

City of Surrey
PLANNING & DEVELOPMENT REPORT

File: 7910-0252-00

Planning Report Date: May 9, 2011

PROPOSAL:

- **Development Variance Permit**

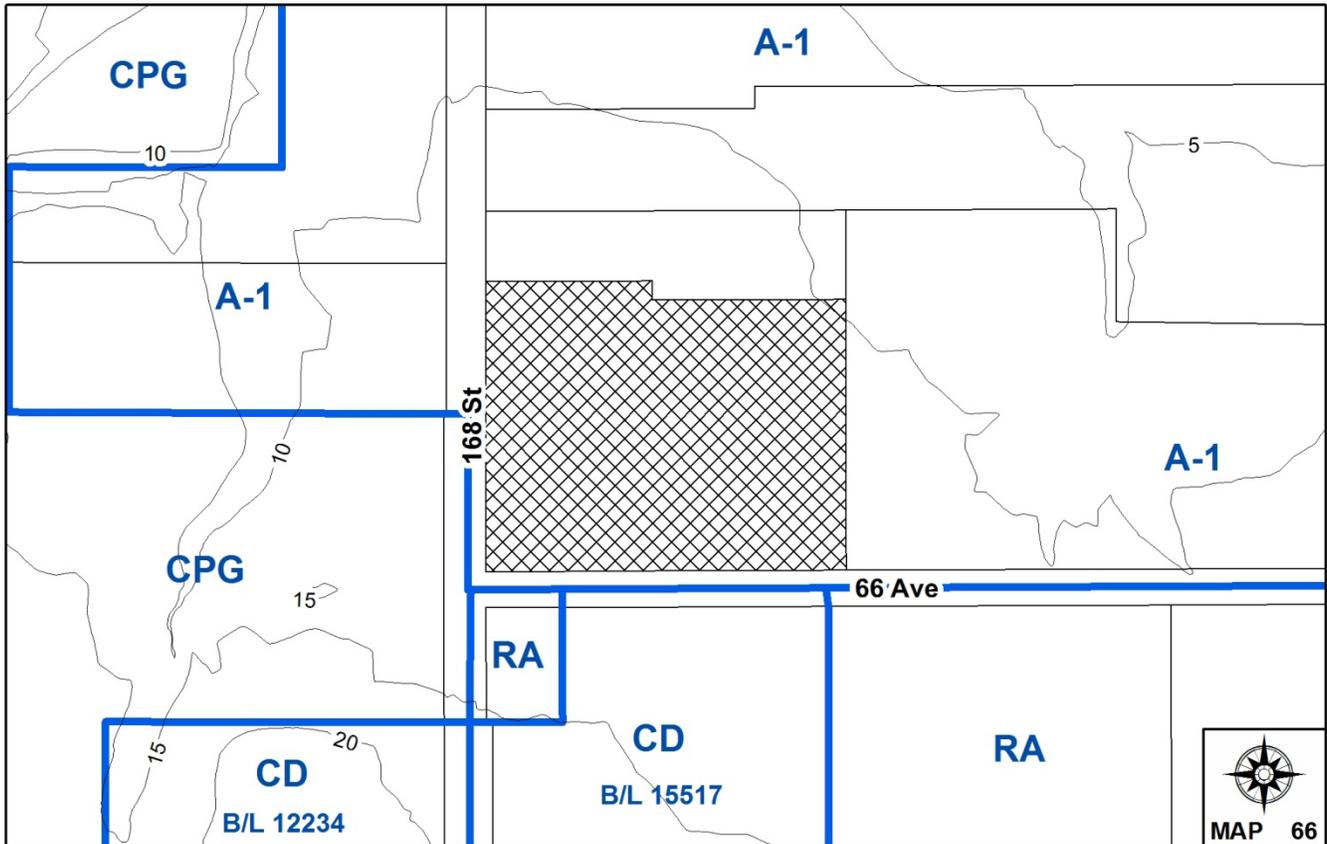
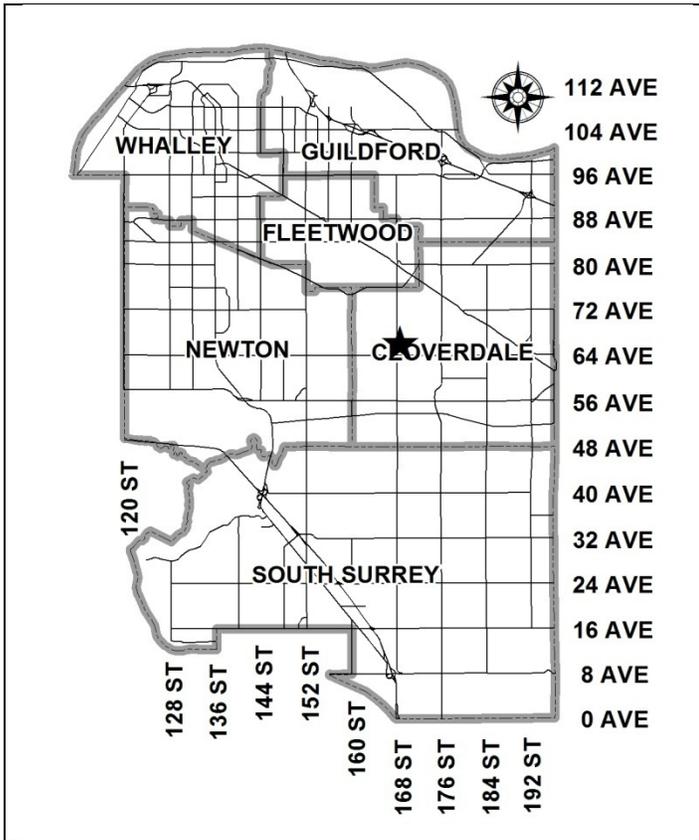
in order to increase the height of a free-standing telecommunications tower from 12 metres (40 ft.) to 43 metres (140 ft.).

