State Highway 99 Grand Parkway H&I

Project Management Plan

Chapter 5

Safety and Health Plan

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5 Safety and Health Plan

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Safety Policy:

Grand Parkway Infrastructure (GPI) is committed to creating a workplace that is safe, healthy and injury-free. Our employees are our most valuable assets, and their safety and health is our first priority. Safety is essential to all business functions and is never compromised under any circumstance. Every employee has a responsibility to maintain our work environment including reporting hazards and working toward preventing accidents.

We will provide training, review our procedures, review accidents and maintain the equipment. In the event of an injury, we will actively work to return the employee back to work when medically possible. Our Drug and Alcohol policy will be strictly enforced with no exceptions.

Mission Statement:

Develop intelligent infrastructure that exceeds our customer’s satisfaction, with respect for the environment, to ensure the safety of our people and community, in order to maximize shareholder value, professionally foster our employees, and make a contribution that improves our society.

Safety Statement:

The Safety Department is committed to working with each employee to provide the professional advice and counsel required to help them meet their safety and health objectives. The contents of this plan are not all inclusive – other recommendations issued by the Safety Department should be given the same consideration as any information contained herein.

Safety Objective:

Our project safety objective is zero accidents. GPI wants to send every employee home in the same or better condition that they arrived to work. To achieve this goal we will perform periodic random unannounced safety audits of our crews. Deficiencies will be addressed and when possible immediately corrected. If unable to immediately correct, a follow up visit will be scheduled to ensure the concern has been corrected. All corrections will be documented and the information discovered during the audits will be discussed during regularly scheduled safety meetings.
Orientation to Safety and Health Plan

To assist in understanding of the Safety and Health Plan for the GPI H, I-1 & I-2 project, it is first essential to understand the relationship of Texas Department of Transportation (TxDOT) and GPI. TxDOT and GPI will work together cooperatively throughout the initial development of the project. As TxDOT has contracted with GPI for the initial development including all design and construction of the project, GPI will be in full control of the Safety and Health Plan for construction as it is enclosed here as the Safety and Health Plan.

GPI will oversee the Safety and Health Plan for construction including the safety of GPI forces as well as the safety of construction subcontractors. Subcontractors will operate under a safety plan accepted by GPI meeting all OSHA requirements and consistent with GPI’s Safety and Health Plan for Construction. GPI management will work cooperatively with TxDOT management to insure a Safety and Health Plan meeting all OSHA standards is in use throughout the development of the project.

Should safety related incidents arise involving the general public during the construction term, TxDOT and GPI management will work cooperatively to manage the incident and document and report the appropriate information. The controlling plan will be determined on the involvement of TxDOT or GPI personnel in the incident. Should one or the other have an employee involved, then said groups plan and procedures will control. Should neither party be involved in the incident directly, TxDOT Operation Staff will be notified and TxDOT will control the incident.
5.1 Introduction

Grand Parkway Infrastructure (GPI) is given the responsibility of providing a safe workplace on the project.

The GPI Safety Manager or his designee will provide support and assistance to all field personnel and management in their efforts to achieve a safe and healthy work environment.

The "Safety and Health Plan" outlines requirements for planning and executing work in a manner that minimizes risks to workers, community and property. While this plan addresses most major activities anticipated, it does not address all situations that may arise. OSHA Standards 29 CFR 1910 and 1926 were the regulations used in developing this plan; therefore, it may be necessary to refer to those resources and/or your company’s Safety Plan for further information. GPI will review, evaluate and update the safety and health plan as necessary.

It may be necessary to amend the Safety and Health Plan as the project progresses.

5.1.1 Project Description

The State Highway 99 Grand Parkway H, I-1 and I-2 project is divided into four (4) segments:

Segment H, that includes, the northern part of the project from Interstate 69 to the US 90. We start with connecting to Segment G by building the bridges over U.S. 59.

Segment I-1, that includes the part of the project from US 90 to the Interstate 10. Guided by right-of-way availability.

Segment I-2A, that includes the part of the project from Interstate 10 to the FM 1405. We are building the main lanes within the existing right-of-way and existing lanes, and connecting to I-1 after I-10.

Segment I-2B, that includes, the southern part of the project from FM 1405 to Hwy. 146.

5.1.2 Safety Commitment

The success of the Safety and Health Plan is dependent upon a sincere commitment by all involved Contractors to achieve a safe work environment by identifying, eliminating and reducing the hazards which may result in personal injuries, occupational illness, and equipment and property damage. The Safety and Health Plan is also designed to protect the general public and anyone who may come in contact with, or may be affected by our work.

GPI is responsible for ensuring that all work is performed in a manner that is consistent with the safe work practices and safety policies contained within the Safety and Health Plan.

All GPI workers and workers of other Contractors regardless of position or longevity with the project, who willfully neglect to accept this responsibility or fail to adhere to the rules and regulations set forth in this plan, will be subject to dismissal, or in the case of Contractors, removal from the project.
Safety is a core value that will not be compromised. Prior to beginning work and throughout its duration, work must be planned and evaluated to ensure all tasks will be performed safely, and that any recognized deficiencies are corrected immediately.

A safe and healthy workplace can be achieved if each worker applies the following principles:
1. Take responsibility for personal safety.
2. Watch out for others.
3. Plan work and come prepared.
4. Follow all jobsite safety rules.
5. Report unsafe acts or conditions to a supervisor immediately.
6. Inspect work area and correct hazards before they cause an incident.

5.1.3 Roles and Responsibilities

GPI Management

The management of GPI has a goal of zero incidents for the project. Management also has a responsibility to provide health and safety leadership, and promote and support a safe working environment. Management will support the Safety Manager in the implementation and enforcement of the Safety and Health Plan.

Safety Team Organization
The Safety Manager

According to Section 1.2 of the PMP, the responsibilities of The Safety Manager include:

• Provide leadership to project management team for the safety process
• Coordinate safety training programs
• Create, implement, manage and enforce safety and health plan along with the project management team
• Coordinate the implementation and follow-up of the emergency management process
• Stop work if warranted
• Will be a full time position on-site

Segment Safety Coordinator

The GPI Segment Safety Coordinators (SSC) or designee will be the onsite shift safety representative. The SCC will perform the role of on-site safety representative. The SSC will also be responsible for supporting field supervisors in their implementation and enforcement of safe work practices and promoting a safe and secure environment for all workers and the general public. The Segment Safety Coordinator is responsible for the following:

1. Conducting audits to ensure compliance with the Safety and Health Plan,
2. Ensuring that weekly safety meetings are held with all GPI supervisors, including Contractor supervisors meeting with their employees to discuss safety and health matters, (To be communicated to applicable employees)
3. Conducting monthly segment-wide safety meetings to include all GPI and Contractor employees within the segment,
4. Promoting a safe and secure work environment that has zero tolerance for violence, threats, harassment and intimidation in the workplace,
5. Include field supervision within daily safety assessment,
6. Conducting with field supervision incident and accident investigations, and
7. Conducting Incident and accident review for all incidents that occur on the project.

Safety Trainer

The GPI Safety Trainer will coordinate and conduct safety training as required to the GPI project under the direction of the Safety Manager.
Construction Managers, Segment Managers, Project Managers, Project Engineers, Construction Superintendents and Foreman

Managers and Field Supervisors are responsible for monitoring their direct hire employees and subcontractors to ensure that the work is being performed in a manner consistent with safety policies, procedures and work practices of the company. They are responsible for promoting a safe, healthful and secure work environment for workers and visitors that is free from violence, threats, harassment and intimidation, and protects the general public from harm in connection with jobsite operations. The following items summarize some of the most frequent safety requirements Managers and Field Supervisors are expected to accomplish:

1. Communicate and enforce effective injury and illness prevention practices; e.g. make company Safety and Health Plan available to workers for their reference and review,
2. Consider safety in operational planning,
3. Minimize hazards,
4. Ensure practice and use of personal protective equipment, warning signs, barricades, fire extinguishers, etc. ahead of need,
5. Conduct safety meetings with workers to discuss safety and health matters,
6. Report all incidents to the designated GPI representative immediately,
7. Conduct investigation of all applicable incidents in the work area,
8. Conduct daily inspections of work areas to identify and correct unsafe conditions and unsafe acts,
9. Ensure that all workers are involved in a documented daily Job Hazard Analysis (JHA) (Appendix 5A-5) that covers the hazards unique to their assignment,
10. Ensure that each worker understands the assigned tasks, is provided with the necessary equipment, and follows all safety and health policies, procedures and work practices,
11. Ensure that all crews perform documented daily inspections as required based on scope of work, e.g. heavy equipment, excavations, confined spaces, scaffolds, etc.,
12. Ensure all required permits are completed,
13. All applicable safety-related documentation must be completed and ready for the GPI daily assessment process, and
14. Participate in weekly inspections and meetings to review and assess project practices related to safety.

Personnel

All workers are responsible for planning and completing all work in a safe manner by following all applicable policies, procedures, and safe work practices. The following items summarize some of the most common safety requirements workers are expected to comply with:

1. Report to work mentally and physically capable of performing all assigned duties,
2. Attend and participate in daily Job Hazard Analysis (JHA) sessions,
3. Attend and participate in weekly safety meetings to discuss safety and health matters,
4. Follow safe work practices,
5. Wear all required personal protective equipment at all times,
6. Conduct daily safety inspections of worksite to identify and correct workplace hazards,
7. Take personal responsibility for their own safety and health,
8. Be observant of the safety and health of coworkers and the general public,
9. Promptly report all injuries, illnesses, unsafe conditions, and unsafe acts to a supervisor immediately,
10. Use all equipment in the correct manner and follow all safety and health policies, procedures, and work practices, as directed by supervisor,
11. Ask for instructions or assistance if unable to understand the assigned task
12. Report to work free from the effects of medication, controlled substances, alcohol and complications arising from illness or injury which might impair judgment and/or the ability to perform work safely,
13. Notify a supervisor of any personal medical condition or controlled substances, alcohol or prescribed medication which might impair ability to perform assigned duties, and
14. Report to a supervisor any behavior by another worker that could reasonably indicate that they may not be fit for duty.

Subcontractor Safety Requirements

Subcontractors selected by GPI will be required to provide a Safety and Health Plan to GPI that addresses the scope of work that will be performed on this project. At a minimum, the Subcontractor’s Safety and Health Plan must meet/satisfy all local, state and federal regulations and requirements. GPI will review the submitted Safety and Health Plans for compliance. In addition, the following safety performance requirements will be expected from all Subcontractors:

1. Complete Pre-Activity Hazard Analysis before start of any new activity or major work (Appendix 5A-4).
2. Complete documented daily JHA (Appendix 5A-5) to address specific safety concerns for the tasks the workers are to perform,
3. Hold documented weekly trade-specific Toolbox Safety Meetings for all crews,
4. Designate specific responsibilities to include equipment operators, flaggers, crane operators, qualified signal persons, qualified riggers, qualified mechanics, and assembly/disassembly directors. Reference (Appendix 5A-20,21,22,23) for designation forms.
5. Train crews in safe work practices that address scopes of work; workers should be shown where to work, what to do and how to do it safely. The workers should be instructed in the responsibilities for their personal safety and the safety of their fellow workers. Supervise crews in doing a quality job safely in the minimum practical time; plan work ahead of time so that necessary resources, i.e. equipment, tools, protective devices/systems and personnel protective equipment (PPE) are acquired and made available to the crews before work commences,
6. Provide instruction to each worker and follow up to see that instructions are carried out correctly,
7. Conduct hazard assessments for all high hazard and critical activities,
8. Ensure that materials, tools and equipment are used properly and protected from loss or damage,
9. Stop work to correct hazards that could be an immediate danger to crews, equipment or the public,
10. Be knowledgeable of the safety requirements for their assigned tasks,
11. Be observant for unsafe acts and conditions constantly and correct them immediately,
12. Protect all hazards created or encountered, daily and ongoing, until the hazards have been eliminated or removed,
13. Establish specific safety rules pertinent to the operation and ensure that they are communicated to and understood by all affected workers,
14. Enforce safety rules consistently,
15. Discipline all workers who violate the safety rules,
16. Review facts concerning accidents, approve corrective measures and follow up to ensure correction is accomplished,
17. Prepare accident reports as required on the proper forms for personal injury, incidents and accidents, and

18. Require and enforce that workers report all accidents, injuries and near misses immediately to the supervisor, and in turn report them to the GPI Safety Department immediately.

GPI requires that Subcontractor supervisors and foremen participate in safety inspections of their work areas, and safety meetings with their crews.
5.2 Administrative

5.2.1 Training and Education

Training is one tool we will use to achieve quality, comply with the requirements and incorporate lessons learned. Our comprehensive training program starts upon arrival to the project with a project-specific new worker safety and environmental orientation as well as specialized trainings based on needs.

Environmental training will educate employees to identify environmental resources and on actions to take to avoid, minimize and/or mitigate impacts. Our safety training program will instruct all project personnel, including employees and supervisors, to recognize, avoid and prevent unsafe and hazardous conditions.

5.2.1.1 Pre-Construction Meeting and Safety Orientation

All subcontractors who will be working on the project will be required to attend a Pre-Construction meeting a minimum of 3 days before their scope of work begins. The involved GPI Construction Department, GPI safety department, GPI Environmental, GPI Quality department, and the GPI DBE department may attend to discuss the expectation for the project. The Summary of Safety Requirements will be used to address the safety requirements. The subcontractor’s representative will sign the acknowledgement and the document will be kept on file by the safety department and document control. The involved project manager or his designee will coordinate the meeting (Appendix 5A-24).

All GPI and Subcontractor’s workers are required to attend the Safety and Environmental Orientation prior to working on the project. Owner managed projects, vendors etc. are not required to attend.

Hardhat stickers will be issued to all workers upon completion of the safety orientation. GPI employees will be issued the required PPE during this orientation.

The GPI Construction Manager or Segment Manager or designee will inform all Subcontractors that a Safety Orientation will be required prior to reporting for work and the schedule of when the Safety Orientation is offered (Appendix 5A-2).

(Appendix 5A-2) of this document contains the Safety Orientation.
5.2.1.2 Safety Training

Our philosophy is that safety is everyone’s job and everyone is responsible for reporting unsafe conditions. Based on continuous improvement, our methods guarantee all employees understand and are aware of potential hazards, and understand proper methods for avoiding them. The Health and Safety Plan will be evaluated by reviewing incidents and accidents, near miss reports with the purpose of identifying trends. These trend studies will be distributed to the field where methods to avoid re-occurrence will be discussed during daily JHA meetings with the purpose of safety improvement. Our safety training program will instruct all project personnel, including employees and supervisors, to recognize, avoid and prevent unsafe and hazardous conditions connected with a particular activity; understand safety and health regulations applicable to the work; and never perform a task without receiving the appropriate training. As work progresses, training includes:

1. Pre-construction/pre-task safety meetings prior to starting a new work element
2. Supervisors responsibility awareness classes
3. Daily job hazard analysis (JHA) for workers conducted by foremen
4. Weekly safety meetings with the site management team conducted by the safety manager or his designee
5. Weekly Toolbox safety meetings
6. Monthly project-wide safety meetings and supervisor safety meetings
7. Post-accident reviews, and safety stand-down and lessons learned meetings to build awareness
8. Mobile Training Trailer will be utilized to train crews along the Project right-of-way.

5.2.1.3 Hazard Communications Program

General

A Hazard Communication Program (HCP) has been established to provide information relating to hazardous chemicals, substances and products to be used onsite in compliance with 1910.1200.

The GPI HCP will be available for review to all workers.

Hazard Determination

GPI and Subcontractors will utilize safety data sheets (SDS) obtained from product suppliers to meet the hazard determination requirements.

Labeling

GPI and Subcontractors are responsible for the enforcement of container labeling requirements for the chemicals that they bring onto the jobsite. Labeling guidelines are provided in the Hazardous Materials Management Plan.

All labels will be checked for the:
1. Identity of the material
2. Appropriate hazard warnings for the material
3. Name and address of the responsible party (only if the container is received from the manufacturer, distributor or importer)

GPI and each Subcontractor is responsible for ensuring that all approved portable containers and any storage tanks used in their work area are labeled with the appropriate identity and hazard warnings.

**Safety Data Sheets (SDS)**

GPI and each Subcontractor will be responsible for compiling and maintaining the master SDS file for their company. A copy of each Subcontractor's SDS file is to be maintained and available upon request.

A complete Hazard Communication file of GPI, will be available at office.

GPI and each Subcontractor will obtain safety data sheets from vendors when ordering products and ensure that all new materials introduced to the jobsite are communicated to all affected workers prior to use.

GPI and each Subcontractor is responsible for ensuring that new products are updated on the company’s’ chemical inventory list and the updated chemical inventory as well as the SDS is added to the SDS file prior to the use of the product on the jobsite.

SDS must be available for review during each work shift at jobsite location.

**Multi-Employer Worksites - Informing Subcontractors**

Periodically, workers may potentially be exposed to hazardous chemicals brought on site by GPI or other subcontractors. GPI or Subcontractor bringing the materials onto the site must be able to furnish the SDS.

**Employee Information and Training**

GPI and each Subcontractor is responsible for ensuring that their employees are trained on their company’s Hazard Communication Plan in compliance with 1910.1200.

GPI and Subcontractor will ensure that their employees are trained on the information below:
2. All operations in their work area where hazardous chemicals are present and encountered,
3. Location and availability of the written Hazard Communication Program, the inventory list of hazardous chemicals, and the SDS,
4. Methods and observations that can be used to detect the presence or release of hazardous chemicals in the work area,
5. Physical and health hazards of the chemicals likely to be encountered during their work,
6. Measures the workers must take to lessen or prevent exposure to the chemical, and
7. Details of the Hazard Communication Program including an explanation of the proper labeling requirement for containers and SDS, and how workers can obtain and use hazard information.
Any scope of work involving substances that are designated “Hazardous Materials” by OSHA including Lead or Asbestos will be conducted in compliance with all applicable OSHA regulations.

5.2.2 Meetings

Daily Job Hazard Analysis Meetings

Daily job hazard analysis (JHA) for workers are conducted by foremen. Topics discussed must be task-specific, appropriate and timely.

Weekly Toolbox Safety Meetings

These training sessions will be conducted by the GPI and Subcontractors’ supervisors for their employees. Topics discussed must be trade-specific, appropriate and timely. They will be conducted weekly. All Subcontractors are required to submit a completed sign-in sheet per crew, along with the topics discussed to the GPI Safety Department weekly.

Monthly Segment-wide Safety Meetings

The GPI Segment Safety Coordinators or their designee will conduct a segment-wide safety meetings monthly for all workers on the project. Various safety topics will be discussed. Attendance is mandatory.

Incident and Near Miss Review Meetings

The Segment Management Team may conduct an incident or Near Miss review meeting with applicable groups and/or Subcontractors when unsafe acts or unsafe conditions are observed in the field or an incident occurs. The meeting will be documented by the responsible GPI Safety Coordinator or their designee using the Incident /Near Miss Review Form (Appendix 5A-10). The completed Incident /Near Miss Review Form, the attendance sheet and any other supporting documentation must be provided to the Safety Department Administrator within 24 hours of the meeting’s conclusion.

Emergency Services Quarterly Meeting

Once a quarter, GPI will meet with the Emergency Services (Police, Ambulance and Fire Department) as specified within 4.4.3 of the PMP, to discuss the project and the Emergency Services requirements. This will include the status of construction, Site access, fire suppression notifications and any traffic re-routing in and around the project. Any customized meetings will be identified as needed, based on the outcome of this meeting to discuss any more specific requirements over the next quarter.

5.2.3 Safety Assessment Program

To ensure a safe place of employment, safety assessments will be performed on the project. These assessments can be scheduled or unscheduled, segment or site specific.

Safety Assessment Process
Safety Assessments will be conducted on a as needed basis. The Segment Management Team, consisting of GPI Managers, Safety Department, Superintendents and Foremen are charged with supporting this responsibility. The Segment Safety coordinator will ensure the execution of the safety assessment procedure.

All deficiencies found will be noted on a Safety Assessment sheet along with the name of the individuals responsible for correcting them. Repeat violations will be noted on the sheet (Appendix 5A-3).

Any deficiencies found must be corrected as soon as possible, but not to exceed 24 hours. Serious deficiencies and hazards must be corrected immediately. Deficiencies needing additional time will require authorization by Safety Director to incorporate continued progress notation if extension is allowed.

It is the responsibility of the GPI team members conducting the assessment to ensure that the corrections have been completed and notated on the assessment form.

The completed assessment forms will be sent to the GPI Safety Manager, and may include distribution to other appropriate persons within GPI’s management.

### 5.2.4 Pre-Activity Hazard Analysis (PHA)

GPI and Subcontractor will prepare a Pre-Activity Hazard Analysis before starting any activity or major work (Appendix 5A-4). This document shall be approved by GPI prior to commencing any activity or major work.

A Pre-Activity Hazard Analysis will be updated on an as needed basis if there is any change in means and methods to perform the activities.

The Pre-Activity Hazard Analysis will involve input from field engineers, superintendents and foreman.

Pre-Activity Hazard Analysis for subcontractors must be available for review by GPI and approved prior to commencing the activity.

Pre-Activity Hazard Analysis shall be part of work plans.

The Construction Manager shall be the only person who can dismiss the need for Pre-Activity Hazard Analysis on a particular Job.

### 5.2.5 Job Hazard Analysis (JHA)

Each Contractor will conduct a Job Hazard Analysis for each task to be performed (Appendix 5A-5). This document shall be available for review during the daily assessments.

A Job Hazard Analysis will be conducted at the beginning of each shift and whenever there is a change in the task or in the environmental conditions.

The Job Hazard Analysis will involve input from all members of the crew and will be signed by all members of the crew upon completion.
Job Hazard Analysis for subcontractors must be available for review at any time during the shift.

GPI Self Performance crews will submit the JHA’s daily to the Safety Coordinator.

5.2.6 Reporting of Injuries and Accidents

Reporting

All incidents including worker injury, motor vehicle, general liability, property damage, utility damage and Near Miss events will be reported immediately to the GPI Safety Department and respective Segment Manager. A board will be maintained at each segment field office promoting number of consecutive incident-free days.

Specific individuals along with their contact information are provided in the separate document, Emergency Action Plan.

Worker Injury

The involved Contactor will call 911 or arrange for medical treatment as needed, following their companies injury management procedures.

GPI employees will be taken to a preferred care provider for medical treatment by a supervisor or a member of the Safety Department.

The involved GPI’s supervisor or Segments Safety Coordinator will complete an investigation report and submit it along with all relevant supporting documentation, to the GPI Safety Manager within 24 hours of the incident.

The involved Subcontractor’s supervisor or Subcontractor’s Safety Department will complete an investigation report and submit it along with all relevant supporting documentation, to the GPI Safety Department within 24 hours of the incident.

The supervisor will have the worker complete an employee statement. The supervisor will complete the Supervisor’s Injury Report and forward both reports to the safety department with 24 hours of the Incident (Appendix 5A-6).

Motor Vehicle Incidents (GPI owned vehicles)

All motor vehicle incidents involving a company owned vehicle are required to be reported. Reporting is required prior to leaving the scene, unless injury or other extenuating circumstances exist.

All incidents on site and off site are required to be reported to the Fleet Manager and the Safety Manager within one (1) hour of the occurrence.

The Safety Manager or his designee will report the incident to the Legal Department as required.
The involved driver will immediately begin gathering information to complete the *Motor Vehicle Accident Report* (Appendix 5A-7) stored in the glove box of the vehicle. Ensure that contact information for the other drivers is collected as soon as it is safe to do so. The driver is responsible to be sure they obtain the other drivers contact information and Police Department investigating officer’s name and badge number, and the Accident Report number.

All accident reports and statements gathered at the scene will be submitted to the Fleet Manager and Safety Department within 24 hours of the occurrence.

**Utility Damage**

All utility damage events will be reported to GPI immediately. Immediate and reasonable care must be taken by the responsible GPI supervisor or Subcontractor to protect workers, property and the public from exposure to any hazards created by the damage event.

Any interruption in service to facility customers must be communicated to GPI as soon as it has been determined.

The *Supervisor’s Utility Damage Report*, (Appendix 5A-9), must be completed and submitted to the Safety Department within 24 hours of the occurrence.

**Utility Damage – Class A and Class B Underground Facilities**

Damage is defined by the Texas Utilities Code, Title 5, Chapter 251, Subchapter A, and Section 251.002(4). Requirements under Subchapter D, Section 251.159. Damage events involving natural or synthetic gas require immediate notification to emergency services, i.e. 911.

**Utility Damage – Overhead Facilities**

The facility owner must be notified about the damage immediately. All overhead lines should be treated as “live” until the facility owner has confirmed otherwise. Lines should not be moved until the facility owner has confirmed it is safe to do so.

**General Liability Incidents**

All general liability incidents must be reported to GPI immediately. A determination will be made as to what additional action needs to be taken based on the type of incident. GPI workers and Subcontractors will contact their Segment Safety Coordinator or their designated contact within the Segment no matter how insignificant the incident may appear. Subcontractors are required to provide a written report and follow their company reporting procedures for such occurrences.

The Segment Safety Coordinator will notify the GPI Safety Manager, who will in turn notify management.

The *General Liability Report*, (Appendix 5A-8), is available if the Subcontractor does not have its own form.
The report and all supporting documentation must be submitted to the GPI Safety Department within 24 hours following notification of the incident.

### 5.2.7 Case Management

#### Procedure

It is our goal that the best medical treatment available is provided to an injured person.

All injuries, no matter how minor, will be reported immediately to the Foreman, Superintendent or Manager of the injured worker. All injuries are required to be reported to the appropriate GPI Segment Safety Coordinator or his designee as soon as possible. Subcontractors are to follow their company policy in regard to injury reporting and case management.

Post incident drug screens will be performed. Drug testing will be done on the individuals involved in incident occurrences and/or near misses in accordance with the GPI Drug & Alcohol Policy.

Subcontractors are required to adhere to GPI’s post incident drug screen policy and provide an affidavit the GPI Safety Department to confirm that a drug screen was completed.

All injuries will be treated consistently. No one will be discriminated against for any reason.

All personnel attending to an injured worker will at all times wear and utilize proper personal protective equipment.

#### Emergency Response

Local Emergency Services will be used for emergency response rescue if needed.

Any GPI or Subcontractor supervisor can notify emergency services by dialing 911.

Local Emergency Services will perform all rescues if needed.

#### Medical Intervention for GPI Employees

All non-job related injuries that require a physician’s attention should be reported to the GPI Safety Manager or his designee. The employee should have a medical release stating “no limitations or restrictions” prior to returning to work. All medications prescribed by a physician will be reported to the GPI Safety Manager or his designee, to the extent permitted by law.

All injuries that meet the prescribed criteria of a recordable injury will be recorded on the OSHA 300 report.

Any employee with a recordable injury who has been placed on modified duty by a physician will not be allowed to work past 40 hours in one week.
GPI employees injured on the job are required to notify their Supervisor immediately. Failure to do so may result in termination. The Supervisor must immediately report this to the GPI Safety Manager or his designee.

All medical records will be kept confidential.

In the event of an on-the-job serious injury requiring medical attention, the employee will not be moved unless failing to move the injured employee further endangers him or her. If necessary, the Safety Manager or his designee will evaluate and make arrangements for the injured employee to be transported to a medical facility.

**General Information for GPI Employees**

There are several steps that are required to be followed in case management. These steps are as follows:

1. An injury occurs, and has been evaluated by the GPI Safety Manager or his designee as needing medical attention by a physician. The employee will be accompanied to the physician’s office by a GPI manager or the GPI Safety Department. The GPI Supervisor or the Safety Coordinator who accompanied the employee to the clinic or hospital will be responsible for obtaining copies of the work release (DWC 73) and submitting the form to the safety department when returning from the physician’s office.

2. After being treated by the medical provider, the GPI Safety Manager will determine if the injury is recordable by the criteria set forth by OSHA. Recordable injury is required to be recorded on the OSHA 300 within 7 days.

3. The Insurance Carrier will complete the DWC Form-001 and the GPI safety manager or his designee will obtain the form from the Carrier from the website for the required OSHA records.

4. If the employee is treated and released to return to work without restrictions and no further treatment required, then the employee will go back to work and the injury case is closed. If the employee is treated and released to modified duty, then the Project Management team will work with the employee's supervisor to determine if modified duty can be provided for the injured employee. If needed, a Modified Duty Letter will be issued by the Safety Manager.

**5.2.8 Substance Abuse Plan**

The **Substance Abuse Policy** was developed to help provide a safe work place by ensuring a drug and alcohol free environment. The GPI Drug and Alcohol Policy is the governing policy for this plan. This plan can be found in (Appendix 5A.25). The Plan has the following essential points:

1. Random drug tests may be performed throughout the job duration. Drug screening will be required for all personnel who experience an injury that requires medical treatment, and for all personnel involved in an incident involving property damage (including utility damage), or involved in a serious near miss incident. A drug screen and/or an alcohol screen test may be given after any auto accident and at any other time alcohol use is suspected.

2. A worker who either refuses to be tested or who tests positive in any drug screen will not be allowed to return to the jobsite. Additionally, stipulations as applicable per the GPI Drug and Alcohol Policy may also apply.

3. GPI, subcontractors and vendors personnel who enter the jobsite must be adhere to this Substance Abuse Plan.
4. Periodically and without prior warning, searches by authorized personnel or agents may be conducted on anyone entering the jobsite. Searches may be made of all personal effects and/or lockers, toolboxes, desks, purses, lunch boxes, personal vehicles and briefcases. All storage areas or items carried onto the job site may also be searched at any time. Any person who refuses to cooperate with such a search will be removed from the premises and not be allowed to return. Additional stipulations may apply as applicable per the GPI Drug and Alcohol Policy or Personnel Policy.

5. Supervision must be made aware of any prescription medication being taken.

6. Being impaired by alcohol, mind-altering or controlled drugs not prescribed to the individual by a licensed medical doctor while on the jobsite will be cause for immediate removal from the site. Possession of any illegal or non-medical drug or alcoholic beverage while on the jobsite will result in immediate removal from the site and that worker may not return. Additional stipulations as applicable under the GPI Drug and Alcohol Policy or Personnel Policy may also apply.

Drug and Alcohol Requirements for Subcontractors

All Subcontractors are required to submit affidavits to the GPI Safety Department prior to beginning work assignments stating that all workers who will work on the project have been drug screened upon Subcontractor employment and that the tests did not indicate drug use by the Subcontractor’s employees. Similar affidavits verifying drug screening will be required after any incident, near miss, property loss or damage incidents (including utility damage) regardless of whether an injury occurred. All post incident, near miss, property loss or damage drug screens will be done within 24 hours of the incident.

5.2.9 Driving of Company Vehicles

All GPI employees must have an approved motor vehicle record and be at least 21 years old prior to being assigned or driving a company vehicle. A motor vehicle record check will be rerun on an annual basis and the results kept on file in the GPI Human Resources Department.

All GPI drivers must have a valid driver's license.

Cell phone use while operating company vehicle is restricted to hands free only. If it is necessary to answer a call pull over and park in a safe place before taking phone call.

Non-production equipment (cars/pickups) will be parked 200 feet away from the immediate work area. If it is not practical to park 200 feet away, they must be parked safely in the work zone in an area designated for that purpose.

Stopping in traffic lanes to hold discussions with others is not permitted.

It is the responsibility of the driver to comply with safety regulations, safe practices and to obey all traffic laws.

GPI vehicle operators must report all incidents immediately to his or her supervisor, the Fleet Manager and the Safety Department. All Subcontractors are required to report all motor vehicle incidents within the
project limits using their company reporting procedures as well as reporting the incidents to the GPI Safety Department.

Everyone operating or riding in a vehicle must wear a seat belt in accordance with applicable laws. Vehicles used to transport employees will have seat belts firmly secured and adequate for the number of employees to be transported.

No one is to ride in the back of a pickup truck or other vehicle unless it is equipped with a manufactured passenger compartment with seat belt.

Tailgates should be in the closed position except when loading or unloading, or when the length of the load requires otherwise. Proper flagging of the load will be maintained.

No vehicle may be left unattended while the engine is running.

Use turn signals. Approaching equipment needs to know your intentions.

All vehicles accessing the worksite and exposed to traffic will be equipped with construction-appropriate lighting that conforms to the State of Texas’ requirements for such operations.

5.2.10 Disciplinary Procedure for GPI Employees

This procedure outlines the use of the disciplinary system.

