State Of Illinois

Department Of Transportation

Bureau Business Services

**Specifications and Questionnaire for a Tandem Axle, Drop Frame, Van Body Trailer**

July 2019

This specification and questionnaire covers a drop frame, aluminum skin, van body trailer for use by the Department of Transportation. The Department of Transportation is specifying acceptable units by required equipment and accessories as outlined below.

Each bidder shall submit with their 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:

* The manufacturer of the equipment proposed has been actively involved in the manufacture of the equipment called for in the questionnaire for a period of not less than 5 years.
* 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: | | | |  | | | |
|  | | | |  | | | |
|  | | | |  | | | |
| Telephone: | | | |  | | |
| Contact Name: | | | | |  | |
| 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.**

**The Trailer shall include the following standard or optional accessories and equipment:**

**Trailer:**

This specification is intended to describe a Van type (enclosed), drop frame, aluminum skin, tandem axle, air suspended trailer with eight (8) pneumatic tires.

|  |  |
| --- | --- |
| Number of tires: |  |

Complies:  Yes  No

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

Complies:  Yes  No

Width of trailer - 102" maximum.

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

The trailer length shall be 53’-0”.

|  |  |  |
| --- | --- | --- |
| Length: |  | Feet |

Complies:  Yes  No

The trailer shall be constructed to a height of 12’-6”. The height shall be consistent with a 5th wheel height of approximately 52”.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Height from level: |  | | Feet/Inches | | |
| Height coupled to 52” 5th wheel: | |  | | Inches |

**Body:**

The trailer shall meet the following dimensions:

The front nose shall be no higher than 12’-6” when measured from level or attached to a 5th wheel with a height of 52”.

|  |  |  |
| --- | --- | --- |
| Front nose height: |  | Feet/Inches |

Complies:  Yes  No

Please provide the following dimensional information:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Front height, floor to roof inside: | |  | | | Feet/Inches | | |
| Side height inside: |  | | | Feet/Inches | |
| Rear height, inside over wheel wells: | | |  | | | | Feet/Inches | |

The nose shall measure 10’-0” back to the drop of the frame.

|  |  |  |
| --- | --- | --- |
| Nose to frame drop: |  | Feet/Inches |

Complies:  Yes  No

The king pin shall be located 18” from the front of the trailer and mounted on a T-36 steel plate 44” x 48” or equal.

|  |  |
| --- | --- |
| Describe king pin, mounting, and location: |  |
|  | |

The trailer shall measure a minimum of 8’-0” from the rear to the center of the rear suspension.

|  |  |  |
| --- | --- | --- |
| Measurement from rear to center: |  | Feet/Inches |

Complies:  Yes  No

The floor from rear to the back of the front drop frame shall be level and full width with the exception of the wheel wells.

Complies:  Yes  No

The drop in frame shall be approximately 19”. This dimension will be discussed with the successful bidder prior to construction.

|  |  |  |
| --- | --- | --- |
| Drop dimension: |  | Inches |

Complies:  Yes  No

The walls of the trailer shall be constructed with “hat” reinforcing with .050” thick aluminum skin.

Complies:  Yes  No

|  |  |
| --- | --- |
| If NO, describe: |  |
|  | |

The reinforcing “hats” shall be a maximum 24” center to center.

Complies:  Yes  No

The area between the “hats” shall be filled with rigid insulation and covered with 3/8”thick plywood on the front and side walls.

Complies:  Yes  No

The wheel wells shall be constructed of a minimum 10-gauge thick welded steel plate. They shall provide a center walkway in the body of the trailer with a minimum width of 42”.

|  |  |  |
| --- | --- | --- |
| Walkway width: |  | Inches |

Complies:  Yes  No

The floor shall be 1-3/8” nominal thickness hardwood flooring with a 24” rear threshold plate beveled into the floor.

Complies:  Yes  No

Crossmembers shall be “I” beam style structural members of 80,000 psi material.

Complies:  Yes  No

|  |  |
| --- | --- |
| If NO, describe: |  |
|  | |

Crossmember spacing shall be no greater than 12” center to center for the full length of the trailer.

|  |  |  |
| --- | --- | --- |
| Crossmember c to c spacing: |  | Inches |

The body floor shall connect to the sides with an extruded aluminum bottom rail. Construction shall be done to prevent electrolysis between metals.

Complies:  Yes  No

The roof shall consist of aluminum skin thickness .040” bonded to the roof bows.

Complies:  Yes  No

|  |  |
| --- | --- |
| If NO, describe: |  |
|  | |

Rigid insulation shall be provided between the bows and covered with 1/4” thick plywood.

Complies:  Yes  No

**Doors:**

All doors in the trailer shall be swinging style, lockable, and secured using heavy steel rods and latches.

Complies:  Yes  No

The rods shall be secured in a minimum of three locations with reinforced openings in the roof and floor.

Complies:  Yes  No

The door frames shall be reinforced. They shall be gasketed with replaceable, high quality gasket material.

Complies:  Yes  No

The rear doors shall open to the full width of the interior and be supported by five (5) hinges.

