

**Canon-McMillan School District**  
Notice of Instructions to Bidders  
Specifications/Exceptions for 72 Passenger School Buses  
2017 Model Year – or Newer

The Board of School Directors of the Canon-McMillan School District will receive bids for the purchase of one or more seventy two (72) passenger school buses all complying in all requirements with the “Standards, Rules, and Regulations Governing Pupil Transportation” as established by the Pennsylvania Department of Education, Harrisburg, PA and the Federal Motor Vehicle Safety Standards (FMSS) as established by the National Highway Traffic Safety Administration, the PA Bureau of Motor Vehicle Code and the State Police of PA Inspection Code in effect at time of delivery to the school districts facility.

The vehicles must carry a current State Inspection Sticker. In the event that the bus is rejected by the PA State Police during the inspection of the vehicle, it shall be the responsibility of the bidder to make whatever corrections necessary to comply with the School Bus Regulations, effective at time of delivery.

All bidders must complete the attached specifications. Each line requires a response stating the specifications proposed by the bidder. In the event that the specifications proposed by the bidder are exactly and unequivocally identical to specifications established by the School District, including brand name, the bidder may respond with the phrase “No Exceptions”. In all other cases, and for all brand name items, the bidder is required to provide written specifications. Each line on which information is requested (noted by phrase EXCEPTION :) must be completed. Additional pages may be added if necessary.

The terms, “no structural difference” or “We are equal to your proposed specifications” will not be permitted. It is the responsibility of the School District and their representatives to determine if a substitution is “or equal”. Therefore, the bidder must be required to provide detailed specifications so that the School District can make the necessary comparisons to enable them to reach the proper decision. Failure to comply will render the bid invalid for material non-compliance to our published specifications.

The Board of School Directors reserves the right to accept or reject any or all bids, waive any informality, and to award a contract which, in their opinion, will be for the best interest of the school district.

In the final determination made by this board, it may be necessary for the bidder to provide a demonstrator vehicle for our inspection.

Delivered by: **August 15, 2017**

The deadline for bus bids is: **Thursday, May 11, 2017 at 1:30 pm**

**OTHER CONDITIONS**

**NOTE** Please initial in the space provided at the end of each statement to indicate your acceptance of these conditions.

Successful bidder agrees to deliver the vehicles on or before: **August 15, 2017**

School buses shall be equipped to meet all Pennsylvania minimum standards prior to delivery. \_\_\_\_\_

Literature, complete specifications and photographs shall accompany bid. \_\_\_\_\_

Successful bidder will provide the district with warranties, line sheets, shop service manual, parts manual, engine service manual, transmission service manual and operator’s manual. \_\_\_\_\_

Dealer agrees to furnish detailed work orders for all warranty work performed. This includes all work “sub-contracted” to another agent. \_\_\_\_\_

Complete parts inventory for all chassis and body items shall be available within 24 hours from selling dealer at their location. \_\_\_\_\_

Please list the location and approximate distance from the school district, of the service facility that will be utilized for all factory-authorized chassis, body, and engine repairs.

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## 2017 - 2018 - Diesel Bus

### Chassis Specifications

The minimum standards are as follows:

#### 1. Frame:

- A. 30,000 GVW plate rating, minimum.
- B. 50,000 P.S.I. steel minimum.
- C. Hi-Tensile strength "Huck-Spin" fasteners with swaged lock nuts to be used for all permanent fixtures.
- D. Front and rear tow hooks.
- E. Exceptions:\_\_\_\_\_

#### 2. Wheelbase:

- A. 273" wheelbase maximum.
- B. Turning radius at curb to be a maximum 34.9'.
- C. 50 degree wheel cut - Minimum
- E. Exception:\_\_\_\_\_

#### 3. Front Axle and suspension:

- A. 12,000 lb., capacity, front axle, minimum.
- B. 10,000 lb. Front springs minimum.
- C. 16.5" x 5" brakes with non-asbestos lining. Dustshields to be included.
- D. Automatic slack adjusters, Meritor.
- E. Double action, piston type shock absorbers.
- F. Petroleum lubed bearings.
- G. Exceptions \_\_\_\_\_

