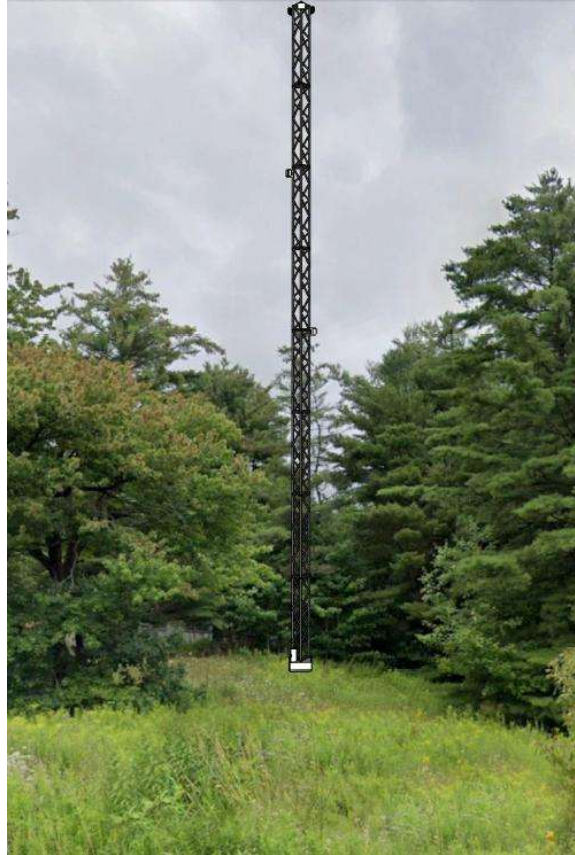




Site Selection and Justification Report
Telecommunications Antenna System Proposal

Thousand islands Tower Site

87 Fitzsimmons Road, Leeds and the Thousand Islands ON, K0E 1L0



Location Coordinates: 44.3676698, -76.0110860
Tower Height: 55 metres
Structure Type: Freestanding Telecommunications Tower
Purpose: Wireless Broadband Infrastructure Deployment

Submitted by:
Kingston Online Services
303 Bagot St., Suite 16A, Kingston ON, K7K 5W7
planning@kos.net | 613-549-8667



1. Introduction

This report provides a justification for the proposed installation of a 55 metre self-supporting telecommunications tower at 87 Fitzsimmons Road in the Township of Leeds and the Thousand Islands. The facility, proposed by Kingston Online Services (KOS), is intended to expand high-speed fixed wireless internet service—delivering speeds of up to 250 Mbps to local residences—while also providing critical backhaul connectivity to other sites within the Township of Leeds and the Thousand Islands and the township of Front of Yonge.

The report demonstrates that alternative sites and co-location opportunities have been considered, and that the proposed site minimizes environmental, visual, and land use impacts while meeting the technical requirements of the network.

2. Site Selection Process

- **Alternative Sites Considered**

A search ring was defined based on topography and existing service gaps. Three other parcels were reviewed within this ring however:

- Two parcels were heavily treed and presented access challenges.
- One parcel had significant wetland coverage.
- The proposed site at 87 Fitzsimmons Road offered the best balance of elevation, landowner willingness, and existing access.

- **Co-location Opportunities**

A review of the ISED database confirmed that there are no existing towers within 1.5 kilometres of the proposed location. The nearest available structures are technically unsuitable, as they do not provide adequate coverage of the identified service gap nor the required downstream backhaul connectivity.

- **Justification for Proposed Site**

87 Fitzsimmons Road is centrally located within the identified coverage gap, has existing access via Fitzsimmons Road, and sits on cleared farmland that avoids sensitive features. The landowner has consented to host the facility, making this the most technically and practically viable option with minimal environmental impact.

3. Existing Conditions



- **Vegetation and Screening Features**

The site is located on open land, with hedgerows and mature trees present along the lot lines. These features provide natural screening for the base the structure while leaving the upper tower visible.

- **Address & Access**

The proposed facility is located at 87 Fitzsimmons Road, with direct access from the municipal roadway, which provides safe, low-volume access for construction and maintenance.

- **Natural Heritage Features**

A desktop review using Township GIS and provincial mapping confirmed wetlands are present northeast of the parcel; however, the tower will be sited well outside the regulated area. No ANSIs or significant woodlots are directly affected. The Cataraqui Region Conservation Authority has confirmed no impact to regulated features.

