



PROJECT NAME: Ambulatory Facility – UKHC Cancer Treatment Center / Ambulatory Surgery Center

Contract Number:

Walsh Project Number: 223026

Project Owner: University of Kentucky

Project Senior PM: Chris Zarvas

Project Executive: Jim Reichart

Project Senior Superintendent: Chris Deiss

VERSION NO.: 00

DATE: 12/14/2023

Project Description:

A new 590,000 GSF Cancer Treatment and Advanced Ambulatory Center will allow needed expansion of patient care services and increased ease of access for the UK Markey Cancer Center and Ambulatory Surgery Facility. Other services housed in the new facility will include but are not limited to outpatient operating rooms, minor procedures, endoscopy, diagnostics and imaging services, pharmacy, retail, outpatient clinics, meeting spaces and necessary support spaces. A new 2,400 space parking structure, thermal utility tunnel, bridge to the existing hospital, expansion of Elizabeth and Waller Streets, and extensive site work will further support this new Cancer Center building.

Policy Statement for Walsh Construction

It is the policy of Walsh Construction to provide a work environment free from unacceptable risks to health and safety. All employees and subcontractors are expected to help strive for this environment in every facet of their work.

Management personnel, site superintendents and foremen will be constantly alert for unsafe acts and conditions. If any unsafe acts or conditions are discovered, corrective action shall be taken with minimal delay. If, in the meantime, any employees are in imminent danger of physical harm, the responsible manager or superintendent is expected to suspend the hazardous operation until corrective action can be completed.

It is expected that all Walsh Construction employees and subcontractors will perform their work assignments in compliance with this policy and will report infractions to their supervisors. No one is expected to (nor will be allowed to) work in an environment where an unacceptable risk exists.

This policy has been designed for the welfare and safety of all Walsh Construction employees and subcontractors to protect life, health, and property. It incorporates the applicable provisions of the Occupational Safety and Health Act (OSHA) of 1970, as amended, as well as relevant state laws governing employee health and safety.

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1.0 INTRODUCTION

1.1 PROJECT COMMITMENT TO HEALTH AND SAFETY

- Provide safe and healthy working conditions for all Walsh and Subcontractor Employees and any other site personnel or visitors.
- Provide adequate protection for the public, and for others who may be exposed to, or associated with WALSH construction operations. Should WALSH or Subcontractor identify a potential public exposure, it must be addressed, evaluated, and resolved via a Job Hazard Analysis (JHA) or a Task Hazard Analysis (THA), or equivalent, for the duration of work.
- Eliminate injuries to personnel, occupational illnesses, and equipment and property damage.
- Follow the SSSP, OSHA guidelines and employer safety and health rules, deferring to the most stringent rule.

1.2 ROLES AND RESPONSIBILITIES

Project Manager:

The Project Manager and the Project Executives are responsible to challenge leadership for continuous improvement, demonstrate commitment and communicate safety expectations for all subcontractors performing work and adhere to the WALSH SSSP.

Superintendent:

The Superintendent has the full responsibility to implement, direct and enforce the HSE program on the project. The Superintendent shall actively support the HSE program by being an example to subordinates through discussions, actions, and directives. Has the responsibility and duty to enforce the observance of all safety rules and regulations by all persons entering or connected with the project. Authorize necessary immediate action to correct substandard safety conditions existing on the project when they are reported or observed. Conduct periodic safety inspections of the job sites and implement necessary corrective action to eliminate all unsafe acts and/or conditions observed. Record observations of inspection and the corrective action implemented in compliance with the reporting and recordkeeping procedures of the HSE program.

Project Safety Professional:

The Safety Professional shall work directly with the Project Manager under direct-line authority to the Regional Safety Manager. It shall be the duties of the Safety Professional to assist with inspections, incident investigations, safety meetings, and the overall implementation of the projects HSE program.

Walsh and Subcontractor Integrated Safety Team:

The WALSH and Subcontractor Integrated Safety Team will address unsafe work conditions which may be noted through inspections. The Integrated Safety Team will require subcontractors and employees to comply with OSHA and the WALSH SSSP.

Foreman/Crew Leader:

The Supervisor or Crew Leader shall be held responsible for implementing and enforcing the HSE program throughout their areas of responsibility. They shall be held accountable for the overall safety of the employees under their supervision. The Supervisor or Crew Leader shall set a good example by complying with the HSE programs, performing all duties in a safe manner, and shall:

1. Be knowledgeable of the HSE program and any applicable federal or state regulations and capably implement them in the work environment.
2. Be knowledgeable of proper safety practices that pertain to the type of work to be performed and the environment in which it is to be performed.
3. Be capable of identifying an unsafe condition and implement immediate corrective action.
4. Ensure that PPE is available and utilized by the employees to perform their duties.
5. Ensure that there are first aid supplies immediately available, that there is someone within the crew who is trained in first aid and there is a means of communication to obtain professional emergency response personnel if needed.
6. Investigate all incidents, complete the necessary paperwork in a timely manner and submit it to the proper personnel for review and disposition.

Employees:

Despite every effort made by the company the basic responsibility for employee health and safety rests with the individual. It is a condition of employment for all employees to conduct their work in a safe and healthy manner. Each employee shall work in accordance with good safety practices as directed by federal, state, and local laws, codes, and standards, as well as any instructions pertaining to a specific operation/job. Report all unsafe conditions or acts, injuries, illness, near miss, or property damage to their immediate supervisor. Refrain from any unsafe acts that may endanger themselves or others. Utilize PPE as required and maintain it in a serviceable condition. No employee permitted to use or transport intoxicants nor be under the influence of any illegal substance on a job site or during working hours.

2.0 EMERGENCY ACTION PLAN

This emergency response plan has been developed so employees understand what to do and /or can be evacuated from the job site if a terrorist act, natural disaster, hazardous spill, or fire occurs on the project.

2.1 PRE-EMERGENCY ACTION PLAN

During their orientation, all employees shall be notified of the different types of emergencies that could occur at the project. All employees will be told where to meet when the "Emergency Alarm" is sounded to warn them of an event.

- Personnel Role: All employees working on the site when the warning is sounded shall assemble near the designated muster points or areas of designated shelter.
- The lines of authority include the Project Owner, Walsh Field Staff, Facility Safety, and others, as required.
- An emergency warning system will be used to communicate an evacuation and return to work.
- Subcontractors shall meet with their supervisors, for a headcount, near the muster point, and at that time be given instructions concerning the emergency.
- Each Subcontractor and Walsh has certified First Aid and CPR (Cardiopulmonary Resuscitation) qualified people. If it is necessary, employees and others shall be transported to the nearest medical facility ASAP.

The jobsite office address is: (will be updated when address is established)

Walsh Construction Company
Attn: UK Project
929 West Adams Street
Chicago, IL 60607

All incidents are to be reported to a supervisor immediately. An occupational clinic has been established for anticipated non-life-threatening emergencies.

Non-Emergency Clinic:

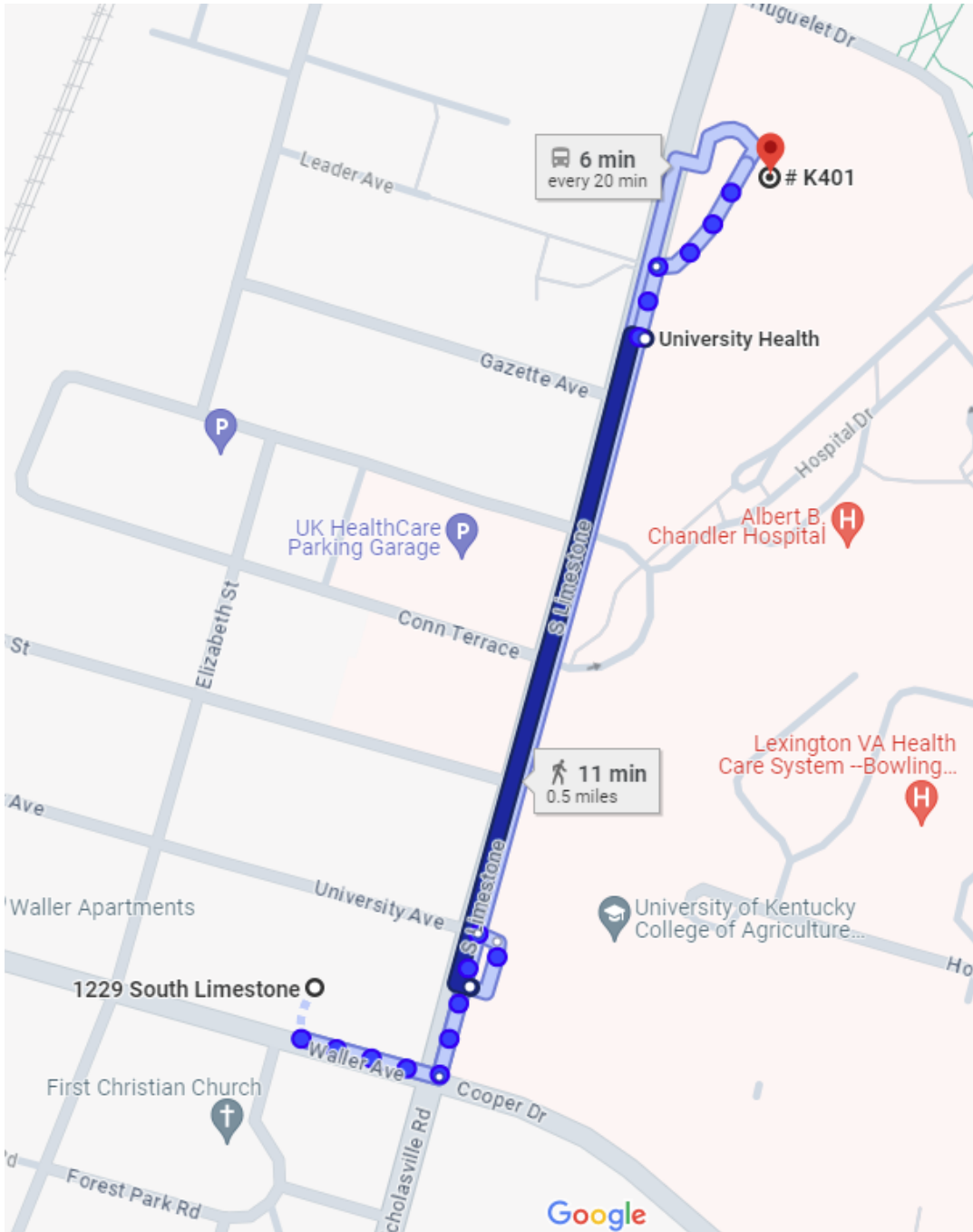
UK HealthCare
740 S Limestone
Lexington, KY 40536
(859) 257-8562
Monday - Friday 7:30 AM – 5:00 PM

Hospital:

Albert B. Chandler (UK) Hospital
1000 S. Limestone First Floor
Lexington, KY 40536
(859) 323-5901

DRIVING DIRECTIONS

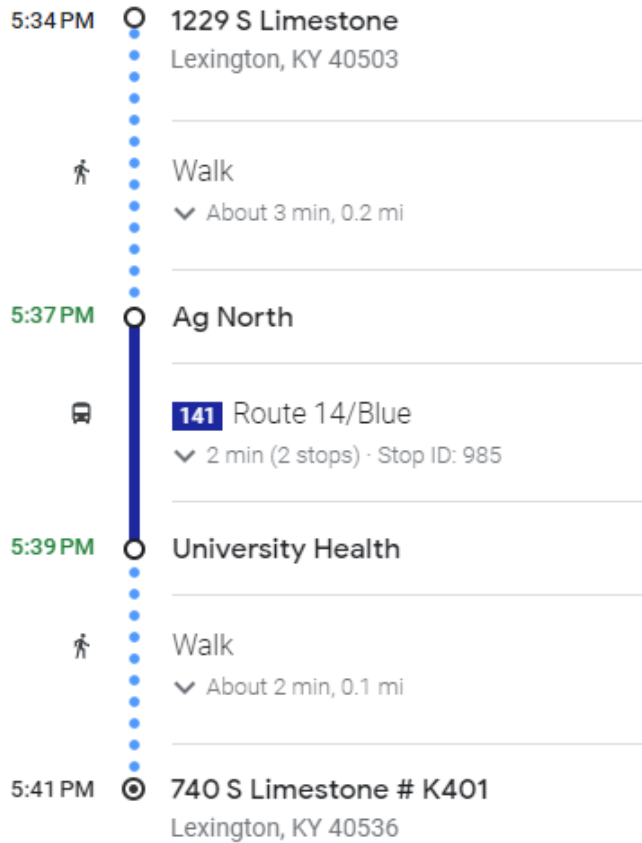
UK HealthCare
740 S Limestone
Lexington, KY 40536
(859) 257-8562
Monday - Friday 7:30 AM – 5:00 PM



← from 1229 S Limestone, Lexington, KY 40503
to 740 S Limestone # K401, Lexington, KY 40536

\$1.00 🚶 5 min every 9 min

 [Add to Calendar](#)



DRIVING DIRECTIONS

Albert B. Chandler (UK) Hospital
1000 S. Limestone First Floor
Lexington, KY 40536
(859) 323-5901

Head EAST across S. Limestone Street from the site.

2.2 PROJECT EMERGENCY CONTACTS:

Chris Deiss	Sr Superintendent	(312) 931-7571
Tim Bogowith	Senior Safety Manager	(725) 270-0682
Chris Zarvas	Sr Project Manager	(909) 486-6231
Scott Mladic	Regional HSE Manager	(312) 613-1996

2.3 OUTSIDE EMERGENCY SERVICE CONTACTS:

Ambulance/Fire/Police		911
Environmental Response		(800) 621-8431
Poison Control Center-		(800) 222-1222
Under Ground Utilities	Kentucky 811	811
National Response Center		(800) 424-8802
Natural Gas	Columbia Gas of Kentucky	(800) 432-9345
Electric	LG&E and KU	(502) 589-1444
Water	Kentucky American Water	(859) 269-2386
Urgent Care <input type="checkbox"/>	UK HealthCare	(859) 257-8562
Hospital	Albert B. Chandler (UK) Hospital	(859) 323-5901

2.4 EMERGENCY EVACUATION PROCEDURES:

1. Upon hearing an evacuation signal, all site personnel are to leave their work areas and collect at the following designated areas of refuge/rally points.
 - Muster Point #1: **Walsh laydown yard north of the WALSH office trailer**
 - Muster Point #2: TBD
2. All employees shall meet at the predetermined Muster Points, for management to conduct a head count and confirm that all employees have safely evacuated the project site. Only trained employees shall re-enter the site for emergency rescue operations and/or to administer first aid.
3. Evacuated employees and other personnel shall remain at their predetermined Muster Point until the Walsh Construction Project Team is notified there are no further hazards present and allows work to continue.
 -
4. Proper authorities (police, fire, rescue, ambulance, etc.) will be notified of the emergency as soon as possible. Signs with emergency phone numbers, instructions and the jobsite address will be clearly posted near all jobsite telephones.
 -
 -
5. At each predetermined Muster Point, subcontractor supervision shall account for their crews and report any missing personnel to the Walsh Construction Project Team.
 -
6. Personnel will remain at the designated site until an all clear is announced or further evacuation steps are ordered.
 -
7. Emergency evacuation route maps and emergency contact lists shall be posted conspicuously

throughout project areas.

Training:

This Emergency Evacuation Procedures will be reviewed with all employees on the project at the following times:

1. Upon initial assignment to the project
2. Whenever responsibilities or designated actions under the Plan change; and
3. Whenever the Plan itself is changed.

2.5 CHEMICAL SPILL:

Subcontractors shall provide spill containment kits and be kept in a sealed container on the jobsite. In the event of a hazardous spill, the Walsh Construction Project Team shall assess the situation for an appropriate response.

The Fire Department and other required agencies shall be contacted immediately by calling 911 and informed of the type and extent of the spill. Appropriate measures should then be implemented to contain the spill until proper cleanup can take place.

2.6 FIRE EMERGENCIES:

- All situations, regardless of size or extent should immediately be reported to the WALSH Authority.
- Under no circumstances should an employee attempt to extinguish a fire when that situation poses a threat of bodily injury. If the threat to life or of bodily injury exists, the Fire Department should be contacted immediately by calling 911 to handle the situation.
- Subcontractor employees shall be trained in the use of portable fire extinguishers. If further assistance is needed to put out or control a fire, the Fire Department will be notified.
- WALSH fire extinguishers will be located throughout the jobsite and will be visibly marked. Any situation that arises that can easily and safely be taken care of with the use of a fire extinguisher should be extinguished immediately. Contact the Fire Department depending on the severity of the fire.
- Portable fire extinguishers shall be provided where needed, during hot work activities. All heavy equipment, etc. shall have portable fire extinguisher.
- Portable fire extinguishers shall be inspected at least monthly. If the pins are missing or it has been used, the fire extinguisher shall be red tagged, taken for re-inspection and charging, if necessary, ASAP after discovered.

1. When fire is discovered:
 - a. Attempt to extinguish small fires and spread to other areas.
 - b. Notify site personnel in the area about the fire.
 - c. Notify the local Fire Department by calling 911.
 - d. Notify site personnel about the fire emergency.
2. If evacuation is deemed necessary, the Emergency Evacuation Procedures described in this plan shall be utilized.
3. When reporting a fire provide the following information:

- a. That there is a fire;
- b. What is on fire;
- c. The specific location of the fire; and
- d. The name, phone number, and location of the person reporting the fire.

2.7 SEVERE WEATHER AND NATURAL DISASTERS:

Tornado:

1. When a warning is issued by sirens or other means, seek inside shelter immediately.
2. The lowest floor without windows, hallways on the lowest floor away from doors and windows, and rooms constructed with reinforced concrete, brick, or block with no windows should be considered.
3. Stay away from outside walls and windows.
4. Use arms to protect your head and neck.
5. Remain sheltered until the tornado threat is announced to be over.
6. Employees should not use equipment and small structures as a means of shelter from a tornado, nor position themselves in an area where there are materials, tools or equipment stored nearby or overhead.

Tornado Muster Area: TBD

Lightning:

1. When lightning is detected within a 15-mile radius of the project a warning will go out to alert workers including (rooftop work, crane activities, manlifts, etc.)
2. When lightning is detected within a 10-mile radius all outdoor work including cranes, aerial lifts, all work vehicles shall be suspended temporarily.
3. Once 30 minutes have passed since the last strike, work shall resume.

2.8 INJURY TO THE GENERAL PUBLIC:

1. If a member of the public is injured during construction, Walsh Construction Project Management Team must be notified immediately.
2. Do not allow the injured party to be moved (unless imminent danger is present).
3. Only people having been trained in Basic First Aid or beyond shall administer emergency medical care to the injured party.
4. Proper authorities (security, police, fire, rescue, ambulance, etc.) shall be notified immediately.

2.9 PROPERTY DAMAGE:

Any property damage on the job site must be promptly reported to the Walsh Construction Project Team, regardless of who the owner of the property is. Certain incidents involving property damage may require an employee evacuation from the jobsite. For example, damage to an underground gas line would require this action to be taken. The property damage incident will be investigated using the project incident report

form and actions taken to prevent recurrence based on findings.

2.10 BOMB THREATS:

In the event of a bomb threat placed with any contractor(s) working on site, naming any area of the jobsite or any combination thereof, the jobsite must immediately be evacuated by all personnel, using the steps outlined above in Emergency Evacuation Procedures.

Proper authorities (security, police, fire, rescue, ambulance, etc.) shall be notified immediately. The jobsite shall remain evacuated of all personnel, until a complete investigation is conducted, and the situation is deemed free of hazard by the acting authorities.

The person receiving the call should try to connect the caller with the Walsh Construction Project Team, or gain as much information as possible such as:

1. Location of bomb
2. Time of detonation
3. Reason why bomb was planted

Additional information relating to the identity of the caller should be attempted to be gathered. They should try to gather information such as the caller's:

1. Sex
2. Race (accent)
3. Voice characteristics
4. Knowledge of building and personnel
5. Background noises

2.11 BLOOD-BORNE PATHOGEN PREVENTION:

This program will apply to all Walsh employees and Subcontractor employees who could, as a result of performing their job duties, come in contact with blood and other potentially infectious bodily fluids. Employees trained and certified in first aid and CPR who might "reasonably anticipate" to come in contact with bodily fluids also must follow the rules and regulations set forth in this plan.

1. When dealing with blood or other bodily fluids, all site employees are required to follow Universal Precautions. Accordingly, all human blood and other human body fluids are treated as if known to be infectious for HIV, Hepatitis B, and other blood-borne pathogens.
2. All certified first aid providers are required to wear disposable latex gloves and eye protection while performing first aid on an injured individual. If rescue breathing or CPR is performed, a one-way resuscitation mask should be used for the protection of the injured and the provider.
3. All blood spills shall be immediately contained and cleaned with an anti-viral solution, or by a solution of 5:1 water to bleach or accepted alternative. In the event of a serious accident, WALSH shall contract with an outside Hazmat firm.

4. Any material saturated with blood must be considered a regulated waste. This means liquid or semi- liquid blood or other potentially infectious materials; contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state if compressed; and items that are caked with dried blood or other potentially infectious materials. Discarded Band-Aids and gauze containing small amounts of blood products are not considered regulated waste. Disposal of all regulated waste shall be the responsibility of emergency medical personnel.

At least one person from each Subcontractor shall be trained in First Aid, CPR, AED procedures and shall be trained in the decontamination of blood spills (Universal Precautions). All individuals are encouraged to attend training in emergency first aid procedures at each jobsite. The Walsh Construction Project Team shall be notified immediately of any bodily fluids spilled on a Walsh Construction Project.

2.12 ACTIVE SHOOTER POLICY:

An Active Shooter is an individual actively engaged in killing or attempting to kill people in a confined and populated area; in most cases, active shooters use firearms(s) and there is no pattern or method to their selection of victims. Active shooter situations are unpredictable and evolve quickly. Typically, the immediate deployment of law enforcement is required to stop the shooting and mitigate harm to victims. Because active shooter situations are often over within 10 to 15 minutes, before law enforcement arrives on the scene, individuals must be prepared both mentally and physically to deal with an active shooter situation.

Good practices for coping with an active shooter situation:

1. Be aware of your environment and any possible dangers.
2. Take note of the two nearest exits in any facility you visit.
3. If you are in an office, stay there and secure the door.
4. If you are in a hallway, get into a room and secure the door.
5. As a last resort, attempt to take the active shooter down.
6. When the shooter is at close range and you cannot flee, your chance of survival is much greater if you try to incapacitate him/her.
7. CALL 911 WHEN IT IS SAFE TO DO SO!

How to respond when an active shooter is in your vicinity:

Quickly determine the most reasonable way to protect your own life. Remember that customers and clients are likely to follow the lead of employees and managers during an active shooter situation.

EVACUATE:

If there is an accessible escape path, attempt to evacuate the premises. Be sure to:

1. Have an escape route and plan in mind.
2. Help others escape, if possible, but evacuate regardless of whether others agree to follow.
3. Leave your belongings behind.
4. Prevent individuals from entering an area where the active shooter may be.

5. Call 911 when you are safe.

HIDE OUT:

If evacuation is not possible, find a place to hide where the active shooter is less likely to find you. Your hiding place should:

1. Be out of the active shooter's view and remain quiet.
2. Provide protection if shots are fired in your direction (i.e., an office with a closed and locked door).
3. Not trap you or restrict your options for movement.
4. Don't hide in groups, spread out along walls, or hide separately to make it more difficult for the shooter
5. Stay in place until law enforcement gives you an "All Clear".

