

Item 9.1.2

**Harbour East - Marine Drive Community Council
October 3, 2013**

TO: Chair and Members of Harbour East - Marine Drive Community Council

SUBMITTED BY: Original signed

Brad Anguish, Director, Community and Recreation Services

DATE: September 4, 2013

SUBJECT: Case 18556: Telecommunications Tower, Ship Harbour

ORIGIN

Application by Eastlink

LEGISLATIVE AUTHORITY

The Federal Radio Communication Act; HRM has no jurisdiction to regulate telecommunications towers, however, Industry Canada requires that proponents consult with local land use authorities to address reasonable and relevant concerns on any proposed antenna system.

RECOMMENDATION

It is recommended that Harbour East - Marine Drive Community Council:

1. Inform Industry Canada that they have no policy-based objection to the proposal by Eastlink to erect a new 76.2 metre (250 foot), self-supporting telecommunication tower and associated equipment cabinet located at Highway 7, Ship Harbour, Eastern Shore West, as shown on Attachment A of this report; and
2. Forward a copy of this report to Industry Canada for background purposes.

BACKGROUND

Eastlink has submitted an application to locate a new 76.2 metre (250 feet) free standing self-support telecommunications tower at Highway 7, Ship Harbour, in between Lake Charlotte and Sheet Harbour. The tower is proposed within a leased portion of the subject property, as shown on Attachments A and B.

The proposed tower:

- is proposed to be located on the north-eastern portion of the subject property, approximately 95 metres (312 feet) from Highway 7 within a small leased portion of the subject property, as shown on Attachments A, B and D;
- will be free standing, self-supporting and 76.2 metres (250 feet) in height;
- will be constructed of steel lattice;
- is not required by Transport Canada to have lighting and painting at this location;
- will be accessed from Highway 7 via a proposed gravel driveway (Attachment A); and
- will be enclosed with 6-8 foot high steel wire fencing at the base and be equipped with anti-climb apparatus.

Site Features and Surrounding Land Use

The subject property is:

- vacant and approximately 14.75 hectares (36.46 acres) in area;
- located within a rural area that is mostly undeveloped and used for forestry purposes;
- designated Mixed Use (MU) under the Municipal Planning Strategy (MPS) for Eastern Shore West (Map 1). The MU designation allows for a wide variety of uses and is designed to promote a rural way of living; and
- zoned MU (Mixed Use) Zone under the Land Use By-law (LUB) for Eastern Shore West (Map 2).

Municipal Process

The federal government has jurisdiction over all forms of radio communication (radio and television broadcasting, microwave communication, private radio transmissions, etc.). Provincial and Municipal governments have little jurisdiction to interfere with or impair communication facilities licensed under federal law. Industry Canada is the federal agency which licenses and regulates these facilities under the provisions of the *Telecommunications Act* (S.C. 1993, c.38).

However, the federal government has recognized that municipal authorities may have an interest in the location of antenna structures and this should be considered in the exercise of its authority. A consultation protocol has therefore been instituted and is followed by HRM. The protocol requires that an applicant notify the appropriate municipality of its intentions and the municipality is then given an opportunity to review the proposal and provide comment. If any concerns arise, the municipality is to provide written notice to the local office of Industry Canada. The submissions will be reviewed by Industry Canada, who will then determine whether or not a license is to be granted and/or upon what conditions such license is granted.

Telecommunication Tower Functional Plan

The Regional Municipal Planning Strategy (RMPS) acknowledges the federal policy encouraging municipal consultation when dealing with antenna structures and recognizes that the means of consultation is to be determined by the Municipality. Policy SU-31 of the Regional MPS directs HRM, in cooperation with Industry Canada and industry stakeholders, to prepare a functional plan to address community concerns regarding aesthetic and environmental impacts of telecommunication structures and facilities. Staff is currently working toward a proposed functional plan for Regional Council's consideration; however, until such time as a functional plan is adopted, the interim approach, as described above will be followed.

DISCUSSION

The MPS for Eastern Shore West does not contain specific guidance or policies regarding the siting of telecommunication towers. Instead, staff refers to the general evaluation criteria of the MPS (IM-10) when reviewing a telecommunication tower and these criteria provide relevant guidance to Council and staff. Of the criteria outlined in Attachment I, staff identified the following matters for specific discussion:

Visual Impact

The subject property is undeveloped and the tower is proposed in a largely forested area. The construction of the tower and proposed access does include the removal of trees and vegetation; however, the surrounding area will remain largely treed. The photo renderings (Attachments E and F) indicate that most of the tower will be visible from Highway 7, with the base obscured by vegetation. Given that area is predominantly used for resource management, the visual impact of the tower is not anticipated to be an issue.

Physical Proximity

As there is no formal policy in the MPS to guide the location of telecommunication towers to ensure adequate separation from adjacent properties, it is prudent to review past practices which indicate that incompatibility between uses can be addressed through screening or separation of uses. Minimum separation distances between towers and residential properties have often been established based on the measured height of a proposed tower. A separation distance based on tower height is founded on a precautionary principle to minimize risk in the unlikely event of structural failure. The base of the telecommunication tower is proposed to be set back approximately 430 metres (1412 feet) from the closest residential property, which is more than 5 times the height of the proposed 76.2 tower, thereby far exceeding the acceptable standard.

