

**MEMORANDUM**

**TO:** Judge Robert Hebert  
County Judge

**FROM:** Debbie Kaminski  
Assistant Purchasing Agent

**AGENDA ITEM**  
21E

**SUBJECT:** Please sign the attached contract(s) approved in Commissioners Court on January 12, 2010. Thank you.

**DATE:** January 13, 2010

**RETURN TO:** Purchasing Department  
Rosenberg Annex  
4520 Reading Road, Suite A  
Rosenberg

H-15-10 1 orig. each ret. to Cheryl at Purchasing

✓

**COUNTY PURCHASING AGENT**  
Fort Bend County, Texas



Gilbert D. Jalomo, Jr., CPPB  
County Purchasing Agent

(281) 341-8640  
Fax (281) 341-8645

December 10, 2009

TO: All Prospective Bidders

RE: Addendum No. 1 – Fort Bend County Bid 10-032 – Purchase of 13-69 Transit Buses for Fort Bend County Transportation Department Over 5 Year Period

Please see ADDENDUM NO. 1.

**PLEASE NOTE: Addendum No. 1 consists of Amendments throughout the document. Accordingly, please download the entire document. Amendments are specific to the following:**

- Section 11.3, Page 17
- Section 11.4, Page 17
- Section 11.40.3, Page 41
- Section 12.32.7, Page 66
- Section 12.39.4, Page 74
- Section 13.17.1, Page 83
- Section 13.37, Page 92
- Section 16.1, Page 110
- Section 19.0, Page 112

\*\*\*\*\*

Immediately upon your receipt of this addendum, please fill out the following information and fax this page to the Fort Bend County Purchasing Department at (281) 341-8645.

National Bus Sales and Leasing, Inc.  
Company Name

Ryan [Signature] 12/21/09  
Signature of person receiving addendum Date

If you have any questions please contact this office.

Sincerely,

Debbie Kaminski  
Debbie Kaminski, CPPB  
Assistant Purchasing Agent

**Fort Bend County Specification Download Acknowledgment**



**Invitation for Bid  
Purchase of 13 – 69 Transit Buses for Fort Bend County Transportation Department over 5  
Year Period  
Bid 10-032**

**VENDORS MUST IMMEDIATELY RETURN THIS FORM BY FAX TO 281-341-8645**

**Vendor Responsibilities:**

- Vendors are responsible to download and complete any addendums.  
(Addendums will be posted on the Fort Bend County Website no later than 48 hours prior to Opening)
- Vendors will submit responses in accordance with requirements stated on cover of document.
- Vendors may not submit responses via email or fax.

National Bus Sales and Leasing, Inc.

Legal Name of Contracting Company

Ryan Frost

Contact Person

15580 Highway 114 Justin, TX 76247

Complete Mailing Address

817-636-2365


Telephone Number

817-636-2947

Facsimile Number

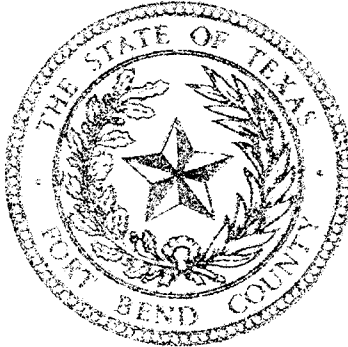
rfrost@nationalbussales.com

Email Address

  
Signature

1/5/2010  
Date

**Fort Bend County, Texas  
Invitation for Bid**



**Purchase of 13 – 69 Transit Buses for Fort Bend County Transportation Department  
Over 5 year Period  
Bid 10-032**

**SUBMIT BIDS TO:**

Fort Bend County  
Purchasing Department  
Rosenberg Annex  
4520 Reading Road, Suite A  
Rosenberg, TX 77471

**\*\*NOTE:**

All correspondence must include the term  
“Purchasing Department” in address to assist in  
proper delivery

**SUBMIT NO LATER THAN:**

Thursday, January 7, 2010  
1:30 PM (Central)

**MARK ENVELOPE:**

Bid 10-032  
Buses

**ALL BIDS MUST BE RECEIVED IN COUNTY PURCHASING OFFICE  
BEFORE RECEIVING DATE AND TIME SPECIFIED.  
BIDS RECEIVED WILL THEN BE OPENED AND PUBLICLY READ.  
BIDS RECEIVED AFTER THE SPECIFIED TIME WILL BE RETURNED  
UNOPENED.**

Results will not be given by phone.  
Results will be provided to in writing  
after Commissioners Court award.

Fort Bend County is always conscious  
and extremely appreciative of your effort  
in the preparation of this bid. Requests for  
information must be in writing and directed  
to:  
Debbie Kaminski, CPPB  
Assistant County Purchasing Agent  
[kaminsk@co.fort-bend.tx.us](mailto:kaminskd@co.fort-bend.tx.us) or  
Fax:281-341-8645

Prepared: 10/10/09  
Issued: 11/25/09

**Vendor Information**

**National Bus Sales and Leasing, Inc.**

Legal Name of Contracting Company

Federal ID Number (Company or Corporation) or Social Security Number (Individual)

817-636-2365

Telephone Number

817-636-2947

Facsimile Number

15580 Highway 114

Complete Mailing Address (for Correspondence)

Justin, TX 76247

City, State and Zip Code

Complete Remittance Address (if different from above)


City, State and Zip Code

**Ryan Frost Southwest Sales Representative**

Authorized Representative and Title (printed)

**rfrost@nationalbussales.com**

Authorized Representative's Email Address



Signature of Authorized Representative

**1.0 GENERAL REQUIREMENTS:**

- 1.1 Read this entire document carefully. Follow all instructions. You are responsible for fulfilling all requirements and specifications. Be sure you understand them.
- 1.2 General Requirements apply to all advertised bids; however, these may be superseded, whole or in part, by the scope, special requirements, specifications, special specifications or other data contained herein.
- 1.3 Governing Law: Bidder is advised that these requirements shall be fully governed by the laws of the State of Texas and that Fort Bend County may request and rely on advice, decisions and opinions of the Attorney General of Texas and the County Attorney concerning any portion of these requirements.
- 1.4 Bid Form Completion: Fill out, sign, and return to the Fort Bend County Purchasing Department ONE (1) complete bid form. An authorized representative of the bidder must sign the Contract Sheet. The contract will be binding only when signed by the County Judge, Fort Bend County and a purchase order authorizing the item(s) desired has been issued. The use of liquid paper is not acceptable and may result in the disqualification of bid. If an error is made, vendor must draw a line through error and initial each change.
- 1.5 Bid Returns: Bidders must return all completed bids to the Fort Bend County Purchasing Department at 4520 Reading Road, Suite A, Rosenberg, Texas no later than 1:30 P.M. on the date specified. Late bids will not be accepted. Bids must be submitted in a sealed envelope, addressed as follows: Fort Bend County Purchasing Agent, Rosenberg Annex, 4520 Reading Road, Suite A, Rosenberg, Texas 77471.
- 1.6 Governing Forms: In the event of any conflict between the terms and provisions of these requirements and the specifications, the specifications shall govern. In the event of any conflict of interpretation of any part of this overall document, Fort Bend County's interpretation shall govern.
- 1.7 Addendums: When specifications are revised, the Fort Bend County Purchasing Department will issue an addendum addressing the nature of the change. Bidders must sign and include it in the returned bid package.
- 1.8 Hold Harmless Agreement: Contractor shall indemnify and hold Fort Bend County harmless from all claims for personal injury, death and/or property damage arising from any cause whatsoever, resulting directly or indirectly from contractor's performance. Contractor shall procure and maintain, with respect to the subject matter of this bid, appropriate insurance coverage including, as a minimum, public liability and property damage with adequate limits to cover contractor's liability as may arise directly or indirectly from work performed under terms of this bid. Certification of such coverage must be provided to the County upon request.

- 1.9 Waiver of Subrogation: Bidder and bidder's insurance carrier waive any and all rights whatsoever with regard to subrogation against Fort Bend County as an indirect party to any suit arising out of personal or property damages resulting from bidder's performance under this agreement.
- 1.10 Severability: If any section, subsection, paragraph, sentence, clause, phrase or word of these requirements or the specifications shall be held invalid, such holding shall not affect the remaining portions of these requirements and the specifications and it is hereby declared that such remaining portions would have been included in these requirements and the specifications as though the invalid portion had been omitted.
- 1.11 Bonds: If this bid requires submission of bid guarantee and performance bond, there will be a separate page explaining those requirements. Bids submitted without the required bid bond or cashier's checks are not acceptable.
- 1.12 Taxes: Fort Bend County is exempt from all federal excise, state and local taxes unless otherwise stated in this document. Fort Bend County claims exemption from all sales and/or use taxes under Chapter 20, Title 122a, Vernon's Texas Civil Statutes, as amended. Texas Limited Sales Tax Exemption Certificates will be furnished upon written request to the Fort Bend County Purchasing Department.
- 1.13 Pricing: Prices for all goods and/or services shall be firm for the duration of this contract and shall be stated on the bid sheet. Prices shall be all inclusive. No price changes, additions, or subsequent qualifications will be honored during the course of the contract. All prices must be written in ink or typewritten. Pricing on all transportation, freight, and other charges are to be prepaid by the contractor and included in the bid prices. If there are any additional charges of any kind, other than those mentioned above, specified or unspecified, bidder MUST indicate the items required and attendant costs or forfeit the right to payment for such items.
- 1.14 Silence of Specifications: The apparent silence of specifications as to any detail, or the apparent omission from it of a detailed description concerning any point, shall be regarded as meaning that only the best commercial practice is to prevail and that only material and workmanship of the finest quality are to be used. All interpretations of specifications shall be made on the basis of this statement. The items furnished under this contract shall be new, unused of the latest product in production to commercial trade and shall be of the highest quality as to materials used and workmanship. Manufacturer furnishing these items shall be experienced in design and construction of such items and shall be an established supplier of the item bid.
- 1.15 Supplemental Materials: Bidders are responsible for including all pertinent product data in the returned bid package. Literature, brochures, data sheets, specification information, completed forms requested as part of the bid package and any other facts which may affect the evaluation and subsequent contract award should be included. Materials such as legal documents and contractual agreements, which the bidder

wishes to include as a condition of the bid, must also be in the returned bid package. Failure to include all necessary and proper supplemental materials may be cause to reject the entire bid.

- 1.16 **Material Safety Data Sheets:** Under the "Hazardous Communication Act", commonly known as the "Texas Right To Know Act", a bidder must provide to County and using departments, with each delivery, material safety data sheets, which are, applicable to hazardous substances defined in the Act. Bidders are obligated to maintain a current, updated file in the Fort Bend County Purchasing Department. Failure of the bidder to maintain such a file will be cause to reject any bid applying thereto.
- 1.17 **Name Brands:** Specifications may reference name brands and model numbers. It is not the intent of Fort Bend County to restrict these bids in such cases, but to establish a desired quality level of merchandise or to meet a pre-established standard due to like existing items. Bidders may offer items of equal stature and the burden of proof of such stature rests with them. Fort Bend County shall act as sole judge in determining equality and acceptability of products offered.
- 1.18 **Color Selection:** Determination of colors of materials is a right reserved by the using department unless otherwise specified in the bid. Unspecified colors shall be quoted as standard colors, not colors, which require up charges or special handling. Unspecified fabrics or vinyl should be construed as medium grade. If bidder fails to get color/material approvals prior to delivery of merchandise, the using department may refuse to accept the items and demand correct shipment without penalty, subject to other legal remedies.
- 1.19 **Review:** The Fort Bend County Purchasing Department shall review bids for compliance with all bid requirements. The Fort Bend County Purchasing Department reserves the right to contact any bidder, at any time, to clarify, verify, or request information with regard to any bid.
- 1.20 **Award:** Fort Bend County reserves the right to award the contract to the responsible bidder who submits the lowest and best bid or reject all bids and publish a new notice.
- 1.21 **Inspections:** Fort Bend County reserves the right to inspect any item(s) or service location for compliance with specifications and requirements and needs of the using department. If a bidder cannot furnish a sample of a bid item, where applicable, for review, or fails to satisfactorily show an ability to perform, the County can reject the bid as inadequate.
- 1.22 **Testing:** Fort Bend County reserves the right to test equipment, supplies, material and goods bid for quality, compliance with specifications and ability to meet the needs of the user. Demonstration units must be available for review. Should the

goods or services fail to meet requirements and/or be unavailable for evaluation, the bid is subject to rejection.

- 1.23 **Disqualification of Bidder:** Upon signing this bid document, a bidder offering to sell supplies, materials, services, or equipment to Fort Bend County certifies that the bidder has not violated the antitrust laws of this state codified in section 15.01, et seq., Business & Commerce Code, or the federal antitrust laws, and has not communicated directly or indirectly the bid made to any competitor or any other person engaged in such line of business. Any or all bids may be rejected if the County believes that collusion exists among the bidders. Bids in which the prices are obviously unbalanced may be rejected. If multiple bids are submitted by a bidder and after the bids are opened, one of the bids is withdrawn, the result will be that all of the bids submitted by that bidder will be withdrawn; however, nothing herein prohibits a vendor from submitting multiple bids for different products or services.
- 1.24 **Awards:** Fort Bend County reserves the right to award this contract on the basis of lowest and best bid in accordance with the laws of the State of Texas, to waive any formality or irregularity, to make awards to more than one bidder, to reject any or all bids. In the event the lowest dollar bidder meeting specifications is not awarded a contract, the bidder may appear before the Commissioners Court and present evidence concerning his responsibility. An award is final only upon formal execution by the Fort Bend County Commissioners Court or the Fort Bend County Purchasing Agent. Fort Bend County reserves the right to withdraw any award until execution by the proper authority.
- 1.25 **Assignment:** The successful vendor may not assign, sell or otherwise transfer this contract without written permission of Fort Bend County Commissioners Court.
- 1.26 **Term Contracts:** If the contract is intended to cover a specific time period, said time will be given in the specifications under scope.
- 1.27 **Maintenance:** Maintenance required for equipment bid should be available in Fort Bend County by a manufacturer authorized maintenance facility. Costs for this service shall be shown on the bid sheet as requested or on a separate sheet, as required. If Fort Bend County opts to include maintenance, it shall be so stated in the purchase order and said cost will be included. Service will commence only upon expiration of applicable warranties and should be priced accordingly.
- 1.28 **Contract Obligation:** Fort Bend County Commissioners Court must award the contract and the County Judge or other person authorized by the Fort Bend County Commissioners Court must sign the contract before it becomes binding on Fort Bend County or the bidders. Department heads are not authorized to sign agreements for Fort Bend County. Binding agreements shall remain in effect until all products and/or services covered by this purchase have been satisfactorily delivered and accepted.

- 1.29 Title Transfer: Title and Risk of Loss of goods shall not pass to Fort Bend County until Fort Bend County actually receives and takes possession of the goods at the point or points of delivery. Receiving times may vary with the using department. Generally, deliveries may be made between 8:30 a.m. and 4:00 p.m., Monday through Friday. Bidders are advised to consult the using department for instructions. The place of delivery shall be shown under the "Special Requirement" section of this bid document and/or on the Purchase Order as a "Ship To:" address.
- 1.30 Purchase Order and Delivery: The successful bidder shall not deliver products or provide services without a Fort Bend County Purchase Order, signed by an authorized agent of the Fort Bend County Purchasing Department. The fastest, most reasonable delivery time shall be indicated by the bidder in the proper place on the bid sheet. Any special information concerning delivery should also be included, on a separate sheet, if necessary. All items shall be shipped F.O.B. inside delivery unless otherwise stated in the specifications. This shall be understood to include bringing merchandise to the appropriate room or place designated by the using department. Every tender or delivery of goods must fully comply with all provisions of these requirements and the specifications including time, delivery and quality. Nonconformance shall constitute a breach, which must be rectified prior to expiration of the time for performance. Failure to rectify within the performance period will be considered cause to reject future deliveries and cancellation of the contract by Fort Bend County without prejudice to other remedies provided by law. Where delivery times are critical, Fort Bend County reserves the right to award accordingly.
- 1.31 Contract Extension: Extensions may be made only by written agreement between Fort Bend County and the bidder. Any price escalations are limited to those stated by the bidder in the original bid.
- 1.32 Termination: Fort Bend County reserves the right to terminate the contract for default if Seller breaches any of the terms therein, including warranties of bidder or if the bidder becomes insolvent or commits acts of bankruptcy. Such right of termination is in addition to and not in lieu of any other remedies, which Fort Bend County may have in law or equity. Default may be construed as, but not limited to, failure to deliver the proper goods and/or services within the proper amount of time, and/or to properly perform any and all services required to Fort Bend County's satisfaction and/or to meet all other obligations and requirements. Contracts may be terminated without cause upon thirty (30) days written notice to either party unless otherwise specified.
- 1.33 Recycled Materials: Fort Bend County encourages the use of products made of recycled materials and shall give preference in purchasing to products made of recycled materials if the products meet applicable specifications as to quantity and quality. Fort Bend County will be the sole judge in determining product preference application.

**2.0 TERMS AND CONDITIONS:**

- 2.1 **Seller to Package Goods:** Seller will package goods in accordance with good commercial practice. Each delivery container shall be clearly and permanently marked as follows (a) Seller's name and address; (b) Consignee's name, address and purchase order number and the bid number if applicable; (c) Container number and total number of containers (e.g. box 1 of 4 boxes); and (d) the number of the container bearing the packing slip. Seller shall bear cost of packaging unless otherwise provided. Goods shall be suitably packed to secure lowest transportation costs and to conform to requirements of common carriers and any applicable specifications. Fort Bend County's count or weight shall be final and conclusive on shipments not accompanied by packing list.
- 2.2 **Shipment Under Reservation Prohibited:** Seller is not authorized to ship goods under reservation and no tender of a bill of lading will operate as a tender of goods.
- 2.3 **Title and Risk of Loss:** The title and risk of loss of the goods shall not pass to the County until a County employee actually receives and takes possession of the goods at the point or points of delivery.
- 2.4 **Delivery Terms:** F.O.B. Destination Freight Prepaid, Inside Delivery, unless delivery terms are specified otherwise on Purchase Order.
- 2.5 **No Replacement of Defective Tender:** Every tender or delivery of goods must fully comply with all provisions of the Purchase Order as to time of delivery, quality and the like. If a tender is made which does not fully conform, this shall constitute a breach and Seller shall not have the right to substitute a conforming tender.
- 2.6 **Place of Delivery:** The place of delivery shall be that set forth in the block of the purchase order entitled "Ship To". Any change thereto shall be effective by modification as provided for in Clause number 2.20 "Modifications", hereof. The terms of this agreement are "no arrival, no sale", at the discretion of Fort Bend County.
- 2.7 **Invoices and Payments:**
  - 2.7.1 Seller shall submit separate invoices, in duplicate. Invoices shall indicate the purchase order number and the bid number if applicable. Invoices shall be itemized and transportation charges, if any, shall be listed separately. A copy of the bill of lading, and the freight waybill when applicable should be attached to the invoice.
  - 2.7.2 Fort Bend County's obligation is payable only and solely from funds available for the purpose of this purchase. Lack of funds shall render the order null and void to the extent funds are not available and any delivered but unpaid goods

will be returned to Seller by the county.

- 2.7.3 Do not include Federal Excise, State, or City Sales Tax. Fort Bend County is a tax-exempt governmental entity.
- 2.8 **Gratuities:** Fort Bend County may, by written notice to the Seller, cancel any order without liability, if it is determined by the County that gratuities, in the form of entertainment, gifts, or otherwise were offered or given by the Seller, or any agent or representative of the Seller to any officer or employee of Fort Bend County with a view toward securing an order. In the event an order is canceled by the County pursuant to this provision, the County shall be entitled, in addition to any other rights and remedies, to recover or withhold the amount of the cost incurred by Seller in providing such gratuities.
- 2.9 **Special Tools and Test Equipment:** If the price stated on the face of an order includes the cost of any special tooling or special test equipment fabricated or required by Seller for the purpose of filing this order, such special tooling equipment and any process sheets related thereto shall become the property of the County and to the extent feasible shall be identified by the Seller as such.
- 2.10 **Warranty/Price:**
- 2.10.1 The price to be paid by the County shall be that contained in Seller's quote or bid which Seller warrants to be no higher than Seller's current prices on orders by others for products of the kind and specification covered by an order for similar quantities under similar or like conditions and methods of purchase. In the event Seller breaches this warranty the prices of the items shall be reduced to the Seller's current prices on orders by others. Fort Bend County may cancel this contract without liability.
- 2.10.2 The Seller warrants that no person or selling agency has been employed or retained to solicit or secure any County order based upon any agreement or understanding for commission, percentage, brokerage, or contingent fee excepting bona fide employees of bona fide established commercial or selling agencies maintained by the Seller for the purpose of securing business. A breach or violation of this warranty gives the County the right, in addition to any other right or rights, to cancel this contract without liability.
- 2.11 **Warranty Product:** Seller shall not limit or exclude any implied warranties and any attempt to do so shall render an order voidable at the option of the County. Seller warrants that the goods furnished will conform to the specifications, drawings, and description listed in the bid invitation and purchase order as applicable, and to the sample(s) furnished by Seller if any. In the event of a conflict between the specifications, drawings, and descriptions, the specifications shall govern.

- 2.12 **Safety Warranty:** Seller warrants that the product sold to Fort Bend County shall conform to the standards promulgated by the U.S. Department of Labor under the Occupational Safety and Health Act of 1970. In the event the product does not conform to OSHA standards, the County may return the product for correction or replacement at the Seller's expense. In the event Seller fails to make the appropriate correction within 10 days, correction made by the County will be at Seller's expense.
- 2.13 **No Warranty by Fort Bend County Against Infringements:** As part of a contract for sale Seller agrees to ascertain whether goods manufactured in accordance with the specifications will give rise to the rightful claim of any third person by way of infringement. Fort Bend County makes no warranty that the production of goods according to the specification will not give rise to such a claim and in no event shall Fort Bend County be liable to Seller for indemnification in the event the Seller is sued on the grounds of infringement or the like. If Seller is of the opinion that an infringement will result, he will notify Fort Bend County to this effect in writing within two days after the receiving Purchase Order. If the County does not receive notice and is subsequently held liable for the infringement, Seller will defend and save the County harmless. If Seller in good faith ascertains that production of the goods in accordance with the specifications will result in infringement, this contract shall be null and void except that the County will pay Seller the reasonable cost of his search as to infringements.
- 2.14 **Right of Inspection:** The County shall have the right to inspect the goods at delivery before accepting them.
- 2.15 **Cancellation:** Fort Bend County shall have the right to cancel for default all or any part of the undelivered portion of an order if Seller breaches any of the terms hereof including warranties of Seller, or if the Seller becomes insolvent or files for protection under the bankruptcy laws. Such rights of cancellation are in addition to and not in lieu of any other remedies, which Fort Bend County may have in law or equity.
- 2.16 **Termination:** The performance of work under a Purchase Order may be terminated in whole or in part by the County in accordance with this provision. Termination of work there under shall be effected by the delivery to the Seller of a "Notice of Termination" specifying the extent to which performance of work under the order is terminated and the date upon which such termination becomes effective. Such right of termination is in addition to and not in lieu of rights of Fort Bend County set forth in Clause 15 herein.
- 2.17 **Force Majeure:** Force Majeure means a delay encountered by a party in the performance of its obligations under this Agreement, which is caused by an event beyond the reasonable control of that party. Without limiting the generality of the foregoing, "Force Majeure" shall include but not be restricted to the following types of events: acts of God or public enemy; acts of governmental or regulatory

authorities; fires, floods, epidemics or serious accidents; unusually severe weather conditions; strikes, lockouts, or other labor disputes; and defaults by subcontractors. In the event of a Force Majeure, the affected party shall not be deemed to have violated its obligations under this Agreement, and the time for performance of any obligations of that party shall be extended by a period of time necessary to overcome the effects of the Force Majeure, provided that the foregoing shall not prevent this Agreement from terminating in accordance with the termination provisions. If any event constituting a Force Majeure occurs, the affected party shall notify the other parties in writing, within twenty-four (24) hours, and disclose the estimated length of delay, and cause of the delay.

- 2.18 **Assignment-Delegation:** No right or interest in an order shall be assigned or delegation of any obligation made by Seller without the written permission of Fort Bend County. Any attempted assignment or delegation by Seller shall be wholly void and totally ineffective for all purposes unless made in conformity with this paragraph.
- 2.19 **Waiver:** No claim or right arising out of a breach of any contract can be discharged in whole or in part by a waiver or renunciation of the claim or right unless the waived or renunciation is supported by consideration and is in writing signed by the aggrieved party.
- 2.20 **Modification:** A Purchase Order can be modified or rescinded only by a writing signed by both of the parties or their duly authorized agents.
- 2.21 **Parol Evidence:** This writing is intended by the parties as a final expression of their agreement and is intended also as a complete and exclusive statement of the terms of this agreement. No course of prior dealings between the parties and no usage of the trade shall be relevant to supplement or explain any terms rendered under this agreement and shall not be relevant to determine the meaning of this agreement even though the accepting or acquiescing party has knowledge of the performance and opportunity for objection. Whenever a term defined by the Uniform Commercial Code is used in this agreement, the definition contained in the Code is to control.
- 2.22 **Applicable Law:** This agreement shall be governed by the Uniform Commercial Code. Whenever the term "Uniform Commercial Code" is used it shall be construed as meaning the Uniform Commercial Code as adopted in the State of Texas and in effective on the date of the purchase order.
- 2.23 **Advertising:** Seller shall not advertise or publish, without the County's prior consent the fact that Fort Bend County has entered into any contract, except to the extent necessary to comply with proper requests for information from an authorized representative of the federal, state, or local government.
- 2.24 **Right to Assurance:** Whenever the County in good faith has reason to question the other party's intent to perform. The County may demand that the other party give

written assurance of his intent to perform. In the event that a demand is made and no assurance is given within five (5) days, the County may treat this failure as an anticipatory repudiation of the contract.

- 2.25 Venue: Both parties agree that venue for any litigation arising from this contract shall lie in Richmond, Fort Bend County, Texas.
- 2.26 Dispute: After award, contractor and County agree to submit any dispute related to this Agreement that cannot be resolved by agreement of the parties to non-binding mediation by an independent mediator selected by County prior to filing an action at law or in equity. Each party shall be responsible for its costs associated with the mediation and one-half (1/2) of the cost of the mediator. Unless otherwise directed by County, Contractor shall continue performance under this Agreement while matters in dispute are being resolved."
- 2.27 Prohibition Against Personal Interest in Contracts: No officer or employee of the County shall have a financial interest, direct or indirect, in any contract with the County, or shall be financially interested, directly or indirectly, in the sale to the County of any land, materials, supplies, or service, except on behalf of the County as an officer or employee. Any willful violation of this section shall constitute malfeasance in office, and any officer or employee guilty thereof shall be subject to disciplinary action under applicable laws, statutes and codes of the State of Texas. Any violation of this section, with the knowledge, expressed or implied of the person or corporation contracting with the County shall render the contract involved voidable by the County Commissioners Court.

### **3.0 SCOPE OF WORK:**

- 3.1 The following specifications are for the Fort Bend County Public Transportation Department to procure buses of multiple sizes and types over the next five (5) years.
- 3.2 All vehicles must be the most recent model year and be accessible. Fort Bend County intends to purchase three (3) various size vehicles, totaling approximately sixty-nine (69) vehicles, within five (5) years of the award date. It is anticipated that vehicles will be as follows:
- 19' to 22' Light Duty bus – 3 minimum, 11 maximum  
24' to 26' Light Duty bus – 5 minimum, 28 maximum  
32' to 37' Medium Duty bus – 5 minimum, 30 maximum
- 3.3 Buses purchased must be capable of accommodating two (2) wheel chair positions, with fold down seats able to be used when wheel chair positions are not in use. Where vehicle size and passenger seating permits, one (1) wheel chair position will be provided. The buses must be designed and constructed to provide safe, economical, and reliable operation of demand response and fixed route services,

suitable for extended service hours in heavy stop-and-go transit service. Overall design and construction shall be conducive to safe passenger entrance and egress and all movement within. The buses shall be new, the most current production model. In this regard, Fort Bend County invites proposals in accordance with State and Federal requirements as outlined in the proposal documents.

- 3.4 Contract will be awarded to the low bidder meeting specification per bus size.
- 3.5 Subsequently there shall be a one-year renewal option at the end of each model year up to four (4) years maximum from the date of the final contract. A price increase will be considered at each renewal date, up to a maximum of 4%, due to chassis cost increases and/or manufacturer's option cost increases. Fort Bend County may accept or reject each new model year renewal cost increase.

#### **4.0 CONTRACT:**

Bidder's signature on Contract Sheet constitutes acceptance of a contract that may result from this solicitation.

#### **5.0 PRE-BID CONFERENCE:**

A pre-bid conference will be held on **Thursday, December 3, 2009 at 10:00 AM** in the Purchasing Department located at 4520 Reading Road, Rosenberg, Texas. Attendance is not mandatory, but all vendors are encouraged to attend.

#### **6.0 REQUEST(S) FOR APPROVAL OR DEVIATION:**

- 6.1 Request(s) for approved equal and request(s) for deviation to the technical specifications or other requirements of the solicitation document shall be submitted to Fort Bend County for evaluation by 3PM (CST) December 11, 2009.
- 6.2 All request(s) for approval shall be submitted on the enclosed RFA form, with all necessary descriptive literature, technical data, or samples to clearly indicate all specifications of the item(s) or deviation(s) proposed to permit evaluation of the request and determine that they meet all requirements of the Solicitation.
- 6.3 Individual RFA's shall include all technical data and salient characteristics of the proposed item offered to meet the specification requirement. Such technical data and salient characteristics shall cover as a minimum the installation, operation and design performance of the item offered for approval.
- 6.4 Request(s) for approval may be submitted by fax to the attention of Debbie Kaminski, CPPB, Assistant County Purchasing Agent at 281-341-8645 or email at [kaminskd@co.fort-bend.tx.us](mailto:kaminskd@co.fort-bend.tx.us). CAUTION: Fax/email bids are not authorized.

- 6.5 Fort Bend County will respond to RFA's by 3PM (CST) December 22, 2009.
- 6.6 Requests for appeals shall be submitted to Fort Bend County by 3PM (CST) December 29, 2009.

**7.0 LIQUIDATED DAMAGES:**

- 7.1 In the event of delay in the completion of deliveries of vehicles beyond the dates/schedule as provided for herein, the Contractor shall be liable for liquidated damages in the amount of Fifty and No/100 Dollars (\$50.00) per calendar day per vehicle, not including weekends and National holidays.
- 7.2 These damages shall be deducted from any monies due, or which may thereafter become due, to the Contractor under this Contract.
- 7.3 The maximum amount of liquidated damages to which the Contractor will be subject is Five Hundred Thousand and No/100 Dollars (\$500,000.00). In the event the Contract has not been otherwise terminated, the Contract will be considered terminated for default when accumulated liquidated damages exceed Five Hundred Thousand and No/100 Dollars (\$500,000.00) at any time during the contract delivery period.

**8.0 PERFORMANCE BOND OR LETTER OF CREDIT:**

No bonds are required for this project.

**9.0 APPLICABLE REGULATIONS AND WARRANTIES:**

- 9.1 Safety: Vehicles must meet all appropriate local, state and Federal Motor Vehicle Safety Standards, including but not limited to standards for impact, rollover, brakes, windshield, windows and lights.
- 9.2 Pollution: Contractor must certify the vehicle being bid must meet Federal Noise and Exhaust emission standards.
- 9.3 ADA: Vehicle must meet Federal accessibility specifications as published in the Americans with Disabilities Act (ADA) and 49 CFR Parts 27, 37 and 38 as they apply to this purchase.
- 9.4 Requirements: The manufacturer's standard warranty for body and chassis must be provided as well as warranty for rust-proofing and lift. Warranties must be effective the day the buyer receives and signs delivery acceptance.
- 9.5 Service: Contractor must be able to provide warranty and maintenance service for the vehicle in the area in which it is to be used. Contractors located outside this area must

be able to arrange a maintenance agreement with a certified distributor located within 50 miles of the service area or with Fort Bend County. This requirement is not meant to restrict responses but to ensure the availability of maintenance and warranty service.

- 9.6 Spare Parts: Contractor must be able to provide or assure access to spare or replacement parts within a reasonable amount of time.
- 9.7 Open Architecture: Contractor must comply with all Federal, state and local requirements, standards and regulations as it relates to the system and subsystems, including but not limited to farebox, destination signs, cameras and AVL systems.

#### **10.0 CERTIFICATION:**

- 10.1 General: Contractor must provide certification that they are a fully authorized distributor of the vehicle being bid; that they are prepared to perform maintenance and warranty service, or have arranged for said service with a certified distributor in the area the vehicle will be used (must specify who); and that they can provide spare or replacement parts, or can assure access to said parts (must specify source).
- 10.2 Buy America: Contractor must certify that the vehicle meets FTA Buy America requirements as specified in 49 CFR parts 661. Specifications: Contractor must certify that the vehicle meets or exceeds these specifications and must obtain approval of exceptions prior to submitting bids.
- 10.3 ADA: Contractor must certify that the vehicle and related equipment meets or exceeds ADA Accessibility Specifications as published in 49 CFR Parts 27, 37 and 38 as they apply to this bid. In the event that any of the attached specifications deviate from ADA accessibility specifications, the specifications of the higher standard will apply.
- 10.4 Bus Testing: Contractor must complete the attached Bus Testing Certification.

#### **11.0 SPECIFICATIONS FOR LIGHT-DUTY DIESEL TRANSIT CONVENTIONAL BUS 19' TO 22':**

- 11.1 The vehicles produced according to the included specifications must be of the latest current model year (2009 or newer). All equipment, options and features provided must be designed, constructed and installed to be fully suitable for their intended use and service. The vehicle must be designed and built using the latest available technology and engineering capabilities. All components must be new. Each bus, including all individual components, must meet or exceed all current Federal, state, and local requirements.

**\*Amended 12/08/09**

11.2 The bus shall be supplied by an integrated vehicle supplier that can provide warranty, service, and parts coverage from a single distribution network for the complete vehicle. The body shall be manufactured in compliance with Quality Standards ISO 9001:2000 with regard to the Sale, Design and Manufacture of Customized Buses and Multipurpose Passenger Vehicles.

\*11.3 This specification will describe the construction of a light-duty transit bus. The bus must meet all Federal Bus Testing Requirements and have completed the required bus testing at the Altoona bus testing facility (or be in the process of completing the test) for the category of four (4) years, 100,000 miles and be fully compliant with the Americans with Disability Act (ADA) requirements. The bus must meet Buy America.

\*11.4 General Dimensions:

Exterior Length.....	263” Maximum
Exterior Width.....	87” Maximum (excluding mirrors)
Exterior Height.....	115” Maximum
Interior Width at seat level.....	80” Minimum
Interior Height at center aisle.....	74” Minimum
Entry Door Dimension (clear opening)...	30” x 80” Minimum
First Step Height from Ground.....	11” Maximum
Step Riser Height.....	9.0” Maximum
Step Tread Depth.....	9.0” Minimum
Wheel Base.....	138” Minimum

11.5 Suspension and Gross Vehicle Weight:

Gross Vehicle Weight Rating (GVWR)....	10,700 lbs. Minimum
Front Axle Capacity.....	4,600 lbs. Minimum
Rear Axle Capacity.....	7,500 lbs. Minimum
Front Springs.....	3,800 lbs. Minimum
Rear Springs.....	7,800 lbs. Minimum

A minimum of ten thousand, seven hundred (10,700) pounds GVWR, or higher if required, to support the loaded weight of the completed vehicle including any optional equipment selected. It is the contractor’s responsibility to calculate the actual loaded weight and to provide a heavier chassis, tire, wheel, spring or axle combination, if required.

11.5.1 Shock absorbers shall be gas type, heaviest available as specified by the chassis manufacturer.

11.5.2 Rear springs shall be a conventional leaf spring of proper design and suitable capacity. Springs shall have anti-squeak characteristics. The suspension system shall take into account capacity on the curb side of the vehicle to overcome additional weight of the lift.

11.5.3 Suspension system shall ensure a consistent smooth ride with passenger load of sixteen (16) adult ambulatory passengers and two (2) wheelchair positions occupied. Jounce and rebound must both be controlled while providing controlled roll stability.

11.5.4 The rear axle and final drive must be of conventional construction, a truck-type rear axle utilizing heavy tubes pressed into cast center section or one-piece casting.

11.5.5 Ring gear should be bolted, not riveted, to differential carrier.

11.5.6 A differential with the appropriate gear ratio to match the power train is required. The vehicle should be designed to operate at sixty-five (65) m.p.h. at 3500 rpm's or less.

11.5.7 Rear tow hooks shall be provided.

11.6 Engine:

Engine shall be of the latest design electronic controlled, V-8, six point six liter (6.6) diesel power or approved equal. The engine is to be EPA certified to comply with 2009 emission standards, or current year of production, and operate on ultra-low sulfur diesel fuel. Engine performance settings to be determined post bid. A complete set of maintenance manuals must be provided. On board diagnostic connector for diagnostic equipment and manual regen switch to be located post bid. Engine must have fast-idle system, fuel/water separator/filter and "Water in Fuel" sensor to be provided with corresponding light on dash panel.

11.6.1 There shall be extra insulation installed between the dash and firewall, as well as beneath the hood and on the splash shields to help reduce chassis noise entering into the bus body. The bus-generated noise level experienced by a passenger at any seat location in the bus shall not exceed 83 dba.

11.6.2 The engine components are to be arranged and mounted so as to provide convenient access for servicing the engine and all of its accessories.

11.7 Fuel System:

The fuel tank shall have a capacity of thirty-five (35) usable gallons. A diamond plate access plate shall be provided in the vehicle floor for the purpose of accessing

the fuel sending unit. An appropriate fuel filter shall be provided.

11.8 Exhaust System:

The vehicle shall be equipped with an exhaust system which meets Federal and state noise level and exhaust emission requirements. The exhaust pipe shall terminate just ahead of the rear corner of the vehicle, exhausting to the street side, and shall be constructed so that it will not cause back pressure in the motor or damage to the paint, bumper, chassis or wiring components of the vehicle. Flexible tubing will not be permitted in the exhaust system. An adequately sized, aluminized steel, long-life muffler shall be used.

The exhaust system shall be secured in place with heavy duty system. No part of the exhaust shall hang below departure angle to the rear bumper bottom.

11.9 Cooling System:

The cooling system shall be of heavy duty to manufacturer's recommended standards. The coolant recovery system shall be factory installed. It shall be super cooling or heavy duty cooling. The cooling system shall have a permanent glycol base antifreeze to protect the system to -20 degrees F. and shall maintain engine temperature not to exceed manufacturer's recommended normal operating temperature.

The cooling system shall have a low coolant warning buzzer and light and shall shut off the engine in 45 seconds of initial warning.

11.10 Transmission:

11.10.1 The transmission shall be an automatic shift, four (4) speed forward and a reverse gear with an auxiliary oil cooler capable of handling extreme temperature associated with transit type operations.

11.10.2 The transmission shift lever shall be interlocked with the starting motor to prevent engagement of the starter in any gear position other than park.

11.10.3 The transmission shall be equipped with an interlock feature that prevents the vehicle from being shifted out of the park position until the lift doors are closed, the lift master switch is off, and the parking brake is released.

11.10.4 A warning signal audible outside of the vehicle shall be activated when the transmission is in reverse.

11.11 Drive Shaft: A drive shaft yoke and guard shall be provided to prevent the drive shaft from dropping to the ground or from whipping the vehicle floor if it becomes

broken or separated.

11.12 Vehicle Controls:

- A heavy duty power steering linkage type shall be provided.
- The steering shall be power assist and shall incorporate a tilt and telescoping feature. Steering from full left to right shall be accomplished in no more than five (5) complete turns of the wheel.
- The steering wheel shall be no less than fifteen (15") inches or more than twenty (20") inches in diameter. The wheel ring shall be of all plastic or synthetic resin construction, molded over metal.
- All steering linkage wear points, including tie rod ends, shall be fitted with lubrication fittings and replaceable bushings or inserts.
- All vehicles shall be keyed alike, with the same key operating the driver's door and ignition switch on all vehicles. One key shall operate all remaining locks on all vehicles (excluding fare box keys). Contractor shall supply two (2) complete sets of keys for each vehicle ordered.

11.13 The following controls, in addition to normal steering, braking and transmission functions are to be provided:

- Column-mounted turn signal lever.
- Emergency flasher control facing driver and clearly visible.
- Master exterior light switch including clearance or marker lights. Switch to be of uniform type.
- Switches and temperature controls for passenger compartment heaters, defroster. Switches must all be uniform in type.
- Separate switch and temperature control for driver heater and defroster.
- Heavy duty electronic variable speed windshield wipers controlled by a variable speed switch or two wipers with intermittent feature shall be furnished. Wiper motor shall be mounted in an easily accessible location for ease of inspection, maintenance and removal. Minimum eighteen (18") inch wiper blade and arm providing 1,037 square inches of wiped area with one hundred and ten (110°) degrees of wiping arc. Windshield washer reservoir shall be mounted in an accessible area and pump shall be electronically operated.

➤ Passenger compartment lights.

11.13.1 All controls are to be within arm's reach of a five foot (5'0") driver with seat belt fastened.

11.13.2 All body switches are to be of uniform type, either push-pull or rocker type, mounted in convenient grouping in a panel near the driver.

11.13.3 All controls and switches shall be plainly and permanently marked. Painted masking is unacceptable.

11.13.4 The control panel and a supplemental driver's control panel shall be located conveniently to the driver's seated position and in full view of the driver.

11.13.5 No switches or instruments shall be obstructed. Controls, trim panels, or other appurtenances shall be arranged in a consistent and uniform manner.

11.14 Electrical System:

11.14.1 The vehicle is to be equipped with a twelve (12) volt extreme duty electrical system. All components are to be selected and integrated to function in an environment characterized by low engine (alternator) speeds and high amperage draws (due to lights, wheelchair lift, flashers, air conditioning or heater, and other accessories operating consistently or simultaneously). As built wiring schematics, one hard copy and one electrical copy are required.

11.14.2 An alternator of at least two hundred (200) amperes output at normal engine speed and an idle of at least one hundred twelve (112) amperes is required. The idle output shall be achieved at an engine speed of no more than seven hundred (700) R.P.M. At no time should the ampere output be less than one hundred ten percent (110%) of loaded draw.

11.14.3 Starter shall be capable of turning over the engine with SAE 40W oil after ten (10) hour cold soak at zero (0°F) degrees.

11.14.4 The vehicle shall be equipped with a fast idle solenoid with manual switch, volt sensor and light which will automatically shut off when brake is applied and transmission is placed in gear.

11.15 Batteries:

11.15.1 Chassis manufacturer supplied batteries shall be supplied. Battery cables shall be color coded for positive and negative number two (#2) battery cable. Cables shall be sleeved with high abrasive resistant flex-guard loom and supported with lined steel clamps on a maximum of fifteen inch (15") centers. All battery terminals shall be coated with anti-corrosion and sealant

protector.

11.15.2 Batteries shall be mounted on a stainless steel mounted tray with battery hold down secured with bolts. Battery tray compartment will be located on the curb (right) side of bus, below the floor line, and with adequate reinforcement brackets mounted to floor supports. Battery compartment should be vented and battery easily serviceable without removal from bus.

11.15.3 A rotary type battery disconnect switch shall be located in the driver side step well within the driver's reach.

#### 11.16 Wiring:

11.16.1 All wiring other than that provided by the original equipment manufacturer (OEM); chassis, wheelchair lift or air conditioning and heating manufacturer shall be cross-linked polyethylene insulated, to two hundred (200°F), shall meet SAE standards, shall be color, function and number coded for positive identification every six (6"), and shall be permanently labeled in words to their function. Precaution shall be taken to avoid heat, water, solvents or chafing by proper routing, clamping, and the use of grommets or suitable electrometric cushion materials. Harnesses shall be designed to resist abrasion by the use of nylon slit flex loom that has a maximum temperature resistance of four hundred and ten degrees (410°F). Harnesses shall be sectional terminating at insulation multi-pin quick disconnects or junction blocks. Heavy duty circuit board junction panel shall be provided inside the vehicle. The circuit block shall be conveniently mounted and have a secure cover. The circuit board shall be equipped with heavy duty twelve (12) volt DC relays, and twelve (12) volt automatic reset circuit breakers and blade fuses. Inside the circuit box shall be a legend identifying each circuit and wire by color, number, function and location. This legend shall be permanently mounted to the vehicle.

11.16.2 All connectors shall meet the requirements of the Society of Automotive Engineers (SAE) recommended practice J878a, Types GXL and SGX.

11.16.3 Vehicles shall be identically wired.

11.16.4 Contractor shall furnish complete wiring diagram with wire size, maximum current flow in each wire, type of insulation, and code used. Wire diagrams must be vehicle specific, body and chassis combined, and shall correctly show all specified options.

11.16.5 No "T" splices or butt connections shall be made in wiring unless prior approval is given. Harness and wiring shall terminate at appropriate junction terminals set in Bakelite or molded plastic material.

11.16.6 Devices such as lamps and wiring requiring periodic checking and servicing shall be readily and easily accessible. All exterior devices shall be sealed to prevent entry of water.

11.17 Instrument Gauges: The following instruments shall be provided:

- Speedometer/Odometer – Chassis manufacturer’s standard design with trip set feature.
- Fuel Gauge – Chassis manufacturer’s standard fuel gauge.
- Oil Pressure Gauge – In addition to the manufacturer’s standard gauge, an audible alarm and light shall be installed that will activate when low oil pressure is detected.
- Water temperature gauge – In addition to the manufacturer’s standard gauge, an audible alarm and light shall be installed that will activate when overheating engine is detected.
- Voltmeter – In lieu of the chassis manufacturer’s standard voltmeter, an additional voltmeter shall be installed with graduated charge and discharge indications.
- Engine hour meter shall be provided.

11.18 Brakes:

11.18.1 Service brakes shall be hydraulic, self-adjusting power disc front and rear. Vehicle shall include a foot operated parking brake.

11.18.2 The brake system shall comply with Federal Motor Vehicle Safety Standard 105.75.

11.18.3 The braking system shall be heavy duty and the largest offered by the manufacturer for the GVWR specified.

11.18.4 The brakes shall be free of objectionable noise and squeal when applied.

11.19 Wheels and Tires:

11.19.1 Vehicles shall be equipped with the heaviest available ventilated wheels, 19” x 6.00” minimum. Rear wheels shall be dual and all wheels are to be interchangeable. Rated capacity shall be equal or exceed GVWR of the vehicle.

11.19.2 Tires shall be LT 225/75R16 radial ply, all season, with steel-cord reinforcement and highway type tread. Wheels and tires are to be of adequate capacity, as determined by reference to the Tire and Rim Association Yearbook, to support the fully loaded vehicle. One matching spare wheel and tire shall be provided with each vehicle but not mounted in or on the vehicle.

11.19.3 Mud flaps shall be included for each wheel of the vehicle.

11.20 Bumpers:

11.20.1 Front bumper shall be the chassis manufacturer's standard front chromed bumper.

11.20.2 Rear bumper shall be the bus manufacturer's standard rear bumper equipped with an anti-ride feature. Bumpers shall be fastened to the chassis frame to adequately absorb shock from impact. In no case are the bumpers to be fastened to the body and allow shock from impact to be transmitted to the body of the vehicle.

11.21 Horn: Dual 12 volt electrically controlled horns shall be furnished and installed so as to be protected from wheel-wash.

11.22 Crash Worthiness:

11.22.1 The body structure shall be built as an integral vehicle adequately reinforced at all joints and corners where stress concentration may occur to adequately carry required loads and withstand road shock. The following items are representative of the minimum requirements of the vehicle. Body assembly shall meet or exceed FMVSS 220, for roll-over protection.

11.22.2 The body and roof structure shall withstand a static load equal to one hundred fifty percent (150%) of the curb weight evenly distributed on the roof with no more than a six inch (6") reduction in any interior dimension. Windows shall remain in place and shall not open under such a load.

11.22.3 The vehicle, at GVWR and under static conditions, shall not exhibit deformation or deflection that impairs operation of doors, wheelchair lift, or other mechanical elements. Static conditions include the vehicle at rest with any one wheel on a six inch (6") deep hole.

11.22.4 Upon request of the County, the Contractor will present certified actual test results which have been conducted to insure that the vehicle offered meets the FMVSS crash worthiness standards for this type of vehicle.

11.23 Body Construction:

- 11.23.1 The body may be constructed of a matrix of fiberglass reinforced plastic (FRP) with an inner thickness of resin-hardened honeycomb craft material. The matrix assembly shall be as follows:  
Exterior surface shall be a minimum .020" thickness of high gloss gel-coat to prevent moisture penetration and corrosion. Secondary surface shall be a minimum one eighth inch (1/8") thickness of resin-hardened FRP. The center composite layer consists of a one inch (1") thickness of resin-hardened "Vertical" honeycomb, or approved equal, laid on edge to allow maximum column strength of each cell. Wall structure shall include a maximum of two (2) three inch (3") wide longitudinal sections of eighteen (18) gauge flat steel extending from the forward body seam to the rearward body seam to provide an additional attachment point for the integrally welded sidewall seat rail. Final surface of body structure is a minimum three thirty seconds inch (3/32") thickness of resin-hardened FRP. Window framing in sidewall shall be a steel ladder-type assembly. Window pillars are minimum of one and one half inches (1 1/2") by one inch (1") fourteen (14) gauge dipped, zinc-plated tube. Top and lower horizontal ladder bridge rails are minimum one inch (1") by two inch (2") twelve (12) gauge zinc plated angle section. Attachment of ladder assembly to roof and lower wall section shall be grade five (5) 1/4" x 3/4" mechanical fasteners on not more than eight inch (8") center. In addition, interface of wall and roof to window ladder assembly surfaces shall include a high strength contact adhesive. Sikaflex 255 or approved equal to provide a one hundred percent (100%) bonding and sealing at these locations. Side panels around and below passenger windows shall be same Melamine material with color being bright white. County to approve color and quality prior to production from samples provided by vendor.
- 11.23.2 The body may be constructed of vertical support columns that shall be eighteen gauge (18) steel. All roof structural support members shall be of the equivalent of sixteen (16) gauge hot rolled steel hat section roof bows. The entire body steel cage frame (door, walls roof, front and rear) shall be securely jig-welded together to provide an integral one-piece body structure. Fastening of roof and side walls by any other means other than welding will not be acceptable. All metal parts shall be given a thorough multiple stage anti-corrosion treatment prior to assembling. The exterior panels shall be continuous panels of .063 aluminum over heavy comb, twenty-five (25) gauge galvanized steel or other metal of the same mechanical properties. Exterior panels are to be riveted or welded to the body framing. Sheet metal screws will not be acceptable for fastening exterior panels. All panels shall be installed so that they will shed water. That is, the panel shall be lapped over the following panel and in no case shall the sealing of the panels be dependent on caulking alone. All exterior joints and seams shall be protected by zinc chromate caulking, butyl rubber tape, or an approved equal. Side panels below the floor line shall be non-corrosive ABS material and easily removable for service and repair. These panels shall be installed using

- methods that allow for a smooth surface with minimal exposed fasteners. All nuts, bolts clips, and other fasteners shall be zinc or cadmium plated or phosphate coated. Sheet metal screws are not permitted.
- 11.23.3 All steel body parts shall be galvanized. Zinc chromate paint shall be applied to aluminum and steel.
- 11.23.4 The primer utilized shall be compatible with finish paints. **Interior surfaces of body panels and posts which are covered by trim materials shall be given protection against corrosion.** In the case of interior body posts, all four (4) sides shall be treated to prevent corrosion.
- 11.23.5 The galvanized welds shall be wire brushed and treated with a cold galvanizing compound.
- 11.23.6 Side and end frame sections shall be designated for maximum strength. End posts shall be designated to resist shear. To increase tolerance for added strength, frame sections are to be jig-welded. Each frame section is to be tube-grind network constructed of 1" x 2" 14 gauge steel tubing to be used in all stress areas – especially around the passenger entrance door and at all points where stress may occur.
- 11.23.7 Gun installed mono-bolt fastenings or rivets shall be utilized on all exterior body panels, rub-rails, and all other locations where stress is concentrated. When mono-bolts cannot be used, all nuts, bolts, clips, washers, clamps and like fasteners on the exterior and interior of the unit shall be zinc or cadmium plated to prevent corrosion.
- 11.23.8 Roof bows shall be constructed from eleven (11) gauge and sixteen (16) gauge steel welded into a parabolic-Z structure. The longitudinal framing from front to rear shall consist of two (2) hatch-shaped members formed of sixteen (16) gauge steel. Exterior roof panels shall be .063 aluminum. The interior panel for the roof within the unit shall have a strength equivalent to twenty-four (24) gauge steel. All metal parts shall be given a thorough multiple stage anti-corrosion treatment prior to assembling.
- 11.23.9 The vehicle shall be rust-proofed with premium quality rust-proofing material. The entire body frame under-structure of the vehicle is to be fully undercoated with non-flammable resin type material, polyoleum, or equivalent, applied after final assembly at the manufacturing facility.
- 11.23.10 Gutters shall be provided to prevent water flowing from the roof onto the side windows and passenger doors. When the vehicle is decelerated, the gutters shall not drain onto the windshield or driver's side window, or into the boarding area. Cross sections of the gutters shall not be less than .025

square inches.

11.24 Roof:

11.24.1 The roof shall have sufficient strength and stiffness to prevent vibration, drumming, or flexing under normal use. Roof structure shall include a minimum of three (3) longitudinal sections of eighteen (18) gauge flat steel extending from the forward the forward body seam to the rearward body seam. All flat steel sections shall be fully integrated into the roof matrix and shall provide additional structural integrity and a secure attachment surface for ceiling panels, handrails, and stanchion fixtures.

11.24.2 The roof is to be constructed to provide an aesthetically pleasing design to the vehicle. The sills, when matched, will provide a clean, clear surface at least two inches (2") wide for secure and sufficient roof mounting.

11.25 Insulation:

Vertical core insulation shall provide for a minimum of a "R-6" thermo-barrier and sound absorption. Side, roof, and front and rear crowns shall be insulated by the vertical core of the body assembly composite.

11.26 Floor:

11.26.1 The vehicle floor assembly shall be a lateral body support, structural design, incorporating longitudinal stringers welded in a perimeter structure of steel and iron. The entire floor assembly shall be jig-welded steel structure. Floor construction methods that utilize wood studs running the length, width, and outside perimeter with a foam core insulation are not acceptable.

11.26.2 The substructure shall be comprised of the following:

11.26.3 A combination of fourteen (14) gauge steel lateral outriggers reinforced at each mounting point, eleven (11) gauge steel C-channel longitudinal support members, and a perimeter of fourteen (14) gauge steel angle welded into a ladder type structure.

11.26.4 The substructure shall be bolted through the lateral outriggers, two (2) per outrigger to the chassis through rubber isolator grommets as provided by the chassis manufacturer. Welding of any body understructure to the chassis frame will not be acceptable.

11.26.5 Over the sub floor structure shall be fastened a minimum of five eighths of an inch (5/8"), seven (7) ply, marine grade plywood which is pattern cut, edge sealed, and attached with quarter inch (1/4") diameter counter sunk Tek screws. Sub floor understructure shall be completely undercoated and

**sealed prior to being installed on the steel frame understructure.**

11.26.6 Floor shall be level throughout and all joints between the floor and vertical surfaces shall be equipped with a floor covering of molding. Flooring shall be laid in such a manner as to be free from squeaks.

11.26.7 **All edges of the plywood shall be sealed prior to installation to resist moisture.** All floor joints will be filled and sanded level to result in a smooth, flat floor ready for installation of the flooring material. The entire floor shall be thoroughly sanded and then completely cleaned of all sanding and foreign material.

11.26.8 The floor in the under seat area and wheelchair position area shall be covered with RCA #TR766, smooth f covering having a minimum thickness of .125 inch (1/8"). **Floor covering shall roll up the sidewall of the seat track.**

11.26.9 Floor covering in aisle and on steps shall be RCA #TR766, non-skid, wear-resistant, and ribbed. Minimum overall thickness shall be .1875 inch (3/16") measured from the top of ribs.

11.26.10 Floor covering shall be laid without gaps or openings between sheets. Seams shall be filled with color matching material so as to be tight against any influx or seepage of water. Seams shall be covered with aluminum trim.

11.26.11 The floor covering material shall be thoroughly cemented into position throughout the entire area and will be free of bubbles and blisters. The floor covering in the platform or standee area shall be three sixteenths inch (3/16") thick top ribbed, single piece. The single piece floor covering in the platform area shall have longitudinal and traverse ribs metered at 45 degrees face to door. The vertical face and top section of the platform step edge backing shall be anchored with A.I.S.I. Type 304 stainless steel screws.

11.26.12 A yellow standee line shall be provided at the driver's modesty panel.

11.27 Roof Liner:

Interior walls shall provide a finish that is durable, easily cleaned and coordinates with the vehicle's interior color scheme. Roof liner shall be molded fiberglass or vinyl clad covered sheeting, neatly installed the full length so as to cover all protrusions.

11.28 Doors and Step Well:

11.28.1 The passenger entry door and step well shall be located at right front of passenger area, located directly across from the driver's seat at a ninety (90°)

degree angle for maximum viewing on entry way.

- 11.28.2 The door shall be manually operated, outward folding type, and both door panels shall be actuated together by a single manually operated door control. The control mechanism shall be of high quality and durability, designed for repeated use over an extended period. The door shall be controlled from the driver's seated position.
- 11.28.3 The passenger entry door structure shall consist of a minimum 12-gauge, 304 grade stainless steel, powder coated using the five (5) step Interpon PZ77 process or approved equal, in bright white to match vehicle interior base color. It shall be the two-piece transit type and shall have a minimum horizontal opening of thirty-six (36") inches and a minimum vertical opening of eighty (80") inches. All screws used to attach the door frame to the vehicle body shall be stainless steel screws.
- 11.28.4 Both vertical closing edges of the door shall be equipped with neoprene bulb seals. At the meeting edge of each door leaf, a two (2") inch neoprene seal shall be installed so that the edges form a tight overlapping seal when closed. Seals shall overlap front over rear to provide an air and water shade.
- 11.28.5 To prevent accidental opening while the vehicle is in motion, the door opening system shall require at least one hundred, twenty-five (125) pound force applied at its center in order to manually separate the leaves.
- 11.28.6 Passenger door windows shall be installed with two (2) piece ozone treated extruded rubber, lock and key of one (1) piece fixed design. Entrance door windows shall be glazed with three sixteenths (3/16") inch thick, thirty-one (31%) percent gray density, tempered safety glass. Each window shall be installed in the upper and lower portions of the passenger door panels in line with the passenger side windows.
- 11.28.7 A driver's door shall be provided to the left of the driver's area. This door shall be accessible from inside and outside the vehicle. The driver door shall incorporate an opening window and arm rest. A driver's side running board with a step depth of twelve (12") inches shall be provided.
- 11.28.8 The steps shall be designed so that the top of the first step is no more than twelve (12") inches above the ground with the vehicle loaded. Step well is to have a minimum first step depth of twelve (12") inches and a minimum second step depth of ten (10") inches and shall be a minimum of thirty-six (36") inches in width. Risers shall not exceed nine (9") inches in height. The surface of all entrance steps shall be covered with eighth (1/8") inch thick rubber flooring on all risers and sides and three sixteenths (3/16") inch thick ribbed rubber step treads. All step edges shall have a two (2") inch yellow

safety band running the full width of each step. Step wells shall incorporate lights to illuminate step tread area and outside of step well shall be protected from splashed material by door and rubber for a tight fit.

11.29 Stanchions, Grab Rails and Handrails:

11.29.1 Vertical handrails shall be securely fastened on both sides of the doorway to assist passengers in entering or exiting the vehicle.

11.29.2 Vertical stanchions shall be provided at the aisle immediately behind the driver's seat and at the step well. A horizontal grab rail shall extend from the wall to each stanchion.

11.29.3 Padded modesty panels shall be provided that extends from the wall to each stanchion. Vinyl shall match the passenger seats.

11.29.4 A smoked three eighths (3/8") inch thick Plexiglas panel shall be provided behind the driver's seat, *within six (6") inches of ceiling*. Panels shall extend from the top of the horizontal grab rail to the ceiling and shall extend from the wall to the vertical stanchion. Stanchion and panel shall not impair driver's seat adjustment.

11.29.5 An overhead handrail shall be installed in the roof of the vehicle on the driver and curb side and shall run the length of the seating area.

11.29.6 All handrails and stanchions shall be one and one-quarter (1 1/4") inch stainless steel.

11.30 Wheelchair Lift Door:

11.30.1 Side opening double outward opening doors shall be provided for the platform type wheelchair lift. Lift shall be mounted within the vehicle body on the curb side behind the passenger entry door. The wheelchair door frame structure shall consist of a minimum 12-gauge, 304 grade stainless steel, powder coated using five (5) step Interpon process, or approved equal, in bright white to match vehicle interior base color. A water deflector shall be integrated into the door frame structure at the top. Door panels shall be made of non-corrosive material. Foam core doors with wood frame supports are not acceptable. Door panel hinges shall be piano type with a minimum three sixteenths (3/16") inch diameter pivot pin. Hinges and hinge fasteners shall be stainless steel to resist rust and corrosion.

11.30.2 Door latch shall be vertical, rotating, two point type with latch rod at top and bottom. Each door panel shall have its own key lockable latch assembly which shall consist of a pistol type grip style twist handle located at the inside

center of the door panel. Door latch shall compress perimeter door seal to prevent leaks. Latch adjustment plates shall be located at the top and bottom of the door frame structure.

11.30.3 Door panel holders shall be gas shock type mounted at the top and allow door panels to open a minimum of one hundred (100°) degrees from the closed position. Wheelchair door clear opening dimensions shall be a minimum of forty-four (44") inches by seventy (70") inches. Lift doors shall be interlocked by a panel door switch controlling the transmission which requires the transmission to be in "Park" position before lift can be operated.

11.30.4 Door windows shall be installed with two (2) piece black ozone treated extruded rubber, lock and key of one (1) piece fixed design. Windows shall be glazed with three sixteenths (3/16") inch thick, thirty-one (31%) percent gray density, tempered safety glass. Each window shall be installed in the upper portion of the lift door panels in line with the passenger side windows. The door will display the international wheelchair symbol.

#### 11.31 Wheelchair Lift:

11.31.1 The wheelchair lift shall be a fully automatic, including folding of the platform, and be electro-hydraulically powered with a minimum test-net load capacity of six hundred sixty (660) pounds. The lift shall be totally self-contained and installed without modifications to the vehicle body or frame inside of the curbside double service doors. The entire assembly shall be installed with adequate protection to prevent accidental injury to passengers.

11.31.2 The attachment of the wheelchair lift assembly to the vehicle shall allow easy removal and be readily accessible for repair and maintenance. The lift assembly shall be mounted in such a manner that in the fully raised position it shall not interfere of the double side doors, passenger seating, and passenger/wheelchair movement inside the vehicle.

11.31.3 The wheelchair lift shall have a bridge plate designed for a smooth transition from the vehicle floor level to the lift platform level when the platform is in the raised loading position.

11.31.4 Bridge plate and platform shall be coated to resist rusting. Platform, bridge plate, and area between bridge plate and aisle shall be skid resistant.

11.31.5 The wheelchair lift cam handrail shall be twenty-six (26") inches high from lift platform. The handrail shall be automatic folding to prevent any obstructions into the vehicle passenger area.

11.31.6 The overall depth of the lift assembly in the stored position inside the vehicle shall not exceed seventeen (17") inches when measured from the floor level of the lift entry doors. No component accessory to the lift shall extend more than twenty-one (21") inches from the lift entry door.

11.31.7 Bolting of any part of the lift assembly directly to the vehicles walls is not acceptable.

11.31.8 The installation of the wheelchair lift assembly shall not cause excessive unbalanced loading of the vehicle.

11.31.9 The lift platform shall be designed so as to stop downward movement upon contact with the ground.

11.31.10 The lift platform shall have an end barrier at least four (4") inches in height that will fold outward to provide a ramp for loading of wheelchairs. The ramp shall fold out automatically upon platform contact with the ground.

11.31.11 The vehicle shall be equipped with the following wheelchair safety features:

- A door cut-off switch shall be installed which prevents the operation of the lift when the doors are closed.
- The maximum capacity in pounds shall be posted on the wheelchair lift within easy view of the operator and passenger.
- The lift platform shall be fitted with a device to prevent the platform from touching or leaning against door after being restored to the stowed position.

11.31.12 Lift shall be equipped with a manual override to permit lift to be raised or lowered manually in the event of a power failure or emergency. The manual override system shall provide a complete operation of the lift without electrical power being supplied. The manual override hydraulic pump and bleed down valve are to be located inside the vehicle. A detachable hand lever to operate the system is to be stored next to the hand pump. The bleed down valve shall have a flow compensator valve that that will limit the maximum descent speed. Manual override instructions shall be visible from inside and outside with the door open.

11.31.13 The wheelchair lift shall comply with all Federal ADA requirements.

11.32 Lift Control, Electrical Circuits, and Wiring:

- 11.32.1 The complete wheelchair lift assembly shall operate from the vehicle's electrical system and shall have one hand-held lift control station with a minimum five (5') foot cable attached so lift can be operated from outside or inside of the vehicle.
- 11.32.2 The control switches on the lift control shall have permanently applied labels identifying their functions.
- 11.32.3 The power to the lift system shall be controlled through an ON/OFF master switch located on the supplemental driver's control panel.
- 11.32.4 When the parking brake is properly applied and the master switch is placed in the "ON" position, an electrical solenoid shall activate that will connect the lift's electrical system to the vehicle's electrical system.
- 11.32.5 The bus lift shall be protected by a one hundred, five (105) amp circuit sentry system. The electrical power cord shall be loomed to protect the cable from outside elements.

11.33 Wheelchair Securement and Seatbelts:

- 11.33.1 The vehicle shall have a minimum of two (2) forward facing wheelchair positions located in the rear of the vehicle. Each wheelchair position shall be provided with restraint devices that will secure the wheelchair and its passenger while in the wheelchair. These devices shall be adjustable to accommodate varying track widths of wheelchairs. Each wheelchair shall have four (4) point securement (2 front, 2 back) in the vehicle with recessed anchor points of sufficient strength to secure a wheelchair and/or wheel scooter. The entire securement system shall comply with all applicable regulations including ADA.
- 11.33.2 Securement system must safely secure manually and electronically operated wheelchairs, (including 3-wheel scooters), and provide ample space for foot rests and proper wheelchair securement.
- 11.33.3 No anchoring points shall project more than one-eighth (1/8") inch above the finished floor. For the purposes of this section, the floor is the entire passenger area of the vehicle.
- 11.33.4 Floor mounted tracks shall be a series type "L" track floor plate. These plates shall be recessed mounted in the floor with three-eighth (3/8") inch diameter, SAE grade 5 bolts, washers and self locking nuts with National Fine Threads.

**\*Amended 12/08/09**

11.33.5 Where mounting bolts do not pierce or attach through the vehicle frame, sub-frame, body posts or equivalent metal structure, a reinforced metal plate not less than one sixteenth (1/16") inch thick is required.

11.33.6 There shall be four (4) retractors assemblies for each wheelchair position in the vehicle to secure the wheelchair to the tracks. Example: Q' Straint QRT Deluxe (Q-8100-A1) System, or approved equal. Each retractor assembly shall consist of a heavy duty series "L" track fitting, the front left and right retractor shall be equipped with manual tension knobs for manual tightening and/or release. Each retractor assembly shall be equipped with a quick release, push-button buckle and buckle connector.

11.33.7 Two (2) seat belts shall be provided for each wheelchair passenger. The torso belts shall be two (2") inches wide, seventy-two (72") inches long, adjustable, with a strength rating of not less than three thousand (3000 lbs.) pounds. One end of the belt shall be secured to a female seat belt fitting and the other end shall have a male seat belt fitting. The seat belt assembly shall provide for a quick-release and also provide for a snap locking to connect both ends together.

11.33.8 A wall mounted height adjustable of approximately twelve (12") inches shoulder harness system shall be provided at each wheelchair securement location that is compatible with the specified restraints. The harness system shall be installed in accordance with all structural requirements established by the restraint supplier and all applicable regulations, including 49 CFR part 571.

11.33.9 All belts, straps, and harness assemblies shall be supplied in bundled sets and shall include a Q Straint or equivalent pouch in which to store them. Storage compartments shall be provided over the windshield and over the driver's door.

11.34 Exterior Lighting:

11.34.1 All exterior lights, with the exception of headlights, passenger entry door, lift door, curb light, and rear back-up lights, shall be Light Emitting Diode (LED) lights. Lighting shall be in accordance with Federal Motor carrier Safety regulations 393.12. All lights shall have wire long enough to move the light six (6") inches from vehicle for service. Lights shall be grounded to body framing structure. All lights shall be sealed from moisture. Fixtures which are surfaced mounted to the body shall be sealed for moisture.

- 11.34.2 Headlights shall be sealed beam type, high and low beam controlled with foot or hand switch. Headlight supports and mountings shall be sufficiently rugged to maintain adjustments under road shock and service conditions. Headlight high beam indicator shall be installed on instrument panel. An audible "headlight on" warning buzzer shall be installed to notify the operator that the headlights are on with the engine turned off.
- 11.34.3 Stop and tail lights shall be red combination 4" round lens, vertically mounted on the rear-end vehicle panels, so as not to be affected by engine exhaust heat. Each side shall include a directional signal, tail light and stop light. Lamp lenses shall not protrude from the body more than two (2) inches. Lamp lens colors and configuration shall be in accordance with current State of Texas school bus requirements. Lights shall be a sealed, single vehicle light fixture.
- 11.34.4 Brake lights shall not override emergency flashers or turn signals. Back-up lights shall be furnished and adequate to illuminate for visibility when backing. Light shall be a sealed, single vehicle light fixture.
- 11.34.5 A collision avoidance light shall be installed on the rear of the vehicle and above the emergency exit door at the center line of the vehicle. Lamp lens shall not protrude from the body of the vehicle more than two (2") inches. Light shall be a sealed, single vehicle LED light fixture. In addition, a horizontal row of not less than three (3) red combination 4" round lens brake lights shall be installed in a fixture on the rear and at the center line of the vehicle on the emergency exit door. They are to light while brakes are applied. Lamp lens shall not protrude more than two (2") inches. Lights shall be a sealed, single vehicle light fixture.
- 11.34.6 Two hazard lamps shall be mounted at the same level on the rear of the bus. The lamps shall be visible at a distance of 500 feet in normal sunlight, flash, and emit amber light. The lamps shall operate from a separate control in the driver's compartment.
- 11.34.7 Two back-up lights, one mounted on each side of the body rear cap, shall be provided. The lamps shall be of the sealed beam type design.
- 11.34.8 Directional signal lamps shall be amber combination 4" round lens, vertically mounted on the rear, one on each side of the vehicle approximately halfway from front to rear. Side signal lamp lens shall incorporate a brushed aluminum guard to protect lens from damage. All side signal lamps to the same height above ground.
- 11.34.9 Passenger entry door area shall be lighted by a hooded exterior door light, suitably mounted so that the entire ground area immediately outside the entry

door is sufficiently illuminated to comply with ADA requirements.

11.34.10 Vehicle shall be equipped with an exterior curb lamp. Light shall be positioned in manufacturer's standard location in such a manner as to illuminate the ground area in the immediate vicinity of the operation of the wheelchair lift. Light shall be automatically activated only when the wheelchair doors are opened. Illumination shall be sufficient to comply with ADA requirements.

11.34.11 Roof marker lights, red or amber, one at each corner shall be provided and protected with brushed aluminum guards.

11.34.12 Clearance marker lights, three (3) lamp cluster, surface mounted, amber in front, red lens in rear, shall be provided and protected with brushed aluminum guards.

11.34.13 Vehicle shall be equipped with daytime running lights.

#### 11.35 Interior Lighting:

11.35.1 The overhead lights and step well lights shall provide no less than five foot-candles of illumination on the entrance step area with the door open. This system shall be illuminated when the passenger door is opened. A separate dash mounted switch shall be provided to operate the overhead lights when the door is closed.

11.35.2 Driver courtesy light shall light when the driver door is opened.

11.35.3 Front step well are shall be lighted by a hooded step well light, suitably mounted so that the entire step well area of the vehicle is sufficiently lighted. The step well light shall be positioned on the side away from wheel splash.

11.35.4 All interior lighting shall be incandescent type with the master control located on the dash or near the driver for easy operation by the driver. Lighting in the passenger area shall be mounted in the ceiling cove at the sidewall with a minimum of three (3) fixtures on each side of the vehicle. Lighting intensity for all cross seats shall have a minimum average of fifteen (15) foot candles at the seated passenger reading plane. In addition, an effective lighting level shall be provided for all other seated passengers. The lighting components shall be located and constructed so as to prevent the entrance of water, contaminants and insects. Lighting fixtures shall be reasonably flush with the interior walls and ceiling so as not to present a hazard to passengers.

11.35.5 Light illumination shall be designed to illuminate the wheelchair lift platform for night operation. Light shall be positioned in manufacturer's

standard location in such a manner as to illuminate the area in the immediate vicinity of the wheelchair lift. Light shall be automatically activated only when the wheelchair lift doors are open. Light switch shall have a driver override. Illumination shall be sufficient to comply with ADA requirements.

11.36 Air Conditioning:

11.36.1 The installed air conditioning system shall cool the vehicle to seventy-two (72°F) degrees measured at a minimum of three points, located four feet above the floor at the longitudinal centerline of the vehicle. The three points shall be (1) near the driver's location; (2) at the mid-point of the body; and (3) two feet forward of the rear of the vehicle.

11.36.2 The test condition under which the above performance must be achieved shall consist of: (1) placing the vehicle in a room (such as a paint booth) where the ambient temperature can be maintained at one hundred and ten (110°F) degrees; (2) heat soaking the vehicle at one hundred and ten (110°F) degrees with windows open for at least one hour; and (3) closing the windows, turning on the air conditioner and cooling the interior of the vehicle at seventy-two (72°F) plus or minus two ( $2^{\circ}\pm F$ ) within a maximum of 30 minutes while maintaining 110°F. The system shall have a dash driver's area evaporator vehicle.

11.36.3 The test shall be performed at the vehicles manufacturer's recommended fast idle speed.

11.36.4 Driver's in-dash heavy-duty air conditioning vehicle shall be chassis manufacturer supplied system. Substitution of other than the chassis air conditioner is acceptable provided that the front and rear systems are compatible and warranty work is performed at one location. The system shall be separately controlled from the passenger area system and shall have provision to divert air to the defrosters. In-dash vehicle shall not interfere with removal or replacement of the engine cover or be blocked by the door operating mechanism.

11.36.5 The passenger area air conditioning unit shall be an American Cooling Technology, 50MAX system, or approved equal. The system shall be separately controlled from a supplemental driver's control panel located at the driver's position. Controls shall include on and off, three (3) speed blower switch and a rotary thermostat switch.

11.36.6 Front and rear systems shall operate independently of each other.

11.36.7 Dual compressors shall be provided. Compressors shall have a nominal ten (10) cubic inches of displacement. The compressors shall be protected by

high and low pressure switches. Compressors shall be driven off the vehicles engine.

- 11.36.8 A three (3) fan condenser shall be provided with a minimum rating of seventy-six thousand (76,000) BTU's. The condenser fans and motors shall be enclosed within the condenser housing. Coil shall be copper tube, expanded into aluminum fins. Integral high/low pressure cut outs to be wired to liquid or discharge line. The fans shall be dynamically balanced with permanent magnet totally enclosed motors. The condenser shall blow air on an angle down from the vehicle chassis to prevent recirculation of hot air. The condenser shall have a sight glass and filter dryer. The system shall be skirt mounted located on the driver (road) side, in front of the rear wheels, and installed to minimize collection of road dirt and facilitate maintenance.
- 11.36.9 A rear mounted evaporator shall be provided. The rear evaporator shall have a minimum rating of fifty-two thousand (52,000) BTU's. Three-speed continuous duty permanently lubricated motors shall be provided. The blower assembly shall be rated at a minimum of five hundred, seventy (570) Cubic Feet per Minute. Coil shall be copper tube, expanded into aluminum fins three (3) rows deep. Thermostatically controlled expansion valve shall be provided. Frame shall be galvanized heavy-duty metal with integral pan and washable filter. The cover shall be made of durable ABS plastic.
- 11.36.10 Evaporator shall be equipped with two (2) drain lines each with a check valve to maintain positive condensation drain flow.
- 11.36.11 Evaporator filter shall be installed in a manner that it may be routinely removed, serviced, or replaced for maintenance without damage to the filter.
- 11.36.12 Installation of the air conditioning system(s) shall be by the vehicle body manufacturer or by an authorized factory air conditioning dealer who normally stocks, sells, installs and services a vehicle of the type being furnished.
- 11.36.13 All air conditioning systems shall use 134A refrigerant.
- 11.36.14 The components of the air conditioning system shall be readily accessible for maintenance. Refrigerant hoses shall meet the latest revision of SAE J-2064, double-braided Barrier type.
- 11.36.15 Two (2) back seated valves shall be installed at the dryer to facilitate evacuation and charging of the air conditioning system and replacement of the dryer vehicle. The system shall also be equipped with Schrader valves to promote efficient testing and servicing.

