SECTION 01 35 23 – PROJECT SAFETY REQUIREMENTS

PART 1 – GENERAL

1.1 OVERVIEW

The Owner's objective is an injury and incident-free project, with a focus on project safety that shall not be compromised to achieve any other business objective. The Contractor shall structure an effective and systematic safety management approach that emphasizes continuous safety process improvement.

The Owner has included in this specification numerous safety requirements that are noticeably more stringent than that of the Occupational Safety and Health Administration (OSHA). The reader will see text throughout these Requirements, matching the format of this paragraph, and is intended to call attention to the fact that the requirement being described is more stringent than that of OSHA. However, this does not relieve the reader from reading and understanding the entire Project Safety Requirements.

1.2 GENERAL REQUIREMENTS

The Owner recognizes that the Contractor and Subcontractors may have existing safety management programs with established safety policies, processes, procedures, and work practices. The Owner will support these where they prove to be as effective and meet the intent and purpose of this Section. Upon request by the Owner, the Contractor and/or Subcontractors (of any tier) shall promptly produce and provide copies of any required documents related to Project safety. Where opportunities for improvement are identified, the Contractor and Subcontractors of any tier shall work collaboratively with the Owner in making appropriate revisions to progress toward an injury and incident-free workplace.

1.3 DEFINITIONS

- 1.3.1 The term "Owner's Safety Representative" (OSR) as used throughout the Contract documents shall refer to any construction safety professional(s) who are acting on behalf of the Owner. This will include but may not be limited to the ORM Construction Safety and Risk Management Coordinator, Campus Construction Safety Representative, and any Risk Control Consultants associated with the Owner.
- 1.3.2 The term "Project Safety Coordinator" (PSC) as used throughout the Contract documents shall refer to the Contractor's construction safety professional who is acting on behalf of the Contractor and who shall be responsible for safety training, inspections, incident investigations, record keeping, reporting, incident response, and claims management, and shall serve as the technical advisor to the Contractor's project staff for all safety issues.

- 1.3.3 The term "Project Safety Assistant(s)" (PSA) as used throughout the Contract documents shall refer to any Contractor's construction safety professional who is acting on behalf of the Contractor and who shall perform safety related tasks as delegated by the PSC.
- 1.3.4 The term "Subcontractor's Safety Representative" (SSR) as used throughout the Contract documents shall refer to a person employed by the Subcontractor of any tier who is identified as the recognized safety representative and who possesses the proper credentials for the position. The SSR is understood to be the immediate supervisor unless identified and documented otherwise. All subcontractors of any tier shall provide at least one recognized SSR anytime the subcontractor is working on the project.
- 1.3.5 The term "qualified" as used throughout this Section shall match the definition within the OSHA construction safety standards (Title 29 CFR, Part 1926). *Qualified means one who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training, and experience, has successfully demonstrated the* ability to resolve problems relating to the subject matter, the work, or the Project.
- 1.3.6 The term "competent" as used throughout this Section shall match the definition within the OSHA construction safety standards (Title 29 CFR, Part 1926). *Competent person means one who can identify 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.* In addition to the OSHA standard, this person must be trained and knowledgeable in the construction and/or operation of specific equipment or a specific work method and show proper documentation to support such training. Basic awareness training will not be acceptable for this position.
- 1.3.7 The term "Construction Area" as used throughout this Section shall refer to the portion of the Owner's property that is released to the Contractor's care and control and is designated by the Contractor as the space where actual construction efforts will be undertaken to execute the Work.
- 1.3.8 The term "Administration Area" as used throughout this Section shall refer to the portion of the Owner's property that is released to the Contractor's care and control and is designated by the Contractor as the space where support efforts will be undertaken to provide administrative needs for the Work. If the Project has project office trailers within the confines of the Owner's property, that space and the parking area around it may be designated as an Administration Area.
- 1.3.9 The term "worker" as used throughout this Section shall refer to any person who is assigned specifically to the Project, has successfully completed the Project safety orientation, and has been issued a project specific ID badge.
- 1.3.10 The term "visitor" as used throughout this Section shall refer to any person who is not assigned specifically to the Project. Visitors will not be issued a project specific ID badge and shall not be allowed access to the "construction areas" unless escorted by a member of the Contractor's project management staff or an Owner representative.

1.3.11 The term "Owner's Designated Representative" (ODR) as used throughout the Contract documents shall refer to the individual(s) assigned by the Owner to act on its behalf, and to undertake certain activities as specifically outlined in the Contract. For the purposes of this specification section, the words "Owner" and "Owner's Designated Representative" are interchangeable. The Owner's Designated Representative is a representative of The University of Texas System Office of Capital Projects or Project Manager for the Campus. The ODR is the only party authorized to direct changes to the scope, cost, or time of the contract.

1.4 PURPOSE

- 1.4.1 The Contractor shall bear overall responsibility for all aspects of safety for the Project.
- 1.4.2 The Contractor shall, always, provide adequate resources, equipment, training, and documentation to:
 - 1.4.2.1 Comply with the requirements of this Section and all applicable Federal, State, and local statutes, standards, and regulations.
 - 1.4.2.2 Provide a safe work environment at the Project.
 - 1.4.2.3 Instill a culture of safe behavior in all supervisors and workers.
 - 1.4.2.4 Ensure a universal understanding that safety and health issues take precedence over all other considerations at the Project.
- 1.4.3 In any circumstance where this Section differs from, or conflicts with any statutory requirement, the more stringent shall apply.
- 1.4.4 The ODR reserves the right to have any person removed from the Project for disregarding Project safety requirements. Removal of the Project Superintendent, Project Manager, any Supervisor, PSC, PSA or SSR may result in work stoppage that will remain in effect pending approval of a suitable replacement. The Contractor shall not be allowed any consideration for time or monetary compensation for said stoppage.
- 1.4.5 The ODR reserves the right to deduct from the Contract any safety related expenses that the Owner incurs as a result of the Contractor's or any Subcontractor's failure to comply with the requirements of this Section.
- 1.4.6 The ODR will deny requests for time extensions and/or monetary considerations whenever the Owner intercedes on behalf of safety compliance as a result of Contractor failure to act as required by Contract.

1.5 RELATED DOCUMENTS

In addition to specific references indicated herein, the Contractor's attention is also directed, but not limited, to the following publications and documents:

- 15.1 Current edition of Uniform General Conditions for The University of Texas System Building Construction Contracts (UGC).
- 1.5.2 Owner's Special Conditions.
- 15.3 Current edition of OSHA Safety Standards for the Construction Industry, CFR Title 29, Part 1926.

PART 2 – PRODUCT

2.1 PROJECT SAFETY COORDINATOR (PSC)

- 2.1.1 The Contractor must provide a qualified Project Safety Coordinator (PSC). The PSC is required from the commencement of construction until at least such time the Owner's Designated Representative (ODR) issues notice of Substantial Completion. ODR's written concurrence is needed prior to PSC removal. Overall recent career experience must include at least seven (7) years that have been dedicated solely to building construction safety with at least five (5) years of construction safety process management experience. Any candidate that has completed a four (4) year degree in a safety-related discipline must show at least three (3) years of actual field experience in safety to qualify for a PSC position. The PSC must have practical knowledge, working experience, and documented continuing education in fall protection, scaffolds, excavation, confined space, crane/equipment operations, electrical, incident investigation, and other such safety/health related training. Training of less than four (4) hours in duration per topic will not be considered acceptable for this requirement. Continuing education of noted training must be dated within five (5) years of the executed contract. OSHA 10/30-hour Construction Outreach or OSHA 510 certificates will not be acceptable for this training requirement. The PSC shall possess a certificate of completion for the OSHA 500 (Train the Trainer in Occupational Safety and Health for Construction Industry) or OSHA 502 (Update for the Construction Industry Outreach Trainer). The PSC must show evidence of specialized training for Emergency First Aid, Cardiopulmonary Resuscitation (CPR), and Automatic External Defibrillator (AED) current to within two (2) years. Formal submittal of proof must be provided prior to acceptance and before any portion of the Work will be allowed to commence. The ODR reserves the right to determine acceptability of the submitted training. Any candidate proposed that does not meet these minimum qualifications will not be accepted. Required qualifications must be maintained throughout the duration of the Project.
- 212 For projects less than \$10M but greater than \$5M, a fully qualified Project Safety Assistant (PSA) as described in Section 2.2 (below) may act as the Project Safety Coordinator (PSC).
- 213 For projects \$5M or less, a PSA-IT (Field Experience Only) qualified individual as

This option allows the project Superintendent to perform both the duties of a Superintendent and PSC simultaneously.

2.2 PROJECT SAFETY ASSISTANT (PSA)

- 22.1 Project Safety Assistant(s) (PSA(s)) are also required. Number of and placement on the project is determined by the final contracted construction amount and average daily work force. Primary recent experience of any proposed PSA must include at least five (5) years that have been dedicated solely to building construction safety. The PSA must have practical knowledge, working experience, and documented continuing education in fall protection, scaffolding, excavations, confined spaces, crane/equipment operations, electrical, incident investigation, and other such safety/health related training. Training of less than four (4) hours in duration per topic will not be considered acceptable for this requirement. Continuing education of noted training must be dated within five (5) years of the executed contract. An OSHA 10/30 Construction Outreach or OSHA 510 certification will not be acceptable for this training requirement. The PSA shall possess a certificate of completion for the OSHA 510 (Occupational Safety and Health Standards for the Construction Industry) or the OSHA 500 (Train the Trainer in Occupational Safety and Health for Construction Industry) or OSHA 502 (Update for the Construction Industry Outreach Trainer) in addition to the continuing education requirements previously noted. The certificate must be dated within five (5) years of the executed Contract. The PSA must show evidence of specialized training for Emergency First Aid, Cardiopulmonary Resuscitation (CPR) and Automated External Defibrillator (AED) current to within two (2) years. Formal submittal of proof must be provided prior to acceptance. The ODR reserves the right to determine acceptability of the submitted training. Any candidate proposed that does not meet these minimum qualifications will not be accepted. Required qualifications must be maintained throughout the duration of the Project.
 - 2.2.1.1 On projects over \$180M, the option of a PSA-IT (In-Training) may be considered for the required fourth PSA after the initial two (2) qualified PSAs are already active on the project. At no time shall a PSA-IT be used as a permanent substitute in place of a fully qualified PSA when required. Qualifications for individuals seeking PSA-IT classification shall comply with one of the following options:
 - 2.2.1.1.1 Option I (College Degree in Safety) Individuals that have obtained a Bachelor's or Master's Degree in Safety
 - 1. The safety degree will count for four (4) years of the five (5) years currently required for a PSA position.
 - 2. Successful achievement of a nationally recognized safety certification (CSP, CHST). The Owner reserves the right to determine years of credit based on the recognition of the certification, requirements to achieve certification, and continuing education to maintain certification. This option can be used to add additional experience.
 - 3. Successful completion of one (1) year of dedicated safety work experience on the project.

Once this individual completes all the requirements indicated above for this option, the "In Training" will be dropped and the individual will be consistent with the current requirements of the UTS Project Safety Requirements 01 35 23.

or

- 2.2.1.1.2 Option II (Field Experience Only) Individuals that have a minimum of seven (7) years in the construction industry and two (2) years of safety responsibilities that are ancillary to their primary duties
 - 1. The experience noted above will count for two (2) years of the five (5) years currently required for a PSA position.
 - 2. Must have documented successful completion of initial training (minimum of eight (8) hours) each in cranes, electrical, fall protection, excavations and soil mechanics, scaffold, permit–required confined space, and incident investigation and
 - 3. Documented successful completion of Supervisor Safety Training or equivalent from an OSHA Training Institute such as TEEX, UT Arlington, etc.

Once this individual completes all the requirements indicated above for this option, the experience level will be counted as four (4) years of dedicated safety experience. At successful completion of one (1) year of dedicated safety work, the "in Training" will be dropped and the individual will be consistent with the current requirements of the UTS Project Safety Requirements 01 35 23.

- 2.3 PSC AND PSA Verification of Qualifications
 - 23.1 The qualifications and previous work experience of the proposed Project Safety Coordinator and Project Safety Assistant(s) shall be submitted with the RFP. Based on final Contractor selection for the project, additional information for the Project Safety Coordinator and Project Safety Assistant(s) will be required prior to written acceptance for the position. Prior to Notice to Proceed for Construction Services, the Contractor must provide resumes for the proposed PSC and PSAs. Contractor selection for the project does not guarantee proposed PSC and/or PSA acceptance. Any PSC or PSA additions or changes after the original acceptance date(s) must be formally submitted for consideration to the ODR. In the case of the PSC, work shall not be allowed to commence prior to written acceptance by the ODR. In the case of the PSAs, each must be assigned to the project on or before the worker count reaches the numbers indicated in Sections 2.4 and 2.5. Any cost related to the Contractor's failure to meet this requirement will not be reimbursed by the Owner and additional time extension of the Project schedule will not be allowed.
 - 232 For two (2) years of military service that demonstrates construction safety experience or an Associate Degree in the field of safety, two (2) years of required experience will be credited for the requirements listed above. For four (4) years of military service that demonstrates construction safety experience or a Bachelor's (Undergraduate) Degree in a safety related field, four (4)years required experience will be credited for the of

requirements listed above. Military experience and/or degree will only receive credit once. A professional certification in a safety related field (CSP, OHST, CHST, etc.) may receive credit for up to four (4) years of experience in addition to the years noted above. The ODR reserves the right to determine year(s) of credit based on recognition of certification, requirements to receive certification, and continuing education requirements to maintain certification.

2.4 PSC AND PSA – Determining the Number of Required PSCs and PSAs

- 2.4.1 The total number of PSCs and PSAs for a Project will be determined by the anticipated total cost for construction services for the completed project using the values below:
 - 2.4.1.1 For projects up to and including Ten Million Dollars (\$10,000,000), only the PSC shall be required.
 - 2.4.1.2 For projects over Ten Million Dollars (\$10,000,000) and up to and including Thirty Million Dollars (\$30,000,000), the PSC and the initial PSA will be required. For projects over Thirty Million Dollars (\$30,000,000) and up to and including One Hundred Eighty Million Dollars (\$180,000,000), the PSC, initial PSA and an additional PSA will be required. For projects over One Hundred Eighty Million Dollars (\$180,000,000), the PSC, initial PSA will be required. So required. Based on scope of work and/or anticipated hazard(s), additional PSA(s) may be required. Any additional PSA(s) beyond those noted above shall be determined and negotiated by the ODR prior to GMP.
- 2.5 PSC AND PSA -- Placement on the Project and Removal from the Project
 - 2.5.1 The placement and removal of the PSC and any PSA for a Project will be determined by the daily population of persons, using the following:
 - 2.5.1.1 One (1) PSC shall be provided by the Contractor and shall be assigned full time, have no duties other than safety, and be dedicated daily to the Project from the commencement of construction activities until at least Substantial Completion. The ODR's written concurrence is required prior to release.
 - 2.5.1.2 The initial one (1) PSA shall be provided by the Contractor and shall be assigned full time, have no duties other than safety, and be dedicated daily to the Project at the time that the daily population reaches twenty-five (25) persons, and shall remain on the Project until at least Substantial Completion and the population decreases to less than 25 persons. The ODR's written concurrence is required prior to release.
 - 2.5.1.3 The second PSA shall be provided by the Contractor and shall be assigned full time, have no duties other than safety, and be dedicated daily to the Project when the daily population at the Project rises to one hundred and fifty (150) persons. Additional PSAs shall be provided by the Contractor and shall be assigned full time, have no duties other than safety, and be dedicated daily to the Project when the daily population increases by another increment of one hundred and fifty (150) persons.

