

## **ASU crane rigging and lift permit approval process**

This document summarizes ASU's requirements for issuing permits for crane and rigging lift plans. ASU Environmental Health and Safety, or EHS, reviews and audits all aspects of safety and compliance related to cranes and rigging used on ASU property. These procedures apply to all site workers, employees, staff and systems that may affect components of fire protection and fire access space necessary to conduct the proposed operation. This review minimizes the impacts created by any encroachments from the project into fire and emergency access, fire department connections, fire hydrants and general emergency services.

Enclosed and operated construction sites that have been permitted through CPMG, EHS and the Fire Marshal's Office as part a new building or major renovation are not required to submit this information. There shall be notice provided to [asuehs@asu.edu](mailto:asuehs@asu.edu) so that EHS can walk the set-up and tear down of the crane as a courtesy.

When applying for approval for an ASU Crane and Rigging Lift Permit, the contractor must provide the following:

1. **An email sent to [asuehs@asu.edu](mailto:asuehs@asu.edu) with a subject line of ASU crane lift and rigging request.** The plan must be submitted a minimum of two weeks prior to any work being performed. Emergency requests will be managed on a case-by-case basis.
2. **Fill out and attach to the email request, in its entirety, the below ASU Crane Rigging and Lift Plan.**
3. **A clear, written summary of the work to be performed, including:**
  - Any building restrictions.
  - Evacuations and restricted floors.
  - Operational dates and times.
  - Set-up and demobilization times.
  - Streets, building names, and overall location.
  - Transport vehicles, dumpster and mobile containers, if they will remain in place or if they will be relocated after loading and unloading.
  - Type of work being performed.
4. **Submit a detailed site map identifying the following:**
  - Crane set-up location.
  - Flagger locations, if applicable.
  - Lift and rigging locations.
  - Location of building fire protection equipment and systems, including fire lanes, FDCs, fire hydrant locations and building evacuation areas. Please be aware that any impairments may result in denial of permit or additional safety requirements.
  - Operational area of work being performed.
  - Restricted areas.
  - Road Closures and Traffic Control Plan, if applicable.
  - Route from roadway to set up location, if applicable.
  - Staging areas, if applicable.
  - Tunnel locations and weight allowances—available from ASU Parking.
5. **Submit details of the site's emergency operation plan.**
  - 24-hour contractor emergency contact information, including email and emergency contact numbers.
  - ASU project manager contact information, including email and emergency contact numbers.
  - Detailed onsite process for emergency personnel and vehicle access affected by project encroachment.
  - Site manager contact information, including email and emergency contact numbers.
  - Training plans for emergencies for construction staff.

6. EHS approval is contingent on the contractor supplying complete and accurate information.

Contractor information	
Primary business contact information	
Site contact during operations – name and number	
Crane information	
Crane operator credentials (must match equipment being used)	
Crane inspection reports (annual and monthly inspection)	
Responsible party for invoice or payment	

7. Upon submittal, EHS will provide ASU Police and ASU Parking and Transit Services a copy of the plan for their review and approval.
8. The local jurisdictional emergency responding agency will be notified.

Upon approval, EHS will provide a permit that must be posted in an accessible, readily visible location on the job site. Failure to have the permit posted may result in operations being suspended until authorization can be confirmed. Issuance of this permit does not relieve the operator from performing any pre-operational inspections, such as daily inspections or load and rigging inspections.

There will be a fee of **\$180.00** for each ASU Crane and Rigging Lift Permit to cover the EHS facility safety review and the fire safety review and permitting. Electronic payments may be submitted using an ISD to CC0668 PG12112. Checks may be submitted to: ASU Environmental Health and Safety, P.O. Box 876412, Tempe, AZ 85287.

Questions? Contact ASU Environmental Health and Safety at 480-965-1823 or email [asuehs@asu.edu](mailto:asuehs@asu.edu).

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## ASU Crane Rigging and Lift Plan

Location of lift or job name: \_\_\_\_\_ Date of lift: \_\_\_\_\_

Description of load: \_\_\_\_\_

Is a diagram of lift, CAD or computer drawing attached? Yes \_\_\_\_\_ No \_\_\_\_\_

Name of person filling out lift plan: \_\_\_\_\_

### Load condition:

New \_\_\_\_\_ Old \_\_\_\_\_ Was this confirmed? Yes \_\_\_\_ No \_\_\_\_

Weight of contents attached to crane or load?  
\_\_\_\_\_ Weight of rigging? \_\_\_\_\_

Weight of ancillary? \_\_\_\_\_ Weight of anything else  
attached to crane or load? \_\_\_\_\_

