SUMMERS-TAYLOR, INC.

HEALTH & SAFETY PROGRAM

Revised 3/2026

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Health & Safety Policy

At Summers-Taylor, Inc., the safety and well-being of our employees and all personnel working within our family is paramount. We are steadfastly committed to fostering and maintaining an Injury Free Environment (IFE) across our entire organization. Safety is personal to each of us. It's woven into the fabric of our daily lives because we value and respect every individual who works with us. We categorically reject any practices that present the unnecessary risk of injury. For us, all injuries are preventable when safety becomes an everyday personal value. Committing to an Injury Free Environment isn't merely the right choice; it is our way of ensuring the job is done. Quality stands as our shield in our unwavering dedication to safety.

Grant T. Summers
President

Key Personnel

President		Grant Summers
Executive Vice President		Ted Bryant
Vice President of Operations		Scott Fuller
Vice President of Engineering		David Bullington
Chief Financial Officer		Chris Hyder
Divisional Vice President	Asphalt Materials	Andrew Knipp
	Logistics	Darius Peedin
	Osborne Electric	Darius Peedin
	Ready-mix Concrete	John Loven
	Ross Pre-Stressed Concrete	Rick Merritt
	Simpson Bridge	Lee Hamrick
	Volunteer Oil	Darius Peedin
Human Resource Manager		Kendra Jackson
Environmental Compliance Manager		Johnny Farmer
Corporate Safety Manager		Jesse Jacobsen
Field Safety Manager		Andy Greene
DOT Safety and Compliance Coordinator		Bryan Forbes
Safety Technician		Abraham Flores-Melchor
Superintendents		Site Specific
Foremen		Site Specific

Points of Contact

Main Office	Front Desk	423-543-3181
Human Resources	Kendra Jackson	423-791-5111
Field Safety Manager	Andy Greene	423-483-5422
DOT Compliance & Safety Coordinator	Bryan Forbes	423-930-3321
Plant & Facility Safety Technician	Abraham Flores-Melchor	423-895-5248
Environmental Compliance	Johnny Farmer	423-791-6636
Traffic Control	David Ayers	423-895-9760

Summers-Taylor Inc. 24/7 Emergency Contacts

Scott Fuller	423-791-5106
Jesse Jacobsen	423-791-5158
Fire/EMS/Police	911
Hazardous Materials Spill - Chemtrec	800-424-9300

Identification of Personnel, Responsibility, and Certification

Corporate Safety Manager is Jesse Jacobsen, he has the following certifications: CPR, First Aid & AED instructor, and OSHA 500 & 510 Authorized Outreach Trainer. ATSSA Flagger Instructor, ATSSA Traffic Control Supervisor, Road Safety Champion Program – Tennessee Transportation Assistance Program (TTAP) - University of Tennessee , TOSHA Hazard Communication, Forklift Instructor, Certified Swing Cab Crane Operator (TLL) & Rigging Trained, Class A Heavy Equipment Operator, Class A CDL Endorsement, Blasting Safety & Regulations, Explosives Control & Compliance, NFPA 70E Safety Training, Tennessee Drug Free Workplace, Confined Space and Competent Person Excavation/ Trenching.

Field Safety Manager is Andy Greene, Certified Safety Manager of Construction (CSMC). He has the following certifications: OSHA 500 & 510 Authorized Outreach Trainer, Advanced Safety Certificate, ATSSA Traffic Control Supervisor, ATSSA National Flagger Instructor, NFPA 70E Safety Training, Crosby Qualified Rigger Train the Trainer, CPR First Aid & AED instructor, MESH certified. MSHA safety, Hazwoper 40, Respiratory Fit test, Confined Space and Competent Person Excavation/ Trenching, Tennessee Drug Free Workplace, Tennessee Damage Prevention 811 Program.

DOT Compliance and Safety Coordinator is Bryan Forbes, he has the following certifications: OSHA 30 Construction, OSHA 10 General Industry, Smith Driving System Instructor, National Flagger Certified, CPR/AED & First Aid, National Traffic Incident Management course, Tennessee Drug Free Workplace, Class A Commercial Driver's License, Certified Fix Cab Crane Operator (TSS) & Rigging Trained, FMCSA Compliance workshop, Tennessee Highway Patrol Roadside Inspection Participant, Six Sigma Green Belt, Forklift Certified.

Plant & Facility Safety Technician is Abraham Flores-Melchor, he has the following certifications: OSHA 500 & 510 Authorized Outreach Trainer, Red Cross First Aid/CPR/AED Instructor, National Flagger Certified, Tennessee Damage Prevention 811 Program, Competent person Lockout Tagout and Confined Space, and Forklift Instructor.

1.0 HEALTH & SAFETY PROGRAM (HSP)

1.1 INJURY FREE ENVIRONMENT (IFE)

Summers-Taylor, Inc. is committed to an Injury Free Environment. IFE is the shared corporate and individual belief that safety is a value, not compromised by cost or schedule. Everyone has the right to go home safely at the end of the day.

Injury Free Environment holds three basic premises:

- All incidents and injuries are preventable; no level of incident or injury is acceptable or tolerated.
- Injury Free operations are possible in construction; a prevailing mindset and conviction exists to do the right thing and what is necessary to achieve that state.
- Elevate safety awareness daily; a journey of continuous improvement to advance safety and achieve a heightened state of awareness where workers choose to be responsible and accountable for their own safety and the safety of their co-workers.

1.2 RESPONSIBILITY AND ACCOUNTABILITY

Everyone associated with our projects must understand their responsibilities with regards to health and safety. With the responsibilities defined, project management, supervision, subcontractors and workers will be held accountable for their health, and safety performance.

NOTE: **Project Management includes Project Executive, Project Director, Project Manager, Project Engineer, and EHS Director.*

***First-line Supervision includes General Superintendents, Superintendents, Field Engineers, General Foreman and Foreman.*

Overall, Health and Safety Program General Responsibilities:

Project Management* - will ensure that the HSP is understood, implemented, and strictly complied with and that Summers-Taylor, Subcontractors, vendors, or third-party individuals working or having business at this project are in conformance to the HSP.

First Line Supervision** - will ensure that the HSP is fully understood, implemented in work planning and communicated to workers. The project is compliant to the HSP.

Workers - will understand the contents of the HSP and follow the established rules and procedures.

Site Safety Representative - will advise project management and supervision as to status and conformance with the project HSP. Support in the administration of the HSP.

General Work Practices:

Project Management* - will ensure that first-line supervision is communicating safe work practices to workers.

First Line Supervision* - will ensure that all work tasks are properly communicated to workers and complied with.

Workers – will follow all safe work practices as communicated to them by their supervisor.

Site Safety Representative – assess whether project is compliant with safe work practices and federal, state, local and company regulations, rules and procedures.

Site-Specific Safety Rules:

Project Management* - will ensure that the site-specific safety rules and procedures are implemented and enforced.

First-Line Supervision* **-** will ensure that the site-specific safety rules and procedures are understood and implemented.

Workers - will understand and follow the site-specific safety rules and procedures.

Site Safety Representative - will assess project conformance to site-specific safety rules and procedures.

Orientation:

Project Management* - will ensure that resources are available to conduct a proper orientation, and they participate in orientation process.

First-Line Supervision* - will ensure that they participate in orientation process and provide trainees with site tour before reporting to work assignments.

Worker - will attend orientation prior to beginning work. Understand and follow the site-specific safety rules and procedures.

Site Safety Representative - will support project management and first line supervision in the development and administration of the orientation.

Training:

Project Management* - will ensure that resources are available to implement safety and health training. Training programs are developed and implemented.
First-Line Supervision* **-** will ensure that they receive a project-specific supervisor safety orientation prior to start of work. All workers under their direction are properly trained in hazard recognition and safe work practices.

Worker - will attend the required project safety and health training. Understand and follow the work practices and guidelines discussed during the training.

Site Safety Representative - assess that project management, first-line supervision and workers have received proper health and safety training. Assist project supervision in training

workers on hazard recognition and safe work practices.

Safety Planning:

Project Management* - will ensure that the national pre-qualification system is being properly utilized for contractor selection. All first-line supervision identifies, evaluate, and control the work site hazards, and resources are available to implement controls.

First-Line Supervision** - will ensure that all hazards are identified, evaluated and controlled and addressed in Daily Pre-Task Plans. Institute a daily assessment program to identify, evaluate and correct work site hazards.

Worker – will understand the hazards of the work and follow the safe practices and controls developed for those hazards.

Site Safety Representative – will assist in evaluating hazards and determining methods of eliminating or reducing the hazard.

Incidents:

Project Management* - will ensure that all incidents are reported properly to the safety department to assist in incident reporting.

First-Line Supervision** - will ensure that they conduct a thorough and proper incident investigation and develop solutions to prevent similar occurrences and notify the safety department for assistance.

Worker – will cooperate and participate in the incident investigation and contribute ideas and solutions.

Site Safety Representative – will assist first-line supervision in investigating incidents. Maintain monthly incident statistics.

1.3 SAFETY REGULATIONS

Summers-Taylor, Inc. and subcontractors shall comply with all applicable government regulations, specific client rules and regulations, and this Health & Safety Program. If any of these standards, requirements, rules or procedures conflict, the most stringent one will prevail.

1.4 NOTIFICATION OF UNSAFE OR HAZARDOUS CONDITIONS & STOP WORK AUTHORITY

Every employee has the right and responsibility to notify the safety department, project management, or supervision of any unsafe or hazardous condition that may be present without fear of retribution. Personnel not only have a right but a responsibility to “Stop Work” when there is a concern or question regarding the control of a health, safety, or environmental threat.

Project management or supervision will take immediate action to correct or remove any hazard brought to their attention. Management and supervision are responsible for creating a culture that promotes “Stop Work” authority free from retribution. Every employee, regardless of position or length of employment, has the right to stop any work they believe is unsafe, unhealthy, or a threat to the environment. “Stop Work” must be initiated for conditions or behaviors that pose a danger to person(s), equipment, or the environment. Situations that warrant implementation “Stop Work” may include, but are not limited to, the following:

- Unsafe Act
- Unsafe or Unhealthy Conditions
- Unanticipated Changes in conditions
- Emergency Situations
- Improper Equipment Usage
- Potential for Equipment Damage
- Apparent Lack of Operational Understanding
- Near Miss Incidents.
- Tasks Assigned but not Covered on the JSA
- Unclear assignment of tasks
- Environmental spill

If an employee, acting in good faith, identifies a perceived condition or behavior that poses a danger to person(s), equipment, or the environment, that person shall immediately utilize their “Stop Work” authority to intervene with the person(s) potentially at risk.
Immediately notify supervision and all affected personnel that “Stop Work” has been initiated. If necessary, supervision will provide directions to stop associated work activities, remove person(s) from the area, stabilize the situation, and make the area as safe as possible.
If the affected person(s) is not in immediate risk, coordinate “Stop Work” actions through the Supervisor. All involved parties must discuss the issue and agree on how to proceed.

If it is determined and agreed the task or operation can proceed as-is (for example, the individual who initiated “Stop Work” unaware of certain facts or procedures), the affected persons should thank them for their concern and proceed with the work.

If it is determined and agreed that the issue initiating “Stop Work” is valid, then every attempt should be made to resolve the issue to the satisfaction of all affected persons before work resumes.

If the issue cannot be resolved immediately, suspend work until proper resolution is achieved. When opinions differ as to the validity of the issue or the resolution, a Summers-Taylor, Inc Safety Representative will investigate the circumstances surrounding the “Stop Work” authority implementation, to include interviewing supervision and those involved and make the final determination.

To reinforce this “Stop Work” Procedure, employees should be informally recognized for exercising “Stop Work” authority.

SUBCONTRACTORS

The project manager, the site superintendent, and safety will ensure subcontractors adhere to this safety manual. If required, the project manager or safety team will ensure that subcontractors comply with orientations, meetings, training, and qualifications. They will also be conducting period inspections to ensure subcontractors are following all jurisdictional requirements.

Sub-contractors are responsible for reporting all accidents and incidents to Summers-Taylor, Inc. within 24hrs. Summers-Taylor will screen all subcontractors to ensure they meet the minimum subcontractor performance evaluation criteria with insurance.

1.5 DISCIPLINARY PROGRAM

At-risk behavior while employed at Summers-Taylor, Inc., which could contribute to an incident or injury will not be tolerated. Each worker has an individual responsibility to work safely, and each first-line supervisor is responsible to correct at-risk behavior of workers under their direction.

At-risk behaviors ***considered immediately dangerous*** to Life or Health that may result in immediate termination from the project, consist of, but are not limited to:

- Failure to follow the Fall Protection Policy
- Failure to follow the Substance Abuse Policy
- Possession of firearms, explosives or dangerous weapons
- Theft and other criminal activity
- Entering or allowing to enter an unprotected trench or excavation
- Failure to follow lockout/tag out procedures.
- Fighting, horseplay, or practical joking
- Entering or allowing to enter, a confined space without following procedures
- Unsafe and/or reckless operation of motorized vehicles or equipment

For those acts or practices ***not considered Immediately Dangerous*** to Life or Health, the following will apply:

- ***First occurrence:*** Verbal, written warning and/or re-training
- ***Second occurrence:*** Written warning, re-training, suspension, or termination from the project
- ***Third occurrence:*** Termination from the project/ of employment

Safety write-ups shall be submitted via HCSS Field App. In the event HCSS Field App is unavailable, **Appendix I** provides a copy of the **Safety Write-up Form**

Subcontractors
Summers-Taylor, Inc. incorporates a progressive disciplinary system for all sub-contractors whose at-risk behaviors that are deemed unsafe. The decision to impose disciplinary actions rests solely on Summers-Taylor management who believe that the particular at-risk behavior deserves disciplinary action potential monetary fine. The amount of disciplinary action depends on the severity and/or potential severity of the at-risk behavior not only to the contractors' own

workers, but to all individuals that may be put at risk by the at-risk behavior due to the offending contractor's non-compliance. Subcontractors may be given three levels of disciplinary action depending on the severity of the situation.

- **First**, a documented verbal warning with potential monetary fines
- **Second**, kicked off the site with potential monetary fines.
- **Third** kicked off the site permanently with potential monetary fines.

1.6 INCIDENT AND NEAR MISS REPORTING AND INVESTIGATION

All safety incidents, including work-related injuries, accidents, near misses, and property damage will be reported and investigated to determine root causes, and recommendations will be developed, communicated, and implemented to prevent recurrence of the incident. This applies to all workers, contractors, and associates on Summers-Taylor, Inc. sites.

The Safety Department will thoroughly investigate all incidents and near misses to determine the probable root cause(s). Preventive action will be required to eliminate future occurrences.

An incident is defined as any unplanned or undesired event that results in or has the potential to result in a work-related injury/illness, property damage, or disruption of business where the cause was from human errors of omission or commission.

A near miss is any situation that has the potential to result in a work-related injury/illness, property damage, serious environmental impact, or disruption of business under slightly difference circumstances.

If the incident requires medical attention, it should be reported as soon as the medical situation has been brought under control. Injured workers shall be accompanied to the medical facility by a supervisor.

The supervisor of the affected employee will notify the safety department immediately and use the online reporting system to initiate the formal notification process within 24hrs using the **HCSS Field App** electronic **Incident Report Form**. This method ensures timely reporting of information about the incident. **Appendix H** is provided as a backup in the event HCSS cannot be accessed and will later be uploaded into the HCSS Field App.

1.7 POST INCIDENT REVIEW MEETING

Upon completion of the incident investigation, the safety department will host a post incident review meeting to be held at the main office. The purpose of the meeting is to analyze the incident to understand what happened, why it happened, and how it was handled, with the primary goal of identifying root causes and implementing preventative measures to stop similar incidents from occurring in the future, essentially learning from mistakes and improving processes for better incident response in the future; it's a key component of continuous improvement within an organization.

Subcontractors & Others

Upon completion of the incident investigation or observation of a major nonconformance, Summers-Taylor may require a post incident review meeting. At this meeting, the Summers-Taylor project team and Summers-Taylor senior project management, supervision, and involved subcontractor(s) will discuss the nonconformance, root causes, and corrective action plans. This meeting may be held on the jobsite, via zoom, main office, plant or facility, or anywhere necessary.

1.8 SUBSTANCE ABUSE POLICY

This policy shall directly reflect ***Summers-Taylor, Inc., the Drug-Free and Alcohol-Free*** policy outlined in the employee handbook. Summers-Taylor, Inc. is committed to providing a safe, drug-free and alcohol-free workplace for all employees. This policy applies to all employees, subcontractors at any tier, vendor, and other third-party employees, including management working on or visiting Summers-Taylor, Inc. sites.

Drug and alcohol abuse on and off the job can contribute both to incidents and to greater risk for all individuals employed at Summers-Taylor, as well as the public. All work tasks on Summers-Taylor projects will be considered safety-sensitive. Therefore, Summers-Taylor, Inc. has established the following policy, pursuant to T.C.A. Section 50-9-100 et. seq.:

- It is a violation of company policy for any employee to use, possess, sell, trade, offer for sale, or offer to buy illegal drugs or otherwise engage in the illegal use of drugs on or off the job.
- It is a violation of company policy for any employee to report to work under the influence of or while possessing in his or her body, blood or urine, illegal drugs in any detectable amount. It is a violation of company policy for any employee to report to work under the influence of or impaired by alcohol.
- It is a violation of the company policy for any employee to use prescription drugs illegally, i.e., to use prescription drugs that have not been legally obtained or in a manner or for a purpose other than as prescribed. However, nothing in this policy precludes the appropriate use of legally prescribed medications.
- Violations of this policy are subject to disciplinary action up to and including termination.

Any worker who suffered or contributed to a work-related injury or illness, which required treatment by a physician or other medical facility or was involved in an accident where damage to property occurred, will be tested for drugs and alcohol.

Subcontractors
Each subcontractor will promote a Drug Free Workplace with their employees and will communicate what constitutes prohibited activities during the safety orientation. Subcontractors will ensure all workers involved in an accident have a post incident drug/alcohol test and will report the results to Summers-Taylor. At a minimum, the drug and alcohol test will follow current NIDA five panel guidelines and alcohol test will follow DOT guidelines.

Workers that refuse to test, stall be tested, are uncooperative with collectors, or attempt to alter a urine specimen will be considered positive and immediately removed from the site.

2.0 SAFETY PLANNING

2.1 CREW DAILY PRE-TASK PLAN

A daily Job Safety Analysis (JSA) meeting will be held by each jobsite supervisor. The JSA meeting includes daily task assignments and risk assessment and mitigation. It shall be communicated to all employees reporting to that supervisor prior to work commencement. In the event of a new assigned task outside of the original JSA meeting, all employees involved in the new task will be required to attend a new JSA meeting. All employees should at least understand the plan of the day. The JSA will be recorded and submitted in the **HCSS Field App**. In the event the HCSS Field App is unavailable, **Appendix D** provides a blank **Pre-Job Safety Analysis** form.

All employees are responsible for hazard identification and reporting. Supervisors shall be responsible for implementing controls to eliminate, control or guard against specific hazards. If a hazard has been identified and no solution can be implemented, the safety department shall be notified immediately.

In the event of adjacent work with shared spaces, in which a hazard maybe present from adjacent work, it shall be included in each affected crews JSA meeting. If a new hazard becomes present, all affected crews will be notified.

Site walkdowns will be conducted by the supervisor daily. The safety department will conduct site safety spot checks as necessary.

Each first-line supervisor will analyze task(s) to be performed by their crew and identify the work sequences, hazards, training, controls, and emergency action plans necessary to protect workers from the identified hazards.

- The work will be broken down into individual steps (i.e. all the steps the work crew will have to take in order to complete that task); the known hazards associated with the work; and the hazard controls (tools, safety equipment, safety rules, safe work practices, etc.) This is a time for workers to provide input into the safety plan.

- First-line supervisors will review the plan with their respective work crew so that each worker is aware of what work activities will occur during the shift, what hazards to be aware of, and how to properly control or eliminate those hazards. Each worker will sign the plan stating that they understand the work activities, hazards and controls. This is also an acknowledgment that each worker agrees to work according to the plan. The completed pre-task plan shall be posted in a conspicuous location near the work activity.

Those tasks with similar work can use prior pre-task plans, but the plan must still be dated and reviewed with crew members at the beginning of the shift. If the scope of work changes or a new hazard appears during the work, the first-line supervisor will stop their crew members and revise the pre-task plan.

Any new employee, temporary employee, or employees who have new or changed job roles will

be monitored as necessary by their supervisor, leadman or subject matter expert.

2.2 ORIENTATION

To promote and ensure an Injury Free Environment, health and safety training is a requirement for all new hire employees. Orientation may be required for specific sites for all employees and subcontractor workers assigned to a project.

Orientation will include a review of the Health and Safety Policy, overview of applicable health and safety legislation including employee right to refuse unsafe work, overview of the company Health and Safety Program, Site specific health and safety requirements, and any additional regional/divisional health and safety requirements deemed necessary by local management.

There will be a verification/evaluation process to ensure the information has been clearly understood by the worker. This can include a written evaluation, oral evaluation, or work practice evaluation.

2.3 SAFETY MEETINGS

Daily and Weekly Safety Meetings - All employees will participate in safety meetings conducted by their supervisor. Weekly safety meetings should communicate any incidents that occurred on the project, safety concerns, new work activities, new and continuing potential hazards and the like. Daily safety meetings shall be targeted towards the plan of the day. In the event that a condition or task changes, all employees involved shall be notified.

Meetings will be recorded and submitted in the **HCSS Field App**. In the event the HCSS Field App is unavailable, **Appendix O** provides a blank **Meeting Sign-In Sheet** form which can be used to record daily/safety meetings.

Subcontractors

Subcontractors shall be responsible for conducting their own meetings. Summers-Taylor reserves the right to remove subcontractor management/supervision personnel who do not regularly attend and/or conduct weekly safety meetings on the site.

3.0 SPECIFIC SAFETY PROGRAMS

3.1 ALONE WORK

Employees may be required to work alone for a variety of reasons. An employee is "working alone," when:

- He or she is on their own at work.
- When they cannot be seen or heard by another person.
- When emergency assistance is not readily available.

Lone workers are only permitted for activities determined to be low risk. Low risk activities include those for which the potential for an incident to occur is deemed to be unlikely, and the severity of any such incident would be non-serious in nature.

Working alone can present a unique set of hazards. Each individual lone worker assignment must be thoroughly evaluated, and personnel must be well trained to ensure they are capable of safely performing their tasks. To the extent possible, the increased hazard to personnel of working alone should be eliminated by implementing the buddy system. To address these special considerations, a Job Safety Analysis (JSA) may be conducted by supervision in conjunction with the lone worker to identify hazards that will be encountered as well as necessary controls to be taken to mitigate the hazards.

An effective form of communication must always be available. The employee is required to check in at regular, pre-arranged intervals and must follow established check-out procedures at the end of the work shift. Any unanticipated change in work scope must be communicated to supervision before proceeding. Supervisors or designated contact personnel shall be aware of the work schedule of the lone worker.

3.2 BLASTING

The transporting, handling, storing, and use of explosives, blasting agents and blasting equipment shall be directed and supervised by a licensed contractor. The licensed contractor shall designate a person knowledgeable and with proven experience and ability in blasting operations as their on-site blaster.

All personnel who participate in blasting operations shall receive initial training in basic explosives safety. Individuals shall receive additional training in explosives safety commensurate with the assigned responsibilities.

Prior to the use, storage or handling of explosives, a job-specific blasting plan shall be prepared by a licensed contractor and submitted to Summers-Taylor for approval.

The job-specific Blasting Plan shall be site-specific and shall at minimum address the following:

- Designation of a qualified individual as the Blaster who has authority over all actions and operations related to blasting. List the names, qualifications, and detailed responsibilities for all personnel involved with the blasting or who will otherwise be responsible for

transporting, handling or storing the explosives. List all incidental personnel and other personnel authorized to be within the danger zone during blasting operations.
- Dates and location of blasting.
- Type and quantity of explosives and detonating or initiating devices to be used at the site. An inventory of explosives and blasting agents stored at the site shall be Maintained.
- Means of transporting explosives and provisions for storing and securing explosives on site.
- Obtaining all applicable permits and licenses.
- Minimum acceptable weather and static conditions and consideration for stray radio frequency energy and electrical currents where electrical initiation will be used.
- Standard procedures for handling, setting, wiring and firing explosives charges
- List of required PPE.
- Minimum standoff distances/means for clearing/controlling access to blast danger areas.
- Procedures for handling misfires and other unusual occurrences.
- Means of annunciation and timing for pre-blast notification and "all clear" after blast.

In addition to the Blasting Plan, the licensed contractor will develop an Emergency Action Plan which shall include:

- Phone numbers of local emergency response organizations (rescue, ambulance, fire department, police)
- Location and phone number of nearest medical services facility
- Actions to be taken when a person is injured.
- A copy of a Safety Data Sheet (SDS) for each explosive or other hazardous material expected to be used.
- Personnel not listed on the blasting plan shall not be allowed on site without approval of the blast officer. All personnel shall receive a safety briefing prior to entering the blast area. A roster shall be maintained of all personnel within the blast area.
- A copy of the blasting plan shall be maintained at the blasting site(s) and office locations.

3.3 BLOODBORNE PATHOGENS

Summers-Taylor, Inc. is committed to providing a safe and healthy work environment for our entire staff. In pursuit of this goal, the following exposure control plan (ECP) is provided to eliminate or minimize occupational exposure to bloodborne pathogens in accordance with OSHA standard 29 CFR 1910.1030, "Occupational Exposure to Bloodborne Pathogens."

The ECP is a key document to assist our organization in implementing and ensuring compliance with the standard, thereby protecting our employees. This ECP includes the following:

- Determination of employee exposure
- Implementation of various methods of exposure control, including:
    - Universal precautions
    - Engineering and work practice controls
    - Personal protective equipment
    - Housekeeping
- Hepatitis B vaccination
- Post-exposure evaluation and follow-up

- Communication of hazards to employees and training
- Recordkeeping
- Procedures for evaluating circumstances surrounding exposure incidents.

Note: *Implementation methods for these elements of the standard are discussed in this ECP.*

Program Administration

- The safety department is responsible for implementation of the ECP. The Safety Department will maintain, review and update the ECP at least annually, and whenever necessary to include new or modified tasks and procedures.
- Those employees who have occupational exposure to blood or other potentially infectious materials (OPIM) must comply with the procedures and work practices outlined in this ECP.
- The Safety Department will provide and maintain all necessary personal protective equipment [PPE], engineering controls [such as sharps containers], labels and red bags as required by the standard. The Safety Department will ensure that adequate supplies of the aforementioned equipment are available in the appropriate sizes.
- The Safety Department will be responsible for ensuring that all medical actions required by the standard are performed and that appropriate employee health and OSHA records are maintained.
- The Safety Department will be responsible for training, documentation of training and making the written ECP available to employees, OSHA and NIOSH representatives.

Employee Exposure Determination

The following is a list of all job classifications at our establishment in which all employees have potential occupational exposure. These are made without regard to the use of Personal Protective Equipment:

Job Title	**Department/Location**
First Aid Responders	Jobsites
Employees Working in Live Sewers	Jobsites

The following is a list of job classifications in which some employees at our establishment have occupational exposure. Included is a list of tasks and procedures, or groups of closely related tasks and procedures, in which occupational exposure may occur for these individuals.

Job Title	**Department/Location**	**Task/Procedure**
Laborers	Jobsites	Live sewer work.
Supervisors	Jobsites or Offices	First aid response.

Methods of Implementation and Control

Exposure Control Plan

Employees covered by the bloodborne pathogen's standard receive an explanation of this ECP during their initial training session. It will also be reviewed in their annual refresher training. All employees can review this plan at any time during their work shifts by contacting the Safety department. If requested, we will provide employees with a copy of the ECP within 15 days of the request.

