State of Illinois

Department of Transportation

Bureau of Business Services

**Specifications and Questionnaire for a Tandem Axle, Radius Style Dump Trailer**

July 2019

This specification and questionnaire covers a quarter-frame, radius or half-round dump trailer for use by the Department of Transportation. In an effort to ensure operating efficiency, parts and service availability and equipment life, the Department of Transportation is specifying acceptable units by required equipment and accessories as outlined below.

Each bidder shall submit with his bid ***two sets*** of descriptive literature and specifications describing ***all*** the equipment proposed. This information shall be clearly marked to indicate the make, model, accessories, and exceptions proposed to be furnished.

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

1. The manufacturer of the equipment proposed has been actively involved in the manufacture of the equipment called for in the **“Proposal”** for a period of not less than 5 years.
2. Parts and service for the equipment proposed are readily available to the State of Illinois.

It is the responsibility of each bidder to complete and return this questionnaire with the bid.

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

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

**Proposed With This Bid:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Make: |  | | | | | |
| Model: | |  | | | | |
| Manufactured by: | | | | | |  |
| Bidder: | | |  | | | |
|  | | | |
| Contact name: | | | | |  | |
| Telephone: | | | |  | | |
| Email: |  | | | | | |

The Illinois Department of Transportation reserves the right to waive minor informalities, deficiencies or technical variances which by their nature are restrictive to a given manufacturer, if in its’ judgement, it would be in the best interest of the State to do so and it would not prejudice the rights of other bidders.

Serviceability will be a factor in award. Successful bidder shall either be able to provide service after purchase or shall indicate other qualified service facilities able to service equipment, within a reasonable period of time at agency locations. Bidder shall provide documentation and enumerating service locations. A Review of the bidder's ability to provide prompt parts and service to the State of Illinois and in particular to the delivery location, will be considered in determining award.

Bids will only be accepted from established manufacturers or their authorized dealers. Any dealer submitting a bid hereby guarantees that it is an authorized dealer of the manufacturer and that the manufacturer has agreed to supply the dealer with all quantities of products required by the dealer in fulfillment of its obligations under any resultant contract with the State. Bidder must submit authorized dealer letter upon request.

**Warranty:**

Manufacturers’ standard warranty shall be provided. **Bidder shall attach copies of warranty with bid****. Warranty shall commence at the Illinois Department of Transportation in-service date.** If any equipment fails to conform to the warranties during the applicable warranty period, the Vendor or Manufacturer will adjust, repair or replace the equipment at no charge to the Department as soon as possible upon notice from the Department. Equipment shall be repaired on-site and will be performed at no additional cost to the Department.

The Vendor may provide or perform warranty service at a dealer location within the Districts geographic region if on-site repair is not possible. Vendor shall facilitate pickup and delivery of equipment at Vendor's cost if warranty repair(s) are made off-site during the warranty period. The contract Vendor is responsible for any failure of their allied or subcontractors’ fulfillment of said warranties. Failure to provide this service shall result in a “Complaint to Vendor” that could affect future bid awards.

**Delivery:**

It will be the responsibility of the successful vendor to guarantee delivery within the quoted time and to require allied manufacturers or suppliers to complete the installation of auxiliary equipment in accordance with the quoted delivery time.

Failure to comply with the quoted delivery time because of delays resulting from the inability of suppliers of allied equipment such as bodies, snowplows, spreaders, etc., may be reason to refuse to consider similar items from those suppliers on future bids.

All equipment provided by the Vendor and the sub-contractor(s) shall be fully operational when delivery is made. Any noted defects at the time of delivery shall be addressed by Vendor in the first 30 days of in-service.

Bidder/Vendor acknowledges the requirements above. Yes  No

|  |  |  |  |
| --- | --- | --- | --- |
| Bidder/Vendor Initials: |  | Date: |  |

**Note: If the equipment proposed exceeds the minimums called for in the specification please do not mark NO. Mark YES and explain with a short comment on how it exceeds.**

**Specified Requirements:**

Quarter-frame radius style dump trailer constructed of Domestic manufactured AR450 steel, including two (2) axles with eight (8) pneumatic tires.

|  |  |  |
| --- | --- | --- |
| Number of tires: |  | |
| Number of axles: |  | |
| Describe steel & shape: | |  | |
|  | | | |

Width of the trailer body shall be approximately 95”.