11.36.16 Refrigerant fittings shall be ATCO or Aeroquip.

11.36.17 Air conditioning circuits shall be protected with auto-resetting circuit breakers or thermal relays. The total electric current required by the two (2) systems in high speed fan mode shall not exceed sixty (60) amperes.

11.36.18 Poor quality of installation shall be grounds for immediate rejection of the complete vehicle.

11.36.19 Contractor shall submit data with bid which encompasses design criteria, evaporator coil size and location, condenser size and location, and performance and reliability studies of the entire system.

11.36.20 Air conditioning system(s) shall have a legible and durable nameplate with the following information:

- Name and address of A/C manufacturer
- Cooling capacity (BTU/hr.) and blower capacity (CFM).
- Type of refrigerant and recommended operating charge.
- Type of refrigerant oil and amount

11.36.21 Contractor shall provide a list of companies or individuals, and their addresses, who stock repair parts in the County's area and who can perform service on the products furnished.

11.36.22 The contractor shall furnish one copy of complete installation, maintenance and operating instructions for each different model, size and type of equipment provided. The instructions shall accompany each vehicle when delivered.

11.36.23 A replacement parts list shall be provided.

11.36.24 The entire rear air conditioning system shall be warranted for 24 months and shall cover 100% parts and labor.

11.37 Heating and Defrosting:

11.37.1 Vehicle shall be equipped with a combination fresh air and recirculating air heaters. The heater controls shall be mounted in the dash panel and in the supplemental control panel, located conveniently to the driver's position and properly labeled. Heater hose connections shall be installed above the floor of the vehicle body and through the fire wall to the engine compartment. The length of the hot water hoses shall be as short as possible consistent with

good installation practices; however, the hoses shall not be installed in such a manner so as to interfere with normal motor maintenance operations, such as removal of the air filter. The hoses shall not dangle or rub against the chassis or sharp edges and shall not interfere with or restrict the operation of any motor function. Heater hoses shall conform to SAE 2083, Class C, as defined in SAE Standard J20E, or latest version thereto.

11.37.2 The front heater shall be a hot water type having a minimum free-flow output of the highest capacity offered by the chassis manufacturer.

11.37.3 A second hot water heater with blower fan shall have a BTU rating on at least thirty thousand (30,000) installed under a seat near the rear of the vehicle.

11.37.4 Easily accessible all brass gate valve(s) shall be furnished to cut off the flow of coolant water to the rear heater.

11.37.5 Defrosting equipment shall keep the windshield, the window to the left of the driver and glass in the service door clear of fog, frost, and snow, using heat from the heater and circulation from the fans. All defrosting equipment shall meet the requirements of FMVSS No.103 or latest revision thereto.

11.38 Windshield and Windows:

11.38.1 The windshield is to be a one-piece design as is provided by the chassis manufacturer. Windshield shall be laminated, tinted safety glass.

11.38.2 Driver's window shall be chassis manufacturer's standard window. The window shall permit unobstructed side vision and shall have a sufficient opening to permit arm signaling. Provisions shall be made to draw in or exclude outside air from the driver's compartment.

11.38.3 Side windows shall be provided the full length of the vehicle. These windows shall be forty-one (41") inches tall and twenty-nine and one half (29 ½") inches wide, transit type upper T-slider ventilating design windows, or approved equal. The upper T-slider shall have a positive lock in the closed position. The glazing shall be a minimum of one eighth (1/8") inch thick with thirty-one (31%) gray density, tempered safety glass. Tinted window film is not acceptable. Windows shall be installed in black powdered or anodized aluminum frames with an interior clamp ring attachment design.

11.38.4 An audible alarm shall be activated when any emergency window is opened. Emergency egress windows shall be designed to meet FMVSS 217.

11.39 Mirrors:

**\*Amended 12/08/09**

11.39.1 Rearview mirrors shall be a minimum of nine (9") inch by eight and one half (8 ½") inch flat mirror surface and nine (9") inch by three and three quarter (3 ¾") convex mirror surface in a heavy-duty A.S.A. resin injection molded housing.

11.39.2 An additional mirror shall be furnished for the driver to view passengers. The mirror shall have a minimum of ninety-six (96) square inches of clear vision. Dimensions shall be approximately six (6") inches by sixteen (16") inches of reflective surface area.

11.39.3 Chassis manufacturer's standard sun visor shall be provided at the driver's position.

11.40 Seats and Seat Layout:

11.40.1 All ambulatory seats shall be mid-high back, forward facing. Double mid-high back, forward facing foldaway seats shall be provided over the wheelchair tie down station on the left side (driver side) of the bus for ambulatory passengers when the wheelchair station is not in use. Seats shall have a minimum width of seventeen and one half (17 ½") inches wide and shall be a minimum of twenty-five (25") inches overall front to back. Double seats shall have a minimum of width of thirty-five (35") inches overall.

11.40.2 Seat frames shall be cold-roll one (1") inch steel tubing and be sixteen (16) gauge or metal of equal mechanical properties. The front seat cushions shall have foam padding and be individually wedged to each passenger for occupants comfort and retention. The indentation load deflection shall be sixty-five (65) to eighty-five (85) pounds. Seat cushion shall meet the flammability requirements of FMVSS 302.

\*11.40.3 Seats and all visible surfaces shall be upholstered in level 3 vinyl material. Vinyl material shall be expanded vinyl, thirty-six (36) ounces per lineal yard minimum, transportation grade. The County will pre-approve all colors prior to production.

11.40.4 Seat backs shall be high impact ABS material which is recessed to provide one and one half (1 ½") inches of additional passenger hip to knee room.

11.40.5 A retractable seatbelt shall be provided for each seated passenger. The retractor shall be emergency locking with anti-cinch capability. The retractor must be attached to the seat structure. Passenger seatbelts shall be "A" type on seat belt assembly conforming to current FMVSS 209 requirements.

11.40.6 Aisle seats shall include an energy absorbent grab bar, three quarter (3/4") inch, twenty (20) gauge steel covered with custom molded, wear and vandal resistant eight (8) pound density, self-skinning polyurethane foam. Grab bar shall be located in the top of the seat back.

11.40.7 All seats shall be recessed track mounted. Floor anchorage shall be neat and shall not present a trip hazard.

11.40.8 Aisles shall not be less than seventeen (17") inches wide.

11.40.9 **CONTRACTOR shall submit drawings of wheelchair positions and seating arrangements during the request for approved equals process.** Final approval of the interior layout including passenger seating, wheelchair positions, driver's seat, location of stanchions, hand holds, driver's barrier, and modesty panels will be made by the County.

11.41 Driver's Seat:

Driver's seat shall be provided with a folding armrest, tilt riser and shall recline. A three (3) point safety belt shall be mounted to the seat frame and shall be equipped with an emergency locking retractor that has a feature which prevents it from progressively tightening the belt around the driver. Seat material shall be the same as the passenger seats. A screw mounted operator's coat hook shall be furnished and installed by the Contractor in the operator's area. Location to be approved by the County after bid award.

11.42 Safety Equipment:

11.42.1 A standard twenty-four (24) unit First Aid Kit shall be provided. It shall include a one way airway apparatus and one pair of disposable gloves. Kit shall be securely mounted near the driver's seat.

11.42.2 A ten (10) pound rechargeable type 210 ABC fire extinguisher with metal head shall be provided. It shall be easily accessible in a bracket mounted near the driver's seat.

11.42.3 Web cutters shall be provided.

11.42.4 A set of three (3) triangular reflectors with a storage container shall be provided and mounted near the driver's seat.

11.42.5 A back-up alarm that is electrically operated and produces an intermittent sound when the vehicle is shifted into reverse shall be furnished. Alarm shall be in compliance with SAE J994B with respect to acoustical performance for Type B device (IE 107 db) (A) and plus or minus 4db with a supply of 14

volts.

11.42.6 A Fresnel lens shall be provided on the rear window of the vehicle.

11.43 Emergency Exits:

11.43.1 A heavy duty emergency door shall be provided at the rear of the vehicle. The door frame structure shall consist of a minimum 12-gauge, 304 grade stainless steel, powder coated using the five (5) step Interpon PZ77 process, or approved equal, in bright white to match vehicle exterior base color. A water deflector shall be integrated into the door frame structure at the top. Door panels shall be made of non-corrosive material. Foam core doors with wood frame supports are not acceptable. Door panel hinges shall be piano type with a minimum three sixteenth (3/16") inch diameter pivot pin. Hinges and hinge fasteners shall be stainless steel to resist rust and corrosion. Door latch shall be vertical, rotating, two point type with latch rod at top and bottom. The door panel shall have its own key lockable latch assembly which shall consist of a pistol grip style twist handle located at the inside center of the door panel. Door latch shall compress perimeter door seal to prevent leaks. Latch adjustment plates shall be located at the top and bottom of the door frame structure. Door panel holder shall be a gas shock type mounted at the top and shall allow the door panels to open a minimum of one hundred (100°) degrees from the closed position.

11.43.2 Door windows shall be installed with two (2) piece black ozone treated extruded rubber, lock and key of one (1) piece fixed design. Two windows shall be installed on the back of the vehicle, one on each side of the emergency door. The windows shall be glazed with three sixteenth (3/16") inch thick, thirty-one percent (31%) gray density, tempered safety glass. Door window height shall match the top of the rear windows on each side of the emergency door.

11.43.3 An audible alarm shall be activated when the emergency door is opened.

11.43.4 A combination roof ventilator and emergency escape hatch shall be provided towards the rear of the vehicle. Example: Trans-Spec Ventilator Hatch

11.44 Painting and Decals:

11.44.1 The base vehicle shall be Bright White in color. The area around the windows shall be black.

11.44.2 Decals furnished by the Contractor for the County to affix to the interior of the bus shall be as follows:

NO SMOKING

2

Size and color TBD

WATCH YOUR STEP	2	Size and color TBD
Do Not Stand Forward of the Yellow Line	2	Size and color TBD
FIRE EXTINGUISHER	1	Size and color TBD
LAW PROHIBITS THE OPERATION OF THIS VEHICLE WHILE ANYONE IS STANDING FORWARD OF THE YELLOW LINE	2	Size and color TBD
No Smoking, Eating, Drinking	2	Size and color TBD
Please Remain Seated While The Bus Is In Motion	2	Size and color TBD

11.44.3 Exterior Decals and Logos:

- “CAUTION – CHILDREN MAY BE EXITING”: 1 (Size and location to be determined after award)
- Fleet number: 5 (numbers and letters) (Location to be determined after award)
- Agency logo’s, stripes etc.

11.44.4 In addition to the decals described above, safety decal(s) shall be furnished and shall be affixed at any applicable area; emergency exit, steps, wheelchair lift, etc. The decals shall include necessary warnings and precautions. Permanent decals are required.

11.45 Delivery:

All vehicles must be serviced prior to delivery in accordance with the manufacturer's "New Vehicle Pre-delivery Service" requirements and as specified below.

Pre-Delivery Service

The following service shall be performed upon all motor vehicles prior to/upon delivery:

- Pre-delivery inspection certified with an affixed Texas Motor Vehicle Inspection Certificate (annual inspection sticker);
- Fluid levels checked and serviced with proper grade fluid;
- Chassis lubrication;
- Exterior wash and interior cleaning; and
- Fuel system(s) filled to capacity.

11.46 Registration:

Successful bidder shall provide necessary documents to enable the County to register the vehicle in the State of Texas. Necessary fees and state taxes will be paid by the

County; do not include such fees and taxes in bid price.

11.47 Manuals

A line setting sheet and manual(s) containing operating and servicing instructions for the vehicle and lift shall be provided with each vehicle. The manual(s) shall be as detailed as possible outlining all necessary operating and servicing instructions for each vehicle and lift including the vehicle's driveline components. Necessary warnings and safety precautions shall be included. In addition, manual(s) containing illustrated parts lists, operating and servicing instructions for related and special equipment supplied with the vehicle and lift shall be provided with the vehicle.

11.48 Warranty:

11.48.1 Bus Chassis

A copy of the chassis manufacturer's warranty must be submitted with the proposal and include the minimum:

- 5 years, unlimited mileage - failure of the chassis frame including cross members.
- 2 years, unlimited mileage - failure of any other original components manufactured by the chassis manufacturer.
- 1 year, unlimited mileage, - failure of any components manufactured by outside suppliers and included as original equipment by the chassis manufacturer. Where the outside supplier's warranty exceeds that of the chassis manufacturers then such warranty shall be stated and shall apply.

11.48.2 Engine: Must include the fuel injection system and emission control system 5 year/unlimited mileage.

11.48.3 HVAC: 3 year, unlimited mileage warranty.

11.48.4 Service Location: There must be a one-source warranty location providing full warranty for body, chassis, and engine. Individual locations for each component will not be accepted.

11.48.5 Towing: There shall be a 60-month / 150,000 mile extended towing warranty for all unsafe or non-drivable warrantable failures (up to \$250 per incident) to the nearest warranty location

11.48.6 Transmission: 2-years, unlimited mileage - copy of OEM warranty to be included

11.48.7 Wheelchair lift: 3 years, unlimited mileages

11.49 Parts and Service:

The bidder providing the vehicle shall be an authorized dealer for the vehicle manufacturer and hold the required current license(s) with the Texas Motor Vehicle Division. The dealer shall have factory-trained personnel available for warranty repairs and the performance of service. The dealer shall also maintain an inventory of high-usage parts and a quick source for low-usage parts. The using County will assume the expense for replacement filters, fuel, cleaning, painting and other minor items normally consumed in day to day operations. Fort Bend County will assume responsibility for cost of repairs resulting from collision, theft, vandalism, operator negligence and/or acts of God.

11.50 Instructions on Safety, Operation, and Preventative Maintenance:

The contractor shall provide Fort Bend County sufficient instruction on safety, operation and preventive maintenance of the vehicle after it has been delivered and is ready for operation. Training shall be completed prior to payment.

11.51 Optional Equipment:

11.51.1 Morryde Suspension: An enhanced rear suspension shall be provided. Suspension system shall be "MOR/RYPDE" and shall ensure a consistent smooth ride with a passenger load of fifteen (15) adult ambulatory passengers and two (2) wheelchair positions occupied. Jounce and rebound must both be controlled while providing controlled roll stability.

11.51.2 Wheel Inserts: Four (4) stainless steel, bolt-on wheel inserts shall be provided. The set shall be installed on the front wheels and rear dual wheels and be complete with all lug and centerpieces. *Clip-on securement of wheel inserts are not acceptable.*

11.51.3 Rear Bumper: Rear bumper shall be black "Help" emergency absorbent bumper as produced by Romeo Rim, Inc. (or approved equal) and shall be equipped with an anti-ride feature. Bumpers shall be securely fastened to the chassis frame to adequately absorb shock from impact. In no case shall bumpers be fastened directly to the body and allow shock from impact to be transmitted to the body of the vehicle.

11.51.4 Electric Powered Passenger Entry Door: In lieu of the manual door, the passenger entry door panels shall be actuated together by a single electric

powered overhead actuator. Actuator shall be equipped with an emergency manual release lever to allow for manual opening in case of emergency.

11.51.5 Lift Platform Cover: Removable vinyl cover shall be provided for the lift platform when in the stored position.

11.51.6 Remote Controlled Mirrors: Mirrors shall be remote controlled. The mirror glass shall be nine and three quarters (9 <sup>3</sup>/<sub>4</sub>" ) inches in height by eight and five eighths (8 <sup>5</sup>/<sub>8</sub>" ) inches in width. All parts including the mirror glass shall be replaceable. A remote control switch shall be provided and located in the operator's compartment; switch must be capable of controlling both right and left mirrors. Example: Ramco Mirrors Model #5500 w/o defrost feature.

11.51.7 Bilingual Signs and Decals: All safety and passenger assistance signs and decals shall also be in Spanish.

11.51.8 Public Information System: Driver activated PIS to announce stops and other passenger information. The system shall include four (4) speakers spaced throughout the vehicle above the passenger seating area enabling sound to reach each passenger. The system shall be integrated with the AM/FM radio system so that the PIS will override the radio when activated.

11.51.9 Stop Request Chime: A chime shall be provided that is activated by a pull cord. The pull cord shall be above the passenger windows within reach of each passenger.

11.51.10 Farebox: Fare box shall be mounted with trip handle toward driver. It shall be mounted on a stanchion, adequately braced, located near the driver and easily accessible to passengers entering the bus. An amber or indirect fare box light shall be connected to the dash instrument lights. Two interchangeable, lockable fare box vaults and fare box, keyed alike, with a double set of keys for each lock shall be supplied. Vault and fare box exteriors shall be marked with key reference. Vehicle shall be provided with wiring and structural support to install the fare box. Wiring for fare box circuit shall be two (2) No. 14 insulated wires in vinyl tubing, one energized directly from a battery positive feed protective circuit breaker and the other to ground. Example: Main Fare Box model Treasury 1, Diamond (or approved equal)

11.51.11 Destination Signs: Changeable destination twelve (12) volt motor driven movable mechanism signs shall be furnished on the curb side above the passenger window and at the front of the vehicle above the windshield. Front sign curtain to be approximately 36 inches wide. Sign curtains to be illuminated. Front bulkhead or sign box shall have a door to open for viewing sign curtain position. Door shall be positioned for ease of driver

operation. Sign shall comply with ADA requirements. Example: Trans Sign, Model D-3110 (or approved equal)

11.51.12 Interior Ad Racks: interior Ad Racks shall be provided on each side of the vehicle interior. Racks will allow for slide-in placement of advertising copy and accommodate a minimum of nine (9), 11" x 14" plastic placards with advertising messages on EACH SIDE. Racks are not to be back-lit but will be adequately illuminated for visibility of messages to passengers at all times.

11.51.13 Ground Plane: A ground plane shall be installed during construction of the vehicle in anticipation of installation of a two-way radio. Coaxial leads shall be furnished. For additional information, contact the ordering agency.

**12.0 SPECIFICATIONS FOR LIGHT-DUTY DIESEL TRANSIT CONVENTIONAL BUS 24' to 26':**

12.1 The vehicles produced according to the included specifications must be of the latest current model year (2009 or newer). All equipment, options and feature provided must be designed, constructed and installed to be fully suitable for their intended use and service. The vehicle must be designed and built using the latest available technology and engineering capabilities. All components must be new. Each bus, including all individual components, must meet or exceed all current Federal, state, and local requirements.

12.2 The bus shall be supplied by an integrated vehicle supplier that can provide warranty, service, and parts coverage from a single distribution network for the complete vehicle. The body shall be manufactured in compliance with Quality Standards ISO 9001:2000 with regard to the Sale, Design and Manufacture of Customized Buses and Multipurpose Passenger Vehicles.

12.3 This specification will describe the construction of a light-duty transit bus. The bus must meet all Federal Bus Testing Requirements and have completed the required bus testing at the Altoona bus testing facility (or be in the process of completing the test) for the category of five (5) years, 150,000 miles and be fully compliant with the Americans with Disability Act (ADA) requirements. The bus must meet Buy America.

12.4 General Dimensions:

Exterior Length.....313" Maximum  
Exterior Width.....96" Maximum (excluding mirrors)  
Exterior Height.....115" Maximum  
Interior Width at seat level.....90" Minimum  
Interior Height at center aisle.....76" Minimum  
Entry Door Dimension (clear opening).....34" x 80" Minimum

First Step Height from Ground.....	12” Maximum
Step Riser Height.....	9.0” Maximum
Step Tread Depth.....	10.0” Minimum
Wheel Base.....	176” Minimum

12.5 Suspension and Gross Vehicle Weight:

Gross Vehicle Weight Rating (GVWR)....	14,050 lbs. Minimum
Front Axle Capacity.....	4,600 lbs. Minimum
Rear Axle Capacity.....	9,450 lbs. Minimum
Front Springs.....	3,250 lbs. Minimum
Rear Springs.....	9,450 lbs. Minimum

12.5.1 A minimum of fourteen thousand and fifty (14,050) pounds GVWR, or higher if required, to support the loaded weight of the completed vehicle including any optional equipment selected. It is the bidder’s responsibility to calculate the actual loaded weight and to provide a heavier chassis, tire, wheel, spring or axle combination, if required.

12.5.2 Shock absorbers shall be gas type, heaviest available as specified by the chassis manufacturer.

12.5.3 Rear springs shall be a conventional leaf spring of proper design and suitable capacity. Springs shall have anti-squeak characteristics. The suspension system shall take into count capacity on the curb side of the vehicle to overcome additional weight of the lift.

12.5.4 An enhanced rear suspension shall be provided. Suspension system shall be “MOR/RIDE” and shall ensure a consistent smooth ride with a passenger load of fifteen (15) adult ambulatory passengers and two (2) wheelchair positions occupied. Jounce and rebound must both be controlled while providing controlled roll stability.

12.5.5 The rear axle and final drive must be of conventional construction, a truck-type rear axle utilizing heavy tubes pressed into cast center section or one-piece casting.

12.5.6 Ring gear should be bolted, not riveted, to differential carrier.

12.5.7 A differential with the appropriate gear ratio to match the power train is required. The vehicle should be designed to operate at sixty-five (65) m.p.h. at 3500 rpm’s or less.

12.5.8 Rear tow hooks shall be provided.

12.6 Engine:

12.6.1 Engine shall be of the latest design electronic controlled, V-8, six point six liter (6.6) diesel power or approved equal. The engine is to be EPA certified to comply with 2009 emission standards, or current year of production, and operate on ultra-low sulfur diesel fuel. Engine performance settings to be determined post bid. A complete set of maintenance manuals must be provided. On board diagnostic connector for diagnostic equipment and manual regen switch to be located post bid. Engine must have fast-idle system, fuel/water separator/filter and "Water in Fuel" sensor to be provided with corresponding light on dash panel.

12.6.2 There shall be extra insulation installed between the dash and firewall, as well as beneath the hood and on the splash shields to help reduce chassis noise entering into the bus body. The bus-generated noise level experienced by a passenger at any seat location in the bus shall not exceed 83 dba.

12.6.3 The engine components are to be arranged and mounted so as to provide convenient access for servicing the engine and all of its accessories.

12.7 Fuel System:

12.7.1 The fuel tank shall have a capacity of fifty-five (55) usable gallons. A diamond plate access plate shall be provided in the vehicle floor for the purpose of accessing the fuel sending unit.

12.7.2 An appropriate fuel filter shall be provided.

12.8 Exhaust System:

12.8.1 The vehicle shall be equipped with an exhaust system which meets Federal and state noise level and exhaust emission requirements. The exhaust pipe shall terminate just ahead of the rear corner of the vehicle, exhausting to the street side, and shall be constructed so that it will not cause back pressure in the motor or damage to the paint, bumper, chassis or wiring components of the vehicle. Flexible tubing will not be permitted in the exhaust system. An adequately sized, aluminized steel, long-life muffler shall be used.

12.8.2 The exhaust system shall be secured in place with heavy duty system. No part of the exhaust shall hang below departure angle to the rear bumper bottom.

12.9 Cooling System:

The cooling system shall be of heavy duty to manufacturer's recommended standards.

The coolant recovery system shall be factory installed. It shall be super cooling or heavy duty cooling. The cooling system shall have permanent glycol base antifreeze to protect the system to -20 degrees F. and shall maintain engine temperature not to exceed manufacturer's recommended normal operating temperature. The cooling system shall have a low coolant warning buzzer and light and shall shut off the engine in 45 seconds of initial warning.

12.10 Transmission:

12.10.1 The transmission shall be an automatic shift, five (5) speed forward and a reverse gear with an auxiliary oil cooler capable of handling extreme temperature associated with transit type operations.

12.10.2 The transmission shift lever shall be interlocked with the starting motor to prevent engagement of the starter in any gear position other than park.

12.10.3 The transmission shall be equipped with an interlock feature that prevents the vehicle from being shifted out of the park position until the lift doors are closed, the lift master switch is off, and the parking brake is released.

12.10.4 A warning signal audible outside of the vehicle shall be activated when the transmission is in reverse.

12.11 Drive Shaft:

A drive shaft yoke and guard shall be provided to prevent the drive shaft from dropping to the ground or from whipping the vehicle floor if it becomes broken or separated.

12.12 Vehicle Controls:

12.12.1 A heavy duty power steering linkage type shall be provided.

12.12.2 The steering shall be power assist and shall incorporate a tilt and telescoping feature. Steering from full left to right shall be accomplished in no more than five (5) complete turns of the heel.

12.12.3 The steering wheel shall be no less than fifteen (15") inches or more than twenty (20") inches in diameter. The wheel ring shall be of all plastic or synthetic resin construction, molded over metal.

12.12.4 All steering linkage wear points, including tie rod ends, shall be fitted with lubrication fittings and replaceable bushings or inserts.

12.12.5 All vehicles shall be keyed alike, with the same key operating the driver's door and ignition switch on all vehicles. One key shall operate all remaining locks on all vehicles (excluding fare box keys). Bidder shall supply two (2) complete sets of keys for each vehicle ordered.

12.12.6 A ground plane shall be installed during construction of the vehicle in anticipation of installation of a two-way radio. Coaxial leads shall be furnished.

12.12.7 A driver activated PIS to announce stops and other passenger information will be included. The system shall include four (4) speakers spaced throughout the vehicle above the passenger seating area enabling sound to reach each passenger. The system shall be integrated with the AM/FM radio system so that the PIS will override the radio when activated.

12.12.8 The following controls, in addition to normal steering, braking and transmission functions are to be provided:

- Column-mounted turn signal lever.
- Cruise control.
- Emergency flasher control facing driver and clearly visible.
- Master exterior light switch including clearance or marker lights. Switch to be of uniform type.
- Switches and temperature controls for passenger compartment heaters, defroster. Switches must all be uniform in type.
- Separate switch and temperature control for driver heater and defroster.
- Heavy duty electronic variable speed windshield wipers controlled by a variable speed switch or two wipers with intermittent feature shall be furnished. Wiper motor shall be mounted in an easily accessible location for ease of inspection, maintenance and removal. Minimum eighteen (18") inch wiper blade and arm providing 1,037 square inches of wiped area with one hundred and ten (110°) degrees of wiping arc. Windshield washer reservoir shall be mounted in an accessible area and pump shall be electronically operated.
- Passenger compartment lights.

12.12.9 All controls are to be within arm's reach of a five foot (5'0") driver with seat belt fastened.

12.12.10 All body switches are to be of uniform type, either push-pull or rocker type, mounted in convenient grouping in a panel near the driver.

12.12.11 All controls and switches shall be plainly and permanently marked. Painted masking is unacceptable.

12.12.12 The control panel and a supplemental driver's control panel shall be located conveniently to the driver's seated position and in full view of the driver.

12.12.13 No switches or instruments shall be obstructed controls, trim panels, or other appurtenances, and shall be arranged in a consistent and uniform manner.

#### 12.13 Electrical System:

12.13.1 The vehicle is to be equipped with a twelve (12) volt extreme duty electrical system. All components are to be selected and integrated to function in an environment characterized by low engine (alternator) speeds and high amperage draws due to lights, wheelchair lift, flashers, air conditioning or heater, and other accessories operating consistently or simultaneously. As built wiring schematics, one hard copy and one electrical copy are required.

12.13.2 An alternator of at least two hundred (200) amperes output at normal engine speed and an idle of at least one hundred twelve (112) amperes is required. The idle output shall be achieved at an engine speed of no more than seven hundred (700) R.P.M. At no time should the ampere output be less than one hundred ten percent (110%) of loaded draw.

12.13.3 Starter shall be capable of turning over the engine with SAE 40W oil after ten (10) hour cold soak at zero (0°F) degrees.

12.13.4 The vehicle shall be equipped with a fast idle solenoid with manual switch, volt sensor and light which will automatically shut off when brake is applied and transmission is placed in gear.

#### 12.14 Batteries:

12.14.1 Chassis manufacturer supplied batteries shall be supplied. Battery cables shall be color coded for positive and negative number two (#2) battery cable. Cables shall be sleeved with high abrasive resistant flex-guard loom and supported with lined steel clamps on a maximum of fifteen inch (15") centers. All battery terminals shall be coated with anti-corrosion and sealant protector.

12.14.2 Batteries shall be mounted on a stainless steel mounted tray with battery hold down secured with bolts. Battery tray compartment will be located on the curb (right) side of bus, below the floor line, and with adequate reinforcement brackets mounted to floor supports. Battery compartment should be vented and battery easily serviceable without removal from bus.

12.14.3 A rotary type battery disconnect switch shall be located in the driver side step well within the driver's reach.

12.15 Wiring:

12.15.1 All wiring other than that provided by the original equipment manufacturer (OEM); chassis, wheelchair lift or air conditioning and heating manufacturer shall be cross-linked polyethylene insulated, to two hundred (200°F), shall meet SAE standards, shall be color, function and number coded for positive identification every six (6"), and shall be permanently labeled in words to their function. Precaution shall be taken to avoid heat, water, solvents or chafing by proper routing, clamping, and the use of grommets or suitable electrometric cushion materials. Harnesses shall be designed to resist abrasion by the use of nylon slit flex loom that has a maximum temperature resistance of four hundred and ten degrees (410°F). Harnesses shall be sectional terminating at insulation multi-pin quick disconnects or junction blocks. Heavy duty circuit board junction panel shall be provided inside the vehicle. The circuit block shall be conveniently mounted and have a secure cover. The circuit board shall be equipped with heavy duty twelve (12) volt DC relays, and twelve (12) volt automatic reset circuit breakers and blade fuses. Inside the circuit box shall be a legend identifying each circuit and wire by color, number, function and location. This legend shall be permanently mounted to the vehicle.

12.15.2 All connectors shall meet the requirements of the Society of Automotive Engineers (SAE) recommended practice J878a, Types GXL and SGX.

12.15.3 Vehicles shall be identically wired.

12.15.4 Bidder shall furnish complete wiring diagram with wire size, maximum current flow in each wire, type of insulation, and code used. Wire diagrams must be vehicle specific, body and chassis combined, and shall correctly show all specified options.

12.15.5 No "T" splices or butt connections shall be made in wiring unless prior approval is given. Harness and wiring shall terminate at appropriate junction terminals set in Bakelite or molded plastic material.

12.15.6 Devices such as lamps and wiring requiring periodic checking and servicing shall be readily and easily accessible. All exterior devices shall be sealed to prevent entry of water.

12.16 Instrument Gauges: The following instruments shall be provided:

- Speedometer/Odometer – Chassis manufacturer’s standard design with trip set feature.
- Fuel Gauge – Chassis manufacturer’s standard fuel gauge.
- Oil Pressure Gauge – In addition to the manufacturer’s standard gauge, an audible alarm and light shall be installed that will activate when low oil pressure is detected.
- Water temperature gauge – In addition to the manufacturer’s standard gauge, an audible alarm and light shall be installed that will activate when overheating engine is detected.
- Voltmeter – In lieu of the chassis manufacturer’s standard voltmeter, an additional voltmeter shall be installed with graduated charge and discharge indications.
- Engine hour meter shall be provided.

12.17 Brakes:

12.17.1 Service brakes shall be hydraulic, self-adjusting power disc front and rear. Vehicle shall include a foot operated parking brake.

12.17.2 The brake system shall comply with Federal Motor Vehicle Safety Standard 105.75.

12.17.3 The braking system shall be heavy duty and the largest offered by the manufacturer for the GVWR specified.

12.17.4 The brakes shall be free of objectionable noise and squeal when applied.

12.18 Wheels and Tires:

12.18.1 Vehicles shall be equipped with the heaviest available ventilated wheels, 19” x 6.00” minimum. Rear wheels shall be dual and all wheels are to be interchangeable. Rated capacity shall be equal or exceed GVWR of the vehicle.

12.18.2 Tires shall be LT 225/75R16 radial ply, all season, with steel-cord reinforcement and highway type tread. Wheels and tires are to be of adequate capacity, as determined by reference to the Tire and Rim Association Yearbook, to support the fully loaded vehicle. One matching spare wheel and tire shall be provided with each vehicle but not mounted in or on the vehicle.

12.18.3 Four (4) stainless steel, bolt-on wheel inserts shall be provided. The set shall be installed on the front wheels and rear dual wheels and be complete with all lug nut covers and centerpieces. ***Clip-type securement of wheel inserts is not acceptable.***

12.18.4 Mud flaps shall be included for each wheel of the vehicle.

12.19 Bumpers:

12.19.1 Front bumper shall be the chassis manufacturer's standard front chromed bumper.

12.19.2 Rear bumper shall be black "Help" energy absorbent bumper as produced by Romeo Rim, Inc. and shall be equipped with an anti-ride feature. Bumpers shall be securely fastened to the chassis frame to adequately absorb shock from impact. In no case are the bumpers to be fastened directly to the body and allow shock from impact to be transmitted to the body of the vehicle.

12.20 Horn:

Dual 12 volt electrically controlled horns shall be furnished and installed so as to be protected from wheel-wash.

12.21 Crash Worthiness:

12.21.1 The body structure shall be built as an integral vehicle adequately reinforced at all joints and corners where stress concentration may occur to adequately carry required loads and withstand road shock. The following items are representative of the minimum requirements of the vehicle.

12.21.2 Body assembly shall meet or exceed FMVSS 220, for roll-over protection.

12.21.3 The body and roof structure shall withstand a static load equal to one hundred fifty percent (150%) of the curb weight evenly distributed on the roof with no more than a six inch (6") reduction in any interior dimension. Windows shall remain in place and shall not open under such a load.

12.21.4 The vehicle, at GVWR and under static conditions, shall not exhibit deformation or deflection that impairs operation of doors, wheelchair lift, or other mechanical elements. Static conditions include the vehicle at rest with any one wheel on a six inch (6") deep hole.

12.21.5 Upon request of the County, the Bidder will present certified actual test results which have been conducted to insure that the vehicle offered meets the FMVSS crash worthiness standards for this type of vehicle.

12.22 Body Construction:

12.22.1 The body may be constructed of a matrix of fiberglass reinforced plastic (FRP) with an inner thickness of resin-hardened honeycomb craft material. The matrix assembly shall be as follows:

12.22.2 Exterior surface shall be a minimum .020" thickness of high gloss gel-coat to prevent moisture penetration and corrosion. Secondary surface shall be a minimum one eighth inch (1/8") thickness of resin-hardened FRP. The center composite layer consists of a one inch (1") thickness of resin-hardened "Vertical" honeycomb, or approved equal, laid on edge to allow maximum column strength of each cell. Wall structure shall include a maximum of two (2) three inch (3") wide longitudinal sections of eighteen (18) gauge flat steel extending from the forward body seam to the rearward body seam to provide an additional attachment point for the integrally welded sidewall seat rail. Final surface of body structure is a minimum three thirty seconds inch (3/32") thickness of resin-hardened FRP. Window framing in sidewall shall be a steel ladder-type assembly. Window pillars are minimum of one and one half inches (1 1/2") by one inch (1") fourteen (14) gauge dipped, zinc-plated tube. Top and lower horizontal ladder bridge rails are minimum one inch (1") by two inch (2") twelve (12) gauge zinc plated angle section. Attachment of ladder assembly to roof and lower wall section shall be grade five (5) 1/4" x 3/4" mechanical fasteners on not more than eight inch (8") center. In addition, interface of wall and roof to window ladder assembly surfaces shall include a high strength contact adhesive. Sikaflex 255 or approved equal to provide a one hundred percent (100%) bonding and sealing at these locations. Side panels around and below passenger windows shall be same Melamine material with color being bright white. County to approve color and quality prior to production from samples provided by vendor.

12.22.3 The body may be constructed of vertical support columns that shall be eighteen gauge (18) steel. All roof structural support members shall be of the equivalent of sixteen (16) gauge hot rolled steel hat section roof bows. The entire body steel cage frame (door, walls roof, front and rear) shall be securely jig-welded together to provide an integral one-piece body structure. Fastening of roof and side walls by any other means other than welding will

not be acceptable. All metal parts shall be given a thorough multiple stage anti-corrosion treatment prior to assembling. The exterior panels shall be continuous panels of .063 aluminum over heavy comb, twenty-five (25) gauge galvanized steel or other metal of the same mechanical properties. Exterior panels are to be riveted or welded to the body framing. Sheet metal screws will not be acceptable for fastening exterior panels. All panels shall be installed so that they will shed water. That is, the panel shall be lapped over the following panel and in no case shall the sealing of the panels be dependent on caulking alone. All exterior joints and seams shall be protected by zinc chromate caulking, butyl rubber tape, or an approved equal. Side panels below the floor line shall be non-corrosive ABS material and easily removable for service and repair. These panels shall be installed using methods that allow for a smooth surface with minimal exposed fasteners. All nuts, bolts clips, and other fasteners shall be zinc or cadmium plated or phosphate coated. Sheet metal screws are not permitted.

12.22.4 All steel body parts shall be galvanized. Zinc chromate paint shall be applied to aluminum and steel.

12.22.5 The primer utilized shall be compatible with finish paints. **Interior surfaces of body panels and posts which are covered by trim materials shall be given protection against corrosion.** In the case of interior body posts, all four (4) sides shall be treated to prevent corrosion.

12.22.6 The galvanized welds shall be wire brushed and treated with a cold galvanizing compound.

12.22.7 Side and end frame sections shall be designated for maximum strength. End posts shall be designated to resist shear. To increase tolerance for added strength, frame sections are to be jig-welded. Each frame section is to be tube-grind network constructed of 1" x 2" 14 gauge steel tubing to be used in all stress areas – especially around the passenger entrance door and at all points where stress may occur.

12.22.8 Gun installed mono-bolt fastenings or rivets shall be utilized on all exterior body panels, rub-rails, and all other locations where stress is concentrated. When mono-bolts cannot be used, all nuts, bolts, clips, washers, clamps and like fasteners on the exterior and interior of the unit shall be zinc or cadmium plated to prevent corrosion.

12.22.9 Roof bows shall be constructed from eleven (11) gauge and sixteen (16) gauge steel welded into a parabolic-Z structure. The longitudinal framing from front to rear shall consist of two (2) hatch-shaped members formed of sixteen (16) gauge steel. Exterior roof panels shall be .063 aluminum. The interior panel for the roof within the unit shall have a

strength equivalent to twenty-four (24) gauge steel. All metal parts shall be given a thorough multiple stage anti-corrosion treatment prior to assembling.

12.22.10 The vehicle shall be rust-proofed with premium quality rust-proofing material. The entire body frame under-structure of the vehicle is to be fully undercoated with non-flammable resin type material, polyoleum, or equivalent, applied after final assembly at the manufacturing facility.

12.22.11 Gutters shall be provided to prevent water flowing from the roof onto the side windows and passenger doors. When the vehicle is decelerated, the gutters shall not drain onto the windshield or driver's side window, or into the boarding area. Cross sections of the gutters shall not be less than .025 square inches.

#### 12.23 Roof:

12.23.1 The roof shall have sufficient strength and stiffness to prevent vibration, drumming, or flexing under normal use. Roof structure shall include a minimum of three (3) longitudinal sections of eighteen (18) gauge flat steel extending from the forward the forward body seam to the rearward body seam. All flat steel sections shall be fully integrated into the roof matrix and shall provide additional structural integrity and a secure attachment surface for ceiling panels, handrails, and stanchion fixtures.

12.23.2 The roof is to be constructed to provide an aesthetically pleasing design to the vehicle. The sills, when matched, will provide a clean, clear surface at least two inches (2") wide for secure and sufficient roof mounting.

#### 12.24 Insulation:

Vertical core insulation shall provide for a minimum of a "R-6" thermo-barrier and sound absorption. Side, roof, and front and rear crowns shall be insulated by the vertical core of the body assembly composite.

#### 12.25 Floor:

12.25.1 The vehicle floor assembly shall be a lateral body support, structural design, incorporating longitudinal stringers welded in a perimeter structure of steel and iron. The entire floor assembly shall be jig-welded steel structure. Floor construction methods that utilize wood studs running the length, width, and outside perimeter with a foam core insulation are not acceptable.

12.25.2 The substructure shall be comprised of the following:

12.25.3 A combination of fourteen (14) gauge steel lateral outriggers reinforced at

each mounting point, eleven (11) gauge steel C-channel longitudinal support members, and a perimeter of fourteen (14) gauge steel angle welded into a ladder type structure.

12.25.4 The substructure shall be bolted through the lateral outriggers, two (2) per outrigger to the chassis through rubber isolator grommets as provided by the chassis manufacturer. Welding of any body understructure to the chassis frame will not be acceptable.

12.25.5 Over the sub floor structure shall be fastened a minimum of five eights of an inch (5/8"), seven (7) ply, marine grade plywood which is pattern cut, edge sealed, and attached with quarter inch (1/4") diameter counter sunk Tek screws. Sub floor understructure shall be completely undercoated and sealed prior to being installed on the steel frame understructure.

12.25.6 Floor shall be level throughout and all joints between the floor and vertical surfaces shall be equipped with a floor covering of molding. Flooring shall be laid in such a manner as to be free from squeaks.

12.25.7 All edges of the plywood shall be sealed prior to installation to resist moisture. All floor joints will be filled and sanded level to result in a smooth, flat floor ready for installation of the flooring material. The entire floor shall be thoroughly sanded and then completely cleaned of all sanding and foreign material.

12.25.8 The floor in the under seat area and wheelchair position area shall be covered with RCA #TR766, smooth f covering having a minimum thickness of .125 inch (1/8"). Floor covering shall roll up the sidewall of the seat track.

12.25.9 Floor covering in aisle and on steps shall be RCA #TR766, non-skid, wear-resistant, and ribbed. Minimum overall thickness shall be .1875 inch (3/16") measured from the top of ribs.

12.25.10 Floor covering shall be laid without gaps or openings between sheets. Seams shall be filled with color matching material so as to be tight against any influx or seepage of water. Seams shall be covered with aluminum trim. The floor covering material shall be thoroughly cemented into position throughout the entire area and will be free of bubbles and blisters.

12.25.11 The floor covering in the platform or standee area shall be three sixteenths inch (3/16") thick top ribbed, single piece. The single piece floor covering in the platform area shall have longitudinal and traverse ribs metered at 45 degrees face to door. The vertical face and top section of the platform step edge backing shall be anchored with A.I.S.I. Type 304 stainless steel screws.

12.25.12 A yellow standee line shall be provided at the driver's modesty panel.

12.26 Roof Liner:

Interior walls shall provide a finish that is durable, easily cleaned and coordinates with the vehicle's interior color scheme. Roof liner shall be molded fiberglass or vinyl clad covered sheeting, neatly installed the full length so as to cover all protrusions.

12.27 Doors and Step Well:

12.27.1 The passenger entry door and step well shall be located at right front of passenger area, located directly across from the driver's seat at a ninety (90°) degree angle for maximum viewing on entry way.

12.27.2 The door shall be electronically operated, outward folding type. The passenger entry door panels shall be actuated together by a single electric powered overhead actuator. Actuator shall be equipped with an emergency manual release lever to allow manual opening in case of an emergency. The door shall be controlled from the driver's seated position.

12.27.3 The passenger entry door structure shall consist of a minimum 12-gauge, 304 grade stainless steel, powder coated using the five (5) step Interpon PZ77 process or approved equal, in bright white to match vehicle interior base color. It shall be the two-piece transit type and shall have a minimum horizontal opening of thirty-six (36") inches and a minimum vertical opening of eighty (80") inches. All screws used to attach the door frame to the vehicle body shall be stainless steel screws.

12.27.4 Both vertical closing edges of the door shall be equipped with neoprene bulb seals. At the meeting edge of each door leaf, a two (2") inch neoprene seal shall be installed so that the edges form a tight overlapping seal when closed. Seals shall overlap front over rear to provide an air and water shade.

12.27.5 Passenger door windows shall be installed with two (2) piece ozone treated extruded rubber, lock and key of one (1) piece fixed design. Entrance door windows shall be glazed with three sixteenths (3/16") inch thick, thirty-one (31%) percent gray density, tempered safety glass. Each window shall be installed in the upper and lower portions of the passenger door panels in line with the passenger side windows.

12.27.6 A driver's door shall be provided to the left of the driver's area. This door shall be accessible from inside and outside the vehicle. The driver door shall incorporate an opening window and arm rest. A driver's side running board with a step depth of twelve (12") inches shall be provided.

12.27.7 The steps shall be designed so that the top of the first step is no more than twelve (12") inches above the ground with the vehicle loaded. Step well is to have a minimum first step depth of twelve (12") inches and a minimum second step depth of ten (10") inches and shall be a minimum of thirty-six (36") inches in width. Risers shall not exceed nine (9") inches in height. The surface of all entrance steps shall be covered with eighth (1/8") inch thick rubber flooring on all risers and sides and three sixteenths (3/16") inch thick ribbed rubber step treads. All step edges shall have a two (2") inch yellow safety band running the full width of each step. Step wells shall incorporate lights to illuminate step tread area and outside of step well shall be protected from splashed material by door and rubber for a tight fit.

12.28 Stanchions, Grab Rails, and Handrails:

12.28.1 Vertical handrails shall be securely fastened on both sides of the doorway to assist passengers in entering or exiting the vehicle.

12.28.2 Vertical stanchions shall be provided at the aisle immediately behind the driver's seat and at the step well. A horizontal grab rail shall extend from the wall to each stanchion.

12.28.3 Padded modesty panels shall be provided that extends from the wall to each stanchion. Vinyl shall match the passenger seats.

12.28.4 A smoked three eights (3/8") inch thick Plexiglas panel shall be provided behind the driver's seat, ***within six (6") inches of ceiling***. Panels shall extend from the top of the horizontal grab rail to the ceiling and shall extend from the wall to the vertical stanchion. Stanchion and panel shall not impair driver's seat adjustment.

12.28.5 An overhead handrail shall be installed in the roof of the vehicle on the driver and curb side and shall run the length of the seating area.

12.28.6 All handrails and stanchions shall be one and one-quarter (1 1/4") inch stainless steel.

12.29 Wheelchair Lift Door:

12.29. Side opening double outward opening doors shall be provided for the platform type wheelchair lift. Lift shall be mounted within the vehicle body on the curb side behind the passenger entry door. The wheelchair door frame structure shall consist of a minimum 12-gauge, 304 grade stainless steel, powder coated using five (5) step Interpon process, or approved equal, in bright white to match vehicle interior base color. A water deflector shall be

integrated into the door frame structure at the top. Door panels shall be made of non-corrosive material. Foam core doors with wood frame supports are not acceptable. Door panel hinges shall be piano type with a minimum three sixteenths (3/16") inch diameter pivot pin.

- 12.29. Hinges and hinge fasteners shall be stainless steel to resist rust and corrosion. Door latch shall be vertical, rotating, two point type with latch rod at top and bottom. Each door panel shall have its own key lockable latch assembly which shall consist of a pistol type grip style twist handle located at the inside center of the door panel. Door latch shall compress perimeter door seal to prevent leaks. Latch adjustment plates shall be located at the top and bottom of the door frame structure.
- 12.29. Door panel holders shall be gas shock type mounted at the top and allow door panels to open a minimum of one hundred (100°) degrees from the closed position. Wheelchair door clear opening dimensions shall be a minimum of forty-four (44") inches by seventy (70") inches. Lift doors shall be interlocked by a panel door switch controlling the transmission which requires the transmission to be in "Park" position before lift can be operated.
- 12.29. Door windows shall be installed with two (2) piece black ozone treated extruded rubber, lock and key of one (1) piece fixed design. Windows shall be glazed with three sixteenths (3/16") inch thick, thirty-one (31%) percent gray density, tempered safety glass. Each window shall be installed in the upper portion of the lift door panels in line with the passenger side windows. The door will display the international wheelchair symbol.

#### 12.30 Wheelchair Lift:

- 12.30.1 The wheelchair lift shall be a fully automatic, including folding of the platform, and be electro-hydraulically powered with a minimum test-net load capacity of eight hundred (800) pounds. The lift shall be totally self-contained and installed without modifications to the vehicle body or frame inside of the curbside double service doors. The entire assembly shall be installed with adequate protection to prevent accidental injury to passengers.
- 12.30.2 The attachment of the wheelchair lift assembly to the vehicle shall allow easy removal and be readily accessible for repair and maintenance. The lift assembly shall be mounted in such a manner that in the fully raised position it shall not interfere of the double side doors, passenger seating, and passenger/wheelchair movement inside the vehicle.
- 12.30.3 The wheelchair lift shall have a bridge plate designed for a smooth transition from the vehicle floor level to the lift platform level when the platform is in the raised loading position.

- 12.30.4 Bridge plate and platform shall be coated to resist rusting. Platform, bridge plate, and area between bridge plate and aisle shall be skid resistant.
- 12.30.5 The wheelchair lift cam handrail shall be twenty-six (26") inches high from lift platform. The handrail shall be automatic folding to prevent any obstructions into the vehicle passenger area.
- 12.30.6 The overall depth of the lift assembly in the stored position inside the vehicle shall not exceed seventeen (17") inches when measured from the floor level of the lift entry doors. No component accessory to the lift shall extend more than twenty-one (21") inches from the lift entry door.
- 12.30.7 Bolting of any part of the lift assembly directly to the vehicles walls is not acceptable.
- 12.30.8 The installation of the wheelchair lift assembly shall not cause excessive unbalanced loading of the vehicle.
- 12.30.9 The lift platform shall be designed so as to stop downward movement upon contact with the ground.
- 12.30.10 The lift platform shall have an end barrier at least four (4") inches in height that will fold outward to provide a ramp for loading of wheelchairs. The ramp shall fold out automatically upon platform contact with the ground.
- 12.30.11 The vehicle shall be equipped with the following wheelchair safety features:
- 12.30.12 A door cut-off switch shall be installed which prevents the operation of the lift when the doors are closed.
- 12.30.13 The maximum capacity in pounds shall be posted on the wheelchair lift within easy view of the operator and passenger.
- 12.30.14 The lift platform shall be fitted with a device to prevent the platform from touching or leaning against door after being restored to the stowed position.
- 12.30.15 Lift shall be equipped with a manual override to permit lift to be raised or lowered manually in the event of a power failure or emergency. The manual override system shall provide a complete operation of the lift without electrical power being supplied. The manual override hydraulic pump and bleed down valve are to be located inside the vehicle. A detachable hand lever to operate the system is to be stored next to the hand pump. The bleed down valve shall have a flow compensator valve that that will limit the maximum descent speed. Manual override instructions shall be visible from

inside and outside with the door open.

12.30.16 A removable vinyl cover shall be provided for the lift platform when in the stored position.

12.30.17 The wheelchair lift shall comply with all Federal ADA requirements.

12.31 Lift Control, Electrical Circuits, and Wiring:

12.31.1 The complete wheelchair lift assembly shall operate from the vehicle's electrical system and shall have one hand-held lift control station with a minimum five (5') foot cable attached so lift can be operated from outside or inside of the vehicle.

12.31.2 The control switches on the lift control shall have permanently applied labels identifying their functions.

12.31.3 The power to the lift system shall be controlled through an ON/OFF master switch located on the supplemental driver's control panel.

12.31.4 When the parking brake is properly applied and the master switch is placed in the "ON" position, an electrical solenoid shall activate that will connect the lift's electrical system to the vehicle's electrical system.

12.31.5 The bus lift shall be protected by a one hundred, five (105) amp circuit sentry system. The electrical power cord shall be loomed to protect the cable from outside elements.

12.32 Wheelchair Securement and Seatbelts:

12.32.1 The vehicle shall have a minimum of two (2) forward facing wheelchair positions located on the driver's side of the center aisle, beginning behind the driver's position. Each wheelchair position shall be provided with restraint devices that will secure the wheelchair and its passenger while in the wheelchair. These devices shall be adjustable to accommodate varying track widths of wheelchairs. Each wheelchair shall have four (4) point securement (2 front, 2back) in the vehicle with recessed anchor points of sufficient strength to secure a wheelchair and/or wheel scooter. The entire securement system shall comply with all applicable regulations including ADA.

12.32.2 Securement system must safely secure manually and electronically operated wheelchairs, (including 3-wheel scooters), and provide ample space for foot rests and proper wheelchair securement.

**\*Amended 12/08/09**

12.32.3 No anchoring points shall project more than one-eighth (1/8") inch above the finished floor. For the purposes of this section, the floor is the entire passenger area of the vehicle.

12.32.4 Floor mounted tracks shall be a series type "L" track floor plate. These plates shall be recessed mounted in the floor with three-eighth (3/8") inch diameter, SAE grade 5 bolts, washers and self locking nuts with National Fine Threads.

12.32.5 Where mounting bolts do not pierce or attach through the vehicle frame, sub-frame, body posts or equivalent metal structure, a reinforced metal plate not less than one sixteenth (1/16") inch thick is required.

12.32.6 There shall be four (4) retractors assemblies for each wheelchair position in the vehicle to secure the wheelchair to the tracks. Example: Q' Straint QRT Deluxe (Q-8100-A1) System, or approved equal. Each retractor assembly shall consist of a heavy duty series "L" track fitting, the front left and right retractor shall be equipped with manual tension knobs for manual tightening and/or release. Each retractor assembly shall be equipped with a quick release, push-button buckle and buckle connector.

\*12.32.7 One (1) seat belt shall be provided for each wheelchair passenger. The torso belts shall be two (2") inches wide, seventy-two (72") inches long, adjustable, with a strength rating of not less than three thousand (3000 lbs.) pounds. One end of the belt shall be secured to a female seat belt fitting and the other end shall have a male seat belt fitting. The seat belt assembly shall provide for a quick-release and also provide for a snap locking to connect both ends together.

12.32.8 A wall mounted height adjustable of approximately twelve (12") inches shoulder harness system shall be provided at each wheelchair securement location that is compatible with the specified restraints. The harness system shall be installed in accordance with all structural requirements established by the restraint supplier and all applicable regulations, including 49 CFR part 571.

12.32.9 All belts, straps, and harness assemblies shall be supplied in bundled sets and shall include a Q Straint or equivalent pouch in which to store them. Storage compartments shall be provided over the windshield and over the driver's door.

12.33 Exterior Lighting:

12.33.1 All exterior lights, with the exception of headlights, passenger entry door, lift

door, curb light, and rear back-up lights, shall be Light Emitting Diode (LED) lights. Lighting shall be in accordance with Federal Motor carrier Safety regulations 393.12. All lights shall have wire long enough to move the light six (6") inches from vehicle for service. Lights shall be grounded to body framing structure. All lights shall be sealed from moisture. Fixtures which are surfaced mounted to the body shall be sealed for moisture.

12.33.2 Headlights shall be sealed beam type, high and low beam controlled with foot or hand switch. Headlights and headlight supports and mountings shall be sufficiently rugged to maintain adjustments under road shock and service conditions. Headlight high beam indicator shall be installed on instrument panel. An audible "headlight on" warning buzzer shall be installed to notify the operator that the headlights are on with the engine turned off.

12.33.3 Stop and tail lights shall be red combination 4" round lens, vertically mounted on the rear-end vehicle panels, so as not to be affected by engine exhaust heat. Each side shall include a directional signal, tail light and stop light. Lamp lenses shall not protrude from the body more than two (2) inches. Lamp lens colors and configuration shall be in accordance with current State of Texas school bus requirements. Lights shall be a sealed, single vehicle light fixture.

12.33.4 Brake lights shall not override emergency flashers or turn signals. Back-up lights shall be furnished and adequate to illuminate for visibility when backing. Light shall be a sealed, single vehicle light fixture.

12.33.5 A collision avoidance light shall be installed on the rear of the vehicle and above the emergency exit door at the center line of the vehicle. Lamp lens shall not protrude from the body of the vehicle more than two (2") inches. Light shall be a sealed, single vehicle LED light fixture. In addition, a horizontal row of not less than three (3) red combination 4" round lens brake lights shall be installed in a fixture on the rear and at the center line of the vehicle on the emergency exit door. They are to light while brakes are applied. Lamp lens shall not protrude more than two (2") inches. Lights shall be a sealed, single vehicle light fixture.

12.33.6 Two hazard lamps shall be mounted at the same level on the rear of the bus. The lamps shall be visible at a distance of 500 feet in normal sunlight, flash, and emit amber light. The lamps shall operate from a separate control in the driver's compartment.

12.33.7 Two back-up lights, one mounted on each side of the body rear cap, shall be provided. The lamps shall be of the sealed beam type design.

12.33.8 Directional signal lamps shall be amber combination 4" round lens,

vertically mounted on the rear, one on each side of the vehicle approximately halfway from front to rear. Side signal lamp lens shall incorporate a brushed aluminum guard to protect lens from damage. All side signal lamps to the same height above ground.

12.33.9 Passenger entry door area shall be lighted by a hooded exterior door light, suitably mounted so that the entire ground area immediately outside the entry door is sufficiently illuminated to comply with ADA requirements.

12.33.10 Vehicle shall be equipped with an exterior curb lamp. Light shall be positioned in manufacturer's standard location in such a manner as to illuminate the ground area in the immediate vicinity of the operation of the wheelchair lift. Light shall be automatically activated only when the wheelchair doors are opened. Illumination shall be sufficient to comply with ADA requirements.

12.33.11 Roof marker lights, red or amber, one at each corner shall be provided and protected with brushed aluminum guards.

12.33.12 Clearance marker lights, three (3) lamp cluster, surface mounted, amber in front, red lens in rear, shall be provided and protected with brushed aluminum guards.

12.33.13 Vehicle shall be equipped with daytime running lights.

12.34 Interior Lighting:

12.34.1 The overhead lights and step well lights shall provide no less than five foot-candles of illumination on the entrance step area with the door open. This system shall be illuminated when the passenger door is opened. A separate dash mounted switch shall be provided to operate the overhead lights when the door is closed.

12.34.2 Driver courtesy light shall light when the driver door is opened.

12.34.3 Front step well are shall be lighted by a hooded step well light, suitably mounted so that the entire step well area of the vehicle is sufficiently lighted. The step well light shall be positioned on the side away from wheel splash.

12.34.4 All interior lighting shall be incandescent type with the master control located on the dash or near the driver for easy operation by the driver. Lighting in the passenger area shall be mounted in the ceiling cove at the sidewall with a minimum of three (3) fixtures on each side of the vehicle. Lighting intensity for all cross seats shall have a minimum average of fifteen (15) foot candles at the seated passenger reading plane. In addition, an

effective lighting level shall be provided for all other seated passengers.

12.34.5 The lighting components shall be located and constructed so as to prevent the entrance of water, contaminants and insects. Lighting fixtures shall be reasonably flush with the interior walls and ceiling so as not to present a hazard to passengers.

12.34.6 Light illumination shall be designed to illuminate the wheelchair lift platform for night operation. Light shall be positioned in manufacturer's standard location in such a manner as to illuminate the area in the immediate vicinity of the wheelchair lift. Light shall be automatically activated only when the wheelchair lift doors are open. Light switch shall have a driver override. Illumination shall be sufficient to comply with ADA requirements.

12.35 Air Conditioning:

12.35.1 The installed air conditioning system shall cool the vehicle to seventy-two (72°F) degrees measured at a minimum of three points, located four feet above the floor at the longitudinal centerline of the vehicle. The three points shall be (1) near the driver's location; (2) at the mid-point of the body; and (3) two feet forward of the rear of the vehicle.

12.35.2 The test condition under which the above performance must be achieved shall consist of: (1) placing the vehicle in a room (such as a paint booth) where the ambient temperature can be maintained at one hundred and ten (110°F) degrees; (2) heat soaking the vehicle at one hundred and ten (110°F) degrees with windows open for at least one hour; and (3) closing the windows, turning on the air conditioner and cooling the interior of the vehicle at seventy-two (72°F) plus or minus two (2°±F) within a maximum of 30 minutes while maintaining 110°F. The system shall have a dash driver's area evaporator vehicle.

12.35.3 The test shall be performed at the vehicles manufacturer's recommended fast idle speed.

12.35.4 Driver's in-dash heavy-duty air conditioning vehicle shall be chassis manufacturer supplied system. Substitution of other than the chassis air conditioner is acceptable provided that the front and rear systems are compatible and warranty work is performed at one location. The system shall be separately controlled from the passenger area system and shall have provision to divert air to the defrosters. In-dash vehicle shall not interfere with removal or replacement of the engine cover or be blocked by the door operating mechanism.

- 12.35.5 The passenger area air conditioning unit shall be an American Cooling Technology, 50MAX system, or approved equal. The system shall be separately controlled from a supplemental driver's control panel located at the driver's position. Controls shall include on and off, three (3) speed blower switch and a rotary thermostat switch.
- 12.35.6 Front and rear systems shall operate independently of each other.
- 12.35.7 Dual compressors shall be provided. Compressors shall have a nominal ten (10) cubic inches of displacement. The compressors shall be protected by high and low pressure switches. Compressors shall be driven off the vehicles engine.
- 12.35.8 A three (3) fan condenser shall be provided with a minimum rating of seventy-six thousand (76,000) BTU's. The condenser fans and motors shall be enclosed within the condenser housing. Coil shall be copper tube, expanded into aluminum fins. Integral high/low pressure cut outs to be wired to liquid or discharge line. The fans shall be dynamically balanced with permanent magnet totally enclosed motors. The condenser shall blow air on an angle down from the vehicle chassis to prevent recirculation of hot air. The condenser shall have a sight glass and filter dryer. The system shall be skirt mounted located on the driver (road) side, in front of the rear wheels, and installed to minimize collection of road dirt and facilitate maintenance.
- 12.35.9 A rear mounted evaporator shall be provided. The rear evaporator shall have a minimum rating of fifty-two thousand (52,000) BTU's. Three-speed continuous duty permanently lubricated motors shall be provided. The blower assembly shall be rated at a minimum of five hundred, seventy (570) Cubic Feet per Minute. Coil shall be copper tube, expanded into aluminum fins three (3) rows deep. Thermostatically controlled expansion valve shall be provided. Frame shall be galvanized heavy-duty metal with integral pan and washable filter. The cover shall be made of durable ABS plastic.
- 12.35.10 Evaporator shall be equipped with two (2) drain lines each with a check valve to maintain positive condensation drain flow.
- 12.35.11 Evaporator filter shall be installed in a manner that it may be routinely removed, serviced, or replaced for maintenance without damage to the filter.
- 12.35.12 Installation of the air conditioning system(s) shall be by the vehicle body manufacturer or by an authorized factory air conditioning dealer who normally stocks, sells, installs and services a vehicle of the type being furnished.
- 12.35.13 All air conditioning systems shall use 134A refrigerant.

- 12.35.14 The components of the air conditioning system shall be readily accessible for maintenance. Refrigerant hoses shall meet the latest revision of SAE J-2064, double-braided Barrier type.
- 12.35.15 Two (2) back seated valves shall be installed at the dryer to facilitate evacuation and charging of the air conditioning system and replacement of the dryer vehicle. The system shall also be equipped with Schrader valves to promote efficient testing and servicing.
- 12.35.16 Refrigerant fittings shall be ATCO or Aeroquip.
- 12.35.17 Air conditioning circuits shall be protected with auto-resetting circuit breakers or thermal relays. The total electric current required by the two (2) systems in high speed fan mode shall not exceed sixty (60) amperes.
- 12.35.18 Poor quality of installation shall be grounds for immediate rejection of the complete vehicle.
- 12.35.19 Contractor shall submit data with bid which encompasses design criteria, evaporator coil size and location, condenser size and location, and performance and reliability studies of the entire system.
- 12.35.20 Air conditioning system(s) shall have a legible and durable nameplate with the following information:
- Name and address of A/C manufacturer
  - Cooling capacity (BTU/hr.) and blower capacity (CFM).
  - Type of refrigerant and recommended operating charge.
  - Type of refrigerant oil and amount
- 12.35.21 Contractor shall provide a list of companies or individuals, and their addresses, who stock repair parts in the County's area and who can perform service on the products furnished.
- 12.35.22 The contractor shall furnish one copy of complete installation, maintenance and operating instructions for each different model, size and type of equipment provided. The instructions shall accompany each vehicle when delivered.

12.35.23 A replacement parts list shall be provided.

12.35.24 The entire rear air conditioning system shall be warranted for 24 months and shall cover 100% parts and labor.

12.36 Heating and Defrosting:

12.36.1 Vehicle shall be equipped with a combination fresh air and recirculating air heaters. The heater controls shall be mounted in the dash panel and in the supplemental control panel, located conveniently to the driver's position and properly labeled. Heater hose connections shall be installed above the floor of the vehicle body and through the fire wall to the engine compartment. The length of the hot water hoses shall be as short as possible consistent with good installation practices; however, the hoses shall not be installed in such a manner so as to interfere with normal motor maintenance operations, such as removal of the air filter. The hoses shall not dangle or rub against the chassis or sharp edges and shall not interfere with or restrict the operation of any motor function. Heater hoses shall conform to SAE 2083, Class C, as defined in SAE Standard J20E, or latest version thereto.

12.36.2 The front heater shall be a hot water type having a minimum free-flow output of the highest capacity offered by the chassis manufacturer.

12.36.3 A second hot water heater with blower fan shall have a BTU rating on at least thirty thousand (30,000) installed under a seat near the rear of the vehicle.

12.36.4 Easily accessible all brass gate valve(s) shall be furnished to cut off the flow of coolant water to the rear heater.

12.36.5 Defrosting equipment shall keep the windshield, the window to the left of the driver and glass in the service door clear of fog, frost, and snow, using heat from the heater and circulation from the fans. All defrosting equipment shall meet the requirements of FMVSS No.103 or latest revision thereto.

12.37 Windshield and Windows:

12.37.1 The windshield is to be a one-piece design as is provided by the chassis manufacturer. Windshield shall be laminated, tinted safety glass.

12.37.2 Driver's window shall be chassis manufacturer's standard window. The window shall permit unobstructed side vision and shall have a sufficient opening to permit arm signaling. Provisions shall be made to draw in or exclude outside air from the driver's compartment.

12.37.3 Side windows shall be provided the full length of the vehicle. These windows shall be forty-one (41") inches tall and twenty-nine and one half (29 ½") inches wide, transit type upper T-slider ventilating design windows, or approved equal. The upper T-slider shall have a positive lock in the closed position. The glazing shall be a minimum of one eighth (1/8") inch thick with thirty-one (31%) gray density, tempered safety glass. Tinted window film is not acceptable. Windows shall be installed in black powdered or anodized aluminum frames with an interior clamp ring attachment design.

12.37.4 An audible alarm shall be activated when any emergency window is opened. Emergency egress windows shall be designed to meet FMVSS 217.

12.38 Mirrors:

12.38.1 Mirrors shall be remote controlled. The mirror glass shall be nine and three-quarters inch (9-3/4") in height by eight and five-eighths inch (8-5/8") in width. All parts, including the mirror glass, shall be replaceable. A remote control switch shall be provided and located in the operator's compartment; switch must be capable of controlling both right and left mirrors. Example: Ramco Mirrors Model #5500 w/o defrost feature.

12.38.2 An additional mirror shall be furnished for the driver to view passengers. The mirror shall have a minimum of ninety-six (96) square inches of clear vision. Dimensions shall be approximately six (6") inches by sixteen (16") inches of reflective surface area.

12.38.3 Chassis manufacturer's standard sun visor shall be provided at the driver's position.

12.39 Seats and Seat Layout:

12.39.1 Four (4) double mid-high back, forward facing ambulatory seats shall be provided behind the wheelchair lift assembly on the right (curb) side of the bus. Three (3) double mid-high back, forward facing ambulatory seats shall be provided behind the rear wheel chair tie down station on the left (driver) side of the bus. Three (3) double mid-high back, forward facing foldaway seats shall be provided over the wheelchair tie down stations for ambulatory passengers when wheelchair stations are not in use.

12.39.2 Seats shall have a minimum width of seventeen and one half (17 ½") inches wide and shall be a minimum of twenty-five (25") inches overall front to back. Double seats shall have a minimum of width of thirty-five (35") inches overall.

**\*Amended 12/08/09**

12.39.3 Seat frames shall be cold-roll one (1") inch steel tubing and be sixteen (16) gauge or metal of equal mechanical properties. The front seat cushions shall have foam padding and be individually wedged to each passenger for occupants comfort and retention. The indentation load deflection shall be sixty-five (65) to eighty-five (85) pounds. Seat cushion shall meet the flammability requirements of FMVSS 302.

\*12.39.4 Seats and all visible surfaces shall be upholstered in level 4 vinyl material. Vinyl material shall be expanded vinyl, forty-two (42) ounces per lineal yard minimum, transportation grade. The County will pre-approve all colors prior to production.

12.39.5 Seat backs shall be high impact ABS material which is recessed to provide one and one half (1-1/2") inches of additional passenger hip to knee room.

12.39.6 A retractable seatbelt shall be provided for each seated passenger. The retractor shall be emergency locking with anti-cinch capability. The retractor must be attached to the seat structure. Passenger seatbelts shall be "A" type on seat belt assembly conforming to current FMVSS 209 requirements.

12.39.7 Aisle seats shall include an energy absorbent grab bar, three quarter (3/4") inch, twenty (20) gauge steel covered with custom molded, wear and vandal resistant eight (8) pound density, self-skinning polyurethane foam. Grab bar shall be located in the top of the seat back.

12.39.8 All seats shall be recessed track mounted. Floor anchorage shall be neat and shall not present a trip hazard.

12.39.9 Aisles shall not be less than seventeen (17") inches wide.

12.39.10 **BIDDER shall submit drawings of wheelchair positions and seating arrangements during the request for approved equals process.** Final approval of the interior layout including passenger seating, wheelchair positions, driver's seat, location of stanchions, hand holds, driver's barrier, and modesty panels will be made by the County.

12.39.11 A chime shall be provided that is activated by a pull cord. The pull cord shall be above the passenger windows within reach of each passenger.

12.40 Driver's Seat:

Driver's seat shall be provided with a folding armrest, tilt riser and shall recline. A three (3) point safety belt shall be mounted to the seat frame and shall be equipped

with an emergency locking retractor that has a feature which prevents it from progressively tightening the belt around the driver. Seat material shall be the same as the passenger seats. A screw mounted operator's coat hook shall be furnished and installed by the Bidder in the operator's area. Location to be approved by the County after bid award.

12.41 Fare Box:

Fare box shall be mounted with trip handle toward driver. It shall be mounted on a stanchion, adequately braced, located near the driver and easily accessible to passengers entering the bus. An amber or indirect fare box light shall be connected to the dash instrument lights. Two interchangeable, lockable fare box vaults and fare box, keyed alike, with a double set of keys for each lock shall be supplied. Vault and fare box exteriors shall be marked with key reference. Vehicle shall be provided with wiring and structural support to install the fare box. Wiring for fare box circuit shall be two (2) No. 14 insulated wires in vinyl tubing, one energized directly from a battery positive feed protective circuit breaker and the other to ground. Example: Main Fare Box model Treasury 1, Diamond (or approved equal)

12.42 Safety Equipment:

12.42. A standard twenty-four (24) unit First Aid Kit shall be provided. It shall include a one way airway apparatus and one pair of disposable gloves. Kit shall be securely mounted near the driver's seat.

12.42. A ten (10) pound rechargeable type 210 ABC fire extinguisher with metal head shall be provided. It shall be easily accessible in a bracket mounted near the driver's seat.

12.42. Web cutters shall be provided.

12.42. A set of three (3) triangular reflectors with a storage container shall be provided and mounted near the driver's seat.

12.42. A back-up alarm that is electrically operated and produces an intermittent sound when the vehicle is shifted into reverse shall be furnished. Alarm shall be in compliance with SAE J994B with respect to acoustical performance for Type B device (IE 107 db) (A) and plus or minus 4db with a supply of 14 volts.

12.42. A Fresnel lens shall be provided on the rear window of the vehicle.

12.43 Emergency Exits:

12.43.1 A heavy duty emergency door shall be provided at the rear of the vehicle. The door frame structure shall consist of a minimum 12-gauge, 304 grade stainless steel, powder coated using the five (5) step Interpon PZ77 process, or approved equal, in bright white to match vehicle exterior base color. A water deflector shall be integrated into the door frame structure at the top. Door panels shall be made of non-corrosive material. Foam core doors with wood frame supports are not acceptable. Door panel hinges shall be piano type with a minimum three sixteenth (3/16") inch diameter pivot pin. Hinges and hinge fasteners shall be stainless steel to resist rust and corrosion.

12.43.2 Door latch shall be vertical, rotating, two point type with latch rod at top and bottom. The door panel shall have its own key lockable latch assembly which shall consist of a pistol grip style twist handle located at the inside center of the door panel. Door latch shall compress perimeter door seal to prevent leaks. Latch adjustment plates shall be located at the top and bottom of the door frame structure.

12.43.3 Door panel holder shall be a gas shock type mounted at the top and shall allow the door panels to open a minimum of one hundred (100°) degrees from the closed position. Door windows shall be installed with two (2) piece black ozone treated extruded rubber, lock and key of one (1) piece fixed design.

12.43.4 Two windows shall be installed on the back of the vehicle, one on each side of the emergency door. The windows shall be glazed with three sixteenth (3/16") inch thick, thirty-one percent (31%) gray density, tempered safety glass. Door window height shall match the top of the rear windows on each side of the emergency door.

12.43.5 An audible alarm shall be activated when the emergency door is opened.

12.43.6 A combination roof ventilator and emergency escape hatch shall be provided towards the rear of the vehicle. Example: Trans-Spec Ventilator Hatch

#### 12.44 Destination Signs:

Changeable destination twelve (12) volt motor driven movable mechanism signs shall be furnished on the curb side above the passenger window and at the front of the vehicle above the windshield. Front sign curtain to be approximately 36 inches wide. Sign curtains to be illuminated. Front bulkhead or sign box shall have a door to open for viewing sign curtain position. Door shall be positioned for ease of driver operation. Sign shall comply with ADA requirements. Example: Trans Sign, Model D-3110 (or approved equal)

#### 12.45 Painting and Decals:

12.45.1 The base vehicle shall be Bright White in color. The area around the windows shall be black.

12.45.2 Decals furnished by the Contractor for the County to affix to the interior of the bus shall be as follows:

NO SMOKING	2	Size and color TBD
WATCH YOUR STEP	2	Size and color TBD
Do Not Stand Forward of the Yellow Line	2	Size and color TBD
FIRE EXTINGUISHER	1	Size and color TBD
LAW PROHIBITS THE OPERATION OF THIS VEHICLE WHILE ANYONE IS STANDING FORWARD OF THE YELLOW LINE	2	Size and color TBD
No Smoking, Eating, Drinking	2	Size and color TBD
Please Remain Seated While The Bus Is In Motion	2	Size and color TBD

12.45.3 Exterior Decals and Logos:

- “CAUTION – CHILDREN MAY BE EXITING”: 1 (Size and location to be determined after award)
- Fleet number: 5 (numbers and letters) (Location to be determined after award)
- Agency logo’s, stripes etc.

12.45.4 In addition to the decals described above, safety decal(s) shall be furnished and shall be affixed at any applicable area; emergency exit, steps, wheelchair lift, etc. The decals shall include necessary warnings and precautions. Permanent decals are required.

12.46 Delivery:

12.46. All vehicles must be serviced prior to delivery in accordance with the manufacturer's "New Vehicle Pre-delivery Service" requirements and as specified below.

12.46. Pre-Delivery Service

The following service shall be performed upon all motor vehicles prior to/upon delivery:

- a) Pre-delivery inspection certified with an affixed Texas Motor Vehicle Inspection Certificate (annual inspection sticker);

- b) Fluid levels checked and serviced with proper grade fluid;
- c) Chassis lubrication;
- d) Exterior wash and interior cleaning; and
- e) Fuel system(s) filled to capacity.

12.47 Registration:

Successful bidder shall provide necessary documents to enable the County to register the vehicle in the State of Texas. Necessary fees and state taxes will be paid by the County; do not include such fees and taxes in bid price.

12.48 Manuals

A line setting sheet and manual(s) containing operating and servicing instructions for the vehicle and lift shall be provided with each vehicle. The manual(s) shall be as detailed as possible outlining all necessary operating and servicing instructions for each vehicle and lift including the vehicle's driveline components. Necessary warnings and safety precautions shall be included. In addition, manual(s) containing illustrated parts lists, operating and servicing instructions for related and special equipment supplied with the vehicle and lift shall be provided with the vehicle.

