1.0 GENERAL

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.1 The responsibility for safety on construction sites shall rest with the Contractor(s). The regulations of the Worker’s Compensation Board (WorkSafe BC) and the British Columbia Building Code apply as a minimum. For the purpose of Part 8 of the British Columbia Building Code the following definitions apply:

   .1 service company: shall mean SFU Facilities for water, gas, sanitary sewers and storm sewers, and SFU Services for telephone, communications and cable television.

   .2 street: shall mean any thoroughfare uses by the public, service vehicles or pedestrians.

   .3 public property: shall mean all property on the SFU campus outside the area defined or shown as the project site - normally delimited by the hoarding line.

.2 All Contractors and Subcontractors must be registered employers with the Workers Compensation Board and must conform to all WorkSafeBC requirements for construction safety.

.3 SFU Project Manager and SFU EHRS will provide the Contractor with any known information regarding hazards to the health or safety of persons in the workplace.

1.2 PRE-DEMOLITION ASSESSMENT

.1 Before any demolition, alteration, modification, change or renovation can begin a Pre-Demolition Assessment must be conducted by a qualified person (as per WorkSafe BC definition). The Pre-Demolition Assessment report must be submitted to the Project Manager and Environmental Health and Research Department (EHRS) within 2 weeks before the start of work. At a minimum the report must meet WorkSafe BC and SFU requirements.

1.3 CONSTRUCTION SAFETY PROGRAM

.1 The Prime Contractor or contractors shall have in place a site-specific safety program acceptable to the Worker’s Compensation Board and SFU. At the start of a job the Contractor shall submit a Notice of Project to WorkSafeBC, with copies to SFU. The Prime Contractor or contractors must complete the SFU Contractor Safety Checklist and submit to the Project Manager and EHRS along with any relevant safety documentation.

.2 The implementation of the safety program shall be monitored through monthly safety meetings with the Prime Contractor, contractors and subcontractors. Minutes of these meetings shall be posted in the site office for view by the public. The Prime Contractor shall report to the Project Manager safety program activities such as safety committee meetings held, inspections performed and the results of any incident or near miss investigations. Issues which require coordination with SFU Facilities, such as lock-out (refer to SFU Lockout Program in Facilities Services Health and Safety Manual for further details), power line contact control or tie in of services (Shutdown Request) shall also be included in these reports.
.3 The contractor shall coordinate with SFU Facilities if services such as power or water may be shut off (Shutdown Request).

.4 The contractor shall abide by the latest version of the SFU Contractor Safety Manual.

1.4 SITE SAFETY PLAN

.1 A Site Safety Plan is required for all additions, renovations and all new buildings regulated under Part 3 of the British Columbia Building Code or when required by WorkSafeBC.

.2 The Prime Contractor shall conduct a job hazard assessment and prepare a Site Safety Plan giving the names and emergency telephone numbers of the Prime Contractor or contractors, the Project Manager, the Consultant, the Trades Safety Coordinator, SFU Campus Safety & Security Services, SFU Safety and Risk Services, and SFU Parking and Sustainable Mobility Services. The Plan shall also show the details of the construction procedure relating to site access, maintenance of any required exits, barricades, traffic control, scaffolding and swing stages, hoisting equipment, fire protection facilities, emergency shut-off locations, material storage, waste materials, control of dust and debris, protection of the edges of each floors and any other items required by the Chief Building Inspector. The Site Safety Plan will be presented to the Project Manager and Environmental Health and Research Safety department at the first Project Meeting.

.3 The Site Safety Plan shall be adjusted to reflect the current stage of construction activities. The Site Safety Plan shall be posted on the job site on a 600mm by 600mm piece of plywood protected from the weather and staked into the ground so as to be visible from the street. Alternatively, it may be posted and protected from the weather on the principal construction site entrance or shelter provided for workers or equipment.

