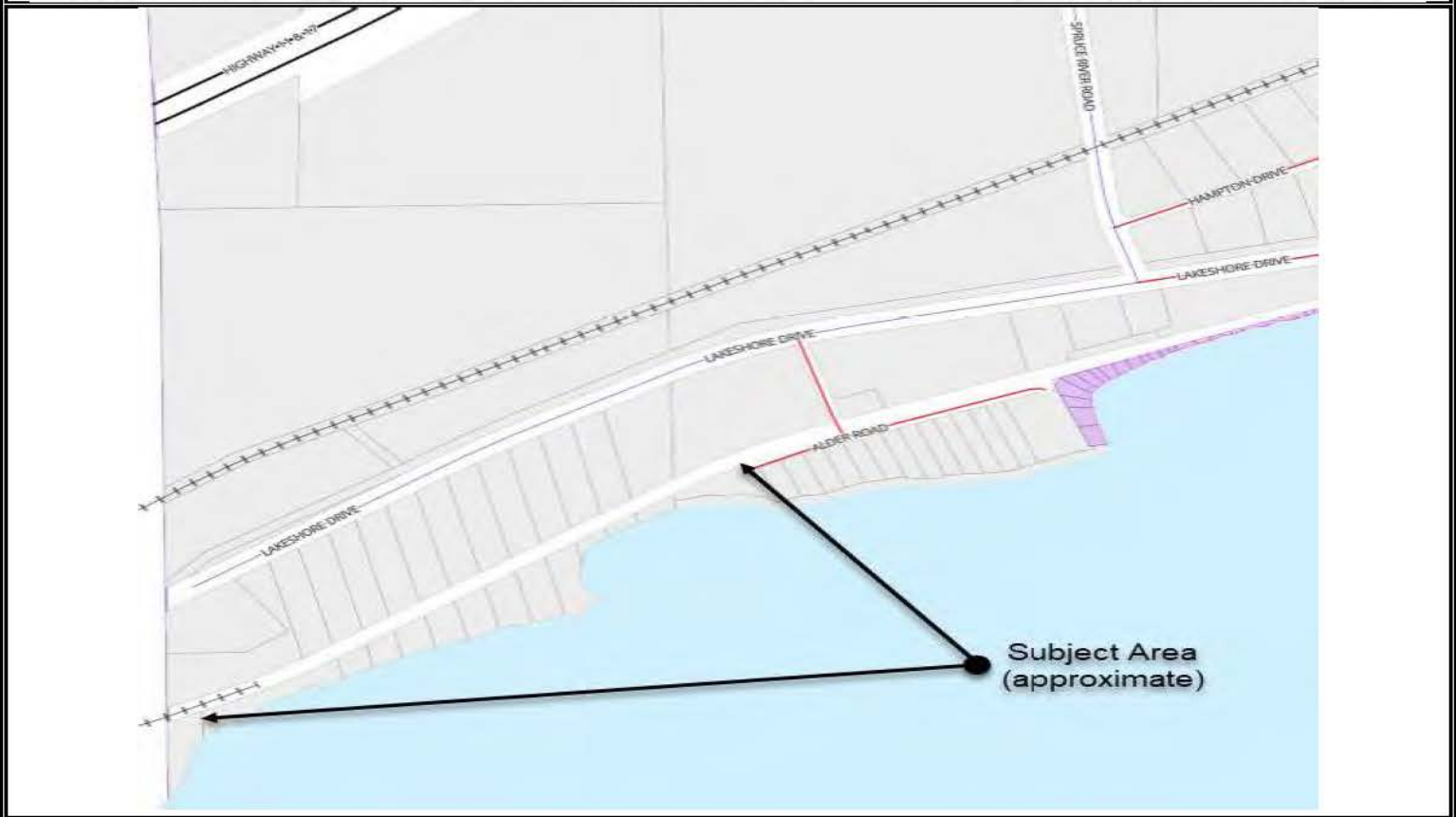
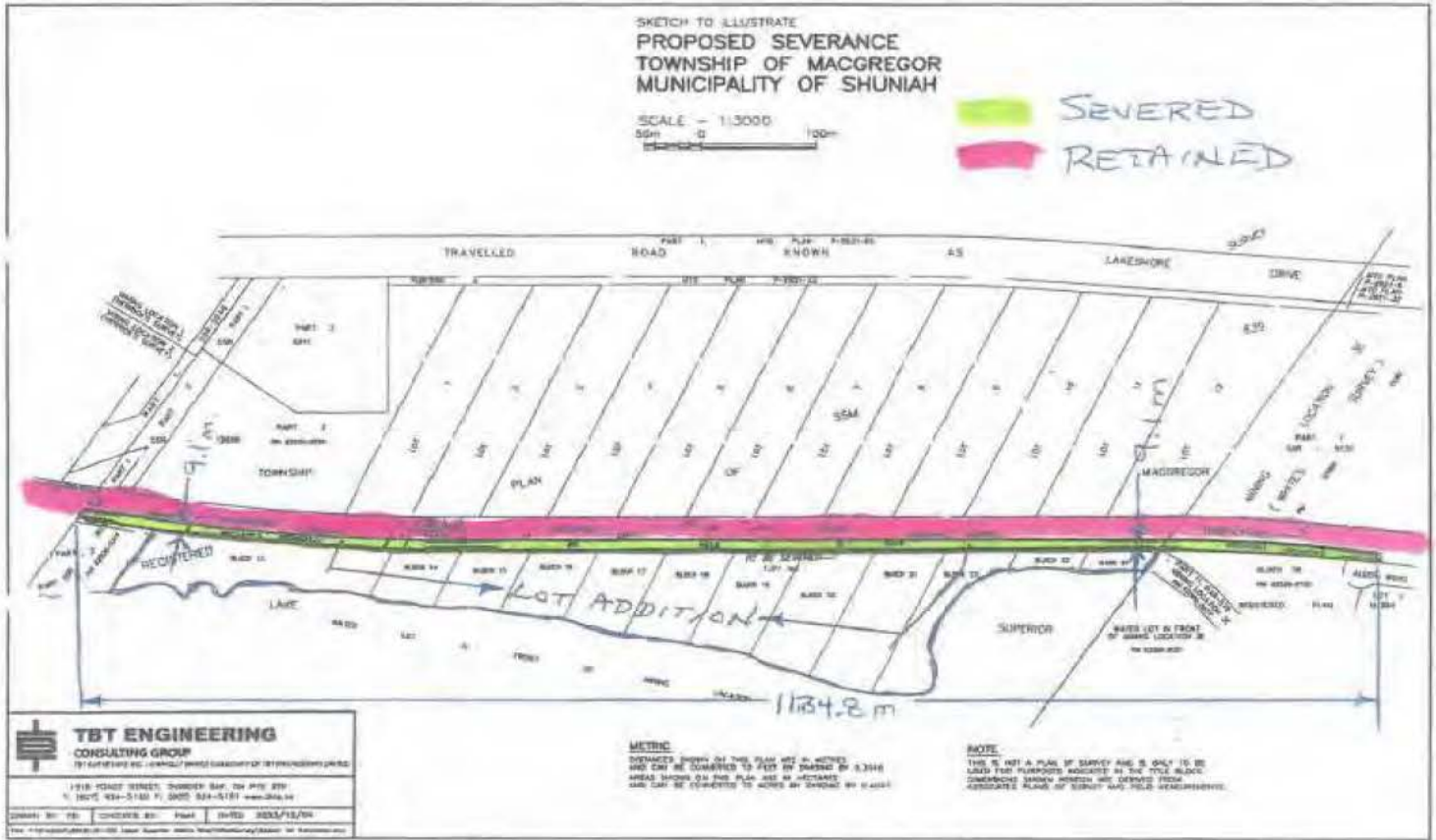
To submit written comments or make a deputation in person, or to make an electronic deputation at the hearing please see Important Information on the next page or contact Jennifer of the Committee of Adjustment at clerkdept@shuniah.org or (807) 683-4548. Please note, comments are made available to the public, and are available on the municipal website.

Written Comments

In order to appear on the agenda, written comments must be received by noon on the Wednesday before the scheduled Committee of Adjustment hearing, which is Wednesday, May 22, 2024. Comments received after this time will still be provided to the Committee, but they will not be attached to the agenda. Written submissions on an Application shall only be received until noon two business days prior to the scheduled hearing, which is Monday, May 27, 2024

To obtain more information:

To obtain more information regarding this application, including plans, sketches and Staff Reports, please contact Committee of Adjustment staff during regular business hours (Monday – Friday, 8:30 a.m. to 4:30 p.m.). Information pertaining to this application is also available at www.shuniah.org (under the Application Notices heading). Once posted, the meeting of agenda can be found by selecting the date of the meeting on the following website <https://shuniah.civicweb.net/Portal/>



Important Information - Application Number: B24-2

Participation (In Person and Electronic options):

Any person who supports or opposes this application may appear either in person or electronically over Zoom. A person may either appear personally, by agent, or by solicitor, to present any reasons why this petition should be granted or denied. If someone is unable to attend the hearing, they may make a written submission that includes reasons for support or opposition. Written submissions on an Application shall only be received until noon two business days prior to the scheduled hearing, which is Monday, May 27, 2024

Written submissions can be mailed and/or emailed to: Municipality of Shuniah
420 Leslie Ave
Thunder Bay, ON P7A1X8
Email: clerkdept@shuniah.org

Please cite **Application B24-2** when submitting your comment.

Residents can view a live stream of the meeting via Zoom. Log in information will be available on the meeting agenda.

To make a deputation, we ask that residents complete and submit the Public Deputation Form **no later than noon two business days prior to the scheduled hearing which is Monday, May 27, 2024** (see above for contact details). The Public Deputation Form is attached. Additional information regarding electronic meeting procedures and public participation is available at www.shuniah.org. The committee shall hear the applicant and ever other person who desires to be heard in favour of or against the application. Presentations to the Committee are limited to 5 minutes in length.

Please note that Committee of Adjustment meetings may be audio/video recorded. Your name, address comments and any other personal information will form part of the public record pertaining to this application. If a party does not participate in the hearing, the Committee may proceed without a party's participation and the party will not be entitled to any further notice regarding the proceeding.

If the applicant does not attend or are not represented at this hearing, the Committee may defer the file or proceed in your absence and make a decision, or may consider the application to have been abandoned, or withdrawn, and close the file.

Public Record:

Personal information collected because of this public meeting is collected under the authority of the Municipal Act, the Municipal Freedom of Information and Protection of Privacy Act (MFIPPA), the Planning Act and all other relevant legislation, and will be used to assist in deciding on this matter. All personal information (as defined by MFIPPA), including (but not limited to) names, addresses, opinions and comments collected will become property of the Municipality of Shuniah, will be made available for public disclosure (including being posted on the internet) and will be used to assist the Committee of Adjustment and staff to process this application.

Notice of Decision:

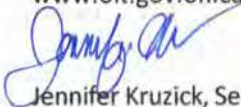
This notice is sent to the applicant, to various agencies, and, in some cases, to surrounding property owners for their information. If you wish to be notified of the decision in respect to this application or an Ontario Land Tribunal (OLT) hearing you must complete the attached Request for Decision form and submit to the Secretary Treasurer of the Committee of Adjustment. In the absence of a written request to be notified of the Committee's decision no further notice of this Hearing, a deferred Hearing date, or the decision of this Committee will be sent to anyone other than the applicant.

Ontario Land Tribunal (OLT):

In accordance with section 53(19) of the Planning Act, 1990 and amendments thereto, the decision may be appealed to the Ontario Land Tribunal by the applicant, the Minister of Housing, or any person or public body who has an interest in the matter. Only individuals, corporations and public bodies may appeal decisions in respect of applications for consent to the Ontario Land Tribunal. A notice of appeal may not be filed by an unincorporated association or group on its behalf. However, a notice of appeal may be filed in the name of an individual who is a member of the association or group

If a person or public body that files an appeal of a decision of the Committee of Adjustment in respect of the proposed consent does not make written submissions to the Committee of Adjustment before it gives or refuses to give a provisional consent, the Ontario Land Tribunal may dismiss the appeal.

An appeal against the decision must set out the reasons for the appeal, must be filed with the Secretary-Treasurer of the Committee of Adjustment, and must be accompanied by the fee required by the Ontario Land Tribunal. The OLT Appeal Fee must be paid by certified cheque or money order payable to the "Minister of Finance." Notice of appeal forms can be obtained at www.olt.gov.on.ca or by visiting our office.



Jennifer Kruzick, Secretary-Treasurer
Committee of Adjustment
Municipality of Shuniah
420 Leslie Avenue
Thunder Bay, Ontario P7A 1X8

mailing date: MARCH 20, 2024
email: clerkdept@shuniah.org
Phone: 807-683-4545
Fax: 807-683-6982

DEPUTATION FORM / REQUEST FOR DECISION

To make a formal deputation, residents must complete and submit this Deputation Form to the Secretary-Treasurer of the Committee of Adjustments no later than noon on the Monday prior to the meeting, which is Monday, May 27, 2024.

If you do not want to make a deputation, but still wish to be notified of the Committee's decision or a related Ontario Land Tribunal (OLT) hearing you must complete this form and submit it to the Secretary-Treasurer of the Committee of Adjustment.

I wish to make a deputation with respect to Application B24-2 on Wednesday, May 29th and I wish to be notified of the Committee's Decision and Ontario Land Tribunal hearing (if applicable).

My deputation will be (check one) in person electronic

I wish to make a deputation with respect to Application B24-2 on Wednesday, May 29th but I *do not* wish to be notified of the Committee's Decision and Ontario Land Tribunal hearing (if applicable).

My deputation will be (check one) in person electronic

I do not wish to make a deputation, but I wish to be notified of the Committee's decision with respect to B24-2 and the Ontario Land Tribunal Hearing (if applicable)

*Please print and ensure form is legible

Name: _____

Address: _____

Phone Number: _____

Email Address: _____

FOR OFFICE USE ONLY		Application No.:	B24-2
Date of Pre-consultation	JAN 23 - 7 MAR 19		
Date Complete App Received	MAR 19, 2019 MAR 20, 2014		
Date Notice Given			
Fee Enclosed (Shuniah)	\$ 500 (PRE-CON)	Receipt No.:	72413/ 7.2.90.2
Fee Enclosed (LRCA)	\$ 275.00	Cheque No.:	131

1. Registered Owner: (List Association Name if Applicable)

Owner's Name: CANADIAN NATIONAL RAILWAY COMPANY
 Owner's Mailing Address: [REDACTED]
 City: [REDACTED] Prov: [REDACTED] Postal Code: [REDACTED] Phone: [REDACTED]
 Cell: [REDACTED] Email Address: [REDACTED]

2. Applicant/Agent Information: (If different from Registered Owner, An Owner's authorization is required, see Schedule A)

Applicant's Name: LAKE SHORE DEVELOPMENTS (THUNDER BAY) INC.
 Solicitor/Authorized Agent/Firm: MENIC PLANNING SERVICES INC.
 Applicant's Mailing Address: [REDACTED]
 City: [REDACTED] Prov: [REDACTED] Postal Code: [REDACTED]
 Cell: [REDACTED] Email Address: [REDACTED]
 Send Correspondence To? (Check all that apply) Owner [] Applicant Agent/Solicitor

3. Type and purpose of the proposed transaction:

Transfer: [] Creation of a New Lot Other: [] a charge
 Addition of a lot [] a lease
 an easement SEE ATTACHED NOTE OF EXPLANATION [] a correction of title
 Other _____

3.1 If a lot addition, identify the lands to which the parcel will be added.

PLAN 55M-639, BLOCKS 13-24

3.2 What is the existing land use to which the parcel will be added?

VACANT

3.3 If known the name of the person to whom the land or an interest in the land is to be transferred, charged or leased?

LAKE SHORE DEVELOPMENTS (THUNDER BAY) INC.

4. Location of subject land:

Property Address: PORTION OF CNR RIGHT OF WAY KINGSTON LINE
 Property Roll Number - 58-28-0 0-00 58-28-020-008-950-00 (obtained from tax bill or assessment notice)

Concession No. <u>CNR ROW</u>	Section No.
Registered Plan No.	Lot(s) No.
Mining Location <u>14</u>	Reference Plan No. Pts.
Geographic Township:	<input checked="" type="checkbox"/> MacGregor [] McTavish

Municipality of Shuniah – Application for Consent

5. Description of subject land:

	Severed	Retained
Frontage (m)	9.1 (WIDTH)	BALANCE OF KINGHORN ROW
Depth (m)	1134.8 (LENGTH)	" "
Area (ha)	1.01	" "

6. Building and structures - include description, dimensions, and dates of construction. Add an additional page if necessary:

Description (main, shed, garage, etc.)	Dimensions (m)	Construction year
1. VACANT LAND - NO BUILDINGS OR STRUCTURES		
2.		
3.		
4.		

7. Access - Road ownership

Severed Parcel

Common Name of Road VIA LAKESHORE DR

- Municipality of Shuniah
- Ministry of Transportation

Private CONDOMINIUM ROAD FOR APPLICATION CURRENTLY IN PROCESS
Other: _____

Retained Parcel

Common Name of Road _____

- Municipality of Shuniah
- Ministry of Transportation
- Private

Other: CNR ROW

8. Access - Road maintenance

Severed Parcel

Common Name of Road _____

- Municipality of Shuniah
- Ministry of Transportation

Private CONDO CORPORATION
Other: _____

Retained Parcel

Common Name of Road _____

- Municipality of Shuniah
- Ministry of Transportation
- Private

Other: CNR ROW

9. Access - Water access

If the proposed access is by water, please describe the nearest public boat launching and car parking facility.

N/A

How far is it from the property and what facilities are there?

Other Access (Specify)

10. Encumbrances:

10.1 Restrictions – Please indicate the nature of any restrictive covenants or easements affecting the subject property and describe each easement or covenant and its effect.

Application B1-19
EASEMENT GRANTED TO APPLICANT BY COMMITTEE OF ADJUSTMENT FOR ACCESS PURPOSES OVER A PORTION OF PROPOSED SEVERED LANDS

10.2 If known, the name of person(s) to whom the land or interest in land is to be conveyed, leased or mortgaged.

LAKESHORE DEVELOPMENTS (THUNDERBAY) INC.

Easement Explanatory Note

As part of this application for lot addition, it is requested that an easement be granted in favour of the applicant, the Canadian National Railway Company. The reason for the requested easement is to ensure the protection of the fiber optic cable which is located within the lands that are the subject of this application.

Municipality of Shuniah – Application for Consent

11. Designation and zoning of subject property /current and proposed land use:

	Severed	Retained
Official plan designation	RESIDENTIAL, PROTECTED AREA IPZ-2	RESIDENTIAL, PROTECTED AREA & IPZ-2
Zoning	"RC" & "RC-H" ZONE	"RC" & "RC-H" ZONE



OFFICIAL PLAN CONFORMITY

12. Explain how the application conforms with the official plan policies (read official plan and cut and paste relevant sections into the Planning Justification Report - see Schedule B for example):

LOT ADDITION - DOES NOT CONFLICT WITH ANY OP POLICIES

See Attachment #1
 • CNR APP. FOR CON
 • PSR 2021

13. If the land is covered by a Minister's Zoning Order, what is the regulation number? What uses are permitted by the order?

CURRENTLY, THIS DOES NOT APPLY.

14. Use of the property:

	Severed	Retained
Existing uses	VACANT LAND	VACANT LAND, DECOMMISSIONED RAIL ROW
Proposed uses	RESIDENTIAL	" " " "

15. What are the surrounding land uses?

East: RESIDENTIAL
 West: CITY OF THUNDER BAY - RESIDENTIAL & UTILITIES
 North: VACANT LAND
 South: LAKE SUPERIOR

16. Former use of subject property and adjacent lands (check as applicable):

Does the Owner own Adjoining Property?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown
Is there any reason to believe that the site or adjacent site may be environmentally contaminated?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Unknown
Has an industrial or commercial use, or an orchard, been on or adjacent to the property?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Unknown
Has lot grading been changed by adding or removing earth or other material?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Unknown
Has a gas station been located on the subject land or adjacent land at any time?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Unknown
Has there been petroleum or other fuel stored on the subject land or adjacent land?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Unknown
Has the Ministry of the Environment, Conservation and Parks, or any other agency formally or informally advised the owners that the property is or may be contaminated?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Unknown

16.1 What information did you use to determine the answers to the above questions on former uses?

HISTORICAL KNOWLEDGE

16.2 If you answered YES to any of the Section 16 table above, a previous use inventory showing all former uses of the subject land, or if appropriate, the land adjacent to the subject land is needed. Is the previous use inventory attached? Yes No

If the inventory is not attached, please explain.

N/A

Municipality of Shuniah – Application for Consent

16.3 If you answered Yes to any of the questions related to the Section 16 table above, was an Environmental Site Assessment (ESA) conducted under the Environmental Assessment Act or has a Record of Site Condition (RSC) been filed? [] Yes [] No [] Unknown

If no, why not? Explain on a separate page, if necessary.

N/A

17. Status of current and other applications under the Planning Act:

17.1 Is this a resubmission of an earlier proposal? [] Yes [X] No [] Unknown

If yes, and if known, describe how it has been changed from the original application.

CURRENTLY, THE LANDS ON EITHER SIDE OF THE CNR LANDS ARE THE SUBJECT OF A REZONING & VACANT LAND CONDO APPLICATION

17.2 Has any land been severed from the parcel as it existed on January 15, 1979? [] Yes [X] No

If yes, how many times? (See official plan Consent policies in Section 4)

18. Other planning applications

18.1 Has the subject property ever been the subject of any other planning application, including applications before Ontario Land Tribunal (OLT), for approval of (check all that apply): [] Yes [] No

[X] Zoning By-law Amendment [] Consent [] Minor Variance [] Site Plan Approval

[] Official Plan Amendment [X] Plan of subdivision/condominium [] Minister's zoning order

If yes, and if known, specify: the file number; the approval Authority; the land it affects; its purpose; its status, and its effect on the proposed amendment:

Z-2/21 - AMEND ZONE DESIGNATIONS & PROVISIONS TO ENABLE VLC.
Z-3/22 - APPLICATION FOR VACANT LAND CONDO COMPRISED OF 24 UNITS & OPEN SPACE BLOCK
B1-19 - EASEMENT FROM CNR TO LAKE SHORE DEVELOPMENTS

18.2 Are there applications for additional Consents on the subject property? [] Yes [X] No

If yes, provide details.

