# -60-06

State of Illinois

Department of Transportation

Bureau of Business Services

**Specifications and Questionnaire for a Tilt–Deck, Tandem axle, Tag Trailer with Electric Brakes**

Load capacity of 24,000 Lbs.

March 2017

This specification is designed to aid the Department of Transportation in the purchase of an efficient and dependable 24,000 lbs. capacity, tilt-deck, tandem axle, tag trailer for maintenance operations.

All bidders are expected to quote upon a manufacturer's latest standard conventional model complete with all standard equipment plus any optional or special equipment required meeting the following specifications. Deviations from these requirements in efforts to obtain extremely low prices will not be acceptable.

Each bidder shall submit with his 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.

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 within 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 sub-contractors’ 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.**

**Trailer Type:**

Tag style, Tandem axle, tandem wheel (8 wheels on the ground), tilt–bed trailer.

Complies: Yes  No

**Capacity:**

24,000 lbs. minimum payload capacity at a highway speed of 55 M.P.H.

Complies: Yes  No

|  |  |
| --- | --- |
| Capacity at 55 mph: |  |

**Frame:**

Main beams shall be wide flange beams pierced to allow full through crossmember installation, or stacked on top with gussets.

Complies: Yes  No

All frame members shall be 50,000 psi. minimum, steel main-rails from front to drawbar to rear of trailer.

|  |  |
| --- | --- |
| Steel rating: |  |

Main beams on chassis shall be a minimum 14" X 26 lbs. /ft. wide flange beam or equivalent.

|  |  |  |
| --- | --- | --- |
| Main beam size on chassis: |  | lbs/ft. |

Main beams on tilt platform shall be a minimum 8” X 15 lbs. /ft. wide flange beam or equivalent.

|  |  |  |
| --- | --- | --- |
| Main beam size on tilt platform frame: |  | lbs/ft. |

Crossmembers shall be a minimum 4” I-beams on 16” centers or 6” I-beams on 22” centers rated to meet trailer GVW specifications.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Crossmember size: | | @ | |  |
| Weight/length on |  | | centers | |

Side rails shall be minimum 7" structural channel of 9.8 lbs. /ft

|  |  |  |
| --- | --- | --- |
| Channel/tube size: | |  |
| Weight/length: |  | |

**Trailer Deck:**

Type – The overall deck length shall be approximately 29’. The trailer shall have a 60” stationary deck with 24’-0” tilt portion equipped with a lock and release.

Complies: Yes  No

Maximum width - 102"

|  |  |
| --- | --- |
| Width: |  |

Length - 29' minimum.

|  |  |  |
| --- | --- | --- |
| Length: |  | |
| Stationary deck length/in.: | | | |  | |
| Tilt deck length/ft.: | |  | | |

Deck height dimension is critical. Trailers considered must have loaded deck height not exceeding 37”.

|  |  |
| --- | --- |
| Loaded height/in.: |  |

The deck shall be full 2" thick hardwood, must be Oak, Apitong, or equal over steel frame with steel reinforced wheel covers. The rear of the tilt deck shall have a tapered approach angle and grousers or angle cleats for traction. This approach plate shall also fold down and serve as an under-ride guard.

Complies: Yes  No

|  |  |  |
| --- | --- | --- |
| Wood thickness: | |  |
| Type of wood: |  | |

The tilt deck portion of the trailer shall have dual cushioning cylinders rated for maximum load capacity.

Complies: Yes  No

|  |  |
| --- | --- |
| Capacity of cylinders: |  |

A single step shall be placed on each side of the trailer to allow easy access to the trailer deck.

Complies: Yes  No

**Tongue:**

Shall extend approximately 7-'0" ahead of the deck.

|  |  |
| --- | --- |
| Tongue length: |  |

The tongue shall be an “A”-frame, designed with ample safety factor to withstand a minimum 20 percent of the rated gross vehicle weight of the trailer. The tongue shall be equipped with an expanded metal tray and lockable tool box lid for storage.

Complies: Yes  No

|  |  |
| --- | --- |
| Load rating: |  |

**Load Transfer:**

The trailer shall be capable of transferring a minimum of 15 percent and a maximum of 20 percent of its load to the towing vehicle.

Complies: Yes  No

|  |  |
| --- | --- |
| Weight transfer percentage with centered load: | % |

The trailer shall be clearly marked, visible on both sides, where 15 percent and 20 percent of the load transfer occurs.

Complies: Yes  No

|  |  |
| --- | --- |
| Describe marking: |  |
|  | |

**Deck Accessories:**

Tie Down Eyes – Minimum of 6 “D” rings equally spaced on each side of trailer on the tilt deck and 2 each side on the stationary deck.

