NORTHERN ARIZONA UNIVERSITY

FIRE SAFETY AND EVACUATION PLAN

Prochnow Auditorium – 3A

317 W Dupont Ave, Flagstaff, Arizona 86011

(Plan Update 5/1/2020)

TABLE OF CONTENTS

Emergency Evacuation Plan …….. 3

Evacuation Procedures
Individuals Requiring Assistance

Fire Extinguishers ……... 4

Rules for Fighting Fires

Fire Drills …….. 5

Purpose of the Drill
Drill Procedures

Fire Prevention Measures …….. 5

Egress
Corridors, Egress Routes and Exit Doors
Obstructions
Items Not Permitted in Corridors, Stairwells and Other Egress Components
Atriums and Large Corridors
Fire/Smoke Doors
Prevention Measures
Open Flames and Smoking

Electrical Fire Safety …… 7

Electrical Wiring and Appliances
Extension Cords
Electrical Panels and Service Equipment
Electrical Outlets/Switches
Multi-outlet Assemblies
Space Heaters

Storage Fire Safety ……. 9

Housekeeping
Cylinder Handling and Storage
General Storage
Flammable Storage
Flammable Liquids – Alcohol Based Hand Rubs, Sanitizers, and Disinfectants

Building Fire Safety Features …… 11

Evacuation Assembly Areas ……. 12

Building Evacuation Maps ……. 13

Emergency Evacuation Plan

The purpose of the Emergency Evacuation Plan is to establish minimum requirements that will provide a reasonable degree of life safety from fire and similar emergencies in NAU buildings and structures. The Emergency Evacuation Plan will be utilized to evacuate all occupants regardless of the type of emergency. Failure to leave the building when a fire evacuation alarm is sounding is a violation of State law.

General

What you should know before an emergency occurs?

- Be familiar with the worksite's emergency evacuation plan.
- Know the pathway to at least two exits from every room/area at the workplace. Recognize the sound/signaling method of the evacuation or other alarms and their different meanings.
- Understand who to contact in an emergency, as well as the specific procedures they will be expected to use.
- Know how many desks or cubicles are between their workstations and two of the nearest exits to escape in the dark, if necessary.
- Know where the fire/evacuation alarms are located and how to use them.

A fire emergency exists whenever:

- A building fire evacuation alarm is sounding (campus buildings will be immediately and totally evacuated whenever the building fire alarm is sounding.)
- There is presence of smoke, or the odor of burning.
- An uncontrolled fire or imminent fire hazard occurs in any building or area of the campus.
- There is a spontaneous or abnormal heating of any material, an uncontrolled release of combustible or toxic gas or other material, or a flammable liquid spill.

When a fire emergency exists, an individual will accomplish, or attempt to accomplish, the following actions:

- Activate fire alarm system located along exit routes.
- Evacuate the building. Do not use elevators.
- Call 523-3000 or 911 from a safe area and give name, location, and nature of emergency.
- Remain at the designated assembly area or at a safe location at least 100 feet away from the building until you are told to re-enter by the City Fire Department, University Police Officer, or other emergency personnel.

Evacuation Procedures

When a fire evacuation alarm is sounding, all occupants will:

- Shut down any experiments or procedures that should not be left unattended.
- Take or secure all valuables, wallets, purses, keys, etc.
- Evacuate the building immediately and in an orderly manner. The last occupant to leave a room should close the door leading to the corridor.
- Never use the elevators. In most university buildings, elevators are automatically recalled to the street floor or transfer level upon the activation of the buildings' fire alarm system.
- Proceed to the nearest and safest exit.
- If possible, assist non-ambulatory occupants to areas of refuge, or to ground level exits. Normally the assistance is in the form of notifying emergency responders of the location of these individuals or by actually providing guidance to safe areas.
- Crawl low, under the smoke to breathe cleaner air if there is a fire. Test doors for heat before opening them by placing the back of your hand against the door so you do not burn your palm and fingers. Do not open a hot door, but find another exit route. Keep "fire doors" closed to slow the spread of smoke and fire.
- Proceed to your designated evacuation assembly area. Be aware of arriving emergency vehicles and the direction of smoke. Move upwind from the building.

- If trapped during an emergency:
    - Stay calm and take steps to protect yourself.
    - Go to a room with an outside window, and telephone for help if possible.
    - Stay where rescuers can see you and wave a light-colored cloth to attract attention.
    - Open windows if possible, but be ready to shut them if smoke rushes in.
    - Stuff clothing, towels, or newspapers around the cracks in doors to prevent smoke from entering your room.

Remain at the designated assembly area or at a safe location at least 100 feet away from the building until instructed to re-enter by the City Fire Department, University Police Officer, or other emergency personnel.

