

Purchasing Department
1320 West Main Street Suite 202
Franklin, Tennessee 37064-3700
Phone (615) 472-4010



WILLIAMSON COUNTY SCHOOLS
RFB # 1194
NEW GENERAL ED & SPECIAL ED SCHOOL BUSES
Fiscal Year 2020-21

Williamson County Board of Education (WCS) is accepting bids from qualified bidders for new General Education and Special Education School Buses for the Fiscal Year 2020-21. Interested bidders shall submit sealed bids using the forms attached to the bid document. Bids must be submitted in a sealed envelope mailed or hand delivered to Williamson County Schools, 1320 West Main Street, Suite 202, Franklin, TN 37064 Attn: Skip Decker. The outside of the envelope must be marked "RFB #1194 NEW GENERAL ED & SPECIAL ED SCHOOL BUSES". Sealed bid envelopes must be submitted on or before 2:30 pm on Monday, December 16, 2019 at which time sealed bid envelopes will be publicly opened. Faxed or emailed bids will not be accepted. Absolutely no bids will be accepted after this time. Sealed bid envelopes shall be stamped (date and time) by WCS to verify the authenticity of receipt. The bid opening will take place at the aforementioned address.

NOTE: A pre-bid meeting has been scheduled for Wednesday, December 4, 2019 at 2:00 pm. The pre-bid meeting will be held at the Central Office, (address listed above). Attendance at the pre-bid meeting is not mandatory. However, attendance is highly encouraged for all potential bidders, as details, specifications, terms and conditions for this project will be addressed at this meeting.

If you have questions concerning this request for bid document, contact the Williamson County Schools Purchasing Department at 615-472-4010 or email skipd@wcs.edu. It is the bidder's responsibility to acknowledge and understand the specifications, scope, requirements, terms and conditions of this bid project. This request for bid was prepared by the Purchasing Department. Should any terms or conditions on the attached Bus Specifications differ from the RFB, then the terms and conditions of the RFB shall govern the process.

The following information must be printed on the outside of the sealed bid envelope:

- WCS RFB # 1194 New General Ed & Special Ed School Buses
- Name of Bidding Company
- Date & Time of Bid Opening

The following information must be included inside the sealed bid envelope:

- Signed and completed bid cover sheets
- Signed and completed Iran Divestment Act Certificate
- Any related support documents / literature

Williamson County Schools reserves the right to accept or reject bids, upon the evidence (or as determined by WCS Staff) before or after the bid opening, that a bidder is not necessarily qualified by experience, is not in a position to perform the work specified in the time allotted, or upon evidence of collusion with intent to defraud or other illegal practice.

- All bids are to be complete in every detail as required. Bids that are incomplete, contain irregularities or are not in accordance with the specifications may be rejected. WCS reserves the right to waive any formalities to accept any bid as a whole, split bid and/or accept any individual item or items within a bid or to reject any or all bids whichever is in the best interest of WCS.
- The bid may be awarded to the lowest bidder(s) or best overall bid and WCS reserves the right to award based on quality, price and availability of services specified whichever is in the best interest of WCS. This bid evaluation will be based on pricing/cost and service as validated through references and / or other qualitative consideration as submitted through the RFB process.
- Awards shall be made based on best and most responsive bid determined to be in the best interest of WCS. Our intent is to award the RFB to the lowest, best and most responsive competitive bidder(s).
- This bid is ultimately subject to funding (as with all WCS Bid projects). WCS is a tax-exempt organization ...Although WCS is tax-exempt – the Bidder(s) are responsible for (and bid cost must reflect) any / all sales and use tax for the materials and or equipment.
- The use of the name of a manufacturer or any special brand, model or make in describing an item or the use of detailed descriptive specifications pertinent thereto, does not restrict bidders to that manufacturer, specific article or such detailed descriptive specifications; the means or method being used is simply to indicate the character, or quality of the article desired. However, the article on which bids are submitted must be of such character, quality and design as will serve the purpose for which it is to be used equally as well as that specified and must be the equal of the article described and equally suitable to the needs of the WCS District. If bidding another item than the make, model, or brand design specified or such detailed descriptive specifications, the manufacturer's name and catalogue reference together with specifications must be given and (CLEARLY STATED ON THE BID SHEET IN EVERY INSTANCE). This will enable the Purchasing Department or the Transportation Department leadership to determine its suitability. WCS reserves the right, through the Purchasing Agent to be the sole judge in the final determination. When no reference is made by the bidder to make or grade proposed to be furnished, it is automatically understood that the specific article named on the bid sheet will be furnished. Williamson County Schools Purchasing Agent must approve any change in offers to the original bid specifications.
- If quantities are provided they are approximations and may only be estimates of annual usage, and not necessarily guaranteed initial purchase quantity. Quantities provided are best estimates of anticipated order quantities. However, WCS cannot guarantee fulfillment of annual usage estimates. The WCBOE reserves the right to increase or decrease amounts and/or quantities.
- All Bids are to be valid for a minimum of 90 days or until awarded whichever comes first. For all awarded bids, the price will remain in effect for 10 months from commencement of bid opening date...this bid covers, December 16, 2019 thru September 20, 2020...This allows WCS to make any possible future – additional purchases (at same awarded bid cost) within the stated 10-month period.