LOCATION: 6630 - 168 Street

OWNERS: Daryl Richard Arnold and
Lynn Arnold

ZONING: A-1

OCP DESIGNATION: Agricultural



RECOMMENDATION SUMMARY

- Refer back to staff to work with the applicant to find an alternate location within the general area of the currently proposed tower.

DEVIATION FROM PLANS, POLICIES OR REGULATIONS

- Seeking an increase in the height of a free-standing telecommunications tower from 12 metres (40 ft.) to 43 metres (140 ft.).
- The proposed telecommunications tower will be set back 15 metres (50 ft.) from 168 Street, which is less than the height of the proposed tower (43 metres/140 ft.), the minimum setback stipulated in the Telecommunication Tower Policy.

RATIONALE OF RECOMMENDATION

- Many area residents have raised objections to the proposal due to its close proximity to the Czorny Alzheimer Centre located at 16850 – 66 Avenue as well as the existing townhouse projects on the east side of 168 Street on 64 Avenue and the tower's effects on health, blockage of views and perceived decrease in property values.
- The Northview Golf Course has offered the applicant, an opportunity to locate a tower on the flats of the golf course. However, the applicant has declined the offer indicating that the preference is to locate it closer to the transportation routes of 168 Street and 64 Avenue.
- BC Hydro has indicated that they would be willing to consider the location of wireless antenna on transmission line towers within the Hydro right-of-way located 720 metres (0.4 mile) north of the subject site adjacent 168 Street. However, this would be subject to a technical proposal being submitted to BC Hydro for consideration. The applicant, a Third Party provider of wireless communications facilities, has elected not to pursue this option.

RECOMMENDATION

The Planning & Development Department recommends that this application be referred back to staff to work with the applicant to explore alternative locations for the proposed free-standing telecommunications tower that accommodate the needs of the applicant.

REFERRALS

Engineering: The Engineering Department has no objection to the proposed Development Variance Permit (DVP) and there are no additional engineering requirements relative to the issuance of the DVP. The applicant should be aware of an existing water service located in the existing driveway when constructing the access road.

Agricultural Advisory Committee (AAC): The proposed DVP proceeded to the AAC for information only on April 6, 2011. There were no comments related to this proposal. Telecommunications equipment is a permitted use in ALR land, as long as the site is confined to an area no greater than 100 square metres (1,076 sq.ft.).

SITE CHARACTERISTICS

Existing Land Use: Existing farm, with associated farm buildings.

Adjacent Area:

Direction	Existing Use	OCP Designation	Existing Zone
North:	Single family dwelling with farm buildings.	Agricultural	A-1
East:	Existing farm.	Agricultural	A-1
South (Across 66 Avenue):	Existing single family dwelling and Czorny Alzheimer Centre.	Agricultural	RA and CD By-law No. 15517
West (Across 168 Street):	Vacant 5-acre property and Northview Golf and Country Club.	Agricultural	A-1 and CPG

APPLICANT'S JUSTIFICATION FOR THE PROPOSED LOCATION

- All users of the proposed tower have an interest in providing high quality communications services to businesses and residents located in the area. The road improvements, increasing traffic and population in the area are creating additional demands on the wireless networks.
- The subject site is at a desired elevation, given the distance from surrounding topography changes and adjacent tower sites.

- The proposed monopole will be situated near the west property line, near the street and will not unduly impact the existing farm operation.
- The proposed monopole is located within an appropriate distance from other telecom towers.
- The site is proposed to be developed as a co-location site to accommodate multiple service providers, therefore, minimizing the number of towers required to service the area.

