

Project Manager Construction Start-up

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CONTRACT LABOUR PROGRAM

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SAFETY GUIDELINES FOR CONTRACTORS

1.0 SCOPE

The following document is a policy that applies to all contractors and subcontractors that provide services to Wilfrid Laurier University to outline the process for managing the health and safety requirements for contractors working on premises occupied or owned by Laurier. Contractors are required to comply with this policy as a condition of conducting business while on Laurier's premises. This policy is also applicable to all Laurier employees who manage work performed by contractors or subcontractors.

No construction or maintenance projects by contractors shall take place at any facility at or around Wilfrid Laurier University (Laurier) without prior consultation and approval of the Assistant Vice-President (AVP): Physical Resources or his or her designate. Advance planning and due diligence are important for a safe, environmentally conscious, well-organized construction site.

Work at any Laurier campuses or sites could be completed by contractors or Laurier employees. This work can be classified into one of three categories outlined below. The categories are as follows:

A. Construction projects where Laurier is a **"Constructor".**
   Depending on the nature of the contract, Laurier may take on the role of constructor as defined in s. 1(1) of Ontario's Occupational Health and Safety Act, R.S.O. 1990, C.0.1. (OHSA), in which case the provisions contained in section 23 of the OHSA apply, in addition to the requirements set out in this policy and in addition to Laurier's legal duties as an "employer" as defined in ss. 25-26 of the OHSA.
B. Non-Construction projects where Laurier is acting as the **"Employer" and may hire temporary contract workers for a specific event or period of time associated with a specific event or occurrence.** The University must fulfill all obligations under section 25 and 26 of OHSA and any other applicable sections of the OHSA or regulations, as "Employer" of contract workers.
C. Construction projects where Laurier retains a **"Contractor to act as the Constructor".** The University does not have responsibilities as "Constructor" for this type of construction project, as long as the retained constructor undertakes the work fully, properly and completely on behalf of the owner (Laurier). The owner including University employees must not exercise any control and responsibility along with the constructor or they may be found liable for the project regardless of the contract between the owner and the constructor, Laurier would still have "Owner" obligations under Section 29 and 30 of OHSA.

The responsible Laurier project administrator requesting the project shall determine the classification of a project/contract. The project administrator must be familiar with the University's obligations under all appropriate sections of the OHSA and regulations.

The University can have projects that can be classified in any of the above three categories at different locations. It is important for the project administrator to know the University's obligations for each type of project at each location.

The constructor must file a notice of a project with the Ministry of Labour (MOL) where applicable i.e. project dollar value exceeds $ 50,000.

2.0 DEFINITIONS AND ACRONYMS

Definitions:

Competent Person: means a person who,

a) Is qualified because of knowledge training and experience to organize work and its performance;
b) Is familiar with the OHSA and the regulations that apply to the work;
c) has knowledge of any potential or actual danger to health and safety in the workplace

Construction: includes erection, alteration, repair, dismantling, demolition, structural maintenance, painting, land clearing, earth moving, grading, excavation, trenching, digging, boring, drilling, blasting, or concreting, the installation of any machinery or plant, and any work or undertaking in connection with a project but does not include any work or undertaking I connection with the project but does not include work or undertaking underground in a mine. *(Note: read together with definition of project to determine "construction project").*

Constructor: means a person who undertakes a project for an owner and includes an owner who undertakes all or part of a project by himself or by more than one employer.

Contractor: a company or person who is retained by contract to perform, wholly or partially, a construction project or maintenance activities.

Employer: means a person who employs one or more workers or contracts for the services of one or more workers and includes a contractor or subcontractor who performs work or supplies services and a contractor or subcontractor who undertakes with an owner, constructor, contractor or subcontractor to perform work or supply services.

Maintenance: means work usually involving repair, replacement in-kind, or a minor change, or service or maintenance work (window cleaning, repair to HVAC units, and small scale electrical activity) provided to the University by contractors, subcontractors or University employees. Large maintenance projects could be seen as a "construction project" in some instances.

Owner: includes a trustee, receiver, mortgagee in possession, tenant, lessee, or occupier of any lands or premises used or to be used as work place, and a person who acts for or on behalf of an owner as his agent or delegate; ("proprietaire").

Project: means a construction project, whether public or private, including,

a) The construction of a building, bridge, structure, industrial establishment, mining plant, shaft, tunnel, trench, excavation, highway, railway, street, runway, parking lot, cofferdam, conduit, sewer water main, service connection, telegraph, telephone or electrical cable, pipe line, duct or well, or any combination thereof.
b) The moving of a building or structure, and

c) Any work or undertaking, or any lands or appurtenances used in connection with

d) construction;
e) Minor Project assumes anticipated cost of $200,000 or less
f) Major Project assumes anticipated cost in excess of $200,000

Project Administrator: any University employee who is arranging, approving or supervising contracted work performed at Laurier.

Supervisor: means a person who has charge of a workplace or authority over a worker.

Subcontractor: means any person or entity having a contract with the Contractor or another subcontractor to perform a part or parts of a project.

Acronyms:

AVP	Assistant Vice President
MOL	Ministry of Labour
OHSA	Ontario's Occupational Health and Safety Act, R.S.O. 1990, C.0.1.
SHERM	Laurier's Safety, Health, Environment & Risk Management department
MSDS	Material Safety Data Sheet
WHMIS	Workplace Hazardous Materials Information System
WSIB	Workplace Safety Insurance Board

3.0 BACKGROUND AND PURPOSE

Contractors may be employed routinely to meet the needs of Laurier. A contractor safety policy is necessary for the protection of the health and safety of University employees, contractor personnel, volunteers, students, visitors, and the general public. There are multiple regulations under the OHSA including, but not limited to:

- Construction Projects, Ontario Regulation 213/91, as amended
- Industrial Establishments, R.R.O. 1990, Regulation 851, as amended
- Designated Substances, Ontario Regulation 490/09, as amended
- Asbestos on Construction Projects and in Building and Repair Operations, Ontario Regulation 278/05, as amended
- Confined Spaces, Ontario Regulation 632/05, as amended
- Control of Exposure to Biological or Chemical Agents, R.R.O. 1990 Ontario Regulation 833, as amended
- Workplace Hazardous Materials Information System (W.H.M.I.S.), R.R.O. 1990 Ontario Regulation 860, as amended
- Window Cleaning, R.R.O. 1990 Ontario Regulation 859, as amended

Laurier's SHERM department has compiled a "Safety Guidelines for Contractors" booklet in order to provide an overview of requirements and expectations for contractors working at Laurier.

The booklet provides information on Laurier programs, policies, applicable regulatory requirements, and other health and safety requirements to safely perform construction and maintenance activities on University campuses. The booklet is not intended to be an all-inclusive source for regulatory or Laurier requirements for construction and maintenance work. The booklet is included as an attachment to this policy.

4.0 RESPONSIBILITIES

The following are classifications of contractor work performed at the University, as well as their direct responsibilities and obligations for health and safety compliances:

A. When Laurier is acting as a **"Constructor"** for a construction project: (controlling entire project or part of project):

- Laurier must ensure that all contractors are properly trained or ensure adequate training is provided to the contractors, ensure that contractors are monitored and that requirements for safety are enforced against the contractor, and that procedures for safe conduct of the work are in place and known to contractor employees. Laurier has all obligations under section 23 of OHSA and applicable regulations.

B. Non-Construction work where Laurier is acting as the **"Employer":**

- Laurier must ensure that the contractor has the specific policies, procedures, training, and supervision to carry out the job safely and in compliance with all provisions of the OHSA, including sections 25 and 26 of OHSA, and, all applicable regulations.

C. When Laurier is retaining a **" Contractor to act as Constructor" for construction project:**

- Laurier does not have responsibilities for this type of construction project, as long as the constructor completely controls all work and Laurier workers or other outside contractors hired by Laurier, are not intermingling in the project and Laurier is not controlling the project in any way. Laurier will have owner obligations (see sections 29, 30 OHSA).
- The project administrator must ensure that Laurier does not award separate contracts for the same project.
- Laurier staff will not perform work on a project with its own forces apart from requested service isolations (i.e life-safety systems).

Note that in circumstances where Laurier becomes aware of non-compliance and/or complaints with respect to health and safety actions or inactions, Laurier has a legal obligation to address the identified concerns. This process is outlined in the Safety Performance section of this policy.

4.1 PROJECT ADMINSTRATORS

All personnel who requisition and approve requisitions for contractor and subcontractor services are required to know and follow this policy and its provisions. All employees of the University involved in contracted services shall be considered project administrators under this policy and shall administer all contract parameters and conditions for contractors, and service personnel.

The project administrator shall establish practices so that the contractors perform their work in a safe and effective manner and meet as a minimum all the requirements of OHSA and applicable

regulations. Any and all applicable regulations shall be known by and potentially applied by the project administrator. Refer to the booklet "Safety Guidelines for Contractors" located in the appendix for additional details.

In all cases except situations where the University decides to retain a "Contractor who acts as Constructor", the project administrator will not only direct the contractor in completion of applicable documentation, but will be involved in on the job oversight of contract employees to ensure that they meet all regulations, their own procedures, and any and all applicable University safety rules.

Project Administrator responsibilities include but are not limited to:

- Be familiar with Worker's Compensation laws, the OHSA and its regulations and Laurier's policies;
- Direct and ensure all applicable documentation is completed and submitted by constructors, contractors, and sub-contractors;
- Ensure documentation submitted is reviewed and is acceptable for the nature and duration of the project;
- Ensure contractors meet all OHSA regulations, their own procedures, and any and all applicable University safety rules which may include job oversight of contracted employees;
- Ensure all front end documents contain the Laurier specific Canadian Construction Documents Committee (CCDC) 2 – 2008 Stipulated Price Contract;
- Prior to beginning a project, the project administrator shall determine (in consultation with SHERM) whether any designated substances or hazardous conditions are present at the project site and shall prepare a list of all designated substances that are present in the work site. The list must be provided to a prospective contractor prior to entering into a binding contract with a contractor;
- During the tendering process ensure the contractors have been provided with copies of the Asbestos Management Program and Safety Guidelines for Contractors;
- Prior to the commencement of a project, the project administrator shall convene a meeting with the constructor, contractor, and subcontractor's to review the designated substances onsite, Laurier's policies and specific requirements (emergency procedures, site security, sign in/sign out, key control, work permit systems etc.) and safety related information essential for the completion of the project; and,
- Coordinate scheduling and notification with Laurier employees affected by work activities.

4.2 CONSTRUCTORS

Requirements with respect to Constructors of a project include, but are not limited to:

- In Ontario every project must have a Constructor if there are two (2) or more employers involved in work at the project;
- The constructor is a person who undertakes a project for an owner and includes an owner who undertakes all or part of a project by himself or by more than one employer; and,
- Laurier Project Administrator must ensure the signed contract clearly states who the constructor is for the project.

The only exception where the University would not be responsible for ensuring that the requirements of applicable regulations are met for contractor activities on site, would be the

situation where the AVP Physical Resources decides to retain a **"Contractor who acts as Constructor",** who fully controls all work at a construction site. The project administrator will require the constructor to complete all applicable documentation, as described in this procedure. Once the constructor has been selected and the contract awarded, the University will take a hands-off approach in regards to safety, to ensure that the constructor maintains full responsibility for safety on the particular job. Refer to the Safety Performance section of this policy for the process to deal with identified safety infractions/hazards on construction projects.

Responsibilities of Constructors include but are not limited to:

- Send a notice of project at the beginning of construction activities;
- Send a notice of project at the closing of construction activities on the terms and conditions provided by provincial legislation;
- Coordinate with the various Contractors working on the project;
- Ensure that the activities of employers, workers, and other persons at the workplace relating to occupational health and safety are coordinated;
- Ensure all employees and subcontractors are informed of Laurier policies and provided a list of all designated substances and hazardous materials;
- Ensure that the OHSA and the regulations are complied with in respect to the project;
- Establish, implement, enforce and maintain a system or process that will ensure compliance with the OHSA and the regulations and ensure the health and safety of all workers.

4.3 CONTRACTORS

Contractors are retained by project administrators to meet the needs of Laurier. Contractor's responsibilities include, but are not limited to:

- Submit all document and verifications required by the OHSA and Worker's Compensation laws, regulations, and this procedure;
- Comply with all applicable OHSA and Worker Compensation laws, regulations, University guidelines and this policy;
- Ensure that employees, subcontractors and employees of subcontractors comply with all applicable OHSA and Workers' Compensation laws, regulations and this procedure;
- Ensure that the proper site separation is erected to limit Laurier students and staff from disturbing work activities.
- Take all reasonable steps to assess all potential workplace hazards

Contractors shall maintain a list of the names of each of their worker(s) and the names of the person(s) the employer has designated to supervise the employer's worker(s) at the project. The list should be provided to the project administrator and must be available if requested.

4.4 DIRECTOR: SAFETY, HEALTH, ENVIRONMENT & RISK MANAGEMENT

The Director, SHERM or designate, plays an integral part in ensuring the health and safety of all aspects of a construction or maintenance project. The director has specific knowledge and resources which shall be utilized. Specific responsibilities of the director, SHERM include, but are not limited to:

- Provide direction related to applicable OHSA legislation specific to the project

- Provide orientation related to Laurier's policies/procedures applicable to the project
- Provide consultation with Laurier project administrators
- Provide approvals regarding contractor pre-qualification and supplied documentation

4.5 WORKERS

Workers have certain responsibilities which are outlined in the OHSA and are based on the Internal Responsibility System (IRS). To ensure a safe workplace for all, worker responsibilities include, but are not limited to:

- Report to the supervisor any absence or defect in any equipment or device, any violation of the Act, or any reason why he/she cannot carry work safely;
- Wear/use equipment, protective devices and clothing required by the employer;
- Work in compliance with OHSA & Regulations;
- Work in a manner that does not endanger themselves or others;
- Not remove or make ineffective any protective device; and,
- Not engage in horseplay or boisterous conduct.

5.0 PROCEDURES

This policy consists of three key elements:

1. Pre-Qualification Documentation
2. Training and Orientation
3. Safety Performance

5.1 PRE-QUALIFICATION DOCUMENTATION

Pre-qualification of a contractor who will act as "Constructor" focuses on ensuring that the contractor has appropriate insurance and WSIB coverage, has a health and safety policy, has competent supervisors and an Occupational Health and Safety management program to completely undertake and control the construction work on behalf of the University.

When pre-qualifying a contractor who will not act as "Constructor" (and over whom the University has the role of "employer"), the focus is on whether the contractor has the specific policies, programs, procedures, training and supervision to perform the job safely. The contractor will demonstrate compliance with all provisions of the OHSA and other applicable regulations as well as Laurier specific policies, permitting and procedures.

Contractors or subcontractors must provide applicable documentation and confirmation, as outlined in the list below, and must complete the Prequalification form SL/CL1 prior to initiating work at the University. Approval of the submitted documentation and Form SF/CL1 shall be made by the project administrator in consultation with SHERM. Constructors or Contractors (all referred to as Contractors herein) hired by Laurier must be pre-approved to perform work or supply services on Laurier's Premises.

Additional information required to validate a Contractor's safety program shall be provided upon request, based on Laurier's review of the contractor prequalification form SF/CL1 and submitted documentation.

Contractors will not subcontract work without the prior approval of the Laurier project administrator. The Contractor will be responsible for the subcontractor and his or her workers, including ensuring compliance with the OHSA and the Workplace Safety & Insurance Act and the applicable regulations, Codes and Standards and Laurier's Policies, Rules and Requirements

For contractors who have blanket purchase orders or who have previously performed work, and all applicable safety documentation is on file, then the requirement for completion of these forms will need to be reviewed every other year, if the work is of similar scope and magnitude as previous contract conditions. However, the contractor must verify that the necessary coverage is enforced and provide notification to the University of any material changes in coverage. If the scope, technical expertise, training requirements, or safety implications are significantly different, then additional information must be obtained prior to beginning work.

The following information is required from each contractor and must be provided to the project administrator prior to initiating work. The SF/CL1 shall be completed to confirm pre-qualification documentation. In addition, for information purposes, the project administrator shall provide copies of these to the Director, SHERM or designate.

1. Certificates of Insurance
   Liability Insurance
   - Minor Projects $2,000,000
   - Major Projects $5,000,000

2. WSIB - Workplace Injury Summary Report (WISR)
   Submit a copy for the last 3 years or equivalent accident/injury data

3. WSIB Clearance Certificate(valid for 90 days)
   Confirms contactor has met reporting and payment obligations and is in good standing with WSIB. Laurier is required to receive a copy of a valid clearance certificate for the duration of work and before the final payment on the contract has been made. An updated WSIB Clearance Certificate must be provided if the project extends beyond the expiry date of the original submitted certificate.

4. Contractor's Health & Safety Policy and Program which shall include: Compliance strategies for all applicable safety legislation, foreseeable job-site hazards and precautionary measures, safe work procedures, standard operating procedures, stop work procedures, incident reporting procedures, and contact names and numbers of the jobsite safety supervisors.

5. Past Environmental, Health & Safety Records (MOE or MOL fines or orders)
   Submit any applicable documentation for the last 5 years or provide a signed letter which confirms no applicable fines or orders were received.

6. Training and Certification Records
   Contractor must provide documentation verifying all employees who will be working at the site have received the necessary safety training required for the specific task/job/project work. Refer to the training section and SF/CL2 for specific training, certification and documentation requirements.

7. Hazardous Materials List

The contractor shall submit a list of all hazardous materials that will be brought onto Laurier property. An MSDS sheet shall be supplied for any products that contain Designated and/or Regulated Substances which are intended to be used. **The use of hazardous materials on campus shall be approved by the Project Administrator in consultation with the SHERM Department.**

Once the pre-qualification documentation has been submitted and reviewed, the project administrator together with the Director, SHERM or designate will determine if the contractors/subcontractors will follow their own policies and procedures or the University policies (or a combination thereof).

5.2 TRAINING & ORIENTATION

5.2.1 Orientation

To ensure that contractors are fully aware of Laurier's expectations, policies and programs as well as applicable regulatory requirements **all contractor supervisors or site superintendents must attend Laurier's "Contractor Safety Awareness Orientation"** prior to the start of any onsite work, which is provided by SHERM or the project administrator. Information provided in the Contractor Safety Awareness Orientation must be conveyed to all workers onsite which must be verified by each contractor's supervisor as outlined in SF/CL 4 "Documentation of Review". The orientation outlines topics covered in the "Safety Guidelines for Contractors" booklet located in the Appendices.

In all cases, the project administrator shall ensure information on designated substances and hazardous materials is provided to the contractor prior to work and in compliance with regulatory obligations.

5.2.2 Training Requirements

All employees of constructors, contractors and subcontractors are required to have completed a safety training program which includes the following components.

- Globally Harmonized System (GHS)
- Right to refuse Unsafe Work
- Hazard Recognition and Communication
- Personal Protective Equipment
- Housekeeping (i.e. workplace organization, prevention of slips, trips and falls, prevention of fire hazards, chemical and biological contamination, and spills)
- Duties under the Occupational Health and Safety Act
- Workplace Violence and Harassment

Contractors must verify in writing that its workers have completed a safety training program(s) which contain the subjects listed above.