#### 4. Rear Axle and Suspension:

- A. 21,000 lb. capacity Meritor rear axle, minimum or equal.
- B. Rear air ride suspension, 21,000 lb. capacity minimum
- C. 16.5" x 7" brakes with non-asbestos lining. Dust shields to be included.
- D. Automatic slack adjusters, Meritor.
- E. 5.29 drive ratio.
- F. Double action ,piston type shock absorbers
- G. Exceptions:\_\_\_\_\_

#### 5. Wheels & Rims:

- A. 8.25 x 22.5, hub-piloted disc wheels, **painted black**.
- B. Exceptions:\_\_\_\_\_

#### 6. Tires:

- A. Front 11R x 22.5, 14 ply, tubeless-highway tread. Goodyear Endurance
- B. Rear 11R x 22.5, 14 ply rating, tubeless-highway tread. Goodyear Endurance
- C. Spare tire and wheel. Same as front tires.
- D. Exceptions:\_\_\_\_\_

**7. Brakes:**

- A. Full air brake system.
- B. Bendix-Westinghouse AD-IP heated air dryer.
- C. 18.7 cfm air compressor, water cooled, engine driven.
- D. 4-channel anti-lock brake system.
- E. Meritor Q-plus lining.
- F. Exceptions:\_\_\_\_\_

**8. Steering:**

- A. TRW THP.60 power steering with TRW power steering pump (gear driven).
- B. Padded steering wheel, tilt/telescopic.
- C. Exceptions:\_\_\_\_\_

**9. Fuel Tank:**

- A. 60 gallon rectangular steel fuel tank mounted between rear frame rails minimum.
- B. Spring loaded fuel tank door with key lock and floor mounted sender inspection plate.
- C. Heated fuel filter/water separator mounted on firewall.
- D. Exceptions:\_\_\_\_\_

**10. Horns:**

- A. Dual electric.
- B. Exceptions:\_\_\_\_\_

**11. Engine:**

- A. In-line six cylinder diesel engine, turbo-charged and after-cooled. No exceptions.
- B. 220 horsepower, 6.7 ltr. minimum, Cummins ISB-13.
- C. Engine mounted oil check and fill.
- D. Low oil pressure, high water temperature alarm, light and buzzer.
- E. Spin-on oil filter.
- F. 110-120 volt engine preheater with receptacle mounted in RH bumper face.
- G. 5 year,100,000 mile engine warranty
- H. 2 year towing warranty to repair shop
- I. VGT engine exhaust brake.
- J. 15 Gallon D.E.F. Tank with dash mounted gauge.
- K. Exceptions:\_\_\_\_\_

**12. Electrical:**

- A. Multi-plex chassis wiring with LED read out in drivers dash area.
- B. 240 amp alternator or equal - Minimum
- C. Daytime running lights.
- D. Three (3) Group 31 batteries, 2100CCA, located in battery compartment.
- E. Air gauge package with dual air pressure.
- F. Air restriction indicator.
- G. Ammeter.
- H. Electric fuel gauge.

**Electrical continued.....**

- I. 7 digit speedometer, resetable trip odometer, tachometer, voltmeter, coolant temperature gauge, high/low beam indicator, engine hour meter, transmission temperature gauge.
- J. Engine oil pressure gauge.
- K. Self-canceling turn signal switch.
- L. Digital clock.
- M. Engine warning system.
- N. Dash mounted switches:
- O. Headlights with parking light position, and high idle with low idle return switches.
- P. Message display center located in speedometer face to provide the following functions:  
Odometer, Trip odometer, boosts pressure, percent engine load, instantaneous fuel rate, average fuel rate, engine hours.
- Q. Exceptions: \_\_\_\_\_

**13. Radiator:**

- A. Coolant protected to -34 degrees.
- B. Cooling hose with constant torque hose clamps.
- C. Surge tank – see through type or sight glass installed.
- D. Charge air cooler of cast aluminum, mounted in tandem with aluminum core coolant radiator.
- E. Exceptions: \_\_\_\_\_

**14. Exhaust System:**

- A. Tailpipe to exit through rear bumper.
- B. Wide band exhaust clamps at all joints.
- C. Exceptions: \_\_\_\_\_