DEVELOPMENT CONSIDERATIONS

- The subject site, at 6630 – 168 Street, is zoned General Agricultural Zone (A-1), designated Agricultural in the Official Community Plan (OCP), and within the Agricultural Land Reserve (ALR). The subject property is approximately 3.13 hectares (7.8 acres) in size.
- The property owner has granted authorization to the Cascadia Tower Inc., to apply for a Development Variance Permit (DVP) application to increase the maximum height of a free-standing telecommunication tower from 12 metres (40 ft.) to 43 metres (140 ft.).
- Cascadia Tower Inc. is a Third Party provider of wireless communications facilities. The company develops, owns and manages the facilities and leases space on its towers to various wireless carriers.
- The proposal is for a galvanized steel monopole installation with ancillary equipment cabinets at the base of the mast. The installation is to be located within a 10-metre (33 ft.) by 10-metre (33 ft.) fenced compound at the west end of the subject property, adjacent 168 Street.
- The applicant has provided written confirmation that three carriers are willing to co-locate on this structure: Mobilicity, Wind and Shaw. The proposed structure can accommodate up to 4 carriers. Rogers has recently submitted an application for a DVP for a proposed 25-metre (82 ft.) free-standing lighting/telecommunication structure at the Cloverdale Athletic Park, south of 64 Avenue adjacent 168 Street under Application No. 7911-0037-00. This application is still at the pre-application stage.
- The applicant has indicated that Mobilicity, Wind and Shaw require a site in this area due to the considerable vehicular traffic and a growing base of residents and businesses in the area.
- The current proposal is to provide improved coverage and capacity for an area generally bounded by 72 Avenue to the north, 56 Avenue (Highway No. 10) to the south, 160 Street to the west and 176 Street to the east.
- Since October 2010, an inter-departmental staff team has been meeting with members of the Canadian Wireless Communication Association (CWCA), representing six (6) telecommunication companies, including Mobilicity, Wind and Shaw. Due to the escalating demand for wireless service, the telecommunication companies have requested a more streamlined process for obtaining approvals from the City for new installations.

Key objectives staff have relayed to the carriers are the importance of a comprehensive strategy to ensure adequate capacity for all carriers while minimizing the number of single-user installations without compromising the existing policy guidelines, especially proximity to residential areas and aesthetics.

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 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 tower proposal in relation to Policy 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 there are no significant structures, farm buildings, or street lights tall enough to be considered for meaningful coverage. There is an existing BC Hydro corridor further north of the subject site, but it is considered too far north and lower in topography and would not provide adequate coverage along 64 Avenue and south of 64 Avenue.

The applicant has indicated that due to the topography, the height required to serve one carrier is a minimum of 30 metres (100 ft.). Co-location requires a minimum of 1.5 metres (5 ft.) to 2.4 metres (8 ft.) of vertical separation between antennas or at least a minimum of 34-metre (110 ft) to 35-metre (115 ft.) tower height to serve as a two-carrier tower.

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

Although the proposal is sited in an agricultural area, it is immediately across the street (66 Avenue) from an Alzheimer care facility and fairly close (approximately 325 metres/1,066 ft.) to existing multiple residential developments to the south along 64 Avenue at 168 Street.

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

The proposed location is not located near any significant cultural, environmental or historic areas.

- 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 telecommunications facility is proposed to be located 15 metres (50 ft.) from 168 Street which is considerably less than the proposed 43-metre (140 ft.) tower height. The proposed location utilizes an existing driveway letdown and is intended to minimize operational obstacles for the existing farm.

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

The proposed tower is located near a small grouping of trees, located close to 168 Street.

- All applicants for free-standing telecommunications structures will be requested to identify any other structure (i.e. Hydro transmission line towers, existing telecommunication towers, etc.) within a radius of 500 metres (1,640 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).

The applicant has indicated that there are no significant structures, farm buildings, or street lights tall enough to be considered for meaningful coverage. There is an existing BC Hydro corridor further north of the subject site, but the applicant considers it too far north and lower in topography and would not provide adequate coverage along 64 Avenue and south of 64 Avenue.

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".

The applicant has provided written confirmation from Mobicity, Wind and Shaw of their interest to co-locate on the monopole. Based on the proposed 43-metre (140 ft.) height, the proposed monopole could accommodate up to four carriers.

Tower Design

- Towers and ancillary equipment shelters will be designed to fit their surroundings and to minimize their visual impact on surrounding properties.
- The use of monopoles is encouraged. Where a tower is being constructed to accommodate a single user, a monopole design is required.
- Landscaping shall be appropriately placed around a telecommunication tower and ancillary facilities, such as equipment shelters, to minimize their visual impact on the neighbourhood.

The applicant is proposing a monopole design with ancillary equipment shelters at the base, which will be screened by a chainlink fence with privacy slats and a cedar hedge, along the north, west and southern sides of the compound.

PUBLIC CONSULTATION

Pre-notification letters were sent by the applicant on or about January 24, 2011, without notifying staff. As per the City's Policy O-49 on Telecommunication Towers, once a draft letter has been reviewed by staff, staff will provide the mailing labels to the applicant for the mail out. The applicant mailed letters to an area encompassing 6 times the height of proposed tower (256 metres/840 feet). Without the benefit of the City's database, the applicant was only able to notify the occupants of the properties and not necessarily all of the owners (if they live elsewhere or are joint owners). Some of the concerned residents were able to obtain information about the proposed telecommunication tower through the Northview Golf Course, which was notified.