- **Natural Hazard Features**

No floodplains, steep slopes, or erosion hazards are present at the tower location.

- **Proximity of Public Roadways**

The tower will be set back more than 45 metres from Fitzsimmons Road, minimizing visual prominence from the roadway.

4. Design and Technical Rationale

- **Proposed Height**

The proposed 55 metre tower height is necessary to clear the local tree canopy (averaging 20 metres to 25 metres) and rolling terrain. A shorter structure would not provide reliable line-of-sight coverage or effective backhaul connectivity.

- **Structure Design and Colouration**

The facility will be a self-supporting lattice tower, finished in natural galvanized steel to blend with the sky. Unlike larger cellular installations, no compound is required. A small network cabinet will be installed at the base, and the tower will be equipped with anti-climb protection for safety.

- **Lighting**

Under Transport Canada Standard 621, structures under 90 metres in height are normally not required to have obstruction lighting unless identified as a concern through NAV CANADA's aeronautical assessment.

For this proposal, Kingston Online Services has submitted applications to NAV CANADA and Transport Canada and is awaiting a determination. Should lighting be required, shielded red obstruction lighting will be installed to minimize visual impact.



5. Potential Impacts and Mitigation

- **Residential Uses**

The nearest residence is located over 150 metres from the proposed site. With vegetation screening and the slim profile of the lattice tower, visual impacts will be minimal. No noise, vibration, or emissions beyond federal standards are anticipated.

- **Viewscapes**

While the tower will be visible from certain vantage points, the surrounding tree cover and rural character help reduce its prominence.

- **Institutional and Recreational Uses**

There are no schools, parks, or community facilities in close proximity to the site. No adverse impacts on recreational activities are anticipated.

- **Land use**

The proposed facility footprint is approximately 6 square metres (including the tower and small equipment cabinet). This is a negligible impact on the productive use of the surrounding land.

- **Other Impacts**

The installation will comply with all applicable regulations, including ISED's CPC-2-0-03 and Health Canada's Safety Code 6, ensuring no risk to public health or safety. Access will use an existing farm entrance, avoiding new disturbance.

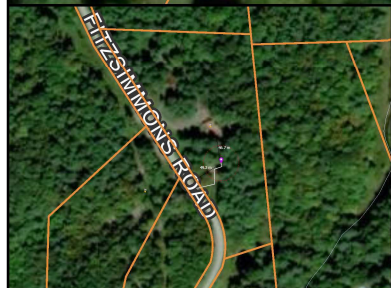
6. Conclusion

The proposed telecommunications tower at 87 Fitzsimmons Road represents the most appropriate location to address the significant coverage gap to the Thousand Islands. Alternative parcels and co-location opportunities were evaluated but found unsuitable.

This site offers:

- Optimal technical performance at 55 metre height
- Minimal impact on environmental and cultural features
- Compatibility with surrounding agricultural and rural land uses
- Safe, efficient access from an existing public road

Based on these considerations, the site is justified as the preferred and most viable location for the proposed facility.



Proposed 46 m Self-Support Telecommunications Tower 87 Fitzsimmons Road, Leeds and the Thousand Islands

Prepared by: Kingston Online Services
Date: 2025-09-03
Scale: 1:1500

Latitude: 44.3676698°N
Longitude: 76.0110860°W



0 37.5 75 150 Metres





ServiceOntario

PARCEL REGISTER (ABBREVIATED) FOR PROPERTY IDENTIFIER

LAND
REGISTRY
OFFICE #28

44219-0051 (LT)

PAGE 1 OF 1
PREPARED FOR KOS
ON 2025/10/01 AT 07:47:30

ONLAND

* CERTIFIED IN ACCORDANCE WITH THE LAND TITLES ACT * SUBJECT TO RESERVATIONS IN CROWN GRANT *

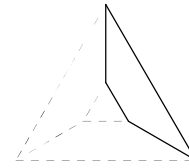
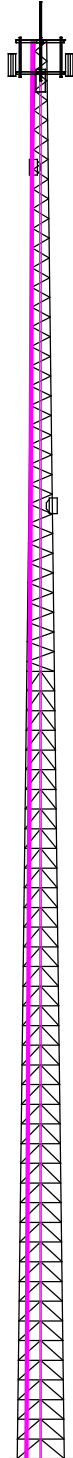
PROPERTY DESCRIPTION:

PT LT 17 CON 1 LANSDOWNE PT 1 28R397 EXCEPT PT 1 TO 3 28R5779 & PT 1 TO 4 28R12881; LEEDS/THOUSAND ISLANDS; SUBJECT TO AN EASEMENT IN GROSS OVER PART
3 28R15675 AS IN LE147311

NOTE: ADJOINING PROPERTIES SHOULD BE INVESTIGATED TO ASCERTAIN DESCRIPTIVE INCONSISTENCIES, IF ANY, WITH DESCRIPTION REPRESENTED FOR THIS PROPERTY.
NOTE: ENSURE THAT YOUR PRINTOUT STATES THE TOTAL NUMBER OF PAGES AND THAT YOU HAVE PICKED THEM ALL UP.

Leg	50 KSI	A	SR 3" Φ	SR 2-3/4" Φ	SR 2-1/2" Φ	SR 2-1/4" Φ	SR 2" Φ	B	C	D	E	F		
Diagonal	44 KSI	G	SR 1" Φ			SR 7/8" Φ			SR 3/4" Φ				H	
Horizontal	44 KSI	E	SR 1-1/4" Φ			SR 1-1/8" Φ		SR 1" Φ						
Brace Bolts	A325	(3) -5/8												
Face Width	6.0'													
Panel Height # Panels	40 @ 2.5'					64 @ 1.3'							1.5'	

180.0'
170.0'
160.0'
150.0'
140.0'
130.0'
110.0'
100.0'
90.0'
80.0'
60.0'
30.0'
10.0'
0.0'

**NOTES:**

1. Limit State Design
2. FACTORED LOADING
3. TYPICAL DESIGN NOT FOR CONSTRUCTION
4. Max T/T=<2.38Deg at Yr10 wind for HP2

ANTENNA LIST

NO	ELEV	ANTENNA	TX-LINE
1-2	177.2'	(2) Tarana BN	(4)-Fiber
3	164'	(1) ePMP4600	(1)-Fiber
4	121.4'	(1) GX-80 2' Dish	(2)-Fiber

MATERIAL LIST

NO	TYPE
A	SR 3-1/4" Φ
B	SR 1-3/4" Φ
C	SR 1-5/8" Φ
D	SR 1-1/2" Φ
E	SR 1-3/8" Φ
F	SR 1-1/4" Φ
G	SR 1-1/8" Φ
H	SR 5/8" Φ

TOTAL FOUNDATION LOADS

H=10.35 k
V=37.62 k
M=1030.05 k-ft
T=3.36 k-ft

INDIVIDUAL FOOTING LOADS

H=6.03 k
V=207.17 k
U=-170.19 k

**Allan Pipe Fab Inc.**

65 Barnes Rd., Cambridge, ON, Canada N3H 4R7

Phone: (519) 650-5858

Fax: (519) 650-5088

Client: ONtower

Job No: Q-10314D4

Date: 26 sep 2025

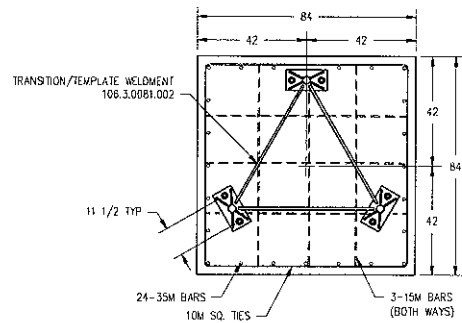
Location: Thousand Islands, ON

Total Height: 180.00'

Tower Height: 180.00'

