



**City of Richmond**  
Planning and Development Department

## Report to Development Permit Panel

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**To:** Development Permit Panel  
**From:** Brian J. Jackson, MCIP  
Director of Development  
**Date:** September 19, 2011  
**File:** DV 11-565153  
**Re:** **Application by Standard Land Company Inc. for a Development Variance Permit at 16300 River Road**

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### Staff Recommendation

That a Development Variance Permit be issued which would vary the provisions of Richmond Zoning Bylaw 8500 to increase the maximum accessory structure height of "Light Industrial (IL)" from 20 m (66 ft.) to 45 m (148 ft.), in order to permit the construction of a telecommunication antenna tower at 16300 River Road.

Brian J. Jackson, MCIP  
Director of Development

BJJ:ke  
Att.

## Staff Report

### Origin

Standard Land Company Inc. (on behalf of Telus Corp.) has applied to the City of Richmond for permission to vary the maximum accessory structure height from 20 m (66 ft.) to 45 m (148 ft.) to develop a new telecommunication antenna tower with related accessory uses at 16300 River Road (refer to Schedule A for a location map).

The site is currently zoned "Light Industrial (IL)" and is vacant of buildings with the exception of a small residential dwelling at the north edge of the site. Outside storage of commercial vehicles is also occurring on remaining portions of the site. The proposed variance will apply to a new telecommunication antenna tower only located at the rear of the site.

### Project Description

The telecommunication antenna tower and all related equipment enclosures are contained within a fenced compound with a total footprint area of 225 sq. m (2,422 sq. ft.) The fenced compound area is located at the southwest corner of the site and is setback 25 m (82 ft.) from the rear (south) property line and 5 m (16.5 ft.) from the side (west) property line. The tower holding the telecommunication antenna is a 45 m lattice self-support structure. Access to the telecommunication area compound will be through a private access road secured through the property and arranged between the service provider and property owner.

### Background

Development surrounding the subject site is as follows:

- To the north: River Road and the foreshore of the Fraser River;
- To the east: A property zoned Golf Course (GC) that is currently vacant with no development;
- To the south: A rail line and right-of-way. Further south are lots zoned Agriculture (AG1); and
- To the west: A property zoned Light Industrial (IL).

### Staff Comments

#### Official Community Plan Land Use and Zoning Designation

The subject site is designated for "Business and Industry" in the General and Specific Land Use Map of the Official Community Plan. The subject site is zoned Light Industrial (IL).

Telecommunication antenna and related infrastructure is considered an accessory use on "Business and Industry" designated land so long as the installation is sensitive to any site-specific features on the property and surrounding adjacencies.

Telecommunication antenna are a permitted use in all zoning districts throughout the City and are subject to the appropriate accessory structure height limitations applicable to each zone. The definition of accessory structure in the Zoning Bylaw also specifically permits telecommunication antenna installations. The subject site's Light Industrial (IL) zoning identifies a maximum accessory structure height limitation of 20 m (66 ft.), therefore requiring a variance to permit the proposed 45 m (148 ft.) structure.



### Flood Plain Designation and Protection Bylaw 8204

The City's Flood Plain Designation and Protection Bylaw 8204 requires a minimum Flood Construction Level (FCL) of 3.1 m. As a result, all equipment and installations associated with the tower proposal that are susceptible to damage by flood waters is required to comply with the minimum Flood Construction Level established for this area. The proponent has confirmed that the tower and all related installations will comply with the Bylaw provisions.

### Status of City of Richmond Draft Telecommunication Antenna Consultation and Protocol

Richmond staff are working on revising and redrafting a Telecommunication Antenna Consultation and Siting Policy. Work on this initiative began in 2009 with revised regulations being included in the City's new Zoning Bylaw (8500). Additional work is being undertaken to develop a Policy for Richmond that includes:

- Specific consultation requirements based on surrounding land uses.
- Develop site-specific siting criteria and design guidelines.
- Provisions to support locating on existing building/structures and co-location of antenna equipment.
- Takes into account Federal jurisdiction over telecommunication antenna and installations, which includes exemptions granted by the Federal agency (Industry Canada).
- Outlines a specific review process for telecommunication antenna installations within the City.