The additional PSAs shall remain on the Project until the daily population falls below the number that required them to be added. The ODR's written concurrence is required prior to release.

- 2.5.1.4 For Contracts that involve multiple Phases, Stages, and Change Orders, the value for construction services shall accumulate as additional packages of work are added to the overall contract. If there are significant gaps between the head count of the previous or current work and the additional work, the ODR will decide if the additional work shall impact only the demand for additional PSAs. The requirement for the PSC will remain as indicated in Section 2.5.1.1.
- 2.5.1.5 During scheduled daily work, a full complement of safety persons must be on site in the numbers as required in Sections 2.5.1.1, 2.5.1.2 and 2.5.1.3. If either the PSC or any of the assigned PSAs will not be on site during the project work scheduled, Owner must be notified in writing with a detailed plan for replacement no less than two (2) weeks prior to the absence (for non-emergencies only) or as soon as the safety person's status is confirmed (for emergencies only). An acceptable replacement must be provided if the absence will be for more that twenty-four (24) continuous hours in any week or as directed by the ODR. If any other work (nights, weekends, or holidays) is planned, the crew size of that specific shift shall determine the number of safety personnel required, but at least the PSC or one (1) PSA must be on site during any work activities. The number of safety persons on site during nights, holidays, or weekends must be with written concurrence of the ODR.

2.6 SUBCONTRACTOR'S SAFETY REPRESENTATIVE (SSR)

- 2.6.1 Each tiered Subcontractor shall declare one (1) or more employees to be its designated SSR. The SSR shall be dedicated to the Project for on-site safety responsibilities. This position cannot be delegated to another tiered contractor.
- 2.6.2 The SSR may have collateral duties but must be on the Project site when any part of the applicable Subcontractor's work is being performed. The PSC shall formally approve each SSR prior to the commencement of work for that subcontractor.
- 2.6.3 Each first-tier Subcontractor's SSR shall possess a certificate of completion for the OSHA 30-hour Outreach Training in the Construction Industry. Remaining tiered Subcontractor SSRs shall possess at least a certificate for the OSHA 10-hour Outreach Training in the Construction Industry. Certificates must be dated within four (4) years of the executed Subcontract. Only a sub-tiered contractor that will have no more than three (3) workers on the project during their entire scope of work may petition to be excluded from this requirement. Any exception shall be by written approval of the ODR.

2.7 CONTRACTOR PROJECT SAFETY MANAGEMENT PLAN (PSMP)

2.7.1 The Contractor shall develop, implement, and furnish adequate resources for their PSMP.

- 2.7.2 The objectives and intent of the PSMP shall include, but not be limited to:
 - 2.7.2.1 Anticipating, planning, controlling and coordinating work to eliminate hazards, minimize risks, and aggressively manage losses involving injuries or property damages;
 - 2.7.2.2 Ensuring education and training for best safety practices by all workers and holding supervisors accountable for safety performance;
 - 2.7.2.3 Documenting and recording preventative measures, establishing inspection, notification, and investigation requirements, and measuring results of performance;
 - 2.7.2.4 Providing protection for adjacent property and safety for the public.
- 2.7.3 The PSMP shall address the inclusion of the Owner's SafetyNet Program for electronic collection of safety observations. The terms of this Owner directed Program shall not be replaced by any existing program including any existing version of the SafetyNet Program already used by the Contractor. Within fourteen (14) calendar days of the issue of the Notice to Proceed (NTP) for Construction Services, the Contractor shall have available a means to record field observations.
- 2.7.4 The Contractor shall submit a complete draft of the PSMP to the ODR for review and written acceptance prior to the issuance of NTP for Construction Services. The Contractor shall incorporate ODR comments into a final draft and shall resubmit the amended version to the ODR within thirty (30) calendar days following the return date of ODR comments to the initial draft.
- 2.7.5 Beginning with the NTP for Construction Services, the PSC shall formally evaluate and update the PSMP and its supporting documentation as construction activities dictate, but at least semi-annually to ensure effectiveness and continuous improvement. The PSC must provide means to verify required evaluation and update.

2.8 PERSONAL PROTECTIVE EQUIPMENT (PPE)

- 2.8.1 PPE shall be required for all persons in construction areas. The following items shall be furnished, inspected, and maintained by the employer:
- 2.8.2 Hard Hats shall be ANSI stamped (Z89.1-1997, Type I, Class E, G and C). Hard Hats shall be worn 100% of the time in construction areas, with the brim forward (or as allowed by the manufacturer). "Cowboy" style hard hats shall not be allowed (even if ANSI stamped). Hard hats with noticeable wear or damage shall be replaced. Each hard hat shall be examined by the PSC or PSA during the Project Safety Orientation to confirm acceptable condition.
- 2.8.3 Eye Protection (Safety Glasses) shall be stamped ANSI Z87. If a worker wears prescription glasses (plastic lens only) that are not marked Z87, the employer shall furnish goggles or safety glasses that are designed to fit over another pair of glasses. Eye

Protection (Safety Glasses) shall be worn 100% of the time in construction area. Anytime power actuated tools, electric or air operated grinding tools, electric or air operated impact tools, chop saws, masonry saws, chainsaws, or drilling tools are used, double eye and face protection shall be worn. Protection must be designed to prevent any air borne material from penetrating between the protection and the eyes.

- 2.8.4 High visibility vests or high visibility upper body clothing (equivalent to ANSI Class 2 or greater as applicable) shall be worn in the construction area. Primary work activities such as traffic control, excavations, rigging from ground level, exterior work at ground level or sub-ground level, earth moving operations may require ANSI Class 3.
- 2.8.5 The Contractor shall purchase and maintain an appropriate inventory of types and sizes to be able to furnish a hard hat, pair of safety glasses and vest for up to ten (10) Owner representatives who may visit the Project.
- 2.8.6 Hearing Conservation and Protection shall meet or exceed OSHA requirements. Except for suppression of sound energy level, no devices or equipment shall be placed in or over the ears. Portable radios, cell phones or any other electronic devices shall not be used by the general work force for any reason while in the construction area. Use by supervision, project management, and safety persons is allowed for work related and emergency communications only. Any additional persons using these devices must be by written concurrence of the ODR. Music devices with or without earpieces are strictly prohibited by anyone while in the construction area. The Contractor may designate an area inside the limits of the project but outside of the active construction area where use of cell phones is allowed during scheduled breaks and lunch only. Location must be by written concurrence of the ODR.
- 2.8.7 Hand Protection that is designed to counter the potential for injury exposure shall be furnished to all workers who must handle materials or equipment with sharp edges, slick surfaces, chemically reactive components or extreme temperatures.
- 2.8.8 Respiratory Protection shall meet or exceed OSHA requirements.
- 2.8.9 Foot Protection (work shoes) must have soles with a resistance to punctures, uppers that cover the entire foot and ankle and resist scrapes and cuts. Sandals, open toed shoes, dress loafers, high-heels, and all athletic style shoes (including those with ANSI markings) are prohibited. Additional protection such as metatarsal guards over work shoes (including steel toe boots) shall be provided when work operations create impact exposures.
- 2.8.10 Other OSHA required PPE shall be furnished as appropriate for specific tasks.
- 2.8.11 Other clothing:
 - 2.8.11.1 Shirts shall not have noticeable holes and shall be free of profane, inflammatory, sexually explicit or discriminatory messages. Sleeve length shall cover the ball of the

shoulder and shirt length shall reach waist of pants. Shirts shall not provide snag points.

2.8.11.2 Pants shall be full length. Holes must not be large enough to provide snag points or offer measurable amounts of exposed skin.

2.9 MEDICAL EQUIPMENT

- 2.9.1 The Contractor shall purchase and maintain at least one (1) First Aid Kit on the Project site as per the current version of ANSI Z308.1. Depending on the size, configuration of the site, travel distance to retrieve, and time required to administer medical treatment, additional First Aid Kits may be required. The kit(s) should be readily available as needed.
- 2.9.2 The Contractor shall purchase and maintain at least one Automatic External Defibrillator (AED) unit on the Project site. The unit shall be in the Contractor project site office with appropriate signage and must be accessible whenever work is ongoing. Depending on the size, configuration of the site, travel distance to retrieve, and time required to administer medical treatment, an additional AED unit may be required.
- 2.9.3 A minimum of two (2) Contractor employees, with current certifications for First Aid / CPR and for use of the AED, shall be at the Project whenever work is being performed.

2.10 WORKER TRAINING

- 2.10.1 All workers shall be trained to perform their specific task(s). Formal documentation to support claimed training must be provided. Acceptable documentation for all certifications and training claimed shall contain name of the training organization, name and title of the trainer(s), date of training, material covered with time spent on each topic, and evaluation process used to determine worker understanding of training. Documentation must be provided by the training organization. The database of employers' workers must be kept up to date and accessible for review as requested. No work or operations may commence without the PSC having completed review and acceptance under this Section. The ODR reserves the right to determine acceptability of training being claimed.
- 2.10.2 For every brand and model of crane and motor driven equipment (earth moving, lift platforms, suspended stages, material handling, etc.) brought onto the Project, the using company shall transmit to the PSC a list of employees who are trained and authorized to operate that brand and model of equipment. Copies of training documentation in addition to any required certifications shall be provided. In addition, cranes shall be operated only by persons who possess certification from an organization that carries nationally recognized accreditation. Industrial Trucks (forklifts) shall only be operated by persons who have been certified by their employer. Individuals who possess required credentials shall demonstrate acceptable proficiency to the PSC or PSA.

2.10.3 For every position that is required to assist with crane and motor driven equipment operations (flaggers, signal persons, riggers, spotters, etc.), the using company shall transmit to the PSC a list of employees who are trained and authorized to perform these functions.

2.11 PROJECT SAFETY SIGNS AND POSTERS

2.11.1 The Contractor shall post a pair of safety regulation signs at every point of entry to the Project: one in English and one in Spanish. Font shall be black in color and sized in each language to completely fill the surface of a white-coated four-foot (4') vertical by eight foot (8') horizontal sheet of 3/4-inch plywood and shall contain only the following text:

ALL VISITORS, DELIVERY PERSONS, AND NEW WORKERS MUST REPORT TO THE PROJECT OFFICE <u>BEFORE</u> ENTERING ANY CONSTRUCTION AREA.

ALL PERSONS ENTERING ANY CONSTRUCTION AREA MUST WEAR STURDY WORK SHOES, PROPER CLOTHING, A HARD HAT AND SAFETY GLASSES AT ALL TIMES – NO EXCEPTIONS ARE ALLOWED DURING WORK HOURS.

POSSESSION OF WEAPONS, ALCOHOLIC BEVERAGES, CONTROLLED SUBSTANCES, OR DRUG PARAPHERNALIA WILL RESULT IN IMMEDIATE REMOVAL FROM THIS PROPERTY.

EXCEPT WHERE DESIGNATED (BY POSTED SIGNS AND AVAILABLE RECEPTACLES), USE OF ANY TOBACCO PRODUCT IS PROHIBITED ON THIS PROJECT

THE MAXIMUM SPEED LIMIT FOR <u>ALL VEHICLES</u> ON THE PROJECT SITE IS NINE (9) MPH – LOWER SPEED MAY BE REQUIRED BY POSTED SIGNS IN SOME AREAS.

ONLY AUTHORIZED VEHICLES ARE ALLOWED ENTRY INTO CONSTRUCTION AREAS.

2.11.2 The Contractor shall post a notice sign at the project office in English and Spanish. Font shall be black in color on a white coated board and size of letters shall be at least three inches (3") in height, and shall contain at least the following text:

VISITORS, DELIVERY PERSONS AND NEW WORKERS MUST CHECK-IN HERE FIRST.

COPIES OF SAFETY DATA SHEETS (SDS) FOR MATERIALS THAT WILL BE USED OR STORED ON SITE MUST BE DELIVERED BY ALL SUBCONTRACTORS TO THIS LOCATION AND SHALL BE AVAILABLE TO ANY REQUESTOR.

- 2.11.3 The Contractor shall also post the following in locations that may easily be viewed by workers:
 - 2.11.3.1 Color Codes for Quarterly Equipment Safety Inspections:

2.11.3.1.1	1st Quarter = White (January 01– March 31)
2.11.3.1.2	2nd Quarter = Green (April 01 – June 30)
2.11.3.1.3	3rd Quarter = Red (July 01– September 30)
2.11.3.1.4	4th Quarter = Orange (October 01 – December 31)

- 2.11.3.2 Emergency contacts list, including mobile phone numbers
- 2.11.3.3 Hazard Rating Guide (HMIS and/or NFPA)
- 2.11.3.4 Insurance Provider for Worker's Compensation Coverage for the Project
- 2.11.3.5 Others as required by Federal and/or State regulation

2.12 PROJECT SAFETY FILE DOCUMENTS

The Contractor shall create and maintain files for Owner review. The following files shall be established in one location on the Project and shall be made accessible to Owner agents during working hours. Additional files shall be created as directed by the ODR.

- 2.12.1 Project Safety Management Plan (PSMP)
- 2.12.2 Project Safety Management Plan Evaluations
- 2.12.3 Project Safety Orientation Checklists
- 2.12.4 Project Access Log
- 2.12.5 Project First Aid Log
- 2.12.6 Project Incident Notification, Investigation, and Evaluation Reports
- 2.12.7 All Qualified Person Certifications and Training Documentation
- 2.12.8 Project Competent Persons Lists
- 2.12.9 Project Equipment and Crane Operators Lists
- 2.12.10 Job Hazard/Safety Analysis (from each Subcontractor per operation)
- 2.12.11 Project Weekly Safety ("Toolbox") Meeting
- 2.12.12 Project Weekly Subcontractor Safety Representative (SSR) Meeting Minutes
- 2.12.13 Contractor Monthly Safety Report
- 2.12.14 Project Quarterly (Portable) Equipment Inspection Reports
- 2.12.15 Project Annual (Large) Equipment Inspection Reports
- 2.12.16 Project Permits (Closed Out)
- 2.12.17 Project Safety Infraction Records
- 2.12.18 Site Specific Safety Plan for Each Subcontractor on the Project
- 2.12.19 Drug / Alcohol Testing Confirmation Documentation
- 2.12.20 Subcontractor's Return to Work Policy and Acknowledgement
- 2.12.21 Contractor UTS Project Safety Requirements 01 35 23 Acknowledgement

PART 3 – EXECUTION

3.1 POSITIONS, ROLES AND REQUIREMENTS FOR PROJECT SAFETY

3.1.1 Contractor's Project Superintendent and Project Manager

The Project Superintendent and Project Manager shall remain actively engaged and share responsibility for project safety throughout construction. Both shall support the PSC and PSA when actions are required to maintain a safe work environment at the Project. Project safety shall never be compromised to achieve any other business objective.

The Project Manager shall ensure that ALL tiered subcontractors receive a copy of the UTS Safety Specification 01 35 23 prior to the execution of a contract (Exhibit N) and ALL required safety documentation is submitted for review and acceptance by the PSC prior to the subcontractor's work start on the project.

