

**PROPOSAL:**

- **Development Variance Permit**

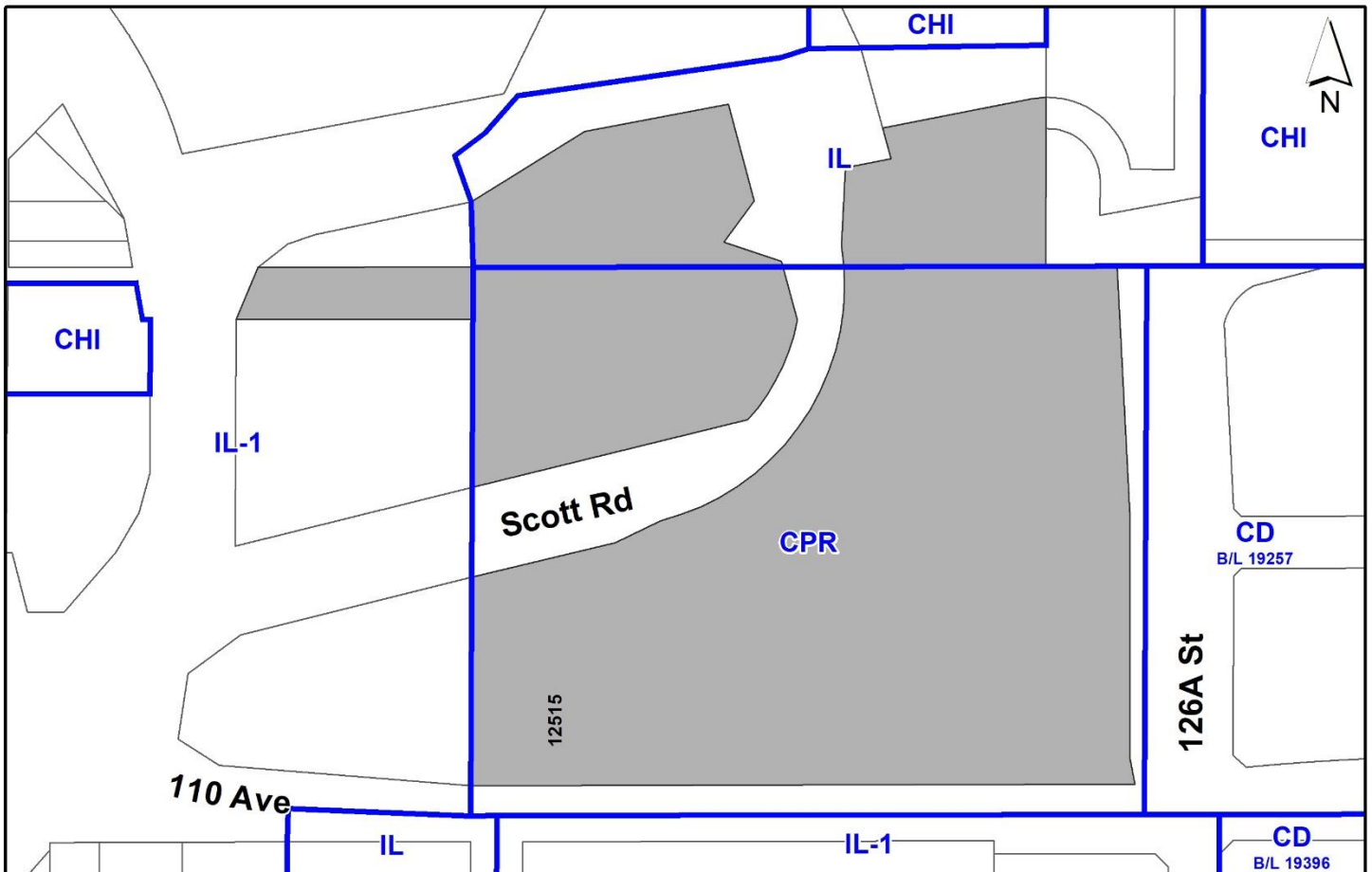
to increase the maximum height of a freestanding telecommunications antenna system tower from 12 metres to 25 metres.

**LOCATION:** 12515 - 110 Avenue

**ZONING:** CPR and IL

**OCP DESIGNATION:** Commercial

**NCP DESIGNATION:** Transit Oriented Urban Village and Skytrain Station



**RECOMMENDATION SUMMARY**

- Approval for Development Variance Permit to proceed to Public Notification.

**DEVIATION FROM PLANS, POLICIES OR REGULATIONS**

- Proposing to increase the maximum height of a free-standing antenna system tower under Part 4 General Provisions of the Zoning Bylaw.

**RATIONALE OF RECOMMENDATION**

- The proposal complies with a majority of the criteria identified in the City's Antenna System Siting Policy (No. O-62).
- The applicant has provided information indicating that there are no existing structures of sufficient height that are suitable to mount an antenna system on within a 500-metre radius of the subject site.
- The proposed location of the antenna system is within the Scott Road Skytrain Station park and ride. The base of the antenna system is approximately 60 metres from the road frontage of 110 Avenue and 100 metres from 126A Street.
- The applicant has provided documentation that indicates that there is a demonstrated coverage gap in the area, which the wireless carriers would like to resolve to provide better service to existing and potentially new customers.

## RECOMMENDATION

The Planning & Development Department recommends that Council approve Development Variance Permit No. 7923-0029-00 (Appendix II), to vary Part 4 General Provisions of the Zoning By-law to increase the maximum height of a free-standing antenna system tower from 12 metres to 25 metres, to proceed to Public Notification.

## SITE CONTEXT & BACKGROUND

Direction	Existing Use	NCP Designation	Existing Zone
Subject Site	Scott Road Skytrain Station park and ride	Transit Oriented Urban Village and Skytrain Station	CPR and IL
North (Including across Scott Road):	Scott Road Skytrain Station	Skytrain Station and Business/Residential Park	CPR and IL
East (Across 126A Street):	Apartment buildings	Multiple Residential	CD (By-law No. 19257)
South (Across 110 Avenue):	Various industrial businesses.	Retail/Residential	IL-1
West ():	Scott Road Skytrain Station park and ride	Transit Oriented Urban Village and Skytrain Station	IL-1

### Context & Background

- The subject site is the Scott Road Skytrain Park and Ride at 12515 - 110 Avenue. The site is approximately 9,278 square metres in area. The site is designated Commercial in the Official Community Plan (OCP), Transit Oriented Urban Village and Skytrain Station in the South Westminster Neighbourhood Concept Plan (NCP) and is split zoned with the majority of the site zoned as Commercial Recreation Zone (CPR) and the northern portion zoned Light Impact Industrial Zone (IL).

