

Proposal: Development Variance Permit to vary the maximum height of a telecommunication tower from 12 metres (39.4 ft.) to 36 metres (118 ft.) and to reduce the front yard setback from 7.5 metres (25 ft.) to 5.0 metres (16.4 ft.).

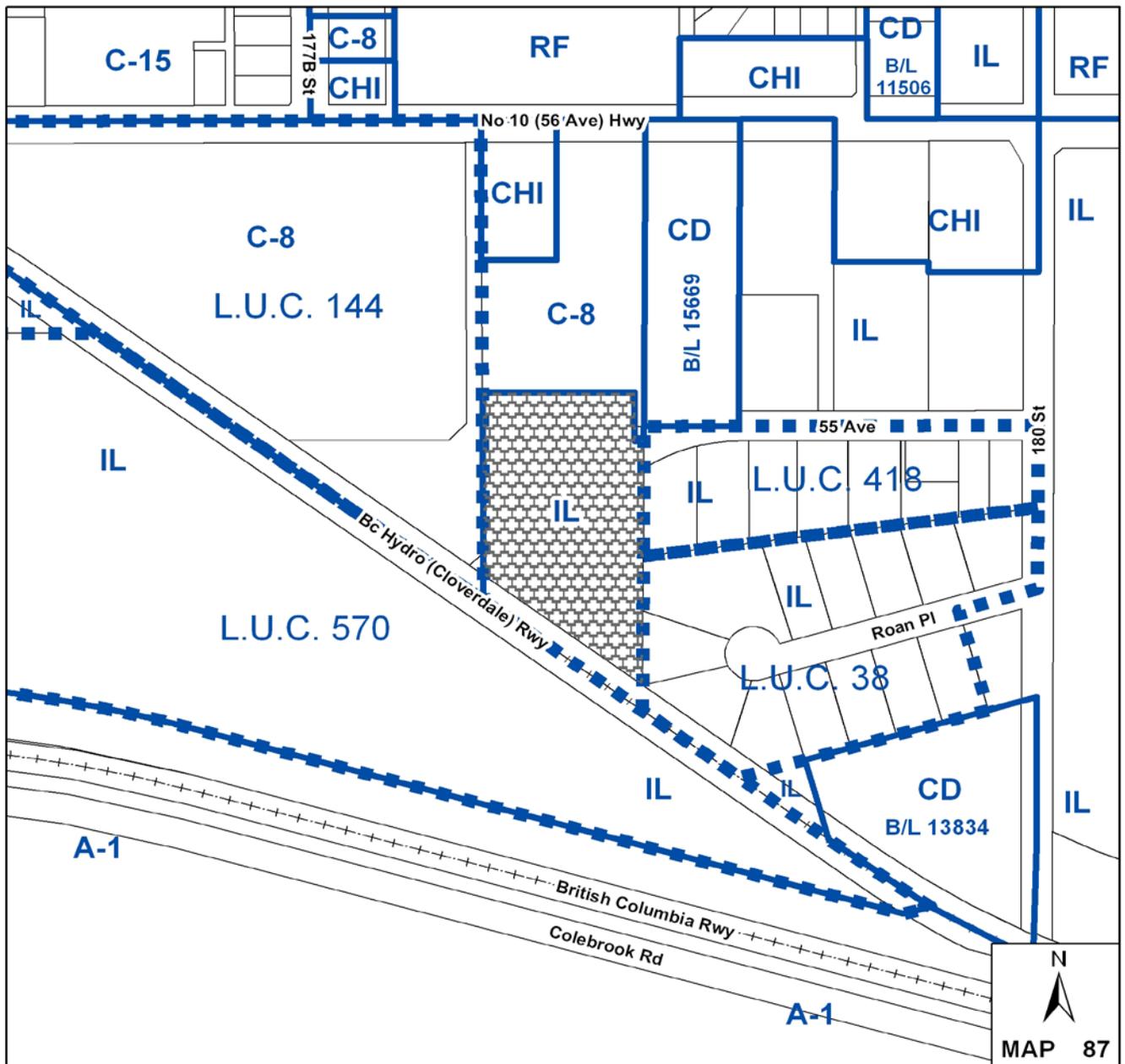
Recommendation: Approval to Proceed

Location: 17852 - 55 Avenue

Zoning: IL

OCP Designation: Industrial

Owner: WesTower Communications Ltd.



PROJECT TIMELINE

Completed Application Submission Date: December 6, 2005
Planning Report Date: February 20, 2006

PROPOSAL

The applicant is proposing:

- a Development Variance Permit to relax the following Zoning By-law regulations:
 - to vary the maximum height of a free-standing telecommunication tower from 12 metres (39.4 ft.) to 36 metres (118 ft.); and
 - to reduce the front yard setback of an accessory structure from 7.5 metres (25 ft.) to 5.0 metres (16.4 ft.)

in order to permit the development of a telecommunication tower.

