



P.O. Box 1749
Halifax, Nova Scotia
B3J 3A5 Canada

Item No. 13.1.8
North West Community Council
February 8, 2016

TO: Chair and Members of North West Community Council

Original Signed

SUBMITTED BY:

Bob Bjerke, Chief Planner & Director, Planning and Development

DATE: January 25, 2016

SUBJECT: **Case 19992: Telecommunications Tower- 65 Beaver Bank Road, Lower Sackville**

ORIGIN

Application by SJSB Network Consulting Group Inc. on behalf of Bell Mobility.

LEGISLATIVE AUTHORITY

The Federal Radiocommunication Act; HRM has no jurisdiction to regulate telecommunication 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 North West Community Council:

1. Inform Industry Canada that they have no objection to the proposal by SJSB Network Consulting Group Inc. on behalf of Bell Mobility to erect a new 20 metre (65.64 ft.) monopole telecommunication tower at 65 Beaver Bank Road, Lower Sackville, as shown on Attachment A of this report;
2. Forward a copy of this report to Industry Canada for background purposes and recommend the fencing at the base of the tower be constructed of opaque materials to further reduce the visual impact.

BACKGROUND

SJSB Network Consulting Group Inc., on behalf of Bell Mobility, is proposing to locate a 20 meter (65.64 ft.) monopole telecommunication tower and associated equipment at 65 Beaver Bank Road, Sackville. The applicant's submission is provided in Attachments A to F of this report.

Location, Designation, Zoning and Surrounding Land Use

Location	65 Beaver Bank Road, Lower Sackville
Subject Property	Approximately 3,227 square metres (34,735 square feet) in size
Regional Designation	Urban Settlement under the Regional Plan
Community Designation	Community Commercial under the Sackville Municipal Planning Strategy (Map 1)
Zoning	Community Commercial (C-2) under the Sackville Land Use By-Law (Map 2)
Current Use(s)	Needs Convenience Store and associated parking lot
Surrounding Land Uses	<ul style="list-style-type: none">• to the north and north-east is Glendale Drive, the Kingdom Hall of Jehovah's Witnesses [(zoned C-2 (Community Commercial))] and a multiple unit dwelling [(zoned R-4 (Multiple Unit Dwelling));• to the east is Old Beaver Bank Road, the Sackville River and a wooded parcel of land owned by HRM [(zoned P-2 (Community Facility));• to the south is a Petro Canada gas station and a small commercial strip mall both zoned C-2 (Community Commercial); and• to the west is Beaver Bank Road, a single unit dwelling [(zoned R-1 (Single Unit Dwelling))] and the First Sackville Presbyterian Church (zoned P-2, Community Facility).

Proposal

The proposed tower:

- is intended to be located approximately 130 meters (426.50 ft.) from the nearest residential property;
- will be free standing, self-supporting and 20 metres (65.64 ft.) in height measured from ground level (Attachment C);
- is not required by Transport Canada to have lighting and painting at this location (Attachment D); and
- will be located at the rear back corner of the subject property and be enclosed by an opaque fence with a locked gate preventing public access to the site and equipment.

Municipal Process

The federal government has jurisdiction over all forms of *Radiocommunication* (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, under the *Department of Industry Act*, is the federal agency which licenses and regulates these facilities under the provisions of the *Radiocommunication Act* (R.S.C. 1985, c.R-2) and the *Radiocommunication Regulations* with due regard to the *Telecommunications Act*.

The federal government, however, 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 policy has therefore been instituted and this process is followed by HRM. The policy 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. In HRM, staff review and public consultation is undertaken prior to Community Council review. Community Council then provides written comment to the local office of Industry Canada.

Regional Plan Direction

The Regional Municipal Planning Strategy (RMPS) acknowledges the federal policy encouraging municipal consultation when dealing with antenna towers and associated structures and recognizes that the means of consultation is to be determined by the Municipality. Policy SU-26 of the RMPS directs HRM, in cooperation with Industry Canada and industry stakeholders, to create an effective consultation approach for the siting of telecommunication towers and antenna.

The Municipality is currently working to develop a new telecommunication tower protocol; however, until a new protocol is adopted by Regional Council, the process described above will be followed. Staff have reviewed the application against the draft protocol, and determined the placement of the monopole to be reasonable consistent with the draft.

Sackville Municipal Planning Strategy

The Sackville MPS does not contain policy that directly relates to the siting and design of telecommunication equipment in the Sackville area, nor does it provide more general policy directing the form and siting of utility stations as a whole. Therefore, when considering the siting of a telecommunication tower, staff and Council should give consider general planning matters such as land use compatibility, placement, architectural and site design.

Alternative Sites and Opportunities

As noted above, the federal government, through Industry Canada has jurisdiction over the location of telecommunication towers; however, they seek comment from the municipality before making their determination. Industry Canada's policy allows telecommunication proposals which are more minor in nature to be exempt from consultation with the municipality. These exemptions include such installations as co-locating on existing towers and locating on top of tall buildings. The exemptions are outlined in Industry Canada's Client Procedures Circular (CPC-2-0-03 Volume 4).

