

SECTION 01 35 23

PROJECT SAFETY REQUIREMENTS

PART 1 – GENERAL

1.1 PURPOSE

- A. This guideline is intended to provide useful information to the Professional Service Provider (PSP) to establish a basis of design. PSP is to apply the principles of this section such that the University of Texas at Arlington (UTA) may achieve a level of quality and consistency in the design and construction of their facilities. Deviations from these guidelines must be approved by UTA and may require justification through Life Cycle Cost (LCC) analysis and submitted to UTA for approval.

1.2 OVERVIEW

- A. The Owner’s objective is an injury and incident-free Project, with a focus on 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 improvement.

1.3 GENERAL REQUIREMENTS

- A. 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 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, Contractor and Subcontractors shall work collaboratively with UT Arlington toward making appropriate revisions to progress toward an injury and incident free workplace.

1.4 DEFINITIONS

- A. The term “Owner’s Safety Representative” (OSR) as used throughout the Contract documents shall refer to any construction safety professional who is acting on behalf of the Owner. This will include but may not be limited to the UT Arlington Safety Inspector.
- B. 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 his ability to solve or resolve problems relating to the subject matter, the work, or the Project.*
- C. 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 is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.*
- D. 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 control and is designated by the Contractor as the space where actual construction efforts will be undertaken to execute the work.
- E. 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 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.
- F. The term “worker” as used throughout this Section shall refer to any person who has successfully completed the Project safety orientation.
- G. The term “visitor” as used throughout this Section shall refer to any person who has not successfully completed the Project safety orientation. Visitors shall not be allowed access to the “construction areas” unless they are escorted by a member of the Contractor’s Project Management staff or UTA.
- H. The term “Owner’s Designated Representative” (ODR) as used throughout the Contract documents shall refer to the individual assigned by the Owner to act on behalf, and to undertake certain activities as specifically outlined in the Contract.

1.5 PURPOSE

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- A. The Contractor shall bear overall responsibility for all aspects of safety at the Project.
- B. The Contractor shall, at all times, provide adequate resources, equipment, training, and documentation to:
 - 1). Assure compliance with the requirements of this Section and all Federal, State, and local statutes, standards, and regulations.
 - 2). Assure a safe work environment at the Project.
 - 3). Instill a culture for safe behavior in all supervisors and workers.
 - 4). Ensure a universal understanding that safety and health issues take precedence over all other considerations at the Project.
- C. In any circumstance where this Section differs from, or conflicts with any statutory requirement, the more stringent shall apply.
- D. The Owner reserves the right to have any manager, supervisor or worker removed from the Project for disregarding Project safety requirements. Removal of Project Superintendent may result in work stoppage that will remain in effect pending approval of a suitable replacement.
- E. The Owner 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.
- F. The Owner 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.

1.6 RELATED DOCUMENTS

- A. In addition to specific references indicated herein, the Contractor's attention is also directed, but not limited, to the following Publications and documents:
- B. Current edition of Uniform General and Supplementary Conditions for The University of Texas System Building Construction Contracts (UGC);
- C. Owner's Special Conditions;
- D. Current edition of OSHA Safety Standards for the Construction Industry, CFR Title 29, Part 1926.

PART 2 – PRODUCT

2.1 CONTRACTOR PROJECT SAFETY MANAGEMENT PLAN (PSMP)

- A. The Contractor shall develop, implement, and furnish adequate resources for the PSMP.
- B. The objectives and intent of the PSMP shall include, but not be limited to:
 - 1. Anticipating, plan, control and coordinate Work to eliminate hazards, minimize risks, and aggressively manage losses involving injuries or property damages;
 - 2. Ensuring education and training for best safety practices by all workers and holding supervisors accountable for safety performance;
 - 3. Documenting and recording preventative measures, establishing inspection, notification, and investigation requirements, and measuring results of performance;
 - 4. Providing protection for adjacent property and safety for the public.
- C. The Contractor shall submit upon request a copy of the PSMP to the Owner.
- D. Beginning with the Notice to Proceed for Construction Services, the Contractor shall formally evaluate and update the PSMP and its supporting documentation at least semi-annually to assure effectiveness and continuous improvement. The Contractor shall submit an evaluation report to the ODR no later than 15 calendar days after completion of the evaluation.

