

FIRE SAFETY PLAN FOR:

Medical School
(Northern Ontario School of Medicine)
Lakehead University
955 Oliver Road
Thunder Bay, Ontario
P7B 5E1

Reviewed without change - January 2023

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Chapter 1: Introduction

As required by the Ontario Fire Code, Section 2.8, (Ontario Regulation 213/07 of the Ontario Fire Protection and Prevention Act, as amended), this Fire Safety Plan has been prepared by Lakehead University for the Medical School, 955 Oliver Road, Thunder Bay, Ontario.

The purpose of the plan is to provide safety information for all occupants in the event of a fire, to ensure the effective use of life saving features in the building, and to prevent fires from being initiated. This fire safety plan has been designed to suit the resources of the Medical School. This plan must be approved by Thunder Bay Fire Rescue; however, Lakehead University is responsible for ensuring that the information provided in this fire plan is accurate and complete.

Information found within this Fire Plan includes: contact information, an audit of building resources, maintenance of building resources (as required by the Ontario Fire Code), building schematics, and an outline of responsibilities, emergency procedures, control and extinguishment of a fire, fire protection measure and fire hazards and prevention.

The Fire Protection and Prevention Act, Part VII, Section 28 states that any person who contravenes any provision of the fire code is guilty of an offence. If convicted a company or corporation is liable to a fine of not more than \$100,000. Any individual, director or officer of a corporation is liable for a fine of not more than \$50,000 or imprisonment for a term of not more than one year, or both.

The Fire Safety Plan shall be reviewed as often as necessary, but at intervals not greater than twelve (12) months, to ensure that it takes account of changes in use and other characteristics of the building. The Chief Fire Official is to be notified regarding any subsequent changes in the contents of the approved Fire Safety Plan.

This official document is to be kept readily available at all times for use by staff and fire officials in the event of an emergency

The approved location of the Fire Safety Plan for the Medical School is the Security Office, UC 1016. In addition, copies will be kept in the Health & Safety Office, as well as both security vehicles.

Electronic copies of the Fire Plan will be posted on the Health & Safety website.

Chapter 2: Audit of Human Resources

Building Owner	Lakehead University 955 Oliver Road Thunder Bay, ON P7B 5E1 Phone: 343-8110
President	Dr. Moira McPherson 955 Oliver Road Thunder Bay, ON P7B 5E1 Phone: 343-8010 ext.8200
Vice President, Finance & Administration	Kathy Pozihun Phone: 343-8010 ext.8383
Director, Physical Plant	Hugh Briggs Phone: 343-8010 ext.8790
Health & Safety, Office of Human Resources	Tiffany Moore Phone: 343-8010 ext.8806 Ursula MacDonald Phone: 343-8010 ext.8671
Security Staff	On site 24/7, minimum 3 people Phone: 343-8911 (Emergencies) Phone: 343-8010 ext.8569 (Non-emergency)
Northern Ontario School of Medicine, Facilities Lead	Bonnie Chimenti Phone: 766-7409
Maintenance Staff	Physical Plant, available from 8am to 4pm (After hours contact Security) Phone: 343-8010 ext.8273
Cleaners	Physical Plant, Mr Joe Benc, Facilities Manager Phone: 343-8010 ext.8962 Physical Plant, Services Supervisor, Phone: 343-8010 ext.8968
Fire Alarm Monitoring Company	Tbay Tel Phone number and passwords are held by Security Services (343-8010 ext.8569).

Chapter 3: Audit of Building Resources

3.1 General Description

The Medical School located at 955 Oliver Road is a non-combustible three(3)-storey building with one(1) basement level constructed in 2005.

The operating hours of the building are 8am to 10pm, Monday to Friday.

i. Occupancy and Use

Basement-Mechanical room, Electrical room, Fire Pump room, Storage room.

Main Floor- Janitors closet, Washrooms, Shipping and Receiving, Lecture Hall, Prep room, Study room, Examination Room, Office, Lounge.

Second Floor-Janitors closet, Electrical Room, Washrooms, Offices, Medical Library, Meeting Room.

Third Floor- Janitors closet, Electrical Room, Washrooms, Offices, Biohazard Laboratory, Chemical Storage.

ii. Fire Department Access

Firefighters will access the property via Oliver Road, Agora Circle entrance. Security Services will call in detailed instructions to the city's Emergency Service Dispatch and provide specific information regarding the alarm, including the building entrance to use and any details concerning the fire (ie. Which zone is affected, any laboratories, chemical storage, etc.).

Security Officers on patrol are responsible for opening the restricted access bollards in between the Medical School and the ATAC.

3.2 Fire Alarm System

This building is provided with an Edwards EST 3 single stage system.

Control Panel location: Main Medical School entrance, X1005.

Annunciator Panel location: A parallel unit is located in the security office, UC 1016.

i. Sequence of Operation

Upon activation of a fire alarm initiating device in any portion of the building, a general fire alarm will sound throughout the building.

ii. Ancillary Functions

The fire alarm system is activated by:

- Manual pull stations
- Smoke detectors
- Duct smoke detectors
- Heat detectors
- Sprinkler Flow Switch

Upon activation of the fire alarm system:

- A fire alarm signal will be transmitted to the Security Office and confirmed at their annunciator panel. A fire alarm signal will also be transmitted to an independent off-site monitoring station.
- The fire alarm annunciator and control panel will display information regarding which zone is affected.
- Fans, equipped with duct smoke detectors , will shut down.
- Door hold opens will release

3.3 Sprinkler System

The building is fully sprinklered.

Water flow switches and supervisory devices are connected to the fire alarm system. The control valve is located in the Mechanical Room on the basement level of the Medical School (MS 0005), as shown on the floor plans.

The Fire Department connection is located beside the Main Entrance to the building, as shown on the site plan.

3.4 Fire Pump

A fire pump supports the sprinkler system in the Medical School. The fire pump, located in MS 0005, is driven by an electric motor and its rated water flow capacity is 400 USGPM at 50psi.

3.5 Fire Hydrants

Private hydrants are located as shown on the site plan. The private hydrants are connected to the municipal water supply.

3.6 Fire Extinguishers

Fire extinguishers are located throughout the building. See floor plans for locations.

3.7 Elevators

One elevator serves the building. Refer to floor plans for location. All occupants are directed to not use the elevator in the event of a fire alarm.

3.8 Emergency Power

Emergency power is provided by the emergency generator in the basement of the Advanced Technology & Academic Centre (AT 0001B). This emergency generator runs off diesel fuel and will power the life safety systems in the Medical School for approximately ten (10) hours. The 750 Litre diesel tank is located in the generator room (AT 0001B)

The fire alarm system is tied into the emergency generator and is also equipped with battery backup contained within the fire alarm panel. In the event of a power failure, the batteries provide sufficient power to allow the fire alarm to operate in “supervision” mode for 24 hours and the alarm to sound for at least 60 minutes.

3.9 Main Hydro Shut-Off

The main hydro disconnect switch is located in the basement electrical room, MS 0001, as shown on the floor plan.

3.10 Gas Shut-Off Valve

The main gas shut off valves for the third floor laboratory gas supply is located in Powerhouse. Maintenance can shut off gas supply to the Medical School upon request.