HRM has requested that the applicant demonstrate that the less intensive options described above have been investigated. In this case, the applicant has completed an investigation and determined there are no viable existing structures in the area that would be suitable for the operations of Bell's network equipment. Bell has advised the surrounding hilly terrain blocks coverage from the other towers in the area, therefore, eliminating the opportunity for co-location of equipment.

DISCUSSION

Physical Proximity

Although the MPS does not 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. Recommended minimum separation distances between towers and residential properties have often been established based on the measured height of a proposed tower. A separation distance which is equal to the tower height is based on a precautionary principle to minimize risk in the unlikely event of structural failure. In the event of tower collapse or ice falling from the tower, the separation distances between the residential properties and the tower are adequate as they exceed the height of the tower in all instances. As proposed, the subject tower appears to pose no risk to adjacent residential properties, as it is located approximately 130 metres (426.5 feet) from the nearest property boundary which is 6 times the tower height.

Visual Impact and the Sackville River Flood Plain

From a community perspective, it is anticipated the proposed tower will generate a visual impact. The tower will be visible from the surrounding area (i.e. Beaver Bank Road, Glendale Drive and Old Beaver Bank Road) similar to other established towers and power line structures. As a means of further reducing visual impact at street level, an opaque fence will be constructed at the base of the tower.

It should be noted that Bell Mobility consulted with the Sackville River Association to determine whether the proposed site would fall within the floodplain of the river. After using flood plain mapping provided by the Association, it was determined that the proposed location is a sufficient distance from the river, and not located in an area prone to flooding.

Health and Safety

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 3 kHz 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 F).

Conclusion

Staff has reviewed the proposal and advise that the physical separation of the proposed tower from residential development and the Sackville River is sufficient. The location of the tower on a commercial site is not anticipated to have any land use compatibility issues with the surrounding area. Therefore, staff recommends that North West Community Council inform Industry Canada that they have no objection to the proposal by Bell Mobility.

FINANCIAL IMPLICATIONS

The HRM costs associated with processing this planning application can be accommodated within the 2015/16 operating budget for C310 Planning & Applications.

COMMUNITY ENGAGEMENT

The community engagement process is consistent with the intent of the HRM Community Engagement Strategy. The level of community engagement was consultation, achieved through a mailout in September 2015. Notices were posted on the HRM website, and mailed to property owners within the notification area as shown on Map 2. No comments were received.

A public hearing is not included in the telecommunication tower 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 and property owners.

ENVIRONMENTAL IMPLICATIONS

No environmental implications have been identified.

ALTERNATIVES

North West Community Council may choose to 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.

ATTACHMENTS

Map 1	Generalized Future Land Use
Map 2	Zoning and Notification
Attachment A	Site Plan & Aerial Photo
Attachment B	Rendering Tower Elevation
Attachment C	Aeronautical Assessment Form
Attachment D	NAV Canada and Transportation Approval
Attachment E	Safety Code 6 Attestation