- 3.1.2 Project Safety Coordinator (PSC)
 - 3.1.2.1 The PSC shall report directly to a Corporate Safety Manager of the Contractor and shall not report through the Contractor's Project Management team.
 - 3.1.2.2 If removal of the PSC is initiated by the Contractor, the existing PSC shall remain in position until a replacement candidate has been proposed to and accepted by the ODR in writing and is specifically assigned to the Project. If the PSC leaves before the proposal and acceptance procedure is concluded, the Contractor shall temporarily install either a Safety Manager (Regional or Corporate) or a professional construction safety consultant as the PSC until a suitable replacement is accepted in writing by the ODR. Any temporary replacement must meet the qualification levels, perform the duties, and be present full time on the Project as required of the PSC for work to proceed. A permanent replacement shall be accomplished within thirty (30) calendar days.
- 3.1.3 Project Safety Assistant (PSA)
 - 3.1.3.1 The PSA shall report to and perform duties as directed by the PSC.
 - 3.1.3.2 If removal of a PSA is initiated by the Contractor, the existing PSA shall remain in position until a replacement candidate has been proposed and accepted by the ODR in writing and is specifically assigned to the Project. If the PSA leaves before the proposal and acceptance procedure is concluded, the contractor shall temporarily install either a Safety Manager (Regional or Corporate) or a professional construction safety consultant as the PSA until a suitable replacement is accepted in writing by the ODR. Any temporary replacement must meet the qualification levels, perform the duties, and be present full time on the Project as required of the PSA position. A permanent replacement shall be provided within thirty (30) calendar days.
- 3.1.4 Both PSC and PSA
 - 3.1.4.1 The PSC and PSA shall have the authority to direct Contractor and Subcontractor personnel to correct any safety deficiency.

- 3.1.4.2 The PSC and PSA shall have the authority to stop any operation(s) that involves any level of risk.
- 3.1.4.3 The PSC and PSA shall be fluent in English and have immediate access to the necessary resources to communicate verbally with all workers on the Project.
- 3.1.5 Subcontractor Safety Representative (SSR)
 - 3.1.5.1 The SSR name, emergency contact information, and documentation of qualifications shall be submitted to and accepted by the PSC prior to the commencement of any work activities by the Subcontractor. Per this section, at least one SSR is required; however, the Subcontractor must plan for and make available as needed a qualified replacement should the primary SSR not be on site. The SSR shall have the authority to direct actions, stop work and enforce discipline for safety issues.
 - 3.1.5.2 The SSR shall submit a written task specific Job Hazard/Safety Analysis (JH/SA) daily and as work conditions change for each of the risk exposures associated with the employer's portion of the work. Documentation of attendees and subject material covered must be provided by the SSR. Each submittal shall be reviewed and accepted by the PSC or PSA prior to commencement of the work operation that will create the exposure.
 - 3.1.5.3 The SSR shall attend the Project Weekly Subcontractor Safety Representatives Meeting when their company is actively performing work at the Project.
 - 3.1.5.4 The SSR shall accompany any injured worker that requires medical attention at a facility outside the Project. The SSR shall be responsible for notification to the PSC of any incident including near misses and shall complete all the documents required to manage any insurance claims. The SSR shall participate in incident investigations that involve their employer's portion of the work.
 - 3.1.5 5 Each SSR may be required to accompany the PSC or PSA during portions of each safety inspection that involves the Subcontractor's scope of Work.
 - 3.1.5.6 The SSR shall ensure that planning, training, equipment and materials are provided so that workers can perform their duties safely.
- 3.1.6 Work Crew Supervisor, Equipment Operator, Competent Person, Qualified Person Medical Responder
 - 3.1.6.1 Supervisors, Equipment Operators, Competent Persons, and Medical Responders for each of the positions held, shall be recognized by the employer through formal submittal to the PSC. Documentation of training with applicable certification shall be maintained in the Project safety file.
 - 3.1.6.2 Designations of certifications and qualifications for special roles shall be clearly displayed on the back of the worker's photo identification badge.

3.2 PROJECT SAFETY MANAGEMENT PLAN (PSMP)

- 3.2.1 Safety Mission and Policy Statement. The Contractor's Safety Mission Statement shall include a commitment to create and maintain a work environment that will eliminate or minimize all risk exposures for all workers at the Project. The Safety Policy Statement shall include acknowledgement that the Contractor is accountable for providing and controlling a safe environment for all workers and members of the public. An original signature and date to endorse and assure commitment by a Corporate Executive or Business Owner shall be affixed to this element of the PSMP. The PSMP shall include the following as a minimum:
- 3.2.2 Safety Roles and Responsibilities. This element shall outline and describe roles, responsibilities, and authority of each member of the Project staff for involvement in site safety, security, incident command, and incident claims management. The Contractor's Project organization chart shall indicate the reporting line for the PSC and PSA(s) as applicable. The PSC or PSAs shall not be responsible for activities associated with insurance enrollment and maintenance or any other duties not directly related to project safety. Administration (clerical) duties related to safety can be transferred to another member of the Project staff. Overall intent is to maximize time in the field by the PSC and PSAs.
- 3.2.3 Safety Enforcement. This element shall include the Contractor's disciplinary procedure for its own employees and for those of all Subcontractors. It shall include a description of the levels of severity and frequency (repetition) that will result in Contractor intervention and provide details of the retraining and/or disciplinary steps that will ensue from the possible combinations of unsafe behaviors. It shall also include discipline for supervisors who tolerate risk.
- 3.2.4 Safety Recognition and Commendation. This element shall include a description of how those workers who demonstrate exemplary safety behavior and those supervisors who manage, enforce, educate and promote safety will be recognized and commended. Any celebration that will occur as part of this element shall not be minimized with achievement of Project milestones that are associated with production, schedule, quality or budget. The Owner supports the use of a Safety Commendation Program (SCP) if it is part of a more comprehensive safety program. Any commendation program must encourage worker participation, reinforce safety training, promote safe behavior and practices, and support continuous improvement of the safety process on the project. No SCP shall be implemented that would discourage reporting of injuries, illnesses, property damage or unsafe working conditions. The SCP shall be prudent, economical, simple, and with a greater focus on daily positive feedback and commending safe work behavior than providing expensive or extravagant commendations. The SCP plan shall be submitted for Owner review and approval prior to implementation and must include details regarding quantity and cost of suggested commendations. *Note: If utilization of vendor donated items for commendations are anticipated, those items will be evaluated to confirm that they are reasonable and appropriate.

- 3.2.5 Safety Hazards. This element shall include a narrative that recognizes existing site conditions, foreseeable changes to existing conditions, local climate, Owner and public interface, environmental impact and remediation issues, skill and experience levels of available work force, utility interruptions, water supply sources, power supply sources, Owner facility provisions, sanitation requirements, parking, material storage areas, and proximity to students and public walkways and roadways. It shall contain a completed copy of the Anticipated Project Hazards Checklist (EXHIBIT A). It shall also be expanded throughout the duration of Work to include Subcontractor plans for elimination or minimization of risk. All portions of this element shall be consistent with existing procedures for the campus Environmental Health and Safety (EHS), Fire Protection, or Police departments, and the local municipal Fire and Rescue.
 - 3.2.5.1 Hazard Communication ("HazCom"). Insert the elements required by OSHA. The PSC shall maintain a Hazardous Materials Inventory List with individual SDS for each, and every, hazardous substance brought onto the Project site. In addition to the product label of contents, all containers with at least five (5) gallons of fluid capacity or twenty (20) pounds of chemical content shall include either HMIS or NFPA hazards warning labels (except drinking water and fire extinguishers). All products with HMIS/NFPA number ratings greater than zero, or one in any of the three categories (health, flammability, or reactivity), shall be considered as hazardous.
 - 3.2.5.2 Environmental (Sensory) Hazards. Insert actions to measure worker exposures and to control hazards that may exist beyond OSHA permissible exposure limits (i.e. dust, he fumes, noise, chemicals, respirable silica, and extreme temperatures). Also, include control and remediation plans for incidents that result in a spill or discharge of a potentially hazardous or toxic substance (liquid or gas). If lasers will be used, include plan to control worker exposure.
 - 3.2.5.3 Roadway and Traffic Hazards. Insert actions to be taken at times when public roadways or sidewalks are affected by construction activities. Signs, devices, and procedures shall be identified where public passage is to be closed or altered. Procedures and training for flaggers shall be required and shall be in compliance with all applicable Texas Department of Transportation (TxDOT) regulations for road safety; specifically, the Texas Manual on Uniform Traffic Control Devices (TMUTCD) shall be referenced.
- 3.2.6 Fire Prevention and Control
 - 3.2.6.1 Insert arrangements and equipment necessary to provide adequate protection during all phases of construction. All portions of this element shall be developed to be consistent with existing procedures of the campus Environmental Health and Safety (EHS), Fire Protection, or Police departments, and the local municipal Fire and Rescue.
 - 3.2.6.2 Burning, Welding, Flame Operations. Insert the process for issuance of a "Hot Work" permit (EXHIBIT B). Daily permit forms shall be issued by the PSC or PSA, even if the campus Environmental Health and Safety (EHS) or Fire Protection departments desire to be involved and issues a campus permit. The permit form shall be completed by the SSR and

returned to the PSC or PSA for field verification of noted conditions and written acceptance prior to start of operation. All permits shall expire at the end of the shift. Permits shall identify the fire watcher(s) and require pre-operation and post operation inspections.

- 3.2.7 Emergency Response. Describe each type and level of emergency that may reasonably be expected to occur on the Project. Insert response or rescue plan for each kind of potential emergency. This element shall address first aid, off-site medical care, property damage, rescue, project alarm signals, wind, flood, lightning strikes, and evacuation, threat of violence, protests or deliberately disruptive events. NOTE: A designated Campus Spokesperson shall be the only person authorized to communicate with the media. This element shall include a drawing or sketch of the site (maintained for "as built" conditions) to indicate gates, emergency vehicle roadways, lay down areas, crane set up positions, exterior hoists, etc. All portions of this element shall be developed to be in accord and cooperation with existing procedures for the campus Environmental Health and Safety (EHS), Fire Protection, or Police departments, and the local municipal Fire and Rescue.
 - 3.2.7.1 Incident Notification. Insert the list of personnel with mobile phone, email, position and company information who may be contacted. The ODR and others as directed shall be included in the incident notification process. Depending on potential severity of the incident, notification may be in written and/or verbal form as directed. Incident notification flow shall be as indicated in EXHIBIT K. Indicate specific positions within the campus staff that may be contacted and/or involved in the notification and control process, i.e. site control and utility management. Campus Public Relations (PR) officer shall be the only person authorized to release live or pre-recorded video or written statements to the media. The Contractor shall cooperate with campus PR officer and coordinate media arrangements as directed.
 - 3.2.7.2 Site Security. Insert actions and control measures to prevent intrusion during work and non-work hours. Describe intended controls for perimeter security, gate security, pedestrian crosswalks, protection at public paths through and alongside construction areas, warning signage, etc. Identify special work that may not be performed during regular hours and will require special precautions. Include descriptive detail for some method of gathering names and probable locations of workers who have not been cleared for safe departure during any type of emergency. Identify the position(s) of all who will possess this information and be prepared to convey critical details quickly to any outside emergency response command that might arrive at the Project.
- 3.2.8 Project Trenching, Tunneling and Excavation. Insert soil boring reports, soil classification analysis, site sketch and any other information that may support, explain or clarify the intent of this element. In addition to requirements in the UGC, this element must be stamped and sealed by a Registered Professional Engineer recognized in the State of Texas in the field of Civil or Soils Engineering.
- 3.2.9 Drug and Alcohol Impairment. The Contractor, for itself and all Subcontractors, shall have a robust drug and alcohol screening and intervention plan. Insert details of the

Contractor policy for screening both direct employees and Subcontractor employees for the presence of controlled substances, prescription pharmaceuticals, and alcohol. Describe all types of testing and confirmation that the Contractor requires and the tolerance thresholds for each substance. This element shall include, as a minimum, a detailed explanation of the following situations and mandatory testing events:

- 3.2.9.1 Pre-project entry Test results conducted within two weeks preceding issuance of badge for Project access. Proof of testing must be documented by company letter with representative name and title, date of testing, location of testing, indicates that testing meets or exceeds the NIDA 5 panel for drugs and DOT for alcohol, name of each tested worker, and results. Results must be negative. Other drug/alcohol testing may be required while working on the project. ANY positive test result requires removal of the worker from the project. Any worker that has been off the project for more than sixty (60) consecutive days must also be retested within the two weeks requirement prior to re-entry.
- 3.2.9.2 Post-incident
- 3.2.9.3 Random selection
- 3.2.9.4 Suspicion
- 3.2.10 Concrete (for slip-form, crane bucket, pump truck, cast-in-place)
- 3.2.11 Confined Space Entry (Permit Required and Restricted Entry)
- 3.2.12 Crane Operations (for set-up/use requirements and limitations)
- 3.2.13 Demolition (Mechanical and/or Explosive Blasting)
- 3.2.14 Electrical Power Service (address power supply and use during construction)
- 3.2.15 Fall Prevention and Protection (from elevations and at same level)
- 3.2.16 Hand and Power Tools
- 3.2.17 High Voltage ("Proximity Work")
- 3.2.18 Ladders and Stairs
- 3.2.19 Lock-out, Tag-out (Energy Isolation for sudden release of any kind of energy)
- 3.2.20 Respiratory Protection
- 3.2.21 Safety Inspection

3.3 PROJECT SAFETY MEETINGS AND TRAINING

- 3.3.1 Project Initial (Safety Kick-Off) Meeting
 - 3.3.1.1 At any time within, but no later than, fifteen (15) calendar days after the issuance of the Notice to Proceed for Construction Services, the Contractor shall arrange suitable accommodations and the Owner's ODR will schedule and chair the meeting. Minimum attendance shall include the Owner's ODR, Construction Inspector(s), OSR, Contractor's PM, Superintendent, PSC and PSA, and Contractor's Corporate Safety Representative. Additional representatives for the Owner, the Institution, the A/E, the Contractor and local regulatory entities may also attend.
 - 3.3.1.2 The Contractor shall confirm the schedule availability for all non-Owner attendees at least fourteen (14) calendar days prior to the meeting date.
- 3.3.2 Initial Meeting with Subcontractors for acknowledgment of Safety Requirements
 - 3.3.2.1 At any time after the date of intent to award each first tier Subcontract, but prior to commencement of any work, the Contractor shall arrange and chair a documented meeting with Subcontractor to explain safety requirements. Minimum attendance shall include the Owner Construction Inspector(s), Contractor's PM, Superintendent, PSC, PSA, and SSR. Other interested parties for the Owner and Contractor may also attend. Any lower-tier Subcontractors that have been awarded part of the work shall also attend. A copy of Exhibit N to this specification is to be signed by representatives from each subcontractor and submitted for review and acceptance by the PSC.
 - 3.3.2.2 In addition to all of the pertinent safety regulations that apply to the portion of the work that the Subcontractor will perform, the Contractor shall clearly state the expectation that safety management of its workers and Sub-tier workers shall be the Subcontractor's responsibility and that failure to adequately manage safety could result in a demand for the removal and replacement of supervisors.
- 3.3.3 Project Safety Orientation Training All Dedicated Project Workers
 - 3.3.3.1 The PSC or PSA shall conduct formal training to every dedicated project worker who is to be allowed into the construction area without an escort. This duty shall not be delegated. Unless the PSC and/or PSA are bi-lingual, a translator shall be present when there are workers in attendance who do not speak English. Workers and their immediate supervisors shall be required to attend a repetition of the orientation whenever observed behavior indicates a lack of understanding or repeated non-compliance of project safety requirements.
 - 3.3.3.2 The PSC shall review the Safety Orientation Checklist (EXHIBIT D) and incorporate each applicable topic within the presentation. The PSC shall develop and administer a process to ensure and demonstrate worker understanding.