3.11 Water Shut-Off Valve

The main water shut-off valve for the Medical School is located in MS 0005. Refer to floor plan for location.

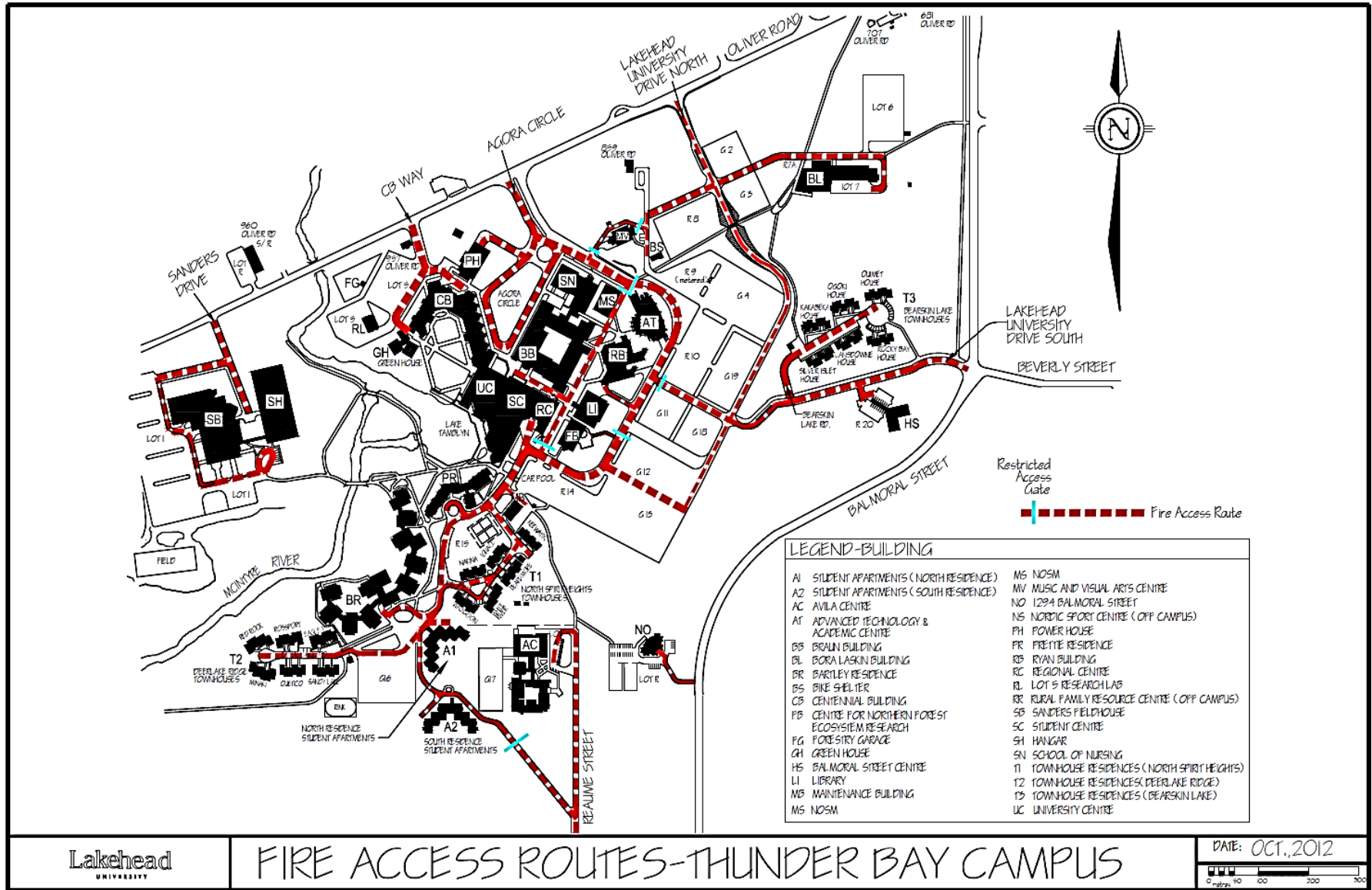
Upon request, Maintenance may access outdoor buried curb stops to shut off the buildings water supply.

3.12 Hazards

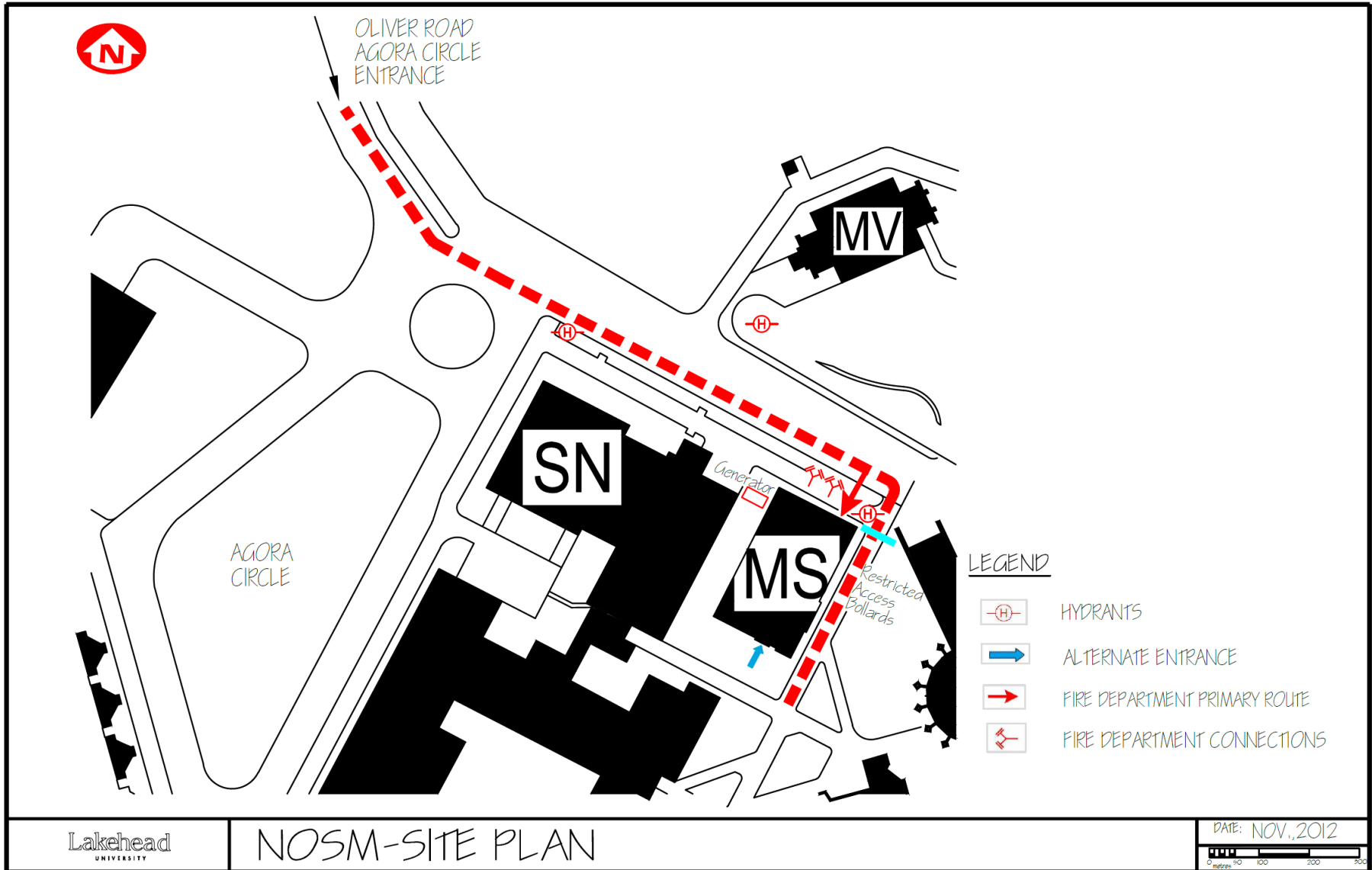
Upon arrival at the scene, Lakehead University Security Staff or the Northern Ontario Supervisory Staff can provide the Fire Department personnel with the exact locations of hazardous materials in the building.