TAKE ACTION AGAINST THE ACTIVE SHOOTER:

As a last resort, and only when your life is in imminent danger, attempt to disrupt and/or incapacitate the active shooter by:

1. Committing to your actions and act as aggressively as possible against him/her
2. Throw items and improvise weapons to distract and disarm the shooter.
3. Recruit others to ambush the shooter with makeshift weapons like chairs, fire extinguishers, scissors, books, etc.
4. Be prepared to cause severe or lethal injury to the shooter.

How to respond when law enforcement arrives:

Law enforcement's purpose is to stop the active shooter as soon as possible. Officers will proceed directly to the area in which the last shots were heard.

1. Know that law enforcement's first task is to end the incident, and they may have to pass injured along the way.
2. Remain calm and follow officers' instructions.
3. Put down any items in your hands (i.e., bags, jackets).
4. Immediately raise your hands and spread your fingers.
5. Always keep your hands visible.
6. Avoid making quick movements toward officers such as holding on to them for safety.
7. Avoid pointing, screaming and/or yelling.
8. Do not stop to ask officers for help or directions when evacuating, just proceed in the direction from which officers are entering the premises unless otherwise instructed.

Information to provide to law enforcement or 911 operator:

1. Location of the active shooter
2. Number of shooters, if more than one

3. Physical description of shooter/s
4. Number and type of weapons held by the shooter/s
5. Number of potential victims at the location

The first officers to arrive at the scene will not stop to help injured persons. Expect rescue teams comprised of additional officers and emergency medical personnel to follow the initial officers. These rescue teams will treat and remove any injured persons. They may also call upon able-bodied individuals to assist in removing the wounded from the premises. Once you have reached a safe location or an assembly point, you will likely be held in that area by law enforcement until the situation is under control, and all witnesses have been identified and questioned. Do not leave until law enforcement authorities have instructed you to do so.

2.13 MEDIA POLICY:

Should an incident occur that is likely to or could reasonably be expected to result in media interest, management should notify the Owner's representative as soon as possible.

"Potential news-making events" include, but are not limited to, involuntary shutdown of a project due to regulatory agency actions, allegations of safety or administrative noncompliance, serious injury or death of an employee on a jobsite, union or employee unrest or public disturbance.

All inquiries or requests for interview from the news media (broadcast or print) should be referred to the Walsh Construction Project Manager. Employees who are solicited by reporters, regardless of the nature of their inquiry, should not respond with a statement.

Employees receiving media calls should immediately notify the Walsh Construction Project Manager and provide background on the inquiry.

2.14 INCIDENT AND NEAR MISS REPORTING:

All incidents resulting in injury or property damage are to be reported at the time of occurrence to the Walsh Construction Project Team. The Walsh Construction Project Team will speak with the worker involved in the incident as well as the Subcontractor in charge of the person(s) involved or witnesses to the event. The contractor will complete their own incident investigation report form and will require each craft person involved to complete a written statement whenever such events take place. The full incident investigation report form shall be submitted **as soon as reasonably possible (same work shift), but no later than 24 hours after the** incident. Walsh and or the Owner may require a more detailed investigation and the Subcontractor will comply with their directions.

1. Near-Miss Event

A Near-Miss is an unplanned event that did not result in injury, illness, or damage – but had the potential to do so. It is the responsibility of the Subcontractor, Supervisor, Superintendent or Project Senior Safety Manager to complete the investigation using the Incident investigation report. This report will include recommendations and/or implementation of corrective actions. The report will be submitted as soon as reasonably possible (same work shift) but no later than 8 hours. A gathering of all involved parties will take place within 24 hours of the incident to review

the case and determine if the steps taken to remediate the incident were appropriate.

2. Medical Treatment Event

It is the responsibility of each Subcontractor to immediately notify the Walsh Construction Project Team of an injury requiring medical treatment. If the injury is considered an emergency call 911. Post-incident alcohol and drug testing must be conducted for any Walsh or subcontractor employee working on the project.

3. General Liability Accident, Property Damage, Environmental Release

It is the responsibility of the Subcontractor to immediately notify the Walsh Construction Project Team of an event involving damage to equipment or material on-site, third parties, and/or the general public. The Subcontractor involved will complete an incident report and submit it to the Walsh Project Senior Safety Manager or Project Superintendent.

3.0 SUBCONTRACTOR SAFETY REQUIREMENTS

3.1 EXPECTATIONS

This WALSH SSSP is designed to set minimum expectations for all employees working on the Walsh Construction Project. Once responsibilities have been assigned, line management, and individual employees alike, can be held accountable for results in achieving Walsh established safety goals and objectives.

The Subcontractor will be required to develop their own Site-Specific Safety Plan (SSSP) and a Job Hazard Analysis (JHA) specific to their Scope of Work. The JHA shall incorporate their scope of work, all anticipated hazards associated with that scope, and measures designed to control said hazards. Additionally, they shall name their competent person responsible for safety on the project and provide any necessary qualification records. Emergency contact information shall also be provided as part of the plan.

The Subcontractor will be required to submit their SSSP, JHA and SDSs for review by Walsh Safety Professionals prior to the scheduling of the initial preconstruction meeting.

3.2 SITE SPECIFIC PROCEDURES

The following elements will be required of all Subcontractors working on a Walsh Construction project:

1. **JOBSITE STRETCH AND FLEX PROGRAM:** Walsh has adopted a mandatory morning stretch and flex program on this project individual contractors will ensure this is being done daily.
2. **OSHA 30 HOUR TRAINING:** All Subcontractor foremen and supervisory personnel shall have at a minimum an OSHA 30 Hour Construction Safety Outreach training certification and shall exhibit documentation of training.
3. **OSHA 10 HOUR TRAINING:** All of Subcontractor's workers shall have at a minimum, an OSHA 10 Hour Construction Safety training certification and shall exhibit documentation of training.
4. **TOBACCO PRODUCTS:** All tobacco products, smokeless tobacco products, and e-cigarettes are prohibited in all Walsh offices, project offices, and Walsh Construction Project site unless there is a designated smoking area.
5. **INCIDENT REPORTING:** Subcontractor or any sub-Subcontractor must report all injuries, occupational- related illnesses, near miss incidents or property damage to the Walsh Construction Project Team immediately. The subcontractor shall instruct its personnel to report, in writing, within 24 hours of all Accidents and Occurrences of any type to Contractor's Site Senior Safety Manager and Superintendent.

6. **ALCOHOL AND DRUG TESTING:** Post-incident alcohol and drug testing must be conducted for any Walsh or subcontractor employee working on the project.
7. **RETURN TO WORK PROGRAM:** Subcontractors shall implement a “Return to Work” (RTW) program to assist workers who are temporarily disabled due to an injury or illness. The RTW program will provide a modified or alternate duty position for any employee who has sustained a work-related injury or illness and is medically unable to perform all or any part of his/her normal duties during all or any part of the normal workday or shift, but who can perform some type of work. Subcontractors shall coordinate with the Walsh project team to ensure that injured or ill employees are treated by the designated medical treatment facility. The designated medical facility shall be utilized for initial treatment and evaluation of all injured employees. Follow-up care will be provided in accordance with applicable Workers’ Compensation laws.
8. **MODIFIED DUTY:** In the event of an injury or illness for a work-related illness or injury, the affected party shall be taken to the designated medical facility for examination and/or treatment. If the doctor determines that the employee qualifies to return to work on an alternate or modified duty basis, the doctor will complete appropriate forms indicating the restrictions and conditions for transitional work. The Subcontractor shall provide alternate or modified work until the employee is able to resume regular duties. All alternate or modified work is temporary in nature and is designed to facilitate a return to regular duties as soon as possible. In no case shall an injured employee be laid-off or terminated from an alternative or modified work position, unless first discussed with the Walsh project team. The subcontractor shall participate as requested in claims review meetings related to workers receiving Workers Compensation benefits.
9. **JOB HAZARD ANALYSIS:** This program establishes Job Hazard Analysis (JHA) and Task Hazard Analysis (THA) for identification and control elimination of potential hazards associated with Subcontractor tasks performed on the project.
 - a. JHA’s must be completed by each Subcontractor of any tier and reviewed by the Walsh team prior to the performance of major scope items and prior to Subcontractor mobilization on-site.
 - b. THA’s must be completed daily by each Subcontractor crew before daily tasks commence on site.
 - i. Subcontractor immediate supervisors are to conduct THA review sessions daily before tasks begin.
 - ii. Copies of THA’s must be posted in the immediate work area and turned in to WALSH Safety Reps on a weekly basis.
 - iii. THA must include crew sign offs for accountability. Before work begins, after break or lunch and end of shift.
10. **DEDICATED ON-SITE SAFETY PERSONNEL:** Anytime a Subcontractor (either by itself or in conjunction with any tier sub) has any employees performing work onsite, a designated fulltime safety representative MUST always be onsite and shall meet the minimum qualifications as listed below. Documentation of certifications/credentials shall be submitted to and approved by the Walsh Senior Safety Manager prior to any mobilization. The dedicated onsite contractor safety representative will cooperate with the Walsh Senior Safety Manager. The contractor safety representative may be removed from the project at the discretion of Walsh.

Total workers per project*	Certification/Credential
1-12	(1) OSHA 30-hour trained Supervisor (dual role)
13-24	(1) STS-C (Full-Time dedicated role)
25-75	(1) CHST (Full-Time dedicated role)
76-199	(1) CHST and (1) STS-C (Full-Time dedicated roles)
200-299	(1) CHST and (2) STS-C (Full-Time dedicated roles)
300+	Add (1) STSC for every 100 workers above 299
300+	Add (1) CHST for every 300 workers above 299
<i>*Total workers per project includes tier subs working under Subcontractor</i>	

If Subcontractor cannot meet the requirements noted in above table Walsh will appoint an individual and the sub shall be back charged \$600/day until the requirements are met. Each Subcontractor Senior Safety Manager shall be subject to Walsh acceptance based on experience, training, and credentials.

11. **DESIGNATED SAFETY REPRESENTATIVE RESPONSIBILITIES:** The onsite safety representative shall participate in the Weekly Integrated Safety Meeting, which will meet on a periodic basis. This representative shall have authority to act on any safety related issues that are concluded by the committee. Subcontractor’s designated safety representative shall conduct a daily safety inspection, to include all of Subcontractor work areas. Documentation confirming completion of such inspections shall be forwarded to Walsh before the following Monday morning before 7am. Subcontractor’s designated safety representative shall attend bi-weekly Safety Representative meetings or as scheduled by the Walsh Senior Safety Manager. Subcontractor’s designated safety representative shall cooperate and coordinate with the Walsh Senior Safety Manager.
12. **CRAFT LEADERSHIP IN SAFETY (CLS):** To assemble a diverse group of personnel to provide review and feedback of all safety related issues and to provide the basis for continuous improvement in the accident prevention activities of the project. Each sub-contractor shall designate an onsite representative to participate in the Craft Leadership Committee, which will meet on a periodic basis. This representative shall have authority to act on any safety related issues that are concluded by the committee.
 - a. Meet bi-monthly to review the status of the project safety activities on the project.
 - b. Formulate policies, set objectives, and evaluate results of those implemented activities and future plans necessary to achieve desired accident prevention goals.
 - c. Provide leadership and support for accident prevention activities.
 - d. Serve as the medium through which project management and superintendents will be given the training necessary for performance of their roles and responsibilities in accident prevention.
 - e. Consider and act upon recommendations developed to eliminate accident causes and to improve Walsh Safety Program and the Subcontractors SSSP.
13. **PERSONAL PROTECTIVE EQUIPMENT (PROJECT MINIMUM REQUIREMENTS):**
 All Subcontractor employees working on a Walsh Construction Project shall be provided the personal protective equipment necessary to complete their jobs safely. The competent person onsite will determine necessary equipment beyond standard required site PPE. Each Subcontractor working on a Walsh Construction project will comply with 29 CFR 1926, Construction Industry Regulations, Subpart E – Personal Protective and Lifesaving Equipment in addition to the guidelines outlined in **Section 5.1** of this plan.

14. **EXPOSURE TO PUBLIC ROADWAYS ENTRANCES:** All deliveries will be made at the designated areas unless otherwise directed by Superintendent. There may be exposure to live vehicular traffic. All speed limits will be obeyed, and deliveries will be made to coincide with working hours. All traffic control signage will meet the Manual on Uniform Traffic Control Devices (MUTCD) requirements before being installed. Fire department access will be maintained and kept open for emergency responders.
15. **SAFETY ORIENTATION:** Each employee selected for work on the project site shall be fully oriented during formal “site safety orientations” on the safety policies and procedures contained in the Walsh SSSP. After completing orientation, the new employee shall understand that by working on a Walsh Construction project he or she will abide by the rules and comply with the intent of Walsh. This training is mandatory for anyone entering the site unescorted or performing any work (Walsh, contractor, vendors, etc.) **Any employee who has been off site for more than 90 days will require an updated site-specific orientation before performing work.**
16. **TOOL-BOX TALKS (SAFETY HUDDLES):** Subcontractors shall coordinate toolbox talks with all their personnel, weekly. This Weekly Safety Meeting shall cover a project-related safety topic. The Subcontractor shall turn those meeting minutes and sign in sheets to Walsh Construction Project Team upon completion.
17. **SAFETY INSPECTION:** Subcontractor supervision shall conduct routine daily in-person inspections of all responsible work areas. Documentation shall be provided (via daily work report) as evidence of regular field presence. Any safety or health deficiencies shall be addressed and corrected immediately. In addition, full safety audits shall be performed and documented accordingly on a weekly basis. Audit findings and paperwork shall be communicated back to the Walsh Senior Safety Manager.

3.3 SAFETY VIOLATIONS MANAGEMENT

It is required that all personnel working on the project comply with all federal, state, local, and site-specific safety standards, regulations, rules, policies, and procedures. The following progressive disciplinary action will be levied against employees and subcontractors who fail to abide by the safety standards and rules.

Additionally, Walsh reserves the right to require retraining for any workers on site before they are allowed back on. Disciplinary action shall be dispensed in the manner described in this policy.

DEFINITIONS: The following definitions shall apply in the application of this policy:

1. **Serious act:** An act that could cause an incident that would most likely result in death or serious physical harm.
 - a. Suspension from the project for 3 days or permanent removal from the project.
 - b. The direct supervisor of the offending employee may receive disciplinary action at the discretion of Walsh Management.
 - c. A 3-day suspension requires re-training on the applicable safety subject(s) violated upon return to the project.
2. **Other-than-serious act:** An act that has a direct relationship to job safety but is not serious in nature
 - a. First Offense- employee is to receive a documented verbal reprimand and receive additional training on the safety subject violated.

- b. Second Offense- employee is to receive a written reprimand and suspension from work on the project for a period of 1-3 days. Upon returning to work, the employee will receive additional training on the safety subject violated.
- c. Third offense- Permanent removal of the employee from the project with written statement of cause

* The direct supervisor of the offending employee may receive disciplinary action at the discretion of Walsh Management.

Project Misconduct: First Offense-Immediate Dismissal from Project

Zero Tolerance Acts	
• Theft	• Verbal or sexual harassment of any member of the public or project.
• Falsifying reports	
• Willful or negligent damage to property	• Failure to follow Fall Protection Policy
• Intoxication	• Failure to follow LOTO procedures, not performing a test to verify no energy prior to working on systems.
• Drug Policy violations	
• Horseplay	
• Fighting	• Entering a confined space without a permit
• Failure to report injuries	• Employee walking or standing directly under a suspended crane load
• Abusive or threatening language	
• Possession of a firearm or weapon	• Failure to observe Danger Tape Barricading
• Smoking on the site	

3.4 PRE-CONSTRUCTION PLANNING:

The project team, as well as Walsh Safety Department, will meet with each Subcontractor before they start to review their Site-Specific Safety and Health Program and all project specific Job Hazard Analyses. The project team shall be an integrated mix of owner, architect, engineer, and Walsh personnel. After reviewing the programs and meeting with the individual Subcontractor, if the team is satisfied with the risk control direction, they will be permitted to begin work.

The Subcontractor will be required to provide their SSSP, JHA's, and Quality Work Plan specific to their work to the pre-construction meeting. The Safety Program shall incorporate the requirements enclosed in this SSSP.

4.0 HEALTH CARE SAFETY PROGRAM: POLICIES AND PROCEDURES

4.1 WORKER SAFETY - POTENTIAL HAZARDS ASSOCIATED WITH WORKING IN HEALTHCARE FACILITIES

Healthcare facilities house some very serious hazards that are not typical to normal construction environments. Therefore, the following hazards/exposures have been incorporated into this program so that all workers can be made aware of the potential hazards they may be faced with. All areas that Walsh will be working in shall be deemed safe by abatement, removal, etc. by that particular healthcare facility/department prior to work starting. All chemicals will be removed from the area(s) to prevent accidental spillage or release of hazardous chemicals. The site Superintendent will be responsible for coordinating this cleanup with the healthcare facilities management team.

4.2 PUBLIC/ PATIENT SAFETY

Many times, our work will require us to be in the common areas of the healthcare facilities, corridors, lobby areas, patient waiting rooms, etc. It is to this end that workers need to be cognoscente of their surroundings. Tripping hazards are to be taken care of immediately and materials are not permitted to be stored in public ways. The right-of-way will always be granted to the public. Containment of our work areas is crucial to the protection of the public from flying objects, dust, debris, falling objects, etc. All work areas will be 100% contained with either a hard barrier or poly barrier. (These are described in detail in the Containment Procedure below and will be identified in the ICRA/ILSM meetings prior to the job starting)

Some of our work could and can be in close proximity to the hospital patients. The Joint Commission on Accreditation and Healthcare Organizations (JCAHO) has developed specific Patient Safety Goals that all hospitals are required to follow, therefore, our work practices shall not be performed in ways that breach these requirements.

Dust control is crucial to the safety and health of most patients. A comprehensive Infection Control Risk Assessment Program has been developed to identify the requirements that will successfully mitigate dust and odors in the contained work area and prevent a release. See the section titled ICRA for specific procedures.

4.3 INFECTION CONTROL RISK ASSESSMENT (ICRA)

Infection Control Risk Assessment (ICRA) is an assessment that is conducted of the future construction related work to take place in a healthcare facility. It is a way to ensure that both air and water within the occupied hospital does not become contaminated and pose a health threat to patients. The main focus of the assessment is to ensure that dust, mold, etc. are kept to an absolute minimum at all times due to the fact that the immune systems of the patients are often compromised, therefore, air borne contaminants can easily cause serious, even life threatening, infections, “matrix of precautions”, and permit necessary to evaluate, communicate and control all aspects of adequate Preconstruction Risk Assessment Infection Control Risk Assessment and Infection Control Construction Permit is required when determined by PCRA. These will be done during the pre-construction planning phase as well as during actual construction in conjunction with coordinated agreements with the Hospital Project Coordinator/Manager and the Infection Control Practitioner.

Once Walsh has completed the pre-construction meeting process, the Superintendent, Project Manager, and Safety Manager are to schedule a meeting with the healthcare facilities Project Coordinator and Infection Control Practitioner to review the project with them. Per the PCRA if necessary, an ICRA will take place. A signed Infectious Control Construction Permit will be posted as required when determined necessary by PCRA. Proper measures will be taken to ensure a dust-free state is maintained. To help with this issue, the following measures will be implemented to ensure dust does not escape the work area, but are not limited to:

1. Required containment will be established during the ICRA meeting.
2. Negative air machine(s) with HEPA filters will be set up inside the work area and exhausted outside the work area (to the exterior of the building if possible).
3. Isolate all HVAC systems.
4. Tacky mats will be placed on both sides of the entrance/exit to the workarea.
5. HEPA vacuums will be available at all times.
6. Mop and water will be available at all times.
7. Entrance to the work area will be placed in a location that is least invasive to the healthcare facilities operations.
8. All debris will be removed in covered buggies only to minimize/eliminate dust from being tracked throughout the healthcare facility.
9. An inspection of the surrounding areas shall be completed to include adjacent rooms, equipment in other areas, etc. that may be affected by noise, power shutdowns, equipment that is being used, and vibration that may be created.

Permit Board:

To comply with Walsh signage SOP, each work area will require a standard Healthcare Permit Board to be placed at the entrance to each project. This sign is intended to identify those work areas within a healthcare facility in which Walsh is working. It is also intended to visibly display all required permits, sign-in sheets, inspection sheets, etc., so that the facilities management personnel can easily see our compliance. Each board must have both the facilities logo and Walsh logo displayed.

The board will contain at least the following items:

1. Negative Air Log (completed daily)
2. Infectious Control Permit and/or ICRA
3. Other that may be pertinent to that facility

To comply with the requirements, all workers going into these areas will be properly trained and have a current certification in ICRA and will be verified that they received eight hours of training by the Walsh Superintendent/Safety as a part of their general orientation prior to the work commencing. Walsh will keep a record of all workers ICRA training certifications on site and available per request. Once a work area is ready and the proper containment has been erected, the Superintendent will perform an inspection of this area to ensure that the requirements of the ICRA meeting have been met. This inspection should take place on a daily basis and periodically throughout the day as required. Refer to the ICRA Checklist for Compliance.

On a daily basis, the Superintendent is responsible for ensuring that the negative air system is working properly. Each project will be supplied with an air current tester or other approved measuring device (i.e.

balloon tube, magnehelic gauge, etc.), which is to be used at all seams in the dust barrier. Once the test has been completed, the Superintendent shall log the time he performed the test and the date. This log is to be placed outside the work location so that it is visible at all times. Negative flow must meet the requirements as set forth by the CDC guidelines.

4.4 ILSM – INTERIM LIFE SAFETY MEASURES

The healthcare facility has to comply with Walsh requirements at all times, including during construction and renovations. To this end, Walsh will not compromise these requirements. Prior to the work commencing, a meeting will be held to discuss the required implementation policy for ILSM to be taken and maintained during construction. The following items are crucial to ILSM compliance:

1. Emergency egress from the construction area is to be maintained at all times and communicated to the workers. For existing healthcare facilities, Walsh will follow the established evacuation procedures.
2. Fire alarm pull stations will be identified prior to work.
3. Access through the healthcare facility will not be impeded upon. A daily egress inspection will be conducted by the Superintendent to ensure proper means of egress through the area is maintained.
4. Fire alarm and suppression systems are not to be impaired when at all possible. However, should it be the case that the systems must be protected or taken offline due to the work process, a permit from the healthcare facility and the local fire department having jurisdiction will be required.
5. All partitions will be required to resist smoke from migrating to different areas of the healthcare facility
6. Walsh standard Permit Board/Signage
7. For Fire Prevention Program refer to Walsh Site Specific Safety Fire Prevention and Hot Work Program.
8. Also, material storage is not permitted in the occupied spaces of the healthcare facility. Added material may cause obstructions in main egress ways in the event of an evacuation or other emergency.

4.5 LOCKOUT/TAGOUT, SCHEDULED SHUTDOWNS, ETC.

It is vitally important that shutdowns are scheduled so that we do not interfere with any life safety equipment, medical gases that are in use, electrical systems that are supplying power to life support equipment, etc. These requirements will be established in the ILSM meetings prior to the work taking place.

All mechanical, electrical, plumbing, fire protection, etc. systems that require work to be performed on them shall be effectively LOTO to a de-energized state. These procedures shall follow in strict accordance with the OSHA requirements in 1910.147 – Control of Hazardous Energy, NFPA 70E, NFPA 99, etc. In most cases, the healthcare facility will have procedures already established for this work. In every case, shutdowns of all types are required to be coordinated with the healthcare’s Facilities Management team. At no time will work be performed on any system prior to this meeting taking place.