- 3.3.3.3 The PSC shall furnish a photo-identification badge to each dedicated project worker who satisfactorily completes the Project Safety Orientation. The badge will indicate the worker's name, employer, job title, project name, and project number. The badge must always be visible when the worker is on the Project and be located above the waist using clip or arm band. Lanyards are prohibited. Failure to maintain the badge will be grounds for removal from the Project. Operator qualifications for specific equipment that can be operated will be identified on the back of the worker's photo identification badge. ID badges shall not be issued to visitors.
- 3.3.3.4 The PSC shall confirm employer insurance requirements have been met and that all required documentation is on site and has been reviewed and found acceptable prior to start of orientation. PSC shall confirm documented credentials for operators and SSR prior to start of orientation. The PSC shall maintain a site access log to document each successful orientation and any reorientations. The log shall include Project critical information (name, employer, badge number and position).
- 3.3.4 Daily Job Hazard / Safety Analysis (JH/SA) Training
 - 3.3.4.1 Prior to start of the work for each shift, the SSR shall conduct a meeting with all members of the work crew to explain how the work steps for the shift are to be accomplished. Explanation shall include a discussion of all the work activities that will be performed in the vicinity as well as the work that the crew is expected to accomplish. Explanation shall address all the recognized risks associated with the task and the hazard controls to be installed or actions to be taken to eliminate or minimize the exposures. Actions to be taken in the event of an emergency shall also be included and documented.
 - 3.3.4.2 A daily JH/SA shall be produced to document this meeting. (Exhibit M Mandatory) It shall contain names and initials of all attendees, name of supervisor (SSR if same), a project specific daily statement of task(s), and any special safety measures or actions that are required to assure elimination or minimization of risk. A copy of the JH/SA shall be reviewed in the field comparing planned and actual work and endorsed by the PSC or PSA prior to work activities and copies of any completed permits shall be clipped to the document. The supervisor's and workers' signatures on the JH/SA shall be understood to also mean a thorough communication of all anticipated hazards and controls has been provided to all workers. A copy of the JH/SA will be posted in the immediate work area (considered to be within 75 feet) until the daily activities are complete. The JH/SA shall be modified as work activities change, warranting additional review and communications to the affected workers throughout the shift. Modified JH/SA must be re-reviewed and endorsed by the PSC or PSA prior to work re-start.
 - 3.3.4.3 Project Management team members (Owner, Contractor and Subcontractor) are expected to attend these JH/SA meetings as frequently as possible to reinforce the Project safety culture.

- 3.3.5 Project Weekly Subcontractor Safety Representatives Meeting
 - 3.3.5.1 The PSC shall chair a weekly meeting with all SSR(s) to ensure that all are aware of the existing hazards and exposures that should be addressed with each crew. A written agenda (EXHIBIT E), attendance roster, and meeting minutes shall be prepared and maintained at the Project site by the PSC.
 - 3.3.5.2 This meeting shall be exclusively reserved for safety and hazard control issues. Attendance shall be required of all SSR(s) when their employer is actively conducting work operations on the Project. Project Management team members (Owner, Contractor and Subcontractor) are expected to attend these weekly meetings as frequently as possible to reinforce the Project safety culture.
- 3.3.6 Project Weekly Site Safety ("Toolbox Talk") Meeting
 - 3.3.6.1 All workers on the project site, including site Project Management team members, shall attend a weekly safety Toolbox Talk, which shall be presented in English and all other languages that are natively spoken at the Project. The PSC or PSA may deliver each talk to the entire Project population or each SSR may deliver individual meetings to their specific trade and/or group. The PSC or PSA shall periodically participate and review individual meetings to ensure effectiveness. The PSC or PSA shall collect and maintain copies of all sign-in sheets for every meeting.
 - 3.3.6.2 Meetings shall address appropriate topics for the current and future work operations and current site conditions. In addition, the PSC or PSA shall communicate information regarding statewide safety results discussed during Monthly PSC Conference Calls, inspection results, and other project safety-related topics.
- 3.3.7 Periodic PSMP Review and Lessons Learned

The Contractor shall work with the Owner to use Lessons Learned to capture significant safety experiences and best practices over the course of the work. The Contractor will work with the Owner to facilitate Lessons Learned at Substantial Completion and will work with Subcontractors to actively participate in Lessons Learned. The Contractor shall develop and distribute any reports that detail findings to the ODR as requested. The PSC shall formally evaluate and update the project safety process and supporting documentation as construction activities dictate, or at least semi-annually to ensure effectiveness and continuous improvement. Modifications after each review shall be submitted to the ODR for review and acceptance.

3.4 SAFETY INSPECTIONS

- 3.4.1 Daily SafetyNet Inspections
 - 3.4.1.1 Project safety inspections shall be entered into SafetyNet. The OSR(s), Owner's Project ODR and CI(s), Owner's Construction Management, PSC and PSA, shall all be recognized users of the Owner's SafetyNet

Program. Other persons such as the Contractor's project management team and the sub-contractor's SSRs are expected to participate in daily project inspections. Information entry into SafetyNet conducted by these individuals shall be through the PSC or PSA.

- 3.4.1.2 User participation shall include recording of all observations and conditions at the Project (via the Program's menu-driven checklist). Additionally, the PSC shall review on-line reports and respond appropriately, detailing sustainable action(s) taken to correct the identified safety process deficiencies.
- 3.4.1.3 Each deficient safety observation shall be corrected or controlled immediately. The PSC shall be responsible for reviewing and ensuring proper closure of all unresolved ("open issues") observations. ODR shall concur prior to closure.
- 3.4.1.4 An OSR will conduct initial training for the PSC understanding and use of the SafetyNet Program. All subsequent training of PSA(s) shall be accomplished by the PSC.
- 3.4.1.5 At a minimum, a daily SafetyNet inspection shall be conducted by each PSC and PSA on site during the shift. The daily inspection may only record a group of observations within a single work operation, but the accumulated inspections conducted by the PSC and PSA throughout each work week shall reflect a comprehensive report of all operations at the Project. Each inspection shall be entered into SafetyNet within twenty-four (24) hours of the inspection. All inspections for the current month must be entered into SafetyNet no later than the last day of that month.
- 3.4.1.6 When an OSR conducts an inspection, the PSC and/or PSA shall be available to join in during the walk around. Other Owner users will also require the PSC and/or PSA to participate in the inspections.
- 3.4.1.7 When the PSC or PSA conducts an inspection, at least one SSR shall join in for the portion of the inspection that addresses the Subcontractor's scope of Work.
- 3.4.2 Quarterly (documented) Inspection of all tools, rigging, and portable equipment
 - 3.4.2.1 In addition to the required daily equipment inspection by the user, the PSC shall facilitate a documented safety inspection each quarter. Each contractor shall produce and submit a document (EXHIBIT F) that addresses all tools, rigging, and portable equipment within the company's inventory on the Project site. Documentation evidencing inspections shall be maintained by the PSC.
 - 3.4.2.2 This inspection shall include, but not be limited to, the following: Fall Arrest / Restraint Equipment, Rigging, Manufactured Ladders, Job Built Ladders, Power Tools, Electrical Cords, Welding Leads, Hoses, First Aid Kits, AEDs, Atmosphere Monitoring Meters, and Ground Fault Circuit Interrupter devices. Personally owned hand tools are exempt from this inspection procedure, but daily examinations of all portable items prior to start of work shift as prescribed by the equipment manufacturer and/or OSHA standards are not relaxed.

- 3.4.2.3 For every item that "passes" the quarterly inspection, the SSR must remove the previous quarter's color coding and affix the current quarter's color coding. The PSC shall establish a universal system for the placement of the color coding for each individual piece of equipment identified in Section 3.4.2.2 (i.e., male end of an extension cord, spreader bar on portable step ladder, etc.) Every item removed from service shall be repaired, replaced, destroyed or immediately removed from the Project. The inspection report shall reflect such actions. Inspection reports shall be completed by the SSR and submitted to the PSC prior to use of any new equipment on the Project site and re-inspections before the first calendar day of the beginning of each quarter of the year. Quarterly re-inspections may begin, and color coding changed anytime during the final one-week period of the previous quarter.
- 3.4.3 Initial and Annual Inspection of all Cranes and Motor Driven Equipment
 - 3.4.3.1 The PSC shall ensure manufacturer required safety inspections and written certifications for all hoists, cranes, mobile equipment, motorized scissors and aerial lift platforms, motorized stage platforms, generators, and compressors are maintained on the Project.
 - 3.4.3.2 The PSC shall ensure that all equipment inspections are consistent with the manufacturer's requirements. An initial inspection and certification of proper condition shall be transmitted to PSC before a piece of equipment can commence operations on the Project.
 - 3.4.3.3 The PSC shall ensure all equipment is inspected annually and certified as required prior to initial use. Any equipment that leaves the Project and returns will require recertification before it shall be allowed to resume operation at the Project.
- 3.4.4 Inspections by Regulatory Agencies

The PSC or PSA shall notify the ODR immediately of the arrival at the Project site by a representative of a Regulatory Agency (OSHA Compliance Officer, TCEQ Representative, Law Enforcement Officer, etc.), and provide the ODR with a copy of any published findings or citations issued to any employer, and shall ensure that statutory posting requirements are met. PSC shall provide the ODR with a copy of any employer's response to the same findings or citations.

3.5 CONTRACTOR RECORDS, INVESTIGATIONS AND REPORTS

3.5.1 Mobile Equipment and Crane Operator Records

Consistent with the requirements of Section 2.10.2, each employer shall submit to the PSC, for each operator, a record of training. The minimum amount of detail as applicable for the specific piece of equipment shall include the following:

3.5.1.1 Pre-start up inspection, travel path issues, and location/set up procedure;

- 3.5.1.2 Start up, operation, intended use, and shut down (normal and emergency);
- 3.5.1.3 Equipment Operations Manual, Limit Chart(s), Motor Plate information, equipment capacities and limitations, alarm features, safety stops, seat belts, roll over protection and preventive maintenance;
- 3.5.1.4 Any additional operational topics as indicated by the equipment manufacturer.
- 3.5.2 Contractor Monthly Safety Report
 - 3.5.2.1 The PSC shall enter the following project information directly into SafetyNet; total man hours by month, all OSHA recordable and days away from work incidents including descriptions and relevant fields, near misses, first aid rendered, and property and equipment damage. Data shall be entered into SafetyNet no later than the 10th of the month following the reporting period.
 - 3.5.2.2 This information is vital to the Owner's safety benchmarking efforts. Failure to submit the information in a timely manner may result in ODR withholding a portion of the Contractor application for payment and shall disqualify the Contractor from consideration for safety recognition for the month of failure to submit as required.
- 3.5.3 Incident Notification, Investigation and Reporting Procedure
 - 3.5.3.1 During the orientation, the PSC shall instruct all workers to immediately report ever incident to their supervisor, even if there is no obvious injury or property damage. Supervisors shall immediately notify the PSC or PSA, who shall immediately notify the ODR of any incident. All Near Miss incidents, First Aid injuries, High Risk Safety Inspection Observations, and other such incidents as directed by the Owner shall be entered into SafetyNet by the PSC. All incidents shall be investigated. The PSC shall lead the efforts and follow a structured incident investigation program. The Contractor and involved subcontractors shall tailor the magnitude and depth of the investigation effort to correspond to the potential, rather than the actual outcome of the incident. Investigation team members shall include safety personnel, project management, line management, affected workers, and consultants as the circumstances dictate. The ODR reserves the right to participate in any incident investigation. The PSC shall develop a Root Cause(s) Analysis report (Exhibit J) that summarizes the incident, identifies the underlying contributing factor(s), determines which process element(s) failed to control the incident, determines which process element(s) will be implemented or improved, and the time needed to take sustainable corrective action(s). PSC shall conduct and submit incident investigation report that supports the Root Cause(s) Analysis in the manner and time as directed by the ODR. The Owner reserves the right to determine the acceptability of the findings. The PSC shall prepare and submit reports that will allow the Owner and Subcontractors to understand findings and any planned changes to the PSMP based on those findings.

- 3.5.3.2 Incident Responsibilities for Workers and Supervisors
 - 3.5.3.2.1 The PSC or PSA shall cover the information in the Worker Responsibilities (EXHIBIT G) document during the orientation and keep copies to hand out to any worker who appears to have sustained an occupational injury.
 - 3.5.3.2.2 The PSC or PSA shall cover the information in the Supervisor Responsibilities (EXHIBIT H) document during the orientation and keep copies to hand out to any supervisor who informs PSC or PSA that a worker injury has occurred.
- 3.5.4 Contractor Final Safety Report
 - 3.5.4.1 The PSC shall work with all contributing subcontractors to prepare a Final Safety Report and shall forward to the ODR no later than thirty (30) calendar days after Substantial Completion.
 - 3.5.4.2 Report shall include at least the following items:
 - 3.5.4.2.1 Summary of the PSMP with description of improvement initiatives undertaken during the course of the Project
 - 3.5.4.2.2 Evaluation of the effectiveness of the PSMP, including summary results of assessments performed
 - 3.5.4.2.3 Project safety performance results (leading and trailing indicator measures)
 - 3.5.4.2.4 Project safety lessons learned and best practices
 - 3.5.4.2.5 Summary of Project incidents
 - 3.5.4.2.6 Evaluation of the Contractor's and all subcontractor's overall safety performance
- 3.5.5 The Contractor shall provide additional reports as requested by the ODR. This may include work force histograms, training documents, safety trending reports, etc.
- 3.5.6 The PSC shall notify the ODR when a worker is removed from the project for a serious infraction, including any of the following reasons: refusal to take a post incident drug/alcohol screen or a positive result if taken, possession of a prohibited weapon on the project, criminal activity, use of equipment that jeopardizes the safety of any project worker, or fighting on the project. Within forty-eight (48) hours of removal, the PSC shall provide the ODR a brief report of finding(s) that resulted in the worker removal. Report must include the project name and location, the name of the removed worker, the legal name of the worker's employer, the date and time of the incident leading to the removal, and a brief summary of the facts justifying the removal.

3.6 CONSTRUCTION OPERATIONS

The following requirements are either in addition to or in the absence of Federal and State regulations. Where conflicts exist, the most stringent directives shall apply.

- 3.6.1 Cranes
 - 3.6.1.1 Tower cranes (including affiliated transformers and power supply equipment) shall be surrounded by at least a sixteen-foot (16') high, 5/8-inch plywood enclosure with a lock-controlled entrance.
 - 3.6.1.2 Operators of cranes shall be trained in the specific make and model of crane and possess certification from a nationally accredited certifying organization.
 - 3.6.1.3 Every crane and piece of hoisting equipment shall be equipped with an anti-two blocking sensor above each lifting block.
 - 3.6.1.4 Unless the crane is equipped with sensors that inform the operator of the weight of the load on the hook and the current wind speed, these measurements shall be determined by other means before commencement of each lift.
 - 3.6.1.5 When outriggers are used on cranes, they shall be fully extended. Float pads shall be landed onto leveled and properly designed and sized slabs or cribbing. Where steel plate is used for cribbing, welded or bolted cleats shall be attached to upper surface to prevent float pads from moving horizontally.