- The language of this WCS RFB shall be binding unless mutually amended by WCS and the awarded bidder. Issuance of the purchase order will be the award notice. The terms and conditions of the WCS-RFB and detailed purchase order shall constitute entire agreement.
- Invoice must be reflective of original bid and must include a valid WCS purchase order number to be paid. WCS will not be responsible for “added expenses”. There shall absolutely be no surcharges. Bidders should submit the most competitive “all in” bid / cost.
- One single invoice – shall be submitted after 100% of order has been successfully delivered to the satisfaction of the WCS Transportation Director. Back orders are discouraged. Bills for partial shipments are not acceptable.
- Notice of final delivery and acceptance must be verified for accuracy and approved by appropriate WCS Transportation – Personnel, prior to submission of invoice for payment. Prices must include complete shipping/delivery costs and installation. The successful bidder must provide full arrangements for delivery.
- All invoices, as mentioned above, must have an approved WCS purchase order number. We require one single invoice per purchase order. The packing slips, manifest or delivery papers should be presented to the WCS Purchasing Department after we receive 100% of the items on the original purchase order. WCS Purchasing Department will coordinate vehicle inspection and invoice approval with WCS Transportation Department.
- Invoices shall be pursuant to the terms and conditions of this RFB. WCS desires to avoid partial projects when possible. No partial invoices will be processed for payment. Invoices should be submitted for payment upon 100% satisfactory completion of each PO. The awarded bidder must have the financial ability to accommodate this type of invoicing and payment arrangement and not request partial payments from WCS. Detailed itemized billing should be included with every invoice submitted. WCS has the right to dispute any invoices.
- The bidder shall abide by and comply with the true intent of the specifications and not take advantage of any unintentional error or omission but shall fully address the full intent and meaning of each aspect of the specifications. By submission of the bid the vendor certifies that all items are reasonably equal to or better than the referenced items and agrees to all terms and conditions stated herein.
- It is the vendor’s responsibility to comply with all local, state and federal laws, regulations, codes, licensing and other governmental requirements regarding the specifications of this project. The bidder must be prepared to substantiate compliance upon request by the Board’s representative.
- In the event a vendor fails to perform, WCS reserves the right to begin negotiations with the “next best bidder” in order to complete the projects or services. In addition, the vendor may forfeit future business with WCS.
- The desired buses should reasonably meet or exceed the specifications of the models included in the detailed specifications which have been provided as a reference. The product awarded could be the referenced brands or any other brand that reasonably meets or exceeds the specifications of the referenced product. Details and specifications will be discussed at the pre-bid meeting.

- Concerning any rebates our preference is for dealer/vendor to handle any manufacturing rebates (and such rebate is reflected in bid pricing). If, however certain rebates require end user (WCS) to apply then bidder MUST state in writing the rebate details, including amount and deadline to apply. This must be indicated on the bidder's cover sheet in order for WCS to consider rebate requirements along with the Bidder's submission.
- It is preferable that all bidders should own or operate a stocked parts and service Facility within 80 miles of Williamson County Schools Transportation Department or guarantee shipment or availability of parts on a NEXT DAY basis.

GENERAL SCOPE OF PROJECT

It is the purpose of this RFB to acquire competitive bids for various types of new School Buses based on a range of possible quantities. All Williamson County School Bid Projects and related purchases are contingent upon funding from the Williamson County Board of Education and the Williamson County Commission ... At this time, it is the desire and intent of WCBOE to fund the following quantities of new school buses for Fiscal Year 2020-21.

**General Education Buses:
(approximately 20 new units)**

**Special Education Buses:
(approximately 1 new unit)**

**Total intent to purchase, (approximately 21) new combined units, if fully funded
through the Williamson County School Board and Williamson County Government**

Williamson County Schools reserves the option of awarding the bid to the most qualified, lowest and most responsive bidder that reasonably meets all specification of this bid project. WCS also reserves the right to piggy-back on a valid awarded contract by other school districts in the State of Tennessee (as allowable under TCA # 12-3-1004) whichever is in the best interest of WCS. WCS will furthermore require the bidders to include on their bid cover sheet (by checking yes or no) an answer that would allow other school districts in the state of Tennessee permission to piggyback off this awarded bid to the extent TN law will allow.

The desired buses should reasonably meet or exceed the specifications of the models included in the detailed specifications which have been provided as a reference. The product awarded could be the referenced brands or any other brand that reasonably meets or exceeds the specifications of the referenced product. Acceptable school buses that are allowed on this bid project are for 2020 or newer model years.

SCHEDULE OF AWARD & RELATED VALUES

- Pre-bid meeting to be held on..... Wednesday, December 4, 2019 at 2:00 p.m.
- The Bid Opening shall take place onMonday, December 16, 2019 at 2:30 p.m.
- Bid tabulations will be sent out with an apparent low bidder on or around Tuesday, Dec. 17, 2019. A letter of intent shall be issued to the awarded bidder(s) after WCS returns from the winter break. This letter of intent to purchase will be issued around or before Jan. 10, 2020. This will allow the awarded bidders sufficient time to make the delivery deadline.
- WCS anticipates issuance of actual (funded) purchase orders for General Ed & Special Ed buses by or before mid-March 2020.
- All bidders must hold their bid price for minimum of 90 days from date of bid opening.
- 100% complete delivery / receipt of all General Ed & Special Ed units must take place by or before Monday, July 20, 2020.
- All New School Bus Vehicles should be delivered to the WCS Transportation Department at 1771 West Main Street, Franklin, TN 37064. New Buses shall have no more than a maximum of 800 miles on the vehicle odometer.

REGARDING INCOMPLETE DELIVERIES - Beginning Tuesday, July 21, 2020, a \$300 per consecutive calendar day penalty will be assessed and deducted from the bus-dealer's invoice amount until the delivery is 100% complete pursuant to the RFB award purchase order – terms and conditions.

- **ALLOWABLE DELIVERY WINDOW** – Do not stagger the delivery of Buses to WCS, all buses are to be delivered as one consolidated shipment during a 48-hour period sometime between Monday, July 6 – Friday, July 17, 2020.
- The awarded vendor should schedule the actual delivery arrangements with the WCS Transportation Department 615-472-4951 at least 48 hours in advance.
- After all bus deliveries have been satisfactorily completed the awarded dealer(s) shall present one (1) detailed, itemized, consolidated invoice along with appropriate Title/Manufacturer Certificate of Origin and warranties, to WCS Purchasing Department...Failure to follow these instructions will result in delayed payment... Invoice must properly reference and match up to the corresponding WCS PO.

THE FOLLOWING SPECIFICATIONS ARE FOR CRITICAL COMPONENTS WHICH MUST BE INCLUDED IN ALL BID SUBMISSIONS

- **ANGEL TRAX HYBRID QUEST / WITH HARD DRIVE INCLUDED is preferred**
INTERIOR 4 CAMERA SYSTEM COMPLETELY INSTALLED 1 front camera, 1 rear camera, 1 driver step well camera, 1 front window facing road camera
- **SCHOOL BUS GPS TRACKING.....WCS UTILIZES AND REQUIRES ZONAR V4 WITH WIRING HARNESS** – The wiring harness should monitor Power On & Off, Door Open & Close, Stop Arm and Reverse.



APX™ 4500 PROJECT 25 MOBILE RADIO

A downed power line or the city transit system coming to a halt during rush hour, when the unexpected strikes, you must interoperate seamlessly and securely with other agencies and responders- often across multiple Project 25 (P25) systems. You need to instantly connect and be informed to make better decisions and respond effectively. While the advanced technology of APX™ radios expertly equips you for the unexpected, your organization may be challenged to improve operating expenses. That's where the APX 4500 P25 mobile radio fits the bill perfectly. It delivers all the benefits of TDMA technology in a compact P25 capable mobile. The APX 4500 brings together powerful technology in an easy-to-use radio that's easy on your budget. It seamlessly unifies public works, utility, rural public safety and transportation users to first responders, so they can communicate effectively in the moments that matter.