As a result of preliminary consultation with telecommunication service providers (wireless/cellular) and Federal (Industry Canada) representatives, a number of revisions and comments were made that require additional work and review by City staff. Follow-up work on the policy and additional consultation with industry stakeholders is planned for the fall, 2011. Depending on the outcome of the consultation and any additional feedback, the earliest anticipated date that a revised policy on telecommunication towers and related installations will be brought forward to Council is in the spring, 2012.

In the absence a specific telecommunication installation policy for Richmond, Industry Canada has a default public consultation process to be followed by all telecommunication installations. The proponent has adhered to all the public consultation requirements and related guidelines identified in the Federal Industry Canada policy. Additional information on consultation and adherence to other Federal guidelines is contained in the upcoming section of the report.

### Federal Requirements Addressed by Telecommunication Antenna Tower Proposal

#### *Federal Public Consultation Requirements*

Public consultation as per Industry Canada policy require a notification area of 3 times the proposed height of the tower measured as a radius from the base of the tower. Based on this, a total of 6 property owners were notified with an information package about the proposal. The proponent received one comment from the neighbouring property owner to the east (16360 River Road), who voiced concerns about the operation of such an installation and any related impacts on local health and safety.



The proponent responded to the neighbouring property owner that the installation will comply with Health Canada's regulations pertaining to the operation of antenna installations. No additional public comments were received. In addition to notification of surrounding property owners, the proponent posted an advertisement in the local paper requesting comments on the proposal. The public consultation period was from March 18, 2011 to April 18, 2011.

Public notification and consultation is also included as part of the statutory process for the Development Variance Permit application. This includes posting of necessary signage on the property, mailed notification and advertisements in a local paper of the Development Variance Permit application proceeding to the Development Permit Panel.

#### *Compliance with Federal Health and Safety Provisions*

The telecommunication installation is required to adhere to all Federal standards and guidelines involving radio frequency exposure. Health Canada establishes these guidelines, with the service provider required to comply with all provisions. Telecommunication towers also are required to comply with all Transport Canada/NAV Canada aeronautical safety requirements, depending on the height and design of the installation.

#### **Analysis**

##### Summary of Co-Location of Service Providers

This telecommunication tower will accommodate antenna installations for 3 different service providers located on the higher elevations of the tower. Based on the lattice structure of the tower and engineered capacity, the proponent has identified that this structure can accommodate additional telecommunication antenna to enable the 3 service providers to expand installations on lower elevations of the tower. The equipment compound surrounding the base of the tower is also sized to accommodate the equipment enclosures required by each service provider.

If all related telecommunication equipment is located on the tower structure (proposed and future installations), the proponent has indicated that the structure would be at capacity. Without the proposed height of 45 m (148 ft.), it is unlikely that a smaller tower would be able to facilitate opportunities for co-location or provide the necessary coverage that a taller structure is able to provide. The potential outcome of which may involve the unnecessary proliferation of a number of smaller telecommunication towers throughout the area to provide the same service coverage that one larger structure can provide.

##### Location of Telecommunication Tower

The subject tower site is located in an area in Richmond where the land use is designated and/or zoned for industrial uses. Active industrial sites are located to the west of the subject site with farming (predominantly cranberry bogs) located to the south across from the rail line. The service provider has also identified this site as a critical component of their overall strategy to improve telecommunication service in the area.

Residential development is limited to single-family dwellings situated along properties that front River Road to the east and No. 7 Road to the west. An approximate measured distance from the base of the tower to the nearest single-family dwelling is 350 m to a single-family dwelling on No. 7 Road and 225 m to a single-family dwelling on the subject site directly to the north (fronting River Road). Therefore, the proposed installation of a 45 m (148 ft.) tower will have minimal impacts on surrounding industrial, agricultural and residential land uses.

#### Compliance with Richmond Draft Policy on Telecommunication Installations

Upon review of the proposed 45 m (148 ft.) tower and related structures, general compliance with the provisions of Richmond's Draft Policy related to Telecommunication Installations is achieved on the following basis:

- The tower is not located on or adjacent to residential areas.
- Location of telecommunication in industrial areas is supported, so long as site specific design and siting issues are addressed.
- No existing structures or buildings in the surrounding area can accommodate the proposed telecommunication equipment.
- The proposal maximizes opportunities for the co-location of antenna equipment (including future expansion) for up to 3 service providers on the same tower.
- The tower and related installations do not involve the removal of any existing trees, landscaping or disturbance of natural habitat areas.
- A metal chain link fence around the perimeter secures the enclosure containing the tower and related equipment. In addition to the chain link fence, a 1.8 m (6 ft.) high cedar fence is located around the west, south and east sides of the compound for additional screening. The wooden fence does not extend along the north side to allow for access to the equipment.

