Existing Antenna Change Request Application

The following procedure outlines the approval process required for external parties interested in making antenna equipment changes on SFU property. **Equipment changes that require SFU approval include:** the addition of antenna or associated equipment, the substitution of antenna or associated equipment, changes to equipment spectrum frequency (Transmission and Receiving) and changes to antenna azimuth.

1. **Antenna Change Request Application:** A party interested in making any of the equipment changes outlined above must first submit the following to SFU Facilities Services:
   i. A **non-refundable** Application Fee of $200, plus applicable taxes, by cheque, to SFU, Facility Services. This fee covers the costs associated with the administration and initial assessment of the application. The request will not be considered without receipt of the Application Fee.
   ii. A completed Application form with all pertinent information to the installation including but not limited to:
      i. Specific location of interest
      ii. Purpose of the change
      iii. Technical specification of all new equipment (if applicable to the requested change), including number and size of antenna, number of bands for each antenna, number of connectors for each band.
      iv. Frequency spectrum each connection will be operating (if applicable to the requested change)
      v. Site sketch plan layout indicating the size and location of any antenna equipment and/or shelter/cabinet changes (Schedule C)
      vi. A baseline schematic clearly showing antenna placement, prior to any changes, complete with each antenna labeled with a unique antenna name, the antenna manufacturer, antenna model antenna type, size of antenna, designation site (if applicable), azimuth, mounting detail, and the frequency(ies) that the antenna is licensed with Industry Canada (Schedule A).

<table>
<thead>
<tr>
<th>Equipment ID # (for easy reference to design drawing)</th>
<th>Manufacturer</th>
<th>Model</th>
<th>Type</th>
<th>Size</th>
<th>Frequency Band</th>
<th>Designation Site (if microwave)</th>
<th>Azimuth</th>
<th>Mounting Detail</th>
</tr>
</thead>
</table>

vii. A baseline schematic of the current site antennas (Schedule E). A more detailed schematic of the proposed site antennas (Schedule F) will be required as part of the Final Application Package if the Antenna Change Request Application is approved and the Applicant decides to proceed.
Once the non-refundable Application Fee and the above information have been received, SFU may arrange to meet with the applicant to review the structural requirements related to the installation such as the potential location of the black box, power requirements, and site improvements as well as the specific network requirements.

2. **Approval in Principle:** The application will be assessed by the SFU RF Committee for feasibility and compliance with SFU policies. SFU may act arbitrarily in considering whether to accept or reject the application.

If the change request is feasible and compliant with SFU policies, SFU will forward the applicant an Approval in Principle to proceed with the application subject to receipt of a **non-refundable** Processing Fee. Depending on the nature of change request, the Processing Fee will start at $200 for a simple change plus applicable taxes. More complex changes will be assessed a higher fee. If the applicant wishes to proceed, a written acknowledgement along with the Processing Fee is to be sent to SFU Facilities Services. Rates are not negotiable.

If the application is denied, the Applicant will be notified¹.

3. **Final Application Package:** If the Applicant wishes to proceed with their change request, they are to provide SFU with an executed Approval in Principle, the processing fee, and at their own cost, additional change request details relating to:

   - The architectural, structural, mechanical, electrical and aesthetic conditions of the installation proposal;
   - The safety, operational and technical details of the installation such as frequency, transmitting direction;
   - A safety code 6 report based on existing site readings and incorporating the theoretical values of the new equipment, completed and sealed by a professional engineer. For further clarity, the Safety Code 6 report is to be prepared using the field measurement method; The report should include the following analysis:
     1. Analysis of the field measurement of aggregate Radio Frequency (RF) contribution from all sources, excluding the proposed change/installation;
     2. Theoretical analysis of RF contribution from only the proposed change/installation;
     3. Analysis of the aggregate RF contribution from all existing sources (field measurement), including the proposed change/installation (theoretical).

SFU’s expectation is that the site must comply to the strictest Safety Code 6 category. At

¹ SFU is not required to reimburse any fee paid by the applicant, return any materials submitted by the applicant or provide to the applicant reasons for the rejection.
this time, it is defined as “the site must be within the Safe Limits Defined by Health Canada for Uncontrolled Environments”.

- Co-location acceptance from existing antenna licensees for the installation of equipment and proposed spectrum
- Any other terms and conditions identified in the Letter of Intent

**Examples for Tower Installations:**

i. Structural Tower Analysis
ii. Full installation Drawings
iii. Reinforcement Drawing – If reinforcement is required, the drawings and structural tower analysis must be completed and stamped by a qualified professional engineer.

Note: Drawings and analysis must be stamped by a qualified Professional Engineer

**Examples for Rooftop Installations:**

i. A second schematic drawing and table clearly showing the following information: antenna placement, with proposed changes, complete with each antenna labeled with a unique antenna name, the antenna manufacturer, antenna model antenna type, size of antenna, designation site (if applicable), azimuth, mounting detail, and the frequency(ies) that the antenna is license with Industry Canada for. Once the proposed changes are accepted, this schematic will become the contracted base line going forward.