## DEVELOPMENT PROPOSAL

### Planning Considerations

- Cypress Land Services Ltd. on behalf of Rogers, is proposing to erect a 25-metre tall free-standing antenna system tower and related equipment within the Scott Road Skytrain Park and Ride parking lot. The proposed installation will be on the third landscape island from the southern property line. The tower is located approximately 60 metres from the southern property line and 75 metres from the eastern property line.
- Electrical conduits will run from 110 Avenue underneath the existing pedestrian walkway.
- The Zoning By-law allows for 12 metre tall free-standing antenna system towers in all zones.
- The applicant is proposing a Development Variance Permit to increase the maximum height of the free-standing antenna system tower from 12 metres to 25 metres.
- The proposal will provide improved telecommunication coverage and capacity for the area of South Westminster and Bridgeview (see Appendix V).

### Referrals

Engineering:                      The Engineering Department has no objection to the project.

TransLink                      TransLink owns the subject property and supports it.

## POLICY & BY-LAW CONSIDERATIONS

- Staff have conveyed to telecommunication companies the importance of a comprehensive strategy to ensure adequate coverage for all carriers while minimizing the number of singular user installations. Staff have also emphasized the importance of keeping the height of installations to a minimum without compromising the existing policy guidelines, especially antenna systems in proximity to residential areas, and to ensure that an appropriate design is being considered.
- Improving high speed wireless service supports the growing high technology sector, high tech education, emergency services and broadens community consultation opportunities through social media.
- The proposed free-standing antenna system tower is required for current and future network capacity upgrades. This proposal will provide increased service to the surrounding area. Many residents and businesses use wireless service as their primary means of communication and have come to expect it as an essential utility.

- The proposed location of the free-standing antenna system tower is in the middle of the parking lot away from neighbouring residential properties. This location should have minimal impact on nearby residential properties.
- The proposed free-standing antenna system tower support the City of Surrey's vision for building a strong economy.

#### City's Antenna System Siting Policy

- On February 22, 2021, Council approved the City's Antenna System Siting Policy (No. O-62), which replaced Policy No. O-49 Telecommunication Towers. Policy No. O-62 was developed by City staff in coordination with industry representatives to ensure that development of antenna systems throughout Surrey meet the needs of residents and conform to telecommunication industry best practices. The policy provides parameters on how free-standing antenna systems should be sited and designed.
- The subject application generally complies with the current Antenna System Siting Policy No. O-62 and is therefore being presented for Council's consideration.
- The following is an evaluation of the current proposal in relation to applicable components of Antenna System Siting Policy No. O-62, with staff comments in italics.

#### **Co-Location**

- Co-location will generally result in taller and wider towers, more antennas on each structure and physical limitations on how many antennas a single antenna supporting structure can structurally support. The City recognizes that the objective of promoting co-location and the objective of making antenna systems less noticeable may sometimes come into conflict.

*(The applicant has confirmed that the subject tower will be only for Rogers. Including additional carriers would require a substantially taller tower.)*

#### **Location Preferences**

- It is preferable that new free-standing antenna systems be sited in non-residential locations and preferably outside of agricultural areas unless other options are exhausted. If free-standing antenna systems are proposed on agricultural land, the proposal should ensure siting avoids farmland, and ensures maximum potential for farming on the remainder of the site.

*(The proposed location is within the Scott Road SkyTrain Station Park and Ride. The closest residential properties are apartment buildings, approximately 120 metres to the east.)*

#### **Design Preferences**

- The appropriate type of telecommunication antenna supporting structure for each situation should be selected with the goal of making best efforts to blend in with the nearby surroundings and minimizing the visual aesthetic impacts of the antenna system on the community. The use of monopoles is strongly encouraged.

*(The proposed antenna systems tower is a monopole design. TransLink specifically requests that this pole be separate to their equipment and does not want the pole to mimic a lighting standard.)*

- The City prefers that towers be a maximum of 15 metres in height, except in industrial, mixed employment, commercial and agricultural areas. The City will consider increased height for a tower when located in an industrial or mixed employment area, and preferably at a distance of at least six times the height of the antenna supporting structure away from residential areas.

*(The proposed 25 metres is higher than the 15 metre maximum height that is preferred by the City.*

*The applicant has advised the increased height of the proposed tower is necessary to fill coverage gaps in the area (see Appendix V). Although there are 6 storey apartments, approximately 120 metres to the east, staff feel the subject site is more appropriate than the rooftops.*

*North Surrey Sports & Ice Complex to the southeast is not considered tall enough for the proposed tower and the subject site was the preferred location by Rogers radio engineering.)*

- Landscaping shall be appropriately placed around telecommunication towers and ancillary facilities, such as equipment shelters, to minimize their visual impact on the neighbourhood. In all instances, the proponent should mitigate negative visual impacts through the use of appropriate landscaping, screening, and stealth design techniques. The design of antenna systems should generally be unobtrusive and consistent with area guidelines. Towers and communication equipment should have a non-glare surface.

*(No landscaping is proposed for screening as the tower as it is located in the centre of the parking lot. The proposed equipment cabinets are located just to the south of the tower (2.5 metres wide by 2.3 metre deep) and will be wrapped to limit the impact.)*

### **Public Consultation Process**

In accordance with policy No. O-62, the applicant sent out 39 notification packages on July 14, 2023, to the neighbouring property owners and mailing addresses within a notification area of 75 metres, which is approximately three times the height of the proposed tower.

- No responses were received by the applicant or staff concerning the proposed towers as a result of the notifications.

### **Zoning By-law**

- The applicant is requesting the following variance:
  - to vary Part 4 General Provisions of the Zoning By-law to increase the maximum height of two free-standing antenna systems from 12 metres to 25 metres.
- The proposal will provide improved telecommunication coverage and capacity for the area of South Westminster and Bridgeview (see Appendix V).