Individuals Requiring Assistance

Individuals requiring assistance should proceed to the nearest stairway and request assistance from other evacuees. Do not obstruct the stairway or door leading to the stairway. If the location becomes unsafe, move to a different exit stairway and call for help until rescued. It is suggested that people with disabilities prepare for emergencies in advance by learning the locations of exit corridors and exit stairways, areas of safe refuge, emergency communications, by planning an escape route, and by showing a classmate, co-worker, or instructor how to assist him/her in case of an emergency. Individuals with speech impairment should carry a whistle or have other means of attracting attention. All exit corridors and stairways are marked with exit signs and are protected with self-closing fire rated doors. These are the safest areas during an emergency.

Ways to help individuals who require assistance

- Become familiar with the individuals who require assistance in your area.
- Inform hearing impaired persons when a fire evacuation alarm is sounding.
- Assist visually impaired persons to an exit stairway.
- Inform University Police, Command Post outside the building, or call 523-3000 or 911 of disabled persons located inside the building that you are unable to evacuate safely.
- In the extreme case where you must physically evacuate a disabled person, you should ask that person how to safely carry or assist.

WHEN THE EVACUATION ALARM SOUNDS, "EVERYONE MUST LEAVE THE BUILDING"

Fire Extinguishers

Note: Hand held fire extinguishers are provided in all NAU buildings and should only be used by properly trained personnel or emergency responders. Hand held extinguishers are not intended for faculty, staff, or student use. **Do not attempt to use a fire extinguisher if you have not been properly trained**.

Remember: A fire extinguisher is no substitute for the Fire Department. Always call the Fire Department first no matter how small you think the fire is.

Rules for Fighting Fires

Fires can be very dangerous and you should always make certain to not endanger yourself or others when attempting to put out a fire. For this reason, when a fire is discovered and **you are properly trained**:

- Assist any person, who is in any immediate danger to safety, if it can be accomplished without risk to you.
- Activate the building fire alarm system or notify the fire department by dialing 523-3000 or 911. When you activate the building fire alarm system, it will notify other occupants, and it will shut down the air-handling units to prevent the spread of smoke throughout the building.
- Only after completing the above two, you may use an extinguisher and the fire is small.

Never Fight A Fire If:

You do not know what is burning and you do not know what type of fire extinguisher to use. Even if you have an ABC extinguisher, there may be something in the fire, which could explode or produce toxic smoke. Chances are you know what is burning, or at least have a pretty good idea, but if you do not know, let the fire department handle it.

The fire is spreading rapidly beyond the spot where it is started. The time to use the fire extinguisher is in the incipient or beginning stages of the fire. If the fire is spreading quickly, it is best to simply evacuate the building, closing doors as you leave.

Tampering/Vandalism

Tampering or vandalizing a fire extinguisher consists of the following:

- Discharging the extinguisher for any other reason than to extinguish a fire.
- Relocating an extinguisher without approval.
- Damaging any part of the extinguisher intentionally or accidentally through carelessness.

Reporting Damaged or Discharged Extinguisher

Never put an extinguisher back in its place after use. If an extinguisher is discharged, even for a few seconds or if it is damaged in any way, report the fire extinguisher and its location to Fire Life Safety by calling Facility Services Work Control Center 523-4227.

Fire Drills

Fire Life Safety conducts fire drills in all university buildings as required by state law. The primary concern in the event of a fire is to get everyone out of the building as quickly as possible. To do this, occupants must be prepared in advance for a quick and orderly evacuation. A trained group will act more calmly under emergency situations, thereby dispelling panic, which has caused more casualties than fire itself. Slow evacuation and panic account for the large majority of all fatalities in fires.

Purpose of Fire Drills:

- To allow occupants to familiarize themselves with drill procedures, location of fire exits, and the sound of the fire alarm.
- To allow fire prevention to monitor the timeliness and effectiveness of evacuations.
- To gauge whether or not persons evacuate the building as legally required.
- To check if fire protection equipment, such as fire doors, is being used properly.
- To gauge how long it takes to evacuate each building, and which exits are generally used.

General Fire Drill Procedures

- Fire drills are arranged and supervised by the Fire Life Safety Department with the cooperation of the NAU Police Department.
- The date and time will be scheduled when most occupants are in the building.
- The Fire Life Safety Specialist will inform Campus Police of the exact times the alarm will be pulled for the drill.
- The Fire Life Safety Specialist will activate the fire alarm.
- After evacuation occupants shall proceed to a pre-determined location and wait for the instruction of emergency personnel to re-enter.
- The Fire Life Safety Specialist shall silence and reset the panel when everyone has evacuated the building.
- Fire drills will be monitored for effectiveness and documented.
- Fire drills will be held at least: Semi-annually in residential occupancies and annually in all other buildings.