4.6 BADGING AND IDENTIFICATION REQUIREMENTS

Due to confidentiality requirements set forth by the healthcare facilities, and Walsh, each worker that enters the work area may be required to have appropriate badging and identification when required by client. This may be different from facility-to-facility; however, each worker is always required to wear the provided identification in a visible location.

If a worker is noticed without the proper credentials, they will be escorted out of the facility and will not be permitted back on site until orientation and badging is complete.

5.0 WALSH CONSTRUCTION SAFETY RULES AND REGULATIONS

5.1 PERSONAL PROTECTIVE EQUIPMENT

All employees, Subcontractors, vendors, visitors, or delivery drivers entering the Project laydown site shall have the minimum PPE as follows:

1. **Hard Hats:** All Subcontractor personnel on site shall always wear an appropriate hard hat per ANSI Z89.1. Employee Names shall be visible on the front of their hard hat.
2. **Hand and Arm Protection:** All Subcontractor personnel are required to wear, at a minimum, ANSI cut level 6 rated protective gloves 100% of the time on this project. A competent person for each trade or group of employees is expected to identify and specify (include in daily THAs) the appropriate glove that best mitigates the potential hazard presented to their employees. When the competent person determines that the use of protective gloves for a specific activity creates a greater hazard, the task must be noted on the THA.
3. **Footwear:** All Subcontractor personnel on site shall wear at minimum 6" sturdy leather work boots
4. **Clothing:** All Subcontractor personnel on site shall always wear appropriate clothing (shirts with 4" long sleeves and long serviceable pants).
5. **High visibility vests, shirts, jackets, or sweatshirts:** shall always be worn by workers unless welding or grinding. Class II high visibility vests shall be worn by workers exposed to traffic by night or day and whenever heavy equipment is operating on-site.
6. **Protective Eyewear:** All Subcontractor personnel on site shall wear 100% eye protection rated per ANSI Z87.1 which also includes prescription Safety Glasses or OTG safety glasses with side shields. Employees shall wear eye and face protection (Full face safety shield along with safety glasses) when there is a flying debris hazard to include the following- overhead work, cutting and welding operations, and activities that create flying debris from powered tools.
7. **Welding / Cutting:** Minimum OSHA standards must be followed for all welding and cutting operations. Soft cap welding and grinding is not authorized on this project.
8. **Hearing Protection:** Hearing protection must be used to meet OSHA standards, this Safety Plan, Federal, State and Local Codes and Regulations. Adequate training must be provided by contractor per OSHA requirements. All Subcontractor personnel on site shall use appropriate hearing protection in areas where noise levels exceed 85 DBA, where exposure to 85 DBA exceeds eight (8) hours per day, or where posted.
9. **Respiratory Protection:** Subcontractors exposed to dust, fumes, and/or gases shall be provided with proper respiratory protection designed to protect against the particular substance encountered. The Subcontractor is solely responsible for the proper testing and training per OSHA standards, and to provide the appropriate equipment.
10. **Additional Requirements:** Subcontractor Supervision shall conduct hazard assessments to identify any additional specific PPE for Subcontractor Workers to ensure adequate protection is provided. In addition, they shall:
 - Provide necessary PPE and training.
 - Monitor use of PPE.
 - Provide replacement PPE when needed.
 - Identify any new hazards that would require the use of PPE.
 - Be responsible for the assurances of PPE adequacy, maintenance, and sanitation.

5.2 HAND AND POWER TOOL SAFETY

Each Subcontractors working a Walsh project must comply with 29 CFR 1926, Construction Industry Regulations, Subpart I – Tools – Hand and Power, in addition to the following guidelines.

1. All damaged tools shall be removed from service.
2. When in doubt on operating procedures, insist upon being instructed on operation and how to utilize all tools in a safe manner.
3. Equipment will not be left unattended while in operation or motion.
4. Portable electric equipment will be unplugged when not in use.
5. Workers must wear level 6 cut resistant gloves when utilizing knives.
6. If the tool is designed to accommodate a guard or side handle, the guard or side handle must be in place while the tool is being used.
7. Additional personal protective equipment (PPE), such as a face shield, goggles and/or hearing protection, may be required while operating a tool.

5.3 MANUAL MATERIAL HANDLING/PROPER LIFTING TECHNIQUE

1. Lifting any material over 50 lbs. shall only be done with two workers.
2. Evaluate to assure that it cannot be done mechanically (to be enforced by Walsh Construction Foremen) first before attempting to manually lift.
 - Fork truck availability
 - Use of pallet jacks, dollies or other lift assisted equipment.
3. Proper lifting technique shall always be practiced (training for all personnel will be conducted at the beginning every project):
 - Bring the load as close to the center of your body as possible.
 - Bend at the knees and utilize legs, not back, for actual physical lift.

Foremen and superintendents shall periodically evaluate work areas and employee work technique to assess the potential for and prevention of strain related musculoskeletal related injuries.

5.4 WORKING ALONE

1. All Job Hazard Analyses shall determine if any work needs to be done alone. The JHA shall address the hazards associated with working alone, any extenuating medical conditions, communication and plan for check-in/monitoring, and plan for rescue.
2. Means of communication or electronic monitoring devices need to be determined before solo work begins to assure direct and reliable correspondence and communication in the event of an emergency. Monitoring solo employee operations shall be planned with established intervals of contact by designated individual with back-up if the primary point of contact person be unable to manage program. Said program shall be in writing with names and methods and timing of communications determined.

3. Emergency response considerations such as establishing time frame for defined “missing”, weather and establishing protocol for contacting appropriate local officials all need to be addressed and planned accordingly.

5.5 HOUSEKEEPING

Good housekeeping on the construction site is essential in maintaining a safe workplace. All Subcontractors will be required to provide clean-up to the dumpster or nearest receptacle daily.

The following guidelines shall be adhered to:

1. Clean-as-you-go practices are required. Do not wait until all work has been completed before cleaning up. Instead, break the work down into smaller tasks and clean the area after each task is completed.
2. Materials will not be stored in a manner that will block, restrict, or prevent access to an egress path or emergency equipment, such as fire extinguishers, emergency eyewash or shower, emergency shutoff buttons or emergency disconnect devices.
3. Tools shall not be strewn about or left where they may cause tripping or other hazards, and shall, at the end of each shift, be collected and stored in a safe location.
4. Lumber and other scrap materials, if no longer needed, and waste materials of all kinds, whether combustible or not, shall, be collected and removed or stored in a safe location. In projects requiring re-cycling of scrap materials, said materials shall be segregated and brought to designated storage areas in preparation for proper re- cycling transportation.
5. All nails will be removed or bent over from all boards, planks, or timbers. Under no conditions will nails be left to form a hazard to workers.
6. Spillage of any liquids of any kind on floors will be immediately cleaned up to avoid slipping, falling, or fire.
7. Walsh Construction will monitor and enforce good housekeeping practices.
8. Failure of any subcontractor to comply with this policy will result in Walsh Construction hiring laborers to clean and then back charging the delinquent subcontractors.
9. Dust control shall be always maintained by watering affected areas for the safety of the public as well as the workers or whatever means that the contract documents allow. No drysweeping shall be permitted in closed areas.
10. If public areas (streets, sidewalks) are being affected by dirt, gravel, mud or any other substance, then the subcontractor will do what is required of them to clean these areas and reduce the effects from happening again. Control procedures may be but are not limited to: mud mats, wheel wash, sweeper, etc. or whatever the contract documents and city/town require.

5.6 WELDING IN HAZARDOUS AREAS

Before welding or cutting is done in a hazardous area, authorization shall be granted by a designated competent person upon inspection of the area. Additionally, the Walsh Construction Superintendent or Safety Manager shall issue a “Hot Work Permit.” If sparks, slag, heat cannot be contained or covered with a non-combustible barrier then welding shall not be performed in those areas respectively.

A fire watch shall be required for all hot work operations. A Fire Watch shall be:

1. Appointed by a competent person.
2. Remain at work area 60 minutes after operation is finished. The fire watch must remain on site for a minimum of 60 minutes to monitor for smoldering fires, per NFPA 51B.
3. Responsible for observation of welding, cutting, or burning operations to guard against fire while the operation is being performed, and for a sufficient time after completion to ensure that no possibility of fire exists.
4. Have fire-extinguishing equipment readily available and be trained in its use.

Welding, cutting, and burning will be prohibited in the following areas:

1. The presence of explosive atmospheres (vapors, dusts, liquids)
2. The presence of large quantities of ignitable combustibles
3. Cutting or welding or pipe where metal is in contact with combustible walls, ceilings, etc. shall not be performed for potential creation of ignition through conduction.
4. No welding or cutting should be performed on used drums, tanks, barrels, or other containment vessels until they have been thoroughly cleaned, purged, and vented.
5. Ventilation during burning, cutting, or welding is absolutely necessary when doing such in a confined space.
6. Ventilation, local exhaust, or general ventilation should be such that any contaminants are kept below maximum allowable concentrations as listed in OSHA 1910.1000.
7. Gas cylinders and welding machines should always be kept on the outside of the confined space. During non- working hours (break, lunch and overnight) torches should be removed from confined spaces.
8. Welding machine operators need to report any defects, and tag related machines out of service, on any equipment which requires repair.
9. When welding materials which may potentially emit fumes containing Chrome VI the contractor must first conduct an IH assessment to determine potential worker exposures above the OSHA PEL. In all cases smoke eaters designed to capture Chrome VI fumes must be utilized, regardless of exposure.

5.7 FUELING REQUIREMENTS FOR PORTABLE TOOLS

1. Extreme caution should be exercised when fueling portable tools, generators, and propane equipment.
2. A fire extinguisher with a rating of 10lb 2ABC shall be available in the event of a fire.
3. Only metal approved safety fuel cans shall be allowed on site per Federal OSHA safety standards. Only red cans used for gasoline and yellow cans for diesel fuel.
4. Fueling within the confines of any building is prohibited.
5. Fuel storage permits, if required, will be obtained from the Local Fire Department.
6. All fuel containers will be properly labeled with the contents of the can.
7. All fuel-operated equipment will be shut down and allowed to cool before any refueling is attempted.
8. If the portable tool is being used inside a building, then air quality needs to be reviewed. This work may need to have more ventilation than normal. This work needs to be reviewed and monitored on a regular basis. The contractor shall exhaust all options before operating any fueled tool inside the building and will be responsible for monitoring the area for carbon monoxide levels and ensuring

appropriate ventilation.

5.8 POWDER ACTUATED TOOLS

The following procedure shall be followed for the use of Powder-Actuated tools on this project:

1. Only qualified operators shall operate powder-actuated tools. A qualified operator is one who has been trained by an authorized instructor and provided with an authorized instructor's card by the tool manufacturer or by an authorized representative of the tool manufacturer.
 - Possesses a qualified operator's card supplied by the manufacturer and issued and signed by both the instructor and operator.
2. Each tool shall be provided with the following:
 - A lockable container
 - Operator's instruction and service manual
 - Powder load and fastener charts
 - Tool inspection record
 - Service tools and accessories
 - Tool maintenance and inspection
 - Follow manufacturers recommendation for use, storage, and disposal.
3. Daily inspection, cleaning and testing shall be performed as recommended by the manufacturer.
4. Powder-actuated tools shall be inspected each day prior to use to check that safety devices are in proper working condition.
5. Tool Security:
 - Explosive actuated tools and the charges shall be secured at all times to prevent unauthorized possession or use.
 - Explosive-actuated tools shall not be loaded until just prior to the intended firing time; neither loaded nor empty tools are to be pointed at anyone; hands are to be kept clear of the barrel end.
 - All spent, and any unspent charges shall be placed in containers kept for that purpose and removed from the jobsite on a daily basis. At no time will charges be allowed to remain unattended.
 - Each storage area shall have this procedure posted in a conspicuous location and all operators on powder-actuated tools will be trained in this procedure prior to start of their work.

5.9 DEMOLITION

The following procedures are to be followed when performing demolition:

1. Prior to any demolition being performed, a hazardous materials survey must be conducted to include any building materials that may contain asbestos, lead, PCBs, mercury, refrigerant, etc.
2. If the demolition is to involve structural components of the building, then a plan must be prepared by a competent person, then reviewed by a structural engineer. An engineered stamp may be required. A survey must be completed of all utilities in the building to assess whether or not these systems are live or have been disabled/made safe. Green and red spray paint is to be used to identify which systems are live (red) and which are dead, and therefore safe to demo (green).
3. A pre-demo checklist must be completed before beginning demolition in a new area.

4. Debris from demolition must be removed throughout the workday, paying special attention to combustible materials. Walking/working surfaces are to be always kept free and clear of debris.
5. Dust control must be always maintained through the use of air filtration, misting with water, use of sweeping compound, etc.
6. When cutting overhead or using a grinder, a face shield must be worn.

5.10 SIGNS, SIGNALS, AND BARRICADES

All employees on a Walsh Construction project site and its Subcontractors will comply with 29 CFR 1926, Construction Industry Regulations, Subpart G, Signs, Signals and Barricades, at a minimum, in addition to the following.

1. Required signs will comply with the OSHA standards described in 1926.200.
2. Where imminent danger to life and health hazards (IDLH) exist the use of DANGER tape will be required.
3. Danger tape must have a sign on all sides with the nature of the hazard, the contractor who installed the tape with a contact number, and the duration the tape will be in place. The danger tape must be immediately removed when hazard no longer exists.
4. The intent of the CAUTION tape is to notify of hazards that may arise during construction activities. Every effort should be made to correct these situations with permanent solutions in a timely fashion. The caution tape must be removed immediately when the hazard no longer exists.
5. All flaggers shall be trained on appropriate procedures before controlling traffic, as required by the Manual on Uniform Traffic Control Devices (MUTCD) and any Municipal or State guidelines.
6. All flaggers shall utilize sign paddles and shall be outfitted with ANSI Class 2 rated high visibility garments, as required by current ANSI standards. All PPE and traffic control equipment shall be outfitted with reflectorized material for night work as required by current ANSI standards.
7. All crane and hoist signals shall comply with applicable ANSI standards.
8. All traffic control devices shall comply with the MUTCD and any applicable Municipal or State guidelines.
9. Emergency communication signage/egress route signage should be posted on floors that include the locations of exits, stairs, fire extinguishers, gates, etc.

6.0 HOT AND COLD TEMPERATURE WORK

The objective of this policy is for each project to conduct a risk assessment that considers the specific work conditions and environments to be encountered during the life cycle of the project. Based on the risk assessment, requirements that address heat and cold stress exposure environments depend on factors such as:

1. Air temperature and wind.
2. Duration of exposure.
3. Type of protective clothing and equipment.
4. Type of work.
5. Level of physical effort.

6. Health status of the employee.

Toolbox Talks will be used and issued to all contractors that address the potential for heat/cold stress, when applicable. In addition, the use of protective clothing (full body suits for hazardous material exposure, heavy clothing/leathers, or any barrier that limit air movement), respirators, and work in confined spaces can increase or compound the risks to the worker, especially in hot environments.

6.1 HEAT STRESS:

Employees who have symptoms or conditions of heat stress, heat stroke, and/or heat exhaustion should notify their foreman or superintendent.

CAUSES AND SYMPTOMS:

Heat stress may occur any time that work is being performed at elevated temperatures. Heat stress symptoms include fatigue, irritability, anxiety, and decreased concentration, dexterity, or movement. If the body's physiological processes fail to maintain a normal body temperature because of excessive heat, several physical reactions can occur ranging from mild to fatal. Because heat stress is one of the most common and potentially serious problems that workers encounter, regular monitoring and preventive measures are vital. Employees must learn to recognize and treat the various forms of heat stress. Workers should be made aware of/given or use the dehydration Urine color chart provided at the back of this section.

PREVENTIVE MEASURES:

Projects should follow these measures to avoid heat stress:

1. Provide fresh drinking water and make it easily accessible.
2. Urge employees to drink 5-8 liters of water per day.
3. Discourage the use of alcohol during non-working hours and discourage the intake of coffee during working hours.
4. Monitor employees for signs of heat stress.
5. An employee with high blood pressure should be monitored often, and extra precautions should be taken.
6. Ensure that adequate shelter is available to protect personnel from heat, as well as cold, rain, or snow, which can decrease physical efficiency and increase the probability of both heat and cold stress.
7. Provide initial training regarding heat stress recognition and prevention.

HEAT STRESS DISORDERS:

Several disorders associated with excessive exposure to hot working conditions can pose serious, even life-threatening effects on individuals. To prevent any incidents from happening, workers daily water consumption should be 5-8 liters per day.

HEAT RASH:

Heat rash is caused by continuous exposure to heat and humid air and is aggravated by chafing clothes. The condition decreases a person's ability to tolerate heat. The symptoms of heat rash include mild, red rash, especially on areas of the body in contact with protective gear.

CARE:

Heat rash is treated by decreasing the amount of time workers wear protective gear and by applying powder to affected areas to help absorb moisture and decrease chafing.

HEAT CRAMPS:

Heat cramps are caused by perspiration that is not balanced by adequate fluid intake. Heat cramps are often the first sign of a heat exposure situation that can lead to the more serious condition of heat stroke. Symptoms of heat cramps are characterized by acute painful spasms of the voluntary muscles.

CARE:

Move the victim to a cool area and loosen clothing. Have the victim drink 250-500 ml of water immediately and every 20 minutes thereafter until symptoms subside. Total water consumption should be 5-8 liters per day.

HEAT EXHAUSTION:

Heat exhaustion is a state of weakness or exhaustion caused by the loss of fluids from the body. This condition, although less dangerous than heat stroke, must be treated. The symptoms of heat exhaustion include pale, clammy, moist skin; profuse perspiration; and extreme weakness. The body temperature is normal, the pulse is weak and rapid, and breathing is shallow. The victim may have a headache, may vomit, and/or may be dizzy.

CARE:

Move the victim to a cool place, loosen the clothing, place the victim in a low head position, and provide bed rest. Have the victim drink 250ml of water immediately and every twenty minutes after until symptoms subside. Consult a physician in severe cases.

HEAT STROKE:

Heat stroke is an acute and dangerous reaction to heat stress caused by failure of the heat regulating mechanisms of the body. During an episode of heat stroke, the body temperature can rise so high that brain damage and death may result if the person is not cooled quickly. The symptoms of heat stroke include red, hot, dry skin (although the person may have been sweating earlier); nausea; dizziness; confusion; extremely high body temperature; rapid respiratory and pulse rate; and unconsciousness or coma.

CARE:

The victim of heat stroke should be cooled quickly to prevent permanent brain damage or death. Soak the victim in cool but not cold water, sponge the body with cool water, or pour water on the body to reduce the temperature to a safe level, 102 degrees Fahrenheit. Do not give the victim coffee, tea, or alcoholic beverages. OBTAIN MEDICAL HELP IMMEDIATELY!

Table 1: Dehydration Urine Color Chart

	Doing ok. You are drinking water as normal, probably well hydrated
	You're just fine. You could stand to drink a little water now, maybe a small glass of water.
	Drink about 1/2 bottle of water (1/4 liter) within the hour or drink a whole bottle (1/2 liter) of water if you're outside and/or sweating.
	Drink about 1/2 bottle of water (1/4 liter) right now or drink a whole bottle (1/2 liter) of water if you're outside and/or sweating.
	Drink 2 bottles of water right now (1 liter). If your urine is darker than this and/or red or brown, then dehydration may not be your problem. See a doctor.

6.2 COLD TEMPERATURE WORK:

Cold stress may occur any time that work is being performed at low temperatures. Cold stress symptoms include fatigue, confusion, uncontrolled shivering, and decreased concentration, dexterity, or movement. If the body's physiological processes fail to maintain a normal body temperature because of excessive cold, several physical reactions can occur ranging from mild to fatal. Because cold stress is one of the most common and potentially serious problems that workers encounter, regular monitoring and preventive measures are vital. Employees must learn to recognize and treat the various forms of cold stress. Workers should be made aware of/given or use the wind chill chart provided at the back of this section to help determine the level of exposure at any given time due to weather conditions.

TREATMENT OF COLD DISORDERS:

The intent of all treatment is to increase the core body temperature to 98.6 degrees Fahrenheit. Cold weather work should be discontinued for any worker with these symptoms, and the worker should be taken to a warm area. Wet clothing should be removed if possible and replaced by dry clothing. A warm, nonalcoholic, non-caffeine drink or soup may be given. Re-warming should be gradual.

PREVENTATIVE MEASURES:

1. Workers should be trained in the recognition of symptoms, treatment of cold stress disorders.
2. Appropriate and suitable clothing must be worn. Clothing should consist of a baselayer, intermediate layer and appropriate outer garments.
3. Extremities of the body should be protected adequately.
4. Hands should be covered with gloves.
5. Caps, hoods, or hard hats with liners should be used to cover the head and ears.
6. Feet should be protected with insulated boots, layers of socks, or boot covers.
7. Workers should keep on hand a change of clean dry clothing.
8. Workers should consume warm, nonalcoholic drinks (avoid or minimize coffee or other liquids containing caffeine) and/or soups.

FROSTBITE:

Frostbite occurs when there is actual freezing of the body tissues, normally when temperatures are below freezing. The injury can result from exposure to cold wind, from prolonged exposure to cold temperatures, or from skin contact with an object whose temperature is below freezing. The tissue damage can be superficial near the skin or extend to deeper body tissues and cause gangrene. The skin may first have a prickly or tingling sensation and later become numb with cold; the appearance may range from superficial redness of the skin to white frozen-looking tissues. Skin sensation progresses to numb with cold. Appearance at the start is a superficial redness of the skin. Appearance progresses to white frozen-looking tissues rigid or wooden to the touch.

CARE:

The victim should be sheltered from the wind and cold and given warm drinks. Clothes, if wet, shall be removed immediately. The victim should be covered with warm clothing or blankets. Do NOT use direct heat and do NOT rub the affected area. Warming should be rapid but gentle.

HYPOTHERMIA:

Hypothermia results when the body loses heat faster than it can be produced. This causes the blood vessels in the skin to constrict in order to conserve important vital heat. Hands and feet are usually affected first. As the body tries to produce more heat, involuntary shivering begins. Uncontrollable shivering and inability to warm-up, confusion, forgetfulness, irritation, clumsiness, slurred speech, blurred vision, loss of manual dexterity and lack of coordination, despair and disinterest, ashen white face and hands, shivering replaced by muscle rigidity, paradoxical stripping of clothes as cold impairs thermo-regulation to center of brain, incoherence and collapse; unconsciousness.

CARE:

Encourage physical activities to generate muscle heat. Replace wet clothing with dry layers, add more layers and make sure to cover the head and neck. Apply hot packs, or water bottles. Supply hot decaffeinated and alcohol-free drinks.

IMMERSION FOOT OR TRENCH FOOT:

These two cold injuries occur because of exposure to cool or cold water. Immersion foot usually results from prolonged exposure when air temperatures are above freezing, whereas trench foot normally occurs from shorter exposure at temperatures near freezing. The symptoms for each disorder are similar and include tingling, itching, swelling, pain in some cases or numbness in others, lack of sweating, and blisters.

CARE:

The care for trench foot is similar to frostbite. Thoroughly clean and dry feet and wear clean dry socks, treat the affected areas by applying warm packs or soaking in warm water for 5 minutes at a time. When sleeping do not wear socks.

7.0 FALL PREVENTION AND PLANNING

7.1 FALL HAZARD ELIMINATION

Elimination of the hazard is the best line of defense against falls from heights. This method is best developed at the planning phase of the project and should be started during the Pre- Construction Safety Planning Conference, for careful assessment of the workplace and the work itself. The key to success at this stage is to design safety directly into the work process. Examples are: backfilling prior to bracing removal in sheeted excavations, attaching a self- retracting lifeline at the top of a gang form on the ground before it is raised into place, use of ground release shackles, and placement of equipment or materials where falls are not an issue.