Hardcopies of the Material Safety Data Sheets are accessible in the centre hallway (X3007) outside the Laboratory.

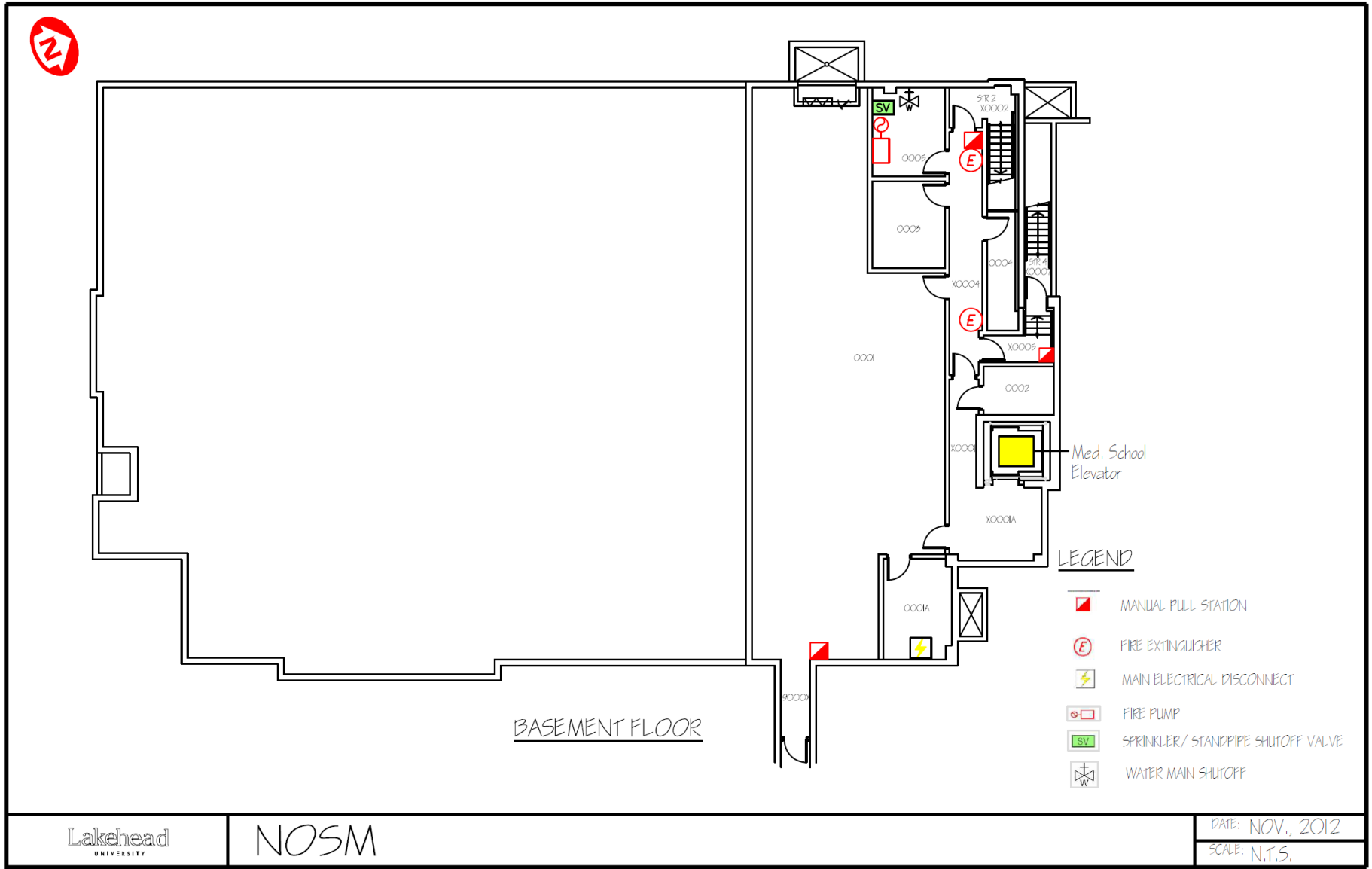
Chapter 4: Building Schematics 4.1 Fire Access Routes