The Safety Department is responsible for reviewing and updating the ECP annually, or more frequently, if necessary, to reflect any new or modified tasks and procedures that affect occupational exposure and to reflect new or revised employee positions with occupational exposure.

Engineering Controls and Work Practices

Engineering controls and work practice controls will be used to prevent or minimize exposure to bloodborne pathogens. All body fluids shall be considered potentially infectious materials. The specific engineering controls and work practice controls used are listed here:

- All employees who provide first aid/response will wash their hands before and after treating an employee.
- Hand washing should be done at a minimum prior to physical contact with an employee, immediately after or as feasible following contact with Blood or other potentially infectious materials, immediately after removal of gloves or other PPE.
- These same controls apply to employees engaged in live sewer work.
- On construction jobsites handwashing facilities are not always readily available. In those cases, anti-bacterial hand-washing solution and towelettes will be made available to all employees to be used until they can access running water and soap.
- Employees will not be permitted to return to work until all equipment and working surfaces have been cleaned and decontaminated after contact with blood or OPIM.

Personal Protective Equipment (PPE)

PPE is provided to our employees at no cost to them. Training in the use of the appropriate PPE for specific tasks or procedures is provided by the Safety department.

PPE is located in the first aid or bloodborne pathogens kits which are in the jobsite's trailers or on the superintendent's trucks and may be obtained through the Safety department. Employees will obtain PPE by requesting it from their direct supervisor.

All employees using PPE must observe the following precautions:

- Wash hands immediately or as soon as feasible after removing gloves or other PPE.
- Remove PPE after it becomes contaminated and before leaving the work area.
- Used PPE may be disposed of in the red bag that is located in the bloodborne pathogens or first aid kit.

- Wear appropriate gloves when it is reasonably anticipated that there may be hand contact with blood or OPIM, and when handling or touching contaminated items or surfaces.
- Replace gloves if torn, punctured or contaminated, or if their ability to function as a barrier is compromised.
- Utility gloves may be decontaminated for reuse if their integrity is not compromised; discard utility gloves if they show signs of cracking, peeling, tearing, puncturing or deterioration.
- Never wash or decontaminate disposable gloves for reuse.
- Wear appropriate face and eye protection when splashes, sprays, spatters or droplets of blood or OPIM pose a hazard to the eye, nose or mouth.
- Remove immediately or as soon as feasible any garment contaminated by blood or OPIM, in such a way as to avoid contact with the outer surface.

Hepatitis B Vaccination

The Safety Department will provide training to employees on hepatitis B vaccinations, addressing safety, benefits, efficacy, methods of administration and availability.

The hepatitis B vaccination series is available at no cost after initial employee training and within 10 days of initial assignment to all employees identified in the exposure determination section of this plan. Vaccination is encouraged unless one of the following conditions is met:

1. Documentation exists that the employee has previously received the series
2. Antibody testing reveals that the employee is immune
3. Medical evaluation shows that vaccination is contraindicated

However, if an employee declines the vaccination, the employee must sign a declination form. Employees who decline may request and obtain the vaccination at a later date at no cost. Documentation of refusal of the vaccination is kept on electronic file.

Vaccination will be provided by one of three medical providers that can be found on the panel and obtained from the human resources department.

Following the medical evaluation, a copy of the health care professional's written opinion will be obtained and provided to the employee within 15 days of the completion of the evaluation. It will be limited to whether the employee requires the hepatitis B vaccine and whether the vaccine was administered.

Hepatitis B Post-Exposure Evaluation and Follow-up

Should an exposure incident occur, contact the Safety department.

An immediately available confidential medical evaluation and follow-up will be conducted by a medical professional the employee may select from our panel. Following initial first aid (e.g., clean the wound, flush eyes or other mucous membrane), the following activities will be performed:

- Document the routes of exposure and how the exposure occurred.
- Identify and document the source individually (unless the employer can establish that

identification is infeasible or prohibited by state or local law).

- Obtain consent and make arrangements to have the source individual tested as soon as possible to determine HIV, hepatitis C virus (HCV) and hepatitis B virus (HBV) infectivity; document that the source individual's test results were conveyed to the employee's health care provider.
- If the source individual is already known to be HIV, HCV and/or HBV positive, new testing need not be performed.
- Ensure that the exposed employee is provided with the source individual's test results and with information about applicable disclosure laws and regulations concerning the identity and infectious status of the source individual (for example, laws protecting confidentiality).
- After obtaining consent, collect exposed employee's blood as soon as feasible after exposure incident, and test blood for HBV and HIV serological status.
- If the employee does not give consent for HIV serological testing during collection of blood for baseline testing, preserve the baseline blood sample for at least 90 days; if the exposed employee elects to have the baseline sample tested during this waiting period, perform testing as soon as feasible.

Administration of Post-exposure Evaluation and Follow-up

The Safety Department ensures that health care professional[s] responsible for employee's hepatitis B vaccination and post-exposure evaluation and follow-up are given a copy of OSHA's bloodborne pathogens standard.

The Safety Department ensures that the health care professional evaluating an employee after an exposure incident receives the following:

- A description of the employee's job duties relevant to the exposure incident
- Route(s) of exposure
- Circumstances of exposure
- Results of the source individual's blood test, if possible
- Relevant employee medical records, including vaccination status.

The Safety Department provides the employee with a copy of the evaluating health care professional's written opinion within 15 days after completion of the evaluation.

Procedures for Evaluating the Circumstances Surrounding an Exposure Incident

The Safety Department will review the circumstances of all exposure incidents to determine the following:

- Engineering controls in use at the time
- Work practices followed
- A description of the device being used (including type and brand)
- Protective equipment or clothing that was used at the time of the exposure incident (e.g., gloves, eye shields)
- Location of the incident (e.g., operating room, emergency room, patient room)
- Procedure being performed when the incident occurred.

Employee Training

All employees who have occupational exposure to bloodborne pathogens receive initial and annual training conducted by an authorized OSHA instructor or a certified first aid/CPR instructor.

All employees who have occupational exposure to bloodborne pathogens receive training on the epidemiology, symptoms and transmission of bloodborne pathogen diseases. In addition, the training program covers, at a minimum, the following elements:

- A copy and explanation of the OSHA bloodborne pathogen standard
- An explanation of our Exposure Control Plan and how to obtain a copy.
- An explanation of methods to recognize tasks and other activities that may involve exposure to blood and OPIM, including what constitutes an exposure incident.
- An explanation of the use and limitations of engineering controls, work practices and PPE
- An explanation of the types, uses, location, removal, handling, decontamination and disposal of PPE
- An explanation of the basis for PPE selection
- Information on the hepatitis B vaccine, including information on its efficacy, safety, method of administration, the benefits of being vaccinated and that the vaccine will be offered free of charge.
- Information on the appropriate actions to take and persons to contact in an emergency involving blood or OPIM.
- An explanation of the procedure to follow if an exposure incident occurs, including the method of reporting the incident and the medical follow-up that will be made available.
- Information on the post-exposure evaluation and follow-up that the employer is required to provide for the employee following an exposure incident.
- An explanation of the signs and labels and/or color coding required by the standard and used at this facility.
- An opportunity for interactive questions and answers with the person conducting the training session.

Note: *Training materials for this facility are available at the office in the safety records folder.*

Recordkeeping

Training Records

Training records are completed for each employee upon completion of training. These documents will be kept for at least three years at the office in the safety records folder.

The training records include the following:

- The dates of the training sessions
- The contents or a summary of the training sessions
- The names and qualifications of persons conducting the training.
- The names and job titles of all persons attending the training sessions.

Employee training records are provided upon request to the employee or the employee's authorized representative within 15 working days. Such requests should be addressed to the Safety department.

Medical Records

Medical records are maintained for each employee with occupational exposure in accordance with 29 CFR 1910.1020, "Access to Employee Exposure and Medical Records."

The Safety Department is responsible for maintenance of the required medical records. These confidential records are kept in a locked file cabinet for at least the duration of employment plus 30 years.

Employee medical records are provided upon request of the employee or to anyone who has written consent from the employee within 15 working days. Such requests should be sent to the Safety department.

OSHA Recordkeeping

An exposure incident is evaluated to determine whether the case meets OSHA's Recordkeeping Requirements (29 CFR 1904). This determination and the recording activities are done by the Safety department.

3.4 CAISSONS & COFFERDAMS

When a worker(s) must enter a caisson, a qualified person will develop a detailed work plan. The plan will include but not be limited to:

- Type of shield to be used
- Means of access for the worker(s)
- Method of atmosphere monitoring to be used
- Training to be provided to worker(s)

When worker(s) are required to enter a caisson four (4) feet in depth or greater, the workplace will be considered a “permit-required” confined space. All requirements of the confined space section of this HSP and OSHA 29 CRF 1910.146 will be strictly followed.

At least two effective means of communication, at least one of which shall be voice communication, shall be provided.

A safe means of access and egress will be provided for caissons and cofferdams. Access will be controlled as to prevent unauthorized entry. A sign “Keep Out” or with similar language or barricading shall be posted when employees are not present.

All workers required to work or enter a caisson, or cofferdam will receive confined space entry training and understand the contents of the written work plan.

Note: Prior to entry, a competent person shall conduct air quality monitoring.

3.5 CONCRETE CONSTRUCTION

All vertical and horizontal rebar, form stakes, metal and/or plastic conduit, and/or small pipe stub-ups will be protected with approved caps or other industry accepted alternatives to protect against impalement and injury.

Workers that will operate vibrators, pump nozzles, and concrete buckets will wear appropriate eye and foot protection. It is highly recommended that long sleeve shirts be worn to protect against exposure of concrete to the bare skin and the possibility of concrete burn and contract dermatitis.

Workers engaged in vertical rebar assembly shall comply with the project six-foot fall protection rules. Positioning devices alone are not approved of fall protection but can be used in conjunction with personal fall protection equipment.

Walkways along form walls will be constructed in accordance with OSHA scaffold and fall protection standards.

Prefabricated forms and form making material will be stacked neatly at all times. When stripping concrete forms, all material will be immediately removed and stacked in an orderly manner. Forming material or debris will not block walkways and aisles. Employees and subcontractors will remove rebar, tie-wire and other debris from the work area daily.

No employee is permitted to ride a concrete bucket. Follow safe rigging practices when handling concrete buckets. Equipment buckets with a discharge device that an employee can operate without being exposed to the load. Equip buckets with safety devices to prevent premature or accidental dumping and ensure that the release is self-closing.

Concrete buggy handles must not extend beyond the wheels on either side of the buggy.

Ensure that reinforcing steel and forms for walls, piers, columns, stairs and similar vertical structures are adequately supported to prevent overturning and collapse and are designed and installed under the supervision of a qualified person.

Ensure that uncoiled wire mesh is adequately secured to prevent recoiling.

When using bull floats, inspect the area to ensure there is no energized equipment or power lines nearby that the handles could touch. Finishers shall wear kneepads and impervious gloves when hand finishing concrete.

Rotating-type powered concrete trowels shall be equipped with dead-man controls that automatically shut down the equipment when the operator’s hands are removed from the controls.

3.6 CONFINED SPACE

Employees may be required to work in an area that is defined as a confined space. A **Confined Space** is a large enough space and so configured that a person can bodily enter and perform work; has limited openings for entry and exit; and was not designed for continuous human occupancy.

Training

Employees involved in confined space activities shall be trained to gain the understanding, knowledge, and skills necessary for the safe performance of the duties assigned under OSHA 29 CFR 1910.146 & 1926.1207. Training shall be provided:

- Before the employee is first assigned duties
- Before there is a change in assigned duties
- Whenever there is a change in permit space operations that present a hazard about which an employee has not previously been trained.
- Whenever the employer has reason to believe either that there are deviations from the permit space entry procedures, or that there are inadequacies in the employees' knowledge or use of these confined space procedures.

Permit Required

A Permit Required space meets these criteria and has one or more of the following characteristics:

- Contains or has the potential to contain a hazardous atmosphere.
- Contains material that has the potential for engulfing an entrant.
- Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross-section.
- Contains any other recognized serious safety or health hazard.

Examples of permit required confined spaces may include, but are not limited to:

- Storage Tanks
- Excavations and trenches
- Caissons & Cofferdams
- Sewers
- Manholes
- Underground vaults and utility tunnels
- Pipelines
- Pits and Tubs
- Open top spaces more than four feet in depth

Non-Permit Required

Permit required confined spaces shall be reclassified as **non-permit spaces** under the following

circumstances:

- The space has no actual or potential atmospheric hazards and if hazards within the space are eliminated without entry into the space.
- If testing and inspection during entry demonstrates that the hazards within the space have been eliminated and remain eliminated
- If a hazard returns, workers shall evacuate the space, and the space shall be reevaluated.
- If new hazards are identified that are not part of the original permit, workers shall immediately evacuate the space, and the confined space shall be re-evaluated.
- Cancelled permits shall be kept on file for a period of at least 12 months and reviewed to determine problems encountered.

Procedures

Only authorized workers may be permitted to enter a permit required confined space.

Workers shall be informed of permit required confined spaces for the work site as they are identified. Danger signs or other equivalent means shall be used to warn of existing confined spaces that are accessible by workers and others. The wording shall be “DANGER-PERMIT-REQUIRED CONFINED SPACE, DO NOT ENTER” or other equivalent language.

Required safety equipment shall be in the confined space work area, in working order, and instruments calibrated.

Initial Evaluation of Confined Spaces

Confined spaces shall be considered as permit required confined spaces until a competent person conducts an initial evaluation of the work site to identify permit required confined spaces. Confined spaces shall be classified as follows:

- Non-Hazardous
- Hazardous due to work task
- Hazardous due to internal condition

If the work site contains permit required confined spaces, danger signs stating "DANGER CONFINED SPACE ENTER BY PERMIT ONLY" or equivalent shall be posted to inform workers of the existence and location of the spaces. Bilingual signs shall be posted as necessary.

The supervisor responsible shall ensure that a Confined Space Entry Form is completed prior to the entry of any permit required confined space. See **Appendix A** for a copy of a **Confined Space Entry Permit** form.

Confined Space Permits are valid for the work period or work shift and become void and shall be reissued when:

- There is an unplanned interruption in the work process.
- The surrounding conditions change that introduce a new hazard.
- Workers leave the space to perform other work.
- The workspace is left unattended.
- The work period (normal time a worker or crew is scheduled to work during that day)

ends.
- When new crew assumes the work assignments of the existing work crew

Permits are not void during any single work period when crew members are added to the existing crew or when crew members are replaced on a planned rotational basis and the provisions of the permit are met including training and instructions.

Permits become void when the scope of work exceeds the definition of work defined on the permit, and when work is required to be completed that is not covered by the permit. Confined Space Permits shall be posted at the confined space work area until the work is completed. At the conclusion of work, the permit shall be returned to the issuer (i.e., Entry Supervisor, client, etc.).

Completed confined space permits shall be kept for a minimum of 12 months and until a review of the confined space permit program is completed.

Atmospheric Testing

Atmospheric conditions of a confined space shall be tested with calibrated equipment prior to entry of workers and as identified by the Initial Evaluation of Confined Spaces. Atmospheric testing shall be completed as indicated below and recorded on the Entry Permit:

- Oxygen content shall be tested. The acceptable range is 19.5 to 23.5 percent.
- Test for combustible gas and vapors. Acceptable range is 0 to 10 percent of the Lower Flammable Limit (or Lower Explosive Limit). Record readings on the Entry Permit.
- Check for toxic gases and airborne combustibles (i.e., dust) as identified by the initial determination of confined spaces.
- Entrants and/or attendants may request additional monitoring at any time.

Pre-Entry (occurring prior to entry)

Only those workers receiving specifically required training and certification on confined space entry shall be allowed to enter and/or attend a confined space. This training shall be documented at orientation. Annual refresher training shall be conducted for all applicable Summers-Taylor, Inc. employees to include emergency rescue drills. Proficiency in assigned duties will be established after training.

Employees who enter a confined space, Attendant(s), and Entry Supervisor shall receive the following minimum instructions concerning the confined space:

- How to recognize symptoms of the specific potential hazards of confined space
- The consequences of exposure to potential hazards
- When to evacuate the confined space
- Adhering to instruction of the Attendant
- Evacuating when alarms sound
- How communications will be maintained
- What to do if an exposure occurs or there is a release of a substance

- Shutting off tools during an emergency

Sources of energy or contaminants shall be controlled, such as:

- Electrical energy
- Pressurized systems such as pipelines and vessels are isolated through double blocking, blinding, bleeding, and depressurization.
- Extreme heat and extreme cold conditions

Pre-entry atmospheric testing shall be completed.

The method of ventilating the confined space shall be established.

The approved tools shall be identified and staged at or near the entry point of the confined space. Tools, electrical tools, and lighting systems shall be approved for use in confined spaces as identified by the Initial Evaluation of confined spaces.

Depending upon the Pre-Job Assessment (lighting and electrical equipment may be either low voltage (50V or less), or conventional 120V portable lamps and tools if powered by approved ground fault circuit interrupter devices and the work is not an electrically hazardous location. Pneumatic equipment may be used instead of electrical equipment.

Required rescue procedures and non-entry rescue equipment shall be staged at the confined space.

The safe methods to enter, exit, and escape for workers (including rescue workers during retrieval) working in a permit-required confined space shall be developed during the job planning phase, specified on, and included, as needed, on the entry permit.

Workers have been issued the required personal protective equipment (PPE).

Ventilation of Confined Spaces

Powered ventilation shall occur before entry into permit-required confined space and continue until after the workers have left the space. The layout of ventilation equipment will be made in such a manner that the air is being sent throughout the entire confined space. Forced air ventilation shall come from a clean source and may not increase hazards.

Air hoses with diffusers may not be used to provide forced ventilation.

Air sampling shall be conducted prior to worker entry to assure the safety of the space and periodic air sampling shall be continued thereafter in the space when forced ventilation is used.

Forced ventilation may be used to:

- To remove contaminants created by work activities such as welding
- As a method of maintaining controlling the ambient temperature of a confined space

when the rise in temperature is caused by atmospheric conditions.

Ventilation shall occur only by forcing air into a confined space. If it is necessary to exhaust hazardous gases, such as those produced when welding, the air being forced into the confined space shall be increased by at least the amount that is being exhausted out of the space.

Performance of Work

The confined space attendant shall remain at the entry point of the confined space while workers are inside any permit required confined space. The confined space attendant shall ensure that only authorized workers enter the confined space. Confined space attendants shall not perform any other work activities except that they may also serve as the attending supervisor. Confined space attendants shall only monitor a single confined space unless entry points to subsequent confined space(s) are immediately adjacent and are under the direct control of the attendant.

If an emergency or other unplanned event takes place during work the Confined Space Work Permit is void.

The Attendant and Entry Supervisor have the authority to discontinue work activities at any time.

Compressed gas cylinders other than a self-contained breathing apparatus should not be taken into a confined space.

The hoses of gas cutting, and welding tools shall be inspected for leaks prior to taking them into any confined space.

Workers who enter confined spaces shall comply with the provisions of this standard and the confined space permit. This includes:

- Supervisors
- Inspectors
- Surveyors
- Observers
- Scaffold Builders
- Engineers
- Vendors
- Contractors, subcontractors, and other workers

Sources of ignition (e.g., flame. arc, or spark) shall not be permitted in any confined space until tests have ensured that the percentage of combustible/flammable gas or vapor is not more than zero (0) % of the Lower Explosive Limit (LEL).

Emergencies

Emergency Notification

It is the responsibility of the Entry Supervisor and/or the Entry Attendant to immediately notify

the senior employee on the worksite of a potential emergency by voice, radio or cell phone. The senior employee will assess the situation and contact emergency response services if applicable.

Only those workers trained and certified in confined space entry procedures on the worksite may assist in emergency rescue operations.

Rescue / Retrieval Systems

To facilitate emergency rescue, retrieval systems or methods shall be used whenever an authorized entrant enters a confined space, unless the retrieval equipment increases the overall risk of entry or would not contribute to the rescue of the entrant.
The entry supervisor, prior to the initial entry of workers into a confined space, will ensure:

- Procedures for summoning emergency and rescue services are available and can respond in a timely manner during confined space entries.
- Rescue equipment and retrieval systems are functioning properly.
- First aid is provided by trained workers.
- Prevention of unauthorized workers from attempting a rescue in a confined space.

Retrieval systems shall meet the following requirements to the greatest extent possible.

- Each authorized entrant shall use a full body harness with a retrieval lifeline attached at the center of the entrant's back near shoulder level, or above the entrant's head or safety coveralls with built-in harness, with a retrieval lifeline attached at the near shoulder level of the entrant's back, or above the entrant's head.
- Wristlets may be used in lieu of the full body harness if the entry supervisor can demonstrate that the use of a full body harness is not feasible or creates a greater hazard and that the use of wristlets is the safest and most effective alternative.
- The other end of the retrieval line shall be attached to a mechanical device or fixed point outside the confined space in such a manner that rescue can begin as soon as the rescuer becomes aware that rescue is necessary. A mechanical device shall be available to retrieve workers from vertical type confined spaces more than 5 feet deep.
- The safety harness shall be of the type that permits easy rescue of workers from confined space during emergency conditions and may be either the harness type that suspends a worker in an upright position or the wrist type rescue harness. (A hoisting device or other effective means for lifting workers from confined spaces is preferred)
- Lifelines shall have a minimum breaking strength of 5,400 pounds.

Completion of Work

When the work is completed in a confined space the following, as a minimum, shall be completed:

- Tools, equipment, and materials shall be removed.
- The area surrounding the confined space shall be clean of materials, equipment, scraps, and debris.
- The supervisor responsible for the confined space work shall inspect the work location to

ensure the cleanup of materials, tools, and other items is complete.
- (Lockout) locks are removed only when work is completed.

Subcontractors

The Confined Space Entry Plan will be submitted to Summers-Taylor for review and issuance of a Confined Space Entry Permit. Prior to any worker entering a confined space, he/she will be trained in the following and records submitted to Summers-Taylor prior to commencement of the work:

- Contents of the Confined Space Entry Plan
- Known hazards in the confined space.
- Emergency procedures in case of an emergency
- Correct use of personal protective equipment when required.
- Hot Work Permit if required.
- Atmosphere testing requirements
- Lockout/Tagout procedures
- Fall protection if required.

3.7 CRANES AND CRIBBING

RESPONSIBILITIES

Site Supervisor

The Site Supervisor or their designate is responsible for assuring that:

- Workers know, understand, and comply with the requirements of this policy.
- Workers are trained in the procedures and use of equipment they are to use to complete the job.
- Audit and inspect for compliance with this policy.
- Each crane is inspected daily, post assembly, annually.
- Inspections using the checklist are available.
- Competent, qualified operators are used when lifting.
- Joint responsibility with the crane operator for the safe operation of the crane(s) and the safety of the lift is maintained.
- Understand that failure to comply with this policy will result in disciplinary action, up to and including discharge.

Crane Operators

The crane operator is responsible for:

- Knowing, understanding, and complying with this policy.
- Inspecting cranes daily and reporting defects noted during these inspections.
- Reporting any unsafe conditions to supervision.

- Knowing the weight of loads PRIOR to lifting.
- Knowing the wind speed PRIOR to lifting.
- Performing a daily inspection using the Daily Operators Inspection Report at the beginning of each day's work PRIOR to the crane use. Any deficiencies that affect the safe operations of the crane shall be repaired PRIOR to use. Each daily inspection report shall remain with the operator during the operation of the crane and will be turned in at the end of the workday.
- Ensure the load, rigging, procedures, and lifts are safe to use. The operator is responsible for the load and lift when the crane is connected to the load.
- Assume joint responsibility with the Site Supervisor for the safe operation of the crane(s) and the safety of the lift.
- Understand that failure to comply with this policy will result in disciplinary action, up to and including discharge.

PROCEDURES

Pre-Lift

- The manufacturer's lifting procedures and methods shall always be observed.
- No modifications or additions which affect the capacity or safe operation of the equipment shall be made by an employee without the manufacturer's written approval. If such modifications or changes are made, the capacity, operation, and maintenance instruction plates, tags, or decals, shall be changed accordingly. In no case shall the original safety factor of the equipment be reduced.
- All cranes shall have a qualified competent operator.
- Inspect cranes when they arrive on site for mechanical integrity, load chart, operating manual, and annual certification decal/sticker.
- Rated load capacities have recommended operating speeds, special hazard warnings, or instructions shall be in a conspicuous place on all equipment, as required, and shall be visible to the operator while at the control station.
- Inspect all rigging devices before use. Follow manufacturer's capacities and recommendations.
- The rear of the rotating superstructure of a crane will be barricaded to warn of the pinch point hazard.
- The area where an overhead lift is made will be barricaded if personnel can have access and walk under the load.
- The ground where the crane will be set up must be solid and able to support the weight of the loaded crane.
- Determine if underground utilities exist near where the crane will be set up.
- Ensure the crane is level and maintained during operation.
- Extend outriggers fully or set per the manufacturer's recommendation for a particular life configuration.
- Weight must be off the tires.
- Before a lift, determine the load weight, radius and load capacity.
- Crane capacity charts are the ideal gross capacity of the crane at certain boom lengths, boom angles and load radius from the crane center pin.

- Deductions to the net capacity should be made per manufacturers load chart or operating manual for attachments such as jibs (stowed or attached), headache balls, wind, less than ideal setups, etc. to determine the load that can be safely lifted.
- Additional deductions to the net capacity are the weight of the crane's load block, rigging and amount of load line required to make the lift. Some manufacturers include the load line in their load charts but others like Manitowoc do not.
- A designated, qualified person will determine the load weight. Note: OEM drawings listing the equipment or machinery assemblies are not always accurate.
- Refer to the shipping weight or have the equipment or machinery assembly weighed.
- Calculate all structural loads and determine the center of gravity.
- Determine the radius from the center pin of the crane to the load using a steel ruler.
- Determine the boom length, counterweight and crane configuration to determine the correct load chart.
- Position the hook over the "Center of Gravity" of the load before starting the lift.

Lifting

- Hand signals to crane operators shall be those prescribed by the applicable ANSI standard for the type of crane in use.
- All workers shall be kept clear of loads about to be lifted and of suspended loads.
- There shall be no sudden acceleration or deceleration of the moving load.
- Side loading of booms shall be limited to freely suspended loads. Cranes shall not be used for dragging loads sideways.
- No hoisting, lowering, swinging, or traveling shall be done while anyone is on the load or hook.
- On truck-mounted cranes, no loads shall be lifted over the front area except as approved by the crane manufacturer.
- The operator shall test the brakes each time a load approaching the rated load is handled by raising it a few inches and applying the brakes.
- Outriggers shall be used when the load to be handled at that particular radius exceeds the rated load without outriggers as given by the manufacturer for that crane. Where floats are used, they shall be securely attached to the outriggers.
- Wood blocks used to support outriggers shall:
    - Be strong enough to prevent crushing.
    - Be free from defects.
    - Be of sufficient width and length to prevent shifting or toppling under load.
- Neither the load nor the boom shall be lowered below the point where less than 2 full wraps of rope remain on their respective drums.
- When two or more cranes are used to lift one load, one designated person shall be responsible for the operation. They shall be required to analyze the operation and instruct all personnel involved in the proper positioning, rigging of the load, and the movements to be made.
- In transit the following additional precautions shall be exercised:
    - The boom shall be carried in line with the direction of motion.
    - The superstructure shall be secured against rotation, except when negotiating turns when there is an operator in the cab or

- The boom is supported by a dolly.

The empty hook shall be lashed or otherwise restrained so that it cannot swing freely.