All work performed at or above 6 feet will be done in conjunction with fall protection 100% of the time, including but not limited to, loading and unloading trailers, steel erection, leading edges of excavations, open floors, shafts (mechanical, etc.), scaffolding, concrete and structural steel. No OSHA CFR 1926 fall protection exceptions shall be utilized on this project. At no time shall a Safety Monitor or Attendant be used as a means of fall prevention.

Shafts will be either covered or guard railed although it is anticipated that stairways will be following floors as constructed. When iron workers complete their work on a given deck the floor will only be open to other trades after the Walsh Construction Project Team inspects the area. Additionally, ironworkers will

not begin steel erection until the Walsh Construction Project Team documents concrete breaking strength. Toe boards are required to be installed. All material will need to be kept a minimum of 6' from the roof/shaft/open floor edges. In addition, any materials that may be blown from roof/shaft/open floor edges shall be secured and/or weighted down.

Concrete gang forms will be utilized for some high concrete walls. Double elevated work platforms will be built into the form systems for working surfaces and as framework for 2"x4" rails with toe-board related scaffold fall protection. Labor tying rebar will be required to submit fall protection plans that identify and explain personal fall arrest systems and related anchorages. They will always be required to have twin self-retracting device (SRD) in addition to positioning systems. Personal fall arrest will be evaluated by the Walsh Construction Project Team before use.

Each contractor is responsible for protecting its own employees by using conventional means of fall protection such as standard guardrails. The ongoing maintenance and daily inspection of this protection must also be included. If a contractor's employee cannot be protected by conventional methods, then adequate pre-planning must be conducted to provide for anchorage points capable of withstanding 5000 lbs. in combination with a safety harness and **self-retracting lifeline (SRL) only**. Perimeter protection should never be used as an anchorage point unless it has been designed by a Professional Engineer (PE) to withstand such force.

7.2 FALL HAZARD PREVENTION

When fall hazards cannot be eliminated, preventing them is the second-best line of defense. This process also requires adequate assessment of the work area and activity to preclude reliance on the workers' behavior and use of personal protective equipment. Subcontractors shall complete a fall protection compliance checklist if that subcontractor will have any workers exposed to a fall hazard.

Examples of fall prevention include, but are not limited to:

1. Ladders
2. Scaffolds
3. Stair-towers
4. Stairways
5. Designate and identify work locations requiring guardrail protection.:
6. Elevated work platforms (concrete formwork);
7. Scaffolds
8. Openings/holes in decks, floors, or other unprotected surfaces; and
9. Unprotected sides of floors/ ramps/ stairways/ platforms. Typical Guardrails requirements include:
10. Shall be constructed of at least 2x4 construction with the top rail able to withstand 200 lbs. of horizontal force.
11. Top rail shall be at 42" plus or minus 3 inches.
12. Mid-rail shall be ½ way at 21" between top rail and walking/working surface.
13. Toe boards shall be installed if an employee is exposed to falling objects. They shall be at least 3 1/2 inches high.

Floor openings larger than 2" must be protected by guardrails or covers. If guardrails are installed, they shall be constructed around all unprotected edges. If covers are used over holes, they must be capable of

supporting 4X the anticipated loads and they must be secured to prevent accidental removal. In addition, they must be marked with words “HOLE” or “COVER”

Fall Restraint is another method of fall hazard prevention. Fall restraint requires the donning of a harness and SRD that limits the distance a worker can extend his walking and working range. Attached to a fixed anchor point that can withstand 3000lbs of force, the fall restraint system will stop the worker when he gets to the edge, eliminating any potential for a fall.

7.3 FALL HAZARD PROTECTION

Fall hazard protection involves using personal fall arrest equipment to prevent the completion of a fall and to reduce the possibility of resulting injuries. Fall protection measures are taken when an employee’s exposure to a fall hazard cannot be eliminated or using fall prevention measures is not an option. It is important to understand that post fall protection rescue must be planned in the event a fall takes place. This is necessary because of the response needed to prevent suspension trauma.

Recognized as the least desirable fall protection method that should only be used as a last resort, fall arrest systems include proper anchorage (rated to 5000lbs per person or 2 x the dynamic rating of fall protection equipment) body support (harness) and connecting means (SRD) all interconnected and rigged to arrest a free fall.

This includes correct installation and proper use of:

1. Rated anchor points
2. Horizontal and Vertical Lifelines
3. Self-retracting lanyards (yo-yos)
4. Rope grabs, etc.

Selection of proper equipment is important and should be based on:

1. The task being performed.
2. Requirement for worker mobility.
3. The number of employees requiring protection.
4. The distance of potential fall. Anchorage point component necessities:
5. The anchorage point should be positioned on an independent structure and used for securing an SRD.
6. An anchorage point should be located above the worker to avoid unnecessary swing in the event of a fall. The anchorage point should be capable of supporting a 5,000- pound minimum strength, and limit free-falls up to six feet.
7. Anchorage points must be engineered by a qualified person. This individual must be capable of determining the required strength, location, and design of the selected anchorage to meet the requirements of the construction activity. Each anchorage point must be carefully planned into the job to provide continuous and complete protection during the work task. Selecting anchorage points requires evaluating the following characteristics:
8. The strength of an anchorage point is its most important characteristic because failure of any anchorage is likely to result in an unprotected fall. The required strength for a fall arrest system ultimately depends on the potential forces applied and the integrity of the anchorage component selected.

9. Clearance: The total fall distance must be determined to ensure the height and location of the anchorage is sufficient to prevent collision injury with the ground or other objects. Follow manufacturers recommendations for calculating fall distance to assure a worker does not contact a lower level.

Body support (a full body harness) is the means of fall protection worn by an employee to minimize the consequences of a fall. Body supports are equipped with D-rings for the attachment of a connecting means, such as a lanyard or retractable device.

Connecting Means. The method of securing an employee to an anchorage includes the use of lanyards, lifelines, and other devices such as self-retracting lifelines and rope grabs. Selecting the appropriate connecting means requires matching the capability of the fall arrest equipment with the requirements and mobility of the work task.

7.4 FALLING OBJECT PREVENTION

The Subcontractor/Seller is responsible for the implementation of a system of safety that will minimize the likelihood of objects being dropped and objects falling due to causes within the control of the Subcontractor/Seller. This system of safety must include daily planning for the implementation of safety strategies to minimize the likelihood of objects being dropped and objects falling due to causes within the control of the Subcontractor/Seller.

Elevated work areas should be enclosed to prevent objects from falling and impacting people and property below, unless such enclosure is not feasible then the perimeter protection must address the fall of material risk posed by stored or handled tools, materials, objects, and equipment to prevent these from being dropped, kicked, knocked, or bumped through openings or gaps.

Tethers or lanyards must be used where the work area is at a height and is not fully enclosed, or where tools or objects are required for use outside of the perimeter protection.

A tether or lanyard must be used to separately secure each individual tool or object in use beyond edge protection or enclosures. The object must be secured prior to crossing through the edge protection or enclosures and or perimeter protection.

7.5 ROOFING FALL PROTECTION

Employees involved in roofing activities on low sloped roofs with unprotected sides/ edges 6 feet or more above a lower surface shall be protected by: guardrails, safety nets, personnel restraint or personal fall arrest equipment. On steep roofs (sloped greater than 4 in 12) 6 feet or more above a lower surface, employees shall be protected by guardrails, safety nets, or a personal fall arrest system.

If warning lines are used it must be maintained at least 6 feet from the leading edge for all subcontractors. The warning line height must be between 34" & 39" from the walking/working surface. The rope, wire or chain must have a breaking strength of 500 pounds and must be flagged every 6 feet and a sign must be posted every 8-feet stating "100% Fall Protection Required Beyond This Point." After erected, the stanchions must be secured from tipping due to wind, etc. per subpart M Letter of Interpretation. Roof work fall protection will require a rail system and flagging. At no time will roofers be able to work without fall protection. Before any work is to begin on the roof, it must be determined what method of fall protection will be implemented and appropriate anchor points identified.

Whenever roofers and any other trade are on the same roof then the flagging must be pulled into the maximum distance. NO Safety Monitor or Attendant shall be utilized on this project.

7.6 EDUCATION AND TRAINING

Subcontractors shall ensure all newly hired personnel as part of their 30-hour or 10-hour OSHA Outreach Safety Training Program in the essentials of fall protection. Periodic fall protection training will be conducted for all Walsh personnel as well. Fall Protection Training will be documented as part of the training. This training certifies Walsh personnel have been trained in all phases of fall protection with said training portable for all Walsh projects. Evidence of fall protection non-compliance shall result in re-training.

Additional site-specific training will be performed as a Toolbox Talk with all affected employees. All documentation of this training will be kept as a signed Toolbox Talk.

At the time that the fall protection equipment is issued, workers will be briefed on:

1. How to recognize any signs of damage to a fall protection system and the importance of removing it from service.
2. An understanding of Walsh's fall protection program.
3. Prompt rescue planning necessary in the event a fall takes place.

7.7 INSPECTION AND MAINTENANCE

Fall protection systems and equipment are designed to prevent serious or fatal injury. All fall protection equipment on Walsh projects shall meet all ANSI, OSHA, and ASTM standards. The storage, maintenance and visual inspections highlighted above need to be performed before each use and regular inspection intervals. This should be performed in accordance with the manufacturer's guidelines and conducted as part of Walsh's procedures for jobsite auditing both on a daily and weekly basis.

All personnel wearing fall protection equipment shall inspect all components in the personal fall arrest system prior to use. The Fall Protection Equipment Inspection Report shall be used for guidance during the inspection process. If fall protection equipment is subject to a load as the result of a fall, the equipment will be taken out of service immediately and given to the Walsh Safety Department.

7.8 FALL PROTECTION MANAGEMENT AND CONTROL

Subcontractors will be trained in fall protection and then audited in the field for compliance effectiveness. Site specific fall protection applications will be discussed as part of the internal pre-construction safety meeting at the beginning of the project.

Subcontractors shall submit site-specific fall protection plans before they start their work. They shall submit their fall protection plan to the safety department for review prior to the subcontractor pre-construction safety planning meeting.

The fall protection plan shall include:

1. Identification of fall related hazards.
2. Fall prevention “system” to be utilized.
3. Fall arrest equipment to be utilized.
4. Qualified/competent analysis of anchorages and any horizontal and vertical equipment.
5. Training of personnel.
6. Incident investigation on all fall related losses.
7. Rescue plan in the event of a fall.

On any construction site there can be some loss of control over workers accessing areas whereby serious fall hazards exist.

8.0 FIRE PROTECTION PROGRAM

8.1 FIRE EXTINGUISHERS:

1. Fire extinguishers shall be a minimum of 10# ABC type or larger if owner/client requires and placed and maintained on the job in conspicuous locations according to OSHA requirements.
2. Fire extinguishers must be affixed in a location to prevent damage from water or other materials. These fire extinguishers shall not be moved or discharged except for fighting a fire.
3. Anyone discharging an extinguisher as a prank will be subject to immediate dismissal.
4. Use of carbon tetrachloride extinguishers is prohibited.
5. Anytime a fire extinguisher is discharged it must be immediately reported to the Walsh Superintendent.

8.2 GUIDELINES

1. Review the OSHA Code 1926.150 through 1926.155. Temporary buildings, when located within another building or structure, shall be of either noncombustible construction or of combustible construction having a fire resistance of not less than 1 hour.
2. Request the Fire Chief visit the site, acquaint him with the project and make any plans required in preparation for any potential emergency.
3. Locate and identify any existing hydrants in the project area for fire department water supply. Provide clear access to same. Any inoperative hydrants will be covered.
4. Activate any new on-site hydrants and interior risers with hose connections for fire department use as soon as possible. Activate sprinklers as soon as possible.
5. Provide, maintain, and conspicuously locate all-purpose ABC type fire extinguishers on the jobsite as conditions warrant or every 3,000 sq. ft., and at each stairway landing. Inspected Monthly with an annual maintenance check conducted as well.
6. The fire department telephone number shall be posted at all jobsite telephones.
7. "No Smoking" signs shall be posted and enforced as required.

8. Cutting and welding operations shall include the following: Floors should be swept free of combustibles within 35 feet of the work area and any flammable liquids should be removed from the area. Wet down the immediate area, where applicable. A fire watch, when necessary, shall be available while work is being performed, at lunchtime and at least 30 minutes after operation is shut down. Fire extinguishers will be required. The subcontractor shall provide floor sweeping, moisture application, fire watch duties and the provision of fire extinguishers. Prior to any burning taking place the Subcontractor shall request a "hot work permit" from the Walsh Superintendent. See chapter 18 of Walsh Safety and Health Program for "hot work permit" procedure.
9. Emergency evacuation plans shall be developed and implemented as needed. These plans shall be reviewed at each job meeting and posted in conspicuous locations. (See Program Element #8 for details on Evacuation Procedures)
10. No volatile liquids shall be used for cleaning agents or as fuels for motorized equipment or tools within the building except with the express approval of Walsh Project Superintendent.
11. Bulk storage of volatile liquids shall be outside the building at a location determined by Walsh Project Superintendent and shall be posted as such. A Permit for storage, if required, must be obtained by the subcontractor from the Fire Department. In addition, the subcontractor who is storing these materials shall furnish the proper type of fire extinguisher to be located within 50 feet of any point on the perimeter of the stored materials. Also, these areas are to be identified with signs restricting access and prohibiting sources of ignition.
12. Regular clean-up of scrap material, sawdust, rags, oil and grease and other residue of construction operations will not only remove or reduce the fire hazard but will promote general safety at the same time.
13. Improperly installed and controlled temporary heating devices could result in loss of life and property on construction sites from fire, asphyxiation, and explosion. Space Heaters shall not be allowed. The following safe practices and procedures shall be followed:
 - a. Temporary heating devices should not be installed or used by anyone on the job until authorized by the Project Superintendent and cleared with the local Fire Department. Electric space heaters shall not be used.
 - b. Portable heating devices (Pot Heaters) shall not be left unattended. If they must be kept running after hours, a fire watch will be assigned.
 - c. Use only approved containers for fuel storage.
 - d. Adequate fire extinguishers should be provided. (2A - 10 lb. ABC)
 - e. At least a 10-foot clearance should be maintained in any direction from any combustible material.
 - f. Heating units should be well constructed with a stable base. Fireproof materials should be placed under the base.
 - g. When polyethylene sheeting, tarpaulins, or canvas coverings are used on the project, they must be U.L. listed fire resistant material with a flame spread rating of 15 or less should be used and at least a 10-foot clearance should be maintained. These materials should be securely fastened.
 - h. Heating devices should not be used in confined or unventilated spaces unless properly vented to the outside.
 - i. All units should be shut down and cooled prior to refueling or moving them.
 - j. Liquid fueled heating devices should be provided with a manual shut-off system on the fuel line. The valve should be located at a safe distance from the unit.
 - k. All bulk storage of flammable material listed above shall be reported to the Superintendent for approval.
 - l. Maintain fire prevention program by checking electrical equipment, use common sense,

- maintain good housekeeping, provide proper flammable liquid storage, provide proper refueling equipment and procedures, utilize cutting and welding fire watches, etc.
- m. Provide security services, if needed or required.
14. Provide fire instructions/training to all personnel:
- a. Know how to get out. Learn what escape route to take from all work areas.
 - b. If you spot a fire, sound the alarm and get to safety, telling others about the fire as you go.
 - c. Know the location of fire extinguishers and any other firefighting equipment.
 - d. Train on use of all fire extinguishers and importance of fighting fires in their incipient stage. Fire Extinguisher training will be done for all Walsh employees at the beginning of each project and annually thereafter.
 - e. Do not attempt to fight a fire, which is too big for you!
15. If there is a fire, DON'T PANIC! Follow your escape plan quickly and calmly.
16. Compressed Gas Cylinders:
- a. All gas bottles such as propane, oxygen and acetylene shall be properly supported and stored and tied in a vertical position in areas designated by Walsh. All stored bottles shall be capped.
 - b. All gas bottles in use shall be tied in a vertical position and capped at the end of the working day.
 - c. All oxygen and acetylene in use shall be in a 5-foot high/ ½ hour fire barrier rated cart with an attached fire extinguisher.
 - d. Storage of any oxygen or acetylene cylinders will be in designated locations identified by Walsh. No storage is permitted inside the building.
 - 1. All fuel tanks should be properly secured.
 - 2. LPG gas cylinders should be stored away from the building out of doors. A cap should be provided to protect the valves on the stored cylinders.
 - 3. Fuel for cutting and burning torches shall be stored in locations and protected as directed by Walsh Superintendent, in conformance with local fire regulations and OSHA requirements.

All combustible or flammable materials will be stored in an appropriately rated lockable cabinet located no closer than 50 feet from the nearest structure. As the project progresses the Walsh will designate a storage location for all combustible and flammable materials. No flammable materials shall be stored inside the building.

Fire extinguishers will be provided by Walsh for every 3000 square feet of the protected building area, adjacent to flammable/combustible storage areas, at every storage and construction shed, and adjacent to stairways on each floor. They will be installed on job made stands or hung and conspicuously located throughout the project. They will be part of the daily inspection with extinguisher log completed monthly by the Walsh Construction Project Team. These fire extinguishers shall not be moved or discharged except for fighting a fire. Anyone discharging an extinguisher as a prank will be subject to immediate dismissal. Anytime a fire extinguisher is discharged to fight an incipient fire the incident shall be reported to the Walsh Superintendent. Use of carbon tetrachloride extinguishers is prohibited.

As soon as the building reaches a height of 4 stories or 50 feet at least one lit stairway will be available for egress. At least one temporary standpipe will be functional as soon as the building reaches a height of 40 feet. The standpipe will be maintained within 1 story of securely decked floors as the building progresses and will be located adjacent to a stairway. Unobstructed fire truck access will be maintained within 100

feet of all Fire Department Connections.

8.3 Fire Protection Management and Control:

Proper permitting at the beginning of the project and establishing contact with local fire and rescue services prior to project commencement are keys to establishing sound control over the potential risk of fire. A qualified and trained fire watch shall be made available any time hot work, as defined, is located within 35 feet of combustibles or flammables or hot work is to be performed above or below combustible. Any hot work to be done in occupied facilities shall not be done without a qualified and trained fire watch. The Safety Department's Safety Coordinator will be evaluating the effectiveness of the program as a component of their safety auditing process. Hot Work needs to be internally managed through the Walsh "HotWork Permitting Program". (See following program element)

9.0 HOT WORK PERMIT PROCEDURE

Hot work is defined as any work that will generate sufficient heat to ignite combustible and/or flammable materials. Combustible materials are substances that will freely support combustion once ignited. Examples of hot work include but are not limited to activity that involves cutting, welding, burning, heating or related operations which involve the use of an open flame or electric arc or any work activity involving the use of spark producing tools or equipment. Anyone involved in any of the aforementioned activities shall be adequately trained in the hot work procedures contained herein. Re-training will be required of anyone not conforming to established project hot work procedures.

9.1 HOT WORK PROCEDURE

Not all situations that arise will be completely covered by this procedure. However, those situations or questions arising from interpretation should be referred to the Walsh Construction Project Team. The Hot Work Permit shall be required of all subcontractors performing defined hot work around combustibles that cannot be relocated. Walsh superintendents shall determine if/when hot work permits are required, or a member of the safety department deems them necessary. If a particular subcontractor is going to be working in a consistent area with consistent exposures and operations, then a "Blanket Permit" can be issued if the Superintendent feels that the control is adequate. (A blanket permit will be limited to 5 consecutive working days.)

All hot work activities will require the designation of at least one fire watch unless all combustible materials within a 35-foot sphere can be effectively removed from the area or covered with a non-combustible barrier. Additionally, a fire watch shall be required when automatic fire detection and alarm systems are inhibited. All penetrations to a lower level shall be covered when the hot work may produce sparks, slag or other hot material that could fall through floor penetrations. All hot work areas shall be barricaded and posted with appropriate warning signs to indicate hot work is in progress.

9.2 HOT WORK PERMIT

1. Evaluate if hot work can be avoided. If not, the Hot Work Permit must be completed by

- subcontractor supervision and distributed to the Superintendent for posting.
2. A hot work is required at all times when there is an open flame or sparks are created.
 3. After completing the necessary information, the recommended Precautions checklist must be completed as directed by the permit. The following checks must be managed to assure adequate protection:
 - a. Available Sprinklers, hose streams, fire extinguishers (and training in their use) are available and in use.
 - b. Assure listed requirements are in place for work within 35 feet of combustibles, explosive atmospheres, flammable liquids, floor and wall openings, and combustible materials that cannot be moved or relocated.
 - c. For combustibles that cannot be removed fire blankets shall be used to capture any welding slag or sparks created.
 - d. For any work on walls and ceilings.
 - e. For any work on enclosed equipment.
 - f. Fire watches and work area monitoring are in place and remain so for a minimum of 60 minutes after the work has been completed.

9.3 HOT WORK MANAGEMENT AND CONTROL:

The Walsh Construction Project Team shall review the projects accordingly to ensure that Hot Work Permits are being utilized in accordance with established procedure.

The Walsh Construction Project Team will review the subcontractors' fire watch training prior to hot work activity. Fire watches shall be trained at minimum in the following:

1. Fully dedicated position and cannot perform any other duties.
2. Fire watch shall be trained in the normal use of a fire extinguisher used at the work site, which will in no case, be less than a 10-pound ABC fire extinguisher - except in computer/data rooms where a special type of fire extinguisher may be required.
3. How to summon emergency responders.
4. Emergency evacuation procedures and notification process.
5. Hot Work permit posting requirements (immediate area of the work activity)
6. The standard permit is valid for one shift or 12 hours.
7. Permit cancelled if emergency alarm, fire alarm, or facility emergency occurs.
8. The fire watch shall wear a red vest or hardhat.
9. In some cases, a fire hose may also be appropriate for the fire.
10. Know the locations and proper procedure for use of the building's fire pull stations.
11. Has Stop Work authority.

10.0 EXCAVATION AND TRENCHING SAFETY

10.1 EXCAVATION NOTIFICATION REQUIREMENTS

Prior to the start of any work involving trenching or excavation operations the Sub-Contractor Foreman involved in the trenching work must notify Walsh Superintendent. Walsh or the site work subcontractor

will notify “Dig Safe” and local utilities prior to any excavation taking place. The Subcontractors management or supervision shall designate a “competent person” (one who has knowledge of the excavation standard, who can identify hazardous conditions, and has authority to stop work at any time the excavation does not meet all safety related requirements) to complete the Walsh Excavation Checklist prior to starting work. A Third-Party locator shall be used to locate any underground utilities within the construction area.