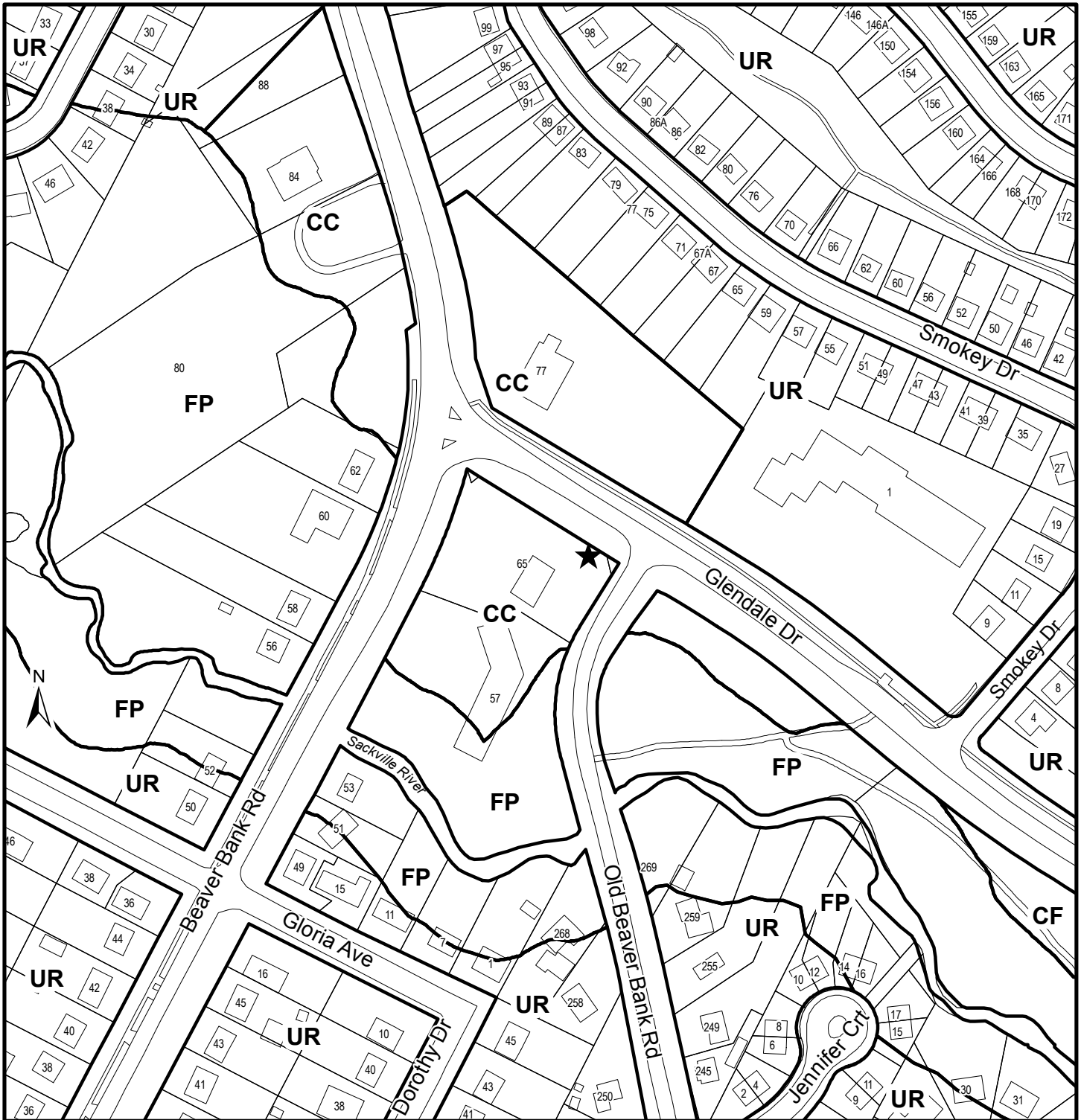
A copy of this report can be obtained online at <http://www.halifax.ca/commcoun/index.php> then choose the appropriate Community Council and meeting date, or by contacting the Office of the Municipal Clerk at 902.490.4210, or Fax 902.490.4208.

Report Prepared by: Stephanie A. Norman, Planner, Development Approvals, 902.490.4843

Original Signed

Report Approved by:

Kelly Denty, Manager, Development Approvals, 902.490.4800



Map 1 - Generalized Future Land Use

HALIFAX

65 Beaver Bank Road

★ Approximate Location of Tower

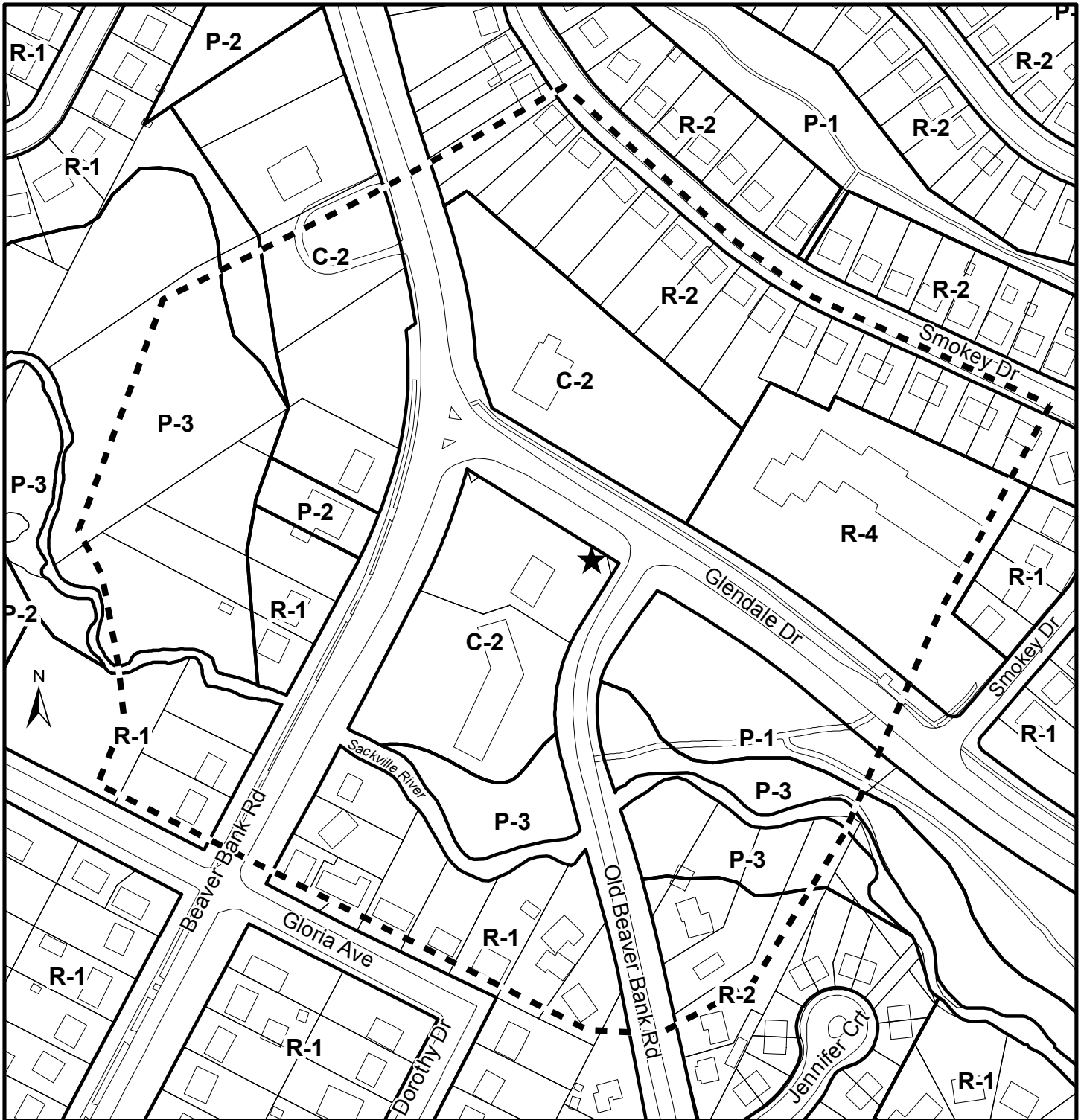
- Designations**
- UR Urban Residential
 - CC Community Commercial
 - CF Community Facility
 - FP Floodplain



