Cranes

CRITICAL LIFT PLAN REQUIREMENTS

Location: _____ Date of Lift: _____

Load description: _____

Lift description: _____

Attach drawings of crane lift, site plan, and load placement

Attach drawings of rigging, connections, sling angles and load.

A. Load

1. Wt. of load	-	lbs.
2. Wt. of aux. block	-	lbs.
3. Wt. of main block	-	lbs.
4. Wt. of lifting beam	-	lbs.
5. Wt. of slings/shackles	-	lbs.
6. Wt. of jib (erected/stowed)	-	lbs.
7. Wt. of hoist rope (extra)	-	lbs.
8. Wt. of Excess load material		lbs.
9. Other 1/2 brackets 3370lb		lbs.
TOTAL	-	lbs.

Source of Load Wt. Information:(Drwgs, Calcs, etc.)

Attach supporting documentation.

Load Wt. Confirmed by:

?

B. CRANE

1. Type of Crane Make: _____ Model: _____
2. Boom Length 0 ft.
3. Radius at Pick-up 0 ft. At landing 0 ft.
4. Crane capacity @ radius for 360 ° Rotation? 0 lbs.
5. Boom Angle at Pick-Up 0 ° At landing 0 °
6. Max. Rated capacity of Crane at this Radius and boom angle for this Lift is? - lbs.
7. Max Load on crane is? - lbs.
8. Lift is what (%) of cranes rated capacity? #DIV/0!

Divide line 6 by line 7 for % of load chart used.

Derates due to wind speed: _____ ***% at*** ***0*** ***MPH***

C. JIB

1. Erected 0 Stowed **0**
2. If jib to be used: Length 0 ft. Angle 0
3. Rated capacity of jib from chart 0 lbs.

D. HOIST

1. Rope diameter: 0 Number of Parts: 0
2. Lift capacity based on line parts - lbs.

E. RIGGING

1. Hitch type ☐ Straight ☐ Basket ☐ Choke
2. No. of Slings _____ Size _____ SEE Rigging Diagram
3. Sling assembly rated capacity _____ lbs.
4. Shackle size _____ No. of Shakles _____
5. Shackle rated capacity _____ lbs.
6. Shackle attached to Load by:

F. Crane Placement

1. Any deviation from firm level ground?	☐ YES	☐ NO
1A. Are there any underground voids?	☐ YES	☐ NO
2. High Voltage or electrical hazards?	☐ YES	☐ NO
2A. If yes, Powerline Permit completed?	☐ YES	☐ NO
3. Any excavations close by?	☐ YES	☐ NO
3A. If so, has a PE calculated safe working distance?		ft.
4. Obstacles/obstruction to lift or swing	☐ YES	☐ NO
5. Travel required?	☐ YES	☐ NO
5A. IF so, is travel path clear?	☐ YES	☐ NO
5B. Load Radius during Pick & Carry	?	ft.
5C. Crane Capacity (Derate %)	?	
6. Swing direction?	?	

G. CONSIDERATIONS

1. Any Changes in crane configuration, placement, rigging lifting scheme, or calculations require that a new critical lift plan be developed. ☐ YES ☐ NO

If yes explain:

H. SIGNAL SYSTEM

☐ Signalman ☐ Radio ☐ CCTV ☐ Other

I. PRE-LIFT CHECKLIST COMPLETED PRIOR TO LIFT

1	☐ On The Spot Lift Plan Pages 1-3	10	☐ Rigger Qualifications
2	☐ Crane Inspection	11	☐ Signal System
3	☐ Rigging Inspection	12	☐ Tag Lines
4	☐ Crane Set-Up	13	☐ Wind/Temperature
5	☐ Swing Room	14	☐ Safety Spotter
6	☐ Hoist Height	15	☐ Traffic
7	☐ Head Room	16	☐ Site Control
8	☐ Crane Counterweight	17	☐ Signatures
9	☐ Operator Qualifications	18	☐ Powerline Permit

J. NOTES/COMMENTS

Prepared By: Wes Renton Date _____

Reviewed By qualified person: Date _____

Project Mgr. Date _____

Crane Planning / Approval Matrix

Review all Sections Necessary of the CCPM During Planning for Compliance of all Lifts	Condition		Planning Requirements			Approval Requirements							
	Section in the Corporate Crane Procedures Manual (CCPM)	Percent of Capacity at Given Radius on Load Chart and/or Multiple Conditions Require all Applicable Planning Requirements	On The Spot Lift Plan Section 1	On The Spot Lift Plan Section 2	Critical Lift Plan	Qualified Person	Discipline Superintendent	Construction Manager	Project Manager	Equipment Operations Manager or Designee	Regional Equipment Manager or Designee	Qualified Engineer	District Manager or Designee
General Lift Criteria	1-E	Less Than or Equal to 75%	✓										
	3-A	Greater Than 75% and Less Than 85%	✓	✓			✓						
	1-E	Utilizing More Than One Hook on a Crane (Total load less than capacity of one hoist line)	✓	✓		✓	✓						
General Lift Criteria Tower Crane	1-E	Less Than or Equal to 90%	✓										
	3-A	Greater Than 90% (Radio Approval)	✓	✓			✓						
Critical Lift Criteria	3-A	Greater Than 85% and Less Than 95%			✓		✓	✓	✓				
	1-E	95% to 100%			✓		✓	✓	✓		✓	✓	
	3-H	2 or More Cranes Less Than 75%			✓		✓	✓	✓				✓
	3-H	2 or More Cranes Greater Than 75%			✓		✓	✓	✓		✓	✓	✓
	3-I	Lifting of Personnel			✓		✓	✓	✓				✓
	1-E	Utilizing More Than One Hook on a Crane (Total load more than capacity of one hoist line)			✓		✓	✓	✓			✓	
	3-A	360 Degree Chart Cannot Be Used			✓		✓	✓		✓			
	1-E	Attachment Points Below COG and Load Rotated			✓		✓	✓	✓				
	1-L	On Rubber/Lift and Carry (RT)			✓		✓	✓					✓
	1-M	Other than Fully Extended Outriggers			✓		✓	✓		✓			
Power Lines	1-F	No Salaried Superintendent and Designated Spotter						✓					✓