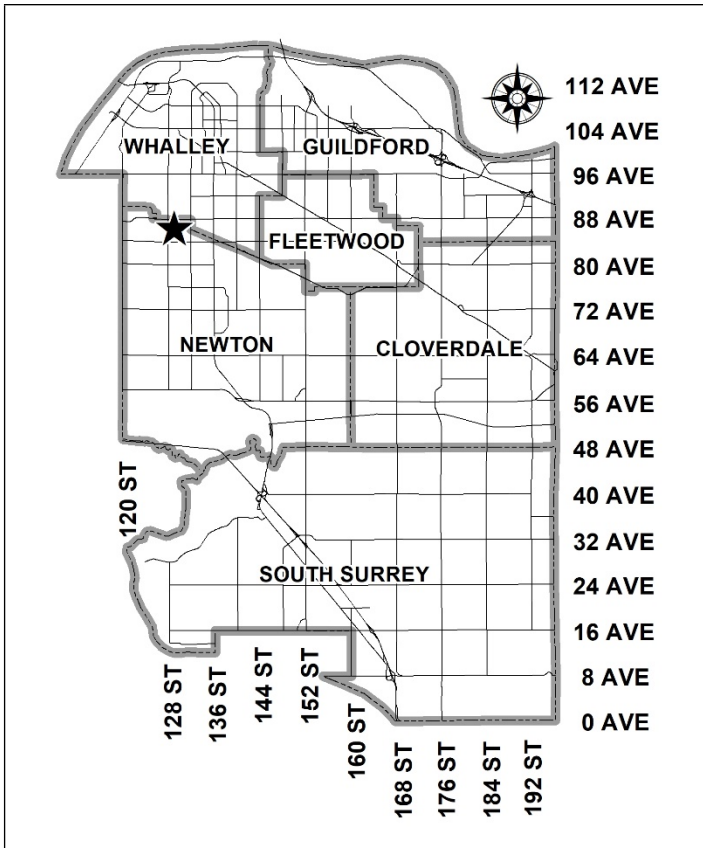


City of Surrey
PLANNING & DEVELOPMENT REPORT
Application No.: 7923-0176-00
Planning Report Date: December 4, 2023



PROPOSAL:

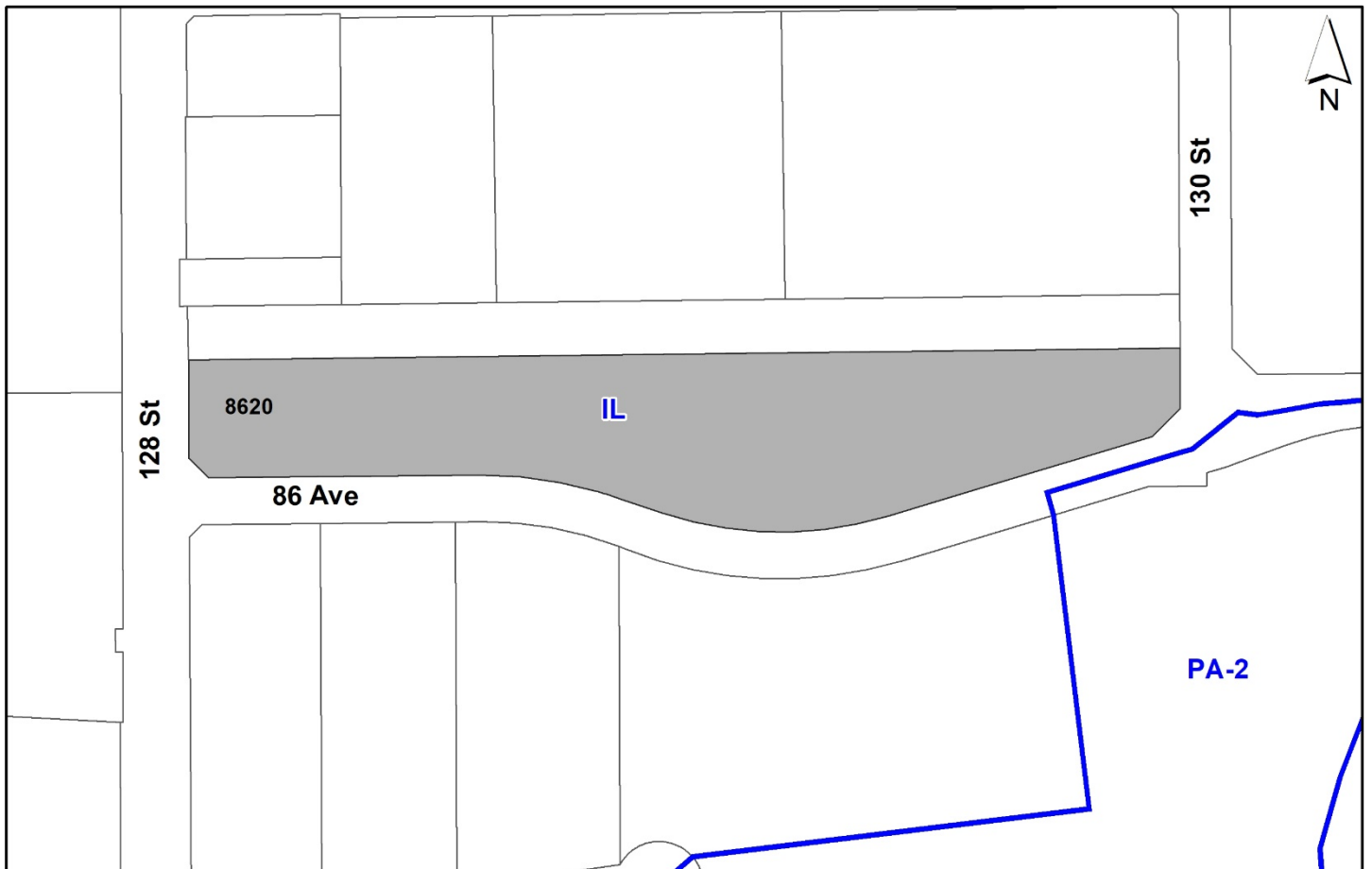
- **Development Variance Permit**

to increase the maximum height of a free-standing telecommunications tower from 12.0 metres to 19.1 metres to permit replacement of an existing antenna pole.

LOCATION: 8620 - 128 Street

ZONING: IL

OCP DESIGNATION: Industrial



RECOMMENDATION SUMMARY

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

DEVIATION FROM PLANS, POLICIES OR REGULATIONS

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

RATIONALE OF RECOMMENDATION

- The proposal conforms to the criteria and best practices identified in the City's Antenna System Siting Policy (No. O-62).
- The proposal will result in minimal visual disruption in the area, as the proposal is to increase the height of an existing telecommunications tower by 4.2 metres and the lot is established with BC Hydro transmission towers.
- The proposed location of the tower is at the north-west of an active industrial lot. The base of the tower and associated equipment will be screened by enclosure fencing.
- Most of the site is undevelopable due to the presence of a BC Hydro Right-of-Way. Replacement of the existing on-site telecommunications tower is more feasible than installation of a new tower.
- The applicant has provided documentation which indicates that there is a demonstrated coverage gap in the area.

RECOMMENDATION

The Planning & Development Department recommends that:

1. Council approve Development Variance Permit No. 7923-0176-00 (Appendix II) varying the following, to proceed to Public Notification:
 - (a) to vary Part 4 General Provisions of the Zoning By-law to increase the maximum height of a free-standing telecommunications tower from 12 metres to 19.1 metres.

SITE CONTEXT & BACKGROUND

Direction	Existing Use	OCP Designation	Existing Zone
Subject Site	Truck parking, BC Hydro transmission towers and power lines, telecommunications tower	Industrial	IL
North (Abutting):	Truck parking, BC Hydro power lines, single and multi-tenant industrial buildings	Industrial	IL
East (Across 130 Street):	Industrial buildings and storage (concrete products), Sikh Academy parking lot	Industrial	IL, PA-2
South (Across 86 Avenue):	Multi-tenant industrial building, transportation and storage, BC Hydro transmission towers and power lines	Industrial	IL
West (Across 128 Street):	Vegetated buffer for BC Hydro station	Industrial	IL

Context & Background

- The subject site is approximately 19,766 square metres or 9.77 hectares in size and located at 8260 128 Street. The site is designated Industrial in the Official Community Plan (OCP) and is zoned “Light Impact Industrial Zone (IL).”
- The subject site is currently occupied by a truck parking business and an existing telecommunications tower and equipment enclosure.
- The existing telecommunications tower and equipment enclosure are located on the northwest corner of the lot. The enclosure is approximately 3 metres wide, 4 metres long, 2 metres from the north property line, and 10 metres from the west property line (128 Street).
- A majority of the site is encumbered by a BC Hydro right-of-way encompassing transmission towers and power lines. Uses under this right-of-way are restricted due to BC Hydro safety standards. The existing telecommunications tower and enclosure is located on the northwest corner of the site, which is the only developable portion of the property.

DEVELOPMENT PROPOSAL

Planning Considerations

- Cypress Land Services Ltd. on behalf of Telus is proposing to replace an existing 14.9-metre tall telecommunications tower located on the northwest portion of the subject site.
- The proposed replacement tower would be 19.1 metres high as measured from the base to the peak of the structure. The monopole itself would be 18.63 metres high,
- The existing enclosure, power cabinet, cable trays, and other equipment associated with the existing tower are proposed for retention.

Referrals

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

POLICY & BY-LAW CONSIDERATIONS

- City 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 and not compromising existing policy guidelines, especially antenna systems either near or within 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 antenna system 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 free-standing antenna system supports 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 meets the needs of residents and conforms 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 Policy No. O-62.

Location Preferences

- It is preferable that new free-standing telecommunication towers be sited in non-residential locations and preferably in industrial or mixed employment areas.

The proposed site is within an industrial area that is absent of any sensitive environmental features or buildings of historical significance. The tower would be approximately 146 metres from the closest residential properties (single family dwellings, across 87 Avenue to the north).