Prevention Measures

It is of the utmost importance to be aware of conditions that may cause a fire emergency and thereby endanger the safety of occupants in the workplace and the residence halls. The major causes of fires at the workplace include overloaded electrical outlets and extension cords, misuse of space heaters, mishandling of flammables, improper storage of combustibles, unsupervised cooking, and improper disposal of smoking materials on campus grounds. Implementing fire prevention measures is the key in an attempt to insure one's personal safety and the safety of roommates, officemates, and friends.

The following fire safety requirements must be strictly observed with regard to means of egress.

Egress

A common causes of fire deaths is blocked exits or exit paths. Blocked exits are probably the most preventable and the one most likely to result in criminal negligence charges. It is therefore essential that there is access for quick evacuation during an emergency.

Corridors, Egress Routes and Exit Doors

In an emergency, one of the most important requirements is to ensure that all occupants can leave the building safely. To accommodate this, corridors, hallways, stairwells, and exits are designed and constructed to allow people to leave the building by the safest and quickest method possible.

Obstructions

- No corridor, aisle way, stairwells or component of a means of egress may be obstructed.
- Non-combustible furniture in lobbies must not obstruct the minimum width of egress and be arranged so there is a direct path through the lobby to the EXIT.
- Wires, cables, or extension cords may not be laid across corridors, aisles, or pathways.
- EXIT doors must remain unlocked during hours in which the building is occupied. Special locking devices must be approved by the Fire Marshal's office.
- Furniture, artwork, wall hangings, statues, etc. which protrude from the walls must not obstruct the minimum width, nor present a tripping, injury or other safety hazard.

Items Not Permitted in Corridors, Stairwells and Other Egress Components

- Flammable storage cabinets of any size.
- Compressed gas bottles of any size.
- Carts, cabinets, shelves or other items on which combustibles or flammables are likely to be stored.
- Chemicals, munitions, pyrotechnics, or any other hazardous material.
- Bicycles, Skateboards or other riding equipment.
- Any item that will impede the normal or emergency flow of traffic, or will obstruct any emergency device.
- Portable heaters, coffee pots, food warmers, printers, copiers or other devices that may present a hazard.
- Unprotected high voltage, electrical or gas powered equipment of any sort.
- Any combustible material and overstuffed furniture, boxes, etc.

Atriums and Large Corridors

The open spaces at the base of atriums and large corridors must be left clear at all times. If there is a need to use these open spaces temporarily for any kind of function, it must be done in a way that is not obstructing passage. The Office of the Fire Marshal must be consulted in advance for proper safety precautions.

Fire/Smoke Doors

Two of the most important functions of doors in terms of life safety are to act as a barrier to fire and smoke and to serve as components in a means of egress.

- Fire and smoke rated doors shall not be blocked open.
- The self-closing devices shall not be disconnected or rendered inoperable.
- For special situations that the door must be held open for movement of furniture, equipment or other large size items, the person responsible for the move will provide an individual at the door to ensure the door is not left open, if the building is evacuated.
- Door chocks or foot stops may not be installed on any fire rated door. Also, furniture, appliances, etc., may not be used to hold the door open.
- Doors that need to be left open for high traffic areas or for visual security may be authorized by the Fire Marshal and an approved magnetic release device shall be installed.
- Obstructions that will prohibit fire and smoke rated doors from closing and latching without human intervention are not permitted.

Prevention Measures

- Make certain that a copy of the "Fire Safety and Evacuation Plan" is posted in a conspicuous location at the main building entrance.
- Have an understanding and knowledge of the contents of the "Fire Safety and Evacuation Plan".
- Regularly observe emergency evacuation routes, fire extinguishers and emergency and exit lights.
- Immediately report any missing equipment or any other problems to Fire Life Safety 523-4227.
- Regularly observe the lobby, corridors, stairwells, and keep them clear of obstructions.
- Regularly observe all exits to keep them clear of obstructions at all times.
- Regularly observe fire doors to make certain they are closed at all times; report inoperable doors to the Facility Services Work Control Center 523-4227.

Open Flames and Smoking

- The use of candles or any other open-flame devices is strictly prohibited in all University buildings (Exception – when approved/permitted by the Fire Marshal).

Northern Arizona University is a Tobacco and Smoke Free Campus.