Health and Safety

Aside from land use issues, there are often concerns about potential health risks from the placement of telecommunication towers. Industry Canada requires that such systems are operated in accordance with the safety guidelines established by Health Canada in their document entitled *Limits of Human Exposure to Radiofrequency Electromagnetic fields in the Frequency Range from 3kHz to 300GHz*, commonly referred to as *Safety Code 6*. This document specifies the maximum recommended human exposure levels to radiofrequency energy from radiation emitting devices. The safety of wireless communication devices such as Wi-Fi equipment, cell

phones, smart phones and their infrastructures, including base stations, is an area of ongoing study for Health Canada.

Prior to receiving a licence from Industry Canada, the operator must submit the calculations on the intensity of the radiofrequency fields to ensure that this installation does not exceed the maximum levels contained in *Safety Code 6* requirements. Information submitted in support of this proposal indicates no concerns in relation to *Safety Code 6* (Attachment H).

Summary

Staff has reviewed this application and found it to be consistent with local plan policy. Staff recommends that Harbour East - Marine Drive Community Council inform Industry Canada that they have no policy-based objection to the proposal by Eastlink.

FINANCIAL IMPLICATIONS

The HRM costs associated with processing this planning application can be accommodated within the approved 2013/14 operating budget for C310 Planning & Applications.

COMMUNITY ENGAGEMENT

The community engagement process is consistent with the intent of the HRM Community Engagement Strategy. Due to the extremely rural nature of the application and the lack of residential neighbours, the level of community engagement was consultation achieved through a mailout. Information was posted on the HRM website and mailed to property owners within the notification area as shown on Map 2. Staff did not receive any comments about this application.

A Public Hearing is not included in the telecommunication application process; Community Council simply forwards a recommendation to Industry Canada.

The location of the proposed tower would potentially impact the following stakeholders: local residents, property owners, telecommunication companies, and Industry Canada.

ENVIRONMENTAL IMPLICATIONS

No implications have been identified.

ALTERNATIVES

Community Council may choose to:

1. Inform Industry Canada that they have no policy-based objection to the proposal by Eastlink. This is the recommended due to the reasons outlined in this report.
2. Inform Industry Canada that they have additional comments or recommendations with respect to the proposed tower. In this event, staff will notify the local office of Industry Canada of Council's recommendations.


3. Inform Industry Canada that they object to the proposal by Eastlink. Staff will notify the local office of Industry Canada of Council's recommendation.

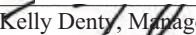
ATTACHMENTS

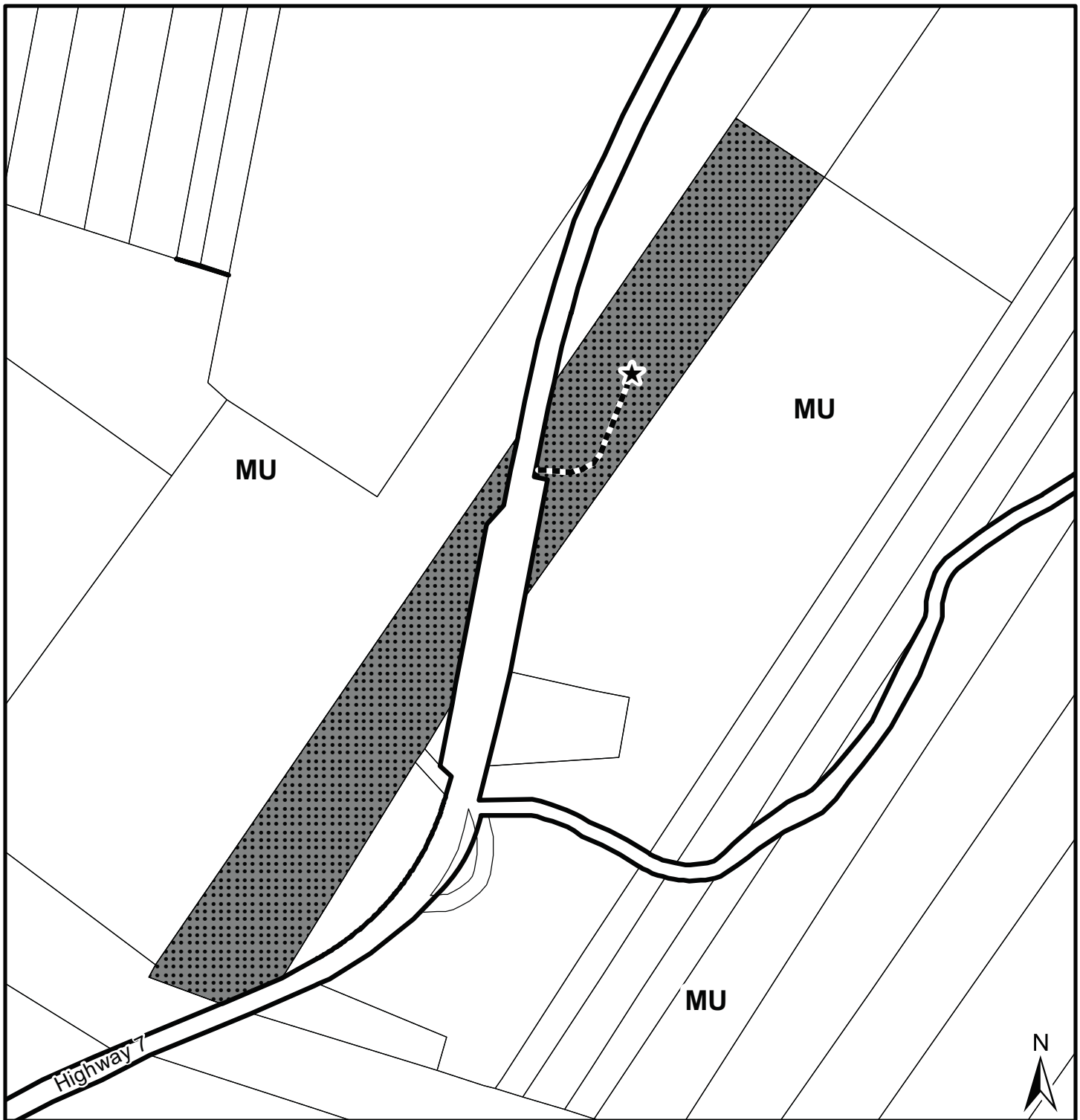
Map 1:	Generalized Future Land Use
Map 2:	Zoning and Notification
Attachment A	Site Plan
Attachment B	Compound Layout
Attachment C	Tower Elevation
Attachment D	Aerial Photo Plan View
Attachment E	Photo A Location
Attachment F	Photo B Location
Attachment G	Transport Canada - Aeronautical Obstruction Clearance Form
Attachment H	Safety Code Six Calculation
Attachment I	Excerpts from the Eastern Shore West MPS