- It is preferable that new free-standing telecommunication towers be sited in areas that maximize the distance from residential areas and which have mature landscaping screening.

The proposed site is within an industrial area that is absent of any sensitive environmental features or buildings of historical significance.

Design Preferences

- Towers and ancillary equipment shelters will be designed to fit their surroundings and to minimize their visual impact on surrounding properties.

The proposed replacement tower is located within an industrial site which is currently used for truck parking. The site houses multiple BC Hydro transmission towers that are

significant in size in comparison to the proposed tower. The replacement tower is proposed to be constructed of wood material corresponding with the original tower and adjacent service poles and power lines.

- The use of the monopole is encouraged. Where a tower is being constructed to accommodate a single user, a monopole design is required.

The proposed replacement tower is a monopole design. Due to the height proposed, the proposed tower is for a single carrier.

- Landscaping may be appropriately placed around telecommunication towers and ancillary facilities, such as equipment shelters, to minimize their visual impact on the neighbourhood.

The base of the replacement tower would be buffered by existing 2.14m high equipment enclosure fencing. The property is screened by fencing and existing BC Hydro and utility towers on 128 Street and 86 Avenue.

Public Consultation Process

- In accordance with consultation requirements under policy No. O-62, the applicant sent out 34 notification packages on September 27, 2023, to property owners and mailing addresses within a notification area of 57.3 metres, which is approximately three times the height of the proposed antenna system.
- One response was received because of these notifications. The respondent was neither for nor against the tower, but used the site for truck parking and noted that vehicles could conduct electricity under the on-site transmission lines during heavy precipitation events.

Zoning By-law

Height Variance

- The applicant is requesting the following variance:
 - to vary Part 4 General Provisions of the Zoning By-law to increase the maximum height of a free-standing telecommunications tower from 12 metres to 19.1 metres.
- The additional height will permit the replacement of an existing 14.9 metre telecommunications tower with a 19.1 metre tall tower.
- The applicant has demonstrated general conformance with the City's Antenna System Siting Policy (No. O-62).
- The variance permits replacement of an existing tower on an established industrial lot that is abutting arterial highways and approximately 146 metres away from the nearest residences. Public realm impacts would also be limited due to the prevalence of utility and power infrastructure on the lot and surrounding area.

- The proposed height will permit the replacement of an existing tower as opposed to the installation of a new monopole and is supportable as a majority of the site is encumbered under a BC Hydro right-of-way and considered undevelopable.

TREES

- No trees will be removed or impacted as part of this telecommunications structure proposal.

INFORMATION ATTACHED TO THIS REPORT

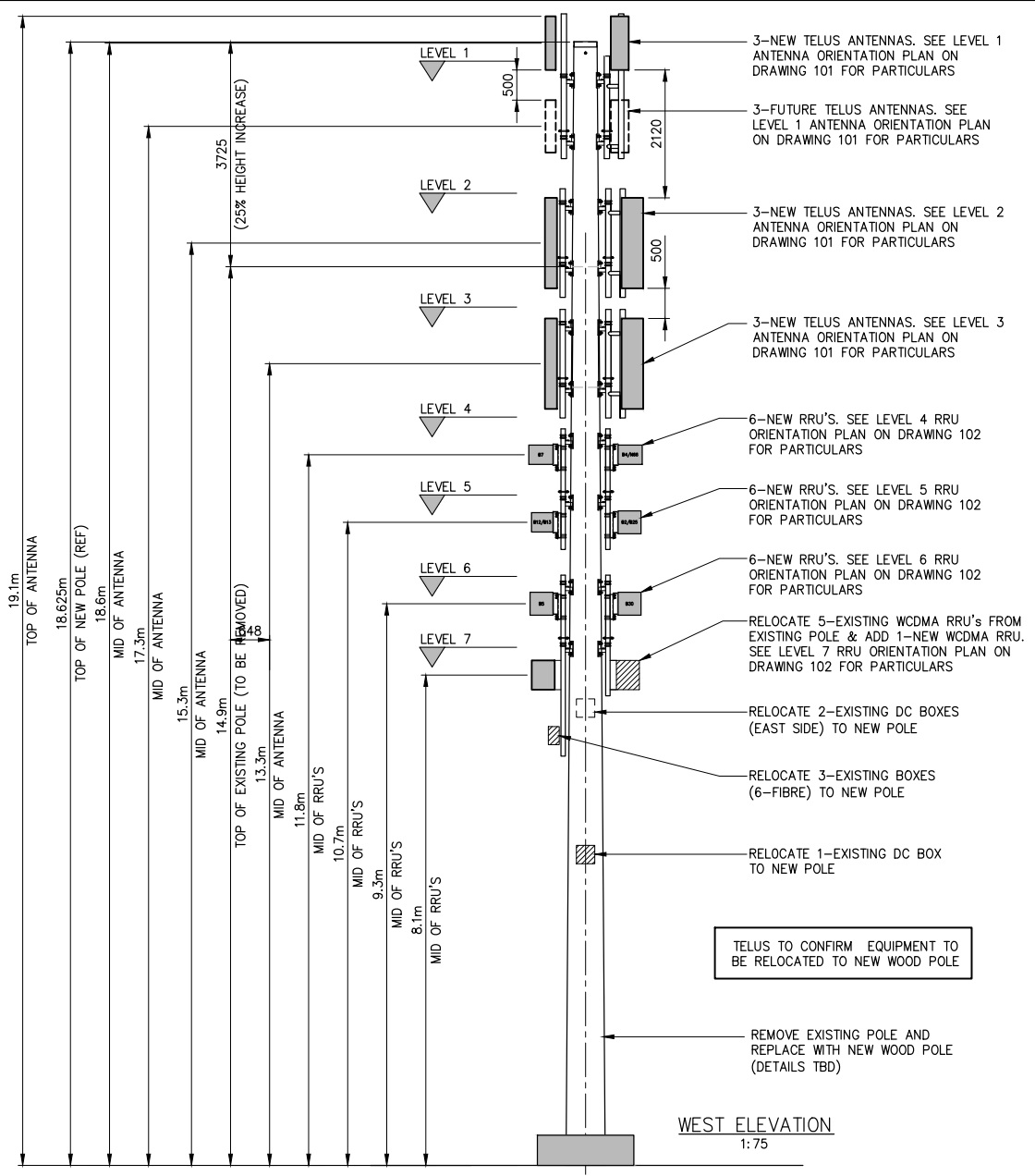
The following information is attached to this Report:

Appendix I.	Site Plan and Elevations
Appendix II.	Development Variance Permit 7923-0176-00
Appendix III.	Tower Site Location and Photo-Simulation

approved by Shawn Low

Don Luymes
General Manager
Planning and Development

JK/ar



DESIGN SPECIFICATIONS:
 CAN/CSA S37-18
 QNBC: 440 Pa
 ICE: 10mm RADIAL
 Ce: VARIES
 Cg: 2.0
 Ca: 1.0
 DAMPING RATIO: 0.42%
 LOAD FACTOR (DEAD LOAD) = 1.25/0.85*
 LOAD FACTOR (WIND LOAD) = 1.40
 IMPORTANCE FACTOR = 1.0
 LOAD COMBINATION FACTOR = 1.00/0.50**
 LOAD FACTOR (ICE LOAD) = 1.45/0.82*

* WHEN THE LOAD RESISTS OVERTURNING, SLIDING, UPLIFT, OR REVERSAL OF LOAD EFFECT.

** FOR COMBO OF WIND, DEAD LOAD & ICE TOGETHER.

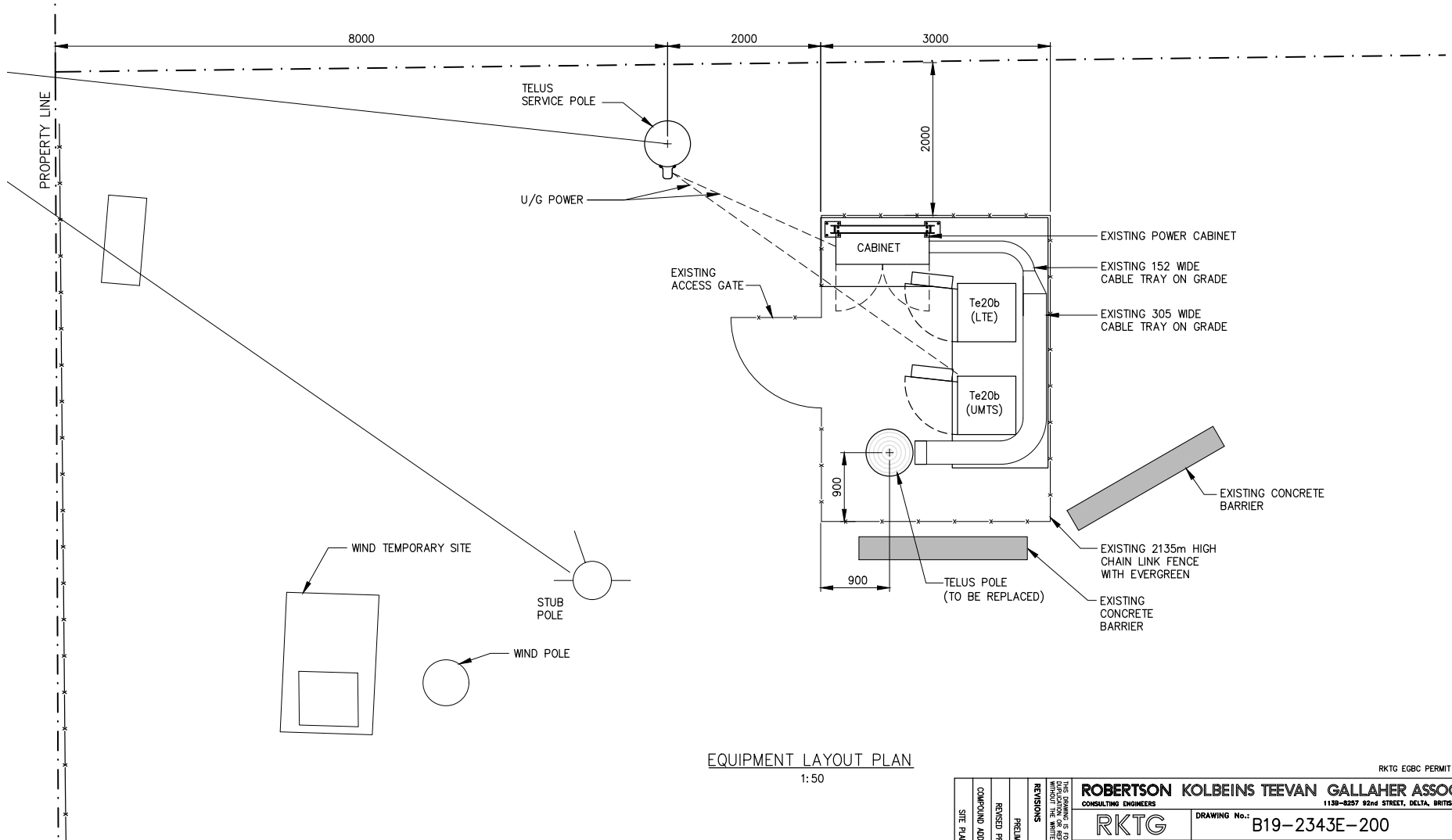
ADDRESS:
 8620 128 ST. SURREY, BC, CANADA

