

HAZARD ASSESSMENT/ABATEMENT PROGRAM

GENERAL CONTRACTOR:

Hanover R.S. Construction, LLC

PROJECT:

Hanover Park Place

PROJECT MANAGER:

Steve Lane

Cell: 813-918-0335

SUPERINTENDENT:

Scope of Work

Provide material and labor to install plumbing system which includes Sanitary, Storm, Domestic water, Pipe insulation, Sump pumps, Water heaters, Fixtures, for the Project known as Hanover Perimeter Town Center.

General Requirements

Miller Mechanical Contractors and Engineers will provide and maintain the following Hanover R.S. Construction, LLC requirements:

- Company Safety Program
- Certificate of Insurance
- Job specific Hazard Communication Program
- Job specific Hazard Assessment/Abatement Program
- List of competent person(s) for each task
- Safety start up meetings, approximately thirty days prior trade work, starting with the project superintendent and Project Manager in attendance

Location

The project is located at 475 Buckhead Ave. Atlanta, GA, 30328

Fall Protection

- Personnel exposed to a fall hazard of six feet or greater shall be protected from injuries related to a fall as required by the referenced CFR section. CFR 29-1926.500. This protection could be in several forms.
- Engineer the hazard out of your work or change your work plan to a different time when the hazard is no longer there or minimize the exposure through pre-fabrication of the work. Or, eliminate it all together by covering it as an example.
- Have safety rails and toe boards installed per the CFR to prevent persons from falling.
- Utilize a combination of the warning line and personal fall arrest system.
- Use a fall arrest device to protect the person from impact injury should they fall. The maximum free fall distance for a fall arrest system is 6'. The attachment point for the lanyard must be capable of withstanding a force of 5400 pounds for each person who is attached.
- If needed use of a scaffold in a manner not consistent with the scaffold manufacturer's instructions shall not be permitted. All scaffolds shall be provided with a ladder or other suitable means of egress and persons shall face the ladder at all times while ascending and descending the ladder.

- Scaffold shall be complete with mid-rails, hand-rails, toe-boards and a fully planked deck otherwise 100% tie-off is required. Tie-off is required for the erection and dismantling process of scaffolding where persons are exposed to a fall hazard of greater than six feet.
- All scaffolds shall be monitored and inspected by a competent person during erection, dismantling and use. Scaffolds shall be inspected daily.
- All roof drains to be installed in a manner to avoid entry into leading edge area or with approved fall protection

Ladders

- Use of a ladder in a manner not consistent with the ladder manufacturer's instructions shall not be permitted.
- Persons shall face the ladder at all times while ascending and descending the ladder.
- Step ladders shall be fully opened with support arms locked into position.
- Extension and straight ladders shall extend at least three feet above the level to be reached. Extension and straight ladders shall be tied off at the top. Where ladders cannot be tied off, a second person may be needed to hold the ladder.
- All ladders shall be set on a firm and level surface.
- If it becomes necessary to work on a ladder over a work or traffic area, which might expose others to tools or materials falling from the ladder, the area below the ladder shall be barricaded.

Or

• Tools and materials shall be tethered to prevent the tools or materials from falling to the level below.

Eve and face

- ANSI Z87 approved eye protection is required 100% while on project.
- ANSI approved face protection is required when the face could be exposed to flying particles. Examples might be grinding, abrasive wheel chop saws, etc.
- Other eye and face protection will be required for soldering and welding operations to protect against radiant energy.

Head

• An ANSI approved hard hat is required at all times when in the construction area. Your hard hat should be inspected daily for damage or defects.

Feet

- A hard sole leather upper work shoe is required foot protection when in the construction area. This will provide limited but adequate protection against general construction hazards to the feet. Additional foot protection may be required if the foot is subject to a crushing hazard. In this case a steel toe work shoe or protective shoe covers will be required to protect against injury.
- Florescent safety vests required by all personnel on site during excavation and when employees are exposed to vehicle / equipment traffic.

Material Handling Equipment

Competent operators only. Daily pre-operation inspection of equipment. No persons shall be permitted under suspended loads. Back-up alarms shall be installed and operational on all directional equipment. On multi-directional equipment such as Track driven excavation equipment, the alarm shall sound during movement in all directions. Some situations will require a flagman to provide instructions to the operator. Clear verbal or visible signals shall be used. Safe speed shall be observed

while moving around the project. Special attention shall be given to foot traffic areas. Operators shall know the weight of the intended load and observe the respective lift capacity charts.

• Do not use particleboard to cover openings. Covers should be strong enough to support any potential load. They should be anchored in place to prevent displacement and they should be clearly marked with the word "HOLE".

Excavations

- Compliance with all excavation requirements. Dig permit must be obtained if required.
- A person Competent in Excavation shall supervise the excavation activity, which includes daily inspection of all excavations.

Egress

- For all excavations, over 30" i.e. (2) 6" Sanitary Tail outs, (2) 16" Storm Tail outs (1) 6" Storm Tail Outs (2) 8" Storm Tail outs (1) 4" Storm Tail outs which need to be entered by personnel, a safe means of access and egress shall be provided such as a stairway, ladder or ramp. A safe means of egress shall be provided at intervals, which would limit the personnel from having to travel more than 25' to reach an egress point.
- Water shall not be permitted to accumulate in the excavation in which personnel must enter.