- Smoking and the use of all tobacco products, including those not approved by the FDA for cessation, is prohibited at all facilities including those owned, operated, or leased by Northern Arizona University. This policy includes, but is not limited to, the use of cigarettes, e-cigarettes, hookah, e-hookah, chew, dip, snuff, cigars, pipes, and vaporizers.
- Smoking and the use of all tobacco products shall not permitted in any enclosed space, including private residential space or private vehicles on university property.
- Smoking and the use of all tobacco products shall be prohibited outdoors on all NAU campus properties including parking lots and athletic facilities.
- This policy applies to all members of the campus community, including but not limited to students, faculty, staff, contractors, vendors, affiliates, volunteers, and visitors to the NAU campus regardless of the purpose for the visit.

Electrical Fire Safety

Electrical fires claim the lives of 200 Americans each year and injure 1,500 more. Some of these fires are caused by electrical system failures and appliance defects, but many are caused by misuse and poor maintenance of electrical appliances, incorrectly installed wiring, overloaded circuits, and improper use of extension cords.

The following are simple steps to take to prevent the loss of life and property resulting from electrical fires.

Electrical Wiring and Appliances

- Supervisors should periodically inspect all electrical equipment and cords to ensure proper use and safe conditions. Improper use of electrical devices to obtain more outlet capacity can result in overloaded circuits and fire.
- Be sure all electrical equipment is properly grounded. If any evidence is found of frayed, cracked, or damaged wiring or electrical outlets, the equipment affected should be taken out of service until repairs are made.
- Coffee makers, and all other appliances with exposed heating elements are prohibited. Approved space heaters and other appliances should not be placed under desks or in other enclosed areas. These appliances should be unplugged after each use and stored only after they are cool enough to touch. They should be operated away from combustible materials such as files, curtains, trash containers.

Wiring

In order to prevent high resistance connections, only licensed electricians are permitted to work on electrical wiring or electrical equipment.

Extension Cords

Electrical extension cords are an acceptable means of providing TEMPORARY electrical power for portable appliances; however, they cannot be used as a substitute for permanent electrical wiring

- The use of extension cords should be minimal and used only when a flexible, temporary connection is necessary.
- The cord and the outlet should be checked periodically to ensure overheating is not occurring. Extension cords cannot be used for fixed wiring, and should never be tacked, stapled, tied, hidden under rugs, or draped over pipes or other supports, fastened to or through woodwork, ceilings or walls. When there is a permanent need of an electrical outlet, one should be installed by an authorized electrician.
- Used for non-heat producing devices.
- UL approved and Factory Mutual listed, and three-wire grounded cords.
- Not connected, spliced together, or piggybacked.
- Approved for use for temporary wiring for holiday displays, artwork, or vendors at special events provided they meet the above requirements.
- Plugged into a permanent outlet.

Electrical Panels and Service Equipment

Electrical Panels must:

- Not be obstructed for 36 inches in all directions around the panel and in front for access.
- Have the panel cover and panel door securely in place and closed.
- Have all breaker and main switches clearly marked as to the equipment area they control.
- Be identifiable as an electrical panel. Do not cover or paint to match the wall, etc.

Electrical Panels must not:

- Be locked.
- Have the breakers taped or otherwise secured in the “on” position.
- Have any work performed on the panel by anyone who is not a licensed electrician.

Electrical Outlets/Switches

Electrical outlets are quite often not thought of as being a fire hazard. It is possible that an overload on the electrical system can cause an outlet to spark. The following safety requirements must be complied with.

Outlets must:

- Have the cover plate securely fastened to the outlet box.
- Have an approved cover.
- Have a ground fault circuit interrupter if within 6 feet of a water source.

Multi-outlet Assemblies

Power strips must be properly placed, equipped with fuses or circuit breakers, plugged directly to a permanent outlet, grounded 3-wire type, and UL approved.

Space Heaters

- Space heaters are not recommended appliances for use. Consult Facilities Services to have your temperature adjusted in your area. However, if a space heater is used, the following guidelines must be followed:

    - The heater must have an automatic safety switch that turns the unit off when tipped over.
    - Units shall possess Underwriter Laboratory or other testing agency listing or label.
    - Space heaters with exposed heating elements are prohibited.
    - Before using the heater, inspect the electrical cord. Look for frayed wire or cracked insulation. If there are any defects in the cord or unit, DO NOT USE.
    - Plug heaters directly into a wall electrical outlet. Never use an extension cord with the heater.
    - Never leave the unit on while you are out of your office. Always check to ensure unit is off before leaving your office for lunch or at the end of the day.
    - Do not place the heater near combustible materials such as papers, magazines, or office furniture. Allow at least three feet clearance between the heater and combustible material.
    - Do not place the heater in or near wet areas or in high traffic areas such as exits.
    - Before operating the heater, always read and follow the manufacturer's operating instructions.