In addition to the above listed training programs, Contractors must certify that their workers have completed a safety training program(s) that includes at a minimum the following, as applicable to the work that the contractor/employee will perform:

- Designated Substances
- Emergency Preparedness
- Confined Space Entry
- Lockout/Tag out
- Electrical Safe Work Practices
- Respiratory Protection (including fit testing)
- Powered Industrial Vehicles (PIV) (individuals required to operate PIV's are required to be certified by their employer)
- Ladder and Scaffold Safety
- Welding and Cutting Safety
- Fall Protection – Full-Body Harness, Lifelines & Lanyards
- Hand & Power Tool Safety
- Excavation Safety
- Any other training applicable to the type of work to be performed

The Laurier Safety Form Number SF/CL 2 "Training and Certification Confirmation Sheet" located in the appendix, must be completed to document contractor training and certification. For contractors/subcontractors that regularly perform services at Laurier, the University on a biennial basis will perform a safety review, or whenever there is a change in personnel or applicable safety conditions which may affect the contractors/subcontractors personnel.

For project contracts, the form (SF/CL 2) will be completed each time the contractor performs a new project, unless the same contract personnel had performed project work of a similar nature within the previous 24 months. At any time the project administrator can request documentation to confirm the training and certification of contracted employees.

5.2.3 Additional Training and Orientation

The following are additional training requirements of contractors performing work at the University.

A. When Laurier is acting as a **"Constructor"** for a construction project:
&
B. Non-Construction work where Laurier is acting as the **"Employer"**

No additional on-site training is required if it is determined that the contractor has policies and procedures acceptable to Laurier. The contractor will be informed by the project administrator of all hazards present at Laurier, and particularly in the area of work.

If it is determined that the contractors are required to follow University policies and procedures, then additional on-site orientation will be required for the relevant policies/programs/procedures/regulations. The Director, SHERM or designate will provide all health and safety orientation.

It is preferred that all contractor/subcontractor personnel undergo this orientation. It is mandatory that at least the contractor's on-site supervisor or site superintendent receive the orientation and then convey this information to all employees under their direct control. It is the responsibility of the project administrator to ensure that the contractor is aware that orientation is to be conducted.

As indicated above, the Director, SHERM will determine whether Contractors/Subcontractors will follow any of their own policies and procedures or University policies, or a combination thereof, whichever maximizes safety to the contractors and the Laurier community.

C. When Laurier is retaining a **" Contractor to act as Constructor"**

The project administrator and/or the Director, SHERM shall before the commencement of the project, convene a meeting with the constructor to review the hazards present at Laurier, and particularly in the area of work.

5.2.4 Work Specific Permitting

Laurier has specific permitting for hot work, confined space entry, radiography permit (floor coring x-rays) and procedural reporting requirements for work involving asbestos-containing materials. For A and B classifications of contractor work the contractors are required to attend orientation which outlines the relevant procedures and permitting processes. Contractors are required to obtain permitting for hot work, confined space entry and radiography. All work involving asbestos-containing materials must be coordinated with the project administrator.

For C classification of contractor work, the constructor or contractor performing the work must have equivalent procedures and permitting processes in place for hot work, confined space entry, radiography, and asbestos work, which must be verified and approved by the project administrator in coordination with SHERM. Once approved, and upon completion of the work, copies of the completed permit must be forwarded to the project administrator and SHERM.

5.3 ON SITE SAFETY PERFORMANCE

5.3.1 Safety Performance – General

For all projects the following Laurier Safety Forms must be reviewed and completed by the project administrator as required. The Laurier Safety Forms are listed in the Appendices

- Laurier Safety Form Number SF/CL3- Preparation and Review of Overall Construction
- Laurier Safety Form Number SF/CL4 – Documentation of Review

5.3.2 Safety Performance – Work Categories A&B

For those situations where Laurier is "acting as Constructor for a Construction Project", and/or "acting as the Employer" the University must take steps to ensure compliance with OHSA requirements and applicable regulations by contractors.

The project administrator has specific obligations such as: to know the law, obligations to inform contractors/subcontractors of hazards, to hold safety meetings, to monitor and to enforce health and safety compliance. The following sets out further details.

A. When Laurier is acting as a **"Constructor"** for a construction project:
&
B. Non-Construction work where Laurier is acting as the **"Employer"**

The safety performance of contractors/subcontractors/employees is a critical element of this policy. Contractors/subcontractors must be informed that violation of Laurier safety rules or any other element of this policy will result in immediate suspension or termination of the project. It is the responsibility of all Laurier personnel to report any unsafe conditions or activities by contractor personnel to their supervisor, the University's physical resources management team or the project administrator. All injuries that occur must be reported to the project administrator and SHERM. SHERM shall maintain records for all injuries, illness and incidents of contractors.

The project administrator shall regularly oversee and practice due diligence in evaluating contractor safety performance. This may include:

1. on site co-ordination
2. appointment of supervision
3. monitoring procedures expected to ensure safety performance
4. pre-job meetings and ongoing safety meetings with contractors and subcontractors as necessary for the work/project

The project administrator shall monitor the contractor/employee's performance for health and safety compliance with OHSA, regulatory requirements, contractor's health and safety policy and/or Laurier rules (as applicable for a particular job or contract). The project specific monitoring initiatives shall be documented in the contract file.

The project administrator shall exercise stop-work authority as required to correct any unsafe work condition, enforce prescribed requirements, or to ensure the health and safety of workers.

The following outlines the procedural process to be performed by the project administrator to deal with an identified unsafe work condition or work activity which is determined to be in contravention to the OHSA, its regulations or Laurier policies, programs or procedures;

1. The unsafe activity, condition or contravention shall be formally documented in writing by the project administrator in consultation with SHERM and be presented to the contractor and subcontractor. A meeting to review the infractions should occur and include applicable representation of the contractor, the project administrator and SHERM.
2. The contractor must respond to the health and safety infractions outlining
    a. Any discrepancies with the alleged health and safety infraction
    b. Corrective actions being taken to address/correct/improve the condition/activity/procedure
    c. Any disciplinary action taken
3. The project administrator, in consultation with SHERM, will review the identified concern and the contractor's response and shall either
    a. authorize the resumption of work by the contractor.
    b. dictate additional requirements to ensure the health and safety of workers prior to continuing with work

Following an incident involving an unsafe activity, condition or contravention, monitoring of the project related to health and safety requirements shall increase.

Should similar or cumulative health and safety concerns become apparent a meeting shall be convened with the project administrator, contractor, subcontractor and SHERM to determine the best course of action related to health and safety. Possible actions for repeated offences may include additional requirements, reporting, monitoring, or termination of the project.

5.3.3 Safety Performance – Work Category C

In the case where a contractor is hired to carry out a construction project as the constructor, the project administrator would be advised as to how to ensure that the constructor remains in control. The contractor must remain in control, so that Laurier is not deemed the "Constructor".

The project administrator would not be involved in administering the day to day operation of the project, would not become involved in safety meetings, would not issue work permits or controls, would generally not discuss timing and co-ordination of contractors, would generally not insist on approving subcontractors, and would not conduct training.

If the project administrator becomes aware of a violation or contravention to the OHSA its regulations or Laurier policies, the violation will be documented and reviewed with the project administrator, the contract supervisor acting as constructor, and SHERM.

The project administrator may request that the contractor stop-work as required to ensure the health and safety of workers.

The following outlines the procedural process to be performed by the project administrator to deal with an identified unsafe work condition or work activity which is determined to be in contravention to the OHSA, its regulations or Laurier policies, programs or procedures:

1. The unsafe activity, condition or contravention shall be formally documented in writing by the project administrator in consultation with SHERM and be presented to the constructor
2. The constructor must respond to the Health and Safety Infractions outlining
    a. Any discrepancies with the alleged health and safety infraction
    b. Corrective actions being taken to address/correct/improve the condition/activity/procedure
    c. Any disciplinary action taken
3. The project administrator, in consultation with SHERM, will review the identified concern and the constructor response and shall either
    a. Accept the actions being taken by the constructor to address the Health and Safety concerns
    b. Reject the actions being taken by the constructor to address the Health and Safety concerns

In cases where the actions of the constructor were not viewed as sufficient to ensure the health and safety of workers, a meeting will be convened between the project administrator, the constructor and SHERM. If the meeting does not facilitate an agreement on actions required to ensure the health and safety of the worker or construction site, external resources shall be contracted to provide direction related to the concern. This may include legal counsel, health and safety consultants, or the Ministry of Labour.

APPENDICES

Laurier Safety Form Number SF/CL 1

PREQUALIFICATION DOCUMENTATION

Please complete the form and forward the original to the SHERM department. Use check boxes or circle information as required. Use additional sheets as required. Submit all required prequalification documentation.

SECTION 1- GENERAL INFORMATION:

Date:	Project Start Date:	Estimated Duration:	
Project:	Building(s):		
Value of all project costs:	☐ Minor under $200,000 or ☐ Major over $200,000		
Scope Of Work:			
Laurier Project Administrator		Contact #	
Constructor:			
Constructor Representative/PM		Contact #	
Constructor Health and Safety Representative		Contact #	

List all Contractors and Subcontractors	Supervisors	Contact #	Est. # of workers
1)			
2)			
3)			
4)			
5)			
6)			
7)			
8)			
9)			

SECTION 2 - PREQUALIFICATION DOCUMENT CONFIRMATION

1. Liability Insurance Certificate	Date of Expiry:	☐ **Y** **N** ☐
2. WSIB Workplace Injury Summary Report		☐ **Y** **N** ☐
3. WSIB Clearance Certificate must be confirmed for all (sub)contractors	Date of Expiry:	☐ **Y** **N** ☐
4. Health and Safety policy/program		☐ **Y** **N** ☐
5. MOE/MOL (Fines or orders in last 5 years or verification letter)		☐ **Y** **N** ☐
6. Training and Certification Records – Completion of Form SF/CL2		☐ **Y** **N** ☐
7. Hazardous Materials List (MSDS's to be provided and retained onsite)		☐ **Y** **N** ☐

Laurier Safety Form Number SF/CL 2

TRAINING AND CERTIFICATION CHECK SHEET

This form shall be completed for work that has been classified in all categories. Each contractor and subcontractor shall verify that all employees working on Laurier sites have completed training programs which include the outlined subjects for all employees. For specific work activities, additional training/certification is required to meet the provincial OHSA and applicable regulations, applicable standards, (i.e. CSA standards, ANSI standards, and NFPA standards) and Laurier requirements.
Confirmation of training and certification may be required upon request.

Description		**Verification of Training**	
Training Requirements – All Employees		**YES**	**NO**
Globally Harmonized System (GHS)			
Right to Refuse Unsafe Work			
Hazard Recognition and Communication			
Personal Protective Equipment			
Housekeeping (as outlined in the training section)			
Personal Protective Equipment			
Workplace Violence and Harassment			
Specific and Regulated Training Requirements	**Applicable? to which Contractor's (#)**	**Verification of Training**	
Designated Substances			
Asbestos Abatement (Worker/Supervisor)			
Confined Space Entry			
Respiratory Protection & Fit Testing			
Electrical Safe Work Practices, including Lock out/Tag out			
Emergency Preparedness			
Fire Protection & Prevention			
Powered Industrial Vehicles (mobile elevated work platforms, forklift, cranes etc.)			
Fall Protection - Full Body Harness, lifelines and Lanyards			
Ladder and Scaffold Safety			
Welding and Cutting Safety			
Excavation Safety			
Hand and Power Tool Safety			

Contractor #	**Company Name / Supervisor**	**Signature**	**Date**
1)			
2)			
3)			
4)			
5)			
6)			

Laurier Safety Form Number SF/CL 3

PREPARATION AND REVIEW OF OVERALL CONSTRUCTION

This form shall be completed for all projects regardless of size and filled out by the Project Administrator and contractor. It shall be signed by the contractor and kept by Laurier with the project records.

A. GENERAL UNIVERSITY SAFETY RULES:	Check If Complete
Provide contractor with facility map and Laurier's Contractor Safety Program (Contractor Safety Policy and "Safety Guidelines for Contractors" booklet).	
Review smoking policy, refer to facility map for designated areas	
Review vehicle use and parking requirements	
Review good housekeeping practices, disposal of construction materials, cardboard, and general refuse	
Report of all near misses and incidents to the Laurier project administrator in charge of the project	
Review drug and alcohol policy	
It is prohibited to bring into the University weapons as described in Provincial legislation	
B. UNIVERSITY EMERGENCY RESPONSE AND PROCEDURES	
Review how to contact ambulance, fire, police and Special Constables Services	
Review Laurier's Emergency/Alarm Procedures	
Provide contractor with primary project contact (Project Administrator, University Engineering/Construction rep., SHERM Director)	
Review how to respond to a medical emergency (Project Administrator, University Engineering/Construction rep., SHERM Director)	
Review emergency exit routes, assembly areas and fire route locations	
C. UNIVERSITY ALARM SYSTEM REVIEW	
Will the work impact/involve or require shutdown of fire alarm systems, system components(smoke/heat detectors)? Has work on Fire Alarm systems or components been Approved by the SHERM Fire Safety Officer?	
D. HAZARDOUS MATERIALS / DESIGNATED SUBSTANCES	
Has the contractor been provided information regarding hazardous materials, conditions or locations that may be present in construction/maintenance work area?	
Has the contractor been provided a copy of the Asbestos Management Program?	
Has the contractor been provided a list of Designated Substances that could potentially be contacted during the performance of the contract?	
Has the contractor been instructed that every contractor and subcontractor are to receive a copy of the hazardous materials present and Designated Substance List?	
Do the contractor have a control program in place for all work involving Designated Substances? Has it been provided to Laurier for review?	
Is additional information/reporting required regarding Designated Substances or hazardous materials/conditions present in the construction/maintenance work area?	
E. GENERAL CONSTRUCTION	
Is key access required? Has this been coordinated with Physical Resources?	
If working in or adjacent to occupied areas, how will your construction activities affect occupants? Have you accounted for fumes, dust, vapours, off-gasing, odours, physical impact, barrier requirements for protecting public ways? Have the occupants been informed of the work?	
Have utility locates been performed prior to demolition or excavation?	

Will a power source (pneumatic/hydralulic/electric/other) require Lock Out /Tag Out procedures?	
Do you require security fencing/guards to protect your equipment and/or ensure no access to the work area.	
Do you have storage requirements including a dedicated area for storage?	
Do you have proper site signage? Including Health and Safety information posted? Is the site supervisors name and contact information posted?	
Is there an established and written safety and health program ready for site use? Have arrangements been made for available competent personnel to conduct frequent and regular site safety inspections of areas and operations? Are Tool Box Talks or Daily Safety/Hazard Assessments conducted?	

WORK PERMITS/APPROVAL – REQUIRED WHEN LAURIER IS THE CONSTRUCTOR.

A. Hot Work Permit Review	
Permitting is required for hot work procedures including welding, burning, cutting and grinding. Review the Laurier hot work program with SHERM and obtain permitting prior to work.	
B. Confined Space Entry Permit Review	
Does a Confined or Restricted Space require access for work? Review the confined space entry policy and ensure compliance and completion of Required Permitting	
C. Radiography Permit Review	
Is the use of x–rays required (floor coring)? Review Radiography permit with SHERM	
D. Designated Substances Review	
Will work impact or be in close proximity to: Asbestos, Lead, Mercury or Silica containing materials or others? **Review legal requirements for Designated Substances work. Coordination and approval is required by the Occupational Hygienist and Safety Specialist for any asbestos related work.**	

I, _____ agree that I have received and reviewed all of the above information from the project administrator related to the project.

_____ _____

Signature Date

Laurier Safety Form Number SF/CL 4

DOCUMENTATION OF REVIEW

This form shall be completed for work that has been classified for all categories by all contractor and subcontractor supervisors. The following signatures demonstrate that the contractor has received and understands the Laurier "Construction Safety Orientation".

As a requirement of signing this document, the supervisor is required to ensure that the information received in the Construction Safety Orientation session including information outlined in the "Safety Guidelines for Contractors" booklet was conveyed and reviewed with onsite personnel prior to work at Laurier.

Contractor (Sub)	Supervisor (Print)	Signature	Date

Safety, Health, Environment & Risk Management (SHERM)

CONTRACTOR SAFETY GUIDELINES



wlu.ca/sherm

LAURIER
Inspiring Lives.

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1.0 Introduction

This document is a summary of environmental, health and safety (EHS) performance expectations. It is not intended to replace or limit the requirements of federal and provincial legislation. It is the Contractor's (the "Contractor") obligation to meet applicable EHS requirements whether or not they are addressed in this document or contractor's site-specific safety program.

At Wilfrid Laurier University, our staff, faculty and students are our most valuable resource. No one aspect of our business is more important than providing a safe work place and operating in an environmentally sound manner. Strong EHS programs will prevent injuries, control losses, and minimize environmental impact. Laurier expects contractors to cooperate in providing a safe workplace and healthy environment.

One of the goals of this document is to communicate Laurier's EHS philosophy and expectations to all construction, service and maintenance contractors. While Laurier shall communicate known hazards from its operations, contractors are expected to manage EHS hazards, risks and programs for their employees and subcontractors.

1.1 INTERNAL RESPONSIBILITY SYSTEM (IRS)

The Internal Responsibility System (IRS), within an organization, is a system that gives everyone direct responsibility for health and safety. Both supervisors and workers play an important role in ensuring a safe and healthful workplace at Laurier. The IRS involves every person in an organization taking responsibility for health and safety by identifying, conveying and correcting hazards and hazardous conditions.

Laurier EHS guidelines may be more comprehensive than federal or provincial regulations. Regulatory compliance is a minimal expectation. Contractors shall, therefore, evaluate the contents of this document as it pertains to the work to be performed at Laurier and shall ensure their employees and subcontractors understand these guidelines. It is your responsibility to ensure that your work is performed in a safe manner and in compliance with Laurier's "Contractor Safety Policy" and these Safety Guidelines. Work being performed in an unsafe or hazardous manner will be stopped by a Laurier Project Administrator.

It is Laurier's sincere desire that each employee leave the site at the end of each work day as physically fit and sound as when the work day began. With your assistance and cooperation, we can achieve our goal of zero injuries.

1.2 EMERGENCY CONTACT INFORMATION

Fire, Police, Ambulance (from any on-campus telephones)	**9-911**	
	Waterloo/Kitchener	**Brantford**
Special Constable Service (SCS)	**Student Services Building - Lower Level** ext. **3333** from a Laurier phone or (**519) 885-3333**	**45 Market Street - First Floor** **ext. 5888** (from a Laurier phone) or **(519) 756-8228** ext. 5762 non-emergencies
Physical Resources	*Planning Design & Construction:* (519) 884-0710 ext. 6312 *Facilities Operations:* (519) 884-0710 ext. 6280	*Facilities Operations* (519) 756-8228 ext. 5574
Safety, Health, Environment & Risk Management	*Director*..... x2874 *Occupational Hygienist & Safety Specialist*..... x2817 *Biological/Chemical/Radiation Safety Officer*..... x3108 *Fire Safety Officer*..... x3887 *C.U.P.E. Health and Safety Officer*..... x6637	*Environmental/Occupational Health & Safety Advisor:* (519) 756-8228 ext. 5469 *Director:* (519) 884-0710 ext. 2874 *Occupational Hygienist and Safety Specialist:* (519) 884-0710 ext. 2817
Local Hospitals	**Grand River Hospital** 835 King Street W Kitchener (519) 742-3611	**Brantford General Hospital** 751 Terrace Hill Street N Brantford (519) 751-5544

Toronto		
In an emergency situation, contractors should contact:		
Building Security 130 King St. W, Toronto (416) 862-6394	Or	**9-911**

2.0 Contractor Orientation

Contractor supervisors are required to attend Laurier's Contractor Safety Awareness Orientation prior to starting work at Laurier. The orientation provides an overview of Laurier's contractor safety program and requirements for working at Laurier. Orientation should be coordinated through the Laurier Project Administrator and Safety, Health, Environment & Risk Management (SHERM).