CONVENIENTLY SMALL EASY TO INSTALL The APX 4500 is designed to get the job done without getting in the way. A simplified dash mount design makes installation quick and easy, fitting into the existing XTL™ footprint so you can reuse mounting holes and cables.

Count on the APX 4500 to withstand wet, dusty and hazardous conditions, too. Its IP56 durability rating is the highest level of certification for uncompromising durability and world class quality in a mobile performer you can hose down.

KEEPS CREWS IN TOUCH. AND UP TO THE MINUTE

Safety runs in the APX family and the APX 4500 mobile is no exception. Like all our APX P25 radios trusted by responders worldwide, the APX 4500 mobile redefines safety. Your crews can count on quick, seamless interoperability and extended range -whether they are talking from the top of a pole or the bottom of a trench. You can depend on AES encryption for secure, tamperproof voice and data communications every time they connect.

With integrated GPS in the APX 4500, you can keep an eye on workers and assets you can't see, tracking their locations continuously. The O2 control head with color display is easy to read and operate in all lighting conditions, from bright sunlight to dark streets. The intelligent lighting on the O2 control head notifies your workers when a call is received, emergency arises, or when they are out of range. Plus, an enlarged multi-function knob makes it easy to use talk-group and volume settings when they're wearing gloves. Over-the-air programming on the APX 4500 keeps your crews current in the field. You can update the latest mobile without interrupting voice communications while they work.

WCS BID COVER SHEET
RFB # 1194
New General Ed & Special Ed
Fiscal Year 2020-21

I, _____ (Print Name), _____ (Title),

_____ (Signature), _____ (Date), verify that I have
carefully read the specifications, terms, conditions and instructions contained within this document and
that I understand, acknowledge and agree to all the language set forth in this document... Again, by
signing this document and submitting my bid in a sealed envelope with Williamson County Schools,
bidder fully acknowledges, understands and accepts the language contained within this RFB document.
Notice to Bidder – *If you find any of the language, terms, conditions or specifications unacceptable –
then please do not bid or submit a bid package for this project.*

Bidder Company Name: _____

Address: _____

Phone Number: _____

Email: _____

WILL OTHER SCHOOL DISTRICTS IN THE STATE OF TN BE ALLOWED TO PIGGY BACK
OFF THIS BID (to the extent the state law will allow)? Yes ___ No ___

ITEM 1

**NEW MODEL Year 2020 or newer – GENERAL ED PASSENGER BUS 84 PASSENGER
Front Engine Transit Type D (Base bid is without seat belts or seat belt ready frame)**

Model _____ **Brand** _____ **Body** _____

Engine _____ **Model Year** _____ **Chassis** _____

Warranty - Confirm Warranty details on the following spec pages.

BASE BID -BUS UNIT PRICE \$ _____

Option: Cost for Three Point Seat Belt system throughout the bus... \$ _____

Option: Cost for Three Point Seat Belt ready frames throughout the bus...\$ _____

Option: Front and Rear, Air Disc Brakes Additional Cost per bus.....\$ _____

Can Bidder Meet the Delivery Deadline? Yes ___ No ___

ATTACH SEAT-LAYOUT AND CONFIGURATION TO BID COVER SHEETS

NAME OF BIDDING COMPANY _____

ITEM 2

**NEW MODEL Year 2020 – or newer GENERAL ED PASSENGER BUS 78 PASSENGER
Conventional Type C (Base bid is without seat belts or seat belt ready frame)**

Model _____ Brand _____ Body _____

Engine _____ Model Year _____ Chassis _____

Warranty - Confirm Warranty details on the following spec pages.

BASE BID - BUS UNIT PRICE \$ _____

Option: Cost for Three Point Seat Belt system throughout the bus.....\$ _____

Option: Cost for Three Point Seat Belt ready frames throughout the bus.....\$ _____

Option: Front and Rear, Air Disc Brakes Additional Cost per bus.....\$ _____

Can the bidder Meet the Delivery Deadline? Yes ___ No ___

ATTACH SEAT-LAYOUT AND CONFIGURATION TO BID COVER SHEETS

ITEM 3

**NEW MODEL Year 2020 or newer - SPECIAL ED PASSENGER BUS
18 PASSENGER + 3 WC Conventional Type C (Base bid must include cost of 3-point harness
seat belts)**

Model _____ Brand _____ Body _____

Engine _____ Model Year _____ Chassis _____

Warranty - Confirm Warranty details on the following spec pages.

BASE BID - BUS UNIT PRICE \$ _____

Option: Front and Rear, Air Disc Brakes Additional Cost per bus..\$ _____

Can the bidder Meet the Delivery Deadline? Yes ___ No ___

ATTACH SEAT-LAYOUT AND CONFIGURATION TO BID COVER SHEETS

Specifications Sheets are on the following pages.

CERTIFICATION OF COMPLIANCE WITH THE IRAN DIVESTMENT ACT

Effective July 1, 2016, this form must be submitted for any contract that is subject to the Iran Divestment Act, Tenn. Code Ann. § 12-12-101, et seq., (“Act”). This form must be submitted with any bid or proposal regardless of where the principal place of business is located.

Pursuant to the Act, this certification must be completed by any corporation, general partnership, limited partnership, limited liability partnership, joint venture, nonprofit organization, or other business organization that is contracting with a political subdivision of the State of Tennessee.

Certification Requirements.

No state agency or local government shall enter into any contract subject to the Act, or amend or renew any such contract with any bidder/contractor who is found ineligible under the Act.

Complete all sections of this certification and sign and date it, under oath, in the presence of a Notary Public or a person authorized to take an oath in another state.

CERTIFICATION:

I, the undersigned, certify that by submission of this bid, each bidder and each person signing on behalf of any Respondent certifies, and in the case of a joint bid or contract each party thereto certifies, as to its own organization, under penalty of perjury, that to the best of its knowledge and belief that each bidder is not on the list created pursuant to Tenn. Code Ann. § 12-12-106.

Respondent represents it has the full power, knowledge, and authority to make this Certification and that the signatory signing this Certification on behalf of bidder/contractor has been duly authorized to do so on behalf of the bidder/contractor.