#### Siting of Tower in Relation to Future Industrial Road

A long-term transportation objective for this portion of River Road is to facilitate improved vehicle access to industrial zoned and designated lands, while also enhancing pedestrian/cyclist use of River Road and other City infrastructure objectives (i.e., dyke and/or drainage upgrades). As a result, a parallel running road south of River Road and located along the south edge of properties in the 16,000 block of River Road has been identified as one item that would be required upon redevelopment of industrial properties in this area. To take this future road alignment into consideration, the tower and related installations are setback 25 m (82 ft.) from the rear property line. The proposed location of the tower and fenced compound will allow for development of a new industrial service road along the subject site's south property line upon industrial redevelopment of the site and surrounding properties in this area.



**Conclusion**

Standard Land Company Inc. has applied to vary the maximum height limitation of an accessory structure to allow for a 45 m (148 ft.) tall telecommunication antenna tower to be constructed on a Light Industrial (IL) zoned property at 16300 River Road. All technical issues, siting and adjacency concerns have been resolved as part of this proposal. Staff recommend support of the Development Variance Permit application.



Kevin Eng  
Planner 1

KE:cas

Prior to future Building Permit issuance, the developer is required to complete the following:

- The applicant is required to obtain a Building Permit for any construction hoarding associated with the proposed development. If construction hoarding is required to temporarily occupy a street, or any part thereof, or occupy the air space above a street or any part thereof, additional City approvals and associated fees may be required as part of the Building Permit. *For further information on the Building Permit, please contact Building Approvals Division at 604-276-4285.*
- Submission of a construction traffic and parking management plan to the satisfaction of the City's Transportation Division (<http://www.richmond.ca/services/ttp/special.htm>).



**No. DV 11-565153**

To the Holder:                   STANDARD LAND COMPANY INC.

Property Address:               16300 RIVER ROAD

Address:                         C/O CHAD MARLATT  
610 – 688 WEST HASTINGS STREET  
VANCOUVER, BC V6B 1P1

1. This Development Variance Permit is issued subject to compliance with all of the Bylaws of the City applicable thereto, except as specifically varied by this Permit.
2. This Development Variance Permit applies to and only to those lands shown cross-hatched on the attached Schedule "A" and any and all buildings, structures and other development thereon.
3. The "Richmond Zoning Bylaw 8500" is hereby varied to increase the maximum accessory structure height of "Light Industrial (IL)" from 20 m (66 ft.) to 45 m (148 ft.) in order to permit the construction of a telecommunication antenna tower as shown on Plan #1 to #3 attached hereto.
4. The land described herein shall be developed generally in accordance with the terms and conditions and provisions of this Permit and any plans and specifications attached to this Permit which shall form a part hereof.
5. If the Holder does not commence the construction permitted by this Permit within 24 months of the date of this Permit, this Permit shall lapse.

This Permit is not a Building Permit.