For cranes of up to and including 35-ton capacities, wooden cribbing shall be a minimum of four inches (4") in thickness. For cranes over 35-ton capacities and up to 150-ton capacities, cribbing shall be a minimum of eight inches (8") in thickness. For all cranes up to 150-ton capacity, the minimum size of the surface ("footprint") of the cribbing assembly shall be determined by the following formula: the capacity of the crane (in tons) divided by 5 equals the minimum square footage required. Properly sized circular crib pads are acceptable. Side dimensions for rectangular crib pads shall be equal to each other or differ by no more than one foot. For cranes larger than 150-ton capacities, a qualified person shall design the cribbing. "Sandwich" units of cribbing are allowed if the plywood on bottom and on top is at least one inch in thickness.

3.6.1.6 For "Pick and Move" operations, the pick shall be made directly in front of the crane with the boom as near vertical as possible. Move at walking speed with a "spotter" in front of the load and another behind the crane. Guy wire cables that secure the load to the body (to prevent lateral force loading of the boom) of the crane shall be required if the grade slope is more than three (3) degrees or the terrain is uneven. Only rubber-tired cranes shall be allowed to perform this operation without a "critical lift" plan and the load must be under fifty percent (50%) of the "on rubber" chart limit.

3.6.1.7 Critical Lifts shall include, but not be limited to: (1) Tandem Lifts, (2) Lifts greater than seventy-five (75%) percent of Load Chart, (3) Crane Suspended Personnel Hoists, (4) Non-Conventional Outrigger placements and (5) "Blind" picks and/or placements. Any of these events shall require submittal of custom designed plans by qualified persons. The PSC is responsible for review and acceptance prior to planned lifts.

3.6.1.8 Multiple lift operations ("Christmas Treeing") shall not be permitted.

- 3.6.1.9 All crane operators on rigs rated for more than five (5) tons of capacity shall submit to a physical examination prior to conducting any work on the Project and, if still on the Project, at least every twelve (12) months thereafter. The physician's written declaration of fitness shall be submitted to and maintained by the PSC in the Project files.
- 3.6.1.10 Only the designated rigger and/or signal persons shall issue lift instructions to the operator. The only exception shall be an emergency stop signal, which may be delivered by anyone on the Project who knows how to alert the operator.
- 3.6.1.11 All loads lifted more than six feet (6') above ground elevation shall have a tag line attached that is long enough to allow control of load spin without placing any part of the body directly below the load. When "shake out" hooks are used, the load must never be elevated above five feet (5') over the surrounding surface and workers must stay at least five feet (5') horizontally away from the suspended load.
- 3.6.1.12 For any load that may be elevated, and the travel path may impact any worker, a means for worker notification must be in place. The crane operator may perform this notification by horn if the load can always be seen . If the crane operator may lose sight of the load at any time, notification must be made by a designated individual who can maintain sight of the load. Notification must be accomplished by some means that attracts the attention of all workers and ensures that the workers are not directly below the load being moved.
- 3.6.1.13 Any erection or dismantle of a tower crane will only be done while activities are monitored by a crane consultant provided by the Owner. Prior to any operation, the tower crane erection/dismantle contractor shall provide a detailed plan for the work. Details of the plan must include at a minimum, all elements in Exhibit L, and the plan must be provided to the ODR as required. The ODR reserves the right to determine acceptability of the information provided. Submission of this plan in no way relieves the Contractor from ensuring all documentation is provided, reviewed for accuracy based on the planned task(s), ensuring that the work is pre-planned and communicated to all affected workers, all workers are properly trained to perform their tasks, and that all work is done according to the agreed to plan. The PSC is responsible for the review and acceptance for the Contractor.

3.6.2 Demolition

- 3.6.2.1 Always maintain clearly marked and well-illuminated egress paths.
- 3.6.2.2 Maintain barricades and signage that isolates impacted areas to prevent entry by other trades and members of the public.
- 3.6.2.3 Removal of materials and trash from elevated locations must be controlled. Materials, scraps or waste shall never be allowed to free-fall from a height greater than ten feet (10'). Items that may be caught by wind and carried horizontally shall never be allowed to drop freely from any distance. If items are allowed to be dropped freely (unless as indicated previously), a person shall be stationed at the landing elevation at a safe distance to warn others away from the operation, and the landing area shall be surrounded by fence type barricade placed at least six feet (6') outside of the expected landing area. Wall openings that may be located vertically between the material drop point and the expected landing area shall be securely covered and marked from inside. Anything that is to move downward at a distance greater than ten feet (10') or is capable of sailing horizontally shall be contained within a chute or controlled by hoist.
- 3.6.2.4 Unless the Contract documents clearly call for it, the use of explosives for demolition is prohibited.
- 3.6.3 Electrical Power
 - 3.6.3.1 Ground Fault Circuit Interruption (GFCI) shall be the primary protection from exposure to electrical current for all workers on the Project. Only exit lighting and medium-high (greater than 240) voltage service will not be GFCI protected.
 - 3.6.3.2 All strings of temporary lights shall be fully lamped and guarded regardless of height and shall be continuously maintained. PSC shall ensure that illumination levels are periodically monitored and adequate for the expected work activities in those areas.
 - 3.6.3.3 All receptacles and switches shall have trim plates installed before they are energized.
 - 3.6.3.4 All power distribution panels shall have full covers installed before primary power is brought into the panel. When energized panels are in open areas, covers shall be locked except when an authorized electrician is working in the immediate area. When panels are located inside separate rooms or closets, automatic closers and automatically locking hardware shall be installed on doors as soon as equipment is energized, and only authorized persons shall be provided a key. Doors shall not be modified to stay unlocked or open. Warning signs shall be placed in conspicuous locations. Energized electrical rooms shall not be used for material storage or continuous personal occupancy. Locked electrical room or panel doors will not be considered to meet the requirements of a Lock Out / Tag Out program. The Lock Out / Tag Out program in use must ensure that any affected worker has the ability to confirm

equipment being worked on has been de-energized, made safe, and has individual control of the locking device and tag used to control inadvertent startup of the equipment.

- 3.6.3.5 The employer shall implement and document an overall safety program that directs activities appropriate for the electrical hazards, voltage, energy level, and circuit conditions anticipated.
- 3.6.3.6 Extension cords used must be a minimum of 12 gauge.
- 3.6.4 Excavations
 - 3.6.4.1 Any and all trenching operations that are four (4) feet or more in depth or could result in any worker's upper body being positioned below grade level shall adhere to the requirements of the UGC. In addition to UGC requirements, every excavation shall require a preliminary meeting with the ODR to determine historical knowledge of existing utilities. Where applicable, a phone call for utility "locates" shall be completed seventy-two (72) hours in advance. "Potholing" and/or hand digging shall be required within three (3) horizontal feet of "located" centerlines, and in areas where knowledge is lacking.
 - 3.6.4.2 The "toe" of spoil piles that are less than four feet (4') in height shall be at least two feet (2') from the edge of any excavation. Spoil piles greater than four feet (4') in height shall add one foot (1') of distance from the excavation for every additional foot in height. Spoils shall be managed to prevent airborne dust.
 - 3.6.4.3 Trench and/or excavations should be backfilled at the end of each shift as applicable.
 - 3.6.4.3.1 When a trench or excavation cannot be backfilled in the same day that it is created, a highly visible fence type barricade shall be erected at a minimum distance of six feet (6') from all approachable edges. All portable means of access shall be removed at the end of each workday.
 - 3.6.4.3.2 Earth ramps that are to be used for walking access shall not exceed twenty percent (20%) in grade slope. Steeper slopes shall be gate controlled for equipment only, and alternate access shall be added for pedestrian traffic.
- 3.6.5 Fall protection and prevention
 - 3.6.5.1 Any walking/working surface that is equal to or greater than six feet (6') above the surrounding area shall present an unacceptable fall exposure unless it has all edges (sides and ends) protected by an attached guardrail system, fall arrest equipment, fall restraint equipment, fall capture netting, or is blocked off by an adjacent wall. An adjacent wall shall be continuous, structurally sound, and at least thirty-nine (39) vertical inches above the

walking/working surface, and within eight (8) horizontal inches from the open edge.

- 3.6.5.2 Any employer that will create a fall exposure equal to or greater than six feet (6') shall submit a detailed plan and set of drawings in advance of the operation to indicate how the exposure shall be addressed. The Contractor shall require the plan to contain either "engineered" or conventional fall protection measures for each and every exposure that involves vertical distances equal to or greater than six feet (6'). Any precautionary measure that would allow greater risk than that afforded by a guardrail system, fall restraint equipment, fall arrest equipment, or fall capture netting shall be prohibited. The use of a "Monitor" is expressly prohibited. The recognized exemptions/exceptions are as follows:
 - 3.6.5.2.1 Allow work from portable step ladders as long as a "three point" contact is maintained, the ladder is properly positioned, secured from movement, the worker's center of gravity remains between the rails and in front of the feet, and the worker's waist does not extend above the top of the ladder. The height of the worker's feet is limited to twelve feet (12') above the supporting work surface for this exemption/exception.
 - 3.6.5.2.2 Allow work from an extension or straight ladder if the ladder is properly positioned, secured from movement, "three point" contact is maintained, the worker's center of gravity remains between the rails and in front of the feet, and the worker's waist does not extend above the top of the ladder. The height of the worker's feet is limited to twelve feet (12') above the supporting work surface for this exemption/exception.
 - 3.6.5.2.3 The use of a warning line system is prohibited unless all other means of fall protection have been demonstrated to be infeasible. If infeasibility is demonstrated to the satisfaction of the PSC and the ODR, work may be performed without fall arrest measures while standing on an elevated walking/working surface only if maintaining a distance of at least fifteen (15) horizontal feet from the edge. The unprotected edge shall be clearly identified by posted signage and a warning line erected continuously at a fifteen-foot (15') setback distance.
 - 3.6.5.2.4 When work is to be performed from a ladder placed near a guardrail system and the ladder can fall toward the leading edge, the safe distance from an unprotected edge shall increase one foot (1') horizontally for each vertical foot that a worker climbs above the surrounding surface. This requirement shall also apply to a ladder that is being placed beside a protected edge. Any leading edge ("controlled access") zone work shall require fall protection arrangements prior to entry.

- 3.6.5.3 Covers placed over pier holes, and roof or floor openings shall be physically secured and clearly marked with warning message "HOLE COVER DO NOT REMOVE." Any cover that is too small for legible wording shall be bright orange or red.
- 3.6.5.4 Job built ramps and bridges shall be surfaced with an abrasive (non-skid) material. Ramps shall comply with ADA slope requirements.
- 3.6.5.5 Equipment and work operations of any description shall not be permitted to be performed directly above a worker unless adequate overhead protection is provided prior to commencement of the operation.
- 3.6.5.6 Any tiered contractor that utilizes fall protection equipment in the course of their work shall provide for prompt rescue of a worker in the event of a fall or shall ensure that a worker is able to self rescue. Specific plans for rescue of workers shall be developed prior to initiating work requiring the use of a personal fall arrest system. The fall protection plan along details for self rescue as needed shall be submitted to the PSC for review prior to work start.
- 3.6.6 Fire Protection
 - 3.6.6.1 All floors that have combustible materials present shall be accessible from ground level by a usable stair system (temporary or permanent). For structures greater than three (3) stories in height, fire sprinkler standpipes shall be completed and charged to within two (2) stories, or thirty (30) vertical feet of all floors containing combustible materials. Siamese connection shall be installed at every level to provide access for fire hoses. All fire extinguishers that are not task-specific (general fire protection) shall be adequate in number and description to comply with OSHA declared limits for egress points, floor area and travel distances. In multistory buildings, at least one fire extinguisher rated no less than 2A shall be located adjacent to each stairway on each floor. They shall be situated in highly visible locations mounted at a height to facilitate ease of inspection and retrieval for use. All fire extinguishers shall be inspected monthly. Inspections tags shall be attached to each extinguisher and initialed by the inspector after each inspection.
 - 3.6.6.2 All fire extinguishers that are task specific shall be inspected, tagged, and furnished in advance by the employer that will be conducting the work requiring such firefighting provisions. All work that includes burning, welding, or spark producing of any type shall be defined as "hot work" and shall require the presence of a fire extinguisher, at least one fire watch, and a Hot Work Permit. Fire extinguisher(s) used for "Hot Work" shall be placed within sight of but no more than twenty-five feet (25') from the perimeter of the task operation and must be of proper size and type for the activity, fully charged, and inspected prior to use. Extinguisher location must always be kept clear and accessible during use. Fire extinguishers in use for general project protection shall not be used for this purpose. Refer to WELDING AND BURNING for additional details.

- 3.6.6.3 No more than twenty-five (25) gallons per floor, of flammable or combustible liquids shall be stored in a room outside of an approved storage cabinet.
- 3.6.6.4 Only UL approved metal fuel containers with flame arrestor and self-closing spout shall be allowed on the project.
- 3.6.6.5 Any liquid storage container larger than twenty five (25) gallons shall be provided with its own secondary containment. Containment must be properly sized and maintained for effectiveness.
- 3.6.7 Housekeeping

The PSC or PSA shall ensure that the Contractor and all Subcontractors "effectively" clean the Project site continuously throughout each workday. "Effective clean-up" shall daily address all the following housekeeping issues:

- 3.6.7.1 All construction waste, trash, and debris shall be placed in designated receptacles. Glass bottles shall not be permitted on the Project site.
- 3.6.7.2 Stack (or restack) all whole and scrap materials in locations that shall not obstruct a clear pathway nor create a risk for toppling onto a person passing through the area.
- 3.6.7.3 Place all hoses, cords, cables and wires in locations that prevent them from being damaged by equipment, sharp edges or pinch points and from creating tripping hazards.
- 3.6.7.4 Secure and effectively cover all materials on roofs or elevated levels that may be displaced by wind or damaged by driving rain or standing water.
- 3.6.7.5 Restore all signs, barricades, fire extinguishers, guardrails, gates, etc. to proper locations and sound condition.
- 3.6.7.6 Properly store and secure all flammable and combustible liquids and gases.
- 3.6.7.7 Collect and place all cut-off or waste pieces of rolling stock, as they are created, into waste or scrap containers.
- 3.6.7.8 Live rounds that have been ejected from powder-actuated tools shall be immediately placed in designated containers and properly disposed of as recommended by the manufacturer.
- 3.6.7.9 All puncture and impalement exposures shall be covered or eliminated as soon as they are created. As per ANSI specification, effective covers shall be designed to prevent impalement of a 250-pound body being dropped from a fall of four feet (4').

- 3.6.7.10 All aisles, exits, and other parts of the means of egress shall always be properly maintained and free of stored material and/or waste .
- 3.6.8 Ladders
 - 3.6.8.1 Until such time that two (2) usable stairways are in place, every elevated platform (slab, deck or work surface) shall have at least two (2) remote (considered to be on opposite ends of the work level) ladders for access/egress when the platform is populated by more than three (3) persons. As the population rises above twenty-five (25), additional means of independent access/egress shall be required. A double-cleated ladder may only serve as one (1) independent means of access/egress.
 - 3.6.8.2 At the end of each workday, ground access to elevated levels shall be eliminated. This shall be accomplished by removal and storage of all portable and job-built ladders, or installation of a lockable shield that prevents use of the lower rungs.
 - 3.6.8.3 Portable aluminum ladders shall be prohibited.
 - 3.6.8.4 Extension ladders, straight ladders and job-built ladders shall be secured from movement at the top and the bottom.
 - 3.6.8.5 Physical barricade offset that forces at least one change in walking path direction shall be constructed within a six-foot (6') radius around the upper access points for any ladder's step off landing area. If space does not allow this required offset barricade, another type of physical barricade must be provided at the ladder's step off landing area.
 - 3.6.8.6 All elevated landings shall include a rope hoist (manual or motorized) near the ladder's upper-most access point.
 - 3.6.8.7 Minimum acceptable manufactured step or extension ladder that can be used is an ANSI heavy-duty rating Type IA. All ladders must be inspected daily for condition and set up. All manufacturer installed labels must be maintained in legible condition on all ladders. All ladders must be marked in such a way as to identify the owner.
- 3.6.9 Medical Assistance and Screening
 - 3.6.9.1 The PSC shall maintain a First Aid Log for all treatment administered on the Project (including any that might later escalate). Each SSR shall report and record details daily.
 - 3.6.9.2 The PSC or PSA and SSR shall transport or accompany any injured worker for initial off-site medical treatment.