- The proposed free-standing antenna system and cabinet locations are compliant with the accessory building setbacks of the CPR Zone.
- As the free-standing antenna system and equipment cabinet are setback more than 60 metres from the nearest public road, and the perimeter of the site along the street frontages has existing landscaping, no additional landscaping or screening is proposed.
- Staff support the requested variance to proceed for consideration.

## TREES

- Cody Laschowski, ISA Certified Arborist of Diamond Head Consulting prepared an Arborist Assessment for the subject property. The table below provides a summary of the proposed tree retention and removal by tree species:

**Table 1: Summary of Proposed Tree Preservation by Tree Species:**

Tree Species	Existing	Remove	Retain
<b>Deciduous Trees</b> (excluding Alder and Cottonwood Trees)			
Acer saccharinum (silver maple)	14	3	11
Carpinus betulus (European hornbeam)	5	1	4
<b>Total (excluding Alder and Cottonwood Trees)</b>	<b>19</b>	<b>4</b>	<b>15</b>
<b>Total Replacement Trees Proposed (excluding Boulevard Street Trees)</b>		<b>0</b>	
<b>Total Retained and Replacement Trees Proposed</b>		<b>15</b>	
<b>Estimated Contribution to the Green City Program</b>		<b>\$4,400</b>	

- The Arborist Assessment states that there are a total of 19 mature trees in the vicinity of the proposed telecommunication tower and compound, excluding Alder and Cottonwood trees. No existing trees are Alder or Cottonwood trees. The applicant proposes to retain 15 trees as part of this development proposal. The proposed tree retention was assessed taking into consideration the location of electrical conduit and footprints.
- Four (4) trees (one bylaw sized and three undersized) are proposed to be removed to accommodate the compound and monopole. The undersized trees are considered protected trees as the trees were planted when the Scott Road Skytrain Park and Ride was developed.
- Two of the trees are proposed to be removed from the parking lot island where the proposed tower and compound are to be located.
- Two trees are proposed to be removed from the boulevard for electrical conduit. Both of the trees proposed for removal are in poor condition.

- For those trees that cannot be retained, the applicant will be required to plant trees on a 1 to 1 replacement ratio for Alder and Cottonwood trees that are outside the streamside protection area, and a 2 to 1 replacement ratio for all other trees, including Alder and Cottonwood that are within a streamside protection area. This will require a proposed total of 8 replacement trees on the site. Since no replacement trees can be accommodated on the site, the proposed deficit of 8 replacement trees will require an estimated cash-in-lieu payment of \$4,400, representing \$550 per tree, to the Green City Program, in accordance with the City's Tree Protection By-law.
- In summary, a total of 15 trees are proposed to be retained in the vicinity of the development with an estimated contribution of \$4,400 to the Green City Fund.
- The contribution will be collected prior to Building Permit issuance, should Council support the requested variance.

#### INFORMATION ATTACHED TO THIS REPORT

The following information is attached to this Report:

Appendix I.	Site Plan and Elevations
Appendix II.	Development Variance Permit No. 7923-0029-00
Appendix III.	Photo Simulations
Appendix IV.	Arborist report and tree preservation summary
Appendix V.	Coverage maps

*approved by Ron Gill*

Don Luymes  
General Manager  
Planning and Development

JKS/ar





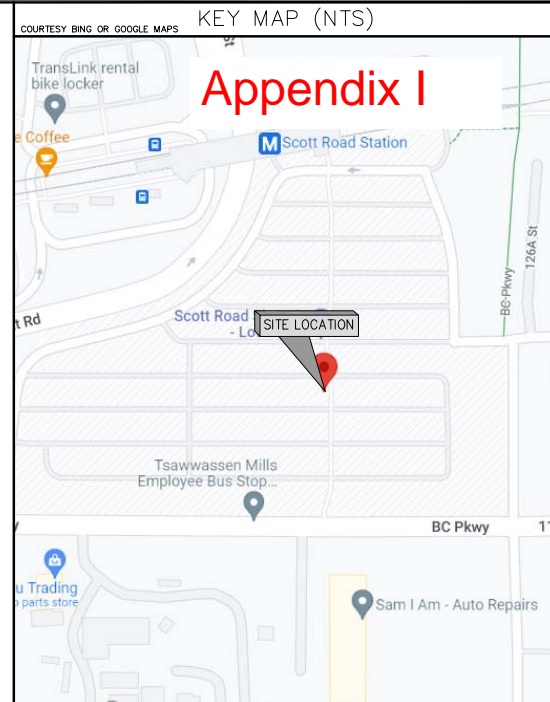
PROJECT NAME:	NEW SITE – GREENFIELD
PROJECT TYPE:	25m MONOPOLE WITH EQUIPMENT ON GRADE
PROJECT SITE No.:	W4008A – SCOTT RD. SKYTRAIN STATION
TOWER OWNER:	ROGERS
ADDRESS:	12515 110 AVE., SURREY, B.C.

DRAWING INDEX			
SHEET	DRAWING DESCRIPTION	NO.	DATE
COV.	TITLE SHEET & SITE KEY PLAN	2	12 MAY 23
A01	TOWER PROFILE	2	12 MAY 23
A02	SITE ACCESS PLAN	2	12 MAY 23
A03	SITE PLAN	2	12 MAY 23
E01	ELECTRICAL ROUTING	2	12 MAY 23

ISSUE		
NO.	DESCRIPTION	DATE
0	PRELIMINARY	19 OCT 22
1	CLIENT COMMENTS	24 NOV 22
2	CLIENT COMMENTS	12 MAY 23



SITE PHOTO



GEOGRAPHIC COORDINATES

LATITUDE: N 49.203270°  
 LONGITUDE: W 122.873635°

UTILITY – CONTACT

BRITISH COLUMBIA ONE CALL: (BEFORE YOU DIG) 1-800-474-6886

NOTES:

1. ENSURE ALL ASPECTS OF WORK CONFORM TO ROGERS SPECIFICATIONS.
2. CONTRACTOR TO VERIFY NORTH DIRECTION AND REPORT ANY DISCREPANCIES.
3. ALL DIMENSIONS ARE IN mm UNLESS NOTED OTHERWISE.
4. READ THESE DRAWINGS IN CONJUNCTION WITH ALL OTHER CONTRACT DOCUMENTS.
5. CONTRACTOR TO VERIFY EXISTING CONDITIONS ON SITE PRIOR TO FABRICATION FOR EXACT FIT. NOTIFY CONSULTANT/ENGINEER REGARDING ANY DISCREPANCIES.
6. DO NOT SCALE DRAWINGS.



