

City of Surrey PLANNING & DEVELOPMENT REPORT File: 7910-0095-00

Planning Report Date: July 9, 2012

PROPOSAL:

• Development Variance Permit

in order to vary the maximum height of 2 proposed telecommunication monopoles from 12 metres (40 ft.) to 25 metres (82 ft.).

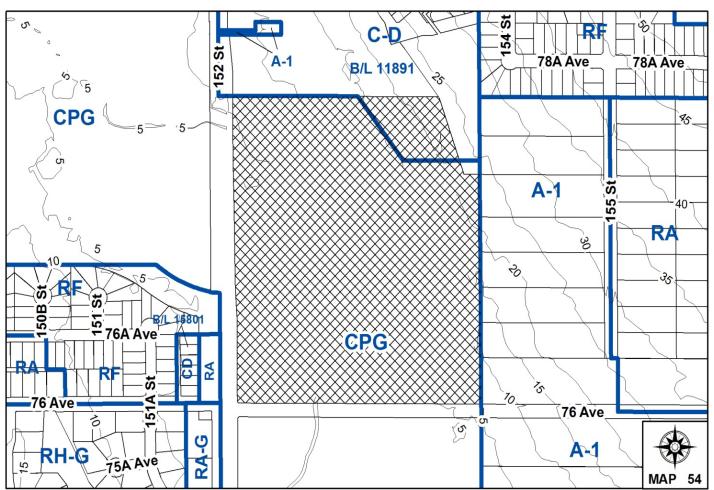
LOCATION: 7778 - 152 Street

OWNER: Eagle Quest Golf Centres Inc., Inc.

No. 60487A

ZONING: CPG and CD (By-law No. 11891)

OCP DESIGNATION: Agricultural and Suburban



RECOMMENDATION SUMMARY

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

DEVIATION FROM PLANS, POLICIES OR REGULATIONS

• The proposed telecommunication monopoles require a variance to the Zoning By-law to increase the maximum permitted height for each, from 12 metres (40 ft.) to 25 metres (82 ft.).

RATIONALE OF RECOMMENDATION

- The proposed telecommunication monopoles are located on a golf course and incorporate a stealth design to match the driving range netting poles. Both telecommunication monopoles will be partially screened by existing netting poles, netting and trees.
- The applicant has examined several alternate locations with the proposed location being the least intrusive.
- The applicant has worked with staff to reduce the circumference of each pole to 460 millimetres (1.5 feet) diameter and will internalize the antennas, to make them blend with the existing netting poles.

RECOMMENDATION

The Planning & Development Department recommends that:

1. Council approve Development Variance Permit No. 7910-0095-00 (Appendix II) varying the following, to proceed to Public Notification:

(a) to vary the maximum height of two proposed free-standing telecommunication monopoles from 12 metres (39 ft.) (40 ft.) to 25 metres (82 ft.).

REFERRALS

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

SITE CHARACTERISTICS

Existing Land Use: Eaglequest Golf Course.

Adjacent Area:

Direction	Existing Use	OCP Designation	Existing Zone
North:	Golf course and low density residential strata development.	Suburban	CD By-law No. 11891
East:	Single family houses on acreage lots.	Suburban	A-1 (the southernmost lot is under Development Application No. 7911- 0085-00 proposing 24 small suburban single family lots and open space at Third Reading.)
South (Across unopened 76 Avenue):	Golf course.	Agricultural	CPG
West (Across 152 Street):	Golf course and vacant residential lot.	Agricultural and Urban	CPG, RF and RA

DEVELOPMENT CONSIDERATIONS

• The subject site is the Eaglequest Golf Course located at 7778 - 152 Street. The site is split-designated Agricultural and Suburban in the Official Community Plan (OCP) and split-zoned "Golf Course Zone" (CPG) and Comprehensive Development (CD) Zone (By-law No. 11891).

• The applicant, Wind Mobile, launched its wireless network in the Vancouver market in 2010 and, over time, has been attempting to expand their coverage area in the Lower Mainland, including within the City of Surrey.

