ROW CRANE SPECIFICATIONS & PERMIT

Rev: 9 | Revision Date: 10/27/2021 | I.D. Number: RCS&P

Crane Operation Specifications & Permit Requirements in the Right-of-Way

No person, firm, or corporation shall set a Crane or Man/Boom Lift in any public right-of-way within the City of Fort Lauderdale without first obtaining approval from the Building Department of the City of Fort Lauderdale.

The following information intends to clarify the <u>responsibility of the Contractor</u> to ensure that adequate consideration has been given to the issue of crane loading, stability and ground bearing capacities in the rights-of-way under the City of Fort Lauderdale's jurisdiction. For Cranes or Man/Boom Lifts weighing greater than 10,000* pounds, the contractor shall provide a (ROW Crane permit) using the <u>Standard Building Permit Application</u>. Reference the <u>Building Permit Application Checklist</u> for general submittal requirements.

The Applicant <u>shall provide</u> scaled drawings to include a site plan, topographic survey, aerial photographs, crane elevations, cross sections and details to include the following:

- Indicate the property street address, location and description of the area for which a crane is to be set (Crane Area)
 - Name and address of the applicant
 - o Type, rated load capacities, weight and dimensions of crane
 - Purpose of the proposed work to be completed
 - Approximate time required to complete the work
 - A copy of an approved work zone traffic control plan
- Provide a sketch defining the jib circle and radius.
 - o The Applicant <u>shall mark the Crane Area</u> in the field with white paint dots to identify the four corners. The jib radial arc shall be limited to the right-ofway and applicant's property and shall not extend over any other private property. The scale drawing shall include easily identifiable topographic features and reference points in the field so that the Crane area and jib radius can be verified by the City's Inspectors.
 - o If the jib circle overlaps private property (other than the property of approved permit), a letter of no objection is required from the respective owner(s). The information of the crane company shall be printed on the sketch with the printed name and signature of a qualified agent of the crane company.
 - Provide Cross Sections through outriggers and support materials, labeling materials and thickness. The cross sections shall include labelled soil or asphalt layers or any other materials beneath support platforms.



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- A \$10,000.00 bond is required for the proposed crane or man/boom lifts and required restoration on City right-of-way. Contractor shall be responsible to repair, with no cost to the City and to the City's satisfaction, any and all damages to the street, sidewalk, and underground utilities, within the City's right-of-way, caused by erection and operation of crane. Click here > Bond Information
 *Bond refund initiates 30 days after Permit is in 'Complete' Status and Post Inspection is Passed.
- Click here > Insurance certificate requirements
- <u>Maintain traffic flow</u> during the crane operation and provide traffic control devices necessary for the maintenance and protection of traffic and pedestrians. Accessible areas in the vicinity of the crane must be protected in accordance with Chapter 33 of the Florida Building Code. Click here > <u>Maintenance of Traffic Permit Guide</u>. MOT plan (to be approved by TAM prior to permit issuance).
- Notify appropriate agencies to identify the presence and <u>locations of Underground Utilities and Overhead Lines</u> (including abandoned utilities) within 15 feet of the Crane Area. Mark-out locations before crane setup on any public street or right-of-way.
 - The utility disclosure may utilize the services of a Ground Penetrating Radar (GPR) or utility mapping organization. <u>Notify the Electrical Utility</u>, a <u>minimum</u> <u>of 72 hours</u> before commencement, including an onsite meeting to establish safe operating conditions near electric power lines.
- Ensure underground installation such as electrical vaults, conduit banks, tanks, water main, storm drainage, sewer, etc. <u>do not exist within 5 feet of the area</u> of the dunnage mats and outriggers.
- Utilize the services of a Geotechnical Firm to evaluate and determine the <u>soil</u> <u>bearing capacity</u> of the soil on which the crane will operate. The weight of the crane, and its respective load, <u>shall not overburden the underlying soils</u>, causing undesirable settlement and damage to buried utilities in the vicinity of the crane foundation.
- Ensure that the <u>bearing pressure</u> imposed by the crane is <u>less than</u> the allowable bearing pressure of the supporting soils. The bearing pressure, imposed by the crane on each outrigger, shall never exceed 1,500 pounds per square foot (psf).
 - * Limit is 1,500 (psf); however, higher bearing pressures may be considered based on adequate justification in the Geotechnical Report and Utility investigations.
- Examine the surface of asphalt or concrete for cracks, depressions and humps indicative of subsurface movements. While these surfaces may seem more secure than soil, it may hide subsurface defects created by poorly compacted utilities backfill, only revealed when the crane is lifting a load. Working on concrete and asphalt surfaces without investigating the construction is prohibited.