**ROEHAMPTON WEST**  
 409 GRANVILLE ST,  
 SUITE 1051  
 VANCOUVER, BC V6C 1T2  
 TEL. (778)228-4228  
 VANCOUVER | KELOWNA | EDMONTON | CALGARY

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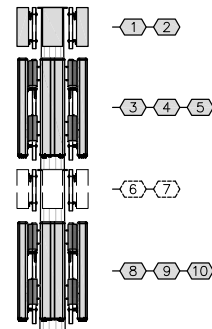
ELEV. ±25.00m  
ELEV. ±24.60m

ELEV. ±22.96m

ELEV. ±19.62m

ELEV. ±5.00m

ELEV. ±0.00m



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③ ④ ⑤

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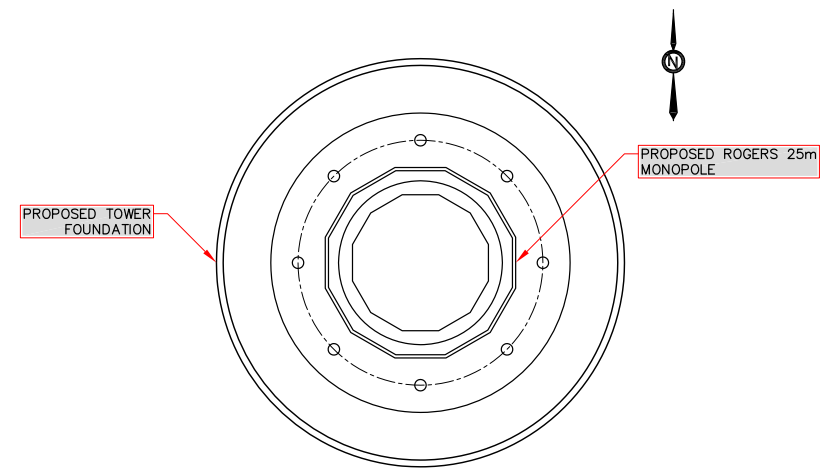
① PROPOSED  
② FUTURE

⑪

1 TOWER PROFILE

#	ELEV. (m)	EQUIPMENT						TX Lines			
		QTY	ANT. ID	Model	Azimuth	MDT (°)	Status	QTY	Type	Length (m)	Status
1	±24.6m	3	NR-1/2/3	AIR3258	60/170/290	0	PROPOSED	60	H&S	±3.0m	PROPOSED
2	±24.6m	2	-	MLUP	-	-	PROPOSED	2	DC	±29.5m	PROPOSED
		2	-	MLUF	-	-		2	FB	±29.5m	
3	±22.96m	3	LTE-1/2/3	FFV454-65B-R7-V2	60/170/290	0	PROPOSED	60	H&S	±3.0m	PROPOSED
4	±22.96m	12	-	RRU	-	-	PROPOSED				
5	±22.96m	3	-	MLUP	-	-	PROPOSED	2	DC	±27.6m	
		3	-	MLUF	-	-		2	FB	±27.6m	
6	±21.29m	3	NR-A/B/C	AIR3228	0/120/230	0	FUTURE	60	H&S	±3.0m	FUTURE
7	±21.29m	2	-	MLUP	-	-	FUTURE	2	DC	±25.5m	FUTURE
		2	-	MLUF	-	-		2	FB	±25.5m	
8	±19.62m	3	OFFSET-1/2/3	FFV454-65B-R7-V2	0/120/230	0	PROPOSED	60	H&S	±3.0m	PROPOSED
9	±19.62m	12	-	RRU	-	-	PROPOSED				
10	±19.62m	3	-	MLUP	-	-	PROPOSED	2	DC	±23.5m	PROPOSED
		3	-	MLUF	-	-		2	FB	±23.5m	
11	±5.0m	1	GPS-1	KRE1012395/2	-	-	PROPOSED	-	-	-	PROPOSED

TX LINES:	TYPE:	SIZE:
JUMPERS	LDF4	1/2"
DC	-	1/2" - 3/4"
FB	-	3/8" - 1/2"



2 TOWER BASE PLAN

- NOTES:
1. TOWER DESIGN IS CONCEPTUAL FOR TENDER PURPOSES AND IS NOT FOR CONSTRUCTION, OBTAIN SITE SPECIFIC WIND FOR FINAL DESIGN.
  2. ALL WORK TO CONFORM TO LATEST ROGERS SPECIFICATIONS.
  3. ALL DIMENSIONS ARE IN MM UNLESS NOTED OTHERWISE.
  4. DRAWINGS ARE NOT TO BE SCALED.

CLIENT:

CARRIER:

5			
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2	NN	CLIENT COMMENTS	12 MAY 23
1	NN	CLIENT COMMENTS	24 NOV 22
0	LS	PRELIMINARY	19 OCT 22
NO. BY		DESCRIPTION	DATE

**ROEHAMPTON WEST**  
409 GRANVILLE ST.  
SUITE 1051  
VANCOUVER, BC V6C 1T2  
TEL. (779)229-4228  
VANCOUVER | KELLOWNA | EDMONTON | CALGARY

LOCATION:  
12515 110 AVE., SURREY, B.C.

TITLE:  
TOWER PROFILE

PROJECT NAME: NEW SITE - GREENFIELD PROJECT NO: W4008A DWG. NO: A01



- NOTES:
1. SITE PLAN OBTAINED FROM SITE VISIT BY ROEHAMPTON WEST, DATED 30 AUG 22 & IMAPBC.
  2. FINAL LOCATION OF THE TOWER TO BE DETERMINED ON THE REVIEW OF THE GEOTECHNICAL REPORT AND SURVEY.