A copy of this report can be obtained online at <http://www.halifax.ca/commcoun/cc.html> then choose the appropriate Community Council and meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

Report Prepared by: Jennifer Chapman, Planner 1, 490-3999

Original signed 

Report Approved by:  Kelly Denty, Manager, Planning Approvals 490-4800



Map 1 - Generalized Future Land Use

PID 40199150,
Ship Harbour

- Subject Area
- Proposed Road Access
- Approximate Location of Tower

Designation

MU Mixed Use

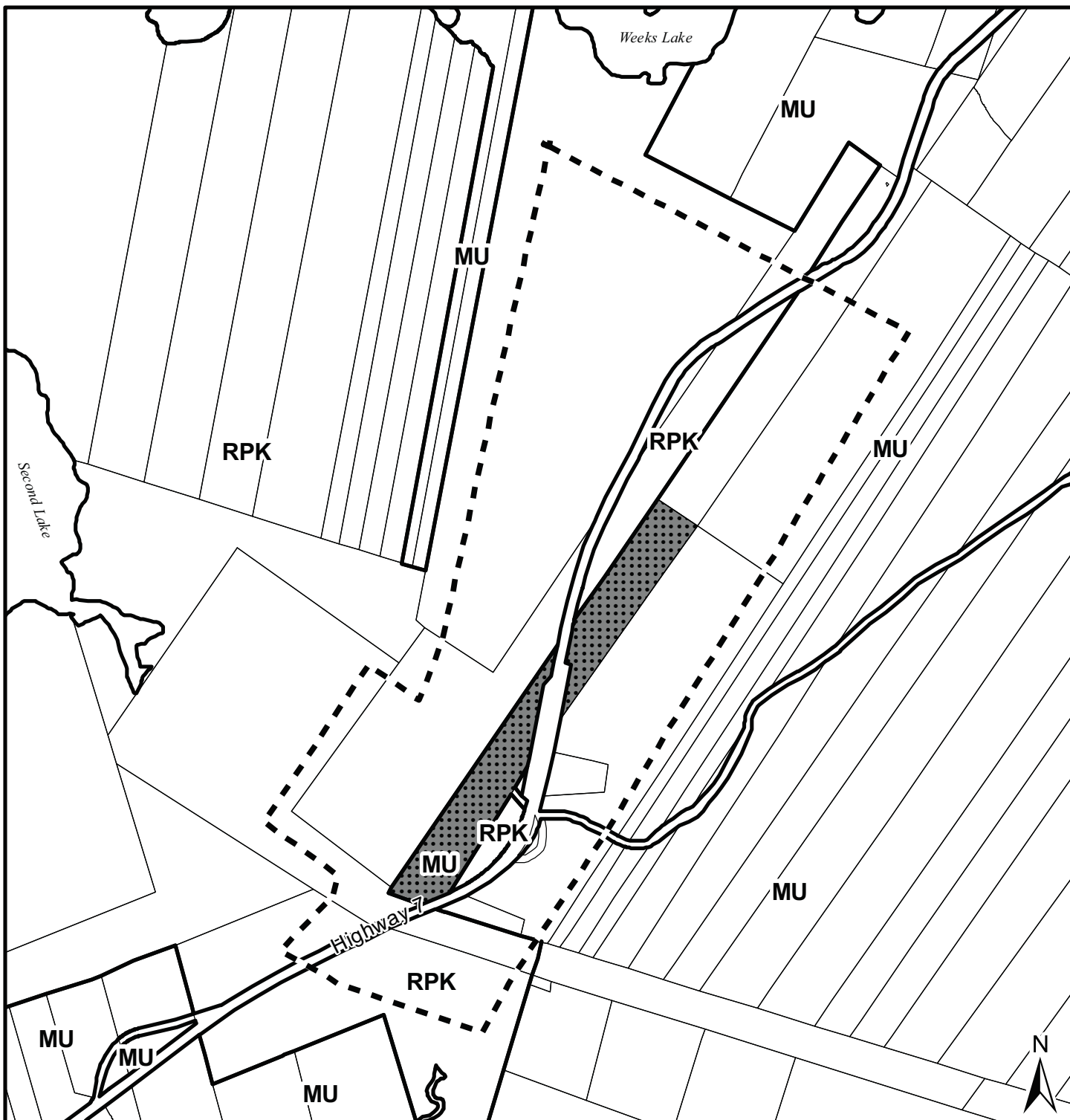
Eastern Shore West