Employee reprimands provide a means of documenting employee safety violations, as well as other violations, and resulting disciplinary action. All reprimands, including verbal reprimands, will be documented on the Employee Disciplinary Action Form, (Appendix 5A-11). Employees who violate safety and other project rules will be subject to written notification by the supervisor or management and subject to possible permanent removal from the site.

A GPI supervisor can issue reprimands to workers who violate safety rules as outlined in the Safety and Health Plan, or any other GPI or jobsite rule.

A copy will be kept on file at the Project Office in the GPI employee’s personnel file. A copy is also to be given to the GPI Safety Manager.

A copy will be kept on file at the Project Office in the GPI employee’s personnel file. A copy is also to be given to the GPI Safety Manager.

The type of disciplinary action(s) taken will be at the discretion of Project Management and may include but not be limited to the following:

1. A verbal warning of violation (must be documented on a Disciplinary Action Record form). These may be given at any time at the discretion of the supervisor.
2. A written notice of violation including disciplinary recommendations (e.g. retraining, coaching, change in duties, etc.).
3. Disciplinary action, such as suspension without pay or termination of the employee(s).

Any severe violation may be cause for immediate termination.
5.2.11 Visitor Safety Procedure

Purpose

The purpose of this procedure is to prevent injuries from occurring to visitors while on the jobsite.

Scope

This procedure covers all visitors to the project including potential vendors, sales personnel and any other individuals who did not attend the project safety orientation.

Escort

All visitors will be escorted while on the project by an authorized employee or subcontractor.

Visitors Check-In

All visitors will be required to check in at the project office. Visitors must be accompanied by an escort while on the project.

Personal Protective Equipment (PPE)

All visitors are required to wear the minimum PPE listed below:

1. Approved hard hat
2. Approved safety glasses (if the visitor is wearing prescription glasses he will be issued OTGs that will fit over and cover the prescription glasses)
3. Approved Class II high visibility traffic vest – Class III for night
4. Sturdy footwear appropriate for the jobsite

Visitors that are being escorted into work areas that may require additional PPE will be notified by the Escort prior to entering into the area.
5.3 General Safety And Health Provisions

5.3.1 General Site Safety Rules

1. All workers, regardless of position, will comply with all Occupational Safety and Health Administration Standards (OSHA), State, Federal, Local laws and rules of GPI outlined in this plan at all times.
   Failure to comply with these requirements may be cause for termination or in the case of Subcontractor employees, removal from the site.
2. Being impaired by alcohol, mind-altering or controlled drugs not prescribed to the individual by a licensed medical doctor while on the jobsite will be cause for immediate removal from the site pending investigation. Possession of any illegal or non-medicinal drug or alcoholic beverage while on the jobsite will result in immediate removal from the site.
3. Guns, weapons, ammunition and explosives of any kind are not allowed on the site. Possession of any of the above may result in immediate removal from the site, and the worker may not return.
4. Proper eye protection in addition to safety glasses with side shields, e.g. goggles, face shields, welding hoods, etc. will be worn when exposed to flying objects, dust, harmful rays (i.e. ultraviolet, radiant and laser lights), chemicals or other eye hazards.
5. Gambling, fighting and horseplay on the job or in areas under project control will be cause for dismissal.
6. No loose dangling jewelry or loop earrings will be worn.
7. Hair may not be worn in a manner that could interfere with the design or function of a hard hat or with the use of a respirator.
8. Hard hats will not be modified in any way.
9. Smoking is not allowed in outside areas where flammable and or combustible materials are present.
10. Riding on equipment loads, hooks or headache balls is prohibited.
11. Only qualified and designated operators will operate heavy equipment.
12. All safe practices will be followed in hoisting and rigging of suspending loads.
13. Compliance with warnings and instructions on all signs, posters and hazard bulletins issued on the job is mandatory.
14. Proper lifting methods must be used at all times.
15. Walkways, traffic lanes and fire exits will not be blocked or obstructed.
16. Prior to entering a different work area, supervisors must communicate hazards and required safety precautions for the particular work area.
17. Always be aware of work going on in the vicinity. Keep clear of overhead work, suspended loads, pinch points, traffic areas, etc.
18. Watch out for tripping and fall hazards.
19. Always have sufficient lighting on stairs, in walkways and other work areas.
20. Always place barricades and signs to warn of traffic, overhead hazards, pinch points, floor openings, etc.
21. Appropriate hand protection shall be used by personnel when handling hazardous materials, hot objects, tools, materials or equipment which may cause hand injuries.
22. Good housekeeping is essential in incident prevention and should be a part of the daily routine. Remember a clean job is a safe job.
23. All protruding nails in scrap lumber must be removed immediately.
24. Paper drinking cups, lunch debris and trash must be placed in trash containers.
25. Materials, stockpiles and/or equipment stored adjacent to active roads or highways must be properly barricaded and kept at a distance from the edge of unprotected lanes per TxDOT specifications.

### 5.3.2 Towed Equipment

Determine first that vehicle is capable of pulling the equipment weight and is legal to haul.

Before towing any machinery or equipment, ensure that safety chains are part of the machinery or equipment.

All chains, hooks, latches and any other parts of the towing system will be inspected to ensure all parts are present and are in good operating condition.

During use, safety chains will be hooked to form an X or cradle.

Use the correct ball and hitch combination.

Wheel chocks will be used during installation and removal of the safety chains to ensure the machinery or equipment does not roll during this period.

All towed equipment and trailers must have working jack stands and they must be securely latched and pinned before jacking up a trailer.

All trailers to be towed are required to have functional lights including tail lights and turn signals.

### 5.3.3 First Aid Kits

Kits must be properly stocked and maintained.

GPI and subcontractors will have a minimum of one person certified in CPR and first aid on site.

### 5.3.4 Sanitation

Drinking water will be secured from sources free of contamination in accordance with local, state, or federal health authorities. It will be dispensed by means that will prevent contamination. Common drinking containers are prohibited.

All drinking water coolers will be marked “Drinking Water Only”.

Water coolers must be used for the containment of drinking fluids and clean ice only.

Water coolers must be kept clean and sanitary.

Single serve drinking cups and waste containers to dispose of used cups will be furnished by GPI and each Subcontractor for their employees.
Ice machines must remain free of contamination. They will contain only ice. No personal food or drink containers are allowed in ice machines. Only scoops will be used to remove loose ice from the machine to dispense into water coolers and ice chests. Scoops will be kept in a clean area outside of the ice machine when not in use.

Water vessels used on the project will be labeled as “non-potable”.

Toilet facilities will be provided to meet public health requirements. The facilities must be maintained and sewage disposed of in accordance with appropriate sanitation requirements under good public health practices, standards and laws.

GPI and Subcontractors will furnish correct number of facilities for the number of employees they have onsite and must be placed in locations accessible to their employees in compliance with OSHA 1926.51 (c) (1) Table D-1.

Illumination

Minimum Requirements

GPI and Subcontractors will at a minimum comply with OSHA 1926.56 (a) Table D-3 for illumination requirements.

Vehicle Lights

All vehicle lights will be in working order. They should be supplemented by additional lighting to make them more visible at night. All vehicles and equipment entering and exiting work zones must be equipped with functioning amber rotating beacon lights or strobes that are approved for highway use. Headlights will not be the sole method of illumination while working.

Glare Control

All lighting will be designed to minimize glare to oncoming traffic by extending tower lights to their full working height where feasible, i.e. where there are no overhead power lines. The use of balloon lighting instead of light towers is an acceptable alternative, and reduces glare.

All work will be discontinued in the event of the failure of the lighting system except in declared emergency situations.
5.4 Safe Work Practices

5.4.1 Housekeeping

Good housekeeping is essential in accident prevention and should be a part of the daily routine, with clean up being a continuous procedure. Remember a clean job is a safe job.

All protruding nails in scrap lumber must be pulled and disposed of immediately.

The working area, stairways, ladders, and passageways will be kept free from loose materials and debris.

Avoid stacking materials underneath overhead power lines.

All hazardous material spills must be reported to the involved Supervisor and the Environmental Compliance Manager immediately.

Areas around saws or other wood working equipment will be kept clean and free of excess scrap, chips and sawdust.

Paper drinking cups, lunch debris and trash will be placed in trash containers for removal. Appropriate trash receptacles and dumpster will be provided and emptied for the use of the employees. To the extent considered reasonable, general trash and debris should be separated in different receptacles and/or dumpster.

Workers that do not maintain a clean and orderly worksite will be subject to disciplinary action.

Tool trailers will be kept clean and orderly to allow for safe access and proper storage of tools.

Materials, stockpiles and or equipment stored adjacent to active roads or highways will be properly barricaded or kept outside of the clear zone of unprotected lanes.

5.4.2 Emergency Action Plan

Purpose

The purpose of this procedure is to minimize and prevent possible harm to workers, damage to material and equipment at the jobsite, to assign specific duties and establish detailed guidelines that provide a timely response and safe movement of people and ensures the accountability of all workers in the event of an emergency. Emergency information is found in the Emergency Action Plan Procedures (Appendix 5A-19).

Procedure

In the event of an emergency (natural or manmade), all workers must stay clear of the emergency, contact their foreman and proceed upwind of the emergency with their foremen for a head count. All Foremen must
notify their Superintendent and the Segment Safety Coordinator that all are present and accounted for, and wait for further instruction.

Responsibilities

The GPI Superintendents will monitor storms as they are broadcasted by the Weather Bureau. Progress of these storms will be forwarded to the GPI Construction Manager.

The GPI Construction Manager or his designated representative will make the decision as to when the storm will be considered a potential threat and initiate Phase 1 of this procedure. If it becomes necessary due to high winds and heavy rainfall, storms, hurricanes or tornadoes, certain precautions may be required. Preparation for this type of weather will be in two phases that will be initiated by the GPI Construction Manager or his designated representative.

Phase I

The GPI Construction Manager or his designated representative will organize a tour of the job site to determine the necessary precautions to take. He will be accompanied by personnel he deems necessary.

The determination will be made as to what on-going work will be adversely affected and as to what work may have to be completed prior to the possible arrival of the threatening weather.

All equipment, scaffolding and material necessary to work in progress, will be secured.

The Construction Department together with the GPI Superintendents and Managers of the involved Subcontractors will make a thorough study of all free-standing columns and partially erected steel, concrete beams etc. to determine if they can withstand expected wind velocities and determine which ones may need guyed or other supports, to withstand such velocities.

Phase II

When the GPI Construction Manager determines that there is a definite threat he will initiate one or more of the following steps:

1. All ongoing construction will cease and preparation will begin for meeting the storm.
2. All scaffolding will be dismantled and stored or securely tied off or tied down to a substantial structure. Particular attention will be given to scaffold boards that will be securely tied or removed from the scaffold.
3. Tarpaulins covering material that may be damaged by the water or wind will be securely lashed down. Securing the corners only will not suffice.
4. All gang boxes and temporary construction structures not securely hooked to a foundation will also be tied down. Material such as plywood, etc., will also be lashed down.
5. All material and equipment that can be moved into a protective structure will be moved inside.
6. All equipment such as cranes, trucks, cherry pickers, etc., will be moved to an area where they are least likely to be reached by high water. Cranes will be stored with booms lowered and outriggers out. All equipment will be parked parallel, close together, with brakes set and wheels chocked.
7. The GPI Construction Manager will make the determination of when personnel will be sent home.
5.4.3 Personal Protective Equipment (PPE)

All workers are responsible for the proper use and care of their PPE. Subcontractors will be required to furnish, train and enforce the use of all PPE for their employees in compliance with OSHA regulations and the GPI Safety and Health Plan.

Categories of Personal Protective Clothing/Equipment

1. Head protection
2. Eye protection
3. Foot protection
4. Hand protection
5. Visibility apparel
6. Face protection
7. Hearing protection
8. Respiratory protection
9. Fall protection

The minimum required PPE on the jobsite consists of 1 through 5 above.

5.4.3.1 Specific PPE Requirements

**Head Protection**

Hard hats will be worn in work areas at all times (except in closed cabs of vehicles). Hard hats protect the head from impact of falling and flying objects and from limited electrical shock and burn.

Hard hats must be Type 1, Class G, and meet the ANSI Z89.1 standard.

Hard hats must be worn as intended by the manufacturer.

Hard hats should be cleaned and inspected regularly, and discarded and replaced in accordance with the manufacturer's guidelines.

Painted hard hats are not allowed. Alteration of the hat or suspension system is not permitted. Skull caps/metal hard hats and cowboy-style hard hats are not permitted.

**Eye Protection**

Proper ANSI Z87.1 approved eye protection is required on the jobsite at all times, and will vary depending on the scope of work.

ANSI Z87.1 approved OTGs (Over the Glasses) may be worn over prescription glasses that do not meet ANSI Z87.1 standards.
Side shields are required on all prescription and non-prescription safety glasses.

Tinted lenses are not permitted between sunset and sunrise. Good judgment should be used when overcast conditions reduce visibility during daylight hours.

Cutting goggles are a minimum requirement when using a cutting torch. Hoods with proper shaded lenses are required for welding. Approved safety glasses with side shields must be worn under the welding hood.

When assisting with welding or cutting operations, workers are required to wear the same eye protection as prescribed for that particular operation and as provided by OSHA 1926.102(b)(1) Table E-2 Filter Lens Shade Numbers for Protection Against Radiant Energy.

Tight fitting or foam-lined safety glasses, and or mono goggles may also be required for certain activities as defined by the JHA.

Foot Protection

Work boots must provide protection to the foot. Leather, hard sole work boots with heel, and that extend at least six inches above the ankle are required. NO athletic type footwear allowed on project. Safety Toe shoes are allowed, but not required. If your company requires Safety Toe foot wear then that requirement will be followed. Where necessary, work boots can be obtained which provide puncture protection. In some work situations, metatarsal (top of foot) protection should be provided, and in some other special situations, electrical conductive or insulating safety shoes would be appropriate. Tennis shoes, sandals, or high heels are not allowed outside the office(s).

Hand Protection

Appropriate hand must be used by personnel when handling hazardous materials, hot objects, tools, materials or equipment which may cause hand injuries.

Visibility Apparel

High Visibility Class II vests will be worn on the outside of any other clothing or jacket. Class III will be worn by employees working as flaggers or at night.

All Employees; Class II vests will be worn during all operations.

Face Protection

A face shield and ANSI Z87.1 safety glasses are required for operations such as grinding, sawing, chipping, reaming, buffing or any particle producing operations.
When assisting with operations such as grinding, sawing, chipping, reaming, buffing or any particle producing operations, workers are required to wear the same face and eye protection as prescribed for that particular operation.

5.4.3.2 Hearing Protection Policy

The primary goal of GPI is to reduce and eliminate hearing loss due to workplace noise exposures. The policy includes the following elements:

1. Environments that contain or equipment that produces potentially hazardous noise should, wherever it is technologically and economically feasible, be modified to reduce the noise level to acceptable levels.
2. Where engineering controls are not feasible, administrative controls and/or the use of hearing protective devices will be employed.
3. Education is vital to the overall success of a hearing conservation policy. An understanding by workers of the permanent nature of noise-induced hearing loss is a goal of GPI.

Grand Parkway Infrastructure (GPI) is aware that excessive noise exposure is a potential cause of hearing loss. In response GPI has established a policy that is intended to meet the requirements of the Occupational Safety and Health Administration’s (OSHA) noise regulations. Grand Parkway Infrastructure will use the Permissible Exposure Limit (PEL) established by OSHA, as detailed in the table below.

<table>
<thead>
<tr>
<th>DURATION PER DAY</th>
<th>SOUND LEVEL (dB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 hours</td>
<td>90</td>
</tr>
<tr>
<td>6 hours</td>
<td>92</td>
</tr>
<tr>
<td>4 hours</td>
<td>95</td>
</tr>
<tr>
<td>3 hours</td>
<td>97</td>
</tr>
<tr>
<td>2 hours</td>
<td>100</td>
</tr>
<tr>
<td>1½ hours</td>
<td>102</td>
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<td>1 hour</td>
<td>105</td>
</tr>
<tr>
<td>½ hour</td>
<td>110</td>
</tr>
<tr>
<td>¼ hour or less</td>
<td>115</td>
</tr>
</tbody>
</table>

OSHA - 29 CFR 1926.52(d) (1), Table D-2 Permissible Noise Exposures

When the sound levels above are exceeded, feasible administrative or engineering controls will be instituted. If the controls fail to reduce the sound levels to within those listed above, hearing protection will be provided by the worker’s employer and used by the worker to reduce the sound levels to an acceptable level. In addition OSHA requirements dictate that whenever worker noise exposures equal or exceed an 8-hour time weighted average (TWA) of 85 decibels, A-weighted (dBA), slow response, a continuing effective hearing conservation program will be instituted.

5.4.3.3 Respiratory Protection Policy

It is the policy of GPI to protect its employees from hazardous atmosphere through a comprehensive program of recognition, evaluation, engineering, administrative and work practice controls, and personal protective equipment including respirators. To the greatest extent feasible, hazard elimination, engineering
and work practice controls will be employed to control worker exposure to within allowable exposure limits. However, where these measures are not feasible or fully effective or are under development, GPI is committed to full compliance with applicable federal and state regulations pertaining to worker respiratory protection.

This policy applies to all GPI employees. Each activity will be evaluated based on OSHA requirements to determine if the use of respiratory protective devices is required. GPI employees who have to enter work areas where respiratory protection is required, will be issued and trained to use and maintain the equivalent respirator being used by the involved specialized subcontractors.

All Subcontractors on site are responsible for identifying potential respiratory hazards associated with their scope of work, and ensuring that all involved workers are provided with proper NIOSH approved respiratory protection at no cost to them.

All Subcontractors and GPI personnel involved in operations that require the issuance, use and maintenance of respiratory protection will be trained prior to their use.

All Subcontractors performing tasks that may require respiratory protection will include the respiratory protection plan in their Safety Plan submittal prior to any work being performed on site.

All respiratory protection practices will be in compliance with OSHA 29 CFR 1910.134.

5.4.3.4 Fall Protection Policy

It is the policy of GPI to enforce a 100% (Continuous) fall protection requirement when workers are exposed to falls of 6’ or more.

All Subcontractors will be responsible for ensuring that their employees are adequately trained in the selection, use, inspection and care of personal fall protection devices and systems.

Equipment

A full body harness in good condition and sized properly to the worker will be used.

Lanyards being used must achieve 100% (Continuous) fall protection, and be shock absorbing with locking snap hooks.

Positioning devices may be used to allow workers a hands-free work environment. Positioning device must be compatible with harness and lanyard and must be used in conjunction with an appropriate lanyard.

Use Requirements

All workers required to wear fall protection must be trained by their company’s Designated Competent Person in the proper use of fall protection before using any fall protection equipment. Subcontractors will provide documentation of training to the GPI Safety Department prior to beginning work on the project. Workers must be able to identify potential fall hazards, determine which products to use in specific work
environments, demonstrate proper tie-off procedures, etc. Workers must also be instructed on inspection and maintenance procedures and the proper wearing of fall protection equipment. It is the responsibility of the involved Subcontractor to ensure this training is completed and documented.

Harnesses are to be worn snug around the body with the shock absorbing end of the lanyard attached to the “D” ring in the center back of the harness.

Lanyards will be kept as short as possible to minimize the free fall distance. Free fall distance will not exceed 6 feet and will not impose greater than 1800 lbs. Maximum Arresting Force (MAF) on the body.

Positioning devices are not designed for fall arrest purposes. A harness and lanyard will be used in conjunction with positioning devices.

All GPI field employees are required to attend fall protection training. Subcontractors are required to provide the training for their employees who utilize fall protection. Verification of this requirement will be provided to the GPI Safety Department.

Failure to follow 100% (Continuous) fall protection will result in disciplinary action up to and including termination or removal from the site.

**Inspection**

User must inspect PPE prior to use.

All lanyards and harnesses must be inspected quarterly by the Designated Competent Person and prior to use by employee using equipment.

All buckles, “D” rings, snaps, thimbles and wear pads must be checked for distortion or sharp edges, cracks, worn parts and corrosion. Any equipment with such evidence of corrosion will not be used. Buckles should work freely with the snap keeper spring providing tension to close the keeper in a locked position and must close flat against the snap exhibiting no sideways movement or play. Rivets and grommets must be tightly embedded in the material without distortion.

A component with any significant defects including but not limited to: cuts, tears, abrasions, mold, undue stretching, alterations or additions, evidence of internal/external deterioration, contact with acids or other corrosives, distorted hooks or faulty hook springs, tongues unfitted to the shoulder of buckles, loose or damaged mountings, non-functioning parts, or anything else which might affect its efficiency must be removed from service immediately.

Cleaning will be done with water and mild soap, rinsing thoroughly in clean water, and hang to air-dry.

Personal fall protection devices must be stored in a clean, cool, dark, dry area free of chemical fumes. Never store in areas where there is direct sunlight. Never store in gang boxes with tools because sharp edges will cause damage.
Any personal fall protection devices that are subjected to a fall must be removed from service and tagged to identify that the device is out of service.

Only use fall protection equipment for their intended purpose.

It is the responsibility of the worker to properly maintain, store, and inspect personal fall protection devices issued by the company.

Misuse of any fall protection equipment is grounds for disciplinary action up to and including termination.

5.4.4 Fire Prevention

General Requirements

- All fires are to be reported immediately to the Supervision and to the GPI Safety Department.
- Before using an open flame, make certain proper fire extinguishers are in the immediate area.
- Know the location of fire extinguishers in your area and know how to use them.
- Make sure that all matches and smoking materials are completely extinguished before they are discarded.
- Smoking is not allowed when fueling equipment.
- Smoking or open flames are not allowed within 50 feet of fuel storage or refueling areas.
- All "NO SMOKING" signs are to be obeyed.
- Only small quantities of flammables are to be stored and dispensed from approved OSHA safety cans.
- Keep work areas free of combustible materials.
- Covered metal containers will be used to store oily rags.
- Never use an air hose or pressure to empty drums containing gasoline or flammable liquids.
- Keep "salamanders" or other space heating equipment clear of combustible materials.
- Do not refuel a hot or running engine. Clean up spills before starting.
- Do not wear oily or combustible clothing on the job.
- Gasoline is to be used as a motor fuel only.

Above Ground Storage Tanks

Above ground storage tanks will be placed on stable ground. The area around the tank(s) will be surrounded by a berm with an approved liner. The berm or containment area will have the capacity to hold 1½ times the greatest amount of liquid that could be released from the largest tank.

A fire extinguisher with a minimum 4-A: 20-B:C containing at least 10 pounds of extinguishing agent must be no closer than 25 feet, and no further than 75 feet.

Each tank must be labeled with the contents of the tank and signs stating either “Flammable” or “Combustible” and “No Smoking”.

Bulk Storage
Storage containers holding flammable or combustible liquids (i.e. those containers used for the purpose of dispensing into smaller containers for immediate use), will be stored in designated areas specially designed for them and that meet local, state and federal regulations.
Small Quantity Handling

Only metal safety cans with a positive self-closing lid and a flash arrestor screen will be allowed on the jobsite.

All fuel cans must be labeled with the contents and the appropriate warnings for the particular product.

Fuel containers for dispensing into gasoline-powered tools cannot exceed 5 gallon capacity.

A funnel must always be used when dispensing gasoline from a safety can.

When filling safety cans, the cans must be set on the ground. Do not fill cans while they are sitting on the tailgate or in the bed of a truck.

No more than 24 gallons may be stored inside of enclosed spaces, e.g. storage or tool containers. If more than 24 gallons must be stored inside of an enclosed space, an approved flammable liquid storage cabinet must be used.

Small quantities of lubricating, linseed and motor oils need not be stored in safety cans. However, these oils should never be stored in open containers (such as cans or buckets) and the contents of the can will always be tagged, labeled, or otherwise indicated on the outside of each container.

Precautionary measures must be taken to prevent the accumulation of explosive vapors, e.g.:
1. Provide adequate ventilation.
2. Control spark-producing devices.
3. Ground against static.

Fire Extinguisher Requirements

A 10 pound class "ABC" fire extinguisher or equivalent will be within 50 feet of any work area which has a fire potential. Operations that are especially fire prone, such as welding or flame cutting areas, will have a fire extinguisher immediately available. All workers must be trained by their employer on the safe use of fire extinguishers.

A 20-pound "ABC" Class fire extinguisher will be placed no closer than 25 feet and no further than 75 feet away from a flammable or combustible storage tank.

Each Subcontractor will have available to their employees at all times, fully charged fire extinguishers with current annual inspection tags.

Adequate fire protection must be provided for all motorized equipment, including compressors and light plants.

Fire extinguishers must be visually inspected by the Designated Competent Person and maintained to meet all local, state and federal regulations for their safe use.
Annually fire extinguishers must be inspected by a licensed technician who is employed by a licensed firm. The firm and the technician licenses are governed by the Texas Department of Insurance and the Texas State Fire Marshal’s Office. The extinguisher must be tagged by the inspector.

5.4.5 Signs, Signals and Barricades

Warning Signs

The purpose of warning signs is to point out a hazardous condition. It notifies persons working nearby or entering the area to proceed with caution.

Use correct signs for the situation or condition, and remove when hazard is eliminated.

Barricades – Non-Traffic Control

Barricades must completely enclose hazardous areas of a more hazardous nature.

Supervision responsible for authorizing entry into the barricaded area will specify the proper protective equipment required.

Warning sign procedure should be used in conjunction with barricaded areas.

Material provided as barricade equipment is not to be used for any other purpose.

All barricades must be designed to protect personnel from the hazards contained within the barricaded area.

When a hazardous condition develops which warrants a barricade, persons will be posted at area entrances to warn or exclude traffic until the area can be properly barricaded.

Never remove barricades or signs without permission.

Barricades will be placed no less than 6 feet from the hazard.

Procedure for Entering Barricaded Areas

Barricaded areas or areas where signs are posted warning others to keep out are to be entered only with authorization from the supervisor responsible for the barricaded work area.

All hazards to include but not limited to floor openings, wall openings, debris, trenches and excavations etc., will be properly barricaded, isolated and/or covered.

All fence barricades must be constructed with 48 inch orange safety fence and T-posts. The post must be covered with rebar caps if they pose an impalement hazard.

T--posts may only be driven with a pole driver.
Warning Tape

Where a rigid barricade is not practical for work area protection, such as a swing radius, overhead work, or scaffolds under construction, red danger tape shall be used to restrict access.

5.4.6 Materials Handling, Storage, Use and Inspection

Only authorized workers who have been provided training and certification, and who have been designated by their employer are allowed to operate forklifts or lift trucks of any kind.

Trucks

The securing of a load on any truck will be planned. The planning is to eliminate the necessity of a man being on the load at any time for the purpose of placing chains and ratchets.

If chains are used to secure loads, then the size of the chains and the method of securing those chains must comply with OSHA 29 CFR 1926.251.

Compressed Gas Cylinders

Compressed gas cylinders will be secured in an upright position at all times and will not be moved or stored lying down.

When transporting compressed gas cylinders, they must be secured to a proper transfer device.

Caps must be kept on all compressed gas cylinders when regulators are not in place.

Rigging Inspection

Determine the safety of rigging, its life expectancy, and its load carrying ability by regularly inspecting every foot of its length. Determinations of rigging safety will be based on the section of the device exhibiting the worst condition or wear.

All rigging rated capacities will be permanently attached. All tags must be legible at all times.

Rigging must be inspected prior to each use by the Designated Competent Person. In addition, all equipment operators and ground personnel should be trained in this procedure. Confirmation of training should be provided using the Competent Person Designation (Appendix 5A-1).

Wire Rope Slings

Conditions of the following nature are sufficient to remove a sling from service:

1. Broken wires
   a. Six or more broken wires in one rope lay, or three or more broken wires in one strand in one rope lay. (A rope lay is the length along the rope in which one strand makes a complete revolution around the rope).
b. One or more broken wires near an attached fitting.

c. Any evidence of wire breaks in the valleys between strands.

2. Worn or abraded wires

3. Corrosion

4. Kinks

5. Bird caging

6. Protruding core

7. Electric arc contact

8. High standing

**Synthetic Fiber/Web Slings**

Conditions of the following nature are sufficient to remove a sling from service:

1. Acid damage

2. Heat damage

3. Cuts

4. Abrasion damage

5. Punctures and snags

**Chain Rigging**

Using chain application for rigging purposes will not be allowed under normal conditions. Chain usage will only be allowed when introduction of last resort reasoning is presented to the GPI Safety department. Approval may then be given assuring that application is safe and in accordance with chain manufactured and tested in accordance with ASTM (American Society for Testing and Materials) guidelines. If other grades of chain are used, they are to be used in accordance with the manufacturer’s recommendations and guidance.

**Chain-Fall**

1. Chain falls and pull-lifts shall be clearly marked to show the capacity and the capacity shall not be exceeded.

2. Chain falls shall be regularly inspected to ensure that they are safe, particular attention being given to the lift chain, pinion, sheaves and hooks for distortion and wear. Pull-lifts shall be regularly inspected to ensure that they are safe, particular attention being given to the ratchet, pawl, chain and hooks for distortion and wear.

3. Straps, shackles, and the beam or overhead structure to which a chain fall or pull-lift is secured shall be of adequate strength to support the weight of load plus gear. The upper hook shall be moused or otherwise secured against coming free of its support.

**5.4.7 Tools – Hand and Power**

Tools used to cut, drill, grind, mill or break concrete and/or asphalt must comply with OSHA 1926.1153 Table 1 to mitigate exposure to respirable crystalline silica.

Use the right tool for the job.
Inspect tools and cords for damage before each use.

Remove defective tools and equipment immediately from service.

Do not use tools with split, loose or broken handles.

It is the responsibility of GPI Supervisors and Subcontractors using tools and equipment to have their equipment inspections completed by the end of each inspection period using quarterly color code. The color code will be as follows: January – March: White; April – June: Green; July – September: Red; October – December: Orange.

Air tools are to be kept in good repair. Defective tools are to be taken out of service immediately.

Keep all loose tools in a toolbox and secure them against falling or dropping from work surfaces.

Keep cutting tools sharp and carry them in a container, not in pockets.

Do not operate equipment without guards in place.

Only qualified workers are to operate power tools.

Operate equipment and tools within manufacturers’ specifications.

Use saw horses or work tables to support work while cutting. Work pieces will not be hand held while being cut, drilled, etc.

Keep tools a safe distance from "live" electricity. The jobsite requires as a minimum, a 10 foot distance from any energized electrical source.

**Electric-Powered Tools**

Daily inspections will be performed by all personnel to ensure that electrical tools and equipment are in good condition and safe to use.

When electrical tools are connected to a temporary power source, personnel must be protected by Ground Fault Circuit Interrupters (GFCI).

Electric power tools and equipment must be properly grounded.

Do not use electric power tools or equipment while standing in water.

All electric power tools and cords will have insulation that meets manufacturer’s specifications.

Only qualified persons are to repair electrical tools or equipment.
Secure all cords, leads, and hoses in the work area to prevent damage to them.

Do not use non-insulated wire, rods, or nails to hang a cord, lead or hose.

**Gasoline-Powered Tools**

Daily inspections will be performed by all personnel to ensure that gasoline-powered tools and equipment are in good condition and safe to use.

When fuel powered tools are used in confined spaces, the applicable requirements for monitoring for concentrations of toxic gases and other atmospheric hazards (i.e., Carbon Monoxide) shall be performed.

Refuel tools in areas away from all ignition sources. Always have a fire extinguisher within 25 feet available and ready for use.

A funnel must always be used when dispensing gasoline from a safety can.

Broken or defective tools must be repaired immediately or removed from the job. Disconnect the spark plug from the tool before making any adjustments or repairs.

Workers using a cut-off saw must wear a face shield over their safety glasses and hearing protection.

Chaps are required when using cut off saws.

Cut-off saws must be equipped with the manufacturer-supplied guard.

Cut-off saws will be carried or moved with the engine in the off position.

Do not cut above waist height and never work from a ladder or over-reach.

**Grinders**

Daily visual inspections must be made of the grinder and cord prior to use. Check all grinding disks and stones for cracks, chips or other flaws before, during and after use. Replace damaged disks immediately.

All grinders must be maintained in good, safe condition.

All handheld powered grinders must be equipped with a momentary contact or constant pressure "on/off" control switch that will shut off power when the pressure is released. Trigger locks must be made inoperable.

Be sure the correct diameter disk is being used for the size of the grinder being used.