AUTHORIZING RESOLUTION NO. \_\_\_\_\_  
DAY OF \_\_\_\_\_, \_\_\_\_\_

ISSUED BY THE COUNCIL THE

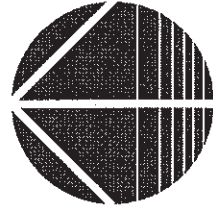
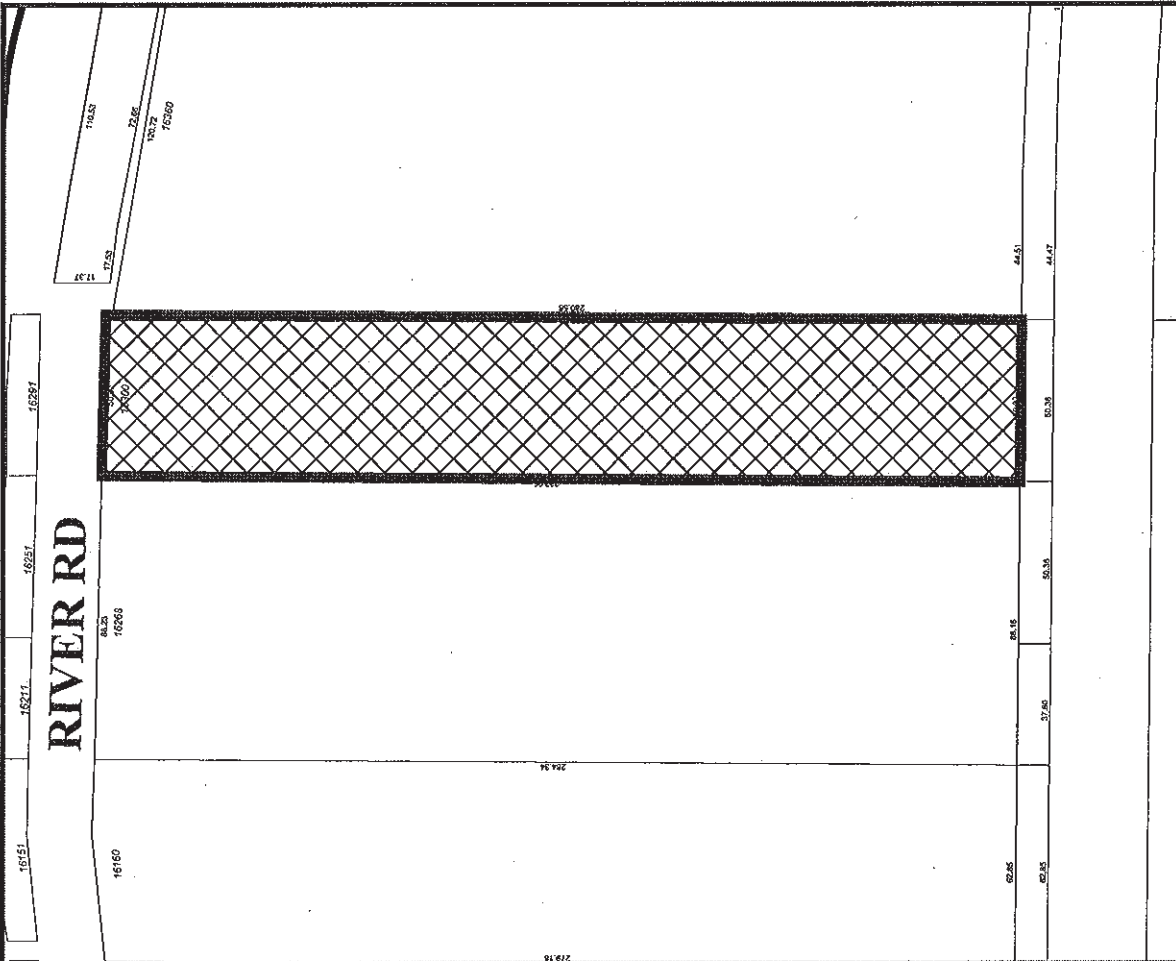
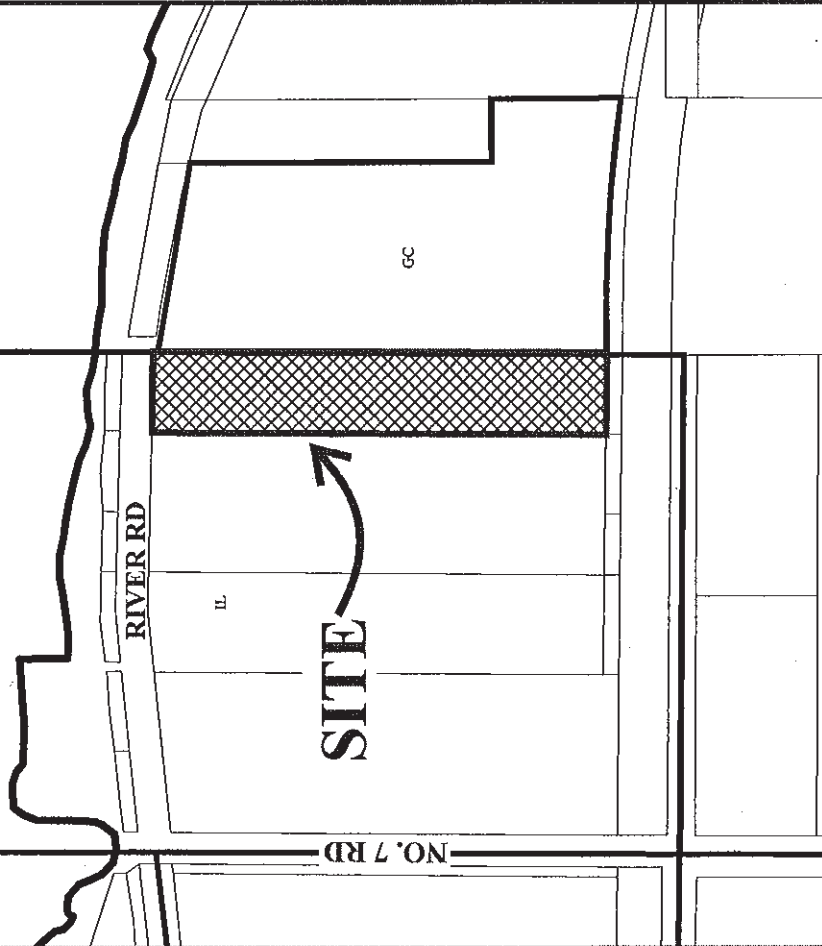
DELIVERED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, \_\_\_\_\_