Storage Fire Safety

Housekeeping

- Fire doors must be kept closed at all times unless they are held open by an approved device connected to the fire alarm system.
- Exits, stairways, and passageways leading to and from exits must be kept free of obstructions at all times. Furnishings, decorations, combustible objects, or flammables must not block exits, access to exits, or any means of egress. Dispose of all waste material as soon as possible in trash/recycle receptacles or dumpsters. Waste materials must never be piled in corridors or stairwells while awaiting removal.
- Flammable and combustible materials should be present in the work area only in the quantities required for the day's job. These materials must be placed in an approved storage area at the end of each day.
- Materials must not obstruct sprinkler head or be piled around fire extinguishers, fire alarm pull stations, or sprinkler and stand pipe control values. To obtain proper distribution of water from sprinklers, a minimum of 18 inches of clear space is required below sprinkler deflectors. Non-sprinkled buildings shall maintain 24 inches of clear space below the ceiling.

Cylinder Handling and Storage

- All cylinders must have proper labeling and stored in an upright position.
- Cylinders must remain secured to a wall, permanent fixture or an approved cart at all times.
- Empty cylinders shall be marked as empty and removed at next scheduled pickup.
- Cylinders must not block exit routes from the lab or building.

General Storage

This section pertains to any room or building used for temporary or long-term storage of combustibles.

- Combustible materials must be separated from other hazardous materials such as flammables, corrosives, explosives, oxidizers etc.
- Combustible storage is prohibited in all mechanical and electrical rooms, spaces, or areas.
- Storage of materials in buildings shall be orderly and stacks shall be stable.
- Storage areas must be separated from other areas by a one-hour fire barrier with a fire rated, self-closing door, and be protected by fire detection and/or suppression systems.
- Stored materials must be kept at least thirty-six inches from any heat source.
- Storage height shall maintain 18 inches from the sprinkler head or 24 inches from the ceiling in areas without sprinkler heads.
- Aisles in storage rooms must have a minimum width of 28 inches to allow for evacuation, and permit firefighters to gain access to the most remote area of the room.
- Storage cannot block fire extinguishers, fire alarm pull stations, emergency or exit lighting, access to evacuation routes or the exit door, emergency equipment or prevent entry of emergency personnel.
- Storage under stairs is not permitted unless the area is enclosed and protected with a one-hour fire rated enclosure and a detection and/or suppression system.
- Doors to storage rooms may not be "propped" open at any time.
- Contact Property Management for proper disposal of surplus, obsolete, and unused property.

Flammable Storage

It is critical that flammables are used properly and stored safely.

- Indoor storage of LP-Gas cylinders is prohibited (except as approved by the Fire Marshal and require approval/permit – see Operational Permit Section).
- Flammable liquids shall be stored in approved flammable cabinets, metal safety cans, or approved containers.
- Rooms used for flammable storage must be constructed to meet the requirements for one-hour fire rating, ventilation, heating, electrical systems, fire detection and/or suppression systems.
- Flammables are not permitted to be stored in basements of buildings.
- A "daily use" of flammable liquids may be stored on open shelves. “Daily use” refers to a small amount of consumable flammables that are expected to be used in a repetitive nature, and the amount used would not constitute more of a hazard than other ordinary combustibles in the room.
- Flammables, required to be stored away from combustibles, will be stored in an approved flammable storage cabinet. This cabinet will be labeled and incorporate self-closing doors.
- Flammable storage will be kept at least 50 feet from open flames or other heat sources.
- Oily or grease-laden rags must be placed in a self-closing oily rag can for proper cleaning or disposal.
- Ordinary combustibles (boxes, cardboard, upholstered furniture, paper) may not be stored in flammable storage areas.

Flammable Liquids - Hand Sanitizer and Disinfectants

(Non-Laboratory Spaces)

Maximum allowable container capacity

Container Type	
Glass	1 pt
Metal or approved Plastic	1 gal

Maximum storage amount

Flammable Liquids	4 gal

Alcohol-based hand rubs

Wall-mounted dispensers containing alcohol - based hand rubs shall be in accordance with all of the following:

- The maximum capacity of each dispenser shall be 68 ounces (2 L).
- The minimum separation between dispensers shall be 48 inches (1219 mm).
- The dispensers shall not be installed above, below, or closer than 1 inch (25 mm) to an electrical receptacle, switch, appliance, device, or other ignition source. The wall space between the dispenser and the floor or intervening counter top shall be free of electrical receptacles, switches, appliances, devices or other ignition sources.
- Dispensers shall be mounted so that the bottom of the dispenser is not less than 42 inches (1067 mm) and not more than 48 inches (1219 mm) above the finished floor.