HALIFAX
REGIONAL MUNICIPALITY
DEVELOPMENT APPROVALS

0 30 60 120 180 240
Meters


This map is an unofficial reproduction of a portion of the Generalized Future Land Use Map for the plan area indicated.


HRM does not guarantee the accuracy of any representation on this plan.



Map 2 - Zoning and Notification

PID 40199150,
Ship Harbour

 Subject Area

 Area of Notification

Eastern Shore West

Zone

MU Mixed Use
RPK Regional Park

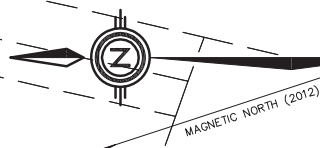
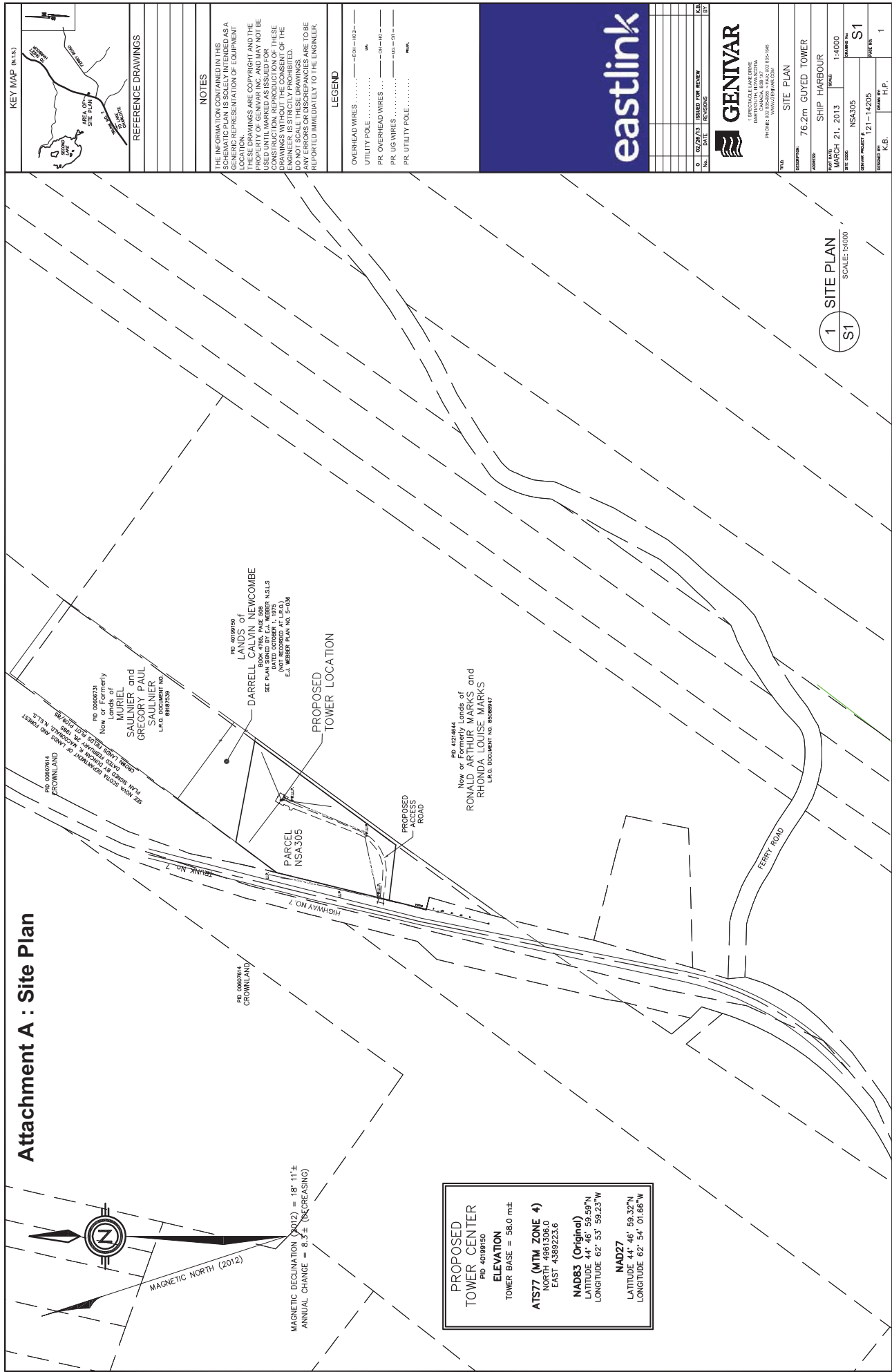
HALIFAX
REGIONAL MUNICIPALITY
DEVELOPMENT APPROVALS