As a result of the applicant's mail out, staff received 5 e-mail responses and 2 phone calls, along with 2 petitions, all in opposition to the proposed telecommunications tower. One petition represented 54 owners (from the Turnberry townhouse complex at 6488 – 168 Street) and the other represented 67 owners (from the Lexington townhouse complex at 16995 – 64 Avenue).

The concerns raised by the individual residents are as follows:

- Health effects related to the radiofrequency of the proposed tower.
- The aesthetics of the proposed tower.
- Property value decrease in proximity to such a structure.
- Would like to see a Public Information Meeting scheduled before the application proceeds to Council for consideration.
- Concerned that the pre-notification area was not expanded to the townhouse developments at 64 Avenue and 168 Street.
- Concerned that the subject site is already being prepared for the proposed tower.

The two petitions raised the following concerns:

- Health effects.
- Blocking of view of the North Shore mountains.
- Decrease in property value.

On March 15, 2011, the applicant held a Public Information Meeting (PIM) at the Northview Golf and Country Club located to the west of the subject site across 168 Street. The area for the notification of the Public Information Meeting was expanded, at the request of the City, to a notification area, which was just beyond 6 times the height of the tower, in order to include the Turnberry and Lexington townhouse developments located along 64 Avenue, east of 168 Street. In total, invitations were mailed to 240 addresses.

A total of 46 attendees signed-in at the PIM, not including the applicant, 5 carrier representatives and a Planning staff member. The comments provided were as follows:

- Residents do not want to see the tower proposed so close to a growing residential neighbourhood.
- Residents do not want to see a proposed tower so close to an Alzheimer's care facility.
- Dissatisfied with the meeting format, i.e. no presentation, no chairs provided, could not ask questions for the benefit of all attendees to hear.

- Would prefer to see the proposed tower built in the floodplain (within the golf course).
- Concern about the health effects.

As a result of the meeting, staff received one 45-signature petition, 2 e-mails and 1 letter, all in opposition to the proposed tower. The comments are as follows:

- Would like Council to hold a Public Meeting (Public Hearing) to listen to the concerns of the residents.
- Health effects.
- Loss of visual enjoyment with the proposed tower blocking views of the North Shore mountains.
- Feel that aesthetically, the proposed tower is unattractive.
- Concern about decrease in property values.

The applicant has provided the following responses to the concerns:

- Opposition to height and presence of a telecommunication tower within a growing community.

The growing neighbourhood is a large part of why the proposed tower is required. Wireless infrastructure must keep up with the growing residential development.

- Loss of visual enjoyment with the proposed tower blocking the view of the North Shore mountains.

With the density and layout of the townhouse units, there are only a small number units that have any exposure to the north and of those with northern views, many are already visually screened from the proposed tower by the Alzheimer's care facility.

- Proximity to an Alzheimer's care facility.

Wireless facilities are located at and on at least 12 hospitals in the Lower Mainland and Fraser Valley, including Surrey. There is no impact to the residents or workers of the Alzheimer's care facility. Residents to the Alzheimer's facility utilize wireless technology with wearable phone/tracking devices that monitor the location of the residents.

- Dissatisfied with the meeting format, i.e. no presentation, no chairs provided and could not ask questions for the benefit of all attendees to hear.

The format of the meeting was an open house and within the guidelines of the City of Surrey's Holding a Public Information Meeting pamphlet. In addition, Cascadia Tower, Mobilicity and Wind Mobile had a total of 5 experienced telecom people there who spoke with individuals in front of 6 poster boards and a laptop computer with a presentation.

- Would prefer to see the proposed tower built in the floodplain (within the golf course).

The floodplain location is too far north from the targeted coverage area, too close to adjacent cell sites and too low in elevation to provide meaningful coverage.

- Concern about the health effects.

The site will operate within Industry Canada and Health Canada regulations. Industry Canada prohibits health concerns as a reason for denying a tower location.

- Tower aesthetics and design.

The proposed tower is consistent with other towers that have been approved in the City of Surrey in similar environments including towers on land owned by the City of Surrey. The proposed tower is tapered and powder-coated in a Grotto Green colour that blends into the sky better than any other colour. The tower and its design is required to accommodate the 3 service providers already committed to the site and other carriers that are likely to go on the tower once constructed.

- Concern about decrease in property values.

Industry Canada prohibits property value concerns as a reason for denying a tower location. The siting of this tower is consistent with other towers within the City of Surrey, including towers on City of Surrey owned property.

BY-LAW VARIANCE AND JUSTIFICATION

(a) Requested Variance:

- To vary the Zoning By-law to increase the maximum height of a free-standing telecommunications tower from 12 metres (40 ft.) to 43 metres (140 ft.).

Applicant's Reasons:

- The applicant has submitted some information to demonstrate that there are capacity issues in the area, which a proposed telecommunication structure would assist in resolving.
- The proposed tower will provide co-location opportunities for at least three wireless carriers and could provide an opportunity for a fourth.

Staff Comments:

- The proposed variance has triggered significant public opposition.
- The applicant has not been receptive to seeking alternative locations and solutions to addressing the coverage and capacity issues in this area.
- Although the residents have requested a Public Hearing to express their opposition directly to Council, this may not be requested if an alternate site was proposed.