Contractor orientation is often conducted during project kick-off meetings and includes a review of Laurier's policies. This orientation is intended to be project specific. Contractors are encouraged to use the orientation session as an opportunity to become familiar with Laurier expectations and to ask questions about applicable Laurier safety procedures. Contractors are expected to review this document with their subcontractors and employees. Contractors may request an orientation or clarification at any time.

2.1 EMERGENCY PROCEDURES

Should you hear a fire alarm, you must evacuate the building in a safe manner and meet with your supervisor in your predetermined meeting area.

2.2 FIRE SAFETY

Contractors shall be familiar with the location of fire alarm activation devices (pull stations), portable fire extinguishers and at least two exit routes from the work area. Contractors shall not obstruct access to exits, exit routes, fire routes or fire equipment or prop open stairwell doors.

Fire or smoke must be reported by activating the nearest fire alarm station, followed by dialling the appropriate Laurier emergency number:

- From a Laurier internal phone dial:

  x3333 (Waterloo)
  x5888 (Brantford)
  x5121 (Toronto)

- From a cell phone or external phone line, dial:

  (519) 884-0710 x3333 (Waterloo/Kitchener)
  (519) 756-8228 x5888 (Brantford)
  (416) 306-0866 x5121 (Toronto)

2.3 TRAINING

Contractors are fully responsible for the training of their employees assigned to work at Laurier. When training is required by law or regulation (e.g. but not limited to, competent supervisor, hazardous waste disposal, respiratory protection use, fall arrest, confined space or asbestos work), the Contractor shall

ensure that only trained workers are assigned to work at Laurier. In addition to meeting the regulatory requirements, it is Laurier's expectation that all personnel shall be adequately trained in proper techniques to safely perform the job assigned to them.

Contractor personnel may also be required to complete certain Laurier specific orientation prior to beginning work. This will be determined based on the comprehensiveness of the contractor's safety documentation and the specific work hazards for the project. The Training and Certification checklist (SF/CL #2) located in the contractor safety policy (www.wlu.ca/sherm) is required to be completed by all contractors to verify and outline minimum training requirements for workers. Contractors may be asked to provide evidence of employee training. Contact the Laurier Project Administrator or SHERM for additional guidance.

The following represents, but is not a complete list of the reasons for which a worker may be prohibited from work on site:

- Possession or use of alcoholic beverages, prescribed drugs that impair a person's ability to work safely, illegal drugs, explosives, weapons and firearms.
- Failure to comply with smoking policy. Smoking inside buildings, within outdoor patios, within 10 metres of any university building, within 20 meters of a sports field or spectator area is prohibited.
- Destruction or removal, without written permission, of any property; posting of unauthorized signs or notices.
- Intimidating, threatening, harassing or interfering with an inspector, or Laurier employee, student, or visitor.
- Fighting, creating a disturbance or horseplay.
- Deliberate violation/willful misconduct of safety rules.
- Not working in compliance with legislative and regulatory requirements.
- Falsely stating or making claims of injury or failure to report an injury on the day of occurrence.
- Misuse of fire prevention/protection equipment.
- Illegal dumping, handling or disposal of hazardous materials.
- Sexual harassment of any individual or group; covert or overt while on Laurier property.
- Unauthorized removal or destruction of a safety barricade, handrail, guardrail, warning sign, fall protection or other safety and warning devices.

2.4 DOCUMENT SUBMITTAL

Prior to beginning a project contractors must submit the following documentation:

- Proof of Insurance (general liability);
- Valid Workplace Safety Insurance Board (WSIB) clearance certificate;
- WSIB Safety Record;
- Current Health and Safety Policy
- Applicable training records

The documentation will be reviewed by the Project Administrator and the SHERM department taking into account the scope of the intended work. All documentation must be valid for the duration of the project or must be resubmitted. Should the scope of the project change, a review of the submitted contract labour documentation should be conducted by the Laurier Project Administrator to ensure it is acceptable.

2.5 ACCIDENT & INCIDENT REPORTING

Accidents are unwanted events usually accompanied by undesirable consequences. The situations following accidents must be managed to reduce the overall negative impact of the accident. Accidents must be carefully investigated and analyzed to gain information that will enable the prevention of other undesirable events with one or more similar factors.

2.5.1 Critical Injuries

Ontario Regulation 834, defines a critical injury as "an injury of a serious nature that,

a) Places life in jeopardy;
b) Produces unconsciousness;
c) Results in substantial loss of blood;
d) Involves the fracture of a leg or arm but not a finger or toe;
e) Involves the amputation of a leg, arm, hand or foot but not a finger or toe;
f) Consists of burns to a major portion of the body; or
g) Cause the loss of sight in an eye.

2.5.2 Laurier as Constructor

Any accidents involving contractor workers and not associated with a construction project involving a constructor worksite must be reported as per the Accident/Incident Reporting Procedure available on the SHERM website (www.wlu.ca/sherm).

Immediately following a workplace injury, contracted workers must complete an Accident/Incident Report Form with their supervisor and project administrator for the project. The report must be forwarded to SHERM within 24 hours.

Injuries meeting the definition of a critical injury (RRO.1990, Regulation 834) must be reported to Special Constable Services (SCS) immediately. For critical Injuries, the Accident/Incident Report Form must be completed and sent to SHERM as soon as possible.

2.5.3 External Retained Constructor

Where Laurier has retained a constructor for a construction project all applicable legislation and WSIB reporting requirements must be adhered to. In instances where a critical injury has occurred or an injury which may be considered critical has occurred, the project administrator and SHERM shall be contacted immediately. The Accident/Incident Reporting form must be completed and submitted to the project administrator and SHERM immediately when a critical injury has occurred or is suspected.

2.6 WORKPLACE VIOLENCE

Laurier has a long standing commitment to promoting a safe and secure academic, student life, and work environment that promotes the achievement of its mission of teaching, research, scholarship and service. With this in mind, harassment and/or violence will not be tolerated, accepted or condoned at Laurier.

In compliance with legislative requirements Laurier has developed a Workplace Violence Prevention Policy (7.18) and Program. A Workplace Violence Reporting form is available on the Laurier Website and should be completed in any case where a contractor or any of its workers are involved in an incident, or witness an incident, that constitutes workplace violence as defined by the Occupational Health and Safety Act.

2.6.1 Harassment and Discrimination Policy

Wilfrid Laurier University is devoted to learning, research, scholarship, creativity, professional expertise, and personal development in a student-centered environment. The university is committed to providing an environment for study, teaching, research work, and recreation for all members of the university community that is supportive of professional and personal development and free from all forms of harassment and/or discrimination as outlined in the Occupational Health and Safety Act and the Ontario Human Rights Code. Harassment of any kind will not be tolerated at Laurier. Refer to Laurier's Workplace Violence Prevention Policy (6.1)for additional details and reporting requirements.

3.0 Construction & Maintenance

Whenever possible and in accordance with relevant regulations and guidelines, exposure to physical and chemical hazards should be eliminated or controlled by using engineering controls or alternative methods. Barricades, hoarding walls, barriers and exhaust ventilation shall be used to limit the potential exposure to physical and chemical hazards.

Because hazards associated with construction and renovation often change as projects progress, daily hazard assessments should be conducted, to anticipate and plan for such changes. Contractor activities such as cutting wallboard or other dust-generating activities have the potential to activate smoke detectors/building evacuation alarm systems.

In construction work areas contractors are required to post emergency phone numbers and key contacts.

3.1 SAFETY & HAZARD AUDITING, ANALYSIS AND RISK ASSESSMENTS

Safety audits and hazard/risk assessments are conducted to ensure all hazards have been identified and appropriate controls have been implemented. They also help ensure that employees are working in compliance with safety procedures. They can reveal if further training is required or if changes are

needed to ensure safe execution of tasks. Hazard/risk assessments are beneficial and help to identify hazards for a job that is not a routine task and presents a particular hazard. Daily safety meetings help promote safe work practices and facilitate a safe work environment.

Contractors are required to conduct hazard and risk assessment on every process of a project and determine control measures for hazards and risks identified prior to the commencement of work. The contractor must take reasonable steps to assess all potential workplace hazards. This involves an ongoing and active assessment of hazards, particularly in situations where multiple contractors are present and intermingling or where the workplace environment is not familiar.

3.2 WORKING IN OCCUPIED AREAS

The Laurier Project Administrator will coordinate service interruptions with the affected areas. Contractors shall notify the Laurier Project Administrator as early as possible in advance of planned service interruptions (i.e., access, electricity, HVAC, water, or phone/data). Accidental or unscheduled interruptions shall be reported immediately to the emergency number (Brantford ext. 5888 or Waterloo/Kitchener ext.3333) and the Laurier Project Administrator.

The use of solvents, adhesives, cleaners or other chemicals or products which produce an odour/vapour/fume/gas which may pose an indoor air quality concern shall be approved by the Laurier Project Administrator and SHERM. The use of these products in or near HVAC systems, air intakes, or occupied space shall be considered on a case by case basis. A review shall be performed by the supervisor or worker. The supervisor or worker performing the review shall be competent, trained and/or qualified to perform the review to ensure all hazards and concerns are identified and addressed. The use of these products may be required in off-peak hours.

Work which would be considered noisy or disturbing to a classroom or office setting shall be reviewed and coordinated through your Laurier Project Administrator to minimize concerns to building occupants.

3.3 FIRE PROTECTION SYSTEMS

Fire protection systems are an integral life safety component for occupants of a building. Fire protection systems are regulated under the Ontario Fire Code and applicable standards (NFPA, CSA). Any work which will/may impact or require shutdown of fire protection systems must be coordinated in advance through the Laurier Project Administrator and Laurier's Fire Safety Officer to ensure the life safety of building occupants. Fire protection systems include, but are not limited to any components of fire alarm systems, sprinklers systems, standpipe systems and special extinguishing systems.

Should any unintended impact of Fire Protection Systems occur, it must be reported immediately to the Laurier Project Administrator.

The Laurier FACL -016 document "Fire Protection Shutdown Procedures" outlines standard operating procedures required when fire protection systems are to be impacted. Components of the Fire

Protection Shutdown Procedure include, but are not limited to: fire protection shutdown permitting, hot work permitting, fire watch, Special Constable notification, alarm monitoring company notification, fire department notification, building occupant notification, and proper building signage.

3.4 ENTRANCES AND EXITS

Contractors may use only those entrances and exits designated for the work area. Laurier posts emergency exits with appropriate signs. Means of egress including fire exits shall not be blocked or obstructed by construction activities or worksites. Fire doors must not be propped open.

3.5 PARKING

Contractor vehicles shall be parked in designated parking areas only and at the contractor's expense. Parking in reserved spaces, patios, walkways, sidewalks, roadways or receiving areas is prohibited. Improperly parked vehicles will be ticketed or towed at the vehicle owner's expense. Contractor representatives must arrange parking for workers to be employed on a project with the consent of the project administrator and the Parking and Transportation Resources Department.

3.6 SITE SEPARATION

Contractors are required to delineate their work area. The Laurier Project Administrator will work with the Contractor to develop a plan of hoarding off the work area to ensure the safety of Laurier staff, faculty and students.

Work separation can be completed by the use of caution tape, pylons, soft or hard hoarding walls or by the use of existing doorways. The work area must be clearly identified by use of signage indicating the work being completed, emergency contact numbers and any personal protective equipment required.

Access to the work area will be limited to the Contractor, sub-trades and approved Laurier staff. In the event of an emergency Laurier staff will contact the Contractor and Project Administrator prior to entering the work area.

3.7 HOUSEKEEPING AND MAINTENANCE OF SITE

Good housekeeping is mandatory. Each employee shall keep his/her work area neat, clean, orderly and free of excess obstructions, trash and debris. Workers shall place waste materials in proper containers. Neatly stack or store work materials and tools in an approved location that does not block walkways, stairs, electrical panels, emergency equipment and exits or present a trip hazard.

- Cover and/or guard open holes, trenches or excavations as per regulated requirements.
- Workers will remove nails and other sharp objects protruding from surfaces and will sweep up loose nails and screws.
- Secure your work area or construction site when it is not occupied by workers.

Temporary cords or hoses should be supported at least seven feet above the floor when routed across aisles, accessible to the Laurier public. If this is not possible, cords and hoses should be secured to the floor by some other temporary means, such as duct tape, matting, etc., to eliminate trip hazards. The area shall be properly marked with appropriate warning signs or traffic cones to alert pedestrian traffic.

3.8 PERSONAL PROTECTIVE EQUIPMENT

As per regulatory requirements, contractors are responsible for assessing hazards and associated risks, and for selecting, maintaining and providing to its employees:

- Personal Protective Equipment (PPE) appropriate to the task at hand.
- Adequate training on the inspection and use of PPE. Contractors shall comply with applicable regulations regarding such equipment.
- PPE in proper working order and acceptable condition.

The Laurier Project Administrator shall stop work if appropriate PPE is not being used.

3.8.1 Clothing

In general, a shirt with sleeves and long pants should be worn at all times. Clothing shall not have loose, torn or dragging fabric. Wear suitable gloves when handling materials or equipment, and while performing operations that could be expected to cause injury to hands or fingers.

3.8.2 Hard-hats

An ANSI certified hard-hat will be worn at all times in construction areas, where overhead work is being undertaken.

3.8.3 Eye & Hearing Protection

Safety glasses with side shields will be worn at all times in construction areas, other designated locations in the facility, or where there is a potential for eye impaction due to conditions or work procedures. Additional eye and/or face protection such as goggles, face shields and welding shields are required when performing operations such as grinding, chemical handling, burning, welding, operating powder actuated tools, etc.

Wear approved hearing protection in designated locations in the facility and while working with or around high noise level equipment, machines and tools (above 85 db).

3.8.4 Respiratory Protection

Respirator equipment is required in areas where health hazards exist due to airborne materials. All workers who use respiratory protection must be adequately trained on respiratory use, exposure

hazards and be properly fit tested prior to using respiratory protection at Laurier. Contact your supervisor to obtain appropriate training and protective equipment.

3.8.5 Protective Footwear

Wear safety shoes in construction areas and other designated locations. Appropriate protective footwear shall be worn when working with corrosives, hazardous chemicals or construction operations. Athletic type shoes, sandals, high heels and open toed shoes are prohibited. Only CSA approved safety footwear is accepted for use when required.

3.8.6 Fall Protection

A full body safety harness with shock absorbent lanyard (maximum length six feet) and double locking hooks is required for all employees working more than ten feet above the surrounding work area when not protected by guard rails, nets, catch platforms or other acceptable methods. Safety belts and lanyards are not considered acceptable. Fall protection is required in, but not limited to, the following examples:

- Sloping roofs.
- Flat roofs without standard guard rail.
- Ladders near the edge of roofs or floor openings or when your feet are above the tenth step.
- Suspended platform or stage.
- Scaffold with incomplete guardrail or decking.
- While installing re-bar, setting forms, placing concrete.
- Working from an elevated platform or lift.

All workers who are required to wear fall protection must have a valid fall protection training certificate. Fall protection equipment must be inspected and in good condition prior to each use.

3.9 TOOLS AND EQUIPMENT

- In general, Contractors shall provide their own tools, equipment and secure storage for valuable tools.
- Contractors shall inspect and maintain tools in safe condition using them only for jobs in which they are intended.
- Contractors shall use non-sparking tools in areas where flammable liquids are stored or dispensed.
- Portable electrical power tools, hand tools, machinery and equipment shall be approved by the appropriate agency, double insulated or have an approved grounding system. Ground Fault Circuit Interrupters (GFCI) shall be used in wet areas.

3.9.1 Hand Tools

- Every tool is designed to do a specific job; use each tool only for its intended purpose.
- Keep hand tools in good condition: clean, sharpened, oiled and not abused.

- Worn tools, such as hammers, wrenches, etc., are dangerous and need constant inspection and replacement.
- Do not force tools beyond their capacity through use of "cheater bars". Follow manufacturer's directions and specifications for use and care of tools and equipment.

3.9.2 Power Tools

- Maintain power tools in good condition and ensure guards are in place before using. Electrical tools must be double insulated or properly grounded.
- Power tools shall not be hoisted or lowered by the cord or hose, use hand lines.
- Power tools shall be used only by those who have been properly instructed in their use. Appropriate personal protective equipment must be worn when using power tools and ensure individuals in immediate area do the same.
- Disconnect electrical or compressed air source before making adjustments or repairs to tools.
- Closely monitor tool condition and check before each use. Tools with damaged or loose parts, ineffective guards, cut or frayed power cords shall be taken out of service and tagged.
- Gas and other flammable liquid shall be contained in safety containers (metal, with spring loaded self-closing lids) and labelled as to their contents.
- Do not wear loose clothing, rings, or other jewellery near operating machinery.

3.9.3 Powder Actuated Tools

Contractors should ensure powder-actuated tools are:

- Used only by trained and, if required, licensed personnel.
- Not to be left unattended or accessible to unauthorized persons.
- Not to be used in explosive or flammable atmospheres.

3.10 CHEMICAL, BIOLOGICAL AND RADIATION HAZARDS

3.10.1 Laboratories

Some Laurier operations involve the use of biological, chemical or radioactive materials that can be hazardous if not handled safely. Areas where work with biological, chemical or radioactive materials is being performed are typically in a laboratory setting and will be marked with appropriate signs. The Laurier Project Administrator has the responsibility to advise the contractor of hazardous materials or areas, and the precautions and/or protective equipment required. Hazardous biological, chemical or radioactive materials shall not be handled.

If the work area is located within a laboratory area, experiments, chemicals and equipment shall not be disturbed in any way. Workers must contact their supervisor if any unexpected hazardous situation or requirements which will impact laboratories is encountered.

Contact your Laurier Project Administrator for specific details on chemical, biological and radiation hazards associated with laboratories at Laurier.

3.10.2 WHMIS

Workers shall be trained in WHMIS and have a current training certificate. Products that are brought onto Laurier property shall be accompanied by an up to date MSDS. The MSDS must be available if requested for review. A competent person shall review the MSDS sheet for all products which are intended to be used at Laurier to ensure any hazards are identified and addressed prior to use. Workers shall have access and review the MSDS for any product they use.

3.10.3 Water Loss

Any water loss which is identified within the work area or occurs during the course of work in the work area (i.e., floods, supply plumbing leaks, drain line leak, water infiltration) must be reported to the Laurier Project Administrator immediately. The Institute of Inspection, Cleaning and Resotration Certification (IICRC) Guideline S500 shall be used to mitigate the loss. Building materials shall be confirmed structurally dry prior to proceeding with work procedures.