\_\_\_\_\_  
MAYOR



# City of Richmond

*North Arm Fraser River*



## DV 11-565153 SCHEDULE "A"

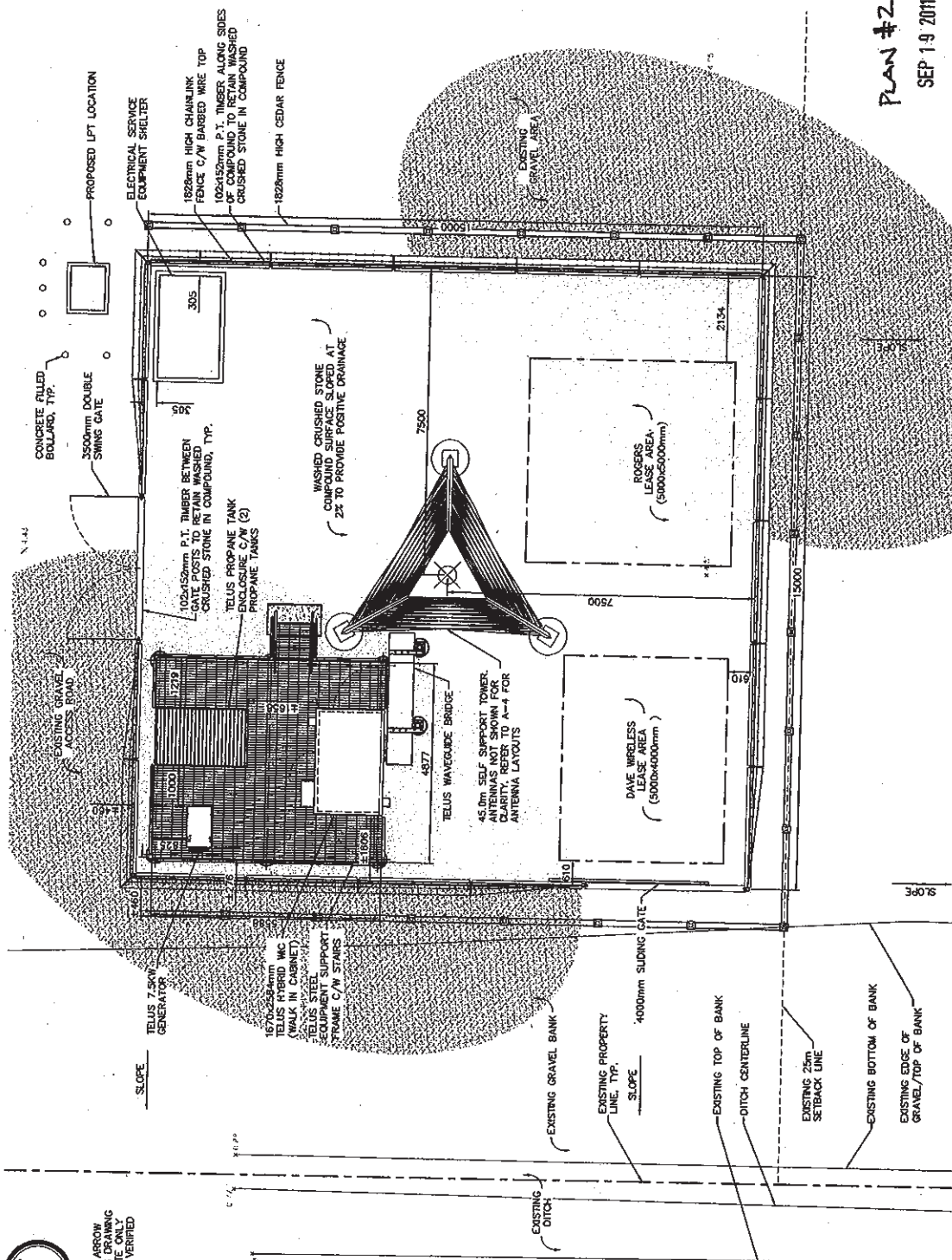
Original Date: 02/28/11  
Revision Date:  
Note: Dimensions are in METRES