		NAD 83		ZONE 10	
DESCRIPTION	NORTHING	EASTING	LAT.	LONG.	GRD EL.
APPROX CENTRE OF TOWER	5445183	509648	N49°09'33.7896" 49.159386°	W122°52'03.63" -122.867675°	68m±

RKTG EGBC PERMIT NUMBER: 1000698

ROBERTSON KOLBEINS TEEVAN GALLAHER ASSOCIATES LTD CONSULTING ENGINEERS 1138-8257 82nd STREET, DELTA, BRITISH COLUMBIA V4G 0A4		DRAWING No.: B19-2343E-100 REV. 9	
BC0636 - 128 ST. & 86 AVE. 2022 VENDOR UPGRADE - SAMSUNG BUILD + N78 WEST ELEVATION			
EMG: N. RAHGOZAR DR: R. JOHNSON CHK: N. RAHGOZAR APP: M. RAMSAY		DATE: MAR 2022 PLOT: 1 : 1 PLOT DATE: OCT 5, 2023	

REVISIONS	DATE	NO
PRELIMINARY	2022	1
REVISIONS FOR SOE	2022	2
UPDATED	JAN 9	3
PRELIMINARY - NEW POLE	SEPT 9	4
REVISIONS	SEPT 19	5
COMPOUND ADDITION REMOVED	JAN 26	6
UPDATED PER CLIENT	MARCH 20	7
UPDATED PER CITY	SEPT 21	8
SITE PLAN ADDED	OCT 3	9



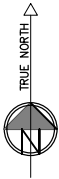
EQUIPMENT LAYOUT PLAN

1:50

RKTG EGBC PERMIT NUMBER: 1000698

ROBERTSON KOLBEINS TEEVAN GALLAHER ASSOCIATES LTD CONSULTING ENGINEERS 1138-8257 52nd STREET, DELTA, BRITISH COLUMBIA V4G 0A4		DRAWING No.: B19-2343E-200 REV. 4	
RKTG		BC0636 - 128 ST. & 86 AVE. 2022 VENDOR UPGRADE - SAMSUNG BUILD + N78 EQUIPMENT LAYOUT PLAN	
EMG: EPD/RJ DR: M. RAMSAY APP: M. RAMSAY		DATE: AUG. 2022 PLOT: 1 : 1 PLOT DATE: OCT 5, 2023	
TELUS			