- In April 2010, Wind Mobile submitted an initial Development Variance Permit application to permit the installation of one 25-metre (82 ft.) high telecommunication monopole to be located adjacent to the netting poles that enclose the driving range on the Eaglequest Golf Course on the north edge of the Eaglequest Golf Course (same location as current application, see Site Plan of Appendix II).
- The proposed monopole was a 25-metre (82 ft.) high, metal, 610 mm (2 ft.) wide pole with 2 microwave dishes. The proposed 25-metre (82 ft.) height was needed to provide an unobstructed visual line of sight for the microwave dish with the E-Comm tower on Fraser Highway.
- A Development Variance Permit was required as the Zoning By-law limits the height of telecommunication structures to 12 metres (40 ft.).
- The telecommunication monopole is proposed to be located on the Eaglequest Golf Course site in order for Wind Mobile to be able to provide coverage in the area of generally bound by 144 Street to the west, 168 Street to the east, 64 Avenue to the south and 88 Avenue to the north (Appendix V).
- A Public Information Meeting (PIM) was held on July 28, 2010 to provide an opportunity for area residents to comment on the proposed telecommunication monopole.
- In response to concerns raised at the PIM the applicant reduced the diameter of the proposed monopole from 610 millimetres (2 ft.) to 460 millimetres (1.5 ft.) and explored alternate locations for the monopole (Appendix IV).
- To conform to the co-location requirements of the City's Telecommunication Policy, the applicant proposed to accommodate a second carrier, Mobilicity, that also started service in the Lower Mainland in 2010.
- However, by adding a second carrier, either the monopole height needed to be increased by an additional 7 metres (23 ft.) to 32 metres (105 ft.) (Appendix III) or a second 25-metre (82 ft.) tall monopole needed to be added to the proposal (Appendix II).
- A second PIM was held on May 17, 2012 to allow area residents to comment on the revised proposal and to provide input into the option of increasing the telecommunication monopole height to 32 metres (105 ft.) to accommodate two carriers or adding a second 25-metre (82 ft.) tall telecommunication monopole for a second carrier (see Public Consultation section).
- The proposed telecommunication monopoles are not replacing netting poles but will be located approximately one metre (3 ft.) away from the netting on the north side of the driving range. The proposed location is approximately 290 metres (950 ft.) east of 152 Street and 80 metres (262 ft.) away from residences to the north (Appendix II).

• The tallest existing wooden netting pole is approximately 24.4 metres (80 ft.) in height and an existing mature tree, located to the northeast of the proposed monopoles, is approximately 30 metres (98 ft.) tall. These, combined with the existing driving range netting, will partially screen the proposed telecommunication monopoles from the residential areas to the north and north-east.

• The applicant proposes an equipment compound with a cedar fence to screen the equipment cabinets. The compound will be located on the north side of the equipment shed approximately 120 metres (394 ft.) to the southeast of the proposed monopoles.

City's Telecommunication Tower Policy

- A City policy on telecommunication towers was developed in conjunction with wireless providers and approved by Council on June 18, 2001 (Policy No. O-49 Telecommunication Towers). The policy provides parameters on how the telecommunication towers should be sited and designed.
- The following is an evaluation of the proposed telecommunication monopoles in relation to Policy No. O-49:

Location and Siting

• When considering the siting of telecommunication tower facilities, every effort should be made to locate new equipment on existing structures such as Hydro transmission towers, utility poles, roof-tops, etc.

Although there are Hydro transmission towers in the immediate vicinity, each of these transmission towers has existing antennas. Since BC Hydro has a policy that only one carrier is allowed per tower, the applicant is unable to locate on the transmission towers (see Appendix IV).

The applicant has also explored the viability of attaching antennas on 15-metre (49 ft.) high street lights along 152 Street. However, this was not considered a feasible option due to differences in geodetic elevations combined with the maximum street light height of 15 metres (49 ft.).