- Before traveling a crane with load, a designated person shall be responsible for determining and controlling safety. Decisions such as position of load, boom location, ground support, travel route, and speed of movement shall be in accord with their determinations.
- A crane with or without load shall not be traveled with the boom so high that it may bounce back over the cab.
- When rotating the crane, sudden starts and stops shall be avoided. Rotational speed shall be such that the load does not swing out beyond the radius at which it can be controlled. A tag or restraint line shall be used when rotation of the load is hazardous.
- When a crane is to be operated at a fixed radius, the boom-hoist pawl or other positive locking device shall be engaged.
- Ropes shall not be handled on a winch head without the knowledge of the operator.
- While a winch head is being used, the operator shall be within convenient reach of the power unit control lever.
- The operator shall not be permitted to leave his position at the controls while the load is suspended.
- No person should be permitted to stand or pass under a load on the hook.
- If the load must remain suspended for any considerable length of time, the operator shall hold the drum from rotating in the lowering direction by activating the positive controllable means of the operator's station.

Other Requirements

- Cranes shall not be operated without the full amount of ballast or counterweight in place as specified by the manufacturer, but truck cranes that have dropped the ballast or counterweight may be operated temporarily with special care and only for light loads without full ballast or counterweight in place. The ballast or counterweight in place specified by the manufacturer shall not be exceeded.
- Necessary clothing and personal belongings shall be stored in such a manner as not to interfere with access or operation.
- Tools, oil cans, waste, extra fuses, and other necessary articles shall be stored in the toolbox and shall not be permitted to lie loose in or about the cab.
- Refueling with small portable containers shall be done with an approved safety type can equipped with an automatic closing cap and flame arrester.
- Machines shall not be refueled with the engine running.
- A fire extinguisher shall be kept in the cab or vicinity of the crane.
- Operations and maintenance personnel shall be familiar with the use and care of the fire extinguishers provided.

Operations Near Overhead Electrical Lines

Except where electrical distribution and transmission lines have been de-energized and visibly grounded at point of work or where insulation barriers, not a part of or an attachment to the

equipment or machinery, have been erected to prevent physical contact with the lines, equipment or machines shall be operated proximate to power lines only in accordance with the following:

Could you get within 20 feet of ANY power line? If the answer is NO, there is no further action required. If the answer is YES, then you have 3 options:

1. De-energize & Ground
2. Maintain 20-foot clearance
3. Ask Utility for Voltage and use Table A (with minimum clearance distances)

If you choose option 2 or 3 then Encroachment Prevention Measures need to be implemented including, a planning meeting, if tag lines are used then non-conductive, elevated warning lines, barricade, or line of signs, plus choose one: Proximity alarm, spotter, warning device, range limiter, or insulating link.

Table A – Minimum Clearance Distances	
Voltage (nominal, kV, alternating current)	**Minimum clearance distance (feet)**
up to 50	10
over 50 to 200	15
over 200 to 350	20
over 350 to 500	25
over 500 to 750	35
over 750 to 1000	45
over 1000	(As established by the power line owner/operator or registered professional engineer who is a qualified person with respect to electrical power transmission and distribution)

If you intentionally work closer than the Table A Zone, you must show that:

- **Staying outside the zone is infeasible.**
- **It is infeasible to de-energize and ground and the following is required:**
  - Power line owner – sets minimum approach distance.
  - Planning meeting – minimum procedures
  - Dedicated spotter
  - Elevated warning line or barricade
  - Insulating link/device
  - Nonconductive rigging
  - Range limiter (if equipped)
  - Nonconductive tag line (if used)
  - Barricades - 10 feet from equipment
  - Limit access to essential workers.
  - Prohibit non-operator workers from touching above insulating link.

    - Properly ground crane
    - Deactivate automatic re-energizer
    - Insulating line cover-up installed

- A worker shall be designated to observe clearance of the equipment and give timely warning for all operations where it is difficult for the operator to maintain the desired clearance by visual means.
- Cage-type boom guards, insulating links, or proximity warning devices may be used on cranes, but the use of such devices shall not alter the requirements of any other regulation of this part even if such device is required by law or regulation.
- Any overhead line shall be considered an energized line unless and until the person owning such line or the electrical utility authorities indicate that it is not an energized line, and it has been visibly grounded.
- Prior to work near transmitter towers where an electrical charge can be induced in the equipment or materials being handled, the transmitter shall be de-energized, or tests shall be made to determine if electrical charge is induced on the crane.

Use of crane baskets will not be allowed on this project without prior approval of the Summers-Taylor Environmental Health and Safety Department. If a basket is deemed necessary, a Summers-Taylor Man Basket permit will be required.

Critical Lift Guidelines

A written critical lift or rigging plan is required for any lift where:

- The load is greater than 75% of the crane capacity as configured for the lift or as defined by the crane manufacturer.
- Two or more cranes are used.
- Any non-routine or critical equipment lift (the Project Manager/Superintendent or Safety Supervisor determines any lift to be non-routine). Critical equipment may include equipment that meets one of the following criteria:
    - The load item, if damaged or upset, would result in a release into the environment of radioactive or hazardous material exceeding the established permissible environmental limits.
    - The load item is unique and, if damaged, would be irreplaceable or not repairable and is vital to a system, facility or project operation.
    - The cost to replace or repair the load item, or the delay in operations of having the load damaged, would have a negative impact on the facility, or organization, or budget to the extent that it would affect program commitments.
    - A lift not meeting the above criteria shall also be designated critical if mishandling or dropping of the load would cause any of the above noted consequences to nearby installations or facilities.
    - Further site-specific criteria may be developed to supplement those cited above and may include loads which require exceptional care in handling because of size, weight, close-tolerance installation or high susceptibility to damage as well as lifts using multiple pieces of lifting equipment.

Hoisting of Personnel

Hoisting of Personnel is prohibited except where Summers-Taylor or our subcontractor demonstrates that the erection, use, and dismantling of conventional means of reaching the work area, such as a personnel hoist, ladder, stairway, aerial lift, elevating work platform, or scaffold, would be more hazardous, or is not possible because of the project's structural design or worksite conditions.

Training

Employees involved in hoisting personnel with crane activities shall be trained:

- In safe work rules
- 100% fall protection
- Lift plan contents
- Emergency procedures

NOTE: Prior to any lift being performed, The **Hoisting Personnel Pre-Lift Inspection** form of **Appendix B** must be completed.

3.8 DEMOLITION

Prior to start of any demolition work, the contractor must ensure a competent person has performed an engineering survey of the building or area to be demolished to determine the condition and location of utilities, whether hazardous materials exist, means and methods of performing the work, sequencing, etc. No work will commence until a written engineering survey has been completed and submitted to Summers-Taylor.

Debris and material shall not be dropped through walls, floor holes, windows or other elevated work areas without the area below being barricaded and properly signed. Under no circumstances shall materials be dropped more than 20 feet without using a chute. Debris chutes shall have a substantial gate at all elevated openings.

If demolition of a building will involve implosions, the demolition contractor shall submit to Summers-Taylor a detailed safety plan to specifically address site preparation, installation of explosives, debris/dust control and blaster qualifications.

Pre-Demolition Considerations

- All potential sources of ignition shall be evaluated, and the necessary corrective measures taken.
- A suitable location at the job site shall be designated and provided with plans, emergency information, and equipment, as needed.
- No material or construction should interfere with access to hydrants, splitter connections, or fire-extinguishing equipment.

Mechanical Demolition

- No workers shall be permitted in any area which can be adversely affected by demolition operations when balling or clamming is being performed. Only those workers necessary for the performance of the operations shall be permitted in this area at any other time.
- The crane boom and load line shall be as short as possible.
- The weight of the demolition ball shall not exceed 50 percent of the crane's rated load, based on the length of the boom and the maximum angle of operation at which the demolition ball will be used, or it shall not exceed 25 percent of the nominal breaking strength of the line by which it is suspended, whichever results in a lesser value.
- The ball shall be attached to the load line with a swivel-type connection to prevent twisting of the load line and shall be attached by positive means in such manner that the weight cannot become accidentally disconnected.
- When pulling over walls or portions thereof, all steel members affected shall have been previously cut free.
- All roof cornices or other such ornamental stonework shall be removed prior to pulling walls over.
- During demolition, continuing inspections by a competent person shall be made as the work progresses to detect hazards resulting from weakened or deteriorated floors, or walls, or loosened material. No worker shall be permitted to work where such hazards exist until they are corrected by shoring, bracing, or other effective means.

3.9 ELECTRICAL

This program is designed to provide guidance and encompass safety-related work practices for qualified workers who work on or near exposed energized electrical conductors or circuit parts and familiarize unqualified persons with electrical safety work practices. It is the role of management to enforce this work instruction, including discipline for non-conformance.

A qualified person shall be familiar with the proper use of the special precautionary techniques, Personal Protective Equipment (PPE), 29 CFR1910.137 (Electrical Protective Equipment), including arc flash suit; insulation and shielding materials; and insulated tools and test equipment. A person may be considered qualified with respect to certain equipment and methods but still unqualified for others.

Electrical Hazard Analysis

If the energized electrical conductors or circuit parts operating at 50 volts or more are not placed in an electrically safe work condition, other safety-related work practices shall be used to protect workers who might be exposed to electrical hazards involved. Such work practices shall protect each worker from arc flash and from contact with energized electrical conductors or circuit parts operating at 50 volts or more directly with any part of the body or indirectly through some other conductive object.

Before a worker works within the limited approach boundary or arc flash boundary of exposed energized electrical conductors or circuit parts that are not put into an electrically safe work condition, work, excluding diagnostics, to be performed shall be considered energized electrical

work and shall be performed by written permit only. **(See Appendix L & M)**
Work practices that are used shall be suitable for the conditions under which the work is to be performed and for the voltage level of energized electrical conductors or circuit parts. Appropriate safety-related work practices shall be determined before any worker is exposed to the electrical hazards involved by using both shock hazard analysis and arc flash hazard analysis.

Arc Flash Hazard Analysis

An arc flash hazard analysis shall determine the arc flash boundary, the incident energy at the working distance, and the PPE that workers within the arc flash boundary shall use.

The arc flash hazard analysis shall be updated when a major modification or renovation takes place. It shall be reviewed periodically, not to exceed five (5) years, to account for changes in the electrical distribution system that could affect the results of the arc flash hazard analysis.

If the analysis is not available or has not been completed, the requirements of 2015 NFPA 70E 130.7(C)(15) and 130.7(C)(16) shall be used in lieu of determining the incident energy at the working distance.

Electrical Hazard Protection Boundaries

Barricades shall be used in conjunction with safety signs where it is necessary to prevent or limit worker access to work areas containing energized electrical conductors or circuit parts. Barricades shall be placed no closer than the limited approach boundary.

If signs and barricades do not provide sufficient warning and protection from electrical hazards, an attendant shall be stationed to warn and protect workers. An attendant shall remain in the area as long as there is a potential for workers to be exposed to the electrical hazard.

Personal Protective Equipment

2015 NFPA 70E Table 130.7(C)(16) shall be used to determine the required PPE for the specific task, once the Hazard/Risk Category has been identified from the Arc Flash Hazard Analysis or 2015 NFPA 70E Table 130.7(C)(15)(a) and Table 130.7(C)(15)(b), including associated notes, and requirements of 2015 NFPA 70E 130.7(C)(15).

The PPE requirements of 2015 NFPA 70E are intended to protect a worker from arc flash and shock hazards. While some situations could result in burns to the skin, even with the protection described in 2015 NFPA Table 130.7(C)(16), burn injury should be reduced and survivable.

Daily Safety Inspections: Rubber insulating gloves should be visually inspected before each day's use and after any situation that may have possibly caused damage to the gloves. Care and maintenance are critical to ensure an insulated glove retains its protection properties.

Electrical Hazard Approach Boundaries

The shock protection boundaries identified as limited approach, restricted approach, and prohibited approach boundaries shall be applicable where approaching workers are exposed to

energized electrical conductors or circuit parts. 2015 NFPA 70E Table 130.4(C)(a) and Table 130.4(C)(b) shall be used for the distance associated with system voltages.

In certain instances, the arc flash boundary might be a greater distance from the energized electrical conductor or circuit parts than the limited approach boundary. The shock protection boundaries and the arc flash boundary are independent of each other.

- **Limited Approach Boundary**. When one or more unqualified workers are working at or close to the limited approach boundary, the designated person in charge of the workspace where the electrical hazard exists shall advise the unqualified worker (s) of the electrical hazard and warn them to stay outside of the limited approach boundary.

    - Unless permitted by 2015 NFPA 70E 130.4(D)(2), no unqualified worker shall be permitted to approach nearer than the limited approach boundary of energized electrical conductors or circuit parts.
    - Where there is a need for an unqualified worker(s) to cross the limited approach boundary, a qualified person shall advise them of the possible hazard and continuously escort unqualified worker(s) while inside the limited approach boundary.

- **Restricted Approach Boundary**. Under no circumstance shall the escorted unqualified worker(s) be permitted to cross the restricted approach boundary.
    - A worker who is undergoing on-the-job training for the purposes of obtaining the skills and knowledge necessary to be considered a qualified person and who, during such training, has demonstrated an ability to perform specific duties safely, and who is under the direct supervision of a qualified person, shall be considered to be a qualified person for the performance of those specific duties.
    - No qualified person shall approach or take any conductive object closer to exposed energized electrical conductor or circuit parts operating at 50 volts or more than the restricted approach boundary set forth in 2015 NFPA 70E Table 130.4(C)(a) and Table 130.4(C)(b) unless the requirements are met for the specific listed applications of 2015 NFPA 70E 130.4(C).
    - To cross the restricted approach boundary and enter the restricted space, qualified persons must do the following:
        - Have a plan that is documented and approved by authorized foreman or supervisors.
        - Use PPE that is appropriate for working near exposed energized conductors or circuit parts and is rated for the voltage and energy level involved.
        - Be certain that no part of the body enters the prohibited space.
        - Minimize the risk from inadvertent movement by keeping as much of the body out of the restricted space as possible, using only protected body parts in the space necessary to accomplish the work.
- **Prohibited Approach Boundary.** Crossing the prohibited approach boundary and entering the prohibited space is considered the same as making contact with exposed energized conductors or circuit parts.
    - To cross the prohibited approach boundary, qualified persons must do the

following:

- Have specified training to work on energized conductors or circuit parts.
- Have a documented plan justifying the need to work close to exposed energized conductors or circuit parts.
- Perform a risk analysis.
- Have the plan and the risk analysis approved by authorized foreman or supervisor.
- Use PPE that is appropriate for working near exposed energized conductors or circuit parts and is rated for the voltage and energy level involved.

De-Energized Parts (Electrically Safe Work Condition)

Energized electrical conductors and circuit parts to which a worker might be exposed shall be put into an electrically safe work condition before a worker performs work.

All electrical circuit conductors and circuit parts shall be considered energized until the source(s) of energy is (are) removed, at which time they shall be considered de-energized. All electrical conductors and circuit parts shall not be considered to be in an electrically safe working condition until all of the applicable requirements of paragraph 10.3 have been met.

Energized electrical conductors or circuit parts that operate at less than 50 volts shall not be required to be de-energized where the capacity of the source and any overcurrent protection between the energy source and the worker are considered and it is determined that there will be no increased exposure to electrical burns or to explosion due to electric arcs.

During the time a worker may be exposed to contact with parts of fixed electrical equipment or circuits which have been de-energized, the circuits energizing the parts shall be locked out in accordance with the Lockout/Tagout Program.

Conductors and parts of electric equipment that have been de-energized but have not been locked out shall be treated as energized.

Interlocks for electrical equipment shall not be used as a substitute for lockout procedures.

Work on De-energized Equipment

Energized electrical conductors or circuit parts to which a worker might be exposed shall be put into an electrically safe work condition before a worker performs work if either of the following conditions exists **(See Appendix K)**:

1. The worker is within the limited approach boundary
2. The worker interacts with equipment where conductors or circuit parts are not exposed, but an increased risk of injury from exposure to an arc flash hazard exists

When a qualified person is working within the limited approach boundary or the arc flash boundary that is not placed into an electrically safe work condition, an energized electrical work permit shall be completed. **(See Appendix M)**

- Examples of increased or additional hazards include, but are not limited to, interruption of life support equipment, deactivation of emergency alarm systems, and shutdown of hazardous location ventilation equipment.
- Examples of work that may be performed on or near energized circuit parts because of infeasibility due to equipment design or operational limitations include performing diagnostics and testing of electric circuits that can only be performed with the circuit energized and work on circuits that form an integral part of a continuous process that would otherwise need to be completely shut down in order to permit work on one circuit or piece of equipment.

Electrical conductors or circuit parts that have been disconnected, but not under lockout; tested; and grounded (where applicable) shall not be considered to be in an electrically safe work condition, and safe work practices appropriate for the circuit voltage and energy level shall be used.

Lockout requirements shall apply to fixed, permanently installed equipment; to temporarily installed equipment; and to portable equipment.

All electrical conductors or circuit parts shall be considered energized until the source(s) of energy is (are) removed, at which time they shall be considered de-energized. All electrical conductors and circuit parts shall not be considered to be in an electrically safe working condition until all the applicable requirements of 2015 NFPA 70E Article 120.1 have been met.

Establishing an electrically safe working condition:

- Determine all possible sources of electrical supply to the specific equipment. Check applicable up-to-date drawings, diagrams, and identification tags.
- After properly interrupting the load current, open the disconnecting device(s) for each source.
- Wherever possible, visually verify that all blades of the disconnecting devices are fully open or that draw out-type circuit breakers are withdrawn to the fully disconnected position.
- Apply lockout/tagout devices in accordance with the Lockout/Tagout Program.
- Use an adequately rated voltage detector to test each phase conductor or circuit part to verify they are de-energized. Test each phase conductor or circuit part both phase-to-phase and phase-to-ground. Before and after each test, determine that the voltage detector is operating satisfactorily.
- Where the possibility of induced voltages or stored electrical energy exists, ground the phase conductors or circuit parts before touching them. Where it could be reasonably anticipated that the conductors or circuit parts being de-energized could contact other exposed energized conductors or circuit parts, apply ground connecting devices rated for the available fault duty.

Prior to re-energizing circuits or equipment, even temporarily, the following requirements shall be met in the order listed:

- A qualified person shall verify that all tools, electrical jumpers, shorts, grounds, and other

similar devices have been removed so the circuits and equipment can be safely energized, including removal of equipment interlock-defeating devices.
- Individuals exposed to the hazards associated with re-energizing the circuit or equipment shall be warned to stay clear of circuits and equipment.
- All lockout equipment shall be removed as specified in the Lockout/Tagout Program.
- A visual check shall be made to ensure all individuals are clear of the circuits and equipment.
- Where appropriate, protective covers, shields, shrouds, and other guarding shall be secured, unless specific maintenance guidance states otherwise.

Energized Electrical Work Exception

If the exposed energized parts cannot be de-energized, an equivalent level of safety shall be provided to protect workers who may be exposed to the electrical hazards involved.

Only qualified personnel may work within the Limited Approach Boundary on electrical conductors or circuit parts or equipment that have not been de-energized.

They shall be properly trained regarding working safely on energized circuits and shall be familiar with the proper use of special precautionary techniques, PPE, insulating and shielding materials and insulated tools.

Energized electrical conductors or circuit parts are to be de-energized in accordance with established lockout/tagout procedures, unless one of the following conditions applies:

- Energized work shall be permitted where it can be demonstrated that the task to be performed introduces additional hazards or increased risk.
    - Examples of additional hazards or increased risk include, but not limited to, interruption of life-support equipment, deactivation of emergency alarm systems, and shutdown of hazardous location ventilation equipment.

- Energized work shall be permitted where it can be demonstrated that the task to be performed is infeasible in a de-energized state due to equipment design or operational limitations.
- Energized electrical conductors or circuit parts that operate at less than 50 volts shall not be required to be de-energized where the capacity of the source and any overcurrent protection between the energy source and the worker are considered and it is determined that there will be no increased exposure to electrical burns or to explosion due to electric arcs.

Energized Electrical Work Permit **(Appendix M)**: When working within the limited approach boundary or the arc flash boundary of exposed energized electrical conductors or circuit parts that are not placed in an electrically safe work condition, work to be performed shall be considered energized electrical work and shall be performed by written permit only. The intent of the permit is to ensure that all appropriate safety precautions have been taken prior to starting energy-free electrical work.

- Work performed within the limited approach boundary of energized electrical conductors or circuit parts by qualified persons related to tasks such as testing, troubleshooting, and voltage measuring shall be permitted to be performed without an energized electrical work permit, if appropriate safe work practices and PPE are provided and used.
    - If the purpose of crossing the limited approach boundary is only for visual inspection and the restricted approach boundary will not be crossed, then an energized electrical work permit shall not be required.
- The permit must be completed by the worker(s) participating in the work and reviewed by a foreman or supervisor who is considered a Qualified Person.
- The completed permit shall be provided to the Safety Coordinator at the completion of the task for retention.

Lighting

Where lack of illumination or an obstruction precludes observation of the work to be performed, workers shall not perform any task within the limited approach boundary of energized electrical conductors or circuit parts operating at 50 volts or more or where an electrical hazard exists.

A portable light can be used to provide light and should be made of non-conducting material to avoid shortening conductors together. The flexible cord of a portable light should not be pinched, kinked, cracked, or cut, exposing live wires or parts.

An individual shall not reach blindly into areas that may contain energized electrical conductors or circuit parts where an electrical hazard exists.

Confined or Enclosed Workspaces

Workers working in a confined or enclosed space that contains exposed energized electrical conductors or circuit parts operating at 50 volts or more, or where an electrical hazard exists, the worker shall use protective shields, protective barriers, or insulating materials as necessary to avoid inadvertent contact with these parts and the effects of the electrical hazard.

Doors, hinged panels, and the like shall be secured to prevent their swinging into a worker and causing the worker to contact exposed energized electrical conductors or circuit parts operating at 50 volts or more or where an electrical hazard exists if movement of the door, hinged panel, and the like is likely to create a hazard.

Conductive Materials and Equipment

Conductive materials, tools and equipment that are in contact with any part of a worker's body shall be handled in a manner that prevents accidental contact with energized electrical conductors or circuit parts.

Means shall be employed to ensure that conductive materials approach exposed energized conductors and circuit parts no closer than that permitted by 2015 NFPA 70E 130.2.

Conductive Articles of jewelry and clothing (e.g., watch bands, bracelets, rings, key chains, or metal headgear) shall not be worn where they present an electrical contact hazard with exposed

energized electrical conductors or circuit parts.

Use of Portable Electric Equipment

Portable electric equipment such as drills, saws, grinders, and portable lights shall be used in a safe manner and be connected to a circuit protected by GFCI capability if being used in a wet or damp environment (i.e., circuit breaker or separately enclosed, portable GFCI). The following guidelines provide minimum requirements for the use of this type of equipment.

All cord and plug-connected electrical equipment, flexible cord sets (extension cords), and portable electric equipment shall be handled in a manner that will not cause damage.

Multiple outlets shall not be "daisy-chained" to one another.

Use of extension cords in combination with power strips shall not be permitted.

Flexible electrical cords connected to equipment shall not be used for raising or lowering the equipment.

Flexible cords may not be fastened with staples or otherwise hung in a fashion that could damage the outer jacket or insulation.

Portable cord- and plug-connected equipment and extension cords shall be visually inspected for external defects such as loose parts, deformed and missing pins, burns or scorch marks, or damage to the outer jacket or insulation as evidence of possible internal damage such as signs of pinching or crushing before use.

If there is evidence of damage that might expose a worker to injury, the defective or damaged item shall be removed from service and not used until repaired and tested to ensure the equipment is safe.

Whenever an attachment plug is to be connected to a receptacle (including extension cords), the plug end and the receptacle shall be checked to ensure they are of proper configurations and the fit is snug.

An extension cord used with grounding-type equipment shall contain an equipment grounding conductor.

Plugs and receptacles may not be connected or altered in a manner that would prevent proper continuity of the equipment grounding conductor at the point where plugs are attached to receptacles. (Do not cut off the ground prong on a plug) Additionally, those devices may not be altered to allow the grounding pole of a plug to be inserted into slots intended for connection to the current-carrying conductors.

- Adapters that do not allow continuity of the equipment grounding connection may not be used.

Portable electric equipment and extension cords used in highly conductive work locations (such

as areas with standing water), or in job locations where workers are likely to contact water shall be approved for those locations and GFI protected.

Workers' hands may not be wet when plugging and unplugging flexible cords and cord- and plug-connected equipment if energized equipment is involved.

- Energized plug and receptacle connections may be handled only with insulated gloves if the condition of the connection could provide a conducting path to the worker's hand. For example, a cord connector is wet from being immersed in water.

Electric Power and Lighting Circuits

Load rated switched (light switch), electrical disconnects, and circuit breakers specifically designed as a disconnecting means shall be used for the routine opening, reversing, or closing of circuits under load conditions.

Cable connectors not of the load-break type, fuses, terminal lugs, and cable splice connections may not be used to disconnect a circuit under load except in an emergency.

After a circuit is de-energized by the automatic operation of a circuit protective device, the circuit shall not be manually re-energized until it has been determined that the equipment and circuit can be safely energized.

Repetitive resetting of circuit breakers or re-energizing circuits through replaced fuses is prohibited.

Over current protection of circuits and conductors may not be modified, not even on a temporary basis, beyond that permitted by applicable portions of electrical codes and standards dealing with overcurrent protection.

Test Instruments and Equipment

Only qualified persons shall perform tasks such as testing, troubleshooting and voltage measuring within the limited approach boundary of energized electrical conductors or circuit parts operating at 50 volts or more or where an electrical hazard exists.

- Test instruments, equipment, and their accessories shall be rated for the circuits and equipment to which they will be connected. Test instruments and equipment and all associated test leads, cables, power cords, probes and connectors shall be visually inspected for external defects and damage before each use.
- If there is a defect or evidence of damage that might expose a worker to injury, the defective or damaged item shall be removed from service, and no worker shall use it until repairs and tests necessary to render the equipment safe have been made.

Personal Protective Equipment (PPE)

Individuals shall be provided with and shall use electrical protective equipment that is appropriate for the type of work to be performed.

Workers shall inspect all Arc Flash PPE prior to use and associated equipment will be maintained and kept in proper working order.

If the insulating capability of protective equipment may be subject to damage during use, the insulating material shall be protected, for example, an outer covering of leather when it is used for the protection of rubber insulating material.

Workers shall wear non-conductive head protection wherever there is a danger of head injury from electric shock or burns due to contact with exposed energized parts.

Workers shall wear protective equipment for the eyes or face wherever there is danger of injury to the eyes or face from electric arches or flashes or from flying objects resulting from electrical explosion.

Workers shall wear protective face and body equipment when working on equipment using chemicals such as battery acid or caustic fluids.

Workers shall wear approved protective equipment when working on equipment with live voltages over 50 volts.

Workers shall wear Arc Rated clothing with sleeves rolled down.

General Protective Equipment and Tools

Only qualified people shall be permitted to work on electrical conductors or circuit parts that have not been put into an electrically safe working condition.

Fuse handling equipment, insulated for the circuit voltage, shall be used to remove, or install fuses when the fuse terminals are energized.

Alerting Techniques

The following techniques shall be used to warn and protect workers from hazards which could cause injury due to electric shock, burns, blasts or failure of electric equipment parts.

- Safety signs, safety symbols, or accident prevention tags shall be used, where necessary, to warn individuals about electrical hazards in their work area. Signs, symbols, and tags shall conform to the requirements of 29 CFR 1910.145, "Specifications for Accident Prevention Signs and Tags."