3.10.4 Sewage

If water loss involves wastewater, sewage, flood water, or other forms of unsanitary water the IICRC S520 Guideline shall be used to mitigate the loss, by a certified remediation contractor. Sewage swab sampling may be required to confirm conditions are acceptable prior to proceeding with work.

3.10.5 Mould

If mould growth is discovered during work procedures or results from an unmitigated water loss work shall stop and measures will be implemented to prevent the spread of airborne spores. A trained and qualified remediation contractor shall be used to mitigate mould growth following the Environmental Abatement Council of Ontario (EACO) 2010 Mould Abatement Guidelines or other industry acceptable guidelines.

3.10.6 Radioactive Devices

Contractors who intend to use radioactive devices shall license, register and use such devices in accordance with all applicable regulations. Contractors may be required to provide evidence of current licenses and registration for the device and operator.

Prior to use at Laurier, a permit must be obtained via SHERM for any equipment that contains a radiation source (i.e., pre-floor coring x-ray). See contract labour policy appendix for the Radiography Permit to be submitted for approval to the Laurier Biological/Chemical/Radiation Safety Officer.

3.11 DESIGNATED SUBSTANCES

Ontario Regulation 490/09 - Designated Substances as amended, outlines requirements for those who work or may potentially deal with Designated Substances. Contractors must be provided with the information related to Designated Substances which may be present in their work areas.

The following designated substances are present at Laurier as part of building materials or infrastructure of various buildings which may be part of or associated with a construction project:

Asbestos (see next section for additional information)

- Limit any airborne exposure.

Lead (i.e., paint, solder, spigots, sheeting, floor and window seams)

- Limit any airborne exposure to dusts (scrapping lead based paint, vapours (welding/cutting).

Mercury (i.e., thermal switches, fluorescent/mercury light tubes)

- Limit exposure to regulatory requirements, don't break mercury light tubes or mercury switches.

Silica (i.e., concrete block, concrete, stone, masonry, asphalt, various aggregate/sand mixtures)

- Limit any airborne exposure by using approved engineering controls and methods.
- Dry cutting of any of the above noted materials is not permitted at Laurier.
- Cutting, chipping, grinding of the above noted materials can produce airborne silica dust.

Awareness of Ontario Regulation 490/09 - Designated Substances as amended, is required in order to work safely near these substances. Where applicable, if work is required which may impact these materials, then specific training/certification is required to ensure work is conducted in a safe manner and in accordance with the Regulation. A record of this training must be provided.

If your work at Laurier may impact any materials that are confirmed or suspected to contain any of the designated substances listed in the Regulation you must abide by the Regulation and if you are not aware of the Regulation than you must stop work and contact your Laurier Project Administrator.

As part of contractor safety orientation an overview of the Designated Substances Regulation is provided to contractors to ensure a minimum level of awareness is in place.

In addition, designated substances may be found in classroom and laboratory settings at Laurier. SHERM maintains an inventory of designated substances found in controlled laboratory settings. Laboratory areas may contain designated substances in various forms including compounds and solutions of: acrylonitrile, arsenic, asbestos, benzene, ethylene oxide, isocyanates, lead, mercury, silica and vinyl chloride. If your work will include laboratory areas your Laurier Project Administrator will arrange for a Laboratory Awareness Training session with SHERM to ensure contractors have been informed of the chemical hazards that are present in the laboratories in which they are performing work.

3.11.1 Asbestos

Asbestos is a material which was widely used in construction materials until approximately the mid 1980's. At Laurier many buildings were built prior to this mid 1980's date and as such many of the original building materials may contain asbestos. Prior to any work, confirmation of any asbestos containing materials (ACM) must be conveyed to the contractor by the Laurier Project Administrator. If the contractor is not provided this information, the Laurier Project Administrator and SHERM must be contacted prior to proceeding with work.

Examples of suspect materials include, but are not limited to:

- Ceiling tiles.
- Thermal insulation (piping, ducting, mechanical).
- Sprayed or towelled on surfacing materials.
- Plaster and drywall joint compound.
- Roofing materials.
- Flooring materials (vinyl floor tiles, vinyl sheet flooring, leveling materials).
- Transite paneling and piping.
- Mastics.
- Caulking.

At any time if the contractor discovers or uncovers materials which are suspected or confirmed to be asbestos containing which may be impacted by work procedures, work must stop and the supervisor, the Laurier Project Administrator and the Laurier Occupational Hygienist & Safety Specialist must be contacted. All suspect materials are to be considered ACM until confirmed or proven otherwise by approved analytical methods. Contractors shall not disturb suspect or confirmed ACM associated with Laurier facilities, unless the work is authorized or approved by SHERM.

ANY AND ALL WORK INVOLVING ASBESTOS CONTAINING MATERIALS MUST BE REVIEWED by Laurier's Occupational Hygienist & Safety Specialist prior to work occurring. Any work procedures which involve ACM shall be conducted in accordance with Ontario Regulation 278/05 Asbestos on Construction Projects and in Buildings and Repair Operations and the Laurier Asbestos Management Program. The work shall be conducted by a trained and qualified remediation contractor as required. The work shall be overseen by a qualified and competent supervisor. An environmental consultant shall be retained where applicable. **Advance notice of 2 weeks** is required to building occupants by the Laurier Project Administrator for any asbestos work unless an emergency situation exists.

Contact the Laurier Project Administrator or SHERM for information pertaining to location of ACM's, sampling and/or analysis results. Constructors are required to retain an environmental consultant to review asbestos documentation, provide work procedures to remediation contractors and inspect remediation work in accordance with the regulation. Any asbestos related work shall be reported to the Project Administrator and SHERM.

3.12 ELECTRICAL SAFETY

- Electrical extension cords and temporary feeders must be three-wire grounded units.
- Contractors must properly safeguard exposed voltage in occupied areas by either posting an attendant or installing appropriate signage. The area of exposed voltage shall be secured within a radius of three (3) feet.
- Electrical cables or wires that are placed across roadways, doors or aisles should be secured to the floor and protected from damage.
- Contractors must use explosion-proof equipment (Class I, Division I) in areas containing combustible or flammable vapors, dusts or fibers. Cords, connectors, and equipment should be inspected to verify that they are free of defects.
- Only qualified electricians are permitted to work on electrical systems and equipment that utilize or control electrical power.
- Never operate electrical tools or equipment in wet areas or areas where potentially flammable dusts, vapors or liquids are present, unless specifically approved for the location.
- Use Ground Fault Circuit Interrupters (GFCI) on power circuits. If permanent plant power circuits are not GFCI, use a portable GFCI box with electrical tools and equipment. Test GFCIs on a regular basis.
- Should a circuit breaker or other protective device "trip," ensure that before resetting, a qualified electrician checks the circuit and equipment and corrects problems.
- Extension cords shall be designated for "extra hard usage" and have at least 12 gauge conductors, grounded (3 prong) plugs, be heavily insulated and in a safe condition. Flat electrical cords are prohibited.
- Inspect extension cords periodically. Damaged cords shall not be used until repaired. Damaged cords shall only be repaired with heat shrink material. Electrical tape is not acceptable.
- Never set up and/or operate equipment such as cranes, lifts, ladders, etc., within ten feet from any overhead power lines.
- Always lockout and tag equipment prior to working on it in accordance to Laurier's Lockout Program procedure. Ensure utility service connections to the equipment have been disconnected prior to locking out; be aware of "stored energy" which may be present. "Try" equipment prior to working on it by testing for presence of voltage, operating controls, etc. Before re-energizing equipment, inspect circuits and the work area to ensure tools, jumpers, grounds, etc., have been removed and that personnel is clear. Also ensure protective guards and covers are in place before re-energizing.
- Use appropriate personal protective equipment (safety glasses, insulating gloves, blanket, etc.) when working near energized circuits or equipment: ensure protective equipment is in good condition. Erect barriers and post warning signs to ensure non-authorized personnel stay clear of the work area.
- Hazards (lack of protective guards or covers, damaged equipment, etc.) must be reported to the supervisor immediately.
- Elevate electrical cords at least seven feet above the work area or protect them from damage.

- Electrical boxes, switch gear, cabinets, electrical rooms etc., shall not be left open when not directly attended. Insulate energized parts when covers have been removed or doors are ajar. Use of cardboard/plywood/other flammable materials to cover energized circuits is prohibited.

3.12.1 Lock-out/Tag-out

The Contractor will assure proper isolation and control of hazardous energy on affected equipment and machinery. Contractors will comply with Laurier's "Lock-Out/Tag out" program, including training and equipping workers. Contractors are expected to maintain a written program and work cooperatively with Laurier personnel for multiple lockouts.

Contact the Laurier Project Administrator or SHERM for additional details.

REMEMBER: Hazardous energy sources include electrical, mechanical, hydraulic, pneumatic, chemical, thermal or other sources in machines and equipment and require proper lock-out/tag-out procedures to ensure worker safety.

3.13 HOT WORK PROGRAM

Laurier utilizes and enforces their system to help minimize the risk associated with Hot Work. If Hot Work is to be performed, it is Laurier's expectation that contractors conduct a job-specific hazard assessment. All flammable and combustible materials shall be removed from the area. The assessment shall also include evaluating other work in the vicinity that has the potential to create a hazard. The Contractor shall meet or exceed all regulations and industry standards when conducting Hot Work.

Contractors shall contact the Laurier Project Administrator to obtain a Hot Work Permit for any temporary operation involving open flame or which produces sparks. This includes, but is not limited to, welding, cutting, grinding, brazing, and torch-applied roofing. The Hot Work Permit should be valid for only one job on one shift, unless other arrangements have been agreed upon.

Where Laurier retains a contractor to act as the constructor, equivalent measures/ procedures/ program must be implemented by the contractor, with approval by Laurier prior to the awarding of contract/conducting work.

3.14 CONFINED SPACE ENTRY

Laurier has an extensive Confined Space Entry Policy and Program including permits. Areas on campus have been reviewed and assigned designations of confined space and restricted space. Entry into an area which is designated as confined or restricted is prohibited without approval by SHERM.

Contractors who may need to enter a confined space at Laurier shall conduct entry under Laurier's program. Prior to conducting work, contractors shall notify SHERM. Upon this notification, Laurier will provide the contractor with information relative to the known or anticipated hazards of the space.

A Contractor shall conduct an independent assessment of the confined space which shall be submitted to the Laurier Project Administrator.

The contractor shall provide all safety and personal protective equipment, including atmospheric testing equipment, protective clothing, hard hats, respirators, life-lines, ventilation equipment and safety harnesses, etc. The Contractor shall ensure its workers have received training in the use of this equipment before they enter the space.

Where a Laurier retains a contractor to act as the constructor, equivalent measures/procedures/ program must be implemented by the contractor, with approval by Laurier prior to the awarding of contract/conducting work.

3.15 COMPRESSED GAS CYLINDERS

- Cylinders must be labeled or marked to identify contents and be properly secured with a chain/harness.
- Workers shall close valves when cylinders are idle, empty or moved. Valve protection caps shall be in place when cylinders are moved or stored.
- Contractors shall keep cylinders a safe distance or shielded from Hot Work or heat sources.
- Contractors shall comply with OHSA requirements on the separation of cylinders containing incompatible chemicals.
- Regulators, hoses and torch assemblies shall be in good working order and checked for leaks prior to initial use or installation. If a leak develops, remove the cylinder to a safe location outside the building.

3.16 COMPRESSED AIR

- Workers shall not use compressed air to clean dust from clothing or skin.
- Workers using compressed air to clean dust and dirt from surfaces must wear eye protection and direct the air stream away from other workers. Use a nozzle that restricts air pressure to a maximum of 30 PSI.

3.17 WORKING AT HEIGHTS

Contractors shall protect workers from falls when performing elevated work above 10 feet or within 10 feet of the edge of a roof or skylight. Typical exposures may include: aerial platforms, scaffold and rack erection, elevated conveyor installation and maintenance, utility work and building exterior maintenance.

Contractors must employ at least one form of conventional fall protection devices, such as railings, nets, guarded work platforms, or personal fall arrest systems. Workers shall wear personal fall protection equipment, as required when working from aerial work platforms, when working from a suspended platform, such as those used for window washing; or when working from a scaffold or other

elevated platform with incomplete guardrails or decking. Users shall perform a documented inspection of their equipment before each use. Fall protection equipment shall be used in these situations as outlined by the equipment manufacturers.

Contractors are responsible to ensure that all workers who are working at heights have received the appropriate training. The training shall be in accordance with the Ministry of Labour Working at Heights training standard. Workers are required to have completed the training every three years by an approved training provider. Copies of training certificates for all workers conducting any work at heights must be provided to Laurier. The contractor shall guard floor and roof openings by providing suitable barriers, guardrails, or covers and securing them to prevent accidental removal or displacement. Toe boards, screens or other suitable guards shall be installed around the perimeter of floor or roof openings to prevent falling objects from striking personnel below as per legislative regulation.

Contractors may not perform overhead work when there is a danger of falling objects striking a person below. Contractors shall isolate such work areas to protect persons from falling objects. The Contractor will barricade and monitor an area of fifteen (15) feet minimum radius from the work area, to prevent unauthorized personnel from entering the hazard area. If the contractor cannot establish this secure area due to operational constraints, then the work shall be scheduled during off-shift hours. Workers shall raise and lower tools and equipment to overhead work areas through the use of aerial work platforms or ropes and tethers. Lowering by cord, throwing or dropping tools and equipment is prohibited.

3.17.1 Ladders

Ladders are intended for access to heights only. With the exception of properly deployed stepladders, ladders are not suitable working platforms. If an elevated platform is necessary, Laurier expects contractors to provide a suitable platform with guardrails, such as a ladder stand, a scaffold, or an aerial work platform.

Ladder use shall be limited, reviewed and possibly restricted from use, where elevated work procedures are required for extended periods of time or the employee's footing level is above 10 feet. Use only approved ladders in good condition and of the type suitable for the task.

- Workers shall not place ladders in door swing areas unless the door is locked or otherwise blocked from striking the ladder.
- Workers shall use wooden or fiberglass portable ladders when working with electricity.
- When used against beams, pipes, or similar supports, workers shall secure ladders to prevent shifting, slipping, or being knocked over.
- Ensure ladders are level and have secure footing. Step ladders shall be fully engaged and straight ladders tied off when working from them.
- Always face the ladder when climbing or descending.
- Work facing the ladder with both feet securely on the rungs.
- Never stand on the top two steps or sit on the top of the step ladder.

- Never stand on the top or straddle the step ladder.
- Never fold up and lean stepladders.
- Never work backwards on or work with two people from the same ladder.
- Ensure a minimum of 3 points of contact are maintained.
- Post warning signs when doing overhead work in traffic areas.
- When workers use ladders to reach elevated levels, the top of the ladder shall extend at least three feet above the work level and be tied off at the top.
- Workers shall not separate the sections of extension ladders.
- Workers shall not stand on furniture to reach work.

3.17.2 Scaffolds

Laurier expects scaffolds to comply with regulations and standard industry practices. Contractors shall train scaffold erectors and users in safe work practices and procedures. Scaffold hired by the contractor shall work under the supervision of a "competent person" as defined by OHSA Scaffolding Standards. The "competent person" shall be within sight of the scaffold erecting activity.

Contractors shall use scaffold equipment according to manufacturer's specifications. Contractors shall not mix different brands of scaffolds. The contractor shall ensure scaffold equipment is inspected before use and deteriorated or damaged components are removed from service.

Platforms shall be fully planked. Wood planks shall be graded for scaffold use by an approved agency. Planks shall be free of holes, saw cuts, and other defects. The contractor will provide and install toe boards, screens, or other suitable guards around the perimeter of elevated work surfaces to prevent falling objects from striking personnel below.

3.17.3 Mobile Equipment/Work Platforms/Cranes

Contractors shall assure trained personnel operate mobile equipment, such as extensible boom lifts, scissors-type lifts, and cranes. The contractor shall provide trained personnel to assist the operator in clearing building fixtures or other obstructions when raising, lowering or advancing the equipment.

Contractors shall conduct a documented inspection of equipment prior to each day's use to assure it is in safe operating condition. Replace or repair defective equipment before bringing it on site.

For outdoor projects, it is not recommended that workers operate cranes, aerial platforms or similar equipment within fifty (50) feet of overhead utilities, unless the contractor's "competent person" has reviewed and approved the work.

3.18 TRENCHING & EXCAVATION

All trenching and excavation work shall be approved by the Laurier Project Administrator and reviewed by a competent person. The work shall be conducted in accordance with relevant Regulatory Standards. All Underground Locates must be conducted prior to work.

3.19 HAZARDOUS WASTE DISPOSAL

Hazardous wastes are wastes that, when present in quantities and concentrations that are high enough, pose a threat to human health or the environment if they are improperly stored, transported, treated or disposed. Hazardous waste must be disposed of responsibly in accordance with Ontario's Environmental Protection Act, Regulation 347 and Canadian Environmental Protection Act, 1999.
As defined in Regulation 347, hazardous wastes include:

- Listed waste (specific waste streams such as an acutely hazardous chemical, hazardous industrial waste, hazardous waste chemical or severely toxic waste)
- Wastes produced during line flushing processes (i.e. boiler line flushing)
- Characteristic wastes (identified through testing and includes corrosive, ignitable, leachate toxic or reactive waste)
- Pathological wastes (human and animal remains and other non-anatomical waste that is infected with a communicable disease)
- PCB wastes (PCB equipment, liquid or material)
- Radioactive wastes (can include naturally occurring radioactive material)

For questions regarding whether waste is considered hazardous, consult with the Project Administrator or SHERM. Provision for the disposal of hazardous waste must be included in the scope of the construction project as the cost of disposal will not be covered by Laurier.

3.19.1 Waste Manifest and Use of HWIN Generator Number

Whether the hazardous waste is to be disposed of with Laurier's involvement or if the contractor is disposing of waste independently will determine if Laurier's Ontario Waste Generator Number is used. **A contractor may not use Laurier's generator number for disposal of waste when Laurier is not involved in the disposal.**

A contractor may choose to dispose of waste that is generated during a project using their own waste contractor and waste generator number. This may occur when the waste is generated by the project, such as leftover paint. In this case, the contractor must be registered for the disposal of that type of waste and is responsible for ensuring the disposal complies with all applicable regulations. Alternatively, Laurier may arrange for the disposal of this waste using Laurier's waste generator number, provided that the construction contract has allowed for this arrangement to occur. In this case, Laurier's waste generator number will be used and a Laurier employee with TDG training will sign the manifest.

Waste that is not generated by the project, but rather onsite before the start of the project or discovered during the project, will be disposed of using Laurier's waste generator number and manifest is to be signed by a Laurier employee.

3.19.2 Hazardous Waste Contractor Approval

Contactors chosen to dispose of hazardous waste must meet the following requirements:

- No regulatory infractions in the past five years or submission of corrective actions for regulatory infractions within five years. Submission of MOE inspection reports and subsequent corrective actions as required.
- No company name change in past five years or submission of company regulatory history under previous name(s) for review.
- Environmentally responsible final waste disposal, ensuring compliance with the Land Disposal Restrictions, and no deep well injection. Submission of MOE Environmental Compliance Approval is required.
- $5M insurance including transport and commercial general liability, error and omissions and environmental impairment insurance.
- Understanding of the Provincial hazardous waste legislation, waste manifesting system, Transportation of Dangerous Goods requirements, WHMIS and all relevant statutes and regulations, depending on the project. Submission of training documents and any company policies referencing hazardous waste is required.