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

The proposed locations are on a golf course and are approximately 80 metres (262 ft.) from any residential area. There are no industrial areas in the vicinity.

• Towers on prominent natural or cultural features, environmentally sensitive areas or areas with historically significant buildings are discouraged.

The proposed location of the monopoles is not near any prominent natural or cultural feature, environmentally sensitive area or area with historically significant buildings.

 New free-standing telecommunication towers should be located at a distance from the edge of an existing or future road allowance no less than the height of the tower.

The proposed location is approximately 270 metres (886 ft.) east of 152 Street.

• Location of telecommunication towers on sites with mature trees is encouraged.

The proposed location will be partially screened for some residents to the north by mature trees.

Co-location

• The carriers and other telecommunication tower owners are encouraged to work co-operatively in reaching agreements which allow for sharing of tower structures so as to minimize the total number of towers in the City.

The applicant has advised that a second carrier on one monopole would require a height of 32 metres (105 ft.). Therefore a second carrier is proposed on a second 25-metre (82 ft.) tall monopole.

Tower Design and Landscaping

- Towers and ancillary equipment shelters will be designed to fit their surroundings and to minimize their visual impact on surrounding properties.
 - Telecommunication equipment will be located along the north of the driving range shed which is on the eastern edge of the driving range. A cedar fence with a hedge is proposed to screen the equipment.
- The use of a monopole is encouraged. Where a tower is being constructed to accommodate a single user, a monopole design is required.
 - Both proposed towers are a monopole design, intended to resemble the existing wooden netting poles around the driving range.
- Landscaping shall be appropriately placed around telecommunication tower and ancillary facilities such as equipment shelters to minimize their visual impact on the neighbourhood.

As the existing netting poles and driving range netting are not screened with landscaping, landscaping is not proposed around the base of the towers. The proposed equipment compound will be enclosed with a cedar fence and will be screened with hedges.

PUBLIC CONSULTATION

• The initial proposal, submitted on April 19, 2010, was for a single 25-metre (82 ft.) tall telecommunication monopole that was 610 millimetres (2 ft.) in diameter and was to be

located in the same location adjacent to the netting poles that encloses the driving range on the Eaglequest Golf Course. A Public Information Meeting (PIM) was held at Eaglequest Golf Course on July 7, 2010. Approximately 20 area residents attended the PIM with concerns over destroyed views, health issues, and significant drop in property values.

- As a result of the first PIM, staff requested the applicant to reduce the massing and explore alternate locations. Several locations were explored (see Appendix IV) with none meeting the applicant's needs or without requiring additional pole height. The applicant was able to narrow the monopole by 25 percent from 610 millimetres (2 ft.) to 460 millimetres (1.5 ft.) and better internalize the antennas by using fiberglass sheathing on the top of the metal telecommunication monopole.
- After the first PIM, the applicant (Wind Mobile) amended the application to include an additional carrier (Mobilicity). The applicant proposed two options, a 32-metre (105 ft.) tall two-carrier monopole (Appendix III) or two 25-metre (82 ft.) tall single-carrier monopoles (Appendix II). As the amended application required either increased height or an additional monopole, it was determined that an additional PIM would be required with neighbouring residents to obtain input on both options. The second PIM was held on May 17, 2012.
- An information package was sent to 41 residents within a 190-metre (623 ft.) radius or six times the height the proposed telecommunication monopole, as measured from the proposed location of the towers, in accordance with Policy No. O-49.
- The May 17, 2012 PIM was held at Eaglequest Golf Course and 23 residents attended. As a result of the meeting, 10 feedback forms were submitted to City staff at the meeting. City staff also received additional letters from 23 residents.
- The concerns raised by the residents are as follows (with the applicant's responses in italics):
 - Dissatisfied with the proposed location.