2.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

- A. PPE shall be required for all workers in construction areas. The following items shall be furnished, inspected, and maintained by the Contractor.
- B. Hard Hats shall be ANSI stamped (Z89.1-1997, Type I, Class E, G and C).
- C. Eye Protection (Safety Glasses) shall be ANSI stamped Z87. If a worker wears prescription glasses (plastic lens only) that are not marked Z87, the Contractor shall furnish goggles or safety glasses that are designed to fit over another pair of glasses.
- D. Vests shall be reflective traffic vests and shall be worn outside of all upper body clothing.
- E. 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 vests for Owner Representatives who may visit the Project.
- F. Hand Protection, Hearing Protection, Respiratory Protection, Fall Arrest Equipment, and other PPE shall all be furnished as required to comply with this Section and OSHA Standards.

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2.3 MEDICAL EQUIPMENT

- A. The Contractor shall purchase and maintain at least 1 First Aid Kit on the Project site as per ANSI Z308.1 and it must be accessible whenever work is ongoing.
- B. The Contractor shall purchase and maintain at least one Automatic External Defibrillator (AED) unit on the project site. The unit shall be located in Contractor project site office with appropriate signage and must be accessible whenever work is ongoing.
- C. A minimum of 2 Contractor employees, with current certifications for CPR/Emergency First Aid and for use of the AED, shall be at the Project whenever work is being performed.

2.4 PROJECT SAFETY SIGNS AND POSTERS

- A. 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 and shall contain only the following text:

ALL VISITORS, DELIVERY PERSONS, AND NEW WORKERS MUST REPORT TO THE PROJECT OFFICE BEFORE 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

COPIES OF MATERIAL SAFETY DATA SHEETS (MSDS) 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.

- B. In addition to the above sign, the Contractor shall post a sign at every point of entry to the project site clearly identifying 24-hour emergency point of contact information for the project.

PART 3 – EXECUTION

3.1 POSITIONS, ROLES AND REQUIREMENTS FOR PROJECT SAFETY

- A. Contractor's Project Superintendent shall have overall responsibility for all aspects of Project safety and is required to maintain a safe work environment at the Project.

3.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

- A. The following PPE requirements shall apply to all workers in construction areas. Contractor may declare specific lunch break areas within construction areas to be exempt from PPE requirements. Markings for these spaces shall be clearly defined and signage shall be legible and prominently posted in language that all workers can read.
- B. 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 Contractor.
- C. Eye Protection (Safety Glasses) shall be worn 100% of the time in construction areas. Additional eye and face protection shall be provided by employers for any employee when work operations create an exposure to airborne particles, chips, sparks, radiation, etc.
- D. High visibility vests or high visibility upper body clothing shall be worn when the worker's primary work activities are subject to vehicle traffic and/or heavy equipment movement 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 will adhere to this requirement. All other activities can be considered by the Contractor with concurrence by the ODR on a case by case basis.
- E. Hearing Conservation and Protection shall meet or exceed OSHA requirements. Except for suppression of sound level energy, no devices or equipment that may hinder ability to hear an alarm shall be placed in or over the ears. Portable radios, cell phones and other electronic devices used for any reason except work related communication and emergency assistance are prohibited in construction areas.
- F. Hand Protection that is designed to counter the exposure shall be furnished to all workers who must handle

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materials or equipment with sharp edges, slick surfaces, chemically reactive components or extreme temperatures.