    - Typical signs warning of electrical hazards include Red, Danger signage with the words:
        - "Danger - Arc Flash" (To be determined by Arc Flash analysis)
        - “Caution – Arc Flash” (To be determined by Arc Flash analysis)
        - "Danger - High Voltage" (All equipment with voltages exceeding 600 volts)
        - "Danger - High Voltage - Authorized Personnel Only" (Entrances to areas with voltages exceeding 600 volts)

    - "Danger - Electric Shock Hazard, When Door Open" (All panels that have door/interlock)
- Barricades shall be used in conjunction with safety signs where it is necessary to prevent or limit worker access to work areas by exposing individuals to non-insulated energized equipment.
- Conductive materials shall not be used for barricades where they might cause an electrical contact hazard.
- If signs and barricades do not provide sufficient warning and protection from electrical hazards, a safety observer or qualified person shall be stationed to warn and protect individuals from the potential hazard.

Grounding Clearances

A minimum of three (3) feet shall be maintained in front of all 0–150-volt electrical panels that may be accessed periodically to perform maintenance on a circuit or to de-energize a circuit in an emergency. A minimum of four (4) feet clear access to the front of all 151-600-volt panels shall be maintained.

Outside of an electrical panel, the workspace may not be less than thirty (30) inches wide in front of the electric panel, and six (6) feet six (6) inches from ground to overhead. Distances will be measured from the front of the enclosure (or opening) of the enclosed live parts. The door must be able to fully open.

Grounding systems are intended to decrease the risk of electric shock to the human body from equipment and wiring.

An Equipment Grounding Conductor (EGC) originating at the service equipment entrance or at the location of a separately derived system shall connect all non-current carrying metal equipment, enclosures, conduits, fittings, and metal outlets. This will provide the necessary electrical continuity required for the over-current devices to trip.

The ground conductor shall be color coded green, green with a tracer color, or bare copper in accordance with the National Electrical Code (NEC).

Grounding conductors must be installed on all electrical equipment, including metal outlets and junction boxes, to comply with NEC and 29 CFR 1910.304 requirements.

The only neutral-to-ground bond shall be at the service entrance and any separately derived source. The neutral and ground should be kept separate at all sub-panel boards and junction boxes. The only two locations where the neutral and ground are bonded together are at the main service entrance and at the secondary side of a separately derived system.

Down line neutral-to-ground bonds result in parallel paths for the load return current where one of the paths becomes the ground circuit. This can cause a malfunction of protective devices and is a direct violation of the NEC.

The Ground Electrode Conductor (GEC) will connect this neutral-to-ground bond to the facilities

ground reference.

Ground-Fault Circuit-Interrupter (GFCI)

GFCI devices shall be used in wet or damp environments, or any other similar conditions, where the human body could accidentally come into contact with energized wiring or equipment and ground.

All out-of-doors maintenance work must be done with GFCI connections. At a minimum, NEC and local electrical code requirements shall be followed.

It is recommended that GFCI devices be self-tested with the testing indicator on GFCI device before each use to determine at what amperage the circuit trips.

Ground-Fault Protection

GFP shall be used when there is a requirement to protect equipment from damaging line-to-ground fault currents by opening all ungrounded conductors of the faulty circuit.

GFI devices shall be used in wet or damp locations. GFP is addressed in the NFPA 70, which requires the installation of all solid-grounded wye electrical services of more than 150 volts to ground, but not exceeding 1000 volts, phase to phase for each service disconnect rated 1000 amperes or more.

Host and Contract Employers Responsibilities

Contractors are instructed to advise Summers-Taylor, Inc. of the following:

- Any unique hazards presented by the contract employer's work.
- Hazards identified during the course of work by the contract employer that were not communicated by the host employer.
- The measures the contractor took to correct any violations reported by the host employer to prevent them from recurring.
- New conditions related to contracted work

Contractors are also required to complete a documented Pre-Job Meeting

- Exchange of electrical safety programs
- Means/methods for reporting violations.
- Requirement for energized work permit:
    - When working within the limited approach boundary or the arc flash boundary of exposed energized electrical conductors or circuit parts that are not placed in an electrically safe work condition, work to be performed shall be considered energized electrical work and shall be performed by written permit only.
    - The intent of the permit is to ensure that all appropriate safety precautions have been taken prior to starting energized electrical work.
- Required additional PPE.

3.10 EMERGENCY ACTION PLAN PROGRAM

The Emergency Action Program is designed to minimize injury, loss of human life, and company resources by training employees, procuring and maintaining necessary equipment, and assigning responsibilities.

Assignment of Responsibility

Emergency Plan Manager(s) – The Safety Department will manage the Emergency Action Plan for Summers-Taylor. They will also maintain all training records pertaining to this plan. The plan manager is responsible for scheduling routine tests of the Summers-Taylor emergency notification system with the appropriate authorities. The Emergency Plan Manager(s) will also coordinate with local public resources, such as fire department and emergency medical personnel, to ensure that they are prepared to respond as detailed in this plan. This includes allowing emergency responders to perform a walkthrough of the facility to familiarize themselves with the layout of the structures, types, and volume of hazardous chemical storage, and other hazards they might encounter when responding to an emergency. Emergency-responder input will be incorporated into this Emergency Action Plan.

Emergency Plan Managers

Safety Director	Jesse Jacobsen	423-791-5158
Safety Tech	Abraham Flores-M	423-895-5248
Field Safety Manager	Andy Greene	423-483-5422
DOT Safety Coordinator	Bryan Forbes	423-930-3321

Emergency Plan Coordinators –They are responsible for implementing the procedures in this plan in their designated areas of supervision in the event of an emergency. If an evacuation has taken place, the emergency plan coordinators will account for each employee or visitor on their floor. All employee counts will be reported to the Emergency Plan Manager(s) as soon as possible.

Plan Implementation

All fires and other emergency situations will be reported as soon as possible to community emergency response personnel by either the Safety team or an emergency plan coordinator. *NOTE: Calling 911 may be more appropriate depending upon the emergency.*

Emergency contact information will be posted in a conspicuous place at each plant, shop, facility, jobsite, etc. The emergency contact information will consist of type of emergency responder (fire, police, ambulance), name, phone number, and address. Additionally, the emergency contact information for designated company personnel will also be listed.

Corporate Notification

If media coverage of a situation is expected, Grant Summers and/or Ted Bryant will represent Summers-Taylor as the media spokesperson(s). If Grant or Ted are unable to arrive at the scene before the media arrives, at least one superintendent or foreman present will have a card that guides them on what to say until Grant or Ted can arrive at the scene.

Evacuation Routes

Emergency evacuation escape route plans will be posted near the emergency points of contact post.

Employee Training

All employees will receive instructions on this Emergency Action Plan as part of the new-employee orientation. Additional training must be provided:

- When there are any changes to the plan or facility.
- When an employee's responsibilities change; and
- annually, as refresher training.
- As established in OSHA 29 CFR 1910.38 & 1926.35

Fire/Evacuation Drills

Fire/evacuation drills will be conducted annually in coordination with local emergency response personnel (police and fire departments). Additional drills will be conducted as needed.

Training Records

Safety will document all training pertaining to this plan and will maintain records electronically.

Plan Evaluation

The Emergency Action Plan will be reviewed and updated annually (or as needed). Following each fire drill, Safety will evaluate the effectiveness of the drill and implement improvements as needed.

Sub-Contractors

Each subcontractor shall develop an Emergency Action Plan; each project team shall develop the following:

- Owner requirements and procedures
- Project Crisis Management and site logistics protocols
- Coordination with local emergency response personnel

The Emergency Action Plan will be posted throughout the jobsite and communicated to workers during the Safety Orientation and weekly safety meetings.

Emergency Action Plan

Fire Emergency

When fire is discovered:

- Activate the nearest fire alarm (if installed)
- Notify the local Fire Department by calling.

- If the fire alarm is not available, notify the site personnel about the fire emergency by the following means: voice communications, radio, phone paging, other.

Fight the fire ONLY if:

- The Fire Department has been notified.
- The Fire is small trash can size and is not spreading to other areas.
- Escaping the area is possible by backing up to the nearest exit.
- The fire extinguisher is in working condition and personnel are trained to use it.

Upon being notified about the fire emergency, occupants must:

- Leave the building using the designated escape routes.
- Assemble in the designated area in the front parking lot.
- Remain outside until the competent authority announces that it is safe to reenter.

Emergency Coordinator or supervisors must:

- Coordinate an orderly evacuation of personnel.
- Perform an accurate head count of personnel reported to the designated area.
- Notify Fire Department about missing personnel.
- Provide the Fire Department personnel with the necessary information about the facility.

Supervisors must:

- Ensure that all employees have evacuated the area/floor.
- Report any problems to the Emergency Coordinator in the assembly area.

Natural Disasters (Tornado, Flood, Earthquake, Lightning/Thunder)

Tornado:

- The Emergency Coordinator will monitor the weather conditions.
- Notify the site personnel about the emergency by the following means: voice communications, radio, phone paging, other.
- When a warning is issued by sirens or other means, seek inside shelter.
- Stay away from outside walls and windows.
- Use arms to protect the head and neck.
- Remain sheltered until the tornado threat is announced to be over.

Flood:

- Be ready to evacuate as directed by the Emergency Coordinator and/or the designated official.
- Notify the site personnel about the emergency by the following means: voice communications, radio, phone paging, other.
- Follow the recommended evacuation routes.

Earthquake:

- Stay calm and await instructions from the Emergency Coordinator or the designated official.
- Keep away from overhead fixtures, windows, filling cabinets, and electrical power.
- Evacuate as instructed by the Emergency Coordinator and/or the designated official.

Lightning Strike/Thunder:

- Prepare to evacuate when lightning is **within 15 miles**.
- Evacuate to shelter when lighting is **within 10 miles**.
- If you hear thunder, even a distant rumble, seek shelter **immediately**. Remain in the shelter for at least 30 minutes after hearing the last sound of thunder.

- Vehicles as Shelter: If safe building structures are not accessible, employers should guide workers to hard-topped metal vehicles with rolled up windows. Remain in the vehicle for at least 30 minutes after hearing the last sound of thunder.

Medical

The Emergency Coordinator or Supervisor will contact 911 for any life-threatening accident or injury, then the Emergency Coordinator.

- Provide the following Information:
    - Nature of medical emergencies.
    - Location of emergency (address, building, room number)
    - Your name and phone number from which you are calling.
    - Notify personnel trained in CPR and First Aid to provide the required assistance prior to the arrival of professional medical help.
    - All other non-life-threatening emergencies contact the Safety Department.

Workplace Violence

Summers-Taylor Inc. resources may not be used to threaten, stalk, or harass anyone at or outside the workplace. Indirect or direct threats of violence, incidents of actual violence and suspicious individuals or activities should be reported as soon as possible to the Emergency Coordinator, supervisor, or Human Resources. When reporting a threat or incident of violence, the employee should be as specific and detailed as possible. Employees should not place themselves in peril, nor should they attempt to intercede during an incident.

Hazardous Material Spill

Safety of personnel during chemical exposure is of paramount importance.

- Report all material spills to the Emergency Coordinator or Supervisor.
- The Emergency Coordinator will notify a local spill cleanup company or the Fire Department (if arrangements have been made) to perform a large chemical spill cleanup.
- Only those trained in emergency operations shall perform clean-up operations.
- Trained personnel shall take precautions to prevent the spread of chemical spills.
- Utility Safety Data Sheets (SDS) to determine appropriate response measures.
- Spills must be handled in a safe manner, while wearing the proper PPE

Off Site Injury or Vehicle Accident

In the event a worker is conducting working operations at any off-site location and experiences any accident or injury, the Emergency Coordinator is to be notified immediately.
State the location, the nature of the accident, type of injury and location being transported to.
Emergency Responders are authorized to exercise judgement in transportation to the appropriate medical facility.
The Emergency Coordinator shall make appropriate notification to the worker's emergency contacts, and if practicable, meet them at the medical facility.
In the event of a transportation accident, in addition to the steps listed above, a report shall be made with the appropriate locality law enforcement.

Utility Strike

Contact 911 for

- Damage to overhead power lines or telephone poles that have been downed by equipment or vehicles, trees, etc.…
    - Evacuate & Barricade area.
- Natural gas line (puncture, cute, break) resulting in leaking/venting gas.
    - Evacuate & Barricade area.
- Damage to water lines that could affect the safety of public or roadways (major service disruption, flooding)
- Damage to traffic signals.

Contact Safety Department or Emergency Coordinator for:

- Minor water line interruptions
- Overhead cables or service lines
- In ground cables (fiber optic) (internet)

3.11 EQUIPMENT & VEHICLES

Heavy equipment (cranes, forklifts, dump trucks, excavators/back hoes, man-lifts, etc.) will be inspected prior to use and comply with applicable OSHA and ANSI standards, which will be documented.

Heavy equipment shall not be operated within 10 feet in any direction of a power line unless the power has been disconnected or blanketed by the utility owner.

Equipment that is equipped with a windshield will be free of cracks or other visible damage. If there is no windshield / window, the operator shall wear safety glasses.

All equipment will be equipped with rollover protective structures (ROPS).

Seatbelts are required to be worn at all times when provided with moving equipment.

Only company and/or delivery vehicles used for the sole purpose of conducting work tasks on-site are permitted in construction areas. Vehicles one ton or greater and equipment used on-site must have an audible backup alarm. The driver and all passengers of any vehicle will wear seat belts.

No equipment or vehicle will be used to transport personnel unless it is specifically designed to do so. This includes beds of pickup trucks.

Equipment operators are responsible for checking their equipment daily to verify it is working properly.

As a minimum, each operator will check:

- Brakes
- Operating controls
- Lights
- Mirrors
- Backup alarm & Horn
- Fire extinguisher
- Hydraulic systems
- Limit switches
- Steering mechanism
- Leaks

Note: *See* ***Appendix C****,* ***Equipment Inspection Sheet***

Equipment operators will possess the required training, certification and licenses as required by law for the equipment that they are required to operate.

Employee(s) shall never operate a personally owned vehicle or company vehicle while impaired to and from work, and/or while on a jobsite.

Equipment / Cargo shall be properly secured and stowed while being transported. Tie-down straps/chains shall be of correct style and capacity for the load.

3.12 EXCAVATION & TRENCHING

The trenching and excavation program includes any activity that disturbs the earth, all employees exposed to excavation hazards, and the control required to prevent cave-ins, struck-bys, engulfment, and utility strikes.

Training

Employees involved in activities involving excavations and trenching shall receive training in excavation and trenching. Training shall consist of:

- The hazards of the space/area (slides, cave-ins, water accumulation, etc.)
- Safe means of access/egress
- Proper support system procedures (erection, maintenance, disassembly and inspection)
- Competent person responsibilities

Prior to any disruption of ground, excavation or trenching, the following will be performed:

- Summers-Taylor shall submit an 811 Utility Locate Request Ticket.
- Summers-Taylor Inc. shall request locations for existing underground private utilities from the Owner.
- Subcontractors shall notify public utility locating authorities.
- The contractor will identify the competent person and submit qualifications for review and approval by Summers-Taylor Inc.
- The competent person will analyze the soil of the work area to determine the condition and type of soil to ascertain proper sloping or shoring requirements.

During excavation or trenching operations, the following requirements will be followed:

- All trenches and excavations will be barricaded, and signage posted at the work area.
- Fall protection shall be provided when employees cross over an excavation six feet (6) or more in depth.
- Walkways shall be provided where employees or equipment are required or permitted to cross over excavations. Guardrails which comply with 1926.502(b) shall be provided where walkways are 6 feet (1.8m) or more above lower levels.
- Trenches or excavations will be sloped or benched in accordance with local rules and regulations and determined by the competent person.
- Supporting systems (i.e. shoring, piling, trench boxes, etc.) will be utilized for all trenches and excavations where sloping or benching could not be performed.
- Spoil piles and all other materials will be placed a minimum of two (2) feet from the edges of all trenches or excavations.
- When underground utilities are suspected, they will be located first by hand digging, hydro excavating or vacuum excavating.
- Adequate ladder or graded ramp access must be always maintained during trenching or excavating activities 4 feet or deeper. Access points will be placed such that no worker travels more than (25) feet in any direction.
- A competent person will inspect excavations and trenches at the beginning of each day before work begins and when conditions change.
- Excavations in Type C soil will not be benched.
- Excavations and trenches four (4) feet or greater in depth will be evaluated for atmospheric hazards to determine whether permit required confined space requirements apply.
- A registered professional engineer must design protective systems for all excavations over 20 feet in depth.

3.13 FALL PROTECTION & PREVENTION

Summers-Taylor Inc., subcontractors, vendors, or other third-party individuals will take all practical measures to eliminate, prevent, and control fall hazards. All work will be planned with the intent to eliminate identified fall hazards. When a fall hazard has been identified and cannot be eliminated, then effective means of all protection will be implemented.

Training

Workers exposed to fall hazards that cannot be eliminated will be equipped, trained and given periodic refresher training in fall protection to minimize the adverse effects of accidental falls. Each employee shall be trained, as necessary in the following areas:

- The nature of fall hazards in the work area.
- Correct procedures for erecting, maintaining, dissembling, and inspecting the fall protection systems to be used.
- The use and operation of guardrail systems, personal fall arrest systems, safety net systems, warning line systems, safety monitoring systems, controlled access zones, and other protection to be used.
- The role of each employee in the safety monitoring system when this system is used.

- The limitations on the use of mechanical equipment during the performance of roofing work on low-sloped roofs.
- The correct procedures for the handling and storage of equipment and materials and the erection of overhead protection.
- The role of employees in fall protection plans.
- And standards contained in OSHA 29 CFR 1926.503 and 1910.30

Fall protection training records shall be maintained and available for review by the safety department.

General Requirements

Workers exposed to fall hazards greater than 6 feet in construction and 4 feet in general industry will be required to implement fall protection and/or prevention measures.

Acceptable fall protection systems include the following:

- Guardrail systems
- Positioning Device Systems
- Safety Netting
- Protection from Falling Objects
- Covers for Floor, Roof and Wall Openings
- Personal Fall Arrest Systems

Fall protection and fall prevention must be evaluated for all tasks performed from heights, including but not limited to:

- Structural steel erection (bolt up and connectors) at 15 feet or 2 stories
- Masonry
- Decking Operations
- Carpentry
- Re-bar assembly
- Scaffold erection/disassembly.
- Concrete forming
- Roofing
- Pre-cast erection
- Inspections
- Cofferdams

Personal Fall Arrest Systems will consist of a full-body harness meeting ANSI requirements, double lanyard with shock absorbing device or retractable lifeline, locking snap hook and anchorage points meeting OSHA regulations.

Restraining/Positioning System (fall restraint)

Only full body harness systems with positioning rings are to be used with any restraining/positioning system.

Restraint line (rope) length shall not exceed the distance to fall exposure and shall be secured to an anchorage capable of supporting at least twice the potential impact load of a worker's fall or 3,000 pounds, whichever is greater.

Requirements for body harness systems, snap hooks, D-rings, and other connectors used with

positioning device systems shall meet the same criteria as those for fall arrest systems.

No makeshift fall protection equipment may be used.

Body belts are prohibited.

Personal Fall Arrest System

Personal Fall Arrest Systems shall do all the following:

- Limit maximum arresting force on a worker to 1,800 pounds. Note: total body weight including tools cannot exceed 310 lbs. to stay under arresting force limit
- Be rigged so that a worker can neither free fall more than 6 feet nor contact any lower level.
- Bring a worker to a complete stop and limit maximum deceleration distance a worker travels to 3.5 feet.
- Have sufficient strength to withstand 5000 lbs. (excluding horizontal lifelines which require a safety factor of at least two times the potential impact energy)
- All components of the personal fall arrest system (lanyards, body harness and attached hardware, and shock-absorbing devices) shall meet the design specifications of local or federal regulations.

The following items/actions are prohibited for use with personal fall arrest systems:

- body belts
- non-locking snap hooks
- lanyards without shock absorbers
- tying back to the lanyard (once around another object) for a means of an anchorage point, unless the lanyard was designed for this purpose by the manufacturer, the object tied around can support the anticipated fall force and the object does not have sharp edges or burrs.

Sufficient Anchorage Points Used

Anchorages shall be used under the supervision of a competent person, as part of a complete personal fall arrest system that maintains a safety factor of at least two (i.e., capable of supporting at least twice the weight expected to be imposed upon it).

Anchorages used to attach personal fall arrest systems will be independent of any anchorage being used to support or suspend platforms and shall be capable of supporting at least 5,000 pounds of force per worker attached.

Anchorage points can include:

- Lifelines (horizontal and vertical)
- Designed anchorage points on aerial lifts.
- Eyebolts listed for use by the manufacturer.

- Specially designed anchorage tools specifically designed to meet fall force requirements, including:
- Wrap-around lanyards as approved by the manufacturer.
- I-beam clamps designed specifically as an anchorage point

Workers will not tie off to a perimeter cable or wire rope handrail unless engineered for such use.

When wire rope is used to construct guardrail systems, at least 1/4" diameter cable shall be used with cable clamps as required by wire rope manufacturers.

Specific Fall Hazard Procedures

Aerial Personnel Lifts

Workers using aerial personnel lifts (e.g. scissor lifts, genie lifts, cherry-pickers, boom-lifts, etc.) shall use a restraint/positioning system or personal fall arrest system, even though a guardrail system is in place.

Attachment points for these systems shall be capable of withstanding 5,000 pounds and shall be maintained on the floor of the lift or where designed by the manufacturer.

Rails of such lifts shall not to be used as attachment points unless designed for that purpose by the manufacturer.

Excavations

Where walkways are provided to permit workers to cross over excavations, guardrails are required on the walkway if the fall would be 6 feet or more to the lower level.

Subcontractors will submit all engineered documentation on horizontal lifelines to Summers-Taylor Inc. for review and approval. All horizontal lifelines will be installed under the direct supervision of a qualified person.

The use of personal fall arrest systems requires the submission of a Rescue Plan for each condition.

Any contractor that must remove a fall protection system in the course of their work will be responsible for immediately replacing the protective system.

Floor openings that are 2-inches or greater and all wall openings will be guarded or covered with an appropriate cover or guardrail. Floor covers will be secured to the floor to prevent easy removal. The floor or wall cover will be properly marked with a Danger sign stating, “COVER-DO NOT REMOVE”. Hole covering materials shall support at least two times the potential weight that will cross over it. If plywood is chosen as the cover material, it shall be of at least ¾ inch in thickness. Hole covers shall be secured in place in such a manner as not to easily be displaced. Examples of securing methods include, but are not limited to nailing, attached cleats, wire, etc.

3.14 FIRE PROTECTION & PREVENTION

Fire Protection

Temporary fire protection measures such as fire extinguishers, temporary hose lines, and temporary standpipes are required during construction.

The Project Team shall develop a Fire Protection Plan in accordance with OSHA 29 CFR 1926 Subpart F

Fire extinguishers will be:

- Conspicuously located
- Inspected monthly.
- Protected from freezing
- Placed within the immediate area of any welding/cutting operation or flammable liquid storage area.
- Placed within five (25) feet whenever gasoline operating equipment is used.

If a fire extinguisher is discharged for any purpose, it should be reported to the safety department.

Each temporary building and trailer (shops, field offices, storage boxes, etc.) will have its own appropriately sized and located class ABC fire extinguisher.

Access to fire hydrants and extinguishers will be maintained at all times. Clear access to buildings and other structures will be maintained at all times.

Fire Prevention

Temporary buildings located within another building or structure shall be constructed of non-combustible material or have a fire resistance rating of one (1) hour. Plastic tarps or covers (visqueen) used for any purpose inside an occupied building or where welding, cutting, or open flame is present will be made of fire-retardant material.

Combustible refuse from construction operations will not be burned or dumped anywhere on the construction site. Such refuse will be removed at frequent intervals, as needed. Storage of large quantities of construction debris will be placed in metal dumpsters.

Storage of compressed gases will include:

- Valves, regulators and hoses removed with valve caps securely on.
- Secured and upright at all times, including when transported in vehicles.
- Fuel and oxygen cylinders separated by a minimum of (20) feet.
- Empty cylinders stored separate from full cylinders: no cylinders in use.

Oily rags and waste are to be stored separately in metal containers fitted with self-closing lids. Trash and refuse must be placed in trash containers provided for this purpose.

Fire and Flammable Liquid Storage and Dispensing

Methylene chloride is a known carcinogen and solvents containing it are prohibited.

Flammable and Combustible Liquids will be stored, dispensed and used in accordance with OSHA and NFPA Requirements.

- When stored outside then they cannot be within (20) feet of any structure or must be in a properly constructed storage locker whenever possible (no more than a total of (25) gallons flammable and combustible liquids can be stored outside of an approved locker).
- Stored in approved portable containers marked as to contents and ownership.
- Posted with "NO SMOKING" signs.
- Outside storage areas are kept free of weeds and other combustible material.
- Storage of flammables will be in an enclosure away from open flame, heat, direct sun or other sources of ignition.

All storage tanks/drums will be placed in a berm or other secondary containment. Berms will be lined with a minimum 6-mil plastic sheeting that is fuel resistant. PVC linings are not allowed.

Fuel and flammable liquid tanks, drums, or barrels will have the proper DOT placard and be labeled as to content.

All fuel storage tanks and compressed gas cylinders will be protected from vehicle traffic.

All fuel dispensing points shall be located away from storm drains and wetlands. The following is required:

- Portable 20 lb. ABC fire extinguisher no closer than (25) feet or further than (75) feet from the fueling point.
- No Smoking signs posted.
- Self-locking fuel nozzle prohibited.
- Spill kit stored nearby
- Tanks will be grounded and when dispensing flammable liquids, the containers will be bonded.

3.15 FIRST AID

Supervisors are responsible for ensuring first aid kits are available and inspected periodically. The safety department will conduct spot checks to ensure first aid kits are adequately stocked and available.

In the event of an incident or injury, a representative from the safety department will be notified immediately. The affected employee and supervisor will report to safety immediately for evaluation. The first aid kit is the primary means of initial treatment. If injured beyond first aid, the employee will be provided with a panel of physicians to choose from. Once selected, that supervisor or safety representative will escort an injured employee to the selected doctor's office for treatment. A post incident drug test will be required.

In the event of a severe injury, life threatening, loss of limb, etc. **911** will be called. If an injury

requires **911**, safety will notify the Human resources department so they can notify the employees of emergency contact.

Summers-Taylor, Inc. accommodates most restrictions related to workers compensation injuries until the affected employee receives a full release from the treating physician.

Training

In the absence of an infirmary, clinic, hospital or physician, which is reasonably accessible in terms of time and distance to the worksite, which is available for the treatment of injured employees, an employee shall be present who has a valid certificate in first aid training.

3.16 FLAGGING OPERATIONS & TEMPORARY TRAFFIC CONTROL

Highway Safety

All workers and supervision will wear high visibility attire in accordance with the ANSI requirements when working near vehicle traffic. ANSI Class 2 will be worn anytime an employee is working near or has potential to be near traffic. ANSI Class 3 will be worn at night anytime an employee is working near or has potential to work adjacent to traffic which could include private jobsites, industrial sites, road systems, parking lots, etc.

Any project with work involving temporary traffic control devices shall control shall be considered and implemented iaw Manual of Uniform Traffic Control Devices or the project traffic control plans. Signs, cones, barrels, and barriers shall all be considered in the planning of implementing a traffic control plan.

All workers and supervision will follow all T.D.O.T. and DOT requirements in other states where work is performed, safety requirements, regulations, and specifications as well as local and federal regulations regarding highway safety as required.

Flagging Operations

All temporary flagging operations and temporary traffic control operations will be in accordance with the Manual of Uniform Traffic Control Devices (MUTCD).

Employees shall be trained and certified for flagging operations. They will be required to pass a written and practical exam administered by a certified ATSSA Flagging Instructor. Summers-Taylor, Inc. will ensure that all subcontractors require trained and certified flagmen when working on Summers-Taylor, Inc. projects.