3.20 UNMANNED AIR VEHICLES

If a Contractor would like to use unmanned air vehicles (UAV) or drones for commercial or research applications they must strictly follow Transport Canada`s Standards on UAV use and the Canadian Aviation Regulations.

Contractors shall ensure that they have submitted all required paper work to Transport Canada and have all the necessary permission to fly. Contractors are to notify the Laurier Project Administrator and SHERM department if they plan on using UAVs. The Contractor must submit the weight of the vehicle, the proposed flight path, safety precautions and the information of the UAV operator.

4.0 Summary

Laurier has a duty to its employees, students, visitors and occupants to provide a safe environment that is free from recognized hazards that have the potential to cause death, injury or serious bodily harm. Because of the number of contract personnel performing work on Laurier's property, Laurier is providing this handbook to contract personnel as part of its safety program to protect its employees and property. It is the responsibility of the contractor to ensure that its personnel perform work in a safe manner and in a safe work environment. Contractors shall train, supervise and direct their personnel concerning compliance with safety rules including those required by Laurier for work on its premises. This manual is not intended by Laurier to abrogate or assume responsibility that a contractor owes to its personnel, employees, or other persons.

This booklet does not replace or limit the requirements of federal and provincial legislation.

5.0 Key Personnel

Use this space to record the name and phone number of key personnel.

	Full Name	Phone Number (s)
Laurier Project Administrator:		
Project Supervisor:		
Project Health and Safety Coordinator/Representative:		
Other:		
Other:		
Other:		
Other:		

6.0 Links

6.1 INFORMATIONAL SOURCES

Useful resources include, but are not limited to:

- Ministry of Labour (MOL) http://www.labour.gov.on.ca
- E-LAWS http://www.e-laws.gov.on.ca
- Infrastructure Health and Safety Association http://www.ihsa.ca
- Canadian Construction Association http://www.cca-acc.com
- Health Canada http://www.hc-sc.gc.ca
- Canadian Centre for Occupational Health and Safety http://www.ccohs.ca

6.2 REGULATIONS, GUIDELINES AND STANDARDS

Applicable regulations, guidelines and standards include, but are not limited to:

- Occupational Health and Safety Act (OHSA), R.S.O. 1990, as amended.
- R.R.O. 1990, Regulation 851, Industrial Establishments, as amended.
- Ontario Regulation 213/91, Construction Projects, as amended.
- R.R.O. 1990, O. Reg. 860, Workplace Hazardous Materials Information System (WHMIS), as amended.
- Ontario Regulation 490/09, Designated Substances, as amended.
- MOL Guide to Asbestos, MOL Guide to Lead on Construction Projects, MOL Guide to Silica on Construction Projects
- Ontario Regulation 278/05, Asbestos on Construction Projects and in Building and Repair Operations, as amended.
- R.R.O. 1990, Regulation 833, Control of Exposure to Chemical & Biological Agents, as amended.
- Fire Protection and Prevention Act, 1997, Ontario Regulation 213/07
- Ontario Regulation 632/05, Confined Spaces, as amended.
- Ontario Regulation 191/11, Accessibility for Ontarians with Disabilities Act, 2005
- EACO 2010 Mould Abatement Guidelines
- IICRC S500 & S520 Standard and Reference Guides for Professional Water Damage Restoration/Mold Remediation
- Ontario Building Code, Electrical Safety Authority,
- NFPA Standards, ANSI Standards, ASHRAE Standards, TSSA Standards, CSA Standards

6.3 LAURIER POLICIES, PROGRAMS AND INFORMATIONAL SOURCES

Laurier specific information can be found at the following locations.

- www.wlu.ca/sherm Safety, Health, Environment & Risk Management
- www.wlu.ca/pr Physical Resources

Applicable Laurier policies and programs should be provided to the contractor by the Project Administrator prior to work and be reviewed as they relate to the work. The following is a listing of Laurier policies and programs which may be applicable. There may be other additional policies and procedures that are not outlined in the list which may be applicable. Contact your project administrator for additional information.

- Contract Labour Policy
- Accident and Incident reporting
- Emergency Procedures and Fire Safety
- Fire Protection Shutdown Procedures
- Asbestos Management Program
- Laurier Asbestos Audit and Database
- Hot Work Program
- Workplace Electrical Safety Program
- Lock Out Tag Out (LOTO)
- Confined Space Program
- Noise Control Program
- Working Alone Policy
- Workplace Violence Prevention program/policy
- Smoking Policy
- Laurier Maps

Safety, Health, Environment & Risk Management (SHERM)

SHERM is committed to promoting an environmentally responsible, safe and healthy work environment for all community members, while striving to ensure compliance with relevant regulations and support the university's mission of teaching and research.

WILFRID LAURIER UNIVERSITY
Waterloo | Brantford | Kitchener | Toronto

75 University Avenue West,
Waterloo ON, Canada N2L 3C5
519.884.0710 x2817 or 2874

Planned Building Power Shutdowns Affecting Fire/Life Safety Systems
Document No. FACL-026

1. INTENT

Laurier is committed to providing a safe working, living and educational environment for staff, faculty, students and visitors. The intent of this document is to provide standard operating procedures (SOP) for Laurier staff and outside service providers (contractors) to use in order to properly shutdown the **power to Laurier buildings** when required.

2. SCOPE

This SOP provides requirements and procedures relating to the ***planned*** shutdown of building power if it affects fire/life safety systems, for the purposes of testing and/or maintenance. The fire/life safety systems affected may be, but are not limited to, fire alarm systems, emergency lighting, sprinkler systems, standpipe systems, special extinguishing systems and fire pump systems.

In the event of an ***unplanned*** power outage "emergency" situation, the "Emergency Response Plan" must be followed.

3. LAURIER CONTACT INFORMATION

	Laurier Brantford	**Laurier Waterloo/ Kitchener location**
Special Constable Service	Market Place First Floor 45 Market Street Internal Ext. 5888 or (519) 756-8228 x 5888	75 University Ave. West Lower Level - Student Services Building Internal Ext. 3333 or (519) 885-3333
Physical Resources	(519) 756-8228 x 5761	(519) 884-0710 x 6280
Fire Department	Brantford Fire Department (519) 752-4346	Waterloo Fire Rescue & Kitchener Fire Department (519) 741-2494
Residential Services	(519) 756-8228 x 5805	(519) 884-0710 x 3617
Fire Safety Officer (SHERM)	Office – (519) 884-0710 x 3887 Cell – (519) 496-2158	

4. DEFINITIONS

Authorized Contractor - A contractor that is approved by the AVP Physical Resources or designate in accordance with all requirements of Laurier's Contractor Safety Policy. Refer to Laurier's Contractor Safety Policy and Safety Guidelines for Contractors booklet for additional information and specific requirements.
To view the booklet in its entirety, go to www.wlu.ca/sherm or click here.

Competent Person – For the purposes of this procedure, a competent person is identified as a person that is trained in the proper operation of fire suppression equipment, specifically pertaining to the fire watch. This person will have a basic understanding of the building systems at the location in question and will be familiar with the building in which the work is taking place and be familiar with Laurier's Fire Alarm Procedures. This person should also be familiar with the egress route from the space and familiar with the fire safety plan in case of emergency arising during the work.

Devices – A component of a given fire protection system. Can include, but is not limited to, heat detectors, smoke detectors, smoke alarms, or pull stations.

Fire Department - Waterloo Fire Rescue, Brantford Fire Department & Kitchener Fire Department will herein be known as the Fire Department. For specific contact information relating to this document, refer to section 3.

Fire Protection Systems – The major fire protection systems within the buildings are: Sprinkler System, Standpipe System, Emergency Lighting, Exit Signage, Fire Pump and Special Extinguishing Systems (i.e. Novec 1230, FM 200).

Fire Watch - A competent person that is posted to observe and monitor conditions of affected areas during the shutdown or maintenance of fire/life safety systems.

Lock out - The act of making equipment, or a hazardous energy source, inoperable by installing a physical means of restraint. This may include, but is not limited to, padlocks or multiple hasp hardware used in conjunction with approved electrical equipment lockout devices.

Physical Resources – The Physical Resources department can refer to either the Project Design and Construction (PDC), or Facilities Operations.

For new construction and renovation projects, PDC personnel are responsible for requesting the appropriate permits and for requesting the appropriate support from Facilities Operations personnel if required (through iService Desk work order at Laurier Waterloo and Laurier's Kitchener Location and by calling ext. 5761 at Laurier Brantford).

For all other functions (ie. maintenance, testing), Facilities Operations personnel are responsible for requesting the appropriate permits and scheduling any additional support required (see section 3 for contact information).

Signals – A means of annunciation for a given fire protection system. Can include, but is not limited to, bells, strobe lights, or horns.

5. ROLES AND RESPONSIBILITIES

The Supervisor Shall:

- Incorporate preventive measures for functions and activities in which there may be an elevated risk of incident or accident with health-related consequences.
- Provide information, instruction, and supervision to employees to protect their health and safety.
- Provide safety training to workers.
- Provide equipment, materials, and protective devices for use by workers.
- Ensure that equipment, materials and protective devices are maintained in good condition and used as prescribed under the Occupational Health and Safety Act (OHSA).
- Work in compliance with the provisions of the OHSA and its regulations and the Ontario Fire Code and adhere to all health and safety procedures/instructions.

The Worker Shall:

- Work in compliance with the provisions of the OHSA and its regulations and the Ontario Fire Code and adhere to all health and safety procedures/instructions.
- Report to their supervisor, all known health and safety hazards, or any violations of the OHSA and its regulations.

The Fire Safety Officer (FSO) or Designate(s) Shall:

- Develop and maintain the “Planned Building Power Shutdowns Affecting Fire/Life Safety Systems” procedure.
- Determine the extent of any fire watch required.
- Ensure that all individuals involved in the shutdown activities are familiar with this SOP and its requirements.
- Determine if fire hazards are present, or likely to be present, in the area of the shutdown.
- Provide training to Physical Resources personnel as necessary.

The Fire Watch Shall:

- Walk the affected area at a minimum, once every hour and log the patrol until the affected system is functioning properly.
- Have a means of contacting emergency services and/or Special Constable Service (cell phone and or radio) in the event of an emergency.
- Initiate a manual evacuation of the building in the event of an actual fire. This includes notifying all personnel working in the building which is affected.
- Be trained in the use of portable fire extinguishers and have at least one at their immediate disposal (an existing building fire extinguisher may be used).
- Be prepared to provide initial fire response.
- Provide fire watch until the affected fire/life safety system is online and functioning normally.
- Understand where more than one Fire Watch may be required (to be determined collaboratively by Physical Resources and Fire Safety Officer).

Special Constable Service (SCS) Shall:

- Notify the Fire Department when requested, through the use of these procedures.
- Initiate the Emergency Responses Plan when necessary.

Physical Resources Shall:

- Notify the FSO of the request to shut down power to a building.
- Notify Special Constable Service of any power outage affecting a fire/life safety system.
- Email the Laurier Community, detail the nature and duration of the power shut down and any fire/life safety systems affected. Notifications must indicate that buildings will to be closed and restricted for use.
- Perform the physical shutdown of the appropriate power system and fire protection systems as outlined in the procedure and follow Laurier's Lockout program. Physical Resources may authorize a contractor or other competent person to shut down a system. In this case, email confirmation must be given from Physical Resources.
- Notify all authorized personnel who will be working in the building of any affected fire/life safety systems.
- Post notices at all building entrances to affected building prior to power shutdown. Notices should be in place at least 15 minutes prior to the outage taking place.
- Lock and/or restrict use of buildings affected by power shut downs, when required to.
- Remove notices when outage has been completed.

6. GENERAL GUIDELINES

As per section 2.8.2.1(1)(h) of the Ontario Fire Code and Laurier's Fire Safety Plans, the procedures listed in section 7 must be followed anytime a fire/life safety system has been affected and not normal operation, due to a planned power outage.

7. PROCEDURE

If you answer no to any of the following questions a fire watch must be set up and the FSO or designate(s) must be contacted to determine the extent of the Fire Watch. As per section 1.1.1.1 of the Ontario Fire Code, the Fire Department must also be notified if there is any interruption in the monitoring of any fire/life safety system.

- Does the building affected have an emergency back-up generator?
- Does the emergency back-up generator power all signals, devices and fire/life safety systems (i.e. fire alarm system, fire pump system, emergency lighting, exit signage etc.)?
- Are all fire/life safety systems within the building functioning normally?

7.1 Planned Building Power Shutdowns Affecting Fire/Life Safety Systems

This SOP is to be used during planned power outages when fire/life safety systems are affected.

7.1.1 Physical Resources must notify the FSO (or designate) of the planned power outage a minimum of 24 hrs prior to the power outage.

7.1.2 The FSO (or designate) must review the outage request and determine the extent of any fire watch, if required.

7.1.3 If the building affected contains an emergency back-up generator which powers all signals, devices and fire/life safety systems a fire watch may not be required. However, the buildings must still be restricted for use as per 7.1.5.

7.1.4 Physical Resources must, as part of the work, notify the Laurier Community (via broadcast email).

7.1.5 During a power outage only key personnel will be allowed to enter the building affected (i.e. SHERM, Physical Resources, Residential Services, Special Constable Service, Fire Watch personnel and approved contractors).

7.1.6 Physical Resources must contact Special Constable Service Dispatch prior to shutting power down if a fire/life safety system is affected.

7.1.7 Special Constable Service dispatch must notify the Fire Department detailing the nature of the outage if the outage affects a fire/life safety system.

7.1.8 The approved contractor or Physical Resources must post signs at building entrances detailing the nature of outage, a minimum of 15 minutes prior to the power outage (see section 9, Appendix B).

7.1.9 Special Constable Service, Physical Resources, Residential Services, an authorized contractor or (pre-approved) outside service provider must conduct a fire watch of the affected area (where required by step 7.1.2). Please note that Special Constable Service is only required to complete fire watch duties during emergencies.

7.1.10 The Fire watch must have radio or cell phone contact to emergency services, Special Constable Service and personnel working in the building and must remain in the area where the fire/life safety system(s) are not functioning normally.

7.1.11 The Fire Watch must check the affected area at least once every hour and document their watch (see section 8 - Appendix “A”).

7.1.12 When complete, the Fire Watch Form(s) must be submitted to the FSO at 232 King Street, Room K101 within 24 hours after outage for record keeping.

7.1.13 The approved contractor or Physical Resources must then take down all posted signage.

7.1.14 Physical Resources must check all fire/life safety systems that were affected, when the outage is complete to ensure they are fully functional.

7.1.15 Physical Resources must check all batteries affected by the power outage (i.e. fire alarm system, emergency lights, and exit signs) within 24hrs after the power outage to ensure they are fully functional.

NOTE 1: If a fire emergency occurs during the outage, the Fire Watch must attempt to activate the fire alarm system by pulling an emergency pull station in a functional zone, contact emergency services (911 or 9-911), Special Constable Service dispatch (section 3) and notify all occupants in the building to evacuate.

8. Appendix "A" – Fire Watch Form

Laurier Fire Watch Form	DATE OF FIRE WATCH
Patrol the affected area once every hour and log below	
Contractor (employee name and company) or Laurier Employee (employee name and department)	Laurier Building / Area of Fire Watch

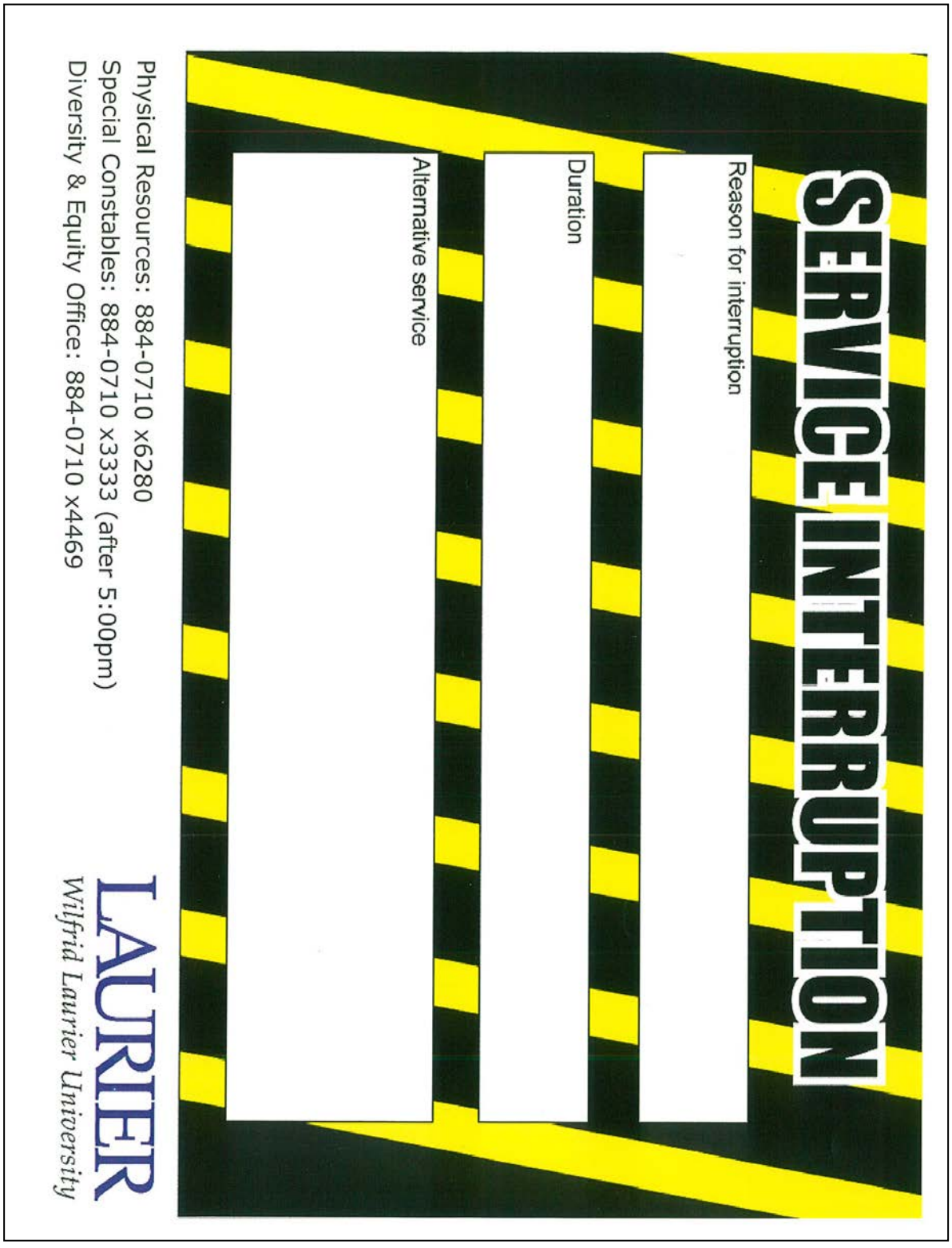
Reason for Fire Watch (provide as much detail as possible):

Time	Evaluation of fire watch area (all clear, smoke , fire)	Signature
Time	Evaluation of fire watch area (all clear, smoke , fire)	Signature
Time	Evaluation of fire watch area (all clear, smoke , fire)	Signature
Time	Evaluation of fire watch area (all clear, smoke , fire)	Signature
Time	Evaluation of fire watch area (all clear, smoke , fire)	Signature
Time	Evaluation of fire watch area (all clear, smoke , fire)	Signature
Time	Evaluation of fire watch area (all clear, smoke , fire)	Signature
Time	Evaluation of fire watch area (all clear, smoke , fire)	Signature
Time	Evaluation of fire watch area (all clear, smoke , fire)	Signature
Time	Evaluation of fire watch area (all clear, smoke , fire)	Signature

Problems to report

Prepared by: Safety, Health, Environment & Risk Management

9. Appendix "B" – Physical Resources Service Notice



10. Relevant Standards / Legislation / Policies

- **Laurier Lock Out Program –** www.wlu.ca/sherm
- **Laurier Fire Safety Plans –** www.wlu.ca/sherm
- **Ontario Fire Code Compendium 2007**
  Section 1.1.1.1 - Where tests, repairs or alterations are made to fire protection installations, including sprinkler and standpipe systems, a procedure of notifications shall be established, and the procedure shall include notifying the fire department and building occupants where necessary for safety in the event of a fire emergency.
  Section 2.8.2.1.(1) A fire safety plan shall include (h) the provision of alternative measures for the safety of occupants during any shutdown of fire protection equipment and systems or part thereof.
- **Occupational Health and Safety Act - Industrial Establishments (2013)**

11. Document Signoff / Revision History

Document Controls			
Fire Protection Shutdown Procedures : FACL-023			
Creation Date:	March 27, 2013	**Revision Date:**	N/A
Approval	**Representative**	**Title**	**Approval Date**
SHERM	**P. Teskey**	**Fire Safety Officer**	**May 7, 2013**
SCS			
PDC			
PR Operations Waterloo			
Physical Resources Brantford Campus:			
Residential Services: Waterloo Campus			

Residential Services: Brantford Campus			

Revision History			
Version	**Date**	**Revised By**	**Description**
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This SOP was prepared for Laurier (2013). Any corrections, additions or comments should be brought to the attention of the Fire Safety Officer of the Safety, Health, Environment & Risk Management department at 519-884-0710 ext. 3887.