Standard: CSA S37 2024

Design Wind & Ice: Qe=470Pa wind, 30mm ice



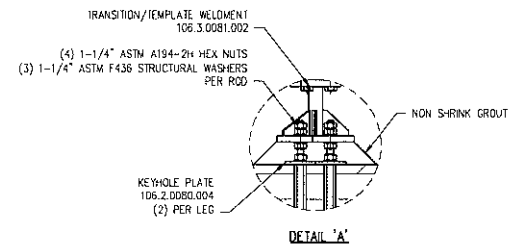
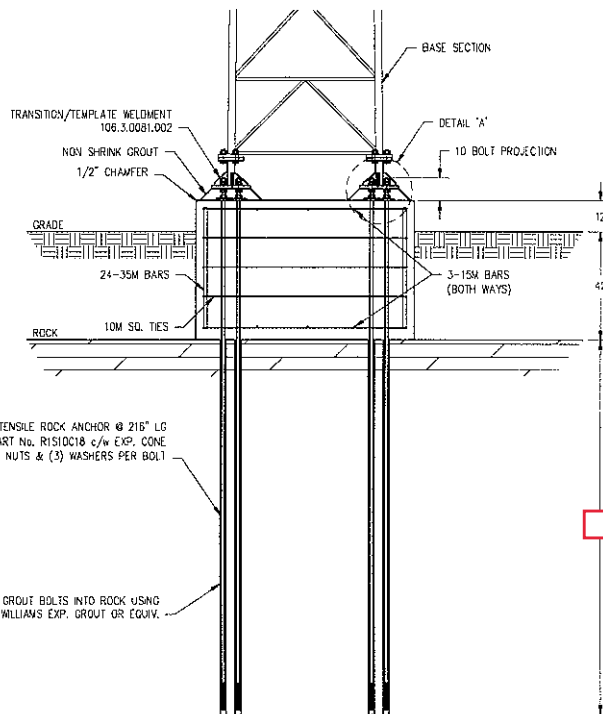
FOUNDATION NOTES:

1. CONTRACTOR SHALL FIELD CHECK ALL DIMENSIONS BEFORE PROCEEDING WITH WORK.
2. FOUNDATION DESIGNED BASED ON GEOTECHNICAL REPORT BY:
 - 2.1. INSPEC-SDI INC.
 - 2.2. DATED: MARCH 7, 2008
 - 2.3. REF# T020429-A1
 - 2.4. ASSUMED VALUES:
 - 2.4.1. ROCK DENSITY = 2400 Kg/m³
 - 2.4.2. ANGLE OF CONE = 35°
 - 2.4.3. WATER TABLE = 5.0m OR GREATER DEPTH
3. FOUNDATION BASE SHALL BE PLACED AGAINST CLEAN ROCK SURFACE.
4. NON SHRINK GROUT WITH A MINIMUM OF 48 MPa AT 28 DAYS SHALL BE USED AT BASE OF TOWER.
5. FOUNDATION DESIGNED IN ACCORDANCE TO CAN/CSA S37-01
6. CONCRETE WORK IN ACCORDANCE TO CAN/CSA-A23.1-04 & CAN/CSA-A23.2-04
7. REINFORCEMENT FOR CONCRETE IN ACCORDANCE WITH CAN/CSA-A23.3-04

WILLIAMS HIGH TENSILE ROCK BOLTS:

PART No. R1510C18
 BOLT DIAMETRE = 1-1/4"
 REQUIRED HOLE DIAMETRE IN ROCK = 2-1/4"
 TORQUE TO SET SHELL = 750 ft lbs
 PRE-TENSION = 51 kips

180ft 63" AWSST - Thousand Islands, ON



REINFORCING BAR CHART				
QTY	SIZE	DIM 'A'	SPACED	DESCRIPTION
24	35M	48"	12-1/2" c/c	
6	15M	78"	18" c/c	
5	10M	78"	11-1/2" c/c	