**15. Controls:**

- A. Key type engine start/stop.
- B. Self-canceling turn signal arm on steering column.
- C. Headlight dimmer switch on signal lever.
- D. Transmission shifter mounted on dash to right of driver.
- E. All controls and switches to be easily operated from driver's seat.
- F. Back lit rocker switches for body accessories.
- G. Exceptions: \_\_\_\_\_

**16. Transmission:**

- A. Allison series 2500 PTS automatic with five (5) forward speeds.
- B. Transmission cooler located in lower radiator.
- C. 5-year, unlimited mile warranty.
- D. Transynd synthetic transmission fluid.
- E. Exceptions: \_\_\_\_\_

**17. Hood/Fenders:**

- A. One piece fiberglass-tilting hood.
- B. Turn signals to be fender mounted for driver visibility.
- C. Halogen headlights with daytime running lights – No exceptions.
- D. Exceptions: \_\_\_\_\_

**18. Bumpers:**

- A. Heavy duty steel bumper, 15” high with 1” flanges top and bottom, ¼” thick.
- B. Exceptions: \_\_\_\_\_

**19. Miscellaneous:**

- A. Complete shop service manuals for engine, transmission, ABS brake system, and wiring diagrams.
- B. Exceptions: \_\_\_\_\_

## BODY SPECIFICATIONS

### 1. Capacity:

- A. Seventy-two (72) passengers.
- B. Rows of seats – 12 rows (2-39" wide seats).
- C. Knee room – 25" minimum.
- D. Aisle width – 12" at cushion level.
- E. Width per passenger – 13".
- F. Exceptions: \_\_\_\_\_

### 2. Headroom:

- A. 77" over 5/8" plywood sub-floor minimum.
- B. Exceptions

### 3. Windshield:

- A. Tinted/shaded windshield.
- B. 2,200 square inches of glass - Minimum
- C. Exceptions

### 4. Interior Requirements:

- A. Side panels are to be aluminized, fully hemmed, steel from the side windows to the seat rails.
- B. Must be installed with pull rivets only. Screws not acceptable.
- C. Floor to be covered with 1/8" smooth rubber under the seats, and in driver area, 3/16" ribbed aisle and step tread.
- D. Rear wheel-housings are to be completely covered.
- E. Tan floor and step treads.
- F. Aluminum aisle trim over floor joints.
- G. Cove molding located between the floor and sides of bus to be 1" coated metal.
- H. Stepwell entrance steps are to be covered with tan ribbed rubber at least 3/16" thick.
- I. 5/8" marine grade plywood sub-floor, screwed down, not nailed.
- J. 3 – Step stainless steel stepwell.
- K. Fuel sender inspection plate.
- L. Interior grab rail.
- M. Exceptions: \_\_\_\_\_

### 5. Mirrors:

- A. Heated rearview exterior mirrors. Each mirror comprised of 74 sq. in. flat and 38 sq. in. convex surface.
- B. One (1) 6" x 30" inside mirror.
- C. One (1) 6" x 30" adjustable shaded Plexiglass Sunvisor.
- D. Heated elliptical cross over mirrors.
- E. Exceptions: \_\_\_\_\_

## 6. Heaters:

- A. Front heater located at left of driver, hot water type with minimum 90,000 BTU capacity.
- B. Heat for passenger area not to be confined to one (1) opening.
- C. At least two (2) heat outlets to be provided with the furthest outlet extending from heater core to at least the third row of seats.
- D. Heater to be fresh-air type with air inlet located at the left cowl, below windshield with air cut-off valve to be controlled from driver's seat.
- E. Under seat heater, hot water, recirculating type with minimum 80,000 BTU capacity.
- F. Heat for passenger area not to be confined to one opening.
- G. Right hand entrance door heater and defroster, 50,000 BTU minimum.
- H. Rear heater motors and switches are to be two-speed, front heater and defroster motor switches to be 3-speed.
- I. Two (2) 6" defroster fans to be located at top of windshield.
- J. Cut off valve for all heaters to be located in driver's area, ¼ turn valves only.
- K. Centralized heater bleeding system external of the body.
- L. Heater cores to be tube and fin type and plumbed in series.
- M. Full width defroster and heater, ducted across windshield, driver's window and entrance door glass.
- N. To have easily accessible-washable air filter.
- O. Exceptions: \_\_\_\_\_