Lockout Program

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1.0 Scope

This program specifically outlines the purpose, authorization, procedures, and techniques to be utilized by Wilfrid Laurier University (WLU) employees on a daily basis to guard against the unexpected energizing, start-up, or release of stored energy which could cause injury. Managers shall ensure that employees under their supervision receive training in the contents of this program and ensure records of this training are maintained. It shall be the duty of each employee to become familiar with the contents of this program and ensure compliance with its procedures. This program will include but is not limited to power sources involving electricity, fluid pressure, air, kinetic, potential, pressurized liquids and stored energy such as found in capacitors or accumulators.

2.0 Purpose

The purpose of the Hazardous Energy Control - Lockout Program is to control the inadvertent release of energy. Included, but not limited to electricity, fluid pressure, air, kinetic, potential, and pressurized liquids which could cause injury to an employee during equipment maintenance, set up and adjustment. This document establishes minimum guidelines for an effective Hazardous Energy Control - Lockout program to protect employees and equipment from injury or damage.

3.0 Applicable Laws

- *Occupational Health and Safety Act (OHSA)*
- *R.R.O. 851/90 respecting Industrial Establishments: Sections 42, 68,74, 75 and 76*

4.0 Relevant Standards

- *Ontario Ministry of Labour (MOL) Engineering Data Sheet: 9-02: Lock-out Procedure for Machinery (June 1980)*
- *American National Standards Institute (ANSI) Standard: Z244.1-Lockout/Tagout of Energy Sources - Minimum Safety Requirements*
- *CAN/CSA- Z460-05*

5.0 Roles of the Workplace Parties

5.1 Managers

- Each manager shall ensure that new employees are trained regarding provisions and requirements of this Hazardous Energy Control - Lockout program

- Each manager shall effectively enforce compliance of this Hazardous Energy Control - Lockout program including the use of corrective disciplinary action where necessary

- Each manager shall assure that the locks and tags and devices required for compliance with the Lockout are provided to their employees

5.2 Workers

- Workers have a duty to report unsafe conditions in the workplace to the employer.

6.0 Definitions and List of Terms

6.1 Affected Employee

Those individuals whose job requires them to operate equipment or machinery subject to Lockout program

6.2 *Authorized Employee*

Those individuals who will physically lockout equipment for servicing/maintenance. These individuals may not necessarily be the employees who normally operate the equipment. This would be the Physical Resources Department and/or Outside Contractors

6.3 Hazardous Energy Source

An energy source when uncontrolled, may provide a risk of injury to the person repairing or otherwise working on equipment. Examples of hazardous energy include mechanical, electrical, pneumatic, hydraulic, chemical and gases or any combinations of the foregoing sources

6.4 Blankout

A device which prevents hazardous material or energy from flowing in a pipe

6.5 Blockout

A device which prevents the movement or rotation of equipment because of stored energy (i.e. a stored energy source may be hydraulic, air pressure, gravity, etc.)

6.6 Lockout
The act of making equipment or a hazardous energy source inoperable by preventing them from being operated by means of a padlock or multiple hasp hardware.

6.7 Tagout
The placement of a tagout device on an energy-isolating device, in accordance with an established procedure, to indicate that the energy-isolating device and the equipment being controlled may not be operated until the tagout device is removed.

6.8 Lockout Device
A device that utilizes a positive means, such as a lock, to hold an energy-isolating device in the safe position and prevent the energizing of a machine or piece of equipment.

6.9 Left Hand Rule
Standing to the right side of the switch, activate the handle with the left hand while facing away from the switch.

6.10 Trade Lock
A special lock specific to each trade. Electrical, Millwright, HVAC, etc. This lock shall be installed by the tradesperson whenever a lockout is going to extend beyond that person's shift. Each trade's individual will carry their own trade locks. The locks will be keyed alike only for each corresponding trade. For example and electrician will not be able to remove a HVAC Trade Lock, and the same for HVAC and all other tradespersons. The locks shall not be used for personal protection, strictly to maintain the lockout while no one is working on the equipment. They are to be only removed at the completion of the job.

7.0 Education and Enforcement

The review of the Program will be performed **annually** to assure that the Energy Control procedures continue to be implemented properly and that the employees are familiar with their responsibilities. In addition, a representative from the Joint Health and Safety Committee will conduct periodic inspections.

8.0 Minor Servicing Tasks And Troubleshooting

Employees performing adjustments and/or other minor servicing activities during normal operations that are routine, repetitive, and integral to the facility equipment (checking motor rotation or speed) are not covered by the Hazardous Energy Control-Lockout program. However, if the employee must either remove or bypass safeguards or other safety devices or place their body where they could be caught or trapped by moving machinery, the equipment must be de-energized, isolated and locks and tags must be applied to the energy isolating devices. This Hazardous Energy Control-Lockout program does not apply to electrical testing

or troubleshooting or work performed above 750 volts.

9.0 Authorization

9.1 Locks - Maintenance

- Each authorized (Physical Resources) employee shall be issued 2 locks, the locks will be issued through the Physical Resources Department and a record of all locks and tags issued shall remain there. The manager of the department or designate shall also keep a record of all authorized employees
- Each employee given such locks will be given one (1) key for their own personal use
- Combination locks or locks with duplicate keys shall not be permitted
- Only the employee shall have a key to their locks.
- The locks shall be used for Lockout purposes only, not for toolboxes or other devices
- Locks and keys must not be lent or transferred amongst employees
- The individual locks issued to the employee's shall have their employee number inscribed on the lock
- All individual lockout locks shall be of the same shape and size
- All lockout locks shall be colour coded to distinguish between trade, Manager, or Outside Contractor
- Equipment locked out for a period of time which extends beyond the trade worker's shift, without someone working on it, shall have *a specific "Trade Lock"* installed on all isolating devices, a tag shall also be installed stating the name, date and why the lock was installed
- A logbook will be kept in the Physical Resources area. This logbook must be kept current with notes indicating name, date, machine and the reason for the use of the *Trade Lock*
- When a *Trade Lock* is installed, it is strictly to maintain the lockout during an extended period. The lock may only be removed by a person of the same trade
- The *Trade Lock may only be removed by that same trade and only to be removed when work has been completed and the employee's personal lock has been removed*

- Under no circumstances shall any Physical Resources employee work under the *Trade Lock*. Their individual lock and tag must be installed on the energy-isolating device

9.2 Tags

- An approved tag shall be installed with all lockout locks

- The tag shall be legible and understandable by all authorized and affected employees and all other employees working in the area

- The tag must be durable – capable of withstanding the environment to which it is exposed to for the maximum period of time that exposure is expected

- The tag shall bear the name of the authorized employee who installed it, and shall contain the date, and the reason for the Lockout

- The tag must be substantial, including their means of attachment, so that accidental removal is prevented

9.3 Individual Lockout

When more than one employee services the same equipment and lockout the same energy-isolating device, this is called *Individual Lockout*

- A multiple locking device (hasp) shall be issued to each authorized employee when the individual locks are issued

- The first authorized employee to arrive on the job shall install a multiple lock hasp and their own individual lock

- Each authorized employee shall attach their own lock and tag to the hasp; this is to ensure that they are protected

- Each employee will retain the key to their lock

- In individual lockout situations it must be clear to all employees that each employee is not considered protected until their own lock is in place

9.4 Outside Contractors

- When outside contractors or sub–contractors are performing service or maintenance on site; they must comply with the Wilfrid Laurier University Lockout program

- A review of the Lockout program shall be conducted at the Safety Orientation Meeting for any outside contractors and sub-contractors, when possible.

- All outside contractors and sub-contractors are responsible for bringing their own locks, tags and multiple locking devices on site.

9.5 Shift Change or Extended Periods

- If servicing or maintenance lasts more than one work shift, Lockout must not be interrupted.

- If it is determined that servicing or maintenance is going to last more than one shift, a *Trade Lock* shall be installed.

- The *Trade Lock* shall be installed by the affected trade - (electrical, HVAC, etc.)

- Information must be recorded in the logbook located at the Trade Lock Centre in the Physical Resources area.

  The *Trade Lock* may only be removed by a person of the same trade

10.0 The Procedure

10.1 Preparation for the Shut Down

Notify all affected employees and/or the manager in the area that a Lockout procedure is going to be performed and the reason thereof. All authorized employees shall know the type and magnitude of energy that the machine or equipment utilizes and the hazards associated.

10.2 Shutdown the Equipment

Use the normal stopping procedure for the equipment being serviced. This may be putting a switch in the "off" position, or pressing a "stop pushbutton". It may involve a more complex operation.

10.3 Isolate The Equipment

Carefully isolate the system from every energy source supplying it. Close valves, de-energize main disconnect switches or circuit breakers. **It must be noted, the extreme importance of practicing the *"Left Hand Rule"* when de-energizing and especially energizing an electrical disconnect switch; standing to the right side of the switch, activate the handle with the left hand while facing away from the switch.**

Disconnect or cap any auxiliary power sources such as secondary electrical, steam, hydraulic, or pneumatic systems, valves, and other energy-isolating devices.

10.4 Apply Lockout Devices

Attach a lock and tag to the energy – isolating device (i.e. ball valve, circuit breaker) to prevent someone from restoring the flow of energy. Any personal lock shall be installed and removed only by the owner. The key to the lock shall remain in the possession of the owner at all times.

10.5 Control of Stored Energy

Relieve, disconnect or restrain any residual hazardous energy that could be present, check that all moving parts have stopped turning, relieve trapped pressure, blank pipe flanges (Confined Space Entry), discharge any electrical capacitors, accumulators, block or support elevated equipment.

10.6 Verify Isolation of Equipment

Ensure that all employees are clear of the Lockout area. Test to make sure the right system has been locked out and cannot be operated, do this by pressing all start buttons or other activating controls, and then return them to the **"off"** position.

11.0 Release from Lock out

11.1 Re-Commissioning Of Equipment or Machinery

- When work has been completed, be sure the equipment is operationally intact and that tools and other non-essential items are cleared
- Inform affected employees and/or the manager of the area that locks and tags will be removed
- Conduct a head count to be sure that everyone is clear of the area
- Remove Lockout devices, each worker must remove his or her own lock
- Any Trade Locks and tags will be removed and tags will be returned to the Trade Lockout Center located at the Physical Resources area
- Follow the equipment or machinery start – up procedure. Perform a test run to ensure it functions as planned
- Notify affected employees and/or the manager of the area that the equipment or machinery is ready for use

11.2 Lock and Tag Removal

In the event that an employee has left their lock and tag on an energy – isolating device, and has left the premises, the following procedure shall be followed and documented.

- Ensure the employee has left the premises
- Attempt to contact the employee
- If the employee is contacted, they shall return to the premises, if practical, to remove their lock and tag
- If the employee cannot be reached or is unable to return to the premises, the physical Resources Manager or their delegate shall first determine the reason for the Lockout
- Determine the status of the job
- A thorough inspection of the equipment or machine is to be conducted by the Physical Resources manager or their delegate and all employees who were involved with the Lockout . This is to determine whether it is safe to remove the lock and tag
- Once it has been determined that it is safe to remove the lock and tag, that Maintenance Manager or their delegate shall complete the ***Lock and Tag Removal Report***
- The lock and tag shall be removed with a witness present, and the lock and tag secured by the Physical Resources manager or their delegate.
- A special warning tag shall be placed at the employee's time card indicating to the employee that their lock and tag has been removed and to report to their manager immediately.

12.0 Training

The managers or their designated representatives are required to provide training to ensure that the purpose and function of the energy control program are understood by employees. Through training, employees will be required to possess the knowledge and skills required for safe application, usage, and removal of energy controls. Training shall include the following:

1. Each authorized employee shall receive training in the recognition of applicable hazardous energy sources, the type and magnitude of the energy available in the workplace, and the methods and means necessary for energy isolation and control

2. Each affected employee shall be instructed in the purpose and use of the energy control procedure

3. All other employees whose work operations are or may be in an area where energy control procedures may be utilized, shall be instructed about the procedure, and about the prohibition relating to attempts to restart or re-energize machinery or equipment which are locked out or tagged out

When tagout systems are used, employees shall also be trained in the following limitations of tags:

1. Tags are warning devices affixed to energy-isolating devices, and do not provide the physical restraint on those devices that is provided by lockout

2. When a tag is attached to an energy-isolating means, it is not to be removed without authorization of the person responsible for it, and is never to be bypassed, ignored or otherwise defeated

3. Tags must be legible and understandable by affected employees, and all other employees whose work operations are or may be in the area, in order to be effective

4. Tags and their means of attachment must be made of materials which will withstand the environmental conditions encountered in the workplace

5. Tags may evoke a false sense of security, and their meaning needs to be understood as part of the overall energy control program

6. Tags must be securely attached to energy-isolating devices so that they cannot be inadvertently or accidentally detached during use

Retraining shall be provided for all authorized and affected employees every two years or when there is a change in energy control procedures.

Retraining shall establish employee proficiency and introduce new or revised control methods and procedures as necessary. The managers or their designated representatives shall certify that employee training has been accomplished and is being kept up-to-date. The certification shall contain each employee's name and dates of training.

LOCKOUT LOCK REMOVAL REPORT

Department: _____

Employee's Name: _____

Machine or Equipment: _____

Date Lock and Tag Removed: _____ Time: _____

Reason for Removal of Lock and Tag

_____

___

Was every reasonable attempt made to contact the employee?

Please check:

_____ Verification was made that the employee was not in the facility

_____ An attempt was made to contact the employee at home

_____ The time the employee was contacted

_____ The employee was given the choice of coming in immediately and removing the lock, but refused

_____ The employee could not be reached

_____ The reason the lock and tag were installed has been determined

_____ The status of the work performed has been determined

_____ Other employees working on the machine or equipment have been consulted with

_____ Witness to the lock and tag removal

Other Comments: _____

Managers Signature: _____ Date: _____

WARNING

Notice to Employee

Name: _____

Lock and Tag Removal

Section

_____

Lockout Program

Please report to your immediate Manager

Date: _____

REVISION HISTORY

Revision	*Date*	*Comments*	*Initials*
00	Oct 1/07	SOP comes into effect	SK
01	Oct 1/08	Program reviewed	SK
02	Feb 4/10	Revisions made to s6.10, s7.0, s9.1, s9.4, s11.1, 11.2,	CS

WATERLOO | **BRANTFORD** | **KITCHENER** | Toronto



Hot Work Program

Effective: February 9, 2008
Revision: 03
Revision Date: July 24, 2013
WILFRID LAURIER UNIVERSITY

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Hot Work Program
Document No. FACL-004-03

1. Purpose

The purpose of this program is to outline the procedures for Laurier employees and contractors to follow when performing hot work activities. This program is intended to meet or exceed the requirements of the Ontario Occupational Health and Safety Act and its applicable regulations and the requirements of the Ontario Fire Code.

2. Scope

This program applies to all Laurier employees and all contractors who perform hot work on Laurier property.

This program provides requirements and procedures relating to ***planned*** hot work operations. In the event that ***unplanned*** work needs to take place in an "emergency" situation, (outside of normal operating hours, or without standard notice periods) the same procedures will be followed. However, work may be authorized by the Fire Safety Officer or designate(s). This type of situation is not intended to be used as a substitute for proper planning, but to permit emergency repairs to take place where there exists an elevated risk that may adversely affect a university building.

3. Laurier Contact Information

Contact	Laurier Brantford	Laurier Waterloo / Kitchener location
Special Constable Service	Market Place First Floor 45 Market Street Internal Ext. 5888 or (519) 756-8228 x 5888	75 University Ave. West Lower Level - Student Services Building Internal Ext. 3333 or (519) 885-3333
Physical Resources	(519) 756-8228 x 5761	(519) 884-0710 x 6280
Fire Department	Brantford Fire Department (519) 752-4346	Waterloo Fire Rescue & Kitchener Fire Department (519) 741-2494
Residential Services	(519) 756-8228 x 5805	(519) 884-0710 x 3617
Fire Safety Officer (SHERM)	Office – (519) 884-0710 x 3887 Cell – (519) 496-2158	

4. Definitions

Competent Person – A person who is qualified because of knowledge, training and experience to organize the work and its performance and has knowledge of any potential or actual danger to health or safety in the workplace.

Confined Space - A fully or partially enclosed space, (a) that is not both designed and constructed for continuous human occupancy, and (b) in which atmospheric hazards may occur because of its construction, location or contents or because of work that is done in it; ("espace clos").

Fire Department - Waterloo Fire Rescue, Brantford Fire Department and Kitchener Fire Department will herein be known as the "Fire Department".

Fire Watch - A competent person, other than the hot work operator, that physically observes and monitors conditions of an affected area during hot work operations. This may also include monitoring an area where fire protection systems have been shut down due to the hot work. For the purposes of this program, fire watch duties are broken down into three parts.

i. **Primary Fire Watch –** Constant fire watch while hot work operations are being completed.
ii. **Secondary Fire Watch –** Constant fire watch for one hour after hot work operations have ended.
iii. **Final Fire Watch –** A final check of the affected area three hours after the secondary fire watch is completed.