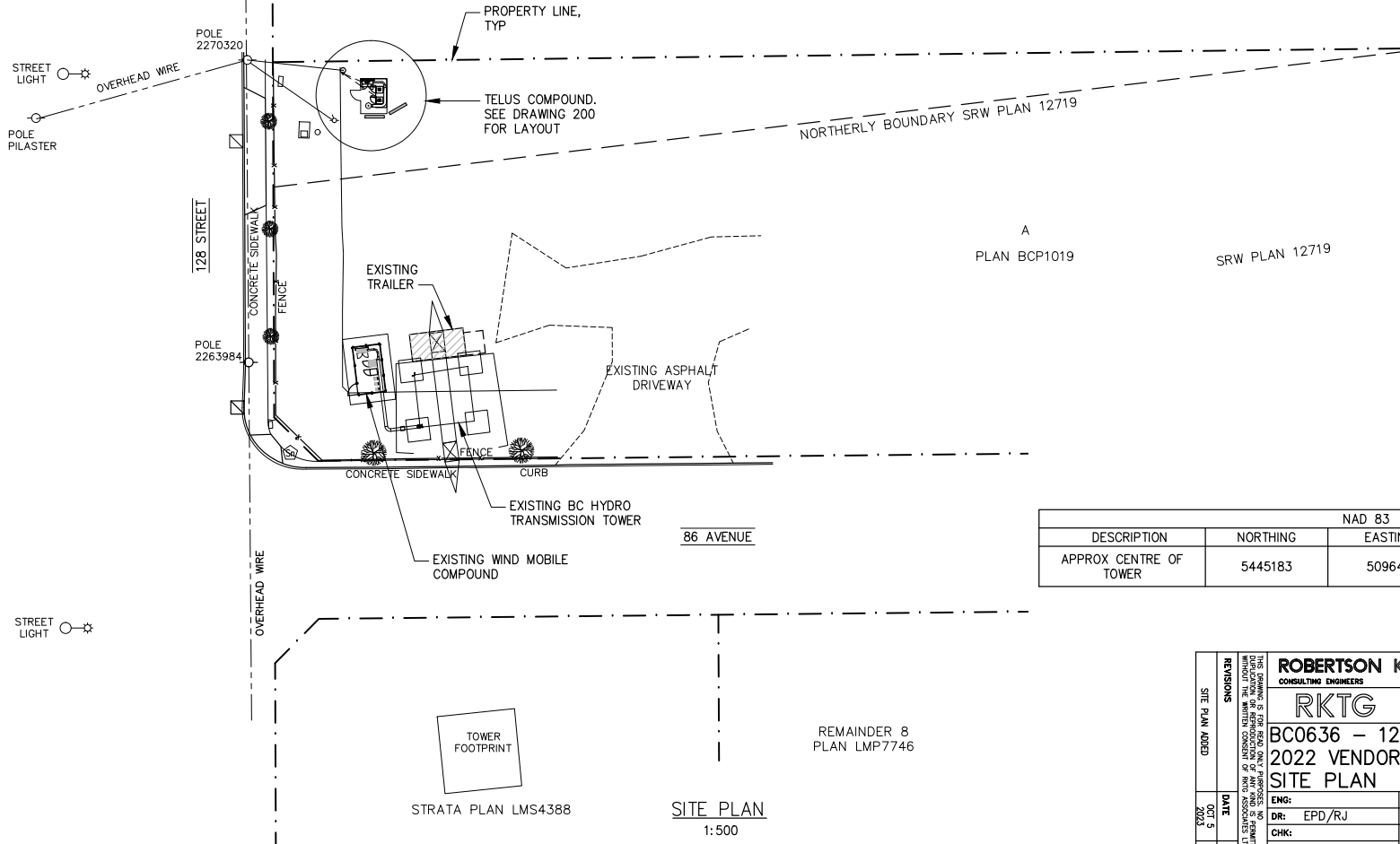
REVISIONS	DATE	NO
PRELIMINARY	AUG. 11, 2022	1
REVISED PRELIMINARY	JUN. 28, 2022	2
COMPILING ADDITION REVISIONED	AUG. 5, 2022	3
SITE PLAN ADDED	AUG. 5, 2022	4



PARCEL A
(EXPLANATORY PLAN 11594)
PLAN 9116
BUILDING

REMAINDER 1
PLAN LMP28842

REMAINDER PARCEL B
(EXPLANATORY PLAN 12090)
PLAN 3270



ADDRESS:
8620 128 ST. SURREY, BC, CANADA

		NAD 83		ZONE 10	
DESCRIPTION	NORTHING	EASTING	LAT.	LONG.	GRD EL.
APPROX CENTRE OF TOWER	5445183	509648	N49°09'33.7896" 49.159386°	W122°52'03.63" -122.867675°	68m±

RKTO EIBC PERMIT NUMBER: 1000698

THE FORMATION OF THIS PLAN IS THE RESULT OF A VISUAL INSPECTION OF THE SITE AND IS NOT A GUARANTEE OF ACCURACY WITHOUT THE WRITTEN CONSENT OF RKTG ASSOCIATES LTD.	ROBERTSON KOLBEINS TEEVAN GALLAHER ASSOCIATES LTD CONSULTING ENGINEERS 1138-8257 82nd STREET, DELTA, BRITISH COLUMBIA V4G 0A4	
	RKTG	DRAWING No.: B19-2343E-201 REV. 4
	BC0636 - 128 ST. & 86 AVE. 2022 VENDOR UPGRADE - SAMSUNG BUILD + N78 SITE PLAN	
	DATE: OCT 5 2023 DR: EPD/RJ CHK: APP: M. RAMSAY	DATE: OCT 2023 PLOT: 1 : 1 PLOT DATE: OCT 5, 2023



STRATA PLAN LMS4388

SITE PLAN
1:500

REMAINDER 8
PLAN LMP7746

CITY OF SURREY

(the "City")

DEVELOPMENT VARIANCE PERMIT

NO.: 7923-0176-00

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: 025-487-272
LOT A SECTION 29 TOWNSHIP 2 NEW WESTMINSTER DISTRICT PLAN BCP1019
EXCEPT PLAN BCP50352
8620 128 Street

(the "Land")

3. Surrey Zoning By-law, 1993, No. 12000, as amended is varied as follows:
 - (a) to vary Part 4 General Provisions of the Zoning By-law to increase the maximum height of a free-standing telecommunications tower from 12 metres to 19.1 metres.
4. This development variance permit applies to only the portion of 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.
5. The Land shall be developed strictly in accordance with the terms and conditions and provisions of this development variance permit.