- 3.6.9.3 Drug and Alcohol Screening shall be mandatory for every supervisor and/or worker who sustains or contributes to any incident that involves property damage, worker injury or as directed by the Owner. If impairment or poor judgment appears to be involved in a first aid event, PSC shall direct injured employee to be screened for probable cause.
- 3.6.9.4 Minimum requirements for drug screening shall at least match the threshold limits for the NIDA 5-panel protocol and alcohol screening shall at least match the Texas DOT vehicle operator's limit for blood alcohol content. Only negative results are acceptable for employment on the Project. Evidence that testing was performed as required shall be by a letter provided by the employer that includes: name of employer and representative, date of testing, name of testing organization, testing criteria that meets or exceeds the above noted levels, name of each worker tested, and results (positive or negative as appropriate).
- 3.6.9.5 Screening shall be initiated as soon as possible, but not later than two (2) hours after the incident occurrence. No matter where the worker receives medical treatment, a post incident drug and alcohol test MUST occur at the Owner's assigned clinic. Any worker's refusal to submit to screening shall be treated in the same manner as a "positive" finding. Any worker who withholds notification of an incident for longer than one (1) hour after the alleged event shall be evaluated by the PSC or PSA, and if declared to be negligent shall be permanently removed from the Project.
- 3.6.10 Motorized Equipment Operation
 - 3.6.10.1 Where possible, equipment operator cabs shall be locked during non-working hours. Only equipment operators and direct supervisors shall have access to keys.
 - 3.6.10.2 No combustion engine equipment shall be operated in enclosed spaces unless the exhaust is piped to outside air, and "fresh" air is brought into the space to replace the amount being consumed. The PSC shall be responsible for monitoring air quality on the Project when combustible engine equipment is used. This includes generators, welding machines, and compressors as well as mobile equipment.
 - 3.6.10.3 For hose and termination fittings on air compressors, "whip checks" shall be used at all connection points. Emergency automatic shut off valves shall be installed on every discharge fitting of all air compressors that can produce air pressure greater than thirty (30) pounds per square inch.
 - 3.6.10.4 Any equipment that operates by rotating such that a worker can possibly be exposed to a caught between hazard must have the immediate swing radius barricaded to prevent worker entry.
 - 3.6.10.5 Only company vehicles with evidenced company provided insurance are allowed in the construction area while on the project. Parking is only allowed in the Contractor's designated parking area(s).

- 3.6.10.6 Accessories for all mobile equipment (blades, buckets, forks, etc.) shall be placed in the down position, ignition off, parking brake engaged, secured from unintended use, and keys removed when the equipment is parked, and the operator is no longer on the equipment.
- 3.6.10.7 If a forklift, crane, or other such mobile lift and carry equipment is being used in an area where the public may be present or in a congested project area where the operator's view may be obstructed, flaggers/spotters will be required as determined by the PSC or PSA.
- 3.6.11 Public Protection
 - 3.6.11.1 The project boundary perimeter shall be secured from public intrusion by fencing and locked gates.
 - 3.6.11.2 "Attractive nuisance" items such as tower cranes, tall ladders, fire escapes, large excavations, etc. shall require additional and separate security measures.
 - 3.6.11.3 No visitor or member of the public shall enter a construction area without an authorized escort.
 - 3.6.11.4 All visitors to the project must abide by all applicable project safety requirements. Visitors must read and sign the Visitor's General Waiver and Release (Exhibit C) prior to entry to the construction area(s).
 - 3.6.11.5 The Contractor shall be authorized to contact campus police to remove anyone who refuses to abide by Contractor directive to leave the construction area. The ODR shall be notified immediately should this occur.
- 3.6.12 Sanitary Facilities
 - 3.6.12.1 The Contractor shall provide at least one (1) toilet facility per twelve (12) workers (separate count per gender) at the Project site; and shall pump, clean and re-supply at least once per week to maintain sanitary conditions. When average temperatures during daylight hours exceed 85 degrees, pump outs shall occur at least twice per week. When female workers are present at the site, toilets designed and designated for their exclusive use shall be clearly marked. Toilets located in project management office trailers and used by office support staff shall not be considered to meet this requirement unless by written consent of the ODR.
 - 3.6.12.2 On all projects that are four (4) stories in height or greater, sanitary facilities shall be furnished on ground level and every third level (maximum 45 vertical feet).
 - 3.6.12.3 The Contractor shall provide and maintain hand washing and sanitizing facilities enough in numbers and locations as to support the toilet facilities indicated in Section 3.6.12.1 and 3.6.12.2.

3.6.12.4 The use of any Owner toilet facility is strictly prohibited unless by written consent of the ODR.

3.6.13 Scaffolding

- 3.6.13.1 Each ground-supported scaffold shall bear a shift inspection tag (initialed and dated by the competent person for each company that requires use of the scaffold) to indicate the status of the scaffold (green tag means completely safe and red tag means specific precautions required, or not safe/do not use). For suspended scaffold, inspection tags shall also be placed on the outriggers as well as the work platform. The PSC shall purchase and control a universal system to be used by all employers at the Project site. Training with supporting documentation shall be required for all workers on the Project who will climb onto any kind of scaffolding. The PSC shall furnish tags and ensure that all applicable workers understand the procedure. This requirement shall apply to all scaffolds.
- 3.6.13.2 Mudsills and surrounding areas at the base of ground-supported scaffolds shall be maintained in a well-dressed and level condition. Scaffold foot plates (or casters) shall be installed on the legs of all ground level frame sections and shall always be visible for inspection. Diagonal braces shall be included in every scaffold section as is practically possible. Every walking/working level shall be fully planked and kick-off protection shall be included along open sides and ends. Overhead protection shall be constructed where any walk-though passage is allowed. Mudsills shall be at least 2"x12" in one-foot lengths with foot place centered and nailed in two corners.
- 3.6.13.3 Brakes on rolling scaffolds shall always be secure except when the scaffold is being moved. Workers shall not be allowed on the platform when a scaffold is being moved. Rolling scaffolds should be used on solid, unobstructed, and flat floor surfaces only.
- 3.6.13.4 Workers in any type of aerial lift including man lift or scissor lift shall be provided with a means to be secured (restraint or maximum 6 ft. SRL) to the lift so that movement is limited to the floor of an elevated lift. No worker shall be allowed to stand on the toe board or rail of the lift. No lift shall be modified to allow the operator to stand above the floor and without full guardrail protection. No worker shall be allowed to exit an elevated lift.
- 3.6.13.5 Stilts shall be inspected daily by the equipment user and maintained properly. Surfaces on which stilts will be used must be dry, flat, and free of pits, holes and obstructions such as debris, as well as other slip, trip and fall hazards. When a worker is using stilts in an area where a guardrail system is used for fall protection, the guardrail system must be increased in height by an amount equal to or greater than the height of the stilts being used. A rigid platform at a height equal to or greater than the height of the stilts shall be used for mounting/dismounting stilts. The platform must be wide and deep enough to sit comfortably, be stable, and be secured from movement while in use. The platform must be kept clear,

accessible, and within the immediate work area (considered to be within 75 ft.) while stilts are in use. Stepladders or makeshift platforms cannot be used for this requirement.

3.6.14 Stairs

- 3.6.14.1 Properly designed and built stair and landing units shall be placed at access doors for every Project office and storage trailer prior to use. Per ANSI requirements, the landing outside each door of any office trailer shall be no greater than one quarter inch (1/4") below the threshold and the unobstructed (standing) area outside the swing radius shall be no less than twenty-two inches (22"). Fire and Life Safety Code (NFPA) and ADA requirements shall also be satisfied as they apply. Ramps or connecting decks may be installed to satisfy this requirement.
- 3.6.14.2 For incomplete permanent stair sections, at least the bottom four (4) risers and upper entry points for each floor shall be physically blocked with a hard barricade and marked "INCOMPLETE – DO NOT USE." Until a complete section is made acceptable for general use, the barricades and signs for that section shall be maintained. Once permanent stairs are put into service for general use, no less than two (2) stairs must always be maintained as open and accessible from the uppermost floor to ground level. To be considered usable, all treads and landings must be filled to the top of the pan and handrails must be in place. If any previously available stair(s) will be blocked during the workday, all impacted workers must be notified, and the alternate means of access/egress communicated prior to that day's work start.
- 3.6.15 Project Service Water
 - 3.6.15.1 Potable Water: Potable water shall comply with city and community health requirements.
 - 3.6.15.2 Non-potable Water: Water storage containers, hose bibs and faucets shall be posted in English and Spanish "DANGER DO NOT DRINK or WASH."
- 3.6.16 Welding and Burning
 - 3.6.16.1 Splices, taps, welds and/or burning operations that may produce sparks, slag or hot scraps shall require a "Hot Work" Permit (daily or per shift). "Hot Work" Permits shall be issued by the PSC. The SSR shall submit completed permit in advance of the work to the PSC for field review and written acceptance. One copy of the accepted permit shall be posted by the SSR in the immediate area of the operation. At the conclusion of the work and successful completion of the smolder/re-kindle watch, a copy of the expended permit shall be signed off and returned to and filed by the PSC. If the campus Environmental Health and Safety (EHS) or Fire Protection departments wish to be involved in the process (provision of permit and/or pre-inspection of the permit space), the Contractor shall accommodate these wishes. The PSC will also issue work specific permit daily or per shift. The PSC shall ensure that all Hot Work will be provided with at least a fire

watcher(s), fire extinguisher(s), and proper spark, slag, or hot scrap containment measures. If the work produces intense light, permit shall also contain requirement for screens to protect others from flash burns.

- 3.6.16.2 Oxygen and fuel gas cylinders shall not be stored together, including on bottle carts, but shall be separated by at least twenty (20) feet and properly secured from movement. At the end of any cutting operation and/or any shift, bottles must be removed from carts. Hoses and gauges shall be removed, and caps restored onto cylinders.
- 3.6.16.3 Anti-flashback arrestors shall be installed at the pressure regulator gauges of all Oxy-Acetylene cutting rigs, even if the torch is equipped with a built-in arrestor.
- 3.6.16.4 Fire watcher(s) shall be posted at every operation that produces sparks, flames or enough heat to create an ignition or to fall onto another level. If multiple activities are no more than twenty (20) feet apart and all activities can always be seen , a single fire watch can be utilized. This allowance must be noted on the Hot Work permit. All fire watchers shall be trained in the use of extinguishers, shall keep other people from entering exposure areas, and shall not be assigned other duties until the rekindling possibility ("smolder/re-kindle watch") is over. When sparks, slag, or fire cannot be controlled at the source and may fall to a different level, a separate fire watch shall monitor each level directly below the work (including exterior locations).
- 3.6.16.5 Heater boxes for welding electrodes shall have a manufacturer's label that certifies the purpose of the unit. Job-built heaters shall be prohibited.
- 3.6.16.6 The unused stubs of welding electrodes ("rod butts") shall be collected and placed in proper disposal containers (i.e. metal bucket with sand or water) as soon as each one is expended. Whenever operation is idle, electrode shall be removed from stinger.
- 3.6.16.7 Welding operations shall not be allowed to present an opportunity for flash burn exposures to the eyes of any workers in the vicinity. All welding operations shall provide appropriate screening measures, erected in advance to contain the high energy light.

3.7 REQUEST FOR SAFETY VARIANCE

If the Project conditions present a situation that will not allow compliance with any portion of this Section, the Contractor shall submit a Request for Safety Variance (EXHIBIT I) to the ODR. The Request for Safety Variance must provide enough detail(s) regarding the action(s) to be taken that will provide a measure of safety that is equal to or exceeds the stated requirement. Until the variance is approved and signed by the ODR and ORM, compliance with this Section is required.

EXHIBIT Attachments:

- EXHIBIT A Anticipated Construction Project Hazards Checklist submittal
- EXHIBIT B Hot Work Permit Project file document
- EXHIBIT C Visitor's General Waiver and Release Contractor submittal
- EXHIBIT D Project Safety Orientation Checklist Project file document
- EXHIBIT E Subcontractor Safety Representatives Weekly Meeting Agenda Template
- EXHIBIT F Quarterly Equipment Inspection Report Project file document
- EXHIBIT G Worker Guide for Reporting Injury Handout
- EXHIBIT H Supervisor Guide for Management of Worker Injury Handout
- EXHIBIT I Request for Safety Variance Contractor submittal
- EXHIBIT J Root Cause Analysis
- EXHIBIT K Incident Notification FlowChart
- EXHIBIT L Tower Crane Assembly/Disassembly Documentation
- EXHIBIT M Job Hazard Analysis Form (Mandatory)
- EXHIBIT N Safety Specification 01 35 23 Contractor Acknowledgement Statement

END OF SECTION 01 35 23

CONTRACTOR SUBMITTAL TO OWNER – CHECKLIST

The University of Texas System – Construction Project Safety

ANTICIPATED CONSTRUCTION PROJECT HAZARDS

CIP	Proje	ect # CIP Project Name	Date
No	Yes	Issue	Timing for appearances
Gen	eral l	Health Exposures	
		Noise, Illumination, Lasers and X-ray	
		Dusts, Mists, Vapors, Gases	
		Chemical exposures	
		Proximity to public and/or traffic	
		Existing geography/ extreme weather	
Elec	trical	Exposures	
		Overhead power lines in area	
		High Voltage (∃ 600 volts)	
		Hot taps and/or Double fed circuits	
Exc	avatio	ons	
		Tunnels and/or Jack and Bore	
		Maximum estimated trench depth	
		Maximum estimated pier sizes	
		Existing underground services	
		Proximity to streets or buildings	
Elev	vated	Fall Exposures	
		Excavations and piers	
		Structural erection (steel/precast)	
		Building exterior	
		Stairwell/ Chase/Elevator Shaft	
		Roof (note steep or low slope)	

Crai	nes/ Hoists/ Derricks	
	Pier Drilling/ Pile Driving	
	Exterior Hoists (Elevators)	
	Mobile Cranes (track and rubber tire)	
	Tower Cranes	
	Critical lifts	
Tool	s and Equipment	
	Powder Actuated	
	Pneumatics or High Torque power tools	
	Generators and Compressors	
Mot	or-Driven Equipment	
	Earth moving equipment	
	Lift Platforms (articulating and/or scissor)	
	Industrial trucks (forklifts)	
	Bulk fuel storage area	
Dem	olition	
	Structural, Explosive or Mechanical	
	Jackhammers and power cutting	
Scaf	folding	
	Ground supported (static and/or motorized)	
	Suspended	
Wel	ding and Burning	
	Types and Locations	
Con	fined Space	
	Permit required and/or not required	

EXHIBIT B

CONTRACTOR DECISION MATRIX – GUIDELINE

The University of Texas System – Construction Project Safety

HOT WORK PERMIT (ONE COPY MUST BE POSTED IN THE VICINITY OF THE WORK)

CIP Project Number:				Request Date:
UT Campus / Institution				
CIP Project Name				
Requesting Company				
Responsible Supervisor				
Work Location				
General Description of Work Tasks				

ISSUES AND/OR PREVENTI	ON MEASURES	DESCRIPTION	
Dedicated Fire Extinguisher(s)			
Special Suppression Equipment			
Fire Blankets/Equipment Shieldin	ng		
Flash Burn (Eye Safety) Screening			
Name of Fire Watcher(s)			
Existing Sprinklers Disabled			
OTHER CONSIDERATIONS:			

NOTES:

- 1. All permits are good for one (1) shift only.
- 2. Unless a specific task requires a **LONGER** time period, fire watch positions must also conduct a smolder-rekindle watch for at least THIRTY (30) MINUTES after the burning/welding operation is completed.
- 3. If the work moves from one area to another during a single shift, the permit must accompany move and all task areas must be identified on the permit.
- 4. After the work is completed, the permit must be initialed by the RESPONSIBLE SUPERVISOR (below) and a copy must then be forwarded to the Prime (Controlling) Contractor within the same workday.