.4 A separate Fire Safety Plan for the construction site shall also be submitted to the SFU Facilities and EHRS in accordance with the BC Fire Code.

1.5 CONTRACTOR SAFETY ORIENTATION

.1 Prior to the start of any work at SFU the Prime Contractor, contractors and subcontractors must complete SFU Contractor Safety Orientation. Orientation can be scheduled and coordinated with the Environmental Health and Research Department (EHRS)

1.6 PROXIMITY TO OVERHEAD POWER LINES

.1 Where work must be conducted in an area which is in close proximity to overhead power lines, SFU Facilities will provide assurance in writing that the power lines are de-energized, or require guarding. The Contractor shall contact SFU Facilities to coordinate appropriate procedures and to obtain the WorkSafeBC form 30M33. All work procedures must be in conformance with Part 19 of the WorkSafeBC Regulations.
1.7 **ROOF TOP ACCESS**

.1 Roof top access is restricted without prior notification to SFU Facilities.

Prior to working on any roof top the contractor must submit a site specific Fall Protection Plan to the Project Manager and EHRS. Contractors and others requiring roof top access on these buildings are required to provide their own safety equipment that meets Canadian Standard Association (CSA) and/or American National Standard Institute (ANSI) requirements.

1.8 **WORKING AT HEIGHTS**

.1 Any work that expose a person to a fall of 10’ or greater, fall protection system must be in place. Any person working at 10’ or greater using a fall protection equipment must be adequately trained to use, maintain and dismantle the equipment. Fall Protection equipment used on site must meet CSA or ANSI requirements.

Prior to working at heights of 10’ or greater, a site-specific Fall Protection Plan must be submitted to the SFU Project Manager and EHRS. The Fall Protection Plan must be readily available on site and updated as site changes.
1.9 MOBILE EQUIPMENT AND CRANES

.1 Mobile Equipment (i.e. forklifts, scissor lifts, aerial lifts, man lifts, etc)

.1 Mobile equipment must be requested and approved by the Project Manager. Prior to requesting the mobile equipment, the Prime Contractor, contractors or subcontractors must submit the equipment specifications to the Project Manager.

.2 Any person operating a mobile equipment on site must be trained with a valid training record(s). Mobile equipment used on site must be meet WorkSafe BC the Manufacturer, CSA and ANSI requirements.

.2 Crane (tower crane, mobile crane and boom trucks)

.1 Crane(s) must be requested and approved by the SFU Project Manager. Prior to requesting the crane, the Prime Contractor, Contractor(s) or Subcontractor(s) must submit the equipment specifications to the SFU Project Manager and EHRS.

.2 Crane work or activity that will affect the roadway, walkway or pathway will require a Traffic Management Plan (including pedestrians). Traffic Management Plan for SFU Burnaby Campus must be submitted (within 1 week of crane work) to the SFU Traffic Manager for approval. Traffic Management Plan for SFU Surrey and Vancouver Campus are approved by the local municipal government and submitted to the SFU Project Manager after approval from the municipal.

.3 All crane operators must be certified by the British Columbia Association for Crane Safety (BCACS), Fulford Harbour Group Ltd (FHG) or the Industry Training Association (ITA). Riggers must be trained (documented) and competent to conduct rigging work.

.4 Crane setup, dismantle and use on site must be in accordance to WorkSafe BC, the Manufacturer, CSA, ANSI and/or Professional Engineer requirements. A Crane Lift Plan must be submitted to the SFU Project Manager and EHRS within 72 hours before the start of any crane work. On the day of the lift, a Pre-Lift Meeting must be conducted and documented. The meeting must be submitted to the SFU Project Manager and EHRS by the end of the workday.