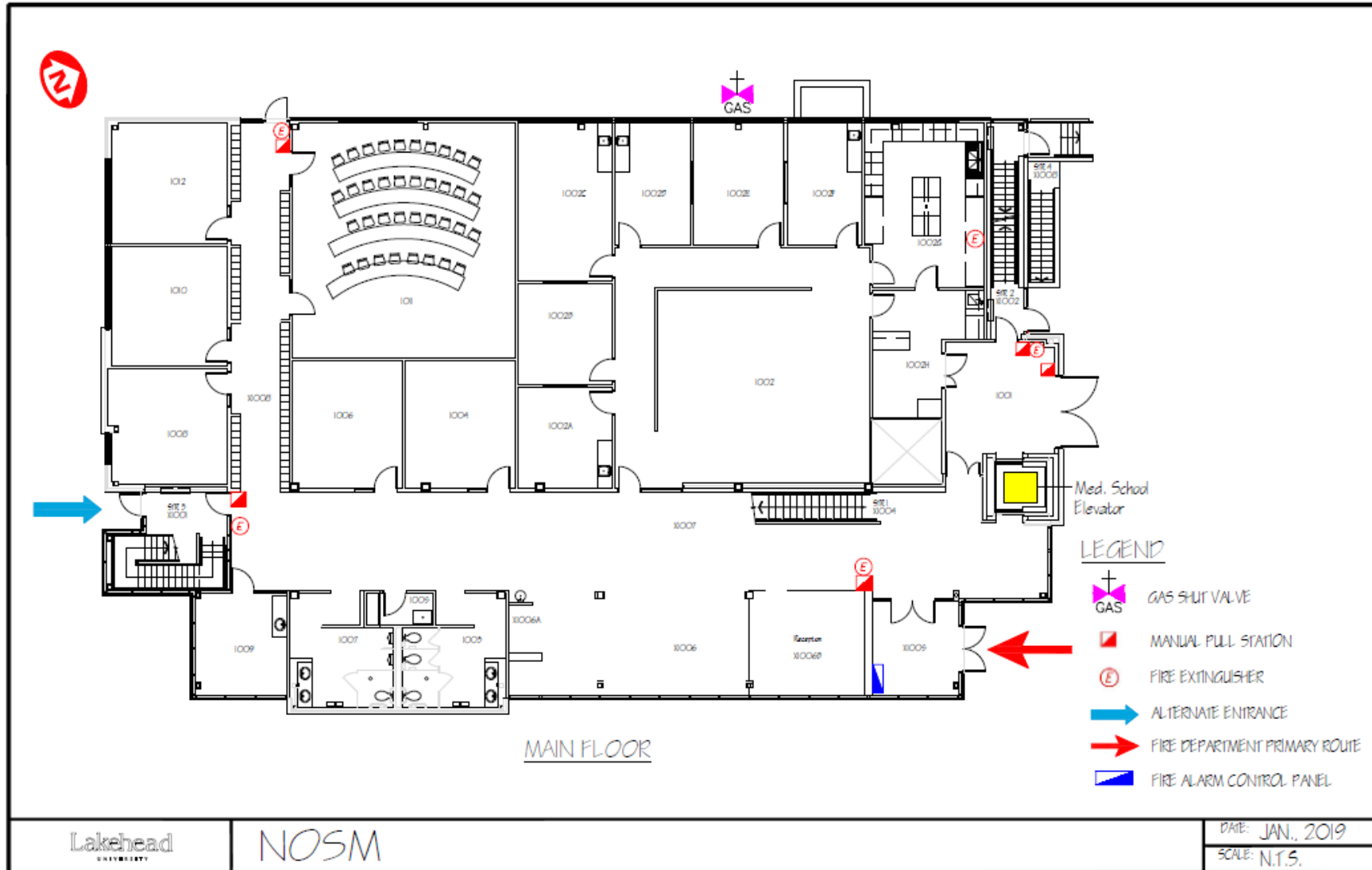
4.2 Site Plan



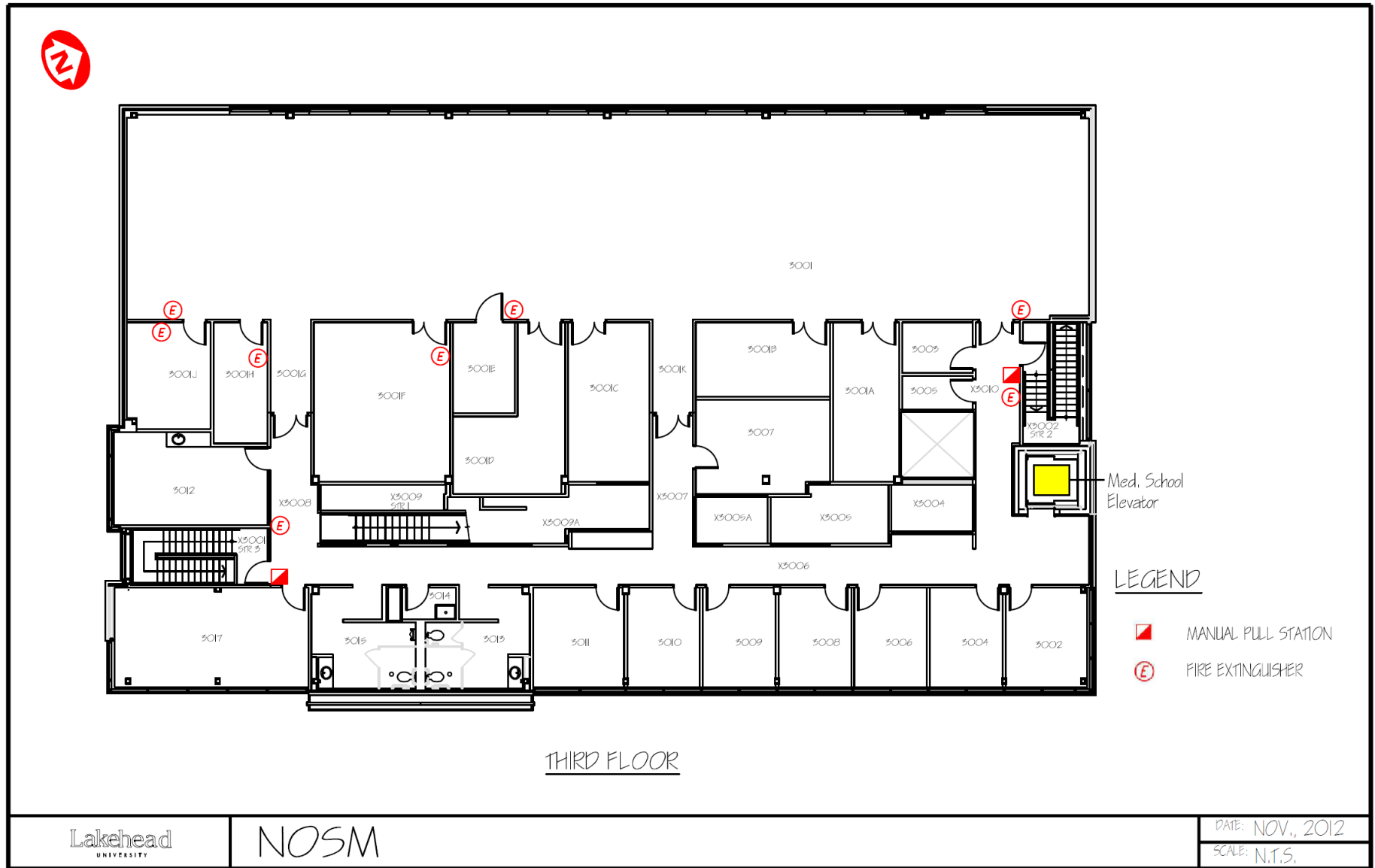
4.3 Basement Floor Plan



4.3 First Floor Plan



4.6 Third Floor Plan



Chapter 5: Responsibilities & Emergency Procedures

The preparation and implementation of a Fire Safety Plan, helps to assure effective use of people and resources to control and eliminate fire hazards in the workplace and to respond effectively to a fire emergency. This will reduce the incidence of fire, protect life safety and reduce the impact of fire should one occur.

The procedures outlined in this Plan will be conducted with all due regard for personal safety

It is not the intent of this Plan to place a person in a hazardous situation that they are not trained or properly equipped for.

Many parties will have a role to play in promoting fire safety in the workplace. Each party will be responsible for certain administrative functions to be performed throughout the year. Some may be responsible for ensuring that tasks are carried out, while others may be responsible for carrying out those tasks.

5.1 Building Owner and Management (President, VP Finance & Administration)

The Ontario Fire Code defines “owner” as “any person, firm, or corporation having control over the property under consideration”. Article 1.2.1.1 of the Ontario Fire Code states, “Unless otherwise specified, the Building owner is responsible for carrying out the provisions of this Code”. Therefore, owners must take responsibility for ensuring compliance with the Ontario Fire Code.

i. Tenants

Tenants or lease holders who have control over any building or a portion of a building also have obligations in regards to fire safety. These specific obligations may be accounted for under the terms of any contracts between these parties. For the Northern Ontario School of Medicine (NOSM), the physical requirements of the Fire Code will be provided by Lakehead (e.g. Maintenance of the facility and fire safety equipment). NOSM will be responsible for the personnel in their area and must generate their own fire emergency procedures and evacuation plans. As a result, NOSM Management has elected to submit their own Fire Safety Plan to Thunder Bay Fire Rescue. NOSM Management and Supervisors must ensure that the Ontario Fire Code is not contravened, for example, allowing fire hazards to exist within their area.