## 7. Doors:

- A. Entrance door to be air operated outward opening type with cushioned header pad installed above door, and 3-position switch
- B. Entrance door shall be located on right side of bus, directly opposite the driver and within his direct view.
- C. Vertical closing edges shall be equipped with flexible material to protect children's fingers.
- D. Dual emergency door hinges to include grease fittings. Piano type hinge not acceptable.
- E. Vandal locks for service and emergency doors
- F. Exceptions: \_\_\_\_\_

## 8. Seats:

- A. All seat backs are to meet FMVSS standards.
- B. Seats are to be covered with brown upholstery, 42 oz. minimum.
- C. The seat backs are to be fully padded.
- D. All seat frames are to be double strength at stress points.
- E. Seat frames must be securely anchored to the floor with grade 8 bolts and locknuts and must be 14-gauge steel.
- F. Driver's seat all foam easily adjustable semi-bucket, must have retractable shoulder harness seat belt with adjustable pillar loop to allow for vertical adjustment (driver only). The seat to be easily adjusted by driver from seated position without the need of tool. To include fabric insert.
- G. Exceptions: \_\_\_\_\_



**9. Windshield Wipers:**

- A. Must be two-speed, electric, and wet-arm blades.
- B. Bottom mounted with intermittent switch.
- C. Exceptions:\_\_\_\_\_

**10. Glass:**

- A. Driver's window is two (2) piece-sliding sash, extruded aluminum.
- B. Side windows are two (2) piece 12" split sash, top half-capable of being lowered, extruded aluminum frame, flush latches.
- C. Rear quarter windows and rear windows to be capable of being pushed out in case of emergency.
- D. Emergency door glass in top and bottom halves of door. Entrance door has four (4) panes of glass, two (2) in each half.
- E. All glass in windshield, windows and doors shall be of approved type safety glass (so mounted that the permanent identification mark is visible) and of quality to prevent distortion of view in any direction.
- F. Four (4) side emergency Push-Out windows, two (2) per side.
- G. Exceptions:\_\_\_\_\_

**11. Ventilation:**

- A. Rain visors to be provided for all side windows.
- B. One (1) low profile roof hatch installed in vehicle roof.
- C. Exceptions:\_\_\_\_\_

**12. Construction:**

- A. All body panels to be zinc steel.
- B. Four (4), one (1) piece double profile rub rails of minimum 16 gauge steel with bottom rail at bottom of skirt. Rub rails to be sealed with yellow silicone at tops.
- C. Side panels – the outside panel from the side window to the bottom of the lower skirt is to be 16-gauge smooth steel. Side panels to be 1-piece from window bottom to bottom of skirt.
- D. Body to have full length 1-piece gusset rail at the floor line from front to rear of bus and from the seat rail to approximately 7" below the floor line.
- E. Impact rail is not to be part of exterior panel.
- F. Roof Bows: Bows are to be 1-piece from floor line to floor line. 14 gauge minimum hat-shaped design only.

**13. Floor:**

- A. Floor to meet FMVSS 221 joint strength; to be constructed using 14 gauge steel panels
- B. Components and parts to be rust proofed and primed after fabrication and prior to assembly using an established and acceptable zinc phosphate process.
- C. Body must be totally sealed and leak free.
- D. Rubber isolators located between body and chassis in front cowl area and the rear body tie-down area. No exceptions.
- E. Exceptions:\_\_\_\_\_