<table>
<thead>
<tr>
<th>Antenna ID # (for easy reference to design drawing)</th>
<th>Antenna Manufacturer</th>
<th>Antenna Model</th>
<th>Antenna Type</th>
<th>Size of Antenna</th>
<th>Antenna Frequency Band</th>
<th>Designation Site (if microwave)</th>
<th>Azimuth</th>
<th>Mounting Detail</th>
</tr>
</thead>
</table>

ii. A Safety Report must be prepared based on measurements of emissions throughout the rooftop and must comply with the requirements in *Industry Canada Guideline GL-08 November 2010*, as amended, updated, renamed or replaced from time to time. Specifically, the proposed installation together will all the installations on the Rooftop emitting radio-frequency electro-magnetic fields existing on the date of the equipment installation must not exceed the most restrictive or stringent standards stated for the Maximum Permissible Exposure (MPE) limits as provided in Code 6. Based on the current Code 6, the proposed installation together with all the existing installations shall not exceed the MPE for the general public in an uncontrolled environment.

Note: Drawings and reports must be stamped by a qualified Professional Engineer.
The information will be reviewed by the SFU RF Committee. SFU may act arbitrarily in considering whether to accept or reject the Final Approval Package. If it is rejected, the Applicant will be notified.

4. **Final Approval:** Once the Applicant has satisfied the conditions and provided SFU with all the detailed information, SFU will issue a final approval, including a licensing rate for the proposed changes. The applicant is not to commence any work at the site until they have:
   
i. Satisfied SFU with all the conditions for the proposed installation
   
ii. Satisfied SFU with the final plans and specifications for the proposed changes, the construction schedule, the analysis, reports and final design drawings
   
iii. Provided SFU with a second Safety Code 6 Report, completed and sealed by a professional engineer for the site AND that the second Safety Code 6 Report is received and accepted by SFU in writing. For further clarity, the report should include the following analysis:
   
(1) Analysis of the field measurement of aggregate Radio Frequency (RF) contribution from all sources, excluding the proposed change/installation;

(2) Analysis of the aggregate RF contribution from all existing sources (field measurement), including the proposed change/installation (field measurement).

SFU’s expectation is that the site must comply to the strictest Safety Code 6 category. At this time, it is defined as “the site must be within the Safe Limits Defined by Health Canada for Uncontrolled Environments”.

5. **Licenses & Permits:** Upon receiving SFU’s Final Approval, the Applicant can proceed with obtaining all the applicable licenses and permits from Governmental Authorities to operate the Equipment that has been installed.

6. **License Agreement Amendment:** SFU will prepare an Amendment to the existing License Agreement outlining the agreed upon changes and conditions, which will be executed by both SFU and the Applicant.

7. **Coordination of Work:** SFU will assign a project coordinator to oversee the installation of antennas and related equipment on campus and to act as a point of contact for the coordination of site work. The project coordinator’s time will charged to the licensee and based on SFU charge-out rates.

8. **As Built Drawings:** The Applicant must provide SFU with both electronic and hard copies of the following stamped as-built design drawings and a stamped as-built inspection report

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2 Same as note 1
completed by a qualified professional engineer, different than the one who performed the installation, provided within 30 days of completing the installation.

9. **Labeling of All Equipment**: Before the equipment becomes operational, the applicant is expected to label all their equipment so they can easily be identified. Specifically, a visual label is to be mounted to the front of each antenna so that it is easily visible from the roof top. The label should cross reference to the “unique” antenna name on Schedule E - Schematics of Equipment.

   Note: SFU will be conducting a regular site review. Equipment that is unauthorized and/or equipment without an obvious owner will be disconnected and removed from the site at the owner’s risk and expense.

Questions can be sent to: realestate@sfu.ca

Payments should be sent to: Simon Fraser University
Facilities Services
8888 University Drive
Burnaby BC V5A 1S6

Attn: Manager of Real Estate Services
SCHEDULE A
APPLICATION FORM

Applicant’s Information

Applicant’s Name: ________________________________________________

Applicant’s Address: ________________________________________________

Applicant’s Representative’s Name: __________________________________

Applicant’s Representative’s Phone No.: ________________________________

Applicant’s Representative’s Fax: ________________________________

Applicant’s Representative’s Email Address: ________________________________

Location of Proposed Antennas

____________________________________________________

Technical Specifications

Purpose of the changes: ________________________________________________

Describe the new equipment and any existing equipment it will be replacing. Include the following equipment information; the size, type, make, model, frequency, spectrum, azimuth, # of bands, # of RTUs and # of connectors.

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SCHEDULE C
SKETCH OF PROPOSED CHANGES
SCHEDULE D

TECHNICAL SPECIFICATIONS
SCHEDULE E

SCHEMATICS OF CURRENT ANTENNA EQUIPMENT
SCHEDULE F

SCHEMATICS OF PROPOSED ANTENNA EQUIPMENT

To be provided before Final Approval