6. 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.

7. The terms of this development variance permit or any amendment to it, are binding on all persons who acquire an interest in the Land.

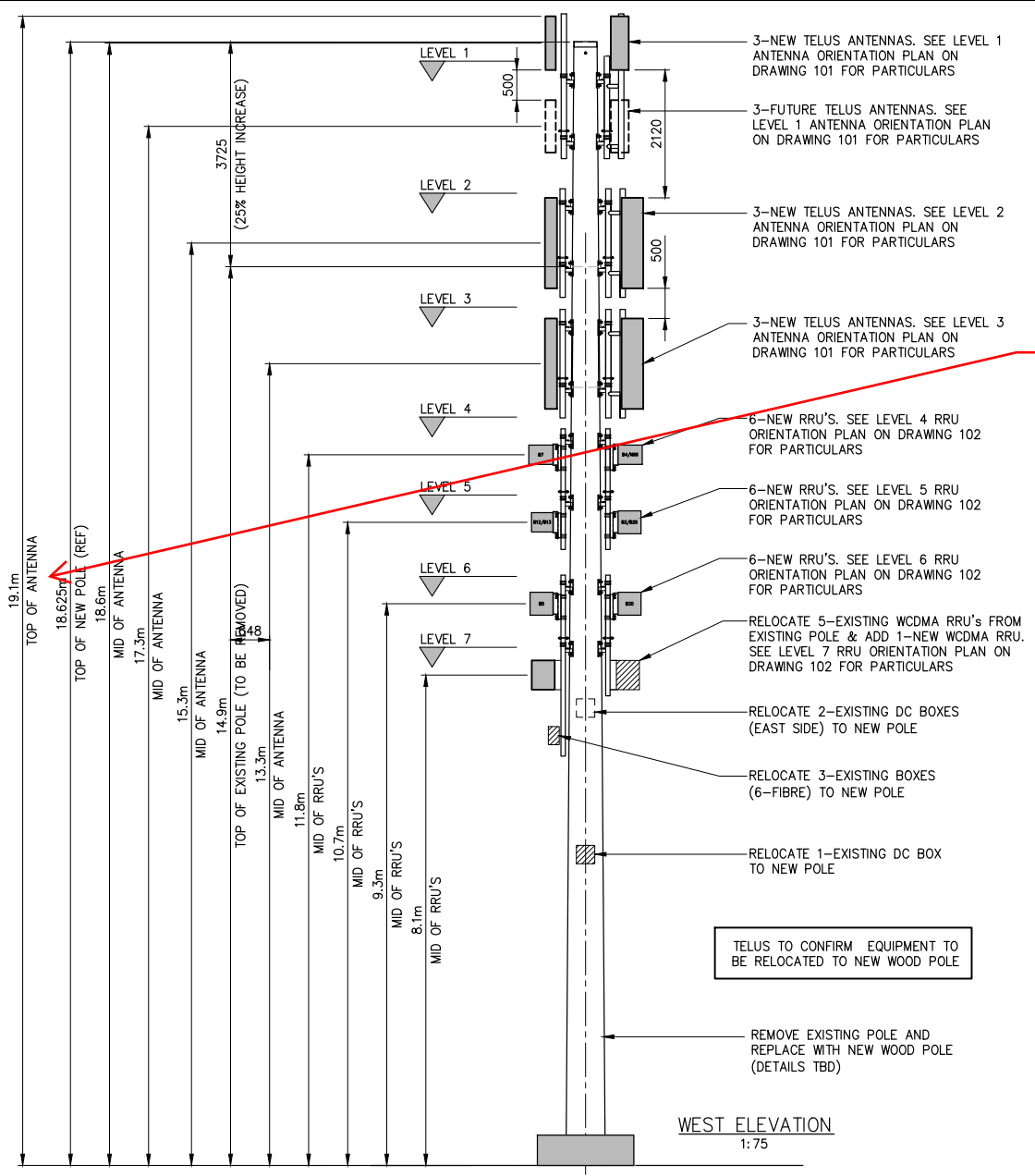
8. This development variance permit is not a building permit.

AUTHORIZING RESOLUTION PASSED BY THE COUNCIL, THE
DAY OF , 20 .

ISSUED THIS DAY OF , 20 .

Mayor – Brenda Locke

City Clerk – Jennifer Ficocelli



DVP 7923-0176-00:
to vary Part 4
General Provisions of
the Zoning By-law to
increase the
maximum height of a
free-standing
telecommunications
tower from 12 metres
to 19.1 metres.