19. Provincial Policy

19.1 Is the proposal consistent with Provincial Policy Statement (PPS) issued under subsection 3(1) of the Planning Act? [X] Yes [] No

Explain why yes or no and paste applicable sections below or in a separate attachment if necessary. (Read the Provincial Policy Statement in its entirety to identify the most relevant sections.)

LOT ADDITION - DOES NOT CONFLICT WITH PPS POLICIES

Municipality of Shuniah – Application for Consent

- 19.2 Are any of the following uses or features on the subject property of the proposed consent or within 500 metres of the subject property of the proposed Consent, unless otherwise specified. (See 2020 Shuniah Official Plan Schedule B1 Development Constraints to assist).

Significant Features Checklist (Please check all appropriate boxes, if any apply.)

Use or Feature	On the Subject property	Within 500m of Subject Property Provide Distance	N/A	Potential information needed
Class 1 Industry*			X	If sensitive land uses proposed within 70m from the boundary lines, a noise/odour/particulate study may be needed
Class 2 industry**			X	If sensitive land uses proposed within 300m from the boundary lines, a noise/odour/particulate study may be needed
Class 3 industry***			X	If sensitive land uses proposed within 1000m from the boundary lines, a noise/odour/particulate study may be needed
A landfill site (closed or active)			X	If sensitive land use is proposed, and if within 500 m of the perimeter of the fill area, address possible leachate and groundwater impacts, noise, methane gas control, odour, vermin and other impacts may be needed.
A sewage treatment plant or waste stabilization pond			X	Assess the need for feasibility study for residential and other sensitive land uses.
Provincial Highway			X	Consult Ministry of Transportation if access to provincial highway is proposed. (If located in proximity to provincial highway, a traffic impact and a stormwater management report may be needed.)
An active railway line and major highways			X	Evaluate impacts of noise within 100m
Electricity generating station, hydro transformer, railway yard, etc.			X	If sensitive land use is proposed, and if within 1000m, a noise study may be needed to determine possible noise impacts and appropriate mitigation measures.
High voltage electric transmission line			X	Consult the appropriate electric power service.
Transportation, infrastructure & utility corridors		X		Will there be a negative impact on a planned corridor? NO
Cultural heritage and archaeology	X			Adverse impact on significant built heritage resources and significant cultural heritage to be mitigated. Development is only allowed on lands containing archaeological resources or areas of archaeological potential if significant archaeological resources have been conserved. STUDIES COMPLETE
An agricultural operation, including livestock facility or stockyard			X	Development to comply with Minimum Distance Separation Formulae (MDS)
An active mine site or an aggregate site operation site within 1000m of the subject land			X	Will development hinder or be incompatible with continued operation or extraction?
Mineral aggregate resources areas			X	Will development hinder access to the resource or the establishment of new resources operations?
A non-operating mine site within 1000m of the subject property			X	Demonstrate that the mine has been rehabilitated OR all potential impacts have been investigated and mitigated.
A rehabilitated mine site, abandoned mine site or mine hazard			X	If proposal is on, adjacent to, or within 1000m, consult with the Ministry of Energy, Northern Development and Mines.
A significant coastal wetland A significant habitat of endangered species and threatened species A provincially significant wetland within 120 metres of the subject lands species			X	Development and site alteration are not permitted in the features. Are any significant coastal wetlands or unevaluated wetlands present on the subject lands or within 120 m? Are any known significant habitats present on the subject lands or within 50 m? Has there been preliminary site assessment to identify whether potentially significant habitats are present?
A significant wildlife habitat A significant Areas of Natural and Scientific Interest (ANSI)			X	Development not permitted, unless demonstrate no negative impacts. Indicate if there are any significant wildlife habitat, and Areas of Natural and Scientific Interest (ANSIs) on the subject lands or within 50 m.

Municipality of Shuniah – Application for Consent

Continued - Use or Feature	On the Subject property	Within 500m (Provide Distance)	N/A	Potential information needed
Fish habitat SHUNIAH HAS E.I.S. ON FILE	X			Development and site alteration are not permitted in fish habitat except in accordance with provincial and federal requirements. Is any fish habitat on the subject property or within 30 m? Is any lake trout lake on the subject lands or within 300 m? If yes to any of the above, an environmental impact study may be required. <i>STUDIES COMPLETE</i>
Adjacent lands to natural heritage features and areas			X	Not permitted unless demonstrated that ecological function of the adjacent lands has been evaluated, and it has been demonstrated that there will be no negative impacts.
Floodplain	X			Identify if located in floodplain and address accordingly, as per official plan policies and Lakehead Region Conservation Authority. <i>STUDIES COMPLETE</i>
A contaminated site			X	Assess an inventory or previous uses in areas of possible soil contaminations.
Hazardous sites****			X	Demonstrate that hazards can be address.
Erosion hazards			X	Determine feasibility within the 1:100 year erosion limits of river valleys and streams.
Sensitive surface water features and sensitive groundwater features			X	Restricted in or near sensitive surface water features and sensitive groundwater features. (Demonstrate suitable mitigation measures and/or alternative development approaches to protect, improve or restore sensitive surface water features, sensitive groundwater features and their hydrologic functions.)
Crown land (identified by the Ministry of Natural Resources and Forestry as being of special interests, such as a lake access point)			X	Consult Municipality for assistance in dealing with planning issues relating to proposals requiring the acquisition or use of Crown lands. Contact the Ministry of Northern Development, Natural Resources and Forestry (MNDMNR) District Office regarding the actual acquisition or use of Crown land.

*Class 1 industry: Small scale, self-contained plant, no outside storage, low probability of fugitive emissions and daytime operations only.

**Class 2 Industry: Medium scale processing and manufacturing with outdoor storage, periodic output of emissions, shift operations and daytime truck traffic.

***Class 3 industry: Processing and manufacturing with frequent and intense off-site impacts and a high probability of fugitive emissions.

****Hazardous sites: property or lands that could be unsafe for development or alteration due to naturally occurring hazard. These hazards may include unstable soils or unstable bedrock.

19.3 Is the subject property within an area designated under any provincial plan or plans? Yes No
If yes, explain how the application conforms or does not conflict with the provincial plan.

CURRENTLY, THIS DOES NOT APPLY.

20. Indigenous Land Claims

20.1 Does the proposed application for consent apply to lands subject to any indigenous land claims or provincial/Indigenous co-management agreement?

Yes No

If known, provide any information you may have as an attachment to the application.

CURRENTLY, THIS DOES NOT APPLY.

20.2 Have you consulted with Indigenous Peoples on this request for a proposed Consent?

Yes No

If yes, provide any information you have on the consultation process and the outcome of the consultation. Please explain (and attach) on a separate page.

THROUGH AN ARCHAEOLOGICAL ASSESSMENT
PROCESS PREPARED IN SUPPORT OF THE PROPOSED
VACANT LAND CONDE

Municipality of Shuniah – Application for Consent

21. Archaeology

21.1 Does the subject property contain any know archaeological resources or area of archaeological potential? If yes, is the proposal consistent with the official plan Cultural Heritage Resources and Archaeology Policies? Yes [] No [] If yes, please explain. Attach a separate page, if needed. Submit a copy of technical report(s), if applicable.

ARCHAEOLOGICAL ASSESSMENT PREPARED. PROVINCE HAS COMPLETED THE REVIEW.

22. Servicing - Water supply

Severed [] Private: Well / Lake / Shared well (specify) [] Retained [] Private: Well / Lake / Shared well (specify) [X] Other: NONE [X] Other: NONE - CUR ROW

Development on a communal or individual well system may need a servicing options report and a hydrogeological report. Non-residential development on a communal well system may need a hydrogeological report.

23. Servicing – Sewage

Severed [] Private: Septic (Class _____) [] Retained [] Private: Septic (Class _____) [X] Other: NONE [X] Other: NONE - CUR ROW

If the requested change would permit development on individual or communal septic system and more than 4,500 litres of effluent would be produced per day as a result of the development being completed, a servicing options report and a hydrogeological report may be needed. If the proposal would produce less than 4,500 litres per day, a hydrogeological report may be needed.

24. Other information

Is there any other information you think may be useful to the Municipality of Shuniah or agencies in reviewing this application? If so, explain below or attach explanation on a separate page.

AFFIDAVIT OR SWORN DECLARATION

I/We, _____ of the City/District/Regional Municipality of _____ in the City/District/Regional Municipality of _____ solemnly declare that all the statements contained in this application are true, and I/We make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of the Canada Evidence Act.

SWORN/AFFIRMED /DECLARED before me at the City of Thunder Bay In the Province of Ontario this 26th day of February 2024

A Commissioner for taking Affidavits. _____

signature

Vanessa Anne Spott, Commissioner, etc. Province of Ontario, for Buset LLP, Barristers and Solicitors. Expires March 31, 2025.

stamp

CONSENT OF THE OWNER:

AUTHORIZATION OF OWNER TO THE USE AND DISCLOSURE OF PERSONAL INFORMATION

Complete the consent of the owner concerning personal information set out below.

I, _____, am the owner of the land that is subject of this application for a consent and for the purposes of the Freedom of Information and Protection of Privacy Act I authorize and consent to the use by or the disclosure to any person or public body of any personal information that is collected under the authority of the Planning Act for the purposes of processing this application.

Date

Signature of Owner

Municipality of Shuniah – Application for Consent

21. Archaeology

21.1 Does the subject property contain any know archaeological resources or area of archaeological potential? If yes, is the proposal consistent with the official plan Cultural Heritage Resources and Archaeology Policies? [] Yes [] No If yes, please explain. Attach a separate page, if needed. Submit a copy of technical report(s), if applicable.

22. Servicing - Water supply

Severed Retained
[] Private: Well / Lake / Shared well (specify) [] Private: Well / Lake / Shared well (specify)
[] Other: _____ [] Other: _____

Development on a communal or individual well system may need a servicing options report and a hydrogeological report. Non-residential development on a communal well system may need a hydrogeological report.

23. Servicing – Sewage

Severed Retained
[] Private: Septic (Class _____) [] Private: Septic (Class _____)
[] Other: _____ [] Other: _____

If the requested change would permit development on individual or communal septic system and more than 4,500 litres of effluent would be produced per day as a result of the development being completed, a servicing options report and a hydrogeological report may be needed. If the proposal would produce less than 4,500 litres per day, a hydrogeological report may be needed.

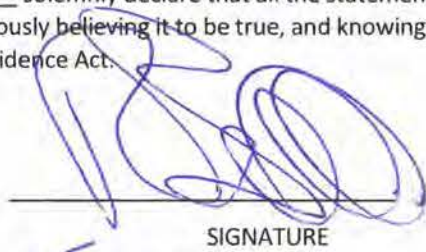
24. Other information

Is there any other information you think may be useful to the Municipality of Shuniah or agencies in reviewing this application? If so, explain below or attach explanation on a separate page.

AFFIDAVIT OR SWORN DECLARATION

I/We, ROBERT LANNETTE FOR LAKESHORE DEVELOPMENT of the City/District/Regional Municipality of THUNDER BAY in the City/District/Regional Municipality of THUNDER BAY solemnly declare that all the statements contained in this application are true, and I/We make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of the Canada Evidence Act.

SWORN/AFFIRMED /DECLARED before me at the _____)
CITY OF THUNDER BAY In the Province)
Of Ontario this 20TH, day of MARCH 2024)


SIGNATURE

A Commissioner for taking Affidavits. _____


signature

Paul Greenwood
CAO, Deputy Clerk, Deputy Treasurer
Municipality of Shuniah
"Commissioner for taking Affidavits"

CONSENT OF THE OWNER:

AUTHORIZATION OF OWNER TO THE USE AND DISCLOSURE OF PERSONAL INFORMATION

Complete the consent of the owner concerning personal information set out below.

I, _____, am the owner of the land that is subject of this application for a consent and for the purposes of the Freedom of Information and Protection of Privacy Act I authorize and consent to the use by or the disclosure to any person or public body of any personal information that is collected under the authority of the Planning Act for the purposes of processing this application.

Date _____

Signature of Owner _____

Municipality of Shuniah – Application for Consent

NOTES:

1. Each application must be accompanied with the fee in accordance with the most recent Fees and Tariffs By-law.
2. ALL mandatory information **MUST** be submitted, and the sketch completed **BEFORE** the application(s) will be accepted for processing.
3. A sketch must accompany the application showing,
 - a) the boundaries and dimensions of any land abutting the subject property that is owned by the owner of the subject property;
 - b) the distance between the subject property and the nearest municipal lot line or landmark such as a bridge or railway crossing;
 - c) the boundaries and dimensions of the subject property, the part that is to be severed and the part that is to be retained;
 - d) the location of all land previously severed from the parcel originally acquired by the current owner of the subject property;
 - e) the approximate location of all natural and artificial features on the subject property and on the land that is adjacent to the subject property that, in the opinion of the applicant may affect the application, such as buildings, railways, roads, watercourses, slopes (contour lines), drainage ditches, river or stream banks, wetlands, wooded areas, wells and septic tanks. See also Official Plan Schedule B1 Constraints Map. (NOTE: the LRCA Regulates 30m around all wetlands);
 - f) the existing uses on adjacent land, such as residential, agricultural and commercial uses;
 - g) the locations, width and name of any roads within or abutting the subject property, indicating whether it is an unopened road allowance, a public travelled road, a private road or a right of way;
 - h) if access to the subject property is by water only, the location of the parking and boat docking facilities to be used;
 - i) the location and nature of any easement affecting the subject property.

PLEASE ENSURE **ALL** PERTINENT INFORMATION IS CONTAINED ON A SINGLE SKETCH ONLY. THE MAXIMUM SIZE FOR THE ACCOMPANYING SKETCH SHALL BE **11" X 17"**. It is up to the applicant to ensure that the information provided is accurate.

EXAMPLE OWNERS AUTHORIZATION LETTER

If there are multiple owners, an authorization letter must be provided by each

Schedule A

Date: March 25, 2024

Owner Name: Canadian National Railway Company Attn: Ernie Longo

Address: [REDACTED]

Phone Number: [REDACTED]

Email: [REDACTED]

Attention: Committee of Adjustment, Secretary-Treasurer

Subject: Letter of Authorization

RE: Subject Lands at

Lot: Pt of Mining Location 14 H.P File 24-2

Plan: Savigny's Survey MacGregor

Address: _____

Dear Approval Authority:

I, Ernie Longo, am the owner of the land that is the subject of this consent application for a (check all that apply) Creation of New Lot/ Addition of a Lot/ Easement/ Other(describe) _____ and I authorize Lakeshores Developments (Thunder Bay) Inc. to make this application on my behalf as described in the attached site plan. For the purposes of the Freedom of Information and Protection of Privacy Act, I authorize Robert Zanette as my agent for this application, to provide any of my personal information that will be included in this application or collected during the process on of the application.

Please do not hesitate to contact me if there are any further questions.

Yours truly,

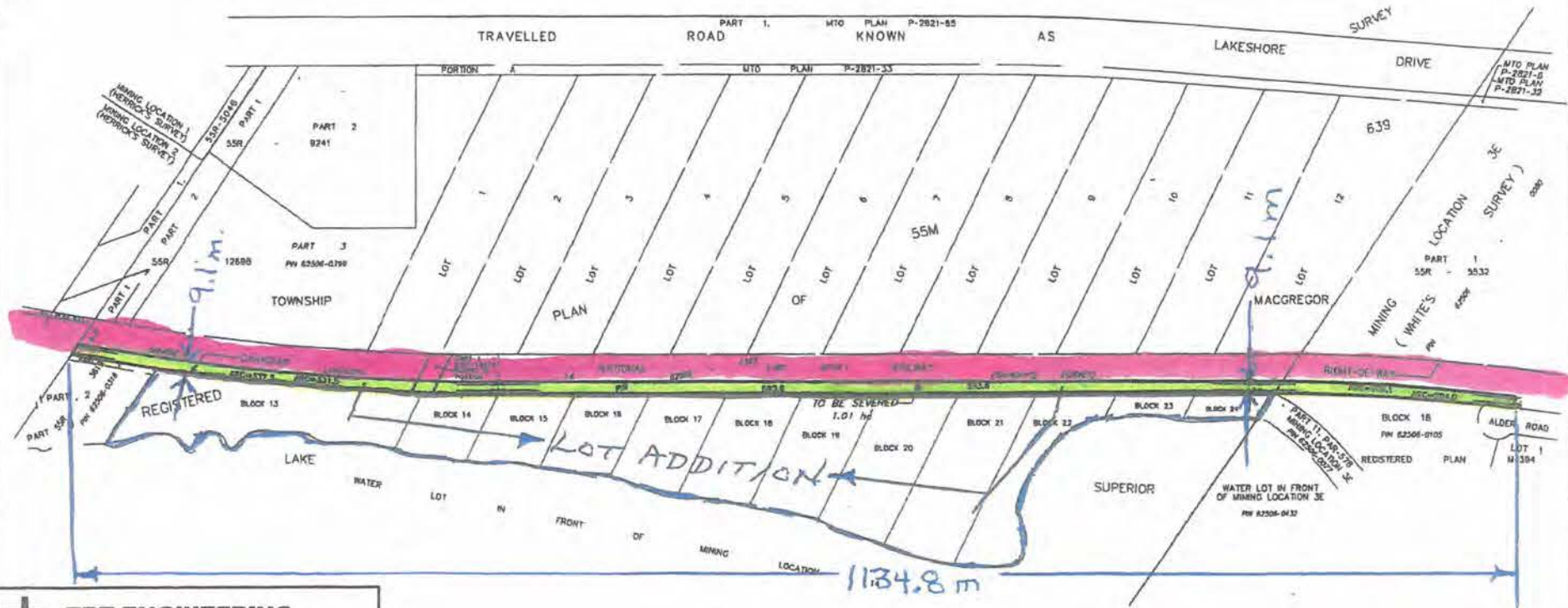


Owner Signature

SKETCH TO ILLUSTRATE
PROPOSED SEVERANCE
 TOWNSHIP OF MACGREGOR
 MUNICIPALITY OF SHUNIAH

SCALE - 1:3000
 50m 0 100m

 SEVERED
 RETAINED



 **TBT ENGINEERING**
 CONSULTING GROUP
 TBT SURVEYORS INC. - A WHOLLY OWNED SUBSIDIARY OF TBT ENGINEERING LIMITED

1918 YONGE STREET, THUNDER BAY, ON P7E 6T9
 T: (807) 624-5180 F: (807) 624-5161 www.tbt.ca

DRAWN BY: PD CHECKED BY: PdH DATED 2023/12/04

File: \\V\projects\2018\18-302 Legal Superior Assin Ming\MiningSurvey\Sketch for Severance.dwg

METRIC
 DISTANCES SHOWN ON THIS PLAN ARE IN METRES
 AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048
 AREAS SHOWN ON THIS PLAN ARE IN HECTARES
 AND CAN BE CONVERTED TO ACRES BY DIVIDING BY 0.4047

NOTE
 THIS IS NOT A PLAN OF SURVEY AND IS ONLY TO BE
 USED FOR PURPOSES INDICATED IN THE TITLE BLOCK.
 DIMENSIONS SHOWN HEREON ARE DERIVED FROM
 ASSOCIATED PLANS OF SURVEY AND FIELD MEASUREMENTS.

MUNICIPALITY OF SHUNIAH
RECEIVED
MAR 06 2024

Per _____

LETTER OF AUTHORIZATION

TO: Municipality of Shuniah

DATE: March 5, 2024

We, **Canadian National Railway Company**, of the **City of Vaughan**, hereby authorize and instruct, **Lakeshores Developments (Thunder Bay) Inc.** to submit an application for the severance of property described as **Part of MINING LOCATION 14 H. P. SAVIGNY'S SURVEY MACGREGOR, District of Thunder Bay, in the Province of Ontario**, as shown crosshatched on Schedule A attached hereto of which we are the Registered Owner; and to appear on behalf of Canadian National Railway Company at any hearings with respect to such a severance application, and this shall be our good and sufficient authority to act on our behalf.

CANADIAN NATIONAL RAILWAY COMPANY



Signed: _____

Ernie Longo
Real Estate Manager

I have authority to bind the Corporation.

Official Plan Conformity

A comprehensive analysis of how the proposed development conforms to the Official Plan was provided in the Planning Justification Report that was filed with this consent application. The consent application will enable the efficient development of the adjacent lands as described in the PJR. The addition of proposed land to the adjacent parcel and the accompanying easement does not conflict with any of the provisions of the Official Plan. Specifically meets the Planning Objectives of Section 1.5 - Shuniah wishes to establish and to achieve the following planning objectives as set out in this section and which are intended to guide decision-making with respect to physical change within the municipality including the administration, operation, and extension of public infrastructure and public services:

- . to promote efficient development and land use patterns which sustain efficient operation and financial well-being of the Municipality and the Province of Ontario over the long term, consistent with Ontario's Provincial Policy Statement (PPS) and conforming to the Growth Plan for Northern Ontario;
- . to promote a land use pattern, density of development, and mix of land uses that minimize climate change impacts, such as impacts upon municipal infrastructure and public services, and the length and number of vehicle trips taken by the residents of the Municipality;
- to promote sustainable development that balances rural quality of life with development.

In addition, Section 1.5 states that to encourage the preservation and possible adaptive re-use of the decommissioned CNR railway corridor along the shoreline of Lake Superior and to maintain that corridor's integrity and continuous linear characteristics while seeking connections with other trails including the Province-wide Cycling Network, parks or open space systems; and while taking into account public input. Discussions have taken place with Shuniah administration and it was agreed that this planning objective will not be impacted by the application for consent.



CNR Application for Consent

An application has been made by CNR to the Committee of Adjustment for the Purpose of severing and conveying to Lakeshore Developments Inc, a parcel of land measuring 9.1 metres by 1134.8 metres. This consent is for lot enlargement purposes.

The purpose of this consent application is to increase the size of the property located to the south of the former Kinghorn rail corridor. This property being developed by Lakeshore Developments is currently the subject of a vacant land condominium application as well as a rezoning application.

During the review of these applications, the approval authority, being the Municipality of Shuniah, requested that the sizes of the proposed condo units located to the south of the former rail corridor be increased in size. To that end, the developer has negotiated the purchase of a portion of the rail right of way to enable the larger lots.

In support of the vacant land condo application and the rezoning application, a planning justification report was prepared by Menic Planning Services. It has been attached to this consent application. It outlines in detail the rationale for the proposed development including a description of the lands, the nature of the proposed development, a description of the supporting studies that have been completed as well as an analysis of the Shuniah Official Plan, Zoning By-law as well as conformity with the Provincial Policy Statement.