12.49 Warranty:

12.49.1 Bus Chassis

- A copy of the chassis manufacturer's warranty must be submitted with the proposal and include the minimum:
- 5 years, unlimited mileage - failure of the chassis frame including cross members.
- 2 years, unlimited mileage - failure of any other original components manufactured by the chassis manufacturer.
- 1 year, unlimited mileage, - failure of any components manufactured by outside suppliers and included as original equipment by the chassis manufacturer. Where the outside supplier's warranty exceeds that of the chassis manufacturers then such warranty shall be stated and shall apply.

12.49.2 Engine: Must include the fuel injection system and emission control system  
5 year/unlimited mileage.

12.49.3 HVAC: 3 year, unlimited mileage warranty.

12.49.4 Service Location: There must be a one-source warranty location providing

full warranty for body, chassis, and engine. Individual locations for each component will not be accepted.

12.49.5 Towing: There shall be a 60-month / 150,000 mile extended towing warranty for all unsafe or non-drivable warrantable failures (up to \$250 per incident) to the nearest warranty location

12.49.6 Transmission: 2-years, unlimited mileage. - copy of OEM warranty to be included

12.49.7 Wheelchair lift: 3 years, unlimited mileages

12.50 Parts and Service:

The bidder providing the vehicle shall be an authorized dealer for the vehicle manufacturer and hold the required current license(s) with the Texas Motor Vehicle Division. The dealer shall have factory-trained personnel available for warranty repairs and the performance of service. The dealer shall also maintain an inventory of high-usage parts and a quick source for low-usage parts. The using County will assume the expense for replacement filters, fuel, cleaning, painting and other minor items normally consumed in day to day operations. Fort Bend County will assume responsibility for cost of repairs resulting from collision, theft, vandalism, operator negligence and/or acts of God.

12.51 Instructions on Safety, Operation, and Preventative Maintenance:

The contractor shall provide Fort Bend County sufficient instruction on safety, operation and preventive maintenance of the vehicle after it has been delivered and is ready for operation. Training shall be completed prior to payment.

**13.0 SPECIFICATIONS FOR MEDIUM-DUTY DIESEL TRANSIT CONVENTIONAL BUS 32' to 37':**

13.1 The vehicles produced according to the included specifications must be of the latest current model year (2009 or newer). All equipment, options and features provided must be designed, constructed and installed to be fully suitable for their intended use and service. The vehicle must be designed and built using the latest available technology and engineering capabilities. All components must be new. Each bus, including all individual components, must meet or exceed all current Federal, state, and local requirements.

13.2 The bus shall be supplied by an integrated vehicle supplier that can provide warranty, service, and parts coverage from a single distribution network for the complete vehicle. The body shall be manufactured in compliance with Quality Standards ISO

9001:2000 with regard to the Sale, Design and Manufacture of Customized Buses and Multipurpose Passenger Vehicles.

13.3 This specification will describe the construction of a medium-duty transit bus. The bus must meet all Federal Bus Testing Requirements and have completed the required bus testing at the Altoona bus testing facility (or be in the process of completing the test) for the category of seven (7) years, 200,000 miles and be fully compliant with the Americans with Disability Act (ADA) requirements. The bus must meet Buy America.

13.4 General Dimensions:

Exterior Length 32' Minimum - 37' Maximum

Exterior Width 96" Maximum (excluding mirrors)

Exterior Heights 131" Maximum

Interior Width at seat level 90.5" Maximum

Interior Height at center aisle 78" Minimum

Entry Door Dimension (clear opening) 28" x 88" Minimum

First Step Height from Ground 14" Maximum

Step Riser Height 9.5" Maximum

Step Tread Depth 9.0" Minimum

Wheel Base 254" Minimum

Gross Vehicle Weight (GVW) 27,500 lbs. Minimum

Fuel Tank Capacity 65 gallons Minimum

Chassis Specifications:

13.5 Alternator:

Shall be 12-volt of not less than 320 amps and provide at least 50% of the rated charge at engine idle. Mounting shall be heavy-duty two-leg type as specified in SAE-J-180.

13.6 Axles and Suspension:

13.6.1 Front spring suspension and rear air suspension to be provided. Minimum front suspension: 10,000 pounds, minimum rear suspension: 17,500 pounds. Axle ratio to be determined post bid. Lateral and longitudinal stability shall be provided by rubber bushed radius rods. Front axle caster adjustment is made by adjusting longitudinal radius rod and shall not require shims.

13.6.2 Roll stability shall be controlled by zero delay constant height control valves, one (1) each on the road and curb side. Parabolic taper-leaf front suspension with heavy-duty shock absorbers. The shock mounting brackets shall be constructed using pressed steel or nodular iron for long life.

13.6.3 Suspension to include air ride system utilizing at least two rear air bags, two leveling valves and heavy-duty shock absorbers and sway bars adequate for vehicle's gross weight. The suspension shall be an OEM chassis installed feature with ride optimized characteristics maintaining a 9.25" suspension ride height. There will also be a rear suspension leveling valve included.

13.7 Batteries:

A minimum two 8D 12-volt type maintenance-free with a minimum of 1,950 total cold cranking amps is required. There shall be a master battery-disconnect switch located on the cab floor to the left of the driver seat that will shut off all electrical items on the bus. A quick connect battery jump start, street side, mounted on bumper is required.

13.8 Brakes:

13.8.1 Brakes shall be full air drum brakes with Bendix 4 channel antilock braking technology with Traction Control and slack adjusters. Bendix AD-IP air dryer and low air pressure warning light and buzzer. Drain valves to be remote – located below driver's compartment or pull lanyards at base of skirt for ease of operation. ABS all wheel anti-lock braking system with backing plates.

13.8.2 Front: brake linings shall be a minimum of 15" X 4".

13.8.3 Rear: lining shall be a minimum of 16.5" X 7.0"

13.8.4 Emergency: 30" spring brakes system with treadle valve controls. Separate instrument panel mounted valve for parking. Brake lines shall be color coded and secured within the frame rail channel where possible. A complete schematic covering the full brake system shall accompany each bus.

13.8.5 There shall be a parking brake interlock that requires the service brake pedal to be pressed and the ignition key in the "ON" position in order to release the parking brake.

13.8.6 FMVSS interlock for wheelchair lift operation required.

13.9 Chassis Construction:

13.9.1 The chassis frame rails shall be a minimum high-strength, low-alloy steel (80,000 PSI yield). All chassis cross-members shall be fastened with Grade-8 equivalent high-strength steel fasteners.

13.9.2 The hood shall be constructed of three (3) easily replaceable panels, mounted with a three-point design to minimize stress. A torsion bar shall be utilized to

provide a maximum force required to open of 27 lbs.

13.10 Cooling System:

13.10.1 Radiator shall be mounted in an over under design with brazed aluminum fins and plastic tanks with in-tank transmission oil cooler. The radiator shall have a minimum 710 sq.in. frontal surface, utilizing two-row aluminum construction, and include an automatic pressure-relief cap. The charge air cooler shall be a minimum of 310 sq. in.

13.10.2 Cooling system must be protected to minus 20-degrees Fahrenheit utilizing a glycol base antifreeze. Coolant recovery system shall be factory installed. System shall include a "low coolant" indicator light. Adequate access shall be provided for easy inspection and filling of the cooling system without removing any other equipment.

13.10.3 Cooling fan is to be two-speed, direct drive with residual torque device for disengaged fan speed.

13.10.4 An automatic engine shutdown must be provided which will be activated by low oil pressure, high engine coolant temperature and/or low engine coolant level. The system must warn the driver with a light and buzzer when engine coolant temperatures reach or exceed 210 degrees Fahrenheit and then shut down when engine coolant temperature reaches 215-degrees Fahrenheit. Engine must be equipped with heavy-duty OEM oil cooler and an internal bypass valve.

13.11 Electrical:

System shall be 12-volt with negative ground. All chassis circuits shall be protected by manual- reset circuit breakers. Chassis and body are to be multi-plexed systems for ease of body to chassis integration and serviceability.

13.12 Engine:

13.12.1 The engine is to be EPA certified to comply with 2009 emission standards and operate on ultra-low sulfur diesel fuel. Minimum 230 H.P. with 620 lbs. ft. torque, diesel, engine performance settings to be determined post bid. A complete set of maintenance manuals must be provided. On-board diagnostic connector for diagnostic equipment and manual regeneration switch to be provided. Engine must have fast-idle system, fuel/water separator/filter and "Water in Fuel" sensor to be provided with corresponding light on dash panel.

**\*Amended 12/08/09**

13.12.2 There shall be extra insulation installed between the dash and firewall, as well as beneath the hood and on the splash shields to help reduce chassis noise entering into the bus body. The bus-generated noise level experienced by a passenger at any seat location in the bus shall not exceed 83 dba.

13.13 Exhaust:

Corrosion resistant diesel particulate filter, all stainless steel piping. Exhaust will exit through a tail pipe that exits to the rear street side of the bus, and will not create a hazard to pedestrians. The bus-generated noise level experienced by the driver or by a passenger at any seat location shall not exceed 80 dBA. A maximum exterior noise level of 76 dBA must be maintained when measured from a distance of fifty (50) feet with the engine operating at a governed speed and the vehicle in stationary position.

13.14 Frame:

All welded and bolted construction with grade-8 head bolts and nuts. The main frame shall be a continuous section from the front of the vehicle to aft of the rear axle. Frame rails shall not be notched, tapered, or cutout to provide clearance for engine or stepwell installation.

13.15 Fuel System:

Fuel tank will be 65 gallons, minimum, located between rails. Fuel lines to be O-ring snap-on quick connect Voss fittings at both ends.

13.16 HVAC Driver:

The driver's area to have a separately controlled and independent air conditioning system providing 30,000BTU heat and 20,000BTU air conditioning. Driver A/C and ventilating systems will incorporate the introduction of fresh air. The A/C and heater to have an easy access replaceable air filter. A manually controlled vent window will be provided in the driver's area.

\*13.17 HVAC Passenger:

\*13.17.1The A/C condenser unit will be roof mounted with integrated compressors and evaporators. The compressors shall be engine mounted. Passenger compartment HVAC shall include dedicated A/C compressors that operate independent of the chassis cab system. Tie-in systems are not acceptable. The A/C unit will be rated at 106,000 BTUs. Passenger A/C will be supplied by an overhead ducted system through the passenger compartment. Controls will be within easy reach of the driver.

13.17.2 There shall be two 65,000 BTU heaters spaced evenly throughout the bus with circulation pump.

13.18 Instrument Panel, Controls, Accessories and Gauges:

13.18.1 All controls and switches shall be mounted in the driver console/instrument panel forward and to the side of and in full view of the driver while in the driving seated position. All controls are to be within arm's reach of a driver 5'0" with seat belt fastened.

13.18.2 All body switches are to be of uniform type, either push-pull or rocker type, mounted in convenient grouping in a panel near the driver. All controls and switches shall be plainly and permanently marked. Painted masking is not acceptable. Controls, accessories and gauges must include:

- Speedometer/7-digit odometer
- Tachometer/Hourmeter
- Engine coolant temperature with 'high engine coolant temp' warning
- Transmission oil temperature gauge
- Fuel gauge with low fuel warning light
- Dual air pressure gauges (with air systems only)
- High / Low Coolant gauge
- Headlights and headlight dimmer switch
- Audible warning for oil pressure, water temperature provided through stop engine, engine protection circuit. Separate light and tone for low air pressure (with air systems only).
- Key-operated starter switch
- Windshield wiper switch, two-speed with intermittent feature
- Low wash fluid indicator
- Fast idle switch
- Cruise control
- Emergency/hazard flashers
- Voltmeter with 'low battery voltage' light
- Driver dome light, switch for manual operation, automatically with chassis door opening
- Dual electric horns
- Oil pressure gauge with 'low oil pressure' warning
- Hook for driver's jacket
- Parking brake/brake system malfunction indicator
- Driver HVAC control switches
- Clearance and identification lamps switches
- 12-volt receptacle located in the dash
- On-board diagnostic display of fault codes in front dash.

13.18.3 All chassis gauges will be backlit. An "On/Off" chassis light status shall be coordinated in conjunction with parking and driving lights system. Brightness will be controlled by a rotary switch.

13.19 Key and Ignition:

All ignition keys shall be keyed alike. There shall be three ignition keys provided with each bus. Ignition switch shall include an accessory position to power AM/FM radio and other items to be determined post bid.

13.20 Steering:

Vehicle shall be provided with a two spoke tilt steering wheel. Steering system to include electric/hydraulic-assist steering pump to enable engine-off power steering.

13.21 Transmission:

Automatic 3000 Series Allison with transmission cooler. The transmission shall have one (1) reverse, one (1) neutral and five (5) forward speeds. A backing alarm, which automatically activates when the transmission is placed in reverse, must be provided. Minimum of one (1) driveshaft guards between transmission and rear axle. Gear ratio's to be determined post bid. A complete set of maintenance manuals and *diagnostic equipment must be provided.*

13.22 Tires and Wheels:

Single front tires and dual rear tires, steel painted wheels minimum 19.5" x 7.5" low profile. Tires to be radial, All Position design Goodyear or approved equal. Wheels shall be white-painted steel disc and include stainless steel wheel covers. Bidder shall supply one (1) spare with each vehicle mounted on wheels identical to those on vehicle. Spare shall be loose shipped, secured from movement and prevented from direct contact with the flooring.

13.23 Windshield:

Windshield shall be fixed type, glazed with safety laminated glass, and tinted above eye level.

13.24 Wiring and Electrical:

13.24.1 As built wiring schematics, one hard copy and one electrical copy are required. Datalink connector, additional length of 4" required, for vehicle programming and diagnostics to be provided in the cab. All components are to be selected and integrated to function in an environment characterized by low engine speeds and high amperage draws (due to lights, flashers, heater,

and other accessories in constant operation.

- 13.24.2 Chassis production shall include wiring for the integration of the body and include sealed connectors for Tail/Amber/Turn/Marker/Back-up/Accessory Power/Ground and sealed connector for Stop/Turn. This wiring is multiplexed to allow diagnostics of the chassis and body electrical systems. The body switches are integrated into the front dash at the factory for plug-in operation at the body factory.
- 13.24.3 A fuse panel shall be conveniently accessible for service from inside the bus. The door to the panel shall be equipped with a thumb latch. A legend shall be posted inside the panel, which shall correspond with the components. Panel shall be in driver's compartment area.
- 13.24.4 All wiring provided in the body construction will be color-coded. The wiring shall be bundled and clamped to protect the wires. Grommets shall be used for protection of wiring through metal framework or panels.
- 13.24.5 All wiring shall conform to the current applicable standards of the Society of Automotive Engineers and be of sufficient size to carry the required current without excessive voltage drop, no drops below 8.5V. The wire shall have adequate mechanical strength for the application and be of a sufficient gauge size to carry the current without overheating. All wiring and related devices shall be installed in a quality workmanship manner and be mechanically and electrically secure.
- 13.24.6 All wiring shall be identified, color-coded where applicable, and numbered for ease of identification. All wiring shall be adequately protected from water, solvents, road splash, stones, grease, oil, fuel, abrasion and chafing.
- 13.24.7 All wires and cables not installed by the engine manufacturer which are subject to extreme heat shall be protected by shields necessary to prevent premature failure.
- 13.24.8 All parts of the wiring system shall be adequately protected from corrosion, and adequately protected from undercarriage washes.
- 13.24.9 Battery cables shall be heavy-duty and adequate to carry current output of the electrical system.
- 13.24.10 Grounding wires shall not pass through hinged doors or any other covers.
- 13.24.11 All harness and wiring shall terminate at appropriate junction terminals set in Bakelite or other molded plastic material.

- 13.24.12 All wiring and connectors shall be of the soldered-insulated or machine-stake type. All circuits shall be protected by manual reset circuit breakers or fuses. All circuit breakers shall be clearly identified. Fuses and fuse blocks, if used, shall be clearly identified and easily accessible from inside each vehicle. Fuses may be placed in multiple fuse block locations. The fuse block shall contain holders for spare fuses of each type.
- 13.24.13 Lamps and wiring shall be readily and easily accessible and serviceable. All exterior devices shall be sealed to prevent entrance of water.
- 13.24.14 There shall be no exposed or loose wiring in the driver or passenger compartment of vehicle.
- 13.24.15 Any wiring installed related to an after-market installation must be enclosed within a loom. Wiring that passes through a body or chassis member must be encased within continuous metallic tubing or be of armored "BX" type.
- 13.24.16 Wiring and harnesses in raceways or other locations shall be supported at regular intervals by "P" clamps or by other supporting hangers where necessary, and routed in separate hangers from heater hoses or air conditioning hoses.

13.25 Body Construction:

- 13.25.1 The body construction will meet or exceed applicable Federal Motor Vehicle Safety Standards. To insure durability adequate reinforcement shall be included in the construction of the body and understructure at all points where stress concentration may occur to enable the vehicle to withstand damage from road shock under required loads.
- 13.25.2 The body shall have steel cage construction. When the sidewalls, floor and roof are WELDED together, they shall form a continuous structure, which is extremely strong and durable. The body cage must be built as a complete assembly and shall be square, plumb and level before welding the cage on the floor structure that is mounted on the chassis with rubber isolators. All nuts, bolts, clips, washers, clamps, and like fasteners shall be zinc or cadmium plated, or phosphate coated, or stainless steel to prevent corrosion.
- 13.25.3 The sidewalls shall be constructed of 1.5" x 1.5" 16-gauge tubular steel studs and corner posts on maximum 48" centers. A 14-gauge, 1-1/2" x 2" tubular horizontal stringer shall be welded to the top of the studs. A 16-gauge Z-rail shall be welded to the studs at the bottom of the sidewall. Seat track shall be welded to the sidewall studs.

13.25.4 The roof will meet FMVSS 220 standards and be constructed with sufficient strength to prevent vibration, drumming, or flexing. The roof shall consist of 16-gauge tubular steel rafters installed on maximum 48" centers. The roof rafters are to be welded into two 16-gauge steel "U" shaped sidewall caps. Roof design will prevent "ponding" of water on the roof.

13.25.5 The back wall frame shall be constructed of 1.5" X 1.5" 16-gauge tubular steel, reinforced with 16-gauge C-channel. A section of 16-gauge Z-channel shall be welded to the bottom of the back wall frame.

13.25.6 Front cap shall be contoured and aesthetically molded, reinforced fiberglass, normal 5/32" thick. Cap to be installed with structure adhesives and rivets. All panels are to be caulked with paintable sealant prior to painting.

13.25.7 Step wells are to be of heavy-duty stainless steel construction, with coved or square corners, and additional reinforcement to prevent deflection. Any fasteners used must be stainless steel. Step well treads shall be at least 9" deep and have slip resistant coating, yellow Coated Fiberglass Mesh. Individual risers shall not exceed 9.5" in height. All risers shall be approximately the same height. The first step height from street level shall not be more than 14" inches from the ground.

13.26 Body Finish, Exterior:

13.26.1 The construction design shall provide an exterior skin with no visible fasteners. Exterior side panels shall be FRP (fiber-glass re-enforced plastic) material.

13.26.2 All underbody plywood and steel, with the exception of the drive shaft, catalytic converter, engine, transmission, exhaust system, etc. shall be undercoated to protect against corrosion and provide additional sound deadening. The material shall be an abrasive-free petroleum black petroleum asphalt emulsion, formulated with corrosion inhibitors. All mechanisms (moving or stationary parts) that are affected or rendered useless by an application of sealant or insulation shall be protected, including vent canisters and drain pipes prior to undercoating.

13.26.3 Mud flaps shall be provided for the rear wheels and be sized effectively to protect the body and not rub the chassis, tires or the ground. Splash aprons and fenders shall be provided in the event that the tires extend beyond the side of the body.

13.26.4 Rain gutters shall be provided over the passenger door and side windows.

13.27 Body Finish, Interior:

13.27.1 The bus interior will be designed to provide the maximum passenger safety and a pleasant, aesthetically pleasing environment. All interior materials will comply with FMVSS 302 governing flammability requirements of interior materials. All interior trim parts are to be high impact ABS material. Interior materials shall be easily cleanable.

13.27.2 Interior ceiling shall be finished using Luan panels covered in off white vinyl. H-rail and fasteners used in retention of panels shall be trimmed with molded covers.

13.27.3 Interior sidewall shall be finished using Luan panels covered in off white vinyl. Panels are to be held in place at the lower edge by J-rail and at the top edge by the window trim ring. Pushpins shall secure the panels to the sidewall studs.

13.27.4 Front bulkhead and transition panel cover shall be light gray ABS plastic. Rear wall covering shall be light gray ABS plastic.

13.28 Bumpers:

Rear bumper shall be heavy-duty steel, painted to match body. Front bumper shall be chrome plated steel.

13.29 Entrance Door:

13.29.1 The front entrance door will have a minimum clear opening width of thirty-four inches (34") and a minimum clear opening height of ninety inches (88"). The entrance door will be double-opening split entrance type with aluminum frame construction and include full length, tinted, and tempered safety glass. The meeting edge of each door leaf will be equipped with a rubber lap seal so that when closed, the doors provide a watertight seal. The entrance door will be equipped with an interior manual safety release mechanism, permitting the door to open in case of an emergency.

13.29.2 The entrance door will be electrically operated and controlled by switches mounted within convenient reach of the seated driver.

13.30 Driver Door:

Chassis cab shall include a dedicated entrance door at front left side of cab. Access to cab and driver seat shall be facilitated by two steps and an exterior mounted grab handle.

13.31 Floor:

13.31.1 The floor shall be essentially a continuous flat plane, except at the step wells, fuel fill cover. The vehicle floor assembly shall be a lateral body support, structural design, incorporating longitudinal stringers welded in a perimeter structure of steel and iron. The entire floor assembly shall be jig-welded steel structure. Floor construction methods that utilize wood studs running the length, width, and outside perimeter with a foam core insulation are not acceptable.

13.31.2 The substructure shall be comprised of a combination of fourteen (14) gauge steel lateral outriggers reinforced at each mounting point, eleven (11) gauge steel C-channel longitudinal support members on a maximum 34" center, and a perimeter of fourteen (14) gauge steel angle welded into a ladder type structure. 11-gauge, 4" wide flat steel shall be provided to support the seat track.

13.31.3 The substructure shall be bolted through the lateral outriggers, two (2) per outrigger to the chassis through rubber isolator grommets as provided by the chassis manufacturer. Welding of any body understructure to the chassis frame will not be acceptable.

13.31.4 Over the sub floor structure shall be fastened a minimum of five eights of an inch (5/8"), seven (7) ply, marine grade plywood which is pattern cut, edge sealed, and attached with quarter inch (1/4") diameter counter sunk Tek screws. Sub floor understructure shall be completely undercoated and sealed prior to being installed on the steel frame understructure.

13.31.5 Floor shall be level throughout and all joints between the floor and vertical surfaces shall be equipped with a floor covering of molding. Flooring shall be laid in such a manner as to be free from squeaks.

13.31.6 All edges of the plywood shall be sealed prior to installation to resist moisture. All floor joints will be filled and sanded level to result in a smooth, flat floor ready for installation of the flooring material. The entire floor shall be thoroughly sanded and then completely cleaned of all sanding and foreign material.

13.32 Floor Covering:

13.32.1 The floor will be covered with dark gray rubber flooring. Floor covering shall be smooth and at least 1/8 inch thick under seats and 3/16 inch thick ribbed, non-skid in the aisle and wheelchair areas and at the entry way of both the front door and the floor area surrounding the lift. All transition joints shall be the butt type. Floor covering must be installed to flooring manufacturer's

specifications.

13.32.2 Steps shall be covered with 3/16 inch thick ribbed step treads. All step edges, thresholds and the boarding edge of ramps of lift platforms shall have a band of color(s) running the full width of the step or edge which contrasts from the step tread and riser, or lift or ramp surface, either light-on-dark or dark-on-light.

13.32.3 A yellow standee line shall be provided at the driver's modesty panel.

### 13.33 Lighting, Exterior:

13.33.1 Halogen headlights with daytime running light feature

13.33.2 All non-OEM exterior lights, other than chassis OEM lights, shall be LED. This includes stop, tail, clearance, turn signal, back-up, license plate, side-directional, and exterior ADA lights. All marker lights shall have protective guards or be recessed to prevent damage.

13.33.3 Two hazard lamps shall be mounted at the same level on the rear of the bus. The lamps shall be visible at a distance of 500 feet in normal sunlight, flash, and emit amber light. The lamps shall operate from a separate control in the driver's compartment.

### 13.34 Interior:

13.34.1 LED passenger compartment lighting shall provide sufficient light for safety and security. Lighting of interior to be adequate to illuminate the interior during night operation.

13.34.2 A separate switch from the chassis lights shall operate the passenger compartment interior lights. Interior lights shall be operative without the engine running.

13.34.3 Stepwell and entrance door exterior lights shall be activated when the entrance door is open.

13.34.4 Stepwell and exterior lights shall be shielded to prevent light from directly shining into passenger's or driver's eyes. Step well lights shall be shielded, should not create a tripping hazard, and must provide adequate illumination on each tread. Exterior door light shall be installed below window level and provide at least 1 foot-candle of illumination on the street surface for a distance of 3 feet perpendicular to all points on the bottom step tread.

**\*Amended 12/08/09**

13.35 License Plate Mounts:

License plate mounts must be provided on both the front and rear of the bus.

13.36 Mirrors:

Exterior electric heated mirror assemblies with one flat rear view 9.66" x 8.39" and one convex rear view 4.88" x 8.75" per side. Mirrors shall be heated and operated remotely from the driver's compartment. Mirror brackets shall be stainless steel. Interior mirror shall be 6" x 30" safety glass with protected edges.

\*13.37 Paint:

The body shall have a pre-baked enamel finish. The basic body color shall be white. An aluminum trim rail, minimum 2" wide, shall be applied to each side of the exterior skin, at the floor line of the bus.

13.38 Roof Vent/Emergency Exit:

One roof vent with venting capabilities shall be installed.

13.39 Rustproofing:

13.39.1 Basic Requirement

- Materials furnished shall be approved for use on U.S. Government vehicles (Ziebart, Poly-oleum, Corashield or approved equal).
- The compound used for rust-proofing shall be of the highest quality available for the purpose. Application methods, techniques and tooling shall provide expert workmanship in accordance with the highest standards of the trade.
- The rust-proofing materials and workmanship shall be guaranteed for a minimum life expectancy of five (5) years from application date.

13.39.2 Application

- All surfaces requiring protection (i.e. metal, not fiberglass or aluminum) shall be completely covered by means of a not less than 2,000 p.s.i. spray.
- Spray tools shall be inserted into closed areas through drilled access holes of 1/2" diameter maximum. After application, the holes

shall be sealed with plastic or rubber caps.

- The rust-proofing material shall be forced into crevices, cracks, and seams.
- Drain holes shall not be blocked.
- Excess rust-proofing shall be removed from the exterior of the vehicle and the upholstery shall be clean.

### 13.39.3 Warranty

When a vehicle is rust-proofed in accordance with this standard, the rust-proofer and/or bidder shall furnish a written warranty stating the period of time the rust-proofing will protect the vehicle (minimum acceptable is (5) year warranty). Defective material and workmanship shall be replaced or repaired by the rust-proofer at no charge in accordance with the warranty.

## 13.40 Seats and Stanchions:

### Passenger Seats

13.40.1 Bus shall accommodate varying numbers of seated passengers, depending on vehicle length. Final layout to be determined post bid. Seats shall be Freedman Mid-Hi. Upholstery will be of Grade 4 minimum, commercial quality with the pattern to be determined post bid.

13.40.2 All seats shall be recessed track mounted. Floor anchorage shall be neat and shall not present a trip hazard.

13.40.3 The seats shall be forward facing. There shall be two-two person flip seats mounted at the wheel chair tie-down stations for use when the wheel chair securement is not in service. Passenger seats are to be lined with plastic, prior to cloth seats covers being installed. The aisle seats shall each have a grab rail mounted on the top of the seat. All seats will include non-retractable passenger seatbelts and folding arm rests.

### Stanchions

13.40.4 There shall be three (3) stanchions with locations aft of front entrance door, aft of the wheel chair lift and behind the driver position. All stanchions will be stainless steel, a minimum of 1 ¼" diameter, with modesty panels. The stanchions shall have a Lexan smoke colored shield mounted between the ceiling and the horizontal bar of the stanchion. The stanchion at the entrance door shall include a stainless steel handrail running perpendicular to the

stepwell and comply with ADA specifications.

Passenger Storage

13.40.5 Pretoria overhead luggage rack with ducted A/C ventilation will be provided above each seating row. The overhead storage shall include individual passenger reading lights. The storage compartment shall be designed to adequately secure contents while maximizing visibility of the contents.

Driver's seat

13.40.6 The driver's seat shall be a deluxe, high quality high back bucket type seat, fully padded, with cloth covering and right-side arm rest, six (6) -way adjustable, upholstery to be compatible with interior and passenger seating. The seat must have an integral headrest, adjustable base and reclining back, fully retractable 3-point lap and shoulder belt. The seat must comply with all applicable FMVSS regulations.

13.41 Speakers and Radio:

13.41.1 Vehicle must come with four (4) internal speakers that will be wired directly into the AM/FM/PA system. Driver's microphone with push/hold on off switch shall be wired in with the above speakers.

13.41.2 An AM/FM/PA Radio with driver's speaker is required.

13.41.3 A ground plane for addition of a communications radio is required. Coaxial leads shall be furnished.

13.42 Sun Visors:

Adjustable sun visor shall be provided for the windshield.

13.43 Towing Devices:

Tow hooks shall be installed on the front and rear of the vehicle. The towing devices shall be adequate in design and construction to permit towing the vehicle without distortion or failure.

13.44 Safety Equipment:

Safety equipment shall be mounted in an appropriate location within the vehicle so as not to rattle or interfere with the driver or passenger movement.

- First aid kit

- Bio-hazard spill kit
- One (1) web cutter
- Fire extinguisher, 10 lb. ABC type
- Warning triangles, reflective type (3 units)

13.45 Destination Signs:

13.45.1 Changeable destination twelve (12) volt motor driven movable mechanism signs shall be furnished on the curb side above the passenger window and at the front of the vehicle above the windshield. Front sign curtain to be approximately 36 inches wide. Sign curtains to be illuminated. Front bulkhead or sign box shall have a door to open for viewing sign curtain position. Door shall be positioned for ease of driver operation. Sign shall comply with ADA requirements. Example: Trans Sign, Model D-3110 (or approved equal)

13.45.2 Sign print will be determined post bid.

13.46 Windows-Passenger:

13.46.1 T-Slide sash windows shall be provided throughout the entire bus except at the side destination sign mounting location. The sash shall be black Flexnar coated aluminum, rust resistant, horizontal slide type. They shall slide freely with minimal effort. The window tracks shall be polymer or nylon extrusions. The sash shall have a locking device to latch the window in the closed position. The main side windows shall be a minimum of 48" wide to offer maximum exterior view. Windows shall be securely mounted to the main structure of the body and windows shall not rattle when open or closed. Tinted safety glass is to be provided in all windows. The side windows shall be easily replaceable and to the maximum extent possible be sized so that they are interchangeable. Windows shall have a painted surround to create a continuous black plane across the side of the bus.

13.46.2 A one piece full rear window shall be installed in the rear cap.

13.46.3 All windows shall be fitted with durable, firmly installed weather seals to prevent the entrance of air and water. Materials used for construction of weather seals shall be designed to withstand varying temperature extremes, road splash and other exterior elements without cracking, leaking, loosening and deteriorating.

13.46.4 Appropriate sash, as required by FMVSS 217 for capacity of vehicle, shall include an emergency push-out feature, designed to allow quick reset by the bus operator. Emergency push-out instructions shall be furnished and installed at push-out window locations.

13.47 Wheelchair Lift:

13.47.1 Wheelchair lift shall be fully automatic in operation and mounted within the vehicle body on the curb side behind the passenger entry door. An option for mounting the wheel chair lift on the curb side in the rear of the vehicle body will be provided. The engine is to automatically switch to 'high idle' with use of wheelchair lift. The power supply shall be an electric hydraulic system. This hydraulic system shall be a gravity down design requiring no limit switches or bypass valves to stop the downward travel of the platform. The lift platform shall have a minimum clear length of forty eight (48)" and a minimum clear width of thirty (32)" measured two (2)" above the platform surface. This platform shall be of steel construction and the surface shall be of see-through grating to allow for increased visibility. The platform must be connected to ascent/descent columns on both sides of the lift. The operation of the lift shall provide a smooth, jerk-free ride in both up and down directions.

13.47.2 The lift shall have a rated load capacity of 660 lbs minimum. The maximum capacity in pounds shall be posted on the wheelchair lift within easy view of the operator and wheelchair passenger. The lift shall have a manually operated override capable of raising and lowering the lift platform in the event of an electrical failure. The manual override hydraulic pump and bleed down valve are to be located inside the vehicle. The bleed down valve shall have a flow compensator that will limit the maximum descent speed. Manual override instructions shall be visible from inside and outside the vehicle with the doors open.

13.47.3 The lift shall have a bridge plate designed for a smooth transition from the vehicle floor level to the lift platform when the platform is in the raised loading position.

13.47.4 The lift shall have two permanently installed handrails, one on each side of the lift. The handrails shall open to a position not less than thirty (30)" and not more than thirty-eight (38)" above the lift platform and fold automatically to prevent any obstructions in the vehicle passenger area. The handrails must be able to withstand a force of one hundred (100) lbs at any point on the handrail without permanent deformation. Handrails shall be a minimum of eight (8)" in length.

13.47.5 Bolting of any part of the lift assembly directly to the vehicle walls will not be acceptable. All attachments to the vehicle will be done through the wall support ribs.

13.47.6 The lift controls shall be mounted in a lightweight weatherproof control box with self centering switches. This control box shall be hand-held and be on a

flexible, cut resistant cord. Switches shall be labeled with proper operating instructions. The hand-held lift control should be mounted on the on the wheelchair lift door for storage when not in use. A secondary mount location will be provided on the interior passenger side wall of the bus, just above the lift pump.

13.47.7 Power to the lift system shall be controlled through an ON/OFF master switch located on the dash. The lift electrical system shall be protected by a manual circuit breaker that can be reset. The lift shall have no exposed electrical connections or pinch points to cause passenger injury.

13.47.8 A door cut-off switch shall be installed which prevents the lift from operating when the door is closed. The lift shall be equipped with a safety belt that will prevent lift operation when uncoupled.

13.47.9 The lift shall conform to ADA accessibility specifications as published in 49 CFR Part 38, Subpart 38.23.

13.47.10 Complete operator's and service manual, and a replacement parts list shall be provided with the lift. These manuals shall have detailed sections covering warranty, installation procedures, operating instruction, service and maintenance procedures and a trouble shooting guide. The lift shall be warranted to be free from defects in material and workmanship for a minimum of twenty four (24) months from date of delivery. Product literature detailing the features of the lift shall be submitted with bid proposal.

13.47.11 Lift components exposed to the environment shall be stainless steel or coated with a polyester powder coat to prevent premature corrosion.

13.47.12 The buses shall meet all requirements of 49 CFR, Part 38, and Subpart B: ADA Accessibility Specifications for Transportation Vehicles – Buses, Vans and Systems. This includes the loading system, wheelchair accommodations, interior movement, passenger information, lighting, doors, signs, etc.

13.47.13 A Ricon KlearVue lift or approved equal is acceptable.

13.48 Wheel Chair Securement:

13.48.1 The securement system shall include (4) individual floor pockets, slide and click type at the retractors are attached to. The retractors must have the fully automatic self tensioning, self locking knob less retractors. The retractors must be able to rotate 360 degrees. The retractors must use "J" hooks for universal application to all wheelchairs. A combination, integrated lap/shoulder belt with a manual height adjuster is required for the wheelchair occupant. Qstraints Hook & Go QRT Max strap systems or approved equal is

acceptable.

13.48.2 Priority Seating Signs and other required notices as required by the ADA shall be installed.

13.48.3 “Stop Request” chime system shall be installed to be visible and audible to the driver and passengers. The stop request sign shall be installed on the front interior header so as not to obstruct the operation of the destination sign. Stop request pull cords (meeting the ADA requirements) shall be installed and activate the light and chime. The pull cords should be yellow, plastic-coated. Stop request push buttons are to be provided in the wheelchair securement areas. The stop request light and chime shall turn off with the opening and/or closing of the passenger door.

13.48.4 Securement systems shall be provided. There shall be two complete sets of Q”Straint Slide-NClick wheelchair securement on the bus including a lap and shoulder harness for use by wheelchair occupant or mobility-aid user. There will be one wall mounted mesh storage bag for each securement position.

13.49 Additional:

The following additional installations and procedures shall be provided to complete the production process:

Water Test:

Vehicle must be water tested upon completion to insure there are no leaks. The water test shall include the underbody as well as the exterior of the bus.

13.50 Painting and Decals:

13.50.1 The base vehicle shall be Bright White in color. The area around the windows shall be black.

13.50.2 Decals furnished by the Contractor for the County to affix to the interior of the bus shall be as follows:

NO SMOKING	2	Size and color TBD
WATCH YOUR STEP	2	Size and color TBD
Do Not Stand Forward of the Yellow Line	2	Size and color TBD
FIRE EXTINGUISHER	1	Size and color TBD
LAW PROHIBITS THE OPERATION OF THIS VEHICLE WHILE ANYONE IS STANDING FORWARD OF THE YELLOW LINE	2	Size and color TBD
No Smoking, Eating, Drinking	2	Size and color TBD

Please Remain Seated While The Bus Is In Motion	2	Size and color TBD
---	---	--------------------

13.50.3 Exterior Decals and Logos:

- “CAUTION – CHILDREN MAY BE EXITING”: 1 (Size and location to be determined after award)
- Fleet number: 5 (numbers and letters) (Location to be determined after award)
- Agency logo’s, stripes etc.

13.50.4 In addition to the decals described above, safety decal(s) shall be furnished and shall be affixed at any applicable area; emergency exit, steps, wheelchair lift, etc. The decals shall include necessary warnings and precautions. Permanent decals are required.

13.51 Delivery:

All vehicles must be serviced prior to delivery in accordance with the manufacturer's "New Vehicle Pre-delivery Service" requirements and as specified below.

Pre-Delivery Service

The following service shall be performed upon all motor vehicles prior to/upon delivery:

- Predelivery inspection certified with an affixed Texas Motor Vehicle Inspection Certificate (annual inspection sticker);
- Fluid levels checked and serviced with proper grade fluid;
- Chassis lubrication;
- Exterior wash and interior cleaning; and
- Fuel system(s) filled to capacity.

13.52 Registration:

Successful bidder shall provide necessary documents to enable the County to register the vehicle in the State of Texas. Necessary fees and state taxes will be paid by the County; do not include such fees and taxes in bid price.

13.53 Manuals

A line setting sheet and manual(s) containing operating and servicing instructions for the vehicle and lift shall be provided with each vehicle. The manual(s) shall be as detailed as possible outlining all necessary operating and servicing instructions for

each vehicle and lift including the vehicle's driveline components. Necessary warnings and safety precautions shall be included. In addition, manual(s) containing illustrated parts lists, operating and servicing instructions for related and special equipment supplied with the vehicle and lift shall be provided with the vehicle.

13.54 Warranty:

13.54.1 Bus Chassis

- A copy of the chassis manufacturer's warranty must be submitted with the proposal and include the minimum:
- 5 years, unlimited mileage - failure of the chassis frame including cross members.
- 2 years, unlimited mileage - failure of any other original components manufactured by the chassis manufacturer.
- 1 year, unlimited mileage, - failure of any components manufactured by outside suppliers and included as original equipment by the chassis manufacturer. Where the outside supplier's warranty exceeds that of the chassis manufacturers then such warranty shall be stated and shall apply.

13.54.2 Engine: Must include the fuel injection system and emission control system 5 year/unlimited mileage.

13.54.3 HVAC: 3 year, unlimited mileage warranty.

13.54.4 Service Location: There must be a one-source warranty location providing full warranty for body, chassis, and engine. Individual locations for each component will not be accepted.

13.54.5 Towing: There shall be a 60-month / 150,000 mile extended towing warranty for all unsafe or non-drivable warrantable failures (up to \$250 per incident) to the nearest warranty location

13.54.6 Transmission: 2-years, unlimited mileage. - copy of OEM warranty to be included

13.54.7 Wheelchair lift: 3 years, unlimited mileages.

13.55 Parts and Service:

The bidder providing the vehicle shall be an authorized dealer for the vehicle manufacturer and hold the required current license(s) with the Texas Motor Vehicle

Division. The dealer shall have factory-trained personnel available for warranty repairs and the performance of service. The dealer shall also maintain an inventory of high-usage parts and a quick source for low-usage parts. The using County will assume the expense for replacement filters, fuel, cleaning, painting and other minor items normally consumed in day to day operations. Fort Bend County will assume responsibility for cost of repairs resulting from collision, theft, vandalism, operator negligence and/or acts of God.

**13.56 Instructions on Safety, Operation, and Preventative Maintenance:**

The contractor shall provide Fort Bend County sufficient instruction on safety, operation and preventive maintenance of the vehicle after it has been delivered and is ready for operation. Training shall be completed prior to payment.

**13.57 Options**

:

13.57.1 An optional design and floor plan for mounting the wheel chair lift on the curb side in the rear of the vehicle body will be provided.

13.57.2 Passenger seats to be equipped with retractable, below the seat, seat belts in place of non-retractable seat belts.

**14.0 FEDERAL CLAUSES:**

14.1 No Government Obligation to Third Parties. Fort Bend County and the Contractor acknowledge and agree that, notwithstanding any concurrence by the Federal Government in or approval of the solicitation or award of the underlying contract, absent the express written consent by the Federal Government, the Federal Government is not a party to this contract and shall not be subject to any obligations or liabilities to Fort Bend County, the Contractor, or any other party (whether or not a party to that contract) pertaining to any matter resulting from the underlying contract. The Contractor agrees to include this clause in each subcontract financed in whole or in part with Federal assistance provided by FTA. It is further agreed that the clause shall not be modified, except to identify the subcontractor who will be subject to its provisions.

14.2 Program Fraud and False or Fraudulent Statement and Related Acts. The Contractor acknowledges that the provisions of the Program Fraud Civil Remedies Act of 1986, as amended, 31 U.S.C. § 3801 *et seq.* and U.S. DOT regulations, "Program Fraud Civil Remedies," 49 C.F.R. Part 31, apply to its actions pertaining to this Project. Upon execution of the underlying contract, the Contractor certifies or affirms the truthfulness and accuracy of any statement it has made, it makes, it may make, or causes to be made, pertaining to the underlying contract or the FTA assisted project for which this contract work is being performed. In addition to other penalties that may be applicable, the Contractor further acknowledges that if it makes, or causes to

be made, a false, fictitious, or fraudulent claim, statement, submission, or certification, the Federal Government reserves the right to impose the penalties of the Program Fraud Civil Remedies Act of 1986 on the Contractor to the extent the Federal Government deems appropriate.

The Contractor also acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification to the Federal Government under a contract connected with a project that is financed in whole or in part with Federal assistance originally awarded by FTA under the authority of 49 U.S.C. § 5307, the Government reserves the right to impose the penalties of 18 U.S.C. § 1001 and 49 U.S.C. § 5307(n)(1) on the Contractor, to the extent the Federal Government deems appropriate.

The Contractor agrees to include the above two clauses in each subcontract financed in whole or in part with Federal assistance provided by FTA. It is further agreed that the clauses shall not be modified, except to identify the subcontractor who will be subject to the provisions.

- 14.3 Access to Records and Reports. The Contractor agrees to provide Fort Bend County, the FTA Administrator, the Comptroller General of the United States or any of their authorized representatives access to any books, documents, papers and records of the Contractor which are directly pertinent to this contract for the purposes of making audits, examinations, excerpts and transcriptions. Contractor also agrees, pursuant to 49 C.F.R. 633.17 to provide the FTA Administrator or his authorized representatives including any PMO Contractor access to Contractor's records and construction sites pertaining to a major capital project, defined at 49 U.S.C. 5302(a)1, which is receiving federal financial assistance through the programs described at 49 U.S.C. 5307, 5309 or 5311. The Contractor agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.

The Contractor agrees to maintain all books, records, accounts and reports required under this contract for a period of not less than three years after the date of termination or expiration of this contract, except in the event of litigation or settlement of claims arising from the performance of this contract, in which case Contractor agrees to maintain same until Fort Bend County, the FTA Administrator, the Comptroller General, or any of their duly authorized representatives, have disposed of all such litigation, appeals, claims or exceptions related thereto.

- 14.4 Federal Changes. The Contractor shall at all times comply with all applicable FTA regulations, policies, procedures and directives, including without limitation those listed directly or by reference in the Master Agreement between Fort Bend County and FTA, as they may be amended or promulgated from time to time during the term of this contract. Contractor's failure to so comply shall constitute a material breach of this contract.

14.5 Civil Rights Requirements. The following requirements apply to the underlying contract:

Nondiscrimination - In accordance with Title VI of the Civil Rights Act, as amended, 42 U.S.C. § 2000d, section 303 of the Age Discrimination Act of 1975, as amended, 42 U.S.C. § 6102, section 202 of the Americans with Disabilities Act of 1990, 42 U.S.C. § 12132, and Federal transit law at 49 U.S.C. § 5332, the Contractor agrees that it will not discriminate against any employee or applicant for employment because of race, color, creed, national origin, sex, age, or disability. In addition, the Contractor agrees to comply with applicable Federal implementing regulations and other implementing requirements FTA may issue.

Equal Employment Opportunity - The following equal employment opportunity requirements apply to the underlying contract:

Race, Color, Creed, National Origin, Sex - In accordance with Title VII of the Civil Rights Act, as amended, 42 U.S.C. § 2000e, and Federal transit laws at 49 U.S.C. § 5332, the Contractor agrees to comply with all applicable equal employment opportunity requirements of U.S. Department of Labor (U.S. DOL) regulations, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor," 41 C.F.R. Parts 60 et seq., (which implement Executive Order No. 11246, "Equal Employment Opportunity," as amended by Executive Order No. 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," 42 U.S.C. § 2000e note), and with any applicable Federal statutes, executive orders, regulations, and Federal policies that may in the future affect construction activities undertaken in the course of the Project. The Contractor agrees to take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, creed, national origin, sex, or age. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.

Age - In accordance with section 4 of the Age Discrimination in Employment Act of 1967, as amended, 29 U.S.C. § § 623 and Federal transit law at 49 U.S.C. § 5332, the Contractor agrees to refrain from discrimination against present and prospective employees for reason of age. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.

Disabilities - In accordance with section 102 of the Americans with Disabilities Act, as amended, 42 U.S.C. § 12112, the Contractor agrees that it will comply with the requirements of U.S. Equal Employment Opportunity Commission, "Regulations to Implement the Equal Employment Provisions of the Americans with Disabilities Act," 29 C.F.R. Part 1630, pertaining to employment of persons with disabilities. In

addition, the Contractor agrees to comply with any implementing requirements FTA may issue.

The Contractor also agrees to include these requirements in each subcontract financed in whole or in part with Federal assistance provided by FTA, modified only if necessary to identify the affected parties.

- 14.6 Disadvantaged Business Enterprise (DBE). This contract is subject to the requirements of Title 49, Code of Federal Regulations, Part 26, *Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs*. The national goal for participation of Disadvantaged Business Enterprises (DBE) is 10%. A separate contract goal has not been established for this procurement.

The Contractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of this DOT-assisted contract. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as Fort Bend County deems appropriate. Each subcontract the Contractor signs with a subcontractor must include the assurance in this paragraph (*see* 49 CFR 26.13(b)).

The successful bidder/offeror will be required to report its DBE participation obtained through race-neutral means throughout the period of performance.

The Contractor is required to pay its subcontractors performing work related to this Contract for satisfactory performance of that work no later than 30 days after the Contractor's receipt of payment for that work from Fort Bend County. In addition, the Contractor is required to return any retainage payments to those subcontractors within 30 days after the subcontractor's work related to this Contract is satisfactorily completed.

The Contractor must promptly notify Fort Bend County whenever a DBE subcontractor performing work related to this Contract is terminated or fails to complete its work, and must make good faith efforts to engage another DBE subcontractor to perform at least the same amount of work. The Contractor may not terminate any DBE subcontractor and perform that work through its own forces or those of an affiliate without the prior written consent of Fort Bend County.

- 14.7 Incorporation of Federal Transit Administration (FTA) Terms. The preceding provisions include, in part, certain Standard Terms and Conditions required by DOT, whether or not expressly set forth in the preceding contract provisions. All contractual provisions required by DOT, as set forth in FTA Circular 4220.1E, are hereby incorporated by reference. Anything to the contrary herein notwithstanding,

all FTA mandated terms shall be deemed to control in the event of a conflict with other provisions contained in this Agreement. The Contractor shall not perform any act, fail to perform any act, or refuse to comply with any Fort Bend County requests which would cause Fort Bend County to be in violation of the FTA terms and conditions.

- 14.8 Government-Wide Debarment and Suspension (Non-Procurement). This contract is a covered transaction for purposes of 49 CFR Part 29. As such, the Contractor is required to verify that none of the Contractor, its principals, as defined at 49 CFR 29.995, or affiliates, as defined at 49 CFR 29.905, are excluded or disqualified as defined at 49 CFR 29.940 and 29.945.

The Contractor is required to comply with 49 CFR 29, Subpart C and must include the requirement to comply with 49 CFR 29, Subpart C in any lower tier covered transaction it enters into.

By signing and submitting its bid or proposal, the bidder or proposer certifies as follows:

The certification in this clause is a material representation of fact relied upon by Fort Bend County. If it is later determined that the bidder or proposer knowingly rendered an erroneous certification, in addition to remedies available to Fort Bend County, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment. The bidder or proposer agrees to comply with the requirements of 49 CFR 29, Subpart C while this offer is valid and throughout the period of any contract that may arise from this offer. The bidder or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.

- 14.9 Buy America. The Contractor agrees to comply with 49 U.S.C. 5323(j) and 49 C.F.R. Part 661, which provide that Federal funds may not be obligated unless steel, iron, and manufactured products used in FTA-funded projects are produced in the United States, unless a waiver has been granted by FTA or the product is subject to a general waiver. General waivers are listed in 49 C.F.R. 661.7, and include final assembly in the United States for 15 passenger vans and 15 passenger wagons produced by Chrysler Corporation, and microcomputer equipment and software. Separate requirements for rolling stock are set out at 49 U.S.C. 5323(j)(2)(C) and 49 C.F.R. 661.11. Rolling stock must be assembled in the United States and have a 60 percent domestic content.

A bidder or offeror must submit to the FTA recipient the appropriate Buy America certification with all bids or offers on FTA-funded contracts, except those subject to a general waiver. Bids or offers that are not accompanied by a completed Buy America certification must be rejected as nonresponsive. This requirement does not apply to lower tier subcontractors.

14.10 Lobbying. Contractors who apply or bid for an award of \$100,000 or more shall file the certification required by 49 CFR part 20, "New Restrictions on Lobbying." Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier shall also disclose the name of any registrant under the Lobbying Disclosure Act of 1995 who has made lobbying contacts on its behalf with non-Federal funds with respect to that Federal contract, grant or award covered by 31 U.S.C. 1352. Such disclosures are forwarded from tier to tier up to the recipient.

14.11 Clean Air. The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. §§ 7401 et seq . The Contractor agrees to report each violation to the County and understands and agrees that the County will, in turn, report each violation as required to assure notification to FTA and the appropriate EPA Regional Office.

The Contractor also agrees to include these requirements in each subcontract exceeding \$100,000 financed in whole or in part with Federal assistance provided by FTA.

14.12 Clean Water. The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq . The Contractor agrees to report each violation to the County and understands and agrees that the County will, in turn, report each violation as required to assure notification to FTA and the appropriate EPA Regional Office.

The Contractor also agrees to include these requirements in each subcontract exceeding \$100,000 financed in whole or in part with Federal assistance provided by FTA.

14.13 Cargo Preference. The Contractor agrees:

(1) to use privately owned United States-Flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to the underlying contract to the extent such vessels are available at fair and reasonable rates for United States-Flag commercial vessels;

(2) to furnish within 20 working days following the date of loading for shipments originating within the United States or within 30 working days following the date of leading for shipments originating outside the United States, a legible copy of a rated, "on-board" commercial ocean bill-of -lading in English for each shipment of cargo

described in the preceding paragraph to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590 and to the FTA recipient (through the contractor in the case of a subcontractor's bill-of-lading.)

(3) to include these requirements in all subcontracts issued pursuant to this contract when the subcontract may involve the transport of equipment, material, or commodities by ocean vessel.

14.14 Fly America. The Contractor agrees to comply with 49 U.S.C. 40118 (the "Fly America" Act) in accordance with the General Services Administration's regulations at 41 CFR Part 301-10, which provide that recipients and sub-recipients of Federal funds and their contractors are required to use U.S. Flag air carriers for U.S Government-financed international air travel and transportation of their personal effects or property, to the extent such service is available, unless travel by foreign air carrier is a matter of necessity, as defined by the Fly America Act. The Contractor shall submit, if a foreign air carrier was used, an appropriate certification or memorandum adequately explaining why service by a U.S. flag air carrier was not available or why it was necessary to use a foreign air carrier and shall, in any event, provide a certificate of compliance with the Fly America requirements. The Contractor agrees to include the requirements of this section in all subcontracts that may involve international air transportation.

14.15 Contract Work Hours and Safety Standards.

(1) Overtime requirements - No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages - In the event of any violation of the clause set forth in paragraph (1) of this section the Contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such Contractor and subcontractor shall be liable to the United States for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this section.

(3) Withholding for unpaid wages and liquidated damages – Fort Bend County shall upon its own action or upon written request of an authorized representative of the

Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the Contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this section.

(4) Subcontracts - The Contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraphs (1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1) through (4) of this section.

14.16 Energy Conservation Requirements. The Contractor agrees to comply with mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act.

14.17 Access for Individuals with Disabilities. The Contractor agrees to comply with 49 U.S.C. § 5301(d), which states the Federal policy that elderly individuals and individuals with disabilities have the same right as other individuals to use public transportation services and facilities, and that special efforts shall be made in planning and designing those services and facilities to implement transportation accessibility rights for elderly individuals and individuals with disabilities. The Contractor also agrees to comply with all applicable provisions of section 504 of the Rehabilitation Act of 1973, as amended, with 29 U.S.C. § 794, which prohibits discrimination on the basis of disability; with the Americans with Disabilities Act of 1990 (ADA), as amended, 42 U.S.C. §§ 12101 *et seq.*, which requires that accessible facilities and services be made available to individuals with disabilities; and with the Architectural Barriers Act of 1968, as amended, 42 U.S.C. §§ 4151 *et seq.*, which requires that buildings and public accommodations be accessible to individuals with disabilities, and any subsequent amendments to these laws. In addition, the Contractor agrees to comply with applicable implementing Federal regulations and directives and any subsequent amendments thereto, as follows:

(1) U.S. DOT regulations, "Transportation Services for Individuals with Disabilities (ADA)," 49 C.F.R. Part 37;

(2) U.S. DOT regulations, "Nondiscrimination on the Basis of Handicap in programs and Activities Receiving or Benefiting from Federal Financial Assistance," 49 C.F.R. Part 27;

- (3) Joint U.S. Architectural and Transportation Barriers Compliance board (U.S. ATBCB)/U.S. DOT regulations, "Americans With Disabilities (ADA) Accessibility Specifications for Transportation Vehicles," 36 C.F.R. Part 1192 and 49 C.F.R. Part 38;
- (4) U.S. DOJ regulations, "Nondiscrimination on the Basis of Disability in State and Local Government Services," 28 C.F.R. Part 35;
- (5) U.S. DOJ regulations, "Nondiscrimination on the Basis of Disability by Public Accommodations and in Commercial Facilities," 28 C.F.R. Part 36;
- (6) U.S. General Services Administration (U.S. GSA) regulations, "Accommodations for the Physically Handicapped," 41 C.F.R. Subpart 101-19;
- (7) U.S. EEOC, "Regulations to Implement the Equal Employment Provisions of the Americans with Disabilities Act," 29 C.F.R. Part 1630;
- (8) U.S. Federal Communications Commission regulations, "Telecommunications Relay Services and Related Customer Premises Equipment for the Hearing and Speech Disabled," 47 C.F.R. Part 64, Subpart F; and
- (9) U.S. ATBCB regulations, "Electronic and Information Technology Accessibility Standards," 36 C.F.R. Part 1194; FTA regulations, "Transportation for Elderly and Handicapped Persons," 49 C.F.R. Part 609; and
- (10) Federal civil rights and nondiscrimination directives implementing the foregoing regulations, except to the extent the Federal Government determines otherwise in writing.

**15.0 ADDITIONAL INFORMATION TO BE SUBMITTED WITH BID:**

- 15.1 Description of Equipment: Bids shall be accompanied by sufficient information to enable the County to ascertain that the equipment offered meets the specifications and shall include correct product literature and detailed specifications. In most cases, manufacturer's product literature alone will not fulfill this requirement. The product description shall include at a minimum:
- 15.2 Drawing of the floor plan showing interior body dimensions and placement of seats, accessories, and ancillary equipment.
- 15.3 A complete description of the vehicle and all equipment to be provided.

NOTE: Failure to provide the required information with the bid may automatically disqualify the bid from consideration for award in connection with this transaction.

**\*Amended 12/08/09**

**16.0 DELIVERY INFORMATION:**

\*16.1 Delivery Schedule: See below:

19' to 22' Light Duty bus – initial order by October 31, 2010.

24' to 26' Light Duty bus – initial order by October 31, 2010.

32' to 37' Medium Duty bus – initial order by July 1, 2010.

16.2 Delivery: Vehicles and equipment shall be delivered FOB to the address shown on the purchase order between the hours of 8 a.m. and 4 p.m., Monday through Friday, excluding state holidays.

16.3 Cancellation By County: Delivery defaults by the vendor or failure to meet specifications authorize the County to cancel the purchase order, purchase the merchandise elsewhere, and charge full increase, if any, in cost and handling to the defaulting vendor.

16.3.1 Should delivery be delayed because of strike, injunction, government controls, or any circumstances beyond the control of the vendor, the vendor shall notify the County in writing of the cause of such delay within 5 days after the beginning thereof and shall state the estimated date delivery will be made.

16.3.2 If delay is foreseen, vendor shall give written notice to the County. The County has the right to extend delivery date if reasons appear valid. Vendor must keep the County advised at all times of the status of the order. Default in promised delivery (without accepted reasons) or failure to meet specifications may cause the vendor to be removed from the bid list.

16.4 Completeness: All equipment shall be delivered complete and ready for use. All parts necessary for operation or which are normally furnished as standard equipment shall be furnished whether specified or not. No substitutions or cancellations are permitted without written approval of the County.

16.5 Vehicle Title(s): When registering the vehicle title, the vendor will record a lien on the title, naming the Texas Department of Transportation, Public Transportation Division as lien holder.

**17.0 DOCUMENTS THAT SHALL BE FURNISHED WITH THE BID:**

17.1 Consolidated Certification Form.

17.2 Domestic Content worksheet (required for bids over \$100,000).

17.3 Printed product literature of the vehicle and all ancillary equipment.

- 17.4 Drawing of the proposed floor plan.
- 17.5 Warranty Certification. Also, a complete list of companies or individuals and their addresses who stock repair parts in the agency's area and who will perform the services.
- 17.6 Federal Motor Vehicle Safety Standards (FMVSS) Certification.
- 17.7 A copy of the franchised Texas new motor vehicle dealer's license.
- 17.8 A copy of the representative's license if required under the Texas Motor Vehicle Commission Code.
- 17.9 A copy of the manufacturer or converter license, whichever applies.
- 17.10 A list of three (3) agencies or people, including phone numbers, of those who have already purchased the proposed vehicle from the vendor and have placed the vehicle into service.
- 17.11 A copy of the Transit Vehicle Manufacturer's DBE certification letter sent by the manufacturer to the Federal Transit Administration.
- 17.12 Certification from the conversion vendor that the conversion system (specific to applicable engine families) meets EPA Memo-1A, and that tests have been performed according to procedures prescribed in 40 CFR Section 85.
- 17.13 Certification from the conversion vendor that the specific conversion system will not cause the vehicle to fail to meet applicable emission standards (according to procedures prescribed in 40 CFR Section 85) at any time during the vehicle's useful life.
- 17.14 Certification in writing from the conversion vendor that, should the conversion system fail to meet applicable emission standards according to procedures prescribed in 40 CFR Section 85) at any time during the vehicle's useful life, the conversion vendor will repair or replace the conversion system, at no charge to the purchasing entity, with a comparable conversion system meeting Memo-1A.

NOTE: Failure to provide the required information with the bid could automatically disqualify the bid from consideration for award in connection with this transaction.

**18.0 DOCUMENTS THAT SHALL BE FURNISHED AT TIME OF DELIVERY OF VEHICLE:**

- 18.1 Color-Coded Diagram(s) showing the complete, as-built electrical wiring of the vehicle, including wiring schematics for all alternative fuel conversion equipment and wheelchair accessibility features. The color coding on the alternative fuel system electrical schematic drawing shall match that of the rest of the vehicle wiring.

**\*Amended 12/08/09**

- 18.2 Manufacturer's Statement of Origin (MSO).
- 18.3 Certification that the GVW rating is not exceeded by the vehicle as equipped.
- 18.4 Vehicle manufacturer certification that the air conditioner meets or exceeds the air conditioner performance specifications.
- 18.5 Altoona Test Report if required in accordance with 49 CFR 665.
- 18.6 A detailed conversion system bill-of-materials (specific to applicable engine families) identifying primary conversion system components, including but not limited to, manufacturer, part number and function. Documentation to ascertain component functionality shall be provided.
- 18.7 Documentation of Federal Test Procedure 75, (FTP) or comparable test.
- 18.8 Copy of the alternative fuel converter's 503 Form Issued by the Texas Railroad Commission.
- 18.9 The LPG alternative fuel system must have been tested for EPA compliance under Option 3 of the Addendum to EPA's Memorandum 1A and must conform with the Railroad Commission of Texas rules and regulations. Each vehicle shall be scheduled for inspection by the Railroad Commission of Texas upon acceptance by the ordering agency.
- 18.10 Registration receipt recording a lien on the vehicle and naming the Texas Department of Transportation, Public Transportation Division as lien holder.

**\*19.0 UNIT BID PRICE:**

Unit bid price, per bus, without options, as specified herein, FOB Fort Bend County, Texas:

19' to 22' Bus 2009 model	\$ <u>N/A</u>
19' to 22' Bus 2010 model	\$ <u>62,753.00</u>
24' to 26' Bus 2009 model	\$ <u>N/A</u>
24' to 26' Bus 2010 model	\$ <u>70,809.00</u>
32' to 37' Bus 2009 model	\$ <u>N/A</u>
32' to 37' Bus 2010 model	\$ <u>N/A</u>

**20.0 OPTIONAL EQUIPMENT FOR 19' TO 22' BUS:**

20.1	Morryde suspension:	\$ <u>875.00</u>
20.2	Wheel inserts:	\$ <u>350.00</u>
20.3	Rear help bumper:	\$ <u>795.00</u>
20.4	Electric powered passenger entry door:	\$ <u>175.00</u>
20.5	Lift platform cover:	\$ <u>175.00</u>
20.6	Remote controlled mirrors:	\$ <u>650.00</u>
20.7	Bilingual signs and decals:	\$ <u>50.00</u>
20.8	Public information system:	\$ <u>475.00</u>
20.9	Stop request chime:	\$ <u>550.00</u>
20.10	Farebox:	\$ <u>2,000.00</u>
20.11	Destination signs:	\$ <u>2,500.00</u>
20.12	Interior ad racks:	\$ <u>425.00</u>
20.13	Ground plane:	\$ <u>105.00</u>
20.14	Driver's storage compartment (common keying):	\$ <u>150.00</u>
20.15	Additional flip up seat (over wheelchair) position:	\$ <u>Included in bid price</u>
20.16	Non-standard paint scheme:	\$ <u>2,000.00 for full body paint</u>
20.17	Boarding chair, secured behind last passenger Seat/lift:	\$ <u>725.00</u>
20.18	Child safety restraint systems:	\$ <u>1,100.00 for double seat</u>

**21.0 OPTIONAL EQUIPMENT FOR 24' TO 26' BUS:**

21.1	Driver's storage compartment (common keying):	\$ <u>N/A with front destination sign</u>
21.2	Additional flip up seat (over wheelchair) position:	\$ <u>Included in bid price</u>

21.3	Non-standard paint scheme:	\$ <u>2,500.00 for full body paint</u>
21.4	Boarding chair, secured behind last passenger Seat/lift:	\$ <u>725.00</u>
21.5	Child safety restraint systems:	\$ <u>1,100.00 per double seat</u>
<b>22.0</b>	<b>OPTIONAL EQUIPMENT FOR 32' TO 37' BUS:</b>	
22.1	Rear position wheelchair lift:	\$ <u>No price difference from front lift</u>
22.2	Retractable seatbelts (below the seat):	\$ <u>225.00 per double seat</u>
22.3	Driver's storage compartment (common keying):	\$ <u>N/A with destination sign</u>
22.4	Additional flip up seat (over wheelchair) position:	\$ <u>Included in bid price</u>
22.5	Non-standard paint scheme:	\$ <u>3,250..00 for full body paint</u>
22.6	Boarding chair, secured behind last passenger Seat/lift:	\$ <u>725.00</u>
22.7	Child safety restraint systems:	\$ <u>1,100.00 for double seat</u>

**Transit Buses  
Bid 10-032**

**Contract Sheet**

**THE STATE OF TEXAS  
COUNTY OF FORT BEND**

This memorandum of agreement made and entered into on the 7<sup>th</sup> day of Januray, 2010, by and between Fort Bend County in the State of Texas (hereinafter designated County), acting herein by County Judge Robert Hebert, by virtue of an order of Fort Bend County Commissioners Court, and National Bus Sales and Leasing, Inc. (hereinafter designated Contractor).  
*(company name)*

**WITNESSETH:**

The Contractor and the County agree that the bid and specifications for the **Transit Buses** which are hereto attached and made a part hereof, together with this instrument and the bond (when required) shall constitute the full agreement and contract between parties and for furnishing the items set out and described; the County agrees to pay the prices stipulated in the accepted bid.

It is further agreed that this contract shall not become binding or effective until signed by the parties hereto and a purchase order authorizing the items desired has been issued.

Executed at Richmond, Texas this 7<sup>th</sup> day of January, 2010.

Fort Bend County, Texas

By: Robert Hebert  
County Judge

By: Ryan Frost  
Signature of Contractor

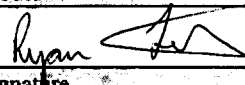
By: Ryan Frost south west sales Representative  
Printed Name and Title

**Domestic Content Worksheet**

(Typical Components of Buses from Appendix B to 49 CFR Sec. 661.11, an itemized component listing from the manufacturer that verifies compliance with the Buy America Provisions may be submitted in lieu of this form)

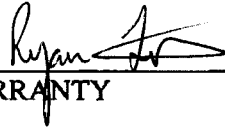
I. Components	% Domestic	X	% Value	Dom. Value
1. engines				
2. transmissions				
3. front axle assemblies				
4. rear axle assemblies				
5. drive shaft assemblies				
6. front suspension assemblies				
7. rear suspension assemblies				
8. air compressor and pneumatic systems				
9. generator, alternator & electrical systems				
10. steering system assemblies				
11. front and rear air brake assemblies				
12. air conditioning compressor assemblies				
13. air conditioning evaporator/condenser assemblies				
14. heating systems.				
15. passenger seats				
16. driver's seat assemblies				
17. window assemblies				
18. entrance and exit door assemblies				
19. door control systems				
20. destination sign assemblies				
21. interior lighting assemblies				
22. front and rear end cap assemblies				
23. front and rear bumper assemblies				
24. specialty steel (structural steel tubing etc.) and aluminum extrusions				
25. aluminum, steel or fiberglass exterior panels and interior trim				
26. flooring and floor coverings				
<b>TOTAL DOMESTIC CONTENT OF COMPONENTS (%)</b>				<b>73</b>

<b>II. Construction Activities</b> (Describe Activities)	
Bus body is constructed on a GM or International chassis	
Location of Construction Activities: Elkhart, Indiana	% OF DOMESTIC CONSTRUCTION ACTIVITIES: 73

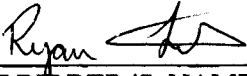
Goshen Coach	Pacer, GCII, Sentinel	2009/2010/2011
Vehicle Manufacturer	Model	Model Year
National Bus Sales and Leasing, Inc		1/5/2010
Vendor Name	Signature	Date

**WARRANTY CERTIFICATION**

The name and address of the Texas servicing dealer nearest the FOB point that will perform the warranty work for the chassis:

FIRM NAME National Bus Sales and Leasing, Inc.	
FIRM ADDRESS 15580 Highway 114 Justin, TX 76247	
FIRM TELEPHONE 817-636-2365	
PRINT BIDDER 'S NAME Ryan Frost	BIDDER 'S SIGNATURE 
NAME OF INDIVIDUAL TO CONTACT FOR WARRANTY Vikki Rinehart	

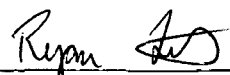
The agency may contact the vendor below for assistance in warranty administration.

FIRM NAME OF BIDDER National Bus Sales and Leasing, Inc.
ADDRESS 15580 Highway 114 Justin, TX 76247
PHONE 817-636-2365
BIDDER 'S SIGNATURE 
PRINT BIDDER 'S NAME Ryan Frost
DATE 1/5/2010

**FMVSS CERTIFICATION - 49 CFR 571 Part D**  
(Circle all applicable standard #s)

#	Title	#	Title
101	#*Controls and Displays	102	#*Transmission shift lever sequence, starter, interlock, transmission braking effect
103	#*Windshield defrost and defogging system	104	#*Windshield wiping and washing system
105	#*Hydraulic brake system	106	#*Brake hoses
107	#*Reflecting surfaces	108	#*Lamps, reflective devices, and assoc. equip.
109	#New pneumatic tires	110	#Tire selection and rims.
111	#*Rearview mirrors	112	#*Headlamps concealment devices.
113	#*Hood latch system	114	#Theft Protection (not for walk-in vans)
115	#*V.I.N. - basic requirements	116	#*Motor vehicle brake fluids
117	#Retreaded pneumatic tires (to be used on rear wheels only)	118	#Power-operated window, partition, roof panel system (GVWR < 10K)
119	*New pneumatic tires for vehicles other than passenger cars	120	*Tire selection & rims for vehicles other than passenger cars
121	*Air brake system	124	#*Accelerator control system
129	#New non-pneumatic tires for passenger cars	201	#@Occupant protection in interior impact
202	#@Head restraints	203	#@Impact protect driver steering control system
204	#*Steering control rearward displace (not walk-in vans)	205	#*Glazing materials
206	#Doors, locks, and door retention components	207	#*Seating system
208	#*Occupant crash protection	209	#*Seat belt assemblies
210	#@Seat belt assembly anchorages	211	#Wheels, nuts, wheel discs, and hub caps
212	#@Windshield mounting	213	#*Child restraint system
214	#@Side impact protection (not walk-in vans)	217	*Bus emergency exits / window retention & release
219	#@Windshield zone intrusion	220	*School Bus rollover protection
301	#@Fuel system integrity (+School Bus >10K GVWR)	302	#*Flammability of interior materials
403	*Wheelchair Securement	404	*Wheelchair Securement

The undersigned BIDDER hereby certifies that all vehicles furnished meet the FMVSS IAW 49 CFR 571.

Name of Company <b>National Bus Sales and Leasing, Inc</b>	Date <b>1/5/2010</b>
Printed Name of Person Signing Form <b>Ryan Frost</b>	Signature 

\*Bus

@Bus with GVWR below 10,000 lbs.

#Passenger Car

**CHANGE FORM / REQUEST FOR APPROVED EQUALS**

<b>PREPARED BY:</b>	<b>DATE:</b>
<b>ADDRESS:</b>	<b>PHONE: (    )</b>
<b>SPEC. #: TXDOT-070-99- _____ (VEHICLE TYPE)</b>	<b>SPEC. DATE:</b>
<b>LOCATION OF REQUEST FOR CHANGE (PAGE, PARAGRAPH #):</b>	
<b>CHANGE REQUESTED</b>	
<b>COMMENTS / REASON FOR CHANGE:</b>	
<b>AGENCY USE ONLY</b>	
<b>REVIEWED BY:</b>	<b>DATE:</b>
<b>ACTION TAKEN:</b>	<b>CONTROL #:</b>
<b>COMMENTS:</b>	<b>(VEH. TYPE) (    )</b>

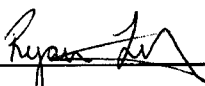
**CERTIFICATION OF RESTRICTIONS ON LOBBYING**

The undersigned certifies, to the best of his or her knowledge and belief, that:

- 1) No Federal appropriated funds have been or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an office or employee of any agency, a Member of Congress, an officer or employee of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- 2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying", in accordance with its instructions.
- 3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance is placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, title 31 U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Executed this 5th day of January, 2010

Company: National Bus Sales and Leasing, Inc.  
Signature:   
Typed Name: Ryan Frost  
Title: Southwest Sales Representative  
Date: 1/5/2010

## Transit References

### Houston Metro

Mike Koepke 713-224-0850  
5700 Eastex Freeway  
Houston, TX 77208

### Capital Metro

Andrew Murphy 512-389-7566  
2910 East 5<sup>th</sup> Street  
Austin, TX 78702

### CARTS

Dave Marsh 512-481-1011  
2010 East 6<sup>th</sup> Street  
Austin, TX 78702

### Concho Valley Council of Governments

Robert Stephens 325-944-9666  
2801 W. Loop 306  
San Angelo, TX 76904

### Central Texas Rural Transit District

J.R. Salazar 325-625-4491  
2310 S. Concho  
Coleman, TX 76834

### Hill Country Transit District

Carole Warlick 325-372-4677  
2509 West Wallace  
San Saba, TX 76877





## Frost, Ryan

---

**From:** Lynch, Karla  
**Sent:** Tuesday, January 05, 2010 11:33 AM  
**To:** Frost, Ryan  
**Subject:** service center closest to Rosenberg

Ryan

They are the closest that service diesel/medium duty

### **Classic Chevrolet Sugar Land**

13115 Southwest Freeway, Sugar Land, TX

(281) 491-9000

[classicchevysugarland.com](http://classicchevysugarland.com)

## Frost, Ryan

---

**From:** Lynch, Karla  
**Sent:** Tuesday, January 05, 2010 11:17 AM  
**To:** Frost, Ryan  
**Subject:** RE: Ft. Bend

Ryan

Here are some ACC service facilities in Houston

Limotech  
6529 Cunningham Rd.  
Houston, TX 77041  
281-531-4204

RPM Automotive  
8614 Beverlyhill St.  
Houston, TX 77063  
713-780-4049

Upland Automotive  
1408 Upland r.  
Houston, TX 77043  
713-464-1424

Control No. 167113



**FRANCHISED MOTOR VEHICLE DEALER**

FRANCHISE NO: A103711

GENERAL DISTINGUISHING NO:

P48666

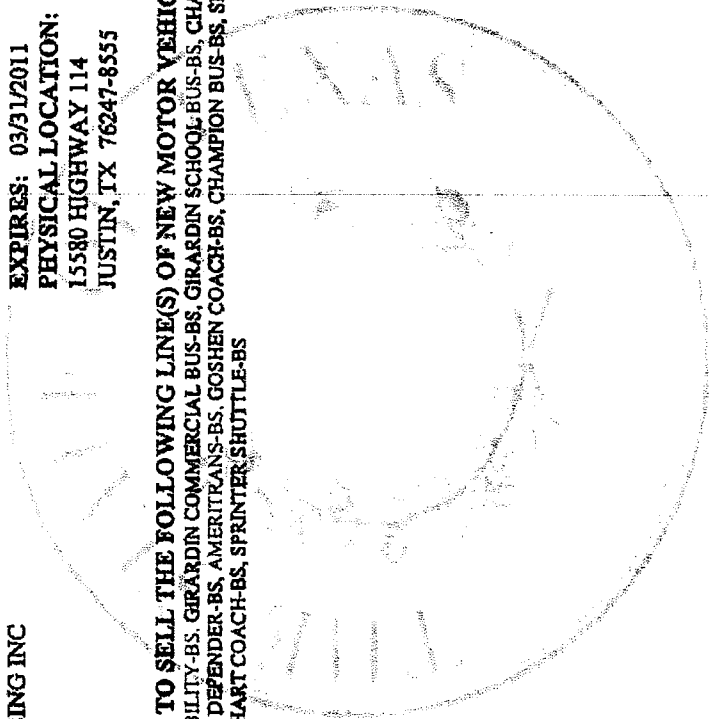
Motor Vehicle Dealer

**MOTOR VEHICLE DIVISION**

NATIONAL BUS SALES AND LEASING INC  
NATIONAL BUS SALES  
PO BOX 6549  
MARIETTA, GA 30065-0549

EXPIRES: 03/31/2011  
PHYSICAL LOCATION:  
15380 HIGHWAY 114  
JUSTIN, TX 76247-8555

**THIS DEALERSHIP IS LICENSED TO SELL THE FOLLOWING LINE(S) OF NEW MOTOR VEHICLES:**  
GLAVAL BUS-BS, STARCRAFT BUS & MOBILITY-BS, GIRARDIN COMMERCIAL BUS-BS, GIRARDIN SCHOOL BUS-BS, CHALLENGER-BS, CRUSADER-BS, CTS FE-BS, CTS RE-BS, DEFENDER-BS, AMERITRANS-BS, GOSHEN COACH-BS, CHAMPION BUS-BS, SPIRIT OF MOBILITY-BS, GENERAL COACH-BS, ELKHART COACH-BS, SPRINTER SHUTTLE-BS  
**ADDITIONAL LOCATION(S):**



HAVING SATISFIED THE APPLICABLE REQUIREMENTS OF CHAPTER 2301 OF THE TEXAS OCCUPATIONS CODE, CHAPTER 503 OF THE TEXAS TRANSPORTATION CODE, AND THE RULES OF THE TRANSPORTATION COMMISSION, THE PERSON NAMED ABOVE IS HEREBY LICENSED WITH THE TEXAS DEPARTMENT OF TRANSPORTATION, MOTOR VEHICLE DIVISION.