10.2 SUPERINTENDENT OVERSIGHT:

It is the responsibility of the Superintendent to ensure that all excavations are conducted in accordance 29 CFR 1926. Close monitoring of all trenching/excavation operations by the Superintendent shall involve:

1. A pre-excavation safety meeting will be held with the Safety Department, Superintendent and Subcontractor Foreman, with Subcontractor Foreman providing Excavation Checklist prior to any trenching operations taking place.
2. Any contractor found excavating a trench improperly shall be stopped immediately and not allowed to continue until proper corrective action has been taken to abate the hazard.
3. The contractor conducting the excavation operation will designate the person competent to perform the work. The competent person will demonstrate to the Superintendent his knowledge of soil conditions and the Contractor's ability to conduct a safe operation. The competent person shall be on site while excavation work is taking place.
4. As previously stated, the Excavation Checklist shall be completed by the Site Contractor's Competent Person and approved by Walsh Superintendent prior to any excavation over 5 feet in depth. In excavations greater than 4 feet in depth and where oxygen deficiency (atmosphere containing less than 19.5 percent oxygen) or Hazardous Atmosphere exists or could reasonably be expected to exist, the atmosphere shall be tested before employees are allowed to enter. A Competent Person trained to conduct atmospheric testing for hazardous atmospheres may be required at the discretion of Walsh.
5. Excavations 5-feet or greater in depth shall be protected by sloping or shoring per OSHA requirements and be inspected using the excavation checklist. The Competent Person shall determine the soil classification prior to any excavating taking place and complete all required inspections.
6. Ladders shall be positioned in excavations 4 feet or deeper so that no employee must travel more than 25 feet to access such ladder.
7. During the excavating process, caution shall be taken to ensure that excavated material is placed no closer than 2 feet from the edge of the trench.
8. Excavations left open overnight shall be inspected by the competent person prior to the start of the next day's activities to ensure the continued stability of the walls of the excavation.
9. Notify “Dig Safe” or other utility locating organizations is to help eliminate potential hazards to workers and unnecessary shutdowns that could be created when electric lines, gas lines, pipelines, sewers and so forth are exposed during trenching and excavation operations.
10. Assure that adequate slopping and benching configurations coincide with the type of soil in which the excavation is taking place.
11. Verify compliance with Engineer's designed earth support systems and assure that manufacture's tabulated data for all utilized trench boxes, is available in the project office. The manufacture's tabulated data limitations must be highlighted and complied with while the box is in use.
12. If manufacture's tabulated date is unavailable, a registered professional engineer must be procured so that the necessary engineering data can be obtained.

13. A copy of the Federal Register 19, C.F.R., Part 1026.650 to 1926.652 and all related appendices must be kept on the project at all times.

10.3 COMPETENT PERSON RESPONSIBILITIES:

1. To test, both manually and visually, all soil deposits excavated. Based on site and environmental related conditions, and on the structure and composition of the excavated earth deposits, the soil will be classified as type A, B, or C. **APPENDIX A** to Subpart P of 29 CFR 1926 will be utilized in soil classification for all new trenches and any time that the excavation conditions change.
2. Inspect all excavations daily prior to personnel entrance or at any time that the excavation changes.
3. Additionally, the following items shall be inspected on a daily basis:
 - a. Surface encumbrances.
 - b. Underground installations. (Dig Safe 1-800-362-2764)
 - c. Proper support of underground structures, duct-banks, etc.
 - d. Egress/Access - no more than 25' lateral travel distance.
 - e. Exposure to vehicular traffic – Class II attire.
 - f. Exposure to falling loads – no working under any excavation equipment while in operation.
 - g. Warning systems for mobile equipment - barricades.
 - h. If water barricades are utilized, ensure they are appropriately filled up.
 - i. Testing and controls for hazardous atmospheres.
 - j. 19.5% oxygen or less – unacceptable.
 - k. 23.5% oxygen or more – unacceptable.
 - l. 10% L.E.L. – unacceptable.
 - m. 35-PPM CO – unacceptable.
 - n. 10-PPM H₂ S – unacceptable.
 - o. Emergency response/rescue equipment availability.
 - p. Water accumulation hazards.
 - q. Stability of adjacent structures.
 - r. Protection from loose rock or soil.
 - s. Excavated materials stored 2' away from edge of excavation.

10.4 MANAGEMENT CONTROL:

The Safety Department and Project Superintendent shall issue the Excavation Checklist to any subcontractor during the subcontractor pre- construction meeting. This will be for any subcontractor engaged in excavation or trenching on their respective projects. The Checklist will list the major exposures associated with the excavation and assure that identification and control measures are in place by the “competent person” assigned to the operation by the subcontractor.

Walsh Superintendent shall be responsible for supervising compliance with applicable safety procedures by all the Direct-Hire, Subcontractors and Sub/Subcontractors and assure full compliance with OSHA trenching and excavation standards.

11.0 SCAFFOLD SAFETY: MANAGEMENT AND CONTROL

Scaffolding is a great tool to help accomplish the job task at hand but working from elevated levels is

inherently dangerous. Looking at the costs associated with falls it is easy to see why specific attention needs to be directed to this work. Walsh has to ensure that all aspects of working from scaffolds are properly managed. Part of that management involves implementing and maintaining controls designed to identify and plan for the risks associated with the activities of erecting, dismantling, and working from an elevated level on a scaffold.

This program applies to all scaffolding on Walsh projects and establishes the minimum requirements for our subcontractors in the erection, dismantling, and use of scaffolding in accordance with Walsh and 29 CFR 1926.450-454.

11.1 FALL PROTECTION

Each employee on all scaffolding more than 6 feet (3.1 m) above a lower level shall be protected from falling to that lower level. This includes required fall protection for all erection and dismantling.

11.2 SCAFFOLD ERECTION

It will be company policy that erection of all scaffolding be under the direction of a “Competent Person” competent in the erection of scaffolding. A copy of the designated “Competent Persons” resume/certifications shall be submitted by the erection company to the Walsh Superintendent prior to installation. Scaffolding shall be erected with one of the following: base plates, screw jacks or casters, on sound, rigid footing. Use of concrete block for footing is not permitted.

11.3 SCAFFOLD TRAINING

All Walsh personnel erecting scaffolding shall receive/or have scaffold erection and dismantling training accordingly. Re- training will be required for anyone who demonstrates unsafe actions or work on scaffolding found to be in non- compliance.

11.4 INSPECTION AND DOCUMENTATION

Scaffold Tagging System Procedure:

Recognizing the dangers associated with the erection and use of scaffolds Walsh has instituted a tagging system that will be administered by Superintendent in conjunction with the Safety Department, as trained and designated competent persons. This tagging system will be required on all the following types of staging:

- 1 Swing staging (Suspension)
- 2 Tubular welded frame (fabricated frame scaffolding)
- 3 Mobile (excluding baker staging)
- 4 System Scaffolding (Tube and Coupler)
- 5 Pump Jacks
- 6 Stair towers
- 7 Mast climbers

The scaffold inspection checklist will be completed by each subcontractor's competent person prior to anyone working on a scaffold. These inspections will be filed in the Walsh office trailer. This tagging system is designed to identify when the scaffolding is ready for use and as a tool for daily sign off by all contractors' competent persons documenting their inspection. The tagging system has three color-coded tags, each representing the condition of the scaffolding system. The color-coded tag definitions follow:

1. Red Tag: Indicates scaffold has not been inspected or is not safe for use by anyone other than scaffold erectors and dismantlers. The tag will read DO NOT USE! This tag will be placed on the scaffold during the erection and dismantling.
2. Yellow Tag: Indicates scaffold has been inspected but can only be used by persons tied off to a proper anchorage point.
3. Green Tag: Indicates scaffold is complete, has been inspected by the competent person, and is safe for use for that shift.
 - i. At no time shall a green or yellow tag be placed on a scaffold that is missing structural members.

Non-Walsh procured scaffolding:

1. When a subcontractor is responsible for the sole use, erection, and dismantling of scaffolding, Walsh will verify that the subcontractor is managing the inspection and tagging system. The subcontractor will provide the tags, and inspection form, orient the subcontractor on the process, assure that daily inspections are being conducted, and that the tags are being initialed.
2. Walsh is required to assure that all scaffold erection and scaffold use is under the direction of a competent person. There should never be a crew working on scaffolding without the oversight of a competent person.

11.5 SCAFFOLD USE COMPLIANCE REQUIREMENTS FOR SUPPORTED SCAFFOLDS

Scaffolds shall be designed by a qualified person and shall be constructed and loaded in accordance with that design. Each scaffold and scaffold component shall be capable of supporting, without failure, its own weight and at least 4 times the maximum intended load applied or transmitted to it.

1. Each platform on all working levels of scaffolds shall be fully planked or decked with a space of no more than 1 inch between the front uprights and the guardrail supports.
2. Scaffolding greater than 4 feet must be equipped with handrails, mid-rails, toe boards, and deck boards.
3. Cross bracing, when installed appropriately, can be utilized as a mid-rail or top rail.
4. Provide access for all scaffolds. Climbing the side of scaffolding is not permitted unless the scaffold is designed with a built-in ladder.
5. The scaffolds front edge shall not be more than 14 inches (36 cm) from the face of the work unless guardrail systems are erected along the front edge and/or personal fall arrest systems are used.
6. The maximum distance that plastering or lathing operation shall be conducted from the face of work is 18 inches (46cm).
7. The maximum distance allowed on outrigger scaffold to the face of work/building is 3 inches.
8. Each end of a plank shall extend at least 6 inches (15cm) over the support unless cleated or restrained.

9. Planks 10 feet or less shall not extend more than 12 inches (30cm) if the plank is over 10 feet it shall not extend 18 inches (46 cm) over the support unless the planks are designed to support employees and their materials without tipping.
10. When planks are overlapped to create a longer plank or to turn a corner this shall occur over supports and shall overlap by at least 12 inches (30cm).
11. Planks shall not be covered with a coating of paint or stains that may obscure the top or bottom wood surfaces.
12. Planks shall not deflect more than 1/60 of the span when loaded.
13. Scaffold components manufactured by different manufacturers shall not be intermixed or modified unless the components fit together without force and the scaffold's structural integrity is maintained and a competent person determines the resulting scaffold is structurally sound.
14. Supported scaffolds with a height to base width ratio of more than four to one (4:1) shall be restrained from tipping by guying, tying, bracing, or equivalent means. These types of support shall be installed according to the scaffold manufacturer's recommendations or at the closest horizontal member to the 4:1 height.
15. This shall be repeated vertically at locations of horizontal members every 20 feet (6.1m) or less thereafter for scaffolds 3 feet (0.91 m) wide or less, and every 26 feet (7.9 m) or less thereafter for scaffolds greater than 3 feet (0.91 m) wide.
16. Supported scaffold poles, legs, posts, frames, and uprights shall bear on base plates and mudsills or other adequate, firm foundation.
17. Footings shall be level, sound, rigid, and capable of supporting the loaded scaffold without settling or displacement.
18. Unstable objects shall not be used to support scaffolds, platform units or used as working platforms.
19. Supported scaffold poles, legs, posts, frames, and uprights shall be plumb and braced to prevent swaying and displacement.
20. When scaffold platforms are more than 2 feet (0.6 m) above or below a point of access, portable ladders, hook-on ladders, attachable ladders, stair towers (scaffold stairways/towers), stairway-type ladders (such as ladder stands), ramps, walkways, integral prefabricated scaffold access, or direct access from another scaffold, structure, personnel hoist, or similar surface shall be used.
21. Cross-braces shall not be used as a means of access.
22. Each employee on all scaffolding more than 6 feet (3.1 m) above a lower level shall be protected from falling to that lower level. This includes required fall protection for all erection and dismantling.
23. The use of shore or lean-to scaffolds is prohibited.
24. The clearance between scaffolds and power lines shall be 10 feet or greater based on verified voltage.
25. Employees shall be prohibited from working on scaffolds covered with snow, ice, or other slippery material except as necessary for removal of such materials.
26. Debris shall not be allowed to accumulate on platforms.
27. Ladders or makeshift devices, such as but not limited to boxes and barrels, shall not be used on top of scaffold platforms to increase the working level height of employees.
28. Each employee on a boatswains' chair, catenary scaffold, float scaffold, needle beam scaffold, or ladder jack scaffold shall be protected by a personal fall arrest system.
29. Each employee performing overhand bricklaying operations from a supported scaffold shall be protected from falling from all open sides and ends of the scaffold (except at the side next to the

wall being laid) using a personal fall arrest system or guardrail system (with minimum 200- pound top-rail capacity).

11.6 SCAFFOLD USE COMPLIANCE REQUIREMENTS FOR SUSPENSION SCAFFOLDS

1. Suspension scaffolds directly connected to roofs and floors, and counterweights used to balance adjustable suspension scaffolds, shall be capable of resisting at least 4 times or 1.5 (minimum) times the tipping moment imposed by the scaffold operating at the rated load of the hoist, whichever is greater.
2. Each suspension rope, including connecting hardware, used on non-adjustable and adjustable suspension scaffolds shall be capable of supporting, without failure, at least 6 times the maximum intended load applied or transmitted to that rope.
3. The stall load of any scaffold hoist shall not exceed 3 times its rated load.
4. All suspension scaffold support devices shall rest on surfaces capable of supporting at least 4 times the load imposed on them by the scaffold operating at the rated load of the hoist.
5. Only those items specifically designed, as counterweights shall be used to counterweight scaffold systems.
6. Counterweights shall be made of non-flowable material. Sand, gravel, and similar materials that can be easily dislocated shall not be used as counterweights.
7. Counterweights shall not be removed from an outrigger beam until the scaffold is disassembled.
8. Tiebacks shall be equivalent in strength to the suspension ropes.
9. Tiebacks shall be secured to a structurally sound anchorage on the building or structure. Sound anchorages include structural members, but do not include standpipes, vents, other piping systems, or electrical conduit.
10. Outrigger beams shall be placed perpendicular to its bearing support.
11. The use of repaired wire rope as suspension rope is prohibited.
12. A competent person prior to each work shift and after every occurrence, which could affect a rope's integrity, shall inspect ropes for defects.
13. There shall be a minimum of 3 wire rope clips installed, with the clips a minimum of 6 rope diameters apart.
14. When U-bolt clips are used, the U-bolt shall be placed over the dead end of the rope, and the saddle shall be placed over the live end of the rope.
15. Each employee on a single-point or two-point adjustable suspension scaffold shall be protected by both a personal fall arrest system and guardrail system. While using suspended scaffolding, attach and secure a safety harness before stepping on the platform and do not remove it until clear of the scaffold. Tie off to an independent lifeline or building structure. Use one lifeline per person.
16. Suspended scaffolding, such as swinging stages, boatswain (bos'n) chairs, floats, and needle beams, requires special approval by the Walsh Construction Project Team before use.

11.7 SCAFFOLD USE COMPLIANCE REQUIREMENTS FOR PUMP JACK SCAFFOLDS

1. Pump jack components must be of the same design and manufacturer. Never use dissimilar parts.
2. Pump jack brackets, braces, and accessories shall be fabricated from metal plates and angles.
3. Each pump jack bracket shall have two positive gripping mechanisms to prevent any failure or

slippage.

4. When the pump jack must pass bracing already installed, an additional brace shall be installed approximately 4 feet (1.2 m) above the brace to be passed and shall be left in place until the pump jack has been moved and the original brace reinstalled.
5. Pump jack ladder scaffold shall be at a minimum 12 inches wide.
6. Poles shall be secured to the structure by rigid triangular bracing or equivalent at the bottom, top, and other points as necessary.
7. Work benches shall not be used as scaffold platforms, never stand on top workbench.
8. Work benches may be used as a top rail if it is installed between 38 to 45 inches above the work platform and is located on all unprotected sides.

11.8 MOBILE SCAFFOLDS

1. Use of mobile scaffolding will require that all wheels are locked prior to workers accessing the scaffolding.
2. All mobile scaffolds shall have guard rails installed once the working deck of the scaffold reaches 4' in height, or manufacturer's specifications, whichever is less.
3. Any time a mobile scaffold reaches twice the minimum base dimension, scaffolds shall be equipped with outriggers, or shall be otherwise restrained against movement.

11.9 SCAFFOLDING MANAGEMENT:

The agreement that Walsh enters regarding scaffolding erection and use needs to assure that all erection and use is under the direction of a competent person. There should never be a crew of masons, carpenters, glazers, working on any scaffolding without the oversight of a competent person for their respective trade. In multi-use staging it will fall back onto the owner/erector, to assure that the scaffolding is safe. Part of each contractor's daily inspection shall be to evaluate the fall protection, bracing and structure tie in, planking condition, base, and mudsill, and loading of the scaffolding throughout the course of every day. The Walsh Construction Project Team must meet with all involved during the subcontractor pre- construction safety planning meeting to ensure effective implementation and maintenance during construction.

12.0 STRUCTURAL STEEL ERECTION: MANAGEMENT AND CONTROL

12.1 STEEL ERECTION SUBMITTALS

All cable guardrails must be looped connections with three cable clamps on each side of the connection, stanchions every 8 feet and flagged or otherwise clearly marked at not more than 6-foot (1.8 m) intervals with high-visibility material. Toe-boards shall be installed for debris protection. Because Walsh will be responsible for cable railing tension once floors are turned over, turnbuckles are to be installed for every straight run of cable.

Steel erectors must submit to the Walsh Superintendent a site-specific steel erection plan written by a qualified person two weeks prior to commencing work. The plan shall contain minimally:

1. Site Layout
2. Sequence of erection
3. Deliveries
4. Staging & Storage
5. Path of overhead loads
6. Crane Set up
7. Fall protection procedures (fall protection required at 6 feet for all operations)
8. Post fall protection plan
9. Training documentation
10. Qualified and Competent person(s)
11. Critical Lifts

12.2 GENERAL REQUIREMENTS

Walsh shall ensure that adequate access roads and a firm, properly graded, drained area, readily accessible to the work with adequate space for the safe storage of materials and the safe operation of the erector's equipment.

It shall be assured that the concrete in Footings, Piers, Walls, and/or mortar in Masonry Piers and walls are in accordance with ASTM standard test method and has reached 75% (Percent) of its intended minimum compression design strength and signed off by a qualified person. The Engineers test results shall be documented and sent to the steel erector prior to steel erection commencing utilizing the "Approval to Begin Steel Erection Form".

Prior to the erection of a column, Walsh shall provide written notification to the steel erector if there has been any repair, replacement, or modification of the anchor rods (anchor bolts) of that column. This shall be documented by utilizing the "Approval to Begin Steel Erection Form" also and given to the steel erector prior erecting any columns on those anchor bolts. Annual 3rd party crane certification must be obtained from subcontractor before work begins. Additionally, operator's licenses must be obtained before work commences. Hand signaling and rigging qualifications.

12.3 ERECTION REQUIREMENTS

1. Pre-shift visual inspection of the crane by a competent person must be done before the work begins on that shift and a copy of this inspection must be given to Walsh in writing before the shift starts.
2. All rigging shall be inspected before each shift by a qualified rigger and a written copy given to the Walsh Superintendent before the work begins on that shift. Defective rigging equipment shall be removed from service immediately. At a minimum the inspection shall meet 1926.251, which shall include but not limited to the following:
 3. Rigging equipment shall not be loaded more than its recommended safe working load.
 4. Rigging equipment, when not in use, shall be removed from the immediate work area.
 5. Special custom design grabs, hooks, clamps, or other lifting accessories shall be marked to indicate the safe working loads and shall be proof tested prior to use.
 6. Slings covered are those made from alloy steel chain, wire rope, metal mesh, natural or synthetic fiber rope (conventional three strand construction), and synthetic web (nylon, polyester, and polypropylene).
 7. Welded alloy steel chain slings shall have permanently affixed durable identification stating size, grade, rated capacity, and sling manufacturer.
 8. Job or shop hooks and links, or makeshift fasteners, formed from bolts, rods, etc., or other such attachments, shall not be used.
 9. Natural and synthetic fiber rope slings shall be immediately removed from service if warning threads are exposed.
10. Each employee engaged in a steel erection activity that is on a walking/working surface 6 feet above a lower level shall be protected from falling by use of guardrail, safety net or personnel fall protection system.
11. Protection from falling objects and the travel paths during the process of steel erection shall be reviewed daily to ensure that no loads are swung over and that no objects can fall on any person.
12. It must be assured that Proper fall protection is in place and reviewed daily by the competent person and that a written copy is given to Walsh with the daily report.
13. Perimeter columns should have holes at 45 inches above the structural slab to install 1/2-inch aircraft grade cable or if using other devices then it must meet the fall protection requirements (200 pounds in an outward and downward direction) or the anchoring point requirements (5000 pounds per person tying off to it). All wire rope shall be secured with at least three (3) Crosby Clips.
14. During decking operations metal decking shall be laid tightly and immediately secured upon placement.
15. All floor openings shall be protected immediately. They shall be protected by constructing guardrails around them or by covering the hole. These types of protection must be in accordance with Subpart M.
16. Beams must be secured to the connections on both sides before the load is walked on to remove the rigging.

12.4 CUSTODY OF FALL PROTECTION (FLOOR TURNOVER)

This policy has been implemented to ensure that, when the steel decking is complete on a given floor, a mechanism is in place to accept said floor so that other trades may safely commence work on that floor. This inspection shall be conducted by the Safety Coordinator in conjunction with the Superintendent and

the steel erectors representative. When turning over a floor a copy of the Custody of Fall Protection Form will be given to the steel erector by the Walsh project team. There are several items that must be completed prior to allowing other trades to access and perform work on a floor. If all the items below are not completed, the floor is not to be turned over.

Required items prior to floor turnover:

1. Overhead protection, being the next floor, must be complete in the area to be turned over.
2. All openings on the floor to be turned over are to be decked over or otherwise covered (hole cover needs to be able to withstand four times the intended maximum load) Large openings (i.e. elevator shafts, stair wells, etc.) must have proper guardrails, toe boards in place.
3. All pour stops on the perimeter of the building and all interior shafts must be in place. These act as the toe board (i.e. overhead protection) to the workers below these areas until the floor is poured and wood toe boards are installed.
4. Access to the floor must be provided. If gang ladders are to be used and more than 25 workers are going to be in the area, a double cleated ladder is required or two access ways.
5. All perimeter/interior (top & mid rail) cables must be tight and not deflect more than 3 inches. Turnbuckles must be installed at the end of each individual strati run. At no time shall any cable rail system (top & mid rail) be more than 12 feet without support.
6. All top rails of the cable guardrail systems must be flagged for visibility with high visibility material at 6-foot intervals.
7. No holes or gaps around the columns.
8. Housekeeping must be completed by the iron workers or their labor force.

Should any of the items above be deficient, the floor is to be rejected until it is corrected. If all items above are satisfactory, is to be completed and a copy given to the steel erector's representative. A representative of the Safety Department is the only one to officially turn over a given floor. The Superintendent is also required to be present during the walk through. It is permissible to turn the floor over in sections given that all the above items are 100% in the given area, there is means of access to this area, and there is a clear delineation between the area turned over and the area not turned over.

12.5 TRAINING REQUIRED FOR SUBCONTRACTORS

Prior to steel erection starting the following specified training shall be required of the erection crews for the following work:

1. Multiple lift rigging procedures – For all iron workers that are involved with this work.
2. Connector procedures – For all iron workers that are involved with this work.
3. Controlled Decking Zone procedures – For all ironworkers that are involved with this work.

12.6 STRUCTURAL STEEL ERECTION MANAGEMENT

During Weekly auditing and monthly project evaluations, all activities shall be reviewed for implementation and documentation. A separate file will be established for all of the necessary paperwork required by the Steel Erection Program Element. Pre- construction safety planning meetings with all Steel Erection Subcontractors shall be conducted a minimum of two weeks before start date/crane mobilization.

13.0 HAZARD COMMUNICATION POLICY

13.1 RESPONSIBILITY

All employees and subcontractors are responsible for complying with the provisions of this program when working for Walsh. Because Walsh is a “controlling contractor” and Walsh projects are considered “multi-employer” work sites, Walsh is responsible that all workers, including subcontractors, are trained and have access to SDS’s (Safety Data Sheets) for materials used on site.

As a minimum, the subcontractor shall incorporate all the basic principles of the Project Safety Program into their Safety Program. The above shall also include the subcontractor’s Hazard Communications Program with SDS to be provided before start of work. Each month subcontractors will provide an updated list of the hazardous materials they have on the project by submitting a Chemical Inventory to the Walsh Construction Project Team. The subcontractor is responsible for maintaining an updated binder of their respective SDSs on the project and will make them immediately available for review upon employee, Walsh or any other request. This can be an electronic binder or system as long as the documents are immediately available.