Sworn as true to the best of my knowledge and belief, subject to the penalties of false statement.

Printed Respondent Name Printed Name of Authorized Official

Signature of Authorized Official

Date

Name of Bidder _____ Bus Mfg. Make & Model _____

**WCS RFB # 1194 SCHOOL BUS BID
FISCAL YEAR 2020-21
SPECIFICATIONS FOR GENERAL EDUCATION
84 PASSENGER TYPE D - FRONT ENGINE TRANSIT BUS**

**State of Tennessee Specifications Unless otherwise noted must meet all
State and Federal School Bus Specifications**

BRAND NAMES are used for identification and communication only,
however any deviation from the specifications must be noted as an exception.

Deliver to: Williamson County Schools
Transportation Bus Garage
1771 West Main Street
Franklin, TN 37064

84 Passenger Type D Front Engine Transit

BODY SPECIFICATIONS		TYPE D - FRONT ENGINE TRANSIT BUS	Notes / Comments
1	Seating Capacity	84 Passenger capacity built on a 90 Passenger shell 24" - 29" minimum knee space is acceptable	
2	Seating	Regular seating throughout... No special seating in the front 2 seats. Bus should have 28 total rows.	
3	Headroom	77 inches minimum	
4	Windows	12" x 24" minimum	
5	Emergency Exit Windows	Total Four (4) push out tinted	
6	Windows	Tinted 28% dark with Black Window Trim no exceptions	
7	Windshield	Tinted	
8	Roof	Painted White	
9	Interior Side Panels	Aluminized	
10	Front Service Door	Air Operated - 3 Position Switch	
11	Front Service Door	Outward Opening with Vandal Lock	
12	Steps / Entrance	Korseal White Pebble Top Nosing 3 step with Exterior Guard	
13	Rub Rails	Black - Four (4) each side	
14	Upholstery	Heavy Duty Upholstery fire block, Gray or Brown cloth or vinyl preferred	

Name of Bidder _____

Bus Mfg. Make & _____

RFB # 1194

BODY SPECIFICATIONS		84 PASS TYPE D - FRONT ENGINE TRANSIT BUS	Notes / Comments
15	Heaters (Including Drivers seat foot warmer)	190,000 BTU Minimum with / removable filter; To include <u>heavy duty booster pump</u> for rear water circulation; dual heater cut off valves	
16	Heater Location	Standard 2 Front 1 Back	
17	Defroster Fans	Two (2) fans (dash mounted)	
18	Body Insulation	1.5 - 2" R-Value 5.5 minimum roof, front, rear & sides	
19	Escape Hatches	Two (2)	
20	Hatch Brand	Transpec or Specialty (low profile)	
21	Warning Lights	With Hoods	
22	Interior Lights	8-10 minimum LED	
23	Air Compressor	18.2 CFM standard	
24	Air Dryer	Bendix AD-IP Heated	
25	Air Tank Drain Valve	3 tank minimum... 4 tanks preferred with 5600 cu.in. Bendix DV-w/heater	
26	Fuel Tank Capacity	100 Gallons Minimum	
27	Fuel Filler Door	Spring Loaded	
28	Fuel Tank Access Plate	Included	
29	Fuel / Water Separator	Racor or Equal with heater	
30	Fuel Tank Location	Between Rails	
31	Battery	1-8 D 1900 CCA or (2) group 31 batteries 2100 CCA minimum or (3) group 31 batteries 2775 CCA minimum	
32	Alternator	240 Min. AMP, Delco, Bosh Brands or 320 AMP on Leece Neville Brands	
33	Tow Hooks	Front and Rear	
34	Chassis Warranty	12 to 24 months – 24,000 miles provide copy with bid	
35	Body Warranty	12 to 24 months – 24,000 miles provide copy with bid	
36	Engine Warranty	5 year 100,000 P & L	
37	Transmission Warranty	7 year Unlimited Miles P & L	
38	Axle Warranty	5 year 100,000 P & L	
39	Differential Warranty	5 year 100,000 P & L	
40	Air compressor Warranty	5 year 100,000 P & L	

Name of Bidder _____ Bus Mfg. Make & Model _____ RFB # 1194

BODY SPECIFICATIONS		84 PASS. TYPE D - FRONT ENGINE TRANSIT BUS	Notes / Comments
41	Two - Way Radio	Motorola APX 4500 to be installed by Commtech prior to delivery & acceptance to WCS contact Don Claiborne	NEW SPECS THIS YEAR
42	AM/FM Radio	AM / FM Radio with AUX / PA system & clock with speakers	
43	Engine	INLINE - Removable from Front 600 ft lb Torque; Int'l Maxx Force or Cummins ISB Engine that meets or exceeds the horsepower and torque requirements specified herein	
44	Engine Type	Six (6) cylinder diesel	
45	Engine Horsepower	220 – 250	
46	Engine Block Heater	750-1250 Watts w/Front fender receptacle mounted	
47	Engine Warning	Coolant & Oil	
48	Transmission	PTS 2500	
49	Transmission Cooler	Internal or External Cooler	
50	Transmission Fluid	TES 295/Allison Transynd	
51	Front Axle Rating	14,600 lbs. minimum	
52	Rear Axle Rating	23,000 lbs. minimum	
53	Suspension Springs Front	Commensurate w/axle 14,600 lbs minimum	
54	Axle Bearings	Oil Bath	
55	Wheel Type	Hub or Stud Piloted	
56	Rim Size	Radial 8.25 x 22.5	
57	Rim color	Black	
58	Tire Size	11R x 22.5 Load Range H	
59	Acceptable Tires	Bridgestone, Firestone, Goodyear or Hankook Balanced & Aligned	
60	Throttle Control	Electronic - Cruise Control	
61	Fuel Solenoid	Electronic	
62	Steering	4 Position Tilt-Telescope	
63	Brake	Air; Antilock; Automatic slack adjustors or air disc	
64	Brakes Front Size	16.5 x 6 Minimum or air disc	
65	Brakes Rear	16.5 x 8 Minimum or air disc	
66	Strobe Light	Specialty 515-400	
67	Strobe Light Guard	Protective Cage	