The following alternative locations were explored (see Appendix IV for map with approximate elevations):

- 1. On the clubhouse at Eaglequest Height requirements could not be met and the golf course owner was opposed.
- 2. Hydro towers Current Hydro policy only allows one carrier per tower. The only available tower falls outside the network's required area.
- 3. Eaglequest's maintenance shed This location was opposed by some residents and was only marginally feasible from a Radio Frequency engineering perspective. Location was also not supported by the golf course owner.
- 4. Within the Eaglequest parking lot Pole height would need to be 40 metres (131 ft.) and 760 millimetres in diameter (2.5 ft.) to compensate for the lower topography. In addition, this location was not supported by the golf course owner or by City staff.

Page 8

5. Surrey Lake – The location was outside the network's required area and not feasible from a Radio Frequency engineering perspective. Topography would require a taller tower.

- 6. Along the netting pole line on the south side of the driving range A location near the south side of the golf course was examined however Radio Frequency testing determined that this location had a lower elevation (which would require taller towers) and falls outside of the network requirements.
- 7. Greenway next to 14th tee and fairway This location is approximately 8 metres (26 ft.) higher geodetic elevation which would require a shorter tower. Though partially screened by trees the proposed tower would be within 20 metres (66 ft.) of existing residential properties.
- 8. Netting pole –If netting was attached to the proposed poles, additional width would be required to offset the structural loading from netting and related wind load. It was determined that the most suitable location was next to the existing netting poles and to create stealth monopoles to look like netting poles.
- Dissatisfied with the design.

The proposed design options are engineered to be as thin as possible. Diameter was reduced from the 610 millimetres (2 ft.) that was presented at July 14, 2010 Public Information Meeting to 460 millimetres (1.5 ft.).

• Concerns about depreciation of property values.

There is no empirical evidence available that demonstrates that cell phone towers in proximity to homes, or any property, depreciate property values.

• Concerns that the proposed installation was just a profit generating goal for Wind Mobile, Mobilicity and Eaglequest Golf Course

The monopole site will be used by Wind Mobile and Mobilicity to provide cellular network coverage for the community, along with improved 911 public safety access for wireless users.

 Residents believe that there are already enough wireless providers in the marketplace.

The addition of new wireless entrants has led to increased competition in the wireless market.

• Concerns of electromagnetic files, radiation, and cancer.

Industry Canada manages the radio communication spectrum in Canada. Among other requirements, Industry Canada requires cellular telecommunication facilities to comply with guidelines set by Health Canada in order to protect people who live or work near these facilities. These Health Canada safety guidelines are outlined in their

"Safety Code 6" document and are among the most stringent in the world. All Wind Mobile and Mobilicity facilities meet or exceed these standards.

• Concern that the applicant's photo simulations did not clearly represent height of proposed options compared to trees and netting poles.

In determining the height of the poles and trees the applicant used a bucket truck and a tape measure to determine that the tallest pole is 24.38 metres (80 ft.) tall. An extrapolation of the tree height was calculated and a laser reading was also used to confirm the height.

BY-LAW VARIANCE AND JUSTIFICATION

(a) Requested Variance:

• To increase the maximum height of two free-standing telecommunication monopoles from 12 metres (40 ft.) to 25 metres (82 ft).

Applicant's Rationale:

- Additional height is required for microwave dish to provide line of sight between E-Comm tower on Fraser Highway and the proposed site.
- Alternate sites have been explored and no other suitable options are possible.
- The two proposed 25-metre (82 ft.) tall monopoles will be sited beside and resemble the existing 24-metre (79 ft.) high netting poles that border the driving range.

Staff Comments:

- The proposal complies with the majority of criteria identified in the City's Policy for Telecommunication Towers.
- The proposed monopoles are stealth in design as they mimic the driving range netting poles and the proposed monopoles are partially screened by an existing tree.
- Staff support the proposed variance.