Compliance with OSHA 1926.1153 Table 1 Respirable crystalline silica
Workers using grinders must wear additional personal protective equipment, i.e. hearing protection, face shield and appropriate respirator for the environment and the material being ground.

Grinders must be equipped with the manufacturer-supplied guard.

Never use a hand grinder as a stationary grinder.

The RPM rating for the attachments must be equal to or greater than the RPM for the tool it is attached to.

**Walk-Behind Equipment**

Only trained operators will use walk-behind equipment.

The operator must have control of the machine at all times. If work is on an uneven surface, the operator will be positioned on the uphill side for added protection, away from the machine.

Always maintain secure footing while operating the machine.

**Powder-Actuated Tools**

Only certified license carrying operators may operate powder actuated tools. Operators must have their credentials with them at all times.

Powder-actuated tools must be visually inspected before each use

Powder-actuated tools must be handled as a firearm.

Powder-actuated tools must never be pointed at anyone.

Never place hand over the muzzle of a loaded powder-actuated tool.

Never rest the tool against the body when loading or making adjustments.

Never leave a loaded powder-actuated tool unattended.

Load all powder-actuated tools just before use.

Never fire a powder-actuated tool in a flammable or combustible atmosphere.

Broken or defective powder-actuated tools must be repaired immediately or removed from the job.

Remove all powder charges from the tool before making any adjustments or repairs.

Never try to release a loaded powder-actuated tool that has jammed in the firing position.
Always check the manufacturer’s recommendations for handling misfires. Miss fired loads must be emerged in water for 24 hours.

Workers using powder-actuated tools and workers exposed to flying debris and/or harmful dusts must be provided with additional personal protective equipment, i.e. hearing protection and face shields.

Live loads/cartridges must be stored in an approved, locked storage cabinet to meet applicable OSHA regulations. Do not throw explosive charges into trash containers or leave them lying around.

5.4.8 Welding and Cutting

- Secure compressed gas cylinders in an upright position at all times and do not move or store lying down.
- Secure compressed gas cylinders to a proper transfer device when transporting.
- Keep caps on all compressed gas cylinders when regulators are not in place.
- Keep regulators free of oil.
- Use flashback arresters on all lines at the torch end.
- Do not use or store compressed gas cylinders in confined areas such as tool trailers or storage containers. Fuel gas and oxygen cylinders must be stored at least 20 feet apart or on opposite sides of a non-combustible fire wall (with a fire resistant rating of at least one half hour) at least five feet in height and outside the range of falling debris and away from heavy traffic areas.
- Welding screens shall be used to protect other workers and the public during welding or cutting operations.
- Wear safety glasses with side shields, hard hats with welding hood attached, long sleeves or leathers and welding gloves when burning or welding.
- Wear a face shield with safety glasses and side shields during all grinding or chipping operations.
- Turn off, bleed down, disconnect regulators and replace cap on compressed gas cylinders when not in use.
- Keep flames, sparks, molten slag and hot metal from coming in contact with combustible and flammable materials.
- Provide a fire extinguisher in the immediate vicinity when using gas or arc welding, blowtorches or blow pots and other devices using an open flame.
- Post “FLAMMABLE” and “NO SMOKING” signs around acetylene storage areas. Post “NO SMOKING” and “OXIDIZER” signs around oxygen storage areas.

Observe the following precautions when hot work is done near combustible materials:

1. See that the floor or area around the work is free of combustible debris.
2. Be sure that no flammable liquids are in the vicinity of the work area.
3. Have all combustible materials within area of proposed work moved to a safe distance. If the material cannot be moved because of excessive weight or bulk, it should be protected with a fire resistant shield or fire blanket.
4. Provide flash screens to protect workers and the public from potential flash burns to the eyes and skin from electric arc while arc welding.
5. Be sure there are no flammable or combustible materials and/or chlorinated solvents in the work area.
6. Do not weld, cut or heat metal drums, barrels or tanks.
7. Provide a fire watch when conditions make such actions necessary to prevent fires. The fire watch must be properly trained and familiar with the use of firefighting equipment. The fire watch's only duty will be as a "Fire Watch". This is the responsibility of the involved Subcontractor.
8. Use a container for the disposal of used welding rods. Container will be provided by the involved Subcontractor.
9. Ensure that the immediate area is free from evidence of fire after completion of a job.
10. Remove the welding rod from the electrode holder when not in use.
11. Protect hoses and leads from damage.
12. Ground all welding machines properly.

5.4.9 Electrical

General Safety Requirements

Electrical equipment and cords must be visually inspected by the Designated Competent Person on a quarterly basis using quarterly color code requirement specified in this section.

All electrical extension cords used on the jobsite will be of the three wire type and be designed for hard or extra hard usage. 16 gauge cords are not allowed.

Electrical cords may not be spliced or repaired with electrical tape.

Any damaged cord must be removed from the jobsite until repaired in accordance with the manufacturer’s specifications for the type of insulation required, wire size and plug attachments. Repairs can only be made by a qualified person.

Consider all electrical wires and cords "live" until checked and/or locked out.

Electrical cords cannot be used for other purposes and must be protected from vehicular traffic.

Unplug all extension cords from power source before rolling up.

Any electrical equipment showing excessive wear or damage will not be used, and must be taken out of service, inspected, repaired, and retested by a Designated Competent Person.

The Lockout/Tag-out program must be adhered to at all times by GPI and Subcontractors.

Electrician must don full arc flash protection and use only electrically rated tools to determine if an electrically powered device has been de-energized or to perform trouble shooting methods.

If work is to be performed near overhead lines closer than 20 feet, a Power Line Close Proximity Permit must be completed. Please reference (Appendix 5A-13). Additional protective measures must be taken to protect workers from contacting overhead lines with any part of their body or directly through conductive materials, tools or equipment.
Any vehicle or mechanical equipment capable of having parts of its structure near overhead lines is to be operated to assure a minimum of 20 foot clearance.

When working in confined spaces with exposed energized conductors, workers must use protective shielding, barriers and insulating materials as necessary to avoid contact. Doors, hinged panels and other equipment will be secured to prevent contact between the workers and energized conductors.

**Assured Electrical Equipment Grounding Conductor Program**

The assured electrical equipment grounding process for the site covers all cord sets and receptacles which are not a part of the permanent wiring of the building or structure and equipment connected by cord and plug which are available for use, or are used by workers. This process will comply with the following minimum requirements and must be documented as outlined in 1926.404(b) (iii). It is the responsibility of the each Designated Competent Person to implement the assured electrical equipment ground conductor process.

Each cord set, attachment cap, plug and receptacle of cord sets and any equipment connected by cord and plug will be visually inspected before each day's use for external defects such as deformed or missing pins or insulation damage. Equipment found damaged or defective must be removed from service.

The daily visual inspection is made only on days the equipment is actually used and should be made by the workers using the extension cords, electrical tools and generators.

All equipment grounding conductors will be tested for continuity.

Each receptacle and attachment cap or plug, must be tested for correct attachment of the equipment-grounding conductor. The equipment-grounding conductor will be connected to its proper terminal.

**Requirements**

Equipment grounding conductors will be installed and maintained in accordance with this procedure.

Equipment grounding conductors will be installed as follows:

1. All 120 volt, single phase, 15 and 20 ampere receptacles will be of the grounding type and their contacts will be grounded by connection to the equipment grounding conductor of the circuit supplying the receptacles in accordance with the applicable requirements of the National Electrical Code.
2. All 120-volt flexible cord sets (extension cords) must have an equipment-grounding conductor that is connected to the grounding contacts of the connector(s) on each end of the cord.
3. The exposed non-current carrying metal parts of 120 volt cord and plug connected tools and equipment that are likely to become energized will be grounded in accordance with the applicable requirements of the National Electrical Code.

GPI employees and Subcontractors will visually inspect receptacles, flexible cord sets (extension cords), except those that are fixed and not exposed to damage, and equipment connected by cord and plug before each day's use for external defects such as missing or deformed pins, for insulation damage, and for
indication of possible internal damage. Where there is evidence of damage, the item will be taken out of service and tagged until tests and any required repairs have been made.

All 120 volt, single phase, 15 and 20 ampere receptacles which are not a part of the permanent wire of the building or structure, 120 volt flexible cord sets, and 120 volt cord and plug connected equipment required to be grounded must be tested as follows:
1. All equipment grounding conductors will be tested for correct attachment of the equipment-grounding conductor.
2. The equipment-grounding conductor will be connected to its proper terminal.
3. Testing Schedule: All required tests will be performed:
   a. Before first use.
   b. Before equipment is returned to service following any repairs.
   c. Before equipment is used after any incident that can be reasonably suspected to have caused damage.
   d. At intervals not to exceed three (3) months.
   The color code will be as follows:

<table>
<thead>
<tr>
<th>January – March</th>
<th>White</th>
</tr>
</thead>
<tbody>
<tr>
<td>April – June</td>
<td>Green</td>
</tr>
<tr>
<td>July – September</td>
<td>Red</td>
</tr>
<tr>
<td>October – December</td>
<td>Orange</td>
</tr>
</tbody>
</table>

5.4.10 Danger Tag, Lockout and Try Procedure

Introduction

It is the policy of the GPI Management to establish procedures to be followed by GPI employees for locking, tagging and trying a de-energized energy source to prevent injury caused by incidental operation. No work may be done on any energy source until the operation is prevented by use of this procedure. The objective of management is to provide a safe work environment and training of workers on these procedures. Subcontractors will implement their own lockout/tag-out program and ensure training and compliance with their employees.

General

Danger tags and locks may only be used to prohibit operation of an energy source.

Only standard construction danger tags will be used by the Subcontractors at this site.

Tags must be able to endure weather conditions and be legible by all authorized and affected workers. Tags must be securely attached so that they cannot be inadvertently or accidentally detached during use. Use a tie-wrap able to withstand 50 pounds of force.

Tags must provide a description of the equipment and/or the circuit number, the date, phone number, name and signature of the person using the tag.
Tags are never to be reused, but destroyed immediately upon removal. No alterations are permitted.

No device will be operated with a danger tag and lock attached regardless of circumstances. They do not provide the physical restraint on those devices that is provided by a lock.

Danger tags and locks will be placed by authorized workers.

No worker may remove another worker's tag or lock unless the owner (worker placing the lock or tag) is offsite. The owner's supervisor will be contacted to verify that the owner is offsite. An effort should be made to contact the worker. If the owner cannot be contacted then the GPI Construction Manager or designated person, (after assuring that the system or circuit is safe and after consulting with the responsible supervisor) may authorize its removal.

"Multi-Lock" devices must be used when multiple workers are involved in operation.

Lines containing energy sources, compressed air, inert gas and water require a lock as well as a tag.

An affected worker is one whose job requires them to operate or use a machine or equipment on which maintenance is being performed under lockout, tag-out, or whose job requires them to work in an area where service or maintenance is being performed.

Each affected worker will be instructed in the purpose and use of the energy control procedure.

An authorized worker is one who tags out or locks out machines or equipment in order to perform service or maintenance on that machine or equipment. An affected worker becomes an authorized worker when that worker's duties include service or maintenance.

Each authorized worker will receive training in the recognition of applicable hazardous energy sources, the type and magnitude of the energy available in the work place, and the methods and means necessary for energy isolation and control.

All other workers whose responsibilities are or may be in an area where energy control procedures may be utilized, will be instructed on the procedure and prohibition of attempting to restart or re-energize machines or equipment that are locked out or tagged out.

**Retraining**

Retraining should be provided for all authorized and affected workers when there is a change in their job assignments, a change in machines, equipment or processes that present a new hazard, or when there is a change in the energy control procedures.

Additional retraining should be conducted whenever there are deviations from or inadequacies identified in the workers' knowledge or use of the energy control procedures.
The retraining should re-establish worker proficiency and introduce new or revised energy control methods and procedures as necessary.

The GPI Safety Manager will ensure that employee training has been accomplished and is being kept up to date for GPI employees. The GPI Safety Department will document the training and that documentation will contain name and dates of training. Subcontractors are responsible for providing training for their employees and provide verification of the training.

5.4.11 Scaffolds

Purpose

The purpose of this procedure is to ensure safe erection, use and dismantling of scaffolds throughout the project.

Scope

All scaffolds and ladders erected and used at this site must conform to the requirements of this procedure.

Definitions

Mobile Scaffold – Scaffold that uses casters or wheels to make the scaffold portable.
Scaffold – A temporary elevated platform and its supporting structure used for supporting workers and or materials.
System Scaffold – Post with fixed connection points that accept runners, bearer, and diagonals that can be interconnected at predetermined levels.
Tube and Coupler Scaffold – Platform(s) supported or suspended by tubing, with coupling devices that connect uprights, braces, bearers and runners.

General

Only properly trained personnel will use or erect scaffolds. Personnel will be trained in compliance with OSHA 29 CFR 1926.454.

Erect all scaffolds in compliance with OSHA standards. Only trained scaffold builders under the direction of a Designated Competent Person will build scaffolds on this project. Designated Competent Person document (Appendix 5A -1) will be submitted to GPI Safety Department.

The site will utilize a color coded tag system:
1. Red – DANGER. Scaffold is shutdown or under construction. No entry is permitted.
   - A red tag will be placed on any incomplete scaffold being erected or dismantled, or a complete scaffold that has been taken out of service for any reason. Only the Designated Competent Person who applied the tag may remove it. The GPI Safety Department reserves the right to red tag any improperly tagged or defective scaffold.
• The tag must specify the reason for the issuance of the red tag and contact information (i.e. name and phone number) of the Designated Competent Person who issued the tag.

2. Yellow – CAUTION. Scaffold is incomplete. Special fall protection requirements apply.
   • A yellow tag will be placed on any scaffold that requires special fall protection, by the Designated Competent Person.
   • The yellow tag must specify the hazards, the preventative measures that must be taken to protect against the hazards, and contact information (i.e. name and phone number) of the Designated Competent Person who issued the tag in the event that clarification is needed.

3. Green – SAFE FOR USE.
   • No person will access any scaffold on site until the Designated Competent Person for scaffolding has inspected and green tagged the scaffold.
   • The green tag must contain the date inspected and the initials of the Designated Competent Person.
   • A Designated Competent Person will inspect, initial and date the green tag on the scaffold daily prior to each use.

Scaffolds must be visually inspected by a Designated Competent Person on a daily basis to ensure the following:
• Secure all decking to the scaffold frame and test for strength, and suitability to bear the intended load as per OSHA 29 CFR 1926.451(b).
• Maintain scaffolds free of debris and loose materials.
• Use only appropriate ladders with swing gates for safe access to scaffolding.
• All scaffolds must have handrails, mid-rails (with protective mesh when warranted), and toe boards according to OSHA standards.
• All persons must use fall protection when working with scaffolds.
• No unauthorized worker may remove any part of a scaffold. Only qualified scaffold personnel are authorized to alter a scaffold.
• Do not interchange manufacturer's frames, bracing, connecting pins and other accessories.

Erection
1. Only properly trained personnel will erect, use and dismantle scaffolding on this project.
2. Scaffolds exceeding 125 feet in height above the base plates must be approved by project management and designed by a Registered Professional Engineer.
3. Examine footing and set scaffold legs in base plates on foundations or mud sills adequate to support the maximum intended load.
4. Adjusting screws are to be installed only between base plate and vertical frame section. They will never be used together with casters; adjusting screws will not be extended more than 12 inches.
5. Scaffolds must be properly braced by cross bracing or diagonal braces (or both) when necessary for securing vertical members together laterally. Cross braces must be of a length that will automatically square and align vertical members so that the erected scaffold is always plumb, square, and rigid. All brace connections must be secure.
6. If the scaffold height exceeds four (4) times the smallest base dimension, it must be secured to the building or structure at the second lift and every other lift thereafter. Running scaffolds are to be
anchored every 30 feet horizontally at the heights established in the preceding sentence. Outriggers, or guys, may be used where it is impractical to secure scaffold to a structure.

7. All scaffold working platforms, beginning with the first lift or frame, must be equipped with a standard 42 inch high rigidly secured (not wired) handrail, 21 inch high mid-rail, and be completely decked with safety planks or manufactured scaffold decking and provided with rigidly secured toe boards.

8. Access to working platforms will be by ladder with rest platforms at 20-foot intervals.

9. Casters used with scaffolding must be rubber tired and provided with a positive locking device to hold the scaffold in position.

10. Casters of rolling scaffold will be locked at all times while the scaffold is being erected or in use. Scaffolds will not be moved while personnel remain on the scaffold. Tools or materials must be removed from the platform to prevent falling during moving.

**Scaffold Inspection**

1. All scaffolds must be inspected by the Designated Competent Person daily, and if found to be defective, tagged out of service until repairs are made. Inspection tags must be attached to the scaffolds. Additional inspections will be conducted as conditions change.

2. Inspect all scaffold components before erecting and during dismantling. Those found with defects must be discarded.

3. Inspect all handrails, mid-rails, cross bracing and steel tubing for damage and defects.

4. Ensure scaffold components are straight and free from bends, kinks, dents and severe rusting.

5. Inspect scaffold frame weld zones for cracks, and ends of tubing for splitting or cracking.

6. Inspect manufactured decking for loose bolts or rivet connections, and bent, kinked or dented frame.

7. Inspect plywood surfaces for softening due to rot, wear or peeling of laminated layers at edges. The surface should have an abrasive non-skid covering applied.

8. Inspect safety planks for external damage. Inspect tie rod/bolt and angle iron cleat.

9. Inspect all quick connecting devices to ensure that they operate properly.

10. Inspect all casters for smooth rolling surfaces, free turning, free acting swivel and that the locking mechanisms are in good working order.

**5.4.12 Fall Protection**

**Scope**

100% (Continuous) fall protection is required when exposed to a fall hazard of six feet or more above the ground or next working surface. It may be necessary to protect workers from falls less than six feet (6’) if a hazard exists. 100% (Continuous) fall protection compliance may consist of the following:

1. Eliminating the fall hazard through acceptable engineering controls.

2. Restricting access through the use of rigid barricades such as standard handrails.

3. Using personal fall protection equipment, e.g. a full body harness with a “Twin Leg” shock-absorbing lanyard with double locking snap hooks.

4. Using Self Retracting Lifelines (SRL) to limit free fall to 2’ or less.

5. Ensuring free fall distance is limited to 6’ or less and the Maximum Arresting Force (MAF) imposed is 1800 lbs. or less.
6. Ensuring that, the Total Fall Distance (TFD) is considered in relation to potential hazards and this risk is mitigated.
   • TFD must be calculated when a personal fall arrest system is used and the distance between the working/walking surface and the nearest surface or object below is less than 25’.

7. Requiring all personnel working on elevated structures to wear a full body harness with the appropriate lanyard at all times.

Acceptable Tie–off Points

Structural members:
1. Must be capable of supporting 5,000 pounds per worker.
2. Must be free of sharp or rough edges.
   • Utilize tie-off straps or rope sleeves to prevent abrasion and cutting.

Self-Retracting Lanyards (SRL):
1. Attach only to structures that are capable of supporting 5,000 pounds.
2. When SRLs are used in conjunction with a Horizontal Life Line (HLL) the SRL will be attached to the lifeline in such a way as to allow it to slide along with the person using it.
3. Utilize anchorage connector straps designed for fall protection use.
4. Conduct inspection of SRLs in accordance with the manufacturers’ recommendations.
5. Use an SRL on all fixed ladders where the length of climb exceeds 20 feet.
6. Utilize Double SRL System to comply with 100% (Continuous) fall protection.

Guardrail Systems

1. Guardrail systems must consist of top rail, mid-rail and toe board.
2. Guardrail systems must be constructed to withstand a load of at least 200 pounds of force applied to the top railing any direction except upward, with a maximum deflection of 2” at any point on the top rail or corresponding members.
3. Top rail must have a vertical height of approximately 42 inches +/- 3 inches from upper surface of top rail to walking/working level. Upright supports must be spaced no more than 8 feet apart.
4. The mid-rail must be halfway between the top rail and the walking/working level (to withstand a load of at least 150 lbs).
5. The toe board must be a minimum of 3½ inches vertical height from the top edge to walking/working level (to withstand a load of at least 50 lbs).
6. A solid barrier should be provided between toe board and top rail in applications where workers and/or traveling public are expected to pass underneath and there is a possibility of falling objects.

Openings - Floors and Walls

Protection is required to prevent personnel or material from falling through floor openings, wall openings or stairways. Protection may be accomplished with guardrails, covers or both.

Floor openings will be protected in one of the following ways:
1. Rigid guardrail and mid-rail of 2 inches x 4 inches wood, 2 inches x 2 inches x 3/8 inches angle iron post, supported by posts on 8 foot centers with toe board at least 4 inches high.
2. Cable guardrail and mid-rail of ½ inch cable with toe boards.
3. A hole cover conforming to the following:
   a. Minimum of 3/4 inch plywood, if one dimension is 18 inches or less
   b. Must be capable of supporting the maximum intended load
   c. Two-inch material if both dimensions exceed 18 inches
   d. Secured to prevent displacement
   e. Clearly marked with "Hole Cover" sign
4. Wall openings must be protected as outlined in 1 above, if the bottom of the opening is less than 39 inches from the working surface, or if the opening is at least 30 inches high by 18 inches wide, through which a person could fall.

Elevated floor edges will be protected in one of the following ways:
1. Perimeter guardrail, as described above.
2. Temporary, non-rigid barricade set back from edge at least 6 feet.
3. Ensure that the person creating a hole is responsible to see that the hole is barricaded or covered.

5.4.12.1 Bridge Construction

When work is being performed out of an aerial lift, all applicable fall protection and safety regulations for aerial lifts will apply.

Forming and Pouring Caps:
1. When deck is being put in place a horizontal lifeline (HLL) must be installed (if necessary two lines can be put up, one on each support beam for cap forms) and used as fall protection while deck is built and the guardrail system is completed.
2. Once the guardrail system is in place, if workers must work above the level of the top rail on the handrail system (i.e. on top of the cap form) then they must be tied off. They may tie off either to the structure or some other point that meets the requirements of an anchorage point.
3. When an aerial lift will be used to gain access to the cap form, an opening will be left so as to facilitate entry. The opening must be closed off or barricaded when not in use.
4. If a ladder is used to gain access to the cap form the opening for the ladder must be protected with removable rope or chain. Whenever the length of climb exceeds 20' fall protection must be implemented, i.e. a self-retracting lanyard.

When checking grades on caps, a horizontal lifeline must be installed on the cap to provide fall protection. If a horizontal lifeline is not feasible, then grades will be checked out of an aerial lift.

Prior to setting beams a horizontal lifeline must be installed on the cap according to OSHA regulations to provide fall protection for the worker responsible for directing the setting of the beam.

When setting pre-cast concrete beams, a horizontal lifeline must be installed on the beam prior to setting the beam. If this is not feasible then an aerial lift will be used to facilitate unhooking the crane from the beam.

When profiling beams, setting deck panels, installing PMD, overhang brackets or guardrails:
1. A controlled access zone will be established to control access to areas where leading edge and other operations are taking place.
2. Horizontal lifelines will be designed by a Registered Professional Engineer (RPE). Horizontal lifelines will be installed, and used, under the supervision of a qualified person. Horizontal Lifelines will be a part of a complete personal fall arrest system, which maintains a safety factor of at least two. RPE stamped and signed drawings for lifeline systems will be developed and reviewed by GPI prior to use.
3. Lifelines will have a minimum breaking strength of 5,000 pounds.
4. Lifelines will be protected against being cut or abraded.
5. The practice of stringing a “slide” line between two horizontal lifelines is not allowed.
6. Self-retracting lifelines (SRLs) may be used. SRLs must be used in accordance with manufacturer’s guidelines.
7. Where guardrail systems terminate, e.g. at abutments, the end and corners will be protected.
8. Any openings left from missing panels or where PMD is to be installed later will be barricaded and identified with to prevent access.
9. Crossovers for openings at caps etc. will be constructed so as to handle all anticipated loads and have a top rail, mid rail and toe board.
10. Horizontal lifelines will be used until the guardrail system is complete and in place.
11. All fall hazards will be eliminated prior to decommission of a controlled access zone.

**Bridge Concrete Placement**

A form of fall protection, such as a guardrail system, will be in place and complete.

Whenever scope of work requires workers to work at a height that effectively eliminates the fall protection afforded them by the guardrail system, workers will be tied off to an acceptable anchorage point.

**Disassembly of Overhangs and Installing Railings**

A horizontal lifeline (HLL) will be set up using concrete dead-men as end anchors to provide fall protection for unprotected edges.

Overhang baskets must have manufacturers or Professional Engineer’s approval for scope of work for which they are being used.

When working in an overhang basket, workers must be tied off.

This work should be performed using aerial lifts as much as is possible.

**Segmental and or Cantilever Balanced Bridges**

In any type of leading-edge bridgework there will be a warning line or barricade 6’ back from any unprotected edge.

SRLs to restrict travel and limit TFD or a HLL are the preferred method of fall protection.
When a HLL and/or SRL is not feasible, a specific fall protection plan for the scope of work involved within 6’ of an unprotected edge must be developed. This plan must meet all the requirements for 100% (Continuous) fall protection.

**MSE Walls and Cast-In-Place Walls**

When walls reach a height of 6’, 100% (Continuous) fall protection using a dead man system meeting the same requirements for dead man systems listed above in this section under removal of overhang baskets or standard guardrails with 42” top rail and 21” mid-rail will be required.

During the construction the standard guard rails will be maintained, unless a controlled access zone is established with barricades and signs stating “Fall Protection Required beyond this point”. The barricades and signs will be maintained until the hazard no longer exists.

**Miscellaneous**

When working six feet or closer to the edge of an incomplete platform or unprotected edge that is 6’ or higher than the ground or next working surface, 100 % (Continuous) tie-off will be used.

Workers will tie off when in aerial lifts.

At any time when a guardrail, lifeline or other fall protective system is taken down for work purposes (e.g. moving in materials) the crew or subcontractor who installed the system must be notified and permission is obtained, along with notifying the GPI Safety Department.

Anytime a fall protection system is taken down or damaged, it is the responsibility of the crew or subcontractor who did the damage to report the damage to the installing crew and to replace or repair the system.

**Rescue Procedure**

GPI and each Subcontractor must provide for prompt rescue of workers in the event of a fall, e.g. have an aerial lift or other means of retrieval readily available.

Any variances must meet 100% (Continuous) fall protection requirements and comply with all applicable local, state, and federal rules and regulations.

**Use and Inspection of Lifelines**

All Subcontractors are required to provide appropriate measures to eliminate personal injuries due to falls. All lifelines erected will be compatible with other fall protection equipment in use as well as meet specific erection guidelines for semi-permanent horizontal lifelines and comply with 29 CFR 1926.104(b). All lifelines will be designed in compliance with 29 CFR 1926.502(d) (8).

GPI and Subcontractors will ensure that all requirements of the program are monitored for compliance.
The involved GPI employees and Subcontractors will determine proper performance requirements and considerations in the selection, location and erection of semi-permanent horizontal lifelines.

The involved Designated Competent Person must inspect all lifelines and system components daily prior to their use.

Any component will be removed from service if subjected to a static shock load.

5.4.13 Cranes, Derricks, Hoists and Conveyors

General Requirements

All cranes to be brought on site will be checked in by a Designated GPI representative using the Mobile Crane Check-in Form, (Appendix 5A-12) before they are released for service.

All cranes are required to have an annual third-party inspection.

The crane must be of sufficient capacity and of proper type (i.e. crawler or mobile; mechanical or hydraulic) to fulfill all requirements of the work without endangering personnel or equipment.

Crane operation will be only at the direction of one Designated Qualified Signal Person.

Outriggers on all mobile cranes will be set and the crane leveled for all lifts (sound horn before setting outriggers), accordingly meeting 1926.1402, Ground Conditions.

When working off of natural ground or any unstable surface the appropriate sized cribbing or mats will be placed under the outrigger pads. Take the tonnage of the crane and divide it by 4, then take the square root of that number. This is the necessary square footage of the cribbing pad, e.g. an 80-ton crane would require a cribbing pad that is approximately 4.5’ square (80/4=20, the square root of 20=4.47). Additional measures may also be necessary to include the use of cribbing of a larger surface area based on the surface/ground conditions, weight of the intended load, etc.

“Walking” of suspended loads will not be permitted when other options are available. Where necessary to do so, the following rules will apply:

1. Investigate route to be followed for solid and level footing.
2. Take whatever steps possible to stabilize the load. The load must not swing from side to side.
3. Personnel will not touch the load for any reason. Dry tag lines made of non-conductive material must be used to control it in addition to Item 2, if additional control is required.

Weight of the load must be positively established prior to handling. Check brakes and machine stability when load is only inches above ground.

The operator must not attempt any lift for which they feel conditions are inadequate.

When leaving the cab, the following precautions should be observed:

1. Disengage the master clutch and shut off the engine,
2. Lower bucket or crane load to ground,
3. Set safety pawls on all drums where these are manually operated, and
4. Set the swing lock or swing brake and both traction brakes and/or locks to prevent machine movement.

The swing radius of the counterweight must be barricaded and will be maintained throughout the day and highly visible. At a minimum red warning tape or equivalent must be used for swing radius identification.

All cranes must be equipped with a functioning anti-two block device.

All cranes must be properly secured after each workday.

Operators may not allow anyone to ride on equipment unless seats are provided for that purpose.

Operators are required to use seat belts if manufactured for their equipment.

Operators must keep ground personnel within sight at all times.

Operators will make certain that the equipment is not adjusted, repaired or greased while in motion or while the motor is running.

No one may climb on or about the equipment while it is in motion.

All guards on equipment must be kept in place.

Crane operators will not allow persons to ride the hook or suspended load.

Crane or shovel booms will never be brought within twenty (20) feet of power lines without a **Power Line Close Proximity Permit, (Appendix 5A-13)**.

All hoisting equipment must be operated on a firm, level foundation.

Avoid sudden stops and starts.

The hoist line must be vertical before starting the lift.

Crane loads and booms may not swing over personnel.

The boom hoist drum pawl should be engaged at all times except when lowering the boom.

A tagline is required on all loads, except when in close proximity to power lines and then they must only be used if they are dry and made of non-conductive material.

No toolboxes, oil cans, choker racks, water coolers or similar additions may be placed in the radius of the swing of the counterweight where a person could conceivably be crushed.
Standing or sitting on the running board, fender, hood, head-ache rack or on a load is prohibited.

Keep well away from the cable in towing and winching operations.

Operators and ground personnel will inspect cables on equipment twice daily in accordance with the manufacturer’s recommendations, and will perform proper maintenance on cables.

The operator is responsible for the safe operation of the equipment at all times.

The operator is responsible for a daily inspection using the type –specific daily inspection log. Copies must be available for review as a part of the daily safety assessment.

The operator is responsible for keeping equipment in safe operating condition, and will report defects or malfunctions to their foreman immediately.

Windshields are to be clean and free of cracks and other obstructions.

Knots in wire rope or tail-chains are prohibited.

All wire rope, nylon slings, chokers, and chain slings will have a tag indicating load capacity and size.

Slings and chokers will be inspected prior to each use and meet OSHA requirements. Cables that are severely kinked will be removed from the site or destroyed.

A critical lift is any lift that exceeds 75% of the capacity of a crane. If a lift exceeds 75% of a crane’s Load Chart Capacity at any given radius, then the lift becomes critical. Other considerations for critical lift are as follows:
1. The lift requires multiple cranes
2. The location is hazardous
3. There is a long lead time for making and receiving a particular load
4. Use of a suspended personnel platform

A critical lift plan must be completed and approved by Superintendent and Project Engineer prior to the lift. If lift is over 90% crane capacity, critical lift plan must be approved by GPI Segment Manager and Safety Manager.

5.4.13.1 Operator Qualification

Only certified crane operators certified thru CIC or CCO are allowed to operate any crane on this site. Unauthorized operation of a crane is cause for removal from the project.

Qualification follow-up: After initial qualification, the operator will be closely monitored by the involved Designated Competent Person until they feel there is no doubt of the operator's full qualifications.

Rental Cranes
All rental cranes must be checked in by a designated GPI representative using the *Mobile Crane Check-in Form*, (Appendix 5A-12).

Third Party Rental operators must provide documentation showing qualification and authorization to operate the crane. The involved Subcontractor who is leasing the crane is responsible for providing GPI with a copy of this documentation.