Dispensing, mixing and handling

Fire Marshal approval required for the following:

- The purchase or storage of flammable liquid containers with a capacity over 1 gallon.
- The purchase or storage of individual containers of flammable liquids exceeding 4 gallons.
- Storage of flammable bulk liquid containers and liquid dispensing or transfer locations.

Prochnow Auditorium Building Fire Safety Features:

1. **Automatic Fire Sprinkler System**
   - ✓ The building is protected by automatic fire sprinklers.

2. **Fire Alarm System**
   - ✓ The building is protected by an addressable fire alarm panel, with area detection and manual pull stations located at each required exit.
   - ✓ The alarm notification signal is an emergency/voice communication system with a temporal pattern tone (3 pulse signal, pause, 3 pulse signal) then a pre-recorded voice message, with visual synchronized strobes.
   - ✓ The fire alarm control unit will automatically report all active fire alarm signals to the NAU Police Dispatch Center.

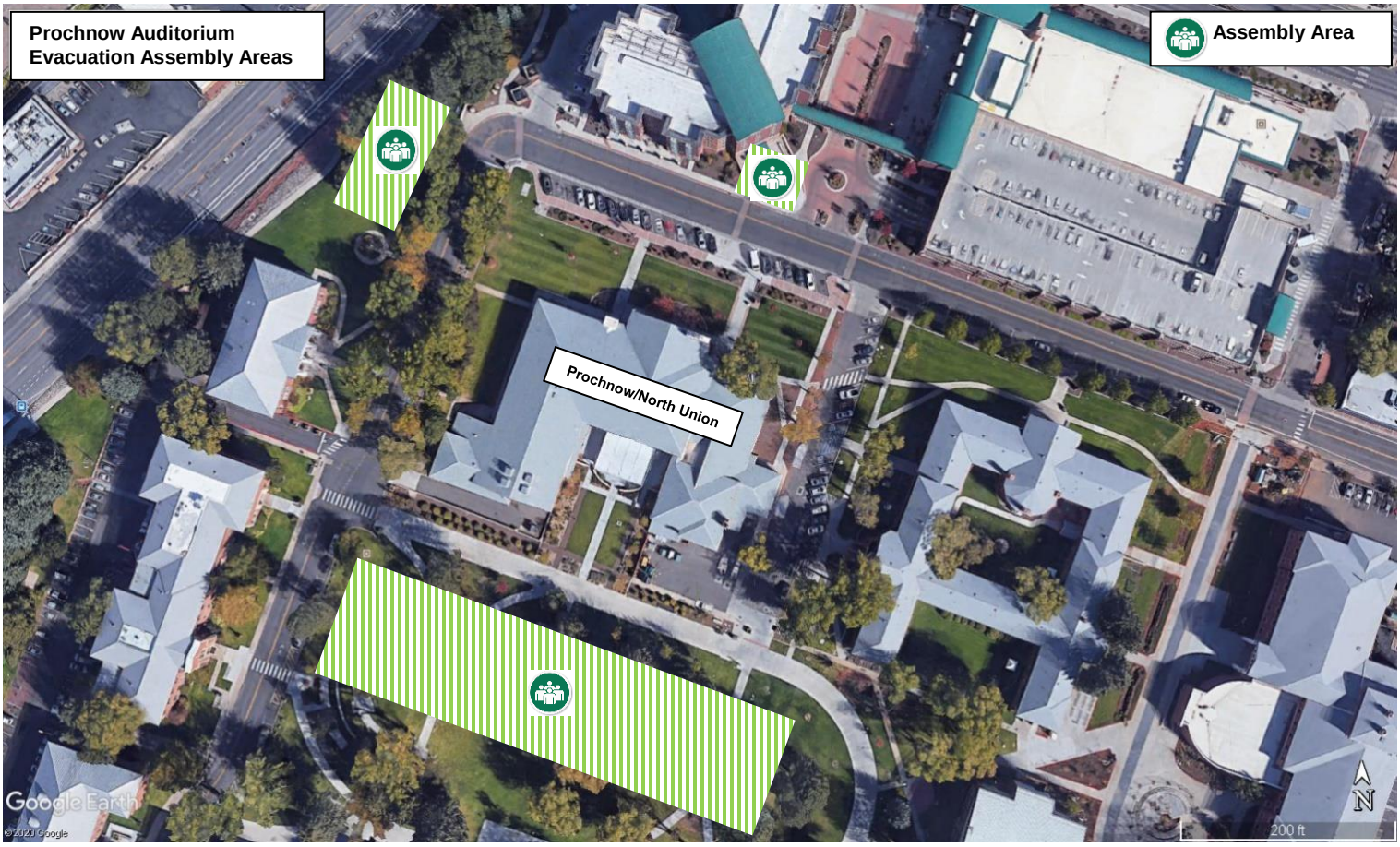
3. **Automated External Defibrillator (AED)**
   - ✓ There are no AEDs installed.