**PLANNING JUSTIFICATION REPORT
LAKESHORE DEVELOPMENT (THUNDER BAY) INC.**

November 2021

Introduction

Menic Planning Services Inc. has prepared the following planning justification report on behalf of Lakeshore Development (Thunder Bay) Inc. The proponents own a 21.8 ha property located on the shores of Lake Superior south of Lakeshore Drive (herein referred to as the "subject property"). These lands are located in the Municipality of Shuniah.

This report is submitted in support of development applications for a vacant land condominium to enable the creation of lots for single detached dwellings proposed on the subject property. The application to be filed with the Municipality of Shuniah for this development is a zoning by-law amendment to Zoning By-law No. 2038-00. A vacant land condominium application has been filed with the Ministry of Municipal Affairs who are the approval authority for plans of subdivision/condominium. The rezoning application to be filed with the Municipality will also include provisions to allow for the establishment of a 15 metre wide private condominium roadway from Lakeshore Drive centered on the common lot line between Lots 1 and 2, Plan 55M-639 and shown as Units 1 and 2 on the draft plan.

This report provides a review of applicable planning policies and provides justification of the applications in support of the development. This report also provides an analysis of how the proposed development is consistent with the Provincial Policy Statement as required under Section 3(1) of the *Planning Act*. It also provides an overview of supporting documents and technical studies that have been completed in support of the applications.

Description of Subject Property

The subject property is located in the westerly most part of the Municipality of Shuniah. It is located almost adjacent to the eastern limits of the City of Thunder Bay.

The lands are generally bounded by Lake Superior to the south, Alder Road to the east, Bare Point Road to the west and the Lakeshore Drive to the north. There exists a CNR right of way that bisects the property from east to west. This right of way is no longer in active service as the tracks have been removed. CN is actively considering the sale of the right of way for municipal purposes.

The legal description of the lands for which planning approvals are being sought is Part of Lots 1 - 12 and Blocks 13 – 24, Plan 55M-639. All of these lands are currently vacant.

Plan 55M-639 is a standard plan of subdivision which was issued draft plan approval in August 2016 and was registered on October 25, 2017. The lots (1 – 12) and the blocks (13 – 24) are currently bound together under the provisions of Section 118 of the *Land Titles Act*.

Proposed Development

The proposed development is comprised of 23 lots and 3 blocks of land. The existing underlying lot fabric consists of 12 lots fronting onto Lakeshore Drive and 12 blocks of land between the CN right of way and Lake Superior. Each of these blocks is currently tied to one

of the lots. The proposed development will result in the creation of 11 additional buildable lots fronting onto Lake Superior with the existing 12 Lakeshore Drive lots converting to vacant land condominium lots. One of the proposed blocks at the west end of the development is intended for open space purposes while the 2 blocks at the east end of the development are to remain tied with their respective Lakeshore Drive parcels. This tie will continue to exist by maintaining the existing restriction that was imposed as part of the previous approval by the use of Section 118 of the *Land Titles Act*. The tie will be rescinded for the other 10 blocks.

The lots are intended to be developed with single detached dwellings and accessory structures. The lot sizes of the 11 lakefront properties will vary from a minimum of approximately 2200 to a maximum of approximately 14000 square metres. The lots fronting onto Lakeshore Drive are all approximately 1.5 hectares in area.

The proposed method of servicing for the development is by individual private septic systems and private individual wells and/or water drawn from Lake Superior. Electrical service will be provided to the proposed development from the existing electrical infrastructure on nearby Lakeshore Drive.

Access to the proposed lakefront lots will be achieved via a private condominium roadway between Lots 1 and 2 of Plan 55M-639 from Lakeshore Drive. This private roadway will be created as a common element as proposed in the condominium application. It will be owned and maintained by the condominium corporation.

The developer had been in negotiations with CNR to obtain a permanent crossing across their right of way which abuts the north limit of the subject lands. This right of way is no longer in active service as the tracks have been removed. An agreement was recently negotiated in which CN agreed to grant a permanent easement to Lakeshore Developments Inc. An application for the creation of this easement was approved by the Committee of Adjustment on May 22, 2019 (Application B1/19). This easement will form part of the common element roadway as described in the previous paragraph.

Supporting Studies

The following engineering and environmental studies have been prepared in support of the proposed development:

1. Hydrogeological Study

A hydrogeological report (Supplemental Rural Servicing Evaluation) was completed by WSP in support of the initial 12 lot development proposal.

A new hydrogeological report has been prepared by North Rock Environmental Inc. in support of the application as requested in pre-consultation. This report analyses the feasibility of developing 11 additional units along the lakeshore. The report entitled Lakeshore Drive Subdivision Land Assessment Procedure D-5-4 Hydrogeological Study was prepared in December 2019. The Ontario Ministry of the Environment,

Conservation and Parks (MECP) Procedure D-5-4 Technical Guideline for Individual On-Site Sewage Systems: Water Quality Impact Assessment was used as a guide to complete this land assessment. This D-5-4 study and hydrogeological investigation is also required under Schedule 1; Subsection 51(17) of the *Planning Act*, R.S.O. 1990, as amended, for the development of more than five lots with privately owned and operated septic systems.

The study concluded that the silty clay and silty sand horizon under the proposed lots is considered a suitable receptor for septic effluent. The development will not cause adverse impacts to surface water features or Lake Superior and there are no sensitive surface water receptors in the area. Residential water wells should be installed up gradient (north) of the septic systems on a lot by lot basis. The individual on-site septic systems must be designed and constructed in accordance with the Ontario Building Code, Thunder Bay District Health Unit guidelines and with consideration to the City of Thunder Bay Engineering Standards.

The report has been included as part of the condominium application submission.

2. Archeological Study

As part of the planning approvals process for the original 12 lot subdivision, the developer had an archeological assessment prepared by WSP Inc. The assessment required the undertaking of both a Stage 1 (April 2013) and a subsequent Stage 2 investigation of the entire property. The assessment concluded that a very small portion of the site close to the lake shore should proceed to a Stage 3 assessment. The archeological study was reviewed and approved by the Ministry of Tourism Culture and Sports. The Stage 3 assessment has been completed and will be submitted as part of the complete application.

3. Breeding Bird Survey

In July 2015, WSP prepared a report on breeding bird populations on the subject property. The report concluded that the overall habitat was not of high quality and of diverse types over significant areas for breeding birds. The habitat types are all relatively small in area. The conclusions would suggest that a further investigation is not warranted for the proposed development.

4. Land Compatibility Noise Assessment Report

In November 2014, WSP prepared a report on the noise impacts of traffic from nearby roads, railways and nearby commercial and industrial stationary noise sources on the subject property as per Ministry of Environment Noise Guidelines. The assessment concluded that there was no requirement for any noise mitigation measures. It recommended the inclusion of warning clauses in agreements of purchase and sale. The conclusions would suggest that a further investigation is not warranted for the proposed development. A statement to this effect has been prepared and will be

submitted as part of the complete application.

5. Land Use Compatibility Analysis

In November 2014, a land use compatibility analysis was prepared by Bear Paw Engineering. The analysis was completed in accordance with MOECC Guidelines D-1 and D-6. This report concluded that there should be minimal concern with regards to compatibility and of surrounding land uses and the proposed residential subdivision. The conclusions would suggest that a further investigation is not warranted for the proposed development.

6. Preliminary Ecological Site Assessment

This report was produced by Bear Paw Engineering and Project Management in June 2014. The report studied various ecological components on the subject property. They included vegetation, critical habitats, significant species and fish habitat. The conclusions would suggest that a further investigation is not warranted for the proposed development.

7. Hydraulic Modeling and Floodplain Delineation Report

This report was prepared by WSP in July 2014. The report studied drainage conditions and floodplain delineation for the subject lands. The report was reviewed and approved by the Lakehead Region Conservation Authority. North Star Creek and its associated buffer area are largely located on 6 of the 12 lots on the north side of the CN right of way. Of the 11 proposed new lots, only one (easternmost) lot is impacted by the creek. Only a small fraction of this large lot is impacted by the creek and the buffer area.

8. Servicing Options Report

A Servicing Options Report was prepared by Engineering Northwest Limited in August 2008. This report was prepared in order to meet the prescribed information requirements as set out in the *Planning Act* where planning approvals are being sought for the creation of 5 or more lots on private services. This report was filed with MMAH along with the subdivision application for the approved 12 lot subdivision development. A new servicing options report has been prepared in support of the additional 11 lots and has been included in the submission for the condominium approval.

9. Environmental Impact Study

An EIS is currently being finalized in support of the condominium application and will be filed with MMAH upon completion.

Municipality of Shuniah Official Plan (Previous)

The previous Official Plan for the Municipality of Shuniah designated these lands as Community Residential. The objectives of this designation as set out in Section 3.1 include the protection and enhancement of the residential character of existing neighbourhoods and also to allow for new residential development. The permitted uses in this designation as set out in Section 3.2.1 include low density residential uses. The development proposal being sought conforms to these objectives and policies.

Section 3.2.4 outlines subdivision and development policies and lists criteria which must be considered for subdivision applications. The studies described in the previous section of this report were done to address these criteria as well as Provincial requirements.

Section 13.4.3 of the OP requires that all roads within a plan of subdivision to be constructed to acceptable standards "except in the case of a private condominium road accepted by Council within a condominium approval." The proposed development intends to provide access from Lakeshore Drive via a private condominium roadway.

In addition, the Concept section of the OP (Section 2) is supportive of the proposed development. Specifically, Section 2.3 Residential, states that "the historic land use pattern has resulted in concentrations of development along Lakeshore Drive and along the shoreline of Lake Superior and Loon Lake. It is the intent of the Municipality to rationalize this development pattern in order to – increase residential densities to levels that facilitate and support local commercial and/or industrial activity, and broaden the existing settlement area."

The approvals process for the recently approved 12 lot subdivision, which includes the subject property, underwent a thorough and rigorous review by the Municipality, the Province and various public agencies. The Municipal review of the Official Plan concluded that:

- "The lands are located in the Community Residential designation in the official plan and this is an area that the municipality wishes to focus upon in order to intensify development to a level that can support local commercial/institutional activity.
- Private sewer and water service is consistent with the official plan and is acceptable in the PPS.
- The official plan encourages the concentration of growth in the Community Residential designation along Lakeshore Drive."

The additional development being proposed is similar in character to the 12 lot subdivision registered in 2017 and would therefore conform to the policies of the Shuniah Official Plan including those specifically outlined in the above paragraph.

Municipality of Shuniah Official Plan 2021

The lands are largely designated as Residential on the land use schedule. The relevant policies include:

The Residential R1 land use designation, is intended to recognize predominantly residential lands that have developed or that will be developed over the length of this official plan. Such residential lands have historically taken the form of single detached residential properties with individual, private water and sewage services.

Historically, residential development focused on resource-based recreational and rural resources within the Municipality. Retirement and other permanent residential activities in particular have been an important element driving residential activity, based upon the abundant shoreline of Lake Superior and inland lakes – a resource that is not available in the nearby City of Thunder Bay. This is expected to continue. The Residential Lands are shown on Schedule A1 and A 2 – Land Use Designations and are described as the developed lands along the shorelines of Bass Lake and Loon Lake and in the vicinity of Sparks Lake; the developed lands along Lakeshore Drive (also composed of Cottage Associations); the developed and vacant lands along the shoreline of Lake Superior; Mackenzie Heights Road; and existing mobile home parks.

The proposed development conforms to these policies.

The lands are partially within and adjacent to the IPZ2 Zone. The relevant policies include:

Intake Protection Zone 2 (IPZ 2) encompasses a portion of the Municipality of Shuniah consisting of mostly undeveloped residential land. No significant or moderate threats have been identified for Municipality of Shuniah. The Municipality shall require any new development adjacent to the IPZs to demonstrate that there would be no negative impact upon the City of Thunder Bay's water supply. To assist with this determination, the Municipality: a) shall consult with the City of Thunder Bay regarding planning approvals required adjacent to the intake protection zones; b) may utilize a Holding Zone designation as a means of implementing this requirement; and c) shall consult with the LRCA. No significant or moderate threat or policies have been identified for the Municipality of Shuniah in the Lakehead Source Protection Plan.

The proponent has consulted with both the City and with the LRCA regarding source water protection during the development of the proposed condominium and no negative issues have been identified.

Lot creation policies – The Plan contemplates that the majority of new lot creation will be achieved through the consent process. However, plans of subdivision and condominium are permitted in certain circumstances as follows:

Residential Use Lot Creation: To achieve efficient land use, lot creation to accommodate

residential development shall be directed to the vicinity of existing concentrations of residential development and be separated from uses that may have an adverse effect (see section 3.20). Due to the over-supply of residential lots in the Municipality (see Appendix 1) residential lots shall generally be created by consent subject to implementation criteria in section 4.2. Land division by consent is governed by section 53 of the Planning Act. For creation of five or more lots, lot creation by plan of subdivision under section 51 of the Planning Act (or plan of condominium) may only be considered in support of resource-based recreational uses (including recreational dwellings) or to improve the land use planning situation in the Cottage Association Lands by converting from co-ownership to freehold ownership or a combination of a freehold and common element condominium (see section 2.2.13) subject to the policies of this plan and Section 4 Implementation Criteria.

The proposed development is for "resource – based recreational uses" in the form of recreational dwellings. The Plan defines this as Resource-based Recreational Use – activities, including residential, which are related to the use of the resource such as a lake, trails, rivers, mountains.

Settlement area policies – The Plan speaks to Settlement Areas as it relates to the PPS 2020. The relevant policy states as follows:

The official plan does not identify a settlement area as defined in the Provincial Policy Statement due to the pattern, type, and growth rate of development in the municipality. But it does consider the residential area of Lakeshore Drive; the developed shoreline of Lake Superior; the developed shoreline of Bass and Loon Lakes, including the communities located at Sparks Lake and Mackenzie Heights as being potential future built-up areas – containing residential neighbourhoods and potential hubs featuring a variety of mixed uses such as local commercial and institutional activity; minor and major open space and recreation features; a local school and various municipal properties (public works yard, fire stations, community centre); and resource-based recreational development including residential dwellings.

The following policies support the proposed development in terms of meeting the intent of the Plan's affordable housing position.

The Thunder Bay District Social Services Administration Board's (TBDSSAB) "Under One Roof: Housing and Homelessness Plan" includes Shuniah as part of "Metro" Thunder Bay due to the fact that it shares a boundary; but does not have the authority to set affordable housing targets like upper tier municipalities in southern Ontario. Furthermore, the Municipality of Shuniah is a rural municipality which does not have a settlement area, has low-growth, low-density, single-detached dwellings, has no public transit, no garbage pick-up, or other common municipal or centralized services. There are no affordable housing units or social housing units of any kind located in Shuniah. Lots for building homes are generally created slowly over time by consent rather than by subdivision, which does not loan itself to the more common affordable housing policies and by-laws in Ontario. Of the current 1,195 dwellings in Shuniah, 1,125 are single detached. 60 are

moveable (thus technically not legally permitted as permanent dwellings), five semidetached; and 5 unspecified (Statistics Canada 2016 Census Data). Finally, in terms of affordable housing, there is not a high need in comparison to Thunder Bay or in terms of local affordability. 2016 Statistics Canada shows that prevalence of low income in Shuniah (Low income cut-offs after tax) for ages 18-64 is only 1.5% compared to 9.8% in the City of Thunder Bay. Shuniah residents spending more than 30% of their income on shelter is 10% for owners and 55.6% for renters (i.e., ~25 people). None are subsidized. Monthly shelter costs for Shuniah tenants are 11.5% below that of the City of Thunder Bay. As such the establishment of affordable housing targets is not applicable. Accordingly, the OP considers additional residential units (and garden suites) to be the primary form of affordable housing; while also contributing to the affordability of the main dwelling.

Municipality of Shuniah Zoning By-law 2038-00

The existing zoning designation applying to this subject property is "RC" Community Residential Zone. A site specific rezoning was processed and approved by By-law 2965-17 which added the H – Holding Symbol to the lakefront lands. This was done as part of the approval process for the approved 12 lot subdivision.

This amending By-law was passed in order to ensure the orderly development of the blocks that were separated by the CN right of way from their associated lots fronting onto Lakeshore Drive. The By-law allows for the H Symbol to be removed once the following matters have been completed:

- The provision of an individual and suitable driveway crossing from the lot to its associated Block across the CN rail right of way capable of passage for emergency services vehicles is completed to the satisfaction of the Municipality of Shuniah.
- That an executed crossing agreement is issued by CN Rail providing for the crossing and building of a driveway across the CN rail right of way for the subject Block.
- The completion of a hydrogeological report on the subject Block to the satisfaction of the Ministry of Environment and Climate Change.
- The approval of the septic system to the satisfaction of the Thunder Bay District Health Unit for the subject Block.
- The approval for an individual and suitable driveway crossing over the regulated area of Northstar Creek to the satisfaction of the Lakehead Region Conservation Authority for Blocks 3 to 12.
- The provision of electrical and telephone services to the subject Block to the satisfaction of Hydro One and TBay Tel.

The matters that need to be addressed to allow for the removal of the Holding Symbol will be addressed during the approvals process and prior to Council considering the passing of an amending by-law.

The proposed zoning by-law amendment being requested, in order to facilitate the vacant land condominium development, is to rezone the lands from the "RC-H" Community Residential Zone – Holding to the "SR" Shoreline Residential Zone. This will allow for smaller lot sizes to reflect the proposed development scheme. All proposed lots will meet the minimum lot area of 2100 square metres and minimum lot frontage of 40 metres as required by the provisions of the "SR" Zone. An "OS" Open Space Zone will also be requested for the proposed park block at the west end of the development.

In addition, the rezoning request will include a reduction in the lot frontage of Units 1 and 2 from the required 60 metres to 52.5 metres. This is needed to allow for the roadway between the 2 parcels to provide access to the lakefront units.

Provincial Policy Statement 2020

The Provincial Policy Statement ("PPS") is issued under Section 3(1) of the Ontario *Planning Act* and provides direction on matters of provincial interest regarding land use planning. All applications considered under the Planning Act "shall be consistent with" the Provincial Policy Statement.

Policy 1.1.1 states that "healthy, livable and safe communities are sustained by:

- a) promoting efficient development and land use patterns which sustain the financial well-being of both the Province and municipalities over the long term;
- b) avoiding development and land use patterns which may cause environmental or public health and safety concerns;
- c) promoting cost-effective development patterns and standards to minimize land consumption and servicing costs".

The proposed development seeks to provide a healthy, livable and residential community based on an efficient and orderly development pattern. This infill vacant land condominium will minimize land consumption and servicing costs in accordance with Section 1.1.1 of the PPS.

The PPS defines "Settlement Areas" as urban areas and rural settlement areas within municipalities that are built up areas where development is concentrated and which have a mix of land uses and lands which have been designated in an official plan for development over the long term planning horizon provided for in Policy 1.1.2. As part of the review of the previous 12 lot subdivision application, the developments along Lakeshore Drive were deemed to be a settlement area where it was appropriate to allow for the intensification of development. This is supported by the OP policies, and specifically Section 2.3, which identifies the Lakeshore Drive community as the "existing settlement area."

Policy 1.1.3.1 and 1.1.3.2 of the PPS state that Settlement Areas shall be the focus of growth and that land use patterns within Settlement Areas shall be based on densities and a mix of land use patterns which:

1. Efficiently use land and resources;
2. Efficiently use existing or planned infrastructure and public service facilities and avoid the need for their unjustified and/or uneconomical expansion; and
3. Minimize negative impacts to air quality and climate change, and promote energy efficiency.

Within Settlement Areas, appropriate development standards should be promoted to facilitate intensification, redevelopment and compact form (Policy 1.1.3.4). The proposed development on the subject lands represents intensification and orderly infill development.

The PPS protects natural heritage by ensuring that natural features and the long term economic function and biodiversity of natural heritage systems are maintained, restored and where possible improved (S. 2.1). Development is not permitted in significant natural heritage and hydrological features or areas. Development and site alteration is not permitted on lands adjacent to natural heritage and hydrological features 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 their ecological function (Section 2.1.6). The demonstration of consistency with the natural heritage policies of the PPS is contained in the EIS as described above.

With regards to cultural heritage and archaeology policies of the PPS, Section 2.6 only permits development and site alteration on lands containing archaeological resources or areas of archaeological potential if the significant archaeological resources have been conserved by removal and documentation or by preservation on site. An Archaeological Assessment was conducted on the subject lands to demonstrate consistency with these policies including a Stage 3 assessment.

The PPS directs development and site alteration away from hazardous lands adjacent to rivers and streams which are impacted by flooding hazards and erosion hazards (Section 3.1.1). The Drainage and Floodplain Mapping Report was prepared and submitted as part of the approval of the recently approved 12 lot subdivision which included the lands that are the subject of the current applications. These studies demonstrate the appropriate consideration for hazardous lands and demonstrate that the proposed applications are consistent with the PPS policies in this regard.

Section 51(24) of the Planning Act

Regard for matters in proposed draft plans of subdivision:

- a) Provincial interests –see PPS analysis above.
- b) Premature or in public interest – the demand exists for the housing proposed by this development.

- c) Conforms to OP and adjacent developments – see analysis above regarding OP conformity. Adjacent lakeshore developments are similar in design and scale.
- d) Suitability of land for subdivision – consistent with surrounding lakeshore developments. Hydrogeological study supports the suitability of the land for the proposed development.
- e) Width, location and grade of proposed roads and adequacy of existing highways – road design issues have been discussed with the Municipality and design data and drawings will be filed with the application. The existing road system has not been identified as being problematic by municipal staff.
- f) Dimension and shape of lots – see draft plan.
- g) Restrictions on the lands to be subdivided and the buildings proposed on the lands – no specific restrictions have been identified other than those imposed by the Zoning By-law as amended. Detailed drawings have been prepared for each of the proposed units to illustrate how development of each can proceed. This will be filed with the application.
- h) Natural resource protection and flood control – studies have been prepared for both of these matters. Reports prepared in consultation with the LRCA will be filed with the application.
- i) Adequacy of utilities municipal services – Hydro One and other service providers have been engaged in the process.
- j) Adequacy of school sites – schools are located in both the Municipality and the City of Thunder Bay. No issues were identified in the prior 12 lot subdivision approval.
- k) Dedication of land for public purposes – no land dedications is anticipated. The proposed Open Space block will be for the use of the condominium unit owners.
- l) Design of plan to optimize the supply and efficient use and conservation of energy- Hydro One has been consulted during the design process. It is anticipated that the design of the dwellings will take advantage of the southern lake side exposure to maximize the use of passive solar energy.
- m) Site plan control – these lands are not designated as areas of site plan control.