### 5.4.13.2 Inspections

#### Annual Inspections Third Party

All cranes and boom trucks used on the site will be required to pass an annual third party inspection prior to operating on the jobsite. The third party inspection will be available on the crane for review by the designated GPI representative.

#### Monthly Inspections by a Competent Person

All cranes used on the site must be inspected monthly by the Designated Competent Person and documented. Copies of this documentation must be provided to the designated GPI representative.

#### Daily Checklist Inspections By A Competent Person/ Operator

All cranes and boom trucks must be inspected daily prior to use by the Designated Crane Operator or Designated Competent Person, and the results documented on a checklist. The records of the daily inspection will be required to be kept on the equipment and available for review. Copies of this documentation must be provided to the designated GPI representative.

### 5.4.13.3 Suspended Personnel Platforms

The use of equipment to hoist employees is prohibited except where GPI or the subcontractor demonstrates that conventional means of reaching the work area would be more hazardous.

#### General

A crane or derrick may be used to hoist workers onto a platform only when:

1. It would be more hazardous to use conventional equipment for elevated work such as a personnel hoist, ladder, stairway, aerial lift, elevated work platform or scaffolding.
2. Structural design or work site conditions make it impossible to erect, use and dismantle such conventional equipment.
3. The crane or derrick and the personnel platform and the use of that platform all comply with 29 CFR 1926.1431.

Any Subcontractor needing to use Suspended Personnel Platform must first notify the GPI Segment Safety Manager a minimum of 48 hours prior using the *Suspension Work Platform Checklist and Authorization*, (Appendix 5A-14).
5.4.14 Self-Propelled Aerial Platforms

Operator Qualification

Only trained and qualified operators who have been designated by their employer will be allowed to operate a self-propelled aerial platform.

Fall Protection

A full body harness with an appropriate lanyard will be worn when operating an aerial platform. Attach the lanyard only to the manufacturer-provided anchorage point. Never attach any lanyard to a handrail or a nearby structure or support.

Use of an aerial platform to gain access to an elevated platform or workstation is permitted only if there is a safe method of gaining access. In the event an aerial platform is to be used in this manner, the following rule will be strictly adhered to:

1. Workers operating on aerial platforms will be tied off 100% of the time while on the platform.
2. Prior to opening the gate of the aerial platform to exit and unhooking from it, workers must tie off to an adequate and acceptable anchor point on the structure they are accessing with the second leg of their lanyard.
3. Prior to disengaging from the structure or work platform, workers must first hook the second leg of their lanyard to the designated anchor point on the aerial platform.

Never remain tied off to an aerial platform while working outside of it nor remain tied off to a structure or work platform while working inside of the aerial platform.

Driving

- Secure turntable before moving extension boom.
- Be sure the machine is in the stowed position before towing.
- Reverse traveling is intended for work site mobility only.
- Ensure proper orientation of turntable for intended direction of travel.
- Never move machine until the outrigger beams and jacks have been completely retracted.
- Be aware of clearances when driving and towing.
- Always travel with the boom positioned in line with the direction of travel.
- Post a lookout when the operator’s view is obstructed.
- Always keep your attention in the direction of travel and watch out for overhead obstructions.
- Driving on a 15% grade to get to the worksite is acceptable but the boom lift should be operated on a flat level surface. When traveling over a long distance it is advisable to lock the turntable (if the boom lift is equipped with one, keep the boom mast retracted and keep the operator platform at or below the horizontal position with the ground. Do not drive the boom lift on grades or side slopes exceeding those specified on caution place-cards or indicated in the Operator’s manual.
- Never drive machine with outriggers extended.
- Do not travel or work machine on soft or uneven surfaces, as tipping will occur.
Safe Operating Practices

- Obey all warnings, cautions, and operating instructions posted on the machine and listed in the operations manual.
- Operators must complete a documented daily inspection which must remain on the equipment for review.
- The operator's manual must remain on the equipment at all times.
- Never operate a malfunctioning machine. If a malfunction occurs, shut down the machine and notify a supervisor.
- Maintain safe clearance from electrical lines and apparatus. A Power Line Close Proximity Permit, (Appendix 5A-13) is required when operating a self-propelled aerial platform within 20 feet of electrical lines and apparatus.
- Never exceed manufacturer's rated platform capacity.
- When riding in or working from the platform, both feet must be firmly positioned on the deck.
- Never position steps, ladders or similar items on the platform to provide additional reach for any purpose.
- Do not allow ground personnel in areas around and under a raised platform.
- Do not operate machine when wind conditions exceed manufacturer’s guidelines.
- Always check clearance on both sides of machine before extending and setting outriggers.
- Be extremely cautious when operating from platform to prevent objects striking or interfering with operating controls.
- Use a flagman or ground guide when operating in confined area.
- Always actuate controls with slow even pressure.
- Never slam a control through neutral to opposite direction. Return lever to neutral, stop and then proceed.
- Never pull the machine or other objects by retracting the boom.
- Never push the machine or objects by telescoping the boom.
- Never use boom for any purpose other than positioning working personnel, their tools and equipment.
- Never attempt to free machine by lifting it off the ground with boom.
- Never walk or climb the boom to gain access to or to leave the platform.
- Stow boom and shut off all power before leaving the machine.
- Always check clearances around entire platform and boom when raising, lowering, swinging and telescoping. Always check turntable clearance before swinging the boom.
- Always check machine stability before positioning platform.
- Keep oil, mud, grease and slippery substances cleaned from your footwear and platform deck.
- Never attach wire, cable or any other items to platform.
- Be familiar with locations and operation of all alternate and override controls.
- Never tamper with the dead man foot switch or other safety limit switches.

Maintenance

- Always disconnect batteries when replacing electrical components.
- Remove rings, watches or other jewelry when performing any maintenance.
- Do not wear loose fitting clothing or unrestrained long hair.
• Use only approved nonflammable cleaning solvents.
• Shut off all power controls before making adjustments, lubricating or performing any other maintenance.
• Use caution when checking hot pressurized engine coolant system.
• Machine must be grounded when refueling. No smoking is mandatory. Never refuel during electrical storms. Ensure fuel cap is secure when not refueling.
• Never work under an elevated boom until boom has been restrained from movement by blocking or with overhead sling.
• Keep oil, grease, water, etc., wiped from standing surfaces and handholds.
• Always check all instruction, caution and warning placards to ensure they are not obliterated, defaced or missing.
• Never allow a machine to be operated until it has been serviced and maintenance performed according to manufacturer's specifications and schedule.

5.4.15 Motorized Vehicles and Mechanized Equipment

Equipment Inspections

All operators of equipment on the project are required to be designated as qualified operators by the subcontractor's project representative. GPI operators shall be designated by a GPI department head.

Before any machinery or mechanized equipment is put in use, it will be inspected by a qualified person to ensure it is in safe operating condition.

Inspections will be performed in accordance with the manufacturer's recommendations and will be documented.

All equipment will be re-inspected prior to use if it leaves the jobsite and returns.

Daily shift inspections will be performed as follows:
1. The Designated Operator of the machine will be responsible for completing and documenting the daily inspections.
2. Inspections will be done at the beginning of each shift during which the equipment is to be used to determine that the brakes and operating systems are in proper working condition and that all required safety devices are in place and functional.
3. The daily equipment inspection shall be documented on the GPI daily inspection form and be available for review during assessments.

Whenever any machinery or equipment is found to be unsafe or whenever a deficiency which affects the safe operation of the equipment is observed, the equipment will be immediately taken out of service and its use prohibited until the unsafe conditions have been corrected.

A tag indicating that the equipment will not be operated will be placed in a conspicuous location on the equipment. Required, lockout procedures will be followed.
The tag will remain in its attached location until it is demonstrated to the individual who tagged the equipment that it is safe to operate.

When corrections are complete, the machinery or equipment will be re-inspected prior to being returned to service.

In no event is any piece of equipment to be placed in use because it is "urgently needed" until it has been thoroughly inspected and the proper guards installed.

**Safeguards and Safe Operating Procedures**

When equipment is used, each operation will include the use of the equipment in the daily job hazard analysis.

Whenever possible, haul roads, ramps and other areas where heavy equipment is moving should be avoided. Follow the flag person's directions and always keep a sharp lookout for moving equipment.

Seatbelts and anchorages that meet applicable federal regulations will be installed and in working condition in all motor vehicles. Two-piece seatbelts and anchorages for construction equipment will comply with applicable federal specifications of SAE J 386a.

Seat belts must be installed and used on all equipment with rollover protection.

Equipment driven on open, public roadways will be operated by a Designated Operator with a valid driver's license.

No one may ride outside cabs of any piece of equipment.

A fully charged and accessible fire extinguisher will be available for each piece of equipment.

All equipment with obstructed vision must be equipped with a reverse signal alarm. Reverse signal back-up alarms will be installed on all self-propelled construction equipment, whether moving alone or in combination.

Back-up alarms will be audible and sufficiently distinct to be heard over prevailing conditions. All back-up alarms will operate automatically upon commencement of backward motion. The alarms may be continuous or intermittent, not exceeding 3-second intervals, and will operate during the entire backward movement. Any person who notices a non-working back up alarm on any piece of equipment will be required to immediately notify their supervisor.

A warning device or signal person will be provided where there is danger to persons from moving equipment, swinging loads, buckets, booms, etc. Back-up alarms will be in addition to the requirements for signal persons.
Guards will be provided for all belts, gears, shafts, pulleys, sprockets, spindles, drums, flywheels, chains or other reciprocating, rotating or moving parts of equipment which are exposed to contact by persons or when they otherwise create a hazard.

All hot surfaces of equipment, including exhaust pipes or other lines, will be guarded or insulated to prevent injury and fire.
Platforms, foot walks, steps, handholds, guardrails and toe boards will be designed, constructed and installed on machinery and equipment to provide safe footing and access ways.

Overhead protection will be provided for operators of forklifts and similar material handling equipment. Suitable protection against the elements, falling or flying objects, swinging loads and similar hazards will be provided for operators of all machinery or equipment.

Glass used in windshields or cabs will be safety glass, and maintained clean and free of cracks in the view of the operator.

The scissor point of all articulating equipment will be guarded.

No guard, safety appliance or device will be removed from machinery or equipment or made ineffective except for making immediate repairs, lubrications or adjustments, and then only after the power has been shut off. All guards and devices will be replaced immediately after completion of repairs and adjustments, and before the power is turned on. All points requiring lubrication during operation will have accessible fittings located without hazardous exposure.

Dozers used for clearing trees and large brush must be equipped with brush guards on the windows and on all sides of the cab.

All bulldozers, tractors or similar equipment will be provided with guards, canopies or grills to protect the operator from falling and flying objects as appropriate to the nature of the operation.

All crawler and rubber-tire tractors, off-highway self-propelled pneumatic-tire earth movers, motor graders, water tank trucks and other self-propelled construction equipment, such as front-end loaders, backhoes, rollers and compactors must be equipped with a rollover protective structure.

Non-production equipment (cars/pickups) will park 200 feet away from the immediate work area. If it is not practical to park 200 feet away, they must be parked safely in the work zone in an area designated for that purpose.

When constructing haul roads for equipment use, the following procedures will be followed:
1. Berms must be built along the roadway, especially on hills and curves where there is a danger of sliding or spinning out.
2. Dust control measures will be monitored to maintain maximum visibility.
3. Ramps and crossing will be clearly marked with flagging and/or signs so that oncoming traffic has ample warning.
4. Haul road surfaces will be smoothed frequently with a motor grader (or similar equipment) and super elevated at curves.
Never start a piece of equipment by shorting across the start terminals.

Never wire around or defeat the neutral start switch.

Always make sure the equipment is in neutral or park before starting it.

Never start a piece of equipment from any place other than the operator's seat.

Always walk around the equipment to check for people before moving and to make sure the area is clear of obstructions.

Check tail swing for interference on large backhoes and cranes.

Equipment and vehicles are not to be left running when unoccupied, no matter how short the duration. This includes on-road and off-road equipment and vehicles.

Prior to dismounting from equipment, the parking brake must be set and all ground engaging tools must be lowered to the ground (exception is backhoes when the backhoe is in the locked position.) When parked on a grade, the wheels should be blocked or turned into a bank. Never park equipment uphill from work areas.

Off-road trucks and equipment that do not have ground engaging tools to lower to the ground must also have chock blocks to prevent uncontrolled movement.

Handrails, ladders, steps and walkways are to be used when mounting and dismounting equipment. Always face the ladder when climbing up and down and use the three-point contact method. Never jump from a piece of equipment or truck.

All towed units such as generators, tool trailers, air compressors, light plants, flat trailers, etc. must have the wheels chocked prior to unhitching the trailer from the tow vehicle.

Operators are to maintain a speed on the roadways that is consistent with the conditions of the roadway, grade, clearance, visibility, traffic and the type of equipment being operated.

Equipment on public roads will be escorted by the involved Subcontractor’s company vehicle equipped with flashing or rotating beacons. The machinery must have a "Slow Moving Vehicle" sign (i.e. orange triangle) and should also be equipped with a flashing or rotating beacon or such other signage as the law and Traffic Control Plan require.

When traveling equipment with attached tools (buckets, forks, etc.) the tools should be positioned forward and within 2 feet of the ground.

Lights will be turned on for safety. Operate all equipment and company vehicles with lights on, including flashing or strobe lights if equipped, both day and night.

No "homemade" tools, jigs, fixtures or rigging devices may be used.
No motor vehicles or equipment operating on this site will be refueled with the engine running or operating.

All ignition switches will be in the "off" position during refueling operations. A suitable fire extinguisher will be at hand during refueling operations.

Supervisors and foremen will train their employees with the provisions of this procedure and require strict compliance.

**Equipment Repairs**

Mechanics must adhere to rules set forth for equipment operations.

Each Subcontractor is required to have a spill kit available to contain and cleanup operating fluid spills. Every spill will be reported to GPI.

Required PPE is to be worn when using solvents or any other hazardous material.

Ensure all equipment and vehicles are locked out, the key removed from the ignition and controls tagged prior to working on the machine.

When it becomes necessary to work beneath a machine or part of a suspended machine, it will be safely blocked or cribbed before work begins.

Only approved solvents are to be used for cleaning parts. The use of gasoline as a cleaning solvent is prohibited.

An approved safety cage or safety rods must be used when inflating lock-ring tires.

**Work Near Overhead Electrical Service Lines Policy**

In order to prevent the possibility of serious injury, the following overhead power line policy will be implemented.

Before any operations begin, all power lines in the immediate work area will be identified, including those located in maintenance and storage yards, plant sites, driveways, etc. These lines will be identified by KVA.

Before work starts on any job where the danger of contacting an overhead power line exists, a *Power Line Close Proximity Permit, (Appendix 5A-13)*, must be included in the Work Plan. Requirements under 29 CFR 1926.1407 through 1926.1411 will be followed.

Specific additions to the standard Work Plan will include:

1. Plan views of the job identifying the location of all overhead utilities. The plans should indicate the voltages, the heights of the lines and the location. These plans will be updated and maintained as determined by job progress, e.g. grade changes, relocation of power lines, cable installation, etc.
2. The plan will be communicated to all GPI workers working near overhead power lines.
3. The location where equipment has the potential to come within 20’ of a power line and a location-specific hazard assessment identifying the work plan/procedure for all pieces of equipment on the job prior to work in that area.
4. Emphasis that equipment and materials should not be stored under overhead lines.

Equipment Traveling or Working near Overhead Power Lines

All work within 20 feet of overhead power lines must not commence prior to compliance with the Close Proximity Permit.

When it becomes necessary to position equipment for performing work in an area near energized power lines, the following procedures must be followed if the equipment has the potential to extend, be raised or otherwise move within the minimum safe clearance.

Power lines should be de-energized or relocated, if at all possible.

If it is possible to have the power line de-energized, do not start operations until notification has been received by the utility owner that the lines are dead and the lines are visibly grounded on both sides of the area where the equipment will be working. If the lines cannot be grounded, a representative from the utility company will be present at the start of each shift (or full-time) to confirm that the lines are de-energized.

If it is not possible to have the lines de-energized and not practical to have the lines relocated, then the equipment must be prevented from coming any closer than 20 feet. If operations could have the possibility of getting within 20 feet of a power line, 29 CFR 1926.1407 through 1926.1411 will be followed.

When possible, vehicles in transit near energized lines must maintain 50 feet clearance.

Positive stop measures must be installed to prevent working equipment or loads from coming within the required clearance of energized power lines.

If positive stops cannot be installed, a supervisor of the involved crew or subcontractor must be present with an air horn (or similar device) at all times with sole responsibility of preventing the equipment from coming any closer than 20 feet. If it is necessary for the supervisor to leave the work location, the equipment will be turned off and the operator will exit the equipment.

A Designated Competent Person must approve all equipment setups in areas where power lines are present. A Power Line Close Proximity Permit will be required. The form for this permit can be found in (Appendix 5A-13).

Any equipment operating near power lines must be moved away from the power line at the end of the shift.

On projects where it is necessary to move equipment or loads on access roads adjacent to energized power lines, the following procedures must be adhered to:
1. Place “DANGER Power Line” signs along the side of roads where overhead power lines run.
2. Demarcate a highly visible line (in day or night) parallel to the overhead power line at a distance that does not permit a piece of equipment moving on the access road to come within the Table A Minimum Clearance Distance (29 CFR 1926.1408) for the kV rating of the power line.

3. Review the written working procedure for moving the equipment along the access road with the operators and crews.

4. A Designated Competent Person of the involved crew must be put in charge of oversight of the equipment during movement. This individual may not delegate their responsibility to a foreman or any other person on the crew; however, they may assign the actual signaling and directing of the movement to a more experienced person.

On projects where power lines cross over access roads, the following procedures must be followed:

1. Place “DANGER Power Line” signs on both sides of the roadway preceding the overhead power lines.

2. Do not permit a piece of equipment passing under the overhead power line, to come within the Table A Minimum Clearance Distance (29 CFR 1926.1408) for the kV rating of the power line.

3. Do not allow anyone to touch the equipment or any materials the equipment is hoisting or carrying during movement of equipment under overhead power lines.

4. A Designated Competent Person of the involved subcontractor must be put in charge of oversight of the equipment during movement. This individual may not delegate their responsibility to a foreman or any other person on the crew; however, they may assign the actual signaling and directing of the movement to a more experienced person.

5. Review the procedure for moving the equipment along the access road with the operators and crews.

Supervisors, operators and all other crewmembers must be thoroughly familiar with these procedures while working in close proximity to energized power lines. They must be trained on the correct procedures to follow in the event equipment or loads make contact with an energized power line. The following procedures must be followed if there is contact with an energized power line:

1. No member of the crew will touch any portion of the equipment or suspended load.

2. The operator should stay with the equipment and break contact before attempting to leave the controls.

3. The utility owner must be notified.

4. Emergency services must be notified if equipment cannot break contact or the general public’s safety is affected.

5. All members of the crew must watch for unexpected collapse of a crane boom, for lines breaking or loads shifting that might cause them to come in contact with power lines.

6. While the equipment is in contact with an energized line, no persons are allowed within a minimum of 40 feet of the equipment, as the ground surrounding the equipment may be energized. Greater distances are required for lines over 50kV.

The GPI Construction Manager and Safety Manager must be notified immediately in the event of an overhead power line contact.

**5.4.16 Plant Operations**
Purpose

The purpose for this procedure is to ensure that all applicable OSHA, state, local and project requirements are met while operating plants on this project.

All plants to be brought on site will be checked in by the GPI Safety Department using the **Batch Plant Check-In Form**, *(Appendix 5A-15)*, after set-up and prior to operation.

Scope

All GPI employees and Subcontractors working on the following types of plants:

1. Concrete Batch Plants
2. Asphalt Batch Plants
3. Pug Mills
4. Crusher Plants

Inspections must be in compliance with manufactures recommendations.

The operators manual for the make and model plant will be located in the control house.

All required warning decals and operational device labels must be legible.

The Hazard Communication Program and all safety data sheets for the products in use and stored on the premises will be available for review in the plant control station.

All chemical containment vessels will be labeled with the contents.

The spill control plan, and containment and clean up materials will be available on site. Workers must be trained in the use of these materials.

Fuel tanks must be labeled with the contents and “Flammable” and “No Smoking” signs posted within 50 feet.

Fire extinguishers must be available throughout the batch plant area in the type, amount and spacing/travel distance as specified in 5A 4.4.

All plants are required to have a properly stocked first aid kit that is visible and accessible.

Workers required to maintain, clean or work with any hazardous energy source are required to ensure that the hazardous energy source is de-energized and locked out. The involved Subcontractor’s supervisor or Designated Competent Person is responsible for implementing their company’s lockout/tag out program before beginning work.

Cement Dust

Appropriate eye protection is required at all times in plant operations.
Designate an area where workers can eat and drink that is free of dust to avoid the ingestion of chemicals.

**Concrete**

Wear alkali-resistant gloves, coveralls with long sleeves and full-length pants, waterproof boots in addition to the required minimum PPE.

Wash contaminated skin areas with cold, running water as soon as possible.

An eye wash station to rinse eyes splashed with wet concrete with water for at least 15 minutes is required to be maintained in the batch plant area.

**Machine Guarding**

Guards are required on all belts, pulleys, augurs, couplings, etc.

Maintain conveyor belt systems to avoid jamming and clear jam only after the equipment is properly shut down and locked out.

Establish and follow lock out/tag out procedures when servicing equipment.

**Falling Objects**

Protect areas underneath conveyor belt systems, or other overhead operations within the plant area to guard against workers being hit by falling material.

Avoid working beneath elevators, conveyor belts and stacker/de-stacker machinery.

Stack and store materials in compliance with 29 CFR 1926.250.

**Confined Spaces**

Mixers and ready-mix trucks have confined spaces. Follow established procedures for confined space entry and work.

Confined spaces shall be evaluated using the *Confined Space Evaluation Form (Appendix 5A-17)*. If the competent person deems the space as permit required then a permit required confined space permit shall be issued from GPI safety regarding self-performance. A permit required confined space permit shall be used by subcontractors and GPI Safety or designee shall review prior to entry.

Wear appropriate protective equipment to avoid silica exposure when removing concrete residues from inside mixer drums.

Use appropriate hearing protection to guard against excessive noise exposure during cement loading/unloading and while using pneumatic chippers inside mixer drums.
Vehicles

Poorly maintained or improperly handled vehicles and equipment can lead to crushing injuries at the plant site or other injuries for truck drivers, and are not to be permitted.

Make sure back-up alarms on all haul trucks and construction equipment are functioning.

Use care with the load out chute on concrete mixers to avoid injuries to hands and fingers.

Use a spotter when backing vehicles in the plant area.

5.4.17 Excavations, Drilling and Boring

General

The procedures for excavations must comply with all applicable state and federal regulations, and the GPI Safety and Health Plan.

All excavations, boring and drilling operations and adjacent areas must be inspected by a Designated Competent Person daily, after every rainfall, as soil conditions change and as needed throughout the shift. These inspections will be documented. A sample Daily Excavation Checklist can be found at (Appendix 5A-18).

5.4.17.1 Utility Locations

The involved GPI employees and Subcontractors are required to complete the Excavation, Drilling, Boring Permit, (Appendix 5A-16) and attach all utility locate confirmation tickets, including Texas 811 and other member and non- member responses, to the checklist prior to beginning any excavation, drilling or boring activity.

The involved Subcontractor is required to notify and request locations of non-member utilities such as municipal water and sewer etc. that may be in the affected work area. The subcontractor is responsible for requesting from GPI the locates for existing utilities as a part of the non-member utility locate procedures.

All proposed locations to be excavated, drilled or bored are required to be identified with white marking paint around the designated area prior to the locator arriving to ensure that the correct area is being marked by the utility locators.

All Texas 811 locate request tickets and non- member request notifications will specify the exact work area to be located and must state that the area to be located by the utility owner’s representative is marked with white paint.

All GPI employees and Subcontractors are required to ensure that all involved equipment operators and other workers are aware of the utility location flags and paint marks in the area and how to determine it is safe to excavate and/or drill in the area.
If locate marks or flags are not visible at the time a Contactor arrives at the work area, work will not begin until it has been verified that the locate service did respond to the locate request and did not find any utilities in the designated work area.

The involved Subcontractor is required to ensure that all of the utilities are identified and marked indicating there is no conflict with the work to be performed.

The GPI Superintendent or his designee is required to verify that the utility locations are marked in the designated area to be excavated, drilled and/or bored and the permit is properly completed by the Designated Competent Person. All locate tickets shall be attached to the completed checklist indicating no obvious underground hazards prior to the work beginning.

All Subcontractors must be aware that locate tickets expire after 14 days and a relocate is required if the work is not completed.

**Utility Damage Events**

In the event a facility is damaged by excavation, boring, drilling or any other activity, the following procedure must be followed:

1. The involved GPI employees or Subcontractor will immediately contact the facility operator to report the damage.
2. The involved GPI employees or Subcontractor is not certain of the operator's identity, the party involved will contact a notification center (e.g. TEXAS 811) to report the damage.
3. If damage endangers life, health, or property because of the presence of flammable material, the GPI employee or Subcontractor will keep sources of ignition away and immediately call 911. The involved GPI employee or Subcontractor is responsible for protecting the affected work area, evacuating personnel up wind and shutting down all equipment.
4. GPI must next be verbally notified. GPI must be informed of any service interruption to customers, the anticipated time of repair and the time when the service has been restored to all affected customers.
5. The involved party will complete a Supervisor's Utility Damage Report, (Appendix 5A-9), and turn it into the GPI Safety Department within 24 hours of the occurrence. This report is also required for above ground utility damage events where damage meeting either of the first two criteria (removing the word “underground”) under the definition of “Damage”, has occurred.

**Definition of Utility Damage**


"Damage" means:

1. the defacing, scraping, displacement, penetration, destruction, or partial or complete severance of an underground facility or of any protective coating, housing, or other protective device of an underground facility;
2. the weakening of structural or lateral support of an underground facility; or
3. The failure to properly replace the backfill covering an underground facility.

5.4.17.2 Excavations

All excavations over 5 feet must be properly shored, sloped or shielded unless otherwise directed by a Designated Competent Person.

Fall Protection around excavations deeper than 6 feet where a fall hazard exists when left unattended or obscured from vision.

All surface encumbrances that are located so as to create a hazard to workers must be protected, removed or supported as necessary to safeguard workers.

Excavations must be properly barricaded and warning signs posted when unattended.

Material, including spoil piles and equipment must be kept a minimum of 2 feet from the edge of excavations.

Spoil piles must not have a greater slope than the slope allowed for the type of soil(s) being excavated.

Workers will not work outside the protected areas of an excavation, i.e. outside of a trench box or shoring system.

Workers must not work in excavations where there is accumulated water unless precautions have been taken to protect the workers from the hazards posed by water accumulation. These precautions will vary with each situation but could include special support or shield systems to protect from cave-ins, water removal to control the level of accumulating water, or the use of a safety harness and, lifeline. Water removal will be conducted under the supervision of a designated competent person.

Trench boxes and shoring systems must have the capacity to resist without failure all loads that are intended or could reasonably be expected to be applied or transmitted to the system. They must also be installed so as to prevent lateral movement. Manufacturer specifications, recommendations and limitations concerning these systems and components must be in writing, and include the Tabulated Data. This documentation must be available at the location where the trench box is being used.

Shoring systems made for particular excavations or uses must be designed by a Registered Professional Engineer (RPE).

Protective systems for excavations greater than 20-feet in depth must be designed by a Registered Professional Engineer (RPE). The designs must be in written form, must include the configurations that were determined to be safe for the particular location and activity and must include the RPE’s signature and seal approving the design. All of the above documentation must be on file with the GPI Safety Department and also available at the location where the system is in use.
Installation and removal of excavation protection systems must be conducted in a manner that meets OSHA regulations, the manufacturer’s specifications and when applicable, a Registered Professional Engineer’s requirements.

A stairway, ramp, ladder or other safe means of access and egress must be located so as to require no more than 25 feet of lateral travel for workers in excavations 4 feet or more in depth.

Temporary special shoring will be used on all abutment walls, roadway walls and MSE retaining walls as needed to prevent sloughing and ensure safety. This shoring will consist of horizontally drilled soil nails, wire mesh and application of gunite. Temporary special shoring will be designed by a Registered Professional Engineer (RPE).

Horizontal Auger Drilling will be done in accordance with applicable federal regulations and industry standards.

5.4.17.3 Requirements for Hazardous Excavations

In any excavation where it can reasonably be expected to contain or develop an oxygen deficient or hazardous atmosphere, all applicable OSHA regulations will apply.

A third party hazardous material contractor will be contacted to enter all hazardous atmospheres or to remove all hazardous materials.

All workers who will be entering excavations and/or working in any type of excavation where the possibility of oxygen deficiency or a hazardous atmosphere could exist must be appropriately trained. The training will consist of confined space training, hazard recognition training, PPE training and any other training as required by federal and state regulations, and company policy.
5.4.17.4 Drilling and Boring

Underground utilities must be located per utility procedures referenced in 5A 4.17.1.

All boring or drilling machines shall be grounded prior to penetration of the earth’s surface.

Identify all other hazards such as overhead power lines, overhead structures, vehicle traffic and pedestrian traffic.

Establish controlled access zones around work to prevent the entry of non-essential personnel. No worker other than the operator will be within 8 feet of the moving auger or inside of the barricaded area.

Drilled shafts required to be protected to prevent falls in compliance with all applicable OSHA regulations.

Drilled shafts are not be entered by any worker of any contractor onsite.

Drilled shafts must be securely barricaded or covered, and appropriate warning signs posted when left unattended.

Fall protection around drill shafts where a fall hazard exists for employees.

Do not allow any part of the machine to contact or come near electrical lines. Maintain a minimum distance of 20 feet.

All surface encumbrances that are located so as to create a hazard to workers must be protected, removed or supported as necessary to safeguard workers.

Material, including spoil piles and equipment must be kept at least 2’ from the edge of the drill shaft.

A bore pit is defined as an excavation.

Always check for obstructions before moving the machine or machine mast.

Do not attempt to move the machine if visibility is obstructed.

Do not attempt to move the machine in a potentially unstable condition.

While in operation, drill should be attended at all times.

Personnel should remain clear of all moving drill parts.

Personnel should not walk under or step over a moving drill stem or auger.
5.4.18 Concrete and Masonry Construction

Concrete Safety

Workers must be trained on the hazards of concrete on bare skin, protective measures to take and the steps to remove and neutralize the concrete in the event of skin contact.

Rubber gloves and rubber boots are required in addition to the minimum required PPE when working with concrete.

All concrete burns must be reported to the involved GPI or Subcontractor’s supervisor and treated immediately by rinsing with water and neutralizing with vinegar or other neutralizing solution.

When placing concrete, make sure the ground will support the loaded concrete truck. Check for buried tanks, shallow sewers and utilities or loosely back-filled trenches and basements. Trucks should stay away from excavated areas where their vibration and shifting weight could cause shifting in unstable excavated areas.

Watch for tripping hazards in concrete formwork such as protrusions of rebar or formwork members. String line is a tripping hazard on paving operations.

Be aware of dangerous form conditions including cracked joists, rotted wood, unsecured wales, loose snap ties or coil rods, un-spliced wales, unsecured bulkheads and un-shored gaps that can be blown out during a pour.

When working at heights over six feet, be sure to have handrails and/or fall protection in place. Do not trust nail-supported formwork to be safe for access or protection.

Working under loads:
No employee shall be permitted to work under concrete buckets while buckets are being elevated or lowered into position. To the extent practical, elevated concrete buckets shall be routed so that no employees, or the fewest number of employees, are exposed to the hazards associated with falling concrete buckets.

Watch for drift and spin of concrete buckets as they are swung into place. Operators will not swing a load over traffic or people.

Concrete tremie sections must be securely fastened to each other with wire rope or other suitable means. As tremie sections are removed, they must be carefully lowered to the ground and stacked.

Maintain stable footing and good balance to avoid strains and sprains from over lifting or shoveling wet concrete.

Use caution when unfolding or attaching concrete truck chutes. Make sure they are tied off properly to prevent jolts and that open chutes are anchored properly before releasing concrete.
Rebar cages and mats as well as column and wall forms must be designed, secured and braced for the intended loads.

Traffic patterns around the placing operation as well as at the plant sites must be clear and understood by everyone in the area.

A spotter must be used when trucks are backing.

Keep 20 feet from the swinging belt of concrete placers.

Use caution when walking around high pressure lines and use whip checks where possible.