- G. Respiratory Protection shall meet or exceed OSHA requirements.
- H. Foot Protection (Work Shoes) must have soles with a resistance to punctures, uppers that cover the entire foot and ankle and offer resistance to 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 shall be provided when work operations create impact exposures.
- I. Other OSHA required PPE shall be furnished as appropriate for specific tasks.
- J. Other clothing:
 - 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.
 - 2. Pants shall be full length. Holes must not be large enough to catch on snag points or offer measurable amounts of exposed skin.

3.3 CONTRACTOR RECORDS, INVESTIGATIONS AND REPORTS

- A. Incident Notification, Investigation and Reporting Procedure
 - 1. The Contractor shall immediately notify the ODR of any incident. All Near Miss incidents, First Aid injuries, High Severity Safety Inspection Observations, and other such incidents as directed by the Owner shall be documented. All incidents shall be investigated. Contractor and involved Subcontractors shall discover all obtainable and measurable information and reach conclusions that cite both the contributing factors and the root cause(s). Contractor shall lead the efforts and follow a structured incident investigation program (Root Cause Analyst or equivalent). 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 and shall include qualified senior management, line management, and safety consultants as the circumstances warrant. UTA reserves the right to participate in incident investigations. Contractor shall prepare and submit reports that will allow UTA and Subcontractors to understand findings and planned changes to the PSMP.
 - 2. Incident Investigation Report
 - a). Contractor shall prepare a two-stage written investigation report for each incident that involves any questions about facts, details or causes.
 - b). The first stage of the report shall provide all of the collected facts and corroborated statements that have a bearing on the understanding of all that happened before, during and after the event. This piece of the report shall be submitted to the ODR as soon as possible, but not less than 2 days following the event.
 - c). The second stage of the report shall provide 3 parts. The first part shall include a time line that contains all of the linked components in the chain of events that set up the incident. The second part shall include a description of all the apparent surface causes and underlying root causes that enabled the incident to occur. The third part shall describe all of the apparent weakness(s) in the PSMP, modification(s) that might have prevented or reduced the severity of the risk, and a commitment to adopt and engage the modification(s) as a new best practice. This piece of the report shall be submitted to the ODR as soon as possible, but not more than 2 weeks following the event. If forensic studies or consultant reports will not be available within 2 weeks, those factors shall be attached as addenda at a later date and the modification(s) to the PSMP may then be further adjusted.
- B. Demolition
 - 1. Maintain clearly marked and well-illuminated egress paths at all times.
 - 2. Maintain barricades and signage that isolates impacted areas to prevent entry by other trades and members of the public.
 - 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 10'. Items that may be caught by wind and carried horizontally shall never be allowed to drop freely for any distance. When items are allowed to be dropped freely, 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 warning tape placed at least 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 10' or is capable of sailing horizontally shall be contained within a chute or controlled by hoist.
 - 4. Unless the Contract documents clearly call for it, the use of explosives for demolition is prohibited.

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C. Electrical Power

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. Welding equipment that also serves as a generator shall not be used for both purposes at the same time.
2. All strings of temporary lights shall be fully lamped and guarded regardless of height, and shall be continuously maintained. Adequate and consistent levels of illumination for the work operations in each area must be maintained at all times
3. All receptacles and switches shall have trim plates installed before they are energized.
4. All power distribution panels shall have full covers installed before primary power is brought into the panel. When energized panels are located in open areas, covers shall be locked except when an electrician is present. 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 wedged to stay open. Warning signs shall be placed in conspicuous locations.

D. Excavations

1. 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 72 hours in advance. "Potholing" and/or hand digging shall be required within 3 horizontal feet of "located" centerlines, and in areas where knowledge is lacking.
2. The "toe" of spoil piles that are less than 4' in height shall be at least 2' from the edge of any excavation. Spoil piles greater than 4' in height shall add 1' of distance from the excavation for every additional foot in height. Spoils shall be managed to prevent airborne dust.
3. Trench excavations should be backfilled at the end of each shift.
 - a). When an excavation cannot be backfilled in the same day as it is created, a highly visible barricade shall be erected at a minimum distance of 6' from all approachable edges. All portable means of access shall be removed at the end of each workday.
 - b). Earth ramps that are to be used for walking access shall not exceed 20% in grade slope. Steeper slopes shall be gate controlled for equipment only, and alternate access shall be added for pedestrian traffic.