Name of Bidder _____

Bus Mfg. Make & Model _____

RFB # 1194

BODY SPECIFICATIONS		84 PASS - TYPE D - FRONT ENGINE TRANSIT BUS	Notes / Comments
68	Side Directional Lights	Right & Left Side, side clearance and cluster - include armor	
69	Body ACC Solenoid	100 Amp Minimum	
70	Head Lamps	Daytime Running	
71	Mirror Interior	6" x 30" or similar equivalent	
72	Mirror Rear View	Roscoe or Eurostyle, Motorized & Heated	
73	Mirror Bracket	Break - Away	
74	Cross View Mirror	Roscoe Heated	
75	School Bus Sign	Reflective Material	
76	Head Liner Panels	Driver area perforated add an overhead storage compartment	
77	Drivers Seat	6 way adjustable air; high back; 2 arm rest (left and right)	
78	Fire Extinguisher	5 lb. with hose	
79	First Aid Body Fluids Kit	Standard	
80	Warning Devices	Triangle	
81	Wipers	Electric	
82	Cleaning Windshield	Stirrup steps & handles	
83	Cleaning Windshield	Bottle Washer	
84	Lettering	Black - 6" painted or vinyl Williamson County Schools	
85	Bus Numbers	4-total sides (front-rear) back sides 6 inch both bumpers	
86	Model Number Location	Yellow rear with unit # 6" back bumper right	
87	Model Number Size / Color	3/4 x 3 " yellow painted or vinyl	
88	Mud Flaps	Front and Rear	
89	Luggage Compartment	Single compartment <u>right curb side</u> only, 34 cubic feet with 1 or 2 doors each located between the axles with key lock	
90	Air Horn	Can be mounted on roof or floor chrome or black	

Name of Bidder _____

Bus Mfg. Make & Model _____

RFB # 1194

BODY SPECIFICATIONS		84 PASS - TYPE D - FRONT ENGINE TRANSIT BUS	Notes / Comments
91	Driver Power Outlet	cell phone dash mounted power outlet	
92	Floor Covering	Rubber Korseal Black	
93	Reflective Tape - 2"	Full length sides and floor level	
94	Passenger Reminder System	CRS electronics or RTI bus - scan	
95	Stop Sign	Strobing Upper and lower LED	
96	Seat Color	Prefer Gray or Brown	
97	Handrails	Left and right required	
98	Gauges	Lights in lieu of gauges not acceptable; Gauges include Voltmeter, AMP meter, Oil Pressure, Fuel, Temperature and Air	
99	Crossing Arm	Installed on front bumper, shall be air or electric with magnetic retainer	
100	Training	FREE TRAINING (Diagnostic, Electrical and other) HANDS ON FOR "ALL WCS MECHANICS" in one session	
101	Trash Container & Holding Device	UL Classified fire resistant polyethylene or equivalent material, 14 quart or less, holding device designed to prevent movement and easy removal/replacement, installed in accessible	
102	Noise Suppression Switch	Meet State Standards-dash mounted	
103	Complete Parts List	Provided with Bid using factory pick list w/current cost per item (CD Preferred Windows Version only)	
104	Optional Pricing	Driver - side luggage compartment (same as above)	
105	Alternate Engines (discouraged)	Alternate Engines must list HP & Torque per engine type	
106	EPA Air Pollution Requirements	Provide Detail of Engine including a written copy & diagram of the procedure for meeting current EPA Emission Requirements. List any and all equipment, tools, products or other necessary items that WCS will be required to purchase.	
107	ANGEL TRAX HYBRID QUEST with hard drive included	INTERIOR 4 CAMERA SYSTEM COMPLETELY INSTALLED 1 front camera, 1 rear camera, 1 driver step well camera, 1 front window facing road camera	
108	SCHOOL BUS GPS TRACKING	WCS UTILIZES AND REQUIRES ZONAR V4 WITH WIRING HARNESS – The wiring harness should monitor Power On & Off, Door Open & Close, Stop Arm and Reverse.	
See the Camera Specifications which are listed on page 5			
End of 84 Passenger General Ed Front Engine Type D Specifications			

NAME OF Bidder _____ Bus Mfg. Make & Model _____

**WCS RFB # 1194
SCHOOL BUS BID
FISCAL YEAR 2020-21 SPECIFICATIONS FOR GENERAL EDUCATION
78 PASSENGER CONVENTIONAL TYPE C**

STATE OF TENNESSEE SPECIFICATIONS UNLESS OTHERWISE NOTED
MUST MEET ALL STATE AND FEDERAL SCHOOL BUS SPECIFICATIONS

BRAND NAMES are used for identification and communication only,
however any deviation from the specifications must be noted as an exception.

Deliver School Buses to:
Williamson County Schools
Transportation Bus Garage
1771 West Main Street
Franklin, TN 37064

78 Passenger General Ed Conventional Type C

BODY SPECIFICATIONS	78 CONVENTIONAL TYPE C	Notes / Comments
Seating Capacity	78 Passenger capacity	
Seating	First seat on the door side 39" width seat with / (2) ICS with seats for children 22 to 85 lbs. IMMI or CE White, BTI SynTec S3C accepted brands or equal too / better than.	
Headroom	77 inches minimum	
Windows	Shall meet or exceed State of TN BOE standards minimum opening of 12 inches when lowered, passenger windows shall be tinted 28%	
Window Frames	Black anodized	
Emergency Exit Windows	2 per side	
Windshield	Shall meet or exceed State of TN BOE standards shaded and tinted	
Roof	Painted White	
Interior Side Panels	Shall meet or exceed State of TN BOE standards	
Front Service Door	Air Operated - 3 Position Switch	
Front Service Door	Outward Opening with Vandal Lock	
Steps / Entrance	Korseal White Pebble Top Nosing 3 step with Exterior Guard	
Hand Rails	Right and left side handrails	
Upholstery	Fire Block Heavy Duty Upholstery, Gray or Brown preferred	

