CRITICAL LIFT PLAN TEMPLATE

CRANE SAFETY

CRITICAL LIFT CRITERIA — This plan is required when ANY of the following apply:

- Lift exceeds 75% of crane's rated capacity at the required radius
- Lift is performed over occupied areas, personnel, or critical equipment
- Multiple cranes are used for a single lift • Lift involves hazardous materials
- Non-routine lift with limited clearance, blind picks, or complex rigging requirements

LIFT IDENTIFICATION

Lift Plan #: _____ Revision: _____ Date Prepared: _____ Lift Date: _____

Project Name: _____ Project #: _____

Job Site Address: _____

Lift Location on Site: _____

Lift Description: _____

_____

CRANE INFORMATION

Crane Type: _____ Make/Model: _____ Max Capacity: _____

Crane ID/Unit #: _____ Serial #: _____ Owner: _____

Boom Length: _____ Jib Length: _____ Counterweight: _____

Operating Radius: _____ Boom Angle: _____ Block Height: _____

CRANE CAPACITY CALCULATION

Rated Capacity at Operating Radius (from load chart): _____ lbs

Deductions Block/Ball Weight: _____ lbs Rigging Weight: _____ lbs Other: _____ lbs

Net Capacity Available: _____ lbs **Total Load Weight:** _____ lbs

LOAD AS % OF NET CAPACITY: _____ % **(Must not exceed 100%)**

LOAD INFORMATION

Load Description: _____

Load Weight (verified): _____ Weight Source: _____ ☐Calc ☐Scale ☐Mfr

Length: _____ Width: _____ Height: _____ CG Height: _____

Center of Gravity Location: _____ Lift Point Locations: _____

Special Handling Requirements: _____

RIGGING PLAN

Slings:

Type: _____ Size: _____ Length: _____ Qty: _____ WLL: _____

Type: _____ Size: _____ Length: _____ Qty: _____ WLL: _____

Shackles:

Type: _____ Size: _____ Qty: _____ WLL: _____ Pin Dia: _____

Spreader Beam/Lifting Bar (if used):

Description: _____ Rated Capacity: _____ Weight: _____

Other Rigging Hardware: _____

SLING ANGLE CALCULATION

Sling Angle from Horizontal: _____ degrees Sling Length: _____ Spread Width: _____

Load per Sling Leg: _____ lbs **Sling WLL:** _____ lbs **Safety Factor:** _____

Note: Sling angle must be 45 degrees or greater. Load per leg increases as angle decreases.

RIGGING SKETCH / DIAGRAM

(Attach detailed rigging diagram showing sling arrangement, load orientation, and lift points)

SITE CONDITIONS & HAZARD ASSESSMENT

Ground Conditions: ☐ Concrete/Asphalt ☐ Compacted Gravel ☐ Soil (verify bearing) ☐ Mats Required

Soil Bearing Capacity (if applicable): _____ Outrigger Pad Size Required: _____

Weather Restrictions:

Max Wind Speed: _____ mph Temperature Limits: _____ ☐ No Rain ☐ No Lightning

Overhead Hazards: ☐ Power Lines ☐ Structures ☐ Other Cranes ☐ None

Power Line Voltage (if present): _____ Distance to Power Lines: _____ Min. Clearance: _____

Underground Hazards: ☐ Utilities ☐ Vaults ☐ Excavations ☐ Tanks ☐ None

Describe Underground Hazards: _____

Other Site Hazards/Considerations: _____

PERSONNEL ASSIGNMENTS

Lift Director: _____ Phone: _____ Cert #: _____

Crane Operator: _____ Phone: _____ Cert #: _____

Signal Person: _____ Phone: _____ Qualified: _____

Rigger(s): _____ Phone: _____ Qualified: _____

Additional Riggers: _____

Safety Representative: _____ Phone: _____

COMMUNICATION PLAN

Primary Method: ☐ Hand Signals ☐ Radio ☐ Voice ☐ Other: _____

Radio Channel/Frequency: _____ Emergency Stop Signal: _____

EXCLUSION ZONE / BARRICADE PLAN

Barricade Type: _____ ☐ Caution Tape ☐ Cones ☐ Hard Barricades ☐ Flaggers

Exclusion Zone Radius: _____ Areas to be Cleared: _____

PRE-LIFT MEETING CHECKLIST

Review the following items with all personnel before commencing lift:

- ☐ Lift plan reviewed and understood by all personnel
- ☐ Crane inspection completed — crane is in safe operating condition
- ☐ All rigging inspected — meets requirements and capacity ratings verified
- ☐ Load weight verified — within crane capacity at operating radius
- ☐ Ground conditions verified — outriggers/pads properly positioned
- ☐ Swing radius and travel path clear of obstructions
- ☐ Exclusion zone established and barricades in place
- ☐ Communication method reviewed — signals understood by all
- ☐ Emergency stop procedures reviewed
- ☐ Weather conditions acceptable for lift
- ☐ Power line clearances verified (if applicable)
- ☐ All personnel wearing required PPE

LIFT SEQUENCE / PROCEDURE

1. _____
2. _____
3. _____
4. _____
5. _____

APPROVALS

AUTHORIZATION TO PROCEED

Prepared By: Name: _____ Signature: _____ Date: _____

Reviewed By: Name: _____ Signature: _____ Date: _____

Lift Director: Name: _____ Signature: _____ Date: _____

Crane Operator: Name: _____ Signature: _____ Date: _____

Site Superintendent: Name: _____ Signature: _____ Date: _____

RECORD RETENTION: Retain this lift plan and all associated documentation for the duration of the project plus a minimum of 5 years. Include any revisions, sketches, or engineering calculations.