Safety Data Sheets must be referenced and included in daily THAs as a means of identifying proper personal protective equipment as well as other control measures including spill response and first aid measures. No work is permitted without first having all necessary equipment and controls for the chemical being used on the project. All hazardous materials and chemicals to be utilized on-site by subcontractors will have a Safety Data Sheet forwarded to the Walsh Construction Project Team for review, approval and filing before being brought onsite.

13.2 SAFETY DATA SHEETS

Subcontractor’s will not develop Safety Data Sheets (SDS) but instead depend on the manufacturers, distributors and/or suppliers to provide this information in a timely fashion.

The Site Superintendent is responsible for obtaining and replacing outdated SDS for all products used on the site. The SDS file is reviewed periodically by the Safety Manager to ensure that every hazardous product has a corresponding data sheet. Copies of the applicable SDSs are maintained by the Site Superintendent in the office trailer and are available to site employees and subcontractors on request. While respecting a company’s right to protect secret formulations (trade secrets) SDS’s which omit health and/or safety information will not be adequate to meet Walsh requirements.

No new product containing a hazardous chemical(s) may be purchased or used without first reviewing the corresponding SDS to determine the extent of the hazard and how to properly protect employees from overexposure.

13.3 LABELING

Preserve the labels already on product containers. At a minimum it is expected that these labels will be

written in plain English, prominently displayed, and they will contain the chemical identity and appropriate hazard warning information, including the target organ(s), if available.

Bulk Storage containers of gasoline, fuel oil, propane, etc. have been labeled as indicated in Section 6.1 above. These labels are weatherproof and placed conspicuously on the containers.

13.4 TRAINING

The Subcontractor is responsible for ensuring that employees who work with hazardous chemicals or have the potential of being exposed to hazardous chemicals have received HAZCOM training.

New employees are trained before their initial assignment to an area that where they may use, or be exposed to, hazardous chemicals and on any non-routine tasks that deviate from the normal course of project operations.

Retraining is done annually and whenever new chemicals are introduced into the workplace. All employee training sessions are documented, and the records retained in the personnel files.

13.5 INFORMING OTHER (SUB)CONTRACTORS

It is the responsibility of the Subcontractor to provide other trades with the following information:

1. A list of hazardous chemicals which are used on the site,
2. Measures to reduce the possibility of employee overexposure,
3. Applicable SDSs, and
4. Procedures to follow if overexposure occurs.

Hazard Communication Management and Control: The assurance that SDS's from Subcontractors are obtained, and logged for quick reference, is paramount to the success of treatment in the event of a spill or exposure to construction related hazardous materials. The project will be audited to assure that the Walsh "Safety Data Sheet Inventory Log" log is available and up to date.

14.0 CONFINED SPACE ENTRY PROCEDURES

To establish the means of identifying confined spaces and to implement the policies and procedures necessary to protect Walsh, and subcontractor personnel alike, while performing their respective duties within these potentially dangerous spaces. To this end the following objectives are established:

1. To ensure that personnel do not enter confined spaces until properly evaluated, and a “Confined Space Entry Permit” is completed, under the direction of the Walsh Project Superintendent.
2. Assurance that any Subcontractors, that enter confined spaces, assign a competent supervisor to oversee confined space entry.
3. Air monitoring is implemented to inform the entrants of the possible hazards and to provide them with atmospheric testing necessary for their completion of the “Entry Permit”.
4. Oxygen level shall be between 19.5% and 23.5%
5. Carbon Monoxide level be 35 ppm or below.
6. LEL of explosive gas shall be at or below 10%
7. Hydrogen Sulfide shall be non-existent.
8. Rescue extraction is in place.
9. Entrant supervision is in place.
10. Ventilation, if necessary, is implemented with monitoring to be always conducted when ventilation is in place. This will ensure adequacy of air movement and overall safety of air within the confined space.

DEFINITION:

A confined space is defined as any space that is surrounded by confining surfaces as to permit either the accumulation of hazardous gasses, mists, fumes, vapors, or dusts, or the possibility of an oxygen deficiency or excess; and that restrains egress to such a degree that a person would have difficulty in escaping from such space in an emergency. Examples of confined spaces include vaults, tunnels, manhole, sewers, any tank, tank cars, tank trucks and certain parts of structures such as bins, silos and hoppers.

14.1 RESPONSIBILITIES

The definition of roles and responsibilities is essential. Confined space requirements, policies, and procedures need to be communicated to Field Operations if the goal of preventing unsafe entry into defined confined spaces is to be realized. With roles and responsibilities established, Field Operations can protect employees of both Walsh and all subcontractors while performing their respective duties within said spaces.

WALSH SAFETY DEPARTMENT’S ROLE AND RESPONSIBILITY:

1. Ensure training is provided for all Superintendents on confined space entry.

2. Provide all Superintendents with assistance as requested to carry out the policies and procedures outlined.
3. Assure that any subcontractor entering confined space provides necessary equipment (air monitoring, ventilation, emergency extraction tripods) as required.
4. Assure coordination of entry operations for multi-employer operations so that the operations of one employer does not endanger the safety of other employers working in the same space.
5. Re-evaluate/re-test space any time requested by any employee or employee representative.

SUPERINTENDENT'S ROLE AND RESPONSIBILITY:

1. Orientate Foremen on Company's procedures for working in confined spaces.
2. Evaluate, where feasible, confined space hazards and determine their severity.
3. Prepare Confined Space Entry Permit,
4. Assure arrangement for on-site training of proposed entrants.
5. Assure arrangement for on-site training of proposed attendants.
6. Assure arrangement for on-site training of proposed individuals authorizing or in charge of entry.
7. Re-evaluate/re-test space any time requested by any employee or employee representative.

SUBCONTRACTOR SUPERVISION:

1. Evaluate confined space hazards and determine their severity.
2. Prepare Confined Space Entry Permit, once an entry permit confined space has been identified. Include the following information on the Entry Permit:
 - a. Location of confined space.
 - b. Nature of the hazard(s).
 - c. Establish means, procedures, and practices for safe entry.
 - d. Deploy signs/posters, barriers, etc., at confined space, advising all persons (employees of this company, employees of other companies working onsite, and pedestrians) of hazards that may be present, and that only authorized entrants are permitted to enter.
 - e. Provide name(s) and phone number(s) of local Rescue Services.
 - f. Provide all other information required by Entry Permit prior to confined space entry.
3. Clearly indicate when "hot work" (i.e. welding) will be performed.
 - a. Provide or assist with on-site training for entrants.
 - b. Provide or assist on-site training for attendants.
4. Provide or assist on-site training for individuals authorized or in charge of entry.
5. Provide, maintain, and ensure the proper use of the equipment necessary for safe entry, including testing, monitoring, communication and personal protective equipment.
6. Ensure that procedures and equipment necessary to rescue entrants from permit spaces are implemented and provided.
7. Provide copy of Entry Permit and any other information available to other contractors on-site, where there is a possibility that their employees may enter the confined space, to ensure that they are aware of the hazards within the space, and procedures for safe entry and exit from same.
8. Furnish the Company's office with copy of Entry Permit.
9. Inspect evacuation of space once work is complete for orderly and safe cancellation of permit once work in confined space has been completed.
10. Re-evaluate/re-test space any time requested by any employee or employee representative.

ENTRANTS ROLE AND RESPONSIBILITY:

1. Advise Foreman of any potential hazards once recognized.
2. Participate in on-site training for confined space entry.
3. Follow all instructions given on conduct relating to entry permit confined space.
4. Request confined space be re-evaluated any time questions arise.

14.2 WALSH POLICY

Because the exposure to injury or death is so high, it is mandatory that the following procedures be followed before entry into any confined space.

SUPERVISION:

Work in confined spaces shall be done only under the authorization and direction of competent work supervisors who are adequately trained as mentioned above and shall be thoroughly familiar with the hazards that may be encountered.

EMPLOYEE TRAINING:

Every employee directed to enter a confined space, perform stand-by duties, provide emergency service, give first aid or act in any rescue, shall be trained thoroughly in his or her particular responsibility. Initial training shall be conducted prior to initial assignment, prior to any change in assignment, or any time a new hazard has been created or special deviations have occurred.

REQUIRED EMERGENCY PERSONNEL:

At least one designated person shall be immediately available to secure or render assistance in the event of an emergency. At no time shall he or she leave. Rescue services shall be coordinated/performed by any of the following:

1. Rescue provided by "host" facility.
2. Provided by an outside service which is given an opportunity to examine and evaluate the entry site, practice rescue, and decline as necessary if they don't feel they are adequately equipped.
3. Provided by the employer (Walsh will not provide rescue personnel) that is equipped and trained to perform necessary rescue. Subcontractors must exhibit proficiency prior to acceptance by the Walsh project team.
4. The Walsh policy shall be that no work be performed in any confined space that has atmospheres immediately dangerous to the life or health (IDLH) of anyone associated with the project.

PRE-ENTRY CONSIDERATIONS:

Considerations necessary for safe work in a confined space will vary greatly depending upon location, configuration, and service. After a Walsh Superintendent, or other qualified person, has assessed the potential hazards, this person shall implement the following safeguards:

ENTRY PERMIT:

A “confined space permit” to authorize work in a confined space shall be completed.

IGNITION SOURCES:

Before any work is done which may release flammable vapors, roads in the immediate area shall be barricaded and posted. Welding and other work, which may be a source of ignition, shall be stopped. Any equipment, which may provide a source of ignition, shall not be permitted within the vicinity of the confined space until the area has been tested and found vapor free. Portable lights used outside as well as inside the confined space shall be suitable for hazardous locations and meet specifications of the National Electrical Code found in the NFPA Publication 479 M.: Portable lights as well as other equipment with connectors or switches approved for hazardous locations and which are constructed and used in full agreement with the American National Standard z117.1-1977, Sections 5.2.1.1 through 5.2.1.6. and OSHA CFR 1910.399 (a). **Isolation** - The confined space shall be isolated by disconnecting all lines connected to the space.

LOCKOUT/TAG-OUT:

Electrical equipment connected with the confined space shall be locked out / tagged out to prevent injury or equipment damage if inadvertently turned on.

TESTING AND MONITORING:

A qualified person shall conduct a survey of the surrounding area, including atmospheric testing if appropriate, to determine whether it is safe to perform confined space entry. These instruments shall be maintained and calibrated to the manufacturer’s specifications.

Entry into confined space is prohibited until initial testing of the atmosphere has been completed from the outside. Tests performed shall include oxygen content, flammability, Carbon Monoxide, and Hydrogen Sulfide. If tests indicate atmospheric conditions are hazardous, the confined space shall be purged, ventilated, and again re-tested. If atmospheric conditions are still hazardous and the confined space cannot be purged free of contamination, additional tests shall be selected and performed to the satisfaction of the qualified person. All test results shall be recorded on Walsh Confined Space Entry Permit. After job completion, this form is to be retained indefinitely.

Entry into a confined space for any type of work is prohibited when tests indicate the concentration of flammable gases in the atmosphere is greater than 10 % of the lower explosive limit (LEL).

Entry into a confined space for any type of work is prohibited when tests indicate the concentration of oxygen to be less than 19.5% or greater than 23.5 %.

Entry into a confined space for any type of work where Carbon monoxide levels are above 35 PPM shall be prohibited. Carbon Monoxide is colorless and odorless. Instrumentation monitoring is absolutely essential because of that characteristic.

Entry into a confined space containing toxic contaminants in concentrations, at or above the threshold limit values, (TLV) shall be permitted only when personal protective equipment appropriate for the specific

contaminants are provided to all affected personnel.

The confined space shall be tested as often as necessary to ensure the safety of employees, and whenever conditions in the confined space change.

In addition to atmospheric testing, a qualified person shall take positive steps to ensure that employees are protected from other physical hazards, which would include, but are not limited to the following:

1. Discharge of steam, high-pressure air, water, or oil into the confined space, or against personnel working outside.
2. Structural failure of the tank shell, roof and roof support members, swing line cables or other tank members. Tools or other objects dropping from overhead.
3. Falls through or from the roof, or from scaffold, stairs, or ladders.
4. Tripping over hoses, pipes, tools, or equipment.
5. Slipping on wet, oily surfaces or colliding with objects in adequately lighted interiors. Insufficient or faulty personal protective equipment.
6. Insufficient or faulty operations, equipment, and tools. Noise more than acceptable levels.
7. Temperature extremes, which may require additional protection or shorter work periods.

EMERGENCY EXTRACTION:

Whenever a worker is required to enter a Permit Required Confined Space, he/she shall wear an approved safety harness with lifeline attached and secured outside the confined space, if it doesn't create an unsafe condition. A mechanical means of extraction shall be made available. The anchorage for all lifelines shall be designated by a qualified person, and will meet a 5,000 lb. minimum strength requirement.

If necessary, ventilation (blowers with attached hoses) shall be constant as work is being performed in the confined space.

COMMUNICATION WITH ENTRANTS:

The attendant needs to have a method to communicate with entrants as necessary to monitor entrant status and to alert entrants of the need to evacuate the space, when required.

While specific communications methods will vary with the circumstances, they must be effective and reliable. It is important to establish a standard for making contact between attendant and the entrant, so the attendant will be able to detect unusual or erratic behavior on the part of the entrant, which may be indicating an undetected hazard.

MANAGEMENT CONTROL:

The Walsh Construction Project Team shall, as a part of its pre-construction meeting with respective exposed subcontractors, identify and ensure that the confined space policies and procedures are adhered to. Review of procedural field implementation shall be reviewed when auditing the site for field compliance. Additionally, because of the importance of good training the following requirement for the individual authorized, or in charge of, confined space entry shall complete, "Training and Duties of Individuals Authorizing or In Charge of Entry".

On an annual basis the Safety Department shall review the program and all cancelled permits to assure that all risk is being adequately managed through the processes currently in place.

15.0 WALSH CRANE SAFETY POLICY

Subcontractor management and supervision, with assigned equipment operators, are directly and primarily responsible for inspection, signaling, rigging, operation and control of all cranes as outlined in this procedure. The Walsh Superintendent shall oversee to ensure that the activities listed take place.

15.1 WALSH REQUIREMENTS AS “CONTROLLING ENTITY” PER NEW OSHA 1926.1400 SUB.CC

WALSH (CONTROLLING ENTITY) INITIAL RESPONSIBILITY:

1. Provide firm, drained, and graded ground conditions sufficient to support equipment to manufacturer’s specification for support and degree of level.
2. Locate and inform the user of equipment of the location of underground hazards (voids, tanks, utilities)
 - a. Identify crane set up locations.
 - b. Contact local one call and private locator.
 - c. Review all available as-builts.

PRIOR TO OPERATION:

1. Assembly/Disassembly “Director – Need letter from crane company on their official letterhead identifying Assembly/Disassembly Director as competent and qualified.
2. Operation - Current Operators License/Certification (NCCCO, OECF, NCCER, CIC Certification).
3. Inspection - Third Party Certification of Crane
4. Mobile Hydraulic – Need third party certification within the last year.
5. Lattice Boom and Tower Cranes – Needs third party certification after erection and if the crane has been modified. Ex. Jumping the crane.
6. Diagram of crane set-up location
7. Radius of all picks to be made.
8. Determination of any “Critical Picks”
Completion of Walsh Critical Pick Plan
9. Prior to crane erection/use develop a plan for Overhead Electrical Exposure (anything within 20 feet).
10. Operators Daily Inspection –Written (to include all wire rope and all associated rigging)
11. Appointment of “Qualified Signaller” – Need letter from employer of individual signaling on their official letterhead, identifying Qualified Signal Person as competent and qualified for any crane signaling necessary due to obstructed views or site-specific safety concerns to be conducted on site.
12. Appointment of “Qualified Rigger” – Need letter from employer of individual performing rigging on their official letterhead, identifying Qualified Rigger as competent and qualified for any person:
 - a. Engaged in hooking, unhooking or guiding the load.

- b. Involved in rigging a suspended load that flies over any and all “Fall Zones.”
- 13. Appointment of “Crane Operator”- Need letter from employer of completed crane evaluation.
 - a. Operator needs certification from National Accredited Operator Testing Organization
 - b. Current Medical Card and Driver’s License

15.2 INSPECTION

There are varying procedures for inspection of subcontractor’s cranes, and they shall be discussed in detail in this section.

HYDRAULIC CRANES AND TRUCK MOUNTED BOOM LIFTS:

All hydraulic cranes and truck mounted boom lifts shall have had a thorough inspection, in the last year prior to arrival at the jobsite, by a competent third-party inspector. That inspection record, with identification of inspector stated clearly on it, shall be provided to the Walsh Project Superintendent prior to the crane operating on site.

All Cranes must be inspected by a Third-Party Qualified Person after being assembled, whenever any components are modified or repaired, involved in an incident, and annually. If the crane was disassembled then reassembled on site, a third-party inspection must be performed and documented after reassembly. This does not include attaching a jib to a mobile crane.

After confirmation that the machine has been inspected and certified within the last year by a competent third party, the following procedures shall be followed:

1. Superintendent and Assigned Walsh Safety Coordinator meet with the foreman, operator, and oiler, if assigned, to assure a thorough completion and implementation of a daily and monthly inspection checklist assigned to that machine.
2. Establish positively, the weight of each load before handling. Check machine stability and maximum operating radius to assure all loads are with 75% as established by the cranes load chart. Any loads over 75% are considered critical requiring the completion of Walsh Critical Pick Checklist prior to the pick.
3. Observe hydraulic crane booms, to include all telescoping sections, and the hoisting system hydraulic cylinders, for any damage, or leaks. Assure that no booms have any welded add-ons. If any welded add-ons to the boom are noted, ensure that Manufacturer approvals are on file for that machine.
4. Coordinate date for an independent Third-Party Inspection service for crane if any questions arise concerning crane maintenance or set-up.
5. Assure operator has operated the crane in question, and that it is not a pure bare rental. If it is the first time that a crane is operated by the operator in question, the company owning the crane shall train the operator in that crane before making any production related picks.

LATTICE BOOM AND TOWER CRANES:

To assure that all cranes utilized on Walsh projects are in safe operating condition, a third-party,

independent inspection shall be conducted on site on all subcontractor's Lattice Boom. Tower Cranes must be inspected during erecting, climbing (e.g. "jumping") or dismantling activities by a Qualified Person. Additionally, a Registered Professional Engineer must verify that the host structure is strong enough to withstand forces imposed on it by braces, anchorages, and supporting floors, and Tower Cranes during set up and prior to operation.

15.3 RESPONSIBILITY:

Estimating shall communicate to subcontractors utilizing the cranes that third party inspection will be required during set-up and to include the cost of such inspection within their work scope and price.

Prior to the subcontract award, the Project Manager shall communicate to any subcontractor that third party independent crane inspection shall be conducted during crane assembly and set-up. The cost of such inspection is to be the Subcontractor's responsibility. The Project Manager needs to ensure that third party crane inspection language is contained in the contract of any subcontractor utilizing a crane for their operations. The Project Manager and Project Superintendent need to coordinate third party inspection, with qualifying subcontractors, in a timely manner to prevent any down time.

15.4 RECOMMENDED CONTRACT LANGUAGE

A qualified and independent third party shall inspect all Lattice Boom and Tower cranes that are brought on site during set-up and prior to operation.

OPERATOR QUALIFICATIONS:

Subcontractors shall demonstrate to Walsh Superintendent that their Crane Operator is properly licensed or has the experience necessary to operate the crane in question. The preferable license is the National Crane Certification of Operators certification. Minimally, the crane operator should be licensed in the respective state in which they are operating. If the state does not have licensing certification, then the crane company shall demonstrate the proficiency of the operator through either experience or actual operation. Walsh shall make it clear that the operator has the right of refusal to make any pick deemed unsafe by the operator.

15.5 CRANE LOAD CAPACITY CHARTS

Crane load capacity charts shall be posted in the cab of each crane, and always visible to the operator. In mobile hydraulic cranes, the operator shall operate either off the "Rubber Chart", or with outriggers fully extended. Any pick off "Rubber Chart" will be considered critical with critical lift protocol followed.

15.6 CRITICAL LIFTS

A critical lift is when any of the following conditions exists.

1. Any lift that exceeds 75 percent of the cranes published load chart capacity at the required lift radius.

2. Lifts that exceed 90% of the mobile crane's published load chart must be approved by the Sr. Project Manager or Program Manager. No lift above 95% of the crane's load chart is permitted.
3. When any part of the equipment's maximum working radius in the work zone, load line or load (including rigging and lifting accessories), could get closer than 20 feet of energized power lines up to 350kV or 50 feet of energized power lines over 350kV.
4. Pick and Carry operations for rubber tire cranes.
5. Any lift made with a rubber tire crane on outriggers that are less than fully extended.
6. Crane – Supported Personnel (Work) Platforms and man baskets shall not be used unless there is no other safe means of access to the work area and OSHA procedures for suspended work platforms are followed. If these methods are employed, they are critical lifts.
7. Multi-Crane Lifts: any lift performed by a crane that requires assistance from another crane or lifting device. These type lifts restrict the lifted load's center of gravity from freely suspending directly beneath a single crane's boom head or auxiliary lifting point.
8. Lifts involving crucial or long lead time equipment.

15.7 WRITTEN CRITICAL LIFT PLAN

A written critical lift plan shall be prepared for all critical lifts to assure that adequate planning has been conducted prior to the lift being made. The plan shall be submitted to the Walsh Construction project team for approval prior to lift being made. To ensure adequate time for review of such plan, it should be submitted at least 10 days prior to the anticipated date of the lift. The Critical Lift Checklist highlights the information necessary.

Critical lifts require extra care due to the small margin of error and/or serious consequences of any mistake. Critical lifts should be avoided if possible and shall be performed under direction of the Lift Director. Crane movements should be preplanned, and compound movements should be avoided, which will reduce the amount of dynamic loading induced on the crane structure. For critical lifts, the operator must use drum pawls as instructed in the machines Operators Manual to protect against inadvertent lowering and to park loads.

The following information shall be included:

1. Why the lift is critical
2. Type of crane
3. Boom length
4. Boom angle
5. Radius
6. Weight of load (weighing may be necessary)
7. Dimensions of load
8. Attachment points for rigging
9. Obstructions in path of load
10. Crane operator's qualifications

15.8 APPROVALS

If the crane operator anticipates any deviation from crane manufacturer's recommendations, the crane operator shall secure written approval from the manufacturer (which may be in e-mail form) and present such approval to Walsh Construction Project Team.

Note: Cranes are rated while performing in a level position, on a solid surface, with no wind conditions considered.

15.9 CRANE OPERATION

1. Only the following qualified personnel shall operate cranes:
 - a. Designated operators complying with State or City Laws.
 - b. Maintenance and test personnel when they have the specific training and hands on work experience to operate, test or maintain the type of crane that they are servicing.
 - c. Qualified Crane Inspectors
 - d. Maintain continuous contact, visual or vocal, (with a radio that has a dedicated channel or hard-wired communication system – Nextel's are not considered adequate) between the crane operator and one qualified signalman. If for any reason contact is lost, the crane operator shall stop all operations and not resume any crane function until full contact is restored.
 - e. The crane must have sufficient capacity and proper type (crawler, rough terrain, truck cranes, mechanical or hydraulic) to fulfill all requirements of the work without endangering personnel or equipment.
 - f. Outriggers on all truck cranes shall be fully extended and set for all lifts. Lifts shall not be attempted with outriggers partially extended and set. Outrigger floats shall be on proper dunnage (solid with no gaps) that is 3 times the area of the float or per manufacturer's specifications. No pick and carry lifts are to be made with truck cranes.
 - g. Rough terrain cranes operated in stationary position shall have outriggers fully extended and set before any lift is made.
2. Pick and carry loads with rough terrain should be avoided. Where necessary to do so, the following applies:
 - a. Use the load chart on truck cranes with rubber wheels.
 - b. Investigate route to be followed for solid and level footing.
 - c. Restrict travel speed to maintain control of the load.
 - d. Tie the load to the frame of the crane.
 - e. Personnel will not touch the load for any reason. In addition to Item 6(d), tag lines will be used for control of the load.
 - f. Where possible, outriggers should be extended and set within a few inches of ground level.
 - g. Establish positively the weight of the load before handling. Check brakes and machine stability when the load is still only inches above the ground.
3. The operator must not attempt any lift for which he/she feels conditions are inadequate. The crane operator has the authority to stop and refuse any loads until a qualified person has determined that the pick can be made safely.
4. Only qualified crane personnel shall direct the changing or disassembly of crane booms. Consideration should be given to having the manufacturer's representative present.
5. The operator shall observe the following precautions when leaving the control station of a machine:
 - a. Disengage the master clutch.
 - b. Lower bucket or crane load to the ground.