The building owner / occupant have numerous responsibilities related to fire safety and must ensure that the following measures are enacted:

Responsibilities	Owner	Tenant
Comply with the Ontario Fire Code	X	X
Ensure the Fire Safety Plan is developed, approved and fully implemented	X	X
Keep a copy of the approved Fire Safety Plan on the premises in an approved location	X	X

Both Lakehead University and NOSM will review the Fire Safety Plan annually and revise when changes occur that will affect the information therein, such as contact information or changes to the fire protection system	X	X
Lakehead University and NOSM will ensure the Chief Fire Official is notified regarding changes in the Fire Safety Plan	X	X
Establishment of emergency procedures to be followed at the time of an emergency		X
Post and maintain at least one (1) copy of the fire emergency procedures		X
Appointment and organization of designated supervisory staff (Managers, Fire Wardens, Maintenance staff, Security) to carry out fire safety duties		X
Instruction of supervisory staff and other occupants so that they are aware of their responsibilities for fire safety		X
Designate and train sufficient alternates to replace supervisory staff during any absence. <i>“Supervisory staff shall be instructed in the fire emergency procedures as described in the fire safety plan before they are given any responsibility for fire safety”, as outlined in Section 2.8.1.2. (1) of the Ontario Fire Code.</i> It is not necessary that the supervisory staff be in the building on a continuous basis, but they shall be available on the notification of a fire emergency, to fulfill their obligations as described in the <i>Medical School</i> Fire Safety Plan		X
Hold drills in accordance with the Ontario Fire Code and in consultation with the Chief Fire Official, incorporating Emergency Procedures appropriate to the <i>Medical School</i>	X	
Keep adequate records of training for a period of at least one-year		X
Keep adequate records of fire drills for a period of at least one-year	X	
Ensure that hazards are identified and eliminated or controlled		X
Maintenance of building facilities and ensure that building life safety and fire protection systems provided for occupant safety are maintained	X	
Provisions of alternate measures for safety of occupants during shut down of fire protection equipment	X	X
Assuring that checks, test and inspections as required by the Ontario Fire Code are completed on schedule and that records are retained for a minimum period of two (2) years	X	

5.2 Employers, Managers and Supervisors

Employers are responsible for fire safety within their area of operation. Employers, Managers and Supervisors must:

- Comply with the Ontario Fire Code within the space you control or lease.
- Ensure that Fire Wardens have been designated and trained to carry out the duties assigned to them.
- Identify key personnel in your department requiring fire extinguisher training. To coordinate training contact the Office of Human Resources – Health & Safety (343-8806).
- Review the fire emergency procedures with your employees.

- Ensure any person who requires assistance to evacuate the building is identified and that a specific plan is established in the event of an emergency. This plan will be formulated in consultation with the areas fire warden.
- Practice and encourage employees to participate in fire drills conducted in the building.
- Encourage employees to cooperate with Fire Wardens and Security staff as they provide direction during fire alarms and building evacuations.
- Respond to any requests to eliminate fire hazards.
 - Eliminate those fire hazards which you can control.
 - Report any fire hazards that you cannot control to Security or Physical Plant.
- Laboratory Supervisors shall prepare emergency plans for their work area. Address specific hazards in the facility.
 - Ensure that ALL students and staff who use the laboratory are trained and familiar with these procedures.
 - Proper signage must be displayed on exterior lab doors.

5.3 Physical Plant (Mechanical & Electrical Staff)

- Be familiar with the floor area, exits, the locations of any fire safety equipment and the sound of the building's fire alarm.
- Be familiar with the operation of all fire protection and life safety systems and equipment.
- Provide specific checks, tests, and inspection requirements of the Ontario Fire Code assigned to you, as summarized in Chapter 11 of this Plan.
- Notify the appropriate persons of any planned or unplanned shutdown of fire protection or life safety equipment.
- Assist in implementing alternate measures for fire safety to compensate for the inactive system, as outlined in the Chapter 9 of this Plan.
- Restore the fire protection and fire alarm systems to normal operation after repairs or maintenance are completed or as soon as you are authorized to do so after an emergency.
- Assist in fire prevention by controlling fire hazards and conditions of possible safety threats.
- Promptly address and correct any fire hazards reported to you.
- Physical Plant will be notified by Security of any fire drills taking place.

i. Emergency Procedures -Physical Plant Staff

Upon notification by Security Services that a fire alarm has been activated, Physical Plant staff will stand by for further instructions.

Electrical Staff will:

- Be notified of all fire alarms and attend the site of any actual fire emergencies, or if the fire alarm system cannot be reset by Security Services.
- Prepare to disconnect the electrical service to the affected area. Disconnection will be at the direction of the Fire Department.
- Request assistance of other Physical Plant Departments as needed.

5.4 Security

- Be familiar with the floor area, exits, the locations of any fire safety equipment and the sound of the building's fire alarm.
- Participate in fire drills as described in this Plan.
- Assist in fire prevention by controlling fire hazards and conditions of possible safety threats.
- Promptly report or correct any fire hazards you have been informed of.
- Provide specific checks, tests, and inspection requirements of the Ontario Fire Code assigned to you, as summarized in the Chapter 11 of this Plan.
- Notify the appropriate persons of any planned or unplanned shutdown of fire protection or life safety equipment.
- Assist in implementing alternate measures for fire safety to compensate for the inactive system, as outlined in Chapter 9 of this Plan.
- Be familiar with the procedures and operation of the Fire Alarm and Security Systems.
- Be familiar with your role upon notification of a fire alarm.
- Know where the Fire Plan is kept and how to access the buildings material safety data sheets.
- Security must have quick access to fire safety equipment (Fire Alarm Panel, generator room, pull station keys, elevator keys, and service/fire access roads).
- Be available to assist the Fire Department.

As with any emergency Fire Alarms will take priority over any other university business

i. Emergency Procedures- Security Services

Upon receiving notification of a fire alarm at the security office, you will:

1. Check the fire panel and print out for the exact location of the alarm.
2. Over the radio, notify the security personnel and dispatch all patrol officers to the appropriate building.
3. Call the monitoring company and verify they have received the alarm signal and have contacted the fire department.
4. Open electronic access gates if present on the buildings Fire Access Route.
5. Await further instructions from the Security Officers on the scene. Upon receipt of a report from the Security Officer on scene, the Security will:
 - a. Contact Fire Dispatch (684-1525) to provide specific information regarding the alarm.
 - b. Contact Physical Plant and Electrical staff (343-8273) if there is a known fire.
6. Alert Human Resources at 343-8806 or 343-8671 or after hours using the Emergency Contact phone numbers filed with Security. Also contact NOSM emergency contacts using the form filed with Security.
7. DO NOT touch the fire panel.
8. Any information received on the cause of the alarm will be relayed immediately to the Security Officers on scene.
9. Ensure the Fire alarm system is not silenced or reset until authorization is given by the Fire Department.