Workers assigned as flaggers will be trained as recommended in the Manual of Uniform Traffic Control Devices and state DOT. When conducting flagging operations, certified flaggers shall have all appropriate PPE, Equipment, and be familiar with the MUTCD Temporary Traffic Control.

When conducting planned flagging operations, the appropriate flagging signs, equipment, and

communication means shall be utilized. For emergency flagging operations an approved MUTCD Temporary Traffic Control approved emergency flag is acceptable.

Maintenance and Protection of Traffic

There will be no temporary blocking or occupying of any street or alleyway without prior approval of Summers-Taylor Inc. and local authorities.

When it becomes necessary to temporarily close a public street or alley, a written traffic control plan is required showing how the closure will occur and submitted for review. Refer to the Manual of Uniform Traffic Control Devices (MUTCD) Part VI when developing a traffic control plan.

At a minimum, the written Traffic Control Plan will contain:

- Time the street(s) will be required to be closed.
- Detail drawing showing temporary signage, tapers, etc.
- Detail plan illustrating detour routes for traffic impacted by the closed streets.

Work that fails to follow the traffic control plan or occupies a city street or sidewalk without authorization will have the work stopped.

3.17 FORKLIFT / POWERED INDUSTRIAL TRUCK CERTIFICATION

Training

Only trained and authorized employees are permitted to operate a forklift or other power industrial truck (PIT). The safety department or designated trainer will administer the forklift operator certification program and maintain training records.

Training shall occur prior to the worker operation of any forklift, and at least every three years thereafter unless an observed performance by the operator dictates the need for more frequent retraining. Classroom and Practical Training in addition to Operator Evaluation are required. Each trainee, who satisfactorily completes the qualifications as outlined above, shall be issued a written document as evidence of being a Qualified Forklift Operator.

Each manufacturer or un-similar model of PIT shall require individual Practical Training and Operator Evaluation prior to receiving authorization to operate.

Note: Forklift operators **must** be certified; and/or be in training under the direct supervision of a certified forklift operator for that type of forklift. Training will consist of classroom lectures utilizing the JJ Keller training program followed by practical and written examinations. Operators are required to pass the written and practical examinations to become certified.

Inspection and Maintenance

Prior to placing a forklift truck into service, the truck operator shall inspect their vehicle and document this inspection. All inspection records will follow the company document control

program.

Any noted condition that affects the safe operation of the lift truck shall be reported to the operator's supervisor for corrective action and shall keep the lift truck from being operated until the unsafe condition is corrected.

Forklifts that are defective, in need of repair or are unsafe shall be tagged "Danger Do Not Operate" and taken out of service until restored to safe operating condition.

A maintenance log shall be maintained for each forklift to determine when required maintenance is due. Only qualified personnel shall perform maintenance and repair. Maintenance records for each forklift shall be kept on file by the maintenance department.

General & Safe Operating Rules

The following safe operating rules apply to workers who operate a forklift. Violations of safe operating rules can and will result in retraining and/or disciplinary action.

General Requirements

- Only workers trained as per the requirements of this manual section and authorized by the department manager shall be allowed to operate Forklifts.
- Forklifts shall not be loaned or rented to others for use.
- Forklifts shall be equipped with a portable fire extinguisher.

Safe Operation

- Stunt driving and horseplay shall not be permitted.
- Forklifts equipped with seat belts will be used by the operator when in use.
- Personnel are not permitted to ride on Forklifts except in designated seats that are part of the equipment design.
- Forklifts shall have a functional horn and back up alarm with a distinctive sound, loud enough to be heard clearly above background noises. There are other scenarios where a flashing yellow/amber light would be installed.
- Copies of the manufacturer's operating instructions for each type of forklift shall be readily available for review by operators and supervisory personnel.
- Lift trucks, stackers, etc., shall have the rated capacity clearly posted on the vehicle to be clearly visible to the operator. When the manufacturer provides auxiliary removable counterweights, corresponding alternate rated capacities also shall be clearly shown on the vehicle. These ratings shall not be exceeded.
- Steering or spinner knobs shall not be attached to the steering wheel unless the steering mechanism is of a type that prevents road reactions from causing the steering hand wheel to spin. The steering knob shall be mounted within the periphery of the wheel.
- No modifications or additions, which affect the capacity or safe operation of the equipment, shall be made without the manufacturer's written approval. If such modifications or changes are made, the capacity, operation, and maintenance instruction plates, tags, or decals shall be changed accordingly. In no case shall the original safety

factor of the equipment be reduced.

- Railroad tracks shall be crossed diagonally wherever possible. Parking closer than 8 feet from the center of railroad tracks is prohibited.
- No person shall be allowed to stand or pass under the elevated portion of any forklift, whether loaded or empty.
- Arms or legs are prohibited from being placed between the uprights of the mast or outside the running lines of the forklift.
- When a forklift is left unattended, load engaging means shall be fully lowered, controls shall be neutralized, power shall be shut off, brakes set and remove the key.
- Wheels shall be blocked if parked on an incline.
- Brakes shall be set, and wheel blocks shall be in place to prevent movement of trucks, trailers, or railroad cars while loading or unloading. Fixed jacks may be necessary to support a semi-trailer during loading or unloading when the trailer is not coupled to a tractor. Prior to forklift entry, the flooring and frames of trucks, trailers and railroad cars shall be checked for breaks and weakness before they are driven into and to determine if it will bear the intended weight of the forklift and intended load.
- A safe distance shall be maintained from the edge of ramps or platforms while on any elevated dock, or platform, or freight car. Forklifts shall not be used for opening or closing freight doors.
- Additional counter weighting of Forklifts shall not be allowed unless approved by the manufacturer.
- Workers shall not jump off a forklift.
- Loads carried shall be secured on the forks to prevent upset / overturn.
- An overhead guard shall be used as protection against falling objects. It should be noted that an overhead guard is intended to offer protection from the impact of small packages, boxes, bagged material. etc. representative of the job application, but not to withstand the impact of a falling capacity load.

Travel/Transport

- Under travel conditions, the forklift shall be operated at a speed that will permit it to be brought to a stop in a safe manner.
- Traffic regulations shall be observed, including authorized work site speed limits. A safe distance shall be maintained approximately three forklift lengths from the forklift truck ahead.
- Traffic regulations shall be observed, including authorized work site speed limits. A safe distance shall be maintained approximately three forklift lengths from the forklift truck ahead.
- The driver shall be required to slow down and sound the horn at cross aisles and other areas where vision is obstructed. If the load being carried obstructs forward view, the driver shall be required to travel with the load trailing.
- The driver shall be required to look in the direction of and keep a clear view of the path of travel.
- Forklifts shall have the manufacturer's nameplate showing its weight with attachments, lifting capacity, lift height maximum and other pertinent data. Nameplates or markings shall be maintained in a legible condition and remain in place.
- Grades shall be ascended or descended slowly.

- When ascending or descending grades in excess of 10 percent, loaded Forklifts shall be driven with the load upgrade.
- Unloaded Forklifts should be operated on all grades with the load engaging which means downgrade.
- Dock board or bridge plates shall be properly secured before they are driven over. Dock board or bridge plates shall be driven over carefully and slowly, and their rated capacity never exceeded. Portable dock boards shall be secured in position, by being anchored or equipped with devices that will prevent their slipping.
- Forklift operators shall yield to pedestrians.
- On grades, the load and load engaging means shall be tilted back if applicable and raised only as far as necessary to clear the road surface.

3.18 HAND & POWER TOOLS

All hand and power tools will be kept in good condition with regular maintenance. Hand and power tools are to be operated according to manufacturer's instructions and guidelines and the personal protective equipment appropriate for the hand or power tool will be worn.

Hand Tools

- Impact tools such as chisels, wedges, etc. are not to have mushroomed heads.
- Wooden handles will not be splintered or cracked.
- Pocketknives will not be used for stripping wires.

Electric Tools

- Never lift or carry a power tool with its cord.
- Guards and safety switches will not be removed or made inoperative.
- Electric tools must have a three-wire cord unless they are double insulated.

Portable Abrasive Wheel Tools

- Guards will not be removed.
- Grinding disks and wheels will be checked to verify they are the correct one for the grinder and rpm.

Pneumatic Tools

- Air hoses ½ inch in diameter or greater will have a safety excess valve installed at the source of air.
- Clips, whips or retainers are required at each air hose coupling and to prevent attachments from being ejected from the tool.
- Only the pneumatic nail guns requiring the muzzle to be pressed against the work surface to fire, are allowed.
- Hose couplings will be secured to prevent displacement.
- Pneumatic nail guns shall be disconnected from the air supply when unattended.

Powder Actuated Tools

- Workers will be trained to operate a powder actuated tool and are required to always carry their training card.
- Fired cartridges shall be placed in a container or bucket and properly disposed of.
- The powder-actuated tool must not be able to fire until it is placed against the surface with a force of (5) pounds or greater.
- Misfire cartridges are to be placed in water for (5) five minutes.

NOTE: Only employees who have been trained in the operation of the particular tool in use shall be allowed to operate a powder actuated tool.

3.19 HAZARDOUS COMMUNICATIONS PROGRAM

All employees are entitled to know the properties and potential safety and health hazards of chemicals or substances that they may encounter while employed at Summers-Taylor, Inc.

Chemical Inventory Database

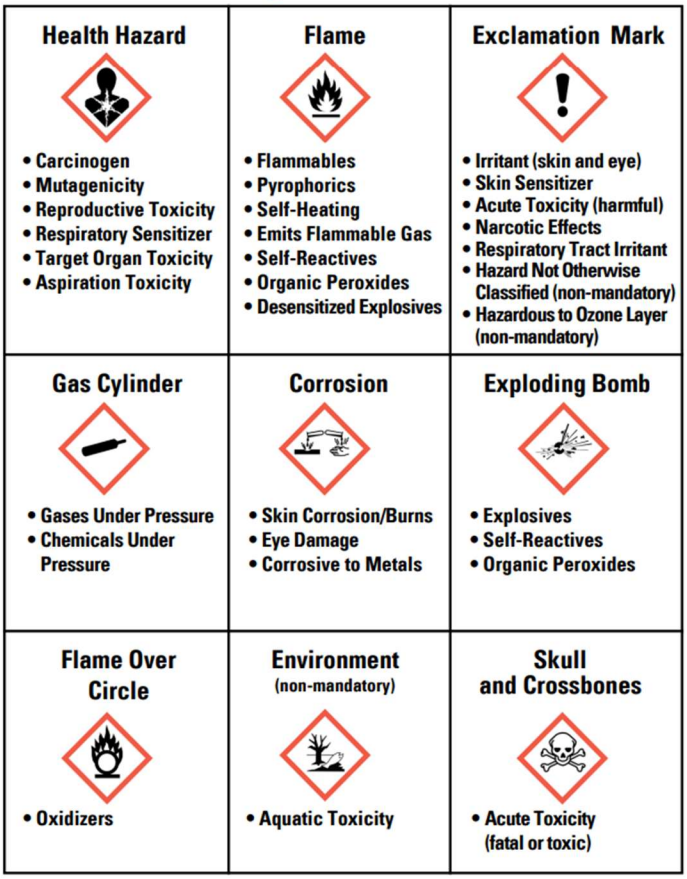
Summers-Taylor, Inc. will maintain a digital SDS library in which all employees will have access to the crew supervisors' IPAD. Access will be granted at any time.

The Master Chemical and Substance Inventory List or equal will be maintained, even if they do not have or will not use any hazardous chemicals or substances.

Labels and Other Hazard Warnings

All containers containing hazardous chemicals will be labeled with the following information:

- **Product Identifier** – The chemicals name and a list of the substances it contains.
- **Supplier Information** – The name, address and phone number of the chemicals manufacturer or supplier.
- **Pictogram** – A symbol inside a diamond with a red border denoting a particular hazard class. The following are the HCS Pictograms and hazards associated with each:



- **Precautionary Statement** – One or more phrases that describe recommended measure to minimize or prevent adverse effects resulting from exposure to a hazardous chemical or improper storage or handling of a hazardous chemical.
- **Signal Words** – A single word used to indicate the relative level of severity of the hazard and alert the reader to a potential hazard on the label. The signal words used are "danger" and "warning." "Danger" is used for the more severe hazards, while "warning" is used for less severe hazards.
- **Hazard Statement** – a phrase assigned to each hazards category. Examples include "harmful if swallowed," "highly flammable liquid and vapor."
- **Small Container Labeling** – containers less than or equal to 100 mL may use abbreviated labels if full hazard information is provided elsewhere and readily accessible to employees.

Subcontractors Guidance & Informing Others

Each subcontractor will submit to Summers-Taylor a Master Chemical and Substance Inventory List and a copy of the Safety Data Sheet (SDS) of all known hazardous chemicals that are in their work area. Prime subcontractors will be responsible for obtaining all sub-tier subcontractors Master Chemical and Substance Inventory Lists/SDS and forwarding them to Summers-Taylor.

Subcontractors will maintain a project specific SDS on location for each hazardous chemical or substance listed on the Master Chemical and Substance Inventory List. Prime subcontractors

will be responsible to ensure all sub-tier subcontractors have their project specific SDS sheets on the project.

HazCom Responsibilities

It will be the responsibility of each worker's supervision or project manager to assure Safety Data Sheets are received prior to, or at the time of delivery of, a hazardous chemical.

Project management and first-line supervision will ensure all hazardous chemicals are properly labeled in accordance with the SDS. Containers that hazardous chemicals have been transferred into for the use during a single work shift will be labeled as to contents.

Nonroutine Tasks

Whenever a nonroutine job involving work with hazardous chemicals is required, special training will be provided for all affected employees prior to the job. The training will include:

- Hazardous chemicals to be used in the nonroutine task.
- Protective measures are required to perform the work safely.
- Emergency procedures; and
- An opportunity to ask questions or ask for additional information.

HazCom Training

All employees shall receive instruction on the Hazard Communication Program, the location of the Master Hazardous Chemical and Substance Inventory list, the location of the Safety Data Sheets, labeling requirements and specific safety or health instructions about the hazardous chemical or substance.

Recommended minimum Hazard Communication Training will consist of:

A. The contents of the program
B. Prior to use of or the potential exposure to any hazardous chemical or substance, workers are to be instructed in:
    - Physical and health hazards
    - Personal protective equipment
    - Procedures to protect against the hazards.
    - Emergency procedures in case of exposure or accidental spill
    - Engineering and administrative controls
C. Labeling requirements
D. Whenever a new chemical or substance is introduced in the workplace, workers will be briefed of its hazards.

Storage and Handling of Chemicals

The clients, vendors, and subcontractors that may have business in or near a work area will be notified that hazardous chemicals are being used and the hazards they may encounter.

If a worker believes they have encountered a hazardous chemical or substance unfamiliar to them, they will immediately notify their supervisor. Project management or supervision will attempt to identify the hazardous chemical or substance and initiate all precautions to handle and dispose of this material, if required, and to properly protect workers.

All employees shall ensure proper storage of chemicals to minimize the potential for a spill. Spill kits must be readily available near all fueling stations, shops, and anytime working near water, either active or inactive streams to include storm water drains. Employees will be provided with training in spill prevention and response procedures. Any spill must be reported to the safety department or environmental compliance department.

3.20 HOT WORK & FIRE EXTINGUISHER USE

Hot work is defined as the use of open flames, other heat sources and/or spark producing devices in areas where combustible or flammable materials are present and/or where there is potential for explosion or fire.

Hot work activities include burning, welding, cutting, grinding or other operations that produce a flame or sparks. Prior to performing "Hot Work" operations, workers will complete a **Hot Work Permit** (**Appendix K**).

A Hot Work Permit is valid only for the date and shift that is stated on the permit.

The following precautionary measures will be taken when a Hot Work Permit is required:

- Grating, openings, etc. will be completely covered in such a way to prevent sparks and slag when falling to a level below.
- Fire extinguisher in the immediate area of work.
- No flammable or combustible material stored within (35) feet in any direction.
- Combustible/flammable materials that cannot be moved must be covered with fire blankets or other suitable material.
- Worker(s) designated for continuous fire watch will be identified, trained, equipped, and remain for a minimum of one-half hour after hot work has ended.
- Follow confined space entry procedures, if required.

Training

Workers will be trained prior to performing any hot work in the following, as a minimum.

- A review of the work to be performed.
- Emergency procedure in case of fire
- Precautions to be taken.
- How to use the fire extinguisher
- Hazards of the area
- Duties of Fire Watch
- Hot Work Permits

3.21 HOUSE KEEPING

The Summers-Taylor Inc. Policy on housekeeping is that all equipment, tools or materials will be stored, stacked, located, placed, temporarily spotted or set up to prevent an incident or injury which could occur in the work area. The area will give the direct and obvious impression of a clean and orderly workplace.

Project management, supervision, workers, vendors and third-party persons will maintain all work locations in an orderly and clean manner.

Mud and dirt tracked onto public streets or alleyways will be removed continuously during the workday.

The following are the minimum housekeeping requirements:

- Access walkways, roadways, and fire lanes will not be blocked with material, tools, ladders, scaffolds, welding leads, air hoses or electrical cords.
- Electrical extension cords, light stringers, air hoses, and welding leads will be elevated above walkways a minimum of seven (7) feet or the area marked with signage stating, "TRIP HAZARD".
- Welding rods, nuts, bolts, and washers will be kept in proper containers.
- Shackles, slings, chokers, ladders, and safety equipment will be removed from the work area when not needed and properly stored.
- Trash containers will be placed at appropriate locations.
- All nails will be removed from scrap and form lumber and swept up daily.
- Rubbish, trash, and debris will be removed from the work area daily.

At all locations where drinking water is dispensed, an adequate trash container will be located for disposal of used drinking cups.

3.22 LADDERS & STAIRWAYS

This program applies to all employees who use, inspect, or work around ladders and stairways. It covers the selection, inspection, setup, use, and maintenance of portable ladders, fixed ladders, and stairways to prevent falls, slips, and structural failures. It includes training requirements, hazard identification, and controls for ensuring ladders and stairways are used safely and kept in safe condition.

Training

Employees shall receive training in the following areas:

- The nature of fall hazards in the work area
- The correct procedures for erecting, maintaining, and disassembling the fall protection systems to be used.
- The proper construction, use, placement, and care in handling of all stairways and ladders.

- The maximum intended load-carrying capacities of ladders
- Other requirements in OSHA 29 CFR 1926.1060

General Ladder Safety

- Stairways having four or more risers or rising 30 inches or more shall have a stair rail system 36 inches high on each unprotected side.
- Metal pan stairs shall not be used until the pans are filled to prevent a tripping hazard.
- Ladders, stairs, or ramps will be provided when there is a change in elevation of 19 inches or greater.
- Ladders will meet the requirements established in OSHA 1926.1050.
- Workers will be trained in the safe use of ladders.
- Ladders are required to ascend or descend truck beds and/or trailers.
- Ladders will extend past the bearing point by no less than 36 inches.
- Ladder landings shall remain clear of all obstacles and obstructions to allow easy access on and off the ladder.
- Fall Protection while working from a ladder is addressed in the Fall Protection section.
- Each contractor is required to inspect ladders prior to use. Ladders with broken or bent rungs, steps, or side rails will be immediately destroyed and removed.
- When ladders are used to access upper levels, they must be secured to prevent displacement.
- All ladders will be heavy-duty with a minimum capacity rating of 250 lbs.

Stepladders

- Stepladders will not be used as straight ladders.
- Stepladders will only be used with the spreaders fully extended and spreader bar locked in place.
- Workers will not stand on the top or top step of the stepladder.
- Workers will not straddle the top of a stepladder or stand on the back of a stepladder unless designed for this use.

Straight/Extension Ladders

- Ladders will be set up so the horizontal distance at the bottom is not less than 1/4 of the vertical distance to the bearing point.
- Workers will not stand on the top three rungs of a ladder. No worker will work when his/her knees are above the top of the ladder.
- All straight ladders will have non-skid feet at the base.

Job Made Ladders

- Job-made ladders shall be constructed for intended use. If a ladder provides the only means of access or exits from a working area for 25 or more employees, or simultaneous two-way traffic is expected, a double cleat ladder shall be installed.
- Job-made ladders will be constructed in accordance with OSHA and ANSI standards.

3.23 LASERS

Precautions will be taken to ensure all workers that will use a laser are trained in proper use and the hazards associated with lasers. Each worker is to be issued a qualification card, which must be carried by the worker and available upon request.
No worker will install, adjust, or operate any laser equipment, without a valid qualification card.

Standard Laser warning signs will be placed around the perimeter of the area where the laser is being used. No laser equipment will be used that does not contain a label, indicating make, maximum output, and beam spread.

Whenever a laser is not in use, shutters or caps will be used and the laser turned off.

When performing internal alignment, lasers will only be guided by mechanical or electronic means.

No laser beam will be directed at any worker.

When environmental conditions exist such as rain, fog, snow or extremely dusty conditions, use of lasers will not be permitted.

Workers using lasers will use appropriate eye protection.

3.24 LEAD SAFETY

When welding, cutting, burning, grinding, chipping, abrasive blasting or rivet busting on painted or coated surfaces, a pre-assessment will be required to determine if the surface(s) contain lead-based paint. If sampling results for lead-bases paint are positive for 0.02% lead by weight, OSHA Standard 29 CFR 1926.62 will be followed.

An initial hazard assessment is required and will be performed to determine worker exposure levels. The assessment will involve personal sampling of a representative group of workers performing different tasks unless historical data is available. During the initial exposure assessment, workers will wear protective clothing and the proper respiratory protection until the results of the assessment are known.

Copies of sample results will be made available. Area sampling of work is will not to be used for determining worker exposure levels.

If sampling results indicate the exposure limits are above 30 µg/m□ but below 50 µg/m□, the following are required:

- Written compliance plan
- Medical surveillance (Blood Lead)
- Personal monitoring
- Hazard communication training for lead as required in 1926.62(l)1.

If sampling results are above 50 µg/m□, the following are required:

- Written compliance plan
- Clean change rooms and showers
- Engineering controls
- Clean lunchrooms
- Respiratory protection
- Warning signs
- Protective clothing
- Training
- Medical surveillance

Each worker is to be notified in writing of their blood and/or personal monitoring results within five (5) working days after the results are known.

Barricades, enclosures, track mats and/or ventilation protocols shall be provided to ensure the protection of the other workers, members of the public or building occupants.

3.25 LOCK-OUT, TAG-OUT (LOTO)

All employees who service or maintain equipment with the potential for hazardous energy must comply with the Lockout/Tagout (LOTO) program. This program protects workers from injuries caused by moving machinery, unexpected energization, or the release of stored energy from sources such as pneumatic, steam, hydraulic, or chemical systems. Refer to **Appendix J for the Lockout/Tagout (LOTO) Permit.**

Training

All employees affected by hazardous energy sources shall be trained. Training shall include:

- The nature of known hazardous energy sources.
- Project specific LOTO procedures
- Standards contained in OSHA CFR 29 1910.147

Safety locks and tags will be applied to all circuits, switches, valves, isolating devices and any other energy sources to ensure equipment, machinery, or processes that have been considered functioning, changed or could otherwise be operable have been rendered non-operational or de-energized.

No person will remove another worker's safety lock or attempt to energize any piece of equipment, machinery or process that has been locked out and tagged.

De-Energizing Equipment and Processes

A Summers-Taylor Inc. representative will coordinate with the operating facility representative when any energized equipment or process must be de-energized.

The Summers-Taylor Inc. representative and operating facility representative will identify all circuits and sources of energy that require locking and tagging to make the equipment or process inoperable. The operating facility representative will notify their personnel that may be affected by the de-energizing. The first-line supervisor for each affected overseeing the work will sign out sufficient safety locks to lock out the piece of equipment or process.

The following procedures shall be followed:

1. The operating facility representative and first-line supervisor(s) will make certain the operating controls to the equipment, machinery or process are in the "off" or "neutral" position.
2. Once the operating controls are in the "off" or "neutral" position, the operating facility representative will place a safety lock and tag on the energy isolating device(s) first.
3. The first-line supervisor(s) will apply their safety lock to each of the isolating devices that provide power or other energy to the machinery, equipment, or process. The first-line supervisor(s) will also apply a visible warning tag. The tag will contain the name of the first-line supervisor(s), company, date, and phone number.
4. Once the first-line supervisor(s) have placed their safety lock(s) and tag(s) on the energy-isolating device, all affected workers will then apply a safety lock and tag to the energy-Isolating device. Alternatively, the first-line supervisor may place the key(s) to their equipment safety lock(s) in a safety lock box, place their individual safety lock and tag on the safety lock box, and then have each affected worker place their safety lock and tag on the lock box.
5. Prior to any work being performed on the piece of equipment, machinery, or process, the operating facility representative and first-line supervisor will verify that it is inoperable. The operating facility representative will attempt to operate the piece of equipment, machinery, or process. After verifying it is inoperable, the switch will be returned to the "off" or "neutral" position.

Stored or residual energy will be dissipated by whatever means are necessary. Capacitors will be discharged and high-capacity elements short-circuited and grounded by a qualified electrician.

Re-Energizing Equipment and Processes

When the required work is completed and the machinery, equipment, or process can be returned to service, the first-line supervisor will contact the operating facility representative to notify them of completed work operations.

The first-line supervisor will make a visual inspection of the equipment, machinery, or process to ensure all workers have completed their work and equipment, tools and other materials are removed from the area.

After confirming all workers, materials, tools and other equipment are out of the area, the operating controls are still in the "off" or "neutral" position, and each worker has removed their safety lock and tag, the first-line supervisor will remove their safety lock and tag from each of the isolating devices.

If a worker fails to remove this or her safety lock at the completion of the job or assigned duties, their immediate supervisor will immediately notify management and the Summers-Taylor Inc. Environmental Health and Safety Department***. Every attempt should be made to contact the workers and require them to return to the project to remove their lock.*** If the worker is unwilling or cannot return to the project, it must be verified that he/she is not physically at the project before the safety lock can be removed. All safety lock removal incidents will be investigated following the incident investigation process and disciplinary action may occur.

The management representative will notify the operating facility representative that the equipment, machinery, or process is clear to be energized.

De-Energizing Fluid Processes

Any vessel, pip, hose or process that contains a hazardous liquid or gas will be purged with nitrogen or flushed before work begins as described in the pre-task plan for the activity.

A management representative will co-ordinate with the operating facility representative when any fluid process requires de-energizing.

The management representative and operating facility representative will identify all valves or gates and where blanks are required to be installed to isolate the work area. The operating facility representative will notify their personnel that they may be affected by the de-energizing.

The first-line supervisor overseeing the work will sign out sufficient safety locks and tags to completely isolate the system.
The operating facility representative and first-line supervisor will verify that each valve or gate is in the “off,” “neutral” or closed position.

Once the vale or gate is in the “off,” “neutral” or closed position, the operating facility representative will place a safety lock on the valve, or gate first. Then the first-line supervisor will apply a safety lock to each valve or gate. The first-line supervisor will also apply a visible warning tag. The tag will contain the name of the first-line supervisor, company, date, and phone number.

Once the first-line supervisor has placed their safety lock(s) and tag(s) on the energy-isolating device, all affected workers will then apply a safety lock and tag to the energy-isolating device. Alternatively, the first-line supervisor may place the key(s) to their equipment safety lock(s) in a safety lock box, place their individual safety lock and tag on the safety lock box and then have each affected worker place their safety lock and tag on the lock box. The required blanks will be placed at this time.

Prior to commencing work, the operating facility representative and first-line supervisor will verify the system, and all piping, hoses, valves, and processes are de-energized, and any stored energy is dissipated or restrained.

Welded valve connections should have the valve handles removed, and the stem tagged “DO NOT OPERATE.” All other valves and isolating devices must be physically prohibited from being operated.