INFORMATION ATTACHED TO THIS REPORT

The following information is attached to this Report:

Appendix I. Lot Owners and Action Summary

Appendix II. Development Variance Permit No. 7910-0095-00

Appendix III. Alternative 32-metre (105 ft.) Co-location Design Explored by Applicant

Appendix IV. Aerial Map of Vicinity with Alternate Sites Explored

Appendix V. Coverage Area Based On Proposed Wind Mobile Monopole

original signed by Judith Robertson

Jean Lamontagne General Manager Planning and Development

Information for City Clerk

Legal Description and Owners of all lots that form part of the application:

ı. (a) Agent: Name: Ian McBean

Alcatel Lucent Canada Inc.

Address: 4190 Still Creek Rd

Burnaby BC V₅C 6C6

Tel: 604-419-5307

2. Properties involved in the Application

(a) Civic Address: 7778 - 152 Street

(b) Civic Address: 7778 - 152 Street

Owner: Eagle Quest Golf Centres Inc., Inc. No. 60487A

PID: 013-207-687

Parcel "One", Except Part in Plan LMP29951 Section 23 Township 2 New Westminster

District Plan 80667

3. Summary of Actions for City Clerk's Office

(a) Proceed with Public Notification for Development Variance Permit No. 7910-0095-00 and bring the Development Variance Permit forward for issuance and execution by the Mayor and City Clerk.

CITY OF SURREY

(the "City")

DEVELOPMENT VARIANCE PERMIT

NO. 7910-0095-00

Issued To: EAGLE QUEST GOLF CENTERS INC., INC. NO. 60487A

(the "Owner")

Address of Owner: 1001 United Boulevard

Coquitlam, BC

V₃K₇A₇

- 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:

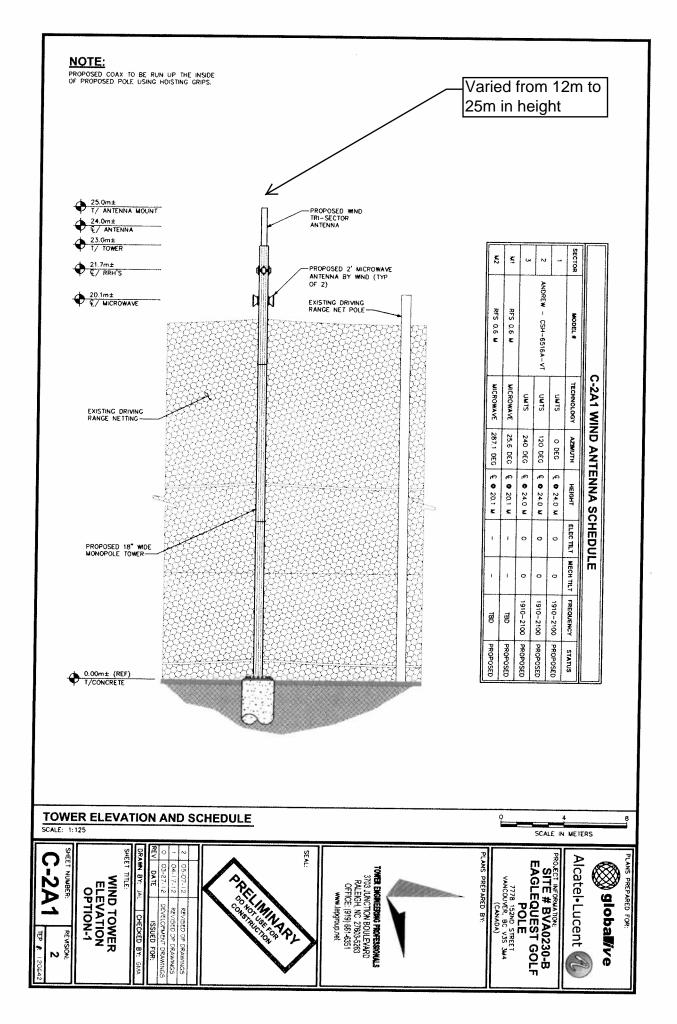
Parcel Identifier: 013-207-687 Parcel "One", Except Part in Plan LMP29951 Section 23 Township 2 New Westminster District Plan 80667