Complies: Yes  No

The tie down eyes or “D” rings shall have a rated capacity of 40,000 lbs. each.

|  |  |
| --- | --- |
| Rated capacity: |  |

Snatch Point – Heavy duty eyelet or “D” ring located front center of tilt portion of the deck with load capacity equal to trailer.

Complies: Yes  No

|  |  |
| --- | --- |
| Rated capacity: |  |

Headboard – Full width across front of deck

Complies: Yes  No

Two (2) tool boxes, constructed of heavy duty aluminum tread plate, 2' x 4' Bolted to floor on each side of stationary deck at the front. The door shall be on top with 2 hydraulic struts to maintain open position both shall be lockable with an extra key.

Complies: Yes  No

**Brakes - Electric:**

Type- All wheels brakes, the electric brake system shall be installed on both axles. All components shall be rated to perform to all safety standards for the GAWR and the capacity of the trailer specified.

Complies: Yes  No

**Brake Connections:**

A brake controller and cable shall be provided for mounting in the truck cab. Mounting of the brake controller and cable to be performed by others.

Complies: Yes  No

**Breakaway System:**

The electric brake system shall include a sealed breakaway safety system.

Complies: Yes  No

**Axles:**

Type – Two each 12,000 lbs. axle capacity minimum with oil bath hubs. Capacity at Ground 24,000 lbs. minimum.

Complies: Yes  No

Component:

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

**Suspension:**

Type– Hutch 9700 or equal adjustable suspension as required and recommended for tandem axle configuration.

Total Capacity at Ground - 24,000 lbs. minimum

|  |  |
| --- | --- |
| Suspension type: |  |

Component:

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

**Wheels:**

Type - Dual, cast spoke or steel disc

Rim Size - 17.5 X 6.75 HC minimum

Wheel Seals - Oil type

Complies: Yes  No

Component:

|  |  |  |
| --- | --- | --- |
| Make: |  | |
| Model: | |  |
| Type: | |  |
| Size: | |  |

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: | |  |

**Tires:**

Type- Tubeless, radial, trailer, designed primarily for on highway use.

Size - 235/85R X 16 – 10 ply, or as needed to meet GVWR

Component:

|  |  |  |
| --- | --- | --- |
| Make: |  | |
| Model: | |  |
| Load rating: | |  |
| Size: | |  |

**Mud flaps:**

Type – Anti sail with brackets mounted behind rear wheels. Black in color, no logo.

Complies: Yes  No

**Hitch:**

Type - Pintle eye for use with Premier Model 2200 latching hook.

Capacity – 100,000 lbs. Gross trailer weight. Minimum 15,000 lbs. Tongue weight, Inside diameter 3 in.

Height Adjustment - 26" to 32"above ground level

Complies: Yes  No

Component:

|  |  |  |
| --- | --- | --- |
| Make: | |  |
| Model: |  | |
| Height: | to | |

**Safety Chains:**

Type - 1/2" steel chain, Grade 7, with matching rated hooks

Location - Outside of hitch frame.

Complies: Yes  No

**Landing Stand:**

Type – Dual, 12,000 lbs. capacity, 2 speed, bolt on jacks.

Complies: Yes  No

Component:

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

**Electrical System:**

Type - 12 volt

Complies: Yes  No

**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

**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 similar to 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 shall be secured utilizing rubber coated clamps bolted to the frame at 18" minimum spacing.

Complies: Yes  No

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

**Truck Connection for Lighting and Electrical:**

Type – 7-way connector, utilizing round pins and sockets, SAE/ATA approved, socket portion installed on trailer lead, pin portion is provided with the truck installation (See diagram on last page).

Complies: Yes  No

**Paint/Finish:**

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

Complies: Yes  No

All lower structure shall be rustproofed with Ziebart 1015 or similar material.

Complies: Yes  No

|  |  |
| --- | --- |
| Describe Rustproofing: |  |
|  | |

**Manuals:**

One copy of “Service or Shop” manual shall be provided to each delivery location.

Complies: Yes  No

Three 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

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

**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 **12 months** shall be provided. Bidder shall attach copy of warranty with bid.

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

Since the continuous operation of this equipment is of the utmost importance and sometimes of an emergency nature, it is necessary that the successful bidder be in a position to render prompt parts and service. Review of the bidder's ability to provide prompt parts and service within the State of Illinois will be considered.

|  |  |
| --- | --- |
| 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

**Bid Package:**

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

1. Specification Questionnaire
2. Descriptive Literature



***Note:*** Navistar uses a Dark Green Wire for their ABS pin instead of the blue shown.