TRUE NORTH ARROW SHOWN ON THIS DRAWING IS APPROXIMATE ONLY AND MUST BE VERIFIED



Plan #2  
SEP 19 2011

1 COMPOUND LAYOUT  
1:100  
0 1m 2m 4m

11-565153

REV.	DESCRIPTION	BY	DATE
G	GENERAL REVISIONS	RM	AUG 31/11
F	SURVEY UPDATED	RM	JUN 20/11
E	SURVEY ADDED	RM	JAN 11/11
D	REVISED PER TELUS	RM	JAN 4/11
C	GENERAL REVISIONS	RM	DEC 20/10
B	ISSUED FOR REVIEW	RM	DEC 07/10
A	ISSUED FOR REVIEW	RM	NOV 28/10

CLIENT:

**TELUS**

**TRK ENGINEERING**

#201-17688 66TH AVE  
SURREY, BC V3S 7X1  
TEL: (604) 574-6432  
FAX: (604) 574-6451  
EMAIL: info@trkeng.com  
WEB: www.trkeng.com

PROJECT:

FRASERVIEW  
16300 RIVER ROAD  
BC1204

RICHMOND

BRITISH COLUMBIA

DRAWING TITLE:

COMPOUND LAYOUT

SCALE: AS NOTED DRAWING NO.

CHECK BY: R.M.

DRAWN BY: A.F.

DATE: NOV 26/10

CAD FILE: 1010-068A3

PROJECT NUMBER: 1010-068

A-3

**NOTES:**  
 1. ELEVATION IS DIAGRAMMATIC ONLY.  
 2. IF REQUIRED, PROVIDE OBSTRUCTION LIGHTING IN ACCORDANCE WITH TRANSPORT CANADA REQUIREMENTS.

REV.	DESCRIPTION	BY	DATE
G	GENERAL REVISIONS	RM	AUG 31/11
F	SURVEY UPDATED	RM	JUN 20/11
E	SURVEY ADDED	RM	JAN 11/11
D	REVISED PER TELUS	RM	JAN 4/11
C	GENERAL REVISIONS	RM	DEC 20/10
B	ISSUED FOR REVIEW	RM	DEC 07/10
A	ISSUED FOR REVIEW	RM	NOV 26/10

CLIENT:



**TRK ENGINEERING**  
 6201-17668 66TH AVE  
 SURREY, BC V3V 7Z1  
 TEL: (604) 574-6431  
 FAX: (604) 574-6431  
 EMAIL: mail@trkeng.com  
 WEB: www.trkeng.com

PROJECT:

FRASERVIEW  
 16300 RIVER ROAD  
 BC1 204  
 RICHMOND BRITISH COLUMBIA  
 DRAWING TITLE:

NORTH ELEVATION AND  
 ANTENNA LAYOUTS

SCALE: AS NOTED DRAWING NO.

CHECK BY: R.M.

DRAWN BY: A.F.

DATE: NOV 26/10

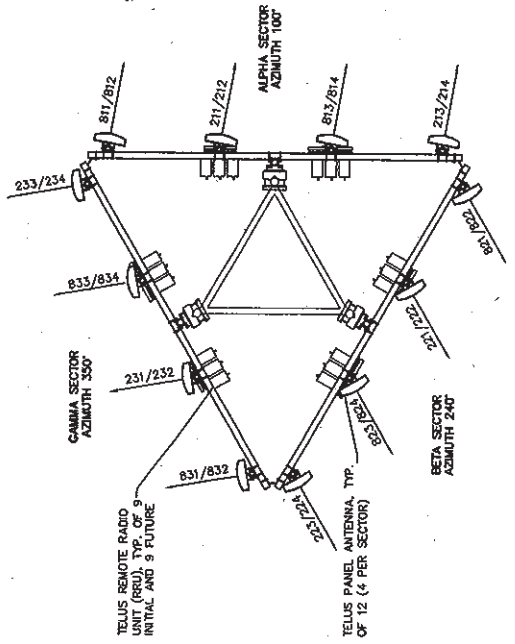
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PROJECT NUMBER: 1010-068

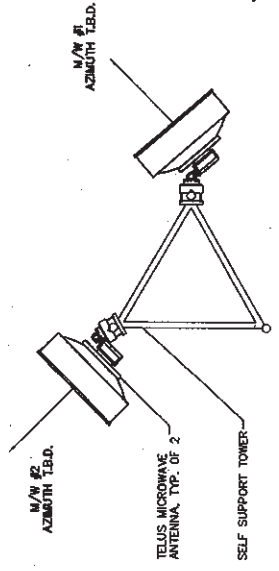
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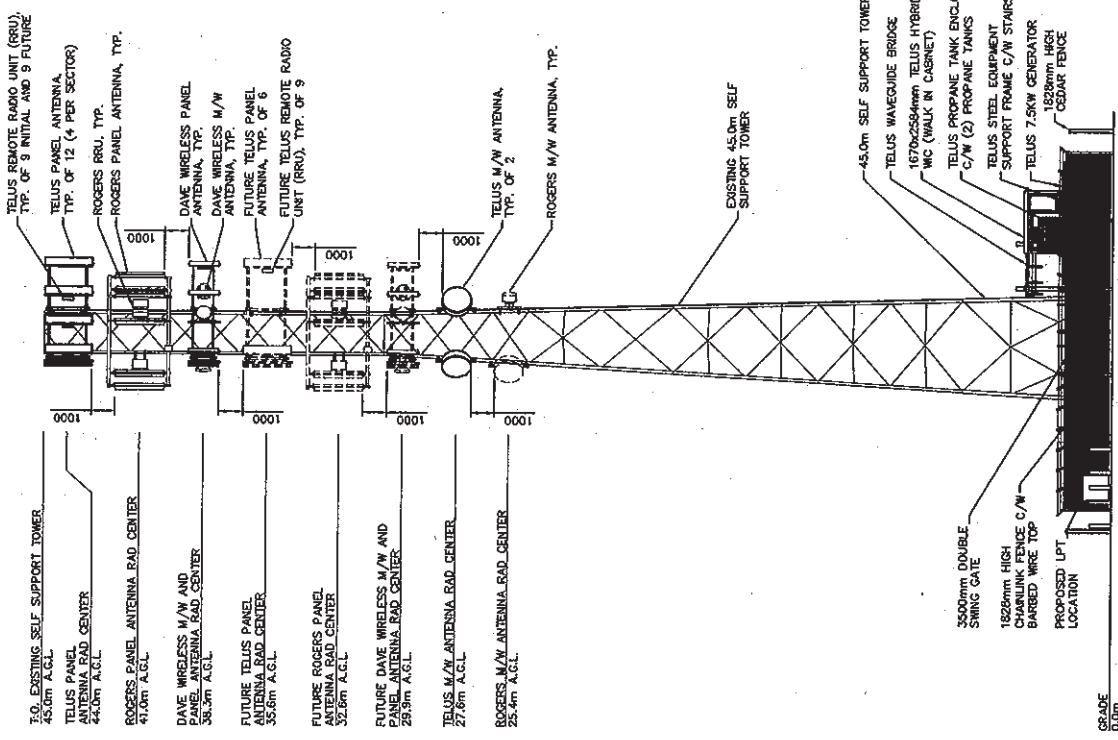
TRUE NORTH ARROW  
 SHOWN ON THIS DRAWING  
 IS APPROXIMATE ONLY  
 AND MUST BE VERIFIED.



2 ANTENNA LAYOUT  
 1:60 0 600 1.2m 2.4m



3 ANTENNA LAYOUT  
 1:60 0 600 1.2m 2.4m



1 NORTH ELEVATION  
 1:200 0 2m 4m 8m

Plan #3

SEP 19, 2011

DV 11-565153