Exposed reinforcing steel (i.e. rebar) or other objects that presents an impalement hazard, such as t-posts, dowels, ground rods or other rigid objects that, by its shape, size or orientation, a worker could impale any part of their body, must be covered or otherwise protected to reduce the hazard.

Employees who work above grade or above any surface and who are exposed to protruding rebar or similar projections shall be protected from impalement by:

A) The use of guardrails, or
B) Approved fall protection systems, or
C) Approved troughs and covers per 344.90, 1712 (C)

Cast-in-Place Concrete

Formwork will be designed, fabricated, erected, supported, braced and maintained so that it will be capable of supporting without failure all vertical and lateral loads that may reasonably be anticipated to be applied to the formwork. Formwork which is designed, fabricated, erected, supported, braced and maintained will be in accordance with Sections 6 and 7 of the American National Standard for Construction and Demolition Operations Concrete and Masonry Work, ANSI A10.9-1983.

Drawings or plans, including all revisions, for the jack layout, formwork (including shoring equipment), working decks, and scaffolds, will be available at the jobsite.

All shoring equipment (including equipment used in re shoring operations) will be inspected prior to erection to determine that the equipment meets the requirements specified in the formwork drawings.

Shoring equipment found to be damaged such that its strength is reduced to less than the anticipated load will not be used for shoring.

Erected shoring equipment will be inspected immediately prior to, during, and immediately after concrete placement.

Shoring equipment that is found to be damaged or weakened after erection, such that its strength is reduced to less than the anticipated load will be immediately reinforced.
Sills for shoring will be sound, rigid, and capable of carrying the maximum intended load.

All base plates, shore heads, extension devices, and adjustment screws will be in firm contact, and secured when necessary, with the foundation and the form.

Eccentric loads on shore heads and similar members are prohibited unless these members have been designed for such loading.

Reinforcing steel for walls, piers, columns, and similar vertical structures will be adequately supported to prevent overturning and to prevent collapse.

Measures will be taken to prevent unrolled wire mesh from recoiling.

**Precast Concrete**

Precast concrete wall units, structural framing, and tilt-up wall panels will be adequately supported to prevent overturning and to prevent collapse until permanent connections are completed.

No worker will be permitted under precast concrete members being lifted or tilted into position except those workers required for the erection of those members.

5.4.19 **Underground Construction**

All underground work will be completed in compliance with CFR 1926.800

5.4.20 **Compressed Air and Light Plants**

**General**

All electrical power receptacles must have a functioning ground fault circuit interrupter (GFCI).

A fire extinguisher (minimum 5lb ABC) is required within 25 feet of all air compressors, light plants, generators, water pumps, etc. while in use.

5.4.20.1 **Compressed Air**

Compressed air must not be used for cleaning purposes except where reduced to 30 PSI or less except for concrete form cleaning purposes.

Air hoses will be bled at compressors before being disconnected.

Never turn compressed air on yourself or others.

Compressors must be equipped with safety check valve(s) at compressed air connections.
Crows foot connections must be safety pinned or secured by the use of whip checks.

Nozzles are required to be equipped with an on/off valve.

Air compressors must have all guards in place.

All air hoses must be inspected prior to each use.

5.4.20.2 Light Plants

Lighting Fixtures

Always follow manufacturers’ procedures for replacing light fixtures on light plants.

Set-Up

Do not raise the mast in the vicinity of overhead power lines.

Light plants should be setup in level areas.

When raising and lowering a mast, take care not to crush or damage the plant’s electric cables. This could lead to a cable being shorted out and causing injury.

Masts must be lowered and locked into their horizontal position when moving.

Servicing

When servicing light plants, the power source must be shut down and immobilized prior to performing maintenance and repairs. When possible, a positive lockout system should be implemented.

When servicing a fixture, unplug the cord to the fixture.

Do not fill fuel tank with engine running. Do not smoke or use open flames near the unit when servicing.

Routine service should be scheduled during daylight hours if possible.

Inspect wire rope cables that raise and lower masts for broken wires.

5.4.21 Abrasive Blasting

Only workers who have been trained and are authorized can operate abrasive blasting equipment.

All sand blasting equipment will be maintained in good condition.

Only non-silica material is permitted for abrasive blasting.
Hoods, hoses, valves and respirators must be inspected daily before use.

In addition to respiratory hazards faced by the blaster, there are hazards to the public and other workers from downwind exposure, cleanup and "pot-tending" that will require protection.

All hose connections will be safety pinned or have whip checks.

GPI and subcontractors are required to perform all abrasive blasting operations in compliance with OSHA regulations.

If practical, the blasting should be done with water injection to moisten the dust particles, reducing the airborne particles.

All abrasive blasting work areas will be identified with red warning tape to ensure no unauthorized persons may enter.

Good housekeeping practices must be followed in abrasive blasting operations.

Specialized PPE is required for abrasive blasting operations.

When compressed air is used for breathing, a carbon monoxide monitor is required.

5.4.22 Overhead Work

Purpose

The purpose of this policy is to provide requirements for working from overhead structures and protection of workers, pedestrians and vehicle traffic.

Policy

All GPI employees and subcontractors are responsible for evaluating, determining and implementing a protection plan prior to beginning work to determine the best methods to protect workers, pedestrians, and vehicles during overhead work.

Overhead Work Involving Vehicle, Worker and Pedestrian Traffic

When performing overhead work from bridges or structures where vehicle or foot traffic may be exposed, all work areas must be protected to prevent any tools materials, debris and equipment from accidentally falling from the work area.

Lane closures are required whenever overhead work cannot positively contain tools, materials, debris or equipment that will be used.

All overhead work platforms and work from bridges and other structures where foot or vehicle traffic is exposed must have a guardrail around the perimeter of the work area that is enclosed at least from the toe
board to mid rail with either solid construction material or metal screen material having openings no greater than ½ inch to prevent material, tools or debris from being kicked or dropped to the area below.

Overhead work where public walkways exist must have a rigid physical barrier and appropriate signage to prevent pedestrians from entering underneath the overhead work area.

Overhead work is to be identified with appropriate barricades and signs when the general public is exposed.

Only authorized workers will be allowed to enter the cordoned off areas.

5.4.23 Ladders

Policy

All GPI employees and subcontractors are required to implement a ladder use and inspection program.

Responsibilities

The GPI Safety Department is responsible for ensuring compliance with the policy.

GPI and subcontractor’s Supervisors and Designated Competent Persons are responsible for ensuring that all requirements of their program are met.

Workers are required to:
1. Understand and comply with the program
2. Guard against damage to the ladders
3. Report any damage to supervision
4. Fully participate in any training and inspection procedures.

Standard Operating Procedures

Only manufactured portable fiberglass ladders and job-built ladders that meet OSHA requirements will be allowed on site.

Workers will be allowed to perform a job requiring a ladder only after they have been trained in the proper use of ladders.

Inspection

To ensure safety and serviceability, all ladders must be inspected before each use.

Ladders must be visually inspected by the Designated Competent Person on a quarterly basis and use color code identifications on the ladder side rails. The results of the inspection shall be documented on the quarterly ladder inspection verification form.
The Designated Competent Person will inspect for:
1. Condition of steps and rungs
2. Oil, grease and other slip hazards
3. Lubricated metal parts
4. Burrs or sharp edges
5. Condition of non-slip/safety feet
6. Structural damage
7. Condition of support braces and other hardware
8. Tightness of screws and bolts
9. Quarterly color-coded tape on the side rails

Training

All workers must be trained on accident prevention when using ladders to include:
1. Identifying hazards in work areas
2. Safety procedures for setting up portable ladders
3. Safety procedures for working on ladders

Retraining will be provided to each worker as necessary.

Procedures for Setting up Portable Ladders

1. Ensure ladder is on a level and stable surface
2. Ensure ladder feet are parallel to resting surface
3. Position extension ladders at about a 4:1 ratio
4. Do not use on slippery surfaces without non-slip feet or securing feet
5. Extend the ladder a minimum of 3 feet above resting surface
6. Extend top section from ground only
7. Lock, guard and barricade when using in doorways or pathways
8. When climbing a ladder to tie off at the resting surface, have a co-worker hold the ladder.
9. Read and follow all labels/markings on the ladder.

Procedure for Use of Ladders

Do not use a ladder if you:
1. Have a serious fear of heights
2. Have a tendency for dizziness or fainting
3. Are not medically fit
4. Are taking prescription medications that affect your ability to climb

The top step or rung of the ladder may not be used.

All ladders must be used according to manufacturer’s requirements with regard to maximum working height.

Do not use if manufacturer Labels/Markings are missing or not legible.
Do not overload ladders.

Only one person may be on a ladder at a time.

Use rope or hoist to lift tools.

Face ladder when climbing; maintain three points of contact, do not overreach, keep body centered between rails.

Maintain a firm grip, use both hands while climbing.

Do not climb onto ladder from the side unless secured against side motion.

Never use a ladder as a platform, plank or hoist; never use ladders on scaffold.

Keep ladder close to work.

Never drop or apply an impact load to ladder.

5.4.24 Confined Spaces

Introduction

It is the policy of GPI Management to establish and maintain a Confined Space Entry Procedure. GPI and subcontractors are required to train all involved workers and to provide guidelines for safe entry requirements governing authorized entrants who enter a confined space and workers assigned as attendants of a confined space. The Confined Space Evaluation can be found in (Appendix 5A-17) of this document.

GPI and Subcontractors will comply with OSHA 1926.Subpart AA-Confined Spaces in Construction.

GPI employees or Subcontractor workers must not enter any tank, tunnel, manhole, vessel or vault without completing a confined space entry permit and following the confined space entry procedures of your company and project requirements.

Procedure Definitions

A Confined Space is an enclosed area which:
1. Is large enough for a worker to enter and perform assigned work and
2. Has limited or restricted means of entry or exit and
3. Is not designed for continuous worker occupancy

A Permit Required Confined Space additionally has one or more of the following characteristics:
1. Contains or has the potential to contain a hazardous atmosphere,
2. Contains a material that has a potential for engulfing the entrant,
3. Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or a floor that slopes downward and tapers to a smaller cross-section and/or
4. Contains any other recognized serious safety or health hazards

Attendant – An individual stationed outside one or more permit spaces who monitors the authorized entrants and who performs all attendant's duties assigned in their employer's permit space program.

Authorized Entrant – A worker who is authorized by their employer to enter a permit space.

Engulfment – The surrounding and effective capture of a person by a liquid or finely divided (flowable) solid substance that can be aspirated to cause death by filling or plugging the respiratory system or that can exert enough force on the body to cause death by strangulation, constriction, or crushing.

Entry – The action by which a person passes through an opening into a permit-required confined space. Entry includes ensuing work activities in that space and is considered to have occurred as soon as any part of the Entrant's body breaks the plane of an opening into the space.

Hazardous Atmosphere – An atmosphere that may expose workers to the risk of death, incapacitation, impairment of ability to self-rescue (that is, escape unaided from a permit space), injury, or acute illness from one or more of the following causes:
1. A flammable gas, vapor or mist in excess of 10% of its lower flammable limit (LFL).
2. An airborne combustible dust at a concentration that obscures vision at a distance of 5 feet or less.
3. An atmospheric oxygen concentration below 19.5% or above 23.0%.
4. An atmospheric concentration of any substance for which a permissible exposure limit (PEL) is published in Subpart Z of 29 CFR Part 1910 (if no PEL, then based upon acceptable limits as indicated on SDS) that could result in worker exposure in excess of its permissible limits.
5. Any other atmospheric condition recognized as Immediately Dangerous to Life or Health (IDLH).

Responsibility

Supervision and/or Designated Competent Person of the involved party entering the confined space will be responsible for control of entry. Supervision will ensure that individuals authorized to enter a confined space are appropriately trained.

Determine that the necessary procedure, work practices and equipment for safe entry are in place before allowing entry to a confined space.

Every supervisor is responsible for the following:
1. Ensuring that all workers involved with confined entry understands that the Attendant is in charge of the whole operation
2. Ensuring that all conditions in the area are safe
3. Setting up any special precautions
4. Designating proper protective equipment
5. Ensuring that all monitoring tests are conducted
6. Terminating confined space entry authorization whenever entry conditions are not met
7. Training personnel
8. Signing permit prior to entry

Attendants who are assigned standby duty outside a confined space must be positioned and equipped to easily communicate with Entrants or others in an emergency. Attendants will not leave the standby position until the Entrants inside the confined space have come out. Attendants will be carefully instructed on their duties.

Attendants for confined spaces will:
1. Receive Attendant training documented and on site for review.
2. Continuously maintain an accurate count of all Authorized Entrants in the confined space. This will prevent entry by non-authorized workers.
3. Recognize potential confined space hazards.
4. Monitor activities inside and outside the confined space to determine if it is safe for the Entrants to remain in the confined space.
5. Maintain effective and continuous communication with Entrants during entry.
6. Order Entrants to evacuate the confined space immediately when:
   a. Entrant exhibits behavioral effects from a hazard exposure,
   b. A situation outside the space that could endanger the Entrants is detected, and/or
   c. An uncontrolled hazard within the confined space is detected.
7. Summon rescue and other emergency services as soon as determining that Entrants need to escape from the confined space hazards.
8. Know how to use rescue techniques and mechanical devices for rescue.
9. Know how to use any firefighting equipment needed for confined space entry.
10. Never leave the confined space area without relief from a trained person or a supervisor.
11. Keep means of entering and exiting open and clear.
12. Ensure flow of air from blowers or other air moving equipment (when applicable) is continuous and uninterrupted.

Monitoring

All confined spaces must be tested by a Designated Competent Person before any entry is permitted. Workers who enter the confined space must be given the opportunity to observe the monitoring.

Atmospheres must be tested for the following:
1. Flammable or explosive gas vapors or mists in excess of 10% LFL
2. Oxygen deficient atmosphere (below 19.5% by volume)
3. Oxygen enriched atmosphere (above 23.0% by volume)

Testing and monitoring must be done prior to entry and continuously to verify that acceptable environmental conditions are being maintained.

Calibration accuracy of monitoring equipment will be done at such frequency sufficient to verify that acceptable environmental conditions are being maintained.
When the presence of toxic materials in a confined space is known or suspected, advance preparation must include:

1. Identification of toxic airborne chemicals that may be encountered in the confined space.
2. Monitoring for toxic materials should be performed continuously, while work is being performed and whenever the potential exists for the presence or production of air contaminants that are immediately dangerous to life or health. The monitoring protocol should recognize the fact that in some instances work performed in confined spaces itself is a source of air contamination, so that testing for toxic material only prior to entry, may fail to reveal a dangerous condition with respect to worker exposure to toxic material that arises during the course of work being performed.

**Ventilation**

Ventilation of a confined space should be started before entry into the space. Ventilation should be calculated to have at least two (2) exchanges of air through the confined space before Entrants are allowed to enter. Forced ventilation must be continuous during any entry activity which produces toxic or flammable atmospheres that may develop during the course of work, such as welding or painting. In such a situation, care should be taken to ensure that the ventilator is explosion proof and the location of the ventilation equipment does not impair the ability of the workers to rapidly exit a confined space. There will be no instance where the ventilation of a confined space be considered as a substitute for testing of the confined environment.

**Training**

Workers assigned as Authorized Entrants in confined spaces must be annually trained on the following:
1. How to identify the hazards that they may be faced with during entry.
2. How to recognize the signs and symptoms of exposure to a hazard and understand the consequences of exposure to a hazard.
3. How to maintain contact with Attendants using visual or radio contact.
4. How to use retrieval lines, respirators and equipment needed for safe entry and exit.
5. When to exit from confined spaces (unless physically unable to do so) e.g.:
   - Attendant orders evacuation
   - An automatic alarm is activated
   - Entrants perceive they are in danger

Workers assigned as Attendants must be trained on the following:
1. How to ensure and maintain an accurate count of all persons in confined spaces.
2. How to recognize potential confined space hazards and monitor activities inside and outside the space to determine if it’s safe for Entrants to remain in the space.
3. How to maintain effective and continuous contact with Entrants during entry and when to order immediate evacuation of Entrants, e.g.:
   a. A condition develops which is not recognized
   b. Detecting behavioral effects of Entrant, suggesting hazard exposure
   c. Detecting a situation outside the space that could endanger the Entrants
4. How to detect an uncontrolled hazard within the confined space
5. How to summon rescue and other emergency services as soon as it is determined that the confined space Entrants need to escape the space
6. Where to post rescue procedure at confined space.
7. How to keep unauthorized workers from entering the confined space
8. Emergency response Do’s and Don’ts
   a. Don’t enter a confined space to attempt rescue of Entrants
   b. Do use any rescue equipment provided for Attendant use
   c. Do perform assigned rescue and emergency duties without entering the confined space

Workers authorizing or in charge of confined space entry must be trained on the following:
1. How to determine what necessary procedure practices and equipment for safe entry are in effect before allowing or authorizing entry.
2. How to periodically check and confirm that entry procedures practices and equipment for safe entry are in effect before allowing or authorizing entry.
3. When to cancel entry authorization and terminate entry, e.g. whenever acceptable conditions do not exist.
4. How to take necessary measures for concluding a confined space operation, i.e. closing off the confined space once the work is completed.
5. Any additional training required by 1926.1207.

5.4.25 Traffic Control

The traffic control procedures in the work zone can be found in the Traffic Management Plan.

All GPI employees and Subcontractors on site are required to follow the Texas Manuel on Uniform Traffic Control Devices (TMUTCD) while working adjacent to the roadway.

The project Traffic Management Plan will be used to properly set up the work zones to ensure workers and the general public are protected. No Contractor may begin work unless they have the proper traffic controls in place.

No GPI employee or Subcontractor is authorized to remove or alter any traffic control placed by others unless obtaining permission from the GPI Traffic Control Manager or the Project Superintendent or his designee.

Any equipment that is parked inside the clear zone of any unprotected traffic lanes is required to have a Type III barricade facing the oncoming traffic.

Proper traffic control techniques should:
1. Reduce confusion to motorists
2. Expedite traffic flow
3. Reduce accidents
4. Eliminate exposure of hazards to workers and the public
5. Prevent damage to private and public property, including damage to the construction project and equipment
6. Protect the company from the possibility of claims and litigation arising from construction zone accidents and incidents
7. Improve public relations
8. Meet owner requirements

**Flagger Control**

Flaggers are required when it is determined by involved subcontractor and/or the GPI construction team or when Traffic Control Plans include flaggers. Flaggers must be designated by their employer using the *Flagger Designation Form* and the form is required to be submitted to the GPI Safety Department (Appendix 5A-22).

Flaggers must be alert, neat in appearance, have good hearing and eyesight and trained in the techniques of flagging traffic by recognized agency before being placed in this position. They must be far enough away from the work to slow or stop traffic before it enters the work zone.

All flaggers must wear protective clothing to include Class III high visibility traffic apparel, hard hats and safety glasses. When necessary, two-way radios will be provided. From sunset to sunrise, flagger stations must be illuminated so the flagger is clearly visible to approaching traffic. Also, flaggers need to be monitored to receive breaks, water and have access to restrooms.

In case of emergency, flaggers shall be prepared with a planned safe escape route.

When communicating through radios, a spare battery pack should be readily available. If for some reason communication breaks down between the flaggers, the operation is to be shut down immediately until the situation is remedied.

**Night Closures**

Although most accidents occur during the daylight hours, the majority of fatalities occur at night. We cannot completely eliminate the possibility of an accident since the motoring public is not within our control, however with the proper equipment, training, planning, personnel and warning devices we can reduce the risk.

During night operations, a back-up, shadow or protection vehicle may be used and should be positioned 100 feet or more behind the "cone" truck as the first signs are placed. This process is to be followed for set-up and tear down.

All crews working in or around the closure need to be outfitted with Class III high visibility traffic apparel in addition to the minimum required PPE. All workers should be visible at a distance of 1,000 feet.

Before making nighttime closures, all materials and equipment must be inspected and in good working order. All message boards and flashing arrow signs must be tested to ensure all lights and switches are functioning properly and that the equipment is fueled and fully charged. All inspections and maintenance procedures must be documented daily and/or nightly.
Day Closures

The largest number of vehicle accidents involved on construction sites occurs during daylight hours. It is vital that all lane closures begin well in advance of the area where work is conducted to provide a strong cushion of worker safety.

Devices should be installed in the direction of traffic in the following order:
1. First Advance Warning Sign
2. Advance Warning Zone
3. Transition Zone
4. Buffer Zone
5. Work Zone
6. Termination Zone

When signs and channeling devices are installed and removed several times during an operation, a spot should be painted or marked where each sign or device is located to minimize time required to reset the signs or devices. Drivers do not expect to see workers in the roadway setting up a traffic control zone. Since the goal is to make the entire operation safe, flashing, construction-appropriate vehicle lights should be used to warn the drivers of the presence of workers.

All aspects of the lane closure should provide clear, concise direction to all drivers. Ensure correct positioning and visibility of all signs, flashing arrow/message signs, barricades and delineators. Any part of the pattern that has been disturbed should be reset as soon and as quickly as possible.

Specialized Vehicles

Projects that require extensive traffic control may set up specific traffic control vehicles with flashing/rotating lights or beacons, sign racks, cone racks, worker platforms, protective railings with impact absorption capabilities, etc.

A cone truck should have warning beacons visible from all directions and a Type II flashing arrow sign controlled from within the cab.

An attenuator traffic control truck (crash truck) should be outfitted with the same warning devices as the cone truck. There should be an approved Truck-Mounted Crash Cushion (TMCC) attached to the rear of the truck for added protection against vehicle impacts. Crash cushions offer some protection to straying vehicles by slowing the vehicle to a stop when hit head-on or by altering their direction away from the hazards in the work zone.

If used, a crash truck must always be the last vehicle in the traffic control procession. There will be two-way communication between all vehicles and the supervisor in charge of traffic control. Communication is the key to running a smooth, well-directed closure.

Each area will have video and photos taken of the traffic and work areas at the beginning of the project and every time the traffic control is changed or switched.
Documentation

Documentation records should include:
1. Starting and ending times of work
2. Location of work
3. Names of crewmembers
4. Types of equipment used
5. Changes in temporary or permanent regulatory devices
6. Installation, change and removal of traffic control devices
7. Drawings of working closure to include all devices

When an inspection requires correction to include maintenance of traffic control devices, the documentation should include:
1. Description of the corrections needed, when it was noted and by whom
2. Corrections made or deferred and why
3. Replacements made or deferred and why
4. Any other needed actions

Good documentation begins with an inventory of traffic control devices located in both the shop and the field. Major projects will require more detailed documentation since they involve more equipment, personnel and longer distances and times of physical exposure with increased danger to workers and the public.

All traffic control will be performed in accordance with the owner’s specifications and the approved permit or submittal.

5.4.26 Work Over or Near Water

Workers working over or near water where there is a danger of drowning must be provided with a U.S. Coast Guard-approved life jacket or buoyant work vest.

Prior to use, life jackets and buoyant work vests must be inspected for defects which could alter their strength or buoyancy. Defective units must be removed from service.

Ring buoys with at least 90 feet of line must be provided and readily available for emergency rescue operations.

At least one lifesaving boat must be immediately available at locations where workers are working over or adjacent to water.

5.4.27 Railroad Safety

GPI or Subcontractor shall be responsible for the safety of their workers in compliance with Federal, State, and Local Regulatory Agencies including but not limited to the Occupational Safety Health Administration and the Federal Railroad Administration. As reinforcement and in furtherance of overall safety measures to be observed by the involved party (and not by way of limitation), the following special safety rules shall be
followed: The involved party shall keep the job site free from safety and health hazards and ensure that its GPI or Subcontractor Employees are competent and properly trained in all safety and health aspects of the job. Specifically, the involved party must ensure that:

1. Proper first aid supplies shall be available on the job site and someone trained in 1st aid/ CPR so that prompt first aid services can be provided to any person that may be injured on the job site.
2. The railroad is promptly notified of any reportable injury (as defined by the U. S. Occupational Safety and Health Administration) to an employee that occurs during the performance of work at the job site.
3. The railroad is promptly notified of any damage to railroad property.
4. Employees do not use, be under the influence of, or have in their possession any alcoholic beverage or illegally obtained drug, narcotic, or other substance while on railroad property.
5. GPI and subcontractors will comply with New FRA (Federal Railroad Administration) Drug Testing Requirements.
6. All waste is properly disposed of in accordance with applicable federal and state regulations.
7. No open fires are permitted on railroad property.
8. All GPI or subcontractor vehicles stop at all railroad crossings to ascertain the way is clear.
9. Seat belts must be worn on vehicles and equipment so equipped.
10. All service vehicles and fuel trucks must be equipped with an audible backup warning device, fire extinguisher and first-aid kit.
11. Headlights must be turned “on” when operating motor vehicles on Railroad property. In addition, four-way flashers must be turned ‘on’ while operating in intermodal facilities. It is permissible to turn headlights off when stopped on railroad property at night to prevent “blinding” other personnel working in the same area.
12. Strobe lights on fuel trucks shall be illuminated when operating on Railroad property and while fueling equipment; and service trucks equipped with strobe lights shall be illuminated while servicing equipment.
13. Always keep vehicles a safe distance away from the outside of the rail, and DO NOT park vehicles or equipment foul of a railroad track.

GPI or Subcontractor-In-Charge will notify Railroad representative of any hazardous material spill observed in their work area. Any spill from a locomotive or car is to be reported immediately.

GPI or Subcontractor Employees will participate in and comply with any job briefings conducted by the Railroad Representative. During these briefings, the involved party and the Railroad Representative will specify safe work procedures, the potential hazards of the job, and Emergency Response Procedures. If any participant has any questions or concerns about the work, he/she must voice them during the job briefing. Additional job briefings will be conducted during the work as conditions, work procedures, or personnel change.

GPI or Subcontractor Employees must take every precaution to prevent injury to themselves, other employees, and the public.

All track work performed by GPI or Subcontractor meets the minimum safety requirements established by the Federal Railroad Administration’s Track Safety Standards 49CFR213.

All excavations, holes and trenches are protected to prevent injuries to other workers, railroad employees
or the public.

Ensure that the railroad policy of NO SMOKING on company property is enforced.
All GPI or Subcontractor Employees must comply with the following safety procedures when working around any railroad track:

1. Always be on the alert for moving equipment. Involved parties must always expect movement on any track, at any time, in either direction.
2. Do not step or walk on the top of the rail, frog, switches, guardrails, or other track components.
3. In passing around the ends of standing cars, engines, roadway machines or work equipment, leave a minimum of 20 feet between yourself and the end of the equipment. Do not go between pieces of equipment if the opening is less than 100 feet as a minimum.
4. Avoid walking or standing on a track unless authorized by the Railroad Representative.
5. Before stepping over or crossing tracks, look in both directions first.
6. Do not sit on, lie under, or cross between cars except as required in the performance of your duties and only when equipment has been protected against movement and authorized by the Railroad Representative.
7. No tools or materials are left close to the track when trains are passing.
8. All GPI and Subcontractor Employees comply with all Federal, State and local regulations concerning Workplace Safety.
Appendices

5A- 1 Competent Person Designation ................................................................. (Reference Pg 36) .................................................................
5A- 2 Safety Orientation ................................................................................. (Reference Pg 11, 22) .................................................................
5A- 3 Daily Safety Assessment ................................................................. (Reference Pg 8, 14) .................................................................
5A- 4 Pre-Activity Hazard Analysis Form ....................................................... (Reference Pg 10, 15) .................................................................
5A- 5 Job Hazard Analysis Form ................................................................. (Reference Pg 9, 12, 14, 15, 61) .................................................................
5A- 6 Supervisor's Injury Report ......................................................................... (Reference Pg 16) .................................................................
5A- 7 Motor Vehicle Accident Report ................................................................. (Reference Pg 16) .................................................................
5A- 8 General Liability Report ................................................................................. (Reference Pg 17) .................................................................
5A- 9 Supervisor's Utility Damage Report ......................................................... (Reference Pg 17, 71) .................................................................
5A- 10 Incident / Near Miss Review Form ......................................................... (Reference Pg 14) .................................................................
5A- 11 Employee Disciplinary Action Form ......................................................... (Reference Pg 21) .................................................................
5A- 12 Mobile Crane Check-In Form ................................................................. (Reference Pg 53, 56) .................................................................
5A- 13 Power Line Close Proximity Permit ......................................................... (Reference Pg 43, 54, 58, 65, 66) .................................................................
5A- 14 Suspended Work Platform Checklist and Authorization ................................ (Reference Pg 57) .................................................................
5A- 15 Batch Plant Check-In Form ....................................................................... (Reference Pg 67) .................................................................
5A- 16 Excavation, Drilling, Boring Permit ......................................................... (Reference Pg 69) .................................................................
5A- 17 Confined Space Evaluation ...................................................................... (Reference Pg 69, 81) .................................................................
5A- 18 Daily Excavation Checklist ...................................................................... (Reference Pg 69) .................................................................
5A- 19 Emergency Action Plan .......................................................................... (Reference Pg 16, 26) .................................................................
5A- 20 Assembly/ Disassembly Director Designation ........................................ (Reference Pg 10) .................................................................
5A- 21 Crane Operator Designation .................................................................... (Reference Pg 10) .................................................................
5A- 22 Flagger Designation ................................................................................. (Reference Pg 10, 86) .................................................................
5A- 23 Operator Designation ........................................................................... (Reference Pg 10) .................................................................
5A- 24 Summary of Safety Requirements ......................................................... (Reference Pg 11) .................................................................
5A- 25 GPI Drug and Alcohol Policy ................................................................. (Reference Pg 13) .................................................................
5A-1 COMPETENT PERSON DESIGNATION
(TO BE COMPLETED AND SUBMITTED AT ORIENTATION)

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<tr>
<th>Project:</th>
<th>Contractor:</th>
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<tr>
<th>Subcontractor:</th>
<th>Employee Name:</th>
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As an authorized representative of the above named “SUBCONTRACTOR”, I hereby appoint the above mentioned “EMPLOYEE” as a “COMPETENT PERSON” in the areas I have indicated below.

To clarify, the Occupational Safety and Health Administration (OSHA) defines a “COMPETENT PERSON” as “one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, AND who has authorization to take prompt corrective measures to eliminate them”. This can be fulfilled through training, qualification, experience or a combination of them.

COMPETENT PERSON IN THE FOLLOWING AREAS

Please circle only those that apply.

- Excavation
- Confined Space
- Ladder Inspection
- Traffic Control
- Crane Inspection
- Tree Removal
- Scaffolds
- Assured Grounding
- Rigging Inspection
- Respiratory Protection
- Crane Signaling
- Asbestos Abatement
- Fall Protection
- Fire Extinguisher Inspection
- Flagging In Work Zones
- Tunneling Operations
- Aerial Lift Inspections
- Assured Grounding Inspection

I understand that if at any point in the future this “EMPLOYEE” loses this designation, is terminated or is removed from the “PROJECT”, I will provide a written notification to GPI Safety Department within 2 business days.

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<tr>
<th>AUTHORIZED REPRESENTATIVE MAKING DESIGNATION</th>
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<tr>
<th>“EMPLOYEE” ACKNOWLEDGEMENT OF THIS DESIGNATION</th>
<th>DATE</th>
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*** TO BE SUBMITTED AT THE TIME OF ORIENTATION ***
OBJECTIVE

PROJECT OVERVIEW

PURPOSE

PERSONAL RESPONSIBILITY - Ability to stop unsafe work acts (Empowerment)

PERSONAL PROTECTIVE EQUIPMENT (PPE)

ADDITIONAL PPE REQUIREMENTS

PREPARING FOR THE DAY

FOCUS POINT

TRAINING
Your employer is responsible for providing you with the training you need to do your job safely and successfully.

Some activities require specific training, certification or approval, e.g.:

• working with chemicals, specialized equipment or tools
• working in confined spaces, at heights over 6’, in trenches or excavations, on scaffolds or ladders, etc.
• when designated to fill a specialized role or function

JOB HAZARD ANALYSES
An effective tool to help us think through what we are about to do.

ADDRESSES:

• Activities (Steps) - What do we have to do to get the job done?
• Hazards - What things during the activity or in the environment can hurt us or what can go wrong?
• Controls - What do we have to do to prevent the hazards from affecting us or others?

REQUIREMENTS:

• Daily and every time before a different job is started
• Must be in writing
• All crew members must be involved and understand
• All must agree and sign off on the JHA form
• Completed JHA forms must remain with the crew
• All JHA forms will be turned in to the office. JHA form must be available to be inspected during audit.

