

## City of Surrey PLANNING \& DEVELOPMENT REPORT File: 7916-0427-00

Planning Report Date: December 5, 2016

## PROPOSAL:

## - Development Variance Permit

to increase the height of a free-standing telecommunications tower from 12 metres ( 40 ft .) to 21 metres ( 69 ft .).

LOCATION 9526-156 Street OWNER:

City of Surrey
RF
OCP DESIGNATION: Urban


## RECOMMENDATION SUMMARY

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


## DEVIATION FROM PLANS, POLICIES OR REGULATIONS

- Seeking a variance to the Zoning By-law to increase the maximum permitted height of a free-standing telecommunications tower from 12 metres ( 40 ft .) to 21 metres ( 69 ft .).


## RATIONALE OF RECOMMENDATION

- The applicant has proposed a monopole design telecommunications tower that will replace an existing wooden hydro pole.
- The applicant has provided information indicating that there are no existing structures that are suitable within a $500-$ metre $(1,640 \mathrm{ft}$.) radius of the subject site.
- The public notification for the proposal generated 3 comments from the 78 property owners within 126 metres ( 413 ft .) of the subject site.
- The applicant has provided documentation which indicates that there is a demonstrated coverage gap in the area, which the wireless carrier 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. 7916-0427-0o (Appendix III) 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 ( 40 ft .) to 21 metres ( 69 ft .), to proceed to Public Notification.

## REFERRALS

Engineering:
Parks, Recreation \& Culture:

BC Hydro:

The Engineering Department has no objection to the project.
Parks requires that the proposed cabinets be screened with a black metal picket fence compound to screen the equipment. As the site is located within the Green Infrastructure Network (GIN), the applicant is volunteering a cash contribution to parks to allow for additional planting and maintenance within the GIN.

BC Hydro is supportive of the proposed replacement of the existing wooden hydro pole with a metal monopole design telecommunications tower.

## SITE CHARACTERISTICS

Existing Land Use: Greenway with multi-use pathway running through it.
Adjacent Area:

| Direction | Existing Use | OCP Designation | Existing Zone |
| :--- | :--- | :--- | :--- |
| North (across Terasen <br> Gas right-of-way): | Single family dwellings. | Urban | RF |
| East (Across lane): | Continuation of greenway <br> with multi-use pathway. | Urban | RA |
| South: | Single family dwellings. | Urban | RF |
| West (Across <br> 156 Street): | Continuation of greenway <br> with multi-use pathway. | Urban | RF |

## DEVELOPMENT CONSIDERATIONS

- The subject site has a civic address of 9526-156 Street and is a linear park greenway with a multi-use pathway running through it. The site is located to the east of 156 Street just south of 96 Avenue in Guildford. The site is designated Urban in the Official Community Plan (OCP) and is zoned "Single Family Residential Zone (RF)".
- SitePath Consulting Ltd. on behalf of Wind Mobile (now Freedom Mobile) is proposing a telecommunications tower and equipment compound on the subject site.
- The proposal will provide improved telecommunication infill coverage and greater building penetration in the area bounded by 100 Avenue to the north, 159 Street to the east, 92 Avenue to the south, and 152 Street to the west (see Appendix IV).
- The applicant is seeking a Development Variance Permit (DVP) to increase the maximum height of a free-standing telecommunications tower from 12 metres ( 40 ft .) to 21 metres ( 69 ft .).
- The applicant proposes to replace an existing 15.9 -metre ( 52 ft .) wooden hydro pole with a $21-$ metre ( 69 ft .) high metal monopole. BC Hydro has recently changed their requirements and now requires that all telecommunication towers replacing wooden poles must be metal poles. The proposed telecommunications tower is a metal monopole that is approximately 50 centimetres ( 1.5 ft .) in circumference at the base and tapers towards the top. Exact width dimensions will not be known until final engineering of the pole has taken place.
- The applicant is proposing one row of 3 panel antennas. Two, o. 6 metre ( 2 ft .) wide microwave dishes are proposed at approximately the 19-metre ( 62 ft .) elevation. The dishes are required due to the lack of fibre-optic cable in the area.
- $\quad \mathrm{BC}$ Hydro requires that existing power lines must be kept at the same elevation. The applicant requires 1.8 metres ( 6 ft .) of separation between the lines and the panel antennas.
- The proposed tower is intended to be located to the south of the existing walkway and approximately 9 metres ( 30 ft .) from the western property line. The proposed cabinet, associated with the proposed tower, will be located along the south property line.
- Staff and the applicant explored whether there were existing structures of sufficient height within a 500 -metre ( $1,640-\mathrm{ft}$.) radius of the subject site but no such structures were found.
- The applicant has provided a rendering of what the proposed grey-coloured monopole will look like from the east along the greenway (Appendix V).
- The applicant is proposing a 2-metre ( 7 ft .) by 3-metre ( 10 ft .) compound for a total area of 6 square metres ( 65 sq . ft.). The compound is proposed to be constructed with a high quality 2.4-metre ( 8 ft .) high black metal picket fence design. Due to maintenance concerns, no landscaping is required surrounding the compound.