Hydraulic and pneumatic equipment or machinery will be blocked to prevent movement.

Re-Energizing Fluid Processes

When the required work is completed and the system can be returned to service, the first-line supervisor will contact the operating facility representative to notify them of completed work operations.

The first-line supervisor will make a visual inspection of the area to ensure all workers; equipment, tools and materials are removed from the area.

After confirming all workers, equipment, tools and materials are removed from the area, the vales and gates are in the "off," "neutral" or "closed" position, and each worker has removed their safety lock and tag, the first-line supervisor will remove their safety lock and tag from each of the isolating devices.

The management representative will notify the operating facility representative that the system is ready to be energized.

3.26 MASONRY CONSTRUCTION

A limited access zone is required to be in place prior to the construction of any masonry wall as explained in 1926.706(a).

Masonry walls over eight (8) feet in height shall be adequately braced to prevent collapse and remain in place until permanent support is in place.

3.27 MATERIAL HANDLING & STORAGE

All equipment, tools, materials, or apparatuses will be stored, stacked, located, placed, temporarily spotted, or set up for manipulation in such a manner as to render it highly improbable that an incident or injury could occur in the work area. The area will give the direct and obvious impression of a clean and orderly workplace.

All materials shall be handled and used with care and caution to prevent incidents or injuries. All employees shall follow all material handling regulations set forth by any local, state, or federal agency.

3.28 MOLD CONTROL

Necessary steps will be taken to prevent the formation of mold from occurring in the work and storage areas. Mold will occur when there are water and a source of nutrient (i.e. wall board, wood, and/or other building material).

Work will be planned too:

Prevent moisture accumulation

- Double check points where moisture may enter:
    - Doors
    - Windows
    - Flashings and caulking
    - Waterproof membranes (proper lapping at joints) and corners

- Roofing systems and penetrations

Properly store material

- Dry location
- Off the ground
- Loose tarps or sheets to allow air flow.

Have drying equipment readily available

- Fans
- De-humidifiers
- Wet-dry vacuum

If mold is observed notify the safety department so an evaluation of the exposure can be made and an abatement plan developed.

3.29 NIGHT WORK

Summers-Taylor, Inc. shall follow all local, state and federal regulations regarding Night Work.

All employees shall wear high visibility apparel when performing night work. All equipment shall be equipped with lights and retroreflective tape. All traffic control devices shall be retro reflectorized and/or illuminated or both in accordance with the MUTCD guidelines. All flagging stations shall be illuminated if flagging operations are used. Employees shall use extreme caution and safety when working at night.

3.30 PERSONAL PROTECTIVE EQUIPMENT (PPE)

The Summers-Taylor, Inc. PPE program applies to all personnel who enter or perform work at all facilities & construction sites, including employees, subcontractors, temporary workers, and visitors. It covers the selection, use, care, maintenance, training, and enforcement of personal protective equipment required to control hazards that cannot be eliminated through engineering or administrative controls.

Training

Employees shall be trained to know at least the following:

- When PPE is necessary
- What PPE is necessary
- How to properly don, doff, adjust and wear PPE.
- The limitations of PPE
- The proper care, maintenance, useful life and disposal of the PPE
- And standards contained in OSHA 29 CFR 1910.132(f) & 1926.21 and 1910.95 for Occupational Noise

Hazard Assessments

A hazard assessment will be conducted in order to determine what hazards are present or are likely to be present that would necessitate the use of PPE. The hazard assessment consists of a walkthrough survey of all work areas and duties to determine sources of hazards to employees that could not be controlled by means of engineering or administrative approaches.

Employee-Owned Equipment

Any employee who wishes to provide his/her own PPE must have the PPE approved by the program administrator prior to use. No employee shall wear their own PPE if it does not meet requirements identified in the appropriate OSHA standards. Where employees provide their own protective equipment, the employer will be responsible to assure its adequacy, including proper maintenance and sanitation of such equipment.

Head Protection

Hard hats will be worn as required; in addition, the following rules apply:

- Hard hats will be worn in accordance with manufacturer requirements.
- Company name displayed on hardhat.
- Hardhats that have a manufacturer date of five (5) years or greater will not be used.
- Meets ANSI Z89.1 requirements.

Eye and Face Protection

Eye and Face Protection Safety glasses with side-shields that meet ANSI Z87 criteria are to be worn as required. Workers with prescription glasses must meet ANSI Z87 requirements or will be required to wear over the glasses (OTG) safety eyewear.

In addition, the following eye/face protective equipment must be used when performing the following work activities:

Activity	Safety Equipment
Welding	Welding Hood and Safety Glasses
Burning	Burning Goggles with Shield
Abrasive grinding or cutting	Face Shield and Safety Glasses
Drilling	Goggles or Face Shield and Safety Glasses
Reaming	Face Shield and Safety Glasses
Chemical Handling	Goggles and Face Shield
Molten Materials	Goggles and Face Shield
Corrosive Liquids	Goggles and Face Shield
Concrete Pumping	Safety Glasses

Foot Protection

Sturdy work boots that are in good condition must be worn (heel and sole will not show excessive wear). Tennis shoes, sandals, or other street-type shoes are not allowed, even if they

have steel toes.

High Visibility Attire

Every worker, visitor, and vendor will wear high-visibility attire as required. ANSI reflectivity requirements must be complied with when working in traffic and/or at night.

Work Attire

Employees working in the field or shop (other than office) are required to wear attire that ensures safety and functionality. This includes:

- Shirts: Long-sleeved or short-sleeved work shirts.
- High-visibility vests or shirts as required.
- Pants: Durable work pants or jeans.
- Footwear: Protective footwear that is in good condition and provides adequate protection.
- Safety Gear: Hard hats, safety glasses, gloves, and other personal protective equipment (PPE) as required by the Safety Department and the job site.
- Weather-Appropriate Clothing: Jackets, rain gear, or other weather-appropriate clothing to ensure comfort and safety in various conditions.

Worksite and Project-Specific Requirements

Specific clothing requirements may vary depending on the worksite and project. Employees must adhere to any additional guidelines provided by the project manager or site foreman.

All employees must comply with the PPE requirements specific to their worksite. This includes wearing any additional protective gear mandated by the project. If questions arise, please contact the Safety Department or the Site Foreman.

Some projects may require specialized attire, such as flame-resistant clothing or additional high-visibility gear. Employees will be informed of these requirements prior to starting work on the site.

All clothing should be clean, neat, and free of offensive language or graphics. Employees are expected to maintain a professional appearance that reflects the company's values and standards. The company reserves the right to address any attire that.

Respiratory Protection

Refer to the **Respiratory Protection Program** later in this manual.

Hearing Protection

Approved hearing protection will be worn as specified in posted areas and while working with or around high-noise level producing machines, tools, or equipment. A good rule to follow is:

- When you must raise your voice to be heard, you need hearing protection.

- Exposure to impulsive or impact noise will not exceed 140dB noise level.

Employees will receive training on hearing protection upon hire and annually thereafter. Employees will be enrolled into a hearing conservation program if employees are exposed to noise at or above 85 decibels (dB) averaged over 8 working hours, or an 8-hour time-weighted average (TWA).

Duration per day, hours	Sound Level dBA Slow Response
8	90
6	92
4	95
3	97
2	100
1 ½	102
1	105
½	110
¼ or less	115

Impulsive or Impact Noise	
Equipment or Tools	**Sound Level Created**
Pneumatic Chip Hammer	103-113
Jack Hammer	102-1111
Concrete Joint Cutter	99-102
Chop Saw	88-102
Stud Welder	101
Bulldozer	93-95
Crane	90-96
Hammer	87-95
Backhoe	84-93
Above hearing exposure based on an eight (8) hour exposure	

Hand Protection

Hand and finger protection shall be specifically addressed in the development of project specific safety plans and daily task plans. The appropriate protection shall be identified. Each crew's competent person shall assist in recommending the correct glove for the task. Workers shall wear the appropriate gloves to prevent hand and finger injuries.

Additional Protections

Summers-Taylor Inc. may require workers to wear additional personal protective equipment to reduce the likelihood of work-related injury or illness.

3.31 PILE DRIVING

No pile driving work will occur until verification that no underground utilities exist in those areas where piles will be driven or existing underground utility locations have been verified by hand or vacuum excavation.

Fall protection will be required when personnel climb leads over six feet.

Hose connections will be secured by at least ¼ inch diameter chain or equivalent wire rope to prevent whipping.

Stirrups will be provided on sheet piling to aid in guiding the pile in place.

For pile other than sheet piles, a driving head or bonnet is required to bell the head.

Stop blocks are required for the leads to prevent the hammer from striking the head block.

A designated signalman will be assigned to give direction to the winchmen.

Pits or excavations that piles are being driven into shall be properly braced, sheet-piled or sloped and barricades shall be provided.

When pile tops are cut, operations will stop for a distance not less than the longest pile that is to be cut.

When driving jacked piles, the pits will be provided with ladders and curbs to prevent materials from falling into the pit.

3.32 PRECAST CONCRETE

A competent person is required who will be responsible for the inspection of all rigging and hardware and the supervision of the rigging of precise concrete members.

Unloading of Precast Concrete Members

Prior to precast concrete members being unloaded, the following will occur:

- Inspect all rigging and hardware.
- Ensure load is stable before releasing binders.
- Ensure precast member is properly rigged.

Placement of Precast Concrete Members

Precast members are not to be moved over other workers.

Worker(s) involved in the setting or connecting of precast members will strictly adhere to the 100% fall protection policy with no exception.

No worker(s) will use their hands to reach under a precast member to adjust a shim or bearing pad.

Post-tensioning Operations

No worker(s) except those essential to the post-tensioning operation, will be permitted behind the jack. Warning signs and barriers will be erected to limit access to the post-tensioning area during post-tensioning operations.

3.33 PRESUMMED ASBESTOS CONTAINING MATERIAL (PACM)

If presumed asbestos-containing material (PACM) is found during performance of the work, the following procedure will be followed:

- Workers observing PACM shall immediately stop work.
- Warn other workers nearby of the disturbed or damaged material.
- Contact your immediate supervisor.
- Barricade the immediate area around the disturbed or damaged material.
- Do not enter the barricaded area until the area is deemed safe by Summers-Taylor, Inc. or subcontractor.

Summers-Taylor, Inc. Project Team will investigate and develop an action plan that may include testing PACM and/or abating suspected material.

ONLY A LICENSED CONTRACTOR WILL REPAIR AND CLEANUP DISTURBED OR DAMAGED MATERIAL

3.34 PROJECT ENTRY AND EXIT

As required, all Summers-Taylor, Inc. employees, subcontractors, delivery personnel, etc. shall check in and out at the job site trailer with Project Management/Lead Supervision when entering and exiting required. Employees, subcontractors, delivery personnel, etc. shall locate Project Management/Lead Supervision to enter and exit the project when there is no job site trailer on site.

3.35 RESPIRATORY PROTECTION

Purpose

The purpose of this respirator program is to establish standard operating procedures to ensure the protection of all employees from respiratory hazards through proper selection and use of respirators. This program applies to all employees who are required to wear respirators during normal operations, non-routine tasks, or emergency operations such as a spill of hazardous substance.

Responsibilities

Program Administrator Duties

This company has designated the Safety Director as the program administrator to oversee the respiratory protection program. Duties of the program administrator include:

- Identify work areas, processes or tasks that require workers to wear respirators, and evaluate hazards.
- Selection of respiratory protection options.
- Monitoring respirator uses to ensure that respirators are used in accordance with their Certifications.
- Arranging for and/or conducting training.
- Ensuring proper storage and maintenance of respiratory protection equipment.
- Conducting or arranging for fit testing.
- Administering the medical surveillance program.
- Maintaining records required by the program.
- Evaluating the program.
- Updating the written program as needed.

Supervisor's Duties

Supervisors are responsible for ensuring that the respiratory protection program is implemented in their particular areas. In addition to being knowledgeable about the program requirements for their own protection, supervisors must also ensure that the program is understood and followed by the employees under their charge. Duties of the supervisors include:

- Ensuring that employees under their supervision (including new hires) have received appropriate training, fit testing, and medical evaluation.
- Ensuring the availability of appropriate respirators and accessories.
- Being aware of tasks requiring the use of respiratory protection.
- Enforcing the proper use of respiratory protection when necessary.
- Ensuring that respirators are properly cleaned, maintained, and stored according to the respiratory protection plan.
- Ensuring that respirators fit well and do not cause discomfort.
- Continually monitoring work areas and operations to identify respiratory hazards.
- Coordinating with the program administrator on how to address respiratory hazards or other concerns regarding the program.

Employee Duties

Each employee has the responsibility to wear his or her respirator when and where required and in the manner in which they were trained. Employees must also:

- Care for and maintain their respirators as instructed and store them in a clean and sanitary Location.
- Inform their supervisor if the respirator no longer fits well and request a new one that fits properly.
- Inform their supervisor or the program administrator of any respiratory hazards that they may not be adequately addressed in the workplace and of any other concerns that they have regarding the program.

Program Elements

Medical Evaluation

Employees who are required to wear respirators must be medically evaluated prior to being fit tested and before being permitted to wear a respirator on the job. Employees are not permitted to wear respirators until a physician has determined that they are medically able to do so.

Medical evaluations shall be confidential, during work hours, convenient, understandable, and employees shall be given a chance to discuss the results with the physician or other healthcare professionals.

A licensed health care professional will provide medical evaluations to employees. Medical evaluation procedures are as follows:

- The medical evaluation will be conducted using medical questionnaire provided in appendix C of 29CFR1910.134 Respiratory Protection Standard. The safety department will provide a copy of this questionnaire to all employees requiring medical evaluation.
- To the extent feasible, the company will assist employees who are unable to read the questionnaire. If this is not possible the employee will be sent directly to the health care professional for assistance and medical evaluation.
- All affected employees will be given a copy of the medical questionnaire to fill out, along with a stamped and addressed envelope for mailing the questionnaire to the health care professional. Employees will be permitted to fill out the questionnaire, have medical evaluation and fit tested on company time.
- All employees will be allowed the opportunity to speak with the health care professionals about their medical evaluation if they so request.
- The program administrator will provide health care professionals with a copy of this program and a copy of OSHA's respiratory protection standard. For each employee requiring evaluation, the health care professional will be provided with information regarding the employees' work are or job title, proposed respirator type and weight, length of time required to wear the respirator, expected physical workload, *light, moderate, or heavy), potential temperature and humidity extremes, and any additional protective clothing required.

- After an employee has received clearance to wear a respirator, additional medical evaluations will be provided under any of the following circumstances:

    - the employee reports signs and/or symptoms related to their ability to use a respirator, such as shortness of breath, dizziness, chest pain, or wheezing.
    - the health care professional or supervisor informs the program administrator that the employees need to be reevaluated.
    - information from this program including observations made during fit testing and program evaluation, indicates a need for reevaluations; and
    - a change occurs in workplace conditions that may result in an increased physiological burden on the employee.

NOTE: *All examinations and questionnaires are to remain confidential between the employee and the physician*

Fit Testing Procedures

The safety department will ensure that fit tests will be administered using an OSHA acceptable qualitative fit test (QLFT) or quantitative fit test (QNFT) protocol. The OSHA-accepted QLFT and QFNT protocols are contained in Appendix A of the Respiratory Standard (1910.134).

Summers-Taylor, Inc. requires employees to be fit tested at the following times and with the same make, model, style, and size of respirator that they will be using.

- Before being allowed to wear any respirator with a tight-fitting face piece and at least annually thereafter.
- Whenever a different respirator face piece (size, style, model, or make) is used.
- Whenever visual observations of changes in the employee's physical condition that could affect respirator fit. Such conditions include, but are not limited to, facial scarring, dental changes, cosmetic surgery, or an obvious change in body weight; and
- Upon employee notification that the fit of the respirator is unacceptable.

The safety department has a record of the fit tests administered to employees including:

- The name or identity of the employee was tested.
- Type of fit test performed.
- Specific make, model, style, and size of the respirator tested.
- Date of test; and
- The pass/fail results.

General Use Procedures

Employees will use their respirators under conditions specified by this program, and in accordance with the training they receive on the use of each model. In addition, the respirator shall not be used in a manner for which it is not certified by NIOSH or its manufacturer.

All employees shall conduct user seal checks each time that they wear their respirator. Employees shall use either the positive or negative pressure check (depending on which tests work best for them) specified in Appendix B-1 of the Respiratory Protection standard.

All employees shall be permitted to leave the work area to maintain their respirator for the following reasons: to clean their respirator if the respirator is impeding their ability to work, change filters or cartridges, replace parts, or to inspect respirator if it stops functioning as intended. Employees should notify their supervisor before leaving the area.

Employees are not permitted to wear tight fitting respirators if they have any condition, such as facial hair, facial scars, eyeglasses, or missing dentures that prevent them from achieving a good seal. Employees are not permitted to wear headphones, jewelry, or other articles that may interfere with the face piece to face seal.

Immediately Dangerous to Life and Health (IDLH) atmospheres
For all Immediately Dangerous to Life and Health (IDLH) atmospheres, the supervisor shall ensure that:

- One or more employees are located outside the IDLH atmosphere.
- Visual, voice or signal line communication is maintained between the employees in the IDLH atmosphere and those located outside.
- The employees located outside the IDLH atmosphere are trained and equipped to provide effective emergency rescue.
- A company designate is notified before the employees located outside the IDLH atmosphere enter the IDLH atmosphere to provide emergency rescue.
- The company designate provides necessary assistance appropriate to the situation.
- Employees located outside the IDLH atmospheres are equipped with proper equipment for rescuing employees who enter these hazardous atmospheres.

Respirator Malfunction

For any malfunction of a respirator (e.g., such as a breakthrough, facepiece leakage, or improperly working valve), the respirator wearer should inform his or her supervisor that the respirator no longer functions as intended and go to a safe area to maintain the respirator. The supervisor must ensure that the employee receives the needed parts to repair the respirator or is provided with a new respirator.

Maintenance and Care Procedures

In order to ensure continuing protection from the respirators being used, it is necessary to establish and implement proper maintenance and care procedures and schedules. A lax attitude toward maintenance and care will negate successful selection and fit because the devices will not deliver the assumed protection unless they are kept in good working order.

Cleaning & Disinfecting

Our company provides each respirator user with a respirator that is clean, sanitary, and in good working order. We ensure that respirators are cleaned and disinfected before and after each use or as often as necessary to be maintained in a sanitary condition.

Respirators are cleaned and disinfected:

- As often as necessary when issued for the exclusive use of one employee;
- Before being work by different individuals
- After each use for emergency use respirators; and
- After each use for respirators used for fit testing and training.

Storage

Storage of respirators must be done properly to ensure that the equipment is protected and not subject to environmental conditions that may cause deterioration. We ensure that respirators are stored to protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, and damaging chemicals. They are packed and stored in sealed airtight container in accordance with any applicable manufacturer's instructions.

Emergency respirators are stored:

- To be accessible to work area
- In compartments marked as such
- In accordance with manufacturer recommendations

Respirator Inspection

All respirators will be inspected after each use and at least monthly. Should any defects be noted, the respirators will be taken to the program administrator or supervisor. Damaged respirators will be either repaired or replaced.

Respirators shall be inspected as follows:

- All respirators used in routine situations shall be inspected before each use and during cleaning.
- All respirators maintained for use in emergency situations shall be inspected at least monthly and in accordance with manufacturers recommendations, and shall be checked for proper function before and after each use; and
- Emergency escape-only respirators shall be inspected before being carried into the workplace for use.

Respirator inspections shall include the following:

- A check of respirator function, tightness of connections, and the condition of the various parts including, but not limited to, the face piece, head straps, valves, connecting tube, and cartridges, canisters, or filters; and
- Check elastomeric parts for pliability and signs of deterioration.

The following checklist will be used when inspecting respirators:

- Face piece:
    - cracks, tears, or holes
    - facemask distortion
    - cracked or loose lenses/face shield
- Head straps
    - breaks or tears
    - broken buckles
- Valves:
    - residue or dirt
    - cracks or tears in valve material
- Filters/cartridges:
    - approval designation
    - gaskets
    - cracks or dents in housing
    - proper cartridge for hazard

Training

The safety department will be responsible for providing training to respirator users or their supervisors on the contents of the respiratory protection program and their responsibilities under it, and on the OSHA Respirator Protection Standard. Workers will be trained prior to using a respirator in the workplace. Supervisors will also be trained prior to using a respirator in the workplace or prior to supervision of employees that must wear respirators.

The training will cover the following topics:

- The Summers-Taylor, Inc. Respiratory Protection Program
- The OSHA Respiratory Protection Standard
- Respiratory hazards encountered and their health effects
- Proper selection and use of respirators
- Limitations of respirators
- Respirator donning and user seal (fit) checks.
- Fit Testing
- Emergency procedures
- Maintenance and storage

- Medical signs and symptoms limiting the effective use of respirators.

Employees will be retrained annually or as needed (e.g., if they need to use a different respirator). Employees must demonstrate their understanding of the topics covered in the training utilizing a hands-on exercise and a written test. Respirator training will be documented by the Program Administrator, and the documentation will include the type, model, and size or respirator for which each employee has been trained and fit tested.

Program Evaluation

The program administrator will conduct periodic evaluations of the workplace to ensure that the provisions of this program are being implemented. The evaluation will include regular consultations with employees who use respirators and their supervisors, site inspections, air monitoring and reviewing records.

Identified problems will be noted and addressed by the Program Administrator. These findings will be reported to management, and the report will list plans to correct deficiencies in the respirator program and target dates for the implementations of those corrections.

Documentation and Recordkeeping

A written copy of this program and the OSHA standard is kept in the Program Administrators office and is available to all employees who wish to review it.

Also maintained in the Program Administrator's office are copies of training and fit test records. These records will be updated as new employees are trained, as existing employees receive refresher training, and as new fit tests are conducted.

The program administrator will also maintain copies of the medical records for all employees covered under the respirator program. The completed medical questionnaire and the physician's documented findings are confidential and will remain at Ballad Health Services. The company will only retain the physician's written recommendation regarding each employee's ability to wear a respirator.

3.36 RIGGING

Riggers must be properly trained and qualified to rig material or equipment lifted by a crane. Training will include:

- Riggers will receive formal and/or on-the-job instruction.
- How to safely rig loads
- Inspection of rigging equipment

Rigging shall include capacity tag/stamps.

Hooks will be equipped with safety latches. Safety latches on hooks that are disabled and/or shakeout ("pelican") hooks will not be used unless in compliance with Subpart R 29CFR1926.

All rigging equipment and spreader bars shall have a manufacturer's tag or otherwise professionally engineered noting its safe working load. Rigging equipment and spreader bars not tagged or marked will be immediately removed from the project.

All rigging will be inspected daily before each shift by the qualified rigger.

3.37 SCAFFOLDING & AERIAL LIFTS

All scaffolding will meet the requirements established in Subpart L of OSHA 29 CFR 1926.

Each contractor using scaffolds must designate a scaffolding competent person to direct and supervise the erection and dismantling of all scaffolding on this project. The competent person will sign and attach one of the following color-coded scaffold tags to each scaffold:

- Green Tag: Scaffolding complete and ready for use.
- Red Tag: Scaffolding incomplete and not for use.
- Yellow Tag: Scaffolding is usable, but personal fall protection is required.

Scaffolding will be inspected daily by the competent person prior to use and sign the tag at the time of inspection. The **Daily Scaffold Safety Inspection** Report (**Appendix G**) will be used to document these inspections.

Training

Workers required to work from scaffolding will receive training in the following:

- Nature of any known hazards, such as electrical, fall or falling objects.
- Correct method of erecting, maintaining, and disassembling fall protection systems.
- Falling object protection system.
- Proper handling of equipment or material on the scaffold.
- Maximum load-carrying capacity of the scaffold.
- Any other pertinent requirements about the scaffold.
- Scaffold Tagging system.
- Access & Egress

During erection and dismantling of scaffolding, if deviation from the fall protection procedure is required, the Environmental Health and Safety Director and Account Manager will be required to approve.

Records must be maintained of scaffolding training and be available for review.

Prior to erection, all scaffolding components shall be inspected for defects, and any damaged components will not be used.

Scaffolding will be erected on a firm foundation/footing. Scaffold poles, legs, posts, framed and uprights will bear on metal base plates, and mud sills.

Scaffold legs, poles, posts, frames and uprights will be pinned or locked to prevent uplift.

No scaffold will be enclosed unless a qualified engineer designs and approves the attachment to the adjacent structure.

Scaffold platforms will be constructed with no space between the platform components. The space between the platform components and the scaffold uprights will not exceed one inch.

Because of special circumstances such as building a scaffold around a pipe, the space opening between the scaffold and the object/structure cannot exceed 9 ½ inches.

Scaffold planks shall extend past the horizontal support a minimum of six inches and not more than 12 inches unless cleated or restrained by hooks.

Scaffold plank will not be overlapped unless:

- Overlap occurs at a horizontal support.
- The minimum planking overlap is 12 inches.

Scaffold plank will be only scaffolding-grade planking.

Ladders or stairs must be used to access any scaffold platform that is more than two feet above or below the point of access. End frames of tubular welded scaffold can be used as a ladder if the following criteria are used:

- Specifically designed and constructed as ladder rungs.
- Rung length of at least eight inches.
- Spacing between rungs not to exceed 16 ¾ inches.
- A walk-through frame or gate is provided for access at each landing.

No worker will climb up or down a scaffold using cross bracing.

Workers working below scaffolding will also be protected from falling objects. Scaffolds will be equipped with toe plates, screening, debris netting, catch platforms, or a canopy structure.

Mobile Elevating Work Platforms / Aerial Lifts

Employees will be trained in inspection and operation of the lift prior to use.

Fall protection including harness and lanyard will be always required while inside the basket. If a unit is equipped with outriggers they shall be extended and shored depending on surface of operating area. The unit shall be inspected prior to use for discrepancies. Any discrepancies found shall be reported to the responsible supervisor.

No MEWP shall be modified unless written approval by the manufacturer.

MEWPs shall not be operated within 20 of a powerline in any direction.

The gates of aerial lifts will be properly engaged whenever the lift is in use.

Travel in aerial lifts is prohibited while platforms are elevated.

Aerial lifts shall not be used as material hoists unless the load is contained within the basket and meets the lift's rated capacity. The lift shall not be modified for hoisting material unless the manufacturer approves it in writing.

Suspended Scaffolds

A competent person will evaluate suspended scaffolding and anchorages and suspension lines before each use.

Workers working from suspended scaffolding will wear a full body harness attached to an independent vertical lifeline.

When welding is required from swing stage scaffolding, the scaffold will be grounded and suspension ropes protected.

Mobile Scaffolds

Interior or dry wall scaffolding (Perry or Baker type scaffolding) greater than one section high will be equipped with outriggers. All other built-up scaffolding will follow the four to one rule.

Wheels on mobile scaffolding will be locked in place when workers are working from it (self-propelling is prohibited).
Scissor lifts shall be used in accordance with 1926.452 (w).

Mast-Climbing Work Platforms (ANSI A92.9-1993)

An erection and dismantling plan shall be provided by the manufacturer and submitted prior to mobilization.

Fall protection shall be provided when wall openings exist on the façade of the building in front of the work platform, the distance to the façade exceeds that permitted, the platform passes as in-set in the façade or it extends past the façade.

In accordance with ANSI requirements, unless the scaffold is equipped with an emergency decent device an evacuation plan from the platform must be developed.

Building access is prohibited underneath scaffold platforms.

System specific training must be provided for all workers who will be on the work platform.

3.38 SILICA

Before beginning any work where a Silica hazard may be present, a Silica assessment must be completed to ensure exposure controls are in place. Please refer to the OSHA Table 1 Specified Exposure Control Methods When Working with Materials Containing Crystalline Silica and if available the manufacturers SDS of working materials.

