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Fall Protection Plan

JBI Construction Fall Protection Plan Last Revised 01/06/20

I. PURPOSE

This plan has been made to establish controls and procedures whenever an employee of JBI Construction Inc. is/are working at elevated heights greater than six(6) feet. This plan will help minimize the risk of serious injury or death, and help identify areas that protections will be needed. This plan is to ensure employee safety while working at heights and has been made to conform to OSHA Standards set in Subpart M.

II. SCOPE

This plan establishes the minimum procedures and requirements that should be used by employees that are working at heights greater than six(6) feet above the walking/working surface level.

III. ROLES AND RESPONSIBILITIES

This section describes the responsibilities of JBI Construction Inc. employees:

A. The safety manager, onsite foremen, and competent person are responsible for overseeing that this plan is followed and enforced. These individuals will also be responsible for the following but not limited to.

- 1. Responsible for evaluating the job and deciding what type of personal fall protection is required.
- 2. Re-evaluate the procedures and protection being used when hazards or conditions change that could place an employee in danger.
- 3. Train employees in the proper use of fall protection and its importance.
- 4. Monitor employees to make sure they are in compliance with local, state and federal fall protection laws.
- 5. Monitor employees for proper use of fall protection.
- B. The employees performing the work are responsible for the following:
 - 1. Understanding the requirements of this plan.
 - 2. Inspecting all parts of their fall protection (i.e. harness, clips, D-rings, lanyards, etc.) before each use.
 - 3. Reporting any unsafe acts or conditions to the safety manager or supervisor immediately.
 - 4. Report all falls and injuries that result from falls.
 - 5. Turn over any equipment that has been used in a fall to the Safety Manager for disposal.

IV. PROCEDURES

This section tells about the different types of fall protection and the proper procedure that accompany them.

Each JBI Construction Inc. employee that will be exposed to fall hazards will be trained in these procedures. It is the employee's responsibility to inform the safety manager or foreman if they feel they are at risk or that the fall protection will cause greater harm. At this point the safety manager will discuss and re-evaluate the job with the foreman/employee before the work is continued.

A. General Fall Protection: whenever possible standard fall protection systems will be utilized and will be followed as stated in OSHA Subpart M(1926.502)

- 1. Guardrails and handrails will be utilized where employees are exposed to potential falls from unprotected sides. Guardrails and handrails must meet the following requirements.
 - a. Toprails/midrails must be at least $\frac{1}{2}$ " nominal diameter or thickness to prevent cuts and lacerations
 - b. If wire rope is used for top rails, must be flagged at 6' intervals with high vis material
 - c. If steel, plastic, synthetic rope used for top rails or midrails must be inspected to ensure strength and stability
 - d. Top edge height of toprails, equivalent guardrails must be 42" +/- 3" above walking/working surface
 - e. Screens, midrails, mesh, intermediate vertical members, or equivalent intermediate structural members must be installed between top edge of guardrail system and walking/working surface when there is no wall or parapet wall at least 21" high. Should be capable of withstanding a force of at least 150lbs applied in any downward or outward direction at any point along midrail or other member
 - g. Midrails when used installed height midway between top edge of guardrail and walking/working level. When screens, mesh used, must extend from top rail of walking/working surface level along the entire opening between top rail supports. Intermediate members (i.e. balusters) when used between posts must not be more that 19" apart
 - h. Must be capable of withstanding a force of 200lbs applied within 2" of top edge in any outward or downward direction. When 200lbs test is applied in a downward direction, top edge of guardrail must not deflect to a height less than 39" above walking/working surface
 - i. Guardrails must be smooth surface to prevent workers from punctures or lacerations to prevent clothing from snagging. Ends of toprails and midrails must not overhang terminal posts, expect where overhang does not constitute a projection hazard.