CLIENT:



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LOCATION:  
 12515 110 AVE., SURREY, B.C.

TITLE:  
 SITE ACCESS PLAN

PROJECT NAME: NEW SITE - GREENFIELD PROJECT NO: W4008A DWG. NO: A02

1 SITE ACCESS PLAN

SITE NOTES:  
 PROPOSED LANDSCAPING. MAINTENANCE TO BE BY TRANSLINK MOVING FORWARD



1 SITE PLAN



NOTES:

1. SITE PLAN OBTAINED FROM SITE VISIT BY ROEHAMPTON WEST, DATED 30 AUG 22 & GOOGLE MAPS.
2. FINAL LOCATION OF THE TOWER TO BE DETERMINED ON THE REVIEW OF THE GEOTECHNICAL REPORT AND SURVEY.

CLIENT:

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LOCATION:  
 12515 110 AVE., SURREY, B.C.

TITLE:  
 SITE PLAN

PROJECT NAME: NEW SITE - GREENFIELD PROJECT NO: W4008A DWG. NO: A03

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1 SITE PLAN



- NOTES:
1. SITE PLAN OBTAINED FROM SITE VISIT BY ROEHAMPTON WEST, DATED 30 AUG 22 & GOOGLE MAPS.
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CLIENT:



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NO.	BY	DESCRIPTION	DATE

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LOCATION:  
 12515 110 AVE., SURREY, B.C.

TITLE: ELECTRICAL ROUTING		
PROJECT NAME: NEW SITE - GREENFIELD	PROJECT NO: W4008A	DWG. NO: E01

CITY OF SURREY

(the "City")

DEVELOPMENT VARIANCE PERMIT

NO.: 7923-0029-00

Issued To:

(the "Owner")

Address of Owner:

1. This development variance permit is issued subject to compliance by the Owner with all statutes, by-laws, orders, regulations or agreements, except as specifically varied by this development variance permit.
2. This development variance permit applies to that real property including land with or without improvements located within the City of Surrey, with the legal description and civic address as follows:

Parcel Identifier: 002-348-047  
Parcel A (Explanatory Plan 13373) Except: Firstly: Parcel One (Reference Plan 13800)  
Secondly: Parcel One (Bylaw Plan 70829)  
Thirdly: Parcel One (Bylaw Plan 72639)  
Fourthly: Parcel 1 (AA149108) Shown As Closed Road On Plan 75334  
Fifthly: Parcel 1 (Statutory Right Of Way Plan 75745  
Sixthly: Parcel 3 (Statutory Right of Way Plan 75804 and  
Seventhly: Parcel 2 (Statutory Right of Way Plan 75832)  
Eighthly: Part Dedicated Road on Plan LMP51,  
Section 17 block 5 North Range 2 West New Westminster District Plan 616

12515 - 110 Avenue

(the "Land")
3. Surrey Zoning By-law, 1993, No. 12000, as amended is varied as follows:

(a) In Sub-section A.1(a)ii.b. of Part 4 General Provisions, in the case of Antenna Systems that are free-standing (affixed directly onto the ground, rather than on a building) the height is increased from 12 metres to 25 metres.
4. The landscaping and the siting of buildings and structures shall be in accordance with the drawings numbered 7923-0029-00 (A) through to and including 7923-0029-00 (D) (the "Drawings") which are attached hereto and form part of this development variance permit.

5. This development variance permit applies to only the that portion of the buildings and structures on the Land shown on Schedule A which is attached hereto and forms part of this development variance permit. This development variance permit does not apply to additions to, or replacement of, any of the existing buildings shown on attached Schedule A, which is attached hereto and forms part of this development variance permit.
6. The Land shall be developed strictly in accordance with the terms and conditions and provisions of this development variance permit.
7. This development variance permit shall lapse if the Owner does not substantially start any construction with respect to which this development variance permit is issued, within two (2) years after the date this development variance permit is issued.
8. The terms of this development variance permit or any amendment to it, are binding on all persons who acquire an interest in the Land.
9. This development variance permit is not a building permit.

AUTHORIZING RESOLUTION PASSED BY THE COUNCIL/DELEGATED OFFICIAL, THE  
DAY OF     , 20 .

ISSUED THIS     DAY OF     , 20 .

---

Mayor – Brenda Locke

---

City Clerk – Jennifer Ficocelli

ELEV. ±25.00m  
ELEV. ±24.60m

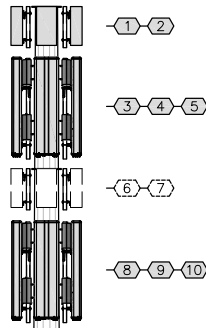
ELEV. ±22.96m

ELEV. ±19.62m

T/O VEGETATION  
= ±14.00m

ELEV. ±5.00m

ELEV. ±0.00m



PROPOSED  
FUTURE

11

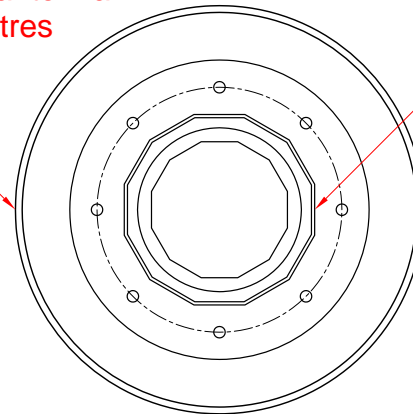
1 TOWER PROFILE

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6	±21.29m	3	NR-A/B/C	AIR3228	0/120/230	0	FUTURE	60	H&S	±3.0m	FUTURE
7	±21.29m	2	-	MLUP	-	-	FUTURE	2	DC	±25.5m	FUTURE
		2	-	MLUF	-	-		2	FB	±25.5m	
8	±19.62m	3	OFFSET-1/2/3	FFV454-65B-R7-V2	0/120/230	0	PROPOSED	60	H&S	±3.0m	PROPOSED
9	±19.62m	12	-	RRU	-	-	PROPOSED				
10	±19.62m	3	-	MLUP	-	-	PROPOSED	2	DC	±23.5m	PROPOSED
		3	-	MLUF	-	-		2	FB	±23.5m	
11	±5.0m	1	GPS-1	KRE1012395/2	-	-	PROPOSED	-	-	-	PROPOSED

TX LINES:	TYPE:	SIZE:
JUMPERS	LDF4	1/2"
DC	-	1/2" - 3/4"
FB	-	3/8" - 1/2"

DVP to vary Part 4 General Provisions of the Zoning By-law to increase the maximum height of a free-standing antenna system tower from 12 metres to 25 metres

PROPOSED TOWER FOUNDATION



PROPOSED ROGERS 25m MONOPOLE

2 TOWER BASE PLAN

NOTES:  
1. TOWER DESIGN IS CONCEPTUAL FOR NOT FOR E SPECIFIC  
2. LATEST  
3. ROGERS SPECIFICATIONS. ALL DIMENSIONS ARE IN MM UNLESS CALED.