Upon notification of a fire alarm, Security Officers assigned to patrol will:

1. ONE officer will meet the Fire Department at the designated entrance.
 - a. Advise the Fire Department of any information regarding the cause of the alarm or details of the fire and relay any concerns regarding the zone affected.
2. ALL OTHER officers will immediately report to the area in distress and report to the other security personnel the condition of the site.
 - a. One officer will check the zone indicated by the annunciation panel as being in distress, if it is safe to do so. Report findings to the security office and indicate if there is a need for other services to be called (ie. Ambulance, Electrical, Mechanical). The officer will also report if there is an actual fire, smoke present or if the cause of the fire is known.
 - b. Ensure fire access routes are unobstructed (Remove any bollards and open gates).
 - c. One officer will control crowds and ensure that all persons are kept away from the building and the roadway is clear for the Fire Department. Ensure no one re-enters the building until the Fire Department has given the all clear.
3. Security officers will follow the instructions of the Fire Department personnel.
4. Once authorized by the Fire Department, Security Officers will silence the alarms, reset the activated device, return elevators to normal service, reset maglocks(if applicable) and provide the "All Clear" announcement to those who have evacuated the building.
5. Security will facilitate the Fire Department's investigation (if a fire occurred).
6. An incident report must be generated for ALL fire alarms, without exception.
7. Forward a copy of the report to the Office of Human Resources – Health & Safety.

Security Officers shall refer to a more detailed description of these procedures in the "Security Services Department Policy & Procedure Manual".

5.5 Emergency Procedures for Supervisory Staff

The following are the fire emergency procedures, as recommended by Thunder Bay Fire Rescue.

Upon Discovery of Fire

1. Leave the area immediately and close doors. Alert occupants.
2. Sound Fire Alarm and follow the fire alarm supervisory procedures.
3. Call 9-1-1 from a safe location
4. Exit the building via the nearest exit.
5. Await the arrival of Fire Department at the main entrance.

Upon Hearing of a Fire Condition:

1. Ensure that the other occupants have been notified of the emergency conditions.
2. Notify the Fire Department of the emergency conditions. Dial 9-1-1 and ask for the Fire Department.
3. If it is safe to do so, supervise the evacuation of all occupants, including those requiring assistance.
4. Upon arrival of the firefighters, inform the fire officer of the conditions in the building and coordinate the efforts of the Supervisory staff with those of the Fire Department.

5. Provide access and vital information to the firefighters as to the location of persons, master keys for this occupancy and services rooms, etc.

Many of these duties will also be the responsibility of Lakehead University Security Services. Supervisory staff of the Northern Ontario School of Medicine procedures should be amended to include calling Security to confirm receipt of the alarm signal at their annunciator. Call 343-8911, extension 8911 or use the emergency phone located outside the main entrance of the Medical School. Work with Lakehead University Security Services to assist the Firefighters on scene.

5.6 All Occupants

All occupants must be familiar with Procedures to be followed upon discovery of smoke or fire and upon hearing the fire alarm. Occupants will also participate in all fire drills and other fire safety training prescribed by Lakehead University.

Notify your Supervisor or Instructor if you have a condition that you feel may inhibit your ability to evacuate the building safely without assistance. If you are assigned to assist someone to evacuate, ensure that you know the procedures to be carried out. Make note and report any fire hazards or unsafe conditions observed in the building.

The following are the procedures recommended by Thunder Bay Fire Rescue. The Northern Ontario School of Medicine may choose to elaborate on these emergency procedures.

Emergency Procedure signs will be affixed to the wall at all fire alarm pull stations and in elevator lobbies.

i. Emergency Procedures- All Occupants

Upon Discovery of Fire:

1. Leave the fire area immediately and close doors
2. Sound Fire Alarm
3. Call the Fire Department 9-1-1
4. Leave the building via nearest Exit

Upon Hearing Fire Alarm:

1. Leave building via nearest Exit
2. Close doors behind you
3. Do not use elevator

Caution

If you encounter smoke – Use an alternate exit

Remain Calm

5.7 Special Evacuation Procedures

i. Contractors & Cleaning Staff

1. As long as it is safe to do so, turn off any equipment you are using and ensure that it is not left in such a way as to block exits.
2. Evacuate the building using the nearest exit stair. Do not use the elevator.
3. Follow the directions of Fire Wardens, Security staff and the Fire Department.
4. Ensure that the building staff are aware that you have evacuated
5. Move away from the building.
6. Do not return to the building until authorized to do so by the Fire Department, Security or a Fire Warden.

Chapter 6: Fire Extinguishment, Control or Confinement

In the event of a small fire, first ensure that the Fire Alarm System has been activated and dial extension 8911(343-8911) to ensure that the Security Office have been notified prior to any attempt to extinguish a fire. Security officers will report to Emergency dispatch (911) any specifics details concerning the location and nature of the fire.

Fighting a fire is always a voluntary act

Only those persons who are trained and familiar with extinguisher operation may attempt to fight a fire. In the event a small fire cannot be extinguished with the use of a portable fire extinguisher or the smoke presents a hazard for the operator, the door to the area should be closed to confine and contain the fire. Leave the area.

6.1 Suggested Operation of Portable Fire Extinguishers

Remember the acronym **P.A.S.S.**

Pull the safety pin

Aim the nozzle

Squeeze the trigger handle

Sweep from side to side (watch for fire restarting)

Never re-hang extinguishers after use. Contact Security Services (343-8569) to ensure that they are properly recharged by qualified personnel. Security services will also ensure that a replacement extinguisher is provided.

Keep extinguishers in a visible area without obstructions around them.

6.2 Classification of Fires

Fires are classified according to the fuel type involved.

Class “A” fires are those fuelled by combustible solids, such as wood, paper, excelsior, rags and rubbish.

Class “B” fires occur in the vapour-air mixture over the surface of flammable liquids, such as gasoline, oil, grease, paints and thinners.

Class “C” fires occur in or near live electrical equipment.

Class “D” fires occur with pyrophoric (combustible) metals such as magnesium, titanium, lithium, sodium, potassium, etc.

Class “K” fires involve cooking oils or fats, such as those found in a deep fryer.

6.3 Classification of Fire Extinguishers

Portable fire extinguishers are classified according to their ability to handle specific classes of fires. Labels on the extinguisher indicate the class or classes of fire that they can be expected to extinguish.



Extinguishers suitable for class “A” fires are identified by a triangle containing the letter “A”



Extinguishers suitable for class “B” fires are identified by a square containing the letter “B”



Extinguishers suitable for class “C” fires are identified by a circle containing the letter “C”



Extinguishers suitable for class “D” fires are identified by a star containing the letter “D”



Extinguishers suitable for class “K” fires are identified by a hexagon containing the letter “K”. Class K extinguishers must ONLY be used on cooking fires (ie. The deep fryer)

In the Medical School only class “ABC” extinguishers are provided.

Chapter 7: Fire Hazards and Fire Prevention

7.1 General

- Emergency exits are marked by the lighted “EXIT” signs. Report any burnt out exit lights to Physical Plant at 343-8273 or to Security 343-8569 after hours.
- Keep fire doors closed. Some fire doors are held open using electromagnetic devices. All hold open devices in the building will be released on activation of the fire alarm system. If you notice any problems with the electromagnetic hold open devices contact Physical Plant at 343-8273 immediately.
- Smoking is prohibited on university property, except in designated smoking area.
- If a circuit breaker consistently “trips”, discontinue using the device that is causing the circuit to trip. Contact a licensed electrician from Physical Plant to assess the electrical system.
- **All electrical work must be done by a licensed electrician with Physical Plant (343-8273).**

In Ontario it is ILLEGAL to connect unapproved equipment to an electrical supply

- Compressed gas cylinders must be secured with a chain at all times whether they are full or empty.
- Use of Compressed gas must abide by O.Reg 214/01

7.2 Hot Works

Hot works, such as welding, will be conducted by approved staff only following approved procedures. Contact Physical Plant at 343-8273 for more information or to request a permit for hot work.