*Brett Bray*

BRETT BRAY, Director  
Texas Department of Transportation  
Motor Vehicle Division

PUNISHABLE AS A SECOND-DEGREE FELONY.

**NATIONAL BUS SALES AND LEASING INC  
NATIONAL BUS SALES  
PO Box 6549  
Marietta, GA 30065-0549**

**License:** A103711  
**License Type:** Franchise  
**Business:** NATIONAL BUS SALES AND  
LEASING INC

**General Distinguishing Number:**  
P48666 Motor Vehicle Dealer

**Plates:**

P43067  
No Plates Ordered  
P48666  
No Plates Ordered

**Stickers:**

P43067  
No Stickers Ordered  
P48666  
No Stickers Ordered

Control No. 155035

**MANUFACTURER REPRESENTATIVE**

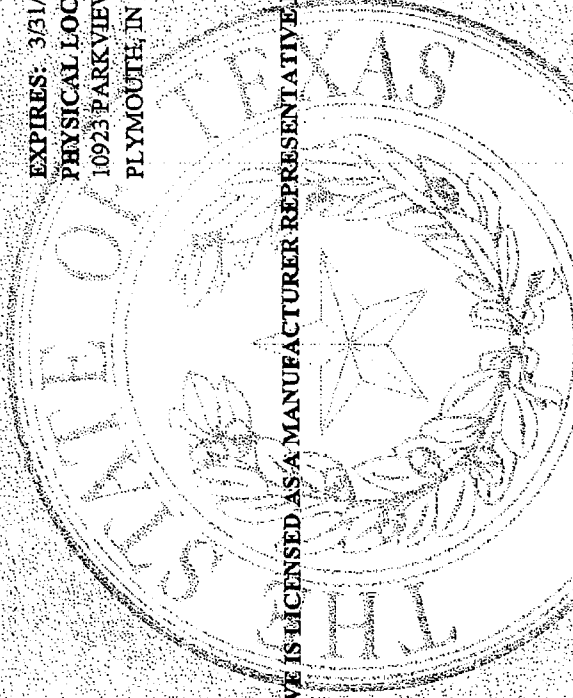
REPRESENTATIVE LICENSE NO: 107403

EXPIRES: 3/31/2010  
PHYSICAL LOCATION:  
10923 PARKVIEW CT  
PLYMOUTH, IN 46563-9390



**MOTOR VEHICLE DIVISION**

TROY SNYDER  
25161 LEER DR  
ELKHART, IN 46514-5426



THE PERSON NAMED ABOVE IS LICENSED AS A MANUFACTURER REPRESENTATIVE FOR:

GC BUS ACQUISITION CORP

HAVING SATISFIED THE APPLICABLE REQUIREMENTS OF CHAPTER 2301 OF THE TEXAS OCCUPATIONS CODE, CHAPTER 503 OF THE TEXAS TRANSPORTATION CODE, AND THE RULES OF THE TRANSPORTATION COMMISSION, THE PERSON NAMED ABOVE IS HEREBY LICENSED WITH THE TEXAS DEPARTMENT OF TRANSPORTATION, MOTOR VEHICLE DIVISION.

*Brett Bray*

**BRETT BRAY, Director**  
Texas Department of Transportation  
Motor Vehicle Division

WARNING: PENAL CODE SECTION 37.10, PROVIDES THAT TAMPERING WITH A GOVERNMENTAL RECORD IS AN OFFENSE PUNISHABLE AS A SECOND-DEGREE FELONY.

4-LES DEPT.

acer II

**STURAA TEST**

**4 YEAR**

**100,000 MILE BUS**

**from**

**GOSHEN COACH,  
DIVISION OF WARRICK INDUSTRIES, INC.**

**MODEL BUS/BA**

**MARCH 2000**

**PTI-BT-R9923-03-00**

**PENNSSTATE**



**The Pennsylvania Transportation Institute**

201 Research Office Building (814) 865-1891  
The Pennsylvania State University  
University Park, PA 16802

**Bus Testing and Research Center**

6th Avenue and 45th Street (814) 949-7944  
Altoona, PA 16602

# TABLE OF CONTENTS

	<u>Page</u>
EXECUTIVE SUMMARY .....	3
ABBREVIATIONS .....	5
BUS CHECK-IN .....	6
1. MAINTAINABILITY	
1.1 ACCESSIBILITY OF COMPONENTS AND SUBSYSTEMS .....	17
1.2 SERVICING, PREVENTATIVE MAINTENANCE, AND REPAIR AND MAINTENANCE DURING TESTING .....	20
1.3 REPLACEMENT AND/OR REPAIR OF SELECTED SUBSYSTEMS .....	24
2. RELIABILITY - DOCUMENTATION OF BREAKDOWN AND REPAIR TIMES DURING TESTING .....	28
3. SAFETY - A DOUBLE-LANE CHANGE (OBSTACLE AVOIDANCE TEST) .....	31
4. PERFORMANCE - AN ACCELERATION, GRADEABILITY, AND TOP SPEED TEST .....	34
5. STRUCTURAL INTEGRITY	
5.1 STRUCTURAL STRENGTH AND DISTORTION TESTS - STRUCTURAL SHAKEDOWN TEST .....	38
5.2 STRUCTURAL STRENGTH AND DISTORTION TESTS - STRUCTURAL DISTORTION .....	41
5.3 STRUCTURAL STRENGTH AND DISTORTION TESTS - STATIC TOWING TEST .....	53
5.4 STRUCTURAL STRENGTH AND DISTORTION TESTS - DYNAMIC TOWING TEST .....	54
5.5 STRUCTURAL STRENGTH AND DISTORTION TESTS - JACKING TEST .....	57
5.6 STRUCTURAL STRENGTH AND DISTORTION TESTS - HOISTING TEST .....	59
5.7 STRUCTURAL DURABILITY TEST .....	61
6. FUEL ECONOMY TEST - A FUEL CONSUMPTION TEST USING AN APPROPRIATE OPERATING CYCLE .....	67
7. NOISE	
7.1 INTERIOR NOISE AND VIBRATION TESTS .....	82
7.2 EXTERIOR NOISE TESTS .....	87

## EXECUTIVE SUMMARY

Goshen Coach, Division of Warrick Industries, Inc., submitted a model Bus/BA, diesel powered 14 seat/21-foot bus, for a 4 year/100,000 mile STURAA test. The odometer reading at the time of delivery was 4,364 miles. Testing started on December 6, 1999, and was completed on March 24, 2000. The Check-In section of the report provides a description of the bus and specifies its major components.

The primary part of the test program is the Structural Durability Test, which also provides the information for the Maintainability and Reliability results. The Structural Durability Test started on February 1, 2000 and was completed on February 29, 2000.

The interior of the bus is configured with seating for 14 passengers including the driver. Additionally, free floor space will accommodate 10 standing passengers resulting in a potential load of 24 persons. At 150 lbs per person, this load results in a total vehicle weight of 11,800 lbs and exceeds the GAWR of the rear axle (7,500 lbs). In order to avoid exceeding the axle weight rating, ballast simulating 8 standing passengers (1,200 lbs) was removed. Elimination of the 8 standing passenger positions resulted in an adjusted gross vehicle weight of 10,600 lbs. The adjusted weight was used for the GVWR segment of the Structural Durability Test. The SLW segment of the test was performed at 10,320 lbs and the final segment of the test was performed at a CW of 8,210 lbs. Durability driving resulted in several failures that required unscheduled maintenance. A description of failures, and a complete and detailed listing of scheduled and unscheduled maintenance, is provided in the Maintainability section of this report.

The components covered in Section 1.3 (Repair and/or Replacement of Selected Subsystems) were found to be readily accessible and no restrictions were noted. Accessibility issues were encountered in accessing the A/C compressor, the fuel filter and the engine belts.

The Reliability Section compiles failures that occurred during structural durability testing. Breakdowns are classified according to subsystems. The data in this section are arranged so that those subsystems with more frequent problems are apparent. Also the problems are listed by class as defined in Section 2. The test bus encountered no Class 1 or Class 2 failures. Of the two reported failures, one was a Class 3 and one was a Class 4.

The Safety Test, a double-lane change maneuver was safely performed in both right-hand and left-hand directions up to a maximum test speed of 45 mph. The performance of the bus is illustrated by a speed vs. time plot. Acceleration and gradeability test data are provided in Section 4, Performance. The average time to obtain 50 mph was 14.25 seconds.

The Shakedown Test produced a maximum final loaded deflection of 0.122 inches under a distributed static load of 9,000 lbs. The test resulted in essentially no permanent deflection of the structure. The Distortion Test was completed with all subsystems, doors and escape mechanism operating properly. No water leakage

was not performed. The Dynamic Towing Test was performed using a front lift tow. The towing interface was accomplished by chaining to the front axle. A rubber cushion was inserted between the tow chains and the front bumper to provide protection. The bus was towed without incident and no damage resulted from the test. The manufacturer does not recommend towing the bus from the rear, therefore a rear test was not performed. The Jacking and Hoisting Tests were performed without incident. The bus was found to be stable on the jack stands and the minimum jacking clearance, measured with a tire deflated, was 9.0 inches.

A Fuel Economy Test was run on simulated central business district, arterial, and commuter courses. The results were 5.63 mpg, 6.58 mpg, and 10.95 mpg respectively; with an overall average of 6.86 mpg.

A series of Interior and Exterior Noise Tests was performed. This data is listed in Section 7.1 and 7.2 respectively.

**STURAA TEST**  
**4 YEAR**  
**100,000 MILE BUS**  
**from**  
**GOSHEN COACH**  
**MODEL GCC 2793-1093-F**

**MARCH 1994**  
**PTI-BT-R9322-94**

**PENNSSTATE**



---

**The Pennsylvania Transportation Institute**

201 Research Office Building  
The Pennsylvania State University  
University Park, PA 16802

(814) 865-1891

**Bus Testing and Research Center**

6th Avenue and 45th Street  
Altoona, PA 16602

(814) 949-7944

## EXECUTIVE SUMMARY

The New Goshen Coach Division of Warrick Industries Inc. submitted a model GCC 2793-1093-F, diesel powered 25-foot 8-inch, 4 yr/100,000 mile bus for STURAA testing. The testing started on November 15, 1993, and was completed on March 18, 1994. The Check-In section of the report provides a description of the bus and specifies its major components.

The primary part of the test program is the Structural Durability Test, which also provides the information for the Maintainability and Reliability results. The Structural Durability Test was started on November 24, 1993 and completed on January 17, 1994.

The first segment of the Structural Durability Test was performed with the bus loaded to a gross vehicle weight of 13,150 lb. The number of standing passengers was reduced from 12 to 2. This reduction in passenger weight was necessary to avoid exceeding the GAWR (9,300 lbs.) of the rear axle. The middle segment was performed at a seated load weight of 12,750 lb., and the final segment was performed at a curb weight of 9,775 lb. The durability driving resulted in unscheduled maintenance that consisted of a variety of subsystem failures. These unscheduled maintenance breakdowns can be found in a complete and detailed listing of scheduled and unscheduled maintenance, which is provided in the Maintainability section of this report.

Accessibility, in general, was adequate. Of the components covered in section 1.3 (Repair and/or Replacement of Selected Subsystems), space to remove the driver's side battery is limited, removal of the air cleaner inlet duct allows for greater ease in removal of the alternator, and a protective fiberglass panel must be removed to access the starter. Other restrictions encountered during testing included limited access space to the fuel filter and glow plugs, and a long neck funnel is required to fill the power steering reservoir.

The Reliability Section compiles failures that occurred during Structural Durability Testing. Unscheduled breakdowns are classified according to subsystems. The data in this section are arranged so that those subsystems with more frequent problems are apparent. The problems also are listed by class as defined in section 2.

A Double-Lane Change (obstacle avoidance) Test was safely performed in both right-hand and left-hand directions up to a maximum test speed of 45 mph. The performance of the bus is illustrated by a speed vs. time plot. Acceleration and Gradeability Test data are provided in section 4, Performance.

The Shakedown Test produced a maximum final deflection of 0.775 inches with a permanent deflection ranging between -0.012 to 0.239 inches under a distributed static load of 11,625 lb. The Distortion Test was completed with water leaks observed at the second and fourth windows on both sides, the fifth window on the left side, the rear window, and the rear emergency door. During the Distortion Test, the wheelchair lift was difficult to operate in three positions due to temporary deformation of the door frame. The NEM submitted for testing was not equipped with any type of tow eyes or tow hooks; therefore the Static Tow Test was not performed. The Dynamic Towing Test was performed with no deformation or damage noted. No problems were encountered during the front lift tow. The manufacturer does not recommend towing the bus from the rear. The Jacking and Hoisting Tests were also performed without incident. The bus was found to be stable on the jack stands, and the minimum jacking clearance observed with a tire deflated was 8.50 inches.

arterial, and commuter courses. The results were 6.64 mpg, 7.54 mpg, and 13.71 mpg respectively; with an overall average of 8.11 mpg.

A series of Interior and Exterior Noise Tests was performed. These data are listed in section 7.1 and 7.2 respectively.



## **Federal Transit Administration**

### **49 CFR Part 661 Buy America Requirements**

#### **Description of Final Assembly Operations**

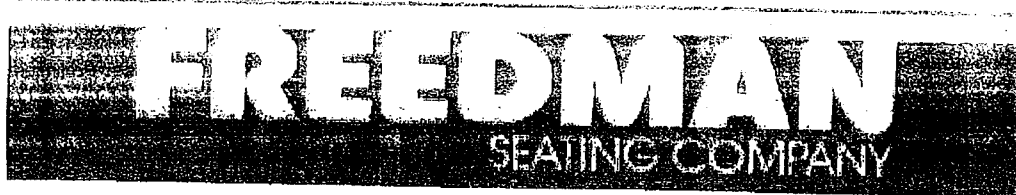
Goshen Coach fabricates all the structural elements of the bus, other than the chassis, and installs them onto a commercially produced heavy-duty chassis. The bus body is fabricated by welding structural steel members together to form floor, walls, and roof sub assemblies. These sub assemblies are then vacuum laminated to form the basic components of a steel cage. The laminated components are then welded together to form the steel cage bus body.

The heating and air conditioning components for the bus are installed as part of the final assembly process. All the wiring harnesses and electrical components are installed as well as the passenger seats, passenger grab rails, wheelchair lifts, and destination signs (if specified).

All buses are road tested and inspected for compliance to specifications prior to delivery.

#### **Final Assembly Location**

All bus assembly operations will take place in Elkhart, Indiana at the address shown below.



December 19, 2005

Goshen Coach, Inc.  
25161 Leer Drive  
Elkhart, IN 46514

To whom it may concern,

This letter does hereby certify that at least 60 % of the cost of the components supplied to Goshen Coach, Inc., in support of the manufacture of buses, is of domestic (U.S) origin. As defined under the Buy America Requirement: Final Rule, 49 CFR part 661.11, cost includes the cost of labor, material, allowance for profit, and the administrative and overhead cost attributable to those components under normal accounting principles. The location of the final assembly is Chicago, IL.

Sincerely,

A handwritten signature in black ink, appearing to read "Dari Cohen".

Dari Cohen  
VP Sales & Mktg.

Certificate of Registration



This is to certify that the Quality Management System of:

Goshen Coach - A Thor Company  
25161 Leer Drive  
Elkhart, IN 46514

Applicable to:

Design and Manufacture of small to mid-size passenger buses and para-transit vehicles.

has been assessed and approved by  
National Quality Assurance, U.S.A., against the provisions of:

ISO 9001:2000

*K M Beard*

For and on behalf  
of NQA, USA, Acton, MA 01720

Certificate Number 12080  
EAC Code 22  
First Issued June 14, 2001  
Valid until June 14, 2010  
Reissued June 11, 2007



This approval is subject to the company maintaining its system to the required standard, which will be monitored by NQA, USA, an accredited organization under the ANSI-ASQ National Accreditation Board.

VEHICLE TEST REPORT  
FMVSS/CMVSS #220  
SCHOOL BUS ROLLOVER PROTECTION  
(CFR 49, PART 571, SECTION 220 / MYSR #220)

TEST VEHICLE

NEW GOSHEN COACH TRANSIT BUS  
OCC 176" W8/298" HDY  
FORD DOONLINE 3-350 RV CUTAWAY

TEST DATE

SEPT. 3, 1993

TEST PERFORMED FOR

NEW GOSHEN COACH  
DIVISION OF WARRICK INDUSTRIES, INC.  
1809 WEST HIVELY  
ELKHART, INDIANA 46517  
(219) 295-3500

TEST CONDUCTED BY

NEW GOSHEN COACH ENGINEERING AND R & D STAFF  
IN CONJUNCTION WITH JYNGER ENGINEERING SERVICES

JYNGER MARKETING AND ENGINEERING, INC.  
200 SAYEROCK DRIVE  
GOSHEN, INDIANA 46526  
(219) 535-2636

COMPLIANCE STATEMENT

This vehicle has been tested in accordance with the requirements of the following regulations: Federal Vehicle Safety Standard number 220, as published in the Code of Federal Regulations (CFR) 49, Part 571, Section 220, revised as of October 1, 1991. Canada Motor Vehicle Safety Standard number 220, as published in the Consolidation of the Motor Vehicle Safety Regulations, revised as of April 1, 1990.

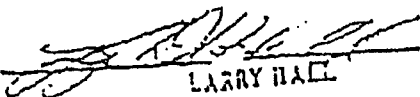
SUMMARY OF RESULTS

ROOF/BODY STRUCTURE: The roof and body structure of this vehicle is adequate to meet the requirements of the standard.

EXIT OPERATION: All Doors, Windows, and Emergency Exits were verified functional, prior to roof load application, under full load, and after test load was removed as required by the standard.

APPROVALS

PROJECT  
ENGINEER:

  
LARRY HALL

CONSULTING  
ENGINEER:



# FMVSS 220

## SCHOOL BUS ROLLOVER TEST

### 1. TITLE

Evaluation of roof assembly of a Warrick van with fiberglass raised top when loaded as described in the Federal Motor Vehicle Safety Standard #220.

### 2. OBJECTIVE

To apply a load to the vehicle's roof system in accordance with the aforementioned safety standard.

The test results pertain only to the designated test specimen furnished for testing.

### 3. MANUFACTURER

A. Name - Warrick Industries  
B. Address - 1110 D.I. Drive  
Elkhart, IN 46514

### 4. TESTING ORGANIZATION

Progressive Engineering, Inc.  
58640 State Road 15  
Goshen, IN 46526

### 5. TESTING PERSONNEL

Test Engineer - Evor F. Johns, P.E.  
Progressive Technician - Chris Jeter, E.I.T.  
Warrick Technician - Mark Barczak

### 6. TEST SPECIMEN

The test was conducted on a "GCII" Ford cutaway unit no. 6945 and has a vehicle identification number of 1FDLE40FSVHA49936.

7. TEST INFORMATION.

The vehicle was loaded with concrete load units applied to an application plate located on the roof structure.

Maximum unit unloaded weight            9,420 lbs.

Load requirement      9,420 lbs. x (1.5) = 14,130 lbs.

The platen was located 6" past the rear wall structure and 6" from the tangent point of the radiused front cap. See attached charts for results.

Forward from the vertical plane of the top of the front window.

8. PROCEDURE

The vehicle platen weight was calculated and concrete load units were weighed on a certified scale. The frame was blocked to assure no body movement. The roof was loaded, deflection values were taken at approximately 1.75 ton load increments until the designated load was reached (1.5 x GVW). All exits were activated, vehicle was then unloaded and the exits were activated again.

9. TEST RESULTS

Ultimate load reached      -      14,148 lbs.

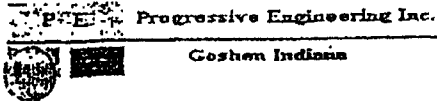
Required load                      -      14,130 lbs.

Warrick's Bus Roof assembly did have adequate structure to reach the required load and still operate the exit locations as required by FMVSS 220 - S4. Test data is recorded on the attached data sheets.



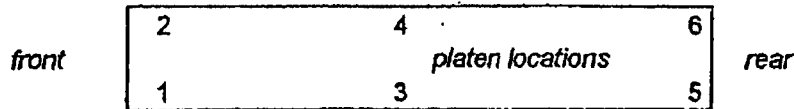
*Evor F. Johns*  
4/14/97

Busroof2



Roof crush test  
Narrick Ind

Project No.: 97-716  
By: CJ Date : 04/14/97  
\* base point

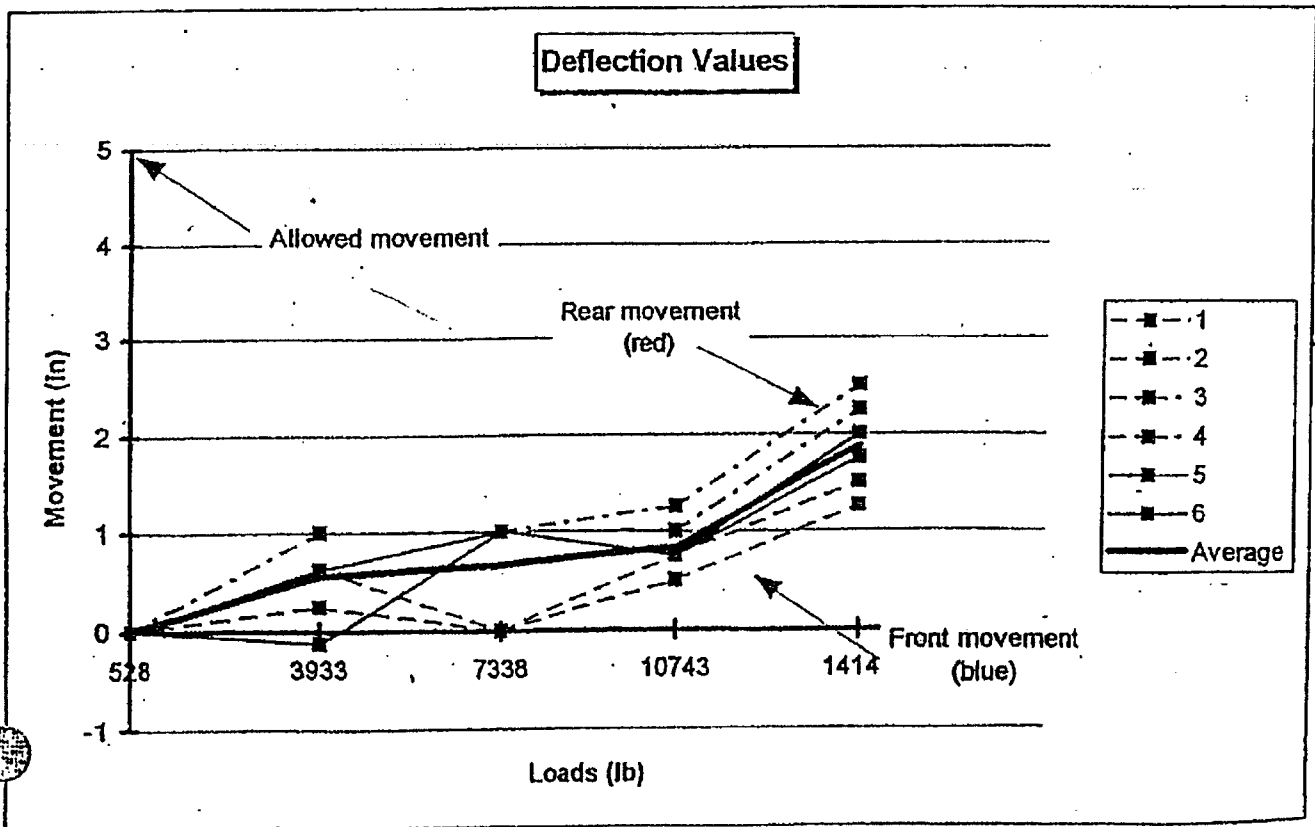


Load	1	2	3	4	5	6	Base	
528	528	16	16.25	14.75	15	13.5	13.75	12.5
3405	3933	16.375	16.25	15.5	15.75	13.875	13.125	12.25
3405	7338	15.5	15.75	15.25	15.5	14	14.25	12
3405	10743	16.25	16.25	15.5	15.5	13.75	14	12
3405	14148	17	17	16.75	16.75	15	15	12

Load	1	2	3	4	5	6	Average
528	0	0	0	0	0	0	0
3933	0.625	0.25	1	1	0.625	-0.125	0.5625
7338	0	0	1	1	1	1	0.666667
10743	0.75	0.5	1.25	1	0.75	0.75	0.833333
14148	1.5	1.25	2.5	2.25	2	1.75	1.875

Deformatic  
(inches)  
1/8 in. toleranc

Average = 1.88 in.





**PROGRESSIVE ENGINEERING, INC.**  
Architectural -- Engineering -- Review Agency -- Surveying -- Testing



58640 STATE ROAD 15  
GOSHEN, INDIANA 46526  
Telephone (219) 533-0337  
Fax (219) 533-9736

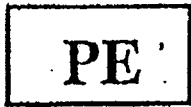
**WARRICK INDUSTRIES**

**FMVSS 221 Test on Aluminum  
Body Panel Joints**

**7/15/96**

This test report contains nine (9) pages, including the cover sheet. Any additions to, alterations of, or unauthorized use of excerpts from this report are expressly forbidden.

96-1208



PROGRESSIVE ENGINEERING, INC.  
Architectural - Engineering - Review Agency - Surveying - Testing



58640 STATE ROAD 15  
COSHEN, INDIANA 46526  
Telephone (219) 533-0337  
Fax (219) 533-9736

---

---

# TRANSMITTAL

---

Date: 07/17/96.

To: Chris Christophersen

Address: Warrick Industries

1809 W. Hively

Elkhart, IN 46517

From: Steve Maierle

Re: FMVSS221 Test Results

Project #: 96-1208, 96-896

---

Message: Enclosed please find the report for project #96-1208, the aluminum panel joint that passed. Also enclosed is a revised drawing for project #96-896 (b).

Sincerely,

Steve Maierle

original

1. TITLE

FMVSS 221 School Bus Body Joint Strength Test.

2. TESTED FOR

A. Name - Warrick Industries  
B. Address - 1809 W. Hively  
Elkhart, IN 46517

3. TESTING ORGANIZATION

Progressive Engineering, Inc.  
58640 State Road 15  
Goshen, IN 46526

4. TESTING PERSONNEL

Test Engineer - Ned C. Myers, P.E.  
Technician - Kirby Elliott

5. TEST SPECIMEN

A. The material test samples were pieces of 0.40" Aluminum.

B. The panel joints were connected with 12 grams/ft<sup>2</sup> Stabond moisture-cured urethane adhesive to sandwich panels constructed of 2.7 mm luan, 1" expanded polystyrene and 2.7 mm luan. See attached drawings for details.

6. TEST INFORMATION

The samples were tested with a Tinius Olsen machine. Opposite ends of the test samples were attached to the test frame with glued clamps and chain. See the attached drawings for details.

7. TEST PROCEDURE

A tensile load was applied to the samples by separating the heads of the Tinius Olsen machine at a rate of 1/8" per minute until an ultimate load was reached.

8. TEST REQUIREMENTS

The panel joint shall be capable of holding the body panel to the member to which it is joined, when subjected to a force of 60% of the tensile strength of the weakest joined body panel.

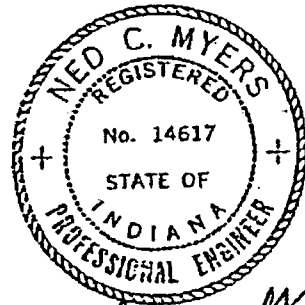
9. TEST RESULTS

A. The average tensile strength for the aluminum body panels tested was 993.4 PLI.

B. The average aluminum panel joint strength tested was 607.5 PLI which is about 61% of the aluminum body panel strength.

10. CONCLUSION

The aluminum body panel was capable of holding at least 60% of the body panel tensile strength as required in FMVSS 221.



*Ned C. Myers*  
7/10/96

PROGRESSIVE ENGINEERING, Inc.

FMVSS 221 TEST

BODY PANEL TEST

Date: 7/15/96

Material: 0.04" Aluminum

sample No.	Load reached	measured width (in.)	Pounds per Linear Inch
1	7320 Lbs.	6.985	1048.0
2	6340 Lbs.	6.947	912.6
3	7100 Lbs.	6.963	1019.7

AVERAGE 993.4 P.L.I.

Panels failed at narrow section, approximately perpendicular to line of action of tensile force.

BODY PANEL JOINT TEST

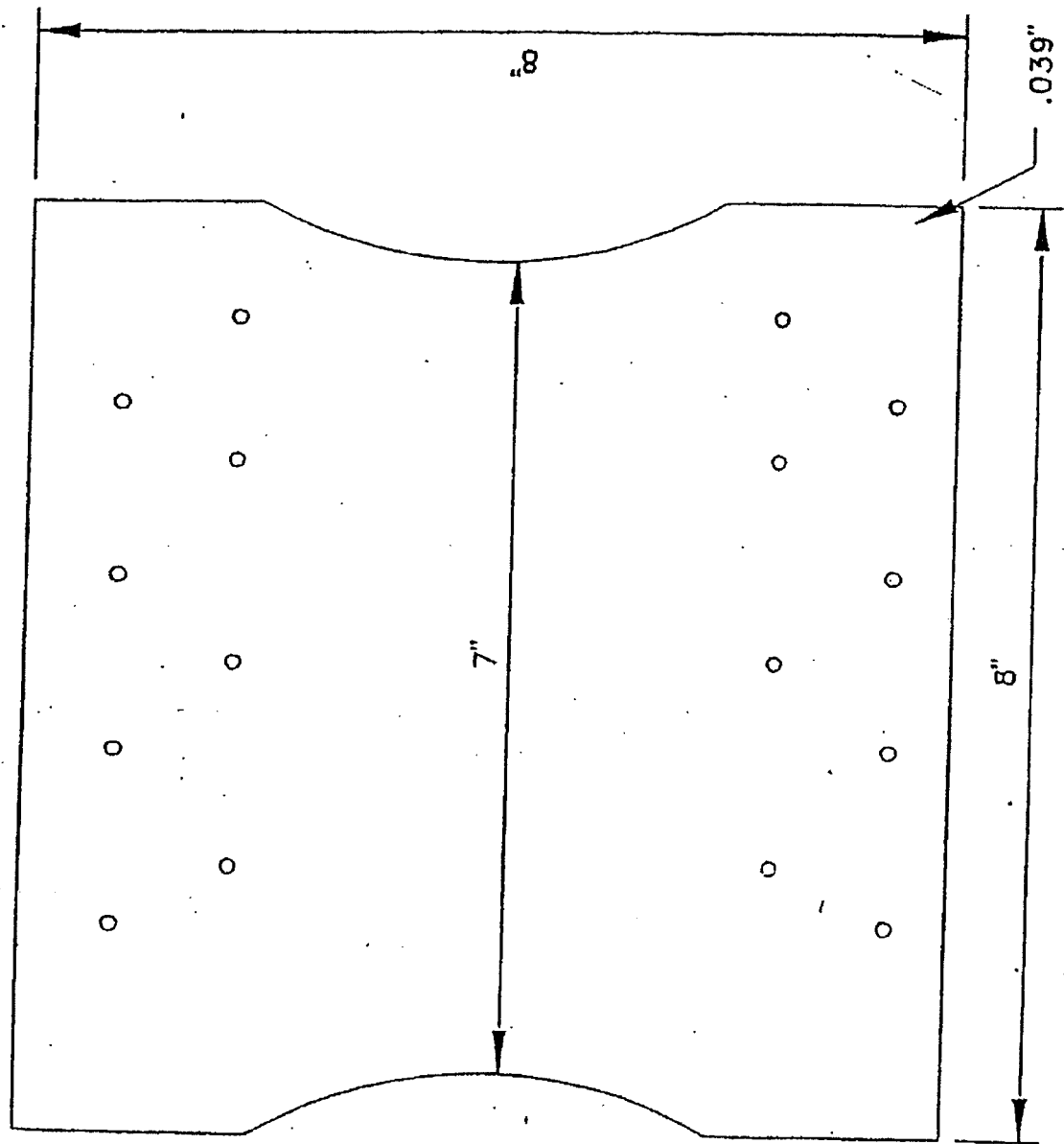
Date: 7/15/96

Material: 0.04" Aluminum glued & laminated to luan and styrofoam

sample No.	Load reached	measured width (in.)	Pounds per Linear Inch
1	5640 Lbs.	8.022	703.1
2	3600 Lbs.	7.928	454.1
3	5340 Lbs.	8.027	665.3

AVERAGE 607.5 P.L.I.

Joint samples 1 and 3 broke the aluminum panel where clamps were attached. The adhesive used at the aluminum overlap failed on sample 2, causing luan to pull apart also.



THIS DRAWING IS A PART OF TEST REPORT NO. 96-1208

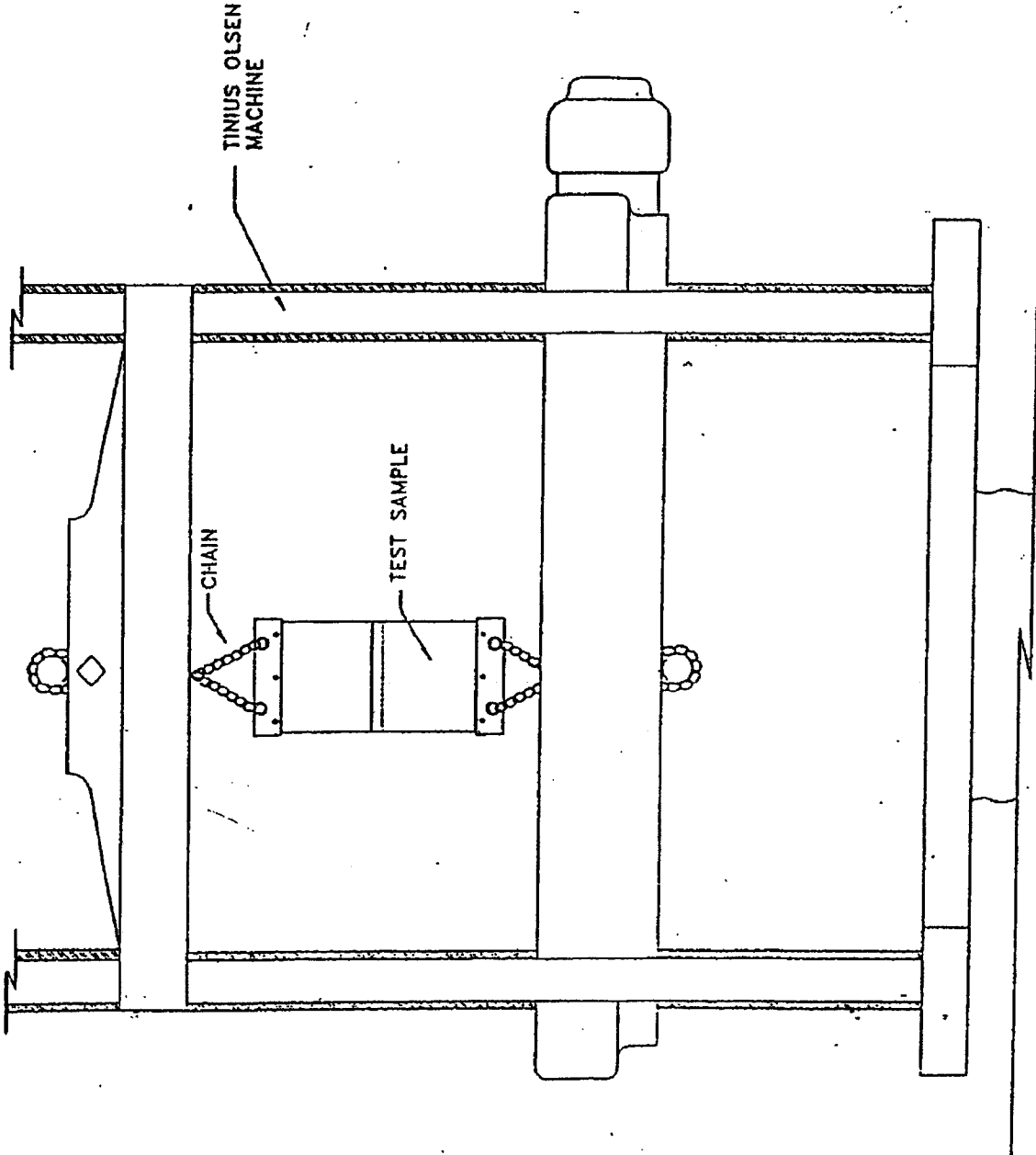



PROGRESSIVE ENGINEERING, INC.  
TESTING LABORATORY

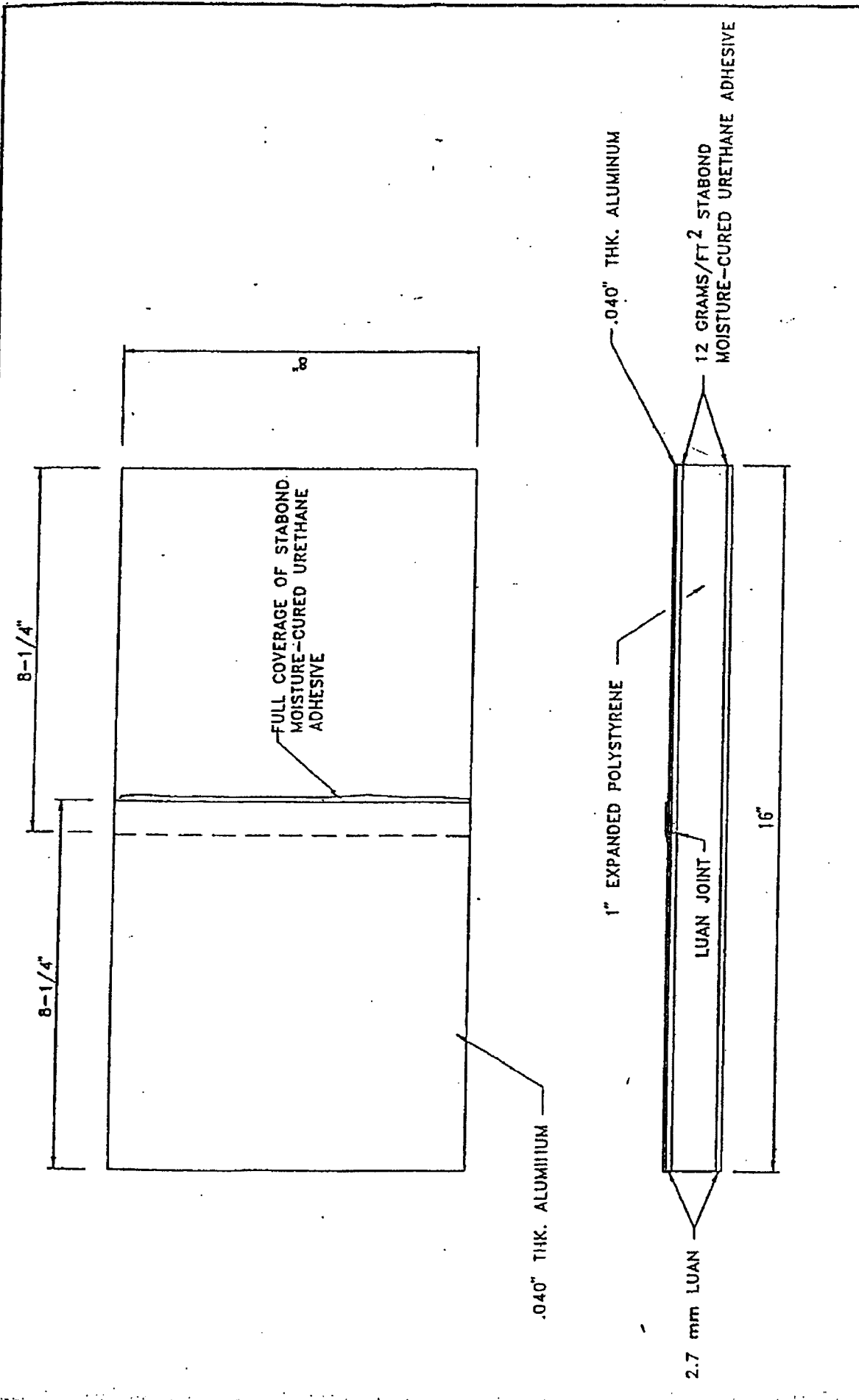
50040 State Road 15  
COSTER, INDIANA 46520  
Telephone (317) 533-0337

This drawing and all information  
contained herein is the property  
of PROGRESSIVE ENGINEERING, INC.  
and is not to be reproduced without  
the written permission of  
PROGRESSIVE ENGINEERING, INC.  
PROGRESSIVE ENGINEERING, INC.  
assumes no responsibility for  
unauthorized use of this drawing.

DRW. BY: M. MORRIS	REVISED BY:	DATE:	TITLE:
7/16/96		7/16/96	WARRICK INDUSTRIES
SCALE: 1"=1"			BODY PANEL
JOB NO. 96-1208			
DWG. NO. B1			



		PROGRESSIVE ENGINEERING, INC. Testing Laboratory
THIS DRAWING AND ALL INFORMATION CONTAINED HEREIN IS THE PROPERTY OF PROGRESSIVE ENGINEERING, INC. IT IS TO BE USED ONLY FOR THE PROJECT AND FOR THE PURPOSES SPECIFIED THEREIN. NO REPRODUCTION OR TRANSMISSION IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, IS PERMITTED WITHOUT THE WRITTEN PERMISSION OF PROGRESSIVE ENGINEERING, INC. PROGRESSIVE ENGINEERING, INC. ASSUMES NO LIABILITY FOR UNAUTHORIZED USE OF THIS DRAWING.		
DRW. BY: H. PETTIT	DATE: 1/31/94	TITLE:
SCALE: 2" = 12"	DRAWING NUMBER:	
TITLE:	DRAWING NUMBER:	



THIS DRAWING IS A PART OF TEST REPORT NO. 96-896

This drawing and all information contained herein is the property of Progressive Engineering, Inc. and is not to be reproduced without the written permission of Progressive Engineering, Inc. Progressive Engineering, Inc. assumes no responsibility for unauthorized use of this drawing.

DRW. BY H. PENN	REVISED ON	CHECKED
DATE 5/5/86		WARRICK INDUSTRIES
SCALE 6"=12"		ALUMINUM JOINT
JOB NO. 96-896		
DRW. NO. B6		

**PE**

**PROGRESSIVE ENGINEERING, INC.  
TESTING LABORATORY**

60040 State Road 13  
COSTICK, INDIANA 46520  
Telephone (219) 533-0337

**PE**

**PROGRESSIVE ENGINEERING, INC.**  
Architectural -- Engineering -- Review Agency -- Surveying -- Testing

---



58640 STATE ROAD 15  
GOSHEN, INDIANA 46526  
Telephone (219) 533-0337  
Fax (219) 533-9736

**GOSHEN COACH**  
Division of Warrick Industries

**Seat Base and Seat Belt Anchorage Test  
on an Automotive Type Seat**

12/22/97

This test report contains eleven (11) pages, including the cover sheet. Any additions to, alterations of, or unauthorized use of excerpts from this report are expressly forbidden.

97-2780

### SEAT BELT ANCHORAGE TEST

1. TITLE

Seating system test per the Federal Motor Vehicle Safety Standard Number 207 Section S4.2(c) in combination with seat belt anchorage test per the Federal Motor Vehicle Safety Standard Number 210 Section S4.2 and S5.2

2. OBJECTIVE

To test seat pedestal with seat frame attached in combination with the Type I seat belt anchorage test per the aforementioned safety standards.

The test results pertain only to the designated test specimen furnished for testing. The manufacturer is responsible for certification of the manufactured product.

3. MANUFACTURER

- A. Name - Goshen Coach, Div. of Warrick Industries
- B. Address - 1110 D I Drive  
Elkhart, IN 46514

4. TESTING ORGANIZATION

Progressive Engineering, Inc.  
58640 State Road 15  
Goshen, IN 46526

5. TESTING PERSONNEL

- Test Engineer - Nadim Missaghian, P.Eng.
- Technician - Mark Barczak, Goshen Coach
- Technician - Scott Schlemmer, Goshen Coach

6. TEST SPECIMEN

The test was conducted on an automotive chair with two (2) seating positions on a steel base supplied by the manufacturer. Slides were also used to simulate an actual installation. See attached drawings for details.

## 7. TEST INFORMATION

A. The floor was rigidly attached in a non-yielding restraining fixture. Three (3) 3/8" - 24 (Grade 8) hex head bolts were used to attach the base to the floor and the side to the wall for both the FMVSS 207 and the FMVSS 210 portions of the test.

B. Seat belts were fastened at the seat belt attachment points with 3/8" diameter (Grade 8) bolts, to restrain the pelvic body block. A strap was attached to the seat base at the center of gravity for the FMVSS 207 portion of the test. See attached drawings for details.

## 8. PROCEDURE

A. The loads were generated using three (3) 4" diameter x 24" stroke hydraulic rams, one attached to each pelvic block and one attached at the center of gravity of the seat frame. The loads were applied to the seat and seat belt anchors through the body blocks, and the seat frame. The applied forces were measured with calibrated test gauges. A permanent record of the forces was recorded on the attached data sheet.

B. The loads were generated by applying hydraulic pressure to create mechanical force until the required load was indicated on test gauges. No attempt was made to subject the test specimen to dynamic loads.

## 9. TEST REQUIREMENTS

### FMVSS - 210

### REQUIREMENTS

Type I belt anchor loads

5,000 lbs. per seating position

Set-up Angle

5-15 Degrees

Maximum time to reach load

30 sec.

Minimum time at load

10 sec.

### FMVSS - 207

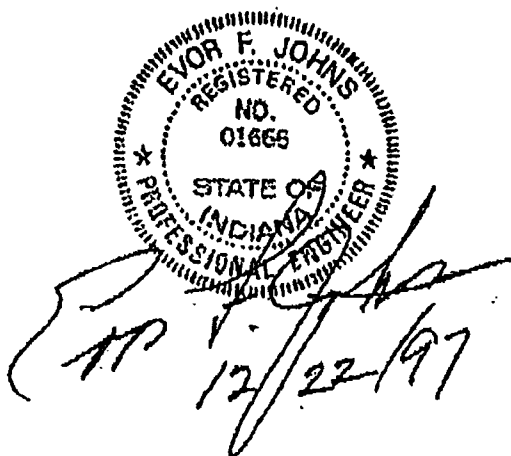
Measured seat weight 45 lbs.

Load applied to seat and base at center of gravity of the assembly:  
20 x 45 lbs. = 900 lbs.

Measured center of gravity = 14" up from floor.

10. TEST RESULTS

The automotive type seat and steel base did have adequate securement and structure to reach and sustain the test loads as required in FMVSS 207 and FMVSS 210 in the test fixture. This test also covers the connection of the base to the vehicle's floor. Test data is reported on the attached data sheet.



EVOR F. JOHNS  
REGISTERED  
NO.  
01665  
STATE OF  
INDIANA  
PROFESSIONAL ENGINEER

EP  
12/22/97

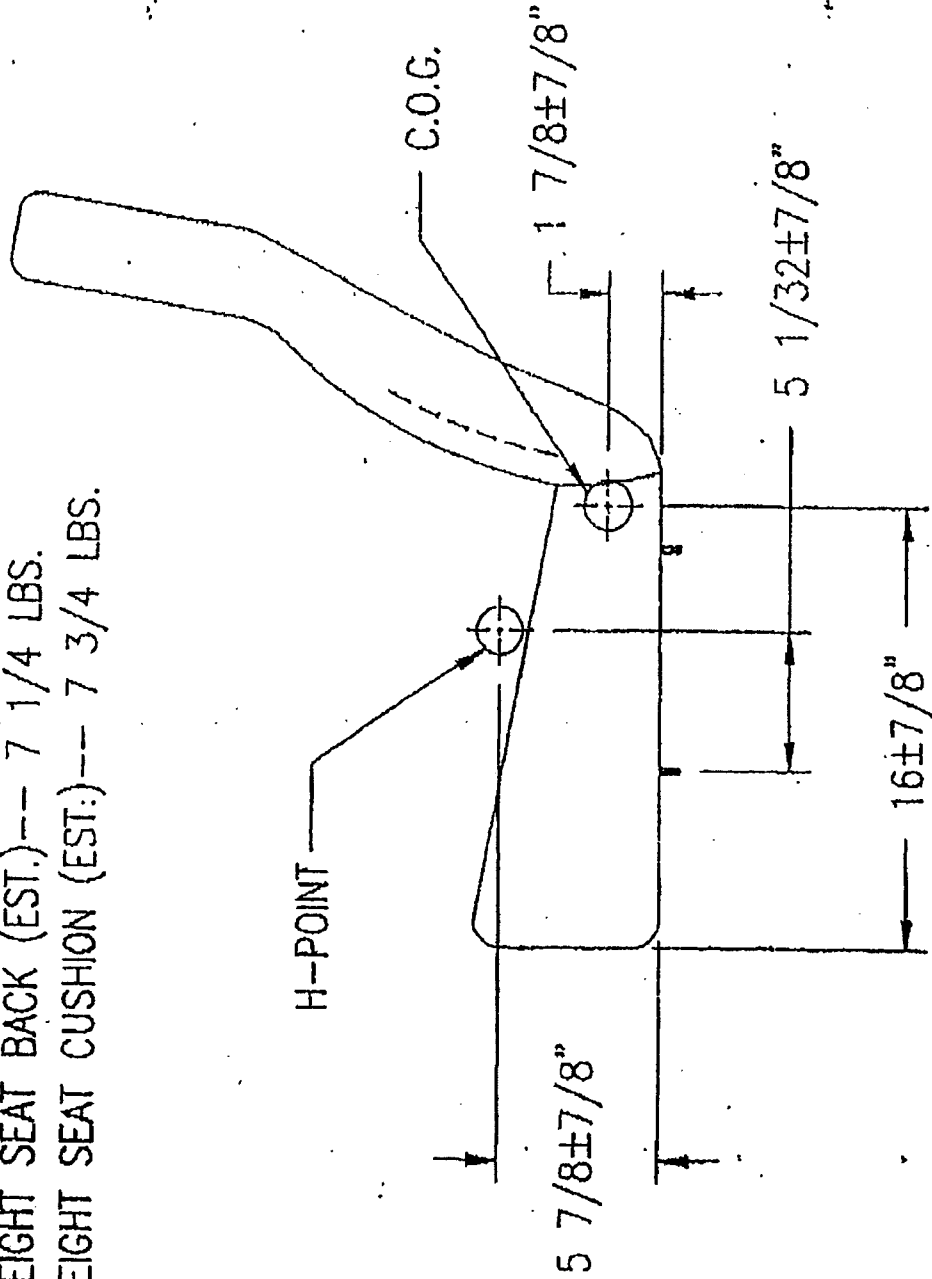
**PROGRESSIVE ENGINEERING, INC.**  
**Seat Belt Anchorage Test**

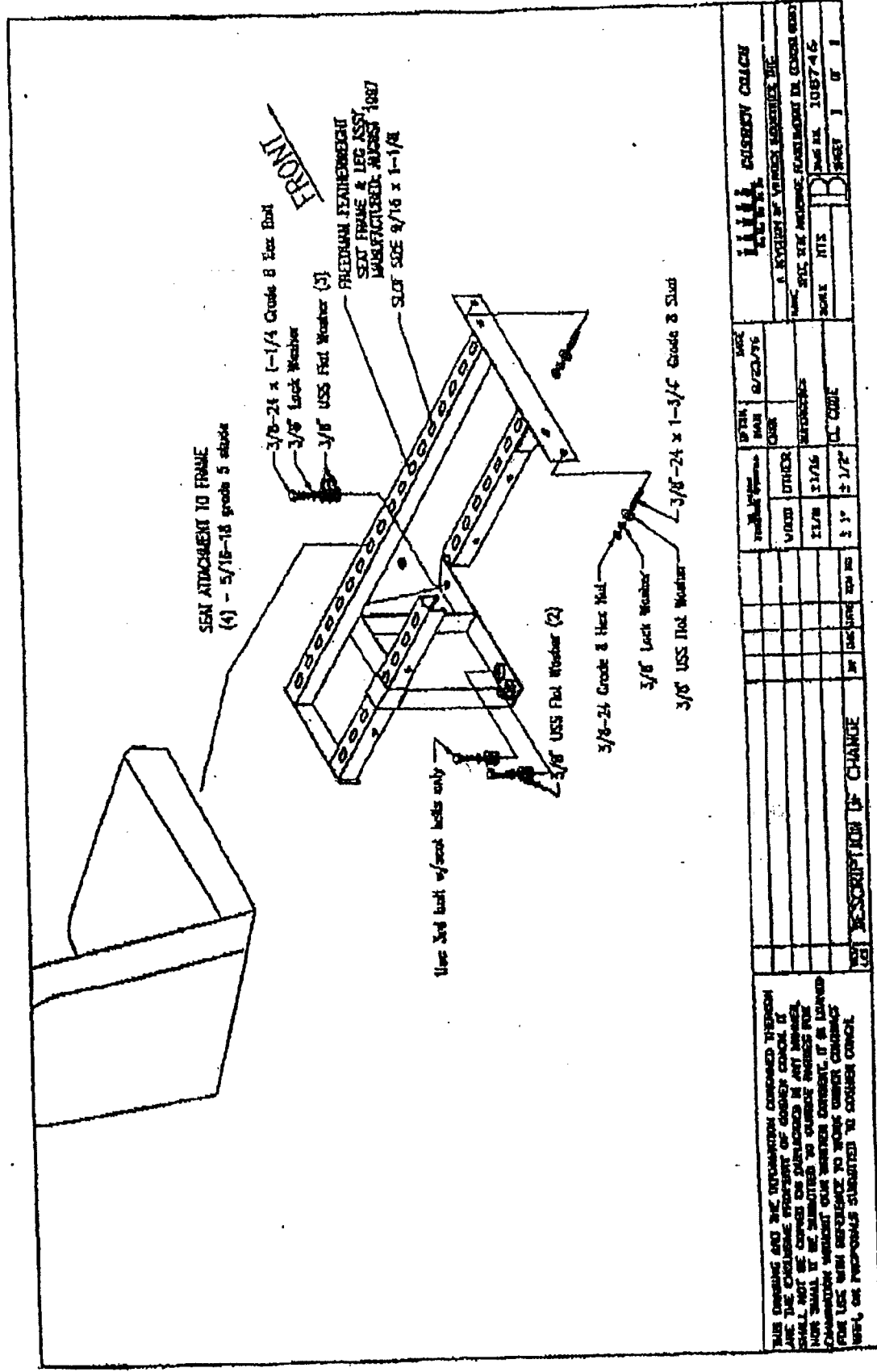
**Manufacturer:** Gosben Coach  
**Identification:** Automotive Seat with two (2) seating positions  
**Test Performed:** FMVSS 210 - Type I & FMVSS 207  
**Date:** 12/18/97

<b>Cylinder #1 (red &amp; white)</b>		<b>Cylinder #2 (yellow)</b>		<b>Cylinder #3 (red &amp; blue)</b>	
<b>Load Required</b>	<b>Load Reached</b>	<b>Load Required</b>	<b>Load Reached</b>	<b>Load Required</b>	<b>Load Reached</b>
5000 lb	5180 lb	5000 lb	5200 lb	900 lb	950 lb

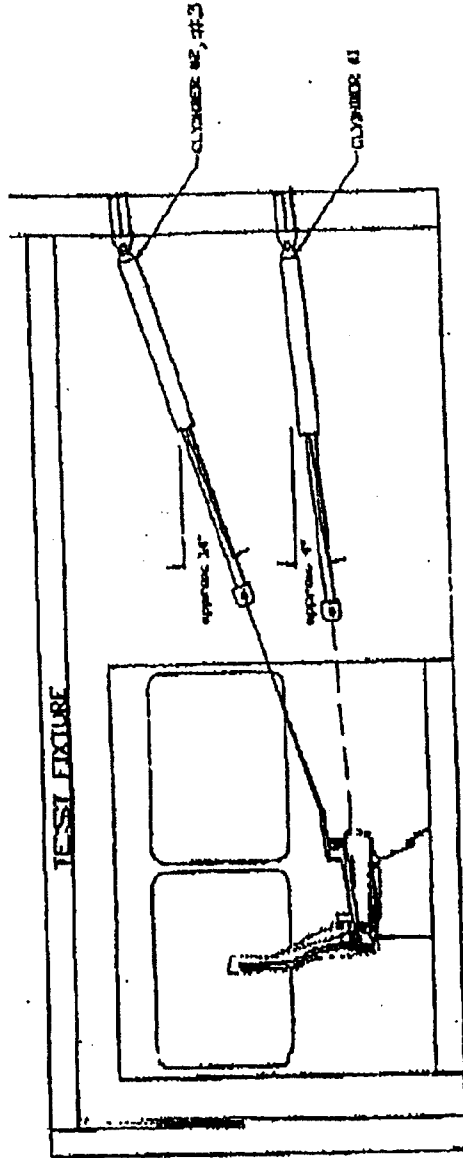
**Load Time: 20 sec.**  
**Hold Time: 15 sec.**

WEIGHT OF FEATHERWEIGHT LEG--7 3/4 LBS.  
 WEIGHT OF FEATHERWEIGHT DOUBLE BASEFRAME-- 10 3/4 LBS.  
 WEIGHT OF FEATHERWEIGHT SEAT BACK (EST.)-- 7 1/4 LBS.  
 WEIGHT OF FEATHERWEIGHT SEAT CUSHION (EST.)-- 7 3/4 LBS.





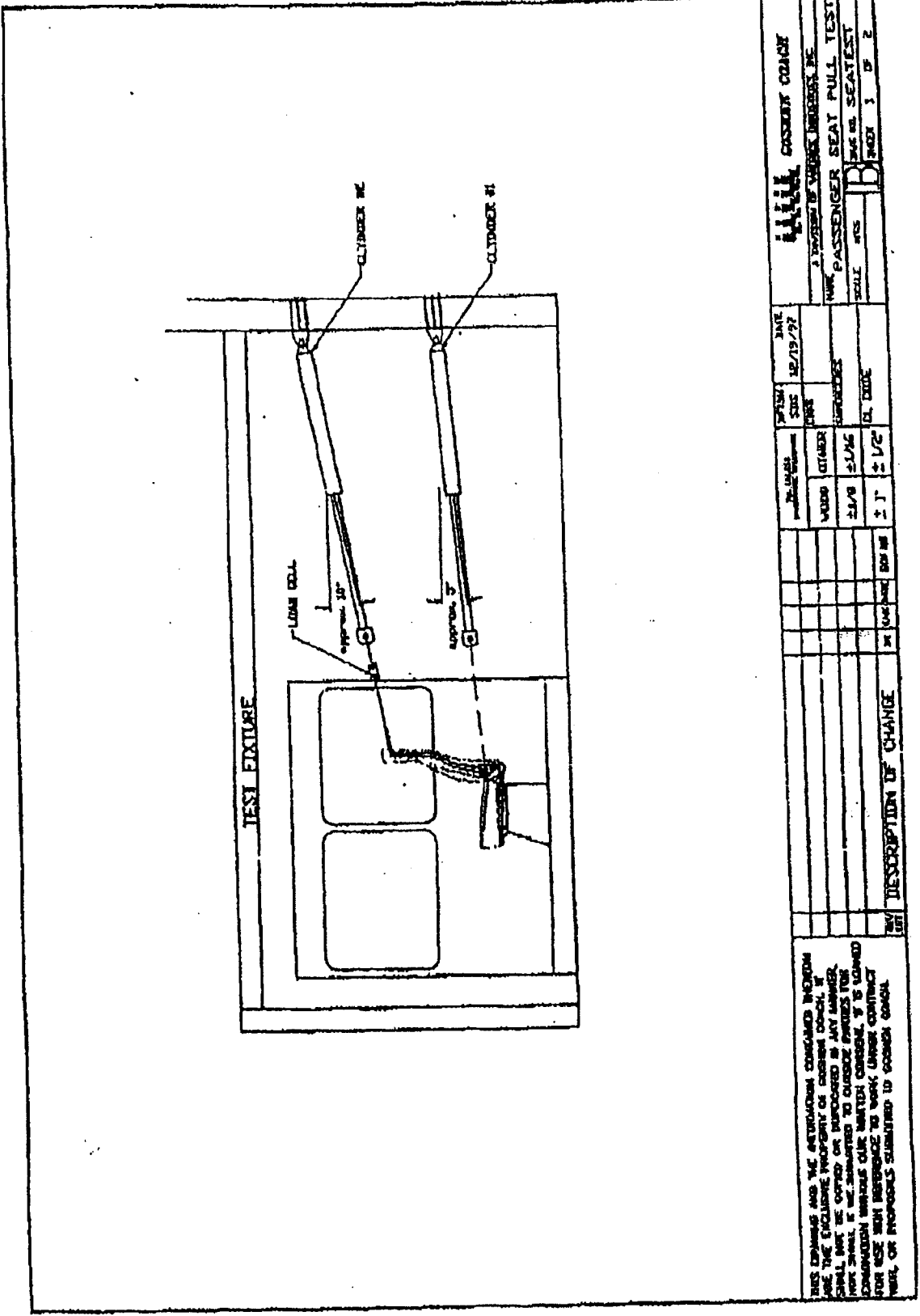
<p>THIS DRAWING AND THE INFORMATION CONTAINED THEREON ARE THE PROPRIETARY PROPERTY OF CHRYSLER CREDIT CORPORATION. IT SHALL NOT BE COPIED OR REPRODUCED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF CHRYSLER CREDIT CORPORATION. ANY UNAUTHORIZED REPRODUCTION OR DISSEMINATION OF THIS DOCUMENT IS STRICTLY PROHIBITED AND WILL BE PROSECUTED TO THE FULL EXTENT OF THE LAW.</p>		<p><b>CHRYSLER CREDIT CORPORATION</b>                  A DIVISION OF CHRYSLER FINANCIAL SERVICES INC.                  300 N. W. 27th Avenue, Fort Lauderdale, FL 33309                  Phone: 305-467-1000                  Fax: 305-467-4600</p>	
DATE	02/23/96	BY	02/23/96
DESIGNED BY	THICK	CHECKED BY	THICK
DATE	11/78	DATE	11/78
SCALE	1:1	SCALE	1:1
<p><b>DESCRIPTION OF CHANGE</b></p>		<p><b>REVISIONS</b></p>	



**TEST FIXTURE**

THIS DRAWING AND THE INFORMATION CONTAINED HEREON IS THE PROPERTY OF THE COMMISSION. IT IS TO BE KEPT IN CONFIDENTIALITY AND NOT TO BE REPRODUCED OR TRANSMITTED IN ANY MANNER, OR TO BE USED FOR ANY PURPOSES OTHER THAN THAT FOR WHICH IT WAS SUBMITTED TO THE COMMISSION. THE COMMISSION WILL NOT BE RESPONSIBLE FOR ANY DAMAGE OR LOSS OF PROFITS, BUSINESS, OR REVENUE, OR FOR ANY SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, INCLUDING ATTORNEY'S FEES, ARISING OUT OF OR FROM THE USE OF THIS DRAWING OR THE INFORMATION CONTAINED HEREON.

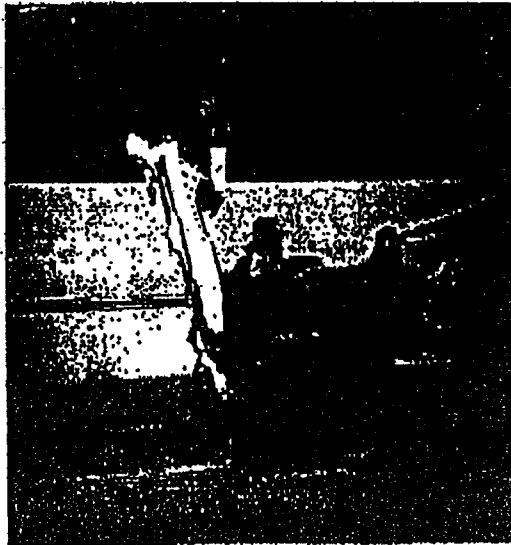
DATE	2/27/97	BY	W. J. WILSON
REV		BY	
DESCRIPTION	TEST FIXTURE FOR SEAT PULL TEST		
PROJECT	SEAT PULL TEST		
DATE	JULY 2 '97		

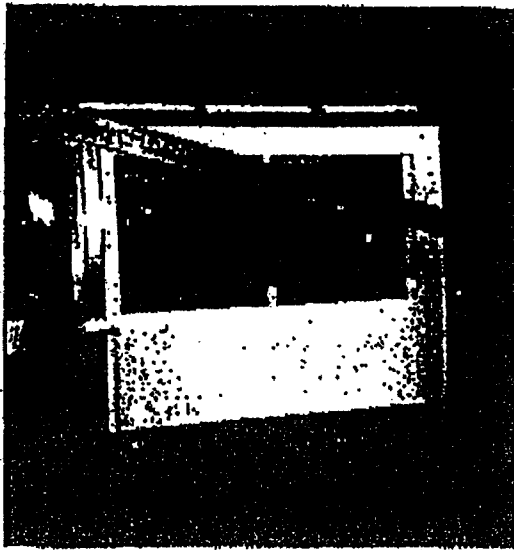


<p>THIS DRAWING AND THE INFORMATION CONTAINED HEREON ARE THE EXCLUSIVE PROPERTY OF COCKBURN COACH, INC. IT SHALL BE COPIED OR REPRODUCED IN ANY MANNER, WITHOUT THE WRITTEN PERMISSION OF COCKBURN COACH, INC. ANY UNAUTHORIZED REPRODUCTION OR USE OF THIS DRAWING WITHOUT OUR WRITTEN CONSENT, IS STRICTLY PROHIBITED. FOR USE WITH REFERENCE TO WORK UNDER CONTRACT WITH OR PERSONS SUBMITTED TO COCKBURN COACH, INC.</p>		<p>DATE 12/19/97</p>	<p>SCALE 1 OF 2</p>
<p>DESCRIPTION OF CHANGE</p>	<p>DATE</p>	<p>BY</p>	<p>NO.</p>
<p>1. PASSENGER SEAT FULL TEST</p>	<p>12/19/97</p>	<p>[Signature]</p>	<p>1</p>
<p>2. PASSENGER SEAT SEATTEST</p>	<p>12/19/97</p>	<p>[Signature]</p>	<p>2</p>
<p>3. PASSENGER SEAT FULL TEST</p>	<p>12/19/97</p>	<p>[Signature]</p>	<p>3</p>
<p>4. PASSENGER SEAT SEATTEST</p>	<p>12/19/97</p>	<p>[Signature]</p>	<p>4</p>
<p>5. PASSENGER SEAT FULL TEST</p>	<p>12/19/97</p>	<p>[Signature]</p>	<p>5</p>
<p>6. PASSENGER SEAT SEATTEST</p>	<p>12/19/97</p>	<p>[Signature]</p>	<p>6</p>
<p>7. PASSENGER SEAT FULL TEST</p>	<p>12/19/97</p>	<p>[Signature]</p>	<p>7</p>
<p>8. PASSENGER SEAT SEATTEST</p>	<p>12/19/97</p>	<p>[Signature]</p>	<p>8</p>
<p>9. PASSENGER SEAT FULL TEST</p>	<p>12/19/97</p>	<p>[Signature]</p>	<p>9</p>
<p>10. PASSENGER SEAT SEATTEST</p>	<p>12/19/97</p>	<p>[Signature]</p>	<p>10</p>



210





## REFERENCES

State of Georgia Department of Transportation  
Atlanta, Georgia  
Contact: Steve Kish  
(404)651-9209

State of West Virginia Public Transit  
Charleston, West Virginia  
Contact: Tim Thomas  
(304)558-0428

State of South Carolina  
Columbia, South Carolina  
Contact: Mumin Abdul Razzaq  
(803)898-2558  
Contact: Marion Carmen  
(803)737-0521

State of Texas Department of Transportation  
Austin, Texas  
Contact: Paul Moon  
(512)416-2825

State of North Carolina Department of Transportation  
Raleigh, North Carolina  
Contact: Nancy Painter  
(919)733-4713 ext.244

State of Alabama Department of Transportation  
Montgomery, Alabama  
Contact: Thomas Thompson  
(334)353-6422



Their Industries Commercial Bus Division

# LIMITED ONE (1) YEAR WARRANTY



Their Industries Commercial Bus Division

## WARRANTY:

Goshen Coach (Warrantor) warrants to the first registered Owner for a period of one (1) year or twelve thousand (12,000) miles from the date of purchase, whichever comes first, that this product shall be free of SUBSTANTIAL DEFECTS in materials and workmanship, attributable to Warrantor, under normal use and service.

## WARRANTY PERFORMANCE:

Warrantor will remedy SUBSTANTIAL DEFECTS by repair, free of charge to the Owner. Owner shall bear all expenses arising out of or relating to transporting the product to the appropriate Warranty Service location. Performance will be completed within thirty (30) calendar days of the date the product is delivered for Warranty Service pursuant to appropriate Warranty Claims Procedures.

## WARRANTY VALIDATION:

Return of the Owner's Registration Card is required to validate this Warranty. Failure to return the registration card voids the Warranty.

## EXPLICIT WARRANTY EXCLUSIONS:

### This Warranty DOES NOT COVER:

1. Damage to the soft trim and appearance items if such damage is due to normal use, wear and tear, or exposure to elements.
2. Accessories or parts not manufactured by Warrantor, which items include (but are not limited to): the chassis and its component parts, heaters, windows, generators, air conditioners, radios, power converters and batteries. The manufacturers of these products may provide warranties covering the performance of their particular products.
3. Products which have been altered or modified by any party other than Warrantor.
4. Damage caused by misuse, neglect, negligence or accident. Usage of this product in a manner which is inconsistent with design intentions or inconsistent with owner's manual directions will invalidate this Warranty in regard to damage caused by or relating to such inconsistent usage.
5. Expenses arising out of or related to transporting the product to an appropriate Warranty Service location for service.

## WARRANTY TERMINATIONS:

The following actions or events will result in the automatic termination of this Warranty and relieve Warrantor from any and all obligations under this Warranty:

1. Misuse or neglect of the product, failure to provide reasonable and necessary maintenance, unauthorized alteration or modification, accident, or improper loading.
2. Sale of the product through auction.
3. The expiration of the warranty period(s) set out herein.

## WARRANTOR RIGHTS:

Warrantor reserves the right to change the parts and designs of its products from time to time without notice and with no obligation to make corresponding changes in its products previously manufactured.

## WARRANTY CLAIM PROCEDURES:

All Warranty Service is to be performed at Warrantor's factory or at an authorized Warranty Service location. All Warranty Service must be authorized by Warrantor, in writing, prior to performance. Such written authorization instructing Owner as to where and when to deliver the product for Warranty Service will be given within five (5) working days of receipt of notification of a defect or malfunction provided the Warranty covers such defect or malfunction and all other terms of this Warranty have been satisfied in full. Notice should be presented in writing via registered mail to Goshen Coach, 25161 Leer Drive, Elkhart, Indiana 46514, and must be postmarked on or before the date of expiration of the appropriate Warranty period. Notice should give Owner's name and address, a brief description of the problem, the product model and serial number, the date of purchase, product mileage, the name of the dealer who sold the product, the current product location and Owner's location for contact during regular business hours.

## DAMAGE RECOVERY LIMITATION:

NO PERSON SHALL BE ENTITLED TO RECOVER FROM WARRANTOR FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES ARISING OUT OF OR RELATING TO ANY DEFECT IN THE PRODUCT.

## WARRANTY LIMITATIONS:

ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED IN DURATION TO THE WARRANTY PERIOD OF ONE (1) YEAR FROM DATE OF FIRST PURCHASE.

There are no Warranties of any nature made by Warrantor beyond the contents of this Limited Warranty. No person has authority to enlarge, amend or modify this Warranty.

## LEGAL RIGHTS:

This Warranty gives only those legal rights specifically enumerated herein. You may have other legal rights which vary from state to state.

SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES OR OF THE DURATION OF IMPLIED WARRANTIES, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.

## EXTENDED WARRANTY ON STRUCTURAL ITEMS:

Warrantor warrants to the first registered Owner for a period of six (6) years or sixty thousand (60,000) miles, whichever comes first, that this product shall be free of SUBSTANTIAL DEFECTS arising out of or relating to the structural portion of the product. The terms of this structural Warranty shall be the exact same terms as set out above in Warrantors Limited One (1) Year Warranty, except as such terms relate to the duration of coverage. This Structural Warranty is intended to only cover the performance of the steel cage structure of the product. For further information concerning such warranty, please contact Warrantor.

1 PAGE 48

GENERAL MOTORS CORPORATION - NORTH AMERICAN OPERATIONS  
BUY AMERICAN CERTIFICATION  
2009 MODEL YEAR

MODEL G33705  
FSV GMC SAVANA  
CARLINE 08  
ASSEMBLY LOC: WENTZVILLE

US CONTENT BY SYSTEM	PERCENTAGE OF VEHICLE COST	DESCRIPTION OF ASSEMBLY OPERATIONS
AXLE & HALF SHAFT	.3644	FLOOR PANEL WELDED TO UNDERBODY
BATTERY & RELATED	.4579	SIDE AND OUTER PANELS WELDED TO FRAMING
BELTS & RESTRAINTS	.3791	WINDSHIELD REINFORCEMENTS AND ROOF PANELS INSTALLED
BRAKES	2.1136	HOOD, DOORS AND FENDERS INSTALLED
CLUSTERS & GAGES	.6329	FRONT AND REAR DOORS INSTALLED
CONVENIENCE	.0682	BODY PRIMED AND SEALED
DOORS	6.3422	EXTERIOR PAINT APPLIED
ENGINE	16.4038	ELECTRICAL WIRING INSTALLED
EXHAUST	3.0894	EXTERIOR MOLDINGS INSTALLED
EXT. TRIM & ORNAM	.0358	AIR CONDITIONING AND HEATER INSTALLED
F. SHEET MET/PLASTIC	1.5482	INSTRUMENT PANEL INSTALLED
FRONT & REAR LAMPS	.0818	DOOR HARDWARE AND WINDOWS INSTALLED
FRONT & REAR SUSP.	3.6924	INTERIOR TRIM & FLOOR COVERING INSTALLED
FUEL TANK/PUMP/LINES	2.0883	SEATS INSTALLED
HVAC	3.1500	SUB FRAME AND ENGINE INSTALLED
INSTRUMENT PANEL	1.3830	TRANSMISSION INSTALLED
MAJOR METAL PANELS	3.0246	TIRES MOUNTED AND INSTALLED
PAINT & MISC MTRL	.0937	VEHICLE TESTED AND INSPECTED
POWER & SIGNAL	.5756	FINISHED VEHICLE SHIPPED
ROOF	1.9014	
SEATS	2.1170	
STEERING	3.2417	
STEP PLT./EXT. ASST.	1.4389	
TRANSMISSION	7.7167	
UNDER BODY	9.1472	
WHEELS & TIRES	3.5057	
WIPER & WASHER	.0774	
TOTAL US CONTENT	74.6722	

PREPARED BY:  
GENERAL MOTORS CORPORATION  
GMNA PRODUCT COST DEVELOPMENT  
MAILCODE 480-108-315  
30400 MOUND RD  
WARREN, MI. 48090-9065  
TEL: (586)986-8155,  
UMTAR1 LZ1392 20081030

REGULATORY PROVISION:  
FEDERAL TRANSIT ADMINISTRATION  
DEPARTMENT OF TRANSPORTATION  
BUY AMERICAN PROGRAM  
CFR CH. VI, PART 663

1 PAGE 47

GENERAL MOTORS CORPORATION - NORTH AMERICAN OPERATIONS  
BUY AMERICAN CERTIFICATION  
2009 MODEL YEAR

MODEL G33503  
FSV GMC SAVANA  
CARLINE 08  
ASSEMBLY LOC: WENTZVILLE

US CONTENT BY SYSTEM	PERCENTAGE OF VEHICLE COST	DESCRIPTION OF ASSEMBLY OPERATIONS
AXLE & HALF SHAFT	.9045	FLOOR PANEL WELDED TO UNDERBODY
BATTERY & RELATED	.5174	SIDE AND OUTER PANELS WELDED TO FRAMING
BELTS & RESTRAINTS	.4176	WINDSHIELD REINFORCEMENTS AND ROOF PANELS INSTALLED
BRAKES	2.3906	HOOD, DOORS AND FENDERS INSTALLED
CLUSTERS & GAGES	.6903	FRONT AND REAR DOORS INSTALLED
CONVENIENCE	.0499	BODY PRIMED AND SEALED
DOORS	2.3882	EXTERIOR PAINT APPLIED
ENGINE	21.2258	ELECTRICAL WIRING INSTALLED
EXHAUST	4.1122	EXTERIOR MOLDINGS INSTALLED
F. SHEET MET/PLASTIC	1.6959	AIR CONDITIONING AND HEATER INSTALLED
FRONT & REAR LAMPS	.0952	INSTRUMENT PANEL INSTALLED
FRONT & REAR SUSP.	5.2122	DOOR HARDWARE AND WINDOWS INSTALLED
FUEL TANK/PUMP/LINES	2.1955	INTERIOR TRIM & FLOOR COVERING INSTALLED
HVAC	3.3895	SEATS INSTALLED
INSTRUMENT PANEL	1.5051	SUB FRAME AND ENGINE INSTALLED
MAJOR METAL PANELS	1.1380	TRANSMISSION INSTALLED
PAINT & MISC MTRL	.0546	TIRES MOUNTED AND INSTALLED
POWER & SIGNAL	.6032	VEHICLE TESTED AND INSPECTED
ROOF	.8301	FINISHED VEHICLE SHIPPED
SEATS	1.9890	
STEERING	3.5114	
STEP PLT./EXT. ASST.	.7477	
TRANSMISSION	8.4664	
UNDER BODY	7.5990	
WHEELS & TIRES	2.2954	
WIPER & WASHER	.0851	
TOTAL US CONTENT	74.1112	

PREPARED BY:  
GENERAL MOTORS CORPORATION  
GMNA PRODUCT COST DEVELOPMENT  
MAILCODE 480-108-315  
30400 MOUND RD  
WARREN, MI. 48090-9065  
TEL: (586)986-8155,  
UMTAR1 LZ1392 20081030

REGULATORY PROVISION:  
FEDERAL TRANSIT ADMINISTRATION  
DEPARTMENT OF TRANSPORTATION  
BUY AMERICAN PROGRAM  
CFR CH. VI, PART 663

PAGE 50

GENERAL MOTORS CORPORATION - NORTH AMERICAN OPERATIONS  
BUY AMERICAN CERTIFICATION  
2009 MODEL YEAR

MODEL G33803  
FSV GMC SAVANA  
CARLINE 08  
ASSEMBLY LOC: WENTZVILLE

US CONTENT BY SYSTEM	PERCENTAGE OF VEHICLE COST	DESCRIPTION OF ASSEMBLY OPERATIONS
AXLE & HALF SHAFT	.2303	FLOOR PANEL WELDED TO UNDERBODY
BATTERY & RELATED	.5339	SIDE AND OUTER PANELS WELDED TO FRAMING
BELTS & RESTRAINTS	.3854	WINDSHIELD REINFORCEMENTS AND ROOF PANELS INSTALLED
BRAKES	2.2177	HOOD, DOORS AND FENDERS INSTALLED
CLUSTERS & GAGES	.6294	FRONT AND REAR DOORS INSTALLED
CONVENIENCE	.0405	BODY PRIMED AND SEALED
DOORS	2.0326	EXTERIOR PAINT APPLIED
ENGINE	22.2368	ELECTRICAL WIRING INSTALLED
EXHAUST	3.2274	EXTERIOR MOLDINGS INSTALLED
F. SHEET MET/PLASTIC	1.5397	AIR CONDITIONING AND HEATER INSTALLED
FRONT & REAR LAMPS	.0842	INSTRUMENT PANEL INSTALLED
FRONT & REAR SUSP.	6.8274	DOOR HARDWARE AND WINDOWS INSTALLED
FUEL TANK/PUMP/LINES	2.3199	INTERIOR TRIM & FLOOR COVERING INSTALLED
HVAC	3.4016	SEATS INSTALLED
INSTRUMENT PANEL	1.3815	SUB FRAME AND ENGINE INSTALLED
MAJOR METAL PANELS	1.0325	TRANSMISSION INSTALLED
PAINT & MISC MTRL	.0529	TIRES MOUNTED AND INSTALLED
POWER & SIGNAL	.5635	VEHICLE TESTED AND INSPECTED
ROOF	.7566	FINISHED VEHICLE SHIPPED
SEATS	1.6684	
STEERING	3.2111	
STEP PLT./EXT. ASST.	.6858	
TRANSMISSION	7.7604	
UNDER BODY	7.1667	
WHEELS & TIRES	.6736	
WIPER & WASHER	.0769	
TOTAL US CONTENT	70.7382	

PREPARED BY:  
GENERAL MOTORS CORPORATION  
GMNA PRODUCT COST DEVELOPMENT  
MAILCODE 480-108-315  
30400 MOUND RD  
WARREN, MI. 48090-9065  
TEL: (586)986-8155,  
UMTAR1 LZ1392 20081030

REGULATORY PROVISION:  
FEDERAL TRANSIT ADMINISTRATION  
DEPARTMENT OF TRANSPORTATION  
BUY AMERICAN PROGRAM  
CFR CH. VI, PART 663

1 PAGE 74

GENERAL MOTORS CORPORATION - NORTH AMERICAN OPERATIONS  
BUY AMERICAN CERTIFICATION  
2009 MODEL YEAR

MODEL K31403  
SILVERADO  
CARLINE 01CP  
ASSEMBLY LOC: PONTIAC

US CONTENT BY SYSTEM -----	PERCENTAGE OF VEHICLE COST -----	DESCRIPTION OF ASSEMBLY OPERATIONS -----
AXLE & HALF SHAFT	.4534	FLOOR PANEL WELDED TO UNDERBODY
BATTERY & RELATED	.4879	SIDE AND OUTER PANELS WELDED TO FRAMING
BELTS & RESTRAINTS	.9249	WINDSHIELD REINFORCEMENTS AND ROOF PANELS INSTALLED
BRAKES	1.2916	HOOD, DOORS AND FENDERS INSTALLED
CONVENIENCE	.1202	FRONT AND REAR DOORS INSTALLED
DOORS	1.4136	BODY PRIMED AND SEALED
ENGINE	22.9054	EXTERIOR PAINT APPLIED
EXHAUST	.2152	ELECTRICAL WIRING INSTALLED
EXT. TRIM & ORNAM	.0704	EXTERIOR MOLDINGS INSTALLED
F. SHEET MET/PLASTIC	.8395	AIR CONDITIONING AND HEATER INSTALLED
FRONT & REAR LAMPS	.2679	INSTRUMENT PANEL INSTALLED
FRONT & REAR SUSP.	6.0657	DOOR HARDWARE AND WINDOWS INSTALLED
FUEL TANK/PUMP/LINES	1.5964	INTERIOR TRIM & FLOOR COVERING INSTALLED
HVAC	2.4065	SEATS INSTALLED
INSTRUMENT PANEL	.6381	SUB FRAME AND ENGINE INSTALLED
MAJOR METAL PANELS	1.1668	TRANSMISSION INSTALLED
PAINT & MISC MTRL	.0468	TIRES MOUNTED AND INSTALLED
POWER & SIGNAL	.4031	VEHICLE TESTED AND INSPECTED
ROOF	.5536	FINISHED VEHICLE SHIPPED
SEATS	3.0774	
STEERING	2.2813	
STEP PLT./EXT. ASST.	.2800	
TRANSMISSION	7.7952	
UNDER BODY	1.3030	
WHEELS & TIRES	2.8796	
WIPER & WASHER	.2179	
TOTAL US CONTENT	59.7027	

PREPARED BY:  
GENERAL MOTORS CORPORATION  
GMNA PRODUCT COST DEVELOPMENT  
MAILCODE 480-108-315  
30400 MOUND RD  
WARREN, MI. 48090-9065  
TEL: (586)986-8155,  
UMTAR1 LZ1392 20081030

REGULATORY PROVISION:  
FEDERAL TRANSIT ADMINISTRATION  
DEPARTMENT OF TRANSPORTATION  
BUY AMERICAN PROGRAM  
CFR CH. VI, PART 663

1 PAGE 21

GENERAL MOTORS CORPORATION - NORTH AMERICAN OPERATIONS  
 BUY AMERICAN CERTIFICATION  
 2009 MODEL YEAR

MODEL C31403  
 SIERRA  
 CARLINE 01CP  
 ASSEMBLY LOC: PONTIAC

US CONTENT BY SYSTEM	PERCENTAGE OF VEHICLE COST	DESCRIPTION OF ASSEMBLY OPERATIONS
AXLE & HALF SHAFT	.1216	FLOOR PANEL WELDED TO UNDERBODY
BATTERY & RELATED	.4730	SIDE AND OUTER PANELS WELDED TO FRAMING
BELTS & RESTRAINTS	1.0653	WINDSHIELD REINFORCEMENTS AND ROOF PANELS INSTALLED
BRAKES	1.4507	HOOD, DOORS AND FENDERS INSTALLED
CLUSTERS & GAGES	.0045	FRONT AND REAR DOORS INSTALLED
CONVENIENCE	.1247	BODY PRIMED AND SEALED
DOORS	1.5168	EXTERIOR PAINT APPLIED
ENGINE	20.6239	ELECTRICAL WIRING INSTALLED
EXHAUST	.2652	EXTERIOR MOLDINGS INSTALLED
EXT. TRIM & ORNAM	.0776	AIR CONDITIONING AND HEATER INSTALLED
F. SHEET MET/PLASTIC	.9392	INSTRUMENT PANEL INSTALLED
FRONT & REAR LAMPS	.2945	DOOR HARDWARE AND WINDOWS INSTALLED
FRONT & REAR SUSP.	4.2787	INTERIOR TRIM & FLOOR COVERING INSTALLED
FUEL TANK/PUMP/LINES	1.7577	SEATS INSTALLED
HVAC	2.5671	SUB FRAME AND ENGINE INSTALLED
INSTRUMENT PANEL	.7203	TRANSMISSION INSTALLED
MAJOR METAL PANELS	1.3264	TIRES MOUNTED AND INSTALLED
PAINT & MISC MTRL	.0945	VEHICLE TESTED AND INSPECTED
POWER & SIGNAL	.4387	FINISHED VEHICLE SHIPPED
ROOF	.6132	
SEATS	3.4186	
STEERING	2.6112	
STEP PLT./EXT. ASST.	.2884	
TRANSMISSION	6.7067	
UNDER BODY	1.5083	
WHEELS & TIRES	2.9511	
WIPER & WASHER	.2484	
TOTAL US CONTENT	56.4877	

PREPARED BY:  
 GENERAL MOTORS CORPORATION  
 GMNA PRODUCT COST DEVELOPMENT  
 MAILCODE 480-108-315  
 30400 MOUND RD  
 WARREN, MI. 48090-9065  
 TEL: (586)986-8155,  
 UMTAR1 LZ1392 20081030

REGULATORY PROVISION:  
 FEDERAL TRANSIT ADMINISTRATION  
 DEPARTMENT OF TRANSPORTATION  
 BUY AMERICAN PROGRAM  
 CFR CH. VI, PART 663

1 PAGE 26

GENERAL MOTORS CORPORATION - NORTH AMERICAN OPERATIONS  
BUY AMERICAN CERTIFICATION  
2009 MODEL YEAR

MODEL C4V042  
MEDIUM DUTY TRUCK  
CARLINE 10  
ASSEMBLY LOC: FLINT MEDIUM

US CONTENT BY SYSTEM	PERCENTAGE OF VEHICLE COST	DESCRIPTION OF ASSEMBLY OPERATIONS
AXLE & HALF SHAFT	1.5809	FLOOR PANEL WELDED TO UNDERBODY
BATTERY & RELATED	.6747	SIDE AND OUTER PANELS WELDED TO FRAMING
BELTS & RESTRAINTS	.7579	WINDSHIELD REINFORCEMENTS AND ROOF PANELS INSTALLED
BRAKES	3.5253	HOOD, DOORS AND FENDERS INSTALLED
CLUSTERS & GAGES	.4256	FRONT AND REAR DOORS INSTALLED
CONVENIENCE	.2451	BODY PRIMED AND SEALED
DOORS	1.0634	EXTERIOR PAINT APPLIED
ENGINE	26.2504	ELECTRICAL WIRING INSTALLED
EXHAUST	6.3940	EXTERIOR MOLDINGS INSTALLED
EXT. TRIM & ORNAM	.0264	AIR CONDITIONING AND HEATER INSTALLED
F. SHEET MET/PLASTIC	2.0416	INSTRUMENT PANEL INSTALLED
FRONT & REAR LAMPS	.5076	DOOR HARDWARE AND WINDOWS INSTALLED
FRONT & REAR SUSP.	7.7365	INTERIOR TRIM & FLOOR COVERING INSTALLED
FUEL TANK/PUMP/LINES	1.2619	SEATS INSTALLED
HVAC	3.0451	SUB FRAME AND ENGINE INSTALLED
INSTRUMENT PANEL	.2846	TRANSMISSION INSTALLED
MAJOR METAL PANELS	.6519	TIRES MOUNTED AND INSTALLED
PAINT & MISC MTRL	.1995	VEHICLE TESTED AND INSPECTED
POWER & SIGNAL	1.2133	FINISHED VEHICLE SHIPPED
ROOF	.2499	
SEATS	1.0222	
STEERING	1.0451	
STEP PLT./EXT. ASST.	.8125	
TRANSMISSION	11.4658	
UNDER BODY	3.1941	
WHEELS & TIRES	3.5565	
WIPER & WASHER	.1846	
TOTAL US CONTENT	79.4179	

PREPARED BY:  
GENERAL MOTORS CORPORATION  
GMNA PRODUCT COST DEVELOPMENT  
MAILCODE 480-108-315  
30400 MOUND RD  
WARREN, MI. 48090-9065  
TEL: (586)986-8155,  
UMTAR1 LZ1392 20081030

REGULATORY PROVISION:  
FEDERAL TRANSIT ADMINISTRATION  
DEPARTMENT OF TRANSPORTATION  
BUY AMERICAN PROGRAM  
CFR CH. VI, PART 663

1 PAGE 32

GENERAL MOTORS CORPORATION - NORTH AMERICAN OPERATIONS  
 BUY AMERICAN CERTIFICATION  
 2009 MODEL YEAR

MODEL C5V042  
 MEDIUM DUTY TRUCK  
 CARLINE 10  
 ASSEMBLY LOC: FLINT MEDIUM

US CONTENT BY SYSTEM	PERCENTAGE OF VEHICLE COST	DESCRIPTION OF ASSEMBLY OPERATIONS
AXLE & HALF SHAFT	1.7732	FLOOR PANEL WELDED TO UNDERBODY
BATTERY & RELATED	.6311	SIDE AND OUTER PANELS WELDED TO FRAMING
BELTS & RESTRAINTS	.5908	WINDSHIELD REINFORCEMENTS AND ROOF PANELS INSTALLED
BRAKES	4.4546	HOOD, DOORS AND FENDERS INSTALLED
CLUSTERS & GAGES	.4960	FRONT AND REAR DOORS INSTALLED
CONVENIENCE	.0854	BODY PRIMED AND SEALED
DOORS	.8491	EXTERIOR PAINT APPLIED
ENGINE	20.8309	ELECTRICAL WIRING INSTALLED
EXHAUST	5.1433	EXTERIOR MOLDINGS INSTALLED
EXT. TRIM & ORNAM	.0270	AIR CONDITIONING AND HEATER INSTALLED
F. SHEET MET/PLASTIC	2.1841	INSTRUMENT PANEL INSTALLED
FRONT & REAR LAMPS	.5110	DOOR HARDWARE AND WINDOWS INSTALLED
FRONT & REAR SUSP.	10.3560	INTERIOR TRIM & FLOOR COVERING INSTALLED
FUEL TANK/PUMP/LINES	1.1476	SEATS INSTALLED
HVAC	3.0153	SUB FRAME AND ENGINE INSTALLED
INSTRUMENT PANEL	.3047	TRANSMISSION INSTALLED
MAJOR METAL PANELS	.6973	TIRES MOUNTED AND INSTALLED
PAINT & MISC MTRL	.2527	VEHICLE TESTED AND INSPECTED
POWER & SIGNAL	1.6257	FINISHED VEHICLE SHIPPED
ROOF	.2644	
SEATS	.5911	
STEERING	1.1344	
STEP PLT./EXT. ASST.	.8158	
TRANSMISSION	12.6546	
UNDER BODY	3.8214	
WHEELS & TIRES	3.7754	
WIPER & WASHER	.1975	
TOTAL US CONTENT	78.2316	

PREPARED BY:  
 GENERAL MOTORS CORPORATION  
 GMNA PRODUCT COST DEVELOPMENT  
 MAILCODE 480-108-315  
 30400 MOUND RD  
 WARREN, MI. 48090-9065  
 TEL: (586)986-8155,  
 UMTARI LZ1392 20081030

REGULATORY PROVISION:  
 FEDERAL TRANSIT ADMINISTRATION  
 DEPARTMENT OF TRANSPORTATION  
 BUY AMERICAN PROGRAM  
 CFR CH. VI, PART 663




Thor Industries Commercial Bus Division

25161 Leer Drive  
Phone: 574-970-6300  
FAX: 574.266.5866  
www.goshencoach.com

To: Whom It May Concern  
From: Donall Hasty  
Date: January 2009  
Re: Goshen Coach, Division of THOR INDUSTRIES, Certifies Compliance To The Following Motor Vehicle Safety Standards (FMVSS/CMVSS) Where Applicable for Each Make and Model

<u>STD.</u>	<u>Description</u>
ICE-002	Interference-Causing Equipment Standard
1106	Noise Emission
101-80	Controls and Displays
102	Transmission Shift Lever Sequence, Starter Interlock and Transmission Brake Effect
103	Windshield Defrosting and Defogging Systems
104	Windshield Wiping and Washing Systems
105-83	Hydraulic Brake Systems
106	Brake Hoses
108	Lamps, Reflective Devices and Associated Equipment
111	Rear View Mirrors
113	Hood Latch System
115	Vehicle Identification Number
116	Motor Vehicle Brake Fluids
119	New Pneumatic Tires for Motor Vehicles Other Than passenger Cars
120	Tire Selection and Rims for Motor Vehicles Other Than Passenger Cars
124	Accelerator Control Systems
125	Warning Devices
204	Steering Controls
205	Glazing Materials
206	Door Locks and Door Retention
207	Seating Systems
208	Occupant Crash Protection (Driver Only)
209	Seat Belt Assemblies
210	Seat Belt Assembly Anchorage
217	Bus Window Retention and Release
220	School Bus Rollover Protection
221	School Bus Body Joint Strength
301-75	Fuel System Integrity
302	Flammability of Materials
403	Platform Lift Systems for Motor Vehicles
404	Platform Lift Installations in Motor Vehicles

 1/6/09  
Donall Hasty - Standards and Compliance Manager



# Pacer II Order Form-V17

All information contained in this document is subject to change without notice.

Date 1/4/2010 Customer Ft. Bend County, TX # of Units 3 to 11  
 Dealer National Bus Sales Address \_\_\_\_\_  
 Contact Ryan Frost City/State/ZIP \_\_\_\_\_ GC Quote # 8113  
 Phone \_\_\_\_\_ Contact \_\_\_\_\_  
 Phone \_\_\_\_\_

The following information is needed for all sales allowances

Delivery By Oct 31st. Will you purchase chassis from GC? Yes  
 Liquidated Damages (daily) None Specified If so, GC chassis cost \_\_\_\_\_  
 Dealer margin \_\_\_\_\_ If not, who will you transfer it through \_\_\_\_\_  
 Dealer add-ons (delivery, PDI, etc) \_\_\_\_\_ If transferred, chassis cost (dnet) \_\_\_\_\_  
 Est. discount required to win \_\_\_\_\_ Chassis rebates available Yes  
 Competition \_\_\_\_\_ Customer FIN code \_\_\_\_\_

One time purchase? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
If no, please answer the following questions
Length of contract (months): up to 60 months
Are add ons allowed? Yes <input type="checkbox"/> No <input type="checkbox"/>
If so, how many?
Is there a price escalater? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
If so, what is the escalator? Up to 4% annually

Is this quote: Government <input checked="" type="checkbox"/> Retail <input type="checkbox"/>
Is this quote a: Bid <input checked="" type="checkbox"/> RFP <input type="checkbox"/>
Is unit FTA funded? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

<b>Order Summary</b>	Sub Total: <u>\$0</u>
	Plus Frt: _____
	Minus Discount: _____
	Bus Body Total: <u>\$0</u>
	D-NET Chassis: _____
	Total: <b>\$0</b>
<b>Special Instructions</b>	<b>This quote is valid for 60 days unless length of contract is filled out above.</b>

If special order chassis is required, describe below  
**STANDARD CHASSIS**

<b>This section for Goshen Coach use.</b>	Requested by: _____	Date _____
	Approval - SIs Mgr: _____	Date _____
	Approval - Prod. Mgr: _____	Date _____
	Approval - Finance. Mgr: _____	Date _____
	Approval - Gen. Mgr: _____	Date _____
	Approval -Thor Bus: _____	Date _____

- |  |   |   |
|--|---|---|
| <input checked="" type="checkbox"/> Std. Black Ribbed Rubber | <input type="checkbox"/> Std. Grey Carpet               | <input checked="" type="checkbox"/> Std. Grey Vinyl |
| <input type="checkbox"/> Colored Ribbed Rubber               | <input checked="" type="checkbox"/> Black Smooth Rubber | <input type="checkbox"/> Vinyl                      |
| Color <u>RCA TR766</u>                                       | <input type="checkbox"/> Colored Smooth Rubber          | Color _____   |
| <input type="checkbox"/> Carpet                              | Color <u>RCA TR766</u>                                  | <input type="checkbox"/> Auto Cloth                 |
| Color _____  | <input type="checkbox"/> Other _____                    | Color _____   |
| <input type="checkbox"/> Other _____                         |   | <input type="checkbox"/> Grey Silver Haze           |

P2C263

**Walls****Ceiling****Floor**

- Std. Grey FRP
- Vinyl  
Color \_\_\_\_\_
- Auto Cloth  
Color \_\_\_\_\_
- Carpet  
Color \_\_\_\_\_
- Grey Silver Haze

- Std. Grey Silver Haze
- Grey FRP
- Vinyl  
Color \_\_\_\_\_
- Auto Cloth  
Color \_\_\_\_\_
- Carpet  
Color \_\_\_\_\_
- Seat Material w/center stripe

- Std. Grey Vinyl  
Color \_\_\_\_\_
- Vinyl  
Color \_\_\_\_\_
- Auto Cloth  
Color \_\_\_\_\_
- Grey Silver Haze
- Grey FRP

**Seat Covers****Graphics**

- Driver L-3 \_\_\_\_\_
- Pass L-3 \_\_\_\_\_
- Co-Pilot \_\_\_\_\_

- Blue
- Burgundy
- Green
- No Graphics

FIN Code	_____
ZIP Code	_____
Release Chassis to	_____
PO#	_____

NOTE: FORD DIESEL MODELS INCLUDE BATTERY BOX WITH SLIDE OUT TRAY.

**Non-Standard****Standard**

\$0

P2C263	1	22' PACER II CHEVY		
G35D	1	Pacer II 159"WB/263" Chevy 3500, 6.6L Diesel, GVWR 12,300		
13781	1	EXHAUST-ROUTE TO STREETSIDE-DIESEL ENGINES (STD ON CHEVY 139" WB CHASSIS) STANDARD ON LS MODELS		
2240	0.5	MUD FLAPS-FRONT (REAR MUD FLAPS ARE STANDARD)		
1451	1	RUNNING BOARD, DRIVER SIDE, ALUMINUM DIAMOND PLATE (N/A ON LS MODEL WHICH HAS MOLDED FIBERGLASS RUNNING BOARDS)		
2247	1	FAST IDLE FOR CHEVY G3500/4500 GAS & DIESEL OR C4500/5500 DIESEL ONLY(INTERMOTIVE GATEWAY)		
2200	1	TOW HOOKS-REAR		
1380	1	FUEL TANK-ACCESS PLATE OVER SENDING UNIT (ON ES N/A WITH REAR LUGGAGE)		
23602	1	BATTERY BOX WITH STAINLESS STEEL SLIDE OUT TRAY		
2180	1	TIRE-SPARE & WHEEL GCII & PII		
47262	1	BUMPER-REAR ANTI-RIDE SHIELD, ALL PACER MODELS		
23141	1	FLOOR-PLYWOOD 5/8" MARINE GRADE		
YSN	1	YELLOW STEP NOSING		
15193	1	RUBBER-COLORED ON ENTIRE FLOOR W/RADIUS, 36" AISLE		
4709	1	STANDEE LINE-YELLOW, w/ 2" SIGN "NO STANDING FORWARD OF YELLOW LINE"		
1517	1	FRP ON CEILING		
4086	1	DOOR HOLD OPEN, GAS STRUT STYLE, EACH (STD ON DOUBLE W/C DOOR) FOR REAR DOOR		
7165	1	REAR DOOR-36" W/2 WINDOWS W/DOOR AJAR BUZZER & LIGHT ON DASH		
1571	1	STAINLESS STEEL-STEPWELL & ENTRY DOOR SURROUND		
7151	1	STAINLESS STEEL - REAR DOOR FRAME (REQUIRES OPTION 7160 OR 7165)		
7166	1	WINDOW-REAR TWIN (N/A WITH REAR LUGGAGE ROOM)		
7020	1	ROOF HATCH-TRANSPAC LOW PROFILE ECONO SAFETY VENT #1975		
4210	1	HEATER, REAR-35000 BTU		
3696	2	VALVE-HEATER, 1/4 TURN BRASS SHUT-OFF ILO STANDARD VALVE		
1535	1	ALARM-BACK UP (STD ON LS MODELS)		
1638	1	ALARM-EMERGENCY WINDOW AJAR PACKAGE		
3011	1	DISCONNECT SWITCH-BATTERY CUT-OFF, FORD & CHEVY		
2400	1	SCHEMATIC-LAMINATED ELECTRIC LEGEND ON ELEC. DOOR		
7030	1	SCHEMATICS-WIRING AS BUILT		
3232	1	LIGHTS-INTERIOR DOME ON WITH ENTRY DOOR OPEN		
3179	1	BRAKE LIGHT-REAR CENTER MOUNTED LED		
3208	1	EXTERIOR LIGHT-HOODED AT ENTRANCE DOOR LED		
3203	1	EXTERIOR LIGHTS (PAIR) - 7" AMBER LED LOCATION		
31931	1	ARMOR FOR MARKER & CLEARANCE LIGHTS		
31815	1	MIDSHIP TURN SIGNAL / MARKER LIGHT COMBINATION (ARMORED) - LED		
4129	1	COAT HOOK-DRIVER W/STRAP		
1506	1	OVERHEAD STORAGE IN FRONT CAP (N/A W/FRONT DESTINATION SIGN)		
4153	1	GRAB RAILS- ENTRANCE VERTICAL, BOTH SIDES		
1520	1	GRAB RAILS-CEILING (BOTH SIDES OF AISLE)		

4130	1	MODESTY PANEL-DRIVER W/ STAINLESS STEEL STANCHIONS		
4140	1	MODESTY PANEL-PLEXIGLASS TOP (TINTED)		
4131	1	MODESTY PANEL-INCREASE WIDTH TO 31"		
3694	1	MODESTY PANEL-BEHIND WHEELCHAIR LIFT		
2277	1	FIRE EXTINGUISHER-10 LB		
1549	1	TRIANGLES-EMERGENCY IN BOX		
7025	263	SKIRTS - FIBERGLASS ILO ALUMINUM (PRICED PER INCH OF BUS' OVERALL LENGTH. I.E., ENTER A QUANTITY OF 285 FOR A 285" BUS)		
1533	1	MIRRORS-INTERIOR FLAT 6"X16"		
7200	1	LENS-WIDE ANGLE 11"X14" (ADHERES TO REAR WINDOW)		
13643	2	DECAL-"NO SMOKING" RED ON WHITE		
4355	1	DECAL-"PRIORITY SEATING WC AREA" (ADA REQUIRED)		
1364	2	DECAL-"WATCH YOUR STEP" MOUNT ON TOP RISER		
4350	1	DECAL-INTERNATIONAL WHEELCHAIR SYMBOL-9"X9"		
13648	2	DECAL-"NO FOOD, DRINK OR TOBACCO USE ALLOWED" RED ON WHITE		
6050	1	PAINT BLACK OUT WINDOWS		
4360	1	INTERLOCK KIT FOR INTERMOTIVE GATEWAY FAST IDLE - CHEVY G3500/4500 GAS & DIESEL. (REQUIRES INTERMOTIVE FAST IDLE OPTION 2247)		
42861	1	WC DR, DOUBLE, 2 WINDOWS, INT LITE, AJAR PKG, EXT LITE, EXTRA SPRING		
4283	1	UPGRADE DOOR FRAME TO STAINLESS STEEL - DOUBLE W/C DOOR (REQUIRES DBL W/C DOOR OPTION)		
4259	1	DUAL HANDLES FOR DOUBLE WC DOOR		
4307	1	Q-STRAINT STORAGE POUCH		
4314	1	Q-STRAINT WEB CUTTER P/N Q5-7590		
43003	1	Q-STRAINT, "QRT" DELUXE SYSTEM WITH L-TRACK Q-8100-A1-L		
4254	1	RICON KLEAR VUE K5510-F ADA, 34" X 54"		
4787	1	SEAT, MID-HIGH, RIGID, SGL, FEATHERWEIGHT (N/A AS AISLE FACING SEAT)		
4786	4	SEAT, MID-HIGH, RIGID, DBL, FEATHERWEIGHT (N/A AS AISLE FACING SEAT)		
44771	1	SEAT, BV FOLD AWAY, NOTCH BACK, DBL, 3-STEP, MID-HI FREEDMAN		
4681	1	RE-COVER OEM DRIVER SEAT, LEVEL 1, CHEVY		
49531	1	SEAT, FABRIC UPGRADE TO LEVEL 3, (1) DRIVER SEAT		
4953	11	SEAT, FABRIC UPGRADE TO LEVEL 3, (1) PASS SEAT		
4746AV	6	GRAB HANDLE, TOP MOUNT, ANTIVANDAL, BLACK (N/A ON HIGH BACK SEATS)		
4674	1	SEAT BELT, U.S.R., SINGLE SEAT, CURB SIDE		
4676	4	SEAT BELT, U.S.R., DOUBLE SEAT		
4663	1	SEAT BELT, U.S.R., DOUBLE 3-STEP FOLDAWAY		
4756	7	SEAT BACK, ABS, MID-HIGH, (N/A ON ICS SEATS)		
<b>VEHICLE OPTIONS</b>				
1355	1	LOCKS KEYED ALIKE - CHASSIS ONLY		
1531	1	FIRST AID-24 UNIT W/AIRWAY		
5009	1	EXTERIOR DECAL-"CAUTION! CHILDREN MAY EXIT THIS BUS" ENGLISH & SPANISH		
	1	INTERMOTIVE PARK CRANK ONLY MODULE FOR CHEVY G3500/4500		
	1	RUBBER FLOORING TO BE RCA BRAND		
	1	18" long LED brake Light mounted on the rear door between windows		
	1	ACC CLIMATE CONTROLS A/C SYSTEM (23023 EVAP, 25031 CONDENSER & TM-16 COMPRESSOR) FOR CHEVY G3500/4500 DIESEL		
	1	8" painted stripe on the body of the bus		
	1	DECAL: Fire Extinguisher		
	2	DECAL: Law Prohibits the operation of this vehicle while anyone is stndng forward of the yellow line		
	2	DECAL: Please remain seated while the bus is in motion		
	1	fleet number (5 numbers and letters) 6" HIGH in 4 locations		
	1	STAINLESS STEEL FRAMES OF W/C DOOR AND REAR EXIT DOOR TO BE POWDER COATED WHITE TO MATCH BUS BODY		
<b>PRODUCTION NOTES</b>				
	1	ABS SEAT BACKS ON ALL SEATS EXCEPT REAR ROW		
	1	THROW IN AN EXTRA "DO NOT STAND FORWARD OF YELLOW STANDEE LINE" DECAL		
	1	KEY BODY DOORS ALIKE, AS MUCH AS POSSIBLE		
	1	RELOCATE BOTH BATTERIES TO SLIDE OUT TRAY		
	1	NO BUTT CONNECTORS		
	1	PLACE INTERIOR DOME LIGHT OVER EACH ROW OF PASSENGER SEATS		



# GCII Order Form-V17

All information contained in this document is subject to change without notice.

Date 1/4/2010 Customer Ft. Bend County, TX # of Units 5 to 28  
 Dealer National Bus Sales Address \_\_\_\_\_  
 Contact Ryan Frost City/State/ZIP \_\_\_\_\_ GC Quote # 8114  
 Phone \_\_\_\_\_ Contact \_\_\_\_\_  
 Phone \_\_\_\_\_

The following information is needed for all sales allowances

Delivery By Oct 31st. Will you purchase chassis from GC? Yes  
 Liquidated Damages (daily) None Specified If so, GC chassis cost \_\_\_\_\_  
 Dealer margin \_\_\_\_\_ If not, who will you transfer it through \_\_\_\_\_  
 Dealer cost (delivery, PDI, etc) \_\_\_\_\_ If transferred, chassis cost (dnet) \_\_\_\_\_  
 Est. discount required to win \_\_\_\_\_ Chassis rebates available Yes  
 Competition \_\_\_\_\_ Customer FIN code \_\_\_\_\_

One time purchase? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
If no, please answer the following questions
Length of contract (months): up to 60 months
Are add ons allowed? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
If so, how many?
Is there a price escalator? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
If so, what is the escalator? Up to 4% annually

Is this quote: Government <input checked="" type="checkbox"/> Retail <input type="checkbox"/>
Is this quote a: Bid <input checked="" type="checkbox"/> RFP <input type="checkbox"/>
Is unit FTA funded? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

<b>Order Summary</b>	Sub Total:	\$0
	Plus Frt:	
	Minus Discount:	
	Bus Body Total:	\$0
	D-NET Chassis:	
	Total:	\$0

**Special Instructions** This quote is valid for 60 days unless length of contract is filled out above.

If special order chassis is required, describe below

**STANDARD CHASSIS**

<b>This section for Goshen Coach use.</b>	Requested by: _____	Date _____
	Approval - Sls Mgr: _____	Date _____
	Approval - Prod. Mgr: _____	Date _____
	Approval - Finance. Mgr. _____	Date _____
	Approval - Gen. Mgr. _____	Date _____
	Approval - Thor Bus _____	Date _____

- |   |   |   |
|---|---|---|
| <b>Alto</b>   | <b>Under Seats</b>  | <b>Cab</b>  |
| <input type="checkbox"/> Std. Black Ribbed Rubber         | <input type="checkbox"/> Std. Grey Carpet                 | <input checked="" type="checkbox"/> Std. Grey Vinyl |
| <input checked="" type="checkbox"/> Colored Ribbed Rubber | <input type="checkbox"/> Black Smooth Rubber              | <input type="checkbox"/> Vinyl                      |
| Color _____   | <input checked="" type="checkbox"/> Colored Smooth Rubber | Color _____   |
| <input type="checkbox"/> Carpet                           | Color _____   | <input type="checkbox"/> Auto Cloth                 |
| Color _____   | <input type="checkbox"/> Other _____                      | Color _____   |
| <input type="checkbox"/> Other _____                      |   | <input type="checkbox"/> Grey Silver Haze           |

- |   |  |  |
|---|--|--|
| <b>Walls</b>                                      | <b>Ceiling</b>                                 | <b>Floors</b>                            |
| <input checked="" type="checkbox"/> Std. Grey FRP | <input type="checkbox"/> Std. Grey Silver Haze | <input type="checkbox"/> Std. Grey Vinyl |
| <input type="checkbox"/> Vinyl                    | <input checked="" type="checkbox"/> Grey FRP   | <input type="checkbox"/> Vinyl           |
| Color _____                                       | <input type="checkbox"/> Vinyl                 | Color _____                              |
| <input type="checkbox"/> Auto Cloth               | Color _____                                    | <input type="checkbox"/> Auto Cloth      |

Color \_\_\_\_\_  
 Carpet \_\_\_\_\_  
 Grey Silver Haze \_\_\_\_\_

Auto Cloth \_\_\_\_\_  
 Carpet \_\_\_\_\_  
 Seat Material w/center stripe \_\_\_\_\_

Color \_\_\_\_\_  
 Grey Silver Haze \_\_\_\_\_  
 Grey FRP \_\_\_\_\_

Blue \_\_\_\_\_  
 Burgundy \_\_\_\_\_  
 Green \_\_\_\_\_  
 No Graphics \_\_\_\_\_

FIN Code \_\_\_\_\_  
 ZIP Code \_\_\_\_\_  
 Release Chassis to \_\_\_\_\_  
 PO# \_\_\_\_\_

NOTE: FORD DIESEL MODELS INCLUDE BATTERY BOX WITH SLIDE OUT TRAY.

Non-Blanks

\$0

GCC314		1	26' MODEL		
G47D	1		GCII 177"WB/314", Chevy 6.6L Dsl, GVWR 14,200		
13781	1		EXHAUST-ROUTE TO STREETSIDE-DIESEL ENGINES (STD ON CHEVY 139" WB CHASSIS) (N/A ON 159" WB / 263" OAL G4500 DUE TO FUEL TANK LOCATION)		
2240	0.5		MUD FLAPS-FRONT (REAR MUD FLAPS ARE STANDARD)		
1451	1		RUNNING BOARD DRIVER SIDE DIAMOND PLATE		
2247	1		FAST IDLE FOR CHEVY G3500/4500 GAS & DIESEL OR C4500/5500 DIESEL ONLY(INTERMOTIVE GATEWAY)		
2200	1		TOW HOOKS-REAR (N/A ON 159"WB / 263" OAL G4500 DUE TO FUEL TANK LOCATION)		
1380	1		FUEL TANK-ACCESS PLATE OVER SENDING UNIT (ON ES N/A WITH REAR LUGGAGE)		
23602	1		BATTERY BOX WITH STAINLESS STEEL SLIDE OUT TRAY		
2180	1		TIRE-SPARE & WHEEL GCII & PII		
7124	1		WHEEL INSERTS-4 WHEELS STAINLESS STEEL (FORD OR CHEVY)		
2110	1		BUMPER-REAR ROMEO RIM		
47263	1		BUMPER-REAR ANTI-RIDE SHIELD, ALL GCII MODELS		
13569	1		MOR/RIDE-REAR CHEVY G3500/4500) (N/A W/SPARE MOUNTING KIT ON 159" WB CHEVY)		
2314	1		FLOOR-PLYWOOD 5/8" MARINE GRADE		
YSN	1		YELLOW STEP NOSING		
15193	1		RUBBER-COLORED W/RADIUS IPO CARPET, 36" AISLE		
4709	1		STANDEE LINE-YELLOW, w/ 2" SIGN "NO STANDING FORWARD OF YELLOW LINE"		
1517	1		FRP ON CEILING		
4086	1		DOOR HOLD OPEN, GAS STRUT STYLE, EACH (STD ON DOUBLE W/C DOOR)		
1500	1		ENTRY DOOR-36" ELECTRIC IPO MANUAL		
7165	1		REAR DOOR-36" W/2 WINDOWS W/DOOR AJAR BUZZER & LIGHT ON DASH		
1571	1		STAINLESS STEEL-STEPWELL & ENTRY DOOR SURROUND		
7151	1		STAINLESS STEEL - REAR DOOR FRAME (REQUIRES OPTION 7160 OR 7165)		
7166	1		WINDOW-REAR TWIN (N/A WITH REAR LUGGAGE ROOM)		
7020	1		ROOF HATCH-TRANSPEC LOW PROFILE ECONO SAFETY VENT #1975		
4210	1		HEATER, REAR-35000 BTU		
3696	2		VALVE-HEATER, 1/4 TURN BRASS SHUT-OFF ILO STANDARD VALVE		
7060	1		DESTINATION SIGN, TRANSIGN-FRONT W/15 POSITION SCROLL & ELECTRIC MOTOR		
7063	1		DESTINATION SIGN, TRANSIGN-SIDE W/15 POSITION SCROLL & ELECTRIC MOTOR		
1535	1		ALARM-BACK UP		
1638	1		ALARM-EMERGENCY WINDOW AJAR PACKAGE		
3011	1		DISCONNECT SWITCH-BATTERY CUT-OFF, FORD & CHEVY		
2400	1		SCHEMATIC-LAMINATED ELECTRIC LEGEND ON ELEC. DOOR		
7030	1		SCHEMATICS-WIRING AS BUILT		
3192	1		STOP REQUEST-PULL CORD SYSTEM		
3075	1		GROUND PLANE & PRE-WIRE FOR 2-WAY RADIO		
3062	1		RADIO-DELUXE AM/FM/CD W/4 SPEAKERS (INCLUDES CLOCK)		
3053	1		ADD ON PA SYSTEM WITH EXTERNAL SPEAKER (REQUIRES A RADIO OR VIDEO OPTION)		
3232	1		LIGHTS-INTERIOR DOME ON WITH ENTRY DOOR OPEN		
3179	1		BRAKE LIGHT-REAR CENTER MOUNTED LED		
3208	1		EXTERIOR LIGHT-HOODED AT ENTRANCE DOOR LED		
3203	1		EXTERIOR LIGHTS (PAIR) - 7" AMBER LED LOCATION REAR		
31931	1		ARMOR FOR MARKER & CLEARANCE LIGHTS		

31815	1	MIDSHIP TURN SIGNAL / MARKER LIGHT COMBINATION (ARMORED) - LED		
4129	1	COAT HOOK-DRIVER W/STRAP		
4153	1	GRAB RAILS- ENTRANCE VERTICAL, BOTH SIDES		
1520	1	GRAB RAILS-CEILING (BOTH SIDES OF AISLE)		
4130	1	MODESTY PANEL-DRIVER W/ STAINLESS STEEL STANCHIONS		
4140	1	MODESTY PANEL- PLEXIGLASS TOP (TINTED)		
4131	1	MODESTY PANEL-INCREASE WIDTH TO 31"		
3694	1	MODESTY PANEL-BEHIND WHEELCHAIR LIFT		
2277	1	FIRE EXTINGUISHER-10 LB		
1549	1	TRIANGLES-EMERGENCY IN BOX		
7025	314	SKIRTS - FIBERGLASS ILO ALUMINUM (PRICED PER INCH OF BUS' OVERALL LENGTH. I.E., ENTER A QUANTITY OF 285 FOR A 285" BUS)		
4885	1	MIRRORS-EXTERIOR, M715, REMOTE CONTROL, CHEVY, ROSCO		
1533	1	MIRRORS-INTERIOR FLAT 6"X16"		
7200	1	LENS-WIDE ANGLE 11"X14" (ADHERES TO REAR WINDOW)		
13643	2	DECAL-"NO SMOKING" RED ON WHITE		
4355	1	DECAL-"PRIORITY SEATING WC AREA" (ADA REQUIRED)		
1364	2	DECAL-"WATCH YOUR STEP" MOUNT ON TOP RISER		
4350	1	DECAL-INTERNATIONAL WHEELCHAIR SYMBOL-9"X9"		
13648	2	DECAL-"NO FOOD, DRINK OR TOBACCO USE ALLOWED" RED ON WHITE		
6050	1	PAINT BLACK OUT WINDOWS		
4360	1	INTERLOCK KIT FOR INTERMOTIVE GATEWAY FAST IDLE - CHEVY G3500/4500 GAS & DIESEL. (REQUIRES INTERMOTIVE FAST IDLE OPTION 2247 )		
4286	1	WC DR, DBL, 2 WIND, INT LITE, AJAR PKG, EXT LITE, EXTRA SPRING		
4283	1	UPGRADE DOOR FRAME TO STAINLESS STEEL - DOUBLE W/C DOOR (REQUIRES DBL W/C DOOR OPTION)		
4259	1	DUAL HANDLES FOR DOUBLE WC DOOR		
4307	2	Q-STRAINT STORAGE POUCH		
4314	1	Q'STRAIT WEB CUTTER P/N Q5-7590		
43003	2	Q'STRAIT, "QRT" DELUXE SYSTEM WITH L-TRACK Q-8100-A1-L		
4254	1	RICON KLEAR VUE K5510-F ADA, 34" X 54"		
4268	1	RICON WHEELCHAIR PADDING KIT (FITS ALL MODELS)		
4786	6	SEAT, MID-HIGH, RIGID, DBL, FEATHERWEIGHT (N/A AS AISLE FACING SEAT)		
44771	2	SEAT, BV FOLD AWAY, NOTCH BACK, DBL, 3-STEP, FREEDMAN		
4681	1	RE-COVER OEM DRIVER SEAT, LEVEL 1, CHEVY		
49541	1	SEAT, FABRIC UPGRADE TO LEVEL 4, (1) DRIVER SEAT		
4954	16	SEAT, FABRIC UPGRADE TO LEVEL 4, (1) PASS SEAT		
4746AV	8	GRAB HANDLE, TOP MOUNT, ANTIVANDAL, BLACK (N/A ON HIGH BACK SEATS)		
4676	6	SEAT BELT, U.S.R., DOUBLE SEAT		
4663	2	SEAT BELT, U.S.R., DOUBLE 3-STEP FOLDAWAY		
4756	12	SEAT BACK, ABS, MID-HIGH, (N/A ON ICS SEATS)		
1355	1	LOCKS KEYED ALIKE - CHASSIS ONLY		
1531	1	FIRST AID-24 UNIT W/AIRWAY		
5009	1	EXTERIOR DECAL-"CAUTION! CHILDREN MAY EXIT THIS BUS" ENGLISH & SPANISH		
4743	1	FAREBOX-MAIN TREASURY MODEL T1-2 WITH (2) VAULTS		
	1	INTERMOTIVE PARK CRANK ONLY MODULE FOR CHEVY G3500/4500		
	1	RUBBER FLOORING TO BE RCA BRAND		
	1	18" long LED brake Light mounted on the rear door between windows		
	1	ACC CLIMATE CONTROLS A/C SYSTEM (23023 EVAP, 25031 CONDENSER & TM-16 COMPRESSOR) FOR CHEVY G3500/4500 DIESEL		
	1	8" painted stripe on the body of the bus		
	1	DECAL: Fire Extinguisher		
	2	DECAL: Law Prohibits the operation of this vehicle while anyone is stndng forward of the yellow line		
	2	DECAL: Please remain seated while the bus is in motion		
	1	fleet number (5 numbers and letters) 6" HIGH in 4 locations		
	1	STAINLESS STEEL FRAMES OF W/C DOOR AND REAR EXIT DOOR TO BE POWDER COATED WHITE TO MATCH BUS BODY		
		<b>PRODUCTION NOTE</b>		
	1	ABS SEAT BACKS ON ALL SEATS EXCEPT REAR ROW		
	1	THROW IN AN EXTRA "DO NOT STAND FORWARD OF YELLOW STANDEE LINE" DECAL		
	1	KEY BODY DOORS ALIKE, AS MUCH AS POSSIBLE		
	1	RELOCATE BOTH BATTERIES TO SLIDE OUT TRAY		
	1	NO BUTT CONNECTORS		
	1	PLACE INTERIOR DOME LIGHT OVER EACH ROW OF PASSENGER SEATS		



U.S. Department  
Of Transportation  
**Federal Transit  
Administration**

Headquarters

1200 New Jersey Avenue S.E.  
Washington DC 20590

October 16, 2009

Mr. P. Michael Person  
Vice President of Finance/DBE Liaison Officer  
Goshen Coach, Inc.  
25161 Leer Drive  
Elkhart, Indiana 46514

Re: Fiscal Year 2010 Goal

Dear Mr. Person:

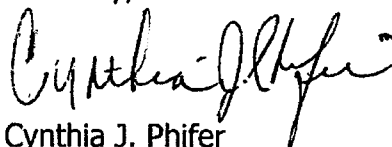
In accordance with the regulations on the Participation of Disadvantaged Business Enterprises (DBEs) in the Department of Transportation Financial Assistance Programs, 49 CFR Part 26, Section 26.49, the Federal Transit Administration's (FTA) Office of Civil Rights reviewed the DBE goal and methodology submitted by Goshen Coach, Inc. for the period of October 1, 2009 through September 30, 2010. Based on our review, we accept your DBE goal submission of .22 percent as of October 16, 2009.

Your firm must submit semi-annual progress reports using the new reporting form entitled "Uniform Report of DBE Awards or Commitments and Payments", which is located on the web site: [www.fta.dot.gov/dbe](http://www.fta.dot.gov/dbe). This report should be submitted by June 1 (for period October 1 – March 31) and December 1 (for period April 1 – September 30), showing contracts awarded and procurements from DBEs on transit vehicle contracts funded by the FTA. Please forward this information to:

Federal Transit Administration  
Office of Civil Rights  
1200 New Jersey Avenue, S.E.  
Room E54-306  
Washington, D.C. 20590

If further assistance is needed, please contact me at (202) 366-1141, fax number at (202) 366-3475, or at my e-mail address: [cynthia.phifer@dot.gov](mailto:cynthia.phifer@dot.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Cynthia J. Phifer". The signature is written in a cursive style with a large, looping initial "C".

Cynthia J. Phifer  
Equal Opportunity Specialist



Thor Industries Commercial Bus Division

# LIMITED ONE (1) YEAR WARRANTY



Thor Industries Commercial Bus Division

Goshen Coach (Warrantor) warrants to the first registered Owner for a period of one (1) year or twelve thousand (12,000) miles from the date of purchase, whichever comes first, that this product shall be free of SUBSTANTIAL DEFECTS in materials and workmanship, attributable to Warrantor, under normal use and service.

## WARRANTY:

### WARRANTY PERFORMANCE:

Warrantor will remedy SUBSTANTIAL DEFECTS by repair, free of charge to the Owner. Owner shall bear all expenses arising out of or relating to transporting the product to the appropriate Warranty Service location. Performance will be completed within thirty (30) calendar days of the date the product is delivered for Warranty Service pursuant to appropriate Warranty Claims Procedures.

### WARRANTY VALIDATION:

Return of the Owner's Registration Card is required to validate this Warranty. Failure to return the registration card voids the Warranty.

### EXPLICIT WARRANTY EXCLUSIONS:

- This Warranty DOES NOT COVER:**
1. Damage to the soft trim and appearance items if such damage is due to normal use, wear and tear, or exposure to elements.
  2. Accessories or parts not manufactured by Warrantor, which items include (but are not limited to): the chassis and its component parts, heaters, windows, generators, air conditioners, radios, power converters and batteries. The manufacturers of these products may provide warranties covering the performance of their particular products.
  3. Products which have been altered or modified by any party other than Warrantor.
  4. Damage caused by misuse, neglect, negligence or accident. Usage of this product in a manner which is inconsistent with design intentions or inconsistent with owner's manual directions will invalidate this Warranty in regard to damage caused by or relating to such inconsistent usage.
  5. Expenses arising out of or related to transporting the product to an appropriate Warranty Service location for service.

### WARRANTY TERMINATIONS:

- The following actions or events will result in the automatic termination of this Warranty and relieve Warrantor from any and all obligations under this Warranty;
1. Misuse or neglect of the product, failure to provide reasonable and necessary maintenance and necessary alteration or modification, accident, or improper loading.
  2. Sale of the product through auction.
  3. The expiration of the warranty period(s) set out herein.

### WARRANTOR RIGHTS:

Warrantor reserves the right to change the parts and designs of its products from time to time without notice and with no obligation to make corresponding changes in its products previously manufactured.

### WARRANTY CLAIM PROCEDURES:

All Warranty Service is to be performed at Warrantor's factory or at an authorized Warranty Service location. All Warranty Service must be authorized by Warrantor, in writing, prior to performance. Such written authorization instructing Owner as to where and when to deliver the product for Warranty Service will be given within five (5) working days of receipt of notification of a defect or malfunction provided the Warranty covers such defect or malfunction and all other terms of this Warranty have been satisfied in full. Notice should be presented in writing via registered mail to Goshen Coach, 25161 Leer Drive, Elkhart, Indiana 46514, and must be postmarked on or before the date of expiration of the appropriate Warranty period. Notice should give Owner's name and address, a brief description of the problem, the product model and serial number, the date of purchase, product mileage, the name of the dealer who sold the product, the current product location and Owner's location for contact during regular business hours.

### DAMAGE RECOVERY LIMITATION:

NO PERSON SHALL BE ENTITLED TO RECOVER FROM WARRANTOR FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES ARISING OUT OF OR RELATING TO ANY DEFECT IN THE PRODUCT.

### WARRANTY LIMITATIONS:

ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED IN DURATION TO THE WARRANTY PERIOD OF ONE (1) YEAR FROM DATE OF FIRST PURCHASE.

There are no Warranties of any nature made by Warrantor beyond the contents of this Limited Warranty. No person has authority to enlarge, amend or modify this Warranty.

### LEGAL RIGHTS:

This Warranty gives only those legal rights specifically enumerated herein. You may have other legal rights which vary from state to state.

SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES OR OF THE DURATION OF IMPLIED WARRANTIES, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.

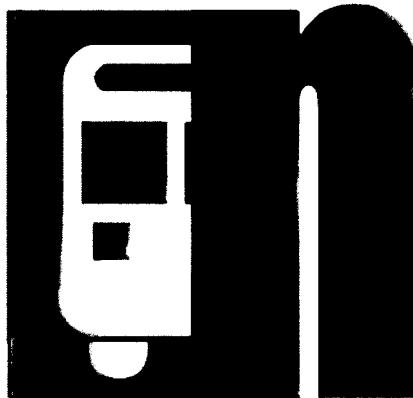
### EXTENDED WARRANTY ON STRUCTURAL ITEMS:

Warrantor warrants to the first registered Owner for a period of six (6) years or sixty-thousand (60,000) miles, whichever comes first, that this product shall be free of SUBSTANTIAL DEFECTS arising out of or relating to the structural portion of the product. The terms of this structural Warranty shall be the exact same terms as set out above in Warrantors Limited One (1) Year Warranty, except as such terms relate to the duration of coverage. This Structural Warranty is intended to only cover the performance of the steel cage structure of the product. For further information concerning such warranty, please contact Warrantor.

*Your New Bus*

# CUSTOMER SERVICE GUIDE

NATIONAL



BUS SALES & LEASING, INC.

**SHIPPING ADDRESS: 800 PICKENS DRIVE EXT. ■ MARIETTA, GA 30062**

**MAILING ADDRESS: P.O. BOX 6549 ■ MARIETTA, GA 30065-0549**

**(770) 422-8920 ■ (800) 282-7981**

VISIT US ON THE WEB: [www.NationalBusSales.com](http://www.NationalBusSales.com)

“The National Company with Local Service”

*Now that we are partners, we want you to know  
how you can count on us for support.*

PLEASE READ ON...

# Table of Contents

## **DELIVERY INFORMATION**

Questions and Answers regarding the delivery of your new bus	4
--	---

## **WARRANTY INFORMATION**

Questions and Answers regarding Warranty	5-8
Customer Notes	9

## **SERVICE INFORMATION**

Questions and Answers about Service	10-11
-------------------------------------	-------

## **PARTS INFORMATION**

Questions and Answers about Parts	12
-----------------------------------	----

# Delivery

## QUESTIONS AND ANSWERS REGARDING THE DELIVERY OF YOUR NEW BUS

### **What to expect when bus is delivered?**

Either at the time of delivery or soon afterwards, you can expect an orientation on the product. The National Bus Sales representative with whom you have been working will provide the orientation.

Perhaps you have already received an orientation on this particular product and do not feel you need another. That is fine, but, if for any reason you would like a "refresher" orientation, we would be happy to provide it. Should you desire an orientation, please call your sales representative so we can see that one is promptly scheduled.

### **What do I do if I have problems or questions regarding the delivery of my bus?**

Call our Sales Department at **(770) 422-8920 or TOLL FREE 1 800-282-7981**. Please let our receptionist know whether you are trying to reach the School Bus or Commercial Bus Sales Department. We will see that your needs will be promptly met!

### **What kind of maintenance procedures do I need to follow as soon as the bus is delivered to my facility?**

Of course, you will want to perform routine checks such as fluid levels, belts, hoses, and proper tire pressure. You will want to ensure all safety and operational systems are functioning properly.

National Bus Sales and/or the bus manufacturer, as part of our standard procedures, has thoroughly checked all these items before delivery to you.

### **National's Sales Directory**

#### **Sales Staff**

John Walsh	Ron Frost
Ken Bosland	Donna Sanders
Karla Lynch	Brent Roy
Beth Taylor	Troy Raley
Ryan Frost	Joe Lynch
David Clawson	Dana Spurgeon
Trisha Horne	Erica Neebling
Jerry Busbee	Greg Dae
Wayne Yates	Craig Cox
Clay Bulmer	Andrew Clawson
Drew Hawkins	Jim Sullivan
Micah Bailey	Eugene Rankin
Lindsey Taylor	Ashley Hughes
Heather Kennedy	Eugene Rankin

# Warranty

## QUESTIONS AND ANSWERS REGARDING WARRANTY

We at National Bus Sales are eager to ensure your continued satisfaction with your new bus. There may come a time when repairs covered under your Warranty Policy are needed. The following information is provided to help you understand how to utilize the Warranty services and get your bus back on the road. It is our desire to serve you as quickly and effectively as possible.

### What is Warranty intended to do?

The Warranty Policy described in the Owner's Certificate is intended to cover the reasonable cost of making repairs to your bus for parts that fail within the designated Warranty period. Having the cost of a repair covered under the Warranty policy means you have followed all the maintenance procedures outlined in the Owner's Manual. It also means the part failed within the designated Warranty period.

The Warranty Policy does not cover routine maintenance. It, also, does not cover repairs for parts failing outside the designated Warranty period. If you have any questions, please contact our Warranty Administrator.

### When does my bus Warranty go into effect?

Your new bus Warranty goes into effect at the mileage and on the date it is delivered and/or registered, whichever comes first.

### What should I do when I need a Warranty repair?

If you have a problem, **prior to making the repair**, contact our Warranty Administrator and explain the problem in detail. Together, we will come to a solution to get your bus back into operation with the least amount of inconvenience.

Please note all repairs must have prior approval by the Warranty Administrator. Please have the following information available:

1. Body Number
2. Mileage
3. Cause of Problem
4. Approximate Repair Cost

### Who do I contact regarding Warranty questions and claims?

<p>National Bus Sales &amp; Leasing, Inc. Warranty Administrator Mailing Address: P.O. Box 6549 ■ Marietta, GA 30065-0549 Shipping Address: 800 Pickens Drive Ext. ■ Marietta, GA 30062 (770) 422-8920 ■ Toll Free 1 800-282-7981 ■ Fax: (770) 422-9007 E-mail: <a href="mailto:Warranty@NationalBusSales.com">Warranty@NationalBusSales.com</a></p>
--

# Warranty

## Where can I go for Warranty service?

Depending on the type of problem, the Warranty Administrator will discuss with you the best way to get your bus back on the road. We may ask you to return the bus to the National Bus Sales service facility or take it to another authorized Warranty service facility. If circumstances warrant, you will be given authorization to repair it at your own facility.

## What procedure do I follow when Warranty repairs are made at my own facility?

Call the National Bus Sales Warranty Administrator prior to taking any action, at that time, you will be given an authorization number. Using this number when communication with National Bus Sales will expedite the Warranty claim process for you.

Once you receive the authorization number and replacement part (if necessary) from National, you may then perform the required repair.

## How do I get parts for Warranty repairs performed at my own facility?

1. Call the Warranty Administrator for the authorization number and to request the needed parts. Warranty work performed under the National Bus Sales' Warranty Policy must use parts supplied by National Bus Sales.

A Parts Credit can only be issued when parts approved by National are used. **USE OF UNAPPROVED PARTS MAY VOID THE WARRANTY.** In most cases, National will get parts to you within 36 hours. The procedure to follow for those rare occasions when National Bus Sales is unable to provide parts will be discussed later in this Customer Service Guide.

2. Receive the necessary parts from National and use them to make the needed Warranty repairs.
3. Complete the Warranty Worksheet, explaining in detail what you did to repair the bus, and send it to the National Bus Sales Warranty Administrator *along with the old part*.

## How do I receive credit for labor and parts if I perform the work in my own facility?

Once the Warranty Administrator has received your completed repair order and the old bus part(s), a claim will be filed accordingly, and upon receipt of a credit, we will credit your account.

### LABOR

1. The Warranty Administrator will authorize a credit to your account with National for the labor expense you have requested on your repair order.
2. Prior to the authorized repairs being complete, the Warranty Administrator will discuss with you the standard labor time involved for certain repairs and the amount you will be reimbursed. If there are extenuating circumstances, please discuss this prior to labor authorization.

### PARTS

When National Bus Sales sends you a part for Warranty repair, National will then debit your account for the cost of the part(s). When you return the old part along with your completed repair order, the claim will be filed. Once the claim has been approved for payment, your account will be credited.

# Warranty

## **What if I already have the necessary part at my own facility?**

To avoid confusion and any misunderstanding, call the National Warranty Administrator. You will be sent a replacement part, ensuring the part you use meets the manufacturer's Warranty qualification. Following this procedure ensures that your bus stays within the Warranty guidelines.

## **What do I do in those rare instances when National has difficulty in providing the necessary parts?**

Call the National Warranty Administrator. If it is determined we are having difficulty providing the parts necessary to make the repair, you will be given instructions to expedite the repair of your bus and still stay within the Warranty guidelines.

## **Does Warranty cover the cost of transporting the bus to and from authorized Warranty repair centers?**

You are responsible for the cost of transporting the bus to and from the authorized Warranty service center. However, we can provide this transportation as a service to our customers at a very reasonable cost. These rates are based upon factors such as distance, chase cars, number of buses, etc

**Please let us know if you need assistance in transporting the vehicle.**

## **Is towing covered under Warranty?**

The component manufacturer (i.e. engine or transmission) covers towing under certain conditions since it is considered a policy decision. The Owner's Manual will detail the circumstances. **Bus manufacturers generally do not cover towing.**

## **What maintenance records are required to ensure the cost of the repairs are covered under Warranty?**

As mentioned earlier, it is a good idea to register your Warranty with National Bus Sales. It is also a good idea to save all your receipts for work performed on your bus. It is important to keep accurate records of all maintenance work. In order to ensure repair costs are covered under the Warranty, you may have to show you followed all the required maintenance procedures described in the Owner's Manual.

## **What do I do when I have problems with the bus while under Warranty but can not get it in for repairs right away?**

The length of time needed to repair your bus will depend upon the severity of the problem, who does the work, and availability of necessary parts. If you bring the bus to the National facility, it is our goal to complete the repairs as quickly as possible. If we know the parts are not immediately available and you want us to make the repairs, we recommend you wait to bring the bus in until the parts arrive. If you receive authorization from the Warranty Administrator to do the work at your own facility and parts are available (which is so the vast majority of the time), we will get the parts to you via UPS the next day.

# Warranty

## **How do I receive proper credit for my Warranty claims?**

1. Before taking any action, call the National Bus Sales Warranty Administrator. You will be given instructions on exactly what to do and will be provided with an authorization number to use in all communications with us.
2. If you perform the work at your own facility, make sure you complete your repair order including all the information for parts and labor. Send this form to our Warranty Administrator.
3. If you perform the work at your own facility, make sure the old parts are returned to us with the label attached to the part. If you received authorization from the Warranty Administrator to purchase parts from an outside vendor, it is essential for you to send a copy of the invoice along with the old part.

## **How long does it take for me to receive credit for my Warranty claims?**

We want to expedite the processing of your Warranty claims. We are committed to crediting you within thirty days after we have received all the paperwork and failed parts for you.

**Note: It is extremely important to file your Warranty claim within 30 days of the repair, or your claim could be subject to disapproval.**

## Warranty

### **Customer Notes:**

# Service

## QUESTIONS AND ANSWERS REGARDING SERVICE

### **Who do I call if one of my buses needs maintenance, repair, body work, an option installed, or some other kind of service?**

Call our Service Department at (770) 422-8920 or Toll Free 1 800-282-7981. We will be pleased to help you!

### **What kinds of service work can I expect the National Bus Sales Service Facility to perform?**

National is fully prepared to meet your bus service needs. We are experts in installing special options like wheelchair lifts, wheelchair securement, air conditioners, and roof vents. We can, also, provide service as it relates to chassis and body repair.

Our service facility can meet your extremely important routine maintenance functions, ensuring all Warranty prerequisites are met.

If you need major repairs, like engine work, transmission or brake repairs, we will make sure your bus is operational as soon as possible.

If you have sustained body damage and need repairs, your needs can be met at the National Bus Sales service facility and/or Body Repair Facility.

### **What about transporting the bus to and from your facility?**

We provide transportation service for our customers at a reasonable cost. These rates are based on distance, time, chase vehicles needed, number of buses, etc. Please note, pick up and delivery of buses will be made during normal business hours, unless other arrangements are made with the Service Manager.

Our hours of operation are Monday – Friday, 8:00 a.m. – 5:00 p.m.

### **How long will it take to get my bus repaired?**

Of course, the length of time necessary to repair your bus will depend on the type of repair necessary, its severity, and the availability of parts.

It is the goal of National Bus Sales to expedite repairs. Once an assessment has been made, we will be able to give a more accurate estimate of repair time.

### **What can I expect to pay?**

National's Service Department rates are both reasonable and competitive. Each job will be evaluated so that you receive the level of service needed to best accommodate the repair. We provide written estimates upon request.

# Service

## **What kind of Warranty do I receive on the service work performed?**

Our standard policy is to provide a 90 day Warranty covering parts and labor on any service work we perform. Any other arrangements for specialized services need to be agreed upon in writing prior to the work being performed.

# Parts

## QUESTIONS AND ANSWERS REGARDING PARTS

### **Who do I call if I need parts for my bus?**

Call our Parts Department at (770) 422-8920 or Toll Free 1 800-282-7981 and we will be happy to serve you!

### **What kinds of parts do you stock?**

We specialize in parts for Blue Bird, Goshen and Collins Buses. We can provide parts for many manufacturers of school, commercial and transit buses, and we also supply parts for our variety of environmentally safe vehicles.

### **How quickly can I expect to receive the parts I order?**

Approximately 90% of all orders received by 3:00 p.m. will ship the same day. Our standard procedure is to ship parts via UPS or motor freight (F.O.B. Marietta, Georgia). Should you require guaranteed service, inform your order analyst.

### **May I come by your facility and pick up the parts I need?**

Of course! We would be happy to see you and get the parts you need while you wait. This would be an excellent time to meet face-to-face with the people responsible for servicing your account.

### **What if you do not have the parts I need in stock?**

In most cases your order can be drop-shipped from the vendor. National can expedite shipping to meet your needs. Should the vendor or manufacturer not have the component you need, we will source the part with other manufacturers to expedite shipping.

**National Bus Sales accepts checks and all major credit cards.**



Thank you for your business!  
“The National Company with Local Service”  
[www.nationalbussales.com](http://www.nationalbussales.com)



## Consolidated Certification Form

Form PTN-130  
(Rev. 07/09)  
Page 1 of 4

### I. FOR ALL BIDS:

The undersigned vendor certifies to abide by these clauses and include the following clauses in each subcontract financed in whole or in part with Federal Transit Administration (FTA) funds. Vendors are certifying by reference the entire list of FTA FY 2009 Certifications and Assurances, and shall download the same at: [http://www.fta.dot.gov/documents/2009-Certs-Appendix\\_A.pdf](http://www.fta.dot.gov/documents/2009-Certs-Appendix_A.pdf).

#### A. Disadvantaged Business Enterprises (DBE) Certification

The vendor will provide products compliant with 49 CFR 26.49 regarding the vehicle manufacturer's overall DBE goal.

#### B. Access to Third Party Contract Records

As required by 49 U.S.C. § 5325(g). The VENDOR agrees provide sufficient access to records as needed to assure proper project management and compliance with Federal laws and regulations.

#### C. Interest of Members of or Delegates to Congress

The vendor certifies that no member of or delegate to the Congress of the United States (US) shall be admitted to any share or part of this contract or to any benefit arising therefrom.

#### D. Prohibited Interest

The vendor certifies that no member, officer or employee of the Public Body or of a local public body during his or her tenure or one year thereafter shall have any interest, direct or indirect, in this contract or the proceeds thereof.

#### E. Cargo Preference - Use of United States-Flag Vessels

The vendor agrees: a. to use privately owned US -Flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material or commodities pursuant to the underlying contract to the extent such vessels are available at fair and reasonable rates for US-Flag commercial vessels; b. to furnish within 20 working days following the date of loading for shipments originating within the US or within 30 working days following the date of loading for shipments originating outside the US, a legible copy of a rated, "on-board" commercial ocean bill-of-lading in English for each shipment of cargo to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590 and to the FTA recipient (through the contractor in the case of a subcontractor's bill-of-lading).

#### F. Energy Conservation

The vendor agrees to comply with mandatory standards and policies relating to energy efficiency, which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act.

#### G. No Obligation by the Federal Government.

The Purchaser and vendor acknowledge and agree that, notwithstanding any concurrence by the Federal Government in or approval of the solicitation or award of the underlying contract, absent the express written consent by the Federal Government, the Federal Government is not a party to this contract and shall not be subject to any obligations or liabilities to the Purchaser, Contractor or any other party (whether or not a party to that contract) pertaining to any matter resulting from the underlying contract).

#### H. Program Fraud and False or Fraudulent Statements or Related Acts

The vendor acknowledges that the provisions of the Program Fraud Civil Remedies Act of 1986, as amended, 31 U.S.C. §3801 et seq. and U.S. DOT regulations, "Program Fraud Civil Remedies," 49 C.F.R. Part 31, apply to its actions pertaining to this project. The vendor certifies truthfulness and accuracy of any statement it makes pertaining to the FTA-assisted project. The vendor acknowledges that if it makes, or causes to be made, a false, fictitious or fraudulent claim, statement, submission or certification, the Federal Government reserves the right to impose the penalties of the Program Fraud Civil Remedies Act of 1986 as deemed appropriate. The vendor acknowledges that if it makes, or causes to be made, a false, fictitious or fraudulent claim, statement submission, or certification to the Federal Government relating to the FTA-assisted project, per 49 U.S.C. §5307, the Government reserves the right to impose the penalties of 18 U.S.C. §1001 and 49 U.S.C. §5307(n)(1) on the Contractor, as deemed appropriate.

#### I. Contract Work Hours

(1) **Overtime requirements** - No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) **Violation; liability for unpaid wages; liquidated damages** - In the event of any violation of the clause set forth in paragraph (1) of this section, the contractor & any subcontractor responsible therefore shall be liable for unpaid wages and shall be liable to the United States for liquidated damages which shall be computed for each individual laborer, mechanic, watchman or guard employed in violation of the clause set forth in paragraph (1) of this section, in the sum of \$10 for each calendar day that an individual was required / permitted to work over 40 hours in a workweek without payment of overtime wages required by the clause in paragraph (1) of this section.

(3) **Withholding for unpaid wages and liquidated damages** - The purchaser shall upon its own action or upon written request of the Department of Labor (DOL) withhold or cause to be withheld, from any money payable for work performed by the contractor or subcontractor under any contract or other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as set-forth in paragraph (2) of this section.

(4) **Subcontracts** - The contractor or subcontractor shall include the clauses set forth in this section and require the same from subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with these clauses.

(5) **Payrolls and basic records** - Payrolls and related basic records shall be maintained by the contractor during the course of the work and preserved for three years thereafter for all laborers and mechanics working at the work site (or under the United States Housing Act of 1937 or the Housing Act of 1949, in the construction or development of the project). Such records shall contain the name, address and social security number of each worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records showing that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, that the plan or program has been communicated in writing to the laborers or mechanics affected, and records of the costs anticipated or actual costs incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of registration of apprenticeship programs, certification of trainee programs, registration of the apprentices and trainees, and ratios & wage rates prescribed in applicable programs.

J. Civil Rights

(1) **Nondiscrimination** - In accordance with Title VI of the Civil Rights Act (CRA), as amended, 42 U.S.C. §2000d, section 303 of the Age Discrimination Act of 1975, as amended, 42 U.S.C. §6102, section 202 of the Americans with Disabilities Act of 1990, 42 U.S.C. §12132, and Federal transit law at 49 U.S.C. §5332, the vendor agrees that it will not discriminate against any employee or applicant for employment because of race, color, creed, national origin, sex, age, or disability. In addition, the vendor agrees to comply with applicable Federal implementing regulations and other implementing requirements FTA may issue.

(2) **Equal Employment Opportunity** - The following equal employment opportunity requirements apply:

(a) **Race, Color, Creed, National Origin, Sex** - In accordance with Title VI of the CRA, as amended, 42 U.S.C. §2000e, and Federal transit laws at 49 U.S.C. §5332, the vendor agrees to comply with all applicable equal employment opportunity requirements of U.S. DOL regulations, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, DOL," 41 C.F.R. Parts 60 et seq., (which implement Executive Order No. 11246, "Equal Employment Opportunity," as amended by Executive Order No. 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," 42 U.S.C. §2000e note), and with any applicable Federal statutes, executive orders, regulations and Federal policies that may in the future affect construction activities undertaken in the course of the Project. The vendor agrees to take affirmative action to ensure that applicants are employed & treated during employment without regard to their race, color, creed, national origin, sex or age. Action shall include but not be limited to employment, upgrading, demotion, transfer, recruitment, layoff, termination, rates of pay or other forms of compensation; and selection for training, including apprenticeship. The vendor agrees to comply with any implementing requirements FTA may issue.

(b) **Age** - In accordance with section 4 of the Age Discrimination in Employment Act of 1967 (29 U.S.C. §§623 and 49 U.S.C. §5332), the vendor agrees to refrain from discrimination against present and prospective employees for reason of age. and comply with any implementing requirements FTA may issue.

(c) Disabilities - In accordance with section 102 of the Americans with Disabilities Act (42 U.S.C. §12112), the contractor agrees to comply with the requirements of U.S. Equal Employment Opportunity Commission, "Regulations to Implement the Equal Employment Provisions of the Americans with Disabilities Act," 29 C.F.R. Part 1630, pertaining to employment of persons with disabilities. and to comply with any implementing requirements FTA may issue.

K. Altoona Test Certification (Check one of the following):

- The vehicle has been Altoona tested, report number: PTI-BT-R9923-03-00 and PTI-BT-R9322-94  
 The vehicle is exempt from testing IAW 49 CFR 665.  
 The vehicle is currently being tested at Altoona.

Federal funds will not be released until the purchasing agency receives a copy of the Altoona test report, as appropriate, per 49 CFR 665.

L. Federal Standards

The VENDOR agrees to comply with applicable third party procurement requirements of 49 U.S.C. chapter 53, applicable U.S. DOT third party procurement and financial administration regulations at 49 C.F.R. § 18.36 or 49 C.F.R. §§ 19.40 - 19.48, with FTA Circular 4220.1F, "Third Party Contracting Guidance," and any later revision thereto, and other procurement requirements in effect now or as amended to the extent applicable.

M. Federal Motor Vehicle Safety Standards (FMVSS)

Any vehicles provided by the vendor will comply with all applicable FMVSS.

N. Application of Federal, State, & Local Laws, Regulations, & Directives (Federal Changes)

The VENDOR agrees that Federal laws and regulations control project award and implementation. The VENDOR understands and agrees that unless the recipient requests FTA approval in writing, the VENDOR may incur a violation of Federal laws or regulations or this agreement if it implements an alternative procedure or course of action not approved by FTA. The VENDOR understands and agrees that Federal laws, regulations, and directives applicable on the date on which Federal assistance is awarded may be modified from time to time. In particular, new Federal laws, regulations, and directives may become effective after the date the project agreement is effective, and might apply to that project agreement. The VENDOR agrees that the most recent versions of such Federal laws, regulations, and directives will apply to the administration of the project at any particular time.