MEETINGS

• Your attendance and participation at your crew’s tool-box safety meeting is required every week.
• Your attendance at the project Monthly meeting is required.
HOUSEKEEPING
• Take personal responsibility
• Keep your work area clean and organized
• Clean as you go, e.g. pull nails immediately
• Pick up after yourself
• If you need a place to put trash, but there is not one in your work area, notify your supervisor

HEALTH
• Do not share drinking cups.
• Only use paper cups or single serve containers.
• Do not modify a soda can to be used as a drinking cup.
• If your work area does not have any paper cups or you are almost out, ask your supervisor for more cups.
• Throw used cups and empty containers in the trash, not on the ground.
• Keep water coolers clean; they are for water only.
• Wash your hands before eating or handling food.

SANITATION
• Use the portable toilets that are provided for you.
• If you need a portable toilet in your work area or it needs to be cleaned, notify your supervisor.
• Take personal responsibility here as well.
• Clean up after yourself. Everyone has to share these.
• Profanity and graffiti may be funny to some, but it is vandalism.

WEATHER
In Hot Or Cold Temperatures:
• Be prepared
• Protect exposed skin
• Stay hydrated
• Know the signs and symptoms of over exposure
• Know your limitations
• Take shelter to recover before you reach your limits
• Watch out for eachother

TRAFFIC
The greatest hazard to which we are all exposed to daily.
• Do not assume that motorists are looking out for you.
• Only work and park vehicles inside the lane closure.
• Do not alter the lane closure for any reason.
• Put your vehicles between you and oncoming traffic.
• Report damaged or missing devices to your supervisor.
• Only authorized individuals are allowed to engage and interact with motorists. No exceptions.
ONLY AUTHORIZED FLAGGERS ARE ALLOWED TO ENGAGE AND INTERACT WITH MOTORISTS. 

Authorized Means:
• Qualified and certified by a certified instructor AND
• Designated by the employer

Flaggers Must Be Equipped With:
• Class III apparel
• a cell phone and a two-way radio
• the appropriate devices and equipment to control traffic

FIRE PREVENTION
• Report all fires to your supervisor immediately.
• Do not begin any hot work without a fire extinguisher.
• Do not smoke near flammables or while fueling.
• Always use a funnel.
• Never refuel running equipment.
• Separate oxygen from all flammables/combustibles.
• Flammable liquids can only be stored in containers that are specifically designed for them.

Fire Extinguishers Required:
• For all hot work or spark producing activities
• When using gasoline powered tools and generators
• In areas where the following are used and stored:
  - Flammable and combustible liquids and solids
  - Flammable gases
  - Batteries
• On all cranes, mobile equipment and construction vehicles

PROTECTING THE WORK AREA
Areas That We Need To Protect:
• Around cranes and drillrigs
• Around trenches, excavations or other surface openings
• Where overhead work is being performed
• Where scaffolds are being erected or dismantled
• Where fall protection is required
• Around fall exposures

Area Protection Must Be:
• Appropriate for the hazard and the environment,
• Effective at communicating the hazard and/or restricting entry,
• Inspected and maintained on a daily basis until the hazard has been eliminated AND
• Enforced by the responsible supervisor

A barricade is defined as any barrier that obstructs passage; therefore colored tape will not be considered a barricade on this project.
• Orange fence, t-posts and lumber are considered examples of barricade materials.
• Only red tape is permitted on the jobsite and only for certain applications, e.g. to identify:
  - Swing radiiuses
  - Overhead hazards, such as areas under scissor or aerial lift work
• Barricades and tape must be identified with a tag indicating the responsible Contractor and supervisor.
**IMPALEMENT HAZARDS**
What counts as an impalement exposure?
- Rebar
- T-posts
- Dowel bars
- Ground rods
- Any rigid object that, by its shape, size or orientation, a person could fall onto or into and thus impale any part of their body
- Eliminate the hazard when possible
- Protect the hazard
- Acceptable means of protecting the hazard:
  - Rebar caps (4” square or 4.5” diameter round, steel-reinforced and correctly sized)
  - Carnie caps (complete system with 2 X 4’s)
  - 2 X 4 wood caps or troughs (must pass a drop test of 250 lbs. from 10 feet and be designed by a professional engineer)

**PINCH POINTS**
What Are They?
Any point at which it is possible for a part of your body to be caught in something moving, or caught between something moving and something not moving.

**STRUCK-BY HAZARDS**
Where Can We Be Exposed To This Hazard?
- When working near moving equipment with blind spots, e.g. cranes and excavators
- When working near moving equipment and vehicles
- When working near material handling operations
- When working under an area where others are working
- When working near operations that can produce flying objects, e.g. demolition, chipping, abrasive blasting

How Can We Identify Struck-By Hazards?
- Job Hazard Analyses

What Things Protect Against Struck-By Hazards?
- Barricades
- Warning tape
- Back-up alarms and horns
- PPE
- Nets
- Toe boards
LADDERS

Three Main Requirements:
• You must be trained on the inspection and safe use of ladders by your employer.
• You may only use manufactured fiberglass ladders or job-built ladders that meet OSHA requirements.
• You must use the correct ladder for the job.

Extension Ladder Requirements:
• Inspect before each use
• Set feet on a solid and level footing
• Extend 3’ or 3 rungs above the top resting point
• Use the 4:1 ratio when setting it up
• Lock extension in place
• Secure at the bottom and the top
• Use 3 point contact when on the ladder
• Fall protection required when climb exceeds 24’

SCAFFOLDS

Four Main Requirements:
• You must be trained by your employer on the safe erection, dismantling and use of the specific scaffold systems you will be using.
• Scaffold system must be appropriate for the task.
• Scaffolds must be complete (not missing or mixing manufacturers’ components) and erected according to manufacturers’ specifications.
• All scaffolds must be inspected and green tagged by the Designated Competent Person every day, prior to use.

RED - DO NOT USE
  - under construction or defective

YELLOW - INCOMPLETE
  - only involved Contractor’s authorized employees permitted
  - special fall protection requirements apply
  - only involved Contractor’s Designated Competent Person may issue

GREEN - OK TO USE
  - only involved Contractor’s Designated Competent Person may issue

FALL PROTECTION

Four Main Requirements:
• You must be trained by your employer on the correct selection, inspection and safe use of the specific personal fall protection systems you will be using.
• 100% at 6 feet NO EXCEPTIONS
• All types of fall protection systems must meet OSHA standards and be:
  - appropriate for the task,
  - complete (not missing or mixing manufacturers’ components),
  - used according to manufacturers’ specifications (if applicable) AND
  - inspected daily by the involved Contractor’s Designated Competent Person.
• Report damaged fall protection systems to your supervisor immediately. Additional Requirements:
• Only two-leg, shock absorbing lanyards are permitted.
• When using positioning devices, a lanyard must also be used.
When using scissor lifts, follow manufacturers’ requirements for safe use and personal fall protection.
Aerial “boom” lifts require 100% tie-off.

EXCAVATIONS
Four Main Requirements:
• You must be trained by your employer on the hazards, safe practices and OSHA standards, as well as the specific protective systems that will be used.
• All utilities must be located and verified before moving any dirt.
• All equipment and devices needed to safely excavate and protect the work area must be provided by the involved Contractor before beginning work. This requires preplanning.
• The involved Contractor’s Designated Competent Person must:
  - inspect the excavation and work area daily, prior to entry and when conditions change AND
  - be present at all times while workers are exposed to excavation hazards

Excavations Are:
• Trenches
• Shafts
• Bore pits
• Any other manmade cut, cavity or depression in an earth surface formed by earth removal

Protection Must Be Provided When:
• excavation reaches 5 feet in depth
• ground conditions or surrounding environment create a hazard that requires protection at less than 5 feet in depth
• task exposes employees to hazard, e.g. working on knees or from a seated position

All protection measures and systems must meet OSHA standards and be:
• appropriate for the hazards and ground conditions,
• complete (not missing or mixing manufacturers’ components) or maintained,
• used according to manufacturers’ specifications (if applicable) AND
• inspected by the involved Contractor’s designated Competent Person prior to entry and ongoing as conditions change.

MOBILE EQUIPMENT
Requirements:
• Only qualified and designated operators permitted
• Valid driver’s license required for rubber tire equipment
• Must be inspected before each shift
• Horns, lights and back up alarms must work properly
• Operators must wear seatbelts
• No passengers
• Hard hats required in open cabs
• No texting or cellphone use
ELECTRICAL
Requirements:
• You must be trained on the inspection and safe use of electrical tools and equipment by your employer.
• All power tools and cords must be inspected before use.
• Damaged cords, tools and equipment must be tagged and removed from service.
• Repairs can only be done by a qualified or Designated Competent Person.
• A GFCI must be used in front of all AC power supplies.

Ground Fault Circuit Interrupters:
• Shuts off power at the source to protect you from electrical shock whenever a leakage in electric current occurs between the power source and the point of use.
• A GFCI must be tested on a regular basis by a Designated Competent Person to make sure it works and provides you with the protection you need.
• A circuit breaker or fuse is not a substitute for a GFCI. Circuit breakers and fuses are designed to protect the tools and equipment; not people.

OVERHEAD POWER LINES
Four Main Requirements:
• Assume all lines are energized. DO NOT TOUCH THEM!!!
• Even if you can tell that the line is not a power line, see the first requirement.
• If you find a line on the ground or sagging, see the first requirement and notify your supervisor immediately. Do not attempt to move them out of the way or pass over them.
• Only qualified persons may handle overhead lines.

If You Come Into Contact With An Overhead Line:
• Remain calm.
• Stay inside the cab or vehicle. Do not touch any metal parts.
• Slowly back away or move in a reverse path from the path that caused the contact.
• If not successful in ending contact, remain in cab or vehicle and call for help.
• Do not move until line has been de-energized.
• Signal to others to stay away from the area and not to touch any part of the equipment, vehicle or load.

When Unsuccessful In Ending Contact And You Need To Get Out To Summon Help Or Because Of Fire:
• Remain calm.
• Jump out without touching the vehicle or equipment and the power line.
• Keep your feet together.
• Hop to safety.
• Signal to others that you have made contact with a power line, to stay away from the area and not to touch any part of the equipment, vehicle or load.
• Call for help.

CONFINED SPACES
Definition
Four Main Requirements:
• You must be trained by your employer on the hazards, safe practices and OSHA standards, as well as the specific policies, procedures and equipment that you will use.
• All equipment and devices needed to test, monitor, ventilate, illuminate and evacuate the space must be provided by the involved Contractor before beginning work. This requires preplanning.
The involved Designated Competent Person must:
- inspect space and test air prior to entry and monitor entrants and conditions on-going AND
- be present at all times while workers are in the confined space.
- Restrict access to work area to only essential crew members.

HAZARD COMMUNICATION
- Your employer is responsible for providing you with training and information on the specific chemicals you will be using and with those you may come into contact.
- Safety Data Sheets (SDS) are available for your information.
- Your supervisor can explain your company's Hazard Communication Program, tell you where you can find the SDS for the chemicals you are using and provide you with the PPE you will need to do your job safely.

Requirements:
- All containers must be labeled.
- Labels must contain the chemical's:
  - name
  - flammability rating
  - toxicity rating
  - reactivity rating
  - special notice or required PPE

MATERIAL HANDLING AND STORAGE
- Keep ALL body parts out of pinch points.
- Nothing may be stored within 30' from the edge of any unprotected lane.
- Keep tool and storage trailers clean and organized.
- Compressed gas cylinders must be stored upright.
- Compressed gas cylinders must have regulators removed prior to moving the cylinder.
- Only qualified and designated employees may rig material to be hoisted.

MATERIAL HANDLING
All Rigging Must Be:
- Inspected before use by the involved Contractor's Designated Competent Person
- Complete
- Tagged or stamped with capacity
- Compatible with each component
- Removed from service if defective or shock loaded

TOOL INSPECTION
- Use the right tool for the job
- If a tool is damaged:
  - do not use it,
  - remove it from service and
  - tell your supervisor.
- If a broken tool can be fixed correctly in the field, fix it.
- Do not attempt to fix a tool unless you are qualified to fix it AND you can fix the tool correctly.
# 5A-3 SAFETY ASSESSMENT

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## SUBCONTRACTORS ONSITE (List Name and Trade)

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**COLUMN A** = Acceptable at time of inspection  
**N/A** = Not applicable  
**#** = Comment

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### 3. Personal Protective Equipment (PPE)

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1. Site / Public Protection
2. Housekeeping
3. Personal Protective Equipment (PPE)
## 4. Confined Space

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## 6. Ladders / Stairs

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## 7. Fall Protection

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<td>Protection from impalement (e.g. rebar, t-posts, etc.)</td>
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## 8. Electrical

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Appendix 5A-3
### 9. Fire Protection

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### 10. Equipment

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### 11. Cranes and Hoisting Equipment

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<td>6. Leads in good condition</td>
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<td>7. Sills, plates, jacks installed</td>
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<td>1. Low Profile Barrier is pinned and bolted in all locations and has 2’ of slide or pinned</td>
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<td>2. Water Barrier is filled and has 6’ of slide space (45 mph or less)</td>
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<td>4. U-Bolts for fall protection are installed correctly. (Don’t saddle a dead horse!)</td>
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<td>5. Clear Zones (main lane, frontage roads)</td>
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<tr>
<td>6. Pedestrian Access</td>
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<tr>
<td>7. Private Property Access. (Only written agreements on file are acceptable)</td>
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<tr>
<td><strong>16. MISCELLANEOUS / COMMENTS (Include Closure Notations)</strong></td>
<td></td>
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<tr>
<td>LOCATION</td>
<td>TIME</td>
<td>Item Code</td>
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</tbody>
</table>
## 5A - 4 Pre-Activity Hazard Analysis

**Hazard Analysis**

Project Name: ____________________  
Operation: ________________________

Project Number: ________________  
Foreman: ________________________

Superintendent: __________________

### Step-by-Step Plan:

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
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<td>2</td>
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<td>11</td>
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<tr>
<td>12</td>
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### Pinch Points:

<table>
<thead>
<tr>
<th>Point</th>
<th>Description</th>
</tr>
</thead>
<tbody>
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<td>9</td>
<td></td>
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<tr>
<td>10</td>
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</tr>
</tbody>
</table>

### Access/ Egress Identification:

<table>
<thead>
<tr>
<th>Type</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Ladder, Ramp, Scaffold, Etc.)</td>
<td>(Equipment, Area, Etc.)</td>
</tr>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
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<td>7</td>
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<td>8</td>
<td></td>
</tr>
</tbody>
</table>

### Priority/Potential Hazard

<table>
<thead>
<tr>
<th>Priority/Potential Hazard</th>
<th>Precautionary Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tbody>
</table>

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Appendix 5A - 4
Hazard Analysis Signature Sheet

This hazard analysis has been reviewed by the following supervision, foreman and crew members:

<table>
<thead>
<tr>
<th>Name (Print)</th>
<th>Signature</th>
<th>Dates Reviewed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
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<td>30</td>
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<td></td>
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<tr>
<td>31</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Foreman: ____________________________________________

Superintendent: ____________________________________________
## DAILY SAFETY TASK ASSESSMENT

<table>
<thead>
<tr>
<th>Personal Protective Equipment</th>
<th>Fall Protection</th>
<th>Floor &amp; Wall Openings</th>
<th>Engineering Controls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye / Face</td>
<td>Guardrail Inspection</td>
<td>Covered / Marked / Barricade</td>
<td>Training on SDS conducted</td>
</tr>
<tr>
<td>Head / Ear</td>
<td>Harness / Lanyard / Positioning Chain Inspection</td>
<td>Properly Stored / Stacked Materials</td>
<td>YES ☐ NO ☐</td>
</tr>
<tr>
<td>Foot / Hand</td>
<td>Life Line Inspection - 3 Clamps</td>
<td>Tag Lines On All Loads</td>
<td>Foreman Conducting Meeting:</td>
</tr>
<tr>
<td>Respirator</td>
<td>Barricades - 6’ Off Edge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clothing</td>
<td>Covers Secured / Marked</td>
<td></td>
<td>Superintendent Reviewed By:</td>
</tr>
</tbody>
</table>

### House Keeping

- Trash Removal
- Work Area Neatness
- Aisle / Walkways Cleared
- Nails Removed

### Ladders

- Daily Rigging Inspection

### Welding & Burning

- Fire Extinguisher

### Electrical

- Proper Handling / Moving
- Pinch Points
- Rebar Caps / Impalement Protection

### Formwork

- Personal Protective Equipment

### Scaffolding

- Striker

### Trenches / Excavation

- Excavation

### Tools

- Competent Person
- Hot Work

### Daily Inspection

- Daily Inspection Report

### Proper Operation Training

- All utilities located / Protected

### Required Permits

- Line Break Permit

**Items Incorporated Into Safety Talk**

Signing this sheet indicates that you attended a safety meeting presented by GPI, LLC on the above date on the hazards indicated. I understand that this is part of an ongoing training effort and I was given the opportunity to ask questions to ensure my full understanding of what was addressed.

**Return To Safety Department**

---

**Appendix 5A-5**
## DAILY TASK SAFETY REVIEW

### Scheduled Work Hours

<table>
<thead>
<tr>
<th>From</th>
<th>To</th>
</tr>
</thead>
</table>

### Weather Conditions:

<table>
<thead>
<tr>
<th>Condition</th>
<th>Temperature</th>
<th>Precipitation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partly Cloudy</td>
<td>High</td>
<td>Rain</td>
</tr>
<tr>
<td>Overcast</td>
<td>Low</td>
<td>Sleet</td>
</tr>
<tr>
<td>Foggy</td>
<td></td>
<td>Snow</td>
</tr>
</tbody>
</table>

### Environmental Checklist:

If any of the following are answered "NO" contact ECM

- Storm Water Protected
- Sensitive Habitat Protected
- Threatened Species Protected
- Water Streams Protected
- Wetlands Protected
- Noise and Air/Dust Controlled

In case of chemical spill or if any Archeological and Historical Discovery

Contact the Environmental Compliance Manager (ECM) Eddie George: Mobile #: 469-416-5304

### MY SURVIVAL CHECKLIST

As a supervisor you are accountable for the safety performance of everyone in your area of responsibility. You should be systematically observing your people and encouraging their safe work practices and addressing their unsafe behaviors to help prevent injuries. As you supervise your work area, pay close attention to how work is performed and make a mental note of both the safe and unsafe behaviors of employees and things that you see, then review with your employees frequently your observations.

<table>
<thead>
<tr>
<th>Planning</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>NA</td>
<td>Unsafe</td>
</tr>
<tr>
<td>Safe</td>
<td>Not Seen</td>
</tr>
</tbody>
</table>

- I have planned and considered all health and environmental hazards involved with this job
- I have planned my work to eliminate struck by and/or against hazards?
- I have planned my work to eliminate caught in and/or between hazards?
- I have planned my work to eliminate slip, trip and fall hazards?
- I have planned my work to eliminate electrical hazards?
- I locked and tagged out all energy sources
- I have the tools and equipment needed to do this job safely
- I have informed others in the area that I am here and what task is to be performed
- I identified my experienced individuals and explained not to take chances or cut any corners
- I identified inexperienced hands and given them proper training
- I have an emergency action plan and/or escape route if something goes wrong
- I conducted all maintenance work
- I conducted all non-routine work and procedures
- I gave praise to my co-workers for working safely

If one or more answers are "NO" re-evaluate the way you are going to do the job, and discuss the procedures with your supervisor

### BUILDING A TRADITION OF EXCELLENCE - NO ONE GETS HURT
### 5A-5 Analisis de Riesgos Sitio de Trabajo

**Nombre del Proyecto:** __________________________  **Número del Proyecto:** __________________________  **Tarea a completarse:** __________________________

**Superintendente que lo reviso:** __________________________  **Supervisor que condujo la reunión:** __________________________

### EVALUACION DIARIA DEL TRABAJO DE SEGURIDAD

<table>
<thead>
<tr>
<th>Firma de entrada del empleado</th>
<th>Listado todos los riesgos asociados con el trabajo</th>
<th>Controles de Ingeniería</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

| Listado Químicos utilizados: | Se dió Entrenamiento en SDS | ȘI | NO |

Firmando esta hoja indica que usted ha atendido una sesión presentada por GPI, LLC en la fecha arriba indicada sobre los riesgos indicados. Yo comprendo que ésta es parte del esfuerzo por el entrenamiento contínuo y que se me dio la oportunidad de hacer preguntas para asegurar mi entendimiento completo de lo que se trató.

### Puntos Incorporados en la Plática de Seguridad

<table>
<thead>
<tr>
<th>Equipo de Protección Personal</th>
<th>Protección de Caidas</th>
<th>Aberturas en Piso &amp; Paredes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SI</td>
<td>NO</td>
</tr>
<tr>
<td><strong>Ojos / Cara</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cabeza / Oído</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Pie / Mano</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Respirador</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Vestuario</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Limpieza**

- **Remoción de Basura**
  - Inspección diaria

**Escaleras**

- **Andamios**
  - Striker

**Protección Contra Incendio**

- **Reporte de inspección diaria**

### Forma de Trabajo

- **Equipo de Protección Personal**
- **Equipo de Protección Personal**

### Herramientas

- **Persona Competente**
  - Trabajo en calor

**Inspección diaria**

- **Reporte de Inspección diaria**
- **Espacios Confinados**

**Entrenamiento de Operación adecuado**

- **Todos los servicios ubicados / Protegidos**
- **Permiso para interrumpir líneas de proceso**

---

**Fecha:** __________________________

**Numero del Proyecto:** __________________________
## REVISIÓN DIARIA DE SEGURIDAD DEL TRABAJO

<table>
<thead>
<tr>
<th>Horario de Trabajo:</th>
<th>De:</th>
<th>Hasta:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condiciones del Clima:</td>
<td>Claro</td>
<td>Temperatura:</td>
</tr>
<tr>
<td>Medio Nublado</td>
<td>Alta F</td>
<td>Lluvia</td>
</tr>
<tr>
<td>Nublado</td>
<td>Baja F</td>
<td>Hielo</td>
</tr>
<tr>
<td>Neblineado</td>
<td></td>
<td>Nieve</td>
</tr>
</tbody>
</table>

### Lista de verificación ambiental: Si cualquiera de los siguientes son respondidas NO contacte ECM
- Tormenta Agua Protegida • Hábitat Sensible Protegida • Especies Amenazadas Protegidas
- Fuentes de Agua Protegidas • Humedales Protegidas • Ruido y Aire/Polvo Controlado

**En caso de un derrame químico o cualquier descubrimiento histórico y arqueológico, contacte el Environmental Compliance Manager (ECM): Eddie George Mobile #: 469-416-5304**

## MI LISTA DE VERIFICACIÓN DE SOBRE VIVENCIA

### Planificación

<table>
<thead>
<tr>
<th></th>
<th>Sí</th>
<th>No</th>
<th>NA</th>
<th>Inseguro</th>
<th>Seguro</th>
<th>No visto</th>
</tr>
</thead>
<tbody>
<tr>
<td>He planeado y considerado todos los peligros de salud y ambiental implicados con el trabajo</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>He planeado mi trabajo para eliminar ser golpeado y/o contra los peligros?</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>He planeado mi trabajo para eliminar ser atrapado y/o estar entre los peligros?</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>He planeado mi trabajo para eliminar peligros de deslizamiento, tropiezos y caídas?</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>He cerrado y etiquetado todas las fuentes de energía</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Tengo las herramientas y equipo necesario para realizar mi trabajo seguro</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>He informado a otros en el área de trabajo de mi presencia y de la tarea que voy a realizar</td>
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</tr>
<tr>
<td>Identifique los individuos experimentados y les explique de no tomar caminos cortos ni riesgos</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Identifique mis trabajadores sin experiencia y les di el entrenamiento apropiado</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Tengo un plan de acción de emergencia y/o de escape en caso que algo salga mal</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Realice todo el trabajo de mantenimiento</td>
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</tr>
<tr>
<td>Realice todo el trabajo no rutinario y procedimientos</td>
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</tr>
<tr>
<td>Felicite a mis compañeros de trabajo por realizar la tarea con seguridad</td>
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</tbody>
</table>

### Desempeño

<table>
<thead>
<tr>
<th></th>
<th>Sí</th>
<th>No</th>
<th>NA</th>
<th>Inseguro</th>
<th>Seguro</th>
<th>No visto</th>
</tr>
</thead>
<tbody>
<tr>
<td>Si una o mas respuestas fueron &quot;NO&quot; re-evalué la manera como va ha realizar el trabajo y discuta los procedimientos con su supervisor</td>
<td></td>
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</tr>
</tbody>
</table>
# 5A-6 SUPERVISOR’S INJURY INVESTIGATION REPORT

<table>
<thead>
<tr>
<th>COMPANY</th>
<th>SUPERVISORS NAME</th>
<th>☐ Injury ☐ Near Miss</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMPLOYEE NAME</td>
<td></td>
<td>Occupation</td>
</tr>
<tr>
<td>LOCATION OF ACCIDENT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DATE OF ACCIDENT</td>
<td>DATE REPORTED</td>
<td>TIME OF ACCIDENT</td>
</tr>
<tr>
<td>A. TYPE OF Accident</td>
<td>How long has employee worked at this occupation?</td>
<td></td>
</tr>
<tr>
<td>B. TYPE OF INJURY/IllNESS</td>
<td>C. PART OF BODY INJURED</td>
<td>How long has the injured person worked at this job?</td>
</tr>
<tr>
<td>TYPE OF ACCIDENT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ Medical Treatment</td>
<td>☐ Near Miss</td>
<td>☐ First Aid</td>
</tr>
<tr>
<td>☐ Near Miss</td>
<td></td>
<td>☐ Medical Treatment</td>
</tr>
</tbody>
</table>

## EMPLOYEE STATEMENT OF ACCIDENT

WHERE AND HOW DID THE ACCIDENT HAPPEN? (USE ADDITIONAL SHEETS IF NECESSARY)

## CAUSE

SPECIFY MACHINE, TOOL, SUBSTANCE, OR OBJECT CONNECTED WITH THE ACCIDENT

UNSAFE MECHANICAL/PHYSICAL/ENVIRONMENTAL CONDITION AT TIME OF ACCIDENT (BE SPECIFIC)

PERSONAL FACTORS (ATTITUDE, LACK OF KNOWLEDGE OR SKILL, SLOW REACTION, FATIGUE)

PERSONAL PROTECTIVE EQUIPMENT REQUIRED? WAS INJURED EMPLOYEE USING REQUIRED EQUIPMENT?

## ACTION PLAN TO PREVENT RECURRENCE

ACTION PLAN TO PREVENT RECURRENCE (MODIFICATION OF MACHINE, MECHANICAL GUARDING, ENVIRONMENT, TRAINING)

FORM COMPLETED BY: ___________________________ DATE: ___________________________

SUPERVISORS SIGNATURE: ___________________________ DATE: ___________________________

## FOLLOW UP

ACTIONS TAKEN ON RECOMMENDATIONS (INCLUDE DATE COMPLETED)
INSTRUCTIONS FOR COMPLETING ACCIDENT REPORT

Please print or type all information. Complete report in as much detail as possible.

1. GENERAL INFORMATION

Fill in all information requested, company name, supervisors name, name of person injured, date, exact location, job title, job being performed, etc. For description of type of accident/illness, injury and body part see the following:

A. TYPE OF ACCIDENT/ILLNESS
   - slip/fall
   - struck by/against
   - caught in/on/between
   - contact with/by
   - over-exertion/lifting
   - burn by
   - cut by
   - amputation

B. TYPE OF INJURY
   - cut
   - bruise
   - puncture
   - abrasion
   - strain

C. PART OF BODY INJURED
   (select as many as needed)
   - sprain
   - burn
   - irritation
   - swelling
   - fracture
   - thumb/finger/hand/wrist
   - elbow/arm/shoulder
   - toe/foot/ankle
   - leg/knee/hip
   - head/neck/face
   - nose/eye/ear/throat
   - chest/abdomen
   - upper back/lower back

2. DESCRIPTION OF ACCIDENT

Describe in as much detail as possible where and how the accident happened. This section is for facts, not opinions. Statements the injured or witnesses made should be detailed. Use an additional piece of paper if more space is needed. Include sketches or photos if they help explain what happened.

3. CAUSES

Identify and describe in detail type of equipment, tools, processes etc., unsafe conditions (mechanical, physical, and environmental) and or personal factors involved in the accident. Discuss the use and requirements regarding any personal protective equipment.

Unsafe Actions
1. Operating equipment without authority
2. Failure to warn
3. Failure to secure
4. Operating at improper speeds
5. Making safety devices inoperable
6. Removing safety devices
7. Using defective equipment
8. Using equipment improperly
9. Failure to use PPE properly
10. Improper loading
11. Improper lifting
12. Improper placement
13. Improper position for the task
14. Servicing equipment in operation
15. Horseplay
16. Drugs or alcohol

Unsafe Conditions
1. Inadequate guards or barriers
2. Inadequate or improper PPE
3. Defective tools, equipment or materials
4. Congestion or restricted areas
5. Inadequate warning signs
6. Fire and explosion hazards
7. Poor housekeeping
8. Hazardous environmental conditions
9. Noise exposure
10. Radiation exposure
11. High and low temperature exposures
12. Inadequate lighting
13. Inadequate ventilation

4. RECOMMENDATIONS

Once causes are identified, action must be taken to prevent the same thing from happening again. Realistic, yet effective recommendations should be implemented. The form should be signed and dated by the appropriate supervisor.