Hot Work- Any operation that produces heat sufficient enough to ignite gases, vapours, dusts etc. Examples of hot work include, but are not limited to cutting, welding, coring, grinding, brazing, soldering *etc.*

Hot Work Operator - A competent person authorized by the Permit Issuer or Physical Resources to complete hot work operations. The hot work operator must never take on responsibilities of "Fire Watch" during hot work operations. Fire watch duties must be completed by another competent person during hot work operations.

Hot Work Permit- The permit authorizing the performance of hot work which ensures all the necessary communication and safe guards for the hot work have been accomplished.

Permit Issuer - Fire Safety Officer or designate.

5. Responsibilities

The Fire Safety Officer (or designate) shall:

- Maintain Hot Work program.
- Issue hot work operator a permit (see appendix C).
- Provide hot work operator with Laurier's approved fire alarm procedures.
- Ensure permit is completed before operations begin.
- Inspect affected area prior to issuing permit.
- Post permit in affected area.

- Determine if there are any hazards, or potential hazards present that could be impacted by the hot work.
- Ensure that Hot Work program is available for viewing.
- Ensure that all individuals involved in hot work operations are familiar with this program and its requirements.
- Provide the hot work operator the Fire/Life Safety Shut Down procedures, if required.

The Hot Work Operator shall:

- Review and be familiar with this program.
- Review program 48 hours prior to hot work taking place.
- Request a permit from the Permit Issuer (see appendix A) 24 hours prior to work.
- Handle equipment safely and perform work so as to not endanger the health, safety or lives of occupants and/or property.
- Follow all safety measures listed in permit and any other measures the Permit Issuer has deemed necessary.
- Immediately cease work if an unsafe condition develops and notify appropriate personnel.
- Cease hot work operations and remain in affected area if the Fire Watch has to leave for any reason (i.e. performing fire watch in other areas affected due to fire/life safety system shutdown or breaks).
- Follow fire alarm procedures if an emergency such as fire occurs.
- Perform site inspection before beginning hot work operations.
- Ensure that the work area is free from combustibles.
- Be responsible for the overall safe operation of hot work activity.
- Ensure equipment and personal protective equipment is in good repair.
- Ensure workers wear required personal protective equipment.
- Ensure that, within 15 metres of work area;
  a. The floor is swept clean of combustibles.
  b. Combustible floors (carpets etc) are wetted down or covered with fire resistant tarpaulins.
  c. There are no flammable liquids or materials present.
  d. There are no dangerous or volatile vapours mists, fumes or dusts present.
  e. Openings in walls floors or equipment where a spark could enter are covered.
  f. Combustibles are moved to opposite sides of walls, ceilings or floors where hot work is performed.
  g. Use fire-resistant tarpaulins or metal shields to protect combustibles that cannot be moved.
  h. Ductwork and duct openings are sealed.
  i. Nearby personnel are moved away or otherwise protected from hot work activities.

Fire Watch shall:

- Ensure all operational fire extinguishing equipment, fire extinguishers, fire hoses and persons qualified to operate them are immediately available.
- Be trained in the use of portable fire extinguishers.
- Have a minimum 2A:10B:C portable fire extinguisher immediately available at all times during hot work operations.
- Keep a constant vigil on the area affected.
- Complete secondary fire watch for one hour after hot work is complete to check for smouldering fires. After the secondary fire watch is complete, the area affected must be re-checked three hours later (this can be done by someone other than the Fire Watch e.g. Special Constable Service or another competent designate).
- Follow Laurier's approved fire alarm procedures.
- Be prepared to provide initial fire response.

- Additional fire watch may be required if hot work cannot be directly observed by a single Fire Watch e.g., in adjacent rooms or upper and lower floors.

Special Constable Service Shall:

- Follow the "Fire/Life Safety Shut Down Procedures" when required.
- Provide fire watch during emergency situations.

Physical Resources Shall:

- Request a Hot Work Permit from the Permit Issuer (see appendix A) 24 hours prior to hot work taking place.
- Provide the Hot Work program to the hot work operator 48 hours prior to planned hot work taking place.
- Follow Fire/Life Safety Shut Down procedures when applicable.
- Follow procedures outlined in section 7.3 if commencing soldering operations.

6. General Program Requirements

6.1 General Information

Anyone performing hot work in or within 10 meters of a Laurier building must obtain a hot work permit prior to commencing such work and follow the procedures outlined in section 7.1. In addition, work must be coordinated with other work in the area such that it meets the requirements of the permit.

- Hot work must not be performed in a sprinkler protected location if such protection is not in service or otherwise impaired, unless adequate alternate precautions have been taken.
- If any fire/life safety systems need to be shut down, due to the hot work operations, the "Fire/Life Safety System Shut Down" procedures must be followed. To view procedures go to www.wlu.ca/sherm.
- The use of hot work methods in any university locations must be avoided if an alternate practical means of accomplishing the desired results is possible.
- Issued permits must be posted at the work site in a conspicuous place at all times.
- A hot work permit is only intended to cover one specific job in one location unless otherwise specified.
- Laurier employees may void a permit and stop all operations where there is reason to believe that circumstances present a hazard. Once the hazard has been addressed, the permit can be either re-authorized or re-issued in its entirety at the discretion of the Permit Issuer.
- If hot work is required to be completed in a "confined space", both the Hot Work Program and the Confined Space Entry Program must be followed.

The following operations require hot work permits:
Cutting, grinding, welding, brazing, heating, plasma cutting, sparking tools in areas where there is storage of solvents within 15 meters, or any other operation that produces heat sufficient enough to ignite gases, vapours, dusts etc.. For soldering operations please see 7.3.

The following operations do not require hot work permits:
Sparking tools such as electric drills, open electrical instruments, electrical equipment (office locations corridors, exit stairs, service areas and service spaces), and use of electrical equipment greater than 15 meters from solvents.

Hot work operations taking place outside and greater than 10 meters from a university building or outdoor storage of flammable and combustible liquids (see 6.2).

6.2 Hot Work Operations Outside Buildings

Hot work operations taking place on Laurier property greater than10 meters from a university building do not require a hot work permit, however must follow the procedure listed in 7.2 to ensure the safety of the university community and its property.

7. Procedures

7.1 Hot Work Operations taking place in and within 10m of Laurier buildings

This procedure is to be followed during planned hot work operations. During unplanned emergency situations, taking place after hours, on weekends or statutory holidays, the same procedure must be followed; however the permit may be issued by the Fire Safety Officer's designate.

7.1.1 Physical Resources must provide the Hot Work Program to the hot work operator 48 hours prior to hot work commencing (see appendix B for flow chart).

7.1.2 Hot work operator or Physical Resources employee must fill out and submit a "Hot Work Request" (see appendix A) and submit to the Permit Issuer 24 hours prior to hot work operations taking place.

7.1.3 The Permit Issuer must inspect the affected area prior to hot work commencing.

7.1.4 Physical Resources, if required, must shut down any affected fire/life safety systems and follow the "Fire/Life Safety Shut Down" procedures.

7.1.5 The Permit Issuer must advise the hot work operator of any potential hazards and any applicable safety requirements including the required PPE and fire watch responsibilities prior to commencing hot work.

7.1.6 Permit Issuer then issues the permit and hot work begins.

7.1.7 Fire watch starts primary watch and monitors the affected area continuously during hot work operation.

7.1.8 Hot work operator immediately notifies Physical Resources when hot work is completed if any fire/life safety systems are affected.

7.1.9 Physical Resources (or Contractor, if given responsibility to do so by Physical Resources) immediately puts compromised fire/life safety system back in normal operation after hot work has been completed.

7.1.10 Fire watch continues secondary watch duties. Fire watch continues for one hour.

7.1.11 Final fire watch is then completed by the Hot Work Operator, Fire Watch or other competent person (this must be determined prior to hot work commencing) three hours after the secondary fire watch is completed.

7.1.12 The competed hot work permit must be submitted to the Fire Safety Officer at 232 King Street, Room K101 within 24 hours for record keeping.

Note 1: If a fire alarm sounds at any point during hot work operations the hot work operator must immediately stop hot work operations, secure the site if it's safe to do so, and follow Laurier's approved fire alarm procedures. Advise Special Constable Services and the Fire Department of the location and the nature of the hot work operation.

Note 2: If a fire breaks out because of the hot work operations, immediately follow Laurier's approved fire alarm procedures.

7.2 Hot Work Operations taking place outside and >10m from buildings

This procedure must be followed anytime hot work operations take place outside and greater than 10 meters from Laurier Buildings.

7.2.1 Hot work operator must notify the Fire Safety Officer and Special Constable Service via phone or email of the date, location and type of hot work to be complete at least 1 hour prior to hot work commencing.

7.2.2 Hot work operator must have a portable fire extinguisher immediately available to them at all times (2A:10B:C).

7.2.3 Combustible materials must be a minimum of 15 meters from the hot work operation or must be adequately protected. This includes, but is not limited to shrubs, trees, grass, combustible structures etc.

7.2.4 The hot work operator must take safety precautions to protect the university community, such as installing guards, screens or any other measures specified by Physical Resources, Special Constable Service or SHERM.

7.3 Soldering Operations

Physical Resources employees and contractors may complete soldering operations at Laurier without requiring a hot work permit. However, the following procedure must be adhered to at all times.

7.3.1 Physical Resources employees must notify their direct supervisor and contractors must notify their Laurier contact, at least 15 minutes prior to soldering taking place.

7.3.2 The soldering operator must determine if any fire/life safety systems need to be shut down due to the soldering operations. If so, the "Fire/life Safety Shut Down" procedures must be followed.

7.3.3 The soldering operator must have a minimum 5lb ABC (2A:10B:C) fire extinguisher immediately available to them during soldering operations.

7.3.4 The soldering operator must take every reasonable precaution to protect combustible items (walls, floors, ceilings, furniture etc.) from being ignited during soldering operations.

7.3.5 When soldering operations are complete, the soldering operator must wet the affected area (piping etc.), and ensure it poses no danger before leaving.

8. Relevant Standards / Legislation / Policies

- Ontario Occupational Health and Safety Act
  - Ontario Regulation 213/91 (Construction Projects)
  - Ontario Regulation 851 (Industrial Establishments)
- Ontario Fire Protection and Prevention Act
- Ontario Fire Code Compendium (2007)

9. Revision history

Revision	*Date*	*Comments*	*Completed by*
00	Feb 9/08	SOP comes into effect	EOHS
01	Feb 9/09	Annual Review, no changes	EOHS
02	Feb 5/10	Revisions to Definitions and s4	CS
03	July 24/13	Re-branded/changed procedures and format/add soldering, brazing & outdoor hot work activities/ add request form	PT

10. Appendix "A" Hot Work Request Form

Please fill out and submit this form 24 hours prior to hot work operations commencing to allow adequate time for the permit to be reviewed.

1. Date of work: _____

2. Date form was submitted:___

3. Time hot work will begin: ___

SAMPLE

4. Work executed by: _____

Laurier University Employee ☐ (or) Outside Contractor ☐

5. Job Site(s): (building/room/area)_____

6. Type of Work: (check work being done)

Welding ☐ Brazing ☐

Cutting ☐ Soldering ☐

Grinding ☐ Other ☐

Heating ☐

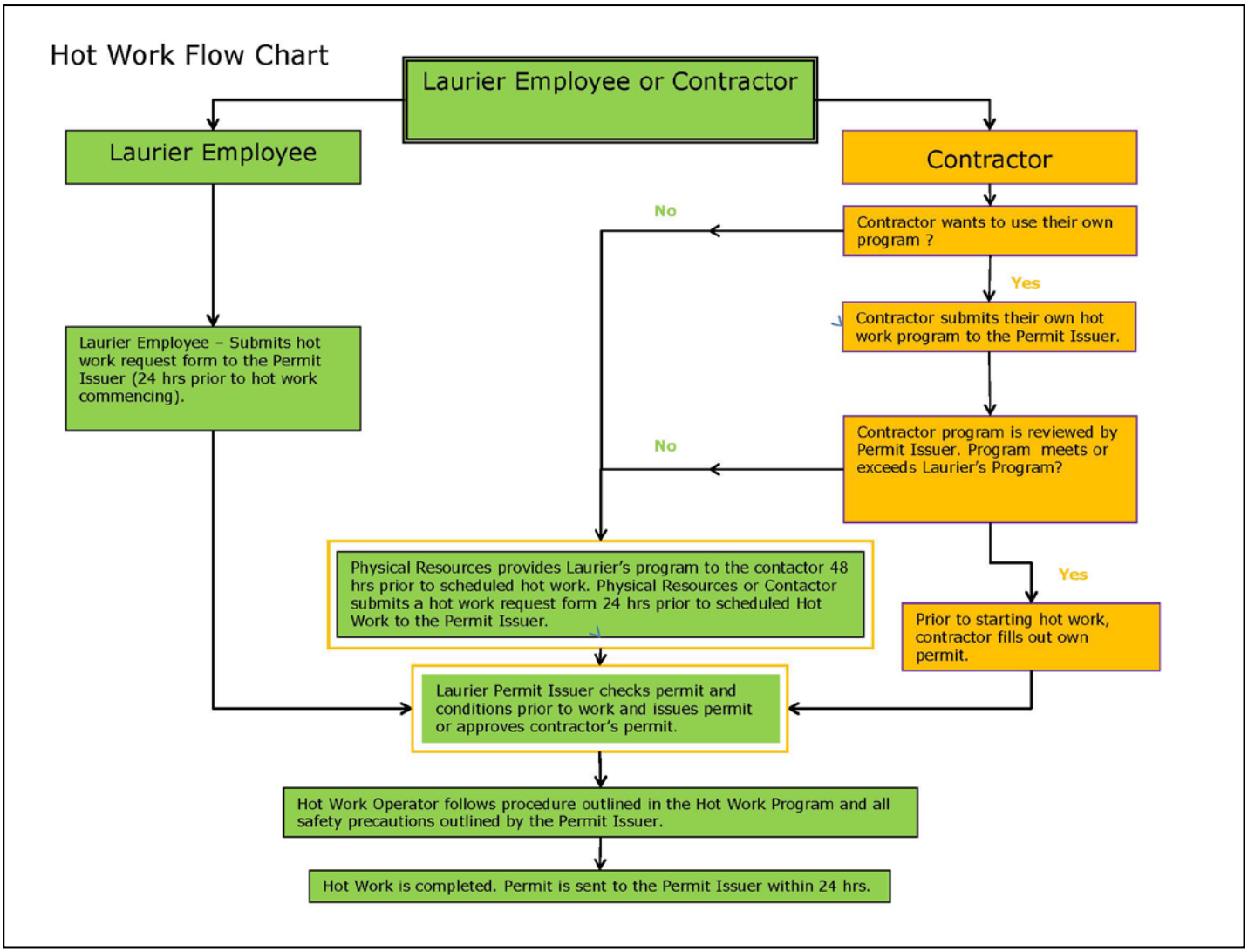
7. Description of Work

_____
_____
_____
_____

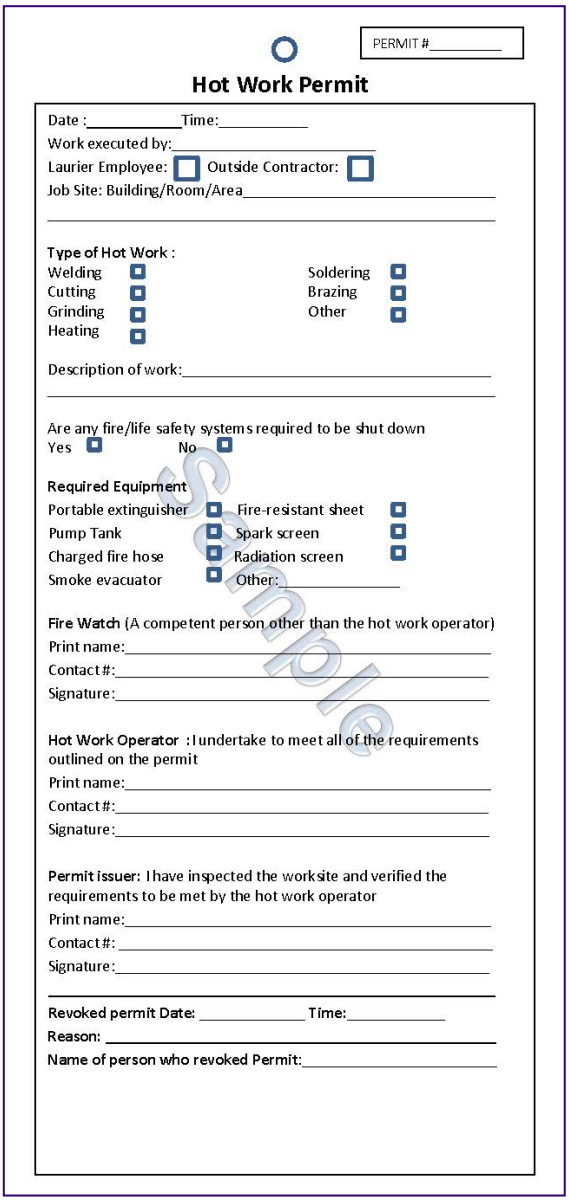
To submit this form, click the "Submit" button located on the top right side of this page.

Note: Fillable form can be found online at www.wlu.ca/Sherm. Click on "General Topics", "Hot Work Program", "Request form".