PROJECT EVALUATION

The following is a summary of the benefits and concerns of supporting the proposed telecommunication tower application:

Pros

- The proposed site addresses wireless coverage and capacity issues in this area of Surrey and responds to the increasing consumer demand for wireless services and in particular, the ever-growing demand for data transmission. The road improvements, increasing traffic and population in this area are additional demands on the wireless networks. This site is particularly critical for the new carriers (Mobicity, Wind Mobile and Shaw) who are building their networks.
- The site is being developed as a co-location site to accommodate up to four carriers, therefore minimizing the number of towers required to service the area.
- The proposed site is located in a non-residential location.
- The applicant is proposing a monopole design.

Cons

- Although the site is located in an agricultural area, it is immediately across 66 Avenue to the south from the existing Czorny Alzheimer Centre and within 325 metres (1,066 ft.) to existing multiple residential developments along 64 Avenue on the east side of 168 Street.
- The neighbouring residents have been very vocal in their opposition to the proposed telecommunications tower citing a number of concerns including detrimental health effects and loss of visual enjoyment. Some residents have noted that they would prefer the proposed tower, if required, to be located further north in the floodplain within the neighbouring Northview Golf Course.

OPTIONAL COURSES OF ACTION

Option A – Refer back to staff

Pros

- Referring the application back to staff will allow staff to work with the applicant to explore alternate locations to address the significant concerns of the neighbourhood while responding to the wireless coverage and capacity issues in this area of Surrey.
- Alternative locations/solutions include the installation of antennas on netting poles at the Northview Golf Course and/or the high voltage B.C. Hydro transmission line towers located further to the north.
- Antennas on netting poles can provide a stealth-design and the B.C. Hydro transmission line tower is an existing structure.

Cons

- An alternate location may still generate public opposition.
- An alternate location may not be as effective in providing meaningful coverage.
- The applicant will be required to negotiate a lease with another property owner.
- There may not be an economic advantage for the applicant, a Third Party provider of wireless communication facilities, to seek an alternate site, particularly on the B.C. Hydro transmission line tower.
- According to industry representatives, the B.C. Hydro approval process for secondary uses can take up to 18 months.

Option B – Approve the DVP to proceed to public notification*Pros*

- Allowing the DVP to proceed to public notification is the next step in addressing current wireless coverage and capacity issues in this general area, and responds to the growing consumer demand for wireless services.

Cons

- Allowing the DVP to proceed to public notification as proposed will generate significant community opposition.
- Although the subject site is located in an agricultural area, it is immediately across the street from an Alzheimer's care facility and relatively close to existing multiple residential developments.
- It is not conclusive that a site further to the north, possibly within the Hydro right-of-way, is not a viable alternative.

CONCLUSION

- The Planning & Development Department recommends Option A, which is to refer the application back to staff to work with the applicant to explore alternative locations to address the demand for wireless coverage and capacity in this area of Surrey.
- If Council is of the opinion that the relative merits of the application are sufficient to allow the application to proceed, (i.e. Option B) Council can approve Development Variance Permit No. 7910-0252-00 varying the following, to proceed to Public Notification:
 - To vary the Zoning By-law to increase the maximum height of a free-standing telecommunications tower from 12 metres (40 ft.) to 43 metres (140 ft.).

INFORMATION ATTACHED TO THIS REPORT

The following information is attached to this Report:

- Appendix I. Lot Owners and Action Summary
- Appendix II. Aerial Map of Vicinity
- Appendix III. Development Variance Permit No. 7910-0252-00

original signed by Judith Robertson

Jean Lamontagne
General Manager
Planning and Development

JKS/kms

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CITY OF SURREY

(the "City")

DEVELOPMENT VARIANCE PERMIT

NO.: 7910-0252-00

Issued To: DARYL RICHARD ARNOLD AND LYNN ARNOLD
("the Owner")

Address of Owner: 6630-168 Street
Surrey, BC
V3S 8E7

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: 007-441-177
Parcel "A" (Explanatory Plan 13050) Lot 1 Section 18 Township 8 New Westminster District
Plan 2611

6630-168 Street
(the "Land")
4. 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 telecommunications tower from 12 metres (40 ft.) to 43 metres (140 ft.).
5. The landscaping and the siting of buildings and structures shall be in accordance with the drawings numbered 7910-0252-00 (A) through to and including 7910-0252-00 (D) (the "Drawings") which are attached hereto and form part of this development variance permit.
6. 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.
7. (a) The landscaping shall conform to drawings numbered 7910-0252-00 (C) and 7910-0252-00 (D)(the "Landscaping").