5. FOLLOW-UP

List actions, which have been taken and their respective completion date. Proper follow-up should continue on any incomplete recommendations.
# 5A 7 - Auto Accident Report Form

Keep In Your Glove Box

When an accident occurs:

<table>
<thead>
<tr>
<th>First Steps</th>
<th>Do Not Say</th>
<th>While Still At the Scene</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Remain calm</td>
<td>• It's all my fault, (even if it is).</td>
<td>• Get as much information as possible</td>
</tr>
<tr>
<td>• Get to a safe place</td>
<td>• My insurance will pay for everything.</td>
<td>on this report.</td>
</tr>
<tr>
<td>• Check for injuries</td>
<td>• It's OK, I have full coverage.</td>
<td>• Take Pictures</td>
</tr>
<tr>
<td>• Administer First Aid</td>
<td></td>
<td>• When the police come, cooperate and</td>
</tr>
<tr>
<td>• Call police/EMT</td>
<td></td>
<td>tell them what you know.</td>
</tr>
</tbody>
</table>

## Accident Details

- **Day/Date/Time AM/PM:**
- **Weather/Road Conditions:**
- **Location of Accident:**
- **Accident Details:**

## Damage Descriptions

- **Insured Vehicle:**

- **Towing Company Name & Phone:**
  - **Other Vehicle:**

- **Towing Company Name & Phone:**

## Other Driver/Vehicle Information

- **Owner’s Name:**
- **Owner’s Address:**
- **Owner’s Phone:**
- **Vehicle Make:**
- **Vehicle Model & Year:**
- **Vehicle Color:**
- **License Plate Number:**
- **Insurance Company:**
- **Agent Name & Phone:**
- **Other Drivers Name:**
- **Other Drivers Address:**
- **Other Drivers Phone:**
Passengers/Injuries:

<table>
<thead>
<tr>
<th>Company Vehicle:</th>
<th>Other Vehicle:</th>
</tr>
</thead>
<tbody>
<tr>
<td># Passengers:</td>
<td># Passengers:</td>
</tr>
<tr>
<td>Injuries:</td>
<td>Injuries:</td>
</tr>
</tbody>
</table>

Police Information

<table>
<thead>
<tr>
<th>Officer Name:</th>
<th></th>
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<tbody>
<tr>
<td>Department:</td>
<td></td>
</tr>
<tr>
<td>Phone:</td>
<td></td>
</tr>
<tr>
<td>Badge Number:</td>
<td></td>
</tr>
<tr>
<td>Other Info:</td>
<td></td>
</tr>
</tbody>
</table>

Witness Information

<table>
<thead>
<tr>
<th>Name:</th>
<th>Name:</th>
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<tbody>
<tr>
<td>Address:</td>
<td>Address:</td>
</tr>
<tr>
<td>Cell Phone:</td>
<td>Cell Phone:</td>
</tr>
<tr>
<td>Work Phone:</td>
<td>Work Phone:</td>
</tr>
</tbody>
</table>

Sketch The Accident Scene:
# 5A-8 General Liability Investigation Report

<table>
<thead>
<tr>
<th><strong>GENERAL INFO</strong></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COMPANY NAME:</strong></td>
<td></td>
<td></td>
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<tr>
<td><strong>SUPERVISORS NAME:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SUPERVISORS PHONE NUMBER:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>INVOLVED EMPLOYEE NAME:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>OCCUPATION:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TYPE OF PROPERTY INVOLVED:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LOCATION OF PROPERTY:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>IF A VEHICLE LIST:</strong> (MAKE, MODEL, TAG NUMBER, SERIAL NUMBER)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>VEHICLE OWNERS NAME AND PHONE:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CLAIMANTS NAME:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CLAIMANTS PHONE NUMBER:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PROPERTY OWNERS NAME:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PROPERTY OWNERS ADDRESS AND PHONE NUMBER:</strong></td>
<td></td>
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<tr>
<td><strong>LOCATION OF ACCIDENT:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PROPERTY CAN BE SEEN AT:</strong> (ADDRESS)</td>
<td></td>
<td></td>
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<tr>
<td><strong>INJURED NAME:</strong></td>
<td></td>
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<tr>
<td><strong>INJURED ADDRESS:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>DATE OF ACCIDENT</strong></td>
<td><strong>DATE REPORTED:</strong></td>
<td><strong>TIME OF ACCIDENT:</strong> AM PM</td>
</tr>
<tr>
<td><strong>TYPE OF COMPANY EQUIPMENT INVOLVED:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>WHERE CAN EQUIPMENT BE SEEN:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>NAME OF INJURED:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ADDRESS OF INJURED:</strong></td>
<td></td>
<td></td>
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<tr>
<td><strong>INJURY TYPE:</strong> (IF KNOWN)</td>
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</tbody>
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<table>
<thead>
<tr>
<th><strong>CLAIMANTS DESCRIPTION:</strong></th>
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<tr>
<th><strong>INVESTIGATION FINDINGS:</strong></th>
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</tbody>
</table>

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For Office Use Only: Incident Hard File, Server File, Legal

Appendix 5A-8
<table>
<thead>
<tr>
<th>Insurance Information:</th>
<th></th>
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</thead>
<tbody>
<tr>
<td><strong>COMPANY NAME:</strong></td>
<td><strong>PHONE NUMBER:</strong></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ADDRESS:</strong></td>
<td><strong>CITY, STATE, ZIP:</strong></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>POLICY NUMBER:</strong></td>
<td></td>
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</tbody>
</table>

**FORM COMPLETED BY** ______________________________ **DATE:** __________________________
### Part A – Date and Location

Date of Incident ___________________________ Time of Incident ___________________________
Contractor Name __________________________ Company Involved __________________________
Segment ____ Person Completing Form __________ Title ________________________________
Description of the Location ___________________________________________________________
Operator’s Name __________________________ Spotter’s Name __________________________

### Part B – Affected Utility

- Electric
- Natural Gas
- Sewer
- Water
- Telephone
- Cable TV

Size of Utility ________________________________
What type of Service?
- Service/Drop
- Main
- Fiber Optic

Depth of Damaged Facility ___ ft

### Part C – Locating and Marking

Was the One-Call Center notified?  Yes [ ]  No [ ]  If Yes, provide the locate ticket number__________________________
Were facility marks visible in the area of the excavation?  Yes [ ]  No [ ]
Were facility marks accurate?  Yes [ ]  No [ ]
Facilities were marked with:
- Paint
- Flags
If paint, what type of locate marks were present?
- Duct Bank (Diamond Pattern)
- Single Line (With Buffer)
- Single Line (Without Buffer)
Have you taken photos (Required) Yes [ ]  No [ ]  What is the distance between the locate marks? ____ ft

### Part D – Excavation Information

Type of Excavation Equipment?
- Backhoe
- Excavator
- Boring
- Auger
- Trencher
- Directional Drill
- Drilling
- Hand Tools
- Probing Device
- Other

Type of work performed?
- Installing Gas Pipeline
- Installing Electric Cable
- Installing Culvert
- Installing Pipe
- Installing Poles
- Installing Anchors
- Other

Please specify ________________________________
Location of Excavation
- Private Property
- Utility Easement
- Project Right-Of-Way

### Part E – Describe how the incident occurred

____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________

Supervisor’s Name __________________________ Signature __________________________ Phone # __________________________
### INCIDENT REVIEW FORM

<table>
<thead>
<tr>
<th>DATE OF REPORT:</th>
<th>TIME:</th>
<th>LOCATION:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>CONTRACTOR(S) INVOLVED:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DATE OF INCIDENT:</th>
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</table>

- Incident □
- Unsafe Action/Behavior □
- Unsafe Condition □

**Name of Person Reporting: (optional)**

<table>
<thead>
<tr>
<th>SUMMARY</th>
</tr>
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<tbody>
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</table>

**Describe the events leading up to the near miss incident:**

<table>
<thead>
<tr>
<th>Corrective actions to be implemented to prevent similar incidents:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
</tr>
<tr>
<td>2.</td>
</tr>
<tr>
<td>3.</td>
</tr>
<tr>
<td>4.</td>
</tr>
<tr>
<td>5.</td>
</tr>
<tr>
<td>6.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Additional actions contractor committed to follow to prevent a recurrence:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
</tr>
<tr>
<td>2.</td>
</tr>
<tr>
<td>3.</td>
</tr>
<tr>
<td>4.</td>
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<tr>
<td>5.</td>
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<tr>
<td>6.</td>
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</tbody>
</table>
5A-11 EMPLOYEE DISCIPLINARY ACTION FORM

Employee Name (print or type):  Employee #:  Position/Title:

The intent of this notice is to inform you that your performance has not been satisfactory for the reasons indicated below and to provide you with an opportunity to cooperate with your Supervisor in correcting this situation. If this situation is not corrected, you will be subject to further disciplinary action, up to and including discharge.

The above person was counseled for the purpose checked:

| ☐ To place on Formal Warning | ☐ To place on Verbal Warning |
| ☐ To place on Formal Probation | ☐ To place on Suspension ______ |
| ☐ To Terminate Employment | ☐ Days/Weeks ______________ |

Area of concern:

| ☐ Quality of work | ☐ Attendance/Tardiness |
| ☐ Failure to Report/Call In | ☐ Personal Conduct |
| ☐ Quantity of work | ☐ Business Ethics Violation |
| ☐ Other: (describe below) |

Has employee previously been counseled about this problem?  ☐ YES  ☐ NO

If Yes:  ☐ Verbal  ☐ Written

By Whom? ____________________________________  When? __________________________

Comment further on areas checked and action taken:

________________________________________________________________________

________________________________________________________________________

Employee Signature (not needed if verbal only)  Date:  

Note: The employee’s signature does not necessarily indicate agreement with this notice but signifies that the employee has read, understood, and has received a copy of its’ contents.

Employee Comments:

________________________________________________________________________

________________________________________________________________________

Summarize results of interview and attitude of employee: __________________________

Be sure all signatures are affixed before returning to Human Resources - Employee Relations.

Supervisor (Print):

________________________________________________________________________

Signature  Date

Next Level Manager (Print):

________________________________________________________________________

Signature  Date
5A-12 MOBILE CRANE CHECK IN

<table>
<thead>
<tr>
<th>SEGMENT:</th>
<th>PROJECT NAME:</th>
<th>DATE:</th>
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<tbody>
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<thead>
<tr>
<th>SEGMENT MANAGER:</th>
<th>PROJECT MANAGER:</th>
</tr>
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<table>
<thead>
<tr>
<th>PERSON CONDUCTING CHECK-IN:</th>
<th>OWNER:</th>
</tr>
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<tbody>
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<table>
<thead>
<tr>
<th>SUBCONTRACTOR:</th>
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<table>
<thead>
<tr>
<th>DATE ANNUAL INSPECTION EXPIRES:</th>
</tr>
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<tbody>
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</table>

<table>
<thead>
<tr>
<th>ACTIVITIES TO BE PERFORMED BY THE UNIT:</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Y</th>
<th>N</th>
<th>N/A</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
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</tr>
</tbody>
</table>

- Type-specific daily inspection log in operator cab?
- Make/model-specific operator manual in operator cab?
- Make/model-specific load chart in operator cab?
- Legible hand signal chart on outside of unit?
- Legible and appropriate warning stickers on unit?
- Appropriate stability items available (e.g. pads, mats, etc.)?
- Appropriate site control items available (e.g. red tape, fencing, etc.)?
- Spill control media available?
- Fire extinguisher?
- Glass and mirrors intact?
- All safety features functional (e.g. alarms, horn, anti-two block, etc.)?
- All hooks have functioning safety latch?
- Block and ball stamped w/ load capacity?
- Special attachments (e.g. spreader bars) stamped w/ load capacity?
- Wire ropes free of visible defects?
- Pulleys and drums free of visible defects?
- Rigging (e.g. slings, chains, etc.) have attached and legible tags?
- Any visible defect or area of concern?

<table>
<thead>
<tr>
<th>Involved Contractors Authorized Representative</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Print

Sign

Comments

Y  N

Space for additional comments and concern are on the back of this form.
Mobile Crane Check In

Comments and Concerns:

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5A-13 POWER LINE CLOSE PROXIMITY PERMIT

Date: ___________________________ Requested by: ___________________________

Company Name: ___________________________ Competent Person: ___________________________

Segment: ___________________________ Start Time: ___________ End Time: ___________

Purpose of Activity: ___________________________

Location of Activity: ___________________________

Supervisor completing the form: ___________________________

Height of power line in feet: ___________ Voltage in kV: ___________________________

Owner of utility and point of contact: ___________________________

Equipment to be used: ___________________________

Safety Option Chosen: □ De-energize and Ground  □ Maintain 20' Clearance  □ Table A Clearance

Method of Protection: □ Dedicated Spotter  □ Proximity Alarm  □ Encroachment Warning Device  □ Encroachment Limiting Device  □ Insulating Link/Device

TABLE A — MINIMUM CLEARANCE DISTANCES (29 CFR 1926.1408)

<table>
<thead>
<tr>
<th>Voltage * (nominal, kV, alternating current)</th>
<th>Minimum clearance distance (feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>up to 50</td>
<td>10</td>
</tr>
<tr>
<td>over 50 to 200</td>
<td>15</td>
</tr>
<tr>
<td>over 200 to 350</td>
<td>20</td>
</tr>
<tr>
<td>over 350 to 500</td>
<td>25</td>
</tr>
<tr>
<td>over 500 to 750</td>
<td>35</td>
</tr>
<tr>
<td>over 750 to 1,000</td>
<td>45</td>
</tr>
<tr>
<td>over 1,000</td>
<td>(as established by the utility owner/operator or registered professional engineer who is a qualified person with respect to electrical power transmission and distribution)</td>
</tr>
</tbody>
</table>

*Note: The value that follows “to” is up to and includes that value. For example, over 50 to 200 means up to and including 200kV.

Operator’s signature: ___________________________

Supervisor’s signature: ___________________________

This form must be completed and signed (all signatures) prior to beginning work or set-up where equipment, personnel and or tools may come within 20 feet of overhead power lines. This form shall remain in the cab of the equipment until the operation is complete. GPI’s Safety Department must be notified prior to work beginning where power lines are in close proximity.

*** The Work Plan, Job Hazard Analysis and Competent Person Designation(s) must be attached to this Permit and be available for review during the activity. ***
The Work Plan, Job Hazard Analysis, Operator Designation and Competent Person Designation must be attached to this Permit and be available for review during activity.**

Description and type of work to be performed:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Provide details concerning the duties location, surrounding obstructions and potential hazards.

**Less Hazardous Alternatives:**

1. Answers to the following to be based on hazard exposure to employees performing the work.
2. Time and cost of operation must not be the determining factor in the method used.
3. After each of the following, state the reason(s) as to why this method may not be used to perform the work operation.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Ladders or stairways</td>
</tr>
<tr>
<td>2.</td>
<td>Scaffolds (tubular, welded frame, two-point suspension)</td>
</tr>
<tr>
<td>3.</td>
<td>Aerial lifts (power platform, vehicle-mounted, elevating and rotating platforms - e.g. scissor lifts, JLGs, high-lift boom trucks)</td>
</tr>
<tr>
<td>4.</td>
<td>Personnel hoists (e.g. elevators, spider lifts)</td>
</tr>
<tr>
<td>5.</td>
<td>Other mechanical methods</td>
</tr>
</tbody>
</table>

Appendix 5A-14
5A-14 SUSPENDED WORK PLATFORM CHECKLIST & AUTHORIZATION

Subcontractor Name: ____________________________________________________________

Project Name: ___________________________________________________________________

Location: ______________________________________________________________________

I, ______________________________________________________ as the Subcontractor's Senior Manager,

approve the use of a suspended work platform at ______________________________ Location

on _______________________.

Date

The use of the suspended work platform will comply with OSHA regulations concerning hoisting personnel
baskets/platforms from cranes and derricks, as well as local practices.

ACKNOWLEDGEMENT:

Subcontractor’s Representative: ________________________________

Signature __________________________ Date ________________

Copies of this completed form must be on file in the GPI Safety Department prior to the lift taking place.

This form is required to be onsite during the lift.
### 5A-15 BATCH PLANT CHECK-IN FORM

<table>
<thead>
<tr>
<th>SEGMENT NO.</th>
<th>PROJECT NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SEGMENT MANAGER</th>
<th>CONSTRUCTION MANAGER</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PERSON(S) CONDUCTING CHECK-IN</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CONTRACTOR/SUPPLIER</th>
<th>OWNER</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MAKE</th>
<th>MODEL</th>
<th>TYPE</th>
<th>CAPACITY</th>
<th>YEAR</th>
<th>UNIT #</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>PHYSICAL PLANT ADDRESS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Daily inspection log in operator house?</th>
<th>Y</th>
<th>N</th>
<th>N/A</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make/model-specific operator manual in operator house?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legible and appropriate warning stickers on unit?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemicals stored in appropriate containment vessels?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oxidizers separated from flammables and combustibles?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All chemicals’ SDS maintained in the operator house?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Documented spill procedures available for the plant?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spill control media available?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adequate eye wash station?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compressed gas cylinders stored upright, secured and capped?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All compressed gas/air hoses in good condition &amp; properly secured to manifolds?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Documented lock-out/tag-out procedures?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lock-out/tag-out components available?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All guards are in place?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Documented confined space procedures?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All ladders and stairs in good condition?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All handrails in place and in good condition?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All catwalks and other walking surfaces secured and in good condition?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adequate number of fire extinguishers?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All safety features functional (e.g. alarms, emergency shut-offs, lights, etc.)?</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>All power sources provided with a functioning and lockable cover?</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>All manufacturer required warning stickers in place and legible?</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Conveyor belts free of visible defects?</td>
<td></td>
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</tbody>
</table>

**PLANT OWNER/.LESSOR AUTHORIZED REPRESENTATIVE**

<table>
<thead>
<tr>
<th>Print</th>
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<table>
<thead>
<tr>
<th>Sign</th>
</tr>
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</table>
## Utility Locate Permit

<table>
<thead>
<tr>
<th>Utility Locate Reference #</th>
<th>Signature of Competent Person</th>
<th>Date located</th>
<th>Locate Flags and/or paint marks visible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gas</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communications</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sewer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pipeline</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>City Illumination</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Telephone</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TxDOT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Storm Water/ Slurry</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Have locates been documented with video and/or photos? __________

Equipment Operator's Signature: ___________________________ Date: ________________

Foreman or Supervisor's Signature: ________________________ Date: __________________

**Ticket Refresh Required every 14 working days**

<table>
<thead>
<tr>
<th>Date: ________________</th>
<th>Ticket Number: ______________________________</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date: ________________</td>
<td>Ticket Number: ______________________________</td>
</tr>
</tbody>
</table>

This permit is required to be completed by the Contractor's Designated Competent Person prior to any work commencing (e.g. drilling, boring, excavating, etc.). All located request tickets and confirmations are to be attached to this permit. The General Contractor's Supt. must view this permit as part of their daily safety survey of the work areas. Permit must be onsite until the work is completed and be available if requested during audit.

*** The Work Plan, Job Hazard Analysis and Competent Person Designation(s) must be attached to this Permit and be available for review during the activity. ***
**5A-17 CONFINED SPACE EVALUATION FORM**

This evaluation is required to be completed in the Work Plan development process if the operation contains any work areas that meet both conditions in Box 1 below AND if workers will have to enter those areas at any time during the operation. This evaluation may be completed in the field if confined space conditions are not identified in the Work Plan development process.

<table>
<thead>
<tr>
<th>BOX 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work area large enough to enter</td>
</tr>
<tr>
<td>Work area has limited or restricted means for entry or exit AND</td>
</tr>
<tr>
<td>Work area is not designed for continuous worker occupancy</td>
</tr>
</tbody>
</table>

If conditions in Box 1 work areas meet any one of the conditions listed in Box 2, the Contractor will be responsible for completing a Permit Required Confined Space (PRCS) Entry Permit (a separate document) and following all required PRCS procedures.

<table>
<thead>
<tr>
<th>BOX 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Work area contains or has the potential to contain a hazardous atmosphere OR</td>
</tr>
<tr>
<td>• Work area contains a material that has the potential to engulf a worker OR</td>
</tr>
<tr>
<td>• Work area has walls that converge inward or floors that slope downward and taper into a smaller area which could trap or asphyxiate a worker OR</td>
</tr>
<tr>
<td>• Work area contains any other recognized safety or health hazard, such as unguarded machinery, exposed live wires or excessive heat</td>
</tr>
</tbody>
</table>

Company Name: ___________________________ Date: ___________ Segment: ____________________

Competent Person(s): ___________________________

Purpose of Entry: ___________________________

Location/Description of Work Area: ___________________________

Mark Y or Not Applicable (N/A) for those that do not apply.

<table>
<thead>
<tr>
<th>SAFETY CHECKLIST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acceptable entry conditions defined?</td>
</tr>
<tr>
<td>Plan to monitor and test work area?</td>
</tr>
<tr>
<td>Plan to isolate release of energy and material into work area?</td>
</tr>
<tr>
<td>Plan to eliminate or control atmospheric hazards in work area?</td>
</tr>
<tr>
<td>Plan to protect workers from external hazards?</td>
</tr>
<tr>
<td>Plan to verify conditions in space are acceptable for the entire duration of the activity?</td>
</tr>
</tbody>
</table>

Mark Y or Not Applicable (N/A) for those that do not apply.

<table>
<thead>
<tr>
<th>EQUIPMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Testing &amp; Monitoring</td>
</tr>
<tr>
<td>Lighting</td>
</tr>
<tr>
<td>Personal Protection</td>
</tr>
<tr>
<td>Ventilation</td>
</tr>
<tr>
<td>Ingress/Egress</td>
</tr>
<tr>
<td>Barriers/Shields</td>
</tr>
<tr>
<td>Communications</td>
</tr>
<tr>
<td>Rescue</td>
</tr>
</tbody>
</table>

Contractor Supervisor's Signature: ___________________________ Date: ___________

Contractor Competent Person's Signature: ___________________________ Date: ___________

Comments: ___________________________

This permit is required to be completed by the Contractor’s Designated Competent Person prior to beginning the work. It is the responsibility of the Contractor’s Designated Competent Person to document on the Contractor’s Entry Permit (a separate document); all required actions specified in the applicable OSHA Regulations, from pre-entry to the termination of the work activity.

*** The Work Plan, Job Hazard Analysis and Competent Person Designation(s) must be attached to this Permit and be available for review during the activity. ***

Appendix 5A-17
# 5A-18 DAILY EXCAVATION CHECKLIST

## Daily Excavation Checklist

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervisors Name</td>
<td>Competent Person:</td>
</tr>
<tr>
<td>Site Location</td>
<td></td>
</tr>
</tbody>
</table>

### Soil Type: Excavation Depth: Excavation Width:

**NOTE:** Competent Person to be onsite at all times

**Type of Protective System Used:**

Indicate for each item: Yes, No or N/A for not applicable:

## 1. General Information:

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A.</strong> Is excavation less than five feet in depth?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>B.</strong> Is there a potential for a cave-in?</td>
<td> </td>
<td> </td>
<td></td>
</tr>
<tr>
<td><em>IF YES, excavation must be sloped, shored, or shielded.</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>C.</strong> Is excavation deeper than five feet in depth?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>IF YES, excavation must be sloped, shored, or shielded.</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>D.</strong> Is sloping used as your protective system?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Slope information to keep in mind:

![Slope Diagram](image)

Example of a Simple 34-degree Slope commonly used around the site for cave-in protection.

## 2. Inspection of Job-site:

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A.</strong> Excavations, adjacent areas, and protective systems inspected by a Competent person daily before the start of work.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>B.</strong> Competent person has the authority to remove employees from the excavation immediately.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>C.</strong> Surface encumbrances removed or supported.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>D.</strong> Employees protected from loose rock or soil that could pose a hazard by falling or rolling into the excavation.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>E.</strong> Hard hats and safety glasses worn by all employees.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>F.</strong> Spoils, materials, and equipment set back at least two feet from the edge of the excavation.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>G.</strong> Adequate barriers provided at all excavations, wells, pits, shafts, etc.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>H.</strong> Class II traffic vests shall be worn by all employees.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>I.</strong> Employees required to stand away from vehicles being loaded or unloaded.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>J.</strong> Warning system established and utilized when mobile equipment is operating near the edge of the excavation.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>K.</strong> Employees prohibited from going under suspended loads.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## 3. Utilities:

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A.</strong> Location of utilities marked.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>B.</strong> Prior to the use of equipment, underground utilities have been located by hand.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>C.</strong> Underground utilities are protected, supported, or removed when excavation open.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

Appendix 5A-18
# Daily Excavation Checklist Continued:

<table>
<thead>
<tr>
<th>4. Means of Access and Egress:</th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Travel distance to means of egress no greater than 25 feet in excavations four feet or more in depth.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. Straight ladders used in excavations extend at least three feet above the edge of the trench.</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Ramps being used for employee access have been designed by the competent person.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. Employees protected from cave-ins when entering or exiting the excavation.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5. Wet Conditions:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Precautions have been taken to protect employees from the accumulation of water.</td>
<td></td>
</tr>
<tr>
<td>B. Water removal equipment monitored by a competent person.</td>
<td></td>
</tr>
<tr>
<td>C. Surface water or runoff diverted or controlled to prevent accumulation in the excavation.</td>
<td></td>
</tr>
<tr>
<td>D. Inspections have been made after every rainstorm or other hazard-increasing occurrence.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6. Hazardous Atmosphere: The atmosphere within the excavation must be tested where there is a reasonable possibility of an oxygen deficiency, combustible or other harmful contaminant exposing employees to a hazard.</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Are there exposed sewer or natural gas lines in excavation?</td>
<td></td>
</tr>
<tr>
<td>B. Is excavation near a landfill area, or are hazardous substances being stored close to the excavation?</td>
<td></td>
</tr>
<tr>
<td><strong>If you answered YES to A or B, then air must be tested before entry.</strong></td>
<td></td>
</tr>
<tr>
<td>C. Employees will contact Fire/Rescue at 911 in case of emergencies.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7. Support Systems:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Materials and/or equipment for support systems selected based on soil analysis, trench depth, and expected loads.</td>
<td></td>
</tr>
<tr>
<td>B. Materials and equipment used for protective systems inspected and in good condition.</td>
<td></td>
</tr>
<tr>
<td>C. Materials and equipment not in good condition have been removed from service.</td>
<td></td>
</tr>
<tr>
<td>D. Protective systems installed without exposing employees to the hazards of cave-ins, collapses, or threat of being struck by materials or equipment.</td>
<td></td>
</tr>
<tr>
<td>E. Members of support system securely fastened to prevent failure.</td>
<td></td>
</tr>
<tr>
<td>F. Support systems provided to ensure stability of adjacent structures, buildings, roadways, sidewalks, walls, etc.</td>
<td></td>
</tr>
<tr>
<td>G. Excavations below the level of the base of a footing have been approved by a Registered Professional Engineer.</td>
<td></td>
</tr>
<tr>
<td>H. Removal of support systems progresses from the bottom and members are released slowly so you can note any indication of possible failure.</td>
<td></td>
</tr>
<tr>
<td>I. Backfilling progresses with removal of support system.</td>
<td></td>
</tr>
<tr>
<td>J. Excavation of material to a level no greater than two feet below the bottom of the support system and only if the system is designed to support the loads calculated for the full depth.</td>
<td></td>
</tr>
<tr>
<td>K. Shield system placed to prevent lateral movement.</td>
<td></td>
</tr>
<tr>
<td>L. Employees are prohibited from remaining in shield system during vertical movement.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>8. Training:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A. All employees have had Excavation Safety Awareness Training.</td>
<td></td>
</tr>
</tbody>
</table>
Emergency Response Plan
An emergency response team is in place here at the GPI Project. Our objective is to eliminate any confusion about emergencies, should one occur. It establishes procedures for calling for help, emergency response, requirements for handling the media, and emergency communication responsibilities.

Communication of the Plan
In order to ensure that all employees are familiar with the plan, it will be posted in all jobsite trailers and on all job/employee information boards. Training will be conducted during weekly safety meetings to ensure all employees and subcontractors are familiar with the plan.

Administration
It will be the responsibility of the onsite Safety Manager, Pete Flores, to periodically review the plan to ensure that it is current and meets the need of the project at this time.

Communication Systems
Communications on the jobsite will be primarily through the use of telephones. This will allow all site supervisors to remain in constant contact in an emergency situation.

Notification Checklists
- Incident Occurs
- Life threatening emergencies requires the immediate supervisor to call 911.

Non-life threatening emergencies follow below:
Subcontractors will follow their companies reporting procedures as well as the below:
- Supervisor notifies the area Superintendent
- 911 is called by the senior on site supervisor, if required
- Onsite supervisor will notify the Safety Department
- Safety Department will notify the appropriate Segment Manager and Construction Manager (and the Public Information Coordinator, if needed)
- Construction Manager will notify PM
First Hour Response Checklist

STEP ONE - Senior Person On-Site

_____ Contact emergency services (Contacts section).
_____ Contact the Safety Department (Contacts section).
_____ Initiate site control and determine if the site should be shut down. Make certain that all employees are accounted for.
_____ Do not move anything that could be classified as evidence. Ensure telephone coverage at the site.
_____ Inform site personnel to direct requests for info. from outside groups to you.
_____ Notify Segment Superintendent.
_____ Post workers to restrict entry to the site. Establish a command center, if needed.
_____ Inform GPI Public Information Coordinator, if needed.
_____ Notify the owner/developer of the project.

STEP TWO – Segment Coordinator

_____ Determine what happened, when/ where it happened, and who is involved.
_____ Verify the current status of the site (shutdown).
_____ Determine whether you and/or Public Information Coordinator are needed on site.
_____ Notify Segment Manager (Contacts section).
_____ Advise the segment office administrator and receptionist how to route calls.
_____ Identify potential spin-off crises.
_____ Notify human resources if needed.

STEP THREE - Safety Manager for Grand Parkway Infrastructure employees and/or designated subcontractor senior manager for subcontract employees

_____ Contact Legal Department, if needed.
_____ Gather number/names of injured and/or fatalities and obtain phone number(s)of the spouse(s) / family(ies).
_____ Contact the Construction Manager to determine who should notify the spouse(s)/family(ies).
_____ Debrief workers who witnessed the accident.
_____ Initiate a post-accident drug/alcohol test.
_____ If appropriate, notify the applicable governmental agency.
_____ Initiate a third party investigation team to work in tandem w/ authorities, if needed.
_____ Designate someone to stay with the injured worker(s) at the hospital until family members arrive.
_____ Document the incident in writing.

STEP FOUR – Grand Parkway Infrastructure, Construction Manager or Subcontractor Senior Manager

_____ If there is an employee injury/fatality, determine who will notify spouse(s)/ family(ies). A fatality may require a personal visit (Injury/Fatality section).
_____ If the injury/fatality is a subcontractor's employee, it is the subcontractors responsibility to notify the spouse/family.
_____ If a non-employee is hurt/killed, allow the authorities to make the notification and contact your insurance broker/company (Contacts section).
_____ Inform any surrounding areas that may be affected by the incident. Instruct employees at the accident site to contact their families to let them know they are OK.

STEP FIVE – Public Information Coordinator

_____ Identify the audiences that need to be contacted for update purposes.
_____ Gather details on past negative issues to which the media may refer.
_____ Fax/e-mail/voicemail all employees and job sites to notify them of the incident and tell them to whom they should direct media/general information calls. Provide on-going updates.
Establish an emergency message mailbox for employees to access if office operations have been impacted.

Track all media coverage via a monitoring service and the Internet.

Secure and offer critical-incident stress counseling for employees who witnessed the accident (if deemed necessary).

CONTACTS IN THE EVENT OF AN EMERGENCY

Crisis Management Team

GPI PM - Albert Molne
Cell: 469-265-6041

GPI Construction Manager – Satya Guduru
Cell: 305-934-8405

Segment H- TBA
Cell:

Segment I-1- TBA
Cell:

Segment I-2- TBA
Cell:

Safety Manager – Pete Flores
Cell: 832-763-2079

GPI Public Information Coordinator – Heather DeLapp
Cell: 972-809-9479

Spokesperson - TxDOT (TBA)
Cell:
Grand Parkway Infrastructure, LLC Counsel - TBA
Cell:

**Insurance & Related Services**

Insurance Company – TBA

Insurance Broker – TBA
Office:  
Cell:

**EMERGENCY SERVICES**

<table>
<thead>
<tr>
<th>EMS</th>
<th>911</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambulance</td>
<td>911</td>
</tr>
<tr>
<td>Police</td>
<td>911</td>
</tr>
<tr>
<td>Fire Department</td>
<td>911</td>
</tr>
<tr>
<td>Poison Information Center</td>
<td>800-222-1222</td>
</tr>
<tr>
<td>American Red Cross</td>
<td>817-335-9137</td>
</tr>
</tbody>
</table>

**Hospitals**

|North – Memorial Hermann| 300 Kingwood Medical Drive  
Kingwood, TX 77339  
281-312-4000 |
|---|---|
|South - Houston Methodist San Jacinto| 4401 Garth Road  
Baytown TX 77521  
281-420-8600 |

**24 Hour ER**

|North - Neighbors Emergency Center| 22678 US-59  
Porter, TX 77365  
281-354-4654 |
|---|---|

**Occupational Health Clinics**

|North - US Healthworks Medical Group| 16630 Imperial Valley Drive, Ste # 115  
Houston, TX 77060  
281-260-0087 |
|---|---|
|South & Afterhours - Core Occupational Medicine| 126 San Augustine Ave.  
Deer Park TX 77536  
281-884-8100 |
Governmental Agencies/Offices

OSHA
Houston North
690 S Loop 336 W, Suite 400
Conroe, TX 77304
Ph# 936-760-3800
Fax# 936-760-3327

Houston South
17625 El Camino Real,
Suite 400
Houston, TX 77058
Ph# 281-286-0583
Fax# 281-286-6352

EPA
US Environmental Protection Agency
1919 Smith St #925
Houston, TX 77002
Ph# 713-209-4900

Haz-Mat
Phoenix Pollution Control &
Environmental Services Inc.
7111 Decker Dr.
Baytown TX 77520
Ph# 281-838-3400
Fax# 281-424-7748

TCEQ
Texas Environmental Quality
5425 Polk St.
Houston, Texas 77023
Ph# 512-239-1000

EMERGENCY PROCEDURES
In the event of an accident, every effort should be made to ensure maximum safety for everyone. Only authorized personnel should be admitted to the scene.
FOR LIFE THREATENING EMERGENCIES DIAL 911

NEXT, REPORT THE EMERGENCY TO ONE OF THE FOLLOWING:

GPI Construction Manager
Satya Guduru
305-934-8405

GPI PM
Albert Molne
469-265-6041

Safety Manager
Pete Flores
832-763-2079

Chemical Spill Procedures

- The following will be implemented in case of a chemical spill.
- The spill will be reported as soon as possible to a supervisor who shall report immediately to the GPI Superintendent and GPI Environmental Compliance Manager as to what type of chemical and how much was spilled.
- The SDS will be used to determine if the all work shall stop in the immediate area of the spill.
- The supervisor will evaluate the spill and utilize the best available containment method. The supervisor will see that the correct employee PPE is used in the containment procedure.
- The senior supervisor will be responsible for reporting the spill to:

  Environmental Compliance Manager - Eddie George:
  Cell: 469-416-5304

  Safety Manager - Pete Flores
  Cell: 832-763-2079

- The Environmental Compliance Manager or his designee will determine if the quantity meets the required quantity to be reported to TCEQ.