Workers that perform any of the following work tasks must be protected from exposure to silica dust unless historical data or real time monitoring indicates it isn't necessary:

- Chipping, hammering, or mixing of refractory.
- Abrasive blasting using silica sand as a blasting medium.
- Abrasive blasting of concrete regardless of the type of medium
- Sawing, hammering, drilling, grinding, or chipping of concrete or masonry products.
- Chipping, hammering, or mixing concrete grout.
- Demolition of concrete masonry structures
- Dry sweeping or compressed air blowing of concrete, masonry, rock or sand dust.

Workers performing any of the above tasks who could be exposed to silica dust shall receive training OSHA 29 CFR 1910.1053 & 1926.1153 regarding health hazards associated with silica.

Acceptable engineering controls will be used when exposure to silica is likely. Examples of acceptable engineering controls are:

- Substitute blasting medium for less hazardous material with less than 1% silica.
- Maintain an effective dust control program.
- Use internal blast-cleaning machines.
- Wet saw
- Use water through the drill stem.

When acceptable engineering controls cannot be used, workers will wear respiratory protection, protective coveralls and gloves. Respirators equipped with NIOSH approval for the exposure level. Respirators must have at least a N95, R95, or P95 filter, per NIOSH recommendations

Note: The common dust mask is not permitted for silica protection.

Workers will also comply with these hygiene requirements when exposed to silica:

- No eating, drinking or using tobacco products in areas where silica dust is present.
- Always wash hands and face before eating, drinking or using tobacco products after working around silica dust.

First-line supervisors should consult their safety representative or the Summers-Taylor, Inc. Environmental Health and Safety Department for further information or assistance.

3.39 STEEL ERECTION

No steel erection will begin without a written Notice to Commence Steel Erection.

Workers engaged in steel erection activities including but not limited to connecting, decking and bolt up are not exempt from Summers-Taylor, Inc. 100% fall protection requirements when working from 15 feet or greater.

Perimeter safety cable installed by steel erector will remain in place unless otherwise instructed by Summers-Taylor, Inc.

Training records indicating workers have received required steel erection training will be

maintained on the project and available for review by Summers-Taylor, Inc., Environmental Health and Safety.

All steel deliveries will be coordinated with the Summers-Taylor, Inc. Project Team to ensure maintenance of traffic around the project is maintained.

Design criteria for any multi-lift device that may be used on this project will be available on the project for review by the Summers-Taylor, Inc., Environmental Health and Safety department.

Work will be planned so that no load will be swung over the public, other workers or occupied structures. Exceptions must be reviewed and approved by Summers-Taylor, Inc.

During bolt-up activities all steps will be taken to protect workers below from falling objects.

- Excavations and trenches four feet or greater in depth will be evaluated for atmospheric hazards to determine whether permit required confined space requirements apply.
- A registered professional engineer must design all excavations over 20 feet in depth.

3.40 TEMPORARY BARRICADES

Temporary barricades will be erected to warn or protect workers whenever hazards or processes such as those listed below are encountered on this project. This list includes, but is not limited to the following:

- Floor or wall openings
- Exposure to vehicular traffic
- Working above other workers
- Low light work areas
- Open excavations/trenches
- Unguarded equipment
- Startup operations and testing of equipment/systems Overhead loads
- Process hazards such as systems, etc.
- Closed stairwells

When barricading is required, the following guidelines should be followed:

- Yellow “Caution” tape is used to limit the passage of workers through the barricaded area. This barricading should only be used to protect workers from hazards that are not severe or the potential for severe injury or death is unlikely.
- Red “Danger” tape is used to prohibit the passage of unauthorized workers through the barricaded area. This barricading should be used to protect workers from hazards that have the potential to cause serious injury or death. Danger tape is not to be used if the hazards cannot be eliminated or removed during a single work shift.
- Rigid barricades are used when protection is required beyond a work shift or longer. It will be used to protect workers from unguarded moving machinery/equipment, vehicle or heavy equipment traffic and low light conditions. Rigid barricading will consist of standard guardrail, temporary chain link fencing, tube and coupler scaffold members with blue construction fencing attached and concrete barriers.
- Radiation “Danger” Tape is used to identify x-raying operations and warn of a radiation hazard in the area.

When using “Caution” or “Danger” tape barricading:

- Install at least six feet from excavations, trenches, holes, leading edges and floor or wall

openings.
- Install a standard “Caution” or “Danger” sign that identifies the hazard at regular intervals around the barricaded area and the name and contact information that erected the barricade.
- Do not impede stairs, walkways, driveways or aisles without notifying Summers-Taylor, Inc. and identifying alternative passageways.

When using rigid barricading:
- Support construction fencing to prevent tipping or sagging.
- Install pins in concrete barriers whenever there is a danger of vehicles or heavy equipment striking them.
- Provide adequate access to the work area.

When work is complete and the hazard is eliminated, remove the barricading immediately.

Workers who enter a “Danger” or “Radiation” barricaded work area without authorization will be subject to disciplinary action up to and including termination.

3.41 VEHICLE & FLEET SAFETY PROGRAM

Overview

As a driver of a company vehicle the authorized driver has been given certain privileges, he/she assumes the duty of obeying all motor vehicle laws, always maintaining the vehicle properly and otherwise following the procedures outlined in the following policy. All drivers must review and sign the **MVR Authorization Request Form** (**Appendix E**) before any operation of a company vehicle is permitted.

Vehicle Fleet Purpose

Company vehicles are provided to support business activities and are to be used only by qualified and authorized employees. They are not to be considered a part of an employee’s compensation and must not be used as an inducement for employment. In all cases, these vehicles are to be operated in strict compliance with the motor vehicle laws of the jurisdiction in which they are driven and with the utmost regard for their care and cost-efficient use.

Note: *Company vehicles may not be used for business/personal activities outside of the company's business, including for the transportation of people or goods, unless authorized by an executive officer for business purposes.*

Driver Licensing

Company drivers and anyone authorized to drive company vehicles must have a valid driver's license issued in the state of residence for the class of vehicle being operated and must be able to drive the vehicle. Obtaining a driver's license will be at the employee’s personal expense.

Driver Qualifications

<u>The driver’s qualifications are as follows:</u>

- Authorized employee of the company
- Must be at least 21 years of age.
- Have experience in the class of vehicle operating.
- Must be licensing requirements and have a current valid driver's license.
- Will not qualify for a company vehicle if during the last 36 months the driver has had any of the following experiences:
    - Been convicted of a felony.
    - Been convicted of sale handling or use of drugs.
    - Been convicted of an alcohol or drug related offense while driving.
    - Have had driver's license suspended or revoked.
    - Been convicted of three or more speeding violations or one or more serious violations.
    - Been involved in two or more chargeable accidents.

Review of Motor Vehicle Record

State motor vehicle records (MVR's) will be used as the source for verifying driver history. MVRs will be obtained and reviewed at least annually. Driving privileges may be withdrawn or suspended and/or the company vehicles removed for any authorized driver not meeting the above requirements. In addition, appropriate disciplinary action may be taken.

Driver Qualification Standard for Prospective Employees

Examples of MVR's that may be unacceptable for prospective drivers:

- Conviction for driving while impaired (DWI/DUI), within the last five years.
- Conviction for death by vehicle, hit and run, racing, careless and reckless driving, implied consent, speeding tickets of 75 miles an hour or more, or more than 15 miles an hour above the legal limit.
- Conviction of more than three ordinary traffic violations, or more than one chargeable accident combined with two or more violations in the past 36 months period.
- Suspension or revocation of driver's license within the last three years for extended periods of time or multiple suspensions.

Management will evaluate driver performance during annual performance reviews and after vehicular accidents. One step in this process is to develop standards for reviewing drivers' violation records. These standards should distinguish between serious and non-serious violations.

The following are examples of serious and non-serious violations:

Serious

- Leaving the scene of an accident
- Reckless careless driving
- Speeding more than 15 miles an hour over the posted speed limit
- Driving under the influence or impaired by alcohol or drugs
- Use of vehicle and drug trafficking reckless homicide soliciting or unlawful use of

weapon
- Driving under suspension or revocation
- Fleeing a police officer
- Vehicle theft
- Chemical Test Refusal
- Improper or illegal lane change
- Following too close

Less Serious

- Stop sign and traffic signal offenses.
- Speeding less than 15 mph over limit
- Improper turn failure to signal or failure to yield and improper backing.
- Operating a defective vehicle
- Failure to observe a funeral procession or crossing a fire hose.
- Seat belt violation
- Registration overweight or permit violation.
- Distracted driving violation

As stated before, MVR's will be examined prior to the start of employment and at least annually thereafter. Any job offer made to an employee candidate for a position with driving duties shall be contingent upon an MVR meeting the required standards. Continued employment in a position with driving duties also requires an MVR meeting the standards outlined below.

The standards for MVR's are as follows:

1. All operators must have a valid driver's license for at least three years.
2. No new driver will be hired with a "questionable" or "high risk" MVR. MVR's will be graded based on the driver **MVR Review Form** on **"Appendix F"** as minimum requirements.
3. Driving records must remain "acceptable" or "marginal" for continued employment in positions with driving duties.

Driver Responsibilities

Each driver is responsible for the actual possession, care, and use of the company vehicle in their possession. Therefore, a driver's responsibilities include, but are not limited to the following:

- Operation of the vehicle in a manner consistent with responsible practices that avoid abuse, theft, neglect, and disrespect to the equipment.
- Obey all traffic laws.
- The use of seatbelts and shoulder harness is mandatory for drivers and passengers.
- Daily pre-trip inspections are mandatory. Vehicles should not be operated with any defect that would prevent safe operation.

- Drivers are responsible for keeping vehicles maintained and in safe working order.
- Adhering to manufacturers' recommendations regarding service maintenance and inspection
- Attention to and practice safe driving techniques (drive defensively) and adherence to current safety requirements.
- Reporting the occurrence of moving violations.
- Drivers must not operate vehicles under the influence of drugs alcohol and over the counter medications that can affect reaction times and cause drowsiness.
- Drivers must ensure loads are properly tarped and/or adequately secure.

Note: *failure to comply with any of these responsibilities will result in disciplinary action.*

Safety and GPS Monitoring

All company vehicles are subject to GPS monitoring. The GPS monitoring system detects location, total miles, speeding, moderate speeding, severe speeding, harsh acceleration, harsh braking, and hard turns. Every month a driver score is calculated based on individual driver habits throughout the month. Safety will monitor the driver's scores to ensure safe driving and investigate any scores too low. If it is determined that a low score is due to driver performance, driver refresher training will be conducted after normal working hours.

Note: *Tampering or attempting disconnect/alter the vehicles GPS and/or dash camera (if installed) will result in disciplinary action and possible loss of driving privileges.*

Personal Use

Company vehicles are provided for business purposes only. The privilege of the use of the vehicle may be withdrawn at any time without notice by the company.

<u>The following rules apply to the use of all company vehicles:</u>

- Only authorized employees may drive.
- Drivers shall follow all traffic laws.
- Company vehicles are not to be driven while under the influence of alcohol or any controlled substance.
- Possession transportation or consumption of alcohol or illegal drugs by anyone in the vehicle is not allowed.
- Possession or transportation of firearms in company vehicles is prohibited.
- The driver and all passengers must wear available personal restraints or seat belts.
- Report any accident immediately to the police and your supervisor.

Note: *Violation of the above rules will result in disciplinary action from removal of driving privileges to discharge.*

Maintenance of Company Vehicles

Authorized drivers are required to perform a daily pre-trip inspection of their company vehicle. Vehicles should not be operated with any defects that would inhibit safe operation during current and foreseeable weather and lighting conditions. Preventative maintenance such as regular oil changes, lubrication, tire pressure, air pressure and fluid checks largely determines whether you

will have a reliable, safe vehicle to drive and support work activities. It is the responsibility of the authorized driver to keep the company vehicle clean in order that a favorable image is presented to our customers and the public. Violation of this maintenance policy will result in disciplinary action from removal of driving privileges to discharge.

Traffic Violations

Fines for parking or moving violations are the personal responsibility of the assigned operator. Summers-Tailor Inc will not condone nor excuse ignorance of traffic citations that result in court summons being directed to itself as the owner of the vehicle.

Each driver is required to report all moving violations including DUI/DWI's to the office within 24 hours. This requirement applies to violations involving the use of any vehicle (company, personal, or other) while on company business. Failure to report violations will result in appropriate disciplinary action.

Note: *Please be aware that traffic violations incurred during non-business hours will affect your driving status as well and are subject to review.*

Mobile Phone Use and Texting

There shall be no mobile phone usage by an CMV/CDL drivers while operating a company vehicle unless that vehicle or the driver's phone is equipped with a "hands-free" operating system. The commercial driver should pull over at a safe location and then return the phone call if necessary. There shall be NO TEXTING while driving a vehicle (Fleet or CMV); the driver shall read or create texts only when stopped and parked in a safe location for them and the vehicle.

Accidents Involving Company Vehicles

All accidents, whether at fault or not, must be reported to your supervisor or the safety team.

<u>In the event of an accident:</u>

- Call the police. The accident report that is filed by the police officer is particularly important to resolving potential issues.
- Do not admit negligence or liability.
- Do not attempt settlement, regardless of how minor.
- Get the name, address, and phone number of all parties involved and any witnesses if possible.
- Exchanged vehicle identification insurance company name and policy numbers with all parties involved.
- Take pictures of the scene if possible.
- Complete the accident report form.
- Turn all the information into the safety department within 24 hours.

Post Accident Reviews

Our safety team reviews all accidents and incidents that occur during the operation of a vehicle on company business. If we determine the driver was involved in a preventable accident, this driver may be subject to termination or, be required to participate in the following:

- Defensive Driving Training, or re-training
- In-cab coaching and counseling
- Camera or telematics monitoring of driver behavior
- Temporary Suspension

Thefts

In the event of a theft of a company vehicle notify the police immediately. Contact the main office and/or the Safety Department.

Preventable Accidents

A preventable accident is defined as any accident involving a company vehicle that results in property damage and/or personal injury, and in which the driver is question failed to take every **reasonable precaution** to prevent the accident.

Classification of preventable accidents:

- Following too close
- Driving too fast for conditions
- Failure to observe clearances.
- Failure to obey signs.
- Improper turns
- Failure to observe signals from other drivers.
- Failure to reduce speed.
- Improper parking
- Improper passing
- Improper backing
- Failure to yield.
- Failure to obey traffic signals or directions.
- Exceeding the posted speed limit
- Driving While Intoxicated (DWI) or Driving Under the Influence (DUI) or similar charges.

Hours of Service

The hours of service (HOS) rules refer to the maximum amount of time drivers are permitted to be on duty, including driving time, and specifies number and length of rest periods, to help ensure that drivers stay awake and alert. The company will comply with HOS regulations found in 49 CFR 395.

Hazardous Materials Shipping

All drivers transporting hazardous materials will have been properly trained. Drivers are responsible for ensuring that the applicable markings/placards that are required are placed on the CMV based on jurisdictional requirements. Drivers will ensure that the proper shipping papers or manifests are properly prepared, stored and retained for the required times based on jurisdictional and company requirements.

Training

Under no circumstances may a driver operate a company motor vehicle until they have successfully completed the initial training on motor vehicle safety. Training can include reading material, watching a presentation, and driving with a supervisor as a ride-a-long. The supervisor of that individual is responsible for conducting training if they assign a driver to driving duties.

Through training we ensure that motor vehicle drivers are knowledgeable in practices such as daily tasks, impaired, fatigued, aggressive, distracted, and defensive driving; seat belt use; vehicle inspection; security and motor vehicle incident procedures; cargo securement; handling hazardous materials and spills; and safety features and emergency equipment.

Driver training must include the following:

- Pre-trip safety inspection
- Use of vehicle controls and equipment, including operation of emergency equipment
- Operation of vehicles, including turning, backing, braking, parking, handling, and vehicle characteristics including those that affect vehicle stability, such as effects of braking and curves, effects of speed on vehicle control, dangers associated with maneuvering through curves, dangers associated with weather or road conditions that a driver may experience (e.g., blizzards, mountainous terrain, high winds), and high center of gravity
- Procedures for maneuvering tunnels, bridges, and railroad crossings
- Requirements pertaining to attendance of vehicles, parking, smoking, routing, and incident reporting.
- Loading and unloading of materials, including:
    - Compatibility and segregation of cargo in a mixed load
    - Package handling methods.
    - Load securement
- Defensive driving included:
    - Proper attitude
    - Visual habits
    - Proper decision making
    - Road rage
    - Distracted driving
- Fatigue management
- Hazardous Materials in compliance with jurisdictional requirements

After a driver has completed the training program, management will determine whether the driver can safely operate a motor vehicle, and the driver will be notified.

3.42 WELDING & CUTTING

When burning or welding using compressed gases, flame arrestors will be installed on the regulator side of the oxygen and gas hoses.

Arc Welding and Cutting

As required, all arc welding and cutting operations shall be shielded by non-combustible or flame-proof screens.

The ground for the welding circuit shall be mechanically strong and electrically adequate for the service required and should be attached directly to the work piece.

When possible, electrode and ground cables shall be supported to prevent obstructions interfering with the safe passage of workers.

Cables with worn insulation may not be used.

Welding current return circuits or grounds must carry their current without hot or sparking contacts and without passage of current through equipment or structures. Specifically, welding current must not be allowed to pass through any of the following materials:

- Acetylene, fuel gas, oxygen or other compressed gas cylinders.
- Tanks or containers used for gasoline, oil or other flammable or combustible material.
- Pipes carrying compressed air, steam, gases or flammable or combustible liquids.
- Conduits carrying electrical conductors.
- Chains, wire ropes, metal hand railings or ladders, machines, shafts, bearings, or weighing scales.

Gas Welding, Cutting and Soldering

A suitable cylinder cart, chain or other secure non-flammable fastening shall be used to keep cylinders from being knocked over while in use.

Cylinders of oxygen shall not be stored next to cylinder of acetylene or other fuel gas. They shall be separated by 20 feet or by a non-combustible barrier, with a ½ hour fire rating.

Oxygen cylinders, cylinder valves, couplings, regulators, hose and apparatus shall be kept free of oil and grease. Oil or grease in the presence of oxygen under pressure may ignite violently.

Empty cylinders shall have their valves closed. Valve protection caps shall always be in place except when cylinders are in use or connected for use.

When moving cylinders by crane or derrick, a cradle, boat or suitable platform shall be used. Slings, hooks or electric magnets shall not be used. Valve protection caps shall always be in place.

Compressed gas cylinders, empty or full, shall be secured in an upright position at all times except, if necessary, for short periods of time while cylinders are actually being moved. Empty cylinders should be marked EMPTY or MT for identification.

Regulators and hoses shall be frequently inspected for leaks, worn places and loose connections.

Regulators shall also be checked for operable gauges.

Approved flash arresters shall be provided in both oxygen and acetylene hoses at the regulator connection.

Training

Employees shall be trained when involved in Gas / Arc Welding & Cutting activities. They shall be trained:

- In the safe use of fuel gas
- What to do with unattended machines and electrode holders
- Operations around water
- Shielding arc welding
- The standards in OSHA 29 CFR 1910.252 - .254

4.0 QUALITY OF LIFE REQUIREMENTS

4.1 SANITATION

Toilet Facilities

Adequate chemical toilets are available on the jobsite for the use of workers.

Chemical toilets shall be serviced often enough to prevent overflowing, creation of an unsanitary condition, a health hazard or nuisance, and shall be maintained in good repair to prevent leakage of the contents to the surrounding ground or onto the floor or other portions of the structure.

Drinking Water

Summers-Taylor and our subcontractors will provide fresh clean drinking water daily to their employees. Drinking water will be dispensed in containers with a tight sealing lid and labeled as Drinking Water. Drinking water containers are to be cleaned daily.

Adequate cups will be made available at each drinking water container. Cups will be stored in a durable clean dispenser. A trash can or other type of receptacle will be provided to collect used cups. Contractors are responsible for cleaning up around the water container area.

The dipping of cups into the container, storing soda cans and bottles, drinking directly from the spout, placing of hands or material into drinking water is prohibited.

4.2 LIGHTING

Construction areas, plants & facilities, ramps, runways, corridors, offices, shops and storage areas will be illuminated as required in 1926.56.

4.3 HEAT & COLD PRECAUTIONS

Heat Stress Precautions

Hydration: Drink plenty of water throughout the day. Avoid caffeinated or alcoholic beverages as they can dehydrate you.

Clothing: Wear lightweight, light-colored, and loose-fitting clothing to help keep cool.

Breaks: Take frequent breaks in shaded or air-conditioned areas to cool down.

Monitoring: Keep an eye on yourself and coworkers for signs of heat illness, such as dizziness, nausea, or heavy sweating.

Cold Stress Precautions

Layering: Wear several layers of loose, insulating clothing. Ensure outer layers are windproof and waterproof.

Breaks: Take breaks in warm areas to prevent prolonged exposure to the cold.

Hydration: Drink warm, non-caffeinated beverages to stay hydrated and warm.

Protect Extremities: Wear hats, gloves, and insulated boots to protect ears, hands, and feet.

Monitoring: Regularly check yourself and coworkers for signs of cold stress, such as shivering, numbness, or confusion.

4.4 INJURY & ILLNESS RECORDKEEPING

Written records of work-related fatalities, injuries, and illnesses will be kept per 1904 Subpart C. All recordable illnesses or injuries are recorded on the OSHA 300 Log within seven calendar days of receiving information that the injury occurred. The OSHA 300A Summary will be signed by a company executive. The annual OSHA 300A summary must be posted in a place visible to employees. The OSHA 300 summary shall be posted from February 1st through April 30th. Recordkeeping forms must be maintained for 5 years.

4.5 RECORDS RETENTION & ACCESS TO MEDICAL RECORDS

Please refer to the company handbook for personnel files. Medical records will be filed separately from employee personnel files kept in the HR department. Medical records will be kept during the period of employment and 30 years after the date of separation which could include exposure, physicals, etc.

Upon, employees will be informed of their rights and the location of records when they first start working, and at least annually thereafter.

All medical records will be retained following local, company, and jurisdictional requirements. Medical records are records concerning the health status of a worker which is made or maintained by a physician, nurse or other health care provider or technician.

Medical records consist of:

- Medical and employment questionnaires or histories
- The results of medical examinations (pre-employment, pre-assignment, periodic, or episodic) and laboratory tests (including chest and other X-ray examinations taken for the purposes of establishing a baseline or detecting occupational illness, and all biological monitoring not defined as an “employee exposure record”).
- Medical opinions, diagnoses, progress notes, and recommendations,
- First aid records
- Descriptions of treatments and prescriptions.

Access

Each worker or designated representative has the right to request access to his/her records. Summers-Taylor, Inc. shall ensure that access is provided at a reasonable time, place, and in a manner. Summers-Taylor, Inc. will provide a copy of the medical records within fifteen (15) working days. The worker may access his/her records by making a request to the human resources manager or safety manager. The medical records will only be released if the worker has given specific written consent.

If the company cannot produce the record within 15 days, the company shall inform the employee of the reason for the delay.

APPENDIX

CONFINED SPACE ENTRY PERMIT

DESCRIPTION

Permit #:_____ **Facility:**_____
Confined Space Supervisor:_____ **Location of Confined Space:**_____
Type: *Non-Permit or Permit* **Type of Confined Space:** *Tank Pipe Manhole Hopper Silo Other:*
Description/Purpose of Entry:_____
Known Hazards:_____
Attendant(s):_____ **Entrant(s):**_____

SPECIAL REQUIREMENTS

(Completed and Reviewed Prior to Entry)

_____*Safety Department Notified*
_____*Adequate Access*
____*Adequate Lighting*
_____*Attendant Required*
_____*Warning Signs Posted at Access*
_____*Ventilation Required*
_____*Authorized Entry Log at Access*
_____*Rescue Equip./Services Available*
_____*Rescue Team Required*
_____*Other:*

____*Hot Work Permit Required*
_____*Fire Extinguisher Available*
_____*Lifelines Required*
_____*Harnesses Required*
_____*Respirators Required (Type:)*
_____*Air Supplied Respirators Required*
_____*Protective Clothing Required*
_____*Communications Equipment*
_____*Continuous Air Monitoring*
_____*Other:*

AIR MONITORING

Atmosphere Checked By: _____
Make: _____ **Model:** _____
Bump Test Complete: *Yes No* **Date:** _____

Contaminants	Permissible Levels	Pre-Entry Check	Time	2nd Check	Time	3rd Check	Time
% Oxygen (O2)	19.5% - 23.5%						
LEL(Comb/Ex)	Less than 10%						
Carbon Monoxide	Less than 35 ppm						
Hydrogen Sulfide	Less than 10 ppm						
Other:							

VERIFICATIONS

Entry Supervisor's Initials

Lockout/Tagout (electrical, mechanical, hydraulic, etc.): _____
Purged, Cleaned, Drained, and Ventilated: _____
Pre-Entry Brief: _____
Pre-Entry Atmospheric Testing: _____

AUTHORIZATION

Entry Supervisor: _____ **Entry Supervisor:** _____ **Date:** _____
Print Sign

HOISTING PERSONNEL PRE-LIFT INSPECTION

FORM DETAILS
Date: _____
Job: _____
Recorded By: _____

JOB INFORMATION
Lift/Job Location: _____
Crane Operator: _____

CRANE INFORMATION
Equipment Number: _____
Crane Make: _____
Crane Model: _____

Pre-Shift Requirements

Equipment pre-shift inspection conducted?	☐ Yes ☐ No
Load chart available and readable?	☐ Yes ☐ No
Equipped with boom angle indicator?	☐ Yes ☐ No
Equipped with boom hoist limiting device?	☐ Yes ☐ No
Equipped with anti-two-block?	☐ Yes ☐ No

Additional Requirements

System other than load hoist brake to regulate lowering speed of personnel? ☐ Yes ☐ No
Telescoping boom equipped with extension-length indicator or measuring marks? ☐ Yes ☐ No

PRE-LIFT CHECKLIST

- ☐ Conduct pre-lift meeting (Required)
- ☐ Equipment operator present (Required)
- ☐ Signal person present (If used)
- ☐ Employees to be hoisted present (Required)
- ☐ Person responsible for task present (Required)

TRIAL LIFT & INSPECTION
Reason for Trial Lift: _____

Requirements
Trial lift performed with unoccupied platform loaded to ≥ 2× anticipated lift weight? ☐
Platform moved sequentially to each intended location? ☐

PROOF TESTING

- ☐ Platform and rigging, proof-tested to 125% of rated capacity?
- ☐ Competent person verified platform and rigging passed test?

Competent Person: _____
Signature: _____

HOISTING PERSONNEL NEAR POWER LINES

Powerlines present within 50 ft of hoisting operations? ☐ Yes ☐ No

Powerline voltage verified? ☐ Yes ☐ No

Clearance Requirements

No hoisting within 20 ft of lines ≤ 350 kV

No hoisting within 50 ft of lines > 350 kV

FALL PROTECTION

- ☐ Employees equipped with harness + lanyard attached to structural member inside platform?

OTHER INFORMATION

- ☐ Weather conditions appropriate?
- ☐ Crane level within 1% grade?
- ☐ Crane pad adequate for full outrigger/stabilizer extension?
- ☐ Crane fueled appropriately

AUTHORIZATION

Have all conditions been properly met?

☐ Yes ☐ No, Do NOT lift until all conditions are met.