0 65 130 260 390 520
Meters

This map is an unofficial reproduction of
a portion of the Zoning Map for the plan
area indicated.

HRM does not guarantee the accuracy
of any representation on this plan.

Attachment A : Site Plan



MAGNETIC DECLINATION (2012) = 18° 11' ±
ANNUAL CHANGE = 8.3 ± (DECREASING)

PROPOSED
TOWER CENTER
PID 40189150
ELEVATION
TOWER BASE = 59.0 m ±
AT577 (MTM ZONE 4)
NORTH 4961306.0
EAST 4389223.6
NAD83 (Original)
LATITUDE 44° 46' 59.59"N
LONGITUDE 62° 53' 59.23"W
NAD27
LATITUDE 44° 46' 59.32"N
LONGITUDE 62° 54' 01.66"W

PID 40199150
Lands of
DARRELL CALVIN NEWCOMBE
BOOK 4765, PAGE 508

PID 40199150

Lands of
CALVIN N

PARCEL
NSA303

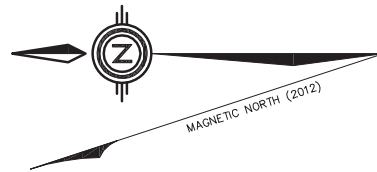
PROPOSED TOWER LOCATION
AREA = 19,150.3 SQ.M±
(4.73 ACRES±)