Sackville
Plan Area

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

The accuracy of any representation on this plan is not guaranteed.



Map 2 - Zoning and Notification

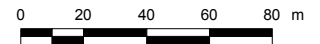
HALIFAX

65 Beaver Bank Road

★ Approximate Tower Location

⋯ Area of Notification

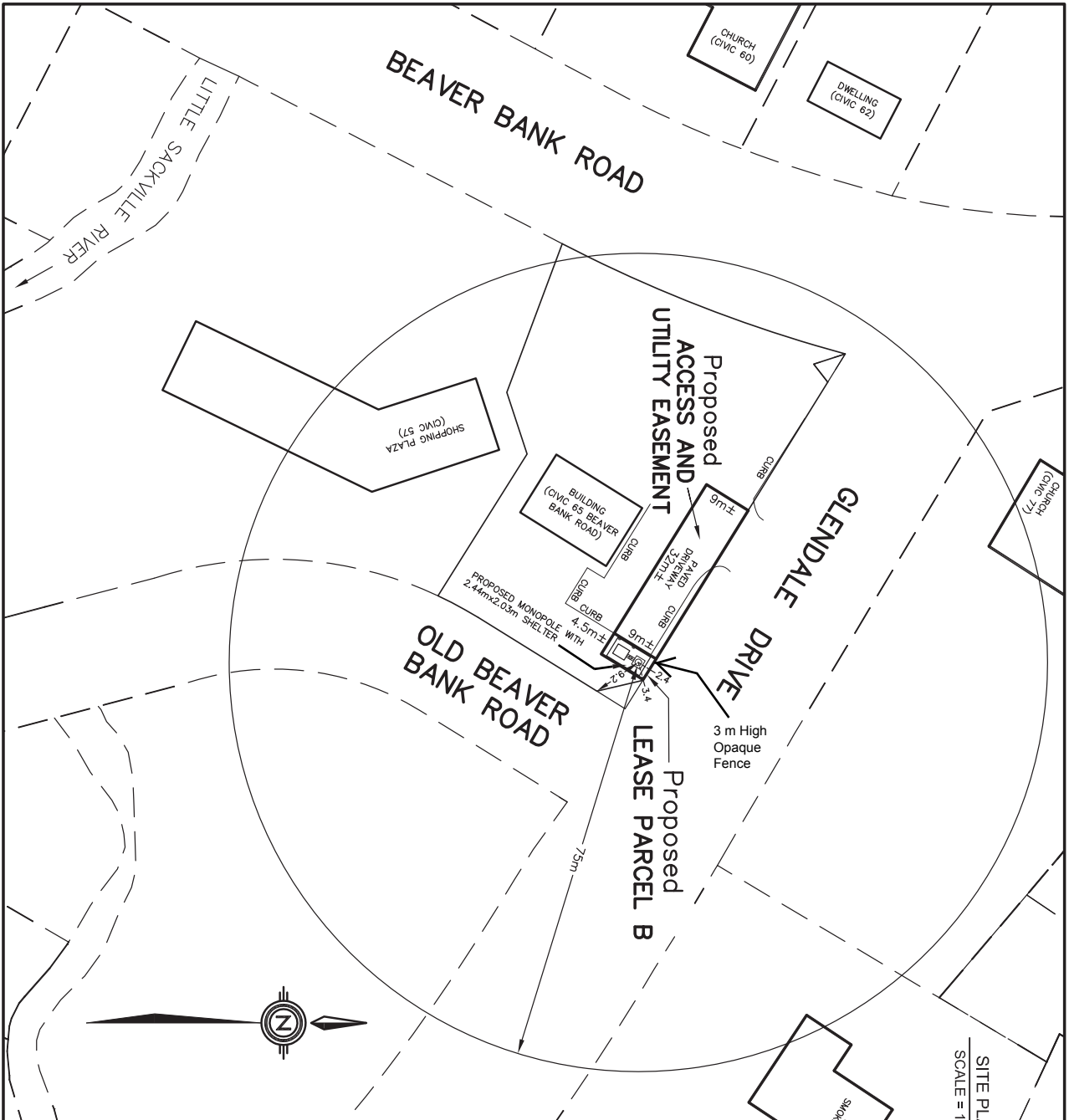
- Zones**
- R-1 Single Unit Dwelling
 - R-2 Two Unit Dwelling
 - R-4 Multiple Unit Dwelling
 - C-2 Community Commercial
 - P-1 Open Space
 - P-2 Community Facility
 - P-3 Floodplain