Complies: Yes  No

|  |  |  |
| --- | --- | --- |
| Body width: |  | Inches |

The trailer shall be a minimum of 28-feet in useable length.

Complies: Yes  No

|  |  |  |
| --- | --- | --- |
| Trailer length: |  | Inches |

The trailer shall have a maximum empty weight ± 14,500 pounds when equipped as specified.

Complies: Yes  No

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| --- | --- | --- |
| Trailer empty weight: |  | Lbs. |

The trailer shall have a GVWR rating of approximately 74,200 pounds.

Complies: Yes  No

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| --- | --- | --- |
| Trailer GVWR Rating: |  | Lbs. |

This trailer shall comply with all current Federal and State Safety Standards.

Complies: Yes  No

**Body:**

All rails and top beams shall be angled to the inside or outside of the body so they provide no flat surface for rock or debris deposits.

Complies: Yes  No

The body floor, front, sides, and tailgate shall all be constructed of ¼” AR450 steel.

Complies: Yes  No

The body dimensions are approximate and shall be as follows:

* Sides 55”
* Front 63”
* Rear 55”
* Overall height 10’-0”

Complies: Yes  No

|  |  |
| --- | --- |
| Side Height: |  |
| Front Height: |  |
| Rear Height: |  |
| Overall height: |  |

The king pin shall be located approximately 8-1/2”-16” from the front of the trailer and mounted to provide a 48” coupler height.

Complies: Yes  No

The body shall include a full-length tarp bar 3-1/4” wide by 1/4” thick.

Complies: Yes  No   Not required

The body shall be fit with a full-length front to rear style electrically operated Shurco Arm-Matic, Aero Easy Cover or Equal tarp with a front to the top of the tailgate coverage. The mounting of the tarp shall not impede the loading of the trailer. The tarp controls shall be on the curbside of the trailer with easy access for the operator. The tarp material shall have a weight of 22 ounces per square foot.

Complies: Yes  No

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| --- | --- | --- | --- |
| Tarp Weight: |  | | Per Sq. Ft. |
| Describe Tarp Control & Mounting: | |  | | |
|  | | | | |
|  | | | | |

There shall be heavy gauge aluminum fenders covering the rear wheels from the rear body post, extending past the front of the front axles tires.

Complies: Yes  No

These fenders shall be triangular or wedge shape and designed so material will not set on them.

Complies: Yes  No

The body shall be furnished with a full width 10” wide apron. This shall keep debris from being dumped and damaging the air brake chambers.

Complies: Yes  No

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| --- | --- | --- | --- | --- |
| Apron Width: | |  | | Inches |
| Describe Apron: | |  | | |
|  | | | | |

The body shall include two ladders for access, one on the driver’s side front and the other curbside rear. They shall provide hand and toe holds outside several steps inside.

Complies: Yes  No

**Landing Stand:**

The landing stands shall be located approximately 109” behind the kingpin . They shall be mounted securely to the draft arms.

Complies: Yes  No

The landing gear shall be capable of supporting the trailer fully loaded.

Complies: Yes  No

The landing stand shall be mechanically operated with two-speed capability with crank located on the street-side of the trailer.

Complies: Yes  No

The landing stand shall include replaceable pads with “sand” style pads supplied.

Complies: Yes  No

**Tailgate:**

The tailgate shall be a “high lift” style, secured and operated by a pneumatic cylinder(s). When the gate is fully open it shall provide a minimum vertical 80” full clear opening.

Complies: Yes  No

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| --- | --- |
| Describe Tailgate & Securing Method: |  |
|  | |
|  | |

The tailgate shall be 1/4 inch thick, AR450 steel with horizontal tubular reinforced bracing.

Complies: Yes  No

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| --- | --- |
| Describe location: |  |
|  | |

The tailgate shall include 20” wide coal door in the bottom center of the tailgate. It shall provide for full opening and closure by a single operator.