E. Fall Protection and Prevention

1. Any walking/working surface that is equal to or greater than 6' above surrounding areas shall present an unacceptable fall exposure unless it has all edges (side and ends) protected by an attached guardrail system, fall arrest netting, or is blocked off by an adjacent wall. An adjacent wall shall be continuous, structurally sound, and at least 39 vertical inches above the walking/working surface, and within 8 horizontal inches from the open edge.
2. Any employer that will create a fall exposure equal to or greater than 6' shall submit a detailed plan and/or 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 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 recognized exemptions/exceptions are as follows:
 - a). Allow work from portable step ladders as long as a "three point" contact is maintained, the ladder is 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 12' for this exemption/exception.
 - b). Allow work from an extension or straight ladder if the ladder is secured from movement, "3 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.
 - c). Work may be performed without fall arrest measures while standing on an elevated walking/working surface at a distance of at least 6 horizontal feet from an unprotected edge. The unprotected edge shall be clearly identified by posted signage and a warning line erected continuously at a 6' setback distance. When work is to be performed from a ladder placed near the warning line and the ladder can fall toward the leading edge, the safe distance from an unprotected edge shall increase 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 capture arrangements prior to entry.
3. Covers placed over pier holes, and roof or floor openings shall be physically secured and clearly marked

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with warning message "HOLE COVER - DO NOT REMOVE." Any cover that is too small for legible wording shall be bright orange or red.

4. Job built ramps and bridges shall be surfaced with an abrasive (non-skid) material. Ramps shall comply with ADA slope requirements.
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.

F. Fire Protection

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 3 stories in height, fire sprinkler standpipes shall be completed and charged to within 2 stories, or 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 shall be adequate in number and description to comply with OSHA declared limits for egress points, floor area and travel distances. They shall be situated in highly visible locations mounted at a height to facilitate ease of inspection and retrieval for use.
2. All fire extinguishers that are task specific shall be inspected and furnished in advance by the employer that will be conducting the work that requires such firefighting provisions. The fire extinguisher shall be situated within sight of and less than 25' from the perimeter of the task operation. All work that includes burning or welding of any type shall be defined as "hot work" and shall require the presence of a fire extinguisher, at least 1 fire watcher, and a Hot Work Permit. Refer to WELDING AND BURNING for additional details.

G. Housekeeping

1. The Contractor and all Subcontractors shall "effectively" clean the Project site continuously throughout each workday. "Effective clean-up" shall adequately address all of the following housekeeping issues:
2. All construction waste, trash, and debris shall be placed in designated receptacles. No dumping of chemicals, paints, or other hazardous materials is allowed on campus. Glass bottles shall not be permitted on the Project site.
3. 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.
4. 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.
5. Secure and effectively cover all materials on roofs or elevated levels that may be displaced by wind.
6. Restore all signs, barricades, fire extinguishers, guardrails, gates, etc. to proper locations and sound condition.
7. Properly store and secure all flammable and combustible liquids and gases.
8. Collect and place all cut-off or waste pieces of rolling stock, as they are created, into waste or scrap containers.
9. 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.
10. 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 lb. body being dropped from a fall of 4'.

H. Ladders

1. Every elevated platform (slab, deck or work surface) shall have at least 2 remote means of access/egress when the platform is populated by more than 3 persons. As the population rises above 25, additional means of independent access/egress shall be required. A double cleated ladder may only serve as 1 independent means of access/egress.
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. Portable aluminum ladders shall be prohibited.
4. Extension ladders, straight ladders and job-built ladders shall be secured from movement at the top and the bottom.
5. Physical barricade offsets that force at least one change in walking path direction shall be constructed within a 6' radius around the upper access points for any ladder's step off landing area.
6. All elevated landings shall include a rope hoist (manual or motorized) near the ladder's upper-most access point.
7. Manufactured portable (step and extension) ladders shall display ANSI heavy-duty rating (Class I-A) and

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be inspected daily for condition and set up.