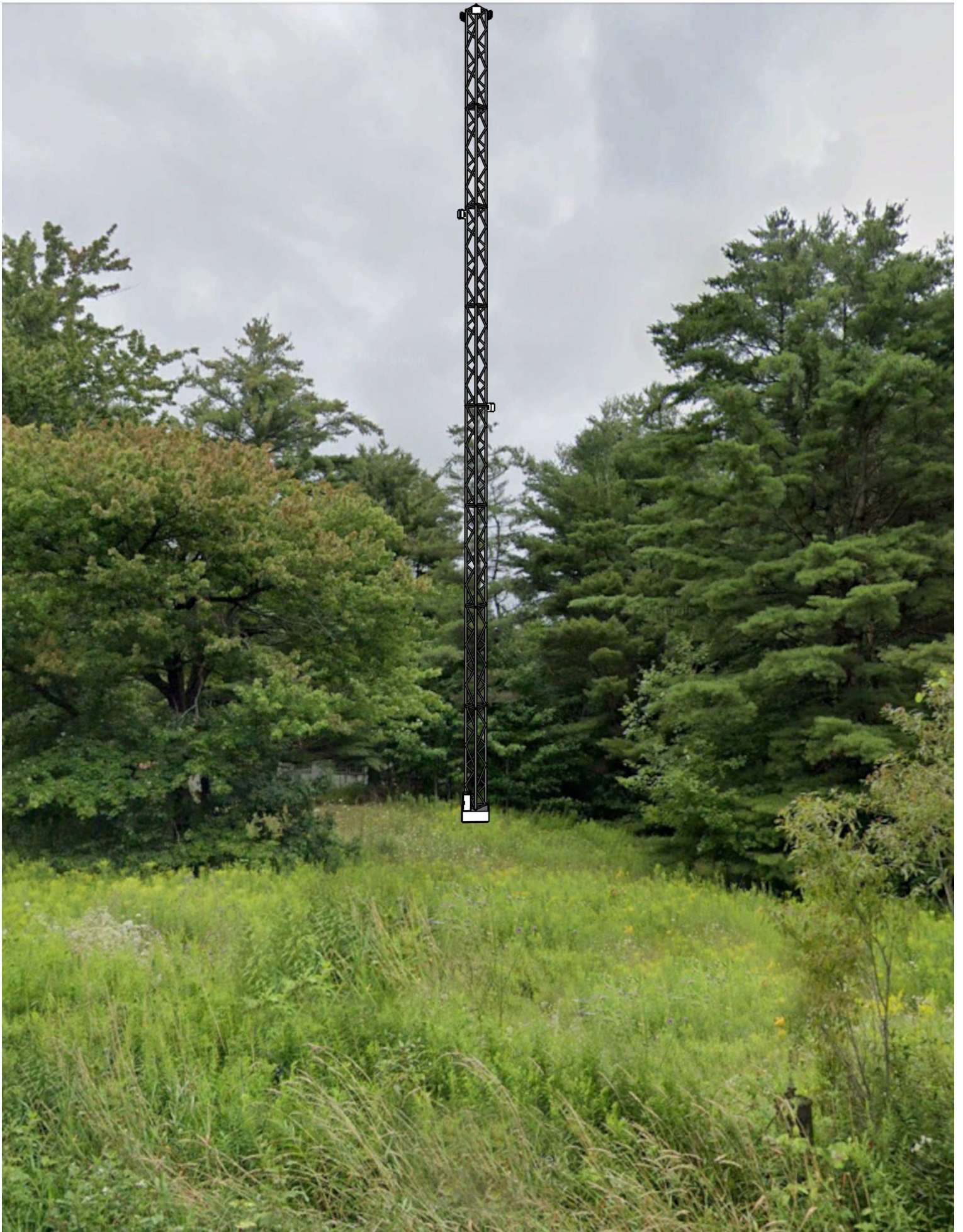
Rev.	Rev'd By	App'd By	Rev. Description	Date	Rev.	Rev'd By	App'd By	Rev. Description	Date
A	MD		ISSUE FOR CONSTRUCTION	08 MAR 17					

Notes: 1. ALL DIMENSIONS ARE IN INCHES

Good Dry Rock
 Typical Not for Construction

AP **ALLAN PIPE FAB INC.**
 386 DORRIS DRIVE
 CAMBRIDGE, ON CANADA
 P: (519) 822-0013 F: (519) 822-7002

Drawn By: [Signature] Checked By: [Signature] Date: 08 MAR 17 Scale: 1:30
 Cu: [Signature] Job No: 3429
 Drawing No: 3429.960.106-1
 FOUNDATION DETAILS





THIS LEASE made this first day of October 2025, between:

PHIL WILCOCK

Hereinafter called the "Landlord"
and

**1085459 ONTARIO LTD., carrying on business as
KINGSTON ONLINE SERVICES**

hereinafter called the "Tenant"

WHEREAS:

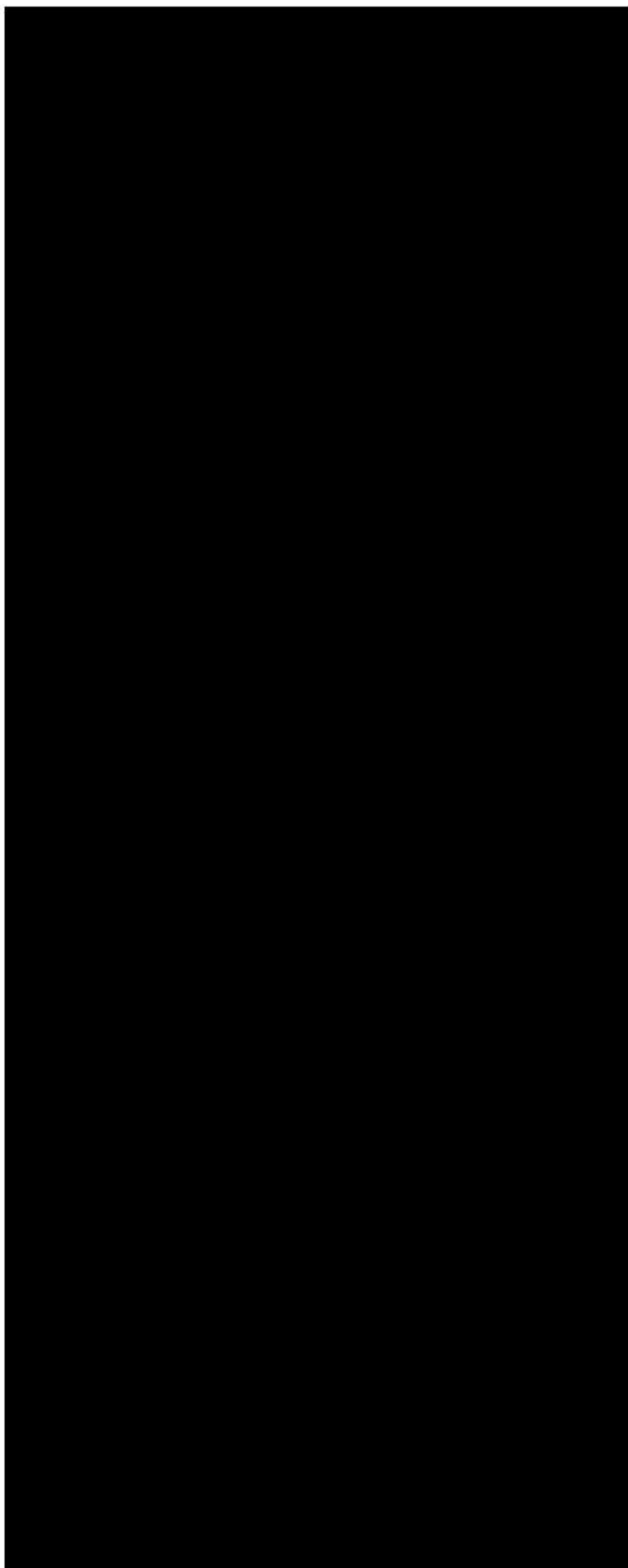
1. The Landlord is the owner of the property located at 87 Fitzsimmons Road (the "Land"), legally described as:

87 Fitzsimmons Road
Leeds and the Thousand Islands, ON
K0E 1L0

2. The Landlord has agreed to grant the Tenant the right to place wireless internet equipment on part of the Land, including to construct and install:

A 150-foot self-support tower with an 8-foot by 8-foot base for the purpose of providing wireless internet services to the surrounding area

NOW THEREFORE WITNESS that in consideration of the mutual rights and obligations herein expressed and for other good and valuable consideration (the receipt and sufficiency of which are hereby acknowledged), the parties agree as follows:



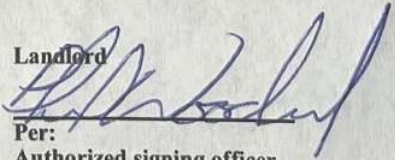
The Landlord warrants that he/she/it is the only person/entity with an ownership interest in Land (save and except for any mortgage interests) and agrees to compensate the Tenant for any damages arising from another owner/co-owner who makes any claim or causes any disruption or interference with the license granted herein.

IN WITNESS WHEREOF the parties have executed this Lease on the date thereafter written.