If unexpected events during the work led to a modified plan, place initials in the appropriate box: NO NO YES YES

If **YES**, describe the unexpected events and the subsequent actions.

EXHIBIT C

CONTRACTOR PROCEDURE – GUIDELINE

Visitor's General Waiver and Release The University of Texas System (Owner)

Visitor Name (Printed):	
Company / Group Affiliation:	
CIP Project Name:	
CIP Project Number:Campus:	
General Contractor:	
Project Safety Coordinator Name (Printed):	

On behalf of The University of Texas (Owner) and the General Contractor, we welcome you to the project. Construction projects can be dangerous and hazardous to employees and visitors alike. Upon entering the site, you must exercise extra care to adhere to safety protocols and instructions from knowledgeable construction professionals.

- Initials _____ I acknowledge that I will observe and follow all safety procedures, including any warning signs or safety instructions posted on or about the premises. In addition, I acknowledge that proper safety vests, hard hats and safety glasses have been provided to me for my visit. I am wearing closed toed shoes that the Project Safety Coordinator has acknowledged will be appropriate for my visitation.
- Initials ______ I hereby waive, release and hold harmless, as well as forever discharge, The University of Texas System, the General Contractor and all subcontractors, their agents and employees from all claims which I, or my heirs, executors or administrators shall or may have, because of bodily injury or death to me or damage to my property resulting from any act or omission of the Released Parties. I AM NOT AGREEING, HOWEVER, TO RELEASE THE RELEASED PARTIES FROM GROSS NEGLIGENCE.
- Initials: _____ I hereby agree to indemnify, defend and hold harmless the Released Parties for any bodily injury, death or damage to other persons or property caused by my acts or omissions while visiting the project.
- Initials: _____ I, the undersigned, acknowledge that I (1) have requested permission from the Owner and General Contractor to visit the Project Site; 2) have executed this Waiver and Release as a condition of and in consideration for being permitted by Owner and General Contractor to visit the project Site; and 3) agree to exercise extreme care while on the Project Site and to comply with all safety rules and requirements of the Owner and General Contractor.

Visitor Signature:	 Date:
Project Safety Coordinator Signature: _	

EXHIBIT D

CONTRACTOR CHECKLIST – ORIENTATION DOCUMENT

The University of Texas System – Construction Project Safety

PROJECT SAFETY ORIENTATION

CIP Project #:

Date of Safety Orientation:

CIP Project Name:

Trainer's Name:

Contractor/Employer's Company Name:

INSTRUCTIONS: Place a *mark* in the box to the right of each topic as it is discussed.

1-	Rev	view General Purpose of Rules		7- Daily Issues			
	a.	Do NOT work alone – stay in contact			a	Housekeeping	
2-	Per	sonal Protective Equipment (PPE)		ITEN	M	Slippery surfaces and Trip hazards	
	Pur	rpose, use, storage and care of:		ITEN	М	Visual obstructions to emergency equipment	
	a	Safety Helmets (Hard Hats)		ITEN	М	Blocked Exit paths	
	b	Basic Eye Protection		ITEN	M	Emergency Roadways	
	с	Additional Eye/Face Protection		ITEN	М	Trash = Vermin/Fire hazards	
	d	Feet/Hands/Clothing Protection		ITEN	M	Puncture/Impalement hazards	
	e	Respiratory Protection		ITEN	M	Unstable Stacks of materials	
	f	Hearing Protection			b	Manual Lifting	
	g	Fall Protection			с	Ladders and Stairs	
	h	Special Protection issues			d	Scaffolding (frame and suspended)	
3-	Ha	zard Communication (aka Right to Know)			e	Tools and Portable equipment	
	a	General Plan			f	GFCI/Electrical power	
	b	Major Chemical hazards on-site:			g	Surface and ground conditions	
NAN	ЛE				h	Overhead exposures	
NAN	ЛE			8-	Mo	otorized Equipment Operations	
NAM	AME			a	Mobile equipment (uses and alarms)		
NAN	ЛE				b	Crane and Rigging Operations	
	с	Hazard Labels			с	Lift platform equipment	
	d	Safety Data Sheet (SDS)			d	Hoists/ Exterior Elevators	
	e	Location of SDS			e	Company/ Personal Vehicles	
	f	Safe Task Training requirements		9-	Sp	vecial Operations (with and w/out permit)	
4-	Em	ergency Equipment (location and use)			a	Excavations	
	a	First Aid Station and AED			b	Concrete pour and place	
	b	Fire Extinguisher			с	Steel and Precast erection	
	с	Eye Wash/Shower Stations			d	Decking and roofing	
5-	Em	ergency Procedures			e	Lock/Tag out of Energized Systems	
	a	Medical/ Injury incident			f	Hot work and Burn Permits	
	b	Fire incident			g	Scaffold erection/dismantle and use	
	с	Weather/ Evacuate			h	Critical shutdown	
	d	Violence, Protest, Spill, Explosion		10-	Mi	iscellaneous Issues	
6-	Inc	ident Notification/Reporting	·i		a	Parking, Smoking, Harassment	
	a	Tell Supervisor Immediately			b	Signs, Barricades, Handrails	
	b	Help -OR- Stay Out of the Way			с	Traffic, Pedestrians, Neighbors	
	с	Give a Statement of Facts			d	Drugs and Alcohol	
	d	Assist Investigation			e	Meetings, Badges, Incentives	
	e	Report Unsafe Acts or Conditions			f	Enforcement	

I understand that this training is designed to help me make safe decisions and act to reduce risks.

Employee Signature

CONTRACTOR TEMPLATE – FILE DOCUMENT

The University of Texas System – Construction Project Safety

SAFETY REPRESENTATIVES WEEKLY MEETING AGENDA

- Sign in and introduction of any new Subcontractor Safety Representatives
- Read minutes from last meeting and vote final adjustments before filing into record

Past (Old Business):

- 1. Discuss investigations (findings and conclusions) from recent past incidents.
- 2. If the Project has a safety committee, have someone from the committee report the safety conditions and behaviors noted in the past week.
- 3. Review safety issues/conditions identified during Project Safety Coordinator's weekly safety inspection or third-party inspection.
- 4. Discuss any pending claims (worker injury or general liability). Review claims handling procedures.
- 5. Discuss trends identified regarding claims or safety performance.

Present (Current and New Business):

- 6. Review the activities for the week ahead. Identify specific safety concerns and issues. Develop actions to control identified hazards.
- 7. Review any SDS for potential exposure warnings that pertain to upcoming operations.
- 8. Review specific PSMP elements and/or requirements.
- 9. Safety suggestions.
- 10. Open forum for general Q and A.
- 11. Announcements
 - Subcontracts that are concluding need final look at their areas
 - Upcoming safety recognition events
 - Upcoming training opportunities
 - Upcoming professional safety seminars or workshops
 - Names of workers who are not permitted to return to Project
 - Time and date of next meeting
 - Next week's mandatory topic for the Weekly Toolbox Talk

SUBCONTRACTOR SUBMITTAL – FILE DOCUMENT

The University of Texas System – Construction Project Safety

QUARTERLY EQUIPMENT INSPECTION REPORT

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Quarterly Color Cou	les:	$(1^{\circ\circ})$ white	1		<u>э</u> ") к	ea		(4)	Oran	ige		
CIP Project Number			Date	e of R	eport							
CIP Project Name												
Contractor												
Employer Name												
Inspector's Name						_			_	_		
INSTRUCTIONS:						q		p	ц			
1. Use one line to identify ea	ch type	of portable equipmer	nt on Proj	ect.	st	000	le	age	sio	6	рц	ac
2. Use a "check" mark to inc	licate per	rtinent categories for	each line	item.	COLC	ts, g	gib	lam	orro	lo u	t aı	atin
3. Use an "N/A" mark to ind	icate no	n-applicable categori	es for eac	h line	pd e	lor	l le	pun	000	sig1	Itac	jer:
item.					t ar gec	l sl	anc	ı pı	r oi	or	i (s ol
4. Use "Qty." column to indi	icate tota	I number for each ite	em inspec	ted.	tac ma	rica	ICe	t aı	vea	ity	e(s) rkir	rm:
5. Use "Comments" area to a	describe	items removed for re	epair and/	or	n in nda	ecti	pla	sen	e v	Im	tur	ala pro
discarded.					ur ur	o el	II.	pre	siv	efo	fe	ng
6. Complete this process wit	hin final	fourteen (14) calend	lar days o	f each	ula	, nc	sels	rts	sec	o d e	ety	urni
quarter.			1		Ins	an.	Lab	pa	ex (Z	Saf	W٤
7. Items that enter or return t	o Projec	t during quarter mus	t first be i	e-		Cle		All	Ň			
Inspected.				0	т				•			
Portable Equipment I	tems			Qty.	Insp	ecti	on Ca	atego	ries			1
									-			
									_			
Comments:				•					•			
								_				

I certify that all the portable items on this Project at the beginning of this quarter have been inspected and certified or removed from service.

Signature of Inspector

Date of Report

Distribution:

Employer's Project file

Contractor's Project file

EXHIBIT G

CONTRACTOR INFORMATION – WORKER HANDOUT

The University of Texas System – Construction Project Safety

WORKER GUIDE FOR REPORTING INJURY

- WORKERS MUST IMMEDIATELY REPORT all injuries (no matter how minor) to a supervisor.
- * The supervisor will report the incident to the Contractor and take care of all paperwork.
- The worker's SSR will drive the injured employee to the clinic to guarantee safe transport and to secure swift and complete medical attention.
- The doctor may prescribe written "orders" for medical restrictions. The supervisor must then assign temporary duties that fit the restrictions ("Light Duty"). This guarantees the worker a full paycheck while the injury heals.
- The worker's SSR will drive the injured worker back to the Project and make arrangements with the employer to get the worker and personal vehicle home by a safe method.
- Injured employees must follow the doctor's "orders" and comply with work restrictions at home and at work. Employers must allow reasonable times for visits to the doctor and to therapy sessions. Normally, sessions can be scheduled during non-work hours.
- The insurance company may contact the injured employee to discover how the doctor and the employer are planning to treat the injury and the recovery. Injured workers should share any personal details that might help the agent understand the situation. If anything needs to be changed in order to help the recovery process, the agent will contact the proper people to make it happen.
- The insurance company will pay the medical bills for injuries on this Project. Workers should never pay any medical bills for an injury that is related to work. If there are any questions, talk to a supervisor and/or the Project Safety Coordinator for the Contractor.

SPECIAL WARNING TO USERS AND ABUSERS

(of alcohol and other controlled substances):

No matter where a worker receives medical care, the treatment will include a drug and alcohol test. Workers who are injured as a result of impairment from alcohol or non-prescribed drugs will lose the guarantee that all medical treatment will be covered by insurance. Also, they will not be allowed to return to work on any UT System Project.

The University of Texas System – Construction Project Safety

SUPERVISOR GUIDE FOR MANAGEMENT OF WORKER INJURY

- 1. Workers must **IMMEDIATELY REPORT** all injuries (no matter how minor they appear at the time of the incident) to a supervisor (foreman, general foreman, superintendent, etc.).
- 2. The supervisor must **IMMEDIATELY REPORT** any injury to the Contractor's Project Superintendent or Safety Coordinator. Improper and/or late reporting of injuries will result in Owner directed recovery charges as described in the Contract.
- 3. The supervisor must then escort the injured employee to the Contractor's Project office (except when the injury requires an ambulance or emergency response).
- 4. The Contractor's Project Safety Coordinator (PSC) shall retrieve 5 documents from the Project Safety Files as follows:
 - a. The form (Authorization for Medical Treatment) that guarantees quickest medical response at the clinic
 - b. A map that shows the best route to the clinic
 - c. A copy of the Return to Work Policy from the employer of the injured worker
 - d. A "First Report of Injury" form to furnish the insurance company with the necessary information to start a claim and pay medical bills
 - e. A "Bona Fide Offer of Employment" form to guarantee suitable employment for medically restricted workers
- 5. The worker's SSR will drive the injured employee to the clinic to guarantee safe transport and present the "Authorization to Treat" form to obtain swift response. This form will also notify the clinic that a test for drugs and alcohol is required. If the injured worker is transported elsewhere, the Contractor shall also notify the insurer. The supervisor shall also be at the clinic to respond to questions from the physician
- 6. After the doctor has completed the examination and all required medical care, the worker's SSR and the worker shall meet with the doctor to accomplish three objectives:
 - a. Review the injury and discover the need for any additional medical assistance.
 - b. Discuss suitable Return to Work positions to accommodate any medical restrictions.
 - c. Present the worker with a "Bona Fide Offer of Employment" form to guarantee continuing employment and to guarantee work tasks that will not exceed prescribed medical restrictions.
- 7. The worker's SSR shall then drive the worker back to the Project and shall make suitable arrangements to get the worker and personal vehicle home at the end of the day. If the doctor has written a prescription that contains orders for medical restrictions, the worker must be assigned to ("Light Duty") tasks that meet the restrictions. This presents a "win-win" for all involved as follows:
 - a. The injured worker will continue to draw his/her full paycheck.
 - b. The employer will be able to keep its insurance rating as competitive as possible.
 - c. The insurance provider will be able to keep the costs of medical claims as low as possible.
 - The SSR must promote three issues to quickly and completely restore health:
 - a. Maintain awareness of medical restrictions and assign work tasks that do not violate the restrictions.
 - b. When contacted by the insurance agent, be candid and share any information that may expedite the physical recovery of the injured worker.
 - c. Allow reasonable times for physical therapy (or other medical treatment) and maintain contact with worker.
- 9. **Zurich** is the insurance company that will pay the medical bills. The Contractor's Project Safety Coordinator will have the contact information to file the required insurance claim.

SPECIAL NOTE: No matter where the worker receives medical treatment, a drug and alcohol test MUST occur at the Project assigned clinic. Employers must not allow workers with confirmed drug or alcohol impairment to return to employment on any UT System Project unless the drug is prescribed by a physician and the work assignment can be safely performed.

8

EXHIBIT I

CONTRACTOR SUBMITTAL TO OWNER

The University of Texas System – Construction Project Safety

REQUEST FOR VARIANCE

Date of Request:

From: (insert name of Contractor and name of person signing on behalf of company)

To: Insert Name of the ODR

CIP Project Name:_____

CIP Project Number:

We respectfully request a variance from the Contract, Section # 01 35 23 (Project Safety Requirements). We understand that no alteration of safety procedures is to be allowed until formal acceptance is executed by the ODR.

We believe that the following regulation(s) is/are either not practicable or not the best practice for the Project at this time.