RECOMMENDATION

The Planning & Development Department recommends that:

1. Council approve Development Variance Permit No. 7905-0381-00, (Appendix IV) varying the following, to proceed to Public Notification:
 - (a) to vary the maximum height of a free-standing telecommunication tower from 12 metres (39.4 ft.) to 36.0 metres (118 ft.); and
 - (b) to reduce the minimum front yard setback of the IL Zone from 7.5 metres (25.0 ft.) to 5.0 metres (16.4 ft.).

REFERRALS

Engineering:

The Engineering Department has no objection to the project subject to the completion of Engineering servicing requirements as identified in the attached (Appendix IV).

BC Hydro:

BC Hydro has verbally stated to staff that they have no concerns regarding the location of the proposed tower relative to their railway.

SITE CHARACTERISTICS

- **Existing Land Use** Material storage and metal fabricating yard, zoned IL, designated Industrial.
- **East:** Various industrial properties, regulated under Land Use Contracts 38 and 418, designated Industrial.
- **South:** BC Southern Railway/vacant industrial lands, regulated by Land Use Contract No. 570, designated Industrial.
- **West:** Oil and gas distribution centre, regulated under Land Use Contract No. 144, designated Commercial.
- **North:** Industrial office building, zoned C-8, designated Industrial/Commercial.

PLAN AND POLICY COMPLIANCE

- OCP Designation: Complies.
- Telecommunication Tower Policy: Partially complies.

DEVELOPMENT CONSIDERATIONS

Background

- The subject site, located at 17852 – 55 Avenue, is designated Industrial in the Official Community Plan (OCP) and zoned "Light Impact Industrial" (IL). The 1.66-hectare (4.09 acre) site is currently used as an industrial metal works and material storage site (for the construction of tower structures) by the owners, WesTower Communications Ltd. Bell Mobility is proposing to construct a lattice telecommunications tower 36 metres (118.1 feet) in height at the southeast corner of the site to better service the wireless needs of the Cloverdale area. The immediate area is characterized by low-rise industrial and commercial buildings.
- Bell Mobility originally considered to locate the tower at the rear of the adjacent industrial property to the east (17786 – 55 Avenue) but it was considered too close to other adjacent industrial buildings. Consideration was also given for siting the antennas on one of the new Kwantlen College buildings under construction further east of the proposed site. However, Bell Mobility concluded that these buildings were not of an adequate height for Bell's operational purposes.
- During pre-consultation, staff indicated that it is the City's preference, as outlined in the Policy for Telecommunications Towers, that the free-standing tower be of a monopole design rather than a lattice design. Bell Mobility indicated that the choice to construct a lattice tower was for the purposes of a safety training facility for WesTower Communications and to accommodate three telecommunications carriers. According to the applicant, meeting these diverse needs is not possible through the construction of a monopole tower.

Proposal

- The applicant is proposing to construct a 36-metre (115.1 feet) high, lattice-style, free-standing telecommunication tower with an accessory 117.4-square metre (1,263.7 sq.ft.) equipment shelter. The tower is proposed to be located in the southeast corner of the site. There are two semi-permanent construction structures located on the property (to the north of the proposed tower location), with construction materials stored along the perimeter of the property. The property is enclosed with chain link fencing. The property is adjacent to a designated heritage resource to the south (BC Southern Rail Right-of-Way). The base of the proposed tower will not be visible from any public roadway as a result of on-site structures and adjacent industrial and commercial buildings.
- The applicant has supplied photo simulation images illustrating the proposed tower's limited visual impact from various vistas throughout the area including from the adjacent commercial plaza on Highway No. 10, from 55 Avenue, and from the residential area to the east. An image was also included to display that the proposed tower is a similar vertical utility structure to the existing utility poles located along the railway to the south.

Policy for Telecommunication Towers

- The Policy for Telecommunications Towers was developed by the four cellular carriers in conjunction with the Planning and Development Department and presented to Council in Corporate Report No. R136 and approved by Council on June 18, 2001. The policy provides the parameters to which telecommunication towers should be sited and serves as a basis for reviewing future telecommunication tower proposals. The Future Tower Sites Map, which was intended to supplement the Policy, was not approved by Council.
- The guidelines, along with a discussion as to how this particular proposal complies with the policy are described as follows:

Location and Siting

- When considering the siting of telecommunication tower facilities, every effort should be made to locate new equipment on the existing structures such as Hydro transmission towers, utility poles, roof tops, etc.
 - The applicant advises that the proposed antennas must be at a minimum height of 36 metres (118 ft.) to service the Cloverdale area. There are no utility structures in the area of a suitable height to locate cellular equipment. In addition, the surrounding area is characterized by low-rise industrial and commercial buildings not significant in height to locate cellular equipment.
- The evaluation of new free-standing telecommunication towers will take into account the general location and siting of towers shown on the Future Tower Site Map, 2000-2004.
 - The proposed tower is located close to the intersection of Highway No. 10 and Highway No. 15, which is a preferred location as identified on the City of Surrey Future Tower Sites 2000-2004 location plan.