Tenant

Per:
Authorized signing officer

Landlord


Per:
Authorized signing officer

Subject: RE: Permit Inquiry Form #10553-207 - 87 Fitzsimmons Rd, LTI
From: Development <Development@crca.ca>
Date: 2025-09-16, 4:18 p.m.
To: "dfenato@kos.net" <dfenato@kos.net>

Dominic

Staff have reviewed your development proposal (drawing attached) and have concluded that the proposed location for the development is not within an area that is subject to Ontario Regulation 41/24. Therefore, a Cataraqui Conservation permit is not required for this development. We would also encourage you to contact the municipalities planning and building department to inquire about any limitations or restrictions that may also apply from a municipal zoning and building perspective.

Regards

Rhonda Roantree
Resource Planning Clerk



2069 Battersea Rd, Glenburnie ON, K0H 1S0
Phone: (613) 546-4228 ext. 220
Toll-Free: 1-877-956-2722
Fax: (613) 547-6474
Web: www.CataraquiConservation.ca

Please note individuals should schedule an appointment with Cataraqui Conservation staff for any in-person inquiries relating to planning and permitting matters. Contact me or visit <https://cataraquiconservation.ca/pages/appointment> to do so.

Cataraqui Conservation sits on the traditional lands of the Haudenosaunee & Anishinabek peoples, and we want to thank the Indigenous people for their continued care and protection of All of Our Relations on this shared land.

From: postmaster@email.pifyapp.com <postmaster@email.pifyapp.com>
Sent: September 15, 2025 2:52 PM
To: Development <Development@crca.ca>
Cc: Krista Fazackerley <KFazackerley@crca.ca>
Subject: Permit Inquiry Form #10553-207

Permit Inquiry Form

- First Name : Dominic
- Last Name : Fenato
- Email : dfenato@kos.net
- Phone : [REDACTED]
- Civic Address of Property (if you don't know/have a civic address, please add the street name or closest civic address to the property) : 87 Fitzsimmons Road
- Municipality : Front Leeds & Lansdowne Twp
- Lot : 17
- Concession : 1
- Ward :
- Waterbody :
- Coordinates (Latitude/Longitude) : 44.3676698, 76.0110860
- Select from the following list :
 - New Building/Structure
- Other :
- Does the project require any of the following? : Site Plan Approval
- Has a previous application been filed for this property? : Unknown
- Brief Description of Work (2-3 sentences to give us a general understanding) :

Building a 46 m tall tower that has a 2.4 m x 2.4 m concrete base.
- Upload a sketch/drawing indicating location of development on the property. : [Image](#)

—bnBXNX2025091602520387FitzsimmonsRoadsketch.png—



Sample Public Notification Letter



Dear Resident,

Kingston Online Services (KOS) is proposing to install a 55 metre freestanding telecommunications tower at 87 Fitzsimmons Road, in the Township of Leeds & the Thousand Islands. This facility would be capable of delivering next generation high-speed wireless broadband service up to 250 Mbps to underserved homes in the Quabbin area.

About the Proposed Facility

- **Height & Design:** A 55 metre self-supporting lattice tower with a natural galvanized steel finish. The structure will be anchored on a reinforced concrete foundation measuring 2.4 metres by 2.4 metres. This tower will not require guy wires, further reducing the tower footprint.
- **Compound:** A small equipment cabinet at the base; no large compound or building required.
- **Lighting:** Under Transport Canada Standard 621, structures under 90 metres in height are normally not required to have obstruction lighting unless identified as a concern through NAV CANADA's aeronautical assessment. Kingston Online Services has submitted applications to NAV CANADA and Transport Canada and is awaiting a determination. Should lighting be required, shielded red obstruction lighting will be installed to minimize visual impact.
- **Safety Compliance:** The facility will meet all applicable federal requirements, including ISSED CPC-2-0-03 and Health Canada's Safety Code 6. An anti-climb system will be installed on the lower sections of the tower to enhance public safety and security.

Why This Location?