- 2. Personal Fall Arrest Systems: Personal fall arrest systems are used to arrest an employee in a fall from a working level. These systems are required to meet the following requirements and will include anchorage, connectors and body harness.
 - a. Must be rigged so that employee can neither free fall more than 6' nor contact any lower level. Bring employee to a complete stop and limit maximum deceleration distance an employee travels to 3.5'. Strength to withstand twice potential impact energy of employee free falling a distance of 6' or free fall distance permitted by the system whichever is less.
 - b. Must be inspected prior to each use for wear, damage, deterioration. Defective components must be removed from service
 - c. Dee-rings and snaphooks minimum tensile strength of 5000lbs. Proof tested to a minimum tensile load of 3600lbs without cracking, breaking, or suffering permanent deformation
 - d. Snaphooks must be compatible with connecting device, be locking type. Inspect locking mechanism to ensure it locks securely after attachment to harness and anchorage point.
 - e. Self retracting lifelines and lanyards that automatically limit free fall distance to 2' or less capable of sustaining a minimum tensile load of 3000lbs applied to device with lifeline or lanyard in fully extended position
 - f. Self retracting lifelines and lanyards that do not limit free fall distance to 2' or less, rip stitch lanyards, and tearing and deforming lanyards must be capable of sustaining a minimum tensile load of 5000lbs applied to device with lifeline or lanyard in fully extended position
 - g. Anchorage must be designed, installed, used under supervision of a qualified person, as part of a complete personal fall arrest system that maintains a safety factor of at least two (ie capable of supporting at least twice the weight expected to be imposed upon it). Anchorage must be independent of any anchorage being used to support or suspend platforms and must be capable of supporting at least 5000lbs per person attached. Lanyards and vertical lifelines must have a minimum breaking strength of 5000lbs
- 3. Covers: Covers are used to prevent falls into holes on working surface. Covers need to meet the follow criteria.
 - a. Covers located in roadways and vehicular aisles must be able to support at least twice the maximum axle load of the largest vehicle to which cover might be subjected. All other covers must be able to support at least twice weight of employees, equipment and materials that may be imposed on cover at any one time.
 - b. To prevent accidental displacement resulting from wind, equipment, or worker activities, all covers must be secured. All covers must be color coded or bear markings "hole" or "cover". See additional requirements in 1926.502(i)

V. FALL HAZARDS AND CONTROLS

JBI Construction Employees have a few different areas where fall hazards exist. The following are locations and controls required.

A. Excavations: For excavations 6' or deeper that are NOT readily seen because of plant growth or other visual barrier; Each employee at the edge of an excavation 6' or more deep must be protected from falling by guardrail systems, fences, barricades or covers. Requirements specified in 1926.501(b)(7)

- 1. Walkways at Excavation if walkways are provided to permit employees to cross over excavations, guardrails are required on walkway if fall would be 6' or more to lower level
- B. Bridge retaining walls: For elevated work required at bridge retaining walls. Employee shall complete work extended out over the unprotected edge of the bridge. This is to be completed by use of boom lift. Employee is required to don full body harness, lanyard, and connectors with point of anchorage to the lift as designed by manufacturer of equipment.

VI. TRAINING REQUIREMENTS

All JBI Construction Inc. employees that will, or have the potential to, be exposed to falls will be trained on this plan and procedures. Items included in training:

- A. How to properly use, and maintain fall protection devices.
- B. How to inspect equipment before use and how to identify worn or damaged equipment.
- C. Identify hazards and what to do when a hazard is noticed.
- D. Proper emergency procedures should an accident occur.
- E. Retraining will occur if:
 - 1. There is reasonable suspicion that an employee is not adequately trained.
 - 2. If employees are found not using required fall protection devices, or using them improperly.
 - 3. New hazards appear.
 - 4. A major incident or accident occurs.
- F. All training will be documented. Documentation shall include:
 - 1. Topics discussed.
 - 2. Training location.
 - 3. Trainers name.
 - 4. Date Training occurred.
 - 5. The name of employees being trained.
 - 6. Employee signatures.