DESIGN SPECIFICATIONS:
 CAN/CSA S37-18
 QNBC: 440 Pa
 ICE: 10mm RADIAL
 Ce: VARIES
 Cg: 2.0
 Ca: 1.0
 DAMPING RATIO: 0.42%
 LOAD FACTOR (DEAD LOAD) = 1.25/0.85*
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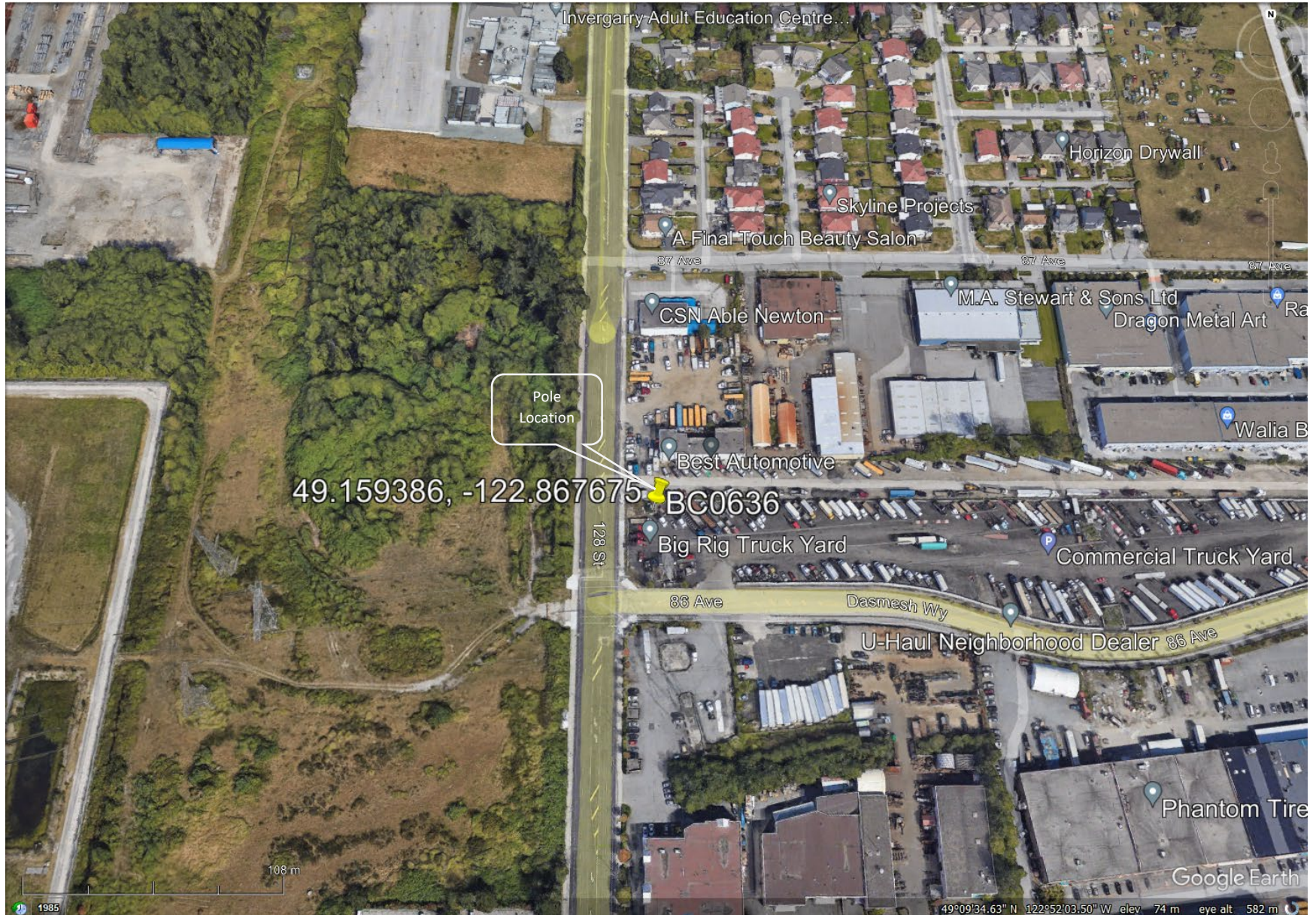
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BC0636 - 128 ST. & 86 AVE. WEST VENDOR UPGRADE - SAMSUNG BUILD + N78 WEST ELEVATION		EMG: N. RAHGOZAR DATE: MAR 2022 DR: R. JOHNSON PLOT: 1 : 1 CHK: N. RAHGOZAR PLOT DATE: APP: M. RAMSAY OCT 5, 2023	
REVISIONS NO. DATE DESCRIPTION 1 2022 PRELIMINARY 2 2022 REVISED S/S FOR S06 3 2022 UPDATED 4 2022 PRELIMINARY - NEW POLE 5 2022 REVISED S/S 6 2022 COMPOUND ADDITION REMOVED 7 2022 UPDATED PER CLIENT 8 2022 UPDATED PER CITY 9 2023 SITE PLAN ADDED		TELUS	

SCHEDULE A TOWER SITE LOCATION



**SCHEDULE B
PHOTO-SIMULATION
Before**



After