O. Right of the Federal Government to Terminate

Upon written notice, the VENDOR agrees that the Federal Government may suspend or terminate all or any part of Federal assistance if terms of the project agreement are violated, if the Federal Government determines that the purposes of the laws authorizing the Project would not be adequately served by the continuation of Federal assistance for the Project, if reasonable progress on the Project is not made, if there is a violation of the project agreement that endangers substantial performance of the Project, or if the Federal Government determines that Federal assistance has been willfully misused by failing to make appropriate use of Project property. Termination of Federal assistance for the Project will not typically invalidate obligations properly incurred before the termination date to the extent those obligations cannot be canceled. The Federal Government reserves the right to require the refund of the entire amount of Federal assistance provided for the Project or a lesser amount.

P. Disputes, Breaches, Defaults, or Other Litigation

The VENDOR agrees that FTA has a vested interest in the settlement of any dispute, breach, default, or litigation involving the Project. Accordingly:

a. **Notification to FTA.** The VENDOR is aware that recipients of Federal assistance must notify FTA in writing of any current or prospective major dispute, breach, default, or litigation that may affect the Federal Government's interests in the Project or the administration or enforcement of Federal laws or regulations. If the Federal Government is to be named as a party to litigation for any reason, in any forum, the appropriate FTA Regional Counsel is to be notified in writing before doing so.

b. **Federal Interest in Recovery.** The VENDOR is aware that the Federal Government retains the right to a proportionate share, based on the percentage of the Federal share awarded for the Project, of proceeds derived from any third party recovery.

c. **Enforcement.** The VENDOR agrees to pursue its legal rights and remedies available under any third party contract or available under law or regulations.

d. **FTA Concurrence.** The VENDOR is aware that FTA reserves the right to concur in any compromise or settlement of any claim involving the Project.

e. **Alternative Dispute Resolution.** The VENDOR is aware that FTA encourages the use of alternative dispute resolution procedures, as may be appropriate.

**II. FOR BIDS OVER \$100,000:**

The vendor agrees to include the following in subcontracts exceeding \$100,000 financed by the FTA.

A. Buy America (Check where applicable):

- The vendor will comply with 49 USC 5323(j) and 49 CFR 661, providing Buy America compliant vehicles.
- The vendor cannot comply with the requirements 49 USC 5323(j), but may qualify for an exception to the requirement pursuant to the regulations in 49 CFR 661.7.

B. Non-Lobbying

The vendor certifies that no funds to be provided under this Contract will be used to attempt to influence any member of or delegate to Congress, to favor or oppose any legislation or appropriation by Congress, to lobby the state or local legislatures, or to lobby any officer or employee of an agency. The vendor certifies that it will comply with "Restrictions on Lobbying: Certification and Disclosure Requirements" as imposed by 29 CFR.

C. Debarment and Suspension

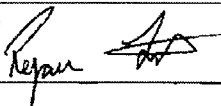
The vendor hereby certifies that it and its principals have not presently or within a three year period been debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from covered transactions by any Federal agency; and the vendor hereby certifies that it and its principals have not presently or within a three-year period been convicted of or had a civil judgment rendered against them for the commission of a fraud or a criminal offense in connection with obtaining, attempting to obtain or performing a public (Federal, state or local) transaction; violation of Federal or state antitrust statutes; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements or receiving stolen property.

D. Clean Water & Air

The vendor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq. The vendor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. §§7401 et seq. The vendor agrees to report each violation to the Purchaser and understands and agrees that the Purchaser will, in turn, report each violation as required to assure notification to the FTA and the EPA.

**III. CERTIFICATION TO PURCHASER:**

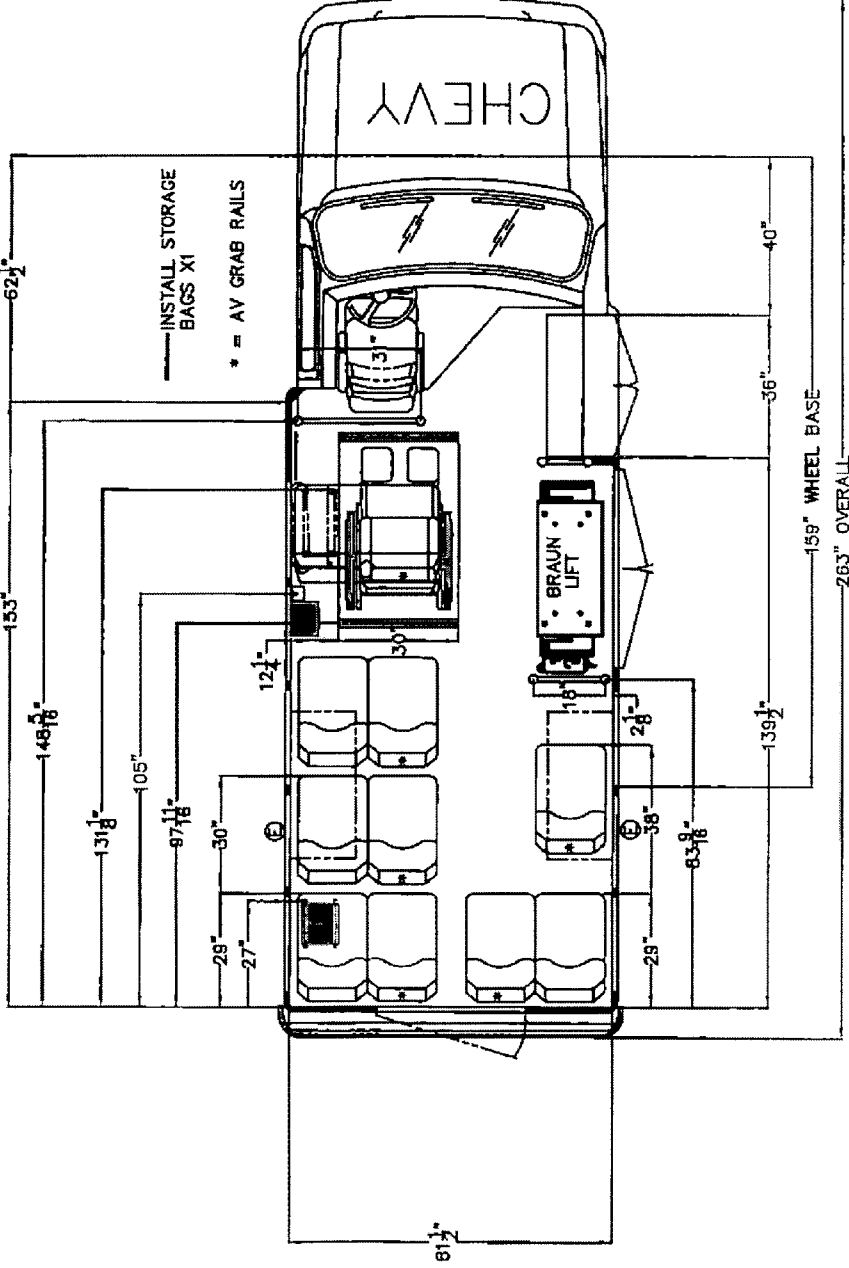
- A. The undersigned vendor certifies that the vehicle(s) furnished will meet or exceed the specifications.
- B. The undersigned vendor certifies that it has read all of the bid documents and agrees to abide by the terms, certifications, and conditions thereof.

Name of Company National Bus Sales and Leasing, Inc.	Printed Name of Person Completing Form Ryan Frost
Address 15580 Hwy. 114 Justin, TX 76247	SS# or Tax ID # 58-1216021
Telephone 817-636-2365	Signature 

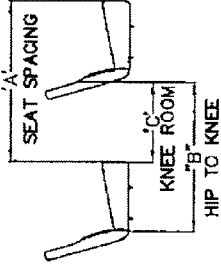
Disadvantaged Business Enterprise Information	Type of Organization (circle)	
	<input type="checkbox"/> Sole Proprietorship	<input type="checkbox"/> General Proprietorship
	<input checked="" type="checkbox"/> Corporation	<input type="checkbox"/> Limited Partnership
Is your firm a DBE? <input type="checkbox"/> (yes) <input checked="" type="checkbox"/> (no)	<input type="checkbox"/> Limited Proprietorship	
If yes, what type?		

The Texas Department of Transportation maintains the information collected through this form. With few exceptions, you are entitled on request to be informed about the information that we collect about you. Under Sections 552.021 and 552.023 of the Government Code, you also are entitled to receive and review this information. Under Section 559.004 of the Government Code, you are also entitled to have us correct information about you that is incorrect.

Rev.	Revision Description	By	Date	ECN / PFCN
A	DR&REL	JH	6/1/06	



SEAT STYLE	SEAT SPACING 'A'	HIP-TO-KNEE 'B'	KNEE ROOM 'C'
MID HI	30"	28"	7 3/4"
MID MI	38"	34"	15 3/4"



19' - 22' CATEGORY

Drawing Name / Description: <b>FP CHEVY Shell Front Lift/139/263</b>		Unit Number: Models:	Reference: Drawing Number: <b>Shell F.L.</b>	GC Part Number: Revision: <b>A</b>
DO NOT SCALE SIZE <b>A</b>	Tolerances: +/- .1/16" +/- .1" Unless Noted Otherwise	Work Instruction Reference: Scale: N/A	Configurator: File location: CHEVY/159/263/F LIFT	Sheet 1 of 1
Drawing Name / Description: <b>FP CHEVY Shell Front Lift/139/263</b>		Unit Number: Models:	Reference: Drawing Number: <b>Shell F.L.</b>	GC Part Number: Revision: <b>A</b>
25181 Lear Drive Elkhart, IN 46514 (874) 970-0083		Date: 2/7/06	Configurator: File location: CHEVY/159/263/F LIFT	Sheet 1 of 1
THIS DRAWING AND THE INFORMATION CONTAINED HEREON ARE THE EXCLUSIVE PROPERTY OF GOSHEN COACH. NO PARTS SHALL BE COPIED OR REPRODUCED IN ANY MANNER, NOR SHALL IT BE SUBMITTED TO OUTSIDE PARTIES FOR EXAMINATION WITHOUT OUR WRITTEN PERMISSION. THIS DRAWING IS LOANED TO YOU FOR USE WITH REFERENCE TO WORK UNDER CONTRACT WITH, OR PROPOSALS SUBMITTED TO GOSHEN COACH.		Scale: N/A	Configurator: File location: CHEVY/159/263/F LIFT	Sheet 1 of 1



Thor Industries Commercial Bus Division

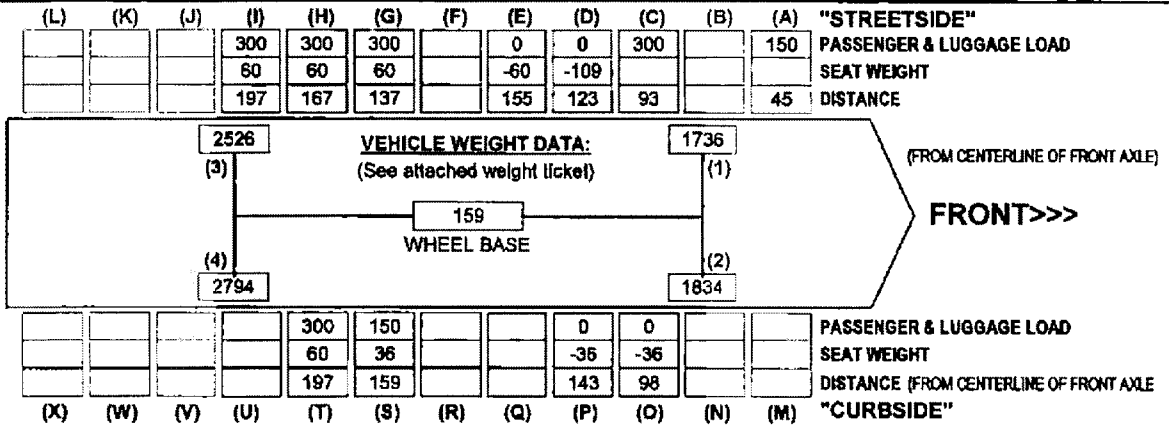
**ESTIMATED**

# WEIGHT ANALYSIS WORKSHEET

F/P NO:	REF NO:	UNIT NO:
0128057	27480	8113
UNIT SERIES NO's:		DATE:
		12/9/2009

VEHICLE DESCRIPTION:			MODEL NO:	MODEL YR:	# SEATING POSITIONS	
PACER II 263" CHEVY - 11P/1WC			P2C263-G35D	2009	2 (INCLUDING DRIVER SEAT)	
CHASSIS DESCRIPTION:		ENGINE:	WHEELBASE:	TIRE SIZE:	FUEL TANK:	FUEL LEVEL:
Chevy C3500 159"WB, 6.6L Dsl, 12,300 GVWR		6.6L (400CID) EFI V8 Dsl	159	LT225/75R16E	37 Gal. Int. Tank @ 100"	1/8

## VEHICLE LOAD DISTRIBUTION



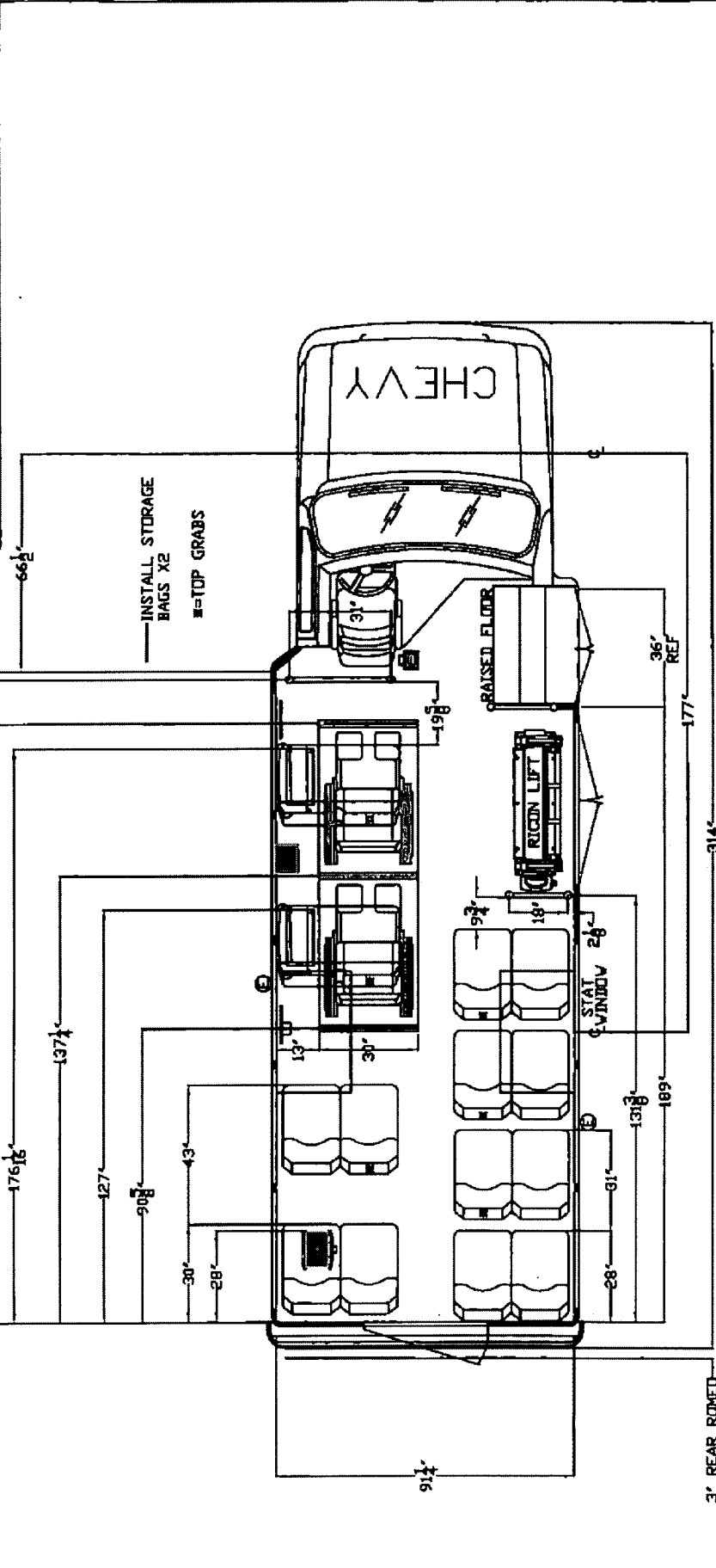
VEHICLE WEIGHT DATA:	FRONT WEIGHTS			REAR WEIGHTS			TOTAL	NOTES:
	LEFT	RIGHT	TOTAL	LEFT	RIGHT	TOTAL		
Actual Completed Weight Of Vehicle	1736	1834	3570	2526	2794	5320	8890	
FUEL LOAD ADJUSTMENT:	43	43	86	73	73	147	233	
VEHICLE CONFIGURATION ADJUSTMENTS:	-30	240	210	92	-205	-113	97	
UNLOADED VEHICLE WEIGHT:	1749	2117	3867	2691	2662	5353	9220	
WEIGHT OF THE OCCUPANTS & LUGGAGE:	187	-72	115	1163	522	1685	1800	
LOADED VEHICLE WEIGHT:	1936	2046	3982	3854	3184	7038	11020	
AVAILABLE EXCESS CARGO CAPACITY:	299	189	318	446	1116	1562	1280	
GROSS VEHICLE WEIGHT RATINGS:	2235	2235	4300	4300	4300	8600	12300	
IS THE WEIGHT RATING EXCEEDED?	NO	NO	NO	NO	NO	NO	NO	

PREPARED BY: Ron Pickens

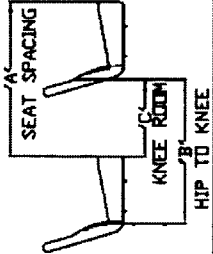
SIGNATURE:

DATE: 12/9/2009

Rev.	Revision Description	By	Date	ECN / PPCN
A				N/A



SEAT STYLE	SEAT SPACING 'A'	HIP-TO-KNEE 'B'	KNEE ROOM 'C'
MID HIGH	30"	26"	7-3/4"
MID HIGH	31"	27"	8-3/4"



24-26' CATEGORY

Drawing Name / Description: <b>FLOOR PLAN, GCII CHEVY 16P/2WC/177WB/314BDY</b>		Unit Number: Modest	Reference: 25161 Leer Drive Elkhart, IN 46514 (574) 970-6300	GC Part Number: <b>0128062</b>	Revision: <b>A</b>
SIZE <b>A</b>	TOLERANCES: +/- 1/16" +/- .1"	Work Instruction Reference:	Date: 12/09/09	Drawing Number: <b>0128062</b>	Class Code: Sheet 1 of
DO NOT SCALE		Scale: N/A	Drawn: RRP	Units: INCHES	File Location: G/2008/GCII/CHEVY/177-313



Thor Industries Commercial Bus Division

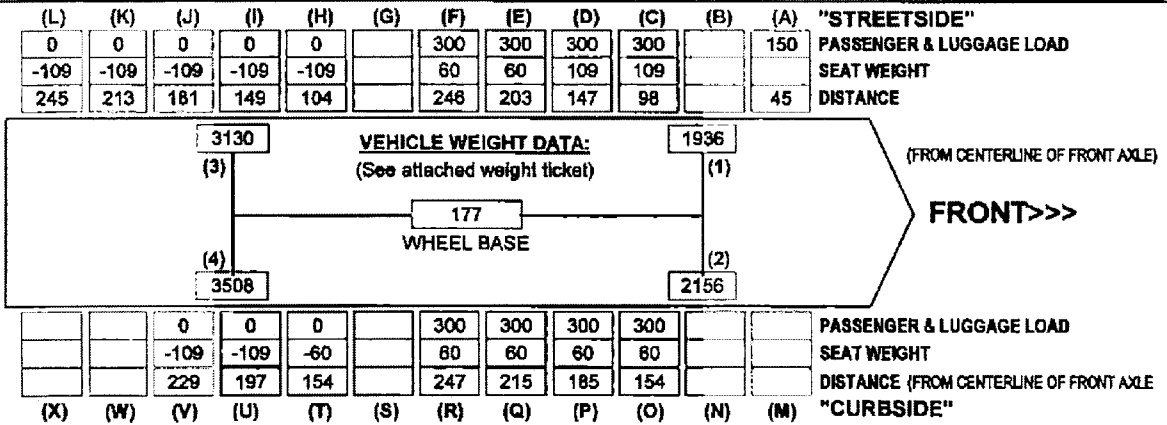
**ESTIMATED**

# WEIGHT ANALYSIS WORKSHEET

F/P NO:	REF NO:	UNIT NO:
0128062	27150	8114.2
UNIT SERIES NO's:		DATE:
		12/9/2009

<b>VEHICLE DESCRIPTION:</b>				MODEL NO:	MODEL YR:	# SEATING POSITIONS
GCII 314" CHEVY - 162WC				GCC314-G47D	2010	7 (INCLUDING DRIVER SEAT)
<b>CHASSIS DESCRIPTION:</b>		ENGINE:	WHEELBASE:	TIRE SIZE:	FUEL TANK:	FUEL LEVEL:
Chevy G4500 177"WB, 6.6L Dsl, 14,200 GVWR		6.6L (400CID) EFI V8 Dsl	177	LT225/75R16E	57 Gal. Rear Tank @ 197"	1/8

## VEHICLE LOAD DISTRIBUTION



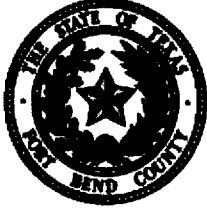
VEHICLE WEIGHT DATA:	FRONT WEIGHTS			REAR WEIGHTS			TOTAL	NOTES:
	LEFT	RIGHT	TOTAL	LEFT	RIGHT	TOTAL		
Actual Completed Weight Of Vehicle	1936	2156	4092	3130	3508	6638	10730	
FUEL LOAD ADJUSTMENT:	-20	-20	-41	200	200	400	359	
VEHICLE CONFIGURATION ADJUSTMENTS:	72	-3	70	-290	-131	-422	-352	
UNLOADED VEHICLE WEIGHT:	1988	2133	4121	3040	3576	6616	10737	
WEIGHT OF THE OCCUPANTS & LUGGAGE:	136	-158	-22	1214	1358	2572	2550	
LOADED VEHICLE WEIGHT:	2123	1976	4099	4254	4934	9188	13287	
AVAILABLE EXCESS CARGO CAPACITY:	557	704	501	686	6	412	913	
GROSS VEHICLE WEIGHT RATINGS:	2880	2880	4600	4840	4940	9500	14200	
IS THE WEIGHT RATING EXCEEDED?	NO	NO	NO	NO	NO	NO	NO	

**ATTENTION:**  
The weight estimate for this vehicle is approaching the limits of the chassis and/or axle ratings, as currently configured. Keep in mind this is an estimate only and may be different than the weight of the completed vehicle. If the actual weight exceeds the chassis manufacturer's ratings, adjustments to the floor plan and/or equipment will need to be made prior to shipment.

PREPARED BY: Ron Pickens

SIGNATURE: *R. Pickens*

DATE: 12/9/2009



**COUNTY PURCHASING AGENT**  
Fort Bend County, Texas



Gilbert D. Jalomo, Jr., CPPB  
County Purchasing Agent

(281) 341-8640  
Fax (281) 341-8645

December 10, 2009

TO: All Prospective Bidders

RE: Addendum No. 1 – Fort Bend County Bid 10-032 – Purchase of 13-69 Transit Busses for Fort Bend County Transportation Department Over 5 Year Period

Please see ADDENDUM NO. 1.

**PLEASE NOTE: Addendum No. 1 consists of Amendments throughout the document. Accordingly, please download the entire document. Amendments are specific to the following:**

- Section 11.3, Page 17
- Section 11.4, Page 17
- Section 11.40.3, Page 41
- Section 12.32.7, Page 66
- Section 12.39.4, Page 74
- Section 13.17.1, Page 83
- Section 13.37, Page 92
- Section 16.1, Page 110
- Section 19.0, Page 112

\*\*\*\*\*

Immediately upon your receipt of this addendum, please fill out the following information and fax this page to the Fort Bend County Purchasing Department at (281) 341-8645.

National Bus Sales and Leasing, Inc.  
Company Name

[Signature] 12/21/09  
Signature of person receiving addendum Date

If you have any questions please contact this office.

Sincerely,

[Signature: Debbie Kaminski]  
Debbie Kaminski, CPPB  
Assistant Purchasing Agent

**Fort Bend County Specification Download Acknowledgment**



**Invitation for Bid  
Purchase of 13 – 69 Transit Buses for Fort Bend County Transportation Department over 5  
Year Period  
Bid 10-032**

**VENDORS MUST IMMEDIATELY RETURN THIS FORM BY FAX TO 281-341-8645**

- Vendor Responsibilities:**
- Vendors are responsible to download and complete any addendums.  
(Addendums will be posted on the Fort Bend County Website no later than 48 hours prior to Opening)
  - Vendors will submit responses in accordance with requirements stated on cover of document.
  - Vendors may not submit responses via email or fax.

National Bus Sales and Leasing, Inc.

Legal Name of Contracting Company

Ryan Frost

Contact Person

15580 Highway 114 Justin, TX 76247

Complete Mailing Address

817-636-2365

Telephone Number

817-636-2947

Facsimile Number

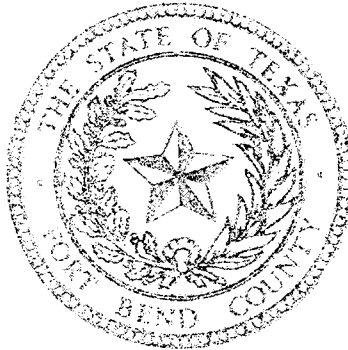
rfrost@nationalbussales.com

Email Address

*Ryan Frost*  
Signature

1/5/2010  
Date

**Fort Bend County, Texas  
Invitation for Bid**



**Purchase of 13 – 69 Transit Buses for Fort Bend County Transportation Department  
Over 5 year Period  
Bid 10-032**

**SUBMIT BIDS TO:**

**Fort Bend County  
Purchasing Department  
Rosenberg Annex  
4520 Reading Road, Suite A  
Rosenberg, TX 77471**

**\*\*NOTE:  
All correspondence must include the term  
“Purchasing Department” in address to assist in  
proper delivery**

**SUBMIT NO LATER THAN:**

**Thursday, January 7, 2010  
1:30 PM (Central)**

**MARK ENVELOPE:**

**Bid 10-032  
Buses**

***ALL BIDS MUST BE RECEIVED IN COUNTY PURCHASING OFFICE  
BEFORE RECEIVING DATE AND TIME SPECIFIED.  
BIDS RECEIVED WILL THEN BE OPENED AND PUBLICLY READ.  
BIDS RECEIVED AFTER THE SPECIFIED TIME WILL BE RETURNED  
UNOPENED.***

**Results will not be given by phone.  
Results will be provided to in writing  
after Commissioners Court award.**

**Fort Bend County is always conscious  
and extremely appreciative of your effort  
in the preparation of this bid. Requests for  
information must be in writing and directed  
to:  
Debbie Kaminski, CPPB  
Assistant County Purchasing Agent  
[kaminsk@co.fort-bend.tx.us](mailto:kaminskd@co.fort-bend.tx.us) or  
Fax:281-341-8645**

**Vendor Information**

**National Bus Sales and Leasing, Inc.**

Legal Name of Contracting Company

Federal ID Number (Company or Corporation) or Social Security Number (Individual)

817-636-2365

Telephone Number

817-636-2947

Facsimile Number

15580 Highway 114

Complete Mailing Address (for Correspondence)

Justin, TX 76247

City, State and Zip Code

Complete Remittance Address (if different from above)

City, State and Zip Code

**Ryan Frost Southwest Sales Representative**

Authorized Representative and Title (printed)

**rfrost@nationalbussales.com**

Authorized Representative's Email Address



Signature of Authorized Representative

**1.0 GENERAL REQUIREMENTS:**

- 1.1 Read this entire document carefully. Follow all instructions. You are responsible for fulfilling all requirements and specifications. Be sure you understand them.
- 1.2 General Requirements apply to all advertised bids; however, these may be superseded, whole or in part, by the scope, special requirements, specifications, special specifications or other data contained herein.
- 1.3 Governing Law: Bidder is advised that these requirements shall be fully governed by the laws of the State of Texas and that Fort Bend County may request and rely on advice, decisions and opinions of the Attorney General of Texas and the County Attorney concerning any portion of these requirements.
- 1.4 Bid Form Completion: Fill out, sign, and return to the Fort Bend County Purchasing Department ONE (1) complete bid form. An authorized representative of the bidder must sign the Contract Sheet. The contract will be binding only when signed by the County Judge, Fort Bend County and a purchase order authorizing the item(s) desired has been issued. The use of liquid paper is not acceptable and may result in the disqualification of bid. If an error is made, vendor must draw a line through error and initial each change.
- 1.5 Bid Returns: Bidders must return all completed bids to the Fort Bend County Purchasing Department at 4520 Reading Road, Suite A, Rosenberg, Texas no later than 1:30 P.M. on the date specified. Late bids will not be accepted. Bids must be submitted in a sealed envelope, addressed as follows: Fort Bend County Purchasing Agent, Rosenberg Annex, 4520 Reading Road, Suite A, Rosenberg, Texas 77471.
- 1.6 Governing Forms: In the event of any conflict between the terms and provisions of these requirements and the specifications, the specifications shall govern. In the event of any conflict of interpretation of any part of this overall document, Fort Bend County's interpretation shall govern.
- 1.7 Addendums: When specifications are revised, the Fort Bend County Purchasing Department will issue an addendum addressing the nature of the change. Bidders must sign and include it in the returned bid package.
- 1.8 Hold Harmless Agreement: Contractor shall indemnify and hold Fort Bend County harmless from all claims for personal injury, death and/or property damage arising from any cause whatsoever, resulting directly or indirectly from contractor's performance. Contractor shall procure and maintain, with respect to the subject matter of this bid, appropriate insurance coverage including, as a minimum, public liability and property damage with adequate limits to cover contractor's liability as may arise directly or indirectly from work performed under terms of this bid. Certification of such coverage must be provided to the County upon request.

- 1.9 **Waiver of Subrogation:** Bidder and bidder's insurance carrier waive any and all rights whatsoever with regard to subrogation against Fort Bend County as an indirect party to any suit arising out of personal or property damages resulting from bidder's performance under this agreement.
- 1.10 **Severability:** If any section, subsection, paragraph, sentence, clause, phrase or word of these requirements or the specifications shall be held invalid, such holding shall not affect the remaining portions of these requirements and the specifications and it is hereby declared that such remaining portions would have been included in these requirements and the specifications as though the invalid portion had been omitted.
- 1.11 **Bonds:** If this bid requires submission of bid guarantee and performance bond, there will be a separate page explaining those requirements. Bids submitted without the required bid bond or cashier's checks are not acceptable.
- 1.12 **Taxes:** Fort Bend County is exempt from all federal excise, state and local taxes unless otherwise stated in this document. Fort Bend County claims exemption from all sales and/or use taxes under Chapter 20, Title 122a, Vernon's Texas Civil Statutes, as amended. Texas Limited Sales Tax Exemption Certificates will be furnished upon written request to the Fort Bend County Purchasing Department.
- 1.13 **Pricing:** Prices for all goods and/or services shall be firm for the duration of this contract and shall be stated on the bid sheet. Prices shall be all inclusive. No price changes, additions, or subsequent qualifications will be honored during the course of the contract. All prices must be written in ink or typewritten. Pricing on all transportation, freight, and other charges are to be prepaid by the contractor and included in the bid prices. If there are any additional charges of any kind, other than those mentioned above, specified or unspecified, bidder **MUST** indicate the items required and attendant costs or forfeit the right to payment for such items.
- 1.14 **Silence of Specifications:** The apparent silence of specifications as to any detail, or the apparent omission from it of a detailed description concerning any point, shall be regarded as meaning that only the best commercial practice is to prevail and that only material and workmanship of the finest quality are to be used. All interpretations of specifications shall be made on the basis of this statement. The items furnished under this contract shall be new, unused of the latest product in production to commercial trade and shall be of the highest quality as to materials used and workmanship. Manufacturer furnishing these items shall be experienced in design and construction of such items and shall be an established supplier of the item bid.
- 1.15 **Supplemental Materials:** Bidders are responsible for including all pertinent product data in the returned bid package. Literature, brochures, data sheets, specification information, completed forms requested as part of the bid package and any other facts which may affect the evaluation and subsequent contract award should be included. Materials such as legal documents and contractual agreements, which the bidder

wishes to include as a condition of the bid, must also be in the returned bid package. Failure to include all necessary and proper supplemental materials may be cause to reject the entire bid.

- 1.16 **Material Safety Data Sheets:** Under the "Hazardous Communication Act", commonly known as the "Texas Right To Know Act", a bidder must provide to County and using departments, with each delivery, material safety data sheets, which are, applicable to hazardous substances defined in the Act. Bidders are obligated to maintain a current, updated file in the Fort Bend County Purchasing Department. Failure of the bidder to maintain such a file will be cause to reject any bid applying thereto.
- 1.17 **Name Brands:** Specifications may reference name brands and model numbers. It is not the intent of Fort Bend County to restrict these bids in such cases, but to establish a desired quality level of merchandise or to meet a pre-established standard due to like existing items. Bidders may offer items of equal stature and the burden of proof of such stature rests with them. Fort Bend County shall act as sole judge in determining equality and acceptability of products offered.
- 1.18 **Color Selection:** Determination of colors of materials is a right reserved by the using department unless otherwise specified in the bid. Unspecified colors shall be quoted as standard colors, not colors, which require up charges or special handling. Unspecified fabrics or vinyl should be construed as medium grade. If bidder fails to get color/material approvals prior to delivery of merchandise, the using department may refuse to accept the items and demand correct shipment without penalty, subject to other legal remedies.
- 1.19 **Review:** The Fort Bend County Purchasing Department shall review bids for compliance with all bid requirements. The Fort Bend County Purchasing Department reserves the right to contact any bidder, at any time, to clarify, verify, or request information with regard to any bid.
- 1.20 **Award:** Fort Bend County reserves the right to award the contract to the responsible bidder who submits the lowest and best bid or reject all bids and publish a new notice.
- 1.21 **Inspections:** Fort Bend County reserves the right to inspect any item(s) or service location for compliance with specifications and requirements and needs of the using department. If a bidder cannot furnish a sample of a bid item, where applicable, for review, or fails to satisfactorily show an ability to perform, the County can reject the bid as inadequate.
- 1.22 **Testing:** Fort Bend County reserves the right to test equipment, supplies, material and goods bid for quality, compliance with specifications and ability to meet the needs of the user. Demonstration units must be available for review. Should the

goods or services fail to meet requirements and/or be unavailable for evaluation, the bid is subject to rejection.

- 1.23 **Disqualification of Bidder:** Upon signing this bid document, a bidder offering to sell supplies, materials, services, or equipment to Fort Bend County certifies that the bidder has not violated the antitrust laws of this state codified in section 15.01, et seq., Business & Commerce Code, or the federal antitrust laws, and has not communicated directly or indirectly the bid made to any competitor or any other person engaged in such line of business. Any or all bids may be rejected if the County believes that collusion exists among the bidders. Bids in which the prices are obviously unbalanced may be rejected. If multiple bids are submitted by a bidder and after the bids are opened, one of the bids is withdrawn, the result will be that all of the bids submitted by that bidder will be withdrawn; however, nothing herein prohibits a vendor from submitting multiple bids for different products or services.
- 1.24 **Awards:** Fort Bend County reserves the right to award this contract on the basis of lowest and best bid in accordance with the laws of the State of Texas, to waive any formality or irregularity, to make awards to more than one bidder, to reject any or all bids. In the event the lowest dollar bidder meeting specifications is not awarded a contract, the bidder may appear before the Commissioners Court and present evidence concerning his responsibility. An award is final only upon formal execution by the Fort Bend County Commissioners Court or the Fort Bend County Purchasing Agent. Fort Bend County reserves the right to withdraw any award until execution by the proper authority.
- 1.25 **Assignment:** The successful vendor may not assign, sell or otherwise transfer this contract without written permission of Fort Bend County Commissioners Court.
- 1.26 **Term Contracts:** If the contract is intended to cover a specific time period, said time will be given in the specifications under scope.
- 1.27 **Maintenance:** Maintenance required for equipment bid should be available in Fort Bend County by a manufacturer authorized maintenance facility. Costs for this service shall be shown on the bid sheet as requested or on a separate sheet, as required. If Fort Bend County opts to include maintenance, it shall be so stated in the purchase order and said cost will be included. Service will commence only upon expiration of applicable warranties and should be priced accordingly.
- 1.28 **Contract Obligation:** Fort Bend County Commissioners Court must award the contract and the County Judge or other person authorized by the Fort Bend County Commissioners Court must sign the contract before it becomes binding on Fort Bend County or the bidders. Department heads are not authorized to sign agreements for Fort Bend County. Binding agreements shall remain in effect until all products and/or services covered by this purchase have been satisfactorily delivered and accepted.

- 1.29 Title Transfer: Title and Risk of Loss of goods shall not pass to Fort Bend County until Fort Bend County actually receives and takes possession of the goods at the point or points of delivery. Receiving times may vary with the using department. Generally, deliveries may be made between 8:30 a.m. and 4:00 p.m., Monday through Friday. Bidders are advised to consult the using department for instructions. The place of delivery shall be shown under the "Special Requirement" section of this bid document and/or on the Purchase Order as a "Ship To:" address.
- 1.30 Purchase Order and Delivery: The successful bidder shall not deliver products or provide services without a Fort Bend County Purchase Order, signed by an authorized agent of the Fort Bend County Purchasing Department. The fastest, most reasonable delivery time shall be indicated by the bidder in the proper place on the bid sheet. Any special information concerning delivery should also be included, on a separate sheet, if necessary. All items shall be shipped F.O.B. inside delivery unless otherwise stated in the specifications. This shall be understood to include bringing merchandise to the appropriate room or place designated by the using department. Every tender or delivery of goods must fully comply with all provisions of these requirements and the specifications including time, delivery and quality. Nonconformance shall constitute a breach, which must be rectified prior to expiration of the time for performance. Failure to rectify within the performance period will be considered cause to reject future deliveries and cancellation of the contract by Fort Bend County without prejudice to other remedies provided by law. Where delivery times are critical, Fort Bend County reserves the right to award accordingly.
- 1.31 Contract Extension: Extensions may be made only by written agreement between Fort Bend County and the bidder. Any price escalations are limited to those stated by the bidder in the original bid.
- 1.32 Termination: Fort Bend County reserves the right to terminate the contract for default if Seller breaches any of the terms therein, including warranties of bidder or if the bidder becomes insolvent or commits acts of bankruptcy. Such right of termination is in addition to and not in lieu of any other remedies, which Fort Bend County may have in law or equity. Default may be construed as, but not limited to, failure to deliver the proper goods and/or services within the proper amount of time, and/or to properly perform any and all services required to Fort Bend County's satisfaction and/or to meet all other obligations and requirements. Contracts may be terminated without cause upon thirty (30) days written notice to either party unless otherwise specified.
- 1.33 Recycled Materials: Fort Bend County encourages the use of products made of recycled materials and shall give preference in purchasing to products made of recycled materials if the products meet applicable specifications as to quantity and quality. Fort Bend County will be the sole judge in determining product preference application.

**2.0 TERMS AND CONDITIONS:**

- 2.1 **Seller to Package Goods:** Seller will package goods in accordance with good commercial practice. Each delivery container shall be clearly and permanently marked as follows (a) Seller's name and address; (b) Consignee's name, address and purchase order number and the bid number if applicable; (c) Container number and total number of containers (e.g. box 1 of 4 boxes); and (d) the number of the container bearing the packing slip. Seller shall bear cost of packaging unless otherwise provided. Goods shall be suitably packed to secure lowest transportation costs and to conform to requirements of common carriers and any applicable specifications. Fort Bend County's count or weight shall be final and conclusive on shipments not accompanied by packing list.
- 2.2 **Shipment Under Reservation Prohibited:** Seller is not authorized to ship goods under reservation and no tender of a bill of lading will operate as a tender of goods.
- 2.3 **Title and Risk of Loss:** The title and risk of loss of the goods shall not pass to the County until a County employee actually receives and takes possession of the goods at the point or points of delivery.
- 2.4 **Delivery Terms:** F.O.B. Destination Freight Prepaid, Inside Delivery, unless delivery terms are specified otherwise on Purchase Order.
- 2.5 **No Replacement of Defective Tender:** Every tender or delivery of goods must fully comply with all provisions of the Purchase Order as to time of delivery, quality and the like. If a tender is made which does not fully conform, this shall constitute a breach and Seller shall not have the right to substitute a conforming tender.
- 2.6 **Place of Delivery:** The place of delivery shall be that set forth in the block of the purchase order entitled "Ship To". Any change thereto shall be effective by modification as provided for in Clause number 2.20 "Modifications", hereof. The terms of this agreement are "no arrival, no sale", at the discretion of Fort Bend County.
- 2.7 **Invoices and Payments:**
  - 2.7.1 Seller shall submit separate invoices, in duplicate. Invoices shall indicate the purchase order number and the bid number if applicable. Invoices shall be itemized and transportation charges, if any, shall be listed separately. A copy of the bill of lading, and the freight waybill when applicable should be attached to the invoice.
  - 2.7.2 Fort Bend County's obligation is payable only and solely from funds available for the purpose of this purchase. Lack of funds shall render the order null and void to the extent funds are not available and any delivered but unpaid goods

will be returned to Seller by the county.

- 2.7.3 Do not include Federal Excise, State, or City Sales Tax. Fort Bend County is a tax-exempt governmental entity.
- 2.8 Gratuities: Fort Bend County may, by written notice to the Seller, cancel any order without liability, if it is determined by the County that gratuities, in the form of entertainment, gifts, or otherwise were offered or given by the Seller, or any agent or representative of the Seller to any officer or employee of Fort Bend County with a view toward securing an order. In the event an order is canceled by the County pursuant to this provision, the County shall be entitled, in addition to any other rights and remedies, to recover or withhold the amount of the cost incurred by Seller in providing such gratuities.
- 2.9 Special Tools and Test Equipment: If the price stated on the face of an order includes the cost of any special tooling or special test equipment fabricated or required by Seller for the purpose of filing this order, such special tooling equipment and any process sheets related thereto shall become the property of the County and to the extent feasible shall be identified by the Seller as such.
- 2.10 Warranty/Price:
- 2.10.1 The price to be paid by the County shall be that contained in Seller's quote or bid which Seller warrants to be no higher than Seller's current prices on orders by others for products of the kind and specification covered by an order for similar quantities under similar or like conditions and methods of purchase. In the event Seller breaches this warranty the prices of the items shall be reduced to the Seller's current prices on orders by others. Fort Bend County may cancel this contract without liability.
- 2.10.2 The Seller warrants that no person or selling agency has been employed or retained to solicit or secure any County order based upon any agreement or understanding for commission, percentage, brokerage, or contingent fee excepting bona fide employees of bona fide established commercial or selling agencies maintained by the Seller for the purpose of securing business. A breach or violation of this warranty gives the County the right, in addition to any other right or rights, to cancel this contract without liability.
- 2.11 Warranty Product: Seller shall not limit or exclude any implied warranties and any attempt to do so shall render an order voidable at the option of the County. Seller warrants that the goods furnished will conform to the specifications, drawings, and description listed in the bid invitation and purchase order as applicable, and to the sample(s) furnished by Seller if any. In the event of a conflict between the specifications, drawings, and descriptions, the specifications shall govern.

- 2.12 **Safety Warranty:** Seller warrants that the product sold to Fort Bend County shall conform to the standards promulgated by the U.S. Department of Labor under the Occupational Safety and Health Act of 1970. In the event the product does not conform to OSHA standards, the County may return the product for correction or replacement at the Seller's expense. In the event Seller fails to make the appropriate correction within 10 days, correction made by the County will be at Seller's expense.
- 2.13 **No Warranty by Fort Bend County Against Infringements:** As part of a contract for sale Seller agrees to ascertain whether goods manufactured in accordance with the specifications will give rise to the rightful claim of any third person by way of infringement. Fort Bend County makes no warranty that the production of goods according to the specification will not give rise to such a claim and in no event shall Fort Bend County be liable to Seller for indemnification in the event the Seller is sued on the grounds of infringement or the like. If Seller is of the opinion that an infringement will result, he will notify Fort Bend County to this effect in writing within two days after the receiving Purchase Order. If the County does not receive notice and is subsequently held liable for the infringement, Seller will defend and save the County harmless. If Seller in good faith ascertains that production of the goods in accordance with the specifications will result in infringement, this contract shall be null and void except that the County will pay Seller the reasonable cost of his search as to infringements.
- 2.14 **Right of Inspection:** The County shall have the right to inspect the goods at delivery before accepting them.
- 2.15 **Cancellation:** Fort Bend County shall have the right to cancel for default all or any part of the undelivered portion of an order if Seller breaches any of the terms hereof including warranties of Seller, or if the Seller becomes insolvent or files for protection under the bankruptcy laws. Such rights of cancellation are in addition to and not in lieu of any other remedies, which Fort Bend County may have in law or equity.
- 2.16 **Termination:** The performance of work under a Purchase Order may be terminated in whole or in part by the County in accordance with this provision. Termination of work there under shall be effected by the delivery to the Seller of a "Notice of Termination" specifying the extent to which performance of work under the order is terminated and the date upon which such termination becomes effective. Such right of termination is in addition to and not in lieu of rights of Fort Bend County set forth in Clause 15 herein.
- 2.17 **Force Majeure:** Force Majeure means a delay encountered by a party in the performance of its obligations under this Agreement, which is caused by an event beyond the reasonable control of that party. Without limiting the generality of the foregoing, "Force Majeure" shall include but not be restricted to the following types of events: acts of God or public enemy; acts of governmental or regulatory

authorities; fires, floods, epidemics or serious accidents; unusually severe weather conditions; strikes, lockouts, or other labor disputes; and defaults by subcontractors. In the event of a Force Majeure, the affected party shall not be deemed to have violated its obligations under this Agreement, and the time for performance of any obligations of that party shall be extended by a period of time necessary to overcome the effects of the Force Majeure, provided that the foregoing shall not prevent this Agreement from terminating in accordance with the termination provisions. If any event constituting a Force Majeure occurs, the affected party shall notify the other parties in writing, within twenty-four (24) hours, and disclose the estimated length of delay, and cause of the delay.

- 2.18 **Assignment-Delegation:** No right or interest in an order shall be assigned or delegation of any obligation made by Seller without the written permission of Fort Bend County. Any attempted assignment or delegation by Seller shall be wholly void and totally ineffective for all purposes unless made in conformity with this paragraph.
- 2.19 **Waiver:** No claim or right arising out of a breach of any contract can be discharged in whole or in part by a waiver or renunciation of the claim or right unless the waived or renunciation is supported by consideration and is in writing signed by the aggrieved party.
- 2.20 **Modification:** A Purchase Order can be modified or rescinded only by a writing signed by both of the parties or their duly authorized agents.
- 2.21 **Parol Evidence:** This writing is intended by the parties as a final expression of their agreement and is intended also as a complete and exclusive statement of the terms of this agreement. No course of prior dealings between the parties and no usage of the trade shall be relevant to supplement or explain any terms rendered under this agreement and shall not be relevant to determine the meaning of this agreement even though the accepting or acquiescing party has knowledge of the performance and opportunity for objection. Whenever a term defined by the Uniform Commercial Code is used in this agreement, the definition contained in the Code is to control.
- 2.22 **Applicable Law:** This agreement shall be governed by the Uniform Commercial Code. Whenever the term "Uniform Commercial Code" is used it shall be construed as meaning the Uniform Commercial Code as adopted in the State of Texas and in effective on the date of the purchase order.
- 2.23 **Advertising:** Seller shall not advertise or publish, without the County's prior consent the fact that Fort Bend County has entered into any contract, except to the extent necessary to comply with proper requests for information from an authorized representative of the federal, state, or local government.
- 2.24 **Right to Assurance:** Whenever the County in good faith has reason to question the other party's intent to perform. The County may demand that the other party give

written assurance of his intent to perform. In the event that a demand is made and no assurance is given within five (5) days, the County may treat this failure as an anticipatory repudiation of the contract.

- 2.25 Venue: Both parties agree that venue for any litigation arising from this contract shall lie in Richmond, Fort Bend County, Texas.
- 2.26 Dispute: After award, contractor and County agree to submit any dispute related to this Agreement that cannot be resolved by agreement of the parties to non-binding mediation by an independent mediator selected by County prior to filing an action at law or in equity. Each party shall be responsible for its costs associated with the mediation and one-half (1/2) of the cost of the mediator. Unless otherwise directed by County, Contractor shall continue performance under this Agreement while matters in dispute are being resolved."
- 2.27 Prohibition Against Personal Interest in Contracts: No officer or employee of the County shall have a financial interest, direct or indirect, in any contract with the County, or shall be financially interested, directly or indirectly, in the sale to the County of any land, materials, supplies, or service, except on behalf of the County as an officer or employee. Any willful violation of this section shall constitute malfeasance in office, and any officer or employee guilty thereof shall be subject to disciplinary action under applicable laws, statutes and codes of the State of Texas. Any violation of this section, with the knowledge, expressed or implied of the person or corporation contracting with the County shall render the contract involved voidable by the County Commissioners Court.

### **3.0 SCOPE OF WORK:**

- 3.1 The following specifications are for the Fort Bend County Public Transportation Department to procure buses of multiple sizes and types over the next five (5) years.
- 3.2 All vehicles must be the most recent model year and be accessible. Fort Bend County intends to purchase three (3) various size vehicles, totaling approximately sixty-nine (69) vehicles, within five (5) years of the award date. It is anticipated that vehicles will be as follows:
  - 19' to 22' Light Duty bus – 3 minimum, 11 maximum
  - 24' to 26' Light Duty bus – 5 minimum, 28 maximum
  - 32' to 37' Medium Duty bus – 5 minimum, 30 maximum
- 3.3 Buses purchased must be capable of accommodating two (2) wheel chair positions, with fold down seats able to be used when wheel chair positions are not in use. Where vehicle size and passenger seating permits, one (1) wheel chair position will be provided. The buses must be designed and constructed to provide safe, economical, and reliable operation of demand response and fixed route services,

suitable for extended service hours in heavy stop-and-go transit service. Overall design and construction shall be conducive to safe passenger entrance and egress and all movement within. The buses shall be new, the most current production model. In this regard, Fort Bend County invites proposals in accordance with State and Federal requirements as outlined in the proposal documents.

- 3.4 Contract will be awarded to the low bidder meeting specification per bus size.
- 3.5 Subsequently there shall be a one-year renewal option at the end of each model year up to four (4) years maximum from the date of the final contract. A price increase will be considered at each renewal date, up to a maximum of 4%, due to chassis cost increases and/or manufacturer's option cost increases. Fort Bend County may accept or reject each new model year renewal cost increase.

#### **4.0 CONTRACT:**

Bidder's signature on Contract Sheet constitutes acceptance of a contract that may result from this solicitation.

#### **5.0 PRE-BID CONFERENCE:**

A pre-bid conference will be held on **Thursday, December 3, 2009 at 10:00 AM** in the Purchasing Department located at 4520 Reading Road, Rosenberg, Texas. Attendance is not mandatory, but all vendors are encouraged to attend.

#### **6.0 REQUEST(S) FOR APPROVAL OR DEVIATION:**

- 6.1 Request(s) for approved equal and request(s) for deviation to the technical specifications or other requirements of the solicitation document shall be submitted to Fort Bend County for evaluation by 3PM (CST) December 11, 2009.
- 6.2 All request(s) for approval shall be submitted on the enclosed RFA form, with all necessary descriptive literature, technical data, or samples to clearly indicate all specifications of the item(s) or deviation(s) proposed to permit evaluation of the request and determine that they meet all requirements of the Solicitation.
- 6.3 Individual RFA's shall include all technical data and salient characteristics of the proposed item offered to meet the specification requirement. Such technical data and salient characteristics shall cover as a minimum the installation, operation and design performance of the item offered for approval.
- 6.4 Request(s) for approval may be submitted by fax to the attention of Debbie Kaminski, CPPB, Assistant County Purchasing Agent at 281-341-8645 or email at [kaminsk@co.fort-bend.tx.us](mailto:kaminskd@co.fort-bend.tx.us). CAUTION: Fax/email bids are not authorized.

- 6.5 Fort Bend County will respond to RFA's by 3PM (CST) December 22, 2009.
- 6.6 Requests for appeals shall be submitted to Fort Bend County by 3PM (CST) December 29, 2009.

**7.0 LIQUIDATED DAMAGES:**

- 7.1 In the event of delay in the completion of deliveries of vehicles beyond the dates/schedule as provided for herein, the Contractor shall be liable for liquidated damages in the amount of Fifty and No/100 Dollars (\$50.00) per calendar day per vehicle, not including weekends and National holidays.
- 7.2 These damages shall be deducted from any monies due, or which may thereafter become due, to the Contractor under this Contract.
- 7.3 The maximum amount of liquidated damages to which the Contractor will be subject is Five Hundred Thousand and No/100 Dollars (\$500,000.00). In the event the Contract has not been otherwise terminated, the Contract will be considered terminated for default when accumulated liquidated damages exceed Five Hundred Thousand and No/100 Dollars (\$500,000.00) at any time during the contract delivery period.

**8.0 PERFORMANCE BOND OR LETTER OF CREDIT:**

No bonds are required for this project.

**9.0 APPLICABLE REGULATIONS AND WARRANTIES:**

- 9.1 Safety: Vehicles must meet all appropriate local, state and Federal Motor Vehicle Safety Standards, including but not limited to standards for impact, rollover, brakes, windshield, windows and lights.
- 9.2 Pollution: Contractor must certify the vehicle being bid must meet Federal Noise and Exhaust emission standards.
- 9.3 ADA: Vehicle must meet Federal accessibility specifications as published in the Americans with Disabilities Act (ADA) and 49 CFR Parts 27, 37 and 38 as they apply to this purchase.
- 9.4 Requirements: The manufacturer's standard warranty for body and chassis must be provided as well as warranty for rust-proofing and lift. Warranties must be effective the day the buyer receives and signs delivery acceptance.
- 9.5 Service: Contractor must be able to provide warranty and maintenance service for the vehicle in the area in which it is to be used. Contractors located outside this area must

be able to arrange a maintenance agreement with a certified distributor located within 50 miles of the service area or with Fort Bend County. This requirement is not meant to restrict responses but to ensure the availability of maintenance and warranty service.

- 9.6 Spare Parts: Contractor must be able to provide or assure access to spare or replacement parts within a reasonable amount of time.
- 9.7 Open Architecture: Contractor must comply with all Federal, state and local requirements, standards and regulations as it relates to the system and subsystems, including but not limited to farebox, destination signs, cameras and AVL systems.

**10.0 CERTIFICATION:**

- 10.1 General: Contractor must provide certification that they are a fully authorized distributor of the vehicle being bid; that they are prepared to perform maintenance and warranty service, or have arranged for said service with a certified distributor in the area the vehicle will be used (must specify who); and that they can provide spare or replacement parts, or can assure access to said parts (must specify source).
- 10.2 Buy America: Contractor must certify that the vehicle meets FTA Buy America requirements as specified in 49 CFR parts 661. Specifications: Contractor must certify that the vehicle meets or exceeds these specifications and must obtain approval of exceptions prior to submitting bids.
- 10.3 ADA: Contractor must certify that the vehicle and related equipment meets or exceeds ADA Accessibility Specifications as published in 49 CFR Parts 27, 37 and 38 as they apply to this bid. In the event that any of the attached specifications deviate from ADA accessibility specifications, the specifications of the higher standard will apply.
- 10.4 Bus Testing: Contractor must complete the attached Bus Testing Certification.

**11.0 SPECIFICATIONS FOR LIGHT-DUTY DIESEL TRANSIT CONVENTIONAL BUS 19' TO 22':**

- 11.1 The vehicles produced according to the included specifications must be of the latest current model year (2009 or newer). All equipment, options and features provided must be designed, constructed and installed to be fully suitable for their intended use and service. The vehicle must be designed and built using the latest available technology and engineering capabilities. All components must be new. Each bus, including all individual components, must meet or exceed all current Federal, state, and local requirements.

**\*Amended 12/08/09**

11.2 The bus shall be supplied by an integrated vehicle supplier that can provide warranty, service, and parts coverage from a single distribution network for the complete vehicle. The body shall be manufactured in compliance with Quality Standards ISO 9001:2000 with regard to the Sale, Design and Manufacture of Customized Buses and Multipurpose Passenger Vehicles.

\*11.3 This specification will describe the construction of a light-duty transit bus. The bus must meet all Federal Bus Testing Requirements and have completed the required bus testing at the Altoona bus testing facility (or be in the process of completing the test) for the category of four (4) years, 100,000 miles and be fully compliant with the Americans with Disability Act (ADA) requirements. The bus must meet Buy America.

\*11.4 General Dimensions:

- Exterior Length.....263” Maximum
- Exterior Width.....87” Maximum (excluding mirrors)
- Exterior Height.....115” Maximum
- Interior Width at seat level.....80” Minimum
- Interior Height at center aisle.....74” Minimum
- Entry Door Dimension (clear opening)...30” x 80” Minimum
- First Step Height from Ground.....11” Maximum
- Step Riser Height.....9.0” Maximum
- Step Tread Depth.....9.0” Minimum
- Wheel Base.....138” Minimum

11.5 Suspension and Gross Vehicle Weight:

- Gross Vehicle Weight Rating (GVWR)....10,700 lbs. Minimum
- Front Axle Capacity.....4,600 lbs. Minimum
- Rear Axle Capacity.....7,500 lbs. Minimum
- Front Springs.....3,800 lbs. Minimum
- Rear Springs.....7,800 lbs. Minimum

A minimum of ten thousand, seven hundred (10,700) pounds GVWR, or higher if required, to support the loaded weight of the completed vehicle including any optional equipment selected. It is the contractor’s responsibility to calculate the actual loaded weight and to provide a heavier chassis, tire, wheel, spring or axle combination, if required.

11.5.1 Shock absorbers shall be gas type, heaviest available as specified by the chassis manufacturer.

11.5.2 Rear springs shall be a conventional leaf spring of proper design and suitable capacity. Springs shall have anti-squeak characteristics. The suspension system shall take into account capacity on the curb side of the vehicle to overcome additional weight of the lift.

11.5.3 Suspension system shall ensure a consistent smooth ride with passenger load of sixteen (16) adult ambulatory passengers and two (2) wheelchair positions occupied. Jounce and rebound must both be controlled while providing controlled roll stability.

11.5.4 The rear axle and final drive must be of conventional construction, a truck-type rear axle utilizing heavy tubes pressed into cast center section or one-piece casting.

11.5.5 Ring gear should be bolted, not riveted, to differential carrier.

11.5.6 A differential with the appropriate gear ratio to match the power train is required. The vehicle should be designed to operate at sixty-five (65) m.p.h. at 3500 rpm's or less.

11.5.7 Rear tow hooks shall be provided.

11.6 Engine:

Engine shall be of the latest design electronic controlled, V-8, six point six liter (6.6) diesel power or approved equal. The engine is to be EPA certified to comply with 2009 emission standards, or current year of production, and operate on ultra-low sulfur diesel fuel. Engine performance settings to be determined post bid. A complete set of maintenance manuals must be provided. On board diagnostic connector for diagnostic equipment and manual regen switch to be located post bid. Engine must have fast-idle system, fuel/water separator/filter and "Water in Fuel" sensor to be provided with corresponding light on dash panel.

11.6.1 There shall be extra insulation installed between the dash and firewall, as well as beneath the hood and on the splash shields to help reduce chassis noise entering into the bus body. The bus-generated noise level experienced by a passenger at any seat location in the bus shall not exceed 83 dba.

11.6.2 The engine components are to be arranged and mounted so as to provide convenient access for servicing the engine and all of its accessories.

11.7 Fuel System:

The fuel tank shall have a capacity of thirty-five (35) usable gallons. A diamond plate access plate shall be provided in the vehicle floor for the purpose of accessing

the fuel sending unit. An appropriate fuel filter shall be provided.

11.8 Exhaust System:

The vehicle shall be equipped with an exhaust system which meets Federal and state noise level and exhaust emission requirements. The exhaust pipe shall terminate just ahead of the rear corner of the vehicle, exhausting to the street side, and shall be constructed so that it will not cause back pressure in the motor or damage to the paint, bumper, chassis or wiring components of the vehicle. Flexible tubing will not be permitted in the exhaust system. An adequately sized, aluminized steel, long-life muffler shall be used.

The exhaust system shall be secured in place with heavy duty system. No part of the exhaust shall hang below departure angle to the rear bumper bottom.

11.9 Cooling System:

The cooling system shall be of heavy duty to manufacturer's recommended standards. The coolant recovery system shall be factory installed. It shall be super cooling or heavy duty cooling. The cooling system shall have a permanent glycol base antifreeze to protect the system to -20 degrees F. and shall maintain engine temperature not to exceed manufacturer's recommended normal operating temperature.

The cooling system shall have a low coolant warning buzzer and light and shall shut off the engine in 45 seconds of initial warning.

11.10 Transmission:

11.10.1 The transmission shall be an automatic shift, four (4) speed forward and a reverse gear with an auxiliary oil cooler capable of handling extreme temperature associated with transit type operations.

11.10.2 The transmission shift lever shall be interlocked with the starting motor to prevent engagement of the starter in any gear position other than park.

11.10.3 The transmission shall be equipped with an interlock feature that prevents the vehicle from being shifted out of the park position until the lift doors are closed, the lift master switch is off, and the parking brake is released.

11.10.4 A warning signal audible outside of the vehicle shall be activated when the transmission is in reverse.

11.11 Drive Shaft: A drive shaft yoke and guard shall be provided to prevent the drive shaft from dropping to the ground or from whipping the vehicle floor if it becomes

broken or separated.

11.12 Vehicle Controls:

- A heavy duty power steering linkage type shall be provided.
- The steering shall be power assist and shall incorporate a tilt and telescoping feature. Steering from full left to right shall be accomplished in no more than five (5) complete turns of the wheel.
- The steering wheel shall be no less than fifteen (15") inches or more than twenty (20") inches in diameter. The wheel ring shall be of all plastic or synthetic resin construction, molded over metal.
- All steering linkage wear points, including tie rod ends, shall be fitted with lubrication fittings and replaceable bushings or inserts.
- All vehicles shall be keyed alike, with the same key operating the driver's door and ignition switch on all vehicles. One key shall operate all remaining locks on all vehicles (excluding fare box keys). Contractor shall supply two (2) complete sets of keys for each vehicle ordered.

11.13 The following controls, in addition to normal steering, braking and transmission functions are to be provided:

- Column-mounted turn signal lever.
- Emergency flasher control facing driver and clearly visible.
- Master exterior light switch including clearance or marker lights. Switch to be of uniform type.
- Switches and temperature controls for passenger compartment heaters, defroster. Switches must all be uniform in type.
- Separate switch and temperature control for driver heater and defroster.
- Heavy duty electronic variable speed windshield wipers controlled by a variable speed switch or two wipers with intermittent feature shall be furnished. Wiper motor shall be mounted in an easily accessible location for ease of inspection, maintenance and removal. Minimum eighteen (18") inch wiper blade and arm providing 1,037 square inches of wiped area with one hundred and ten (110°) degrees of wiping arc. Windshield washer reservoir shall be mounted in an accessible area and pump shall be electronically operated.

➤ Passenger compartment lights.

11.13.1 All controls are to be within arm's reach of a five foot (5'0") driver with seat belt fastened.

11.13.2 All body switches are to be of uniform type, either push-pull or rocker type, mounted in convenient grouping in a panel near the driver.

11.13.3 All controls and switches shall be plainly and permanently marked. Painted masking is unacceptable.

11.13.4 The control panel and a supplemental driver's control panel shall be located conveniently to the driver's seated position and in full view of the driver.

11.13.5 No switches or instruments shall be obstructed. Controls, trim panels, or other appurtenances shall be arranged in a consistent and uniform manner.

11.14 Electrical System:

11.14.1 The vehicle is to be equipped with a twelve (12) volt extreme duty electrical system. All components are to be selected and integrated to function in an environment characterized by low engine (alternator) speeds and high amperage draws (due to lights, wheelchair lift, flashers, air conditioning or heater, and other accessories operating consistently or simultaneously. As built wiring schematics, one hard copy and one electrical copy are required.

11.14.2 An alternator of at least two hundred (200) amperes output at normal engine speed and an idle of at least one hundred twelve (112) amperes is required. The idle output shall be achieved at an engine speed of no more than seven hundred (700) R.P.M. At no time should the ampere output be less than one hundred ten percent (110%) of loaded draw.

11.14.3 Starter shall be capable of turning over the engine with SAE 40W oil after ten (10) hour cold soak at zero (0°F) degrees.

11.14.4 The vehicle shall be equipped with a fast idle solenoid with manual switch, volt sensor and light which will automatically shut off when brake is applied and transmission is placed in gear.

11.15 Batteries:

11.15.1 Chassis manufacturer supplied batteries shall be supplied. Battery cables shall be color coded for positive and negative number two (#2) battery cable. Cables shall be sleeved with high abrasive resistant flex-guard loom and supported with lined steel clamps on a maximum of fifteen inch (15") centers. All battery terminals shall be coated with anti-corrosion and sealant

protector.

11.15.2 Batteries shall be mounted on a stainless steel mounted tray with battery hold down secured with bolts. Battery tray compartment will be located on the curb (right) side of bus, below the floor line, and with adequate reinforcement brackets mounted to floor supports. Battery compartment should be vented and battery easily serviceable without removal from bus.

11.15.3 A rotary type battery disconnect switch shall be located in the driver side step well within the driver's reach.

#### 11.16 Wiring:

11.16.1 All wiring other than that provided by the original equipment manufacturer (OEM); chassis, wheelchair lift or air conditioning and heating manufacturer shall be cross-linked polyethylene insulated, to two hundred (200°F), shall meet SAE standards, shall be color, function and number coded for positive identification every six (6"), and shall be permanently labeled in words to their function. Precaution shall be taken to avoid heat, water, solvents or chafing by proper routing, clamping, and the use of grommets or suitable electrometric cushion materials. Harnesses shall be designed to resist abrasion by the use of nylon slit flex loom that has a maximum temperature resistance of four hundred and ten degrees (410°F). Harnesses shall be sectional terminating at insulation multi-pin quick disconnects or junction blocks. Heavy duty circuit board junction panel shall be provided inside the vehicle. The circuit block shall be conveniently mounted and have a secure cover. The circuit board shall be equipped with heavy duty twelve (12) volt DC relays, and twelve (12) volt automatic reset circuit breakers and blade fuses. Inside the circuit box shall be a legend identifying each circuit and wire by color, number, function and location. This legend shall be permanently mounted to the vehicle.

11.16.2 All connectors shall meet the requirements of the Society of Automotive Engineers (SAE) recommended practice J878a, Types GXL and SGX.

11.16.3 Vehicles shall be identically wired.

11.16.4 Contractor shall furnish complete wiring diagram with wire size, maximum current flow in each wire, type of insulation, and code used. Wire diagrams must be vehicle specific, body and chassis combined, and shall correctly show all specified options.

11.16.5 No "T" splices or butt connections shall be made in wiring unless prior approval is given. Harness and wiring shall terminate at appropriate junction terminals set in Bakelite or molded plastic material.

11.16.6 Devices such as lamps and wiring requiring periodic checking and servicing shall be readily and easily accessible. All exterior devices shall be sealed to prevent entry of water.

11.17 Instrument Gauges: The following instruments shall be provided:

- Speedometer/Odometer – Chassis manufacturer’s standard design with trip set feature.
- Fuel Gauge – Chassis manufacturer’s standard fuel gauge.
- Oil Pressure Gauge – In addition to the manufacturer’s standard gauge, an audible alarm and light shall be installed that will activate when low oil pressure is detected.
- Water temperature gauge – In addition to the manufacturer’s standard gauge, an audible alarm and light shall be installed that will activate when overheating engine is detected.
- Voltmeter – In lieu of the chassis manufacturer’s standard voltmeter, an additional voltmeter shall be installed with graduated charge and discharge indications.
- Engine hour meter shall be provided.

11.18 Brakes:

11.18.1 Service brakes shall be hydraulic, self-adjusting power disc front and rear. Vehicle shall include a foot operated parking brake.

11.18.2 The brake system shall comply with Federal Motor Vehicle Safety Standard 105.75.

11.18.3 The braking system shall be heavy duty and the largest offered by the manufacturer for the GVWR specified.

11.18.4 The brakes shall be free of objectionable noise and squeal when applied.

11.19 Wheels and Tires:

11.19.1 Vehicles shall be equipped with the heaviest available ventilated wheels, 19” x 6.00” minimum. Rear wheels shall be dual and all wheels are to be interchangeable. Rated capacity shall be equal or exceed GVWR of the vehicle.

11.19.2 Tires shall be LT 225/75Rx16 radial ply, all season, with steel-cord reinforcement and highway type tread. Wheels and tires are to be of adequate capacity, as determined by reference to the Tire and Rim Association Yearbook, to support the fully loaded vehicle. One matching spare wheel and tire shall be provided with each vehicle but not mounted in or on the vehicle.

11.19.3 Mud flaps shall be included for each wheel of the vehicle.

11.20 Bumpers:

11.20.1 Front bumper shall be the chassis manufacturer's standard front chromed bumper.

11.20.2 Rear bumper shall be the bus manufacturer's standard rear bumper equipped with an anti-ride feature. Bumpers shall be fastened to the chassis frame to adequately absorb shock from impact. In no case are the bumpers to be fastened to the body and allow shock from impact to be transmitted to the body of the vehicle.

11.21 Horn: Dual 12 volt electrically controlled horns shall be furnished and installed so as to be protected from wheel-wash.

11.22 Crash Worthiness:

11.22.1 The body structure shall be built as an integral vehicle adequately reinforced at all joints and corners where stress concentration may occur to adequately carry required loads and withstand road shock. The following items are representative of the minimum requirements of the vehicle. Body assembly shall meet or exceed FMVSS 220, for roll-over protection.

11.22.2 The body and roof structure shall withstand a static load equal to one hundred fifty percent (150%) of the curb weight evenly distributed on the roof with no more than a six inch (6") reduction in any interior dimension. Windows shall remain in place and shall not open under such a load.

11.22.3 The vehicle, at GVWR and under static conditions, shall not exhibit deformation or deflection that impairs operation of doors, wheelchair lift, or other mechanical elements. Static conditions include the vehicle at rest with any one wheel on a six inch (6") deep hole.

11.22.4 Upon request of the County, the Contractor will present certified actual test results which have been conducted to insure that the vehicle offered meets the FMVSS crash worthiness standards for this type of vehicle.

11.23 Body Construction:

- 11.23.1 The body may be constructed of a matrix of fiberglass reinforced plastic (FRP) with an inner thickness of resin-hardened honeycomb craft material. The matrix assembly shall be as follows:  
Exterior surface shall be a minimum .020" thickness of high gloss gel-coat to prevent moisture penetration and corrosion. Secondary surface shall be a minimum one eighth inch (1/8") thickness of resin-hardened FRP. The center composite layer consists of a one inch (1") thickness of resin-hardened "Vertical" honeycomb, or approved equal, laid on edge to allow maximum column strength of each cell. Wall structure shall include a maximum of two (2) three inch (3") wide longitudinal sections of eighteen (18) gauge flat steel extending from the forward body seam to the rearward body seam to provide an additional attachment point for the integrally welded sidewall seat rail. Final surface of body structure is a minimum three thirty seconds inch (3/32") thickness of resin-hardened FRP. Window framing in sidewall shall be a steel ladder-type assembly. Window pillars are minimum of one and one half inches (1 1/2") by one inch (1") fourteen (14) gauge dipped, zinc-plated tube. Top and lower horizontal ladder bridge rails are minimum one inch (1") by two inch (2") twelve (12) gauge zinc plated angle section. Attachment of ladder assembly to roof and lower wall section shall be grade five (5) 1/4" x 3/4" mechanical fasteners on not more than eight inch (8") center. In addition, interface of wall and roof to window ladder assembly surfaces shall include a high strength contact adhesive. Sikaflex 255 or approved equal to provide a one hundred percent (100%) bonding and sealing at these locations. Side panels around and below passenger windows shall be same Melamine material with color being bright white. County to approve color and quality prior to production from samples provided by vendor.
- 11.23.2 The body may be constructed of vertical support columns that shall be eighteen gauge (18) steel. All roof structural support members shall be of the equivalent of sixteen (16) gauge hot rolled steel hat section roof bows. The entire body steel cage frame (door, walls roof, front and rear) shall be securely jig-welded together to provide an integral one-piece body structure. Fastening of roof and side walls by any other means other than welding will not be acceptable. All metal parts shall be given a thorough multiple stage anti-corrosion treatment prior to assembling. The exterior panels shall be continuous panels of .063 aluminum over heavy comb, twenty-five (25) gauge galvanized steel or other metal of the same mechanical properties. Exterior panels are to be riveted or welded to the body framing. Sheet metal screws will not be acceptable for fastening exterior panels. All panels shall be installed so that they will shed water. That is, the panel shall be lapped over the following panel and in no case shall the sealing of the panels be dependent on caulking alone. All exterior joints and seams shall be protected by zinc chromate caulking, butyl rubber tape, or an approved equal. Side panels below the floor line shall be non-corrosive ABS material and easily removable for service and repair. These panels shall be installed using

methods that allow for a smooth surface with minimal exposed fasteners. All nuts, bolts clips, and other fasteners shall be zinc or cadmium plated or phosphate coated. Sheet metal screws are not permitted.

11.23.3 All steel body parts shall be galvanized. Zinc chromate paint shall be applied to aluminum and steel.

11.23.4 The primer utilized shall be compatible with finish paints. **Interior surfaces of body panels and posts which are covered by trim materials shall be given protection against corrosion.** In the case of interior body posts, all four (4) sides shall be treated to prevent corrosion.

11.23.5 The galvanized welds shall be wire brushed and treated with a cold galvanizing compound.

11.23.6 Side and end frame sections shall be designated for maximum strength. End posts shall be designated to resist shear. To increase tolerance for added strength, frame sections are to be jig-welded. Each frame section is to be tube-grind network constructed of 1" x 2" 14 gauge steel tubing to be used in all stress areas – especially around the passenger entrance door and at all points where stress may occur.

11.23.7 Gun installed mono-bolt fastenings or rivets shall be utilized on all exterior body panels, rub-rails, and all other locations where stress is concentrated. When mono-bolts cannot be used, all nuts, bolts, clips, washers, clamps and like fasteners on the exterior and interior of the unit shall be zinc or cadmium plated to prevent corrosion.

11.23.8 Roof bows shall be constructed from eleven (11) gauge and sixteen (16) gauge steel welded into a parabolic-Z structure. The longitudinal framing from front to rear shall consist of two (2) hatch-shaped members formed of sixteen (16) gauge steel. Exterior roof panels shall be .063 aluminum. The interior panel for the roof within the unit shall have a strength equivalent to twenty-four (24) gauge steel. All metal parts shall be given a thorough multiple stage anti-corrosion treatment prior to assembling.

11.23.9 The vehicle shall be rust-proofed with premium quality rust-proofing material. The entire body frame under-structure of the vehicle is to be fully undercoated with non-flammable resin type material, polyoleum, or equivalent, applied after final assembly at the manufacturing facility.

11.23.10 Gutters shall be provided to prevent water flowing from the roof onto the side windows and passenger doors. When the vehicle is decelerated, the gutters shall not drain onto the windshield or driver's side window, or into the boarding area. Cross sections of the gutters shall not be less than .025

square inches.

11.24 Roof:

11.24.1 The roof shall have sufficient strength and stiffness to prevent vibration, drumming, or flexing under normal use. Roof structure shall include a minimum of three (3) longitudinal sections of eighteen (18) gauge flat steel extending from the forward the forward body seam to the rearward body seam. All flat steel sections shall be fully integrated into the roof matrix and shall provide additional structural integrity and a secure attachment surface for ceiling panels, handrails, and stanchion fixtures.

11.24.2 The roof is to be constructed to provide an aesthetically pleasing design to the vehicle. The sills, when matched, will provide a clean, clear surface at least two inches (2") wide for secure and sufficient roof mounting.

11.25 Insulation:

Vertical core insulation shall provide for a minimum of a "R-6" thermo-barrier and sound absorption. Side, roof, and front and rear crowns shall be insulated by the vertical core of the body assembly composite.