.5 Any crane that is left un-supervised must be secured in a manner that un-authorized personnel(s) cannot operate, climb (i.e. secured ladder access point), alter or use in a way that can pose a threat to the public, workers and SFU.
1.10 PROCEDURE FOR ENTERING CONFINED SPACES

.1 Contractors must conform to the WorkSafe BC regulations with respect to entering confined spaces such as manholes, service tunnels, etc. Contractors must submit the following site-specific safety documentation:

.1 Risk Assessment on the confined space(s) from a qualified person (as per WorkSafe BC definition).

.2 Entry, Monitor, Rescue and other applicable Safe Work Procedure for the confined space(s) from a qualified person.

1.11 PROTECTIVE CLOTHING & EQUIPMENT

.1 Contractors are required to provide their own protective clothing and equipment when required for access to any restricted location on the SFU Campus. This would include, but not be limited to items such as, hard hats, safety footwear, eye protection, ear plugs, respirators and protective coveralls. Items which require custom fitting, such as respirators, shall not be made available for use by more than one person. All protective clothing and equipment must meet CSA, ANSI or other recognized standards from the Board.

1.12 BARRICADES AND BARRIERS

.1 All barricades and barriers on construction sites shall conform to all safety practices required by regulations and good practice. Barriers for work outside the construction site must be visible both day and night.

.2 All walkways in close proximity to job sites shall be built with overhead protection where overhead work is being performed in close proximity.

.3 In pedestrian areas adequate warning must be provided for visually impaired pedestrians. Chain link fencing or hoarding is preferred as it allows blind persons to feel the base of the barricade with their canes. Audible or tactile warning devices may also be required. Depending on the illumination on site and campus, additional lighting may also be required to illuminate pedestrian areas. Before setting up barricades in pedestrian areas the Owner must be notified at least 48 hours in advance to inform visually impaired people.

.4 In vehicular areas barriers shall conform to the requirements of Part 8 of the B.C. Building Code. The placement of all barriers in vehicular areas must be approved by Traffic Safety and, if applicable, the Ministry of Transportation and Highways.

1.13 FIRST AID

.1 The Contractor shall arrange for the provision of first aid facilities and an Accident Prevention Program to the requirements of the Workers' Compensation Board of B.C.
1.14 LOCKOUT PROCEDURES

.1 All Contractors shall conform to the newest SFU EHRS Lockout Procedure, as well as the SFU Lockout Program in Facilities Services Health and Safety Manual.

1.15 X-RAYS AND OTHER CONSTRUCTION TESTING

.1 Non-destructive testing involving x-ray sources or x-ray emitting devices shall be in accordance with the Canadian Nuclear Safety Commission Regulations and Health Canada Safety Code 34 to minimize radiation exposure to workers, other building occupants and passersby. All testing of this nature must be reported in writing, at least 3 days in advance, to EHRS Program Manager, Ionizing Radiation (Radiation Safety Officer): 778-782-3633.

.2 The following must be provided to SFU Project Manager and Radiation Safety Officer within 72 hour before the start of work:

   .1 Complete SFU Industrial Radiographer Checklist,
   .2 Canadian Nuclear Safety Commission (CNSC) license,
   .3 Documentation to show the device is certified by the CNSC,
   .4 Certification/License of the Industrial Radiographer,
   .5 A control plan to prevent ingress during testing and how the organization will implement the plan,
   .6 Plan that specify their barriers and signage for the radiation generating work,
   .7 Site specific emergency procedures,
   .8 The organization's Radiation Safety Officer,
   .9 Leak test result for all radiation generating device that will be brought onto campus (valid for 12 months),
   .10 TDG class 7 certificate.
   .11 A briefing on the safety issues related to the use of the industrial radiographer.

1.16 FIRE PROTECTION DURING CONSTRUCTION & DEMOLITION

.1 Refer to Part 8 of the B.C. Building Code and the requirements of the Fire Services Act, Regulations and Bulletins.

1.17 EXCAVATION AND GROUND DISTURBANCE

.1 Before excavation or any type of ground disturbance, it is critical to check with SFU Records in Facilities Services for utilities drawings and engineering information on SFU utilities.