- (b) The Landscaping shall be completed within six (6) months after the date of the final inspection of the buildings and structures referred to in the Drawings.
- (c) Prior to the issuance of the building permit for this development, security is to be submitted to ensure satisfactory completion of the Landscaping. The security for the Landscaping is to be submitted as follows:

Cash in the amount of \$5,000

(the "Security")

- (d)
 - i. When the Landscaping is substantially complete as determined by the City, without the City having to use the Security, 90% of the original Security will be returned. When the Landscaping receives final approval by the City, not earlier than twelve (12) months after the date of substantial completion of the Landscaping, 10% of the original Security will be returned.
 - ii. If final approval of the Landscaping is not given by the City, the City has the option of using the Security to complete the Landscaping and any remaining money shall be returned. The Owner hereby authorizes the City or its agents to enter upon the Land to complete the Landscaping.
 - iii. If the City elects not to enter upon the Land to complete the Landscaping and the Owner does not complete the Landscaping, the Security is forfeited to the City five (5) years after the date of the provisional or final inspection of the buildings and structures referred to in the Drawings.
- 8. The Land shall be developed strictly in accordance with the terms and conditions and provisions of this development variance permit.
- 9. 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.
- 10. The terms of this development variance permit or any amendment to it, are binding on all persons who acquire an interest in the Land.

- ii. 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 – Dianne L. Watts

City Clerk – Jane Sullivan

TOWER OWNER/APPLICANT



208-545 Clyde Avenue
West Vancouver, BC V7V 1C5
(604) 968-7177
info@cascadiatower.com

No.	Date	Release
△	Sept 18/10	For Release
△	Feb 10/11	Update per City
△	Apr 4/11	Update per City
△		
△		
△		

SITE NAME

Cloverdale West

SITE NUMBER

CT20

SITE ADDRESS

6630 168 Street
Surrey, BC

SHEET TITLE

Elevation

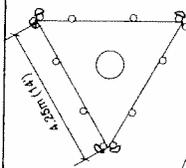
SHEET NUMBER

A-3

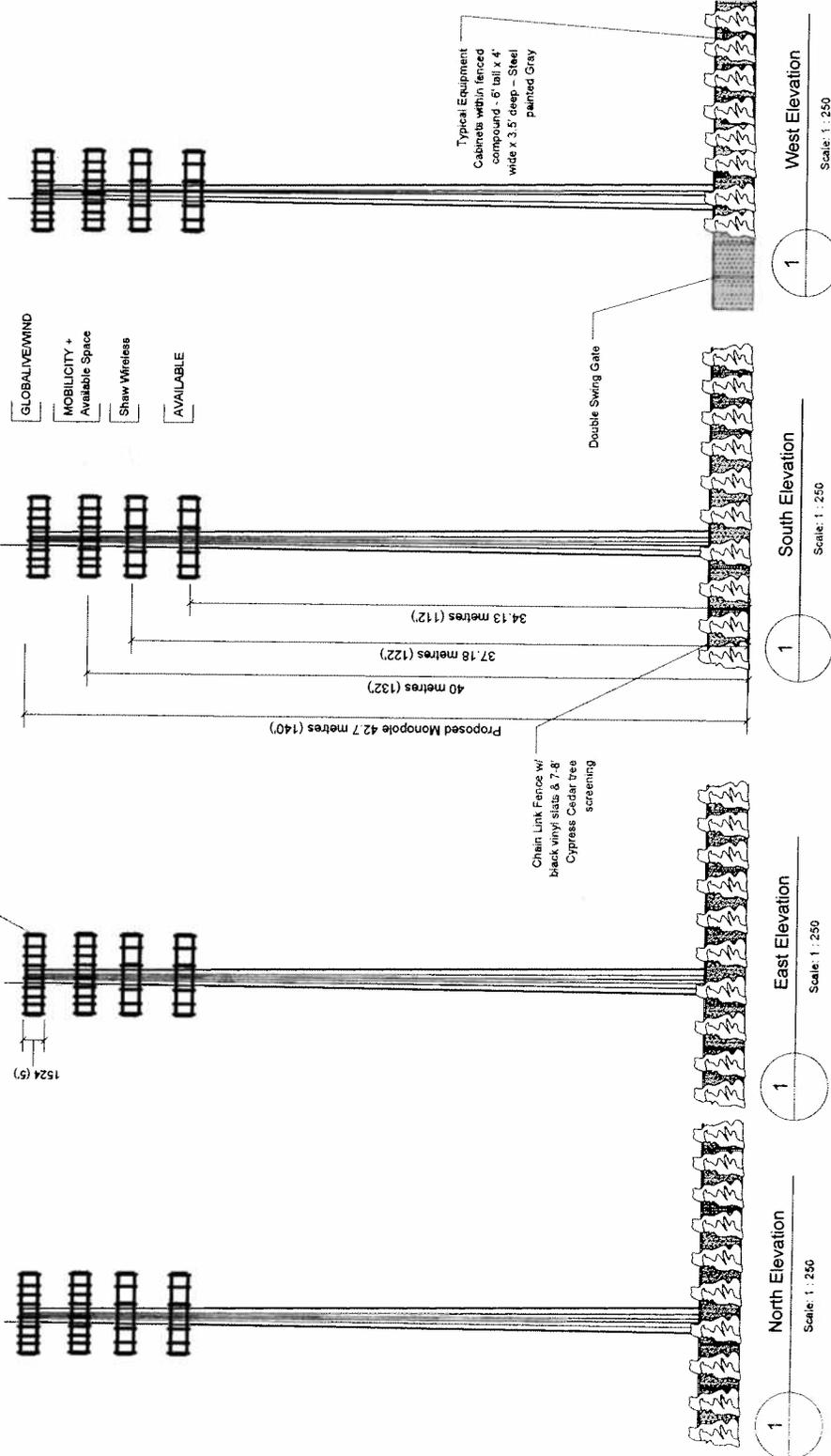


MONOPOLE & SUPPORT
FRAME TO BE POWDER
COATED 'GROTTO GREEN'
COLOUR

Proposed Antennas
1524 (5) x 250 (10')