Now or Formerly Lands of
RONALD ARTHUR MARKS
and RHONDA LOUSIE MARKS

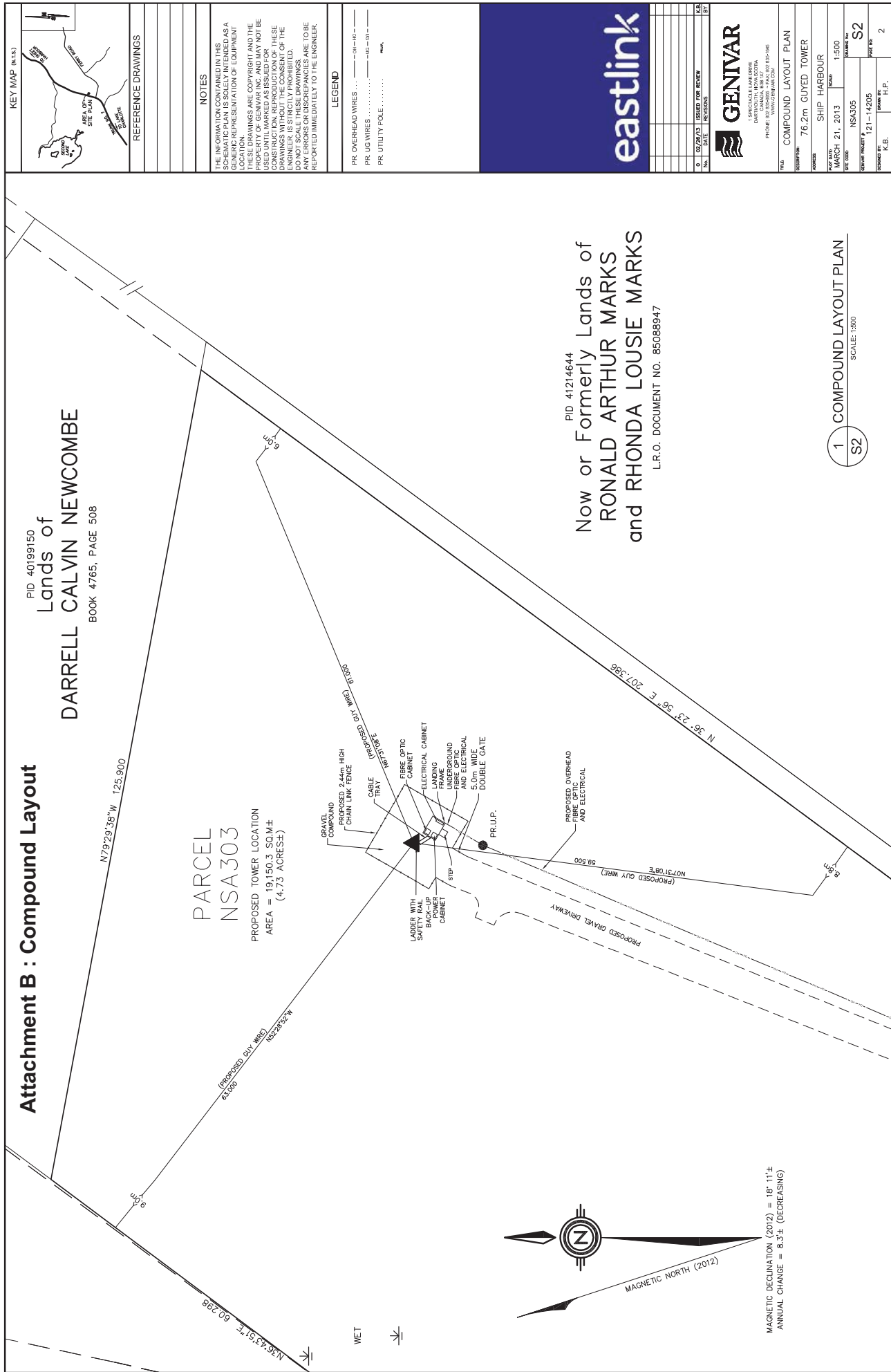
L.R.O. DOCUMENT NO. 85088947

1 COMPOUND LAYOUT PLAN
SCALE: 1:500

SCALE: 1:500



MAGNETIC DECLINATION (2012) = 18° 11' ±
ANNUAL CHANGE = 8.3' ± (DECREASING)

