Safety programs are most effective when they are designed to meet the specific and individual needs of each company. This safety program does not constitute a complete and comprehensive safety program. The intent of this safety program is to encourage the development of individual company specific program by providing a sample format and suggested wording for program components.

This safety program is not intended to be an exhaustive treatment of the subject, and should not be interpreted as precluding other procedures which would enhance the safety of your place of work or project sites.

Midwest Builders’ Casualty makes no guarantee, warranty or assurance, expressed or implied, that this safety program will insure compliance or is in compliance with requirements of any OSHA regulation or any other law or regulation dealing with safety as it pertains to employees or the safety regulations as it pertains to hazardous substances and/or the work environment.
**SCAFFOLDS**

**STATEMENT OF POLICY**

It is the policy of (your company name) to provide safe working conditions on all scaffolding that employees will be erecting or working from. It is important that every employee recognizes his or her responsibilities as it relates to erecting or working from scaffolding. All rules and guidelines must be followed as set forth in this program.

**General**

1. Each scaffold and component must be able to support 4 x the maximum intended load.
2. Each platform on all working levels must be fully planked.
3. The front edge of all platforms shall not be more than 14" from the face of the work. Unless guardrails or personal fall arrest system is used.
4. The maximum distance from the face for outrigger scaffold shall be 3 inches.
5. Platforms that are 10' or less shall extend at least 6" but not more than 12" past support.
6. Platforms greater than 10' shall not extend more than 18" past the support.
7. Platforms that are overlapped to create a long platform shall be done only over supports and extend at least 12" unless nailed together to prevent movement.
8. At points of a scaffold where platforms change direction. Any platform on a bearer at other than a right angle shall be laid first, and platforms which rest at right angles over the same bearer laid second.
9. Scaffold components manufactured by different manufacturers shall not be intermixed unless scaffold structural integrity is maintained by the user.
10. Wood platforms shall not be covered with paint.

**Access**

1. When scaffold platforms are more than 2 ft. above or below a point of access a ladder of same type must be used. Cross braces shall not be used as a means of access.
2. Portable, hook on ladders shall be positioned so as not to tip scaffolding over.
3. Portable, hook on ladders shall be positioned so their bottom rung is not more than 24" above supporting level.
4. Portable, hook on ladders that are more than 35 ft. shall have a rest platform at least every 35 ft.

**Stairtowers**

1. A stairrail consisting of a toprail and a midrail shall be provided on each side of scaffold stairway.
2. Stairrail system and handrails shall be surfaced to prevent injury to employees and prevent snagging of clothing.
3. Handrails, and toprails that are used as handrails, shall be at least 3" from other objects.
4. A landing platform at least 18" long shall be provided at each level.
5. Effective September 2, 1997, access shall be provided where feasible for employees erecting or dismantling a scaffold.
6. Hook on or attachable ladders shall be installed as soon as scaffold erection has progressed to a point that permits safe installation and use.
7. Cross braces on tubular welded frame scaffolds shall not be used as a means of access or egress.
**Criteria for Supported Scaffolds**

1. Supported scaffolds with height to base width ratio of more than four to one (4:1) shall be restrained from tipping by guying, tying, bracing, or equivalent means.
2. Guys, ties, and braces shall be installed every 20 ft. vertically and 30 ft. horizontal to prevent scaffold from tipping.
3. Scaffold poles, legs, frames must bear on base plates and mud sills or other adequate foundation.
4. Footings shall be level, sound, rigid, and capable of supporting the load without settling or displacement.
5. Unstable objects shall not be used to support scaffold. Unstable objects include barrels, loose brick, or concrete block, etc.

**Criteria for Suspension Scaffolds**

1. All suspension scaffold support devices, shall rest on surfaces capable of supporting at least 4 times load imposed.
2. Counterweights shall be made of non-flowable material. Sand, gravel, and similar materials shall not be used as counterweights.
3. Counterweights shall be secured by mechanical means to the outrigger beam to prevent accidental displacement.
4. Outrigger beams which are not stabilized by bolts or other direct connections to the floor or roof deck shall be secured by tiebacks.
5. Tiebacks shall be secured to a structurally sound anchorage on the building or structure.
6. When winding drum hoists are used on a suspension scaffold, they shall contain not less than four wraps of the suspension rope at the lowest point of travel.
7. The use of repaired wire rope as suspension rope is prohibited.
8. Ropes shall be inspected for defects by a competent person prior to each workshift.
9. When wire rope clips are used on suspension scaffolds, there shall be a minimum of 3 wire rope clips installed, with clips a minimum of 6 rope diameters apart.
10. V-bolt clips shall not be used at the point of suspension for any scaffold hoist.