Chapter 8: Fire Protection Measures

8.1 Fire Alarms & Pull Stations

The Medical School is equipped with fire alarm pull stations. Look for pull stations as you approach an exterior exit or a stairwell leading outside. The pull station will generally be located in the corridor adjacent to the exterior door leading to the vestibule or the stairwell, or located inside the vestibule itself. Refer to building drawings in Chapter 4.

8.2 Fire Extinguishers

The Medical School is equipped with fire extinguishers. The extinguishers are either wall mounted, or located in the hallways. Extinguishers are checked monthly. If you discharge an extinguisher, or find one that has been discharged, contact Security at 343-8569 and request a replacement.

8.3 Emergency Exits

Emergency Exits are marked by lighted signs with the word “EXIT”. Exit signs are located high on the wall above ground level doors, or at stairwells leading to ground level exit doors. Lighted directional signage is also provided, where required. An outlined arrow appearing below the word “EXIT” indicates the direction to the closest emergency exit. Following these signs will provide an exit route during an emergency.

8.4 Emergency Lighting

The Medical School is equipped with emergency lighting. Emergency lighting provides illumination to exits, corridors and principle exit routes in the event of the loss of primary power.

8.5 Fire Routes

Fire routes are areas of access for responding Fire Professionals. Obey the signs posted and park only in designated parking spots.

Chapter 9: Alternative Measures for Fire Safety

In the event of any shut down of fire protection equipment systems (either entirely or partially), alternate measures for fire safety must be taken. For any shut down of fire protection equipment in excess of 24 hours, the Fire Department shall be notified in writing.

Occupants will be notified of the areas affected by the shutdown and instructions for alternate fire safety measures or actions will be posted as to alternative provisions or actions to be taken in case of emergency. These provisions and actions must be acceptable to the Chief Fire Official.

9.1 Fire Alarm Systems

- It is the responsibility of Physical Plant to notify Security Services when any or all of a fire alarm system is out of service.
- Security will notify the Fire Department with a description of the problem and the anticipated length of time needed to correct it.
- Security will notify the monitoring company that a portion of the fire alarm system is offline.
- The Office of Human Resources – Health & Safety will notify the building supervisory staff that the fire alarm system is temporarily shut down.
- While the fire alarm is out of service, Security Services will either lock out the building or initiate a fire watch. During a Fire Watch a walkthrough of the affected area will be completed regularly by Security Services until such a time that the fire alarm service is restored.

- Notices will be posted on all exits and the main entrance by Security, stating the problem and when it is expected to be corrected.
- Security will notify the Fire Department, the monitoring company and the building occupants when the fire alarm system is back in operation.

9.2 Sprinkler Systems

- It is the responsibility of Physical Plant to notify Security Services when all or part of the sprinkler system is out-of service.
- Security will notify the monitoring company that a portion of the fire protection system is shutdown.
- Security Service will notify the Fire Department that all or part of the sprinkler system in a particular building is out of service and that a Fire Watch is in place.
- During the fire watch, a walkthrough of the affected area will be completed regularly by security services until such a time that the fire alarm service is restored.
- Closed control valves shall be tagged or identified in an approved manner (Ontario Fire Code Subsection 6.5.2).
- Hot works (ie. Welding) should be discontinued in areas affected by the shutdown, or special precautions taken where this work will continue.
- Security will post notices at building entrances and in areas affected by the shutdown, informing building occupants of the circumstances and alternate measures in place.
- Security will notify the Fire Department /the monitoring company and the building occupants when the fire alarm system is back in operation.

9.3 Water System Shutdown

- It is the responsibility of Physical Plant to notify Security Services when all or part of the water system is out-of-service.
- Security Services will notify the Fire Department that all or part of the water system on campus is out-of-service, as well as the location of any fire hydrants taken out-of-service.
- Physical Plant will bag and lock out any fire hydrants that have been taken out of service.

9.4 Emergency Power Shutdown

- It is the responsibility of Physical Plant to notify Security Services when all or part of the emergency power system is out-of-service.
- Security Services will notify the Office of Media Relations to send out a general notice to the University Community and will notify the Fire Department that all or part of the emergency power system is out-of-service.

9.5 Fire Watch

A fire watch is implemented to ensure the fire safety of a building or area of a building and to minimize the impact of malfunctioning equipment. Security officers dedicated to a fire watch are responsible for patrolling the affected area(s) at least once every hour.

A fire watch is required when:

1. Failure of the fire alarm system occurs.
2. Failure of fire safety equipment occurs.
3. Any act which causes an increased risk to persons or property, such as hot works.
4. The Fire Department requests a fire watch be initiated.

9.6 Exits

Exits shall not be obstructed. In the event that planned construction or maintenance will cause an exit to become unusable, the following emergency procedures will be employed:

- Ensure the planned construction or maintenance is in compliance with municipal building permits.
- Ensure alternative measures are developed to compensate for the blocked exits.
- Post temporary exit signs to clearly identify the alternate exits.
- If necessary, create emergency evacuation procedures.

Physical Plant will alert the building occupants to obstructed exits via a communication bulletin.

9.7 Fire Extinguishers

It is the responsibility of Security Services to provide a temporary fire extinguisher (of equal type and rating) when a fire extinguisher has been removed for servicing.

Chapter 10: Fire Drills

Fire drills are regularly conducted to ensure that all building occupants are familiar with fire evacuation procedures. Fire drills assist Security Services and Human Resources staff in revising and refining fire emergency procedures.

The Medical School will have scheduled fire drills twice a year and fire drill records are required to be retained for a period of one year. Every attempt will be made to schedule fire drills so that they do not conflict with tests. Drills will not occur during scheduled examination periods.

All occupants of a building must evacuate immediately during a fire drill

Building occupants should report any observations made during the evacuation to a Fire Warden. Fire Wardens should report any problems encountered during the evacuation drill to Health & Safety by calling 343-8806.

Chapter 11: Maintenance Schedule as Required by the Ontario Fire Code

The following is a list of the portions of the Fire Code that require checks, inspections, and/or tests to be conducted of the facilities. Permanent records of all tests and corrective measures taken are required to be retained for a period of two years after they are made. If the time interval between tests exceeds two years, then the records shall be retained for the period of the test interval plus one year.

Records are to be made available upon the request of the Chief Fire Official or Fire Prevention Officers.

This list has been prepared for convenience only. For accurate reference, the fire code and referenced standards should be consulted.

Definitions of key terms include:

Check: means visual observation to ensure the device or system is in place and is not obviously damaged or obstructed.

Test: means the operation of a device or system to ensure that it will perform in accordance with its intended operation or function.

Inspect: means physical examination to determine that the device or system will apparently perform in accordance with its intended function.