(Insert verbiage that describes the specified regulation.) (Insert description of how and why the existing conditions make the existing regulation less than the safest method for accomplishing the work – convenience is not an acceptable reason.) (Insert the proposed method in enough detail to allow a reader to visualize the proposed plan that is as good or better than the stated requirement(s).)

Very truly yours,

Signature	Position
On behalf of the Board of Regents of The	University of Texas System, Contractor's request is:
ACCEPTED	DENIED
Printed name Request reviewed by the ODR	Signature
Printed Name	Signature

*Note: This variance as reviewed is understood to be for this scope of work and this project only. It is further understood that this variance is not portable as it relates to any other UT System Project.

ROOT CAUSE ANALYSIS FORM

Root Cause Analysis

CIP Project Name			CIP Project Number		
Name of Incident			Date of Incident		
Employee Injury	□ No □	Yes	If yes, list employee name		
Date of RCA			If revising, date of revision	Revision No.	
Contractor			Subcontractor (if applicable)		

This RCA is due to:

□ Injury, □ Level "A" Safety Deficiency, □ Property Damage, □ Other Incidents as directed by the Owner

Identify all underlying contributing factors to reduce potential for recurrence of same type incident. Remember:

- ✓ Worker's actions made sense to that person at the time (circumstances & perceptions)
- \checkmark Understand the thought process behind the decisions that were made at the time
- ✓ Look beyond the individuals involved to uncover systemic contributing risk factors
- ✓ Break the blame cycle (culture must value honest reporting learning organization)
- ✓ Find error precursors & flawed or missing defenses or processes that led to incident

The Root Cause Analysis investigation should thoroughly address these questions:

- 1. Was the incident controlled and limited so that all workers and the project were made safe post incident? What was done?
- 2. Explain what happened (facts and circumstances) that resulted in the incident.
- 3. Are there other work areas or tasks where this type of incident could occur again?
- 4. If worker's actions contributed to the incident, why did the worker feel this was the best course of action at the time?
- 5. What processes were in place to prevent the incident? Identify processes that failed.
- 6. Is there any other information that should be known that is relevant to this incident?
- 7. What processes could have been implemented or improved that might have prevented this incident?
- 8. What processes will be improved or implemented to reduce risk of recurrence? When will these new processes be in place?

FOR OWNER USE ONLY

Level	□Fire Alarm □First Aid □Level A □Near Miss □Property Damage □Recordable □SWPP □Other
Incident	□Caught Between □Electrical □Equipment Handling □Fall □Fall □Fall Protection □Foreign Body
Type:	\Box Haz Mat \Box Heat Exhaustion \Box Ladder \Box Material Handling \Box Puncture \Box Security \Box Slip/Trip \Box SWPP
	□Tool Handling □Worn Equipment □Other
Injury	□N/A □Blunt Trauma □Chemical Burn □Contusion □Cramps □Crushing □Dust in Eye
Type:	□Fall □Flash Burn □Heat Exhaustion □Insulation in Eye □Knee Blood Blister □Laceration □Laceration & Shock
	□Other □Puncture □Shock □Sprain □Strain

EXHIBIT K

A **SERIOUS INCIDENT** is one where any of the following occur:

- EMS/Ambulance responds
- Hospitalization occurs
- Multiple injuries
- Life threatening or potentially life threatening (loss of consciousness, loss of airway, loss of heartbeat, head injury, massive bleeding, impalements, avulsions of any sort, etc.)

If calling to report a **Serious Incident** and someone on the calling chain is unavailable, leave a message, but them jump to the next person in the chain to ensure timely notification. For example, if Contractor cannot reach the ODR, then contact the CI; ODR Supervisor would then make decisions on behalf of the ODR

Reports of **Serious Incidents** will include the status of injured persons and follow up until stabilized or return to work.



EXHIBIT L TOWER CRANE ERECTION / DISMANTLE DOCUMENTATION

The University of Texas System – Construction Project Safety

REQUIRED INFORMATION TO BE SUBMITTED AND REVIEWED PRIOR TO ANY TOWER CRANE ERECTION OR DISMANTLE OPERATION

The plan will need to be submitted for review by the Owner at <u>least two weeks</u> prior to the date of the planned erection or dismantle. ORM will be providing a third-party consultant during the erection or dismantle process. No work will begin until all plan elements noted below have been submitted and reviewed for acceptance. The plan must include at a minimum:

- 1. Annual inspection of all assist cranes that will be utilized to erect or dismantle the tower crane.
- 2. Operator's nationally recognized certification(s) and supporting training documentation for all make and model of cranes that will be used. Operator's annual physical.
- 3. Qualifications (with supporting training documentation) for the Erection/Dismantle Director and all crew members, riggers and signal persons. Training documentation must include organization and person(s) that conducted the training, material covered in the training, time spent on each training element, and details to the evaluation process used to verify worker understanding of training. This may be through testing and/or demonstration of skills. Rigging can only be performed by persons who possess documentation of completion from a training program that carries recognized accreditation.
- 4. Verification of soil conditions for all anticipated mobile crane positions. Detailed plan with map for the location(s) of the assist crane(s) and associated hazards near those locations. Plan to control identified hazards.
- 5. Training documents for all crew members for their assigned task(s). A letter indicating positions with no supporting documentation is not acceptable. Fall protection training must be included. See # 3 for the required training documentation.
- 6. Details for work stoppage due to high wind speed or other inclement weather conditions. The actual shutdown procedure, including who is responsible for shutdown determination and how it will be communicated to all affected workers.
- 7. Copy of the manufacturer's equipment manual for review for the make and model of tower crane that will be erected or dismantled.
- 8. Structural information regarding the tower crane base pad (prior to erection).
- 9. Details on sequencing for sectional erection and bolting (including torque) (prior to erection), details on sequencing for sectional dismantle with bolt removal procedure (prior to dismantle) and rigging procedure with verifications. Cannot indicate that plan will follow manufacturer's equipment manual.
- 10. Documentation showing that each worker has been drug/alcohol tested within two (2) weeks prior to work start on the project. Negative result per worker is needed for entry.
- 11. Prior to the erection of the tower crane, the General Contractor will need to develop a High Angle Rescue Plan. The intent of this plan is to be able to effectively remove an individual from the horizontal portion of the crane in the event of an emergency during erection, use of the tower crane, and the dismantle operation.

REMINDER - this information submission in no way removes the General Contractor's safety professionals and project management team from the obligation of ensuring all documentation is provided, reviewed for adequacy based on the planned task(s), ensuring that the work is pre- planned and communicated to all affected workers, all workers are properly trained to perform their individual tasks, and that all work is done according to the agreed upon plan and the manufacturer's requirements.

JOB HAZARD ANALYSIS FORM (MANDATORY)

Daily Job Hazard Analysis

This JHA is vali	This JHA is valid only for the work and date specified. This JHA shall be posted at the immediate work area while the work is ongoing. If the noted									
this IHA When	;e, tne this IF	JHA snall [A expires	t be re-evaluated to	incorp	PSC/PSA	for record	ssued immediately. Any emer	gency or in	cident auto	omatically invalidates
Project Name and Number Company Name				1 10 110	100/10/1	Date and Time				
				Supervisor						
Description of wor	rk to be	performed	:							
A. Are Permits Re	equired	? Are they d	isplayed and properly	signed b	y the PSC/P	SA?	B. Atmospheric Monitoring			
Hot Work	Y	N	Confined Space	Y	N		Oxygen Concentration	Y	N	Reading
Lockout/Tag-out	Y	N	Roadway Traffic	Y	N		Combustible Gas/Flammable V	/apors Y	N	Reading
Excavation	Y	N	Other (specify)				Hazardous/Toxic Gas	Y	N	Reading
							Are concentration levels safe?	Y	Ν	
C. THINK about	the wor	k you and y	our crews will be doing	g today.	Place a Y for	r Yes or N for	No next to each element. All eleme	ents identified	with a Y or `	Yes must be addressed in
Section D.										X
Confined Space			_	A	A-Frame Ladders			Other (provide	details below)
Aerial Man-lifts			—	F	Extension Lad	lders	-			
Lockout / Ta	igout		_	S	Scissors		_			
Excavations			—	Opening / Isolation of equipment						
Trenches			—	Loading / Unloading > 50 lbs.						
Motorized Equipment			Work on live equipment							
Ground Supported Scaffold			—	Welding						
Suspended Scaffold			_	Burning / Cutting operations						
Mobile/Rubber Tire Crane				Work at Heights > 6'						
Tower Crane	3									

C.2 Hazards

Airborne Particulates	Falls	Public Traffic (vehicle / foot)
Body Stress (hot / cold)	Slip / Trip Hazards	Repetitive Motion
Lighting	Pinch Points	Lifting
Noise	Electric Shock	Material Handling
Radiation	Sharp Objects	Work of Others (specify)
Chemical Exposure (skin / eyes / inhalation)	Thermal Burns	
Flammable Materials	Housekeeping	
Overhead Work	Obstructed View	Other Hazards (specify)
Motorized Equipment	Awkward Positioning	
Access / Egress Paths	Insects / Animals	
Floor Cut-outs	Walking Surfaces	

C.3 Hazard Controls	C.4 Proper PPE		
Hazard Assessment	Walking/working surfaces clear and unobstructed	Protective Suits	
Pre-task Planning	Proper storage of material and equipment	Hard Hats	
Worker Training	Equipment warning/safety devices operational	Safety Glasses	
Equipment Selection	Proper lifting / placement / securing of material	Face Shield / Goggles	
Equipment Inspection	Fall protection in place / inspected / maintained	Traffic Safety Clothing	
Permits developed and reviewed	Housekeeping maintained daily and verified	Fall Protection	
Work area verification of conditions	Fire protection measures in place	Hearing Protection	
Review of As-builts	Equipment grounded / bonded	Gloves	
Utility owners contacted	Flash burns shielded	Respirator	
Utilities located and confirmed	Spark containment	Foot Protection	
Equipment operators qualified	Flow able material contained	Other (specify)	
Equipment training documented and on-hand	Emergency response in place and communicated		
Atmospheric Testing	Barricades / covers / signs in place and secure		
Live equipment isolated? (list equipment below)	Stand-by persons (specify name and task below)		
Competent Dercon (print name)	Spotter / Flagger / Traffic Control (print name and tack)		
	Spotter / Plagger / Plante Control (print name and task)		
		_	

D. This portion of this JHA is to be completed by the supervisor with input from crew members. Once complete this JHA must be reviewed with all affected crew members or when conditions change.

Work Activities based on C.1

Possible Hazards base on C.2

Controls to Address Hazards based on C.3

C.5 Emergency Response

Fire Extinguishers located at?	Report Emergencies to? (name & number)	
SDS located at?	(name & number)	
Eye Wash Station located at?	Emergency alarm sound like?	
First-aid AED located at?	Muster Point is located at?	

Е.	Crew Printed Name	Signature	Badge #	Crew Printed Name	Signature	Badge #
1.			11.			
2.			12.			
3.			13.			
4.			14.			
5.			15.			
6.			16.			
7.			17.			
8.			18.			
9.			19.			
10.			20.			

F. JHA developed and communicated by;		Daily JHA reviewed by (PSC / PSA):		
Printed Name	Signature	Printed Name	Signature	
Date	Time	Date	Time	

EXHIBIT N

CONTRACTOR ACKNOWLEDGEMENT STATEMENT

UTS PROJECT SAFETY REQUIREMENTS 01 35 23 CONTRACTOR ACKNOWLEDGEMENT STATEMENT

CIP Project Name:_____ CIP Project No: _____

By executing this document as an authorized representative of the referenced Company identified below, I acknowledge and confirm that I have read and understand the contents of the UTS Project Safety Requirements 01 35 23 in its entirety. I also recognize and acknowledge that the obligation to protect safety and health is not limited to the requirements of UTS Project Safety Requirements 01 35 23 only, but also includes all applicable rules, regulations, and guidelines necessary to provide a safe and healthful working environment for all employees and employees on the project. The Company will comply with all applicable safety requirements.

The Company will further communicate the requirements of the UTS Project Safety Requirements 01 35 23 and other applicable safety rules, regulations and guidelines to all tiered Subcontractors that will perform work on the Project and obtain and submit to the Owner a signed copy of this Contractor Acknowledgement Statement from each such Subcontractor.

(Legal Name of Company)

(Address)

(Type Name of Officer)

(Signature of Officer)

(Title)

(Date)

REVISION LOG

The following is provided for convenience to the Owner, Architect/Engineer and Contractor to track changes between annual document issuances and is not to be considered by any party to be contractual or 100% complete.

Date	Paragraph Revised			
02/01/08	Correct numbering in Section 3.8			
06/01/08	Include SafetyNet Program in Section 2.4			
04/01/09	Reissue date of substantially revised document. (not posted to eManual)			
04/26/10	Reissue date of substantially revised document. Notable changes include:			
	 increased experience level and qualifications of the Project Safety 			
	Coordinator (PSC) and Project Safety Assistant(s) (PSA)			
	 modified the number of PSAs required on a Project and their start and 			
	conclusion of service days			
	• increased credit for formal education, continuing education, and			
	certification for PSCs and PSAs			
	• modified OSHA 10/30-hour training requirements			
	modified hard had sticker process for equipment operators			
	modified safety vest requirement			
	• modified height requirement for ladder use without fall protection			
	removed other exemptions for fall protection			
	 added visitor waiver and release requirement and document 			
	 other cosmetic changes with no impact to content or intent of specifications. 			
3/24/11	Inclusion of criminal background check requirement and associated forms			
5/17/11	Removal of criminal background check requirement and associated forms			
9/1/12	Clarifications to align with SafetyNet data gathering and Exhibit title revisions			
12/18/15	Inclusion of PSC in training and other minor clarifications			
9/21/18	 Reformatted text describing requirements that exceed OSHA requirements; 			
	added statement at the beginning calling attention to the reformatted text; misc.			
	edits			
	 In general, clarified Owner's expectations and existing requirements 			
	throughout this document with revised terminology to align with industry			
	• Updated reference to Safety Data Sheets in 2.11.2 and in Exhibits D and E			
	Added sections 2.12.18 through 2.12.21			
	• Clarified section 3.1.1 to ensure this specification is received and reviewed by			
	subcontractors			
	• Deleted section 3.1.7 in its entirety			
	Clarified section 3.2.2 regarding expectation of PSC/PSA admin duties			
	Clarified section 3.2.4 regarding Owner's position on Safety Recognition and			
	Commendation			

	• Added section 3.5.6 requiring the PSC to communicate the expulsion of a
	worker from the project site
	Added section 3.6.6.4 related to metal fuel containers
	• Added section 3.6.6.5 related to liquid storage containers larger than 25
	gallons
	• Added section 3.6.7.10 related to housekeeping of means of egress
	Clarified requirement in section 3.6.8.5 related to physical barricades at
	ladder step-off landing areas
	• Added sections 3.6.10.5 through 3.6.10.7 related to motorized equipment
	operation
	Updated wording to industry standard in Exhibit L
	 Added Exhibit N – UTS Safety Specification (01 35 23) Contractor
	Acknowledgment Statement
4/1/19	Added sections 2.1.2 and 2.1.3 related to Project Safety Coordinator
	qualifications
	Updated Exhibit C
4/7/20	Updated document and Exhibits to remove reference to the Office of Facilities
	Planning and Construction (OFPC) and correct grammar and format errors.
	Standardized language in multiple sections
	Modified Exhibit I to reflect ORM review and acceptance.
	Modified Exhibit K to reflect generic language for project management
	positions for notification