**Use**

1. Scaffolds and components shall be inspected for visible defects by a competent person before each shift.
2. The clearance between scaffolds and powerlines shall be as follows:

<table>
<thead>
<tr>
<th>Voltage</th>
<th>Insulated Lines</th>
<th>Uninsulated Lines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 300 volts</td>
<td>3 feet (0.9 m)</td>
<td>10 feet (3.1 m)</td>
</tr>
<tr>
<td>300 volts to 50 kv</td>
<td>10 feet (3.1 m)</td>
<td>10 feet (3.1 m) plus 0.4 inches (1.0 cm) for each 1 kv over 50 kv.</td>
</tr>
<tr>
<td>More than 50 kv</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Alternatives**

- Insulated Lines: 2 times the length of the line insulator, but never less than 10 feet (3.1 m).
- Uninsulated Lines: 2 times the length of the line insulator, but never less than 10 feet (3.1 m).
3. Scaffolds shall be erected, moved, dismantled, or altered only under the supervision and direction of a competent person qualified in scaffold erection, moving, dismantling, or alteration.
4. Employees shall be prohibited from working on scaffolds covered with snow and ice or other slippery material.
5. Where swinging loads are being hoisted tag lines or equivalent measures to control the loads shall be used.
6. Debris shall not be allowed to accumulate on platforms.
7. Makeshift devices shall not be used on top of scaffold platform to increase working height.

**Fall Protection**

1. Each employee on a scaffold more than 10 ft. above a lower level shall be protected from falling to that lower level.
2. The employer shall have a competent person determine the feasibility and safety of providing fall protection for employees erecting or dismantling supported scaffolds.
3. Personal fall arrest systems used on scaffolds shall be attached by lanyard to a vertical lifeline, horizontal lifeline, or scaffold structural member.
4. Vertical lifelines, independent support lines and suspension ropes shall not be attached to each other, nor shall they be attached to or use the same point of anchorage.
5. Guardrail system shall be installed along all open sides and ends of platforms.
6. The top edge height of guardrails manufactured before January 1, 2000, must be between 36" and 45". After January 1, 2000 between 38" and 45".
7. When using midrails they shall be installed approximately midway between top edge of guardrail system and platform surface.
8. Each toprail or equivalent member of guardrail system shall be capable of withstanding a force of 100 lbs. for single and two point adjustable suspension scaffolds. All other scaffolding shall be capable of withstanding force of 200 lbs.
9. Midrails, screens, mesh, shall be capable of withstanding a force of 75 lbs. for guardrail system with 100 lb. toprail, and at least 150 lbs. for guardrail system of 200 lb. toprail.
10. Guardrails shall be surfaced to prevent injury to an employee from punctures or lacerations, and to prevent snagging of clothing.
11. Steel or plastic banding shall not be used as a toprail or midrail.
12. Crossbracing is acceptable in place of midrail when the crossing point is between 20" and 30". Be used as toprail when crossing point is between 38" and 48" above working platform.

**Falling Object Protection**

1. Employee shall be protected from falling hand tools, debris, and other small objects through the installation of toeboards, screens, or guardrail system, or through the erection of debris nets, catch platforms that contain or deflect the falling object.
2. The area below the scaffold to which objects can fall shall be barricaded, and employees shall not be permitted to enter the hazard area.
3. A toeboard shall be erected along the edge of platforms more than 10 ft. above lower level.
4. Toeboards shall be capable of withstanding at least 50 lbs. of force.
5. Toeboards shall be at least 3 ½ inches high. They shall be securely fastened in place and not have more than ¼” clearance above walking/working surface.
**Fabricated Frame Scaffolds**

1. Frames and panels shall be braced by cross, horizontal, or diagonal braces, which secure vertical members together laterally. Cross braces shall be such length as will automatically square and align vertical members.
2. Where uplift can occur scaffold end frames or panels shall be locked together vertically by pins or equivalent means.
3. Scaffolds over 125 ft. in height shall be designed by a registered professional engineer.

**Single-Point Adjustable Suspension Scaffold**

1. The supporting rope between the scaffold and the suspension device shall be kept vertical.
2. Boatswains’ chair tackle shall consist of correct size ball bearings or bushed blocks containing safety hooks and properly “eye-spliced” minimum 5/8\(^{\text{th}}\) inch diameter first-grade manila rope.
3. Boatswains’ chair seat slings shall be reeved through four corner holes in the seat; shall cross each other on the underside of the seat; and shall be rigged so as to prevent slippage.
4. Boatswains’ chair seat slings shall be a minimum of 5/8\(^{\text{th}}\) inch diameter fiber, synthetic rope.