Cave-in

- The spoil pile shall be placed at least two from the side wall of the excavation.
- Minimum slope on excavations over 4' in depth shall be 1' rise to 1-1/2' run.
- Other forms of protection against cave-in may be utilized such as shoring or a trench
 box to eliminate the need for benching or sloping. If these or similar items are used,
 personnel shall not be permitted outside of the protected area of the shoring even for
 access or egress.

Vehicle Traffic

• In areas where equipment or vehicle traffic exists, a barrier shall be in place to keep vehicles and equipment away from the excavation. This barrier could be a large spoil pile, stop logs or other materials, which would serve the same purpose.

Equipment

- Stay clear of equipment while in operation. Maintain clear communication with operator. Comply with all PPE requirements. The equipment may be used to lower tools and/or materials into the excavation. No persons shall be permitted under the suspended loads. If necessary, a tag line will be used to control the load.
- Proper rigging equipment shall be used. Only persons competent in rigging shall perform and/or supervise rigging operations.

Chemicals

Materials

- If not already on file a MSDS (Material Safety Data Sheet) shall be in hand upon receipt of any hazardous material. The MSDS shall be read and complied with. Installed in the MSDS binder and logged and transmitted to others accordingly.
- Flammable materials shall not be stored in the building unless in an approved FS cabinet.
- Chemicals shall be used for the purpose in which they were intended and the requirements of the MSDS shall be strictly adhered to.
- Along with the MSDS, factory installed, labels shall be maintained on the container.
 If the label becomes disconnected or damaged the container must have a label placed on it immediately indicating the contents of the chemical it contains. The same shall apply for generic containers such as those bought for PVC operations. Portable containers (those in small quantities which are filled, used and emptied by the same person in one shift) are not required to have a label as long as the container it was filled from is properly labeled.

Stocking Floors

- Some situations may require the removal of fall protection rails, cables, etc.. Persons exposed to a fall hazard of six feet or more shall be protected from such falls. Fall protection must be provided for all persons within six feet of the hazard. In extended fall exposure situations in place to prevent displacement and they all unprotected person at least six feet from the fall hazard. The barricade shall have appropriate signs on it and shall be removed and disposed of properly when finished with it. The fall protection rails, cables, etc. that had been removed to facilitate the lift shall be back in place prior to removing the barricade.
- Un-stable loads shall be secured during transit and lifting. Utilize loading zones where available. Loading of materials in other areas may require a spotter or barricades to keep personnel from under the load. Keep load low to ground until reaching the lifting point. Assure the machine is level prior to lifting. For forklifts a certified operator is required.

Soldering

- A 10# ABC fire extinguisher shall be in the immediate work area. A fire-watch shall be present during the welding operation.
- Flammable and combustible materials shall be removed from the welding area.
- Welding blankets shall be utilized to protect materials and equipment, which cannot be removed from the immediate welding area.
- Welding screens shall be utilized when welding or grinding is to be performed near traffic areas or when in close proximity to others.
- All compressed gas cylinders shall be secured in an upright position. When not in use, regulators shall be removed and cylinder caps shall be installed. Gas bottles or fuels shall be separated by at least 20' from gas bottles containing oxidizers.
- Proper PPE shall be utilized to protect persons from various burn hazards.
- Proper shades of safety glasses shall be worn to protect employees from radiant energy and molten splash hazards when soldering or brazing.

• General or point ventilation may be required to maintain a safe atmosphere in the work area.

Tools

- GFCI's (Ground Fault Circuit Interrupters) shall be utilized at the power source.
- If the power source is not all ready GFCI protected a portable GFCI shall be plugged in to the power source ahead of all tools and cords.
- Tools and cords shall be inspected before each use. Any tool found to be defective or damaged (i.e.; frayed cord, missing ground prong, etc.) shall be immediately removed from service, tagged and sent for repair.
- Cords shall be used in a manner that will pose a trip hazard. They shall not be placed in equipment traffic areas.
- Extension and tool cord repairs are limited to removing the cord cap, cutting the cord back to the damaged area, replacing the cap and inspecting the cord for other damage. Double insulated tools used shall be clearly marked as such with words or a Square in a Square symbol to indicate double insulated.

Overhead Work

Falling materials

- If the material and/or equipment were heavy enough to require lifting equipment than it is more than likely heavy enough to cause serious injury should it fall onto or near someone. Therefore, either a spotter or barricades shall control traffic below the lifting area.
- For materials light enough to be installed without the assistance of medical lifting equipment, the hazard of serious injury from falling materials is minimal.
- Even light tools and materials can become a serious safety hazard when the material falls from 12' or more above the working elevation. When working at heights above 12' the same requirements apply for a spotter and/or barricades as for heavy materials.
- Even light tools and materials installed at low elevations can be extremely hazardous. If the material and/or equipment has sharp edges or pointed ends. Care shall be taken to protect other personnel from accidental contact with such materials if the sharps and points cannot be covered to protect all.
- In addition to the above, special precautions shall be taken to protect floor openings where risers are being installed in multi-story buildings which could allow materials being installed to fall to floors below through the riser openings. Covers and/or barricades shall be provided to protect all.