- c. Set safety pawls on all drums where these are operated manually.
- d. Set the swing brake and travel brakes to prevent machine movement when lifts unattended for short periods and operator remains in immediate area.
6. When the crane is left unattended for extended periods of time or the operator leaves the immediate area, all brakes and locks shall be engaged.
7. Cranes shall be operated smoothly, avoiding sudden stops and starts.
8. The hoist line must be always vertical.
9. At no time shall personnel be positioned beneath suspended loads.
10. No one is permitted to ride the hook or the load.
11. The boom hoist drum pawl should be always engaged except when lowering the boom.
12. Do not get on or off a machine when it is in motion. No adjustment, repair, or lubrication is permitted on moving machinery unless required by the manufacturers.
13. Work within 20 feet of electric lines is prohibited.
14. All loads require a tag line.
15. No toolboxes, oil cans, choker racks, water coolers or similar additions may be placed in the radius of the swing of the counterweight where a person could conceivably be struck.
16. The swing radius of the counterweight must be barricaded.
17. Lifts associated with steel erection and concrete bucket handlings are the only crane operations where free-fall can be used.
18. The manufacturer's operations manual and load charts associated with the machine shall be always in the cab of the crane.
19. Manufacturer's instructions and prohibitions must be followed at all times during the assembly and/or disassembly of the crane.
20. All safety devices must be on the equipment and must be in proper working order prior to operation. If any of the devices are inoperable, the equipment must be taken out of service until such components are repaired or replaced. Some examples include crane level indicator, boom stops, jib stops, foot pedal locks, horns, etc.
21. All manufacturer procedures applicable to the operational functions of equipment, including its use with attachments, must be complied with at all times.
22. All cranes shall be equipped with an anti, two-blocking device which will cease all operations of the crane if operation will result in the crane becoming two-blocked.
23. An ABC fire extinguisher, load chart, and operator's manual are required to be in the cab at all times.
24. All underground vaults and existing utilities will be marked before as well as before any crane is set up.
 - a. Documented rigging equipment inspections.
 - b. Documented daily crane inspections filed with the Walsh Construction Project Team weekly.
 - c. All cranes must use anti-two blocking devices, as specified in ANSI B30.5 for each load hoisting line. Cranes must be operated in compliance with 29CFR1926.1400.
 - d. Mechanical parts of any crane must be inspected by the operator and given to the Walsh Superintendent prior to each shift and monthly.
25. Cranes are to be operated within the design limits specified by the manufacturer.
26. All Riggers and Signalers are to be "Qualified" riggers and "Qualified" Signal persons and must be designated by wearing a hard hat cover and/or a designated high-vis vest that is solely different than those worn throughout the rest of the project.
27. The rated load capacity of the crane is never to be exceeded.
28. Rated load capacities, recommended operation speeds, and special hazard warnings or instructions

shall be posted conspicuously on all equipment.

29. All accessible areas within the radius of the counterweight swing must be barricaded to limit access.
30. Cranes, hoists, boom trucks and derricks shall not be installed or operated within 20' of any power line unless lines have been de-energized and grounded, or other options per OSHA 1926.1407 are implemented.
31. Personnel are prohibited from riding on the hook of the "headache" ball.
32. The use of personnel hoists must be approved by the Walsh Construction Project Team after the subcontractor has proven there is no other practical safer means.
33. All OSHA requirements must be followed when using personnel baskets.
34. Outriggers must be fully extended and on firm ground.
35. Crane inspections must be conducted on equipment per the OSHA standards. These inspections and the competent person are the responsibility of the crane owner and the contractor providing the crane.
36. The use of a mobile phone while operating a crane is strictly prohibited.
37. Tower, rough terrain, and crawler crane operations must have an operable anemometer to measure onsite wind speeds during work. This can be a crane-mounted unit or a handheld device.
38. Crane appurtenances that exceed 200-feet above the ground shall be marked and lighted, unless an exemption is received from the FAA.

15.10 RIGGING/MATERIAL HANDLING

Any contractor performing rigging must have a qualified rigger. Slings without identification marking must be removed from service.

1. Safety latches must be installed on all hooks (shakeout hooks are an exception).
2. Do not leave unsecured or unattended suspended loads.
3. Use softeners when possible, to obtain a "bite" on material being rigged.
4. Inspect wire rope slings for frays, kinks, and worn spots before each use. Do not exceed safe working capacity.
5. Inspect fiber rope slings for broken fibers, wear, and deteriorated inner and outer strands prior to use. Do not use fiber rope slings where fumes, vapors, sprays, mist, and corrosive chemicals are present. The use of chains is not allowed.
6. All rigging components shall be inspected prior to every use and must be free of all defects. Any wire rope, nylon and or chain slings found to be defective shall be tagged out of service and removed from the site. The rigging inspections shall be documented on a weekly basis utilizing the rigging inspection form and shall be turned in to the Walsh Superintendent.
7. Rigging shall not be loaded in excess of its safe working load. Any rigging loaded beyond capacity or used for non-intended purposes shall be removed from service and placed in the Walsh Project Superintendents office for non-use assurance.
8. Tag lines shall be used on all rigged loads.
9. Only "qualified riggers" will be allowed to rig any load which will be suspended and swung into place.
10. Only "qualified signal persons" shall signal loads suspended and swung into place by any crane or hoisting machinery.
11. All hooks utilized in hoisting materials, which rigging will be attached, shall be equipped with

manufacturers supplied safety latches.

12. At no time shall any person, or part of a person, be under a suspended load. The one exception to this rule involves ironworkers involved in making connections for the purpose of structural steel erection.
13. All rigging (wire rope slings, wire rope chokers, nylon slings, etc.) shall always have identification tags affixed to them.
14. Rigging equipment, when not in use, shall be removed from the immediate work area.
15. Except for steel erection, multiple lift rigging ("Christmas Treeing") of any material is prohibited. Christmas Treeing for steel erection shall be limited to 3-pieces.

15.11 CRANE WORK NEAR OVERHEAD ELECTRIC OR HAZARDOUS PIPELINES

1. Walsh site Superintendent and Subcontractor foreman shall review the scope of work.
2. These individuals will decide whether:
 - a. The line will be shut down;
 - b. The crane will be grounded;
 - c. If an electrical department stand-by man is necessary;
 - d. If protective equipment must be worn.
3. Note: Employees handling tag lines or attaching or disconnecting loads must wear tested Linemen's gloves of adequate voltage rating with protectors and rubber footwear as per OSHA standards.
4. No crane shall be operated under these conditions unless:
 - a. A signalman is present whose sole function shall be to assure that clearances are maintained.
 - b. Signs and barricades warning personnel to stay clear are posted around the crane.
 - c. The crane operator is the only person on the rig under any high-tension lines.
5. Precautions noted in this procedure apply to all electric lines. Similar considerations must be given to piping systems that contain potentially hazardous materials.
6. Correct identification of all overhead electric lines is vital since there is considerable resemblance between some high voltage lines and "telephone" lines.
7. All crane operators will be instructed to stay on the rig in case of contact with any electrical lines.
8. Fixed leads shall be provided with ladder and climbing devices, and adequate rings, or similar attachment points, so that the loft worker may engage his safety harness lanyard to the leads.

16.0 WALSH EQUIPMENT SAFETY POLICY

16.1 FORKLIFTS, LULLS, BOBCATS AND ALL POWERED INDUSTRIAL VEHICLES

1. All Walsh personnel and Subcontractors who intend to use this equipment shall comply with 520 CMR 6.00 and follow the requirements of Federal OSHA Regulation in particular 29 CFR 1926 and 1910.
2. Operator of equipment shall verify and assure that trailer chocks and supports are in place prior to unloading.
3. All workers must be trained and certified by a qualified instructor for the specific piece of equipment they will operate. Training shall involve classroom instruction/testing and practical operation instruction/testing, with said training conforming to the requirements of the manufacturer. Retraining is to be conducted every 3 years or at any time the Walsh Superintendent recognizes inadequacies in operation or if an incident occurs. Training will include understanding load capacities of individual machines, distances at which loads can be picked and placed, re-fueling requirements, operation of machine on slopes and ramps, visibility requirements when traveling forward or backing, and balancing and counter balancing consistent with manufacturers requirements.
4. Only authorized (training and proficiency testing) Walsh employees shall be allowed to operate any mobile equipment.
5. The operator's manual and fire extinguisher must be with the equipment at all times.
6. Load charts must be posted in cab at all times. At no time shall the machine be loaded beyond its rated capacity.
7. At no time any loads or materials to be suspended from the forks or any part of the cradle assembly, traffic carriage, or boom. Only manufacturer approved devices which were specifically designed for this task will be allowed. Additionally, the operator shall not attempt to use the machine in any manner or for any purpose other than that for which it was designed. If the machine is being used inside a building, then air quality needs to be reviewed. This includes scrubbers being installed on the exhaust of the equipment to reduce the quantity of gases being released from the equipment. The scrubber, air quality, and machine must be reviewed and monitored on a regular basis.
8. All equipment is to be inspected before each shift in compliance with manufacturer's recommendations.
9. The inspection shall be documented using the Powered Industrial Vehicle Inspection Form or

approved equivalent.

10. All equipment shall be fitted with working back-up alarms. If background noise renders back-up alarm inaudible, then an assigned competent person shall be employed to oversee the backing of equipment.
11. Seatbelts shall be always worn by all equipment operators. Unless equipped, passengers shall not ride on equipment.
12. Eye protection shall be mandatory for anyone operating equipment in an unenclosed cab.
13. Fueling of all equipment shall be done only after the engine has been shut off. No smoking signs shall be posted, and fire extinguishers mounted and available in the area where refueling is to be done.

Any time equipment or lifts are operating on site, each subcontractor is to have a spill kit available for immediate use in the event of a release of restricted or non-restricted material. Workers are to follow the guidelines set forth in the Walsh Spill Containment Program, at a minimum. Subcontractors may follow their own plan provided all the items in Walsh Spill Containment Plan are met.

16.2 AERIAL AND SCISSORLIFTS

EQUIPMENT INSTRUCTIONS AND MARKINGS:

Each aerial/scissor lift shall have a manual containing instructions for maintenance and operations. If a unit can be operated in different configurations, then these shall be clearly described, including the rated capacity of each configuration.

All scissor lifts and boom lifts shall have an approved shroud or guard over the joystick/controls, or a timeout feature on the lift/lower and drive selector, which disables the lift/lower and drive functions after several seconds of inactivity. Moreover, boom lifts must be delivered with anti-crush or secondary-guard technology.

All scissor lifts and boom lifts shall have approved working gates. Chains are not allowed on Walsh Healthcare projects.

OPERATING PROCEDURES:

1. Prior to mobilizing, all Mobile Elevated Work Platforms must be inspected to ensure compliance with Walsh requirements. MEWP's (scissor lifts, aerial boom lifts, and knuckle booms) must have dual action controls to be approved for use. Dual action controls require that there be two separate actions to activate the lift. If a MEWP arrives on site and does not have dual action controls and/or anti-crush device, then it must remain inoperable until a dual action control and/or anti-crush device is installed. The dual action control may consist of a button that must be depressed for the controls to operate, or a toggle switch that must be activated prior to operating the MEWP controls (The toggle switch must automatically return to the center when released).
2. When a lift is delivered to the project, the rental company or the owner of the lift shall inspect the lift & provide documentation that the lift is safe to operate onsite. The lift shall be free from any physical defects in new or like new condition with all the safety placards present. The operator's manual and inspection documentation shall be included.

3. Operators shall read and obey all warning placards on the machine and become familiar with the operator's manual. This includes all manufacturer's recommendations and operating instructions.
4. A malfunctioning lift shall not be operated until it is repaired per the manufacturer's recommendations and shall be tagged out of service.
5. The controls shall be plainly marked as to their function.
6. A pre-start inspection shall be completed daily before use. If the lift has defects or is malfunctioning, then it should not be used.
7. Prior to operating the lift, the operator shall check the area for hazardous conditions including debris, holes, and bumps.
8. Make sure the lift is on level ground at all times when the platform is elevated.
9. Stunt driving and horseplay will not be permitted.
10. Do not load the platform more than the designed working load. The personnel's weight is included as part of the load.
11. Materials placed in the basket shall not extend beyond the outer edges of the basket.
12. Aerial/scissor lifts are not to be used as cranes. Lifting with the basket, handling chokers, or boom is not permitted.
13. Always be sure that there is sufficient clearance before moving under any overhead obstruction or when working near electrical lines.
14. Do not walk under the boom to gain access to the platform.
15. Do not tie the platform off to any structure.
16. Do not stand on the rails, always keep your feet on the platform. Planks, ladders, or other devices shall also not be used to raise the height of the platform. Only manufactured allowed components can be used to gain height.
17. Safety harnesses in compliance with 1926.453(b) (2) (v)/Letter of interpretation #20070823-7896 (January 2009) must be worn and tied off to an approved anchorage. A 2-foot lanyard or a qualified retractable lanyard is recommended for fall protection.
18. All scissor lifts must be equipped with an attachment point provided by the manufacturer for a restraint system, they are to be used. The intent of this protection is to keep workers within the confines of the passive protective system (rails) so the shortest length of lanyard that allows the task to be completed and keep the worker confined to the walking/working surface is required. Note: These attachment points are not designed as fall protection anchorages.
19. Never climb above the work platform. Employees must keep both feet on the floor of the basket and not stand on the railing or toe board during operation.
20. Do not use a lift to access any structure. Personnel may exit when all other means of access are impractical or create a greater hazard, if continual tie off is maintained.
21. The basket must be at its lowest possible elevation when moving the machine.
22. Barricades and/ or a flag person should be used when operating in high traffic.
23. Use care when exiting the basket; do not jump from the basket.
24. Controls shall be tested in accordance with the manufacturer's recommendations or instructions prior to use to determine if they are working properly.
25. Tying off to an adjacent structure, pole, or other equipment is not permitted.
26. Modifications or alterations of the lift shall not be made unless prior written consent is received from the manufacturer. A registered professional engineer must be qualified with respect to the equipment involved and must ensure the original safety factor of the equipment is not reduced.
27. Working swing gates are required on all scissor lifts. Chains are not allowed to be used as a gate.

TRAINING:

1. All Walsh Personnel and subcontractors using aerial/scissor lifts owned by, rented by, or otherwise under the control of Walsh shall be trained by a designated competent person before being allowed to operate the lift. Subcontractors using aerial lifts without their own company policy shall also be trained. These trained employees will be designated by an operator's decal to be worn on their hard hats and shall be the only employees allowed to operate the lifts.
2. All training shall be documented and kept on file in the field office.
3. An outline will be used by the instructor during training sessions to cover all facets of aerial lift operations.
4. All persons receiving training shall perform the following:
5. Hands on operation of controls at the platform and lower-level panel.
6. Preoperational inspection of the lift as well as a functional test to ensure competency of the individual who is to operate the lift.

MANAGEMENT AND CONTROL:

A safety file will be established on the project for all necessary certification, inspection, and licensing necessary for the safe operation of the equipment listed in this program element. This file shall be reviewed by the projects assigned Safety Coordinator on a periodic basis to assure the necessary information is being collected, reviewed for approval, and filed.

Mobile Elevated Work Platform Use in High Lift Situations (applies to boom lifts with an operating platform height of 30' and above) require the following:

1. A dedicated JHA shall be developed for each activity operating a MEWP above 30'.
2. A system for managing the affected area below the basket (i.e. CAZ) and movement of the MEWP's is necessary to decrease the risk of struck-by hazards.
3. If any of the workers in the Aerial Boom Lifts are incapacitated and incapable of descending, a rescue may be required. Due to the nature of this type of work, it is prudent to establish an emergency response plan which has redundancy built into it.
4. Boom lifts cannot be operated by the basket controls without first depressing a covered, protected foot switch. This causes the operator to be intentional about basket movement and reduces the risk of incidental operations.
5. The lifts should have a pressure-actuated auto shut-off across the controls which shuts down the equipment to prevent entrapment.

DEDICATED SPOTTER:

Required any time a scissor lift must be moved in an elevated state, entering or exiting doorways or when operated in congested areas. Spotters will be responsible for ensuring that the area around the MEWP and the travel path are free of obstruction and clear of equipment and personnel.

A DEDICATED GROUND SPOTTER (WITH NO OTHER COLLATERAL DUTIES) SHALL BE IN PLACE WHOSE DUTIES ARE AS FOLLOWS:

1. Visually verify and communicate via two-way radio that all obstructions are clear of the path of travel at the ground level.
2. Visually verify that all obstructions are clear while basket is moving.
3. The ground spotter shall be responsible for no more than 1 Controlled Access Zone (CAZ).
4. Additional spotters will be required if MEWP's need to be operated/relocated simultaneously within 1 CAZ (Approximate size and dimension of CAZ is below).

SPOTTER LOGISTICS:

1. If 2 or more lifts are required to operate simultaneously, each operator/spotter team will utilize their own dedicated radio channel.
2. The Spotter shall not use a cell phone, headphones or other devices which may distract them from their duties.
3. The Spotter shall have stop work authority.
4. The spotter shall wear, at a minimum, a Class II high visibility vest, shirt, or jacket.
5. The Spotter/operator team shall perform a "radio" check prior to the commencement of the activity and every 30 minutes thereafter if no communications occur during that time frame.
6. Operation of MEWP from the basket is prohibited without prior communication with the spotter and an "All Clear" is given.

EMERGENCY RESPONSE:

1. The Spotter shall be trained in how to safely use the ground controls. The ground controls shall be tested prior to work occurring each day and/or shift.
2. The Local Fire Department Shall be invited to the project site to review conditions and site activities which may have the potential for a "Vertical Rescue" in the event of an emergency.
3. The emergency response number shall be conspicuously posted.
4. Walsh, the Fire Department and Dispatch shall determine a key phrase or word which indicates that a "Vertical Rescue Team" is required. (These teams have specialized training and equipment to respond to high rescue conditions.)
5. Workers on the ground shall stay out of the CAZ and communicate with the spotter if entrance is needed.
6. A Stop Work must immediately be called when any deviations are observed with fall protection.
7. Identify and discuss tasks which have the potential for falling tools, materials and/or debris. Do not start work until procedures are in place to prevent the loss of tools or equipment (tethering or other means) and/or a Controlled Access Zone is established.
8. Workers should avoid positioning themselves, and their equipment, in the line of fire where they could be struck by falling, flying or moving objects from the overhead platform.
9. Utilize tag lines to maintain positive control of objects being removed or hoisted to ensure the object does not come in contact with the lift.

17.0 ELECTRICAL SAFETY AND LOCK-OUT/TAG-OUT

17.1 NFPA 70 E POLICY (WORK ON LIVE ELECTRICAL):

It shall be Walsh policy that no work be allowed on live electrical by any electrical subcontractor unless shut down is proven, in writing, infeasible (example – life support in hospital environment).

If, on those occasions when work must be performed on energized electrical circuits because of demonstrated infeasibility of shut down, said work may only be done by fully Qualified individuals. The Qualified individuals must be protected from electrical shock and arc flash by PPE that has the caloric rating necessary of protecting workers against voltages they will be exposed to. Additionally, a “live work permit”, with appropriate signatures, will have to be completed and submitted to the Walsh Superintendent prior to their “live work” being conducted.

17.2 PROJECT ELECTRICAL SAFETY POLICIES AND PROCEDURES

General electrical safety begins with the establishment of sound policy governing electrical safety rules and regulations. Those rules, which follow, will be enforced by the project Superintendent and safety coordinator with all deficiencies directed to the electrical subcontractor for abatement of non-compliance:

1. All electrical equipment will be treated as energized.
2. Only authorized licensed electricians under contract with Walsh will be allowed to work on any electrical equipment whether it be activated or de- activated.
3. Any electrical equipment, panels, junction boxes that are energized will be posted. Live panels shall not be left unattended unless protective panel covers have been put back in place protecting workers from coming into contact with live parts. Clearance distances for anyone working in the vicinity of live electrical shall be established in accordance with NFPA 70 E. It shall be a Walsh Policy that no distance is safe. No live electrical shall be exposed. For Authorized/Qualified personnel the following table shall apply.
4. Any energized equipment, or electrical switchgear will be equipped with and fall under the OSHA lock out/tag out standard. (1926.417). A Lockout Tagout program shall be developed, if needed, utilizing the program established by the electrical contractor to assure that all employees are trained in the same manner following the same policies.
5. Any Vehicle or mechanical equipment capable of having parts of its structure elevated near energized overhead lines shall be operated so that a clearance of 10 ft. is maintained. If the voltage is higher than 50KV the clearance shall be increased 4 inches for every 10KV of that voltage. If alternative measures are requested the Walsh Safety Department shall be contacted.
6. Employees may not enter spaces containing exposed energized parts unless illumination is provided that enables the employees to worksafely.
7. Protective Shields, barriers, or insulating materials as necessary shall be provided when working in confined or enclosed workspaces.
8. Should there be any questions as to the status of any electrical equipment, a licensed electrician will make that determination.
9. Construction workers shall not work next to electrical equipment and maintain at least a 10-foot clearance, until the area has been made safe.

10. Only approved three-wire grounded or double insulated tools shall be brought onto the jobsite. Only three-wire round extension cords are allowed.
11. Only non-conductive ladders shall be used in the proximity of any electrical current carrying conductors.
12. All extension cords used on Walsh projects shall be a minimum of 12 gauge. Flat three wire cords are not allowed. SJO and SJT, or other similarly rated cords only, shall be used. Cords shall be 12 gauges or better. 14-gauge cords will not be allowed for use on this project and will be strictly enforced by the Walsh Construction Project Team.
13. All splices in temporary electrical wiring shall be protected, at a minimum, with electrical tape. The protection must extend to the original wire sheathing/insulation. This shall include wire nuts.
14. All temporary lighting must be suspended by non-conductive material. It may not be suspended from any life safety systems (sprinklers, fire alarm, etc.)
15. All temporary power for the project will be installed on protected and dedicated circuits with 100% GFCI protection. temporary lighting shall be run with sheathed multi-conduction wire. No single strand wiring is allowed.
16. Temporary lighting must never be put on the same circuit as temporary or permanent receptacles; temporary lights must be on a dedicated circuit and cannot be used for power. Temporary lighting must be at least 8' off the ground and provide a minimum of 5 candle feet in each area of the project.
17. The electrical contractor will be responsible for all temp power and any general temp lighting that may be needed. Subcontractors will be responsible for task lighting if lighting above the OSHA standard is required for a work task.
18. Spider boxes shall be mounted whenever possible a minimum of 6-feet off the ground and all electrical cords shall be suspended off the ground with non- conductive materials.