**Two-Point Adjustable Scaffold (Swing Stages)**

1. Platforms shall not be more than 36" wide unless designed by a qualified person.
2. Platform shall be securely fastened to hangers by U-bolts.
3. The blocks for fiber or synthetic rope shall consist of at least one double and one single block. The sheaves of all blocks shall fit the size of rope used.

**Mobile Scaffolds**

1. Scaffolds shall be braced by cross, horizontal, or diagonal braces, to prevent rocking or collapse of scaffold.
2. Scaffold casters and wheels shall be locked with positive wheel and/or wheel and swivel locks to prevent movement.
3. Manual force used to move the scaffold shall be applied as close to the base as practicable, but not more than 5 ft. above the supporting surface.
4. Employees shall not be allowed to ride on scaffolds unless the following conditions exist:
   1) The surface the scaffold is moving on is within 3 degrees of level and free of pits, holes, and obstructions.
   2) The height to base width ration of the scaffold during movement is two to one or less.

**Aerial Lifts**

1. Lift controls shall be tested each day prior to use.
2. Only authorized persons shall operate an aerial lift.
3. Belting off to an adjacent pole, structure, or equipment while working from an aerial lift shall not be permitted.
4. Employees shall always work standing firmly on the floor of the basket.
5. A body harness shall be worn and a lanyard attached to the boom or basket when working from aerial lift.
6. Wheel chocks shall be installed before using an aerial lift on an incline.
* If the scaffold that you are using is not listed refer to 1926.451 Subpart L for specific guidelines.

**Training**

1. Each employee of (your company name) that works from a scaffold shall be trained by a person qualified in the subject matter to recognize the hazards associated with the type of scaffold being used.

2. Each employee of (your company name) that is involved in erecting, disassembling, moving, operating, repairing, maintaining, or inspecting a scaffold shall be trained by a competent person to recognize any hazards associated with the work in question.

3. Employees will be retrained if there is a change in the hazards at the worksite, or an employee shows inadequacies in scaffold training.
SCAFFOLD INSPECTION, PERMITTING & TAGGING SYSTEM

Ensuring the work place is a safe environment and free from hazards is everyone’s responsibility. When scaffolding is used on the job site, it must be thoroughly inspected during erection, and immediately after erection is complete. Daily inspection shall be conducted by the competent person pre-shift, throughout the shift. After completion of the scaffold inspection each scaffold shall be tagged according to the hazards associated with scaffold components.

You may use the enclosed form, *Scaffold Erection and Use Permit.*

A three tag scaffold tagging system shall be utilized while on the Speedway project.

- **Green Tag** – The scaffold meets all State and Federal Regulations. It does not require being tied-off while working on the platform.
- **Yellow Tag** – The scaffold is structurally safe. The guardrail system is not complete. A full body harness is required and associates working off of scaffolding must be tied off.
- **Red Tag** – The scaffold is not complete. **DO NOT USE.**

Any alterations or modifications of scaffolding will require a re-inspection by the Competent Person. Only authorized associates are assigned to erect, dismantle, or make repairs to scaffolding.

**GENERAL – All Types of Scaffolds**

Each scaffold and scaffold components shall be capable of supporting its own weight and at least four times the maximum intended load applied or transported to it. (e.g. – 500 lbs load, the scaffold must be designed to hold 2,000 lbs. of pressure).

1. All required equipment should be assembled, checked and inspected before being erected or used.
2. Provide a suitable foundation for scaffolds to prevent setting or shifting. Keep scaffolds plumb and level at all times.
3. All decking used for scaffolds must be #1 dense pine 2” x 9” minimum or equivalent scaffold grade lumber specifically purchased for this use.

<table>
<thead>
<tr>
<th>Working Load P.S.F.</th>
<th>Full Thickness Undressed Lumber</th>
<th>Nominal Thickness Lumber 1½” Minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>50</td>
<td>75</td>
</tr>
<tr>
<td>Permissible Span Ft.</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>6</td>
</tr>
</tbody>
</table>

As a minimum, scaffolds MUST support 50 pounds per square foot (P.S.F.).

4. Decking boards must be laid flush with adjacent boards to prevent openings through which tools and material may fall. All boards must overlap a minimum of 12 inches.
5. Decking boards must extend over their end supports not less than 6 inches no more than 18 inches.
6. All work platforms must be secured from movement.
7. All scaffolds over 4 feet in height are required to have a ladder or some other device to permit
persons to climb to the platform. Where the height of the scaffold exceeds 10 feet, the access ladder must extend to the top of the handrail and must be secured to the scaffold.