- It is preferable that new free-standing telecommunication towers be sited in non-residential locations and preferably in industrial areas.
 - The proposed tower is located in an industrial park approximately half a kilometre from any residential area.
- Towers on prominent natural and cultural features, environmentally sensitive areas or areas with historically significant buildings are discouraged.
 - The proposed location is not within any natural, cultural or environmentally sensitive area.
 - The proposed location of the tower is adjacent to the BC Southern Rail Right-of-Way which is on the Heritage Site Registry. The railway is currently used daily for freight deliver. The Fraser Valley Heritage Railway Society has preliminary plans to use the rail corridor for passenger train purposes between the existing Sullivan Station and a yet to be determined location in Cloverdale. As such, City Heritage staff have recommended that the lattice tower incorporate architectural features from former rail structures that were once located in the general area, to increase the aesthetics of the built environment should a passenger railcar frequent the area in the future.
 - Due to the structural requirements of the proposed lattice tower and the planned use of the tower as a training facility, the applicant has indicated special features are unable to be incorporated. In addition, given the nature of the area (the rear yards of various industrial properties with limited aesthetic appeal) there are no other existing buildings or structures that include heritage architectural features. The area of the site between the railway and the base of the proposed tower is currently used for the storage of steel and metal materials. While the stored materials may reduce the visibility of the proposed tower's base from the railway, Bell has agreed to provide landscaping at the base of the structures to reduce the visible impact of the proposed tower should the areas be frequented by a future passenger railcar.
- 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 tower is not located within 36 metres (118 ft.) of an existing or future road allowance.
- Location of telecommunications towers on sites with mature trees is encouraged.
 - There are a limited number of mature trees to the east of the proposed tower. There are no mature trees on site.
- All applicants will be requested to identify any structures within a radius of 500 metres (1,640 ft.) of 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 structures within 500 metres (1,640 ft.) of the proposed location that are of a sufficient height to support telecommunication antennas.
- The proposed tower structure is required to serve the needs of the property owner, WesTower Communications, to operate as an on-site safety training facility.

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. This practice is typically referred to as co-location.
 - The proposed tower is designed to be shared by three telecommunications carriers. Interest has been preliminarily confirmed by one carrier in addition to Bell Mobility.

Tower Design and Landscaping

- Tower and ancillary equipment shelters will be designed to fit their surroundings and to minimize their visual impact on surrounding properties.
 - The proposed tower and ancillary shelter is located along the rear of an industrial park and will not have a significant visual impact on surrounding properties. The proposed tower will be unpainted steel/metal and the equipment shelter will be constructed with painted grey metal siding.
- The use of monopoles is encouraged. Where a tower is being constructed to accommodate a single user, a monopole design is required.
 - The tower is proposed to be of a lattice design to service up to three carriers. In addition, the proposed tower is intended to operate as a safety training facility for WesTower Communications, the owners of the subject site. This safety training requires the structure to be of a lattice design.
- Landscaping shall be appropriately placed around telecommunication tower and ancillary facilities to minimize their visual impact on the neighbourhood.
 - While there is limited landscaping on adjacent sites, the applicant has agreed to place landscaping at the base of the proposed tower and equipment shelter in areas visible from the railway to the south.

PRE-NOTIFICATION

Pre-consultation was not required because the proposed free-standing telecommunications tower is not located in a residential area or located within six times the height of the proposed tower of a residential area (as outlined in the Council approved Policy for Telecommunication Towers).

ADVISORY DESIGN PANEL

This application was not referred to the ADP and was reviewed by staff and found satisfactory.

BY-LAW VARIANCE AND JUSTIFICATION

(a) Requested Variance:

- To increase the maximum allowable height of a free-standing telecommunication tower from 12 metres (39.4 ft.) to 36 metres (118 ft.).

Applicant's Reasons:

- The proposed tower is located close to the intersection of Highway No. 10 and Highway No. 15, a preferred location as identified on the City of Surrey Future Tower Sites 2000 - 2004 location plan.
- The applicant advises that proposed antennas must be at a height of 36 metres (118.1 ft.) to service the Cloverdale area.
- The proposed tower is located within an Industrial Zone.
- The proposed tower is designed to be shared by three telecommunications carriers. Interest has been confirmed by one carrier in addition to Bell Mobility.
- The proposed tower is not located within any prominent natural or cultural features.
- The proposed tower is not located within 36 metres (118 ft.) of an existing or future road allowance.
- There are no alternative structures within 500 metres (1,640 ft.) of the proposed location with a sufficient height to support the antennas.