## City's Telecommunications Strategy

- The key message staff have relayed to telecommunication companies is the importance of a comprehensive strategy to ensure adequate coverage for all carriers while minimizing the number of singuler user installations and keeping heights of installations to a minimum without compromising the existing policy guidelines, especially proximity to residential areas and aesthetics being adequately addressed.
- 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 telecommunications tower supports the City of Surrey's vision for building a strong economy.
- The subject application generally complies with the current Telecommunications Tower Policy No. O-49 and is therefore being presented for Council's consideration.
- The 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 towers should be sited and designed.
- The following is an evaluation of the current proposal 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 line towers, utility poles, roof tops, etc.

The applicant has indicated that they require a 21-metre ( 66 ft .) height in order to ensure an expanded infill coverage and greater building penetration area bounded by 100 Avenue to the north, 159 Street to the east, 92 Avenue to the south, and 152 Street to the west (see Appendix IV).

The applicant has informed staff that there are no existing structures within a 500-metre ( $1,640 \mathrm{ft}$.) radius from the proposed location of the telecommunications tower that have the necessary height to facilitate the increased coverage area.

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

The proposed location is within a greenway and has single family dwellings to the north and south. Several years ago, staff explored an alternate site behind the North Surrey Works Yard within Hemlock Park. However, an approximately 40 -metre ( 131 ft .) tall tower would be required to house several carriers which was not supported by staff. Furthermore, technology and the industry have evolved which now require, ideally, a finer network composed of several shorter towers.

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

The proposed location of the installation is located on a greenway within a hydro corridor and is designed to be low impact. The applicant has designed the compound with a black metal picket fence design to screen the equipment and will provide a cash contribution to Parks to improve the Green Infrastructure Network within the City.

- New free-standing telecommunications 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 wireless installation is within 9 metres ( 30 ft.) of 156 Street which is less than the proposed tower height. The applicant chose this location along the greenway as it provided good access from 156 Street as well as was central to the coverage area required.

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

Due to the greenway being completely encumbered by a BC Hydro ROW, mature trees are not allowed due to conflict with the hydro lines.

- All applicants for free-standing telecommunication structures will be requested to identify any other structure (e.g. hydro transmission tower, existing telecommunication towers, etc.) within a radius of 500 metres ( $1,640 \mathrm{ft}$.) from the proposed location and to provide reasons why other existing structures within that radius are not acceptable for use (i.e. structural capabilities, safety, available space or failing to meet service coverage needs).

There are no suitable structures within a 500-metre (1,640 ft.) radius of the subject site that have the necessary height to facilitate the increased coverage area.

## Co-Location

- The carriers and other telecommunication tower owners are encouraged to work cooperatively in reaching agreements which allow for sharing of tower structures so as to minimize the total number of towers in the City. This practice is typically referred to as "co-location".

Co-location would require an additional height of approximately 5 metres (16 ft.) as well as additional width and massing which would make the proposed tower much more prominent. Staff are currently processing another application for a 19.5-metre ( 64 ft .) high telecommunications tower approximately 350 metres ( $1,150 \mathrm{ft}$.) to the east for a competitor (Appendix VI). Staff recommend two shorter telecommunication towers rather than one taller and bulkier telecommunication tower.

## Tower Design and Landscaping Criteria

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

The original design of the cell tower was a 20.5-metre ( 67 ft .) wooden pole which would have blended in better with the surroundings. BC Hydro has recently changed their policy regarding swapping out wooden poles and now requires that telecommunication towers be metal poles with increased separation from the power lines. As such, the current proposal is the same height but is now a metal monopole.

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

Due to the height proposed, the proposed tower will be for a single carrier and is a monopole design that is replacing an existing wooden hydro pole.

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

The applicant proposes a 2 metre ( 6.5 ft .) by 3 metre ( 10 ft .) equipment compound constructed of black metal picket fence approximately 2.4 metres ( 8 ft .) tall. Due to maintenance concerns, parks have requested that the proposed compound is not screened with landscaping.

## PUBLIC CONSULTATION

In accordance with the City policy, the applicant sent out 78 notification packages on October 24, 2016 to property owners within a notification area of 126 metres ( 413 ft .), which is approximately six times the height of the proposed tower.

As a result of these notifications, 3 responses against the proposal were received by the agent concerning the proposed tower. The comments are as follows:

- Concerns about health impacts from the proposed cellular tower.