1 Antenna Support Frame Plan
Scale: 1" = 10'



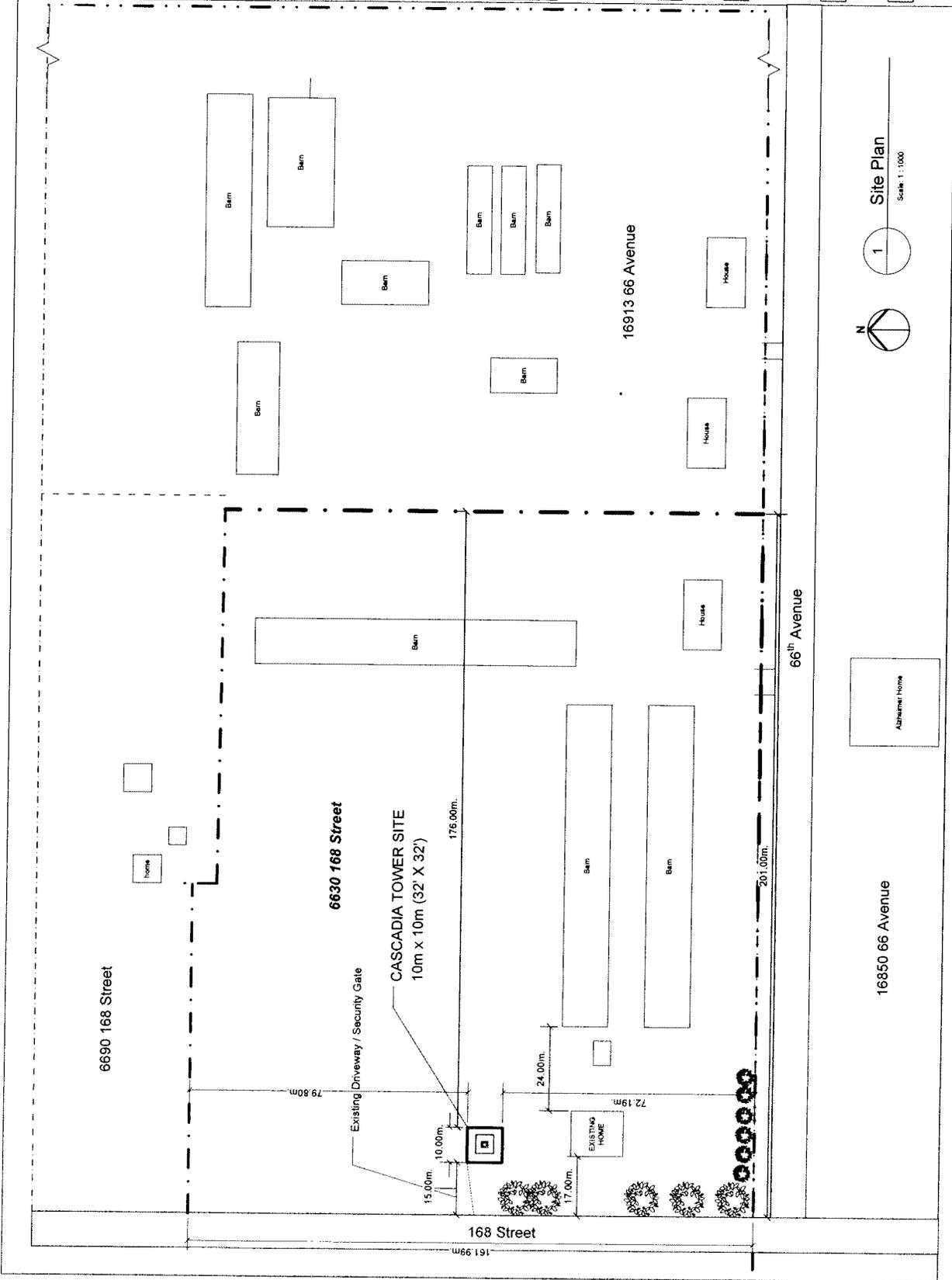
- GLOBALVIEWWIND
- MOBILITY + Available Space
- Shaw Wireless
- AVAILABLE

TOWER OWNER/APPLICANT

Cascadia Tower Inc.
Wireless Infrastructure Specialists
208-545 Clyde Avenue
West Vancouver, BC V7T 1C5
(604) 986-7177
info@cascadiatower.com