8. Use red flags in the day and yellow lights at night as a warning when scaffolds are erected in roads or walkways. Head clearance of 7 feet is required for scaffolds erected over pedestrian passageways. In addition, the obstructing scaffold should be adequately marked with caution tape.

9. Overhead protection must be provided for persons on a scaffold exposed to overhead hazards.

10. All scaffolds over 10 feet in height must have handrails not less than 36 inches or more than 42 inches high, midrails and toeboards must be a minimum of 4 inches (nominal) in height.

11. Before erecting scaffolds near electric lines or exposed electrical equipment, employees must consult their supervisor to determine what special precautions may be necessary.

12. Keep all equipment in good repair. Do not use defective scaffold material.

13. Personnel should not work on scaffolding during storms or high winds.

14. All materials being hoisted on a scaffold require a tag line.

**Section Scaffolds**

1. Do not force braces to fit. Adjust evenness of scaffold until the proper fit can be made with ease.

2. Check all wing nuts and locks for tightness.

3. Never climb on cross braces.

4. Sufficiently brace and tie fixed scaffolds to wall, building or other firm support every 26 feet of height and every 30 feet of length. Temporary supports should be provided where permanent supports are not available for bracing.

**Suspended And Swing Scaffolds**

Each person MSUT be protected by a safety harness attached to a lifeline. The lifeline MUST be securely attached to substantial members of the structure (not the scaffold) or to securely rigged lines, which will safely suspend the worker in case of a fall.

**Special Scaffolds**

1. Horse scaffolds shall not be constructed or arranged more than two tiers or 10 feet in height. Horses must be spaced not more than 5 feet for medium duty (50 P.S.F.) and 8 feet for light duty. (24 P.S.F.).

2. Mobile Scaffold Towers – The maximum work level height must not exceed four times the smallest base dimension. Where the basic mobile unit does not meet this requirement, suitable outrigger frames must be made to guy or brace the unit against tripping.
   a. All scaffold casters must be provided with a positive wheel and/or swivel lock to prevent movement.
   b. Where leveling of the elevated work platform is required, screw jacks or other suitable means of adjusting the height must be provided in the base section of each mobile unit.

3. Rolling and folding type scaffolds – These scaffolds are designed for light loading (25 P.S.F.). The manufacturers dead weight loading or concentrated loading must not be exceeded. Any shifting of load or twisting movement on the scaffold may cause it to fall. Such scaffolds must be posted with their load limitations.
SCAFFOLD ERECTION AND USE PERMIT

Name: ___________________________ Date: ___________________________

Company: ___________________________ Job Number: ___________________________

INSTRUCTIONS: Daily scaffolding inspections must be completed by a competent person trained in scaffolding requirements per 29 CFR 1926.450.

GENERAL REQUIREMENTS

<table>
<thead>
<tr>
<th>Y</th>
<th>N</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are scaffolds erected on sound footing?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are toe-boards installed &amp; capacity of 50 lbs?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are guardrails and mid-rails installed on opened sides?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are guardrails within 36” to 45” in height &amp; capacity of 200 lbs?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are scaffolds designed and erected to hold four times the intended load?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are all components in good condition and any damaged components removed from service?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are all load-carrying timbers in framing of 1500 ft (Stress Grade) construction grade lumber?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is all planking scaffold grade and is it limited in spans to the table below?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The maximum permissible spans for 2X10 or wider planks are shown in the following table:

<table>
<thead>
<tr>
<th>Working Loads (PSF)</th>
<th>Full Thickness</th>
<th>Nominal Thickness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Undressed Lumber</td>
<td>Lumber</td>
</tr>
<tr>
<td>25</td>
<td>50</td>
<td>25</td>
</tr>
<tr>
<td>50</td>
<td>75</td>
<td>50</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Permissible Span</th>
<th>10</th>
<th>8</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Y</th>
<th>N</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are scaffold planks overlapped at least 12 inches or secured?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is an access ladder provided to scaffolding working levels?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do planks extend over their supports by at least 6 inches?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is the maximum extension 18 inches?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are all poles, legs and uprights plumb and securely or rigidly braced to prevent movement?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is overhead protection provided for workers exposed to falling objects?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If scaffolds are suspended by fiber or synthetic rope, is welding, burning, riveting or open flame work prohibited?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are only protected fiber or steel rope used for suspension of scaffolds used near corrosive substances or chemicals?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Will suspension systems hold six times the maximum intended loads?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do all materials being hoisted have a tag line?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are tools, materials and debris removed from scaffold to prevent accumulation?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Scaffold Location:

Name of Competent Person: ___________________________ Date: ___________________________

Supervisor: ___________________________ Time: ___________________________

SUBMIT COMPLETED FORM TO SAFETY DEPARTMENT