NRAO Department of Environmental Safety & Security
Lift Plan Permit

Lift Description: **ES&S Approved:** **Date:**

Lift Supervisor: **Mgmnt Signature:**

Lift Date:

Lift Criteria	Notes/Comments
1. What item(s) will be lifted?	
2. Are there any special precautions?	
3. What is the weight of each item and total weight of the load?	
4. Where is the center of gravity? The center of gravity of a stable load is directly below the main hook and below the lowest point of attachment of the slings.	
5. List each piece of equipment, accessory, and rigging component, by type and rated capacity that will be used during the lift.	
a. Crane	
b. Hoist	
c. Fork Truck	
d. Slings (identify the configuration used: choker, basket, or vertical, and angle)	
e. Shackles	
f. Eye Bolts/Swivel Eyes	
g. Turnbuckles	
h. Spreader Bars	
i. Hook (Type and load limit)	
j. Other (Special lifting fixture, below the hook lifting devices, multi leg bridle, etc)	
6. Are there designated checkpoints or hold points?	
7. If yes, list them and their estimated instrument readings, as relevant, to check job progress against the plan.	
8. How will you rig the load?	
9. Will tag lines be needed to control the load?	
10. What personnel will you need to assist with the lift?	
a. Crane operator	
b. Riggers	
c. Spotters	
d. Tag Line Handlers	
e. Fork truck driver	
f. Other	

11. Safety equipment (hard hats, safety shoes, gloves)	
12. Mobile Crane location	
a. Will crane be set up on concrete? If yes, can concrete support the weight of the crane and the load?	
b. Will crane be set up on asphalt? If yes, will cribbing be needed (for asphalt temp > 32.2° C)?	
c. Will crane be set up on gravel or rough ground? If yes, cribbing will be required.	
13. Are any of the structures listed below located in the area of the crane set up? If yes, indicate their location on the Load Path Sketch.	
a. Manholes	
b. Underground voids	
c. Pipe chases	
d. Overhead obstructions or power lines	
14. Additional information	

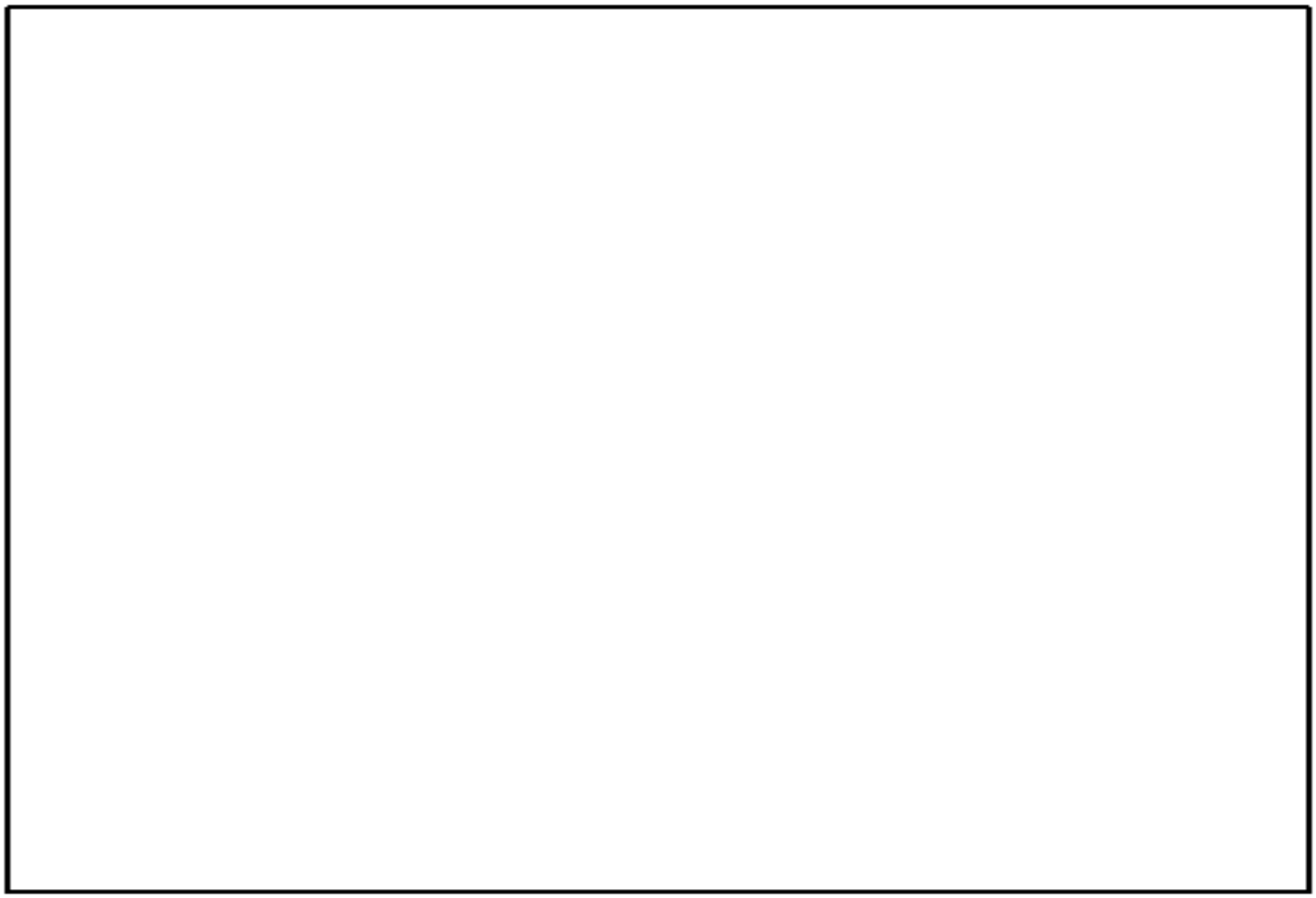
Rigging Sketch

Identify the following on the sketch:

- Lift point identification
- Method(s) of attachment
- Load angle factors (e.g., vertical and horizontal vectors of sling loads)
- Sling angles
- Accessories used
- Rated capacity of equipment in the configuration(s) in which it will be used. (including boom length, boom angle, and work area.)

Load Path Sketch

- Show the load path and height at key points in the job.
- Include the crane position(s) relative to the load and relative to surrounding obstructions.
- Indicate lifting and travel speed limitations if applicable.



Return the Completed Form to: ES&S Site Safety Division
Copy to: NRAO ES&S Admin Support – Diana Torres: dltorres@nrao.edu