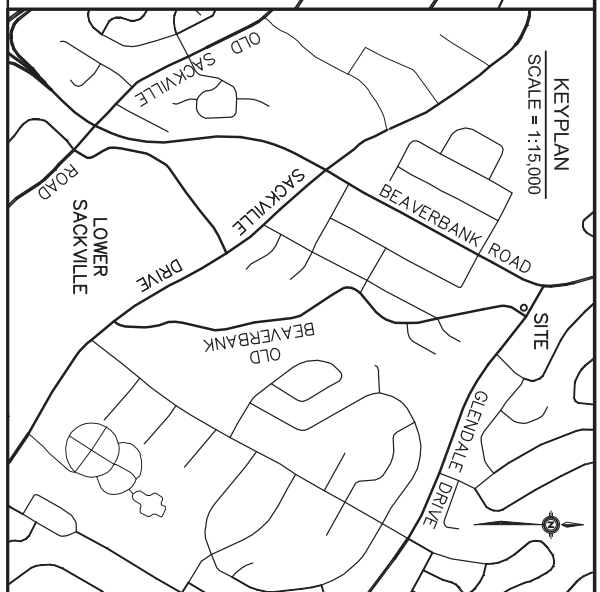
This map is an unofficial reproduction of a portion of the Zoning Map for the plan area indicated.

The accuracy of any representation on this plan is not guaranteed.

Sackville
Land Use By-law Area



SITE PLAN
SCALE = 1:1750



KEYPLAN
SCALE = 1:15,000

Bell WSP

1585 Canada Ave.
Dartmouth, Nova Scotia
T 902-455-5662
F 902-455-5664
www.bellsouth.com

**SITE PLAN OF PROPOSED
LEASE PARCEL B AND
ACCESS AND UTILITY EASEMENT**

GLENDALE DRIVE AND
OLD BEAVER BANK ROAD
LOWER SACKVILLE
HALIFAX COUNTY
PROVINCE OF NOVA SCOTIA

REF. NO. 111-25229 DWG. NO. 111-25229503

SCALE : 1/750 (METRIC)