  The Environmental Compliance Manager shall immediately report the spill to:

  GPI Construction Manager – Satya Guduru 305-934-8405
  GPI Segment H Manager – TBA
  GPI Segment I-1 Manager – TBA
  GPI Segment I-2 Manager – TBA

- Work may resume as soon as the spilled chemical has been removed from the area and it is deemed safe to return by the supervisor and the environmental and safety manager.

Severe Weather Procedures

In case a severe weather alert is issued (for floods, wind, lightening and hail), the following procedures will be implemented:

- In case of severe weather, GPI Management will notify the field personnel via telephone and advise of the threat level. If threat is:
  o Moderate - Field crews will be told to standby.

Appendix 5A-19
Severe - Field crews will be ordered to stop work immediately.

- All supervisors, including subcontractors **will be informed of the alert to stop work.
- These supervisors will inform all field employees to stop work immediately and supervisors will take a headcount of their crews. Any missing employees will be reported immediately to the supervisor or segment safety coordinator.
- Once all employees are accounted for, they will be directed to evacuate the site.
- Employees shall not return to the jobsite until the superintendent or his designee says it is safe to do so.

**Personnel Emergency Plan**

In case of an employee injury on site, the following plan will be implemented:

- The Supervisor will be notified by the employee of the injury.
- Subcontractors supervisors will follow their company reporting procedures and then follow the below:

**Life threatening emergencies requires the immediate supervisor to call 911.**

**Non-life threatening emergencies follow below:**

Subcontractors will follow their companies reporting procedures as well as the below:

- Supervisor notifies the GPI Segment Superintendent
- 911 is called by the senior person onsite if required
- Segment Superintendent or immediate supervisor will notify the GPI Safety Manager
- The Safety Manager will notify the appropriate Segment Manager and Construction Manager, Insurance Broker adjusters by phone if required.
- Construction Manager, will notify PM and Legal Department if required.

A completed accident investigation with pictures is required to submitted to the GPI safety director with 24 hours of the injury. Subcontractors may use their company's pre-approved accident investigation forms.

**Fire Emergency**

All fires are required to be reported as soon as possible.

The procedures for a fire on site are as follows:

- Fire extinguishers will be located throughout the jobsite where there is potential for fire hazard.
- If a fire cannot be immediately extinguished with one (1) fire extinguisher, 911 will be immediately notified.
- All employees shall leave the area until the fire is out and the supervisor says it's safe to return to the area.
- Employees inform supervisor of the type of fire (wood, gas, electrical, etc.) and its size. The local Fire Department will be notified of the fire at this time by calling 911 and given directions to the location.
- A designated person(s) shall direct emergency equipment to the fire scene.
- Segment Superintendent or immediate supervisor will notify the GPI Safety Manager
- The Safety Manager will notify the appropriate Segment Manager and Construction Manager, Insurance Broker adjusters by phone if required.
- Construction Manager, will notify PM, Legal Department and/or Public Information Coordinator if required.
Emergencies Involving The Public, Property, And Utility Damage

Any emergency involving the public pedestrians, vehicle property damage, or other property damage and/or utility damage requires that the senior supervisor report to:

Subcontractors are required to follow their companies Reporting procedures. As well as the reporting requirements below.

- Supervisor notifies the Segment Superintendent
- 911 is called by the Foreman or Superintendent if required
- Segment Superintendent or immediate supervisor will notify the Safety Manager. Safety Manager will notify the appropriate Segment Manager and Construction Manager, and Legal Department by phone as required, and Public Information Coordinator, if needed.

Construction Manager will notify PM.

- The involved supervisor will complete the General Liability information report along and attach pictures if available and forward to the Safety Manager within 24 hours of the incident.
- The Safety Manager will be responsible for submitting the completed reports along with supporting documentation to the Legal department for review before distribution.

Bomb Threats, Terrorist Threats, And Workplace Violence

In the event a bomb or terrorist threat would arrive, as well as workplace violence situations, we will proceed accordingly as our evacuation procedure mandates.

Evacuation Procedures

Employees should become familiar with evacuation routes and assembly points. Establish an alternate route to be used in the event your route is blocked or unsafe.

During an evacuation:
- If time and conditions permit, secure your workplace.
- Follow instructions from your immediate supervisor.
- Walk, do not run. Don’t push or crowd.
- Keep noise to a minimum so you can hear emergency instructions.
- Assist people with disabilities.
- Move to your assembly point unless otherwise instructed.

Terrorist Threat

Terrorism may involve devastating acts using weapons of mass destruction. These weapons range from chemical agents, biological hazards, a radiological or nuclear device, and other explosives. The primary objective of a terrorist is to create widespread fear.

If there is a Terrorist Threat:
- Stay calm and be vigilant.
- Follow the instructions of your immediate supervisor.
- Move to your assembly point unless otherwise instructed.

If you receive a Bomb Threat:
- Ask the caller the following questions:
- When is the bomb going to explode?
Where is the bomb right now?
What kind of bomb is it?
What does the bomb look like?
Why did you place the bomb?
Where are you calling from?
Record the exact time and length of the call.
Write down the exact words of the caller.
Listen carefully to the caller's voice and background noise.
After you hang up, call 9-1-1 immediately from a hard-wired telephone – do not use cell phones to report a bomb threat.
Evacuate to your assembly point unless otherwise instructed.

Workplace Violence
Workplace violence includes more than just rampages, shootings and assaults. Violence in the workplace includes those individuals who create an atmosphere of distress and stress (mild to severe) by their overt and covert hostile and aggressive behaviors.

- If someone is actually harming someone else or presents a viable and immediate threat, call the police, then call your immediate supervisor.
- The segment manager is designated to respond to a critical incident and will make all necessary notifications.
- Afterwards, document what occurred, i.e. who, what, where and when, so that you will have accurate facts when an investigation occurs.

Public Demonstration Emergencies
In case of public demonstrations' emergencies, the Construction Manager will notify the Public Information Coordinator.

Serious Incident Notification
The Safety Manager is responsible for insuring that any serious incident is reported as soon as possible to:

- PM
- Construction Manager
- Segment Managers

Crisis Procedures

In The Event Of A Serious Employee Injury

1. Determine the extent and nature of the injuries.
2. Find out immediately where the person is being taken.
3. The senior person on-site and the Segment Manager determines the most appropriate person to call the spouse/family. That individual explains that there has been an accident and that the employee has been injured, but does not discuss the severity of the injuries. If the spouse/family asks about the severity of the injuries, the response should be: “We can't be certain of the extent of the injuries until we hear from a doctor.”
4. If necessary, send an employee to the injured employee’s house to lend assistance. This help may include offering a ride to the hospital (if a cab is not used), or finding someone to watch the children (if applicable). Discourage anyone from driving themselves unless someone absolutely insists.
5. The Segment Manager assigns someone to stay in contact with the hospital to monitor the injured person's condition.
NOTE: If the injury involves a non-employee, the authorities should be consulted about notification procedures.

In The Event Of An Employee Fatality

1. A member of the company’s upper-management team makes a “best effort” to inform the spouse/family in person of the accident. If it is not possible to make a face-to-face notification, a member of clergy or a police officer may be a possible candidate. The goal is to notify the spouse/family quickly. A phone call is a last resort because of its impersonal nature. (See the following pages for more detail.)

NOTE: Upper management may decide to treat the notification in the same manner as an injury situation (as described on the previous page) in order to get the spouse/family to the medical facility as quickly as possible. Once the spouse/family arrives at the medical facility, the attending physician can deliver the news. A member of the company’s upper-management team should be attendance to provide support.

2. The designated company representative remains at the employee’s home until other family members arrive or for as long as he or she can.

3. The media may attempt to contact a family member. You cannot prevent them from talking to the media. It is their right to speak to the media if they wish.

4. Determine whether the employee’s family is in need of money to cover small expenses. If so, it may be appropriate to provide assistance in this area. The few dollars spent will come back in goodwill.

5. Maintain contact with a relative or close friend of the spouse or family to ensure that funeral arrangements and related items are being handled. The family may wish to visit the site prior to, or immediately following, the funeral. The company should make arrangements for this visit to occur.

NOTE: If the fatality involves a non-employee, the authorities should be consulted about notification procedures. Contact your insurance company and legal counsel as soon as possible.

Fatality Notification

In the event of an employee fatality, you may be called upon to notify the spouse or family member. This is a traumatic event for both the relative and you. Here are some guidelines to help with this process.

Do your homework. Obtain the full name, address and social security number of the deceased. Next, get the full name of the next of kin, the relationship (wife, brother, mother, etc.) and determine if the family members are English speaking. Find out if the family member has any health problems that could be exacerbated upon notification. If so, bring a health-care professional along with you. Gather all information relative to the case so you can provide an explanation.

Determine where you will meet. Will the contact be at home, work, or school? If it is outside of the home, arrange with the relative’s employer or school for a private place to meet. Verify that you are talking to the correct person, i.e. "Are you Sandy Johnson’s sister?"

Do not go alone. Take a fellow employee, friend of the deceased, member of the clergy, or police or fire official to support you.

Decide in advance what you will say. There is no easy way to say that someone has died, so do not even try. Speak simply and directly. Using terms like “mortally wounded” only confuses people. While it is not necessary to be blunt or cold, at some point it is necessary to say “dead” or “died.” Example: "Mrs. Jones, there was a very bad accident this morning at the project. Charlie was moving a ladder and fell over a guardrail. The paramedics did everything they could, but he died instantly."
Do not lie. If you tell a mother that her son died with her name on his lips but she later learns his death was immediate, there is a conflict. It may not be necessary to offer all of the details. Example: If the spouse asks, "Did he suffer much?" an appropriate answer might be, "I don't think so."

Be prepared for emotions. There will be shock, denial, grief, numbness, and anger. These emotional reactions will be directed at the deceased, at you, and at the medical staff. Let the relative vent these feelings. Use common sense and do what seems appropriate at this time. Some people will appreciate a touch of a hand; others will not.

Decide what not to say. By not preparing what to say, you may end up saying things that you will later regret. Example: In an effort to offer words of comfort, do not say, "He's with God now," or "You're young and will find someone else." Instead, say, "I'm so sorry this has happened to you" or "What can I do to help you right now?"

Always listen. The formula is 90% listening and 10% talking. If the relative needs to go to the hospital or funeral home, you may offer to drive or get a cab. If there are children involved, help arrange for a sitter or have a friend to look after them. When appropriate, offer assistance in getting in touch with the life insurance company, social security, and so forth.

When it is over. You have gone through an extremely stressful event. Take care of yourself now. Use a critical-incident stress counselor to review the difficult process you went through. No one ever gets comfortable with this part of the job.

Safety
Grand Parkway Infrastructure, LLC is very proud of its proactive approach to the health and safety of our workers. We have a well-established and comprehensive safety and health program which is distributed and administered on all of our projects.

All levels of our management team are committed to a safe workplace. Weekly safety meetings are required at each job-site and attendance is mandatory. We also request the senior employees from all of our subcontractors attend or that they hold their own meetings.

Our Safety manager, Pete Flores, is dedicated to instilling the importance of safety on all of our jobs with all of our employees. Safety banners and posters are used to communicate achievements and raise safety awareness at all levels.
Project Data Sheet

Project:
Grand Parkway Infrastructure, LLC

Address/ Directions:
8811 FM1960 Bypass Road West
Humble, Texas 77338

Major Subs:

Hospitals:

North-
Memorial Hermann
300 Kingwood Medical Drive
Kingwood, TX 77339
281-312-4000

South-
Houston Methodist San Jacinto
4401 Garth Road
Baytown TX 77521
281-420-8600

Subcontractor Emergency

1. All subcontractors must be notified that they are to contact the GPI most senior person on-site in the event of any emergency.
2. Notification to the employee's family and/or spouse of injury/fatality is the responsibility of the subcontractor's management team.
3. Refer to the Project Data Sheet for a list of the major subcontractors.
Team Members' Responsibility

Segment Manager
- Center point for all crisis communications. Assign team members and their responsibilities.
- Determine who will notify the spouse/family of injured/fatal. Notify the owner of the project.
- Advise and coordinate decisions with upper management.
- Fill in for other team members, if needed.

Public Information Coordinator
- Responsible for all communications from the corporation to the general public (through the media).
- Develop communication strategy and plan media response. Maintain media information log sheets.

Senior Person On-Site
- Take control of the site and delegate action. Coordinate emergency services.
- Contact the Segment Manager and relay all information relating to the crisis.
- Act as temporary spokesperson until the corporate Public Information Coordinator arrives.

Safety Manager
- Secure the area as quickly as possible. Notify the necessary authorities.
- Interview witnesses.
- Document the incident both writing and film (if appropriate). Liaison with the medical facilities.
- Provide information to the Segment Manager and Public Information Coordinator.
- Responsible for reviewing and updating the crisis management plan as needed.

Superintendent
- Be aware of the need for bi-lingual capabilities.
- Provide project information to the Segment Manager and Public Information Coordinator.
- Manage the job-site during the emergency

Office Administrator
- Provides support to the crisis team, e.g., screening phone calls, making travel arrangements, clerical support, assisting the family in the event of an injury or fatality.

Legal Counsel
- Review the crisis management plan and make additions, corrections, recommendations.
- Is advised of all decisions during an emergency.

Upper Management
- Allocate time to stay on-top of the emergency until its conclusion and assist where ever necessary.
- Approve statements prior to release.
- Personally informs the employee's spouse/family in the event of a fatality.

Post-Crisis Evaluation
An evaluation will be completed by all members of the crisis-management team within one week after the outset of the crisis. The goal of effective crisis management is to learn from experience and apply that knowledge to strengthen the existing crisis-management plan and team.
As an Authorized Representative of the above named “SUBCONTRACTOR”, I hereby appoint the above mentioned "EMPLOYEE" as an "A/D DIRECTOR".

An "A/D DIRECTOR" is one who meets the criteria for both a Competent Person and a Qualified Person, and is responsible for directing or performing crane assembly/disassembly (A/D) operations. This individual must meet requirements of 29 CFR § 1926.1404.

The Occupational Safety and Health Administration (OSHA) defines a Competent Person as “one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, AND who has authorization to take prompt corrective measures to eliminate them.”

A Qualified Person is an individual, who by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training and experience, can continually demonstrate the ability to successfully solve/resolve problems relating to the equipment the work and the environment.

NOTE - A Competent Person Designation form must be submitted to the GPI Safety Department with this form.

I, the Authorized “SUBCONTRACTOR” Representative, understand that if at any point in the future this "EMPLOYEE" loses this designation, is terminated or is removed from the "PROJECT", I will provide a written notification to "GPI" within 2 business days.

** TO BE SUBMITTED AT THE TIME OF ORIENTATION **
As an Authorized Representative of the above named Subcontractor, I hereby appoint the above mentioned Employee as a Qualified Person.

A Qualified Person is an individual, who by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training and experience, can continually demonstrate the ability to successfully solve/resolve problems relating to the equipment, the work and the environment.

Positions Of Responsibility Individual Is Qualified (Please indicate all that apply)

_____ Rigger

_____ Signal Person (§ 1926.1428)

_____ Maintenance and Repair Employee (§ 1926.1429)

I, the Authorized Subcontractor Representative, understand that if at any point in the future this Employee loses this designation, is terminated or is removed from the Project, I will provide a written notification to GPI within 2 business days.
5A-22 FLAGGER DESIGNATION

SUBCONTRACTOR: EMPLOYEE:

As an Authorized Representative of the above named "SUBCONTRACTOR," I hereby appoint the above mentioned "EMPLOYEE" as a "FLAGGER."

A "FLAGGER" is defined as one who is qualified to perform flagging duties, that is follow the flagging procedures set forth in the TMUTCD, direct traffic and effectively communicate with the public in a courteous manner AND is independently certified by an approved organization or trained by a Certified Flagging Instructor representing the "SUBCONTRACTOR".

TxDOT-APPROVED ORGANIZATION or CERTIFIED INSTRUCTOR (Please indicate)
- Texas Engineering Extension Service
- American Traffic Safety Services Association
- National Safety Council
- Other Approved Organization: ____________________________________________

I, the Authorized "SUBCONTRACTOR" Representative, understand that if at any point in the future this "EMPLOYEE" loses this designation, is terminated or is removed from the "PROJECT", I will provide a written notification to "GPI" within 2 business days.

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As an Authorized Representative of the above named "SUBCONTRACTOR", I hereby appoint the above listed "EMPLOYEE" as an "OPERATOR."

The Occupational Safety and Health Administration (OSHA) requires that an "OPERATOR" be qualified or certified, dependent upon the type of equipment to be operated.

A qualified “OPERATOR” is an individual who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge training and experience, continually demonstrates the ability to successfully solve/resolve problems relating to the equipment, the work and the environment.

A certified “OPERATOR” is one who has completed a formal training program through an accredited operator testing organization and who has passed tests in both knowledge and skill for a particular type and capacity of equipment.

**LIST THE EQUIPMENT "EMPLOYEE" IS AUTHORIZED TO OPERATE (Please complete as appropriate)**

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**ADDITIONAL INFORMATION FOR CRANE OPERATORS (Please Indicate)**

Certification by an accredited crane operator testing organization (1926.1427(b))     
Qualification by an audited employer program (1926.1427(c))    

I, the Authorized "SUBCONTRACTOR" Representative, understand that if at any point in the future this "EMPLOYEE" loses this designation, is terminated or is removed from the "PROJECT", I will provide a written notification to the GPI Safety Department within 2 business days.

**AUTHORIZED “SUBCONTRACTOR” REPRESENTATIVE**

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5A-24 SUMMARY OF SAFETY REQUIREMENTS

Company: _______________________________ Date: __________________

REQUIRED TAKE-AWAY DOCUMENTATION FOR CONTRACTOR

- Construction Safety Plan
- Copy of Summary of Safety Requirements

REQUIRED DOCUMENTATION TO BE PROVIDED TO GPI

- Company Safety Manual
- Key Personnel and Safety contact information on the company letterhead
  1. Onsite Superintendent
  2. Safety Representative
  3. Supervisor (Construction - Project Manager, Engineer)
  4. Emergency contact information for onsite supervision
- Designations - to be presented at the time of orientation (for detailed information see page 3)
  1. Competent Person designations
  2. Equipment Operators designations
     a. Heavy Equipment - Back-Hoe, Excavators, arial lifts
     b. Crane
        i. Operators
        ii. A/D Directors
        iii. Qualified Riggers
        iv. Qualified Signal Persons
  3. Traffic Flagger designations
- Copies of First-Aid and CPR training cards from the American Red Cross or other accredited agencies for a minimum of one person onsite.
- Trench Safety Plan (if applicable)
- Work plans are to be presented for each job to be performed at a pre-task meeting scheduled by the project manager or his designee, and once Work Plan is accepted a copy is to be kept on site and be readily available for review.

SAFETY REQUIREMENTS OF THE PROJECT

- PPE - The minimum required:
  1. ANSI approved Hard-Hat
     i. No cowboy style hard-hat
     ii. No modifications
  2. Z-87.1 Safety Glasses
     i. Clear or Dark Glasses
  3. Class II apparel for all employees
     i. Lime green for Construction
  4. Sturdy leather work boots
     i. Toe guards are required when compacting soil with wacky packer or jack-hammer
  5. No sleeveless shirts will be permitted on site

- Traffic Control
  1. Traffic Control (TC) that meets applicable requirements for local, state, and federal regulations
must be provided when working in or adjacent to roadways. The GPI Traffic department must be made aware of all traffic control operations prior to the commencement of the work.

2. Give notice of minimum 48 hours but preferably a week prior to beginning work to the **Traffic Control Officer (TCO)**.
   
   I. Weekend night work - TBA
   
   II. Day work - TBA

3. All personnel involved in traffic control operations shall be certified in work zone safety etc. thru a recognized agency such as TEEX or ATSSA.

4. DO NOT move or alter TC devices and report damaged devices to the TCO


**Equipment**

1. All equipment movement on open public roadways must be escorted by a company vehicle.
2. Equipment must have an orange “slow moving” triangle and an amber beacon light as well as company vehicle escort.
3. Rubber tire Equipment Operators that will drive on open public roads must have a valid driver’s license
4. No equipment shall be left overnight closer than **30 feet** to any travel lanes
5. No off road equipment shall not be operated on any interstate highway such as SH 59, I10, ALT 90 and/ or existing SH99 (I-2).
6. Crane operators are required to be certified thru a recognized accredited provider such as NCCCO, CIC, or NCCR.

**Visitors**

1. All visitors, vendors, mechanics etc. who enter the jobsite must check in at the GPI segment office and receive a “Visitor badge and check out at the end of the day and return “Visitor” badge.
2. Visitors are required to be escorted while on site by the contractor management or a designee.
3. The inviting contractor is responsible for controlling all activities of the invited visitors while on site.

All hazards created or encountered such as, excavations, overhead work must be protected daily and give maintenance for the duration of the project or until the hazard no longer exists.

All night work shall be performed using adequate lighting to safely perform the work. The lighting shall be positioned so that it does not affect the traffic around the work zone or the public.

All electrical supply generators or other power supplies must be equipped with **Ground Fault Circuit Interrupters** (GFCI’s) in addition the company shall comply with assured Grounding inspection requirements (White, Green, Red, Orange).

**Excavation**

1. Requires an Excavation Checklist on a daily basis
2. Utility Locate Permit with utility locates confirmation number thru 811 and call for municipal utilities
3. A copy of the Confirmation ticket must be onsite along with the Utility Locate Permit on site
4. The subcontractor is responsible to contacting GPI prior to excavating.
5. Impalement Hazards = flat top caps and NOT mushroom caps

Notify the Grand Parkway Infrastructure Safety and Construction Departments when any workers will be onsite between the hours of 5:30 PM and 6:30 AM.

**Housekeeping**

1. Keep work area free of trash and trip/ fall hazards
2. Remove all protruding nails from lumber (DO NOT bend nails- remove them)

100% Fall Protection - Zero Tolerance
All accidents must be reported to the Grand Parkway Infrastructure, LLC Safety Department immediately.

1. The GPI Safety Department will notify the appropriate GPI personnel.
2. A post-accident drug test must be conducted and a signed letter of verification must be forwarded to the GPI Safety Department confirming the results of the drug screen.
3. Follow your company policy for the situation

- Safety / Environmental Orientation (Dates to be announced)
  1. Will be held on every Monday through Thursday starting at 7:30am - 11:00am.
     I. Monday and Wednesday orientation will be in English.
     II. Tuesday and Thursday will be in Spanish.
  2. Notify Safety Department ahead of time of employees attending orientation.
  3. Employees must arrive on time and being late for orientation will result in your employee having to reschedule until next orientation.
  4. All employees are required to attend orientation prior to work on this project.

- Designations - continue from page 1
  1. Company-designated “Competent Persons” for specific areas of responsibility must be identified on the form provided, (i.e. Confined Space, Scaffolding, Assured Grounding, Ladders, Fire Extinguishers, Excavation, Rigging, Signaling, Fall Protection). Submit forms to the Grand Parkway Infrastructure, LLC Safety Department.
  2. Company-designated “Qualified and Certified Flaggers” must be identified on the form provided (if applicable). Uniform requirement is Class III. Submit forms to the Grand Parkway Infrastructure, LLC Safety Department.
  3. Company-designated “Certified Operators” for Cranes must be identified on the form provided. Submit forms to the Grand Parkway Infrastructure, LLC Safety Department at the time of the orientation.
  4. Company-designated “A/D Directors” for Crane (Assembly/Disassembly) must be identified on the form provided (if applicable). Submit forms to the Grand Parkway Infrastructure, LLC Safety Department at the time of the orientation.
  5. Company-designated “Qualified Riggers,” “Qualified Signal Persons” and “Qualified Maintenance Personnel” for Cranes must be identified on the form provided. Submit forms to the Grand Parkway Infrastructure, LLC Safety Department at the time of the orientation.

ADDITIONAL REQUIREMENTS (all documentation below must be available, as needed, to the GPI Department, upon request)

- A documented Job Hazard Analysis must be completed by each crew, DAILY.
- A documented pre-shift equipment inspection conducted by the operator, DAILY.
- A documented pre-shift crane inspection conducted by the operator, DAILY.
- A documented pre-shift inspection of excavations, confined spaces, and scaffolding conducted by a company-designated “Competent Person”, DAILY.
- A documented “Tool-box” safety meeting conducted by each crew, WEEKLY.
- Mandatory attendance to the Job wide General Safety Meeting hosted by Grand Parkway Infrastructure LLC., Monthly.
- Documented Inspection verification form to be completed by Contractor for (Ladders, Fall protection equipment, assured Grounding Electrical, Ladders, Rigging equipment) – Quarterly
• Documented **Inspection verification form** to be completed by Contractor for **Fire Extinguishers – Monthly**
• **Work Plan** - once accepted by GPI, a copy must be on site readily available for review

This document is only a summary of the safety requirements and therefore does not include all safety requirements for the Project. The full safety program for the Project is detailed in the Safety Plan for Construction.

**Subcontractors Senior site managers and/ or Safety Manager**

Print ___________________________ Signature ___________________________ Date __________

Print ___________________________ Signature ___________________________ Date __________

Print ___________________________ Signature ___________________________ Date __________

**GPI Representatives Signature**

Print ___________________________ Signature ___________________________ Date __________

Print ___________________________ Signature ___________________________ Date __________

Print ___________________________ Signature ___________________________ Date __________

**Failure to comply with safety requirements are subject to permanent removal from project.**
5A-25 GPI Drug and Alcohol Policy

PURPOSE
The purpose of this policy is to communicate the position of the Company on alcohol and drugs in the workplace and to provide guidance for implementation of related programs within the Company. It is the intention of the Company to provide a drug-free, healthful, safe and efficient workplace in every facility of the Company. This policy applies to all crew members and subcontractors. Each employee shares the responsibility to maintain this environment for the benefit of all crew members as well as to enhance the Company's success in providing high quality services to customers.

PROHIBITION
While on Grand Parkway Infrastructures (GPI) premises and while conducting business-related activities of GPI, no employee may use, possess, sell, manufacture, distribute, dispense, conceal, receive, transport, or be under the influence (including the presence of detectable levels or identifiable trace quantities) of any of the following items or substances: Illegal drugs, controlled substances, marijuana, intoxicants (legal or illegal), "look-alike" substances, designer drugs, counterfeit or synthetic drugs, inhalants, and any other drugs or substances that will, in any way, affect safety, work ability, alertness, coordination, judgment, response, or the safety of others on the job.

Alcoholic beverages, except as specifically authorized by Company management. (Note: Moderate use of alcohol at Company-approved meetings, or in an appropriate social setting, is not prohibited by this Policy.) Consuming alcoholic beverages while driving company vehicle or driving any vehicle for Company business while intoxicated is prohibited. The consumption of alcohol on Company time or on Company property is prohibited.

DRUG PARAPHERNALIA
Prescription drugs and over-the-counter medications, except under the following conditions:
1. The drugs have been prescribed by an authorized medical practitioner for current use (within the past 12 months) for the person in possession of the drugs.
2. The drugs/medications, both prescribed and over-the-counter, must be kept in their original container and must be taken in accordance with the dosage recommendations and usage cautions and generally must not affect the person's ability to perform work safely.

The Company reserves the right to consult with a medical doctor to determine if a drug or medication, whether prescribed, produces hazardous or non-safe effects and may
restrict the use of any such drug or medication accordingly on Company property or while working. The Company also reserves the right to require an employee to undergo a fitness for duty medical examination by a physician of the Company's choosing. This may also include restricting or altering the individual's work activity or presence at the work site.

Violation of this policy may lead to disciplinary action, including but not limited to termination. Violations may also have other legal consequences.

**GOVERNMENT CONTRACTS**
Under the Drug-Free Workplace Act, any crew member who performs on a government contract or grant must notify his/her local Human Resources Department of a criminal conviction for a drug-related activity. The report must be made within five days of the conviction. This is a legal requirement as well as GPI policy.

**POLICY ENFORCEMENT**
Because of the importance of this Policy, the Company reserves the right, at all times, while on Company premises and property and when circumstances warrant, to have Company supervisors and/or authorized Search and Inspection Specialists, including scent-trained dogs, conduct searches and inspections of crew members, or other persons, and their personal property and effects, to include, but not be limited to, lunchboxes, purses, briefcases, baggage, offices, desks, clothing, and vehicles (including trunks, glove compartments, etc.), for the purpose of determining if such crew members or other persons are using, possessing, selling, manufacturing, distributing, dispensing, concealing, receiving, or transporting any of the prohibited items and substances contained in the policy.

The crew member's supervisor, safety staff or senior management has the right to conduct an on-the-spot search and inspection of crew members, or others, and their personal property and effects, as described, if said supervisor has a reason to believe that crew members, or others, are in direct violation of any part of this Policy. All searches and inspections conducted by outside authorized specialists will be in the presence of HR or Safety Staff member.

A Search and Inspection, as defined herein, may also include and require crew members and others present on Company property to submit to a Urine Drug Screen Test and/or Blood Test or other examination. Tests/inspections may be required under the following circumstances:

3. During pre-employment examinations.
4. When a crew member's supervisor has reason to believe that an employee on Company property is using or under the influence of prohibited drugs,
alcohol, or any other prohibited substance, or that there has been a violation of this policy.

5. When an employee, or other person, is found in possession of suspected illegal or prohibited drugs or other controlled substances, or when any of these are found in an area controlled or used exclusively by said employee or other person.

6. When an employee returns to active employment after a leave of absence of thirty (30) or more days.

7. Following an on-the-job injury requiring treatment from a physician or following a serious or potentially serious accident or incident, including near misses, in which safety precautions were violated, unsafe instructions or orders were given, vehicles/equipment/property was damaged, or unusually careless acts were performed. All persons involved and within the immediate vicinity of the incident may have their urine, breath-alcohol and blood tested. If it is impossible or impractical, because of the physical condition of the individual(s) involved in the accident, to give a urine and blood sample, and if in subsequent medical treatment of the person(s) blood will be drawn, then such blood may be analyzed for drugs, alcohol, and other prohibited substances.

8. Randomly (periodically and unannounced). The Search, Inspection, Urine, Breath-Alcohol and/or Blood Drug Screening provisions herein will be performed with concern for the personal privacy of each crew member, or other person, and will also apply to contract labor, when feasible.

Also, GPI will comply with external customer testing requirements. In this regard, crew members may be required to submit to drug and alcohol tests as a condition of doing business with certain customers.

At the discretion of the Company or in compliance with customer testing requirements, crew members may be asked to sign an acknowledgment form indicating that they have received a copy of any applicable testing policy.

All crew members are expected to cooperate with any investigation regarding this policy. Failure to cooperate, providing false information or omitting information may subject any crew member to disciplinary action up to and including termination of employment.

**Penalties for Violating Policy**

Any crew member found in violation of this policy, or who refuses to submit to a search or urine, breath-alcohol and/or blood analysis, shall be removed from Company property and be subject to disciplinary action, up to and including termination of employment.
Any crew member ordered to submit to urine, breath-alcohol and/or blood analysis tests should be informed of the reasons why he or she is being ordered to submit the specimen. Any crew member failing, after a two-hour period, to submit the specimen will be informed that this refusal constitutes failure to obey a direct order and that this is ground for termination.

Any crew member who, as a result of drug testing and screening, is found to have detectable levels or identifiable trace quantities of a prohibited drug or substance in his or her system, regardless of when or where the drug or substance entered that person's system, without an explanation satisfactory to Company, will be considered in violation of this Policy, will be removed from Company property, and will be subject to disciplinary action, up to and including termination of employment.

Preliminary findings of a Policy violation may require that the crew member be suspended, without pay, pending the results of a Company investigation. If said investigation clears the crew member of any Policy violation, then said crew member will be fully reinstated, including pay, to his or her job.

Any crew member, or anyone else, who in any way alters, tampers with, or substitutes a urine or blood specimen, will be considered a violator of this Policy and the crew member shall be discharged. A non-crew member shall be removed and barred from Company premises.

Line management is responsible for the implementation of this policy as it relates to their crew members. The Safety Department is responsible for developing, communicating, and monitoring this policy. The Project Manager must approve all interpretations and exceptions to this policy. This policy is subject to revision at Management's discretion.