Materials to be Submitted in Support of the Proposed Development

The following is a list of the applications, studies and material that will be filed in support of the proposed development.

1. Submit to Shuniah and MMAH a revised Vacant Land Condominium showing the final lakeside lot layout and any required easements as part of the plan for the purpose of facilitating a circulation to partner ministries.
2. Submit to Shuniah and MMAH a series of site plans showing that all of the 11 proposed lakefront lots are capable of being logically developed including building envelopes and all appropriate setbacks.
3. Submit to MMAH the new Hydrogeological Report.
4. Submit to Shuniah and MMAH the amended Planning Justification Report.
5. Submit to Shuniah and MMAH the LCRA letter in support of the proposed development.

6. Submit with the Vacant Land Condominium application, all updated and revised studies and reports in support of the proposed development
7. Prepare and submit to Shuniah a rezoning application for the proposed development.
8. Prepare draft amending agreement for the existing Subdivision Agreement to remove the linkage of the blocks to the lots as required and also to deal with other miscellaneous matters in the Subdivision Agreement as may be required by the Municipality relative to the proposed lakeside development.

Registration Procedures

1. Satisfy all conditions of Draft Plan Approval.
2. Prepare Declaration for the Vacant Land Condominium and submit to Shuniah and MMAH for approval.
3. Register Condominium Plan and Declaration on title to lands.
4. Prepare condo by-laws and register on title.
5. Register on title to lands Subdivision Amending Agreement.
6. Prepare standard agreement of purchase and sale with any notification clauses as required by Subdivision Agreement.

Public Consultation Strategy

Section 4.5 of the Shuniah Official Plan contains policies for public engagement and notification. The policy requires the proponent to submit a strategy for public engagement as part of a complete application.

The proponent proposes that the public consultation be in the form of a Public Meeting with the Municipal Council as prescribed by the *Planning Act*. This was the same strategy that was used during the approval process for the initial plan of subdivision that was approved in 2017.

Conclusion

The proposal by Lakeshore Developments Inc. to create a total of 23 parcels of land from the existing 12 lot subdivision by way of a Vacant Land Condominium will create a high quality development that will be an asset to the Municipality of Shuniah. The proposed development is supported by numerous engineering and environmental studies. These studies provide a summary of the technical basis for the development proposal and address consistency with the PPS and the Shuniah Official Plan. It is important to note that the overall density of this proposed development will be almost 1 hectare per unit. This is a low overall density consistent with existing development and the goals of the Shuniah Official Plan.

The development applications are consistent with the applicable policies of the PPS as described herein, including the policies concerning development and land use patterns, natural hazards and natural and cultural heritage. The development applications are also

consistent with the Shuniah Official Plan. The subject applications have planning merit and should proceed through the public process as prescribed by the *Planning Act*.

Syl Menic MCIP, RPP
Menic Planning Services Inc.

ENVIRONMENTAL IMPACT STUDY

Lakeshore Drive, Shuniah, ON

Lakeshore Developments (Thunder Bay) Inc.



OCTOBER 6, 2021

BearPaw Engineering & Project Management
P.O. Box 181, Shoal Lake #40 First Nation, Ontario

Contents

1.0 INTRODUCTION	4
1.1 Description of Subject Property	4
1.2 Description of Development	4
1.3 Environmental Scope	4
1.4 Purpose	7
2.0 OVERVIEW OF POLICY FRAMEWORK	8
2.1 Federal Framework	8
2.1.1 Migratory Birds Convention Act, 1994	8
2.1.2 Fisheries Act	8
2.2 PROVINCIAL FRAMEWORK	8
2.2.1 Provincial Policy Statement, 2020	8
2.2.2 Ministry of Municipal Affairs and Housing – “One Window” Planning Service	10
2.2.3 Growth Plan for Northern Ontario	10
2.2.4 Green Technologies	11
2.2.5 Conservation Authority Act, 1990	13
2.2.5.1 Source Protection	13
2.2.6 Endangered Species Act	13
2.3 MUNICIPAL FRAMEWORK	14
2.3.1 Municipality of Shuniah Official Plan, 2021	14
3.0 METHODOLOGY	15
3.1 Information Sources	15
3.2 Field Methodology	16
3.3 Groundwater	16
3.4 Ecological Land Classification	16
3.5 Endangered, Threatened and Rare Species	17
3.6 Identification of Significant Wildlife Habitat	17
3.7 Breeding Bird Survey	17
3.8 Fish Habitat Assessment	17
3.9 Amphibian Identification	18
3.10 Incidental Wildlife	18
4.0 RESULTS	19
4.1 General Site Description	19
4.2 Aquatic Environment	19
4.2.1 Watershed Summary	19

4.2.2 Groundwater	19
4.2.3 Fish Habitat	20
4.3 Terrestrial Environment	20
4.3.1 Landforms, Soils and Surficial Geology.....	20
4.3.2 Vegetation	21
4.3.3 Breeding Bird Survey	23
4.3.4 Incidental Wildlife	23
4.4 Natural Heritage Features.....	24
4.4.1 Special Environmentally Significant Areas	24
4.4.2 Wetlands	24
4.4.3 Woodlands	24
4.4.4 Areas of Natural and Scientific Interest	24
4.4.5 Species at Risk and Species at Risk Habitat.....	24
4.4.6 Significant Wildlife Habitat.....	24
5.0 ECOLOGICAL FUNCTION.....	26
6.0 DESCRIPTION OF PROPOSED DEVELOPMENT	27
7.0 IMPACT IDENTIFICATION AND ANALYSIS.....	27
7.1 Direct Impacts	27
7.1.1 Tree and Vegetation Removal	28
7.1.2 Diversion of Stormwater Flows.....	28
7.1.3 Sedimentation of Natural Features.....	28
7.1.4 Disturbance to Wildlife and Wildlife Habitat.....	28
7.1.5 Disturbance to Migratory Birds	29
7.2 INDIRECT IMPACTS.....	29
7.2.1 Anthropogenic Disturbance.....	29
8.0 PROPOSED MITIGATION MEASURES.....	30
8.1 Natural Heritage Buffers	30
8.2 Beaver Dam Removal and Box Culvert Installation	30
8.3 Landscaping and Planting Plan.....	30
8.4 Stormwater Management.....	31
8.5 Erosion and Sediment Control Plan	31
8.6 Environmental Monitoring Plan.....	32
8.7 Wildlife Impact Mitigation Plan	32
8.8 Bird Strike Analysis.....	33
9.0 SUMMARY	35

APPENDIX A - Concept Plans	36
APPENDIX B - Planning Policy Schedules	39
APPENDIX C - Breeding Bird Survey Excerpts.....	52
APPENDIX D - SAR and SCC Screening.....	55
APPENDIX E - Site Photographs.....	61
Attachment A - MMAH email.....	68
Attachment B - LRCA Email	70

1.0 INTRODUCTION

BearPaw Engineering & Project Management (BearPaw) was retained by Lakeshore Developments (Thunder Bay) Inc. to complete an Environmental Impact Study (EIS) in support of a development application for the proposed development of a 21.8 ha property development on the shores of Lake Superior in the Municipality of Shuniah (the Municipality), Ontario (the “Property”). Adjacent lands within 120 metres (m) of the Property boundary are considered the “Study Area” for the EIS (Figure 1).

In brief, the Study Area consists of cultural and natural areas. While lands to the east of the Study Area consist of residential land uses, lands to the north and west consist of light industrial and institutional land uses, respectively. Tablelands of the Property are currently vacant and consist of areas made up of trees, shrubs, and beaver dam flooded interconnected ponds. Woodlands within the riparian corridor of the North Star Creek are located within the Study Area.

1.1 Description of Subject Property

The subject property is located within the Municipality of Shuniah, Ontario, adjacent to the City of Thunder Bay. The lands are bound by Lake Superior to the south, Alder Road to the east, Bare Point Road to the west and the CNR right of way to the north.

The legal description of the lands for which planning approvals are being sought is Part of Lots 1 & 2 and Blocks 13 – 24, Plan 55M-639. All of these lands are currently vacant.

Plan 55M-639 is a standard plan of subdivision which was issued draft plan approval in August 2016 and was registered on October 25, 2017. The lots (1-12) and the blocks (13-24) are currently bound together under the provisions of Section 118 of the Land Titles Act. Preliminary design drawings are included in Appendix A. Locations of home should be configured to minimize potential impact to any natural heritage features of the property.

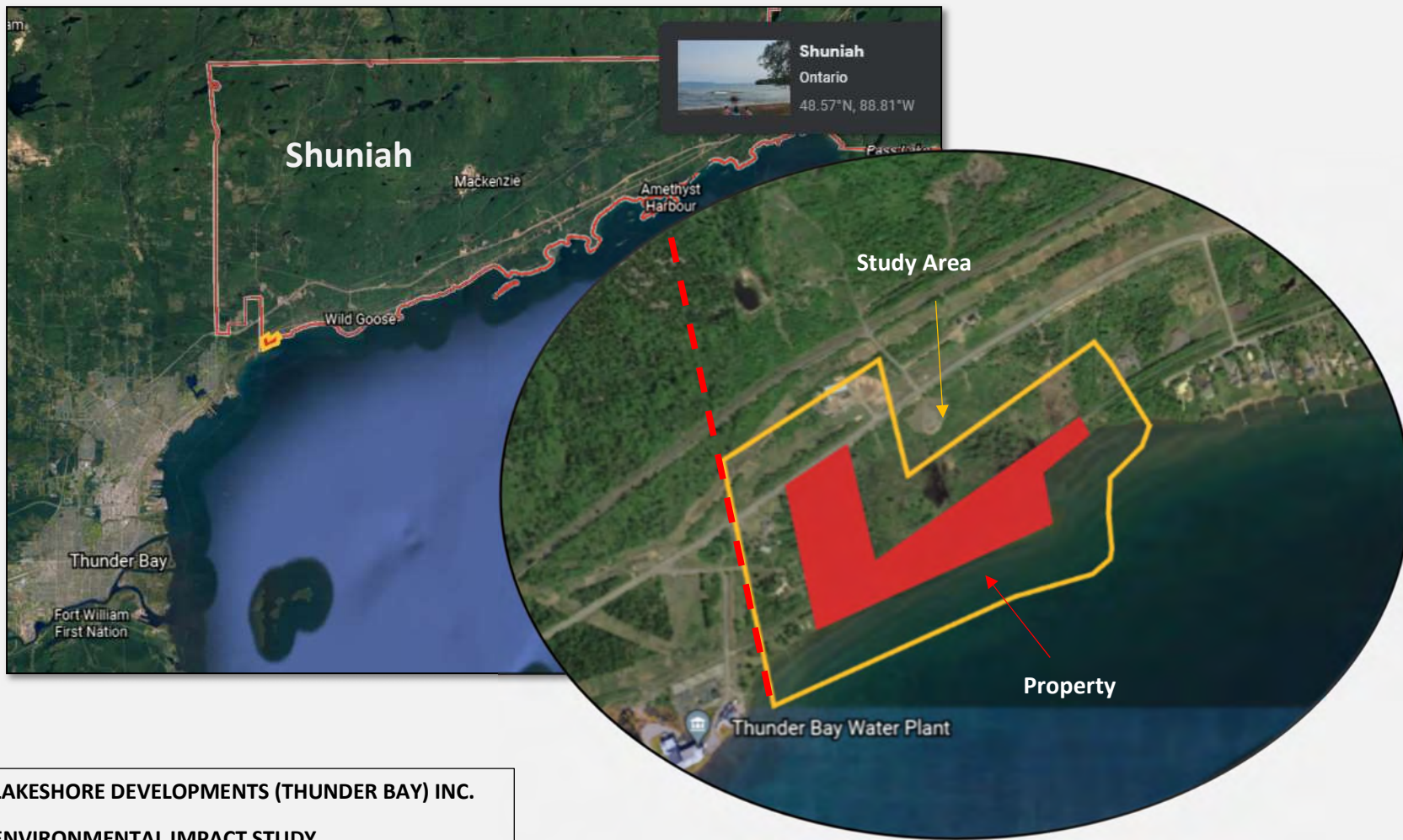
1.2 Description of Development

The subject development of the vacant land condominium planning application includes construction of a common element gravel road, installation of Tertiary Treatment Units, stormwater management facilities, beaver and beaver dam removal, minimal clearing activities, and homes with driveway access. Other design features may be added during the detailed design phase of the project such as shoreline protection features.

1.3 Environmental Scope

This EIS will encompass the subject property and natural feature(s) of the Study Area. A number of studies have been completed for the subject property and were made available for review. As a result, some aspects of environmental impact have been or are being addressed separately and individually. This includes: a wave uprush study, natural hazards (flood line delineation, mapping, and improvement recommendations), a breeding bird study, a fish habitat assessment, source protection impact assessments, and other related technical reports that have been requested to date. Relevant summary information available at the time of the authoring of this report will be included in this report and mitigation recommendations will encompass all environmental impact concerns that can be addressed as identified to date. This report essentially “fills in the blanks” in terms of environmental impact related to all other natural heritage features of the Study Area and adjacent lands.

The Study Area contains provincially significant natural heritage features. That portion, and all other natural features that meet the criteria for designation as natural heritage system (NHS) components will be retained and protected with setbacks and other buffer management measures determined through this Scoped EIS.



LAKESHORE DEVELOPMENTS (THUNDER BAY) INC.
ENVIRONMENTAL IMPACT STUDY
FIGURE 1
PROJECT LOCATION

1.4 Purpose

The purpose of the EIS is to:

- a) Document existing conditions of the natural environment;
- b) Determine the potential limits of development;
- c) Evaluate the potential for environmental impacts associated with the proposed development; and,
- d) Recommend mitigation, restoration, enhancement measures to preserve and/or restore natural features, and if necessary, compensation.

An EIS is required for the Study Area to support the new application for development as well as to account for Provincial and Municipal updates. Consultation has continued for the Study Area is ongoing through the Provincial “One-Window” (OW) approach for approval to ensure the updated EIS meets requirements of the Region, the Municipality, the LRCA, and various applicable agencies of the OW.

2.0 OVERVIEW OF POLICY FRAMEWORK

The Study Area is subject to three levels of planning policies: federal, provincial, and municipal. For purposes of the following discussion, the most recent updated versions of the applicable documents have been reviewed. This section is not intended to constitute a complete land use planning assessment as it focuses on the relevant environmental policies and regulations. The documents referenced below should be read in their entirety for a more detailed understanding of the land use policy framework to the Study Area and surrounding area. Policies within each document that relate to the natural environment and apply to the Study Area are outlined in subsequent sections. Relevant planning policy schedules and maps for the Study Area are provided in Appendix A for reference.

2.1 Federal Framework

2.1.1 Migratory Birds Convention Act, 1994

The Migratory Birds Convention Act (MBCA) came into effect in Canada on June 23, 1994. The purpose of the MBCA is to protect and conserve migratory bird species (this definition includes species populations, individuals, and their nests). There are three applicable regulations under the MBCA: Designations of Regulatory Provisions for Purposes of Enforcement (SOR/2017-108), Migratory Bird Sanctuary Regulations (C.R.C., C. 1036), and Migratory Birds Regulations (C.R.C., C. 1035). These regulations serve to define protected Bird Sanctuary Areas that receive protection, and identify prohibited actions against Migratory Birds and within Migratory Bird Sanctuaries. Migratory Bird Sanctuaries (MBS) are designated by the Act for each province and provide safe refuge for migratory birds in terrestrial and marine environments. No designated MBS are located within the Study Area; however, based on the location of the Study Area relative to Lake Superior potential stop over habitat for migratory birds may be provided in woodlands within the riparian corridor of North Star Creek. A Breeding Bird Survey was completed by WSP in July, 2015. The potential for migratory birds to occur within the Study Area is discussed further in Section 4.3.3.

2.1.2 Fisheries Act

The Fisheries Act requires that projects avoid causing any harmful alteration, disruption or destruction of fish and/or fish habitat unless authorized by the Minister of Fisheries and Oceans Canada. The Fish and Fish Habitat Protection Program of Fisheries and Oceans Canada reviews projects to ensure compliance with the Fisheries Act and the Species at Risk Act. A Fish Habitat Assessment was completed for the property by WSP in July, 2016. The potential for fish, fish habitat and aquatic species at risk to occur within the Study Area is discussed further in Section 4.2.3.

2.2 PROVINCIAL FRAMEWORK

2.2.1 Provincial Policy Statement, 2020

The Provincial Policy Statement, 2020 (PPS) provides overall policy direction on matters of provincial interest related to land use planning and development in Ontario. The PPS sets forth a vision for Ontario's land use planning system by managing and directing land use to achieve efficient development and land use patterns, wise use and management of resources, and protecting public health and safety. This report deals specifically with the policies that are not being addressed directly with MMAH in regards to Policy 2.1, Natural Heritage. Policies 2.2, Water and 3.1, Natural Hazards, are, for the most part, being addressed directly between Lakeshore Developments (Thunder Bay) Inc. and MMAH. This report deals mostly with the protection and management of natural heritage and water resources, including the following:

- Significant wetlands;
- Significant woodlands;
- Significant wildlife habitat;
- Significant areas of natural and scientific interest (ANSIs);
- Fish habitat;
- Sensitive surface water features; and,
- Sensitive ground water features.

In the PPS, “wildlife” is described as:

“all wild mammals, birds, reptiles, amphibians, fishes, invertebrates, plants, fungi, algae, bacteria and other wild organisms” (Ontario Wildlife Working Group 1991);

The PPS specifically identifies “wildlife habitat” as:

“areas where plants, animals, and other organisms live, and find adequate amounts of food, water, shelter, and space needed to sustain their populations. Specific wildlife habitats of concerns may include areas where species concentrate at a vulnerable point in their annual or life cycle; and areas which are important to migratory or non-migratory species.”

The PPS defines “significant” to mean:

“in regard to wetlands, coastal wetlands and areas of natural and scientific interest, an area identified as provincially significant by the Ontario Ministry of Natural Resources using evaluation procedures established by the Province, as amended from time to time”;

“in regard to woodlands, an area which is ecologically important in terms of features such as species composition, age of trees and stand history; functionally important due to its contribution to the broader landscape because of its location, size or due to the amount of forest cover in the planning area; or economically important due to site quality, species composition, or past management history. These are to be identified using criteria established by the Ontario Ministry of Natural Resources”; and

“in regard to other features and areas in policy in 2.1, ecologically important in terms of features, functions, representation or amount, and contributing to the quality and diversity of an identifiable geographic area or natural heritage system”.

The PPS defines “sensitive” to mean:

“in regard to surface water features and ground water features, means areas that are particularly susceptible to impacts from activities or events, including, but not limited to, water withdrawals, and additions of pollutants.”

Potential significance of natural heritage features may be evaluated based on size, age, presence of rare or sensitive species, species diversity, and linkage functions, taking into consideration factors such as adjacent land use and degree of disturbance. Criteria for determining significance follow guidance outlined in the Natural Heritage Reference Manual (NDMNRF, 2010), the Significant Wildlife Habitat Technical Guide (NDMNRF, 2015), and the Significant Wildlife Habitat Criteria Schedules for Ecoregion 3W (Draft, 2017), where applicable. The Study Area technically falls within the 4W Ecoregion bordering on the 3W Ecoregion. As no SWH Criteria Schedules exist yet for this area, the use of the 3W Schedule listed above has been permitted by a NDMNRF through MMAH (Attachment A).

Significance of natural features identified within the Study Area is further discussed in Section 4.4 of this report.

2.2.2 Ministry of Municipal Affairs and Housing – “One Window” Planning Service

The current approval authority for the Lakeshore Subdivision planning application is the Ministry of Municipal Affairs and Housing (MMAH) on behalf of the Municipality of Shuniah. The service is delivered by MMAH through the Provincial “One-Window” approach. The One-Window Planning Service is the process whereby the Ministry of Municipal Affairs and Housing provides municipalities, planning boards, developers and the public with one-stop access for provincial planning services.

This one window approach provides a single provincial process which integrates the perspective of several Partner Ministries: Municipal Affairs and Housing; Environment, Conservation and Parks; Natural Resources and Forestry; Transportation; Tourism, Culture and Sport; Agriculture, Food and Rural Affairs; Energy, Northern Development and Mines; Infrastructure, Economic Development, Job Creation and Trade; and Health and Long-Term Care.

At various stages of the application process, the MMAH circulates information, studies, and questions put forward by the developer for response by the various ministries. Additional commenting agencies fall outside the One-Window approach and may provide comments and approvals directly to the developer. This includes, for example, the Lakehead Regional Conservation Authority (LRCA).

2.2.3 Growth Plan for Northern Ontario

The Growth Plan for Northern Ontario, released March 3, 2011, is a 25-year plan that provides guidance to align provincial decision-making and investment for economic and population growth in Northern Ontario.

The key growth management goals for the Growth Plan for Northern Ontario include:

- Diversifying of traditional resource-based industries
- Workforce education and training
- Integration of infrastructure investments and planning
- Tools for Indigenous peoples' participation in the economy

Approved by the Lieutenant Governor in Council, Order-in-Council No 209/2011. The Growth Plan for Northern Ontario, 2011, was prepared and approved under the Places to Grow Act, 2005, to take effect on March 3, 2011.

In terms of the environment, the Growth Plan is not just important as the basis for a strong economy, it also supports the health, quality of life and identity of northerners. Spectacular natural areas are a unique, irreplaceable part of Northern Ontario's heritage. Northerners take pride in this natural heritage, and take seriously their role as the stewards of the natural environment so that it can be enjoyed by future generations.

Northern Ontario includes two of the Great Lakes: Lake Superior and Lake Huron. The Great Lakes are not only a valued environmental feature but provide Northern Ontario with innumerable economic advantages. Northern Ontario's many lakes and waterways are valued for their environmental benefits, as popular community and tourism attractors and for their contribution to commercial and recreational fishing. Their clean and reliable supply of water feeds the North's manufacturing industries including transportation, bioproducts and food processing. The Great Lakes also form a major inland waterway, providing an efficient means of bulk commodity transport for Ontario, including the North.