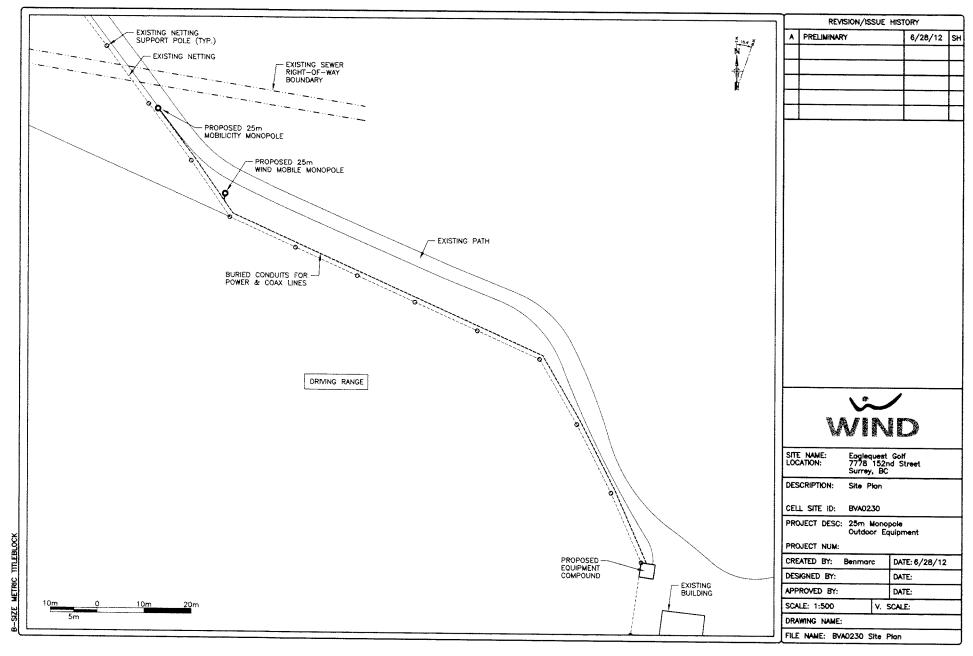
7778 - 152 Street

(the "Land")

- 3. Surrey Zoning By-law, 1993, No. 12000, as amended is varied as follows:
 - (a) To vary Sub-section A.1(a)ii.b. of Part 4 General Provisions, to increase the height of two telecommunications tower from 12 metres (40 ft.) to 25 metres (82 ft.).
- 4. The siting of buildings and structures shall be in accordance with the drawings numbered 7910-0095-00 (A) through to and including 7910-0095-00 (B) (D) (the "Drawings") which are attached hereto and form part of this development variance permit.
- 5. This development variance permit applies to only 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<u>5.</u>	The Land shall be developed strictly in accordance with the terms and conditions and provisions of this development variance permit.			
7 <u>6.</u>	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.			
<u>87</u> .	The terms of this development variance permit or any amendment to it, are binding on al persons who acquire an interest in the Land.			
9 9.	This development variance permit is not a building permit.			
	IORIZING RESOLUTION PASSED BY THE COUNCIL, THE DAY OF , 20 . D THIS DAY OF , 20 .			
	Mayor – Dianne L. Watts			
	City Clerk – Jane Sullivan			