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- Provide the following documentation:
 - Safety plan for the crane operation, including a description of standard field procedures, description of safety support field personnel and duties, 24/7 emergency contacts, any failsafe safety mechanisms provided by equipment (such as tip-over sensors), etc.
 - Current Annual Crane inspection report and Crane ID number for the specific crane authorized under this permit. The crane inspection report shall be provided by a subject matter expert recognized by the U.S. Department of Labor and licensed by the National Commission for the Certification of Crane Operators.
 - Licenses for each person that will be operating the specific type of equipment authorized under this permit (such as mobile crane, articulating crane, tower crane, boom/man lift, scissor lift). The licenses shall be issued by the National Commission for the Certification of Crane Operators and/ or Crane Certification Association of America or other agency recognized by the U.S. Department of Labor and OSHA.
- Provide relative ATLAS information for water, sewer and storm drainage for next submittal. Contact <u>Plan@fortlauderdale.gov</u> for ATLAS sheets. In addition to ATLAS sheets, provide any and all as-builts associated with this area. Please transpose to survey/site plan.
- Utilize the services of a Registered Professional Engineer to <u>evaluate the bearing</u> <u>area</u> of the dunnage or mats necessary to distribute the weight of the crane, including weight calculations for each outrigger or crawler track.
 - Upon completion of the evaluation, a documented plan to ensure crane stability and integrity of underground installation <u>shall be provided</u> to the City's engineering department.
- Provide a signed and sealed letter from a Geotechnical Engineer stating that based on his/her <u>subsurface investigation</u> the (Crane Area) is clear of underlying existing utilities susceptible to damage, free of voids and/or loose material andthat the existing pavement and underlying materials are structurally adequate to support the crane and all loads imposed (including the effects of dynamic loading), <u>within</u> acceptable deflection tolerances required, for safe crane operation.
 - The letter shall further certify that any structures existing in the vicinity of the (Crane Area), such as seawalls, pools, subsurface vaults and building components, are structurally adequate to withstand the forces generated by the crane operation/loading. The report shall include the following as a minimum:
 - > SPT (Standard Penetration Test) results
 - Soil analysis and soil boring report
 - Maximum soil bearing pressure



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- Provide a contractor compliance letter serving as written confirmation that
 the [prime contractor] will have senior representation and responsibility
 throughout the entire duration of the subject crane assembly/disassembly. In
 addition, the letter shall serve as written confirmation that the [prime
 contractor] will ensure compliance with Geotechnical report requirements
 and all permit conditions.
- Place outrigger floats on a suitable blocking/cribbing composed of timber, steel, or other dense material to reduce the chance of soil settlement when handling moderate loads known to be well within the crane's capacity and on average soils.
- When dunnage/ blocking are composed of multiple pieces, such as wood timber, the collective assembly must be tightly packed, with no space between adjacent members.
- The float shall bear on <u>all</u> timbers or on a steel or composite plate able to distribute the weight evenly over the <u>entire</u> assembly. The material utilized for cribbing <u>must be</u> dense enough to resist crushing from the force applied, and <u>shall be</u> arranged or assembled to prevent individual movement during operation. Blocking shall be employed under <u>all floats</u> to ensure that the crane maintains equal support in <u>all quadrants</u> of operation.
- Permit Holder shall notify the Engineering Department in advance of setting acrane within the right-of-way and after setting the crane in order to schedule the inspections.
- Provide an <u>Indemnification and Hold Harmless Agreement</u> executed by permit applicant, property owner and crane operator on a standard form provided by the Engineering Department. The agreement may require modification to address particular conditions of a project. <u>Hold Harmless Form</u>
- A Revocable License Agreement (RLA) will be <u>required</u> if operation results in traffic detours <u>exceeding (72 hours)</u>. RLA's must be approved by the City Commission and engineering.

*Note: For cranes **weighing less than or equal to 10,000 pounds** provide all of the above with exception of the following:

Signed and sealed Geo-Technical report (not required

Click here > Boom/Man Lift Operation Specifications & Permit Requirements in the Right-of-Way

