November 7, 2013

Dear UBC Students and Campus Community:

Your UBC-Vancouver campus is a learning laboratory for your post-secondary education and the new AMS Student Union Building (SUB) serves as a hub for students to interact and foster a vibrant student community. Rogers' understand that the use of wireless services for your wireless devices (i.e., Smartphones, tablets and laptops) in your student community is necessary. In order to ensure dependable high speed wireless service is available in this student community, Rogers is proposing to install radiocommunications antenna and equipment at the new SUB, located at 6138 Student Union Boulevard.

Rogers has consulted with UBC Campus and Community Planning and submitted a Development Permit Application. As part of the Development Permit process, which ensures that all new projects are consistent with the vision of UBC Strategic Plan and UBC Land Use Plan, you are invited to comment on the Rogers proposal at an open house held in the old SUB concourse November 21, 2013 between 11:30 AM-1:30 PM.

Your questions and comments are an important part of the consultation process.

Rogers Communications Inc.

Peter Leathley
Municipal Affairs Specialist (BC), Wireless Network Implementation

Public Consultation Information Package
Wireless Communications Installation

Location: 6138 Student Union Boulevard
Rogers Site: W3465 (UBC New Student Union Building Relocate Outdoor)

Contact

Rogers Communications Inc.
1600 – 4710 Kingsway,
Burnaby, British Columbia V5G 4W7

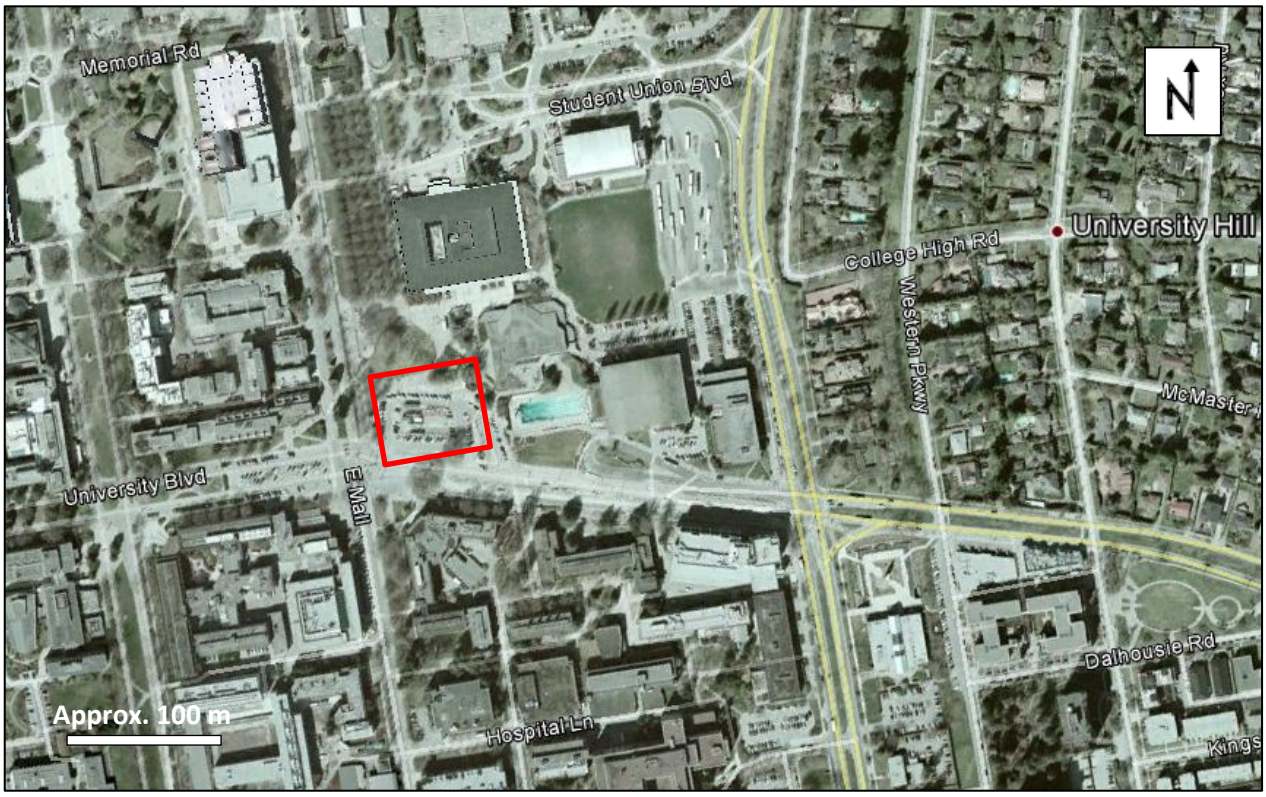
Contact name: Samuel Sugita
c/o Standard Land Company Inc.
Agents to Rogers Communications Inc.
Tel: (604) 687-1119
Email: CommentsBC@standardland.com