NAME OF Bidder _____ Bus Mfg. Make & Model _____		RFB # 1194
BODY SPECIFICATIONS	Gen. Ed Conventional Type C	Notes / Comments
Heaters (Including Drivers seat foot warmer)	160,000 BTU min total w/removable filter, to include heavy duty booster pump for rear water circulation, dual heater cut off valves	
Heater Location	Standard 2 Front 1 Back	
Defroster Fans	Two (2) fans (dash mounted) shall meet TN State Board of Education requirements	
Body Insulation	Shall meet or exceed State of TN BOE standards	
Escape Hatches	Two (2)	
Hatch Brand	Transpec or Specialty (low profile)	
Warning Lights	LED on all exterior lights / flush mounted or with armor	
Interior Lights	8-10 minimum LED	
Lamps Monitor	16 – light Monitor LED	
Air Compressor	18.2 CFM	
Air Dryer	Bendix Ad-IP Heated	
Air Tank Drain Valve	3 tanks with minimum of 3400 total combined cu.in. Bendix DV2 w/heater	
Fuel Tank Capacity	100 Gallons Minimum	
Fuel Filler Door	Spring Loaded	
Fuel Tank Access Plate	Included	
Fuel / Water Separator	Cummins or Racor	
Fuel Tank	Electronic controlled fuel solenoid	
Battery	3 – group 31 w 2775 CCA or Greater Total 12 volt 150 AMP Circuit Breaker & Battery Cut off Switch	
Alternator	240 Min. AMP, Delco, Bosh Brands or 320 AMP on Leece Neville Brands	
Chassis Warranty	3 year / 50,000 mile	
Body Warranty	3 year / 50,000 mile	
Engine Warranty	5 year 100,000	
Transmission Warranty	7 year unlimited miles	
Axle Warranty	3 year / 50,000 mile	
Differential Warranty	3 year / 50,000 mile	
Air compressor Warranty	5 year unlimited warranty	
Two - Way Radio	APX 4500 mobile installed	New spec this year
AM/FM Radio	AM / FM Radio with PA system & clock with speakers	

NAME OF Bidder _____ Bus Mfg. Make & Model _____		RFB # 1194
BODY SPECIFICATIONS	General Ed Conventional Type C	Notes / Comments
Engine	INLINE - Removable from Front Six cylinder diesel 600 ft lb Torque; @ 220 H.P. Int'l Maxx Force or Cummins ISB Engine that meets or exceeds the horsepower and torque requirements specified herein	
Engine Horsepower	220 – 250 HP	
Engine Block Heater	750-1250 Watts w/Front fender receptacle mounted	
Engine Warning	Coolant & Oil	
Transmission Size	Allison 2500 Transmission with Basic fuel sense vs. performance or economy	
Transmission Cooler	Internal or External Cooler oil pressure and temp gauge	
Transmission Fluid	TES 295/Allison Transynd	
Front Axle Rating	10,000 - 12,000 lbs. minimum	
Rear Axle Rating	21,000 – 23,000 lbs. minimum	
Suspension Springs Front & Rear	Same Capacity as the axle	
Axle Bearings	Oil Bath	
Wheel Type	Hub Pilot	
Rim Size	Radial 8.25 x 22.5	
Rim color	Black	
Tire Size	11R x 22.5 Load Range H	
Acceptable Tires	<u>Goodyear, Firestone, Bridgestone or Hankook</u> Balanced & Aligned	
Fuel Solenoid	Electronic	
Steering	4 Position Tilt-Telescope	
Brakes	Air; Antilock; Automatic slack adjustors	
Brakes Front Size	16"5 x 5" Minimum	
Brakes Rear	16.5" x 7" Minimum	
Strobe Light	LED Strobing low profile	
Strobe Light Guard	Protective Cage	
Side Directional Lights	Right & Left Side, side clearance and cluster – flush mounted or include armor	
Body ACC Solenoid	100 Amp Minimum	
Head Lamps	Daytime Running Halogen	
Mirror Interior	6 x 30 with back up camera	

NAME OF Bidder _____ Bus Mfg. Make & Model _____		RFB # 1194
BODY SPECIFICATIONS	General Ed Conventional Type C	Notes / Comments
Mirror Rear View	Roscoe or Eurostyle, Motorized & Heated	
Mirror Bracket	Break - Away	
School Bus Sign	Reflective Material	
Head Liner Panels	Driver area perforated overhead storage compartment in header over the windshield	
Drivers Seat	adjustable air; high back arm rest on right & left	
Fire Extinguisher	Shall meet or exceed TN BOE standards	
First Aid Body Fluids Kit	Shall meet or exceed TN BOE standards	
Warning Devices	Shall meet or exceed TN State Board of Ed standards	
Wipers	Electric intermittent with single switch	
Cleaning Windshield	Stirrup steps & handles	
Cleaning Windshield	Bottle Washer	
Lettering	Shall meet or exceed State of TN BOE standards	
Bus Numbers	4-total sides (front-rear) back sides 6 " both bumpers ...Rear Bumper Model Year in yellow 2"	
Drivers Restraint System	Shall meet or exceed TN State BOE specifications	
RUB RAILS	Four (4) painted black	
Mud Flaps	Front and Rear	
Rear Fenders	Yellow metal or Black Rubber	
Drivers Document Compartment	5 pocket barrier with safe cut pouch, with broom holder, concealed hook and loop enclosure to keep items secure in pocket in hook and loop style seat cover only; BESI or equal to or better, to be installed on the barrier seat driver side.	
Air Horn	Can be mounted on roof or floor chrome or black meet or exceed TN State BOE standards	
Interior	Shall meet or exceed TN State BOE standards	
Floor Covering	Rubber Korseal Black	
Reflective Tape - 2"	Full length sides and floor level	
Side skirts	Shall meet or exceed TN State BOE standards	
Stop Sign	Strobing Upper and lower LED	
Handrails	Left and right required	

NAME OF Bidder _____ Bus Mfg. Make & Model _____		RFB # 1194
BODY SPECIFICATIONS	General Ed Conventional Type C	Notes / Comments
Gauges	Lights in lieu of gauges not acceptable; Gauges include Voltmeter, AMP meter, Oil Pressure, Fuel, Temperature and Air	
Crossing Arm	Installed on front bumper, shall be air or electric with retainer	
Training	FREE TRAINING (Diagnostic & Electrical) HANDS ON FOR "ALL WCS MECHANICS" in one session	
Trash Container & Holding Device	UL Classified fire resistant polyethylene or equivalent material, 14 quart or less, holding device designed to prevent movement and easy removal/replacement, installed in accessible	
Noise Suppression Switch	Mounted within easy access to driver, must meet or exceed TN State DOE standards	
Complete Parts List	Web based or printed paper copy to be delivered with bus	
Throttle Control	Electronic Cruise Control	
EPA Air Pollution Requirements	Must meet or exceed State of TN Board of Education Specs. Must also meet or exceed all Federal and local Emission Standards	
Luggage Compartment	Single compartment <u>right curb side</u> only, 34 cubic feet with 1 or 2 doors each located between the axles with key lock.	
See the Camera Specifications which are listed on page 5 of this bid document.		
End of 78 Passenger General Ed Conventional Type C		