A commitment to environmental protection and conservation is reinforced through a commitment to environmental leadership and a culture of conservation. Sustainability planning at the local level, and environmental leadership demonstrated at both the provincial and municipal government levels and within industry, will help meet this Plan's environmental protection objectives, and lay the groundwork required for the North to transition to a green economy.

This Plan is built on a solid understanding of the multiple values and benefits that the North's renowned natural environment provides to the people and the economy of the region, and the province.

In terms of sustainable development of natural resources, the Growth Plan ensures:

- Provincial policies, programs, and regulations will integrate approaches to natural resource management to support environmental, social and economic health;
- Natural resource management and stewardship practices will occur within a framework that recognizes and responds to evolving environmental, economic and social values, and science-based knowledge and information, which allows for the introduction of new practices, technologies and management approaches, traditional knowledge, and locally and regionally responsive approaches;

In respect to environmental protection, the Growth Plan ensures:

- Municipalities are encouraged to contribute to the protection of *surface water features* and *ground water features* by:
 - planning and designing municipal water and wastewater systems that return water to the Great Lake watershed from which the withdrawal originates
 - co-ordinating planning for potable water, stormwater, and wastewater systems with communities with which they share inland water sources and/or receiving water bodies.

The Province will work with the federal government, municipalities and others to include measures to protect and preserve air quality, water quality and quantity, and natural heritage in planning for climate change impacts and environmental sustainability.

2.2.4 Green Technologies

Planning and decision-making by the Province and municipalities should consider opportunities for fostering a culture of conservation and demonstrating environmental leadership by adopting sustainability practices.

The Province will work with the federal government, municipalities and others to promote Northern Ontario locations for investments to contribute to the growth of Ontario's green economy including opportunities for research and commercialization of green technologies. The Lakeshore Drive subdivision will incorporate green technologies in the development such as stormwater management designs minimizing environmental impacts.



LAKESHORE DEVELOPMENTS (THUNDER BAY) INC.

ENVIRONMENTAL IMPACT STUDY

FIGURE 2

NATURAL HERITAGE

- Property Boundary
- Study Area
- North Star Creek
- Interconnected Ponds
- SWH
- Clearcut Areas
- Alder Subdivision

2.2.5 Conservation Authority Act, 1990

Ontario Regulation 180/06 as amended by Ontario Regulation 63/13: Development, Interference with Wetlands and Alterations to Shorelines and Watercourses, made under the authority of the Conservation Authorities Act, is intended to ensure public safety and protect property with respect to natural hazards and to safeguard watershed health by preventing pollution and destruction of sensitive environmental areas such as wetlands, shorelines and watercourses. Ontario Regulation 180/06, is administered by the Lakehead Regional Conservation Authority (LRCA).

Under Ontario Regulation 180/06, any proposed development, interference or alteration within a Regulated Area requires a permit from LRCA. The Study Area is located with the LRCA Regulated Area (Appendix A). Additionally, floodplain delineation, wave uprush, and hydrogeological conditions of the site have previously been studied. These matters will be addressed separately and individually apart from the scope of this EIS.

2.2.5.1 Source Protection

The Lakehead Source Protection Area is one of eight Source Protection Areas and 11 Source Protection Regions created across the province by the Clean Water Act, Regulation #107. As part of the Property falls within the Intake Protection Zones, after completing a series of studies related to potential impacts, the Proponent has received confirmation from the Lakehead Source Protection Committee that there are no issues or concerns with the development (Attachment B).

2.2.6 Endangered Species Act

In June 2008, the Endangered Species Act, 2007 (ESA) came into effect in Ontario. The purpose of the ESA is to identify species at risk (SAR) based on the best available scientific information; to protect SAR and their habitats, to promote the recovery of SAR; and to promote stewardship activities to assist in the protection and recovery of SAR in Ontario. There are two applicable regulations under the ESA; Ontario Regulation 230/08 (the SARO List); and, Ontario Regulation 242/08 (General). These regulations serve to identify which species and habitat receive protection and provide direction on the current implementation of the ESA by the Ministry of Environment, Conservation and Parks (MECP). The potential for SAR and SAR habitat to be present within the Study Area is discussed further in Section 4.4.5 and Section 4.4.6 of this report.

2.3 MUNICIPAL FRAMEWORK

2.3.1 Municipality of Shuniah Official Plan, 2021

Shuniah's Official Plan (SOP) was adopted by Council on October 13, 2020 and approved by the Assistant Deputy Minister, MMAH on March 26, 2021. The plan is in effect for 10 years from the date of final approval.

The SOP is the long-range strategic land use policy document for Shuniah and is established primarily for the purpose of assessing, managing and directing physical change and its effects on the social, economic, and environmental health and well-being of the community (SOP, 2021).

Land use designations assigned by the SOP reflect the anticipated land uses as identified by Shuniah and identify locations of existing natural features and development constraints within the Municipality. Designations assigned to the tablelands of the Study Area identify areas for potential development and community growth. Proposed development and site alteration for the Study Area are also required to adhere to development policies of designations for natural features. SOP Schedules containing designations and development constraints for the Study Area are available in Appendix A. SOP designations and development constraints identified in the Study Area and their associated policies are discussed below.

Depicted by the Municipality of Shuniah Zoning By-Law Map, the blocks 1-13 within the Study Area are currently designated as a Residential Holding Zone (Appendix A). The historic land use pattern in Shuniah has resulted in concentrations of development along Lakeshore Drive and along the shoreline of Lake Superior and Loon Lake.

3.0 METHODOLOGY

The existing conditions information contained in this EIS is based on prior field investigations completed in the Study Area, existing published data, and data made available through various public agencies and web-based mapping programs relating to the Study Area. Additional site reconnaissance activities were conducted by BearPaw in 2021 to assist in the verification and further characterization of existing conditions for the Study Area.

3.1 Information Sources

To determine the existing conditions for the Study Area, in addition to field investigations, primary source information was reviewed to identify known environmental constraint areas, soils, landforms, geological features, significant natural heritage features such as watercourses, woodlands, wetlands and potential wildlife occurrences in relation to the Study Area. As identified in Section 4.4, some natural heritage features found in the Study Area, as defined under the PPS (2014) require consideration within the EIS.

Secondary source information included:

- Topographic mapping
- Aerial photography;
- NDMNRF Ecological Land Classification Documents;
- Natural Heritage Information Centre (NHIC) data (Significant Areas and Species at Risk);
- Species at Risk range maps and habitat descriptions;
- Species at Risk Regional Lists (MECP);
- Land Information Ontario (LIO) feature and base mapping;
- City of Thunder Bay Stormwater Management Plan;
- Ontario Breeding Bird Atlas;
- Ontario Reptile and Amphibian Atlas;
- Ontario Butterfly Atlas;
- NatureServe Explorer;
- Relevant municipal and provincial policy documents and legislation;
- Past reports for adjacent properties.

In addition, historic and current consultant reports specific to the proposed development and Study Area were reviewed to further characterize existing conditions and natural heritage features within the Study Area, including:

- 2010 Bald Eagle Study, prepared by Bill Wiltshire & Associates;
- 2010 Hydrogeological Conditions Letter, prepared by DST Consulting Engineers;
- 2014 Supplemental Rural Servicing Evaluation, Prepared by WSP;
- 2014 Drainage and Floodplain Mapping Report, prepared by WSP;
- 2014 Land Use Compatibility Analysis, prepared by BearPaw;
- 2014 Preliminary Ecological Site Assessment, prepared by BearPaw;
- 2015 Breeding Bird Survey, prepared by WSP;
- 2016 Fish Habitat Assessment, prepared by WSP;
- 2020 Early Consultation Response Letter, MMAH
- 2020 Service Options Statement, prepared by Northrock Environmental;
- 2020/2021 Correspondence, MMAH, One Window Service, Conservation Authorities;
- 2021 Clients Guide to Species at Risk Checklist, MECP Responses

- 2021 Municipality of Shuniah Official Plan

3.2 Field Methodology

Field reconnaissance activities are listed below conducted by the various consultants as discussed in the reports listed above. Field investigation data for the Study Area, secondary source information, relevant to this report was extracted from these reports and letters. In addition, a biologist was deployed to the Study Area in September, 2021, to provide more detail on the presence/absence of vegetation communities and natural features.

Date	Purpose of Visit	Consultant
2010	Bald Eagle Nesting	Wiltshire & Associates
2010	Hydrogeological Assessment	DST Consulting Engineers
2013	Stage 1 Archeology	WSP
April, 2014	Preliminary ESA	BearPaw
October, 2014	Land Use Compatibility	BearPaw
2014	Supp. Rural Serv. Evaluation	WSP
July, 2015	Breeding Bird Survey	WSP
June, 2016	Fish Habitat Assessment	WSP
2016	Stage 2 Archeology	WSP
July, 2019	Land Assessment (Hydro-g)	Northrock
May, 2020	TTU Soils Assessment	TBDHU
November, 2020	Servicing Options Statement	Northrock
November, 2020	Stage 3 Archeology	WSP
September, 2021	Ecological Land Classification	Northrock
September, 2021	Shoreline Conditions	BearPaw

3.3 Groundwater

A work program was completed at the site in 2010 by DST Consulting Engineers (DST) to provide a letter regarding the expected hydrogeological impact due to the development at the Site. The work program included the completion of five (5) boreholes on site to depths between 3.0 – 4.6 m (assumed bedrock). In 2015, WSP theoretically analysed 12 wells on the site and evaluated groundwater attributes for the Study Area. In 2020, Northrock Environmental completed a test pit program to confirm groundwater flow and establish groundwater contours.

3.4 Ecological Land Classification

Ecosystems at each level of spatial hierarchy (various scales of a map) are defined and characterized on the basis of common features that set them apart from other units. This leads to unique settings and patterns for ecosystems and unique elements such as flora and fauna. This is how the Ecological Land Classification has been developed.

The Study Area falls within Ecoregion 4w, and more specifically Ecodistrict 4W-2, the Kakabeka Ecodistrict. For many of the Ecoregions, Significant Wildlife Habitat (SWH) Criteria and Terrestrial Environment Schedules have been developed. There are no SWH Criteria Schedules available for Ecoregion 4W. However, there is a SWH Criteria for Ecoregion 3W and its use has been permitted by a Partner Ministry through MMAH. General and site-specific terrestrial environment information is discussed in Section 4.3. The potential for SWH within the Study Area is discussed in Section 4.4.6.

3.5 Endangered, Threatened and Rare Species

SAR are defined as those listed as Endangered or Threatened under the ESA. Species of Conservation Concern (SCC) are defined as species listed as Threatened or Endangered under the federal Species at Risk Act, 2002 (SARA), but not under the provincial ESA; species that are provincially rare/tracked (i.e. have a Subnational (provincial) Rank of S1 – Critically Imperilled, S2 – Imperilled or S3 – Vulnerable) and/or are listed as Special Concern under the ESA. The Proponent was requested to review and complete the Client’s Guide for Species at Risk Checklist (MECP, 2019). The checklist was completed and submitted to MMAH in July, 2020. NDMNRF’s Natural Heritage Information Centre (NHIC) Make-a-Map: Natural Heritage Areas application was queried for the Atlas NAD83 Identification 16CU4171 and the results were shared with MECP staff. MECP reviewed the findings and added a few potential SAR for the area that were not found in the NHIC data. A complete screening for the potential for SAR and SCC to occur within the Study Area was completed and is available in Appendix D (Table D-1). None of the SAR or SCC with the potential to occur in the area are likely present. This is due to site conditions that conflict with the habitat the species are expected to be found in.

3.6 Identification of Significant Wildlife Habitat

Criteria for determining significance of wildlife habitat (SWH) for the Study Area follow the guidelines outlined in Section 7.3.1 of the Natural Heritage Reference Manual (NHRM; NDMNRF, 2010), the Significant Wildlife Habitat Technical Guide (SWHTG; NDMNRF, 2000) and the Significant Wildlife Habitat Criteria Schedules for Ecoregion 3W (NDMNRF Draft, 2017), where applicable. It should be noted that there are currently no available SWH criteria schedules for Ecoregion 4W, the actual Ecoregion the Study Area is located in, however, the use of the 3W schedule has been confirmed acceptable by the applicable Partner Ministry through MMAH (Attachment A).

3.7 Breeding Bird Survey

A Breeding Bird Survey was conducted for the Study Area by WSP in July, 2015. Methods used by WSP are described in the Shuniah Subdivision Breeding Birds Survey available the aforementioned report. In brief, diurnal breeding bird surveys conducted within the Study Area followed the methods outlined in the Ontario Breeding Bird Atlas Guide for Participants (Cadman et al 2007). The Breeding bird survey protocol was designed and completed based on recommendations given by the Forest Bird Monitoring Protocol (FBMP; Konze and McLaren, 1997) and Ontario Breeding Bird Atlas (OBBA; Bird Studies Canada et al., 2006). The Forest Bird Monitoring Protocol recommends completing standardized point counts to survey an area for breeding birds.

In addition to documentation of breeding birds, vegetation, incidental wildlife observations, and natural heritage features were noted and recorded. The WSP report was referenced for SAR, SCC, and SWH evaluation in this EIS.

3.8 Fish Habitat Assessment

In 2014, fish habitat was identified in the North Star Creek by WSP which led to a Fish Habitat Assessment that was completed in June, 2016. The Creek was evaluated in accordance with the federal Fisheries Act determining:

- The overall sensitivity of the habitat;
- Potential impacts of the proposed development;
- Mitigation measures to be incorporated into planning and design to reduce or eliminate negative impacts to the habitat; and

- Identify any approvals or permits that may be required to proceed with the proposed development.

The overall sensitivity for the Study Area in terms of fish habitat has been determined to be moderate. The report has been submitted to MMAH by Lakeshore Developments (Thunder Bay) Inc. The proponent should refer to the Fish Habitat Assessment Report for mitigation measures related to the fish habitat in the Study Area.

3.9 Amphibian Identification

Amphibian geospatial data was reviewed for Amphibian recordings the Study Area. No species were observed on any of the available data sites. SWH for Amphibians was evaluated in accordance with the Ecoregion 3W SWH Criteria Schedules.

3.10 Incidental Wildlife

Incidental observations of wildlife or evidence of presence/absence of wildlife were captured during field investigations. The observations have been incorporated into this EIS.

4.0 RESULTS

The following sections outline the existing environmental conditions determined through the background review and field investigations within the Study Area.

4.1 General Site Description

The application includes a portion of the Property comprising of Lots 1 and 2 plus the 11 blocks along the shoreline. The Property area is approximately 10.61 hectares which is approximately 25.60% of the total Study Area (41.43ha). In its current state, the Property contains vacant lands, a short section of the North Star Creek including its riparian area. The surrounding land uses within the remaining Study Area are described as follows:

- North: highways, commercial, aggregate and light industrial abandoned or inactive facilities;
- West: Bare Point Water Treatment Plant and a residence (Northwest);
- East: open space and shoreline residential (Alder) subdivision; and
- South: Lake Superior

4.2 Aquatic Environment

4.2.1 Watershed Summary

The Study Area is located in the Lakehead Watershed. The Lakehead Region Conservation Authority (LRCA) administers programs within its area of jurisdiction, which is based on the municipal boundaries of its eight Member Municipalities. This includes an area of 2,718 square kilometres, including approximately 200 kilometres of Lake Superior shoreline, excluding islands. There are 36 subwatersheds within the boundaries of the LRCA area of jurisdiction. The scientific watershed, which is 11,526 square kilometres, is based on the flow of water contained within the portion of the watershed that would eventually pass through the LRCA jurisdiction and reach Lake Superior. This includes the groundwater of the Property and the drainage of the North Star Creek. The Lakehead Watershed has many wetlands within its boundaries, including swamps, bogs, fens and marshes. There are 13 Provincially Significant Wetlands (PSW) within the Lakehead Watershed covering an area of 38.5 square kilometres. There are seven coastal PSW's located along the shoreline of Lake Superior. These wetlands aid in shoreline stabilization and water purification, provide habitat for many species in the area and places to enjoy recreational activities.

The 2014 Drainage and Floodplain Mapping Report, prepared by WSP, provides more detailed information in regards to the watershed the Study Area is associated with and specifically the North Star Creek. Watershed matters related to source water protection, servicing, flooding, erosion, and wave uprush factors for the development are being handled directly and individually between the Proponent and MMAH.

4.2.2 Groundwater

A work program was completed at the site in 2010 by DST Consulting Engineers (DST) to provide a letter regarding the expected hydrogeological impact due to the development at the Site. The work program included the completion of five (5) boreholes on site to depths between 3.0 – 4.6 m (assumed bedrock). The borehole investigation concluded that the stratigraphy of the Site's overburden is organics, peat or fill over a silt layer with varying amounts of sand. Surface water was observed on the western lots of the Site (March 2010). Groundwater levels observed in the boreholes ranged from 0.4 to 2.4 metres below ground surface and groundwater flow is towards the Lake (south).

DST concluded that the Site is underlain by a highly permeable unconfined aquifer comprised of a sand layer. Work completed by WSP Canada Inc., dated June 2014 was comprised of a theoretical evaluation of the predicted groundwater interference potentially arising from 12 wells, commentary on the likelihood of establishing potable water for the site and how the site should be configured with septic systems to minimize the risk of adverse impacts. The report was reviewed by MOE with comments noting the need to actually construct and test wells on site to satisfy the requirements of MOE Guideline D-5-5.

The bedrock geology reported for the Study Area is sedimentary rocks from the Animikie Group which includes wacke, shale, iron formation, limestone and minor volcanic rocks (OGS, 1991). Fine grained lacustrine deposits overlay the bedrock in this area (OGS, 1975) and as confirmed by DST during the borehole drilling program. The movement of groundwater through the subsurface is controlled by the hydraulic gradients and the relative distribution of coarse and fine-grained sediments. Water will move laterally and vertically through coarse-grained sediments (sands and gravels) faster than through fine-grained sediments (silts and clays). As such, geologic units are typically grouped into hydrostratigraphic units that reflect the capacity of the unit to transmit water. These units are defined as aquifers with good capacity to transmit water or aquitards which typically impede the transmission of water. Ultimately, the distribution and interconnection of aquifers and aquitards on the Site are responsible for the observed groundwater movement. Beneath these sediments, groundwater movement occurs through fractures in the bedrock. Lake Superior is the ultimate receiver of the groundwater from this site and surrounding area.

4.2.3 Fish Habitat

The North Star Creek Watershed is confirmed to provide fish habitat (WSP, 2016). Fish collected during WSP's assessment were "forage fish", common to cool and cold-water streams. As the Creek is a direct tributary of Lake Superior, it is assumed that cold water species may be present. As a result, no in-water work should occur between September 1 and June 15. The WSP report should be reviewed for all matters related to Fish and Fish Habitat in the Study Area.

4.3 Terrestrial Environment

4.3.1 Landforms, Soils and Surficial Geology

The Study Area is located within (Port Arthur Hills) James subregion of the Canadian Shield physiographic region, and, as previously mentioned, the Kakabeka Ecodistrict. The Northern Ontario Engineering Geology and Terrain Study identifies the landscape as glaciolacustrine, with the west section being within a plain and the east section within a delta (Figure 13). Glaciolacustrine deposits are sediments deposited into lakes from glaciers (Ontario Geological Survey, 2005). The resulting soil has been identified as muck, which is an unclassified soil that is well composed of thick organic materials with very poor drainage (Agriculture Canada, 1981). Glacial Lake Minong formed at the end of the Pleistocene epoch as the Laurentide Ice Sheet receded north. As the lake's drainage progressed towards stabilization, shorelines were formed at various elevations until the current shoreline of Lake Superior was established sometime within the last 2000 years. The glaciolacustrine sediments discussed in the previous paragraph would have formed during the Lake Minong phase. The Study Area is situated at an elevation between 188 m ASL and 190 m ASL. The bedrock geology reported for the Site is sedimentary rocks from the Animikie Group which includes wacke, shale, iron formation, limestone and minor volcanic rocks (OGS, 1991). Fine grained lacustrine deposits overlay the bedrock in this area (OGS, 1975) and as confirmed by DST during the borehole drilling program. The topography is fairly level, but there is a slight upward slope to the landscape towards the northwest from Lake

Superior. Lake Superior is the largest of the Great Lakes, providing significant resources since the Paleo period. The site is located on fairly level terrain that continues to slope upward slightly to the northwest.

4.3.2 Vegetation

The area has a high incidence of disturbance. In some areas on the property the stands are in poor condition with more than half the standing trees either dead or in severe decline. The property has been harvested in the past and has a history of disturbance. The northern part of the property, near the proposed entrance to the common element road system between lots 1 & 2, is dominated by a regenerating open shrub cover with a few remnant White Birch with top die back, Trembling Aspen and White Spruce trees.

The shrub layer is largely Bush Honeysuckle, Mountain Maple with a few scattered and sizeable Mountain Ash. Lack of mature canopy appears to be due to logging and significant blow down combined with mature Trembling Aspen decay and fall over. There are many large fallen Aspen trees on the ground throughout.

Near the centre of the property there is a small remnant mature Larch bog stand showing many of the characteristic species in a Tamarack (Black Spruce)/Speckled Alder/Labrador Tea V type (V23-as described in Field Guide to the Forest Ecosystem Classification for Northwestern Ontario). This is the only stand with large mature trees of any species that appears to be essentially undisturbed by human activity on the property. It measures approximately 80 m north to south and 130 m east-west. Labrador tea, Prickly Wild rose were notable shrub species, with bearberry among the groundcover species, and unidentified sphagnum moss species. Lots 1, 2 and 3 It is predominately a Trembling aspen (white Birch)/Mountain maple mixed wood. It has some of a V8 type species structure.

Some disturbance is evident from likely past logging or fuel wood cutting of undetermined age. The CN Rail ROW is bordered by a steep bank and ditch on the north side in this west sector which is dominated by a 15 m wide belt of dense Alder, some Willow and young Larch. Shrub species in this area include dense Saskatoon or Juneberry.

The Ontario Land Inventory has classified the area surrounding the property as having slight to moderately severe limitations in the production of wildlife. These limitations seem to stem from the poor nutrient and moisture conditions in the soil. The poor soil conditions limit vegetation growth that is needed to sustain adequate food and habitat sources for wildlife (Makela, 2012).