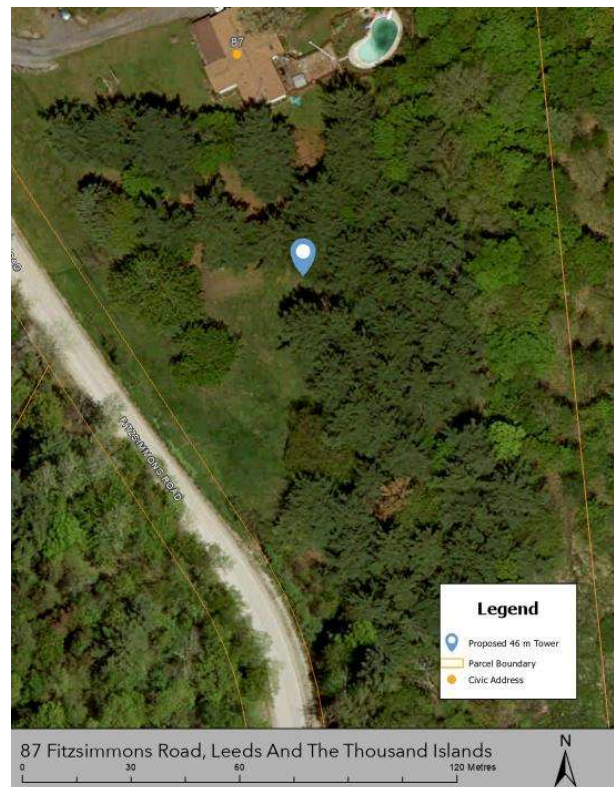
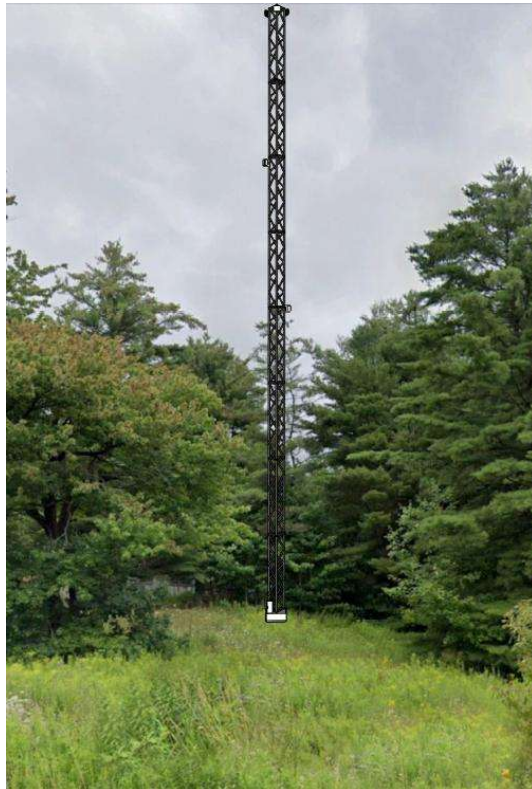
- Centrally located within the identified broadband coverage gap.
- Provides reliable line-of-sight over local tree canopy and terrain.
- Avoids sensitive environmental features such as wetlands and significant woodlots.
- Supported by the landowner, with access via Fitzsimmons Road.

Potential Impacts

- **Residential:** The nearest residence is more than 150 metres away; visual impacts will be minimal due to tree screening and slim tower profile.
- **Agricultural:** Facility footprint is approximately 6 square metres, with negligible effect on the land.
- **Environmental:** The proposed site is located outside regulated wetlands and hazard lands, as confirmed through consultation with the Township of Leeds and the Thousand Islands and the Cataraqui Region Conservation Authority. It is situated on open land with existing access, eliminating the need to disturb any vegetation and thereby minimizing environmental impacts.



Simulated tower view



Public Consultation

In accordance with Innovation, Science and Economic Development Canada (ISED) requirements, Kingston Online Services is notifying the public and inviting comments.

- **Comment Period:** Written comments will be accepted for 30 days from the date of this notice.
- **How to Submit:**
 - **Mail:** Kingston Online Services, 303 Bagot Street, Suite 16A, Kingston ON, K7K 5W7
 - **Email:** planning@kos.net
- A community information session will be held _____

We encourage you to share any questions or feedback. KOS is committed to working with residents, the Township of the Leeds and Thousand Islands, and federal regulators to ensure this facility is designed and operated responsibly.

Sincerely,
Kingston Online Services
303 Bagot Street, Kingston ON, K7K 5W7
planning@kos.net | www.kos.net