11. Appendix "B" Flow Chart



12. Appendix "C" Hot Work Permit (Sample Only)



PERMIT #_____

Hot Work Permit

Date :_____Time:_____
Work executed by:_____
Laurier Employee: ☐ Outside Contractor: ☐
Job Site: Building/Room/Area_____

Type of Hot Work :

Welding	☐	Soldering	☐
Cutting	☐	Brazing	☐
Grinding	☐	Other	☐
Heating	☐		

Description of work:_____

Are any fire/life safety systems required to be shut down
Yes ☐ No ☐

Required Equipment

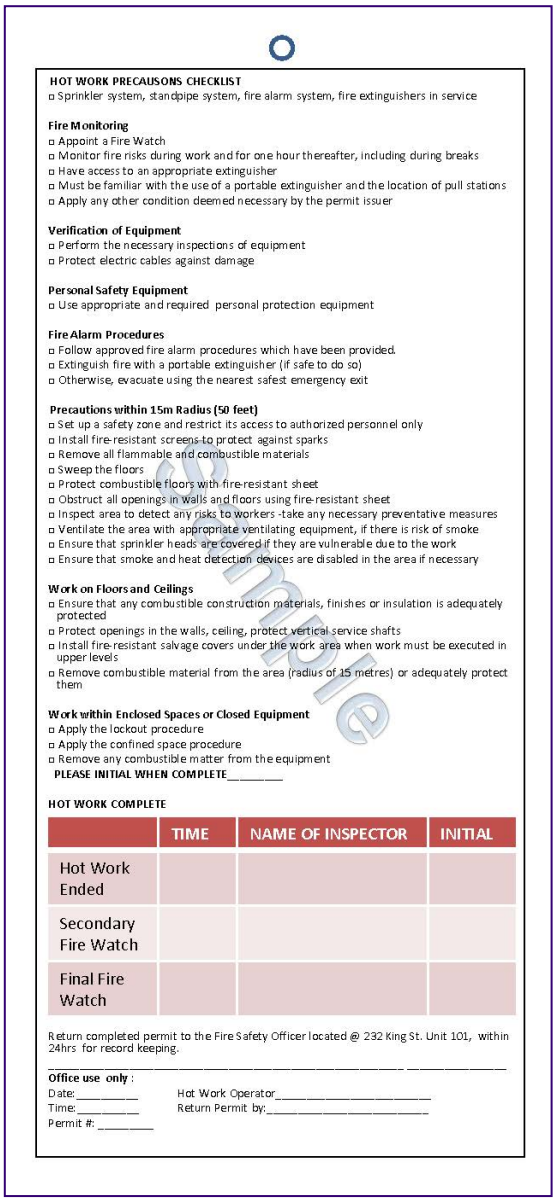
Portable extinguisher	☐	Fire-resistant sheet	☐
Pump Tank	☐	Spark screen	☐
Charged fire hose	☐	Radiation screen	☐
Smoke evacuator	☐	Other:_____	

Fire Watch (A competent person other than the hot work operator)
Print name:_____
Contact #:_____
Signature:_____

Hot Work Operator : I undertake to meet all of the requirements outlined on the permit
Print name:_____
Contact #:_____
Signature:_____

Permit issuer: I have inspected the worksite and verified the requirements to be met by the hot work operator
Print name:_____
Contact #:_____
Signature:_____

Revoked permit Date: _____ **Time:**_____
Reason: _____
Name of person who revoked Permit:_____



HOT WORK PRECAUSONS CHECKLIST
▫ Sprinkler system, standpipe system, fire alarm system, fire extinguishers in service

Fire Monitoring
▫ Appoint a Fire Watch
▫ Monitor fire risks during work and for one hour thereafter, including during breaks
▫ Have access to an appropriate extinguisher
▫ Must be familiar with the use of a portable extinguisher and the location of pull stations
▫ Apply any other condition deemed necessary by the permit issuer

Verification of Equipment
▫ Perform the necessary inspections of equipment
▫ Protect electric cables against damage

Personal Safety Equipment
▫ Use appropriate and required personal protection equipment

Fire Alarm Procedures
▫ Follow approved fire alarm procedures which have been provided.
▫ Extinguish fire with a portable extinguisher (if safe to do so)
▫ Otherwise, evacuate using the nearest safest emergency exit

Precautions within 15m Radius (50 feet)
▫ Set up a safety zone and restrict its access to authorized personnel only
▫ Install fire-resistant screens to protect against sparks
▫ Remove all flammable and combustible materials
▫ Sweep the floors
▫ Protect combustible floors with fire-resistant sheet
▫ Obstruct all openings in walls and floors using fire-resistant sheet
▫ Inspect area to detect any risks to workers -take any necessary preventative measures
▫ Ventilate the area with appropriate ventilating equipment, if there is risk of smoke
▫ Ensure that sprinkler heads are covered if they are vulnerable due to the work
▫ Ensure that smoke and heat detection devices are disabled in the area if necessary

Work on Floors and Ceilings
▫ Ensure that any combustible construction materials, finishes or insulation is adequately protected
▫ Protect openings in the walls, ceiling, protect vertical service shafts
▫ Install fire-resistant salvage covers under the work area when work must be executed in upper levels
▫ Remove combustible material from the area (radius of 15 metres) or adequately protect them

Work within Enclosed Spaces or Closed Equipment
▫ Apply the lockout procedure
▫ Apply the confined space procedure
▫ Remove any combustible matter from the equipment
PLEASE INITIAL WHEN COMPLETE_____

HOT WORK COMPLETE

	TIME	NAME OF INSPECTOR	INITIAL
Hot Work Ended			
Secondary Fire Watch			
Final Fire Watch			

Return completed permit to the Fire Safety Officer located @ 232 King St. Unit 101, within 24hrs for record keeping.

Office use only :
Date:_____ Hot Work Operator_____
Time:_____ Return Permit by:_____
Permit #: _____

Sample

DATE

COMPANY NAME,
ADDRESS,

Re: [insert name of project/description of work]

AGREEMENT RELATING TO THE USE OF A LAURIER KEY OR BUILDING PASS

At your request, Wilfrid Laurier University ("Laurier" or "University") will issue to you or your authorized employees, agents or contractors temporary loaner keys or electronic access to buildings/areas/offices ("Facility") of Wilfrid Laurier University for necessary construction and/or maintenance services. In this agreement "key" or "keys" includes all physical keys, pass codes or electronic access to a controlled University Facility.

A deposit of $500 per submaster key and/or $1,000 per master key issued will be required before the University will issue any key(s) to you. Please make a certified cheque payable to Wilfrid Laurier University, which will be held in trust. Upon return of all key(s) issued, the University will return the certified cheque.

At all times, these keys remain the property of Laurier and are loaned to you on the understanding that if they are lost, not returned, or if there is evidence of key duplication, tampering or unauthorized use, your company shall be responsible and liable for the cost of any associated re-keying if required. There will be a charge deducted from your contract to cover all costs to re-key the affected Facilities (which charges may be recovered by deducting from any payments owing by Laurier to you under separate agreement). This is required to maintain security. In addition to the cost of re-keying Facilities (which may include office(s), building(s) or areas of a campus in the University's sole discretion), you will also be liable for all costs associated with lost or stolen keys, including replacement of all keys currently in use for authorized users or University employees for the affected Facilities.

It is your responsibility to ensure that all key holders understand and follow all obligations associated with use of a University key, including obligations arising from the University Key Control Policy 4.12 (https://legacy.wlu.ca/page.php?grp_id=2505&p=12100). Key holders must ensure that doors are kept secured and that no unauthorized individuals have access to the keys or Facilities. When leaving the Facilities all doors shall be secured to the same standard as they were upon arrival for the day. Failure to appropriately maintain the security of the Facilities may result in the loss of the use of keys.

Keys will be issued for the minimum period necessary to accomplish the authorized construction or maintenance. Keys cannot be duplicated or loaned to others. If you require additional keys, please contact the Physical Resources office at ext 6280, or at 81 Lodge St.

The University reserves the right to recall and/or to examine keys at any time. Any loss of a key must be reported immediately to the Physical Resources office at ext 6280, or at 81 Lodge St. Keys must be returned to the Physical Resources Office, 81 Lodge Street before final payment will be processed by Laurier.

You are responsible to assure that only authorized employees, agents or contractors receive a Laurier key. You must list on the attached form the names of all individuals who will be issued or have use of a Laurier key. It is your responsibility to verify through photo identification that only authorized individuals are issued a key. You must have all recipients sign for all keys.

You, and your employees, agents or contractors agree to abide by all Laurier rules, regulations, policies and procedures with respect to the access to and use of Laurier keys. You agree to indemnify and save harmless Laurier from and against all actions, causes of action, claims, damages, expenses or losses which arise out of or in connection with the use or misuse of a Laurier key and access to Laurier's Facilities with a Laurier key.

The terms of this agreement are separate from and in addition to any contract, memorandum of understanding or agreement between you and Laurier relating to construction and/or maintenance services at Laurier.

This will confirm that you have received the following key(s)/fob(s) as of this date:

1 – KEY LETTER & ISSUE #
1 – KEY LETTER & ISSUE #

WILFRID LAURIER UNIVERSITY

_____ Date: _____

Name: _____
Title:
"I have authority to bind the University"

LAURIER
Inspiring Lives.
Physical Resources

MINUTES OF PRECONSTRUCTION MEETING

Date of Meeting: **Project:**

Date Minutes Distributed: **Project No:**

In Attendance:

	Telephone	**Email**

Distribution: All present /file

1.0 Contractor

The Contractor for this project is _____.
The Contractor is deemed to be the Constructor.

2.0 Letter of Intent

The Contractor confirmed receipt of the Letter of Intent from the Consultant, and is in agreement with the contract amount stated therein: **yes / no**

3.0 Preconstruction Documents Required by WLU

The Contractor shall submit the following documents:

Certificate of Commercial and General Liability Insurance
Workplace Safety and Insurance Board Certificate
Workplace Injury Summary Report
Health and Safety Policy/Program including procedure for verification of training of site personnel
Hazardous Materials List (MSDS to be provided and retained on site)
Contractor's Performance/Labour/Material Bond (if applicable)

4.0 Project Correspondence

All written correspondence concerning this project must show the "**project name and number"** as indicated at the start of these minutes.

5.0 Starting and Completion Dates

Project schedule submitted at this meeting: **yes / no**
Date project to commence:
Date project to finish (100% completion):
The Contractor's normal working hours are: 7:00 a.m. – 5:00 p.m.

6.0 Field Supervision

Field inspection for the University will be carried out by:

7.0 Job Superintendent

Superintendent's name: cell:
Will be on site: full time /

8.0 Job Meetings

Job meetings to be held:
Location of job meetings:
Date and time of scheduled meetings:

9.0 Building Permit

A building permit for this project has been applied for by _____ on behalf of the University.

10.0 Notice of Change Procedures

Contemplated Change Notice will be issued only when there is a change involving contract price. Upon receipt of a "contemplated Change Notice", the Contractor will send a written quotation (extra or credit) to the Wilfrid Laurier University. No work is to proceed until the quotation has been approved by the Wilfrid Laurier University.

11.0 Shutdowns

The Contractor is asked to give **ten (10) working days** notice for services shutdowns, i.e. electrical, steam, hot/cold water, air gas, etc. Shorter shutdown periods may be arranged depending on the nature of the service.

Isolation of existing fire control systems will be initiated by the Project Administrator for WLU.

12.0 Working Drawings and Specifications

Number of additional working drawings and specifications required:
Drawings:
Specifications:

13.0 As-Built Drawings

At the completion of the project the contractor shall provide the University with **two (2) sets** of "As Built" drawings to fully conform to the requirements of the WLU specifications for this project.

14.0 Manuals / Shop Drawings

Provide as called for in the specifications all shop drawings for pre-ordering approvals and submit as early as possible all manuals containing shop drawings, instructions and maintenance data relative to all major components.

Deliveries of shop drawings for review purposes shall be carried out by courier service.

15.0 Parking

16.0 Garbage Bin

The contractor will place a waste container as required, exact location to be determined in the filed, not to conflict with emergency vehicles, entrances, or emergency exits, during construction. The contractor will be responsible for any and all damage created by the waste disposal service, supplying this project.

17.0 Safety Procedures

A copy of the Laurier Contractor Safety Guidelines has been provided to the Contractor and reviewed at this meeting.

The Contractor shall be the Constructor and is fully responsible for safety within the work area.

The University may monitoring safety in the field on all of its projects. Of particular interest, are the following items: Notice of Project document forwarded to the Ministry of Labour, applicable WHMIS documents on the site, Safety Policies and job site Safety Committees, hard hats and safety footwear on all projects at all times, housekeeping, work where there is a danger of falling, and proper protection, signage and barriers for the safety of the public as well as for workers.

However, by noting or not noting safety infractions, the University does not accept any responsibility for the individual contractor's lack of awareness or enforcement of the applicable requirements of the Occupational Health and Safety Act. Contractors must be aware, that when work begins at any building or site, that they assume full responsibility for the safety, in all respects, for that site and surrounding areas. The contractor also assumes responsibility for the safety of any Wilfrid Laurier University staff or students entering the work site area. For that reason, it is recommended as a matter of proper procedures, that University personnel first report to the prime contractor's supervisor when entering a work site.

18.0 Welding / Hot Work

The Contractor must request from the University contract administrator a hot work permit before proceeding with any flame cutting, welding, grinding, brazing, and torch applied roofing Refer to Contractor safety Guidelines for more information. The University will require advance notice for the hot work permit.

19.0 Electrical Safety

Refer to the Contractor Safety Guidelines.

The Contractor shall employ a Lock-out/Tag Out procedure that complies with the University's Lock-out/Tag-out program requirements.

No HV electrical cables are to be disturbed or moved by the Contractor. Any relocation of HV cables must be carried out by WLU electrical trades.

20.0 Asbestos and Designated Substances Procedures

Refer to Contractor Safety Guidelines.

Documentation of asbestos containing materials (ACM) and other designated substances in the work area will be provided at the time of tender. Contractor shall review and confirm receipt.

Any work involving disturbance or removal of ACM designated substances shall follow the appropriate Regulation(s) and be completed by persons with the required training and documentation.

It must be made clear that **no asbestos removals or work in asbestos environment shall occur without 5 working days notice prior to the work scheduled to take place.** Normal practice is, after notification, an independent asbestos consultant will review the proposal and monitor the start up of these activities. Air handling systems will be shut down by the University in areas affected. Adequate and highly visible signage must be provided by the contractor at entry locations to asbestos work sites to prevent accidental entry by students, staff and other workmen. **Waybills must be provided showing proof of proper disposal at appropriate dump sites.**

21.0 Radiography & Hole Coring Procedures

To ensure that safety measures are considered, and that workers, students and staff are aware of the safe procedures to follow during X-rays, a "Radiography Source Permit" must be obtained from the EH&S Office 10 days prior to X-raying. Under no circumstances should X-rays be performed without the prior notification and approval. The permit must be posted outside the space while the work is conducted. All X-rays must be done after business hours. An 80 foot radius must be established around the X-Ray sight. For the health and safety of the occupants. **No one is allowed** in the building during these time periods.

When site conditions do not make it feasible to x-ray the contractor must exercise reasonable judgment to evaluate whether there is a chance that coring will cause the severing of electrical, low voltage or any other services that may be in the structure that is being penetrated. The use of hammer chisels may be necessary in some buildings. A thorough inspection of both sides of the surfaces must be performed. A flux scanner to check for live loaded A.C. is to be used prior to any drilling, coring or chiseling. Where applicable the opening of drop ceilings on the undersides of floors including fixed surfaces must be done to expose the break through area. Small diameter pilot holes must be drilled prior to the final coring or chiseling.

A qualified Electrician with access to a circuit scanner must be present during coring or chiseling should any services be severed. The PM must be contacted immediately should services be severed. Depending on the circumstance the contractor may be asked to begin restoration procedures of severed services immediately. Any penetration of structural beams, columns or supports must be cleared by the PM before proceeding. Patching and making good of coring is the responsibility of the successful bidder.

22.0 Inspection and Testing

All test reports for H.V.A.C., Fire Protection systems and ESA shall be submitted to WLU as per specifications and drawings.

23.0 Landscaping / Building Fabric

24.0 Cash Allowance

25.0 Notice of Excavation

No excavation to commence unless field stakeouts have been completed, by internal forces and the contractor has arranged for utility stakeouts.

26.0 Washrooms

The Contractor may use the washrooms facilities in the building provided they are kept clean and free of construction debris.

27.0 Deficiency Tour

Will be scheduled for

28.0 Keys / Access

Access to be coordinated by the WLU Project Manager.

29.0 Moving

Moves will be coordinated by WLU.

30.0 Signage

Signage for this project has been supplied by the owner and erected by the contractor. The contractor shall fill in the necessary information on the signage as required.

31.0 General

Due to the serious liability issues that arise during construction, site visits by WLU students, staff, faculty and the public are prohibited unless approved by the WLU representative and the general contractor.

Prepared by:

Additional Information

Special Constables: (519) - 885 – 3333, from internal phone: extension 3333

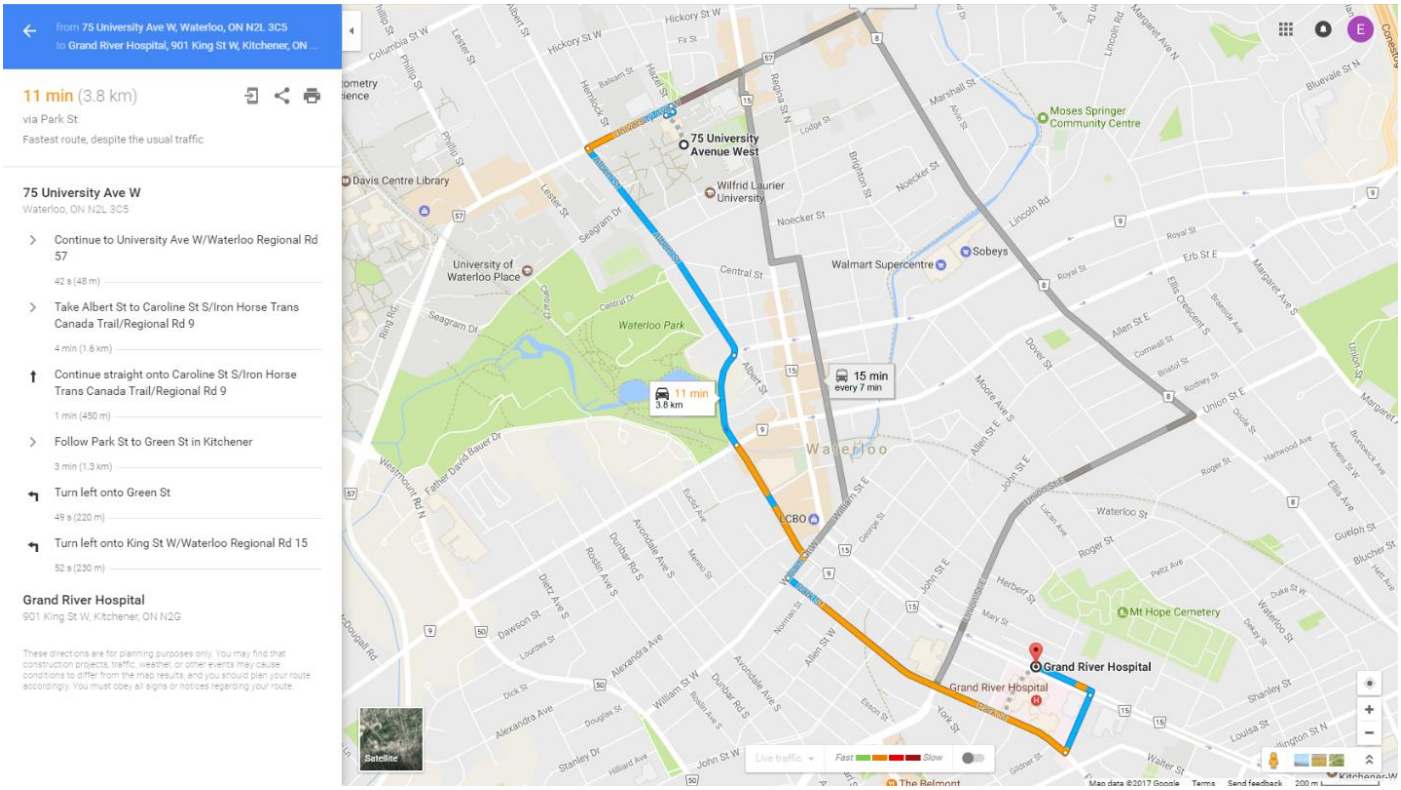
For immediate emergencies: 911

Email: dispatch@wlu.ca

Internal location: Wilfrid Laurier University Special Constable Service is located on the bottom floor of the Student Services Building directly across from the Dining Hall. Administration offices are located at 232 King Street N.

Map Directions to Grand River Hospital

Link: https://goo.gl/maps/W6a29PfGN4s



Interactive Campus Map link:
http://www.myatlascms.com/map/index.php?id=638#!ct/6779,6781,6783,6784,6785,6786,6787,6789

Parking:

