State of Illinois

Department of Transportation

Bureau of Business Services

**Specifications and Questionnaire for Track Mounted, Self-Propelled, Telescopic Boom Lift**

August 2018

This specification and questionnaire covers a self-propelled, diesel powered, telescopic aerial device to be used by the Department of Transportation Division of Highways Bridge Maintenance and Repair personnel aerial inspections, maintenance and repairs. In an effort to improve parts and service availability and increase tool life, the Department of Transportation is specifying units and accessories as outlined below.

Each bidder shall submit with their bid **two sets** of descriptive literature and specifications describing **all** the **equipment** and **options** proposed. This information shall be clearly marked to indicate the make, model, and accessories proposed to be furnished. If this information is not furnished, the bid may not be considered.

Bidders quoting on specified equipment must submit with their bid written proof of the following:

* The manufacturer of the equipment proposed has been actively involved in the manufacture of the equipment called for in the **bid** for a period of not less than 5 years.
* Parts and service for the equipment proposed are readily available within the State of Illinois.

It is the responsibility of each bidder to complete and return this questionnaire with the bid. If the questionnaire is returned incomplete or is not returned, the bid may not be considered.

**Bidders are advised to carefully read these specifications as changes have been made since the last solicitation issued.**

**Unless otherwise specified, the proposed equipment shall be complete in all parts and ready for immediate use upon delivery.**

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| --- |
| **Proposed with this Bid:** |
| Make: |       |
| Model: |       |
| Manufactured By: |       |
| Bidder: |       |
|  |       |
|  |       |
| Telephone: |       |
| Contact Name: |       |
| Email: |       |

The makes and models of the machines listed below are solely to provide bidders a minimum level of quality, size of machine requested, and basic configuration. The machines listed below also meet the Departments’ requirements for functioning under and around the bridges and structures our crews are required to service and repair, many times dictated by emergency situations and conditions. All machines quoted will be evaluated by compliance with the following specifications. Since the work performed and expected of these machines can be of an extreme emergency nature, the potential availability of parts and service will be equally important and considered in determining equality and award.

The makes and models are as follows:

Genie S-65 XC (With Quad Track)

JLG 660SJC

**All aerial devices shall include the following standard or optional accessories and equipment:**

**Aerial Lift:**

This unit shall be constructed for the primary purpose of providing personnel both an aerial lift platform and a working platform.

Complies: Yes [ ]  No [ ]

All components and controls for the complete operation of this device shall be contained at the basket at the end of the boom.

Complies: Yes [ ]  No [ ]

The aerial device shall provide a height of 65 feet to the bottom of the platform with a working height of approximately 70 feet.

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| --- | --- | --- |
| Height to bottom: |       | gallons |
| Rated working height: |       | gallons |

The boom shall consist of hydraulically extendable/retractable sections and one (1) articulating boom (jib) section at the platform.

Complies: Yes [ ]  No [ ]

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| Describe: |       |

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The boom shall have a minimum travel arc of 132 degrees including above and below horizontal.

Complies: Yes [ ]  No [ ]

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| Vertical angle: |       | degrees |
| Below horizontal: |       | degrees |

The stowed or transport height of the aerial device shall be approximately 8’-6” high.

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| --- | --- | --- |
| Transport height: |       | Ft/Ins. |

The aerial device shall be capable of 360 degrees continuous rotation.

Complies: Yes [ ]  No [ ]

There shall be an LED flashing amber light mounted in a visible location on the body of the aerial.

Complies: Yes [ ]  No [ ]

**Personnel Platform**

The platform shall be 8’-0” long and a minimum 36” wide and be self-leveling.

Complies: Yes [ ]  No [ ]

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| --- | --- |
| Describe platform and size: |       |
|       |

The platform leveling system shall be a closed system, maintaining the platform in level position relative to the frame of the chassis throughout boom movement.

Complies: Yes [ ]  No [ ]

A manual leveling valve shall be provided with the lower manual control bank. The lower platform controls shall include an electronic switch to relevel the platform.

Complies: Yes [ ]  No [ ]

The platform shall be capable of 180-degree minimum hydraulic rotation.

Complies: Yes [ ]  No [ ]

The platform shall include safety rails rated to support 700 pounds and include an inward closing gate.

Complies: Yes [ ]  No [ ]

The platform shall be 30” X 72” with a 700-pound rated capacity in any boom position. The platform shall include a minimum of two (2) safety lanyard attachment points.

Complies: Yes [ ]  No [ ]

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| --- | --- | --- |
| Platform size: |       | Ft/Ins. |
| Platform rating: |       | Lbs. |

Boom and rotational controls shall be easily accessed by the operator.

Complies: Yes [ ]  No [ ]

The platform shall be equipped with multiple adjustable work lights.

Complies: Yes [ ]  No [ ]

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| --- | --- |
| Describe: |       |

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|       |

**Boom(s)**

The booms shall be tubular, rectangular steel sections including heavy duty cylinder fittings, pivot pins, and replaceable, ultra-high molecular weight polyethylene wear plates.

Complies: Yes [ ]  No [ ]

Lift shall be accomplished using double acting hydraulic cylinders with holding devices.

Complies: Yes [ ]  No [ ]

The boom(s) shall provide a horizontal reach over the side of 57’.

Complies: Yes [ ]  No [ ]

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| Reach over side: |       | Ft/In. |

The boom or jib section shall be a 10’-0” articulating jib.

Complies: Yes [ ]  No [ ]

**Operator’s Controls:**

Operator’s controls shall be proportional electronic joystick with a console mounted on the operator’s platform.

Complies: Yes [ ]  No [ ]

The aerial device controls at the platform shall include all boom and platform functions. Boom master switch, engine start/stop, boom control hi/low switch, engine speed and emergency pump switch shall be included.