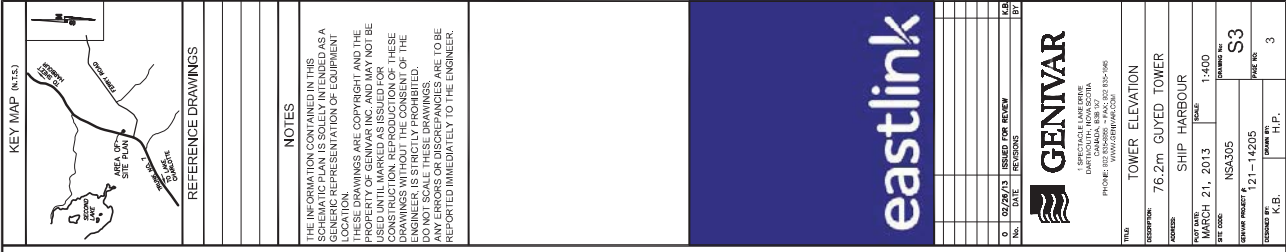


<u>T.O. TOWER</u>	<u>TOWER HEIGHT</u>
EL. 134.2m	EL. 76.2m



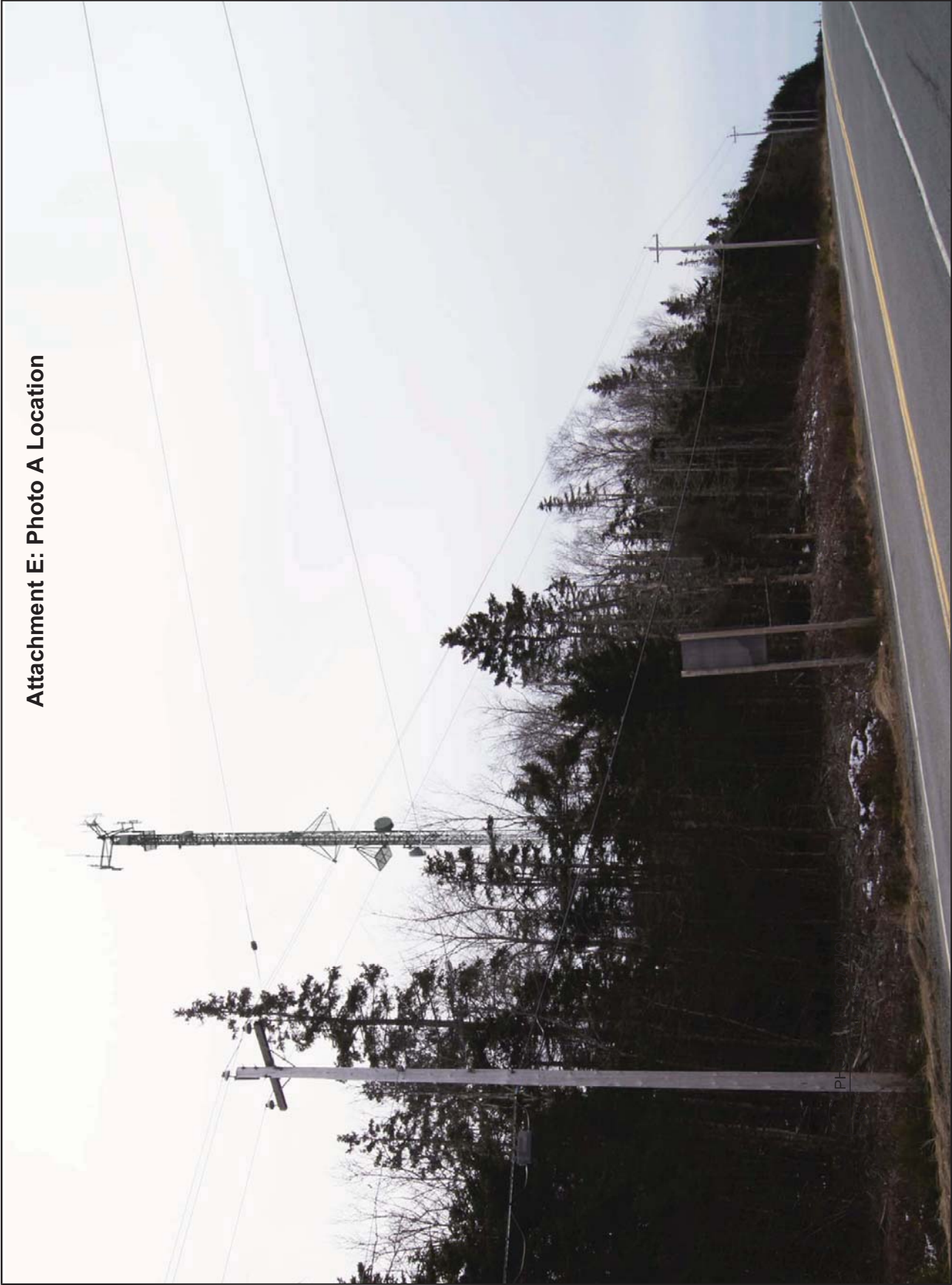
1 HSPA ANTENNA LAYOUT
S3
SCALE: 1:50

1 TOWER ELEVATION - LOOKING NORTH
SCALE: 1:400
S3

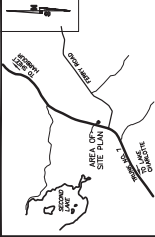




Attachment E: Photo A Location




KEY MAP (NTS)




REFERENCE DRAWINGS

NOTES

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0	12/26/13	ISSUED FOR REVIEW	K.B.
1	01/07/14	REVISED	1.0



1. SERVICE AREA OFFICE
DARTMOUTH, NOVA SCOTIA
PHONE: 902.850.5050 • FAX: 902.850.5056
WWW.GENTVAR.COM

PHOTO "A" LOCATION

76.2m GUYED TOWER

SHIP HARBOUR

DATE: MARCH 21, 2013

SCALE: NTS

REV: 002

NSA305

ISSUED BY: 121-14205

DESIGNED BY: K.B.

DRAWN BY: L.G.

5

S5

121-14205

5

Attachment F : Photo B Location

1 PHOTO "B" LOCATION
S6 SCALE: NTS



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TITLE		PHOTO "B" LOCATION	
DESCRIPTION		76.2m GUYED TOWER	
ADDRESS		SHIP HARBOUR	
PROJECT DATE		MARCH 21, 2013	
SHEET NO.		NSA305	
DRAWING NO.		S6	
DESIGNED BY		K.B.	
CHECKED BY		I.G.	
DATE		121-14205	
PROJECT #		S6	
DRAWN BY		6	

1 PHOTO "B" LOCATION

Attachment G: Transport Canada - Aeronautical Obstruction Clearance Form



Transport Canada
Transports Canada

APPENDIX C TO CAR 621.19 - ANNEXE C RAC 621.19

AERONAUTICAL OBSTRUCTION CLEARANCE FORM

FORMULAIRE D'AUTORISATION D'OBSTACLE AÉRIEN

TC File No./Ref. No. - TC: n° du dossier/No. de réf.

RECEIVED/REÇU

TO BE COMPLETED BY APPLICANT - À REMPLIR PAR LE REQUÉRANT

Operator's Name - Nom de l'opérateur Bregg Communications (EastLink)		
Operator's Address - Adresse de l'opérateur 6080 Young St		
Operator's Contact - Agent de liaison de l'opérateur Logan McDaid		
Contact's Telephone No. - N° de téléphone de l'aison 902-406-3616	Contact's FAX No. - N° de télécopieur de l'aison 902-407-3485	Contact's Email Address - Adresse électronique de l'aison logan.mcdaid@corp.eastlink.ca
Applicant's Name - Nom du requérant NSA305 - Ship Harbour, PID#40199150		Address - Adresse 6080 Young St
City - Ville Halifax	Province/Territory - Province/Territoire NS	Postal - Code - postal B3K5M3
Applicant's Telephone No. - N° de téléphone du requérant 902-406-3616	Applicant's FAX No. - N° de télécopieur du requérant 902-407-3485	Applicant's Email Address - Adresse électronique du requérant logan.mcdaid@corp.eastlink.ca

Nearest city / town to proposed facility Ville la plus proche de la structure proposée Ship Harbour	Geographic coordinates of structure - coordonnées géographiques de la structure	<input type="checkbox"/> NAD27 <input checked="" type="checkbox"/> NAD83 <input type="checkbox"/> WGS84
	46° 46' 57" N Latitude Latitude N 62° 54' 00" W Longitude Longitude O	

TOWERS / ANTENNAS TOURS / ANTENNES	BUILDING OR OTHER STRUCTURE BÂTIMENT OU AUTRE STRUCTURE	Feet - Pieds	Meters - Mètres
A	A		76.2
B	B		
C	C		62

List any tall adjacent buildings and structures which may shield the proposed structure (Attach sketch)
Faire une liste indiquant les structures et bâtiments avoisinants plus haut que le bâtiment projeté (Inclure un diagramme)