# Schedule A

7923-0029-00(A)

CLIENT:

CARRIER:



5			
4			
3			
2	NN	CLIENT COMMENTS	12 MAY 23
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VANCOUVER, BC V6C 1T2  
TEL. (778)228-4228  
VANCOUVER | KELLOWNA | EDMONTON | CALGARY

LOCATION:  
12515 110 AVE., SURREY, B.C.  
TITLE:  
TOWER PROFILE  
PROJECT NAME: NEW SITE - GREENFIELD PROJECT NO: W4008A DWG. NO: A01

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NOTES:  
 1. SITE PLAN OBTAINED FROM SITE VISIT BY ROEHAMPTON WEST, C. VER TO VIEW RT  
**7923-0029-00(B)**

CLIENT:

CARRIER:



5			
4			
3			
2	NN	CLIENT COMMENTS	12 MAY 23
1	NN	CLIENT COMMENTS	24 NOV 22
0	LS	PRELIMINARY	19 OCT 22
NO. BY		DESCRIPTION	DATE

**ROEHAMPTON WEST**  
 409 GRANVILLE ST.  
 SUITE 1051  
 VANCOUVER, BC V6C 1T2  
 TEL. (778)228-4228  
 VANCOUVER | KELLOWNA | EDMONTON | CALGARY

LOCATION:  
 12515 110 AVE., SURREY, B.C.

TITLE:  
 SITE ACCESS PLAN

PROJECT NAME: NEW SITE - GREENFIELD PROJECT NO: W4008A DWG. NO: A02

1 SITE ACCESS PLAN

SITE NOTES:  
 PROPOSED LANDSCAPING. MAINTENANCE TO BE BY TRANSLINK MOVING FORWARD

NOTES:

1. SITE PLAN OBTAINED FROM SITE VISIT BY ROEHAMPTON WEST, OOGLE : TOWER TO REVIEW OF THE GEOTECHNICAL REPORT AND SURVEY.

7923-0029-00(C)



1 SITE PLAN

CLIENT:

CARRIER:



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2	NN	CLIENT COMMENTS 12 MAY 23
1	NN	CLIENT COMMENTS 24 NOV 22
0	LS	PRELIMINARY 19 OCT 22
NO. BY	DESCRIPTION	DATE

**ROEHAMPTON WEST**  
 409 GRANVILLE ST.  
 SUITE 1051  
 VANCOUVER, BC V6C 1T2  
 TEL. (779)229-4228  
 VANCOUVER | KELLOWNA | EDMONTON | CALGARY

LOCATION:  
 12515 110 AVE., SURREY, B.C.

TITLE:  
 SITE PLAN

PROJECT NAME: NEW SITE - GREENFIELD PROJECT NO: W4008A DWG. NO: A03

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1 SITE PLAN

7923-0029-00(D)

NOTES:  
 1. SITE PLAN OBTAINED FROM SITE VISIT BY ROEHAMPTON WEST, IGLE  
 OWNER TO REVIEW OF THE GEOTECHNICAL REPORT AND SURVEY.

CLIENT:

CARRIER:

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2	NN	CLIENT COMMENTS	12 MAY 23
1	NN	CLIENT COMMENTS	24 NOV 22
0	LS	PRELIMINARY	19 OCT 22
NO.	BY	DESCRIPTION	DATE

**ROEHAMPTON WEST**  
 409 GRANVILLE ST.  
 SUITE 1051  
 VANCOUVER, BC V6C 1T2  
 TEL. (778)228-4228  
 VANCOUVER | KELLOWNA | EDMONTON | CALGARY

LOCATION:  
 12513 110 AVE., SURREY, B.C.

TITLE:  
 ELECTRICAL ROUTING

PROJECT NAME: NEW SITE - GREENFIELD	PROJECT NO: W4008A	DWG. NO: E01
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Google Earth

© 2022 Google

1.54 m

### 3.0 Findings: Tree Inventory and Risk Assessment

#### 3.1 Tree Inventory

Table 1 summarizes the trees on site and Appendix 1 contains the complete tree inventory.

##### Trees On-site

There are 19 protected trees on-site within the project scope area. In total, four protected trees are recommended for removal and 15 are recommended for retention on the site as part of this development proposal (see Appendix 1 for individual tree inventory information).

Table 1: Summary of the on-site and City tree inventory by species, the recommended number to be retained and removed.

Tree Species	Existing	Remove	Retain
<b>Deciduous Trees (excluding Alder and Cottonwood)</b>			
Acer saccharinum	14	3	11
Carpinus betulus	5	1	4
<b>Total (excluding Alder and Cottonwood Trees)</b>	<b>19</b>	<b>4</b>	<b>15</b>
<b>Additional Trees in the proposed Open Space/ Riparian Area</b>	-	-	-
<b>Total Replacement Trees Proposed (excluding Boulevard/Riparian Area)</b>		-	
<b>Total Retained and Replacement Trees</b>		<b>15</b>	

#### 3.2 Tree Risk Assessment

No trees on this site posed a *high* or *extreme* risk to targets at the time of assessment.

### 4.0 Tree Preservation Summary

Table 2: City of Surrey tree preservation summary table for on-site and off-site trees, including the number of replacement trees proposed.