No.	Date	Release
1	Sept 18/10	For Discussion
2	Apr 4, 2011	Schedule table per CN
3		
4		
5		
6		

SITE NAME	Cloverdale West
SITE NUMBER	CT20
SITE ADDRESS	6630 168 Street Surrey, BC
SHEET TITLE	Site Plan
SHEET NUMBER	A-1



1 Site Plan
Scale 1:1000

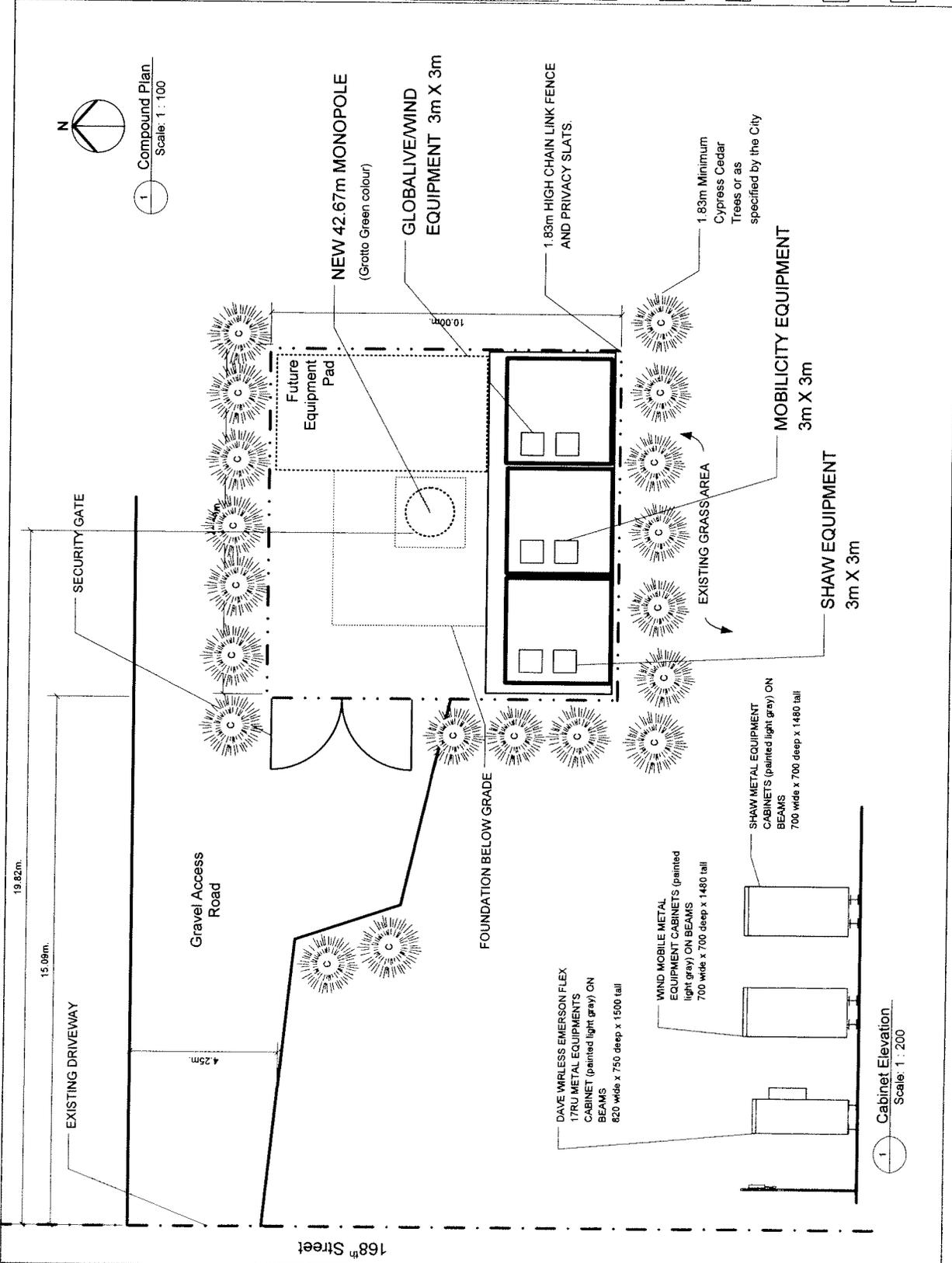


16850 66 Avenue
Alzheimer Home

TOWER OWNER/APPLICANT
Cascadia Tower Inc.
 Wireless Infrastructure Specialists
 208-545 Clyde Avenue
 West Vancouver, BC V7T 1C5
 (604) 866-7177
 info@cascadiatower.com

No.	Date	Release
△	Jun 2010	For Discussion
△	Feb 1011	Update Per City
△	Apr 4/11	Update Per City
△		
△		
△		

SITE NAME	Cloverdale West
SITE NUMBER	CT20
SITE ADDRESS	6630 168 Street
SHEET TITLE	Compound Plan
SHEET NUMBER	A-2



1
 Compound Plan
 Scale: 1 : 100

1
 Cabinet Elevation
 Scale: 1 : 200