New struc. - Nouv. struc. <input checked="" type="checkbox"/> Yes Oui <input type="checkbox"/> No Non	Add. to exist. struc. incl. total hgt. - Ajout à un bâti. exis. incl. hauteur total	Proposed Construction - Date - de construction proposée April 2012
--	---	---

TYPE OF STRUCTURE (narrative description and function) - GENRE DE STRUCTURE (description narrative et fonction)
76.2m self supported tower, NSA305 - Ship Harbour, PID#40199150

Original signed _____ Date (Y/A-M-D/J) 2012-29-2

Signature (of applicant) (du requérant)

TRANSPORT CANADA USE ONLY - À L'USAGE DE TRANSPORTS CANADA

AERONAUTICAL ASSESSMENT - ÉVALUATION AÉRONAUTIQUE

Site acceptable - Emplacement acceptable <input checked="" type="checkbox"/> Yes Oui <input type="checkbox"/> No (if no, reason) Non (si non, pourquoi)
Lighting as per (TP382) required - Balisage lumineux tel que demandé au (TP382) <input type="checkbox"/> Yes Oui <input checked="" type="checkbox"/> No Non
Painting as per (TP382) required - Balisage peint tel que demandé au (TP382) <input type="checkbox"/> Yes Oui <input checked="" type="checkbox"/> No Non
Temporary lighting required - Nécessité d'un balisage lumineux temporaire <input type="checkbox"/> Yes Oui <input checked="" type="checkbox"/> No (if yes, type) Non (si oui, de quel genre)
Advise Transport Canada in writing 90 days before construction Avertir Transports Canada par écrit 90 jours avant la construction <input type="checkbox"/> when construction starts au commencement de la construction <input type="checkbox"/> and on completion et à la fin des travaux <input type="checkbox"/> Valid to Valable jusqu'à
Civil Aviation Inspector (as required) - Inspecteur Aviation Civile (si nécessaire) Comments - Commentaires

Original signed _____ Date (Y/A-M-D/J) 2012-03-06

Signature _____ Date

Regional Manager Aerodrome Safety
Gestionnaire Régional Sécurité des aéroports

Original signed _____ Date (Y/A-M-D/J) 2012-03-06

Attachment H: Safety Code Six Calculation



Halifax, April 15th 2013

Safety Code 6 Attestation for NSA305

Site General Information	
Site Name	NSA305 - EL - Ship Harbour
Community	Poplar Point
Latitude	44-46-59.59N
Longitude	62-53-59.23W
Tower Height	76.2 m
Tower Type	Guyed
Number of antennas	6

It is the responsibility of operators of radio-communication and broadcasting installations to ensure that their facilities comply with Health Canada's Safety Code 6 at all times, taking into consideration the local radio environment. Compliance with Safety Code 6 is an ongoing obligation. EastLink acknowledges this obligation and its entire site design and operational processes reflect this.

To ensure compliance at the design stage, EastLink uses engineering best practices. These practices include preventing any access in front of the antenna, installing antennas to ensure at least a minimal distance from any windows, designing the site in a way that the public cannot come close to the antenna and never installing antennas near balconies. At all time and anywhere the general public can have access, emissions from EastLink's wireless installations are well below the established limits.

Once the site is built, EastLink continuously monitors the power of its equipment remotely and ensures Safety Code 6 compliance even in the event that equipment is changed or added to the site. Upon request by Industry Canada or other public authorities, EastLink can engage a third Party firm to perform live measurements to demonstrate compliance with the Safety Code 6.

Original signed

Robert Seibel

Attachment I
Excerpts from the Eastern Shore West MPS

IM-10 In considering development agreements and amendments to the land use bylaw, in addition to all other criteria as set out in various policies of this Strategy, Council shall have appropriate regard to the following matters:

- (a) that the proposal is in conformity with the intent of this Strategy and with the requirements of all other municipal by-laws and regulations.
- (b) that the proposal is not premature or inappropriate by reason of:
 - (i) the financial capability of the Municipality to absorb any costs relating to the development;
 - (ii) the adequacy of central or on-site sewerage and water services;
 - (iii) the adequacy or proximity of school, recreation or other community facilities;
 - (iv) the adequacy of road networks leading or adjacent to or within the development; and
 - (v) the potential for damage to or for destruction of designated historic buildings and sites.
- (c) That controls are placed on the proposed development so as to reduce conflict with any adjacent or nearby land uses by reason of:
 - (i) type of use;
 - (ii) height, bulk and lot coverage of any proposed building;
 - (iii) traffic generation, access to and egress from the site, and parking;
 - (iv) open storage; and
 - (v) signs.
- (d) that the proposed site is suitable in terms of the steepness of grades, soil and geological conditions, locations of watercourses, marshes or bogs and susceptibility to flooding; and
- (e) any other relevant matter of planning concern.
- (f) Within any designation, where a holding zone has been established pursuant to “Infrastructure Charges - Policy IC-6”, Subdivision Approval shall be subject to the provisions of the Subdivision By-law respecting the maximum number of lots created per year, except in accordance with the development agreement provisions of the MGA and the “Infrastructure Charges” Policies of this MPS. (RC-Jul 2/02;E-Aug 17/02)**