Complies: Yes  No

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| --- | --- | --- |
| Coal Door Dimensions: |  | Inches |

**Axles & Suspension:**

Tandem axles spaced not less than 51" apart.

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| --- | --- | --- |
| Axle Spacing: |  | Inches |

Axles shall be tubular steel with an outside diameter of 5” rated at 25,000 pounds each, including inner and outer bearings.

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| --- | --- | --- |
| Axle Diameter: |  | Inches |
| Axle Rating: |  | Lbs. |

|  |  |
| --- | --- |
| Describe Bearings: |  |
|  | |

Axles shall be mounted to trailer frame in such a way as to reduce twist and strain on trailer when road or dumping on irregularities are encountered.

Complies: Yes  No

The suspension shall be similar or equal to a Watson & Chalin 50,000 pound single point, 3-leaf suspension, located approximately 47” from the tandem centerline to the rear of the trailer.

Complies: Yes  No

Component:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Make: |  | | | |
| Model: |  | | | |
| Suspension Rating: | | |  | Lbs. |

|  |  |
| --- | --- |
| Describe Suspension Mounting: |  |
|  | |
|  | |

**Tires and Wheels:**

Tires shall be tubeless radial 11 X 24.5 (H) or as needed to meet load capacity.

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| --- | --- | --- | --- |
| Size: |  | | |
| Load rating: | |  | |
| Tread type: | |  | |
| Manufacturer: | | |  |

Wheels shall be steel, ten (10) hole/lug, hub piloted disc type.

Complies: Yes  No

|  |  |
| --- | --- |
| Size: |  |

One spare tire and wheel provided and mounted according to manufacturer’s standard.

Complies: Yes  No

Oil type wheel bearing seals shall be provided in all hubs.

Complies: Yes  No

Hub assemblies shall provide for visual indication of oil level.

Complies: Yes  No

Each set of dual wheels shall include a Crossfire Dual Tire Pressure equalization system (or IDOT approved equal) to equalize tire pressure between the dual tires. This feature shall also provide isolation should one tire experience a 10 psi loss.

Complies: Yes  No

Component:

|  |  |  |
| --- | --- | --- |
| Make: |  | |
| Model: | |  |

One of the right wheels shall also be equipped with a hub-odometer, designed for the size of wheel and tire proposed to be furnished. The hub-odometer hub assembly shall also allow easy oil level checking.

Complies: Yes  No

Component:

|  |  |  |
| --- | --- | --- |
| Make: |  | |
| Model: | |  |

**Hoist:**

The hoist shall be capable of lifting the trailer when loaded to capacity to its full height.

Complies: Yes  No

The cylinder shall be approximately 8” in diameter.

Complies: Yes  No

|  |  |  |
| --- | --- | --- |
| Cylinder Diameter: |  | Inches |
| Extended Length: |  | Feet/inches |
| Cylinder Stages: |  |  |

The hoist cylinder may be either boxed or inverted and open but, must provide power up and power down hydraulic functions.

Complies: Yes  No

|  |  |
| --- | --- |
| Describe Cylinder Mounting & Operation: |  |
|  | |
|  | |

**Brakes:**

Air brakes to be 16.5” X 7” ABS 2S/1M S-cam style, on all axles with dust shields and stroke sensing style automatic slack adjusters.

Complies: Yes  No

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| --- | --- | --- |
| Brake size: |  | Inches |

|  |  |
| --- | --- |
| Describe Cylinder Mounting & Operation: |  |
|  | |
|  | |

The trailer hoses shall include Meritor Wabco (or Department of Transportation approved equal) part number 952 201 019 0 glad hand filter cartridges on both glad hand connectors.

Complies: Yes  No

Component:

|  |  |
| --- | --- |
| Make: |  |
| Part No.: |  |

**Wiring and Lights:**

**Lights (LED):**

Combination Rear Tail, Turn, and Stop Signal:

Type - Dual combination Class A, sealed, shock mounted, LED 4” minimum Truck Lite Super 44 or equal.

Location - Rear of trailer, recessed for protection

LensColor - Red

Complies: Yes  No

**License Plate Lamp:**

Type- Sealed LED Truck-Lite Model 15 series or equal.