I. Petroleum-Based Fuel Operated Equipment

1. Where possible, equipment operator cabs shall be locked during non-working hours. Only equipment operators and direct supervisors shall have access to keys.
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 Contractor shall be responsible for monitoring air quality at the Project. This includes generators and compressors as well as mobile equipment.
3. 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 are capable of producing air pressure greater than 30 lbs. per square inch.

J. Public Protection

1. The project boundary perimeter shall be secured from public intrusion by fencing and locked gates.
2. "Attractive nuisance" items such as tower cranes, tall ladders, fire escapes, large excavations, etc. shall require additional and separate security measures.
3. Contractor shall challenge any visitor or member of the public who attempts to enter a construction area without an authorized escort.
4. All visitors to the project must abide by all project safety requirements.
5. 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.

K. Sanitary Facilities

1. The Contractor shall provide at least 1 toilet facility per 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°, 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.
2. On all projects that are 4 stories in height or greater, sanitary facilities shall be furnished on ground level and every 3 level (maximum 45 vertical feet).
3. The use of any Owner facility is strictly prohibited unless by written consent of the ODR.

L. Scaffolding

1. Each ground-supported scaffold shall bear a shift inspection tag (initialed 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 outrigger as well as the work platform. The Contractor shall purchase and control a universal system to be used by all employers at the Project site. Training and documentation shall be required for all workers on the Project who will climb onto any kind of scaffolding. Contractor shall furnish tags, and ensure that all applicable workers understand the procedure. This requirement shall apply to all scaffolds.
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 be visible for inspection at all times. Diagonal braces shall be included in every scaffold section as is practically possible. Every work level shall be fully planked and kick-off protection shall be included along open sides and ends. Overhead protection shall be constructed where walk-through passages are allowed. Mudsills shall be at least 2"x12" in 1' lengths with foot plate centered and nailed in 2 corners.
3. Brakes on rolling scaffolds shall be secured at all times, except when the scaffold is being moved. Workers shall not be allowed on the platform when a scaffold is being moved.

M. Stairs

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 ¼" below the threshold and the unobstructed (standing) area outside the swing radius shall be no less than 22". Fire & 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.
2. For incomplete permanent stair sections, at least the bottom 4 risers and upper entry points for each floor shall be physically blocked 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.

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N. Project Service Water

1. Potable Water: Potable water shall comply with city and community health requirements.
2. Non-potable Water: Water storage containers, hose bibs and faucets shall be posted in English and Spanish "DANGER – DO NOT DRINK."

O. Welding and Burning

1. Splices, taps, welds and/or burning operations that may produce sparks, slag or hot scraps shall require "Hot-Work" or "Burn" Permits. "Burn Permit" forms shall be specified by UTA Environmental Health & Safety (EH &S). The Contractor shall submit completed permit form in advance of the Work to EH&S for approval. A copy of the approved Burn Permit shall be posted in the vicinity of the work. The Contractor shall ensure that all Hot Work will be provided with at least a fire watcher(s), fire extinguisher(s), and smolder watch. If the work produces intense light, permit shall also contain requirement for screens to protect others from flash burns.
2. Oxygen and fuel gas cylinders shall not be stored together, including on bottle carts. At the end of any cutting operation and/or any shift, bottles must be removed from carts and taken to OSHA prescribed storage arrangements. Hoses and gauges shall be removed and caps restored onto cylinders.
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.
4. Fire watchers shall be posted at every operation that produces sparks, flames or sufficient heat to create an ignition or to fall onto another person. 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 watch") is over. When sparks, slag, or fire may fall to a different level, a separate watcher shall monitor each level directly below the work (including exterior locations).
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.
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.
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.

END OF SECTION 01 35 23