November 7, 2013

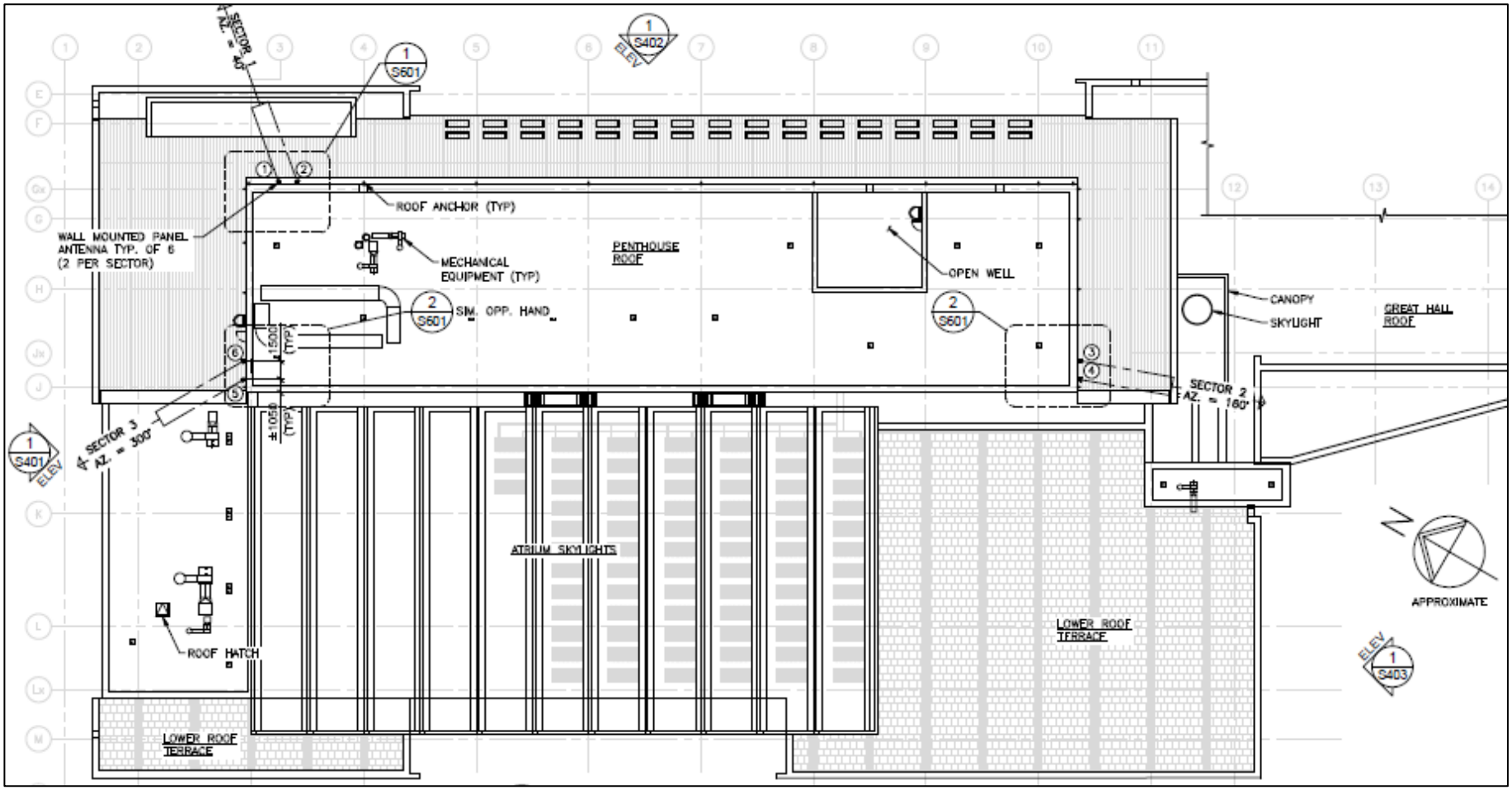
What is being proposed?

To ensure continued reliable service, Rogers is proposing to enhance and restore a high quality network signal for the wireless network in the area by adding equipment on the rooftop of the new Student Union Building (SUB). Specifically, there will be six antennas to be installed onto the wall of the mechanical penthouse located on the rooftop of the new SUB.