NAME OF BIDDER _____ BUS MFG. Make & Model _____

WCS RFB # 1194 SCHOOL

**BUS BID FISCAL YEAR 2020-21
SPECIFICATIONS FOR SPECIAL EDUCATION
18 PASSENGER + 3 WC SPECIAL ED CONVENTIONAL TYPE C**

STATE OF TENNESSEE SPECIFICATIONS UNLESS OTHERWISE NOTED
MUST MEET ALL STATE AND FEDERAL SCHOOL BUS SPECIFICATIONS

<p>BRAND NAMES are used for identification and communication only, however any deviation from the specifications must be noted as an exception.</p>			
<p>Deliver School Buses to: Williamson County Schools Transportation Bus Garage 1771 West Main Street Franklin, TN 37064</p>			
<p>Special ED Passenger Conventional Type C</p>			
BODY SPECIFICATIONS	SPECIAL ED PASSENGER TYPE C	Notes / Comments	
1	Air conditioning	120,000 total BTU minimum - Include front in wall & rear in wall bulkhead evaporators with skirt mounted condensers. Must include manufacturer's build sheet with parts & model #	
2	Backup Alarm	Minimum of 112 DBS rear bumper area mounted	
3	Belt Cutter	QTY 2 tie tech or safe cut	
4	Body Type	Type C W/WC lift	
5	Bus Model	2019 model or newer	
6	Capacity Design	18 + 3 WC Totaling 21 passengers plus driver	Only 2 seat belts per seat
7	Defroster Fans	2 Dual 6 " dash mounted	
8	Document Holder	plastic attached in front of overhead area	
9	Door Front Service	3 position switch Air Operated - outward opening with vandal lock	
10	Door Lift	Single Door 42" width located in rear	
11	Fenders	Yellow metal or black rubber on Rear Wheels	
12	Fire Extinguisher	5 lb. with hose	
13	First Aid Body Fluids Kit	Meeting TN Minimum standard	
14	5 pocket barrier with safe cut pouch with broom holder	Concealed hook and loop enclosure to keep items secure in pocket in hook and loop style seat cover only; BESI or equal to be installed on the barrier seat driver side.	
15	FLOOR DESIGN SEAT & WHEEL CHAIR LOCATIONS (DELIVERED 18 + 3 WC Passengers)	Each seat shall be 39" in width and shall have an integrated child seat (9 safeGuard ICS with (2) three point seat belts. ICS shall offer security of a five (5) point harness for children 22 to 85 lbs. IMMI , CE White BTI, Syn-Tec 53C or equal to or better than accepted brands. Three (3) WC stations with continuous tracking of 50" one placed at door side and the other driver side.	WCS desires only 2 seat belts per seat . WCS will use the bus as a 18 + 3 WC 21 seat capacity bus.

NAME OF Bidder _____ Bus Mfg. Make and Model _____
RFB # 1194

BODY SPECIFICATIONS		SPECIAL ED PASSENGER TYPE C	Notes / Comments
16	Floor Design	Flat floor (buyer must approve floor plan please include copy)	
17	Floor Covering	Black rubber	
18	Floor covering	Plywood 5/8 exterior grade	
19	Hand Rails	Qty 2 - Left and Right Sides of Step well	
20	Head Line Panels	Full Length Perforated	
21	Headroom	77" Minimum	
22	Heater Rear Location	Approx. 80,000 - 88,000 BTU preferred rear wall mounted with removable filter	
23	Heaters Front & Rear	160,000 BTU min total w/removable filter, to include heavy duty booster pump for rear water circulation, dual heater cut off valves	
24	Identification Lettering	Williamson County Schools / Black on both sides	
25	Identification Numbers Model Year	3/4 x 6" Year & Unit Numbers (buyer will provide unit numbers)	
26	Identification Numbers Bus	4 total sides Front & Rear All Black on sides. Yellow on front & rear bumpers	
27	Identification Disabled Placard	Placed on WC Lift Door	
28	Insulation	1.5 " R-Value min. roof, front, rear & sides 1/2" sound absorbing form installed under drivers footboard perforated ceiling in driver's area	
29	Lamps Head	Daytime Running	
30	Lamps Front & Rear Signal	LED	
31	Lamps Warning	Exterior LED flush mounted or with armor	
32	Lamps Side Marker	LED	
33	Lamps Interior	Four (4) Minimum LED	
34	Lamps Monitor	16 Light Monitor LED	
35	Lamp Strobe	LED Strobing with protective armor	
36	Lift Location	Rear Curb Side	
37	Lift Model	BRAUN MODEL, Century or Millennium or Ricon S-Series; All lifts must past WCS' Pre-delivery FMVSS403 compliancy inspection or the vehicle will not be accepted. The lift will be tested at pre-delivery by WCS with 800 lbs of weight and will be expected to lift and lower it safely 10 times.	
38	Mirror Bracket	Break - away	
39	Mirror Cross View	Roscoe Heated	
40	Mirror Head	Motorized-Heated	

NAME OF Bidder _____ Bus Mfg. Make and Model _____
RFB # 1194

BODY SPECIFICATIONS		SPECIAL ED PASSENGER TYPE C	Notes / Comments
41	Mirror Interior	6 x 30 with visor WITH BACK UP CAMERA	
42	Mirror Rear View	Roscoe Eurostyle	
43	Mud Flaps	Front & Rear Wheels	
44	Noise Suppression Switch	Meet State standards - dash mounted	
45	Parts Report	Access to complete list bus parts on a web based program and in print.	
46	Passenger Reminder Location	Warning Buzzer Interior	
47	Passenger Reminder System	Shall meet or exceed all State of TN Board of Ed Standards wired to interior dome lights	
48	Radio AM/FM	AM / FM Radio PA system & clock Include 4 speakers	
49	Radio Two Way & Bracket	Compatible With Motorola APX4500. Contact Commtech Don Claiborne for details	
50	Radio Two Way Antenna	1/4 wave complete	
51	Radio Two Way Model	Motorola APX4500	
52	Radio Two Way Installation	Complete installation to be done by Commtech before acceptance and delivery to WCS	
53	Radio Two Way External Speaker	KES 3	
54	Radio Two Way Frequency & Tone Control	APX 4500 installed	New specs this year
55	Roof	Painted White	
56	Roof Ventilator Emergency Exit	Shall meet or exceed TN State BOE standards	
57	Rub Rails	Four (4) Each Side all painted Black	
58	School Bus Sign	Reflective Material	
59	Seat Driver's	6-Way Adjustable -Air	
60	Seat Driver's	High back; 2 arm rest (right & left) (Please mark exceptions)	
61	Seating Capacity	18 + 3 WC for a total of 21 passengers (plus driver) IMMI, Syn-Tec 53 C or C.E. White Seats	