The vegetation and habitat types on the property have been largely disturbed by human activity and a high percentage is in a regeneration shrub land form. Only the small mature larch stand in the centre of the property appears to be essentially intact original forest cover. The beaver ponds and channel complex covering much of Lots 3, 4, 5 and part of Lot 6 has added some habitat diversity and some evolving vegetation types to the property.

The shoreline of the property is comprised of shallow water rock and sand mixture. Some parts of the shore appear to have been eroded, pushing vegetation inland. Dominant vegetation along the riparian area of the North Star Creek include common species such as red osier dogwood (*Cornus stolonifera*), speckled alder (*Alnus incana*), American mountain ash (*sorbus americana*) and willows (*Salix sp.*). The beaver complex located on the north side of the CN line has created a series of interconnected ponds extending from east to west. The ponds were formed in alder and willow swamp, bordered by mature white spruce and tamarack forest. Overall, the habitat is not particularly high quality or of diverse

types over significant areas for wildlife. Site photos can be found in Appendix E and in the Appendix of the 2014 WSP Fish Habitat Assessment.

4.3.3 Breeding Bird Survey

A total of 25 bird species were observed within the Study Area by WSP in the 2015 Shuniah Subdivision Breeding Bird Survey (WSP, Table 2). Of the 25 species, breeding evidence was noted as CONF for 4 of the 25, PROB for 15 species, POSS for 5 species, with 1 species, a male Black-throated Green warbler not exhibiting any territorial behaviour and not in breeding habitat, although it was close at ~ 200m to suitable mixed wood stands to the west and south of the observation location, and it is therefore noted as questionable breeding status.

None of the bird species identified within the Study Area are designated as SAR or SCC.

4.3.4 Incidental Wildlife

Although incidental wildlife sightings adjacent to the Study Area are documented by various organizations and wildlife spotting communities such as iNaturalist, information relating to incidental wildlife in the Study Area itself is limited. The area is home to one or more active beavers and a variety of birds.

4.4 Natural Heritage Features

4.4.1 Special Environmentally Significant Areas

Aside from the Intake Protection Zones, there are no special environmentally protected areas within the Study Area.

4.4.2 Wetlands

Not all development impacts are considered negative. The City of Thunder Bay Stormwater Management Plan evaluated, in detail, the locations and characteristics of wetlands in the region. No wetlands are located in or directly adjacent to the Study Area. However, the North Star Creek is the downstream end of the Catbert Creek tributary which contains a wetland. The natural function of the Creek has been disrupted by beaver dams and perched culvert installations crossing Lakeshore Drive and the CN ROW. In WSP's 2014 flood study of the property, installation of box culverts was recommended to improve drainage of the site and reduce flooding. Furthermore, in the Fish Habitat Assessment for the site, WSP recommends removal of the beavers and beaver dams. The alterations above will help restore the natural ecological function of the North Star Creek, including those related to upstream linked wetlands. The LRCA should be consulted prior to any alterations to the creek.

4.4.3 Woodlands

Woodlands of the Study Area do not meet the NDMNRF size, ecological functions, uncommon characteristics, or economic and social functional values criteria to be considered significant with the exception of the riparian cover of the North Star Creek. Potential impacts related to woodlands within the Study Area are included in Section 7.1.1.

4.4.4 Areas of Natural and Scientific Interest

No Life Science or Earth Science Areas of Natural or Scientific Interest exist within or directly adjacent to the Study Area (NHIC).

4.4.5 Species at Risk and Species at Risk Habitat

No SAR or SAR habitat are expected to be found within the Study Area. See Appendix D (Table D-1) for a complete screening that was conducted referencing all sources listed in Information Sources above.

4.4.6 Significant Wildlife Habitat

The vegetation and habitat types on the property have been largely disturbed by human activity and a high percentage is in a regeneration shrub land form. Only the small mature larch stand at Station #2 appears to be essentially intact original forest cover. The beaver ponds and channel complex covering much of Lots 3, 4, 5 and part of Lot 6 has added some habitat diversity and some evolving vegetation types to the property, providing suitable breeding habitat for bird species such as the observed Mallard and American Woodcock. Overall the habitat is not particularly high quality or of diverse types over significant areas for most mammals and birds. The habitat types are all relatively

small in area. The observed bird species were those that might be typically anticipated to breed in such an area.

Criteria for determining the significance of wildlife habitat follow the guidelines outlined in the NHRM (NDMNRF, 2010) and the Significant Wildlife Habitat Criteria Schedules for Ecoregion 3W (NDMNRF Draft, 2017), where applicable. Woodlands of the Study Area are not likely to provide candidate SWH for Landbird Migratory Stopover Areas. While candidate SWH is present, WSP noted that preliminary avian species richness and diversity data reported as a result of the 2015 Breeding Bird Survey does not meet criteria for SWH.

Preliminary design drawings indicate development will not affect and SWH.

Candidate SWH identified as a result of the background review and field investigations are listed below and are mapped within Figure 4. The majority of SWH relates to the 120m out from the shoreline. Potential impacts to wildlife habitat are discussed in Section 7.1.4 and Section 7.1.5, respectively.

- Colonial Waterbird Nesting Area – wildlife concentration area (NHIC)
- Waterfowl Stopover and Staging Area (Terrestrial)
- Waterfowl Stopover and Staging Area (Aquatic)
- Shorebird Migratory Stopover Area
- Sharp-tailed Grouse Lek
- Amphibian Breeding Habitat
- Snake Hibernaculum
- Freshwater Coastal Dunes
- Waterfowl Nesting Area

5.0 ECOLOGICAL FUNCTION

Natural features within and adjacent to the Study Area were assessed to determine their ecological functionality. The natural ecological function of the property itself has been made poor due to flooding associated with beaver damming and perched culverts. The shoreline on the Southern boundary of the property provides decent habitat for birds and aquatic species. Other lands adjacent to the Study Area consist of subdivision development (Alder Road Subdivision) to the east, Lakeshore Drive to the north, and Bare Point WTP to the west. Lakeshore Drive limits the movement of wildlife within the Study Area from north to south. The flooding of the riparian corridor of the North Star Creek make it difficult for land mammals and aquatic species to traverse the property and considerable regular anthropogenic disturbance minimize the likelihood of settlements.

The associated potential impacts of the development and proposed mitigation measures are discussed in Sections 7.0 and 8.0.

6.0 DESCRIPTION OF PROPOSED DEVELOPMENT

The subject property is located the westerly most part of the Municipality of Shuniah. The lands are bound by Lake Superior to the south, Alder Road to the east, Bare Point Road to the west and the Lakeshore Drive to the north. It is located almost adjacent to the eastern limits of the City of Thunder Bay.

Lots and blocks of the property will be developed for single detached residential dwellings. An application has been filed with the Municipality of Shuniah for the development. A 15-metre-wide private condominium roadway from Lakeshore Drive centred on the common lot line between Lots 1 and 2, Plan 55M-639 and shown as Units 1 and 2 on the draft plan. There exists a CNR right of way that bisects the property from east to west. This right of way is no longer in active service as the tracks have been removed.

The lots are intended to be developed with single detached dwellings and accessory structures. The lot sizes of the 11 lakefront properties will vary from a minimum of approximately 2200 to a maximum of approximately 14000 square metres. The lots fronting onto Lakeshore Drive are all approximately 1.5 hectares in area.

The proposed method of servicing for the development is by individual private septic systems and private individual wells and/or water drawn from Lake Superior. Electrical service will be provided to the proposed development from the existing electrical infrastructure on nearby Lakeshore Drive.

Access to the proposed lakefront lots will be achieved via a private condominium roadway between Lots 1 and 2 of Plan 55M-639 from Lakeshore Drive. This private roadway will be created as a common element as proposed in the condominium application. It will be owned and maintained by the condominium corporation.

Construction of the proposed development would include vegetation clearing and grading activities, as well as the placement of driveways, sidewalks, and underground servicing for stormwater, sanitary (TTU) and water. Clearing activities will include the removal of disturbed meadow vegetation identified within tablelands of the Study Area. While clearing activities may require the removal of select trees within the disturbed meadow and hedgerows, trees of the riparian corridor of North Star Creek will be retained and protected within staked environmental buffers. Other natural features (candidate SWH habitat) will also be retained and protected by integrating applicable setbacks in Detailed Design. The proposed development, associated impacts and mitigation measures are discussed further in Sections 7.0 and 8.0.

7.0 IMPACT IDENTIFICATION AND ANALYSIS

7.1 Direct Impacts

Direct impacts are those that are immediately evident as a result of the development. Typically, the adverse effects of direct impacts are most evident during the site preparation and construction phase of development. The potential direct impacts of the proposed development are:

- Tree and vegetation removal;
- Diversion of stormwater flows;
- Sedimentation of natural features; and
- Disturbance to wildlife and wildlife habitat

7.1.1 Tree and Vegetation Removal

While clearing activities will be required to remove select trees and ground vegetation, vegetation removals within the Study Area are expected to be minimal. In addition, vegetation clearings may also require the removal of select small trees and shrub cover. A tree inventory and subsequent arborist report will be required during detailed design to determine impacts to trees as a result of the proposed development. Mitigation for the removal of ground vegetation and select trees within the Study Area are provided in Section 8.3.

7.1.2 Diversion of Stormwater Flows

The construction of impermeable surfaces creates an excess flow of water during storms. This sudden addition of volume to a larger water system can be concerning. In addition, the runoff can catch and distribute pollutants that negatively affect the larger system. Refer to Section 8.4 below for discussion on the recommended process to complete a detailed SWM plan for the development.

7.1.3 Sedimentation of Natural Features

Construction activity, especially operations involving the handling of earthen material, dramatically increases the availability of sediment for erosion and transport by surface drainage. In order to mitigate the adverse environmental impacts caused by the release of sediment-laden runoff into receiving watercourses, measures for erosion and sediment control are required for construction sites. This is an extremely important component of projects that plays a large role in the protection of downstream watercourses and aquatic habitat. In addition, the potential impacts of changes to land use and land cover can include changes to surface water infiltration, runoff, streamflow regime, water quality, downstream channel erosion, and wildlife habitat. As a result, there is the potential for impacts to occur if construction best management practices are not implemented. Potential impacts may include, but are not limited to:

- Disturbance to or loss of vegetation due to the deposition of dust and/or overland mobilization of soil; and
- Disturbance and sedimentation to the North Star Creek, Significant Woodlands due to the mobilization of soil during excavations and construction activities.

Refer to Section 8.5 for mitigation measures related to erosion and sedimentation within the Study Area.

7.1.4 Disturbance to Wildlife and Wildlife Habitat

Wildlife within the Study Area has the potential to be temporarily impacted by construction activities within the proposed development area. Habitat for wildlife may be impacted by construction in the following ways:

- Displacement, injury, or death resulting from contact with heavy equipment during clearing and grading activities; and
- Disturbance to wildlife as a result of noise associated with construction activities, particularly during breeding periods.

No provincially listed Species at Risk were identified within or adjacent to the property.

7.1.5 Disturbance to Migratory Birds

As discussed in Section 4.3.3, the Woodlands have the potential to provide candidate SWH for Landbird Migratory Stopover Areas. WSP (2015) identified 4 of 25 bird species with CONF breeding status. While direct impacts to habitat are not anticipated as a result of the proposed development, the addition of condominium residential buildings in the Study Area may cause increased fatalities to migratory birds during spring and fall migration. Common building designs of urban landscapes impose many hazards to migratory birds. It is common for lakeside buildings to have large surface areas consisting of glass windows. Glare, reflections from nearby vegetation, and light pollution from glass surfaces are the primary cause of bird fatalities. Birds can become confused by optical illusions imposed by glass surfaces, which can lead to fatal collisions. Refer to Section 8.8 for mitigation measures for construction for the development area and bird strike analysis following the standard Bird-Friendly Development Guidelines.

7.2 INDIRECT IMPACTS

Indirect impacts are those that do not always manifest in the core area of development but in the lands adjacent to the development. Indirect impacts can begin in the construction phase; however, they can continue post-construction. Potential indirect impacts of the proposed development include anthropogenic disturbance and colonization of non-native and/or invasive species.

7.2.1 Anthropogenic Disturbance

Disturbance to local wildlife communities due to indirect impacts on the lands adjacent to the proposed development could result if left unmitigated. Noise, light, vibration and human presence are indirect impacts that can adversely influence the population size and breeding success of local wildlife. The proposed development is adjacent to existing highly urbanized areas, thus the impact of disturbance is expected to be minor. Mitigation measures related to wildlife are addressed in Section 8.6.

8.0 PROPOSED MITIGATION MEASURES

Mitigation involves the avoidance or minimization of developmental impacts through good design, construction practices and/or restoration and enhancement activities. The feasibility of mitigation options has been evaluated based on the natural features within and adjacent to the Study Area. The impact assessment of the proposed development plan highlighted four potential direct impacts, which include tree and vegetation removal, diversion of surface water flows, sedimentation of natural features, and disturbance to wildlife. A variety of mitigation techniques can be used to minimize or eliminate the above-mentioned impacts. These measures include enhancement of the buffer areas through a Bird-Friendly Design, Landscaping and Planting Plan, a Stormwater Management (SWM) Plan, Erosion and Sediment Control Plan and an Environmental Monitoring Plan. Each mitigation measure is introduced below. Detailed mitigation measures will be finalized in consultation with the MMAH, its commenting agencies, and Shuniah as part of the preliminary and Detailed Design of the proposed development.

8.1 Natural Heritage Buffers

The proposed development will be limited to the boundaries staked boundaries that will create buffers to natural heritage features and lands within 100 year flood elevations (post improvements, WSP). The staked areas will be illustrated in the Detailed Design stage of the development.

8.2 Beaver Dam Removal and Box Culvert Installation

Beavers and Beaver dams will be removed from the property and boxed culverts will be installed as recommended by WSP, improving the natural ecological function of the North Star Creek, while reducing the flood risk of the lands.

8.3 Landscaping and Planting Plan

The proposed development will require the removal of ground vegetation and select trees within the Study Area. As a result, a Landscaping and Planting Plan will be prepared during Detailed Design to offset proposed vegetation removal and propose enhancements to buffers of natural areas where possible. Compensation plantings of trees are generally based on the number of removals required to facilitate construction of the development. The preliminary proposed plantings for buffer enhancement areas include:

- A mix of native deciduous and coniferous trees and shrubs throughout the development and buffer area;
- Sodding within the residential portions of the development; and
- A native seed mix recommended by suppliers for enhancement within buffer areas

The following monitoring and maintenance measures may also be recommended for compensation planting areas:

- Removal of invasive tree and shrubs, where applicable;
- Watering and weeding of newly planted areas as required for the proper establishment of plantings; and
- Replacement of dead material from the previous year's planting

The following additional measures are recommended to protect trees within the Study Area during site preparation and construction activities:

- Prior to construction, trees to be preserved will be protected with approved tree protection hoarding. This hoarding shall be maintained for the duration of construction and shall not be

removed until authorized by the Consulting Arborist. Hoarding shall be constructed at the location as noted on the Tree Preservation and Removal Plan;

- The limits of protection hoarding shall be confirmed in the field by the Consulting Arborist and the Municipality's Public Works Officer or equivalent;
- Areas within the protection hoarding shall remain undisturbed for the duration of site construction and shall not be used for the storage of excavated fill, building materials, structures or equipment;
- Minor grading works will be permitted at the edge of the preservation zone as required to correct localized depressions adjacent to the new development, under the supervision of the Consulting Arborist;
- Where root systems of trees to be preserved are exposed or damaged by construction work, they shall be trimmed neatly by a qualified Arborist in accordance with acceptable arboriculture practice. The exposed area should be backfilled with appropriate material to prevent desiccation;
- No cables of any type shall be wrapped around or installed in trees to be preserved. No contaminants will be dumped or flushed where feeder roots of trees exist; and,
- Following construction, the limits of the Tree Protection Zone shall be inspected by the Consulting Arborist and the City. Remaining hazardous trees or limbs will be removed by a qualified Arborist as directed by the Consulting Arborist.

8.4 Stormwater Management

A Preliminary Stormwater Assessment is currently being completed followed by a design brief of a SWM system for the development. Post-development stormwater quality and quantity for the site should be that or equal or less than pre-development conditions. Initial discussion for the Lakeshore development include green technology options such as rain gardens.

8.5 Erosion and Sediment Control Plan

Construction activity, especially operations involving the handling of earthen material, dramatically increases the availability of sediment for erosion and transport by surface drainage. In order to mitigate the adverse environmental impacts caused by the release of sediment-laden runoff into receiving watercourses, measures for erosion and sediment control are required for construction sites. This is an extremely important component of land development that plays a large role in the protection of downstream watercourses and aquatic habitat. Control measures must be selected that are appropriate for the erosion potential of the site should be implemented and modified on a staged basis to reflect the site activities. Furthermore, their effectiveness decreases with sediment loading and therefore inspection and maintenance are required. In addition, an Erosion and Sediment Control Plan will be developed as part of Detailed Design for the proposed development. The plan may include, but is not limited to installation of geotextile silt fences, rock check dams, ditch checks, mud mats, temporary sediment ponds, designated topsoil stockpile areas, and cut-off swales and ditches to divert surface flows to the appropriate sediment control area; with provisions for re-vegetating the area as soon as construction is completed.

More specifically, the plan may include the following measures:

- Standard duty silt fencing (OPSD 219.110) and/or other equivalent erosion and sediment controls should be installed around the perimeter of the work area to demarcate the construction area and prevent erosion and sedimentation into adjacent habitats. Erosion and sediment control measures should be monitored regularly to ensure they are functioning properly and if issues are identified should be dealt with promptly;

- Stockpiling of excavated material should not occur outside the delineated work area. If stockpiling is to occur outside of this area, silt fencing should be used to contain any spoil piles to prevent sedimentation into adjacent areas. Further, stockpiling of excavated materials will not occur within 30 m of watercourses;
- A spill response plan should be developed and implemented as required; and
- The use of silt socks, dewatering ponds, etc. should be implemented to avoid sedimentation and erosion in adjacent areas as required. If dewatering requires more than 50,000 litres (L) of water to be pumped per day, appropriate permits must be obtained from the MECP before the dewatering.

8.6 Environmental Monitoring Plan

The Environmental Monitoring Plan (EMP) will be carried out, if required, through the duration of construction activities on-site to ensure that the erosion and sediment control measures operate effectively and to monitor the potential impact, if any, upon the natural environment. The duration of construction is defined as the period of time from the beginning of earthworks until the site is stabilized. Site stabilization is defined as the point in time when the roads have been paved, buildings have been built, lawns have been sodded and restoration plantings have been completed. Erosion and sediment control measures should be regularly monitored and are likely to require periodic cleaning (e.g., removal of accumulated silt), maintenance and/or re-construction. Inspections of the erosion and sediment controls on the construction site should be undertaken by a certified sediment and erosion control monitor. If damaged control measures are observed they should be repaired and/or replaced promptly. Site inspection staff and construction managers should consult the LRCA. The LRCA addresses streambank soil erosion concerns by providing general advice and recommendations to Member Municipalities in an effort to protect Municipal capital investments. The EMP may be implemented during active construction periods for the development with the following frequency:

- On a bi-weekly basis and/or;
- After every 10 mm or greater rainfall event

Protected vegetation areas may require periodic monitoring to ensure that they are not being impacted by the proposed development. Should impacts be observed, necessary steps will be taken to ensure that the impacted vegetation is either restored or replaced.

Environmental buffer zones, specifically 30 metre buffers from normal high-water mark for cold water creeks will be taken into account during preliminary and final designs and staked out in pre-construction activities according to the NDMNRF Natural Heritage Resource Manual. These detailed buffer plans will impact the overall Site Plan for location of services, driveway, parking, building envelopes, etc. Relevant planning policy schedules and maps for the Study Area are provided in Appendix A for reference.

8.7 Wildlife Impact Mitigation Plan

Strategies to mitigate impacts to general wildlife prior to and during construction are proposed. These may include (but are not limited to):

- Clearing vegetation outside the breeding bird season (April 1 to August 31). Should any clearing be required during the breeding bird season (April 1 to August 31), nest searches conducted by a qualified person must be completed 48 hours prior to clearing activities. If nests are found, work within approximately 10 m (depending on the associated bird species)

of the tree should cease until the young of year have fledged or until the nest is determined to be inactive. If no nests are present, clearing may occur. This is in accordance with the federal Migratory Birds Convention Act;

- Schedule vegetation clearing and grading activities to avoid disturbance to amphibians and other sensitive wildlife species, where possible;
- Where possible, maximize the distance of construction equipment used from the woodland/wetland edge to avoid disturbing wildlife;
- Limit the use of lighting, where possible. Avoid light effects entering the Significant Woodlands.
- Installation of wildlife exclusion fencing and escape routes, which direct wildlife away from the construction area and to more suitable habitat (e.g., Significant Woodlands);
- Visual monitoring for wildlife species and avoidance where encountered, if possible;
- If necessary, have a qualified biologist or qualified equivalent to monitor construction in the areas of potential wildlife habitat. If wildlife are found within the construction area they will be re-located to an area outside of the development into an area of appropriate habitat, as necessary;
- Construction crews working on site should be educated on local wildlife and take appropriate measures for avoiding wildlife; and
- Should an animal be injured or found injured during construction they should be transported to an appropriate wildlife rehabilitation center

8.8 Bird Strike Analysis

Building design should be considered in accordance with standard Bird-Friendly Development Guidelines, especially being that some of the residences will be along the shoreline of Lake Superior which may provide additional glare to homes. The guidelines recommend mitigation for building design to reduce fatal collisions by migrating birds. The presence of reflective glare and light pollution are the main factors contributing to increased bird fatalities within urban areas. The goal of design criteria within the guidelines is to recommend methods for reducing the presence of these two factors within new buildings. For the proposed development within the Study Area of Lakeshore Drive, the following mitigation strategies from the guideline should be considered in building design:

- The glass of exterior walls should reduce reflective glare by:
 - Installing exterior walls that create visual markers;
 - Install glass with fritted patterns or embedded abstract shapes;
 - Adhering translucent film or decals to the exterior of windows;
 - Using glass with paned framing; and
 - Installing decorative Grilles and Louvres to windows

Reflective glare from windows should be reduced by:

- Designing exterior glass walls at an angle;
- Installing internal screens behind exterior glass walls; and
- Including awnings, overhangs, and sun screens above windowed-walls.
- To reduce light pollution by:
 - Installing external decorative lighting that projects light downward; and
 - Modify building operations to reduce the use of lighting after hours of primary use

In addition, stewardship packages for residents and owner/operators of new buildings regarding bird-friendly operations should be distributed; packages should identify the significant and sensitivity of

the natural environment the Study Area. Specific design requirements meeting criteria of the guidelines will be chosen during the Detailed Design phase.