Complies:  Yes  No

The roof shall include a reinforced overhead rain gutter at the rear door opening.

Complies:  Yes  No

The doors shall be constructed of metal clad plywood or plastic core, minimum 3/4” thick.

Complies:  Yes  No

The trailer shall have two side openings on the curb side:

1. 16” back from the front drop frame shall be a 4’x4’ lockable, gasketed, door opening with four (4) hinges on the right side of the door.
2. 10’ from the front drop frame shall be a 4’x8’ lockable, gasketed, door opening with five (5) hinges on the right side of the door.

Complies:  Yes  No

These doors shall be metal clad 3/4” plywood or plastic core or a combination of both.

Complies:  Yes  No

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

All doors shall include loop style hold backs. Aluminum style if available.

Complies:  Yes  No

***Note:*** All entry doors shall have recessed step(s) if needed. This can be discussed with winning bidder prior to construction.

**Landing Stand:**

The landing gear shall be located immediately prior to the frame drop and be capable of supporting the trailer fully loaded.

Complies:  Yes  No

The landing stand shall be mechanically operated with two speed capability.

Complies:  Yes  No

The landing stand shall include two (2) stands with replaceable pads. The pads provided shall be low profile sand shoes.

Complies:  Yes  No

**Axles and Suspension:**

Tandem axles spaced not less than 49" apart.

|  |  |  |
| --- | --- | --- |
| Axle spacing: |  | Inches |

Axle and suspension shall be rated at a minimum of 20,000 lbs. each.

|  |  |  |
| --- | --- | --- |
| Axle rating: |  | Lbs. |

Axles shall be tubular steel with an outside diameter and a wall thickness to correspond with their rating.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Axle diameter (O.D.): | | |  | | Inches | |
| Wall thickness: | |  | | Inches | |
| Material: |  | | | | | | |

Air ride suspension shall provide for full trailer rated capacity for all axles.

|  |  |  |
| --- | --- | --- |
| Suspension rating: |  | Lbs. |

Complies:  Yes  No

Component:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Make: |  | | | | |
| Model: | |  | | | |
| Capacity: | | |  | Lbs. |

Two (2) air tanks shall be provided. One mounted in front of the wheel boxes and the second mounted behind the wheel boxes. Both must include automatic drain valves.

Complies:  Yes  No

Component:

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

**Tires and Wheels:**

Tires shall be tubeless radial, size 285/75R24.5G or equal.

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

Wheels shall be hub piloted steel disc, painted or powder coated manufacturer’s standard white or gray.

Complies:  Yes  No

Oil type wheel bearing seals with hub assemblies, that provide for visual indication of oil level.

Complies:  Yes  No

One of the right wheels (curb side) shall also be equipped with hub-odometer which is designed for the size of wheel and tire proposed to be furnished. The hub-odometer hub assembly shall also be a type which provides for easy oil level checking.

Component:

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

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: | |  |

**Brakes:**

Air brakes to be of a size and design that will provide adequate control for a capacity load under all circumstances. Air brakes shall conform to all State and Federal safety regulations.

Complies:  Yes  No

|  |  |
| --- | --- |
| Describe brake system: |  |
|  | |

**Wiring and LED Lighting:**

All wiring and LED lighting shall be a totally sealed package. All holes shall be grommeted and sealed junction boxes provided when necessary.

Complies:  Yes  No

Component:

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

All necessary lighting and reflectors shall comply with Illinois Motor Vehicle Laws and Federal safety requirements.

Complies:  Yes  No

A minimum 7-wire, ATA approved receptacle for trailer light jumper cable shall be furnished.

Complies:  Yes  No

All rear lighting (Tail, Turn, and Stop) shall be recessed and mounted in shock-proof light mountings.

Complies:  Yes  No

***Note:*** Interior courtesy lighting shall be provided if included in base price of unit.

**Included Equipment and Accessories:**

One standard air brake connector kit shall be provided with each trailer. The glad hands shall be Meritor Wabco part number 952 201 018 0 filtered units or IDOT approved equal

1. Air brake jumper hose and connectors.
2. Rear anti-sail mud flaps.
3. One spare wheel and tire assembly.

Complies:  Yes  No

**Finish:**

All exterior aluminum surfaces shall be painted or coated white. All steel parts shall be chemically etched, primed two coats and painted two coats black enamel.

|  |  |
| --- | --- |
| Describe finish: |  |
|  | |

**General:**

Two sets of shop drawings or blueprints shall be submitted and approved before construction begins.

Complies:  Yes  No

All operator's manuals, parts lists, and warranty information shall be provided at time of delivery.

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:**

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 manufacturer's rated loads for chains and bearings shall not be exceeded when the unit is loaded with such loads.

Complies:  Yes  No

Full coverage warranty for a minimum **12 months** shall be provided. Frame and body shall carry a five (5) year manufacturers’ warranty. Bidder shall attach copy of warranty with bid.

Complies:  Yes  No

List service locations in Illinois:

|  |
| --- |
|  |
|  |

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 and in the presence of authorized state personnel to prove out any features which may be in question.

Complies:  Yes  No

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

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