Surrey Project Number

Site Address Rogers Scott Road Skytrain Station (W4008) 12515 110 Ave Surrey, BC

Registered Arborist Cody Laschowski

On-Site Trees	Number of Trees
<b>Protected Trees Identified</b> (On-site and shared trees, including trees within boulevards and proposed streets and lanes, but excluding trees in proposed open space or riparian areas)	<b>19</b>
<b>Protected Trees to be Removed</b>	<b>4</b>
<b>Protected Trees to be Retained</b> (excluding trees within proposed open space or riparian areas)	<b>15</b>
<b>Total Replacement Trees Required:</b>	
- Alder & Cottonwood Trees Requiring 1 to 1 Replacement Ratio	
X one (1) = 0	<b>8</b>
- All other Trees Requiring 2 to 1 Replacement Ratio	
4 X two (2) = 0	
<b>Replacement Trees Proposed</b>	<b>0</b>
<b>Replacement Trees in Deficit</b>	<b>8</b>
<b>Protected Trees to be Retained in Proposed Open Space / Riparian Areas</b>	<b>0</b>

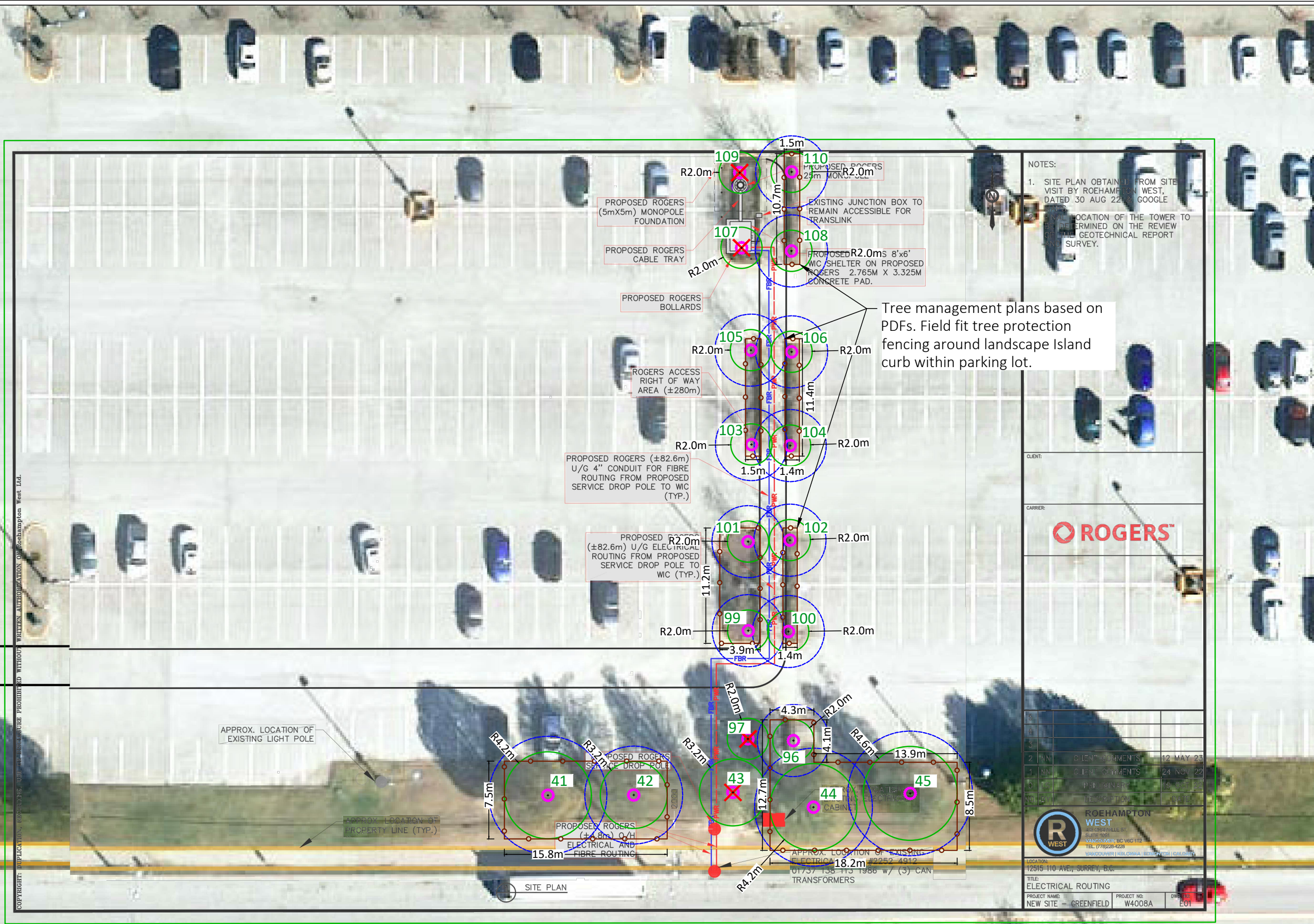
Off-Site Trees	Number of Trees
<b>Protected Off-Site Trees to be Removed</b>	<b>0</b>
<b>Total Replacement Trees Required:</b>	
- Alder & Cottonwood Trees Requiring 1 to 1 Replacement Ratio	
X one (1) = 0	<b>0</b>
- All other Trees Requiring 2 to 1 Replacement Ratio	
X two (2) = 0	
<b>Replacement Trees Proposed</b>	<b>0</b>
<b>Replacement Trees in Deficit</b>	<b>0</b>

Summary, report and plan prepared and submitted by

  
Signature of Arborist

September 15, 2023

Date



- LEGEND**
- TREE PROTECTION ZONE
  - NO-BUILD ZONE
  - TREE PROTECTION FENCE
  - SURVEYED TREE TO BE RETAINED
  - UN-SURVEYED TREE TO BE RETAINED
  - ✗ SURVEYED TREE TO BE REMOVED
  - ✗ UN-SURVEYED TREE TO BE REMOVED

**NOTES:**

- SITE PLAN OBTAINED FROM SITE VISIT BY ROEHAMPTON WEST, DATED 30 AUG 22, USING GOOGLE EARTH.
- LOCATION OF THE TOWER TO BE DETERMINED ON THE REVIEW OF THE GEOTECHNICAL REPORT SURVEY.

Tree management plans based on PDFs. Field fit tree protection fencing around landscape island curb within parking lot.