Other \_\_\_\_\_

### Add all weights to determine gross load

\*Gross load \_\_\_\_\_ Type of crane \_\_\_\_\_

Radius at pick up point \_\_\_\_\_ Radius at landing if  
different \_\_\_\_\_

Gross capacity at pick point \_\_\_\_\_ Gross capacity at  
landing point \_\_\_\_\_

### \*Subtract gross load from gross capacity to calculate capacity margin.

\*Capacity margin  
Percentage of cranes capacity? \_\_\_\_\_

### Crane configuration:

Boom length? \_\_\_\_\_ Boom angle? \_\_\_\_\_  
Radius? \_\_\_\_\_ Parts of line? \_\_\_\_\_

Jib or extension used? Yes \_\_\_\_\_ No \_\_\_\_\_

Hoist used: Main \_\_\_\_\_ Aux \_\_\_\_\_ Line pull \_\_\_\_\_

Outriggers Yes \_\_\_\_\_ No \_\_\_\_\_ Crane set up consistent  
with drawings? Yes \_\_\_\_\_ No \_\_\_\_\_

### Rigging:

Type of slings used: \_\_\_\_\_

### Crane placement:

Is foundation capable of supporting crane and  
anticipated load? Yes \_\_\_\_\_ No \_\_\_\_\_

Are there any power lines or other utilities in the lift  
area? Yes \_\_\_\_\_ No \_\_\_\_\_

Are all obstruction identified? Yes \_\_\_\_\_ No \_\_\_\_\_

Has the swinging radius of the superstructure  
been cleared? Yes \_\_\_\_\_ No \_\_\_\_\_

Will a dry run with no load on the hook be made?  
Yes \_\_\_\_\_ No \_\_\_\_\_

### Special considerations:

Is the lift greater than 75% of the cranes capacity?  
Yes \_\_\_\_\_ No \_\_\_\_\_

Is the lift a multiple crane lift? Yes \_\_\_\_\_ No \_\_\_\_\_

Does the lift involve lifting of personnel?  
Yes \_\_\_\_\_ No \_\_\_\_\_

Is this lift within 20-ft to a live power line? Yes  
\_\_\_\_\_ No \_\_\_\_\_

Is this a lift of an object out of water  
Yes \_\_\_\_\_ No \_\_\_\_\_

If **yes** to any special consideration, is additional  
documentation required?

Yes \_\_\_\_\_ No \_\_\_\_\_

### Pre-lift checklist:

Crane inspection performed by the operator?  
Yes \_\_\_\_\_ No \_\_\_\_\_

Crane level? Yes \_\_\_\_\_ No \_\_\_\_\_

Swing area barricaded? Yes \_\_\_\_\_ No \_\_\_\_\_

Wire _____ rope _____ synthetic chain _____	Yes _____ No _____
Capacity of rigging _____	Overhead clearance checked and adequate? Yes _____ No _____
Number of slings used _____	Signalman identified and qualified? Yes _____ No _____
Shackles used _____	Wind...maximum allowed: _____
Capacity of shackles _____	Traffic controlled? Yes _____ No _____
Additional rigging _____	Weather/ lightning conditions? _____
Capacity of any additional rigging _____	<b>Other considerations:</b>
Have all sling angles been taken into account to determine capacity? Yes _____ No _____	Is any welding required? Yes _____ No _____
<b>Travel path:</b>	Is any blocking or shims required? Yes _____ No _____
What quadrant will lift start in? _____	Does any utility, power, water or gas need to be secured from the load or attached? Yes _____ No _____
What quadrant will lift finish in? _____	Are there any road closers? Yes _____ No _____
Is there a capacity reduction for landing Quadrant? Yes _____ No _____	Is there a time limit on the lift? Yes _____ No _____
Are tagline handlers required for this lift? Yes _____ No _____	Does the job site have any special job site warnings for crane lifts such as air horns or whistles? Yes _____ No _____
Are the taglines long enough to control the load thru the entire lift? Yes _____ No _____	Will special PPE be required for this lift? Yes _____ No _____ if yes, has it been provided? Yes _____ No _____
Has the travel path for the tagline handlers been cleared? Yes _____ No _____	
What orientation or side does the load need to be placed? <b>Please check all that apply.</b> <input type="checkbox"/> Top <input type="checkbox"/> Bottom <input type="checkbox"/> North <input type="checkbox"/> South <input type="checkbox"/> East <input type="checkbox"/> West	
Rigging inspected? Yes _____ No _____	
Load clearance to boom and structures adequate? Yes _____ No _____	

**Describe the emergency procedures: this is the "what-if" plan. Include emergency landing or weather.** \_\_\_\_\_

**Additional remarks:** \_\_\_\_\_

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