17.3 GROUND FAULT CIRCUIT INTERRUPTER, CORD AND CONNECTOR POLICY

1. Ground Fault Circuit Interrupters (GFCI) shall be the sole source of power available to employees on Walsh projects. All 120-volt single phase 15 & 20- ampere receptacles shall have approved GFCI's. Although a (GFCI) Ground Fault Protection Program system will be in use, tools and electrical cords shall be maintained in good working order and condition. Electrical cords will be free of cuts. Cords with missing ground pins will be taken out of service immediately.
2. All electrical tools, cords and equipment must be visually checked prior to each use. Any damaged tools, cords and equipment must be taken out of service immediately.
3. Employees shall visually inspect flexible cord sets and equipment connected by cord and plug before each day's use for external defects (deformed or missing pins, insulation damage and indication of possible internal damage). Where there is evidence of damage, the damaged item shall be taken out of service, by the employee, taken to his/her foreman who will tag the item "out of service", and removed from service until it is tested, and repairs needed have been made.
4. The Electrical Contractor shall test the GFCI system on a monthly basis and keep a record of such tests. Employees, prior to connecting their tools or cords into the GFCI system, shall manually test the GFCI to assure that it is operating.
5. The electrical contractor must turn in written verification that they have tested all GFCI receptacles once each month, at minimum.
6. The Electrical Contractor shall devise a method to continue providing GFCI protection after the permanent power has been activated in the building. If necessary, each subcontractor shall provide

their employees with GFCI cords.

17.4 LOCK-OUT/TAG-OUT POLICY

RESPONSIBILITIES:

1. Electrical/Mechanical/Equipment Subcontractors: Responsible for planning deliberate energy control program to ensure that machines and equipment are isolated and inoperative before any employees perform servicing or maintenance. They shall also be responsible for Periodic inspections to ensure that energy control procedures (locks and tags) continue to be implemented properly and that employees are familiar with their responsibilities under these procedures. The project Superintendent shall certify that the periodic inspections have been performed.
2. Walsh Superintendent to be included in all electrical coordination issues.
3. Subcontractor Supervisor/Foreman: Responsible for training dealing with the equipment, type(s) of energy, and hazard(s) specific to his particular jobsite. In addition, the Supervisor/Foreman will be responsible for obtaining the appropriate lock-out-tag- out devices.
4. Authorized Employee: Responsible for implementing the energy control procedures, installing locks and tags, and performing the service or installation. Each Affected Employee shall have his/her name on locks/tags accordingly.
5. Affected Employee/Other Employees: Responsible for recognizing when the control procedure is being implemented and understanding the purpose of the procedure and the importance of not attempting to start up or use the equipment that has been locked or tagged out.

17.5 TRAINING

Electrical subcontractor shall be responsible for providing all training necessary for their personnel, and all peripherally affected personnel working for Walsh and any other subcontractors, on any issues regarding energy lock-out/tag-out procedures and any time there is a change in job assignment, procedures or new hazards are introduced. All training shall be documented and signed by attendant employees. An authorized employee has the primary responsibility for a set number of employees working under the protection of a group lockout or tagout device. During shift change or personnel changes, specific procedures to ensure the continuity of lockout or tagout procedures shall be developed. Documentation must be specific. The training must include recognition of hazardous energy sources, type, and magnitude of energy available, and means and methods necessary for energy isolation and control. Each authorized employee shall receive adequate training. The training shall address all affected employees and must instruct them in the purpose and use of the energy control procedure. Training shall extend to employees that may be working in an area where energy control procedures may be utilized. The employee training must also include when tagout systems are used as well as the limitations of same. Training shall also include that a tag is not to be removed without prior authorization. The tag is not to ever be ignored or defeated in any way.

Retraining is required when there is a change in job assignments, in machines, when there is a change in the energy control procedures, or a new hazard is introduced. All training is to be documented, signed, and certified.

17.6 APPLICATION OF CONTROLS AND LOCK-OUT TAG-OUT DEVICES:

Procedures for shutting down specific pieces of equipment (pumps, boilers, air handling equipment, etc.) are only to be done by approved and competent subcontractors working for Walsh. Installation, start-up, and servicing are outlined in the Installation and Operation and Maintenance Manuals that accompany each piece of equipment at shipment and should be followed. Additionally, work that involves the transmission and distribution systems for gas, steam, water, or petroleum products need to be part of all discussions regarding lock-out/tag-out as well.

Generally, the procedure for applying energy controls by contractors includes the following elements and actions that need to be planned and implemented in sequence:

1. Preparation for shut down.
2. Shut down of energy to any machine or equipment.
3. Application of the lockout or tag out device by responsible contractors.
4. Ensuring all stored or residual energy is released safely.
5. Verify the location and de-energization of the machine or equipment.

17.7 REMOVAL OF LOCKS AND TAGS

Before lock-out or tag-out devices are removed, the Authorize Employee(s) shall take the following actions or observe the following procedures:

1. Inspect the work area to ensure that non-essential items have been removed and that machine or equipment components are intact and capable of operating properly;
2. Check the area around the machine or equipment to ensure that all employees have been safely positioned or removed;
3. Notify all Affected Employees immediately after removing locks or tags and before starting equipment or machines;
4. Make sure that locks or tags are removed **ONLY** by those employees who attached them.
5. Follow the manufacturer's start-up procedures outlined in the Installation Manuals and Operations and Maintenance Manuals which accompany each piece of equipment at shipment.

17.8 ADDITIONAL SAFETY REQUIREMENTS

Temporary removal of locks or tags and the re-energization of any machine or equipment is allowed **ONLY** when necessary, under special conditions, i.e., when power is needed for the testing or positioning of machines, equipment, or components (e.g. Construction of elevators) The re-energization must be conducted in accordance with the sequence of steps listed below:

1. Clear the machines or equipment of tools and materials.
2. Remove employees from the machines or equipment area. Remove the lockout or tag-out devices as specified above.
3. Energize and proceed with testing or positioning.
4. De-energize all systems, isolate the machine or equipment from the energy source, and reapply lockout or tag-out devices as specified.

OUTSIDE PERSONNEL (CONTRACTORS, ETC.):

Walsh Company, Inc. will inform other contractors of any lockout/tagout program initiated by any other subcontractor to ensure proper coordination. Walsh will ensure that their personnel understand and comply with all restrictions and/or prohibitions of the other employer's energy control program.

GROUP LOCKOUT OR TAGOUT:

During all group lockout/tagout operations where the release of hazardous energy is possible, each Authorized Employee performing servicing or maintenance shall be protected by their own personal lockout or tagout device.

SHIFT OR PERSONNEL CHANGES:

Occasionally Walsh works on a project that requires more than one work- shift during the day. On this type of project, there is an overlap of workers (both shifts on the job for a short period of time, usually one- half hour). During this overlap, locks and tags will be removed by the Authorized Employee and replaced with the locks and tags of the Authorized Employee on the new shift. On the rare occasions that a worker working and a piece of equipment would leave the project (either to go to another project, or leaving Walsh while the piece of equipment was still locked or tagged-out, the Superintendent/Foreman may remove the locks and/or tags by strictly following the procedures outlined above.

MANAGEMENT AND CONTROL:

Because of its high hazard status electrical safety shall be closely monitored daily by the Project Superintendent and by the Safety Department. All Walsh employees shall be trained in the electrical policies and procedures contained herein. Electrical safety will be evaluated and scored on the Project Safety Evaluation so that the focus on this potentially life- threatening exposure is clearly in line with the risk. Projects shall be equipped with "tick testers" and circuit testers to assure that circuits are properly wired and that live energy can be adequately identified.

The electrical sub shall test all GFCI and document to Walsh Project Superintendent in writing that circuits are tripping accordingly.

18.0 CONCRETE AND MASONRY CONSTRUCTION

18.1 CONCRETE CONSTRUCTION

1. Gloves, rubber boots, face protection and hardhats will be worn when pumping, pouring, or spreading out concrete.
2. Cement burns are a potential hazard, especially during the warm summer months. The best and easiest first aid treatment is water, which must be available to wash concrete off the skin before it can burn. Vinegar or a commercial neutralizer can be used to counter act the burning effect. Report all cement burns to the foreman/supervisor at once.
3. Concrete weighs 150 lbs. per cubic foot. Maintain stable footing and good balance to avoid strains and sprains for over- lifting and shoveling.

4. All protruding reinforcing steel, onto which an employee could fall, must be guarded or capped, as appropriate.
5. No employee shall be permitted to place or tie reinforcing steel more than six feet above an adjacent working surface without the use of conventional fall protection devices (harness and lanyard, guardrails, or safety net).
6. No employee shall ride in concrete buckets.
7. No employee shall be permitted to work under concrete buckets while buckets are being elevated or lowered into position. Buckets with hydraulic or pneumatic gates will also be equipped with positive safety latches to prevent premature or accidental dumping.
8. Power troweling machines must be equipped with trigger switches that automatically turn off the equipment when pressure on the switch is released.
9. Always provide access across rebar prior to placement. Good access will prevent injuries caused by slips, trips, and falls.

19.0 RESPIRATORY PROTECTION PROGRAM

19.1 PROGRAM MANAGEMENT

Each subcontractor will be responsible for the active administration of their own Respiratory Protection Program for their employees. For Walsh employees that require protection, the project superintendent and safety department will be responsible for the active administration of the Respiratory Protection Program. A member of the Safety Department shall be responsible for selecting, training, and fit testing, all prospective wearing of respirators. Only NIOSH Approved respiratory protective equipment shall be purchased.

Any employee of any subcontractor who routinely or sporadically has cause to utilize respiratory protective equipment in the course of his/her duties shall be considered a mandatory participant and shall comply fully with all guidelines contained herein.

19.2 MEDICAL EVALUATION OF RESPIRATOR WEARERS

Anyone subject to the respiratory protection program shall be evaluated medically in an accredited medical facility. It must be assured that potential wearers of respirators are physically capable of performing work using a respirator. It shall be assured that the necessary medical questionnaire has been completed and reviewed by competent medical personnel. As a matter of company policy, a pulmonary function test will be administered prior to any fit testing to be done. A pulmonary function test as well as a respiratory fit test shall be good for one full year from the date of completion.

19.3 RESPIRATOR SELECTION

Prior to choosing a respirator the environmental conditions and work requirements must be adequately considered by the contractor performing work in those areas. Additional consideration should be given to the type and extent of the hazard and the limitations of the respirators available. It will be the Superintendent's responsibility to assure that engineering all potential sources of contamination out of the workplace be done as a primary order of business. Only when the contaminants cannot be eliminated via

engineering, substitution or change of work plan will respiratory protection be afforded Walsh employees.

Walsh employees will not be required to work in oxygen deficient atmospheres or any atmosphere which is IDLH (immediately dangerous to Life and Health). Any work to be done in those types of atmospheres shall only be done by duly trained and experienced subcontracted personnel.

19.4 TRAINING

All Walsh personnel shall be trained in the Respiratory Protective Equipment Program initially and will re-train at least annually. Training shall be conducted by the Safety Department with Instruction covering the following topics minimally:

1. Explanation of the hazard and repercussions if respirator is not used properly.
2. Filter change durations/recognition
3. Explanation as to why a particular respirator/cartridge has been selected.
4. IDLH Atmospheres
5. Instruction on proper donning, fit, limits of use, and operation.
6. Instruction on proper respirator maintenance, inspection, disinfecting and storage.
7. Any breakthrough of contaminant detected, or excessive resistance requires wearer to leave area to wash and disinfect the respirator.

19.5 RESPIRATOR FIT

Employees shall be properly fit tested upon issuance of new equipment and at least annually thereafter. A Fit Test Record will be used to track and document all fit testing. A record will be kept of all testing and will be updated annually.

THE FOLLOWING TESTS SHALL BE CONDUCTED EACH TIME THE RESPIRATOR IS DONNED:

1. Negative Pressure Test
2. Positive Pressure Test

19.6 RESPIRATOR INSPECTION, MAINTENANCE AND STORAGE

RESPIRATOR INSPECTION:

Inspection for defects is necessary for identification of damaged or malfunctioning equipment. Respirator inspection frequently shall involve inspection of equipment before and after each use and at least monthly for those not used routinely.

CLEANING AND DISINFECTING:

Respirators used routinely shall be cleaned and disinfected as necessary to assure proper protection is provided. Routinely used respirators shall be exchanged daily for cleaning and inspection.

STORAGE:

Respirators shall be stored to protect against Dust, Sun

1. Dust
2. Sunlight
3. Heat
4. Extreme Cold
5. Damaging Chemicals
6. Mechanical Damage

20.0 ENVIRONMENTAL EXPOSURES: IDENTIFICATION AND CONTROLS

20.1 LEAD

ACTION LEVEL:

The action level is 30 micrograms of lead per cubic meter of air, averaged over an 8-hour day. The action level triggers exposure monitoring, medical surveillance, and training.

The Permissible Exposure Limit for lead (PEL) is 50 micrograms of lead per cubic meter of air averaged over an eight-hour day.

HEALTH HAZARDS:

When absorbed in certain doses, lead is toxic. The purpose of lead controls is to prevent absorption. It is intended to protect you not only from immediate effects but long-term effects of lead exposure. Lead is absorbed by:

How does it enter your body?

1. Inhalation (breathing) - if scattered into the air.
2. Ingestion (eating) - if lead on hands when eating food, smoking, chewing tobacco
3. It is not absorbed through the skin.

A portion of the lead that enters your body gets into your blood stream. It is then stored in various organs. Some will be excreted while some remains in the tissues. The amount stored increases if you absorb more than you excrete. This stored lead can cause irreversible damage.

EXPOSURE ASSESSMENT:

If lead is present in the workplace Walsh is required to do an exposure assessment to determine if the exposure is above the action level (30 ug/m³). Exposure is that which would occur if the employee was not wearing a respirator. Employees must be monitored unless there is objective data which can demonstrate conclusively that no employee will be exposed to lead more than the action level.

Objective data may be compiled from various sources (insurance companies, trade associations, or exposure data collected from similar operations). If Walsh has conducted air sampling for lead in the past 12

months, we may use these results, (referred to as historical data) provided they are applicable to the same employee tasks and exposure conditions and meet the requirements for accuracy as specified in the standard.

The standard lists certain tasks which might result in exposures to lead more than the PEL and, in some cases, exposures in excess of 50 times the PEL. If you are performing any of these tasks, Walsh must provide you with appropriate respiratory protection, protective clothing, and equipment, change areas, hand washing facilities, biological monitoring, and training until such time that an exposure assessment is conducted which demonstrates that your exposure level is below the PEL.

If you are exposed to lead and air sampling is performed, your employer is required to notify you in writing within 5 working days of the air monitoring results which represent your exposure. If the results indicate that your exposure exceeds the PEL (without regard to your use of a respirator), then your employer must also notify you of this in writing and provide you with a description of the corrective action that has been taken or will be taken to reduce your exposure.

Your exposure must be rechecked by monitoring, at least every six months if your exposure is at or over the action level but below the PEL. Your employer may discontinue monitoring for you if 2 consecutive measurements, taken at least 7 days apart, are at or below the action level. Air monitoring must be repeated every 3 months if you are exposed over the PEL. Your employer must continue monitoring for you at this frequency until 2 consecutive measurements, taken at least 7 days apart, are below the PEL but above the action level.

COMPLIANCE/TRAINING:

Your employer is required to ensure that no employee is exposed to lead more than the PEL. The standard requires Walsh to institute engineering and work practice controls including administrative controls to reduce employee exposure. These controls must always be used, if feasible, and supplemented with respiratory protection if they do not reach exposure levels below the PEL. See Respiratory Protection Standard for details on implementation.

If there is lead on the project, then a separate binder with lead awareness training will be implemented on the Project with said binder containing "Lead Awareness training". All project orientations will have this "Lead Awareness" as a mandatory section of their initial training that they must read in conjunction with the normal orientation. Additionally, the project wide Safety Orientation will reflect additional lead awareness with the following information incorporated:

1. Workers may need to perform work on these painted surfaces. They may need to disturb this paint by drilling, sawing, demoing, fastening, or carpentry. In doing so they will use saws, drills, screw guns, impact wrenches, Sawzall's, hand wrenches, ads, crowbars, hammers, and other hand tools.
2. Workers performing activities other than those listed above must be monitored to insure they are not being exposed to a hazard.
3. If paint flakes or dust is generated from lead paint, then the area must be cleaned by a license contractor.
4. Workers who contact potential lead paint or other contaminated surfaces should use proper hand and face washing procedures prior to eating, drinking, smoking, chewing tobacco, chewing gum, or applying cosmetics.

5. Subcontractor foreman are responsible for reviewing hazmat report with their employees and ensuring their compliance with the safety rules.

20.2 ASBESTOS

In construction asbestos is commonly found in floor tiles, floor and roof mastics, window glazing and caulking, older plasters, and on steam pipes and boilers. Normally all asbestos will be identified before Walsh starts demolition and abatement of that asbestos will be completed by licensed and certified abatement companies and personnel. An Industrial Hygienist, as a third party, will be required to give a clearance sample exhibiting clean areas upon completion.

What are the dangers of asbestos exposure to Walsh or subcontract workers?

The inhalation of asbestos fibers by workers can cause serious diseases of the lungs and other organs that may not appear until years after the exposure has occurred. For instance, asbestosis can cause a buildup of scar-like tissue in the lungs and result in loss of lung function that often progresses to disability and death. Asbestos fibers associated with these health risks are too small to be seen with the naked eye, and smokers are at higher risk of developing some asbestos-related diseases.

It will be Walsh policy to conduct monitoring in areas adjacent to unabated asbestos if work in that area is required. Projects with asbestos that could be hidden and potentially exposed through the course of construction will also have asbestos awareness training. The curriculum for that training will be developed on a project-by-project basis. In addition to Federal, state, and local regulations governing the abatement of asbestos, subcontractors performing abatement inside of regulated areas shall have a manometer on site to ensure that regulated areas are maintaining the appropriate amount of negative pressure.

29 CFR 1926.1101 covers construction work, including alteration, repair, renovation, and demolition of structures containing asbestos.

The standards for the construction industry classify the hazards of asbestos work activities and prescribe requirements for each classification:

1. **Class I** is the most potentially hazardous class of asbestos jobs and involves the removal of thermal system insulation and sprayed-on or troweled-on surfacing asbestos-containing materials or presumed Asbestos-containing materials.
2. **Class II** includes the removal of other types of asbestos-containing materials that are not thermal system insulation, such as resilient flooring and roofing materials containing asbestos.
3. **Class III** focuses on repair and maintenance operations where asbestos-containing or presumed asbestos-containing materials are disturbed.
4. **Class IV** pertains to custodial activities where employees clean up asbestos-containing waste and debris.

PERMISSIBLE EXPOSURE LIMITS FOR ASBESTOS:

Employee exposure to asbestos must not exceed 0.1 fiber per cubic centimeter (f/cc) of air, averaged over an 8-hour work shift. Short-term exposure must also be limited to not more than 1.0 f/cc, averaged over a 30-minute period. Rotation of employees to achieve compliance with either permissible exposure limit (PEL) is prohibited.

Walsh will create control zones known as regulated areas that are designed to protect employees where certain work with asbestos is performed. Walsh will limit access to regulated areas to authorized persons who are wearing appropriate respiratory protection. Eating, smoking, drinking, chewing tobacco or gum, and applying cosmetics in these areas will be prohibited.

MISCELLANEOUS REQUIREMENTS:

1. During active removal, the licensed asbestos abatement contractor shall have a manometer on site in order to ensure that proper negative pressure (0.020 in./water column) is being maintained. At any time, if the proper amount of negative pressure is not maintained, the abatement contractor shall cease all removal activities until such time that proper negative can be maintained.
2. The asbestos abatement contractor shall insure that all workers' licenses are posted at the containment location along with the sign in/sign out log. Licenses may be posted in an alternate central location at the discretion of Walsh.
3. All required paperwork including, but not limited to licenses, training certificates, respirator fit tests, and medical qualifications shall be maintained on site and shall be available for review.
4. The asbestos contractor's license must be posted in a central location as determined by Walsh.
5. All polyethylene sheeting used on the project shall be fire rated. The asbestos contractor shall post documentation of the fire rating of the poly.

20.3 Crystalline Silica Exposure

Walsh shall not allow dry sweeping or dry brushing where such activity could contribute to employee exposure to respirable crystalline silica unless wet sweeping, HEPA-filtered vacuuming or other methods that minimize the likelihood of exposure are not feasible.

Subcontractors who use "Table 1: Specified Exposure Control Methods When Working with Materials Containing Crystalline Silica" (found in the OSHA Silica standard for construction) correctly do not have to provide exposure monitoring of employees and are not subject to the listed PEL. The table spells out the need for respiratory protection (along with minimum assigned protection factors) for certain operations.

If exposure control methods listed in Table 1 are not used, then the Subcontractor:

Must perform an exposure assessment to assess the exposure of each employee who is or may reasonably be expected to be exposed at or above the action level.

1. Protects workers from exposures above the permissible exposure limit (PEL) of 25 micrograms per cubic meter of air averaged over an 8-hour day.
2. Dust control measures must be used to protect workers from exposures above the PEL; and
3. Provide respirators to workers when dust controls cannot limit exposures.
4. For tasks performed indoors or in enclosed areas, provide a means of exhaust as needed to minimize the accumulation of visible airborne dust.
5. Using wet methods, apply water at flow rates sufficient to minimize release of visible dust.
6. If performing multiple tasks from Table 1 that in whole exceed 4 hours, use the respiratory protection for each task that's designated for >4 hours' work.
7. After working with products that contain crystalline silica, each individual will be required to thoroughly wash their hands before eating, drinking, or smoking. Eating, drinking, or

smoking near silica or in silica- regulated areas is strictly prohibited.

21. COMPETENT PERSON DESIGNATION FORM



PROJECT COMPETENT PERSONS DESIGNATION

The following person/persons will represent (Company) _____ as the competent person(s) as defined by OSHA 29 CFR 1926.32 for applicable standards associated with scope of work.

Standard	Title	Printed Name / Phone#	Alt. Printed Name / Phone#
N/A	COVID-19 Reporting *Point of Contact		
1926.2	General Safety and Health		
1926.5	First Aid/ CPR		
1926.101	Hearing Protection		
1926.500-503	Fall Protection and Inspection		
1926.59(1910.1200)	Hazardous Communication		
1926.751-756	Steel Erection		
1926.700 - 706	Concrete and Masonry		
1926.103	Respiratory Protection		
1926.1153	Silica - Respirable Crystalline		
1926.1101	Asbestos		
1926.62	Lead		
1926.352	Fire Prevention		
1926.416	Electrical - Extension Cords		
1926.404	Electrical (Assured Grounding)		
1926.650-652	Excavations		
1926.1203	Confined Space		
1926.600 - 606	Equipment - Mechanized		
1926.602(c)	Forklift – lifting and hauling equipment.		
1926.453	Aerial Lifts		
1926.452(w)	Scissor Lifts - mobile supported scaffold		
1926.1400-1430	Cranes and Derricks		
1926.1419	Crane Signaling		
1926.251	Rigging equipment		
1926.450-454	Scaffold		
1926.1053, 1060	Ladders and Stairways (Inspections)		
1926.552	Material, Personnel Hoist, and Elevators		
1926.800-803	Underground Construction -Caissons		
1926.9	Blasting		
1926.850,859	Demolition		
1926.351	Welding and cutting		
1926.1127	Cadmium		
1926.1126	Chromium (VI)		

By completing this form, I state the individuals listed above are capable of identifying existing and predictable hazards in the surroundings or working conditions which are considered hazardous, or dangerous to employees and have the authority to take prompt corrective measures to eliminate them.

EMPLOYEE 1: _____ DATE: _____

EMPLOYEE 2: _____ DATE: _____

DESIGNATED BY: _____ DATE: _____