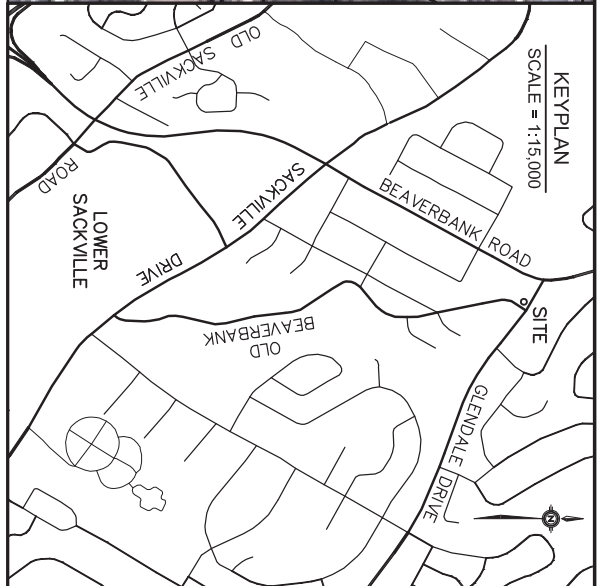
SEPTEMBER 15, 2014

SHEET 1 OF 3

J1570 * BEAVERBANK



AERIAL PHOTOGRAPH - PLAN VIEW
SCALE = 1:11,000



KEY PLAN
SCALE = 1:15,000

Bell **WSP**

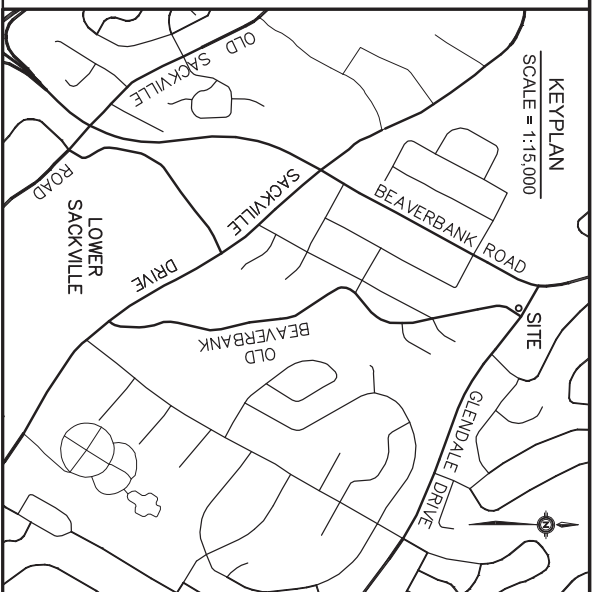
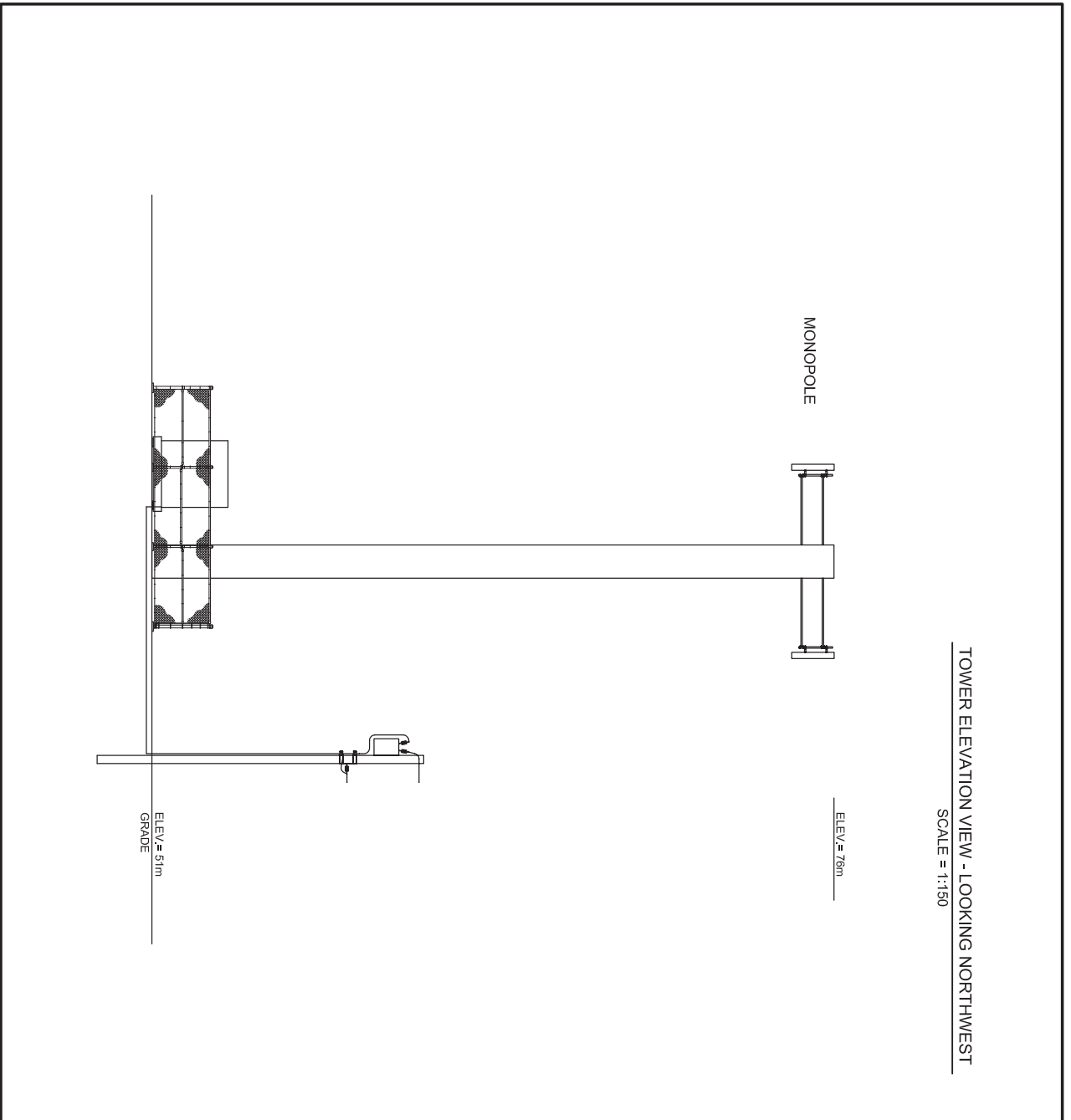
WSP Canada Inc.
1900 Highway 101
Dartmouth, Nova Scotia
B3B 2C6
F: 902-535-8865
A: 902-535-8865
www.wsp.ca