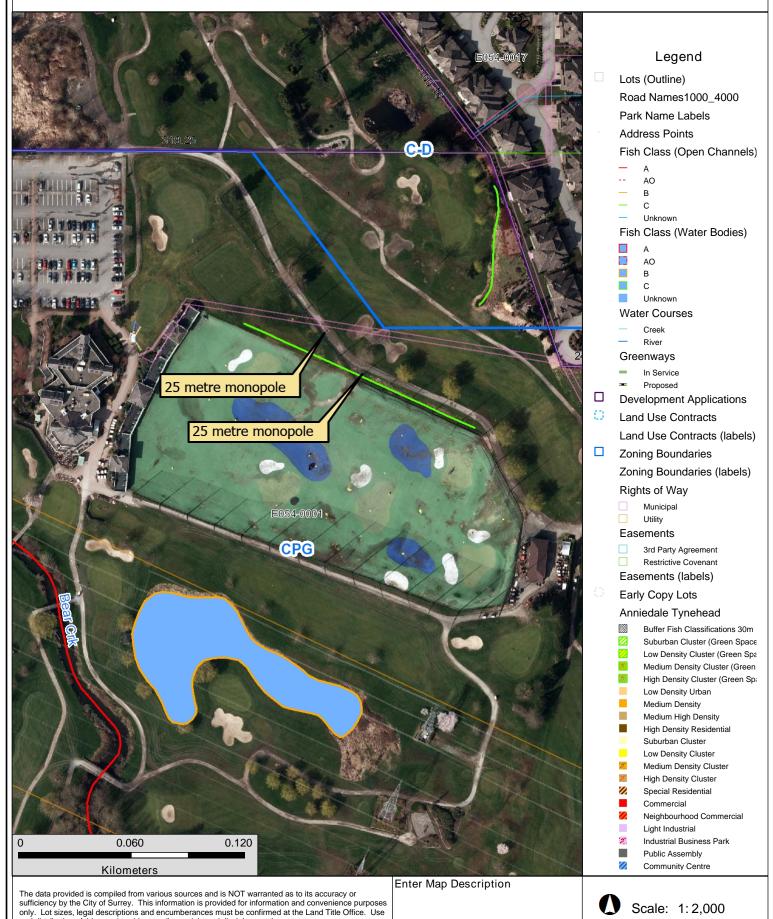




Map created on: July-04-12

City of Surrey Mapping Online System

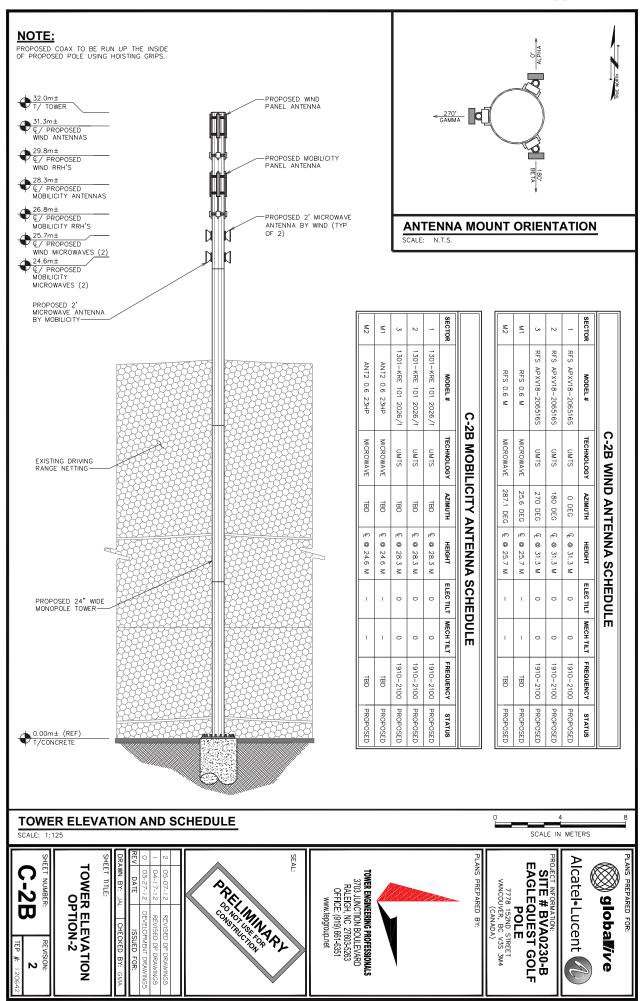
and distribution of this map is subject to all copyright and disclaimer notices at cosmos.surrey.ca.



7910-0095-00(D)

2 25m 1-carrier monopoles





1 32m / 2 carrier monopole