When a network weakness is identified, Rogers' radiofrequency engineers' first steps are to explore any and all opportunities to add additional equipment on nearby towers or mount antennas on existing buildings. Only when every alternative has been exhausted, does Rogers consider constructing a new wireless structure. In this case, Rogers radiofrequency engineers have determined that the new SUB is a suitable structure to provide optimal coverage in this area.

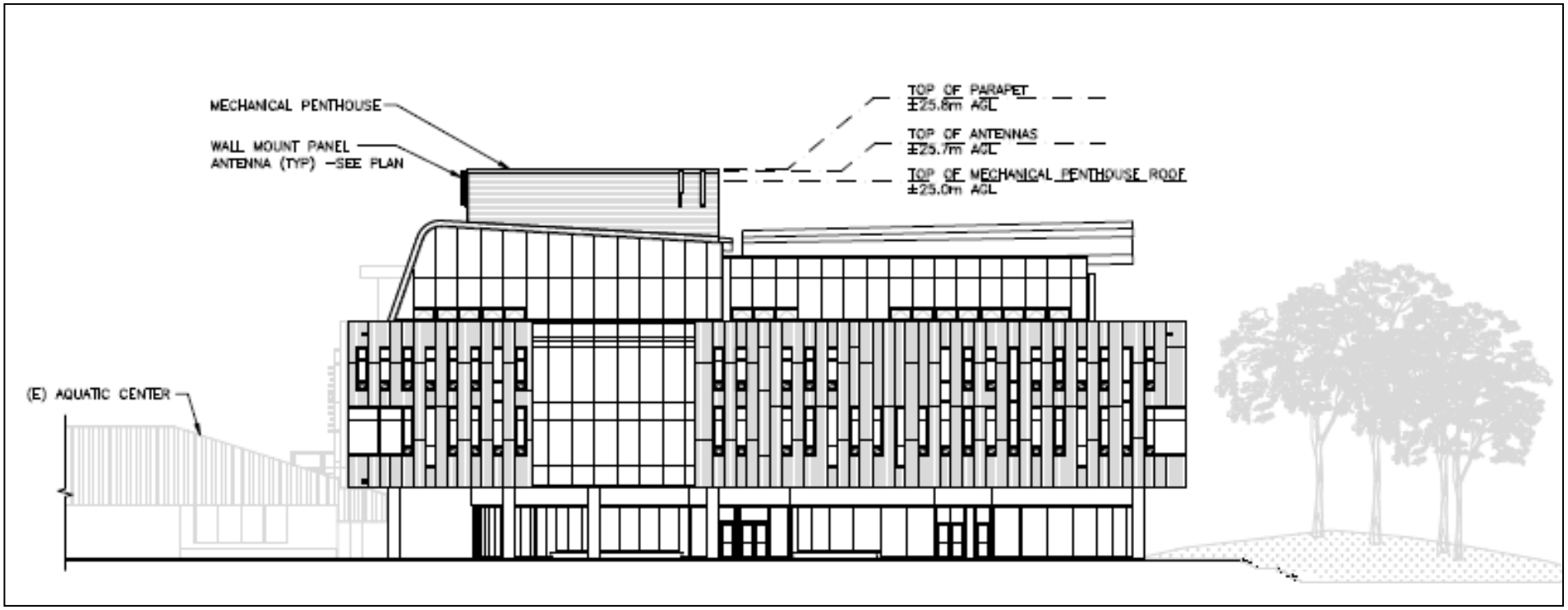


Rooftop Plan



Note: not to scale.

Tower Elevation (North)



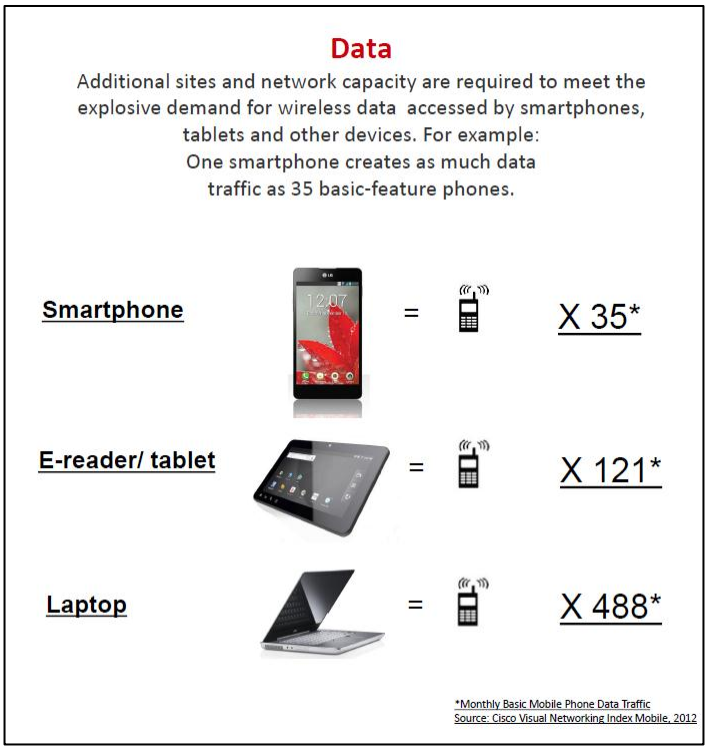
Note: not to scale.