AERIAL PHOTOGRAPH – PLAN VIEW
OF PROPOSED LEASE PARCEL B
AND ACCESS AND UTILITY EASEMENT
GLENDALE DRIVE AND
OLD BEAVERBANK ROAD
LOWER SACKVILLE
HALIFAX COUNTY
PROVINCE OF NOVA SCOTIA



SCALE : 1/11,000 (METRIC)
SEPTEMBER 15, 2014
SHEET 2 OF 3

J1570 * BEAVERBANK



Bell WSP

WSP Canada Inc.
1500 University Avenue
Dartmouth, Nova Scotia
T 902-455-5662
F 902-455-5665
www.wsp.ca

**TOWER ELEVATION VIEW OF
25 METRE MONOPOLE
LOOKING NORTHWEST**

GLENDALE DRIVE AND
OLD BEAVERBANK ROAD
LOWER SACKVILLE
HALIFAX COUNTY
PROVINCE OF NOVA SCOTIA

SCALE : 1/150 (METRIC)
SEPTEMBER 15, 2014
SHEET 3 OF 3

J1570 * BEAVERBANK

REF. NO. 111-25229 DWG. NO. 111-25229503

Attachment B - Rendering Tower Elevation

Appendix 3: Photo Renderings

Bell Photo Simulation
J1570 Beaverbank
20m monopole, ø 508mm
Tower location 44°46'54.90" N 63°41'26.70" W
Photo Rendered on November 26, 2018



The proposed structure looking West from Beaverbank Road toward Glendale Drive.

Bell Photo Simulation
J1570 Beaverbank
20m monopole, ø 508mm
Tower location 44°46'54.90" N 63°41'26.70" W
Photo Rendered on November 26, 2018



Rendering showing the height of the proposed structure as compared to an adjacent power pole.

Attachment C - Aeronautical Assessment Form

555-5555

Customer name here

10:04:48 a.m. 02-05-2015

1 / 1



Transport Canada / Transports Canada

Transport Canada number

2015-018

Applicant number

J1570

AERONAUTICAL ASSESSMENT FORM FOR OBSTRUCTION EVALUATION

SECTION 1

Owner's Name Bell Mobility Inc.		Contact Person Patricia Kennedy	
Address PO Box 880			
City Halifax		Province Nova Scotia	Postal Code
Telephone number (909-999-9999) (902) 486-5514	Fax number (909-999-9999) (902) 422-7215	Email Address patricia.kennedy@bell.ca	

SECTION 2

Applicant's Name Bell Mobility Inc. c/o Altus Group		Contact Person Aaron Murnaghan (Altus Group)	
Address 1969 Upper Water Street, Suite 1701			
City Halifax		Province Nova Scotia	Postal Code B3J 3R7
Telephone number (909-999-9999) (902) 420-6633	Fax number (909-999-9999) (902) 422-6698	Email Address marney.cohen@altusgroup.com	

SECTION 3

Description of Proposal (or as attached)
REV1 - TC#2012-327

Bell Site: J1570
Site Name & Candidate: Beaverbank*Robeys - 65 Beaverbank Road, Sackville, N.S.

Tower Type: 20M Monopole
See Site Plan attached.

SECTION 4

Geographic Coordinates NAD83 NAD27 WGS84

N Latitude deg 44 min 46 sec 54.9

W Latitude deg 63 min 41 sec 26.7

For multiple structures in a grouping, submit geographical coordinates on a separate spreadsheet (e.g. windfarms, transmission lines)

SECTION 5

Nearest Community Beaverbank	Province Nova Scotia
--	--------------------------------

SECTION 6

Nearest Aerodrome

SECTION 7

Have you contacted the aerodrome?
 Yes No

SECTION 8

Notice of
 New Construction Change to existing structure

SECTION 9

Duration
 Permanent Temporary

28-0427E (1412-05)

Page 1 of 4



Attachment C - Aeronautical Assessment Form

555-5555

Customer name here

10:06:10 a.m. 02-05-2015

1 / 1

Transport Canada number

2015-018

SECTION 10

Proposed Construction Date Beginning (yyyy-mm-dd)
2015-04-30

SECTION 11

Temporary Structure

From date (yyyy-mm-dd) _____ To date (yyyy-mm-dd) _____

SECTION 12

Marking and Lighting Proposed (refer to Standard 621)

- | | | |
|--|--|--|
| <input type="checkbox"/> Red lights and paint | <input type="checkbox"/> Red and M.I. white lights | <input type="checkbox"/> White M.I. lights |
| <input type="checkbox"/> Red and H.I. white lights | <input type="checkbox"/> White H.I. lights | <input type="checkbox"/> No painting |
| <input type="checkbox"/> No lighting | <input type="checkbox"/> Paint marking only | <input type="checkbox"/> Other (provide description) |

SECTION 13

Monitoring to Standard 621, article 4.7 Visual Inspection Remote Indicator

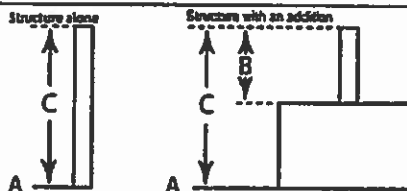
SECTION 14

Catenary/Cable Crossing

- | | | |
|--|---|--|
| <input type="checkbox"/> Paint supporting structures | <input type="checkbox"/> Cable marker spheres | <input type="checkbox"/> Shore markers |
| <input type="checkbox"/> Support structure lighting | <input type="checkbox"/> Cable marker lights | |

SECTION 15

	Feet	Metres
A Ground Elevation (AMSL)		51M
B Height of an addition to a structure		
C Total structure height including B (AGL)		20M
Overall height (A plus C) (AMSL)		71M



SECTION 16

Does the proposal comply with Airport Zoning Regulations?