11.26 Floor:

11.26.1 The vehicle floor assembly shall be a lateral body support, structural design, incorporating longitudinal stringers welded in a perimeter structure of steel and iron. The entire floor assembly shall be jig-welded steel structure. Floor construction methods that utilize wood studs running the length, width, and outside perimeter with a foam core insulation are not acceptable.

11.26.2 The substructure shall be comprised of the following:

11.26.3 A combination of fourteen (14) gauge steel lateral outriggers reinforced at each mounting point, eleven (11) gauge steel C-channel longitudinal support members, and a perimeter of fourteen (14) gauge steel angle welded into a ladder type structure.

11.26.4 The substructure shall be bolted through the lateral outriggers, two (2) per outrigger to the chassis through rubber isolator grommets as provided by the chassis manufacturer. Welding of any body understructure to the chassis frame will not be acceptable.

11.26.5 Over the sub floor structure shall be fastened a minimum of five eights of an inch (5/8"), seven (7) ply, marine grade plywood which is pattern cut, edge sealed, and attached with quarter inch (1/4") diameter counter sunk Tek screws. Sub floor understructure shall be completely undercoated and

**sealed prior to being installed on the steel frame understructure.**

11.26.6 Floor shall be level throughout and all joints between the floor and vertical surfaces shall be equipped with a floor covering of molding. Flooring shall be laid in such a manner as to be free from squeaks.

11.26.7 **All edges of the plywood shall be sealed prior to installation to resist moisture.** All floor joints will be filled and sanded level to result in a smooth, flat floor ready for installation of the flooring material. The entire floor shall be thoroughly sanded and then completely cleaned of all sanding and foreign material.

11.26.8 The floor in the under seat area and wheelchair position area shall be covered with RCA #TR766, smooth f covering having a minimum thickness of .125 inch (1/8"). **Floor covering shall roll up the sidewall of the seat track.**

11.26.9 Floor covering in aisle and on steps shall be RCA #TR766, non-skid, wear-resistant, and ribbed. Minimum overall thickness shall be .1875 inch (3/16") measured from the top of ribs.

11.26.10 Floor covering shall be laid without gaps or openings between sheets. Seams shall be filled with color matching material so as to be tight against any influx or seepage of water. Seams shall be covered with aluminum trim.

11.26.11 The floor covering material shall be thoroughly cemented into position throughout the entire area and will be free of bubbles and blisters. The floor covering in the platform or standee area shall be three sixteenths inch (3/16") thick top ribbed, single piece. The single piece floor covering in the platform area shall have longitudinal and traverse ribs metered at 45 degrees face to door. The vertical face and top section of the platform step edge backing shall be anchored with A.I.S.I. Type 304 stainless steel screws.

11.26.12 A yellow standee line shall be provided at the driver's modesty panel.

11.27 Roof Liner:

Interior walls shall provide a finish that is durable, easily cleaned and coordinates with the vehicle's interior color scheme. Roof liner shall be molded fiberglass or vinyl clad covered sheeting, neatly installed the full length so as to cover all protrusions.

11.28 Doors and Step Well:

11.28.1 The passenger entry door and step well shall be located at right front of passenger area, located directly across from the driver's seat at a ninety (90°)

degree angle for maximum viewing on entry way.

- 11.28.2 The door shall be manually operated, outward folding type, and both door panels shall be actuated together by a single manually operated door control. The control mechanism shall be of high quality and durability, designed for repeated use over an extended period. The door shall be controlled from the driver's seated position.
- 11.28.3 The passenger entry door structure shall consist of a minimum 12-gauge, 304 grade stainless steel, powder coated using the five (5) step Interpon PZ77 process or approved equal, in bright white to match vehicle interior base color. It shall be the two-piece transit type and shall have a minimum horizontal opening of thirty-six (36") inches and a minimum vertical opening of eighty (80") inches. All screws used to attach the door frame to the vehicle body shall be stainless steel screws.
- 11.28.4 Both vertical closing edges of the door shall be equipped with neoprene bulb seals. At the meeting edge of each door leaf, a two (2") inch neoprene seal shall be installed so that the edges form a tight overlapping seal when closed. Seals shall overlap front over rear to provide an air and water shade.
- 11.28.5 To prevent accidental opening while the vehicle is in motion, the door opening system shall require at least one hundred, twenty-five (125) pound force applied at its center in order to manually separate the leaves.
- 11.28.6 Passenger door windows shall be installed with two (2) piece ozone treated extruded rubber, lock and key of one (1) piece fixed design. Entrance door windows shall be glazed with three sixteenths (3/16") inch thick, thirty-one (31%) percent gray density, tempered safety glass. Each window shall be installed in the upper and lower portions of the passenger door panels in line with the passenger side windows.
- 11.28.7 A driver's door shall be provided to the left of the driver's area. This door shall be accessible from inside and outside the vehicle. The driver door shall incorporate an opening window and arm rest. A driver's side running board with a step depth of twelve (12") inches shall be provided.
- 11.28.8 The steps shall be designed so that the top of the first step is no more than twelve (12") inches above the ground with the vehicle loaded. Step well is to have a minimum first step depth of twelve (12") inches and a minimum second step depth of ten (10") inches and shall be a minimum of thirty-six (36") inches in width. Risers shall not exceed nine (9") inches in height. The surface of all entrance steps shall be covered with eighth (1/8") inch thick rubber flooring on all risers and sides and three sixteenths (3/16") inch thick ribbed rubber step treads. All step edges shall have a two (2") inch yellow

safety band running the full width of each step. Step wells shall incorporate lights to illuminate step tread area and outside of step well shall be protected from splashed material by door and rubber for a tight fit.

11.29 Stanchions, Grab Rails and Handrails:

11.29.1 Vertical handrails shall be securely fastened on both sides of the doorway to assist passengers in entering or exiting the vehicle.

11.29.2 Vertical stanchions shall be provided at the aisle immediately behind the driver's seat and at the step well. A horizontal grab rail shall extend from the wall to each stanchion.

11.29.3 Padded modesty panels shall be provided that extends from the wall to each stanchion. Vinyl shall match the passenger seats.

11.29.4 A smoked three eights (3/8") inch thick Plexiglas panel shall be provided behind the driver's seat, ***within six (6") inches of ceiling***. Panels shall extend from the top of the horizontal grab rail to the ceiling and shall extend from the wall to the vertical stanchion. Stanchion and panel shall not impair driver's seat adjustment.

11.29.5 An overhead handrail shall be installed in the roof of the vehicle on the driver and curb side and shall run the length of the seating area.

11.29.6 All handrails and stanchions shall be one and one-quarter (1 1/4") inch stainless steel.

11.30 Wheelchair Lift Door:

11.30.1 Side opening double outward opening doors shall be provided for the platform type wheelchair lift. Lift shall be mounted within the vehicle body on the curb side behind the passenger entry door. The wheelchair door frame structure shall consist of a minimum 12-gauge, 304 grade stainless steel, powder coated using five (5) step Interpon process, or approved equal, in bright white to match vehicle interior base color. A water deflector shall be integrated into the door frame structure at the top. Door panels shall be made of non-corrosive material. Foam core doors with wood frame supports are not acceptable. Door panel hinges shall be piano type with a minimum three sixteenths (3/16") inch diameter pivot pin. Hinges and hinge fasteners shall be stainless steel to resist rust and corrosion.

11.30.2 Door latch shall be vertical, rotating, two point type with latch rod at top and bottom. Each door panel shall have its own key lockable latch assembly which shall consist of a pistol type grip style twist handle located at the inside

center of the door panel. Door latch shall compress perimeter door seal to prevent leaks. Latch adjustment plates shall be located at the top and bottom of the door frame structure.

11.30.3 Door panel holders shall be gas shock type mounted at the top and allow door panels to open a minimum of one hundred (100°) degrees from the closed position. Wheelchair door clear opening dimensions shall be a minimum of forty-four (44”) inches by seventy (70”) inches. Lift doors shall be interlocked by a panel door switch controlling the transmission which requires the transmission to be in “Park” position before lift can be operated.

11.30.4 Door windows shall be installed with two (2) piece black ozone treated extruded rubber, lock and key of one (1) piece fixed design. Windows shall be glazed with three sixteenths (3/16”) inch thick, thirty-one (31%) percent gray density, tempered safety glass. Each window shall be installed in the upper portion of the lift door panels in line with the passenger side windows. The door will display the international wheelchair symbol.

#### 11.31 Wheelchair Lift:

11.31.1 The wheelchair lift shall be a fully automatic, including folding of the platform, and be electro-hydraulically powered with a minimum test-net load capacity of six hundred sixty (660) pounds. The lift shall be totally self-contained and installed without modifications to the vehicle body or frame inside of the curbside double service doors. The entire assembly shall be installed with adequate protection to prevent accidental injury to passengers.

11.31.2 The attachment of the wheelchair lift assembly to the vehicle shall allow easy removal and be readily accessible for repair and maintenance. The lift assembly shall be mounted in such a manner that in the fully raised position it shall not interfere of the double side doors, passenger seating, and passenger/wheelchair movement inside the vehicle.

11.31.3 The wheelchair lift shall have a bridge plate designed for a smooth transition from the vehicle floor level to the lift platform level when the platform is in the raised loading position.

11.31.4 Bridge plate and platform shall be coated to resist rusting. Platform, bridge plate, and area between bridge plate and aisle shall be skid resistant.

11.31.5 The wheelchair lift cam handrail shall be twenty-six (26”) inches high from lift platform. The handrail shall be automatic folding to prevent any obstructions into the vehicle passenger area.

11.31.6 The overall depth of the lift assembly in the stored position inside the vehicle shall not exceed seventeen (17") inches when measured from the floor level of the lift entry doors. No component accessory to the lift shall extend more than twenty-one (21") inches from the lift entry door.

11.31.7 Bolting of any part of the lift assembly directly to the vehicles walls is not acceptable.

11.31.8 The installation of the wheelchair lift assembly shall not cause excessive unbalanced loading of the vehicle.

11.31.9 The lift platform shall be designed so as to stop downward movement upon contact with the ground.

11.31.10 The lift platform shall have an end barrier at least four (4") inches in height that will fold outward to provide a ramp for loading of wheelchairs. The ramp shall fold out automatically upon platform contact with the ground.

11.31.11 The vehicle shall be equipped with the following wheelchair safety features:

- A door cut-off switch shall be installed which prevents the operation of the lift when the doors are closed.
- The maximum capacity in pounds shall be posted on the wheelchair lift within easy view of the operator and passenger.
- The lift platform shall be fitted with a device to prevent the platform from touching or leaning against door after being restored to the stowed position.

11.31.12 Lift shall be equipped with a manual override to permit lift to be raised or lowered manually in the event of a power failure or emergency. The manual override system shall provide a complete operation of the lift without electrical power being supplied. The manual override hydraulic pump and bleed down valve are to be located inside the vehicle. A detachable hand lever to operate the system is to be stored next to the hand pump. The bleed down valve shall have a flow compensator valve that that will limit the maximum descent speed. Manual override instructions shall be visible from inside and outside with the door open.

11.31.13 The wheelchair lift shall comply with all Federal ADA requirements.

## 11.32 Lift Control, Electrical Circuits, and Wiring:

- 11.32.1 The complete wheelchair lift assembly shall operate from the vehicle's electrical system and shall have one hand-held lift control station with a minimum five (5') foot cable attached so lift can be operated from outside or inside of the vehicle.
- 11.32.2 The control switches on the lift control shall have permanently applied labels identifying their functions.
- 11.32.3 The power to the lift system shall be controlled through an ON/OFF master switch located on the supplemental driver's control panel.
- 11.32.4 When the parking brake is properly applied and the master switch is placed in the "ON" position, an electrical solenoid shall activate that will connect the lift's electrical system to the vehicle's electrical system.
- 11.32.5 The bus lift shall be protected by a one hundred, five (105) amp circuit sentry system. The electrical power cord shall be loomed to protect the cable from outside elements.

11.33 Wheelchair Securement and Seatbelts:

- 11.33.1 The vehicle shall have a minimum of two (2) forward facing wheelchair positions located in the rear of the vehicle. Each wheelchair position shall be provided with restraint devices that will secure the wheelchair and its passenger while in the wheelchair. These devices shall be adjustable to accommodate varying track widths of wheelchairs. Each wheelchair shall have four (4) point securement (2 front, 2 back) in the vehicle with recessed anchor points of sufficient strength to secure a wheelchair and/or wheel scooter. The entire securement system shall comply with all applicable regulations including ADA.
- 11.33.2 Securement system must safely secure manually and electronically operated wheelchairs, (including 3-wheel scooters), and provide ample space for foot rests and proper wheelchair securement.
- 11.33.3 No anchoring points shall project more than one-eighth (1/8") inch above the finished floor. For the purposes of this section, the floor is the entire passenger area of the vehicle.
- 11.33.4 Floor mounted tracks shall be a series type "L" track floor plate. These plates shall be recessed mounted in the floor with three-eighth (3/8") inch diameter, SAE grade 5 bolts, washers and self locking nuts with National Fine Threads.

**\*Amended 12/08/09**

11.33.5 Where mounting bolts do not pierce or attach through the vehicle frame, sub-frame, body posts or equivalent metal structure, a reinforced metal plate not less than one sixteenth (1/16") inch thick is required.

11.33.6 There shall be four (4) retractors assemblies for each wheelchair position in the vehicle to secure the wheelchair to the tracks. Example: Q' Straint QRT Deluxe (Q-8100-A1) System, or approved equal. Each retractor assembly shall consist of a heavy duty series "L" track fitting, the front left and right retractor shall be equipped with manual tension knobs for manual tightening and/or release. Each retractor assembly shall be equipped with a quick release, push-button buckle and buckle connector.

11.33.7 Two (2) seat belts shall be provided for each wheelchair passenger. The torso belts shall be two (2") inches wide, seventy-two (72") inches long, adjustable, with a strength rating of not less than three thousand (3000 lbs.) pounds. One end of the belt shall be secured to a female seat belt fitting and the other end shall have a male seat belt fitting. The seat belt assembly shall provide for a quick-release and also provide for a snap locking to connect both ends together.

11.33.8 A wall mounted height adjustable of approximately twelve (12") inches shoulder harness system shall be provided at each wheelchair securement location that is compatible with the specified restraints. The harness system shall be installed in accordance with all structural requirements established by the restraint supplier and all applicable regulations, including 49 CFR part 571.

11.33.9 All belts, straps, and harness assemblies shall be supplied in bundled sets and shall include a Q Straint or equivalent pouch in which to store them. Storage compartments shall be provided over the windshield and over the driver's door.

11.34 Exterior Lighting:

11.34.1 All exterior lights, with the exception of headlights, passenger entry door, lift door, curb light, and rear back-up lights, shall be Light Emitting Diode (LED) lights. Lighting shall be in accordance with Federal Motor carrier Safety regulations 393.12. All lights shall have wire long enough to move the light six (6") inches from vehicle for service. Lights shall be grounded to body framing structure. All lights shall be sealed from moisture. Fixtures which are surfaced mounted to the body shall be sealed for moisture.

- 11.34.2 Headlights shall be sealed beam type, high and low beam controlled with foot or hand switch. Headlight supports and mountings shall be sufficiently rugged to maintain adjustments under road shock and service conditions. Headlight high beam indicator shall be installed on instrument panel. An audible "headlight on" warning buzzer shall be installed to notify the operator that the headlights are on with the engine turned off.
- 11.34.3 Stop and tail lights shall be red combination 4" round lens, vertically mounted on the rear-end vehicle panels, so as not to be affected by engine exhaust heat. Each side shall include a directional signal, tail light and stop light. Lamp lenses shall not protrude from the body more than two (2) inches. Lamp lens colors and configuration shall be in accordance with current State of Texas school bus requirements. Lights shall be a sealed, single vehicle light fixture.
- 11.34.4 Brake lights shall not override emergency flashers or turn signals. Back-up lights shall be furnished and adequate to illuminate for visibility when backing. Light shall be a sealed, single vehicle light fixture.
- 11.34.5 A collision avoidance light shall be installed on the rear of the vehicle and above the emergency exit door at the center line of the vehicle. Lamp lens shall not protrude from the body of the vehicle more than two (2") inches. Light shall be a sealed, single vehicle LED light fixture. In addition, a horizontal row of not less than three (3) red combination 4" round lens brake lights shall be installed in a fixture on the rear and at the center line of the vehicle on the emergency exit door. They are to light while brakes are applied. Lamp lens shall not protrude more than two (2") inches. Lights shall be a sealed, single vehicle light fixture.
- 11.34.6 Two hazard lamps shall be mounted at the same level on the rear of the bus. The lamps shall be visible at a distance of 500 feet in normal sunlight, flash, and emit amber light. The lamps shall operate from a separate control in the driver's compartment.
- 11.34.7 Two back-up lights, one mounted on each side of the body rear cap, shall be provided. The lamps shall be of the sealed beam type design.
- 11.34.8 Directional signal lamps shall be amber combination 4" round lens, vertically mounted on the rear, one on each side of the vehicle approximately halfway from front to rear. Side signal lamp lens shall incorporate a brushed aluminum guard to protect lens from damage. All side signal lamps to the same height above ground.
- 11.34.9 Passenger entry door area shall be lighted by a hooded exterior door light, suitably mounted so that the entire ground area immediately outside the entry

door is sufficiently illuminated to comply with ADA requirements.

11.34.10 Vehicle shall be equipped with an exterior curb lamp. Light shall be positioned in manufacturer's standard location in such a manner as to illuminate the ground area in the immediate vicinity of the operation of the wheelchair lift. Light shall be automatically activated only when the wheelchair doors are opened. Illumination shall be sufficient to comply with ADA requirements.

11.34.11 Roof marker lights, red or amber, one at each corner shall be provided and protected with brushed aluminum guards.

11.34.12 Clearance marker lights, three (3) lamp cluster, surface mounted, amber in front, red lens in rear, shall be provided and protected with brushed aluminum guards.

11.34.13 Vehicle shall be equipped with daytime running lights.

#### 11.35 Interior Lighting:

11.35.1 The overhead lights and step well lights shall provide no less than five foot-candles of illumination on the entrance step area with the door open. This system shall be illuminated when the passenger door is opened. A separate dash mounted switch shall be provided to operate the overhead lights when the door is closed.

11.35.2 Driver courtesy light shall light when the driver door is opened.

11.35.3 Front step well are shall be lighted by a hooded step well light, suitably mounted so that the entire step well area of the vehicle is sufficiently lighted. The step well light shall be positioned on the side away from wheel splash.

11.35.4 All interior lighting shall be incandescent type with the master control located on the dash or near the driver for easy operation by the driver. Lighting in the passenger area shall be mounted in the ceiling cove at the sidewall with a minimum of three (3) fixtures on each side of the vehicle. Lighting intensity for all cross seats shall have a minimum average of fifteen (15) foot candles at the seated passenger reading plane. In addition, an effective lighting level shall be provided for all other seated passengers. The lighting components shall be located and constructed so as to prevent the entrance of water, contaminants and insects. Lighting fixtures shall be reasonably flush with the interior walls and ceiling so as not to present a hazard to passengers.

11.35.5 Light illumination shall be designed to illuminate the wheelchair lift platform for night operation. Light shall be positioned in manufacturer's

standard location in such a manner as to illuminate the area in the immediate vicinity of the wheelchair lift. Light shall be automatically activated only when the wheelchair lift doors are open. Light switch shall have a driver override. Illumination shall be sufficient to comply with ADA requirements.

11.36 Air Conditioning:

11.36.1 The installed air conditioning system shall cool the vehicle to seventy-two (72°F) degrees measured at a minimum of three points, located four feet above the floor at the longitudinal centerline of the vehicle. The three points shall be (1) near the driver's location; (2) at the mid-point of the body; and (3) two feet forward of the rear of the vehicle.

11.36.2 The test condition under which the above performance must be achieved shall consist of: (1) placing the vehicle in a room (such as a paint booth) where the ambient temperature can be maintained at one hundred and ten (110°F) degrees; (2) heat soaking the vehicle at one hundred and ten (110°F) degrees with windows open for at least one hour; and (3) closing the windows, turning on the air conditioner and cooling the interior of the vehicle at seventy-two (72°F) plus or minus two (2°±F) within a maximum of 30 minutes while maintaining 110°F. The system shall have a dash driver's area evaporator vehicle.

11.36.3 The test shall be performed at the vehicles manufacturer's recommended fast idle speed.

11.36.4 Driver's in-dash heavy-duty air conditioning vehicle shall be chassis manufacturer supplied system. Substitution of other than the chassis air conditioner is acceptable provided that the front and rear systems are compatible and warranty work is performed at one location. The system shall be separately controlled from the passenger area system and shall have provision to divert air to the defrosters. In-dash vehicle shall not interfere with removal or replacement of the engine cover or be blocked by the door operating mechanism.

11.36.5 The passenger area air conditioning unit shall be an American Cooling Technology, 50MAX system, or approved equal. The system shall be separately controlled from a supplemental driver's control panel located at the driver's position. Controls shall include on and off, three (3) speed blower switch and a rotary thermostat switch.

11.36.6 Front and rear systems shall operate independently of each other.

11.36.7 Dual compressors shall be provided. Compressors shall have a nominal ten (10) cubic inches of displacement. The compressors shall be protected by

high and low pressure switches. Compressors shall be driven off the vehicles engine.

11.36.8 A three (3) fan condenser shall be provided with a minimum rating of seventy-six thousand (76,000) BTU's. The condenser fans and motors shall be enclosed within the condenser housing. Coil shall be copper tube, expanded into aluminum fins. Integral high/low pressure cut outs to be wired to liquid or discharge line. The fans shall be dynamically balanced with permanent magnet totally enclosed motors. The condenser shall blow air on an angle down from the vehicle chassis to prevent recirculation of hot air. The condenser shall have a sight glass and filter dryer. The system shall be skirt mounted located on the driver (road) side, in front of the rear wheels, and installed to minimize collection of road dirt and facilitate maintenance.

11.36.9 A rear mounted evaporator shall be provided. The rear evaporator shall have a minimum rating of fifty-two thousand (52,000) BTU's. Three-speed continuous duty permanently lubricated motors shall be provided. The blower assembly shall be rated at a minimum of five hundred, seventy (570) Cubic Feet per Minute. Coil shall be copper tube, expanded into aluminum fins three (3) rows deep. Thermostatically controlled expansion valve shall be provided. Frame shall be galvanized heavy-duty metal with integral pan and washable filter. The cover shall be made of durable ABS plastic.

11.36.10 Evaporator shall be equipped with two (2) drain lines each with a check valve to maintain positive condensation drain flow.

11.36.11 Evaporator filter shall be installed in a manner that it may be routinely removed, serviced, or replaced for maintenance without damage to the filter.

11.36.12 Installation of the air conditioning system(s) shall be by the vehicle body manufacturer or by an authorized factory air conditioning dealer who normally stocks, sells, installs and services a vehicle of the type being furnished.

11.36.13 All air conditioning systems shall use 134A refrigerant.

11.36.14 The components of the air conditioning system shall be readily accessible for maintenance. Refrigerant hoses shall meet the latest revision of SAE J-2064, double-braided Barrier type.

11.36.15 Two (2) back seated valves shall be installed at the dryer to facilitate evacuation and charging of the air conditioning system and replacement of the dryer vehicle. The system shall also be equipped with Schrader valves to promote efficient testing and servicing.

11.36.16 Refrigerant fittings shall be ATCO or Aeroquip.

11.36.17 Air conditioning circuits shall be protected with auto-resetting circuit breakers or thermal relays. The total electric current required by the two (2) systems in high speed fan mode shall not exceed sixty (60) amperes.

11.36.18 Poor quality of installation shall be grounds for immediate rejection of the complete vehicle.

11.36.19 Contractor shall submit data with bid which encompasses design criteria, evaporator coil size and location, condenser size and location, and performance and reliability studies of the entire system.

11.36.20 Air conditioning system(s) shall have a legible and durable nameplate with the following information:

- Name and address of A/C manufacturer
- Cooling capacity (BTU/hr.) and blower capacity (CFM).
- Type of refrigerant and recommended operating charge.
- Type of refrigerant oil and amount

11.36.21 Contractor shall provide a list of companies or individuals, and their addresses, who stock repair parts in the County's area and who can perform service on the products furnished.

11.36.22 The contractor shall furnish one copy of complete installation, maintenance and operating instructions for each different model, size and type of equipment provided. The instructions shall accompany each vehicle when delivered.

11.36.23 A replacement parts list shall be provided.

11.36.24 The entire rear air conditioning system shall be warranted for 24 months and shall cover 100% parts and labor.

#### 11.37 Heating and Defrosting:

11.37.1 Vehicle shall be equipped with a combination fresh air and recirculating air heaters. The heater controls shall be mounted in the dash panel and in the supplemental control panel, located conveniently to the driver's position and properly labeled. Heater hose connections shall be installed above the floor of the vehicle body and through the fire wall to the engine compartment. The length of the hot water hoses shall be as short as possible consistent with

good installation practices; however, the hoses shall not be installed in such a manner so as to interfere with normal motor maintenance operations, such as removal of the air filter. The hoses shall not dangle or rub against the chassis or sharp edges and shall not interfere with or restrict the operation of any motor function. Heater hoses shall conform to SAE 2083, Class C, as defined in SAE Standard J20E, or latest version thereto.

11.37.2 The front heater shall be a hot water type having a minimum free-flow output of the highest capacity offered by the chassis manufacturer.

11.37.3 A second hot water heater with blower fan shall have a BTU rating on at least thirty thousand (30,000) installed under a seat near the rear of the vehicle.

11.37.4 Easily accessible all brass gate valve(s) shall be furnished to cut off the flow of coolant water to the rear heater.

11.37.5 Defrosting equipment shall keep the windshield, the window to the left of the driver and glass in the service door clear of fog, frost, and snow, using heat from the heater and circulation from the fans. All defrosting equipment shall meet the requirements of FMVSS No.103 or latest revision thereto.

#### 11.38 Windshield and Windows:

11.38.1 The windshield is to be a one-piece design as is provided by the chassis manufacturer. Windshield shall be laminated, tinted safety glass.

11.38.2 Driver's window shall be chassis manufacturer's standard window. The window shall permit unobstructed side vision and shall have a sufficient opening to permit arm signaling. Provisions shall be made to draw in or exclude outside air from the driver's compartment.

11.38.3 Side windows shall be provided the full length of the vehicle. These windows shall be forty-one (41") inches tall and twenty-nine and one half (29 1/2") inches wide, transit type upper T-slider ventilating design windows, or approved equal. The upper T-slider shall have a positive lock in the closed position. The glazing shall be a minimum of one eighth (1/8") inch thick with thirty-one (31%) gray density, tempered safety glass. Tinted window film is not acceptable. Windows shall be installed in black powdered or anodized aluminum frames with an interior clamp ring attachment design.

11.38.4 An audible alarm shall be activated when any emergency window is opened. Emergency egress windows shall be designed to meet FMVSS 217.

#### 11.39 Mirrors:

**\*Amended 12/08/09**

11.39.1 Rearview mirrors shall be a minimum of nine (9") inch by eight and one half (8 ½") inch flat mirror surface and nine (9") inch by three and three quarter (3 ¾") convex mirror surface in a heavy-duty A.S.A. resin injection molded housing.

11.39.2 An additional mirror shall be furnished for the driver to view passengers. The mirror shall have a minimum of ninety-six (96) square inches of clear vision. Dimensions shall be approximately six (6") inches by sixteen (16") inches of reflective surface area.

11.39.3 Chassis manufacturer's standard sun visor shall be provided at the driver's position.

11.40 Seats and Seat Layout:

11.40.1 All ambulatory seats shall be mid-high back, forward facing. Double mid-high back, forward facing foldaway seats shall be provided over the wheelchair tie down station on the left side (driver side) of the bus for ambulatory passengers when the wheelchair station is not in use. Seats shall have a minimum width of seventeen and one half (17 ½") inches wide and shall be a minimum of twenty-five (25") inches overall front to back. Double seats shall have a minimum of width of thirty-five (35") inches overall.

11.40.2 Seat frames shall be cold-roll one (1") inch steel tubing and be sixteen (16) gauge or metal of equal mechanical properties. The front seat cushions shall have foam padding and be individually wedged to each passenger for occupants comfort and retention. The indentation load deflection shall be sixty-five (65) to eighty-five (85) pounds. Seat cushion shall meet the flammability requirements of FMVSS 302.

\*11.40.3 Seats and all visible surfaces shall be upholstered in level 3 vinyl material. Vinyl material shall be expanded vinyl, thirty-six (36) ounces per lineal yard minimum, transportation grade. The County will pre-approve all colors prior to production.

11.40.4 Seat backs shall be high impact ABS material which is recessed to provide one and one half (1 ½") inches of additional passenger hip to knee room.

11.40.5 A retractable seatbelt shall be provided for each seated passenger. The retractor shall be emergency locking with anti-cinch capability. The retractor must be attached to the seat structure. Passenger seatbelts shall be "A" type on seat belt assembly conforming to current FMVSS 209 requirements.

11.40.6 Aisle seats shall include an energy absorbent grab bar, three quarter (3/4") inch, twenty (20) gauge steel covered with custom molded, wear and vandal resistant eight (8) pound density, self-skinning polyurethane foam. Grab bar shall be located in the top of the seat back.

11.40.7 All seats shall be recessed track mounted. Floor anchorage shall be neat and shall not present a trip hazard.

11.40.8 Aisles shall not be less than seventeen (17") inches wide.

11.40.9 **CONTRACTOR shall submit drawings of wheelchair positions and seating arrangements during the request for approved equals process.** Final approval of the interior layout including passenger seating, wheelchair positions, driver's seat, location of stanchions, hand holds, driver's barrier, and modesty panels will be made by the County.

11.41 Driver's Seat:

Driver's seat shall be provided with a folding armrest, tilt riser and shall recline. A three (3) point safety belt shall be mounted to the seat frame and shall be equipped with an emergency locking retractor that has a feature which prevents it from progressively tightening the belt around the driver. Seat material shall be the same as the passenger seats. A screw mounted operator's coat hook shall be furnished and installed by the Contractor in the operator's area. Location to be approved by the County after bid award.

11.42 Safety Equipment:

11.42.1 A standard twenty-four (24) unit First Aid Kit shall be provided. It shall include a one way airway apparatus and one pair of disposable gloves. Kit shall be securely mounted near the driver's seat.

11.42.2 A ten (10) pound rechargeable type 210 ABC fire extinguisher with metal head shall be provided. It shall be easily accessible in a bracket mounted near the driver's seat.

11.42.3 Web cutters shall be provided.

11.42.4 A set of three (3) triangular reflectors with a storage container shall be provided and mounted near the driver's seat.

11.42.5 A back-up alarm that is electrically operated and produces an intermittent sound when the vehicle is shifted into reverse shall be furnished. Alarm shall be in compliance with SAE J994B with respect to acoustical performance for Type B device (IE 107 db) (A) and plus or minus 4db with a supply of 14

volts.

11.42.6 A Fresnel lens shall be provided on the rear window of the vehicle.

11.43 Emergency Exits:

11.43.1 A heavy duty emergency door shall be provided at the rear of the vehicle.

The door frame structure shall consist of a minimum 12-gauge, 304 grade stainless steel, powder coated using the five (5) step Interpon PZ77 process, or approved equal, in bright white to match vehicle exterior base color. A water deflector shall be integrated into the door frame structure at the top. Door panels shall be made of non-corrosive material. Foam core doors with wood frame supports are not acceptable. Door panel hinges shall be piano type with a minimum three sixteenth (3/16") inch diameter pivot pin. Hinges and hinge fasteners shall be stainless steel to resist rust and corrosion. Door latch shall be vertical, rotating, two point type with latch rod at top and bottom. The door panel shall have its own key lockable latch assembly which shall consist of a pistol grip style twist handle located at the inside center of the door panel. Door latch shall compress perimeter door seal to prevent leaks. Latch adjustment plates shall be located at the top and bottom of the door frame structure. Door panel holder shall be a gas shock type mounted at the top and shall allow the door panels to open a minimum of one hundred (100°) degrees from the closed position.

11.43.2 Door windows shall be installed with two (2) piece black ozone treated extruded rubber, lock and key of one (1) piece fixed design. Two windows shall be installed on the back of the vehicle, one on each side of the emergency door. The windows shall be glazed with three sixteenth (3/16") inch thick, thirty-one percent (31%) gray density, tempered safety glass. Door window height shall match the top of the rear windows on each side of the emergency door.

11.43.3 An audible alarm shall be activated when the emergency door is opened.

11.43.4 A combination roof ventilator and emergency escape hatch shall be provided towards the rear of the vehicle. Example: Trans-Spec Ventilator Hatch

11.44 Painting and Decals:

11.44.1 The base vehicle shall be Bright White in color. The area around the windows shall be black.

11.44.2 Decals furnished by the Contractor for the County to affix to the interior of the bus shall be as follows:

NO SMOKING

2

Size and color TBD

WATCH YOUR STEP	2	Size and color TBD
Do Not Stand Forward of the Yellow Line	2	Size and color TBD
FIRE EXTINGUISHER	1	Size and color TBD
LAW PROHIBITS THE OPERATION OF THIS VEHICLE WHILE ANYONE IS STANDING FORWARD OF THE YELLOW LINE	2	Size and color TBD
No Smoking, Eating, Drinking	2	Size and color TBD
Please Remain Seated While The Bus Is In Motion	2	Size and color TBD

11.44.3 Exterior Decals and Logos:

- “CAUTION – CHILDREN MAY BE EXITING”: 1 (Size and location to be determined after award)
- Fleet number: 5 (numbers and letters) (Location to be determined after award)
- Agency logo’s, stripes etc.

11.44.4 In addition to the decals described above, safety decal(s) shall be furnished and shall be affixed at any applicable area; emergency exit, steps, wheelchair lift, etc. The decals shall include necessary warnings and precautions. Permanent decals are required.

11.45 Delivery:

All vehicles must be serviced prior to delivery in accordance with the manufacturer's "New Vehicle Pre-delivery Service" requirements and as specified below.

Pre-Delivery Service

The following service shall be performed upon all motor vehicles prior to/upon delivery:

- Pre-delivery inspection certified with an affixed Texas Motor Vehicle Inspection Certificate (annual inspection sticker);
- Fluid levels checked and serviced with proper grade fluid;
- Chassis lubrication;
- Exterior wash and interior cleaning; and
- Fuel system(s) filled to capacity.

11.46 Registration:

Successful bidder shall provide necessary documents to enable the County to register the vehicle in the State of Texas. Necessary fees and state taxes will be paid by the

County; do not include such fees and taxes in bid price.

11.47 Manuals

A line setting sheet and manual(s) containing operating and servicing instructions for the vehicle and lift shall be provided with each vehicle. The manual(s) shall be as detailed as possible outlining all necessary operating and servicing instructions for each vehicle and lift including the vehicle's driveline components. Necessary warnings and safety precautions shall be included. In addition, manual(s) containing illustrated parts lists, operating and servicing instructions for related and special equipment supplied with the vehicle and lift shall be provided with the vehicle.

11.48 Warranty:

11.48.1 Bus Chassis

A copy of the chassis manufacturer's warranty must be submitted with the proposal and include the minimum:

- 5 years, unlimited mileage - failure of the chassis frame including cross members.
- 2 years, unlimited mileage - failure of any other original components manufactured by the chassis manufacturer.
- 1 year, unlimited mileage, - failure of any components manufactured by outside suppliers and included as original equipment by the chassis manufacturer. Where the outside supplier's warranty exceeds that of the chassis manufacturers then such warranty shall be stated and shall apply.

11.48.2 Engine: Must include the fuel injection system and emission control system 5 year/unlimited mileage.

11.48.3 HVAC: 3 year, unlimited mileage warranty.

11.48.4 Service Location: There must be a one-source warranty location providing full warranty for body, chassis, and engine. Individual locations for each component will not be accepted.

11.48.5 Towing: There shall be a 60-month / 150,000 mile extended towing warranty for all unsafe or non-drivable warrantable failures (up to \$250 per incident) to the nearest warranty location

11.48.6 Transmission: 2-years, unlimited mileage - copy of OEM warranty to be included

11.48.7 Wheelchair lift: 3 years, unlimited mileages

11.49 Parts and Service:

The bidder providing the vehicle shall be an authorized dealer for the vehicle manufacturer and hold the required current license(s) with the Texas Motor Vehicle Division. The dealer shall have factory-trained personnel available for warranty repairs and the performance of service. The dealer shall also maintain an inventory of high-usage parts and a quick source for low-usage parts. The using County will assume the expense for replacement filters, fuel, cleaning, painting and other minor items normally consumed in day to day operations. Fort Bend County will assume responsibility for cost of repairs resulting from collision, theft, vandalism, operator negligence and/or acts of God.

11.50 Instructions on Safety, Operation, and Preventative Maintenance:

The contractor shall provide Fort Bend County sufficient instruction on safety, operation and preventive maintenance of the vehicle after it has been delivered and is ready for operation. Training shall be completed prior to payment.

11.51 Optional Equipment:

11.51.1 Morryde Suspension: An enhanced rear suspension shall be provided. Suspension system shall be "MOR/RYPDE" and shall ensure a consistent smooth ride with a passenger load of fifteen (15) adult ambulatory passengers and two (2) wheelchair positions occupied. Jounce and rebound must both be controlled while providing controlled roll stability.

11.51.2 Wheel Inserts: Four (4) stainless steel, bolt-on wheel inserts shall be provided. The set shall be installed on the front wheels and rear dual wheels and be complete with all lug and centerpieces. ***Clip-on securement of wheel inserts are not acceptable.***

11.51.3 Rear Bumper: Rear bumper shall be black "Help" emergency absorbent bumper as produced by Romeo Rim, Inc. (or approved equal) and shall be equipped with an anti-ride feature. Bumpers shall be securely fastened to the chassis frame to adequately absorb shock from impact. In no case shall bumpers be fastened directly to the body and allow shock from impact to be transmitted to the body of the vehicle.

11.51.4 Electric Powered Passenger Entry Door: In lieu of the manual door, the passenger entry door panels shall be actuated together by a single electric

powered overhead actuator. Actuator shall be equipped with an emergency manual release lever to allow for manual opening in case of emergency.

11.51.5 Lift Platform Cover: Removable vinyl cover shall be provided for the lift platform when in the stored position.

11.51.6 Remote Controlled Mirrors: Mirrors shall be remote controlled. The mirror glass shall be nine and three quarters (9 <sup>3</sup>/<sub>4</sub>" ) inches in height by eight and five eighths (8 <sup>5</sup>/<sub>8</sub>" ) inches in width. All parts including the mirror glass shall be replaceable. A remote control switch shall be provided and located in the operator's compartment; switch must be capable of controlling both right and left mirrors. Example: Ramco Mirrors Model #5500 w/o defrost feature.

11.51.7 Bilingual Signs and Decals: All safety and passenger assistance signs and decals shall also be in Spanish.

11.51.8 Public Information System: Driver activated PIS to announce stops and other passenger information. The system shall include four (4) speakers spaced throughout the vehicle above the passenger seating area enabling sound to reach each passenger. The system shall be integrated with the AM/FM radio system so that the PIS will override the radio when activated.

11.51.9 Stop Request Chime: A chime shall be provided that is activated by a pull cord. The pull cord shall be above the passenger windows within reach of each passenger.

11.51.10 Farebox: Fare box shall be mounted with trip handle toward driver. It shall be mounted on a stanchion, adequately braced, located near the driver and easily accessible to passengers entering the bus. An amber or indirect fare box light shall be connected to the dash instrument lights. Two interchangeable, lockable fare box vaults and fare box, keyed alike, with a double set of keys for each lock shall be supplied. Vault and fare box exteriors shall be marked with key reference. Vehicle shall be provided with wiring and structural support to install the fare box. Wiring for fare box circuit shall be two (2) No. 14 insulated wires in vinyl tubing, one energized directly from a battery positive feed protective circuit breaker and the other to ground. Example: Main Fare Box model Treasury 1, Diamond (or approved equal)

11.51.11 Destination Signs: Changeable destination twelve (12) volt motor driven movable mechanism signs shall be furnished on the curb side above the passenger window and at the front of the vehicle above the windshield. Front sign curtain to be approximately 36 inches wide. Sign curtains to be illuminated. Front bulkhead or sign box shall have a door to open for viewing sign curtain position. Door shall be positioned for ease of driver

operation. Sign shall comply with ADA requirements. Example: Trans Sign, Model D-3110 (or approved equal)

11.51.12 Interior Ad Racks: interior Ad Racks shall be provided on each side of the vehicle interior. Racks will allow for slide-in placement of advertising copy and accommodate a minimum of nine (9), 11" x 14" plastic placards with advertising messages on EACH SIDE. Racks are not to be back-lit but will be adequately illuminated for visibility of messages to passengers at all times.

11.51.13 Ground Plane: A ground plane shall be installed during construction of the vehicle in anticipation of installation of a two-way radio. Coaxial leads shall be furnished. For additional information, contact the ordering agency.

**12.0 SPECIFICATIONS FOR LIGHT-DUTY DIESEL TRANSIT CONVENTIONAL BUS 24' to 26':**

12.1 The vehicles produced according to the included specifications must be of the latest current model year (2009 or newer). All equipment, options and feature provided must be designed, constructed and installed to be fully suitable for their intended use and service. The vehicle must be designed and built using the latest available technology and engineering capabilities. All components must be new. Each bus, including all individual components, must meet or exceed all current Federal, state, and local requirements.

12.2 The bus shall be supplied by an integrated vehicle supplier that can provide warranty, service, and parts coverage from a single distribution network for the complete vehicle. The body shall be manufactured in compliance with Quality Standards ISO 9001:2000 with regard to the Sale, Design and Manufacture of Customized Buses and Multipurpose Passenger Vehicles.

12.3 This specification will describe the construction of a light-duty transit bus. The bus must meet all Federal Bus Testing Requirements and have completed the required bus testing at the Altoona bus testing facility (or be in the process of completing the test) for the category of five (5) years, 150,000 miles and be fully compliant with the Americans with Disability Act (ADA) requirements. The bus must meet Buy America.

12.4 General Dimensions:

- Exterior Length.....313" Maximum
- Exterior Width.....96" Maximum (excluding mirrors)
- Exterior Height.....115" Maximum
- Interior Width at seat level.....90" Minimum
- Interior Height at center aisle.....76" Minimum
- Entry Door Dimension (clear opening).....34" x 80" Minimum

First Step Height from Ground.....	12” Maximum
Step Riser Height.....	9.0” Maximum
Step Tread Depth.....	10.0” Minimum
Wheel Base.....	176” Minimum

12.5 Suspension and Gross Vehicle Weight:

Gross Vehicle Weight Rating (GVWR)....	14,050 lbs. Minimum
Front Axle Capacity.....	4,600 lbs. Minimum
Rear Axle Capacity.....	9,450 lbs. Minimum
Front Springs.....	3,250 lbs. Minimum
Rear Springs.....	9,450 lbs. Minimum

12.5.1 A minimum of fourteen thousand and fifty (14,050) pounds GVWR, or higher if required, to support the loaded weight of the completed vehicle including any optional equipment selected. It is the bidder’s responsibility to calculate the actual loaded weight and to provide a heavier chassis, tire, wheel, spring or axle combination, if required.

12.5.2 Shock absorbers shall be gas type, heaviest available as specified by the chassis manufacturer.

12.5.3 Rear springs shall be a conventional leaf spring of proper design and suitable capacity. Springs shall have anti-squeak characteristics. The suspension system shall take into count capacity on the curb side of the vehicle to overcome additional weight of the lift.

12.5.4 An enhanced rear suspension shall be provided. Suspension system shall be “MOR/RYPDE” and shall ensure a consistent smooth ride with a passenger load of fifteen (15) adult ambulatory passengers and two (2) wheelchair positions occupied. Jounce and rebound must both be controlled while providing controlled roll stability.

12.5.5 The rear axle and final drive must be of conventional construction, a truck-type rear axle utilizing heavy tubes pressed into cast center section or one-piece casting.

12.5.6 Ring gear should be bolted, not riveted, to differential carrier.

12.5.7 A differential with the appropriate gear ratio to match the power train is required. The vehicle should be designed to operate at sixty-five (65) m.p.h. at 3500 rpm’s or less.

12.5.8 Rear tow hooks shall be provided.

12.6 Engine:

12.6.1 Engine shall be of the latest design electronic controlled, V-8, six point six liter (6.6) diesel power or approved equal. The engine is to be EPA certified to comply with 2009 emission standards, or current year of production, and operate on ultra-low sulfur diesel fuel. Engine performance settings to be determined post bid. A complete set of maintenance manuals must be provided. On board diagnostic connector for diagnostic equipment and manual regen switch to be located post bid. Engine must have fast-idle system, fuel/water separator/filter and "Water in Fuel" sensor to be provided with corresponding light on dash panel.

12.6.2 There shall be extra insulation installed between the dash and firewall, as well as beneath the hood and on the splash shields to help reduce chassis noise entering into the bus body. The bus-generated noise level experienced by a passenger at any seat location in the bus shall not exceed 83 dba.

12.6.3 The engine components are to be arranged and mounted so as to provide convenient access for servicing the engine and all of its accessories.

12.7 Fuel System:

12.7.1 The fuel tank shall have a capacity of fifty-five (55) usable gallons. A diamond plate access plate shall be provided in the vehicle floor for the purpose of accessing the fuel sending unit.

12.7.2 An appropriate fuel filter shall be provided.

12.8 Exhaust System:

12.8.1 The vehicle shall be equipped with an exhaust system which meets Federal and state noise level and exhaust emission requirements. The exhaust pipe shall terminate just ahead of the rear corner of the vehicle, exhausting to the street side, and shall be constructed so that it will not cause back pressure in the motor or damage to the paint, bumper, chassis or wiring components of the vehicle. Flexible tubing will not be permitted in the exhaust system. An adequately sized, aluminized steel, long-life muffler shall be used.

12.8.2 The exhaust system shall be secured in place with heavy duty system. No part of the exhaust shall hang below departure angle to the rear bumper bottom.

12.9 Cooling System:

The cooling system shall be of heavy duty to manufacturer's recommended standards.

The coolant recovery system shall be factory installed. It shall be super cooling or heavy duty cooling. The cooling system shall have permanent glycol base antifreeze to protect the system to -20 degrees F. and shall maintain engine temperature not to exceed manufacturer's recommended normal operating temperature. The cooling system shall have a low coolant warning buzzer and light and shall shut off the engine in 45 seconds of initial warning.

12.10 Transmission:

12.10.1 The transmission shall be an automatic shift, five (5) speed forward and a reverse gear with an auxiliary oil cooler capable of handling extreme temperature associated with transit type operations.

12.10.2 The transmission shift lever shall be interlocked with the starting motor to prevent engagement of the starter in any gear position other than park.

12.10.3 The transmission shall be equipped with an interlock feature that prevents the vehicle from being shifted out of the park position until the lift doors are closed, the lift master switch is off, and the parking brake is released.

12.10.4 A warning signal audible outside of the vehicle shall be activated when the transmission is in reverse.

12.11 Drive Shaft:

A drive shaft yoke and guard shall be provided to prevent the drive shaft from dropping to the ground or from whipping the vehicle floor if it becomes broken or separated.

12.12 Vehicle Controls:

12.12.1 A heavy duty power steering linkage type shall be provided.

12.12.2 The steering shall be power assist and shall incorporate a tilt and telescoping feature. Steering from full left to right shall be accomplished in no more than five (5) complete turns of the heel.

12.12.3 The steering wheel shall be no less than fifteen (15") inches or more than twenty (20") inches in diameter. The wheel ring shall be of all plastic or synthetic resin construction, molded over metal.

12.12.4 All steering linkage wear points, including tie rod ends, shall be fitted with lubrication fittings and replaceable bushings or inserts.

- 12.12.5 All vehicles shall be keyed alike, with the same key operating the driver's door and ignition switch on all vehicles. One key shall operate all remaining locks on all vehicles (excluding fare box keys). Bidder shall supply two (2) complete sets of keys for each vehicle ordered.
- 12.12.6 A ground plane shall be installed during construction of the vehicle in anticipation of installation of a two-way radio. Coaxial leads shall be furnished.
- 12.12.7 A driver activated PIS to announce stops and other passenger information will be included. The system shall include four (4) speakers spaced throughout the vehicle above the passenger seating area enabling sound to reach each passenger. The system shall be integrated with the AM/FM radio system so that the PIS will override the radio when activated.
- 12.12.8 The following controls, in addition to normal steering, braking and transmission functions are to be provided:
- Column-mounted turn signal lever.
  - Cruise control.
  - Emergency flasher control facing driver and clearly visible.
  - Master exterior light switch including clearance or marker lights. Switch to be of uniform type.
  - Switches and temperature controls for passenger compartment heaters, defroster. Switches must all be uniform in type.
  - Separate switch and temperature control for driver heater and defroster.
  - Heavy duty electronic variable speed windshield wipers controlled by a variable speed switch or two wipers with intermittent feature shall be furnished. Wiper motor shall be mounted in an easily accessible location for ease of inspection, maintenance and removal. Minimum eighteen (18") inch wiper blade and arm providing 1,037 square inches of wiped area with one hundred and ten (110°) degrees of wiping arc. Windshield washer reservoir shall be mounted in an accessible area and pump shall be electronically operated.
  - Passenger compartment lights.

12.12.9 All controls are to be within arm's reach of a five foot (5'0") driver with seat belt fastened.

12.12.10 All body switches are to be of uniform type, either push-pull or rocker type, mounted in convenient grouping in a panel near the driver.

12.12.11 All controls and switches shall be plainly and permanently marked. Painted masking is unacceptable.

12.12.12 The control panel and a supplemental driver's control panel shall be located conveniently to the driver's seated position and in full view of the driver.

12.12.13 No switches or instruments shall be obstructed controls, trim panels, or other appurtenances, and shall be arranged in a consistent and uniform manner.

#### 12.13 Electrical System:

12.13.1 The vehicle is to be equipped with a twelve (12) volt extreme duty electrical system. All components are to be selected and integrated to function in an environment characterized by low engine (alternator) speeds and high amperage draws due to lights, wheelchair lift, flashers, air conditioning or heater, and other accessories operating consistently or simultaneously. As built wiring schematics, one hard copy and one electrical copy are required.

12.13.2 An alternator of at least two hundred (200) amperes output at normal engine speed and an idle of at least one hundred twelve (112) amperes is required. The idle output shall be achieved at an engine speed of no more than seven hundred (700) R.P.M. At no time should the ampere output be less than one hundred ten percent (110%) of loaded draw.

12.13.3 Starter shall be capable of turning over the engine with SAE 40W oil after ten (10) hour cold soak at zero (0°F) degrees.

12.13.4 The vehicle shall be equipped with a fast idle solenoid with manual switch, volt sensor and light which will automatically shut off when brake is applied and transmission is placed in gear.

#### 12.14 Batteries:

12.14.1 Chassis manufacturer supplied batteries shall be supplied. Battery cables shall be color coded for positive and negative number two (#2) battery cable. Cables shall be sleeved with high abrasive resistant flex-guard loom and supported with lined steel clamps on a maximum of fifteen inch (15") centers. All battery terminals shall be coated with anti-corrosion and sealant protector.

12.14.2 Batteries shall be mounted on a stainless steel mounted tray with battery hold down secured with bolts. Battery tray compartment will be located on the curb (right) side of bus, below the floor line, and with adequate reinforcement brackets mounted to floor supports. Battery compartment should be vented and battery easily serviceable without removal from bus.

12.14.3 A rotary type battery disconnect switch shall be located in the driver side step well within the driver's reach.

12.15 Wiring:

12.15.1 All wiring other than that provided by the original equipment manufacturer (OEM); chassis, wheelchair lift or air conditioning and heating manufacturer shall be cross-linked polyethylene insulated, to two hundred (200°F), shall meet SAE standards, shall be color, function and number coded for positive identification every six (6"), and shall be permanently labeled in words to their function. Precaution shall be taken to avoid heat, water, solvents or chafing by proper routing, clamping, and the use of grommets or suitable electrometric cushion materials. Harnesses shall be designed to resist abrasion by the use of nylon slit flex loom that has a maximum temperature resistance of four hundred and ten degrees (410°F). Harnesses shall be sectional terminating at insulation multi-pin quick disconnects or junction blocks. Heavy duty circuit board junction panel shall be provided inside the vehicle. The circuit block shall be conveniently mounted and have a secure cover. The circuit board shall be equipped with heavy duty twelve (12) volt DC relays, and twelve (12) volt automatic reset circuit breakers and blade fuses. Inside the circuit box shall be a legend identifying each circuit and wire by color, number, function and location. This legend shall be permanently mounted to the vehicle.

12.15.2 All connectors shall meet the requirements of the Society of Automotive Engineers (SAE) recommended practice J878a, Types GXL and SGX.

12.15.3 Vehicles shall be identically wired.

12.15.4 Bidder shall furnish complete wiring diagram with wire size, maximum current flow in each wire, type of insulation, and code used. Wire diagrams must be vehicle specific, body and chassis combined, and shall correctly show all specified options.

12.15.5 No "T" splices or butt connections shall be made in wiring unless prior approval is given. Harness and wiring shall terminate at appropriate junction terminals set in Bakelite or molded plastic material.

12.15.6 Devices such as lamps and wiring requiring periodic checking and servicing shall be readily and easily accessible. All exterior devices shall be sealed to prevent entry of water.

12.16 Instrument Gauges: The following instruments shall be provided:

- Speedometer/Odometer – Chassis manufacturer’s standard design with trip set feature.
- Fuel Gauge – Chassis manufacturer’s standard fuel gauge.
- Oil Pressure Gauge – In addition to the manufacturer’s standard gauge, an audible alarm and light shall be installed that will activate when low oil pressure is detected.
- Water temperature gauge – In addition to the manufacturer’s standard gauge, an audible alarm and light shall be installed that will activate when overheating engine is detected.
- Voltmeter – In lieu of the chassis manufacturer’s standard voltmeter, an additional voltmeter shall be installed with graduated charge and discharge indications.
- Engine hour meter shall be provided.

12.17 Brakes:

12.17.1 Service brakes shall be hydraulic, self-adjusting power disc front and rear. Vehicle shall include a foot operated parking brake.

12.17.2 The brake system shall comply with Federal Motor Vehicle Safety Standard 105.75.

12.17.3 The braking system shall be heavy duty and the largest offered by the manufacturer for the GVWR specified.

12.17.4 The brakes shall be free of objectionable noise and squeal when applied.

12.18 Wheels and Tires:

12.18.1 Vehicles shall be equipped with the heaviest available ventilated wheels, 19” x 6.00” minimum. Rear wheels shall be dual and all wheels are to be interchangeable. Rated capacity shall be equal or exceed GVWR of the vehicle.

12.18.2 Tires shall be LT 225/75R<sub>x</sub>16 radial ply, all season, with steel-cord reinforcement an highway type tread. Wheels and tires are to be of adequate capacity, as determined by reference to the Tire and Rim Association Yearbook, to support the fully loaded vehicle. One matching spare wheel and tire shall be provided with each vehicle but not mounted in or on the vehicle.

12.18.3 Four (4) stainless steel, bolt-on wheel inserts shall be provided. The set shall be installed on the front wheels and rear dual wheels and be complete with all lug nut covers and centerpieces. *Clip-type securement of wheel inserts is not acceptable.*

12.18.4 Mud flaps shall be included for each wheel of the vehicle.

12.19 Bumpers:

12.19.1 Front bumper shall be the chassis manufacturer's standard front chromed bumper.

12.19.2 Rear bumper shall be black "Help" energy absorbent bumper as produced by Romeo Rim, Inc. and shall be equipped with an anti-ride feature. Bumpers shall be securely fastened to the chassis frame to adequately absorb shock from impact. In no case are the bumpers to be fastened directly to the body and allow shock from impact to be transmitted to the body of the vehicle.

12.20 Horn:

Dual 12 volt electrically controlled horns shall be furnished and installed so as to be protected from wheel-wash.

12.21 Crash Worthiness:

12.21.1 The body structure shall be built as an integral vehicle adequately reinforced at all joints and corners where stress concentration may occur to adequately carry required loads and withstand road shock. The following items are representative of the minimum requirements of the vehicle.

12.21.2 Body assembly shall meet or exceed FMVSS 220, for roll-over protection.

12.21.3 The body and roof structure shall withstand a static load equal to one hundred fifty percent (150%) of the curb weight evenly distributed on the roof with no more than a six inch (6") reduction in any interior dimension. Windows shall remain in place and shall not open under such a load.

12.21.4 The vehicle, at GVWR and under static conditions, shall not exhibit deformation or deflection that impairs operation of doors, wheelchair lift, or other mechanical elements. Static conditions include the vehicle at rest with any one wheel on a six inch (6") deep hole.

12.21.5 Upon request of the County, the Bidder will present certified actual test results which have been conducted to insure that the vehicle offered meets the FMVSS crash worthiness standards for this type of vehicle.

12.22 Body Construction:

12.22.1 The body may be constructed of a matrix of fiberglass reinforced plastic (FRP) with an inner thickness of resin-hardened honeycomb craft material. The matrix assembly shall be as follows:

12.22.2 Exterior surface shall be a minimum .020" thickness of high gloss gel-coat to prevent moisture penetration and corrosion. Secondary surface shall be a minimum one eighth inch (1/8") thickness of resin-hardened FRP. The center composite layer consists of a one inch (1") thickness of resin-hardened "Vertical" honeycomb, or approved equal, laid on edge to allow maximum column strength of each cell. Wall structure shall include a maximum of two (2) three inch (3") wide longitudinal sections of eighteen (18) gauge flat steel extending from the forward body seam to the rearward body seam to provide an additional attachment point for the integrally welded sidewall seat rail. Final surface of body structure is a minimum three thirty seconds inch (3/32") thickness of resin-hardened FRP. Window framing in sidewall shall be a steel ladder- type assembly. Window pillars are minimum of one and one half inches (1 1/2") by one inch (1") fourteen (14) gauge dipped, zinc-plated tube. Top and lower horizontal ladder bridge rails are minimum one inch (1") by two inch (2") twelve (12) gauge zinc plated angle section. Attachment of ladder assembly to roof and lower wall section shall be grade five (5) 1/4" x 3/4" mechanical fasteners on not more than eight inch (8") center. In addition, interface of wall and roof to window ladder assembly surfaces shall include a high strength contact adhesive. Sikaflex 255 or approved equal to provide a one hundred percent (100%) bonding and sealing at these locations. Side panels around and below passenger windows shall be same Melamine material with color being bright white. County to approve color and quality prior to production from samples provided by vendor.

12.22.3 The body may be constructed of vertical support columns that shall be eighteen gauge (18) steel. All roof structural support members shall be of the equivalent of sixteen (16) gauge hot rolled steel hat section roof bows. The entire body steel cage frame (door, walls roof, front and rear) shall be securely jig-welded together to provide an integral one-piece body structure. Fastening of roof and side walls by any other means other than welding will

not be acceptable. All metal parts shall be given a thorough multiple stage anti-corrosion treatment prior to assembling. The exterior panels shall be continuous panels of .063 aluminum over heavy comb, twenty-five (25) gauge galvanized steel or other metal of the same mechanical properties. Exterior panels are to be riveted or welded to the body framing. Sheet metal screws will not be acceptable for fastening exterior panels. All panels shall be installed so that they will shed water. That is, the panel shall be lapped over the following panel and in no case shall the sealing of the panels be dependent on caulking alone. All exterior joints and seams shall be protected by zinc chromate caulking, butyl rubber tape, or an approved equal. Side panels below the floor line shall be non-corrosive ABS material and easily removable for service and repair. These panels shall be installed using methods that allow for a smooth surface with minimal exposed fasteners. All nuts, bolts clips, and other fasteners shall be zinc or cadmium plated or phosphate coated. Sheet metal screws are not permitted.

12.22.4 All steel body parts shall be galvanized. Zinc chromate paint shall be applied to aluminum and steel.

12.22.5 The primer utilized shall be compatible with finish paints. **Interior surfaces of body panels and posts which are covered by trim materials shall be given protection against corrosion.** In the case of interior body posts, all four (4) sides shall be treated to prevent corrosion.

12.22.6 The galvanized welds shall be wire brushed and treated with a cold galvanizing compound.

12.22.7 Side and end frame sections shall be designated for maximum strength. End posts shall be designated to resist shear. To increase tolerance for added strength, frame sections are to be jig-welded. Each frame section is to be tube-grind network constructed of 1" x 2" 14 gauge steel tubing to be used in all stress areas – especially around the passenger entrance door and at all points where stress may occur.

12.22.8 Gun installed mono-bolt fastenings or rivets shall be utilized on all exterior body panels, rub-rails, and all other locations where stress is concentrated. When mono-bolts cannot be used, all nuts, bolts, clips, washers, clamps and like fasteners on the exterior and interior of the unit shall be zinc or cadmium plated to prevent corrosion.

12.22.9 Roof bows shall be constructed from eleven (11) gauge and sixteen (16) gauge steel welded into a parabolic-Z structure. The longitudinal framing from front to rear shall consist of two (2) hatch-shaped members formed of sixteen (16) gauge steel. Exterior roof panels shall be .063 aluminum. The interior panel for the roof within the unit shall have a

strength equivalent to twenty-four (24) gauge steel. All metal parts shall be given a thorough multiple stage anti-corrosion treatment prior to assembling.

12.22.10 The vehicle shall be rust-proofed with premium quality rust-proofing material. The entire body frame under-structure of the vehicle is to be fully undercoated with non-flammable resin type material, polyoleum, or equivalent, applied after final assembly at the manufacturing facility.

12.22.11 Gutters shall be provided to prevent water flowing from the roof onto the side windows and passenger doors. When the vehicle is decelerated, the gutters shall not drain onto the windshield or driver's side window, or into the boarding area. Cross sections of the gutters shall not be less than .025 square inches.

#### 12.23 Roof:

12.23.1 The roof shall have sufficient strength and stiffness to prevent vibration, drumming, or flexing under normal use. Roof structure shall include a minimum of three (3) longitudinal sections of eighteen (18) gauge flat steel extending from the forward the forward body seam to the rearward body seam. All flat steel sections shall be fully integrated into the roof matrix and shall provide additional structural integrity and a secure attachment surface for ceiling panels, handrails, and stanchion fixtures.

12.23.2 The roof is to be constructed to provide an aesthetically pleasing design to the vehicle. The sills, when matched, will provide a clean, clear surface at least two inches (2") wide for secure and sufficient roof mounting.

#### 12.24 Insulation:

Vertical core insulation shall provide for a minimum of a "R-6" thermo-barrier and sound absorption. Side, roof, and front and rear crowns shall be insulated by the vertical core of the body assembly composite.

#### 12.25 Floor:

12.25.1 The vehicle floor assembly shall be a lateral body support, structural design, incorporating longitudinal stringers welded in a perimeter structure of steel and iron. The entire floor assembly shall be jig-welded steel structure. Floor construction methods that utilize wood studs running the length, width, and outside perimeter with a foam core insulation are not acceptable.

12.25.2 The substructure shall be comprised of the following:

12.25.3 A combination of fourteen (14) gauge steel lateral outriggers reinforced at

each mounting point, eleven (11) gauge steel C-channel longitudinal support members, and a perimeter of fourteen (14) gauge steel angle welded into a ladder type structure.

12.25.4 The substructure shall be bolted through the lateral outriggers, two (2) per outrigger to the chassis through rubber isolator grommets as provided by the chassis manufacturer. Welding of any body understructure to the chassis frame will not be acceptable.

12.25.5 Over the sub floor structure shall be fastened a minimum of five eighths of an inch (5/8"), seven (7) ply, marine grade plywood which is pattern cut, edge sealed, and attached with quarter inch (1/4") diameter counter sunk Tek screws. Sub floor understructure shall be completely undercoated and sealed prior to being installed on the steel frame understructure.

12.25.6 Floor shall be level throughout and all joints between the floor and vertical surfaces shall be equipped with a floor covering of molding. Flooring shall be laid in such a manner as to be free from squeaks.

12.25.7 All edges of the plywood shall be sealed prior to installation to resist moisture. All floor joints will be filled and sanded level to result in a smooth, flat floor ready for installation of the flooring material. The entire floor shall be thoroughly sanded and then completely cleaned of all sanding and foreign material.

12.25.8 The floor in the under seat area and wheelchair position area shall be covered with RCA #TR766, smooth f covering having a minimum thickness of .125 inch (1/8"). Floor covering shall roll up the sidewall of the seat track.

12.25.9 Floor covering in aisle and on steps shall be RCA #TR766, non-skid, wear-resistant, and ribbed. Minimum overall thickness shall be .1875 inch (3/16") measured from the top of ribs.

12.25.10 Floor covering shall be laid without gaps or openings between sheets. Seams shall be filled with color matching material so as to be tight against any influx or seepage of water. Seams shall be covered with aluminum trim. The floor covering material shall be thoroughly cemented into position throughout the entire area and will be free of bubbles and blisters.

12.25.11 The floor covering in the platform or standee area shall be three sixteenths inch (3/16") thick top ribbed, single piece. The single piece floor covering in the platform area shall have longitudinal and traverse ribs metered at 45 degrees face to door. The vertical face and top section of the platform step edge backing shall be anchored with A.I.S.I. Type 304 stainless steel screws.

12.25.12 A yellow standee line shall be provided at the driver's modesty panel.

12.26 Roof Liner:

Interior walls shall provide a finish that is durable, easily cleaned and coordinates with the vehicle's interior color scheme. Roof liner shall be molded fiberglass or vinyl clad covered sheeting, neatly installed the full length so as to cover all protrusions.

12.27 Doors and Step Well:

12.27.1 The passenger entry door and step well shall be located at right front of passenger area, located directly across from the driver's seat at a ninety (90°) degree angle for maximum viewing on entry way.

12.27.2 The door shall be electronically operated, outward folding type. The passenger entry door panels shall be actuated together by a single electric powered overhead actuator. Actuator shall be equipped with an emergency manual release lever to allow manual opening in case of an emergency. The door shall be controlled from the driver's seated position.

12.27.3 The passenger entry door structure shall consist of a minimum 12-gauge, 304 grade stainless steel, powder coated using the five (5) step Interpon PZ77 process or approved equal, in bright white to match vehicle interior base color. It shall be the two-piece transit type and shall have a minimum horizontal opening of thirty-six (36") inches and a minimum vertical opening of eighty (80") inches. All screws used to attach the door frame to the vehicle body shall be stainless steel screws.

12.27.4 Both vertical closing edges of the door shall be equipped with neoprene bulb seals. At the meeting edge of each door leaf, a two (2") inch neoprene seal shall be installed so that the edges form a tight overlapping seal when closed. Seals shall overlap front over rear to provide an air and water shade.

12.27.5 Passenger door windows shall be installed with two (2) piece ozone treated extruded rubber, lock and key of one (1) piece fixed design. Entrance door windows shall be glazed with three sixteenths (3/16") inch thick, thirty-one (31%) percent gray density, tempered safety glass. Each window shall be installed in the upper and lower portions of the passenger door panels in line with the passenger side windows.

12.27.6 A driver's door shall be provided to the left of the driver's area. This door shall be accessible from inside and outside the vehicle. The driver door shall incorporate an opening window and arm rest. A driver's side running board with a step depth of twelve (12") inches shall be provided.

12.27.7 The steps shall be designed so that the top of the first step is no more than twelve (12") inches above the ground with the vehicle loaded. Step well is to have a minimum first step depth of twelve (12") inches and a minimum second step depth of ten (10") inches and shall be a minimum of thirty-six (36") inches in width. Risers shall not exceed nine (9") inches in height. The surface of all entrance steps shall be covered with eighth (1/8") inch thick rubber flooring on all risers and sides and three sixteenths (3/16") inch thick ribbed rubber step treads. All step edges shall have a two (2") inch yellow safety band running the full width of each step. Step wells shall incorporate lights to illuminate step tread area and outside of step well shall be protected from splashed material by door and rubber for a tight fit.

12.28 Stanchions, Grab Rails, and Handrails:

12.28.1 Vertical handrails shall be securely fastened on both sides of the doorway to assist passengers in entering or exiting the vehicle.

12.28.2 Vertical stanchions shall be provided at the aisle immediately behind the driver's seat and at the step well. A horizontal grab rail shall extend from the wall to each stanchion.

12.28.3 Padded modesty panels shall be provided that extends from the wall to each stanchion. Vinyl shall match the passenger seats.

12.28.4 A smoked three eighths (3/8") inch thick Plexiglas panel shall be provided behind the driver's seat, ***within six (6") inches of ceiling***. Panels shall extend from the top of the horizontal grab rail to the ceiling and shall extend from the wall to the vertical stanchion. Stanchion and panel shall not impair driver's seat adjustment.

12.28.5 An overhead handrail shall be installed in the roof of the vehicle on the driver and curb side and shall run the length of the seating area.

12.28.6 All handrails and stanchions shall be one and one-quarter (1 1/4") inch stainless steel.

12.29 Wheelchair Lift Door:

12.29. Side opening double outward opening doors shall be provided for the platform type wheelchair lift. Lift shall be mounted within the vehicle body on the curb side behind the passenger entry door. The wheelchair door frame structure shall consist of a minimum 12-gauge, 304 grade stainless steel, powder coated using five (5) step Interpon process, or approved equal, in bright white to match vehicle interior base color. A water deflector shall be

integrated into the door frame structure at the top. Door panels shall be made of non-corrosive material. Foam core doors with wood frame supports are not acceptable. Door panel hinges shall be piano type with a minimum three sixteenths (3/16") inch diameter pivot pin.

- 12.29. Hinges and hinge fasteners shall be stainless steel to resist rust and corrosion. Door latch shall be vertical, rotating, two point type with latch rod at top and bottom. Each door panel shall have its own key lockable latch assembly which shall consist of a pistol type grip style twist handle located at the inside center of the door panel. Door latch shall compress perimeter door seal to prevent leaks. Latch adjustment plates shall be located at the top and bottom of the door frame structure.
- 12.29. Door panel holders shall be gas shock type mounted at the top and allow door panels to open a minimum of one hundred (100°) degrees from the closed position. Wheelchair door clear opening dimensions shall be a minimum of forty-four (44") inches by seventy (70") inches. Lift doors shall be interlocked by a panel door switch controlling the transmission which requires the transmission to be in "Park" position before lift can be operated.
- 12.29. Door windows shall be installed with two (2) piece black ozone treated extruded rubber, lock and key of one (1) piece fixed design. Windows shall be glazed with three sixteenths (3/16") inch thick, thirty-one (31%) percent gray density, tempered safety glass. Each window shall be installed in the upper portion of the lift door panels in line with the passenger side windows. The door will display the international wheelchair symbol.

12.30 Wheelchair Lift:

- 12.30.1 The wheelchair lift shall be a fully automatic, including folding of the platform, and be electro-hydraulically powered with a minimum test-net load capacity of eight hundred (800) pounds. The lift shall be totally self-contained and installed without modifications to the vehicle body or frame inside of the curbside double service doors. The entire assembly shall be installed with adequate protection to prevent accidental injury to passengers.
- 12.30.2 The attachment of the wheelchair lift assembly to the vehicle shall allow easy removal and be readily accessible for repair and maintenance. The lift assembly shall be mounted in such a manner that in the fully raised position it shall not interfere of the double side doors, passenger seating, and passenger/wheelchair movement inside the vehicle.
- 12.30.3 The wheelchair lift shall have a bridge plate designed for a smooth transition from the vehicle floor level to the lift platform level when the platform is in the raised loading position.

- 12.30.4 Bridge plate and platform shall be coated to resist rusting. Platform, bridge plate, and area between bridge plate and aisle shall be skid resistant.
- 12.30.5 The wheelchair lift cam handrail shall be twenty-six (26") inches high from lift platform. The handrail shall be automatic folding to prevent any obstructions into the vehicle passenger area.
- 12.30.6 The overall depth of the lift assembly in the stored position inside the vehicle shall not exceed seventeen (17") inches when measured from the floor level of the lift entry doors. No component accessory to the lift shall extend more than twenty-one (21") inches from the lift entry door.
- 12.30.7 Bolting of any part of the lift assembly directly to the vehicles walls is not acceptable.
- 12.30.8 The installation of the wheelchair lift assembly shall not cause excessive unbalanced loading of the vehicle.
- 12.30.9 The lift platform shall be designed so as to stop downward movement upon contact with the ground.
- 12.30.10 The lift platform shall have an end barrier at least four (4") inches in height that will fold outward to provide a ramp for loading of wheelchairs. The ramp shall fold out automatically upon platform contact with the ground.
- 12.30.11 The vehicle shall be equipped with the following wheelchair safety features:
- 12.30.12 A door cut-off switch shall be installed which prevents the operation of the lift when the doors are closed.
- 12.30.13 The maximum capacity in pounds shall be posted on the wheelchair lift within easy view of the operator and passenger.
- 12.30.14 The lift platform shall be fitted with a device to prevent the platform from touching or leaning against door after being restored to the stowed position.
- 12.30.15 Lift shall be equipped with a manual override to permit lift to be raised or lowered manually in the event of a power failure or emergency. The manual override system shall provide a complete operation of the lift without electrical power being supplied. The manual override hydraulic pump and bleed down valve are to be located inside the vehicle. A detachable hand lever to operate the system is to be stored next to the hand pump. The bleed down valve shall have a flow compensator valve that that will limit the maximum descent speed. Manual override instructions shall be visible from

inside and outside with the door open.

12.30.16 A removable vinyl cover shall be provided for the lift platform when in the stored position.

12.30.17 The wheelchair lift shall comply with all Federal ADA requirements.

12.31 Lift Control, Electrical Circuits, and Wiring:

12.31.1 The complete wheelchair lift assembly shall operate from the vehicle's electrical system and shall have one hand-held lift control station with a minimum five (5') foot cable attached so lift can be operated from outside or inside of the vehicle.

12.31.2 The control switches on the lift control shall have permanently applied labels identifying their functions.

12.31.3 The power to the lift system shall be controlled through an ON/OFF master switch located on the supplemental driver's control panel.

12.31.4 When the parking brake is properly applied and the master switch is placed in the "ON" position, an electrical solenoid shall activate that will connect the lift's electrical system to the vehicle's electrical system.

12.31.5 The bus lift shall be protected by a one hundred, five (105) amp circuit sentry system. The electrical power cord shall be loomed to protect the cable from outside elements.

12.32 Wheelchair Securement and Seatbelts:

12.32.1 The vehicle shall have a minimum of two (2) forward facing wheelchair positions located on the driver's side of the center aisle, beginning behind the driver's position. Each wheelchair position shall be provided with restraint devices that will secure the wheelchair and its passenger while in the wheelchair. These devices shall be adjustable to accommodate varying track widths of wheelchairs. Each wheelchair shall have four (4) point securement (2 front, 2back) in the vehicle with recessed anchor points of sufficient strength to secure a wheelchair and/or wheel scooter. The entire securement system shall comply with all applicable regulations including ADA.

12.32.2 Securement system must safely secure manually and electronically operated wheelchairs, (including 3-wheel scooters), and provide ample space for foot rests and proper wheelchair securement.

**\*Amended 12/08/09**

- 12.32.3 No anchoring points shall project more than one-eighth (1/8") inch above the finished floor. For the purposes of this section, the floor is the entire passenger area of the vehicle.
- 12.32.4 Floor mounted tracks shall be a series type "L" track floor plate. These plates shall be recessed mounted in the floor with three-eighth (3/8") inch diameter, SAE grade 5 bolts, washers and self locking nuts with National Fine Threads.
- 12.32.5 Where mounting bolts do not pierce or attach through the vehicle frame, sub-frame, body posts or equivalent metal structure, a reinforced metal plate not less than one sixteenth (1/16") inch thick is required.
- 12.32.6 There shall be four (4) retractors assemblies for each wheelchair position in the vehicle to secure the wheelchair to the tracks. Example: Q' Straint QRT Deluxe (Q-8100-A1) System, or approved equal. Each retractor assembly shall consist of a heavy duty series "L" track fitting, the front left and right retractor shall be equipped with manual tension knobs for manual tightening and/or release. Each retractor assembly shall be equipped with a quick release, push-button buckle and buckle connector.
- \*12.32.7 One (1) seat belt shall be provided for each wheelchair passenger. The torso belts shall be two (2") inches wide, seventy-two (72") inches long, adjustable, with a strength rating of not less than three thousand (3000 lbs.) pounds. One end of the belt shall be secured to a female seat belt fitting and the other end shall have a male seat belt fitting. The seat belt assembly shall provide for a quick-release and also provide for a snap locking to connect both ends together.
- 12.32.8 A wall mounted height adjustable of approximately twelve (12") inches shoulder harness system shall be provided at each wheelchair securement location that is compatible with the specified restraints. The harness system shall be installed in accordance with all structural requirements established by the restraint supplier and all applicable regulations, including 49 CFR part 571.
- 12.32.9 All belts, straps, and harness assemblies shall be supplied in bundled sets and shall include a Q Straint or equivalent pouch in which to store them. Storage compartments shall be provided over the windshield and over the driver's door.