Why is this installation required?

Rogers is consistently working to improve wireless coverage in BC communities and improve network quality for its customers. In response to a growing demand for wireless voice and data services, particularly within this area of UBC, Rogers is proposing to install radiocommunications equipment at the new SUB.

With the wide use of Smartphones, tablets and other forms of mobile computing devices, customer demand for higher data speeds has become increasingly important. The amount of data that can be processed and/or the number of calls that can occur at the same time is limited by two key factors: the number of users at any one time and the distance between the device and the cell site. As network demand increases, denser radio networks (more sites that are closer together) are required. It is also the case that the amount of coverage provided by a single site is inversely proportional to the number of voice calls and/or data transactions that occur at a given time. This becomes important as cells sites begin to function at or above capacity and gaps in coverage develop during periods of overcapacity. While this is represented by slowed transactions times for internet use, applications, and e-mail, it is much more problematic for voice calls, which either cannot be made or are constantly dropped. Where once excellent coverage and high quality calls were the norm, as capacity is reached, calls can no longer be processed even though the device may show strong coverage.

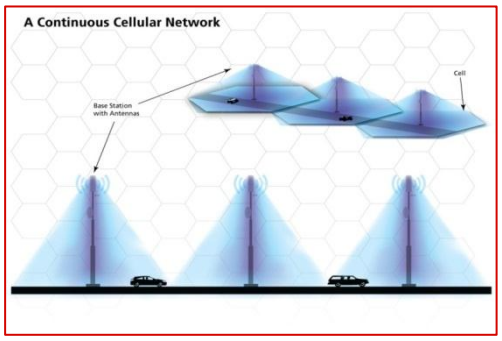
The table below illustrates how devices that transmit and receive data information need much more network capacity than standard mobile phones. For example, one Smartphone uses a wireless network as much as 35 standard mobile phones.



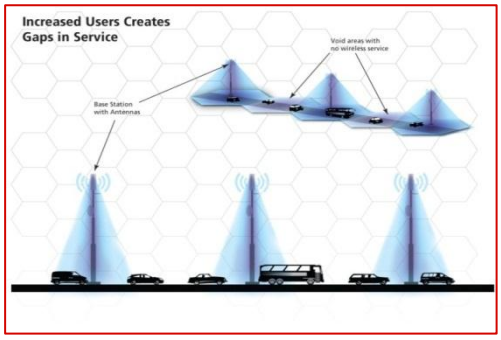
How do wireless networks work?

Wireless networks work by dividing geographic areas into “cells”. Each cell is served by a base station (in this case, a tower supporting telecommunications equipment). Mobile devices communicate with each other by exchanging radio signals with base stations.

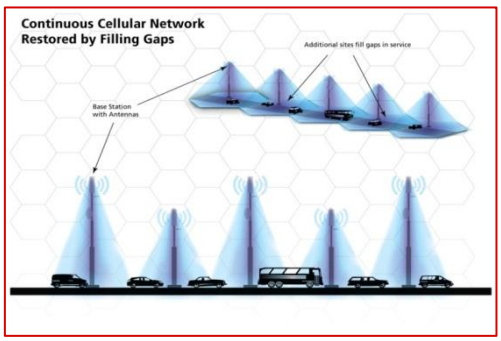
As more mobile phones and devices use the network, the “footprint” of service offered by a base station, like the proposed tower site, shrinks. This result is reduced coverage and gaps in service. Gaps in coverage can result in dropped calls and unreliable service. The drawings below illustrate how gaps in service develop as well as how additional equipment (or the addition of base stations) will enhance service.



A network is a series of interconnected cells each containing a base station (antennas and radio equipment). A high quality network offers continuous wireless service by placing base stations in specific geographical locations that allow us to use wireless devices.



When a base station reaches maximum capacity, the coverage footprint shrinks in order to handle volume.



New base stations must be built to fill in the void areas and restore continuous wireless service.

What is the consultation and approval process and who is involved?