9.0 SUMMARY

The EIS was prepared for the proposed development located at Lakeshore Drive, legally described as Lots 1 and 2, Blocks 13 to 24, Registered Plan 55M-639, Pt Mining Loc 14, within the Township of MacGregor Township, of the Municipality of Shuniah, Thunder Bay District. The findings of the field investigations and secondary source reviews and past consultant reports and bird and vegetation surveys, are presented in the EIS. The EIS was required by recommendation in previous studies and as a requirement of the One-Window review service.

The Study Area is divided into community residential lands with the applicant applying for the shoreline blocks to be deemed shoreline residential properties. Woodlands exist on most of the property and within the riparian corridor of North Star Creek however only the woodlands within the riparian corridor of the creek should be considered significant. As a result of field investigations, candidate SWH for several species was identified along the shoreline. The proposed development will require the removal of ground vegetation and select trees within in portions of the lots and blocks. Based on the proposed development, potential impacts may include disturbance to candidate wildlife habitat (birds), erosion and sedimentation, as well as diversion of surface water flows to the North Star Creek. These impacts will be avoided or minimized by implementing the mitigation, restoration, and management measures described in this report. Impacts to migratory birds and migratory stopover SWH can be mitigated if bird friendly designs are incorporated into the building architecture.

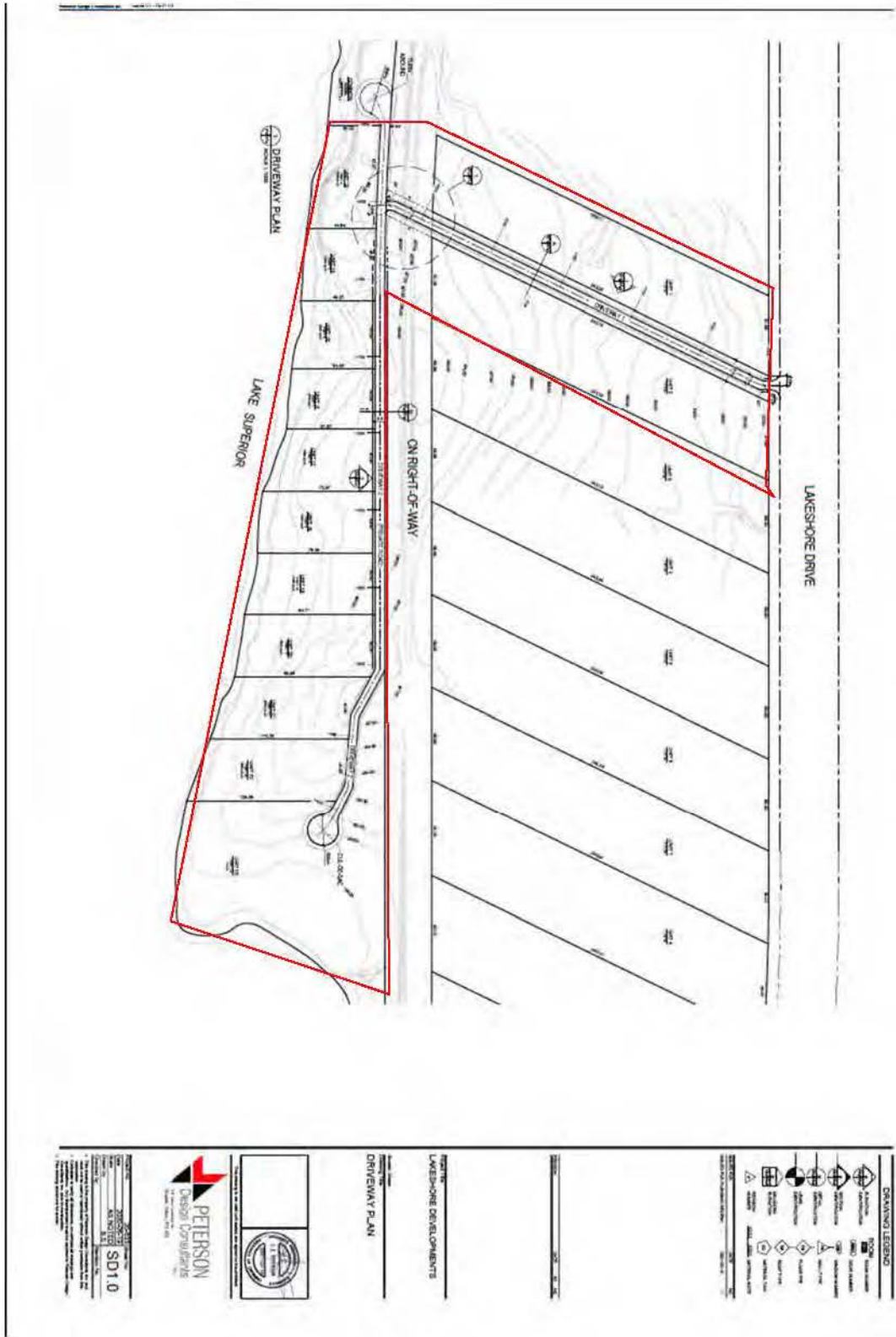
To ensure the maintenance of existing surface water run-off patterns, a SWM plan and/or a functional servicing report in accordance with Ontario stormwater planning, design, and engineering standards should be completed in the Detailed Design stage of the development. In addition, an Erosion and Sediment Control Plan and a dewatering plan will be developed at Detailed Design to ensure the natural features located in proximity to the proposed development are not adversely affected as a result of construction activities.

A tree inventory and arborist report, and subsequent Landscaping Plan and Planting Plan will be developed for the Property during Detailed Design. These reports will quantify the required tree removals, as well as determine compensation and mitigation to assist in preventing anthropogenic disturbance and the spread of non-native, invasive species.

Lastly, an Environmental Monitoring Plan is recommended during construction to monitor impacts on the natural environment and to ensure mitigation measures are implemented.

*Reference listing to be made available at a later date.

APPENDIX A - Concept Plans



APPENDIX B - Planning Policy Schedules

2.0 Wise Use and Management of Resources

Ontario's long-term prosperity, environmental health, and social well-being depend on conserving biodiversity, protecting the health of the Great Lakes, and protecting natural heritage, water, agricultural, mineral and cultural heritage and archaeological resources for their economic, environmental and social benefits.

Accordingly:

2.1 Natural Heritage

2.1.1 Natural features and areas shall be protected for the long term.

2.1.2 The diversity and connectivity of natural features in an area, and the long-term *ecological function* and biodiversity of *natural heritage systems*, should be maintained, restored or, where possible, improved, recognizing linkages between and among *natural heritage features and areas, surface water features and ground water features*.

2.1.3 *Natural heritage systems* shall be identified in Ecoregions 6E & 7E¹, recognizing that *natural heritage systems* will vary in size and form in *settlement areas, rural areas, and prime agricultural areas*.

2.1.4 *Development and site alteration* shall not be permitted in:

- a) *significant wetlands* in Ecoregions 5E, 6E and 7E¹; and
- b) *significant coastal wetlands*.

2.1.5 *Development and site alteration* shall not be permitted in:

- a) *significant wetlands* in the Canadian Shield north of Ecoregions 5E, 6E and 7E¹;
- b) *significant woodlands* in Ecoregions 6E and 7E (excluding islands in Lake Huron and the St. Marys River)¹;
- c) *significant valleylands* in Ecoregions 6E and 7E (excluding islands in Lake Huron and the St. Marys River)¹;
- d) *significant wildlife habitat*;
- e) *significant areas of natural and scientific interest*; and
- f) *coastal wetlands* in Ecoregions 5E, 6E and 7E¹ that are not subject to policy 2.1.4(b)

unless it has been demonstrated that there will be no *negative impacts* on the natural features or their *ecological functions*.

¹ Ecoregions 5E, 6E and 7E are shown on Figure 1.

- 2.1.6 *Development and site alteration shall not be permitted in fish habitat except in accordance with provincial and federal requirements.*
- 2.1.7 *Development and site alteration shall not be permitted in habitat of endangered species and threatened species, except in accordance with provincial and federal requirements.*
- 2.1.8 *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.*
- 2.1.9 Nothing in policy 2.1 is intended to limit the ability of *agricultural uses* to continue.

2.2 Water

- 2.2.1 Planning authorities shall protect, improve or restore the *quality and quantity of water* by:
 - a) using the *watershed* as the ecologically meaningful scale for integrated and long-term planning, which can be a foundation for considering cumulative impacts of development;
 - b) minimizing potential *negative impacts*, including cross-jurisdictional and cross-*watershed* impacts;
 - c) evaluating and preparing for the *impacts of a changing climate* to water resource systems at the watershed level;
 - d) 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*;
 - e) maintaining linkages and related functions among *ground water features, hydrologic functions, natural heritage features and areas, and surface water features* including shoreline areas;
 - f) implementing necessary restrictions on *development and site alteration* to:
 - 1. protect all municipal drinking water supplies and *designated vulnerable areas*; and
 - 2. protect, improve or restore *vulnerable surface and ground water, sensitive surface water features and sensitive ground water features, and their hydrologic functions*;
 - g) planning for efficient and sustainable use of water resources, through practices for water conservation and sustaining water quality;
 - h) ensuring consideration of environmental lake capacity, where applicable; and
 - i) ensuring stormwater management practices minimize stormwater volumes and contaminant loads, and maintain or increase the extent of vegetative and pervious surfaces.

features and sensitive ground water features such that these features and their related *hydrologic functions* will be protected, improved or restored.

Mitigative measures and/or alternative development approaches may be required in order to protect, improve or restore *sensitive surface water features, sensitive ground water features, and their hydrologic functions*.

3.0 Protecting Public Health and Safety

Ontario's long-term prosperity, environmental health and social well-being depend on reducing the potential for public cost or risk to Ontario's residents from natural or human-made hazards.

Development shall be directed away from areas of natural or human-made hazards where there is an unacceptable risk to public health or safety or of property damage, and not create new or aggravate existing hazards.

Mitigating potential risk to public health or safety or of property damage from natural hazards, including the risks that may be associated with the impacts of a changing climate, will require the Province, planning authorities, and conservation authorities to work together.

Accordingly:

3.1 Natural Hazards

3.1.1 Development shall generally be directed, in accordance with guidance developed by the Province (as amended from time to time), to areas outside of:

- a) *hazardous lands* adjacent to the shorelines of the *Great Lakes - St. Lawrence River System* and *large inland lakes* which are impacted by *flooding hazards, erosion hazards* and/or *dynamic beach hazards*;
- b) *hazardous lands* adjacent to *river, stream and small inland lake systems* which are impacted by *flooding hazards* and/or *erosion hazards*; and
- c) *hazardous sites*.

3.1.2 *Development* and *site alteration* shall not be permitted within:

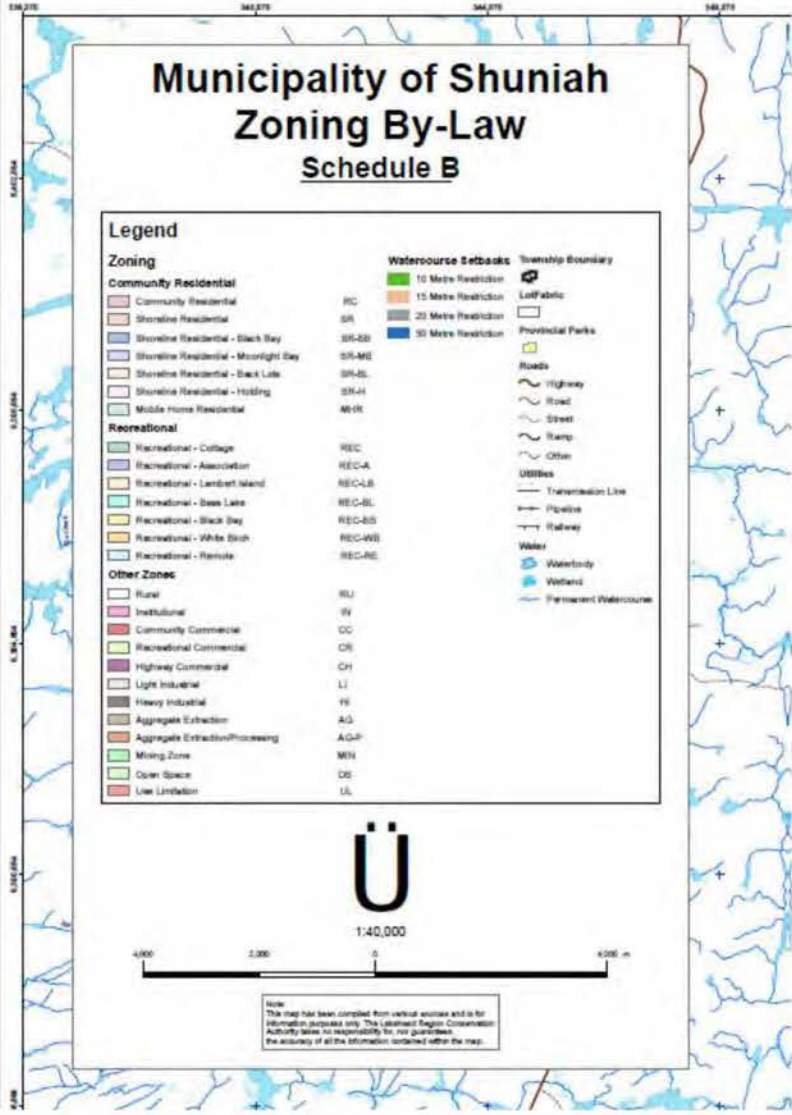
- a) *the dynamic beach hazard*;
- b) *defined portions of the flooding hazard along connecting channels* (the St. Marys, St. Clair, Detroit, Niagara and St. Lawrence Rivers);
- c) areas that would be rendered inaccessible to people and vehicles during times of *flooding hazards, erosion hazards* and/or *dynamic beach hazards*, unless it has been demonstrated that the site has safe access appropriate for the nature of the *development* and the natural hazard; and
- d) a *floodway* regardless of whether the area of inundation contains high points of land not subject to flooding.

3.1.3 Planning authorities shall prepare for the *impacts of a changing climate* that may increase the risk associated with natural hazards.

3.1.4 Despite policy 3.1.2, *development* and *site alteration* may be permitted in certain areas associated with the *flooding hazard* along *river, stream and small inland lake systems*:

- a) in those exceptional situations where a *Special Policy Area* has been approved. The designation of a *Special Policy Area*, and any change or modification to the official plan policies, land use designations or boundaries applying to *Special Policy Area* lands, must be approved by the Ministers of Municipal Affairs and Housing and Natural Resources and Forestry prior to the approval authority approving such changes or modifications; or
 - b) where the *development* is limited to uses which by their nature must locate within the *floodway*, including flood and/or erosion control works or minor additions or passive non-structural uses which do not affect flood flows.
- 3.1.5 *Development* shall not be permitted to locate in *hazardous lands* and *hazardous sites* where the use is:
- a) an *institutional use* including hospitals, long-term care homes, retirement homes, pre-schools, school nurseries, day cares and schools;
 - b) an *essential emergency service* such as that provided by fire, police and ambulance stations and electrical substations; or
 - c) uses associated with the disposal, manufacture, treatment or storage of *hazardous substances*.
- 3.1.6 Where the *two zone concept* for *flood plains* is applied, *development* and *site alteration* may be permitted in the *flood fringe*, subject to appropriate floodproofing to the *flooding hazard* elevation or another *flooding hazard* standard approved by the Minister of Natural Resources and Forestry.
- 3.1.7 Further to policy 3.1.6, and except as prohibited in policies 3.1.2 and 3.1.5, *development* and *site alteration* may be permitted in those portions of *hazardous lands* and *hazardous sites* where the effects and risk to public safety are minor, could be mitigated in accordance with provincial standards, and where all of the following are demonstrated and achieved:
- a) *development* and *site alteration* is carried out in accordance with *floodproofing standards*, *protection works standards*, and *access standards*;
 - b) vehicles and people have a way of safely entering and exiting the area during times of flooding, erosion and other emergencies;
 - c) new hazards are not created and existing hazards are not aggravated; and
 - d) no adverse environmental impacts will result.
- 3.1.8 *Development* shall generally be directed to areas outside of lands that are unsafe for *development* due to the presence of *hazardous forest types for wildland fire*.
- Development* may however be permitted in lands with *hazardous forest types for wildland fire* where the risk is mitigated in accordance with *wildland fire assessment and mitigation standards*.







THE CORPORATION OF THE MUNICIPALITY OF SHUNIAH

BY-LAW NO. 2965-17

A By-law to amend the Zoning By-law No. 2038-00 and to place a Holding Symbol on the property described as Part of Mining Location 14 HP Savigney's Survey, Township of MacGregor.

Recitals

- a) Council has received a request to amend the Zoning By-law in order to place a Holding symbol on the property that is subject of a Subdivision application.
- b) Council may, under Section 36 of the Planning Act pass a by-law under Section 34 of the Act using a holding symbol "H" in connection with any zone designation and specify the uses to which buildings, lands, or structures may be used prior to the removal of the holding symbol; and specify the uses to which buildings, lands, or structures may be used for at such time as the holding symbol is removed.
- c) A Public Meeting to consider this amendment was held in accordance with the regulations and provisions of the Planning Act.
- d) It is advisable and expedient to amend By-law No. 2038-00, the Zoning By-law of the Municipality of Shuniah in the manner as herein set forth.

NOW THEREFORE THE COUNCIL OF THE CORPORATION OF THE MUNICIPALITY OF SHUNIAH ENACTS AS FOLLOWS:

1. NOTWITHSTANDING the Zone designation shown on Schedule "B" of By-law 2038-00, the lands and premises as set out on Blocks 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 and 13 on Schedule "A" attached hereto and more particularly described as as follows,;

Part of Mining Location 14 HP Savigney's Survey, MacGregor Township, now being the Municipality of Shuniah.

ALL shown as "PROPERTY LOCATION" on "Schedule "A" to and forming part of this By-law.

Are hereby removed from the "RC" Community Residential Zone and are hereby designated as "RC-H" Community Residential – HOLDING Zone .

2. Section 7.4 Holding Zone- This Section is hereby amended by the addition of the following text at the end of the current section;
For the lands and premises being, Part of Mining Location 14 Savigney's Survey, MacGregor Township, now being the Municipality of Shuniah, MacGregor Township, now being the Municipality of Shuniah, in the District of Thunder Bay, being all Blocks of land as attached hereto as Schedule "A" that the following shall apply
3. The holding symbol shall not be removed from a Block as described in this By-law until such time as the following items have been completed:
 - a) The provision of an individual and suitable driveway crossing from the lot to its associated Block across the CN rail right of way capable of passage for emergency services vehicles be completed to the satisfaction of the Municipality of Shuniah.

- b) That an executed crossing agreement is issued by CN Rail providing for the crossing and building of a driveway across the CN rail right-of-way for the subject Block.
 - c) The completion of a hydro-geological report on the subject Block to the satisfaction of the Ministry of Environment and Climate Change.
 - d) The approval of a septic system to the satisfaction of the Thunder Bay District Health Unit for the subject Block.
 - e) The approval for an individual and suitable driveway crossing over the regulated area of Northstar Creek to the satisfaction of the Lakehead Region Conservation Authority for Blocks 3 to 12.
 - f) The provision of electrical and telephone services to the subject Block to satisfaction of Hydro One and TBayTel.
4. That all the terms as set out under Section 3 herein shall be completed to the satisfaction of the Municipality and may be completed on each individual Block independent and exclusive of any other Block described on Schedule "A".
5. Nothing in this By-law amends the permitted uses or setback requirements or other provisions of By-law 2038-00.
6. That Schedules "A" shall form an integral part of this by-law.
7. This By-law is in accordance with the Municipality of Shuniah Official Plan
8. This By-law shall come into force and take effect upon the final passing thereof, as subject to the provisions of the Planning Act.

READ A FIRST AND SECOND TIME THIS 8th DAY OF August, 2017


Mayor

Clerk

READ A THIRD AND FINAL TIME THIS 8th DAY OF August, 2017


Mayor

Clerk



The screenshot displays the website for the Lakeshore Region Council of Governments. At the top, there are two browser tabs: 'Mandate = Lakeshore Region Co...' and 'https://lakeshore.ca.com/about/mandate'. The navigation menu includes: REGULATIONS, FLOOD PROTECTION, WATERSHED, CONSERVATION, EVENTS & EDUCATION, STEWARDSHIP, and GREAT LAKES.

About

- Annual Reports
- News
- Newsletter
- Mandate**
- Board
- Budget and Financial Statements
- Volunteer
- Join Our Team
- Partners
- The Living Classroom Fund
- Contact
- Foundation
- Archives

Area of Jurisdiction

The LRCA Area of Jurisdiction includes: City of Thunder Bay, Municipalities of Neebing, Shuniah and Oliver Paipooonge and the Townships of Conmee, O'Connor, Gillies and Dorion. The Ministry of Natural Resources and Forestry is responsible for areas outside the jurisdiction of the Authority.

The map shows the geographical area of jurisdiction, including municipalities like Neebing, Thunder Bay, and Silver Island, and townships like Conmee, O'Connor, Gillies, and Dorion. It also shows the city of Thunder Bay and the municipalities of Neebing, Shuniah, and Oliver Paipooonge. The map is a satellite-style view with a dark overlay indicating the jurisdiction area.

Keyboard shortcuts: Map data ©2021 Google. Terms of Use. Report a map error.

11:33 AM
2021-10-04

Protecting_the_Lakehead_Watershed_brochure_Mar... 2 / 2 69% + | [Icons]

As photos courtesy of the Lakehead Region Conservation Authority in Environment Canada March 2012 State River Municipality of Owen Sound

Conserve Today... For A Better Tomorrow

Water in the Lakehead watershed flows south to Lake Superior.

PROTECTING THE LAKEHEAD WATERSHED

Remember that your actions and those of your neighbours affect the water quality in the watershed.