NAME OF Bidder _____ Bus Mfg. Make & Model _____
RFB # 1194

BODY SPECIFICATIONS		SPECIAL ED PASSENGER TYPE C	Notes / Comments
62	Seats & Belts	9 Safe ICS with 2 three point seat belts per seat	
63	Seat Spacing Knee Room	Prefer Maximum Possible - Please include knee spacing in floor plan copy	
64	Seat Upholstery	Fire Block, Heavy duty , Gray or Brown Preferred	
65	Securement Systems	Q' Straint or Sure -lok Kit Model # FF612S-4C-7 2 (2 kits); Auto Retracting - with mounted storage bags on side walls	
66	Side Panels Interior	Aluminized	
67	Solenoid ACC Body	100 Amp Minimum	
68	Steps Entrance	Koroseal White pebble top nosing 3-step	
69	Stop Sign	Strobing upper & lower LED lights	
70	System floor Track	L-Track w/debris cover for unused sections	
71	System floor Track	50 inches per chair space	
72	System floor Track	Recessed in plywood	
73	Warning Devices	Triangle	
74	Warranty Body	3 year 50,000 mile	
75	Wheel Chair Spaces	Three (3) Positioned ready to go	
76	Window Frames	Black Anodized	
77	Windows	12" x 24" minimum	
78	Windows	Dark tinted - 28% Dark	
79	Windows Emergency Exit	1 per side	
80	Windshield	Shall meet or exceed State of TN BOE standards shaded and tinted	
81	Windshield Cleaning	Stirrup Steps & Handles	
82	Windshield Cleaning	Bottle Washer	
83	Wipers	Electric w/ intermittent	
84	Air Compressor	18.7 CFM	
85	Air Dryer	Bendix AD- IP Heated	
86	Air Tank Drain Valve	Bendix DV - 2 Heated	
87	Alternator	Minimum 270 AMP for A/C efficiency using Delco, bosch Brands 320 amp Minimum using LEECE NEVILLE BRAND	

NAME OF Bidder _____ Bus Mfg. Make & Model _____
RFB # 1194

BODY SPECIFICATIONS		SPECIAL ED PASSENGER TYPE C	Notes / Comments
88	Axle Bearings	Oil Bath	
89	Axle Front Rating	10,000 lbs. - 12,000 lbs.	
90	Axle Rear Rating & Ration	21,000 lbs. – 23,000 lbs.	
91	Suspension Front	Springs same as the axle	
92	Suspension Rear	Air Ride 21,000 lbs.	
93	Battery	3 group-2775 CCA OR GREATER TOTAL - 12 volt 150 AMP Circuit Breaker & Battery Cut off switch	
94	Battery Box	Must be large enough to handle above battery size as well as all cutoff switches for AC & WC lift	
95	Brakes Front Size	16.5 x 5 minimum	
96	Brakes Rear Size	16.5 x 7 minimum	
97	Brakes	Full air; Anti-lock - all wheel, outer board drum type, with auto slack adjuster	
98	Engine Block Heater	750 watts minimum with receptacle	
99	Engine Horsepower	200 -250 with 600 lb. torque, in line six cylinder	
100	Engine Type	6 cylinder diesel Int'l MAXX FORCE DT - CUMMINS ISB or EQUAL that meets or exceeds the horsepower and torque requirements specified herein	
101	Engine Certification	2019 Model or Newer	
102	Engine Warning Audible	Coolant and oil	
103	EPA Air Pollution Requirements	Must meet or exceed State of TN Board of Education Specs. Must also meet or exceed all Federal and local Emission Standards	
104	Fuel Filler Door	Spring loaded	
105	Fuel Solenoid	Electronic - cut off all body circuits	
106	Fuel Tank Access Plate	Included	
107	Fuel Tank Capacity	Mounted between the frame rails tank 60 gallon capacity	
108	Fuel /Water Separator	Cummins, Racor or Equal	
109	Governor	Road Speed 65 MPH	
110	High / Low Idle Switch	Dash mounted	

NAME OF Bidder _____ Bus Mfg. Make & Model _____
RFB # 1194

BODY SPECIFICATIONS		SPECIAL ED PASSENGER TYPE C	Notes / Comments
111	Keys	2 Common Ignition Keys - Keyed alike 2 Common Auxiliary Keys - Keyed alike	
112	Steering Column	Telescoping - 4 position tilt wheel	
113	Throttle Control	Electronic cruise control	
114	Tire Rim Color	Black	
115	Tire Rim Size	8.25 x 22.5	
116	Tires & Size Range	255/70R Load Range H Low profile	
117	Tires	Goodyear, Firestone, Hankook Balanced & Aligned – Provide certificate of alignment	
118	Tow Hooks	Front & Rear	
119	Transmission	Allison PTS 2500 Series 5-Speed Automatic	
120	Training	FREE TRAINING (Diagnostic & Electrical) HANDS ON FOR “ALL WCS MECHANICS” in one session	
121	Trash Container & Holding Device	UL Classified fire resistant polyethylene or equivalent material, 14 quart or less, holding device designed to prevent movement and easy removal/replacement, installed in accessible	
122	Warranty Air compressor	5 year / 100,000 miles	
123	Warranty Alternator	3 year / 50,000 miles	
124	Warranty Axle	3 year / 50,000 miles	
125	Warranty Chassis	3 year / 50,000 miles	
126	Warranty Differential	3 year / 50,000 miles	
127	Warranty Engine	5 year - 100,000 miles	
128	Warranty Transmission	7 year unlimited	
129	Wheel Base	Approximately 238" wheelbase	
130	Complete Parts List	Web based or printed paper copy to be delivered with bus	
131	ANGEL TRAX HYBRID QUEST with hard drive included	INTERIOR 4 CAMERA SYSTEM COMPLETELY INSTALLED 1 front camera, 1 rear camera, 1 driver step well camera, 1 front window facing road camera	
132	SCHOOL BUS GPS TRACKING	WCS UTILIZES AND REQUIRES ZONAR V4 WITH WIRING HARNESS – The wiring harness should monitor Power On & Off, Door Open & Close, Stop Arm and Reverse.	
See the Camera Specifications which are listed on page 5 of this bid document			
End of specifications for Special Ed Type C			