- Yes No N/A

Where the location of the object is on lands affected by Airport Zoning Regulations, a legal survey is required with the submittal.

I hereby certify that all the above statements made by me are true, complete and correct to the best of my knowledge. Also, I agree to mark and/or light and maintain the structure with established marking and lighting standards as necessary.

Steve Coobdon - Construction Manager - Marney Cohen on behalf of Bell Mobility Inc
Name of person filing notice

Signature Date (yyyy-mm-dd)

TRANSPORT CANADA ASSESSMENT

Marking and lighting required (as per Standard 621)

- Lighting Required Marking Required Temporary Lighting Required No Lighting or marking required

Comments (Transport Canada use Only)

Completion of this form does not constitute authorization for construction nor replace other approvals or permits. See instruction D and E.

Civil Aviation Inspector

Original Signed

Signature /

Original Signed

Date (yyyy-mm-dd)

2015/02/05

Note 1: This assessment expires 18 months from the date of assessment unless extended, revised, or terminated by the issuing office.

Note 2: If there is a change to the intended installation, a new submittal is required.

28-0427E (1412-05)

Page 2 of 4



Attachment D - NAV Canada and Transportation Approval

Appendix 5: NAV Canada and Transport Canada Approvals



October 24, 2014

Your file
J1570 65 Beaverbrook Rd
Our file
14-2403

Mr Aaron Murnaghan
Altus Group
1969 Upper Water Street, Suite 1701
Halifax, NS
B3J 3R7

RE: Communication: Monopole - Beaverbrook, NS
(N44° 46' 54.9" W63° 41' 26.7" / 82.0210' AGL / 249.3438' AMSL)

Mr Murnaghan,

We have evaluated the captioned proposal and NAV CANADA has no objection to the project as submitted.

NAV CANADA does not require notification of construction, however, if you should decide not to proceed with this project, please advise us accordingly so that we may formally close the file. If you have any questions, contact the Land Use Department by telephone at 1-866-577-0247 or e-mail at landuse@navcanada.ca

NAV CANADA's land use evaluation is valid for a period of 12 months. Our assessment is limited to the impact of the proposed physical structure on the air navigation system and installations; it neither constitutes nor replaces any approvals or permits required by Transport Canada, Industry Canada, other Federal Government departments, Provincial or Municipal land use authorities or any other agency from which approval is required. Industry Canada addresses any spectrum management issues that may arise from your proposal and consults with NAV CANADA Engineering as deemed necessary.

Yours truly,

Original Signed

David Legault
Manager, Data Collection
Aeronautical Information Services

cc ATLR - Atlantic Region, Transport Canada
CFR3 - FALL RIVER(WATER)

1601 Tom Roberts, P.O. Box 9824 Stn T, Ottawa, ON, K1G 6R2
Telephone: +1 (866) 577-0247, Fax: +1 (613) 248-4034
Z-LDU-101 Version 13.5

1601 Tom Roberts, C.P. 9824 Succursale T, Ottawa, Ontario, K1G 6R2
Téléphone: +1 (866) 577-0247, Télécopieur: +1 (613) 248-4034

12 July 2013

Appendix 4: Safety Code 6 Attestation



Nov 21, 2014

To all interested parties,

Regarding the proposed cell site located at,

"J1450 Beaverbank (Sobeys)"
Beaverbank & Glendale
Sackville, NS
Lat : 44.78106 N
Lon : 063.69111 W

Bell Mobility has reviewed the proposed cell tower located at "J1450 Beaverbank (Sobeys)" for compliance with Health Canada's Safety Code 6 (SC6) limits to radio frequency (RF) exposure. Bell Mobility confirms that the proposed installation is in compliance with these regulations.

I attest that the information provided is correct and that a technical study has been prepared by qualified RF engineering professionals according to Industry Canada Guidelines.

Should you have any questions, comments, or concerns, please contact the undersigned.

**Jason
Lee**

Digitally signed by Jason Lee
DN: cn=Jason Lee, ou=Bell
Mobility, ou=RF Engineering,
email=jason.lee@bell.ca, o=CA
Date: 2014.11.21 09:02:51
-04'00'

Jason Lee, M.Eng., P.Eng.

Senior Advisor - RF Engineering,
Bell Mobility, Atlantic Region

Off.: 902.487.5061
Cell: 902.220.9988
jason.lee@bell.ca