LAKE SUPERIOR FACTS

- It is the largest freshwater lake in the world by surface area and third largest lake by volume.
- It is the largest of the Great Lakes with a surface area of 82,100 square kilometres and a volume of 12,230 cubic kilometres.
- Over 1500 streams and rivers run into Lake Superior.
- It has a maximum depth of 426 metres and an average depth of 147 metres.
- It contains more water than all of the other Great Lakes combined.
- It has the longest hydraulic retention time, 101 years of all the Great Lakes (i.e. the time it would take for all the water to replace itself).
- All time high Lake Superior water levels were experienced in 1950, 1958 and 1988, while all time low levels were recorded in 1925, 1926 and 2007.

LOW WATER LEVELS IN THE WATERSHED

Many residents in the watershed obtain their water from private wells or lake intakes. In times of low water, residents can experience water shortages in their wells or have exposed water intake pipes due to lower than normal lake levels.

Even though Lake Superior contains 10% of the earth's surface water, low water levels can still have an impact. To minimize impacts from low water levels, the following actions can assist in preserving shoreline habitats while allowing continued enjoyment of all the recreational opportunities the lake provides:

- When low water levels expose rocks and woody debris in the nearshore, leave them in place as they provide

Legend

- State Watershed
- Red River
- Southwestern River
- Green River
- White River
- Wolfe River
- Wabigoon River
- Wabigoon Creek
- Wabigoon Lake
- Wabigoon Bay
- Wabigoon Point
- Wabigoon Narrows
- Wabigoon Falls
- Wabigoon Dam
- Wabigoon Bridge
- Wabigoon Road
- Wabigoon Station
- Wabigoon Mill
- Wabigoon Mill Dam
- Wabigoon Mill Pond
- Wabigoon Mill Race
- Wabigoon Mill Race Dam
- Wabigoon Mill Race Pond
- Wabigoon Mill Race Dam
- Wabigoon Mill Race Pond
- Wabigoon Mill Race Dam
- Wabigoon Mill Race Pond

LAKEHEAD WATERSHED FACTS

- Extends from the US border on the southwest to the Township of Dorion on the northeast, covering 11,526 square kilometres.
- Includes 13 provincially significant wetlands.
- Consists of 22 river systems that flow in a southerly direction towards Lake Superior including the following major tributaries: Wolf River, Mackenzie River, Current River, McVicar Creek, McIntyre River, Neading River, Kaministiquia River, Whitefish River, Sase River and Pine River.
- There are two municipal drinking water systems in the watershed and the remaining residents draw their water from private wells.
- The Thunder Bay Area of Concern was designated in 1987 under the Canada-United States Great Lakes Water Quality Agreement. The Remedial Action Plan committees are currently coordinating the effort to restore the environmental quality and beneficial uses in the area.

IMPORTANCE OF RIPARIAN ZONES

When it comes to large bodies of water like Lake Superior, our greatest potential impacts occur where we get our feet wet—in the nearshore areas like wetlands and riparian zones. Riparian zones are the narrow strips of land that border creeks, rivers or other bodies of water.

Although riparian areas may occupy only a small percentage of the area of the watershed, they represent an extremely important component of the overall landscape. In other words, riparian zones, if undisturbed, act as a buffer between land and water.

Riparian vegetation can offer many services to a watershed.

Hydrology Models

Annual Flow (SMR 2003) View Flows

Hourly Graphical Index Method (1991) View Flows

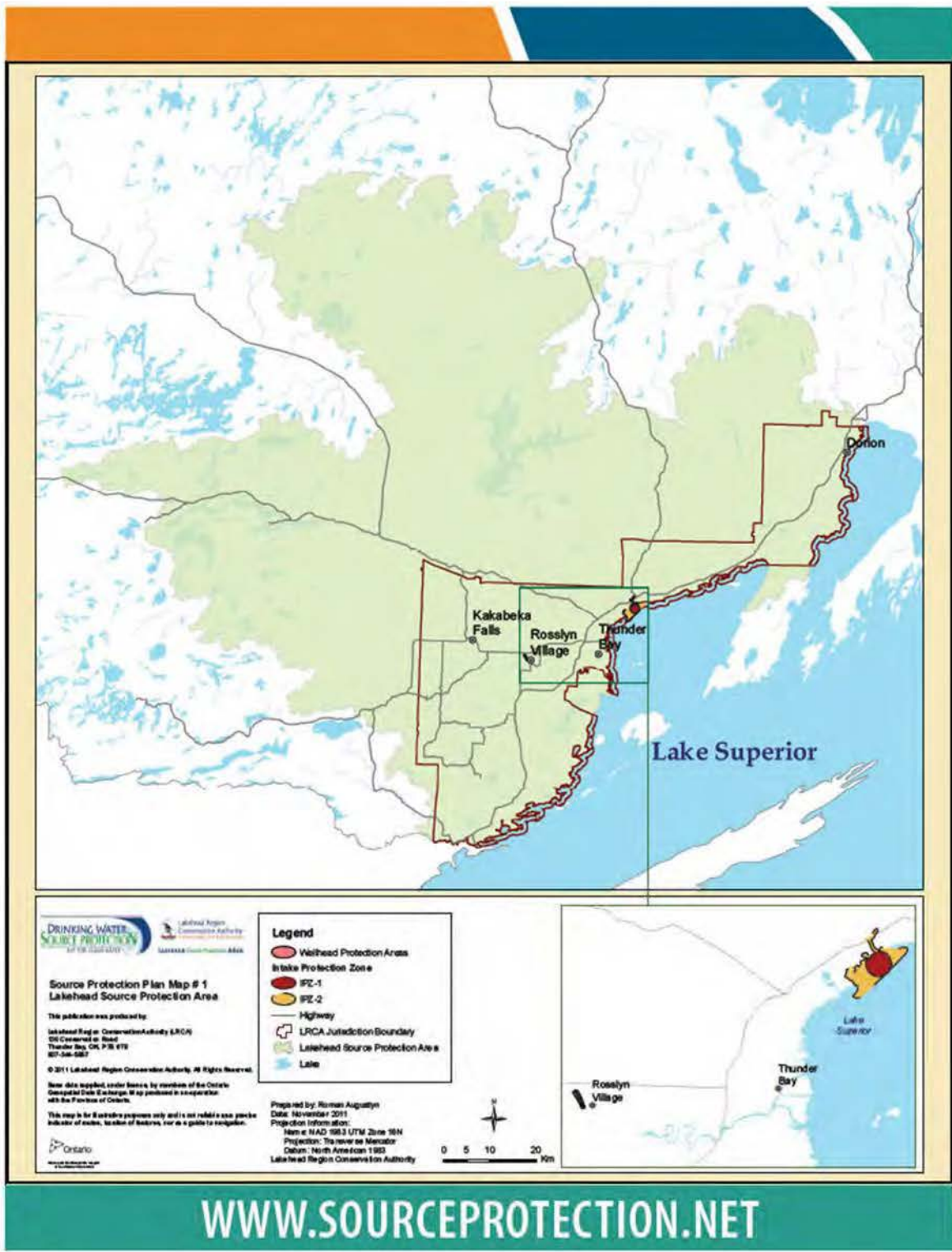
Hourly Regression Method (1991) View Flows

Hourly Index Flow Method with ENR (Shaw 1993) View Flows

Hourly Flow Multiple Regression (Shaw 1993) View Flows

Hydrology models note

Flow	Results (m ³ /s)
Qp	1,544,793
Qb	2,349,935
Q75	4,108,827
Q50	5,485,385
Q25	7,154,514
Q10	8,754,336



APPENDIX C - Breeding Bird Survey Excerpts

Table 2: Observed Breeding Bird Species and breeding evidence rank

Species	Breeding Evidence ranking	Behaviour	Point Count Station number observed-recorded from	GPS Coordinates NAD 83
Hermit Thrush	PROB	Territorial	Station 1	16 U 0341705 E 5372133 N
Red breasted Nuthatch	PROB	Territorial-several birds counter calling	Station 1	
Black-capped Chickadee	PROB	Territorial	Station 1	
American Crow	POSS	Flying over site-no stick nests observed	Station 1	



Shuniah Subdivision Breeding Birds Survey
WSP Reference No. 151-09241-00

Red-eyed Vireo	CONF	Flying with food in bill	Station 1	
Ruffed Grouse	PROB	Flew only very short distance when flushed	Station 2	16 U 0341618 E 5372039 N
American Redstart	POSS	Foraging	Station 2	
White-throated Sparrow	POSS	Skulking in shrub-typical habitat	Station 2	
Hairy Woodpecker	CONF	Visiting nest hole	Station 2	
Northern Flicker	PROB	feeding	Station 2	
Pileated Woodpecker	PROB	Suitable nest trees & old nest holes evident	Station 2	
Song Sparrow	PROB	Territorial singing	Station 2	
American Woodcock	POSS	Flushed from ground-suitable habitat-alder thicket	On walk through	
Red-winged Blackbird	PROB	"scolding" calls	Station 2	
Cedar Waxwing	POSS	Ubiquitous, some suitable habitat	Station 2	
Blue-headed Vireo	CONF	Carrying food in bill	Station 3	Moved S to CN ROW due to ponds - 16 U 0341502 E 537873 N
Mallard	CONF	Would not flush off pond-low calls	On walk through	
Kestrel	PROB	Repeat fly outs from same tree-very vocal	Station 3	
Common yellow-throat Warbler	PROB	Territorial	Station 3	
Magnolia Warbler	PROB	Territorial	Station 3	
Least Flycatcher	PROB	Feeding	Station 3	
Mourning Warbler	PROB	Territorial	Well # A143506	16 U 0341537 E 5372137 N
Chestnut-sided Warbler	PROB	Territorial –curious and stayed in constrained area	Well # A143505	16 U 0341337 E 5372002 N
Black-throated Green Warbler	?	Out of typical habitat	Well #A143505	
Yellow Warbler	PROB	Stayed in constrained area	Well #A143505	

Incidentally Observed Species

Red-breasted Merganser	CONF	With young-may have nested nearby	Lake Superior-S off Lot 11 shoreline
American White Pelican	Not likely	No nesting colonies near	Lake Superior-flying inshore from SE



Shuniah Subdivision Breeding Birds Survey
WSP Reference No. 151-09241-00

Herring Gull	Not Likely	No nesting colonies near	Several - just off shore of Lots
--------------	------------	--------------------------	----------------------------------

APPENDIX D - SAR and SCC Screening

Table D-1: Species at Risk Screening for Lakeshore Drive Subdivision, Shuniah, ON

Scientific Name	Common Name	SARA Status ¹	SRank ³	Information Source	Habitat Requirements ^{2,5}	Potential Habitat in the Study Area	Rationale for Potential to Occur
Mammals							
Myotis lucifugus	Little Brown Myotis	END	S4	Ecoregion 3W SWH Criteria Schedule, NHIC,NDMN RF	Uses caves, quarries, tunnels, hollow trees or buildings for roosting; winters in humid caves; maternity sites in dark warm areas such as attics and barns; feeds primarily in wetlands, forest edges	No	Highly sensitive to noise, light and physical disturbances. Proposed development is located directly adjacent to Bare Point WTP and Lakeshore Drive, both providing significant disturbances that minimize the likelihood of the presence of bat hibernation atmosphere and roosting
Myotis septentrionalis	Northern Myotis	END	S3	Ecoregion 3W SWH Criteria Schedule, NHIC,NDMN RF	Hibernates during winter in mines or caves; during summer males roost alone and females form maternity colonies of up to 60 adults; roosts in houses, manmade structures but prefers hollow trees or under loose bark; hunts within forests, below canopy	No	Highly sensitive to noise, light and physical disturbances. Proposed development is located directly adjacent to Bare Point WTP and Lakeshore Drive, both providing significant disturbances that minimize the likelihood of the presence of bat hibernation atmosphere and roosting.
Urocyon cinereoargenteus	Gray Fox	THR	S1	Ecoregion 3W SWH Criteria Schedule, NHIC,NDMN RF	Hardwood forests with a mix of fields and woods; swamps; wooded, brushy or rocky habitats; woodland farmland edge; old fields with thickets; dens in hollow log or tree; individual has numerous winter dens throughout its range which is > 40 ha.	No	The Study Area is bounded by elements that produce significant anthropogenic disturbance including the Alder subdivision, the Bare Point WTP, and Lakeshore Drive.
Puma concolor	Cougar	END	SU (unrankable)	Ecoregion 3W SWH Criteria Schedule, NHIC,NDMN RF	The Cougar lives in large, undisturbed forests or other natural areas where there is little human activity.	No	High disturbance area.
Canis lupus lycaon	Algonquin Wolf	THR	S4	Ecoregion 3W SWH Criteria Schedule, NHIC,NDMN RF	The Algonquin Wolf is not restricted to any specific habitat type but typically occurs in deciduous and mixed forest landscapes. It is found to be most prevalent in areas with abundant prey, such as Beaver, White-tailed	No	High disturbance area.

Environmental Impact Study - Lakeshore Drive, Shuniah, ON

					Deer and Moose along with low levels of human-caused mortality. Den sites are typically found in conifer dominated forests close to a permanent water source. Suitable soil to construct a den, such as sand, is necessary for excavation.		
Reptiles							
Emydoidea blandingii	Blanding Turtle	THR	S3	Ecoregion 3W SWH Criteria Schedule, NHIC,NDMN RF	Southern and Central Ontario	No	Study Area not located in Southern or Central Ontario
Chelydra serpentina	Snapping Turtle	SC	S4	Ecoregion 3W SWH Criteria Schedule, NHIC,NDMN RF	<p>Best nesting habitat for turtles is close to water and away from roads and other sites less prone to loss of eggs by predation from skunks, raccoons or other animals.</p> <p>For an area to function as a turtle-nesting area, it must provide sand and</p> <p>gravel that turtles are able to dig in and be located in an open and sunny area. Nesting areas on the sides of municipal or provincial road embankments and shoulders are not SWH. Sand and gravel beaches adjacent to undisturbed shallow weedy areas of</p>	Not Likely	Potential to occur on the shoreline and inland due to conditions of sand, etc., however high disturbance in area make suitable habitat unlikely for nesting.

Environmental Impact Study - Lakeshore Drive, Shuniah, ON

					marshes, lakes, and rivers are most likely used.		
Birds							
Pelecanus erythrorhynchos	American White Pelican	THR	S3	Ecoregion 3W SWH Criteria Schedule, NHIC,NDMN RF	American White Pelicans nest in groups on remote islands that are barren or sparsely treed located in lakes, reservoirs, or on large rivers. Remote islands offer eggs and chicks some protection from predators. Pelicans nest in slight depressions in the ground with sticks and vegetation piled up around them. Their diet is mainly fish.	No	No barren islands. Open water only.
Haliaeetus leucocephalus	Bald Eagle	SC		WSP		No	Breeding Bird Survey, 2015
Caprimulgus vociferus	Whip-poor-will	THR		WSP		No	Breeding Bird Survey, 2015
Riparia riparia	Bank Swallow	THR		Ecoregion 3W SWH Criteria Schedule, NHIC,NDMN RF	Any site or areas with exposed soil banks, undisturbed or naturally eroding that is not a licensed/permitted aggregate area. Does not include man-made structures (e.g. bridges or buildings) or recently (2 years) disturbed soil areas, such as berms, soil or aggregate stockpiles.	No	No exposed soil banks. Gradual slope to shoreline.
Aquila chrysaetos	Golden Eagle	END	S1	Ecoregion 3W SWH Criteria Schedule,	Important habitat includes forested ecosites within the vicinity of lakes and rivers that	No	No presence documented during bird studies for property. No incidental observations. High disturbance area.

Environmental Impact Study - Lakeshore Drive, Shuniah, ON

				NHIC,NDMN RF	receive large runs of salmonids. Undisturbed mature trees or snags distributed evenly along shorelines are important. Most individual trees used for perching are “super canopy” trees.		
Cirsium pitcheri	Pitcher’s Thistle	THR	S2	Ecoregion 3W SWH Criteria Schedule, NHIC,NDMN RF	The global population of the Pitcher’s thistle is limited to the Great Lakes basin of Canada and the United States. In Canada, the Pitcher’s thistle is found only in Ontario where it is believed to be restricted to 30 sites: three on the Lake Huron shoreline south of the Bruce Peninsula, two on the Lake Superior shoreline and the remainder in the Manitoulin region.	No	Study Area outside limits of existence.
Provincially Rare Vegetation Communities	American Dune Grass – Beach Pea – Sand Cherry Dune Grassland Type (S2), Basic Open Cliff Type (S3S4), Boreal Acidic Sandstone Open Cliff Type		S1-S4	iNaturalist, NatureServ, NHIC	Various...	No	None identified in source data. Habitat not suitable.

Environmental Impact Study - Lakeshore Drive, Shuniah, ON

(S2), Great Lakes Arctic-Alpine Basic Open Bedrock Shoreline Type (S3), Open Sandstone Cliff Type (S1)							
--	--	--	--	--	--	--	--

APPENDIX E - Site Photographs



Photo 1 – View from Lakeshore Drive near proposed entry to property facing south, south-east.



Photo 3: View facing southeast showing Mixed deciduous/coniferous forest.

Species: balsam Fir, White Birch



Photo 3: View facing northwest showing Mixed deciduous/coniferous forest.

Species: Tamarack, Northern White Cedar



Photo 4: View facing east showing Trembling Aspen dominant Forest.

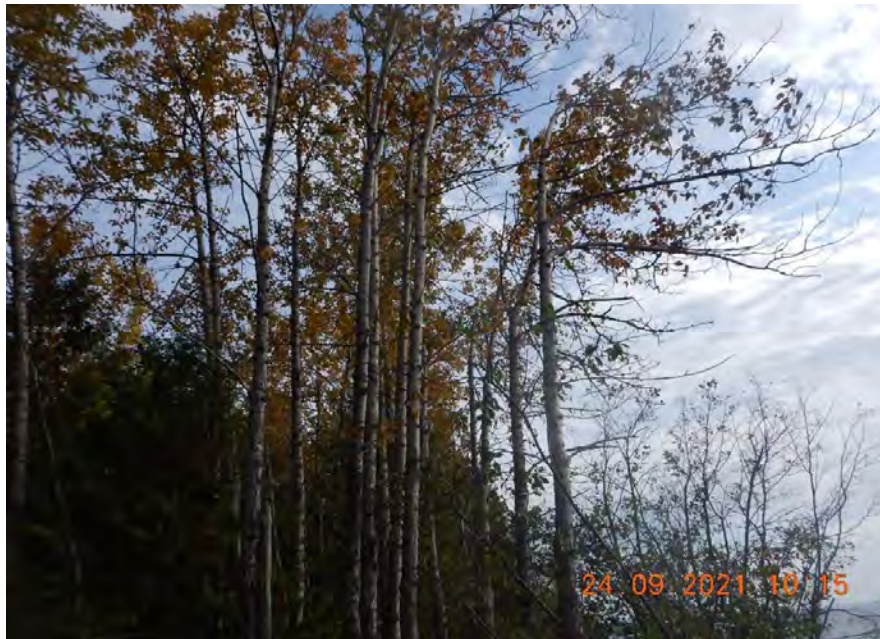


Photo 5: View facing east showing Trembling Aspen dominant Forest.



Photo 6: View facing north showing interconnected ponds.



Photo 7: View facing northwest showing Black Spruce tree growth at interconnected ponds.



Photo 8: View facing west showing open area by interconnected ponds.



Photo 9: View facing north showing grassland area by interconnected ponds.



Photo 10: View showing downed tree, evidence of beavers in the area



Photo 11: View showing recent activity of beavers near interconnected ponds

Attachment A - MMAH email



Brock Campbell <brockmackenzie38@gmail.com>

Ecoregion 3W vs 4W

Eady, Robert (MMAH) <[REDACTED]>

13 September 2021 at 13:33

To: Robert Zanette <[REDACTED].ca>

Cc: Richard Buset [REDACTED], Syl Menic [REDACTED], Brock Campbell [REDACTED], "Kosny, Victoria (MMAH)" <[REDACTED]>, "Grant, Megan (MMAH)" <[REDACTED]>, "Edmonds, Danica (MMAH)" <[REDACTED]>

Good Afternoon Mr. Zanette:

As per your email below, I have consulted with the appropriate Partner Ministry and offer the following ministerial comments:

“There is no ecoregion criteria schedule for 4w. The 3w ecoregion criteria schedule is the only one that has been developed in northwestern Ontario. Its use would be acceptable for the Shuniah property, but not mandatory. The proponent is free to develop their own criteria for evaluation of significance of wildlife habitat using methods accepted by the MNDMNRF as per the natural heritage reference manual.”

I hope this information is of some assistance.

Regards,

Robert Eady

Robert Eady, MCP

Planner | Ministry of Municipal Affairs and Housing

Municipal Services Office – North (Thunder Bay)

435 James St S. Suite 223

Thunder Bay, Ontario P7E 6S7

[REDACTED]

[REDACTED]

[REDACTED]

Attachment B - LRCA Email

Hi Robert,

On March 16, 2021, the Lakehead Source Protection Committee (SPC) discussed your development proposal with respect to the Intake Protection Zone (IPZ) for the Bare Point Water Treatment Facility. It was noted that the City of Thunder Bay had requested a detailed assessment on the potential impacts to the IPZ. SPC members noted that new and properly installed septic systems are not considered a significant threat to the IPZ as they are inspected and approved by the Thunder Bay District Health Unit. A requirement to install tertiary treatment systems for the proposed lots was discussed and deemed unwarranted by the SPC members; however, are encouraged on the lots. Further, it was noted that any proposed policy updates could be brought forward through the *Clean Water Act* Section 36 or Section 34 process. A workplan to update the Lakehead Source Protection and Assessment Report via a Section 36 Order will be submitted to the Ministry of Environment, Conservation and Parks by May 7, 2023. As such, no significant concerns were voiced at that time from the SPC members.

LRCA staff received the 'Impact Study for Individual On-Site Sewage Service on Portable Water Sources around the Proposed Property' by Qiuyan Yuan, dated February 15, 2021. Please be advised that the proposed lots need to have sufficient developable area (dwelling, septic system, replacement septic bed and well) outside the hazard area (i.e., shoreline slope and 100 year flood level on Lake Superior) plus a 15 metre setback allowance, and as such, a wave uprush study is required to establish the limit of the hazard area along Lake Superior. Please refer to our letter dated September 15, 2020. Note that the development is located within an area that may be subject to future policies of the Lakehead Source Protection Plan.

Thanks,

Gail

Gail Willis, C.E.T.

Watershed Manager and Provincial Offences Officer

130 Conservation Road PO Box 10427, Thunder Bay, ON P7B 6T8

Phone: (807) 344-5857 Ext. 223

www.lakeheadca.com