Staff Comments:

- The proposed tower meets most of the criteria outlined for the development of a free-standing tower in the Council-approved Policy for Telecommunication Towers.
- While the proposed tower is a "lattice" design, this type of tower is considered appropriate as it is located in an industrial area and is proposed to be used as a training facility for WesTower Communications, the business located on, and the owner of, the subject site.
- The visibility of the proposed tower from Highway No. 10 the north will be partially reduced from Highway No. 10 as it is behind a number of commercial and industrial buildings and elevation of the proposed site is approximately 5.0 metres (16.4 ft.) below the elevation of Highway No. 10.

- Visibility of the tower from the residential community to the east will be limited as the immediately adjacent industrial buildings block the lower portion of the tower. In addition, the residential area is over 500 metres (1,640 ft.) away, which helps to reduce its visibility within the horizon.
- Visibility from the west will be limited because the base of the tower is partially blocked by the adjacent railway line and the proposed location is over 500 metres (1,640 ft.) from Highway No. 15.
- Immediately south of the proposed tower location are vacant industrial lands. Beyond the industrial lands are agricultural lands. One residence is located approximately 275 metres (900 ft.) from the proposed tower. Visibility of a portion of the tower will be reduced because there are a number of existing mature trees between the residence and the proposed tower. There are also two sets of rail lines between the residence and the proposed tower.

(b) Requested Variance:

- To reduce the minimum front yard setback from 7.5 metres (25 ft.) to 5.0 metres (16.4 ft.).

Applicant's Reasons:

- The proposed location on site is at the extreme south-east corner and is preferred given the existing uses and activities that take place on site.
- The reduced setback permits the tower to be located a few yards further from the view of public rights-of-way.

Staff Comments:

- The front yard is considered the entire east property line of the subject lot, although only the northern portion fronts a street (55 Avenue).
- The reduced front yard setback enables the proposed tower to be located at a point on the property furthest from the public right-of-way, which helps reduce the visual impact of the tower from the right-of-way.
- The portion of the front yard that is located nearest to the proposed tower acts as a side yard because the property has limited road frontage. The side yard requirement is 0.0 metre when adjacent to an industrial use. The adjacent site is regulated by Land Use Contract (LUC) No. 38, with the underlying zoning being "Light Impact Industrial Zone (IL)".
- To protect the existing 5.0-metre (16.4 ft.) drainage right-of-way along the east property line, a 5.0-metre (16.4 ft.) setback is proposed.
- Planning and Engineering staff have no objections to the requested variance.

INFORMATION ATTACHED TO THIS REPORT

The following information is attached to this Report:

Appendix I.	Lot Owners, Action Summary and Project Data Sheets
Appendix II.	Contour Map
Appendix III.	Site Plan and Elevations
Appendix IV.	Engineering Summary
Appendix V.	Development Variance Permit No. 7905-0381-00

INFORMATION AVAILABLE ON FILE

- Detailed Engineering Comments dated January 25, 2006.
- Soil Contamination Review Questionnaire prepared by Roy Jeffay dated December 6, 2005.
- Corporate Report No. R136, considered by Council on June 18, 2001.
- Photo simulation images provided by the applicant.

Murray Dinwoodie
General Manager
Planning and Development

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DEVELOPMENT DATA SHEET

Existing Zoning: IL

Required Development Data	Minimum Required / Maximum Allowed	Proposed Tower
LOT AREA (in square metres)		
Gross Total		
Road Widening area		
Undevelopable area		
Net Total		4.09 ac/1.66 ha
LOT COVERAGE (in % of net lot area)		
Buildings & Structures		
Paved & Hard Surfaced Areas		
Total Site Coverage		0.7%
SETBACKS (in metres)		
Front	7.5 m	5.0 m (16.4 ft.)*
Rear	7.5 m	7.5 m
Side #1 (North)	0.0 m	
Side #2 (South)	0.0 m	5.5 metres
BUILDING HEIGHT (in metres/storeys)		
Tower	12.0 m (40 ft.)	36 metres (118 ft.)*
Shelter/Equipment Structure		3.5 metres (11.5 ft.)
NUMBER OF RESIDENTIAL UNITS		
Bachelor		
One Bed		
Two Bedroom		
Three Bedroom +		
Total		
FLOOR AREA: Residential		
FLOOR AREA: Commercial		
Retail		
Office		
Total		
FLOOR AREA: Industrial (Shelter/Equipment Structures)		117.4 m ² (1,263.7 sq.ft.)
FLOOR AREA: Institutional		
TOTAL BUILDING FLOOR AREA		

****Variance requested***

CONTOUR MAP FOR SUBJECT SITE