#### 14. Electrical:

- A. Lights
- B. Stepwell light to operate when door is opened.
- C. Front and rear roof clearance lights– L.E.D. Lights.
- D. Front and rear cluster lights– center roof, front and rear – L.E.D. Lights.
- E. One (1) license plate light (in combination with left taillight).
- F. Two (2) stoplights, 7”.
- G. Two (2) back-up lights, 7”.
- H. Approved Pennsylvania hooded roof-warning lights with black painted background. Lamps are to be halogen.
- I. Self-canceling directional signals, 7” rear, indicator lights on dash.
- J. Two (2) side body directional signals per side.
- K. Switch panel located below driver’s window. This switch panel to be positioned for optimum driver’s visibility and ergonomically correct for control operation.
- L. Body electrical terminal to be housed in a weather proof, lighted, locking exterior panel, located under driver’s window.
- M. Wires to be color and continuously number coded and carried through loom. Wiring diagram to be attached to inside of exterior access door for permanent reference.
- N. Buzzer on emergency exits to indicate when door is open.
- O. Locking battery compartment with sliding tray to be installed on the left side of the body, directly below drivers window on left side of body.
- P. Side stop-arm – to meet State and Federal requirements, air operated.
- Q. Drivers dome light on separate switch. Double row of interior dome lights.
- R. Body solenoid switch.
- S. All switches to be rocker type, laser etched, back lit type.
- T. Heater/defroster controls to be mounted in one (1) centralized location.
- U. Access to wiring harness without removing windows. Wire molding to be made from composite material.
- V. Air operated front bumper crossing control arm with Poly-rod.
- W. Back-up alarm.
- X. 14 cp. Stepwell light to be wired to ID lights with entrance door open.
- Y. Exceptions: \_\_\_\_\_

#### 15. Accessories:

- A. First aid kit.
- B. Wrecking bar – mounted in driver’s area.
- C. Triangular reflectors.
- D. Fire extinguisher: 5 pound dry chemical A-B-C type; shall be provided and suitable mounted so as to be readily accessible and available for use to the operator in case of emergency.
- E. Body fluid kit.
- F. All equipment mounted in compartment above windshield.
- G. Exceptions: \_\_\_\_\_

**16. Mud Flaps:**

- A. Two (2) rear, with metal mudguards front and rear of rear wheels.
- B. Two (2) front.
- C. Exceptions: \_\_\_\_\_

**17. Insulation:**

- A. Full 1 ½" insulation in roof and sides to floor line, (state R-value).
- B. Must have minimum – 5.75 R-value, must not retain water.
- C. Perforated acoustical headlining panels spanning the entire length of the bus.
- D. Exceptions: \_\_\_\_\_

**18. Undercoating:**

- A. Entire underside of body, including floor members, side panels, and fenders below floor level, shall be coated with asphalt-base or rubber base.
- B. Undercoating material applied by a spray method in order to seal, deaden sound, insulate and prevent oxidation of the underside of the body.
- C. Care must be taken to be certain no water drain holes designed into body are closed with undercoating material.
- D. Exceptions: \_\_\_\_\_

**19. Painting:**

- A. Bus to be painted national school bus yellow including belt panel except for black front and rear bumpers, rub rails and mirror assemblies.
- B. Paint to be heat-set Polyurethane, with hi-temp bake, no exceptions.
- C. Seat frames and legs to be painted black.
- D. Exceptions \_\_\_\_\_

**20. Lettering:**

- A. 8" "School Bus" to be lettered front and rear, hinged sign covers are to be included.
- C. School District lettering and bus numbers.
- D. Exceptions: \_\_\_\_\_

**21. Miscellaneous:**

- A. Folding steps on front cowl, both sides of body.
- B. Toolbox located under rear seat of bus for chain storage.
- C. Power point for cell phone plug in.
- D. Locking glove compartment.
- E. AM/FM Radio unit with integrated PA system microphone with eight (8) speakers and wiring.
- F. Exceptions: \_\_\_\_\_

### **Manufacturing Specifications:**

Each bidder shall be required to include with the bid forms and specifications, complete factory specifications describing the body on which his bid has been based and the unit which he intends to supply to meet the minimum requirements outlined above. The absence of detailed specifications pertaining to this particular vehicle (not a general specification) will deem bid as non-responsive.

## 72 PASSENGER SCHOOL BUSES

**Bids will be opened at 1:30 pm, at the Support Facility, on Thursday, May 11, 2017**

Company \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

Phone \_\_\_\_\_

Contact \_\_\_\_\_

\$ \_\_\_\_\_ new 72 passenger - bid price per unit. Model Year \_\_\_\_\_

\$ \_\_\_\_\_ new 72 passenger - bid price per unit. Model Year \_\_\_\_\_

\$ \_\_\_\_\_ new 72 passenger - bid price per unit. Model Year \_\_\_\_\_