11.1 Daily Tasks

Responsibility	Task	Description	Fire Code Reference
Security	Inspect	Fire alarm system for status of primary and remote trouble indicators and primary power "on" indicator.	6.3.2.2. CAN/ULC-S536
Maintenance	Check	Pump Rooms temperature during freezing weather.	6.6.3.2.

11.2 Weekly

Responsibility	Task	Description	Fire Code Reference
Maintenance	Check	Sprinkler water supply pressure and system air or water pressure for required operation pressure.	6.5.3.3.
Maintenance	Check and Maintain	Hoods, ducts and filters subject to accumulations of combustible deposits. Clean if the accumulation of such deposits creates a fire hazard.	2.6.1.3.
Maintenance	Check	The water level in the fire pump reservoir.	6.6.3.1.

Maintenance	Operate	Fire pumps at rated speed.	6.6.3.3.(1)
Maintenance	Check	The fire pump discharge pressure, suction pressure, lubricating oil level, relief valves, priming water level and general operation conditions during the operation of fire pumps.	6.6.3.3.(2)

11.3 Monthly Tasks

Responsibility	Task	Description	Fire Code Reference
Maintenance	Inspect	Doors in fire separations.	2.2.3.4.
Contractor	Check	Pilot lights on emergency lighting unit equipment for operation.	2.7.3.3.(1)
Contractor	Inspect	Emergency lighting unit equipment.	2.7.3.3.(2)
Contractor	Test	Emergency lighting unit equipment for function upon failure of the primary power supply.	2.7.3.3.(3)(a)
Contractor	Inspect and Test	Batteries that provide emergency power for lights referred to in 2.7.3.3. (5)	2.7.3.3. (6)
Security	Inspect	Portable fire extinguishers and record electronically or on the attached tag.	6.2.7.2.
Security	Inspect	Hose stations to ensure that the hose is in the proper position and that all of the equipment is in place and operable.	6.4.2.1.
Contractor	Inspect and Test	Fire alarm system for operability: initiating device, alert/alarm/trouble signals, annunciator, battery, voice paging and emergency telephones.	6.3.2.2. CAN/ULC-S536
Contractor	Test	The alarm on sprinkler systems at the sprinkler valve test connection.	6.5.5.2.(1)

11.4 Tasks Every Two (2) Months

Responsibility	Task	Description	Fire Code Reference
Contractor	Test	Transmitters and water flow actuated devices where an electrical supervisory signal service is provided for a sprinkler system.	6.5.5.7.(2)

11.5 Semi-annual Tasks

Responsibility	Task	Description	Fire Code Reference
Security and Health & Safety	Conduct	Fire drills of all buildings that house laboratories or studios.	4.12.4.1.(2)

Maintenance	Inspect and clean	Ventilation systems of a power ventilated enclosure serving a laboratory or studio.	4.12.7.1.(2)(b)
Contractor	Test	Valve supervisory switches, building and tank water temperature and water level supervisory devices and other sprinkler system supervisory devices where an electrical supervisory signal service is provided for a sprinkler system.	6.5.5.7.(3)

11.6 Annual Tasks

Responsibility	Task	Description	Fire Code Reference
Maintenance	Operate	Disconnect switch for mechanical air-condition and ventilation systems.	2.6.1.8.
Contractor	Test	Emergency lighting unit equipment for design duration.	2.7.3.3.(3)(b)
Contractor	Test and Inspect	Emergency lighting equipment charging conditions for voltage, current and recovery period to ensure manufacturer’s specifications are met.	2.7.3.3.(4)
Health & Safety	Review	Fire safety plan as often as necessary but at intervals not greater than 12 months.	2.8.2.1.(4)
Contractor	Inspect and maintain	Electrical equipment, mechanical systems, piping, valves, and automatic and manual control and safety devices	4.12.7.1.(1)
Contractor	Inspect and clean	Ventilation systems serving a laboratory for the ventilation systems of the open laboratory areas.	4.12.7.1.(1)(a)
Contractor	Maintain	Fire extinguishers (mechanical parts, extinguishing agent, and expelling means will be thoroughly examined)	6.2.7.1. NFPA 10
Contractor	Inspect and Test	Fire alarm system operability and all components and devices	6.3.2.2. CAN/ULC-S536
Maintenance	Inspect	Private hydrants annually and after each use.	6.6.5.1. - 6.6.5.5.
Maintenance	Inspect and check	Private hydrants water flow.	6.6.5.6.
Contractor	Check	Exposed sprinkler piping hangers to ensure that they are kept in good repair.	6.5.3.2.
Contractor	Check	Sprinkler heads to ensure that they are free from damage, corrosion, grease, dust, paint or whitewash.	6.5.3.5.
Contractor	Inspect	Fire department sprinkler system connections (plugs or caps removed) for wear, rust or obstruction.	6.5.4.4.(1).

Contractor	Test	Water flow alarm on wet sprinkler systems, using the hydraulically remote test connection.	6.5.5.3.
Contractor	Test	Sprinkler system water supply pressure with the main drain valve fully open for obstructions or deterioration of the main water supply.	6.5.5.5.
Contractor	Test	Fire pumps at full rated capacity to ensure that they are capable of delivering the rated flow.	6.6.3.5.

11.7 Tasks Every Five (5) Years

Responsibility	Task	Description	Fire Code Reference
Contractor	Test	H2O, CO2 and dry chemical (stainless steel shell) extinguishers, hydrostatically tested.	6.2.7.1. NFPA 10

11.8 Tasks Every Six (6) Years

Responsibility	Task	Description	Fire Code Reference
Contractor	Maintain	Stored-pressure fire extinguishers that require a 12-year hydrostatic test by emptying and subjecting to the applicable maintenance procedures.	6.2.7.1. NFPA 10

11.9 Tasks Every Twelve (12) Years

Responsibility	Task	Description	Fire Code Reference
Contractor	Test	Extinguishers with milled steel shells hydrostatically tested.	6.2.7.1. NFPA 10

11.10 Tasks, As Required

Responsibility	Task	Description	Fire Code Reference
Security	Check	Doors in fire separations in occupied buildings as frequently as necessary to ensure that they remain closed.	2.2.3.5.(1)
Maintenance	Inspect	Fire dampers, as required.	2.2.3.7.
Security	Maintain	Access for firefighting free of obstructions.	2.5.1.2.(1)
Security	Maintain	Fire access routes to be immediately ready for fire department vehicles.	2.5.1.3.
Health & Safety	Review	Fire safety plan as often as necessary but at intervals not greater than 12 months.	2.8.2.1.(4)

Maintenance	Maintain	Fire department sprinkler connection free of obstructions.	2.5.1.2.(3)
Contractor	Inspect	After any alterations or repairs, an inspection shall be made to ensure valves are returned to the fully open position and are sealed, locked or electrically supervised.	6.6.1.2.(3)
Security	Maintain	When an emergency power system or any part thereof is shut down, the supervisory stall shall be notified.	6.7.1.1.(3)
Security	Maintain	Required exit signs in a clean and legible condition and clearly visible.	2.7.3.1.
Security	Illuminate	Exit signs while the building is occupied.	2.7.3.2.

Fire Drill Report

Building:	
Date:	Time:
In attendance:	
Comments and/or Deficiencies Noted:	

Signature: _____