Industry Canada has the final authority to approve towers under the Radiocommunications Act. However, Industry Canada also encourages Rogers to work with the local land use authority, which in this case is UBC Campus + Community Planning (C+CP). Understanding that the new SUB has gone through a rigorous design process, Rogers worked with C+CP and DIALOG (architecture firm who designed the new SUB) to ensure that the proposed installation conforms with the vision for the new SUB. As part of C+CP Development Permit Application process, Rogers is required to notify and hold an open house inviting the student community to comment on the proposed antenna installation.

At the conclusion of this consultation process, Rogers will work with C+CP and consider comments received and make any reasonable adjustments to the proposal before commencing antenna installation.

How safe is this rooftop installation?

Rogers relies on the health experts to set radio frequency standards and oversee acceptable levels. In fact, adherence to national health standards is a condition of our operating licence. As a wireless provider, Rogers is responsible for ensuring that all of these safety standards are met and maintained.

In Canada, Industry Canada has adopted Health Canada's Safety Code 6, which establishes the safe limit for all devices that emit radio frequency waves and ensures public safety. The consensus among Canadian health organizations and the scientific community is that wireless antennas are safe. Here in BC, the BC Centre for Disease Control has reviewed the scientific data and supported the safety of wireless structures. Similarly, the Chief Medical Health Officer for Vancouver Coastal Health has determined that installations such as this one are appropriate (see weblinks on the next page).

Base stations, like this tower site, operate at very low power. Typically, the maximum power density levels from tower structures over 30 metres are less than one percent (1%) of Health Canada's Safety Code 6 government safety standard at ground level. The power would be similar to that of a computer monitor or light bulb operating in a household when measured at ground level.

In addition, Rogers adheres to a number of Canadian safety standards:

Health Canada's Safety Code 6 Compliance
Rogers attests that the radio antenna system described in this package will at all times comply with Health Canada's Safety Code 6 limits.

Canadian Environmental Assessment Act
Rogers attests that the radio antenna system as proposed for this site will comply with the Canadian Environmental Assessment Act.

Engineering Practices
Rogers attests that the radio antenna system proposed for this site will be constructed in compliance with all applicable safety and building standards and comply with good engineering practices including structural adequacy. Preliminary layout plans have been

included in this notification package.

Transport Canada's Aeronautical Obstruction Marking Requirements
Rogers attests that the radio antenna system described in this notification package will comply with Transport Canada / NAV CANADA aeronautical safety requirements. Rogers made all necessary applications to Transport Canada and NAV CANADA and confirms that both lighting or markings are required.

Where can I go for more information?

The following web links are provided for your information. We are also happy to answer any questions you may have.

Telecommunication Systems
www.ic.gc.ca/eic/site/smt-gst.nsf/eng/h_sf01702.html

Public Consultation Guidelines
www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf08781.html

Safety Code 6
www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf08792.html

Vancouver Coastal Health
www.vch.ca/about_us/news/archive/2011-news/concerns_about_cell_phone_tower_radiation_addressed

Canadian Wireless Telecommunications Association
www.cwta.ca

BC Centre for Disease Control
www.bccdc.ca/healthenv/ElectromagFields/default.htm

RFCom – University of Ottawa
www.rfcom.ca

Your role

UBC Campus + Community Planning is seeking your input and comments about the proposed installation to ensure consideration is given to all of the needs of the UBC community as well as Rogers' technical requirements, including improved wireless services for the area.

Industry Canada

Industry Canada, as the regulator for all wireless providers across Canada, sets out the rules and policies for our business. In addition to Industry Canada, we work closely with municipal and provincial authorities to seek their support to identify appropriate site options and if needed, to obtain any necessary permits and approvals.

Land Use Consultant

Rogers is working with Standard Land Company Inc. on this project, who assists our efforts in gathering public input and working with regulatory authorities.

Contact Information

Rogers Communications Inc.
c/o Standard Land Company Inc.
Attention: Samuel Sugita
610 – 688 West Hastings Street
Vancouver, British Columbia V6B 1P1
Tel: (604) 687-1119
E-mail: CommentsBC@standardland.com

Please find below, additional contacts in the event that there are questions specific to local land use or Industry Canada Regulations.

University of British Columbia
Campus and Community Planning
Attention: Karen Russell
2210 West Mall
Vancouver, British Columbia V6T 1Z4
Tel: (604) 822-1586
E-mail: karen.russell@ubc.ca

Industry Canada
Lower Mainland Office
1230 Government Street
Victoria, British Columbia V8W 3M4
Tel: (604) 586-2521
E-mail: vancouver.district@ic.gc.ca