Crane Operator: _____

Signature: _____

Site Supervisor: _____

Signature : _____

Signal Personnel : _____

Signature : _____

Hoisted Personnel : _____

Signature : _____

Responsable Person : _____

Signature: _____

COMPANY EMERGENCY CONTACTS

Jesse Jacobsen — Safety Manager: (423) 791-5158

Andy Greene — Field Safety Manager: (423) 483-5422

HEAVY EQUIPMENT PRE-OPERATIONAL INSPECTION

Appendix C

ST #: _____ Make: _____

Hour Meter: _____ Model: _____

Odometer / Date: _____ Location: _____

General Equipment Condition

☐ New ☐ Good ☐ Fair ☐ Poor ☐ Unacceptable — Explain in Comments

WALK-AROUND VISUAL INSPECTION

		OK	Service/Repair	Unacceptable	N/A
1	Cleanliness				
2	Fluid Leaks				
3	Broken Glass				
4	Body or Structural Damage				
5	Tires/Tracks - Inflated/Adjusted Properly				
6	Fire Extinguisher Equipped and Charged				
7	Mirrors				
8	Mud Flaps				
9	Wipers, Lights, Reflectors				
10	Ladders/Steps and Grab Rails				
11	Decals Installed and Legible				
12	Loose Parts or Missing Covers				
13	Belts and Hoses Serviceable				
14	Exhaust Systems				
15	Hydraulic Lines and Cylinders				
16	Batteries and Cables				
17	Broken Welds				
18	Other:				

Fluid Levels

1	Engine Oil				
2	Transmission Fluid				
3	Hydraulic Fluid				
4	Coolant				
5	Fuel				
6	Lubricants				

Attachments

1	Cutting Edges/Teeth/Pins/Bushings, etc.				
2	Buckets / Blades				

Cab Operational Check

		OK	Service/Repair	Unacceptable	N/A
1	Cleanliness				
2	Seat and Seat Belts				
3	Gauges and Instruments				
4	Controls and Levers				
5	Parking Brake				
6	Service Brake				
7	Limit or Safety Switches				
8	Emergency Shutdown				
9	Steering System				
10	Heater and AC System				
11	Horn, Warning Alarms / Devices				
12	Clutches				
13	Drives				
14	Transmission				
15	Engine				
16	Hydraulic Mechanisms				
17	Electric Wiring				
18	Charging System				
19	Is equipment in safe operating condition?				
20	Is operator's manual in the equipment cab?				
21	Other:				

SIGNATURES

Operator Signature: _____Date: _____

Foreman / Supervisor: _____Date: _____

Comments:_____

_____

PRE-JOB BRIEFING / JSA FORM

Appendix D

Jobsite / Project Name: _____ Activity / Task: _____

Work Area: _____ Date: _____

Steps of Activity / Task	Related Hazards	Safe Plan	Resources / Tools / Equipment

PRE-JOB VERIFICATION

Have Lessons Learned, Operating Experiences, or incidents related to this activity been reviewed with all staff and craft? Yes ☐ No ☐

Have all staff and craft been briefed on site expectations and the JSA, and documented for audit? Yes ☐ No ☐

SUPERVISOR

Print Name: _____Signature: _____Date: _____

PRE-JOB BRIEFING / JSA FORM

Appendix D

PRE-JOB REVIEW CHECKLIST		
(Check all that apply. A new Pre-Job is required if job scope or conditions change.)		
REQUIRED PERMITS	**Hazards**	**Safe Plan**
☐ Confined Space	☐ Overhead Utilities	☐ Power de-energization required ☐ Insulation blankets ☐ Wire watcher
☐ Critical Lift		☐ Required clearance distance: _____ ft ☐ Safe work zone marked
☐ Hot Work	☐ Crane or Lifting Equipment	☐ Flagger ☐ Tag lines ☐ Rigging Card ☐ Crane Coordinator
☐ Lockout / Tagout / Clearance		☐ Lift calculation ☐ Barricaded area ☐ Equipment inspected
☐ Excavation		☐ Personnel protected
☐ Lockout, Tagout (LOTO)	☐ Underground Utilities	☐ Reviewed as-builts ☐ Subsurface survey ☐ Dig permit
Required PPE		☐ Clearance distance: _____ ft ☐ Safe work zone marked
☐ Hard Hat, Type 1 Class E	☐ Electrical	☐ LOTO / Try-Out ☐ Permit required ☐ Confirm de-energized
☐ Ear Plugs/Earmuffs		☐ Reviewed electrical safety procedures
Eye Protection:	☐ Excavations	☐ Permit ☐ Inspected ☐ Sloping/shoring ☐ Barricades
☐ Safety Glasses/Z-87-1 w/Side Shields		☐ Access/egress ☐ Water protection ☐ Competent person sign-off
☐ Face Shield	☐ Fire Hazard	☐ Hot Work Permit ☐ Fire extinguishers ☐ Fire watch
☐ Welding Hood		☐ Adjacent area protected ☐ Remove flammables
Hand Protection: Hand/Arm	☐ Vehicular Traffic or Heavy Equipment	☐ Barricades ☐ Cones ☐ Signs ☐ Flagger ☐ Lane closure ☐ Spotter
☐ Cut Level ANSI 2 or above		communication verified ☐ Approved traffic plan
☐ General work gloves	☐ Noise >85dB	☐ Ear plugs ☐ Earmuffs ☐ Both
☐ ANSI cut Level 7 w/ A5 Forearm Sleeve protector	☐ Hand & Power Tools:	☐ Inspect condition ☐ GFCI ☐ PPE for each tool
Foot Protection:		☐ Review operator manuals ☐ Guarding OK
☐ Metatarsal Guards	☐ Hand Hazards	List sharp tools/materials: _____
☐ Safety To Boots (above Ankle)		☐ PPE gloves ☐ Protected sharp edges
☐ Rubber Boots	☐ Manual Lifting	☐ Proper lifting technique ☐ Identify heavy items
☐ Rubber Boot Covers		☐ Hand protection ☐ Back support belts
☐ Dielectric Footwear	☐ Ladders	☐ Inspect condition ☐ Quarterly inspection
Respiratory Protection:		☐ Tied off ☐ Proper angle ☐ Ladder safety reviewed
☐ Air Purifying Respirator		☐ 300 lb. Type 1A ☐ Correct ladder in use
☐ Supplied Air Respirator	☐ Scaffolds	☐ Inspect condition ☐ Tags in place ☐ Secured
☐ N95 Mask		☐ Toe boards ☐ Adequate footings ☐ Proper storage
Special Clothing:		☐ Competent person inspection
☐ Tyvek Suit	☐ Slips, Trips / Falls	☐ Remove hazards ☐ Mark hazards
☐ Poly Coated Tyvek Suit		☐ Store tools/materials ☐ Secure cords ☐ Clean work zone
☐ Fire Resistant Coveralls	☐ Pinch Points	List pinch points: _____
☐ Safety Vest Class 2		☐ Protect hands/body
☐ Safety Vest Class 3	☐ Working w/ Chemicals	List chemicals/hazards: _____
Fall Protection:		☐ Review SDS ☐ Proper containers/labels ☐ Identify PPE
☐ Harness	☐ Asbestos or Lead Paint Potential	☐ Controls in place ☐ Monitoring ☐ PPE
☐ Double Lanyard Required		
☐ Anchorage Point Available	☐ Heat Stress Potential	☐ Monitoring ☐ Hydration ☐ Cool-down periods
☐ Retractable Device Needed		☐ Sunscreen ☐ Symptoms reviewed
☐ Horizontal Lifeline System	☐ Cold Stress Potential	☐ Proper clothing ☐ Wind chill < 32°F
☐ Fall Clearance Dist. Checked		☐ Warm-up periods ☐ Symptoms reviewed
☐ Fall Rescue/Retrieval Plan	☐ Environmental	☐ Air emissions ☐ Water discharge ☐ Waste mgmt.
Additional PPE:		☐ Pollution prevention ☐ Waste minimization
☐	☐ Natural or Site Hazards	☐ Weather ☐ Terrain ☐ Adjacent operations
☐		☐ Biological hazards ☐ Animals/insects
☐	☐ Adjacent Work / Processes	☐ Notification ☐ Coordination
☐		☐ Barriers required
	☐ Barricades / Covers	☐ Caution barricade tape required ☐ Danger barricade tape required
		☐ Rigid railing required ☐ Covers over opening ☐ Warning signs required
	Additional Information:	

PRE-JOB BRIEFING / JSA FORM

Appendix D

Date: _____

	Print Name	Signature
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MVR AUTHORIZATION REQUEST FORM

FORM DETAILS
Date: _____
Division / Department: _____
Requested By: _____

AUTHORIZATION TO OBTAIN MOTOR VEHICLE RECORDS
Employee Name: _____
Legal First Name, Last Name
Driver's License Number: _____
Driver's License State: _____
Date of Birth: _____
MM/DD/YYYY

Statement of Understanding
I understand that driving a company vehicle (or my own vehicle, as required) is a condition of employment. I agree to allow Summers-Taylor, Inc. to check my driving record prior to hire and periodically thereafter. I agree to report immediately any license suspensions, serious accidents, offenses, or any condition affecting my ability to drive a Summers-Taylor, Inc. vehicle (or my own vehicle, if required). I understand this information will be used for employment purposes only and will not be shared without my written consent. I acknowledge that I have read and will abide by the Fleet Safety Program.

Signature: _____

INSURANCE AFFIDAVIT
Employee acknowledges they will not drive a company-insured vehicle for the delivery of passengers or goods via a Transportation Network Platform (TNP), unless doing so for Summers-Taylor, Inc. business.
Examples include: Doordash, Lyft, Uber, Uber Eats, etc.

Signature: _____

MVR REVIEW WORKSHEET

DRIVER INFORMATION

Driver Name: _____ Reviewer: _____

RISK / VIOLATION ASSESSMENT

Risk/Violation		Points Assessed:	Sub-Totals
Age:	29 and Older	0	
	22-25	2	
	18-21	5	
Employment:	5yrs	0	
	2-5yrs	2	
	2yrs	3	
MVR Violation:	1	3	
(Moving)	2	4	
	3	8	
Accidents:	1	2	
	2	3	
	3	5	
	4	8	
Restricted License		8	
DWI/DUI		15	
Suspended/Revoked License		15	
Risk Assessment		Total	

POINT CALCULATION RATING

4–5: Acceptable (Best)
6–7: Marginal (Average)
8–10: Questionable (Voluntary — Requires Review with Employee)
11–14: Probation (Requires Review with Employee)
15+: High Risk (Unacceptable for Hire / Suspension of Driving Privileges / Disciplinary Action up to and including Termination / Review)

***Note**: The MVR Review criteria serve as a guideline. Management discretion may be applied when appropriate. Any exceptions for questionable MVRs require written approval and rationale from the Safety Director or designated company officials.*

SIGNATURES

Driver Acknowledgment

I confirm that my driving record was reviewed with me on this date. I understand the company MVR Program, the review process, and any corrective actions that apply.

Driver Signature: _____Date: _____

Reviewer Confirmation

I confirm that I conducted an MVR review on this date and reviewed any applicable corrective actions.

Reviewer Signature: _____Date: _____

SCAFFOLD INSPECTION

GENERAL INFORMATION

Inspection Date: _____
Job: _____
Location of Scaffold: _____
Inspector: _____
Recorded By: _____
Notes: _____
Summary: _____

SCAFFOLDS — GENERAL INSPECTION

All abutted planks resting on separate support surfaces?	Yes ☐ No ☐
All brace connections secured?	Yes ☐ No ☐
Casters locked during scaffold use?	Yes ☐ No ☐
Footings support ≥ 4× maximum intended load without settling?	Yes ☐ No ☐
Frames secured by braces providing lateral support?	Yes ☐ No ☐
Guardrails installed between 39"–45"?	Yes ☐ No ☐
Guardrails installed on all open sides and ends?	Yes ☐ No ☐
Planks overlapped over supports?	Yes ☐ No ☐
Platforms at least 18" wide?	Yes ☐ No ☐
Platforms extend ≥ 6" over supports or are restrained?	Yes ☐ No ☐
Platforms < 18" wide protected by guardrails or PFAS?	Yes ☐ No ☐
Scaffolds/components loaded within rated capacities?	Yes ☐ No ☐
Scaffolds erected on firm foundations?	Yes ☐ No ☐
Scaffolds stabilized to prevent tipping during movement?	Yes ☐ No ☐
Casters pinned to frames or adjustment screws?	Yes ☐ No ☐
Frames joined with coupling pins or equivalent?	Yes ☐ No ☐
Frames secured by braces providing lateral support?	Yes ☐ No ☐
Scaffold kept free from debris?	Yes ☐ No ☐
Platform surfaces visible and free of paint/opaque coverings?	Yes ☐ No ☐
Ties installed at each end and ≤ 30 ft intervals?	Yes ☐ No ☐
Toe boards at least 3½" high?	Yes ☐ No ☐
Unprotected sides < 14" from working surface?	Yes ☐ No ☐
Clearance requirements from power lines met?	Yes ☐ No ☐
Braces function to automatically square/align frames?	Yes ☐ No ☐

FRAME SCAFFOLDS — DETAILED REQUIREMENTS

First vertical tie installed at ≤ 4× minimum base width?	Yes ☐ No ☐
General public adequately protected?	Yes ☐ No ☐
Scaffold constructed/loaded per competent person design?	Yes ☐ No ☐
Scaffold inspected by competent person?	Yes ☐ No ☐
Cross braces not used as access?	Yes ☐ No ☐
Ladders positioned to avoid tipping scaffold?	Yes ☐ No ☐

Occupied scaffolds not moved?	Yes ☐ No ☐
Slippery conditions corrected?	Yes ☐ No ☐
Ties installed at horizontal member supporting inner/outer legs?	Yes ☐ No ☐
Toe boards installed?	Yes ☐ No ☐
Vertical ties repeated ≤ 20 ft (≤ 3 ft wide)?	Yes ☐ No ☐
Vertical ties repeated ≤ 26 ft (> 3 ft wide)?	Yes ☐ No ☐
Base plates secured to mudsills (if used)?	Yes ☐ No ☐
Scaffold rests on mudsills if footing not firm?	Yes ☐ No ☐
Safe access for platforms > 2 ft above/below access point?	Yes ☐ No ☐
Guardrail system capable of 200 lb force?	Yes ☐ No ☐
Bottom rung of ladder < 24" above supporting surface?	Yes ☐ No ☐
Gap between last plank and upright acceptable?	Yes ☐ No ☐
Platform fully planked with < 1" between planks/uprights?	Yes ☐ No ☐
Scaffold structure plumb and braced to prevent sway/displacement?	Yes ☐ No ☐

MOBILE SCAFFOLDS

Force applied near base when moving scaffold?	Yes ☐ No ☐
Screens installed where needed to protect workers?	Yes ☐ No ☐
Platforms > 10 ft long do not extend > 18" over support?	Yes ☐ No ☐
Mixed-manufacturer components approved by competent person?	Yes ☐ No ☐
Scaffolds not meeting 4:1 base-to-height ratio secured with ties?	Yes ☐ No ☐
Frames locked together where uplift is possible?	Yes ☐ No ☐

INCIDENT REPORT

INCIDENT INFORMATION
Job / Project: _____
Date & Time of Report: _____
Date & Time of Incident: _____
Reported By: _____
Phone Number: _____

INCIDENT DESCRIPTION
Provide a clear, factual description of the incident.

_____
_____
_____
_____
_____
_____
_____
_____

CASE CONTACTS
Person in Charge: _____
Phone Number: _____
Person Most Familiar with Incident: _____
Phone Number: _____

INCIDENT LOCATION
Location Description: _____
Address: _____
City, State, Zip: _____

DAMAGE / INJURY DETAILS
What is the Damage or Injury?

_____
_____
_____
_____

Estimated Cost: _____
Actual Cost: _____

SAFETY WRITE-UP

MAIN INFORMATION
Job / Project: _____
Date & Time: _____

EMPLOYEE INFORMATION
Employee Name: _____
Employee Supervisor: _____

WRITE-UP DESCRIPTION
Provide a clear description of the unsafe act, behavior, or violation.

_____
_____
_____
_____
_____

WARNING NOTICE
Reason (Circle One): Unsafe Act Unsafe Behavior
Type (Circle One): Verbal 1st Written 2nd Written Final Notice

SIGNATURES
Employee Signature: _____
Employee Notes: _____
_____

Supervisor Signature: _____
Supervisor Notes: _____
_____

Lock-Out, Tag-Out Permit

Appendix J

Energy Sources : (Circle One)	Electrical	STI	Gas	Pneumatic (Air)	Hydraulic (oil)	Gravity	Steam	Wind	Rotating

Equipment Description/Common Name:			
Manufacture:		Location of Equipment:	
Equipment LOTO performed By:		Date:	

Yes	No	Procedural Steps (If there are any questions concerning this procedure see your Senior Technician or the EHS Representative). Complete all steps and power sources that apply.
☐	☐	**1. NOTIFICATION OF AFFECTED EMPLOYEES**: Affected employees who use or work near the equipment have been notified that it is being shut down. In addition to this lockout procedure, the Authorized Employee must be aware of any additional safety requirements when dealing with this type of equipment. If there are any questions, see your Senior Technician or EHS Representative before proceeding.
☐	☐	**2. ALL SOURCES OF ENERGY HAVE BEEN IDENTIFIED** above*, SOURCES OF STORED ENERGY (including their location) are: _____
☐	☐	**3. DEACTIVATION OF ENERGY SOURCES & APPLICATION OF ENERGY CONTROL DEVICES**: The equipment is deactivated by switching "off" the power switch located at _____ Test equipment used to determine absence of voltage, PPE Present, Test equipment has been tested, location of test points for testing the absence of voltage identified _____
☐	☐	**ELECTRICAL POWER** (at _____ V) to the equipment is controlled at _____ using the following energy control devices _____ Apply safety grounds _____
☐	☐	**PNEUMATIC/HYDRAULIC/STEAM POWER** to the equipment is controlled at _____ using the following energy control devices _____
☐	☐	**GRAVITATIONAL ENERGY/COOLING WATER/GAS** is controlled by _____ using the following energy control devices _____
☐	☐	**4. VERIFICATION OF LOCKOUT/TAGOUT**: Energy isolation is verified by attempting to activate _____
☐	☐	TRY-OUT step performed by: _____ (Initial)
☐	☐	**5. SIGN-OFF**: If you have completed all of the previous steps (energy isolation is verified), and checked Yes for each box, please sign your name, fill in the information below, and then proceed with the work: I verify that the above steps have been completed and that I am authorized and trained to perform Lockout Tag-out procedures. _____ _____ _____ *Signature* *Department* *Date*
☐	☐	**6. RE-ENERGIZATION OF EQUIPMENT**: Once work is complete: all equipment parts are replaced; all personnel and tools are cleared; Inspection of work area complete. Contact Resistance test complete per phase: AB_____ AC_____BC_____ tests performed by: _____(Initial)
☐	☐	Each person involved in the work removes their own locks and tags and the last person assures all other personnel are clear and removes the energy control devices.
☐	☐	Energy is reconnected to the machine/system by _____
☐	☐	Control devices are removed from _____
☐	☐	Affected Employees are notified that the equipment is ready for use.

HOT WORK PERMIT

GENERAL INFORMATION

Hot work includes any operation involving open flame or producing heat/sparks, such as welding, cutting, brazing, grinding, soldering, thawing pipe, torch-applied roofing, or chemical welding.
Before beginning work, ensure precautions required by NFPA 51B and ANSI Z49.1 are in place.
A fire extinguisher must be readily available.
***Note**: Seek alternative or safer methods whenever possible.*

PERMIT DETAILS

Hot Work Performed By: ☐ Employee ☐ Contractor Date: _____
Type of Hot Work: _____ Time Started: _____
Work to Be Done: _____ Time Completed: _____

HOT WORK PRECAUTIONS CHECKLIST

General Requirements

- ☐ Available sprinklers, hose streams, and extinguishers are in service and operable.
- ☐ Hot work equipment is in good working condition per manufacturer specifications.
- ☐ Special permission obtained for hot work on metal vessels or piping lined with rubber/plastic.

Requirements Within 35 ft (11 m) of Hot Work

- ☐ Flammable liquids, dust, lint, and oily deposits removed.
- ☐ Explosive atmosphere eliminated.
- ☐ Floors swept clean; trash removed.
- ☐ Combustible floors wet down or covered with fire-resistive/noncombustible materials.
- ☐ Personnel protected from electrical shock when floors are wet.
- ☐ Combustible storage removed or covered with approved welding pads, blankets, curtains, or metal shields.
- ☐ All wall and floor openings covered.
- ☐ Ducts and conveyors that may carry sparks protected, covered, or shut down.

Hot Work on Walls, Ceilings, or Roofs

- ☐ Construction is noncombustible and free of combustible coverings/insulation.
- ☐ Combustible material on opposite side moved away.

Hot Work on Enclosed Equipment

- ☐ Enclosed equipment cleaned of all combustibles.
- ☐ Containers purged of flammable liquids/vapors.
- ☐ Pressurized vessels, piping, and equipment removed from service, isolated, and vented.

Fire Watch & Fire Monitoring

- ☐ Fire watch provided during hot work and for at least 1 hour afterward (including breaks).
- ☐ Fire watch equipped with suitable extinguishers and, where practical, a charged small hose.
- ☐ Fire watch trained in equipment use and alarm procedures.
- ☐ Fire watch provided in adjoining areas (above/below) as needed.
- ☐ Monitoring extended beyond 1 hour per PAI/fire watch. ☐ Yes ☐ No

Name of Person Performing Hot Work: _____
Signature: _____
Permit-Authorizing Individual (PAI) Name: _____
Signature: _____

ELECTRICAL WORK HAZARD ASSESSMENT

JOB INFORMATION
Job / Work Order Number: _____
Job Location / Circuit / Equipment: _____
Description of Work to Be Performed:

1. ENERGIZED WORK REQUIREMENT
Will this task require exposure to energized electrical conductors or circuit parts, or work within an arc flash boundary (including testing/troubleshooting)? ☐ Yes ☐ No

2. SHOCK HAZARD ANALYSIS

Voltage (V) Level (Phase-to-Phase):
☐ Less than 120 V ☐ 120 V ☐ 208 V ☐ 240 V ☐ 277 V ☐ 480 V ☐ Greater than 600 V V
System Type:
☐ Single Phase ☐ 3 Phase
Approach Boundaries:
Limited: _____ inches
Restricted: _____ inches

3. ARC FLASH HAZARD
Has an arc flash analysis been performed on this equipment? ☐ Yes ☐ No
If "Yes":
Arc Flash PPE Category: _____
Arc Flash Boundary: _____ inches
Incident Energy at Working Distance: _____ cal/cm²
If "No":
Using NFPA 70E Arc Flash PPE Category tables:
Arc Flash PPE Category: _____
Arc Flash Boundary: _____ inches

4. DE-ENERGIZATION POSSIBILITY
Can equipment be de-energized, locked, and tagged out prior to task (other than testing/troubleshooting)? ☐ Yes ☐ No
If No, complete the Energized Electrical Work Permit on page 2 of the original document.

5. NON-ELECTRICAL HAZARDS

☐ Falls	☐ Obstructed Egress	☐ Extreme Temperature
☐ Chemical Exposure	☐ Lack of Lighting	☐ Repetitive Motions
☐ Traffic in Public Areas	☐ Radiation Exposure	☐ Confined Space
☐ Falling Objects	☐ Heavy or Repetitive Lifting	☐ Noise
☐ Biological Exposure	☐ Wet or Damp Area	

☐ Other: _____

6. PERSONAL PROTECTIVE EQUIPMENT (PPE) & SAFETY MEASURES

Body Protection

☐ Arc-Rated Shirt & Pants ☐ Cotton Long Sleeve Shirt & Pants

☐ Coveralls ☐ Arc-Rated Rainwear / Jacket

☐ Arc-Rated Flash Suit Jacket & Pants

☐ Arc-Rated Fall Protection Harness

Eye, Face & Head Protection

☐ Safety Glasses ☐ Safety Goggles

☐ Arc-Rated Hardhat ☐ Hardhat Liner

☐ Arc-Rated Face Shield ☐ Arc-Rated Balaclava

☐ Arc-Rated Flash Hood

☐ Hearing Protection (Ear Canal Inserts)

Foot Protection

☐ Closed-Toe Shoes ☐ Leather Work Shoes

Hand & Arm Protection

☐ Heavy-Duty Leather Gloves

☐ Rubber Insulating Gloves with Leather Protectors

☐ Rubber Insulating Gloves Only

☐ Rubber Sleeves

Respiratory Protection

☐ Dust Mask ☐ Air Filtering Respirator

☐ Supplied Air Respirator ☐ SCBA

Tools

☐ Insulated Tools ☐ Meter ☐ Rubber Blankets

Safety Measures

☐ Barricades with Signs ☐ Attendant

Other_____

EMPLOYEE ACKNOWLEDGMENT

Employee Name: _____

Employee Signature: _____

Date: _____

ENERGIZED ELECTRICAL WORK PERMIT

PART I — REQUESTOR INFORMATION

Job / Work Order Number: _____
A. Description of Circuit / Equipment / Job Location
_____
_____
B. Description of Work to Be Performed
_____
_____
C. Justification for Performing Work Energized
Explain why the circuit/equipment cannot be de-energized or deferred until the next scheduled outage.
_____
_____

Requestor Name: _____
Requestor Signature: _____
Date: _____

PART II — ELECTRICALLY QUALIFIED PERSON

A. Job Briefing Confirmation
Evidence of completion of a job briefing, including discussion of all job-related hazards:
_____
_____
B. Safety Feasibility Determination
Do you agree the above-described work can be performed safely? ☐ Yes ☐ No (If "No," return form to requestor.)
Electrically Qualified Person: _____
Date: _____
Electrically Qualified Person: _____
Date: _____

PART III — APPROVAL TO PERFORM ENERGIZED WORK

Approving Supervisor Name: _____
Approving Supervisor Signature: _____
Date: _____

PART IV — DOCUMENTATION OF COMPLETED ENERGIZED WORK

I understand that the energized electrical work described above was completed on:
Date: _____
Administrative Supervisor Name: _____
Administrative Supervisor Signature: _____

VOLUNTARY USE OF RESPIRATOR FORM

EMPLOYEE INFORMATION
Company Name: _____
Project / Location: _____
Employee Name: _____
Job Title: _____
Date: _____

RESPIRATOR TYPE (Check One)

- ☐ Filtering Facepiece (e.g., N95)
- ☐ Half-Mask Elastomeric
- ☐ Full-Face Elastomeric
- ☐ Other: _____

Model / Description: _____
Employee Initials: _____

EMPLOYEE RESPONSIBILITIES
(OSHA Appendix D — Information for Employees Using Respirators When Not Required)
Respirators can provide effective protection when properly selected and worn. Improper use or poor maintenance can create hazards. When using a respirator voluntarily, employees must follow these precautions:

1. Read and follow all manufacturer instructions on use, maintenance, cleaning, care, and limitations.
2. Use only respirators certified by NIOSH for the contaminant of concern. Certification labels indicate the respirator's purpose and protection level.
3. Do not wear a respirator in atmospheres containing contaminants for which it is not designed (e.g., dust respirators do not protect against gases or vapors).
4. Keep track of your respirator to avoid using someone else's equipment.

EMPLOYEE CERTIFICATION
I certify that I have read and understand the information above and that I am voluntarily choosing to use a respirator.
Employee Signature: _____
Date: _____

SUPERVISOR / SAFETY REPRESENTATIVE REVIEW

- ☐ Supervisor provided OSHA Appendix D
- ☐ Respirator type reviewed
- ☐ No mandatory-use hazards identified
- ☐ Medical evaluation required

Supervisor Name: _____
Supervisor Signature: _____
Date: _____

MEETING SIGN-IN SHEET

MEETING INFORMATION

Topic: _____

Description: _____

Instructor: _____

Location: _____

Date / Time: _____

ATTENDANCE RECORD

	Name	Signature
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