- NOTES**
- The location of un-surveyed trees on this plan is approximate. Their location and ownership cannot be confirmed without being surveyed by a Registered BC Land Surveyor.
  - All tree protection fencing must be built to the relevant municipal bylaw specifications. The dimensions shown are from the outer edge of the stem of the tree.
  - The tree protection zone shown is a graphical representation of the critical root zone, measured from the outer edge of the stem of the tree. (½ the trees diameter was added to the graphical tree protection circles to accommodate the survey point being in the center of the tree)
  - Any construction activities or grade changes within the Root Protection Zone must be approved by the project arborist.
  - This plan is based on a topographic and tree location survey provided by the owners' Registered British Columbia Land Surveyor (BCLS) and layout drawings provide by the owners' Engineer (P Eng).
  - This plan is provided for context only, and is not certified as to the accuracy of the location of features or dimensions that are shown on this plan. Please refer to the original survey plan and engineering plans.

CLIENT: **ROGERS**

CARRIER: **ROGERS**

1	CLIENT COMMENTS	12 MAY 23
2	CLIENT COMMENTS	24 NOV 22
3	PRELIMINARY	16 NOV 22
4	REVISION	16 NOV 22
5	REVISION	16 NOV 22

**ROEHAMPTON WEST**  
 400 CRAWFORD ST.  
 SUITE 100  
 VANCOUVER, BC V6C 1T2  
 TEL: (778) 228-4228  
 www.roehamptonwest.com

LOCATION: 12515-110 AVE., SURREY, B.C.  
 TITLE: ELECTRICAL ROUTING  
 PROJECT NAME: NEW SITE - GREENFIELD PROJECT NO: W4008A DRAWN BY: EGT

- REFERENCE DRAWINGS**
- Base electrical routing plan provided by Roehampton West dated May 12, 2023.



3559 COMMERCIAL STREET  
 VANCOUVER BC | V5N 4E8  
 T 604.733.4886

Drawing title: Tree Management Plan  
 Project address: Rogers Scott Road Skytrain Station, Surrey  
 Client: Cypress Land Services

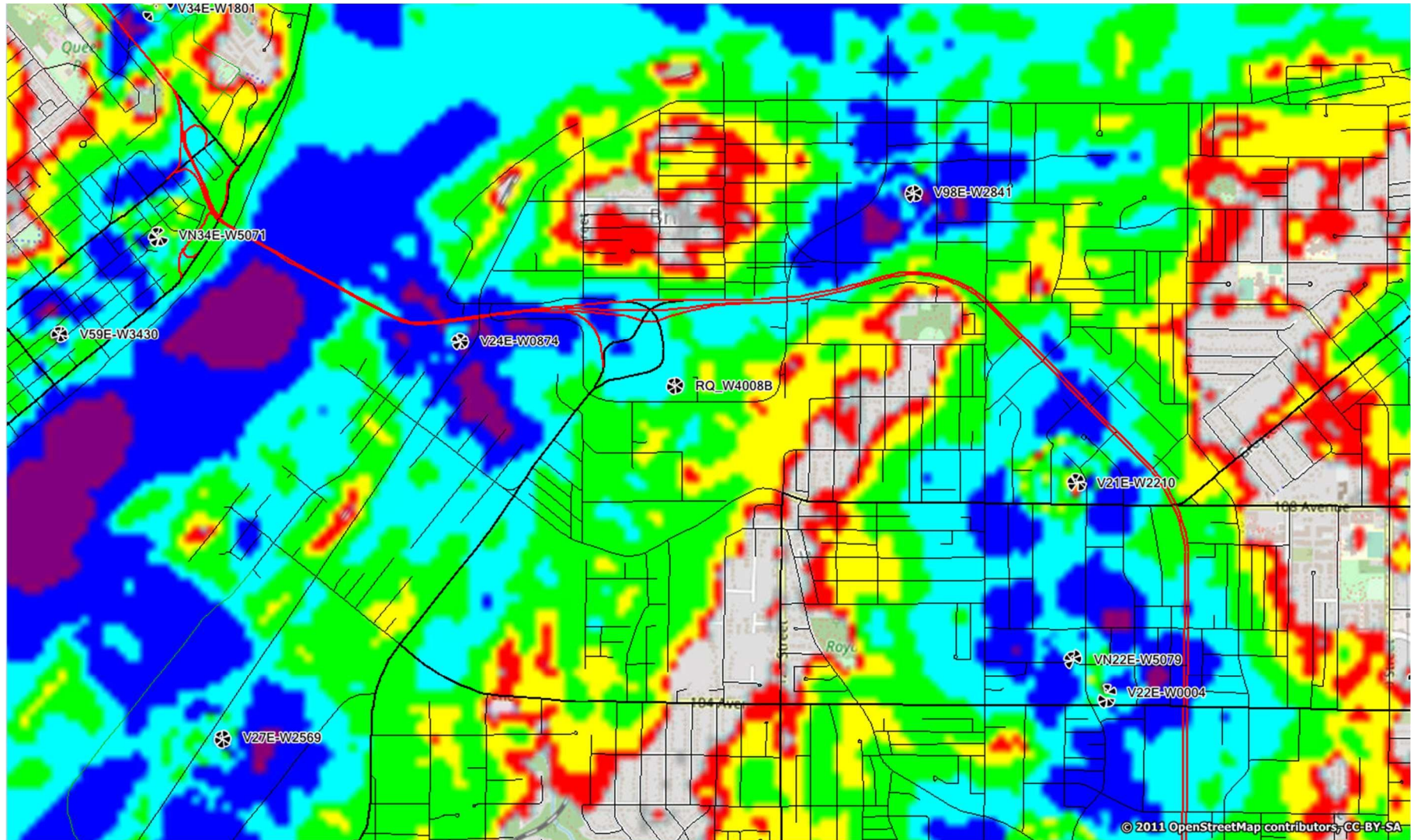
Drawing No: 001  
 Date: 2023/09/15  
 Drawn by: CL  
 Page Size: TABLOID 11"x17"

Page #  
 1 of 1



Coverage maps  
**RADIO SITE QUALIFICATION**  
LTE 2100 MHz, RSRP: BEFORE

Appendix V



# RADIO SITE QUALIFICATION

## LTE 2100 MHz, RSRP: AFTER