LensColor - Clear

Complies: Yes  No

**Rear Identification Lights (3-Bar):**

Type-Shock mounted LED Model 15 or 35 Truck-Lite ID bar series or equal.

Location - Rear of trailer, recessed for protection

Lens Color - Red

Complies: Yes  No

**Clearance Lights:**

Type - LED Truck-Lite Model 15, 18 or 21 series or equal

Location - As required

Complies: Yes  No

**Lights and Reflectors:**

Must meet all federal and SAE regulations and comply with the Illinois Law and Vehicle Code in effect at the time of manufacture.

Complies: Yes  No

DOT approved reflective conspicuity tape shall run entire length of trailer.

Complies:  Yes  No

**Wiring:**

Wiring shall be complete 12 volt with sealed modular wiring harness. All connections shall be in a weatherproof junction box. Quick-disconnected splices, soldered and covered with shrink-wrap are not acceptable.

All lights, wiring, and junction boxes shall combine to form a sealed waterproof system, Truck-Lite's 50800 series or equal for commercial vehicles utilizing standard production wiring harnesses where practical.

Component:

|  |  |  |
| --- | --- | --- |
| Make: |  | |
| Model: | |  |

All lamp connections and all junction box post connections shall be treated with a corrosion inhibitor.

Complies: Yes  No

All wiring passing through metal shall be protected by formed rubber grommets.

Complies: Yes  No

**Note**: Use of garden or other styles of hose as grommeting is ***not*** acceptable.

All wiring not in conduit shall be secured utilizing nylon or coated clamps bolted to the frame at 18" minimum spacing.

Complies: Yes  No

|  |  |
| --- | --- |
| If NO, please explain: |  |
|  | |

**Truck Connection for Lighting and Electrical:**

Type – Heavy all-weather cord with 7-way connector, utilizing round pins and sockets, SAE/ATA approved, plug portion installed on trailer with lead long enough to allow for turning movements of the trailer. The pin portion or socket is provided with the truck installation.

Complies: Yes  No

**Paint/Finish:**

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

Complies: Yes  No

|  |  |
| --- | --- |
| Describe Paint/Finish: |  |

**Manuals:**

Two (2) 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 CD/DVD or Flash drive in lieu of paper.

Instruction performed by qualified factory or dealer representative covering the operation and routine service and maintenance of the equipment shall be provided upon delivery. The training shall be for all personnel in the assigned headquarters location of the equipment.

Complies: Yes  No

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| --- | --- |
| Describe Training: |  |
|  | |
|  | |

**Note:** This is not a sales call. Training not meeting IDOT expectations will be cause to generate a “Complaint-to-Vendor”.

**Requirements Covering Items Detailed Above:**

The trailer shall be furnished complete with all safety components that are required by the current Federal Safety Standards for the size trailer proposed.

Complies: Yes  No

All equipment cataloged as standard or safety related 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 manufacturers rated loads for chains and bearings shall not be exceeded when the unit is loaded with such loads.

Complies: Yes  No

Standard tool kits shall be supplied if required.

Complies: Yes  No   Not required

Full coverage warranty for a minimum of **12 months** shall be provided. Bidder shall attach copy of warranty with bid.

Complies: Yes  No

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

**Repair Parts and Service:**

Since continuous operation of this trailer is of the utmost importance and many times of an emergency nature, it is necessary that the successful bidder be in a position to render prompt parts and service within the State of Illinois.

|  |  |
| --- | --- |
| List sources for parts and service : |  |
|  | |
|  | |
|  | |

The vendor or manufacturer of the unit which is considered for award shall, at the request of the State of Illinois, demonstrate this equipment within the receiving District in the State of Illinois in the presence of authorized state personnel to prove out any features which may be in question.

Complies: Yes  No

**Delivery:**

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

Complies: Yes  No

The trailer shall be delivered oiled, greased, serviced and ready for operation.

Complies: Yes  No

|  |  |
| --- | --- |
| If NO to any portion, please explain: |  |
|  | |
|  | |

**Bid Package:**

If not quoting in BidBuy, bidders will need to send two copies of each of the following with their bid response.

a) Specification Questionnaire

b) Descriptive Literature