Complies: Yes [ ]  No [ ]

The functions of all controls shall be permanently marked (***No decals***) and encased in a weather tight container.

Complies: Yes [ ]  No [ ]

A set of controls mounted in a secure location on the chassis shall be provided. These controls shall be capable of over-riding the platform controls.

Complies: Yes [ ]  No [ ]

**Engine:**

The engine shall be a current production, 4-cylinder, fuel injected, liquid cooled diesel and meet the following:

The engine shall have a SAE net horsepower rating of 67 H.P. at governed RPM and equipped with a cold weather starting aid.

Complies: Yes [ ]  No [ ]

Component provided:

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| --- | --- |
| Make: |       |
| Model: |       |
| Number of cylinders: |       |
| Horsepower @ governed RPM: |       | H.P. |
| Rated H.P. (Net) |       | H.P. |

The engine shall be compliant with all current Tier 4 emission standards.

Complies: Yes [ ]  No [ ]

**Fuel system:**

The fuel system shall be diesel and clearly labeled as such.

Complies: Yes [ ]  No [ ]

The fuel tank shall be sized properly to manufacturer’s specifications for engine supplied with unit.

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| --- | --- |
| Tank capacity: |       |

**Cooling System:**

Manufacturer’s standard cooling system with extended life antifreeze rated to -30°F.

Complies: Yes [ ]  No [ ]

**Transmission, Axles, & Drive train:**

The aerial device shall be mounted on steel tracks with a track width of 19’-7”.

Complies: Yes [ ]  No [ ]

The aerial device shall include a 5º tilt alarm and indicator light to alert the operator of uneven terrain.

Complies: Yes [ ]  No [ ]

**Chassis:**

The aerial device proposed must include the following approximate dimensions and capacities

Weight - 29,300 pounds

Width – 8’-2”

Ground clearance – 1’-4”

Proposed aerial device:

|  |  |  |
| --- | --- | --- |
| Weight: |       | Lbs. |
| Width: |       | Inches |
| Clearance: |       | Inches |

**Tracks:**

The tracks shall be steel and cleated for use off-road or rough terrain use.

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| --- | --- |
| Track dimensions: |       |
| Length of track on ground: |       | Feet/Inches |

**Auxiliary Power**

The aerial device shall be equipped with 12-volt DC auxiliary power to operate the boom functions in the event of loss of engine power.

Complies: Yes [ ]  No [ ]

**Hydraulic System:**

The power for the mast shall be provided by an open centered hydraulic system as designed by the manufacturer.

Complies: Yes [ ]  No [ ]

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| --- | --- |
| Pump type: |       |
| Flow rating |       |

All hydraulic cylinders shall include holding valves to prevent cylinder collapse in event of hydraulic hose failure.

Complies: Yes [ ]  No [ ]

The hydraulic oil reservoir capacity shall be as required by the manufacturer and be approximately 40 gallons.

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| Reservoir capacity: |       | gallons |

The hydraulic system shall include filtration to remove debris and water. The reservoir shall be mounted to provide easy access to add oil, or, change filters and screens.

Complies: Yes [ ]  No [ ]

**Miscellaneous Accessories:**

The following miscellaneous items shall be furnished and functional:

* Horn
* Hourmeter
* Tilt alarm
* Tool tray (at platform)
* Lifting/tie down lugs
* 7,500-Watt generator system (capable of powering lights and tools and a welder)
* 2 each 110V-AC receptacles in the platform
* Motion alarm
* Air compressor – Minimum delivery of 9 CFM @ 125 psi
* 1” air line from ground to the platform thru booms with auto-reel
* Cold weather kit with engine block heater

Complies: Yes [ ]  No [ ]

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| If no, describe: |       |

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|  |       |

**Paint/Finish:**

All exterior surfaces normally painted shall be cleaned, prepped, painted or powder coated manufacturer’s standard color.

Complies: Yes [ ]  No [ ]

**Manuals:**

Three (3) copies of all operators’ manuals, parts lists, and warranty information shall be provided at time of delivery to each district receiving one or more units.

Complies: Yes [ ]  No [ ]

One (1) set of “Service or Shop” Manuals shall be provided to each delivery location.

Complies: Yes [ ]  No [ ]

***Note:*** The manuals, parts lists, and service or shop manuals listed above may be furnished on DVD in lieu of paper.

**Training:**

The successful bidder shall supply training of Department of Transportation personnel. Training shall cover routine service, and minor repair. A second phase shall include the training of selected individuals as operators. The length of the operator’s training shall be a minimum of two (2) working days but may be extended by the receiver if deemed necessary.

Complies: Yes [ ]  No [ ]

A training video (if available) covering the operation of this equipment shall be provided with the training.

Complies: Yes [ ]  No [ ]

**Requirements Covering Items Detailed Above:**

All equipment cataloged as standard shall be furnished and in place and shall be included in the purchase price of the unit. Any parts, tools, and/or accessories not specifically called for but required for proper operation shall be provided.

Complies: Yes [ ]  No [ ]

The component parts of the unit shall be of proper size and design to safely withstand maximum stresses imposed by a capacity load, and the manufacturer's rated loads for all component parts shall **not** be exceeded when the unit is so loaded.

Complies: Yes [ ]  No [ ]

Full coverage warranty for a minimum 12 months shall be provided for all components and their installation. The bidder shall attach a copy of warranty with the bid.

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| --- | --- |
| Describe warranty: |       |
|       |

**Delivery:**

This machine is to be delivered in first-class operating condition with acceptance subject to Department of Transportation approval.

Complies: Yes [ ]  No [ ]

**Bid Package:**

Bidders will need to send two copies of each of the following with their bid proposal.

1. Specification Questionnaire
2. Descriptive Literature

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| If NO to any portion, explain: |       |
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