4. **Area of Refuge/Rescue Assistance**
   - ✓ There are no approved Areas of Refuge/Rescue Assistance.

5. **Portable Fire Extinguishers**
   - ✓ Hand held portable fire extinguishers are provided throughout the building. (See map on page 13)

6. **Fire Drills**
   - ✓ Fire drills are conducted one (1) annually 10 days after the start of the fall semester.

7. **Hazardous Materials**
   - ✓ No hazardous materials.



Evacuation Procedures

- Proceed to a designated assembly area.
- Be aware of traffic and arriving emergency vehicles.
- Be aware of current conditions. Do not stand down wind.
- Do not stand in driveways or roadways, emergency responders need clear access to buildings.
- **Remain** at the designated assembly area or at a safe location at least 100 feet away from the building until instructed to re-enter by the City Fire Department, University Police Officer, or other emergency personnel.

LEGEND

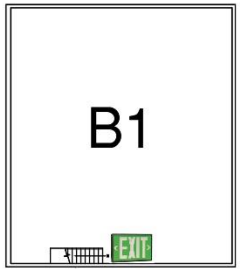
EXIT

EXTINGUISHER

FIRE ALARM PULL

Building Maps

Basement



N

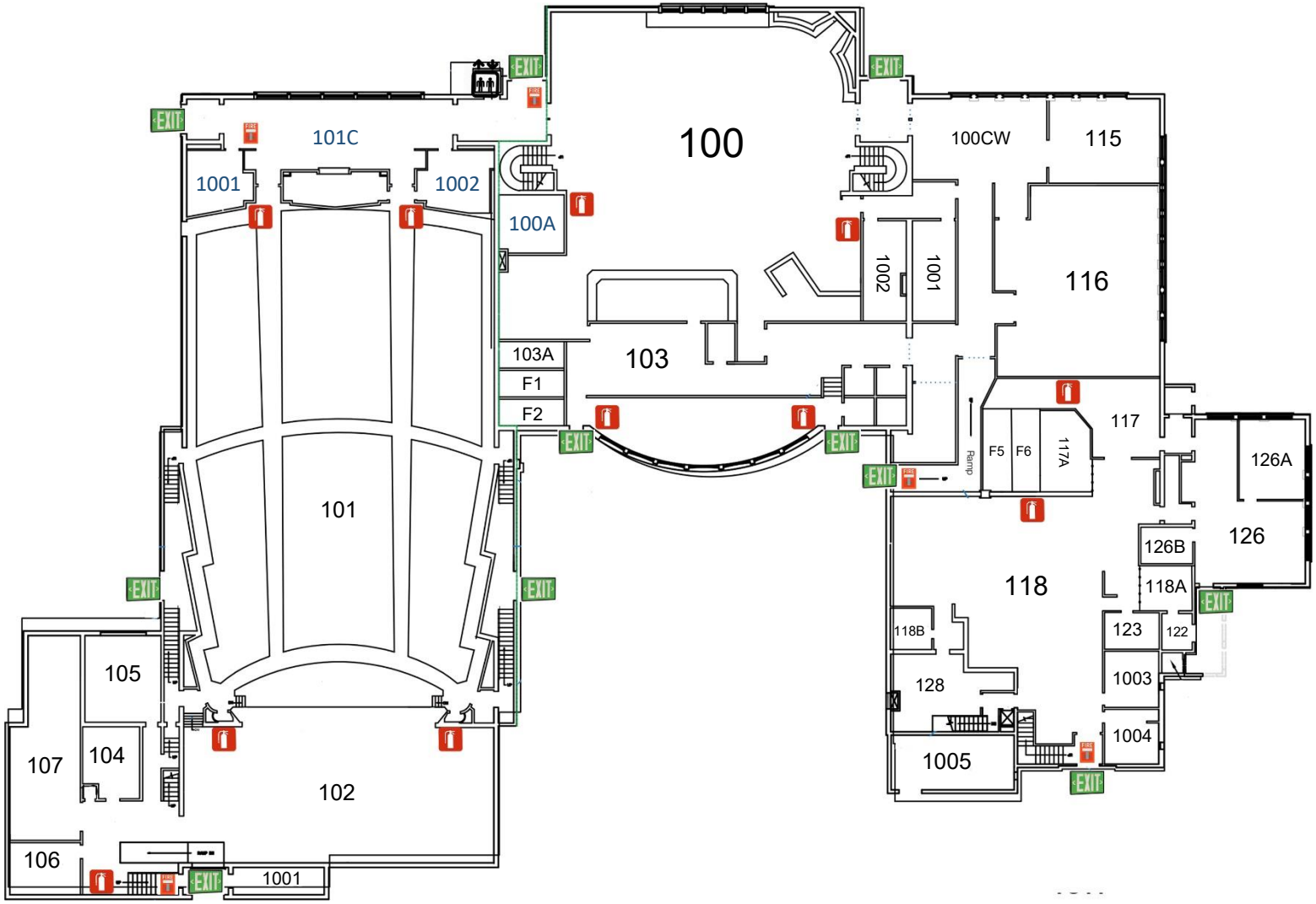
LEGEND

EXIT

EXTINGUISHER

FIRE ALARM PULL

First Floor



N

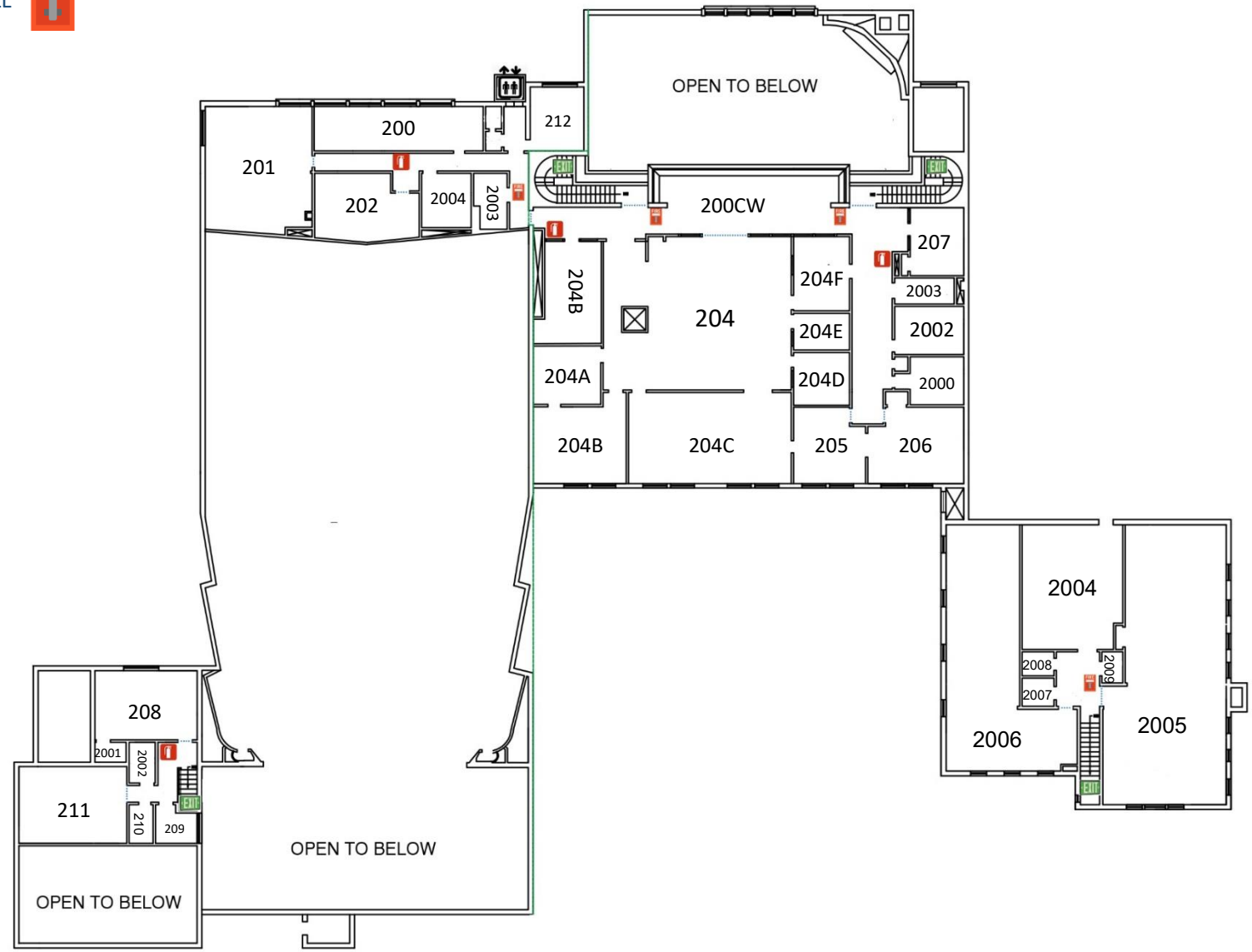
LEGEND

EXIT

EXTINGUISHER

FIRE ALARM PULL

Second Floor



N