Cellular tower installations are required to be designed, constructed, and operated in adherence with the minimum standards set by Health and Industry Canada.

- Concern about the equipment emitting noise.

Wind Mobile (now Freedom Mobile) has confirmed that the compound and tower will be silent.

- Concern that the equipment will prevent lawn mowing and landscaping maintenance around it.

The City will maintain the grassed area around the compound.

- Concern that traffic will be impacted by construction of the tower.

There will be limited impacts to traffic when the pole is being constructed. Otherwise there will be no traffic interruptions.

- Prefer the pole to be relocated to a location with less traffic and fewer residents.

The applicant has explored alternate locations and the subject location was determined as the preferred location.

- Concerns that the facility will devalue property in the area.

According to the applicant, there is no consistent evidence to suggest that wireless facilities impact property values.

- The proposed facility will be an eye sore along a greenway where residents walk.

The applicant will be required to screen the equipment compound with a black metal picket fence compound. The proposed telecommunications tower is a monopole design replacing an existing wooden hydro pole.

## BIODIVERSITY CONSERVATION STRATEGY

- The City of Surrey Biodiversity Conservation Strategy (BCS) Green Infrastructure Network (GIN) map, adopted by Council on July 21, 2014 (Corporate Report No. R141; 2014), identifies the entire greenway as a 30 -metre ( 98 ft .) GIN corridor.
- The BCS further identifies the GIN area of the subject site as having a low habitat suitability rating, derived from species at risk presence, species accounts and known ecosystem habitat inventories.
- The applicant is volunteering a cash contribution to parks in the amount of $\$ 6,000$ to allow for additional GIN planting and maintenance within the parkland.


## BY-LAW VARIANCE AND JUSTIFICATION

(a) Requested 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 ( 40 ft .) to 21 metres ( 69 ft .).

Applicant's Reasons:

- The applicant has submitted documentation demonstrating that there is a coverage gap in the area, which the proposed telecommunications tower would assist in resolving.
- There are limited options for cell towers in the area.

Staff Comments:

- The proposal complies with the majority of criteria identified in the City's Policy for Telecommunications Towers. The proposed location is within a City-owned greenway.
- As a result of public notification, minimal concerns have been expressed.
- Staff support the requested variance.


## INFORMATION ATTACHED TO THIS REPORT

The following information is attached to this Report:

Appendix I. Lot Owners and Action Summary
Appendix II. Site Plan, Elevations, Landscape Plans and Perspective
Appendix III. Development Variance Permit No. 7916-0427-00
Appendix IV. Coverage Maps
Appendix V. Renderings
Appendix VI. Aerial Photo of Area

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:

1. (a) Agent: Name: Brian Gregg

Address: $\quad 221$ - West Esplanade, Suite 209
North Vancouver, BC $\mathrm{V}_{7} \mathrm{M}_{3} \mathrm{~J}_{3}$
2. Properties involved in the Application
(a) Civic Address: 9526-156 Street
(b) Civic Address: 9526-156 Street

Owner: City Of Surrey
PID: 003-435-725
Lot:
34, 003-435-725
Lot 34 Except: Part Dedicated Road Plan 70999, Section 35 Township 2 New Westminster District Plan 70998
3. Summary of Actions for City Clerk's Office
(a) Proceed with Public Notification for Development Variance Permit No. 7916-0427-oo and bring the Development Variance Permit forward for issuance and execution by the Mayor and City Clerk.

## Appendix II







## DEVELOPMENT VARIANCE PERMIT

NO.: 7916-0427-oo
Issued To:
City Of Surrey
("the Owner")
Address of Owner: 13450-104 Avenue
Surrey, BC V3T1V8

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: 003-435-725
Lot 34 Except: Part Dedicated Road Plan 70999, Section 35 Township 2 New
Westminster District Plan 70998
9526-156 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 a telecommunication tower from 12 metres ( 40 ft .) to 21 metres ( 69 ft .).
4. The siting of structures shall be in accordance with the drawings numbered 7916-0427oo(A) through to and including 7916-0427-oo(E) (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 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, THE DAY OF , 20 . ISSUED THIS DAY OF , 20 .

Mayor - Linda Hepner

City Clerk - Jane Sullivan

（V）00－Lても0－9さ6し

（』）00－Lても0－9さ6し

（D）00－Lても0－9！6ム

(ब) 00-Lても0-9โ6L


- LANDSCAPE PLAN

(2) THE SITE

(3) KEYMOCATION PLAN

VIND


1. UMTS 1900 MHz Coverage Prediction BVA0067 Area - Current

2. UMTS 1900 MHz Coverage Prediction BVA0067 Area - Current plus BVA0067_C




## CIS City of Surrey Mapping Online System