12.33 Exterior Lighting:

- 12.33.1 All exterior lights, with the exception of headlights, passenger entry door, lift

door, curb light, and rear back-up lights, shall be Light Emitting Diode (LED) lights. Lighting shall be in accordance with Federal Motor carrier Safety regulations 393.12. All lights shall have wire long enough to move the light six (6") inches from vehicle for service. Lights shall be grounded to body framing structure. All lights shall be sealed from moisture. Fixtures which are surfaced mounted to the body shall be sealed for moisture.

12.33.2 Headlights shall be sealed beam type, high and low beam controlled with foot or hand switch. Headlights and headlight supports and mountings shall be sufficiently rugged to maintain adjustments under road shock and service conditions. Headlight high beam indicator shall be installed on instrument panel. An audible "headlight on" warning buzzer shall be installed to notify the operator that the headlights are on with the engine turned off.

12.33.3 Stop and tail lights shall be red combination 4" round lens, vertically mounted on the rear-end vehicle panels, so as not to be affected by engine exhaust heat. Each side shall include a directional signal, tail light and stop light. Lamp lenses shall not protrude from the body more than two (2) inches. Lamp lens colors and configuration shall be in accordance with current State of Texas school bus requirements. Lights shall be a sealed, single vehicle light fixture.

12.33.4 Brake lights shall not override emergency flashers or turn signals. Back-up lights shall be furnished and adequate to illuminate for visibility when backing. Light shall be a sealed, single vehicle light fixture.

12.33.5 A collision avoidance light shall be installed on the rear of the vehicle and above the emergency exit door at the center line of the vehicle. Lamp lens shall not protrude from the body of the vehicle more than two (2") inches. Light shall be a sealed, single vehicle LED light fixture. In addition, a horizontal row of not less than three (3) red combination 4" round ~~lens~~ brake lights shall be installed in a fixture on the rear and at the center line of the vehicle on the emergency exit door. They are to light while brakes are applied. Lamp lens shall not protrude more than two (2") inches. Lights shall be a sealed, single vehicle light fixture.

12.33.6 Two hazard lamps shall be mounted at the same level on the rear of the bus. The lamps shall be visible at a distance of 500 feet in normal sunlight, flash, and emit amber light. The lamps shall operate from a separate control in the driver's compartment.

12.33.7 Two back-up lights, one mounted on each side of the body rear cap, shall be provided. The lamps shall be of the sealed beam type design.

12.33.8 Directional signal lamps shall be amber combination 4" round lens,

vertically mounted on the rear, one on each side of the vehicle approximately halfway from front to rear. Side signal lamp lens shall incorporate a brushed aluminum guard to protect lens from damage. All side signal lamps to the same height above ground.

12.33.9 Passenger entry door area shall be lighted by a hooded exterior door light, suitably mounted so that the entire ground area immediately outside the entry door is sufficiently illuminated to comply with ADA requirements.

12.33.10 Vehicle shall be equipped with an exterior curb lamp. Light shall be positioned in manufacturer's standard location in such a manner as to illuminate the ground area in the immediate vicinity of the operation of the wheelchair lift. Light shall be automatically activated only when the wheelchair doors are opened. Illumination shall be sufficient to comply with ADA requirements.

12.33.11 Roof marker lights, red or amber, one at each corner shall be provided and protected with brushed aluminum guards.

12.33.12 Clearance marker lights, three (3) lamp cluster, surface mounted, amber in front, red lens in rear, shall be provided and protected with brushed aluminum guards.

12.33.13 Vehicle shall be equipped with daytime running lights.

12.34 Interior Lighting:

12.34.1 The overhead lights and step well lights shall provide no less than five foot-candles of illumination on the entrance step area with the door open. This system shall be illuminated when the passenger door is opened. A separate dash mounted switch shall be provided to operate the overhead lights when the door is closed.

12.34.2 Driver courtesy light shall light when the driver door is opened.

12.34.3 Front step well are shall be lighted by a hooded step well light, suitably mounted so that the entire step well area of the vehicle is sufficiently lighted. The step well light shall be positioned on the side away from wheel splash.

12.34.4 All interior lighting shall be incandescent type with the master control located on the dash or near the driver for easy operation by the driver. Lighting in the passenger area shall be mounted in the ceiling cove at the sidewall with a minimum of three (3) fixtures on each side of the vehicle. Lighting intensity for all cross seats shall have a minimum average of fifteen (15) foot candles at the seated passenger reading plane. In addition, an

effective lighting level shall be provided for all other seated passengers.

12.34.5 The lighting components shall be located and constructed so as to prevent the entrance of water, contaminants and insects. Lighting fixtures shall be reasonably flush with the interior walls and ceiling so as not to present a hazard to passengers.

12.34.6 Light illumination shall be designed to illuminate the wheelchair lift platform for night operation. Light shall be positioned in manufacturer's standard location in such a manner as to illuminate the area in the immediate vicinity of the wheelchair lift. Light shall be automatically activated only when the wheelchair lift doors are open. Light switch shall have a driver override. Illumination shall be sufficient to comply with ADA requirements.

12.35 Air Conditioning:

12.35.1 The installed air conditioning system shall cool the vehicle to seventy-two (72°F) degrees measured at a minimum of three points, located four feet above the floor at the longitudinal centerline of the vehicle. The three points shall be (1) near the driver's location; (2) at the mid-point of the body; and (3) two feet forward of the rear of the vehicle.

12.35.2 The test condition under which the above performance must be achieved shall consist of: (1) placing the vehicle in a room (such as a paint booth) where the ambient temperature can be maintained at one hundred and ten (110°F) degrees; (2) heat soaking the vehicle at one hundred and ten (110°F) degrees with windows open for at least one hour; and (3) closing the windows, turning on the air conditioner and cooling the interior of the vehicle at seventy-two (72°F) plus or minus two (2°±F) within a maximum of 30 minutes while maintaining 110°F. The system shall have a dash driver's area evaporator vehicle.

12.35.3 The test shall be performed at the vehicles manufacturer's recommended fast idle speed.

12.35.4 Driver's in-dash heavy-duty air conditioning vehicle shall be chassis manufacturer supplied system. Substitution of other than the chassis air conditioner is acceptable provided that the front and rear systems are compatible and warranty work is performed at one location. The system shall be separately controlled from the passenger area system and shall have provision to divert air to the defrosters. In-dash vehicle shall not interfere with removal or replacement of the engine cover or be blocked by the door operating mechanism.

- 12.35.5 The passenger area air conditioning unit shall be an American Cooling Technology, 50MAX system, or approved equal. The system shall be separately controlled from a supplemental driver's control panel located at the driver's position. Controls shall include on and off, three (3) speed blower switch and a rotary thermostat switch.
- 12.35.6 Front and rear systems shall operate independently of each other.
- 12.35.7 Dual compressors shall be provided. Compressors shall have a nominal ten (10) cubic inches of displacement. The compressors shall be protected by high and low pressure switches. Compressors shall be driven off the vehicles engine.
- 12.35.8 A three (3) fan condenser shall be provided with a minimum rating of seventy-six thousand (76,000) BTU's. The condenser fans and motors shall be enclosed within the condenser housing. Coil shall be copper tube, expanded into aluminum fins. Integral high/low pressure cut outs to be wired to liquid or discharge line. The fans shall be dynamically balanced with permanent magnet totally enclosed motors. The condenser shall blow air on an angle down from the vehicle chassis to prevent recirculation of hot air. The condenser shall have a sight glass and filter dryer. The system shall be skirt mounted located on the driver (road) side, in front of the rear wheels, and installed to minimize collection of road dirt and facilitate maintenance.
- 12.35.9 A rear mounted evaporator shall be provided. The rear evaporator shall have a minimum rating of fifty-two thousand (52,000) BTU's. Three-speed continuous duty permanently lubricated motors shall be provided. The blower assembly shall be rated at a minimum of five hundred, seventy (570) Cubic Feet per Minute. Coil shall be copper tube, expanded into aluminum fins three (3) rows deep. Thermostatically controlled expansion valve shall be provided. Frame shall be galvanized heavy-duty metal with integral pan and washable filter. The cover shall be made of durable ABS plastic.
- 12.35.10 Evaporator shall be equipped with two (2) drain lines each with a check valve to maintain positive condensation drain flow.
- 12.35.11 Evaporator filter shall be installed in a manner that it may be routinely removed, serviced, or replaced for maintenance without damage to the filter.
- 12.35.12 Installation of the air conditioning system(s) shall be by the vehicle body manufacturer or by an authorized factory air conditioning dealer who normally stocks, sells, installs and services a vehicle of the type being furnished.
- 12.35.13 All air conditioning systems shall use 134A refrigerant.

12.35.14 The components of the air conditioning system shall be readily accessible for maintenance. Refrigerant hoses shall meet the latest revision of SAE J-2064, double-braided Barrier type.

12.35.15 Two (2) back seated valves shall be installed at the dryer to facilitate evacuation and charging of the air conditioning system and replacement of the dryer vehicle. The system shall also be equipped with Schrader valves to promote efficient testing and servicing.

12.35.16 Refrigerant fittings shall be ATCO or Aeroquip.

12.35.17 Air conditioning circuits shall be protected with auto-resetting circuit breakers or thermal relays. The total electric current required by the two (2) systems in high speed fan mode shall not exceed sixty (60) amperes.

12.35.18 Poor quality of installation shall be grounds for immediate rejection of the complete vehicle.

12.35.19 Contractor shall submit data with bid which encompasses design criteria, evaporator coil size and location, condenser size and location, and performance and reliability studies of the entire system.

12.35.20 Air conditioning system(s) shall have a legible and durable nameplate with the following information:

- Name and address of A/C manufacturer
- Cooling capacity (BTU/hr.) and blower capacity (CFM).
- Type of refrigerant and recommended operating charge.
- Type of refrigerant oil and amount

12.35.21 Contractor shall provide a list of companies or individuals, and their addresses, who stock repair parts in the County's area and who can perform service on the products furnished.

12.35.22 The contractor shall furnish one copy of complete installation, maintenance and operating instructions for each different model, size and type of equipment provided. The instructions shall accompany each vehicle when delivered.

12.35.23 A replacement parts list shall be provided.

12.35.24 The entire rear air conditioning system shall be warranted for 24 months and shall cover 100% parts and labor.

12.36 Heating and Defrosting:

12.36.1 Vehicle shall be equipped with a combination fresh air and recirculating air heaters. The heater controls shall be mounted in the dash panel and in the supplemental control panel, located conveniently to the driver's position and properly labeled. Heater hose connections shall be installed above the floor of the vehicle body and through the fire wall to the engine compartment. The length of the hot water hoses shall be as short as possible consistent with good installation practices; however, the hoses shall not be installed in such a manner so as to interfere with normal motor maintenance operations, such as removal of the air filter. The hoses shall not dangle or rub against the chassis or sharp edges and shall not interfere with or restrict the operation of any motor function. Heater hoses shall conform to SAE 2083, Class C, as defined in SAE Standard J20E, or latest version thereto.

12.36.2 The front heater shall be a hot water type having a minimum free-flow output of the highest capacity offered by the chassis manufacturer.

12.36.3 A second hot water heater with blower fan shall have a BTU rating on at least thirty thousand (30,000) installed under a seat near the rear of the vehicle.

12.36.4 Easily accessible all brass gate valve(s) shall be furnished to cut off the flow of coolant water to the rear heater.

12.36.5 Defrosting equipment shall keep the windshield, the window to the left of the driver and glass in the service door clear of fog, frost, and snow, using heat from the heater and circulation from the fans. All defrosting equipment shall meet the requirements of FMVSS No.103 or latest revision thereto.

12.37 Windshield and Windows:

12.37.1 The windshield is to be a one-piece design as is provided by the chassis manufacturer. Windshield shall be laminated, tinted safety glass.

12.37.2 Driver's window shall be chassis manufacturer's standard window. The window shall permit unobstructed side vision and shall have a sufficient opening to permit arm signaling. Provisions shall be made to draw in or exclude outside air from the driver's compartment.

12.37.3 Side windows shall be provided the full length of the vehicle. These windows shall be forty-one (41") inches tall and twenty-nine and one half (29 ½") inches wide, transit type upper T-slider ventilating design windows, or approved equal. The upper T-slider shall have a positive lock in the closed position. The glazing shall be a minimum of one eighth (1/8") inch thick with thirty-one (31%) gray density, tempered safety glass. Tinted window film is not acceptable. Windows shall be installed in black powdered or anodized aluminum frames with an interior clamp ring attachment design.

12.37.4 An audible alarm shall be activated when any emergency window is opened. Emergency egress windows shall be designed to meet FMVSS 217.

12.38 Mirrors:

12.38.1 Mirrors shall be remote controlled. The mirror glass shall be nine and three-quarters inch (9-3/4") in height by eight and five-eighths inch (8-5/8") in width. All parts, including the mirror glass, shall be replaceable. A remote control switch shall be provided and located in the operator's compartment; switch must be capable of controlling both right and left mirrors. Example: Ramco Mirrors Model #5500 w/o defrost feature.

12.38.2 An additional mirror shall be furnished for the driver to view passengers. The mirror shall have a minimum of ninety-six (96) square inches of clear vision. Dimensions shall be approximately six (6") inches by sixteen (16") inches of reflective surface area.

12.38.3 Chassis manufacturer's standard sun visor shall be provided at the driver's position.

12.39 Seats and Seat Layout:

12.39.1 Four (4) double mid-high back, forward facing ambulatory seats shall be provided behind the wheelchair lift assembly on the right (curb) side of the bus. Three (3) double mid-high back, forward facing ambulatory seats shall be provided behind the rear wheel chair tie down station on the left (driver) side of the bus. Three (3) double mid-high back, forward facing foldaway seats shall be provided over the wheelchair tie down stations for ambulatory passengers when wheelchair stations are not in use.

12.39.2 Seats shall have a minimum width of seventeen and one half (17 ½") inches wide and shall be a minimum of twenty-five (25") inches overall front to back. Double seats shall have a minimum of width of thirty-five (35") inches overall.

**\*Amended 12/08/09**

12.39.3 Seat frames shall be cold-roll one (1") inch steel tubing and be sixteen (16) gauge or metal of equal mechanical properties. The front seat cushions shall have foam padding and be individually wedged to each passenger for occupants comfort and retention. The indentation load deflection shall be sixty-five (65) to eighty-five (85) pounds. Seat cushion shall meet the flammability requirements of FMVSS 302.

\*12.39.4 Seats and all visible surfaces shall be upholstered in level 4 vinyl material. Vinyl material shall be expanded vinyl, forty-two (42) ounces per lineal yard minimum, transportation grade. The County will pre-approve all colors prior to production.

12.39.5 Seat backs shall be high impact ABS material which is recessed to provide one and one half (1-1/2") inches of additional passenger hip to knee room.

12.39.6 A retractable seatbelt shall be provided for each seated passenger. The retractor shall be emergency locking with anti-cinch capability. The retractor must be attached to the seat structure. Passenger seatbelts shall be "A" type on seat belt assembly conforming to current FMVSS 209 requirements.

12.39.7 Aisle seats shall include an energy absorbent grab bar, three quarter (3/4") inch, twenty (20) gauge steel covered with custom molded, wear and vandal resistant eight (8) pound density, self-skinning polyurethane foam. Grab bar shall be located in the top of the seat back.

12.39.8 All seats shall be recessed track mounted. Floor anchorage shall be neat and shall not present a trip hazard.

12.39.9 Aisles shall not be less than seventeen (17") inches wide.

12.39.10 **BIDDER shall submit drawings of wheelchair positions and seating arrangements during the request for approved equals process.** Final approval of the interior layout including passenger seating, wheelchair positions, driver's seat, location of stanchions, hand holds, driver's barrier, and modesty panels will be made by the County.

12.39.11 A chime shall be provided that is activated by a pull cord. The pull cord shall be above the passenger windows within reach of each passenger.

12.40 Driver's Seat:

Driver's seat shall be provided with a folding armrest, tilt riser and shall recline. A three (3) point safety belt shall be mounted to the seat frame and shall be equipped

with an emergency locking retractor that has a feature which prevents it from progressively tightening the belt around the driver. Seat material shall be the same as the passenger seats. A screw mounted operator's coat hook shall be furnished and installed by the Bidder in the operator's area. Location to be approved by the County after bid award.

12.41 Fare Box:

Fare box shall be mounted with trip handle toward driver. It shall be mounted on a stanchion, adequately braced, located near the driver and easily accessible to passengers entering the bus. An amber or indirect fare box light shall be connected to the dash instrument lights. Two interchangeable, lockable fare box vaults and fare box, keyed alike, with a double set of keys for each lock shall be supplied. Vault and fare box exteriors shall be marked with key reference. Vehicle shall be provided with wiring and structural support to install the fare box. Wiring for fare box circuit shall be two (2) No. 14 insulated wires in vinyl tubing, one energized directly from a battery positive feed protective circuit breaker and the other to ground. Example: Main Fare Box model Treasury 1, Diamond (or approved equal)

12.42 Safety Equipment:

12.42. A standard twenty-four (24) unit First Aid Kit shall be provided. It shall include a one way airway apparatus and one pair of disposable gloves. Kit shall be securely mounted near the driver's seat.

12.42. A ten (10) pound rechargeable type 210 ABC fire extinguisher with metal head shall be provided. It shall be easily accessible in a bracket mounted near the driver's seat.

12.42. Web cutters shall be provided.

12.42. A set of three (3) triangular reflectors with a storage container shall be provided and mounted near the driver's seat.

12.42. A back-up alarm that is electrically operated and produces an intermittent sound when the vehicle is shifted into reverse shall be furnished. Alarm shall be in compliance with SAE J994B with respect to acoustical performance for Type B device (IE 107 db) (A) and plus or minus 4db with a supply of 14 volts.

12.42. A Fresnel lens shall be provided on the rear window of the vehicle.

12.43 Emergency Exits:

12.43.1 A heavy duty emergency door shall be provided at the rear of the vehicle. The door frame structure shall consist of a minimum 12-gauge, 304 grade stainless steel, powder coated using the five (5) step Interpon PZ77 process, or approved equal, in bright white to match vehicle exterior base color. A water deflector shall be integrated into the door frame structure at the top. Door panels shall be made of non-corrosive material. Foam core doors with wood frame supports are not acceptable. Door panel hinges shall be piano type with a minimum three sixteenth (3/16") inch diameter pivot pin. Hinges and hinge fasteners shall be stainless steel to resist rust and corrosion.

12.43.2 Door latch shall be vertical, rotating, two point type with latch rod at top and bottom. The door panel shall have its own key lockable latch assembly which shall consist of a pistol grip style twist handle located at the inside center of the door panel. Door latch shall compress perimeter door seal to prevent leaks. Latch adjustment plates shall be located at the top and bottom of the door frame structure.

12.43.3 Door panel holder shall be a gas shock type mounted at the top and shall allow the door panels to open a minimum of one hundred (100°) degrees from the closed position. Door windows shall be installed with two (2) piece black ozone treated extruded rubber, lock and key of one (1) piece fixed design.

12.43.4 Two windows shall be installed on the back of the vehicle, one on each side of the emergency door. The windows shall be glazed with three sixteenth (3/16") inch thick, thirty-one percent (31%) gray density, tempered safety glass. Door window height shall match the top of the rear windows on each side of the emergency door.

12.43.5 An audible alarm shall be activated when the emergency door is opened.

12.43.6 A combination roof ventilator and emergency escape hatch shall be provided towards the rear of the vehicle. Example: Trans-Spec Ventilator Hatch

#### 12.44 Destination Signs:

Changeable destination twelve (12) volt motor driven movable mechanism signs shall be furnished on the curb side above the passenger window and at the front of the vehicle above the windshield. Front sign curtain to be approximately 36 inches wide. Sign curtains to be illuminated. Front bulkhead or sign box shall have a door to open for viewing sign curtain position. Door shall be positioned for ease of driver operation. Sign shall comply with ADA requirements. Example: Trans Sign, Model D-3110 (or approved equal)

#### 12.45 Painting and Decals:

12.45.1 The base vehicle shall be Bright White in color. The area around the windows shall be black.

12.45.2 Decals furnished by the Contractor for the County to affix to the interior of the bus shall be as follows:

NO SMOKING	2	Size and color TBD
WATCH YOUR STEP	2	Size and color TBD
Do Not Stand Forward of the Yellow Line	2	Size and color TBD
FIRE EXTINGUISHER	1	Size and color TBD
LAW PROHIBITS THE OPERATION OF THIS VEHICLE WHILE ANYONE IS STANDING FORWARD OF THE YELLOW LINE	2	Size and color TBD
No Smoking, Eating, Drinking	2	Size and color TBD
Please Remain Seated While The Bus Is In Motion	2	Size and color TBD

12.45.3 Exterior Decals and Logos:

- “CAUTION – CHILDREN MAY BE EXITING”: 1 (Size and location to be determined after award)
- Fleet number: 5 (numbers and letters) (Location to be determined after award)
- Agency logo’s, stripes etc.

12.45.4 In addition to the decals described above, safety decal(s) shall be furnished and shall be affixed at any applicable area; emergency exit, steps, wheelchair lift, etc. The decals shall include necessary warnings and precautions. Permanent decals are required.

12.46 Delivery:

12.46. All vehicles must be serviced prior to delivery in accordance with the manufacturer's "New Vehicle Pre-delivery Service" requirements and as specified below.

12.46. Pre-Delivery Service

The following service shall be performed upon all motor vehicles prior to/upon delivery:

- a) Pre-delivery inspection certified with an affixed Texas Motor Vehicle Inspection Certificate (annual inspection sticker);

- b) Fluid levels checked and serviced with proper grade fluid;
- c) Chassis lubrication;
- d) Exterior wash and interior cleaning; and
- e) Fuel system(s) filled to capacity.

12.47 Registration:

Successful bidder shall provide necessary documents to enable the County to register the vehicle in the State of Texas. Necessary fees and state taxes will be paid by the County; do not include such fees and taxes in bid price.

12.48 Manuals

A line setting sheet and manual(s) containing operating and servicing instructions for the vehicle and lift shall be provided with each vehicle. The manual(s) shall be as detailed as possible outlining all necessary operating and servicing instructions for each vehicle and lift including the vehicle's driveline components. Necessary warnings and safety precautions shall be included. In addition, manual(s) containing illustrated parts lists, operating and servicing instructions for related and special equipment supplied with the vehicle and lift shall be provided with the vehicle.

12.49 Warranty:

12.49.1 Bus Chassis

- A copy of the chassis manufacturer's warranty must be submitted with the proposal and include the minimum:
- 5 years, unlimited mileage - failure of the chassis frame including cross members.
- 2 years, unlimited mileage - failure of any other original components manufactured by the chassis manufacturer.
- 1 year, unlimited mileage, - failure of any components manufactured by outside suppliers and included as original equipment by the chassis manufacturer. Where the outside supplier's warranty exceeds that of the chassis manufacturers then such warranty shall be stated and shall apply.

12.49.2 Engine: Must include the fuel injection system and emission control system 5 year/unlimited mileage.

12.49.3 HVAC: 3 year, unlimited mileage warranty.

12.49.4 Service Location: There must be a one-source warranty location providing

full warranty for body, chassis, and engine. Individual locations for each component will not be accepted.

12.49.5 Towing: There shall be a 60-month / 150,000 mile extended towing warranty for all unsafe or non-drivable warrantable failures (up to \$250 per incident) to the nearest warranty location

12.49.6 Transmission: 2-years, unlimited mileage. - copy of OEM warranty to be included

12.49.7 Wheelchair lift: 3 years, unlimited mileages

12.50 Parts and Service:

The bidder providing the vehicle shall be an authorized dealer for the vehicle manufacturer and hold the required current license(s) with the Texas Motor Vehicle Division. The dealer shall have factory-trained personnel available for warranty repairs and the performance of service. The dealer shall also maintain an inventory of high-usage parts and a quick source for low-usage parts. The using County will assume the expense for replacement filters, fuel, cleaning, painting and other minor items normally consumed in day to day operations. Fort Bend County will assume responsibility for cost of repairs resulting from collision, theft, vandalism, operator negligence and/or acts of God.

12.51 Instructions on Safety, Operation, and Preventative Maintenance:

The contractor shall provide Fort Bend County sufficient instruction on safety, operation and preventive maintenance of the vehicle after it has been delivered and is ready for operation. Training shall be completed prior to payment.

**13.0 SPECIFICATIONS FOR MEDIUM-DUTY DIESEL TRANSIT CONVENTIONAL BUS 32' to 37':**

13.1 The vehicles produced according to the included specifications must be of the latest current model year (2009 or newer). All equipment, options and features provided must be designed, constructed and installed to be fully suitable for their intended use and service. The vehicle must be designed and built using the latest available technology and engineering capabilities. All components must be new. Each bus, including all individual components, must meet or exceed all current Federal, state, and local requirements.

13.2 The bus shall be supplied by an integrated vehicle supplier that can provide warranty, service, and parts coverage from a single distribution network for the complete vehicle. The body shall be manufactured in compliance with Quality Standards ISO

9001:2000 with regard to the Sale, Design and Manufacture of Customized Buses and Multipurpose Passenger Vehicles.

13.3 This specification will describe the construction of a medium-duty transit bus. The bus must meet all Federal Bus Testing Requirements and have completed the required bus testing at the Altoona bus testing facility (or be in the process of completing the test) for the category of seven (7) years, 200,000 miles and be fully compliant with the Americans with Disability Act (ADA) requirements. The bus must meet Buy America.

13.4 General Dimensions:

Exterior Length 32' Minimum - 37' Maximum  
Exterior Width 96" Maximum (excluding mirrors)  
Exterior Heights 131" Maximum  
Interior Width at seat level 90.5" Maximum  
Interior Height at center aisle 78" Minimum  
Entry Door Dimension (clear opening) 28" x 88" Minimum  
First Step Height from Ground 14" Maximum  
Step Riser Height 9.5" Maximum  
Step Tread Depth 9.0" Minimum  
Wheel Base 254" Minimum  
Gross Vehicle Weight (GVW) 27,500 lbs. Minimum  
Fuel Tank Capacity 65 gallons Minimum

Chassis Specifications:

13.5 Alternator:

Shall be 12-volt of not less than 320 amps and provide at least 50% of the rated charge at engine idle. Mounting shall be heavy-duty two-leg type as specified in SAE-J-180.

13.6 Axles and Suspension:

13.6.1 Front spring suspension and rear air suspension to be provided. Minimum front suspension: 10,000 pounds, minimum rear suspension: 17,500 pounds. Axle ratio to be determined post bid. Lateral and longitudinal stability shall be provided by rubber bushed radius rods. Front axle caster adjustment is made by adjusting longitudinal radius rod and shall not require shims.

13.6.2 Roll stability shall be controlled by zero delay constant height control valves, one (1) each on the road and curb side. Parabolic taper-leaf front suspension with heavy-duty shock absorbers. The shock mounting brackets shall be constructed using pressed steel or nodular iron for long life.

13.6.3 Suspension to include air ride system utilizing at least two rear air bags, two leveling valves and heavy-duty shock absorbers and sway bars adequate for vehicle's gross weight. The suspension shall be an OEM chassis installed feature with ride optimized characteristics maintaining a 9.25" suspension ride height. There will also be a rear suspension leveling valve included.

13.7 Batteries:

A minimum two 8D 12-volt type maintenance-free with a minimum of 1,950 total cold cranking amps is required. There shall be a master battery-disconnect switch located on the cab floor to the left of the driver seat that will shut off all electrical items on the bus. A quick connect battery jump start, street side, mounted on bumper is required.

13.8 Brakes:

13.8.1 Brakes shall be full air drum brakes with Bendix 4 channel antilock braking technology with Traction Control and slack adjusters. Bendix AD-IP air dryer and low air pressure warning light and buzzer. Drain valves to be remote – located below driver's compartment or pull lanyards at base of skirt for ease of operation. ABS all wheel anti-lock braking system with backing plates.

13.8.2 Front: brake linings shall be a minimum of 15" X 4".

13.8.3 Rear: lining shall be a minimum of 16.5" X 7.0"

13.8.4 Emergency: 30" spring brakes system with treadle valve controls. Separate instrument panel mounted valve for parking. Brake lines shall be color coded and secured within the frame rail channel where possible. A complete schematic covering the full brake system shall accompany each bus.

13.8.5 There shall be a parking brake interlock that requires the service brake pedal to be pressed and the ignition key in the "ON" position in order to release the parking brake.

13.8.6 FMVSS interlock for wheelchair lift operation required.

13.9 Chassis Construction:

13.9.1 The chassis frame rails shall be a minimum high-strength, low-alloy steel (80,000 PSI yield). All chassis cross-members shall be fastened with Grade-8 equivalent high-strength steel fasteners.

13.9.2 The hood shall be constructed of three (3) easily replaceable panels, mounted with a three-point design to minimize stress. A torsion bar shall be utilized to

provide a maximum force required to open of 27 lbs.

13.10 Cooling System:

13.10.1 Radiator shall be mounted in an over under design with brazed aluminum fins and plastic tanks with in-tank transmission oil cooler. The radiator shall have a minimum 710 sq.in. frontal surface, utilizing two-row aluminum construction, and include an automatic pressure-relief cap. The charge air cooler shall be a minimum of 310 sq. in.

13.10.2 Cooling system must be protected to minus 20-degrees Fahrenheit utilizing a glycol base antifreeze. Coolant recovery system shall be factory installed. System shall include a "low coolant" indicator light. Adequate access shall be provided for easy inspection and filling of the cooling system without removing any other equipment.

13.10.3 Cooling fan is to be two-speed, direct drive with residual torque device for disengaged fan speed.

13.10.4 An automatic engine shutdown must be provided which will be activated by low oil pressure, high engine coolant temperature and/or low engine coolant level. The system must warn the driver with a light and buzzer when engine coolant temperatures reach or exceed 210 degrees Fahrenheit and then shut down when engine coolant temperature reaches 215-degrees Fahrenheit. Engine must be equipped with heavy-duty OEM oil cooler and an internal bypass valve.

13.11 Electrical:

System shall be 12-volt with negative ground. All chassis circuits shall be protected by manual- reset circuit breakers. Chassis and body are to be multi-plexed systems for ease of body to chassis integration and serviceability.

13.12 Engine:

13.12.1 The engine is to be EPA certified to comply with 2009 emission standards and operate on ultra-low sulfur diesel fuel. Minimum 230 H.P. with 620 lbs. ft. torque, diesel, engine performance settings to be determined post bid. A complete set of maintenance manuals must be provided. On-board diagnostic connector for diagnostic equipment and manual regeneration switch to be provided. Engine must have fast-idle system, fuel/water separator/filter and "Water in Fuel" sensor to be provided with corresponding light on dash panel.

**\*Amended 12/08/09**

13.12.2 There shall be extra insulation installed between the dash and firewall, as well as beneath the hood and on the splash shields to help reduce chassis noise entering into the bus body. The bus-generated noise level experienced by a passenger at any seat location in the bus shall not exceed 83 dba.

13.13 Exhaust:

Corrosion resistant diesel particulate filter, all stainless steel piping. Exhaust will exit through a tail pipe that exits to the rear street side of the bus, and will not create a hazard to pedestrians. The bus-generated noise level experienced by the driver or by a passenger at any seat location shall not exceed 80 dBA. A maximum exterior noise level of 76 dBA must be maintained when measured from a distance of fifty (50) feet with the engine operating at a governed speed and the vehicle in stationary position.

13.14 Frame:

All welded and bolted construction with grade-8 head bolts and nuts. The main frame shall be a continuous section from the front of the vehicle to aft of the rear axle. Frame rails shall not be notched, tapered, or cutout to provide clearance for engine or stepwell installation.

13.15 Fuel System:

Fuel tank will be 65 gallons, minimum, located between rails. Fuel lines to be O-ring snap-on quick connect Voss fittings at both ends.

13.16 HVAC Driver:

The driver's area to have a separately controlled and independent air conditioning system providing 30,000BTU heat and 20,000BTU air conditioning. Driver A/C and ventilating systems will incorporate the introduction of fresh air. The A/C and heater to have an easy access replaceable air filter. A manually controlled vent window will be provided in the driver's area.

\*13.17 HVAC Passenger:

\*13.17.1 The A/C condenser unit will be roof mounted with integrated compressors and evaporators. The compressors shall be engine mounted. Passenger compartment HVAC shall include dedicated A/C compressors that operate independent of the chassis cab system. Tie-in systems are not acceptable. The A/C unit will be rated at 106,000 BTUs. Passenger A/C will be supplied by an overhead ducted system through the passenger compartment. Controls will be within easy reach of the driver.

13.17.2 There shall be two 65,000 BTU heaters spaced evenly throughout the bus with circulation pump.

13.18 Instrument Panel, Controls, Accessories and Gauges:

13.18.1 All controls and switches shall be mounted in the driver console/instrument panel forward and to the side of and in full view of the driver while in the driving seated position. All controls are to be within arm's reach of a driver 5'0" with seat belt fastened.

13.18.2 All body switches are to be of uniform type, either push-pull or rocker type, mounted in convenient grouping in a panel near the driver. All controls and switches shall be plainly and permanently marked. Painted masking is not acceptable. Controls, accessories and gauges must include:

- Speedometer/7-digit odometer
- Tachometer/Hourmeter
- Engine coolant temperature with 'high engine coolant temp' warning
- Transmission oil temperature gauge
- Fuel gauge with low fuel warning light
- Dual air pressure gauges (with air systems only)
- High / Low Coolant gauge
- Headlights and headlight dimmer switch
- Audible warning for oil pressure, water temperature provided through stop engine, engine protection circuit. Separate light and tone for low air pressure (with air systems only).
- Key-operated starter switch
- Windshield wiper switch, two-speed with intermittent feature
- Low wash fluid indicator
- Fast idle switch
- Cruise control
- Emergency/hazard flashers
- Voltmeter with 'low battery voltage' light
- Driver dome light, switch for manual operation, automatically with chassis door opening
- Dual electric horns
- Oil pressure gauge with 'low oil pressure' warning
- Hook for driver's jacket
- Parking brake/brake system malfunction indicator
- Driver HVAC control switches
- Clearance and identification lamps switches
- 12-volt receptacle located in the dash
- On-board diagnostic display of fault codes in front dash.

13.18.3 All chassis gauges will be backlit. An “On/Off” chassis light status shall be coordinated in conjunction with parking and driving lights system. Brightness will be controlled by a rotary switch.

13.19 Key and Ignition:

All ignition keys shall be keyed alike. There shall be three ignition keys provided with each bus. Ignition switch shall include an accessory position to power AM/FM radio and other items to be determined post bid.

13.20 Steering:

Vehicle shall be provided with a two spoke tilt steering wheel. Steering system to include electric/hydraulic-assist steering pump to enable engine-off power steering.

13.21 Transmission:

Automatic 3000 Series Allison with transmission cooler. The transmission shall have one (1) reverse, one (1) neutral and five (5) forward speeds. A backing alarm, which automatically activates when the transmission is placed in reverse, must be provided. Minimum of one (1) driveshaft guards between transmission and rear axle. Gear ratio's to be determined post bid. A complete set of maintenance manuals and *diagnostic equipment must be provided.*

13.22 Tires and Wheels:

Single front tires and dual rear tires, steel painted wheels minimum 19.5” x 7.5” low profile. Tires to be radial, All Position design Goodyear or approved equal. Wheels shall be white-painted steel disc and include stainless steel wheel covers. Bidder shall supply one (1) spare with each vehicle mounted on wheels identical to those on vehicle. Spare shall be loose shipped, secured from movement and prevented from direct contact with the flooring.

13.23 Windshield:

Windshield shall be fixed type, glazed with safety laminated glass, and tinted above eye level.

13.24 Wiring and Electrical:

13.24.1 As built wiring schematics, one hard copy and one electrical copy are required. Datalink connector, additional length of 4” required, for vehicle programming and diagnostics to be provided in the cab. All components are to be selected and integrated to function in an environment characterized by low engine speeds and high amperage draws (due to lights, flashers, heater,

and other accessories in constant operation.

- 13.24.2 Chassis production shall include wiring for the integration of the body and include sealed connectors for Tail/Amber/Turn/Marker/Back-up/Accessory Power/Ground and sealed connector for Stop/Turn. This wiring is multiplexed to allow diagnostics of the chassis and body electrical systems. The body switches are integrated into the front dash at the factory for plug-in operation at the body factory.
- 13.24.3 A fuse panel shall be conveniently accessible for service from inside the bus. The door to the panel shall be equipped with a thumb latch. A legend shall be posted inside the panel, which shall correspond with the components. Panel shall be in driver's compartment area.
- 13.24.4 All wiring provided in the body construction will be color-coded. The wiring shall be bundled and clamped to protect the wires. Grommets shall be used for protection of wiring through metal framework or panels.
- 13.24.5 All wiring shall conform to the current applicable standards of the Society of Automotive Engineers and be of sufficient size to carry the required current without excessive voltage drop, no drops below 8.5V. The wire shall have adequate mechanical strength for the application and be of a sufficient gauge size to carry the current without overheating. All wiring and related devices shall be installed in a quality workmanship manner and be mechanically and electrically secure.
- 13.24.6 All wiring shall be identified, color-coded where applicable, and numbered for ease of identification. All wiring shall be adequately protected from water, solvents, road splash, stones, grease, oil, fuel, abrasion and chafing.
- 13.24.7 All wires and cables not installed by the engine manufacturer which are subject to extreme heat shall be protected by shields necessary to prevent premature failure.
- 13.24.8 All parts of the wiring system shall be adequately protected from corrosion, and adequately protected from undercarriage washes.
- 13.24.9 Battery cables shall be heavy-duty and adequate to carry current output of the electrical system.
- 13.24.10 Grounding wires shall not pass through hinged doors or any other covers.
- 13.24.11 All harness and wiring shall terminate at appropriate junction terminals set in Bakelite or other molded plastic material.

- 13.24.12 All wiring and connectors shall be of the soldered-insulated or machine-stake type. All circuits shall be protected by manual reset circuit breakers or fuses. All circuit breakers shall be clearly identified. Fuses and fuse blocks, if used, shall be clearly identified and easily accessible from inside each vehicle. Fuses may be placed in multiple fuse block locations. The fuse block shall contain holders for spare fuses of each type.
- 13.24.13 Lamps and wiring shall be readily and easily accessible and serviceable. All exterior devices shall be sealed to prevent entrance of water.
- 13.24.14 There shall be no exposed or loose wiring in the driver or passenger compartment of vehicle.
- 13.24.15 Any wiring installed related to an after-market installation must be enclosed within a loom. Wiring that passes through a body or chassis member must be encased within continuous metallic tubing or be of armored "BX" type.
- 13.24.16 Wiring and harnesses in raceways or other locations shall be supported at regular intervals by "P" clamps or by other supporting hangers where necessary, and routed in separate hangers from heater hoses or air conditioning hoses.

13.25 Body Construction:

- 13.25.1 The body construction will meet or exceed applicable Federal Motor Vehicle Safety Standards. To insure durability adequate reinforcement shall be included in the construction of the body and understructure at all points where stress concentration may occur to enable the vehicle to withstand damage from road shock under required loads.
- 13.25.2 The body shall have steel cage construction. When the sidewalls, floor and roof are WELDED together, they shall form a continuous structure, which is extremely strong and durable. The body cage must be built as a complete assembly and shall be square, plumb and level before welding the cage on the floor structure that is mounted on the chassis with rubber isolators. All nuts, bolts, clips, washers, clamps, and like fasteners shall be zinc or cadmium plated, or phosphate coated, or stainless steel to prevent corrosion.
- 13.25.3 The sidewalls shall be constructed of 1.5" x 1.5" 16-gauge tubular steel studs and corner posts on maximum 48" centers. A 14-gauge, 1-1/2" x 2" tubular horizontal stringer shall be welded to the top of the studs. A 16-gauge Z-rail shall be welded to the studs at the bottom of the sidewall. Seat track shall be welded to the sidewall studs.

13.25.4 The roof will meet FMVSS 220 standards and be constructed with sufficient strength to prevent vibration, drumming, or flexing. The roof shall consist of 16-gauge tubular steel rafters installed on maximum 48" centers. The roof rafters are to be welded into two 16-gauge steel "U" shaped sidewall caps. Roof design will prevent "ponding" of water on the roof.

13.25.5 The back wall frame shall be constructed of 1.5" X 1.5" 16-gauge tubular steel, reinforced with 16-gauge C-channel. A section of 16-gauge Z-channel shall be welded to the bottom of the back wall frame.

13.25.6 Front cap shall be contoured and aesthetically molded, reinforced fiberglass, normal 5/32" thick. Cap to be installed with structure adhesives and rivets. All panels are to be caulked with paintable sealant prior to painting.

13.25.7 Step wells are to be of heavy-duty stainless steel construction, with coved or square corners, and additional reinforcement to prevent deflection. Any fasteners used must be stainless steel. Step well treads shall be at least 9" deep and have slip resistant coating, yellow Coated Fiberglass Mesh. Individual risers shall not exceed 9.5" in height. All risers shall be approximately the same height. The first step height from street level shall not be more than 14" inches from the ground.

13.26 Body Finish, Exterior:

13.26.1 The construction design shall provide an exterior skin with no visible fasteners. Exterior side panels shall be FRP (fiber-glass re-enforced plastic) material.

13.26.2 All underbody plywood and steel, with the exception of the drive shaft, catalytic converter, engine, transmission, exhaust system, etc. shall be undercoated to protect against corrosion and provide additional sound deadening. The material shall be an abrasive-free petroleum black petroleum asphalt emulsion, formulated with corrosion inhibitors. All mechanisms (moving or stationary parts) that are affected or rendered useless by an application of sealant or insulation shall be protected, including vent canisters and drain pipes prior to undercoating.

13.26.3 Mud flaps shall be provided for the rear wheels and be sized effectively to protect the body and not rub the chassis, tires or the ground. Splash aprons and fenders shall be provided in the event that the tires extend beyond the side of the body.

13.26.4 Rain gutters shall be provided over the passenger door and side windows.

13.27 Body Finish, Interior:

13.27.1 The bus interior will be designed to provide the maximum passenger safety and a pleasant, aesthetically pleasing environment. All interior materials will comply with FMVSS 302 governing flammability requirements of interior materials. All interior trim parts are to be high impact ABS material. Interior materials shall be easily cleanable.

13.27.2 Interior ceiling shall be finished using Luan panels covered in off white vinyl. H-rail and fasteners used in retention of panels shall be trimmed with molded covers.

13.27.3 Interior sidewall shall be finished using Luan panels covered in off white vinyl. Panels are to be held in place at the lower edge by J-rail and at the top edge by the window trim ring. Pushpins shall secure the panels to the sidewall studs.

13.27.4 Front bulkhead and transition panel cover shall be light gray ABS plastic. Rear wall covering shall be light gray ABS plastic.

13.28 Bumpers:

Rear bumper shall be heavy-duty steel, painted to match body. Front bumper shall be chrome plated steel.

13.29 Entrance Door:

13.29.1 The front entrance door will have a minimum clear opening width of thirty-four inches (34") and a minimum clear opening height of ninety inches (88"). The entrance door will be double-opening split entrance type with aluminum frame construction and include full length, tinted, and tempered safety glass. The meeting edge of each door leaf will be equipped with a rubber lap seal so that when closed, the doors provide a watertight seal. The entrance door will be equipped with an interior manual safety release mechanism, permitting the door to open in case of an emergency.

13.29.2 The entrance door will be electrically operated and controlled by switches mounted within convenient reach of the seated driver.

13.30 Driver Door:

Chassis cab shall include a dedicated entrance door at front left side of cab. Access to cab and driver seat shall be facilitated by two steps and an exterior mounted grab handle.

13.31 Floor:

13.31.1 The floor shall be essentially a continuous flat plane, except at the step wells, fuel fill cover. The vehicle floor assembly shall be a lateral body support, structural design, incorporating longitudinal stringers welded in a perimeter structure of steel and iron. The entire floor assembly shall be jig-welded steel structure. Floor construction methods that utilize wood studs running the length, width, and outside perimeter with a foam core insulation are not acceptable.

13.31.2 The substructure shall be comprised of a combination of fourteen (14) gauge steel lateral outriggers reinforced at each mounting point, eleven (11) gauge steel C-channel longitudinal support members on a maximum 34" center, and a perimeter of fourteen (14) gauge steel angle welded into a ladder type structure. 11-gauge, 4" wide flat steel shall be provided to support the seat track.

13.31.3 The substructure shall be bolted through the lateral outriggers, two (2) per outrigger to the chassis through rubber isolator grommets as provided by the chassis manufacturer. Welding of any body understructure to the chassis frame will not be acceptable.

13.31.4 Over the sub floor structure shall be fastened a minimum of five eighths of an inch (5/8"), seven (7) ply, marine grade plywood which is pattern cut, edge sealed, and attached with quarter inch (1/4") diameter counter sunk Tek screws. Sub floor understructure shall be completely undercoated and sealed prior to being installed on the steel frame understructure.

13.31.5 Floor shall be level throughout and all joints between the floor and vertical surfaces shall be equipped with a floor covering of molding. Flooring shall be laid in such a manner as to be free from squeaks.

13.31.6 All edges of the plywood shall be sealed prior to installation to resist moisture. All floor joints will be filled and sanded level to result in a smooth, flat floor ready for installation of the flooring material. The entire floor shall be thoroughly sanded and then completely cleaned of all sanding and foreign material.

13.32 Floor Covering:

13.32.1 The floor will be covered with dark gray rubber flooring. Floor covering shall be smooth and at least 1/8 inch thick under seats and 3/16 inch thick ribbed, non-skid in the aisle and wheelchair areas and at the entry way of both the front door and the floor area surrounding the lift. All transition joints shall be the butt type. Floor covering must be installed to flooring manufacturer's

specifications.

13.32.2 Steps shall be covered with 3/16 inch thick ribbed step treads. All step edges, thresholds and the boarding edge of ramps of lift platforms shall have a band of color(s) running the full width of the step or edge which contrasts from the step tread and riser, or lift or ramp surface, either light-on-dark or dark-on-light.

13.32.3 A yellow standee line shall be provided at the driver's modesty panel.

### 13.33 Lighting, Exterior:

13.33.1 Halogen headlights with daytime running light feature

13.33.2 All non-OEM exterior lights, other than chassis OEM lights, shall be LED. This includes stop, tail, clearance, turn signal, back-up, license plate, side-directional, and exterior ADA lights. All marker lights shall have protective guards or be recessed to prevent damage.

13.33.3 Two hazard lamps shall be mounted at the same level on the rear of the bus. The lamps shall be visible at a distance of 500 feet in normal sunlight, flash, and emit amber light. The lamps shall operate from a separate control in the driver's compartment.

### 13.34 Interior:

13.34.1 LED passenger compartment lighting shall provide sufficient light for safety and security. Lighting of interior to be adequate to illuminate the interior during night operation.

13.34.2 A separate switch from the chassis lights shall operate the passenger compartment interior lights. Interior lights shall be operative without the engine running.

13.34.3 Stepwell and entrance door exterior lights shall be activated when the entrance door is open.

13.34.4 Stepwell and exterior lights shall be shielded to prevent light from directly shining into passenger's or driver's eyes. Step well lights shall be shielded, should not create a tripping hazard, and must provide adequate illumination on each tread. Exterior door light shall be installed below window level and provide at least 1 foot-candle of illumination on the street surface for a distance of 3 feet perpendicular to all points on the bottom step tread.

**\*Amended 12/08/09**

13.35 License Plate Mounts:

License plate mounts must be provided on both the front and rear of the bus.

13.36 Mirrors:

Exterior electric heated mirror assemblies with one flat rear view 9.66" x 8.39" and one convex rear view 4.88" x 8.75" per side. Mirrors shall be heated and operated remotely from the driver's compartment. Mirror brackets shall be stainless steel. Interior mirror shall be 6" x 30" safety glass with protected edges.

\*13.37 Paint:

The body shall have a pre-baked enamel finish. The basic body color shall be white. An aluminum trim rail, minimum 2" wide, shall be applied to each side of the exterior skin, at the floor line of the bus.

13.38 Roof Vent/Emergency Exit:

One roof vent with venting capabilities shall be installed.

13.39 Rustproofing:

13.39.1 Basic Requirement

- Materials furnished shall be approved for use on U.S. Government vehicles (Ziebart, Poly-oleum, Corashield or approved equal).
- The compound used for rust-proofing shall be of the highest quality available for the purpose. Application methods, techniques and tooling shall provide expert workmanship in accordance with the highest standards of the trade.
- The rust-proofing materials and workmanship shall be guaranteed for a minimum life expectancy of five (5) years from application date.

13.39.2 Application

- All surfaces requiring protection (i.e. metal, not fiberglass or aluminum) shall be completely covered by means of a not less than 2,000 p.s.i. spray.
- Spray tools shall be inserted into closed areas through drilled access holes of 1/2" diameter maximum. After application, the holes

shall be sealed with plastic or rubber caps.

- The rust-proofing material shall be forced into crevices, cracks, and seams.
- Drain holes shall not be blocked.
- Excess rust-proofing shall be removed from the exterior of the vehicle and the upholstery shall be clean.

### 13.39.3 Warranty

When a vehicle is rust-proofed in accordance with this standard, the rust-proofer and/or bidder shall furnish a written warranty stating the period of time the rust-proofing will protect the vehicle (minimum acceptable is (5) year warranty). Defective material and workmanship shall be replaced or repaired by the rust-proofer at no charge in accordance with the warranty.

## 13.40 Seats and Stanchions:

### Passenger Seats

13.40.1 Bus shall accommodate varying numbers of seated passengers, depending on vehicle length. Final layout to be determined post bid. Seats shall be Freedman Mid-Hi. Upholstery will be of Grade 4 minimum, commercial quality with the pattern to be determined post bid.

13.40.2 All seats shall be recessed track mounted. Floor anchorage shall be neat and shall not present a trip hazard.

13.40.3 The seats shall be forward facing. There shall be two-two person flip seats mounted at the wheel chair tie-down stations for use when the wheel chair securement is not in service. Passenger seats are to be lined with plastic, prior to cloth seats covers being installed. The aisle seats shall each have a grab rail mounted on the top of the seat. All seats will include non-retractable passenger seatbelts and folding arm rests.

### Stanchions

13.40.4 There shall be three (3) stanchions with locations aft of front entrance door, aft of the wheel chair lift and behind the driver position. All stanchions will be stainless steel, a minimum of 1 ¼" diameter, with modesty panels. The stanchions shall have a Lexan smoke colored shield mounted between the ceiling and the horizontal bar of the stanchion. The stanchion at the entrance door shall include a stainless steel handrail running perpendicular to the

stepwell and comply with ADA specifications.

Passenger Storage

13.40.5 Pretoria overhead luggage rack with ducted A/C ventilation will be provided above each seating row. The overhead storage shall include individual passenger reading lights. The storage compartment shall be designed to adequately secure contents while maximizing visibility of the contents.

Driver's seat

13.40.6 The driver's seat shall be a deluxe, high quality high back bucket type seat, fully padded, with cloth covering and right-side arm rest, six (6) -way adjustable, upholstery to be compatible with interior and passenger seating. The seat must have an integral headrest, adjustable base and reclining back, fully retractable 3-point lap and shoulder belt. The seat must comply with all applicable FMVSS regulations.

13.41 Speakers and Radio:

13.41.1 Vehicle must come with four (4) internal speakers that will be wired directly into the AM/FM/PA system. Driver's microphone with push/hold on off switch shall be wired in with the above speakers.

13.41.2 An AM/FM/PA Radio with driver's speaker is required.

13.41.3 A ground plane for addition of a communications radio is required. Coaxial leads shall be furnished.

13.42 Sun Visors:

Adjustable sun visor shall be provided for the windshield.

13.43 Towing Devices:

Tow hooks shall be installed on the front and rear of the vehicle. The towing devices shall be adequate in design and construction to permit towing the vehicle without distortion or failure.

13.44 Safety Equipment:

Safety equipment shall be mounted in an appropriate location within the vehicle so as not to rattle or interfere with the driver or passenger movement.

- First aid kit

- Bio-hazard spill kit
- One (1) web cutter
- Fire extinguisher, 10 lb. ABC type
- Warning triangles, reflective type (3 units)

13.45 Destination Signs:

13.45.1 Changeable destination twelve (12) volt motor driven movable mechanism signs shall be furnished on the curb side above the passenger window and at the front of the vehicle above the windshield. Front sign curtain to be approximately 36 inches wide. Sign curtains to be illuminated. Front bulkhead or sign box shall have a door to open for viewing sign curtain position. Door shall be positioned for ease of driver operation. Sign shall comply with ADA requirements. Example: Trans Sign, Model D-3110 (or approved equal)

13.45.2 Sign print will be determined post bid.

13.46 Windows-Passenger:

13.46.1 T-Slide sash windows shall be provided throughout the entire bus except at the side destination sign mounting location. The sash shall be black Flexnar coated aluminum, rust resistant, horizontal slide type. They shall slide freely with minimal effort. The window tracks shall be polymer or nylon extrusions. The sash shall have a locking device to latch the window in the closed position. The main side windows shall be a minimum of 48" wide to offer maximum exterior view. Windows shall be securely mounted to the main structure of the body and windows shall not rattle when open or closed. Tinted safety glass is to be provided in all windows. The side windows shall be easily replaceable and to the maximum extent possible be sized so that they are interchangeable. Windows shall have a painted surround to create a continuous black plane across the side of the bus.

13.46.2 A one piece full rear window shall be installed in the rear cap.

13.46.3 All windows shall be fitted with durable, firmly installed weather seals to prevent the entrance of air and water. Materials used for construction of weather seals shall be designed to withstand varying temperature extremes, road splash and other exterior elements without cracking, leaking, loosening and deteriorating.

13.46.4 Appropriate sash, as required by FMVSS 217 for capacity of vehicle, shall include an emergency push-out feature, designed to allow quick reset by the bus operator. Emergency push-out instructions shall be furnished and installed at push-out window locations.

13.47 Wheelchair Lift:

13.47.1 Wheelchair lift shall be fully automatic in operation and mounted within the vehicle body on the curb side behind the passenger entry door. An option for mounting the wheel chair lift on the curb side in the rear of the vehicle body will be provided. The engine is to automatically switch to 'high idle' with use of wheelchair lift. The power supply shall be an electric hydraulic system. This hydraulic system shall be a gravity down design requiring no limit switches or bypass valves to stop the downward travel of the platform. The lift platform shall have a minimum clear length of forty eight (48)" and a minimum clear width of thirty (32)" measured two (2)" above the platform surface. This platform shall be of steel construction and the surface shall be of see-through grating to allow for increased visibility. The platform must be connected to ascent/descent columns on both sides of the lift. The operation of the lift shall provide a smooth, jerk-free ride in both up and down directions.

13.47.2 The lift shall have a rated load capacity of 660 lbs minimum. The maximum capacity in pounds shall be posted on the wheelchair lift within easy view of the operator and wheelchair passenger. The lift shall have a manually operated override capable of raising and lowering the lift platform in the event of an electrical failure. The manual override hydraulic pump and bleed down valve are to be located inside the vehicle. The bleed down valve shall have a flow compensator that will limit the maximum descent speed. Manual override instructions shall be visible from inside and outside the vehicle with the doors open.

13.47.3 The lift shall have a bridge plate designed for a smooth transition from the vehicle floor level to the lift platform when the platform is in the raised loading position.

13.47.4 The lift shall have two permanently installed handrails, one on each side of the lift. The handrails shall open to a position not less than thirty (30)" and not more than thirty-eight (38)" above the lift platform and fold automatically to prevent any obstructions in the vehicle passenger area. The handrails must be able to withstand a force of one hundred (100) lbs at any point on the handrail without permanent deformation. Handrails shall be a minimum of eight (8)" in length.

13.47.5 Bolting of any part of the lift assembly directly to the vehicle walls will not be acceptable. All attachments to the vehicle will be done through the wall support ribs.

13.47.6 The lift controls shall be mounted in a lightweight weatherproof control box with self centering switches. This control box shall be hand-held and be on a

flexible, cut resistant cord. Switches shall be labeled with proper operating instructions. The hand-held lift control should be mounted on the on the wheelchair lift door for storage when not in use. A secondary mount location will be provided on the interior passenger side wall of the bus, just above the lift pump.

13.47.7 Power to the lift system shall be controlled through an ON/OFF master switch located on the dash. The lift electrical system shall be protected by a manual circuit breaker that can be reset. The lift shall have no exposed electrical connections or pinch points to cause passenger injury.

13.47.8 A door cut-off switch shall be installed which prevents the lift from operating when the door is closed. The lift shall be equipped with a safety belt that will prevent lift operation when uncoupled.

13.47.9 The lift shall conform to ADA accessibility specifications as published in 49 CFR Part 38, Subpart 38.23.

13.47.10 Complete operator's and service manual, and a replacement parts list shall be provided with the lift. These manuals shall have detailed sections covering warranty, installation procedures, operating instruction, service and maintenance procedures and a trouble shooting guide. The lift shall be warranted to be free from defects in material and workmanship for a minimum of twenty four (24) months from date of delivery. Product literature detailing the features of the lift shall be submitted with bid proposal.

13.47.11 Lift components exposed to the environment shall be stainless steel or coated with a polyester powder coat to prevent premature corrosion.

13.47.12 The buses shall meet all requirements of 49 CFR, Part 38, and Subpart B: ADA Accessibility Specifications for Transportation Vehicles – Buses, Vans and Systems. This includes the loading system, wheelchair accommodations, interior movement, passenger information, lighting, doors, signs, etc.

13.47.13 A Ricon KlearVue lift or approved equal is acceptable.

13.48 Wheel Chair Securement:

13.48.1 The securement system shall include (4) individual floor pockets, slide and click type at the retractors are attached to. The retractors must have the fully automatic self tensioning, self locking knob less retractors. The retractors must to be able to rotate 360 degrees. The retractors must use” J “hooks for universal application to all wheelchairs. A combination, integrated lap/shoulder belt with a manual height adjuster is required for the wheelchair occupant. Qstraints Hook & Go QRT Max strap systems or approved equal is

acceptable.

13.48.2 Priority Seating Signs and other required notices as required by the ADA shall be installed.

13.48.3 “Stop Request” chime system shall be installed to be visible and audible to the driver and passengers. The stop request sign shall be installed on the front interior header so as not to obstruct the operation of the destination sign. Stop request pull cords (meeting the ADA requirements) shall be installed and activate the light and chime. The pull cords should be yellow, plastic-coated. Stop request push buttons are to be provided in the wheelchair securement areas. The stop request light and chime shall turn off with the opening and/or closing of the passenger door.

13.48.4 Securement systems shall be provided. There shall be two complete sets of Q”Straint Slide-NClick wheelchair securement on the bus including a lap and shoulder harness for use by wheelchair occupant or mobility-aid user. There will be one wall mounted mesh storage bag for each securement position.

13.49 Additional:

The following additional installations and procedures shall be provided to complete the production process:

Water Test:

Vehicle must be water tested upon completion to insure there are no leaks. The water test shall include the underbody as well as the exterior of the bus.

13.50 Painting and Decals:

13.50.1 The base vehicle shall be Bright White in color. The area around the windows shall be black.

13.50.2 Decals furnished by the Contractor for the County to affix to the interior of the bus shall be as follows:

NO SMOKING	2	Size and color TBD
WATCH YOUR STEP	2	Size and color TBD
Do Not Stand Forward of the Yellow Line	2	Size and color TBD
FIRE EXTINGUISHER	1	Size and color TBD
LAW PROHIBITS THE OPERATION OF THIS VEHICLE WHILE ANYONE IS STANDING FORWARD OF THE YELLOW LINE	2	Size and color TBD
No Smoking, Eating, Drinking	2	Size and color TBD

Please Remain Seated While The Bus Is In Motion	2	Size and color TBD
---	---	--------------------

13.50.3 Exterior Decals and Logos:

- “CAUTION – CHILDREN MAY BE EXITING”: 1 (Size and location to be determined after award)
- Fleet number: 5 (numbers and letters) (Location to be determined after award)
- Agency logo’s, stripes etc.

13.50.4 In addition to the decals described above, safety decal(s) shall be furnished and shall be affixed at any applicable area; emergency exit, steps, wheelchair lift, etc. The decals shall include necessary warnings and precautions. Permanent decals are required.

13.51 Delivery:

All vehicles must be serviced prior to delivery in accordance with the manufacturer's "New Vehicle Pre-delivery Service" requirements and as specified below.

Pre-Delivery Service

The following service shall be performed upon all motor vehicles prior to/upon delivery:

- Predelivery inspection certified with an affixed Texas Motor Vehicle Inspection Certificate (annual inspection sticker);
- Fluid levels checked and serviced with proper grade fluid;
- Chassis lubrication;
- Exterior wash and interior cleaning; and
- Fuel system(s) filled to capacity.

13.52 Registration:

Successful bidder shall provide necessary documents to enable the County to register the vehicle in the State of Texas. Necessary fees and state taxes will be paid by the County; do not include such fees and taxes in bid price.

13.53 Manuals

A line setting sheet and manual(s) containing operating and servicing instructions for the vehicle and lift shall be provided with each vehicle. The manual(s) shall be as detailed as possible outlining all necessary operating and servicing instructions for

each vehicle and lift including the vehicle's driveline components. Necessary warnings and safety precautions shall be included. In addition, manual(s) containing illustrated parts lists, operating and servicing instructions for related and special equipment supplied with the vehicle and lift shall be provided with the vehicle.

13.54 Warranty:

13.54.1 Bus Chassis

- A copy of the chassis manufacturer's warranty must be submitted with the proposal and include the minimum:
- 5 years, unlimited mileage - failure of the chassis frame including cross members.
- 2 years, unlimited mileage - failure of any other original components manufactured by the chassis manufacturer.
- 1 year, unlimited mileage, - failure of any components manufactured by outside suppliers and included as original equipment by the chassis manufacturer. Where the outside supplier's warranty exceeds that of the chassis manufacturers then such warranty shall be stated and shall apply.

13.54.2 Engine: Must include the fuel injection system and emission control system 5 year/unlimited mileage.

13.54.3 HVAC: 3 year, unlimited mileage warranty.

13.54.4 Service Location: There must be a one-source warranty location providing full warranty for body, chassis, and engine. Individual locations for each component will not be accepted.

13.54.5 Towing: There shall be a 60-month / 150,000 mile extended towing warranty for all unsafe or non-drivable warrantable failures (up to \$250 per incident) to the nearest warranty location

13.54.6 Transmission: 2-years, unlimited mileage. - copy of OEM warranty to be included

13.54.7 Wheelchair lift: 3 years, unlimited mileages.

13.55 Parts and Service:

The bidder providing the vehicle shall be an authorized dealer for the vehicle manufacturer and hold the required current license(s) with the Texas Motor Vehicle

Division. The dealer shall have factory-trained personnel available for warranty repairs and the performance of service. The dealer shall also maintain an inventory of high-usage parts and a quick source for low-usage parts. The using County will assume the expense for replacement filters, fuel, cleaning, painting and other minor items normally consumed in day to day operations. Fort Bend County will assume responsibility for cost of repairs resulting from collision, theft, vandalism, operator negligence and/or acts of God.

13.56 Instructions on Safety, Operation, and Preventative Maintenance:

The contractor shall provide Fort Bend County sufficient instruction on safety, operation and preventive maintenance of the vehicle after it has been delivered and is ready for operation. Training shall be completed prior to payment.

13.57 Options

13.57.1 An optional design and floor plan for mounting the wheel chair lift on the curb side in the rear of the vehicle body will be provided.

13.57.2 Passenger seats to be equipped with retractable, below the seat, seat belts in place of non-retractable seat belts.

**14.0 FEDERAL CLAUSES:**

14.1 No Government Obligation to Third Parties. Fort Bend County and the Contractor acknowledge and agree that, notwithstanding any concurrence by the Federal Government in or approval of the solicitation or award of the underlying contract, absent the express written consent by the Federal Government, the Federal Government is not a party to this contract and shall not be subject to any obligations or liabilities to Fort Bend County, the Contractor, or any other party (whether or not a party to that contract) pertaining to any matter resulting from the underlying contract. The Contractor agrees to include this clause in each subcontract financed in whole or in part with Federal assistance provided by FTA. It is further agreed that the clause shall not be modified, except to identify the subcontractor who will be subject to its provisions.

14.2 Program Fraud and False or Fraudulent Statement and Related Acts. The Contractor acknowledges that the provisions of the Program Fraud Civil Remedies Act of 1986, as amended, 31 U.S.C. § 3801 *et seq.* and U.S. DOT regulations, "Program Fraud Civil Remedies," 49 C.F.R. Part 31, apply to its actions pertaining to this Project. Upon execution of the underlying contract, the Contractor certifies or affirms the truthfulness and accuracy of any statement it has made, it makes, it may make, or causes to be made, pertaining to the underlying contract or the FTA assisted project for which this contract work is being performed. In addition to other penalties that may be applicable, the Contractor further acknowledges that if it makes, or causes to

be made, a false, fictitious, or fraudulent claim, statement, submission, or certification, the Federal Government reserves the right to impose the penalties of the Program Fraud Civil Remedies Act of 1986 on the Contractor to the extent the Federal Government deems appropriate.

The Contractor also acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification to the Federal Government under a contract connected with a project that is financed in whole or in part with Federal assistance originally awarded by FTA under the authority of 49 U.S.C. § 5307, the Government reserves the right to impose the penalties of 18 U.S.C. § 1001 and 49 U.S.C. § 5307(n)(1) on the Contractor, to the extent the Federal Government deems appropriate.

The Contractor agrees to include the above two clauses in each subcontract financed in whole or in part with Federal assistance provided by FTA. It is further agreed that the clauses shall not be modified, except to identify the subcontractor who will be subject to the provisions.

- 14.3 Access to Records and Reports. The Contractor agrees to provide Fort Bend County, the FTA Administrator, the Comptroller General of the United States or any of their authorized representatives access to any books, documents, papers and records of the Contractor which are directly pertinent to this contract for the purposes of making audits, examinations, excerpts and transcriptions. Contractor also agrees, pursuant to 49 C.F.R. 633.17 to provide the FTA Administrator or his authorized representatives including any PMO Contractor access to Contractor's records and construction sites pertaining to a major capital project, defined at 49 U.S.C. 5302(a)1, which is receiving federal financial assistance through the programs described at 49 U.S.C. 5307, 5309 or 5311. The Contractor agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.

The Contractor agrees to maintain all books, records, accounts and reports required under this contract for a period of not less than three years after the date of termination or expiration of this contract, except in the event of litigation or settlement of claims arising from the performance of this contract, in which case Contractor agrees to maintain same until Fort Bend County, the FTA Administrator, the Comptroller General, or any of their duly authorized representatives, have disposed of all such litigation, appeals, claims or exceptions related thereto.

- 14.4 Federal Changes. The Contractor shall at all times comply with all applicable FTA regulations, policies, procedures and directives, including without limitation those listed directly or by reference in the Master Agreement between Fort Bend County and FTA, as they may be amended or promulgated from time to time during the term of this contract. Contractor's failure to so comply shall constitute a material breach of this contract.

14.5 Civil Rights Requirements. The following requirements apply to the underlying contract:

Nondiscrimination - In accordance with Title VI of the Civil Rights Act, as amended, 42 U.S.C. § 2000d, section 303 of the Age Discrimination Act of 1975, as amended, 42 U.S.C. § 6102, section 202 of the Americans with Disabilities Act of 1990, 42 U.S.C. § 12132, and Federal transit law at 49 U.S.C. § 5332, the Contractor agrees that it will not discriminate against any employee or applicant for employment because of race, color, creed, national origin, sex, age, or disability. In addition, the Contractor agrees to comply with applicable Federal implementing regulations and other implementing requirements FTA may issue.

Equal Employment Opportunity - The following equal employment opportunity requirements apply to the underlying contract:

Race, Color, Creed, National Origin, Sex - In accordance with Title VII of the Civil Rights Act, as amended, 42 U.S.C. § 2000e, and Federal transit laws at 49 U.S.C. § 5332, the Contractor agrees to comply with all applicable equal employment opportunity requirements of U.S. Department of Labor (U.S. DOL) regulations, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor," 41 C.F.R. Parts 60 *et seq.*, (which implement Executive Order No. 11246, "Equal Employment Opportunity," as amended by Executive Order No. 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," 42 U.S.C. § 2000e note), and with any applicable Federal statutes, executive orders, regulations, and Federal policies that may in the future affect construction activities undertaken in the course of the Project. The Contractor agrees to take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, creed, national origin, sex, or age. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.

Age - In accordance with section 4 of the Age Discrimination in Employment Act of 1967, as amended, 29 U.S.C. § 623 and Federal transit law at 49 U.S.C. § 5332, the Contractor agrees to refrain from discrimination against present and prospective employees for reason of age. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.

Disabilities - In accordance with section 102 of the Americans with Disabilities Act, as amended, 42 U.S.C. § 12112, the Contractor agrees that it will comply with the requirements of U.S. Equal Employment Opportunity Commission, "Regulations to Implement the Equal Employment Provisions of the Americans with Disabilities Act," 29 C.F.R. Part 1630, pertaining to employment of persons with disabilities. In

addition, the Contractor agrees to comply with any implementing requirements FTA may issue.

The Contractor also agrees to include these requirements in each subcontract financed in whole or in part with Federal assistance provided by FTA, modified only if necessary to identify the affected parties.

- 14.6 Disadvantaged Business Enterprise (DBE). This contract is subject to the requirements of Title 49, Code of Federal Regulations, Part 26, *Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs*. The national goal for participation of Disadvantaged Business Enterprises (DBE) is 10%. A separate contract goal has not been established for this procurement.

The Contractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of this DOT-assisted contract. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as Fort Bend County deems appropriate. Each subcontract the Contractor signs with a subcontractor must include the assurance in this paragraph (*see* 49 CFR 26.13(b)).

The successful bidder/offeror will be required to report its DBE participation obtained through race-neutral means throughout the period of performance.

The Contractor is required to pay its subcontractors performing work related to this Contract for satisfactory performance of that work no later than 30 days after the Contractor's receipt of payment for that work from Fort Bend County. In addition, the Contractor is required to return any retainage payments to those subcontractors within 30 days after the subcontractor's work related to this Contract is satisfactorily completed.

The Contractor must promptly notify Fort Bend County whenever a DBE subcontractor performing work related to this Contract is terminated or fails to complete its work, and must make good faith efforts to engage another DBE subcontractor to perform at least the same amount of work. The Contractor may not terminate any DBE subcontractor and perform that work through its own forces or those of an affiliate without the prior written consent of Fort Bend County.

- 14.7 Incorporation of Federal Transit Administration (FTA) Terms. The preceding provisions include, in part, certain Standard Terms and Conditions required by DOT, whether or not expressly set forth in the preceding contract provisions. All contractual provisions required by DOT, as set forth in FTA Circular 4220.1E, are hereby incorporated by reference. Anything to the contrary herein notwithstanding,

all FTA mandated terms shall be deemed to control in the event of a conflict with other provisions contained in this Agreement. The Contractor shall not perform any act, fail to perform any act, or refuse to comply with any Fort Bend County requests which would cause Fort Bend County to be in violation of the FTA terms and conditions.

- 14.8 Government-Wide Debarment and Suspension (Non-Procurement). This contract is a covered transaction for purposes of 49 CFR Part 29. As such, the Contractor is required to verify that none of the Contractor, its principals, as defined at 49 CFR 29.995, or affiliates, as defined at 49 CFR 29.905, are excluded or disqualified as defined at 49 CFR 29.940 and 29.945.

The Contractor is required to comply with 49 CFR 29, Subpart C and must include the requirement to comply with 49 CFR 29, Subpart C in any lower tier covered transaction it enters into.

By signing and submitting its bid or proposal, the bidder or proposer certifies as follows:

The certification in this clause is a material representation of fact relied upon by Fort Bend County. If it is later determined that the bidder or proposer knowingly rendered an erroneous certification, in addition to remedies available to Fort Bend County, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment. The bidder or proposer agrees to comply with the requirements of 49 CFR 29, Subpart C while this offer is valid and throughout the period of any contract that may arise from this offer. The bidder or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.

- 14.9 Buy America. The Contractor agrees to comply with 49 U.S.C. 5323(j) and 49 C.F.R. Part 661, which provide that Federal funds may not be obligated unless steel, iron, and manufactured products used in FTA-funded projects are produced in the United States, unless a waiver has been granted by FTA or the product is subject to a general waiver. General waivers are listed in 49 C.F.R. 661.7, and include final assembly in the United States for 15 passenger vans and 15 passenger wagons produced by Chrysler Corporation, and microcomputer equipment and software. Separate requirements for rolling stock are set out at 49 U.S.C. 5323(j)(2)(C) and 49 C.F.R. 661.11. Rolling stock must be assembled in the United States and have a 60 percent domestic content.

A bidder or offeror must submit to the FTA recipient the appropriate Buy America certification with all bids or offers on FTA-funded contracts, except those subject to a general waiver. Bids or offers that are not accompanied by a completed Buy America certification must be rejected as nonresponsive. This requirement does not apply to lower tier subcontractors.

14.10 Lobbying. Contractors who apply or bid for an award of \$100,000 or more shall file the certification required by 49 CFR part 20, "New Restrictions on Lobbying." Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier shall also disclose the name of any registrant under the Lobbying Disclosure Act of 1995 who has made lobbying contacts on its behalf with non-Federal funds with respect to that Federal contract, grant or award covered by 31 U.S.C. 1352. Such disclosures are forwarded from tier to tier up to the recipient.

14.11 Clean Air. The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. §§ 7401 et seq . The Contractor agrees to report each violation to the County and understands and agrees that the County will, in turn, report each violation as required to assure notification to FTA and the appropriate EPA Regional Office.

The Contractor also agrees to include these requirements in each subcontract exceeding \$100,000 financed in whole or in part with Federal assistance provided by FTA.

14.12 Clean Water. The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq . The Contractor agrees to report each violation to the County and understands and agrees that the County will, in turn, report each violation as required to assure notification to FTA and the appropriate EPA Regional Office.

The Contractor also agrees to include these requirements in each subcontract exceeding \$100,000 financed in whole or in part with Federal assistance provided by FTA.

14.13 Cargo Preference. The Contractor agrees:

(1) to use privately owned United States-Flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to the underlying contract to the extent such vessels are available at fair and reasonable rates for United States-Flag commercial vessels;

(2) to furnish within 20 working days following the date of loading for shipments originating within the United States or within 30 working days following the date of leading for shipments originating outside the United States, a legible copy of a rated, "on-board" commercial ocean bill-of -lading in English for each shipment of cargo

described in the preceding paragraph to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590 and to the FTA recipient (through the contractor in the case of a subcontractor's bill-of-lading.)

(3) to include these requirements in all subcontracts issued pursuant to this contract when the subcontract may involve the transport of equipment, material, or commodities by ocean vessel.

14.14 Fly America. The Contractor agrees to comply with 49 U.S.C. 40118 (the "Fly America" Act) in accordance with the General Services Administration's regulations at 41 CFR Part 301-10, which provide that recipients and sub-recipients of Federal funds and their contractors are required to use U.S. Flag air carriers for U.S. Government-financed international air travel and transportation of their personal effects or property, to the extent such service is available, unless travel by foreign air carrier is a matter of necessity, as defined by the Fly America Act. The Contractor shall submit, if a foreign air carrier was used, an appropriate certification or memorandum adequately explaining why service by a U.S. flag air carrier was not available or why it was necessary to use a foreign air carrier and shall, in any event, provide a certificate of compliance with the Fly America requirements. The Contractor agrees to include the requirements of this section in all subcontracts that may involve international air transportation.

14.15 Contract Work Hours and Safety Standards.

(1) Overtime requirements - No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages - In the event of any violation of the clause set forth in paragraph (1) of this section the Contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such Contractor and subcontractor shall be liable to the United States for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this section.

(3) Withholding for unpaid wages and liquidated damages – Fort Bend County shall upon its own action or upon written request of an authorized representative of the

Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the Contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this section.

(4) Subcontracts - The Contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraphs (1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1) through (4) of this section.

14.16 Energy Conservation Requirements. The Contractor agrees to comply with mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act.

14.17 Access for Individuals with Disabilities. The Contractor agrees to comply with 49 U.S.C. § 5301(d), which states the Federal policy that elderly individuals and individuals with disabilities have the same right as other individuals to use public transportation services and facilities, and that special efforts shall be made in planning and designing those services and facilities to implement transportation accessibility rights for elderly individuals and individuals with disabilities. The Contractor also agrees to comply with all applicable provisions of section 504 of the Rehabilitation Act of 1973, as amended, with 29 U.S.C. § 794, which prohibits discrimination on the basis of disability; with the Americans with Disabilities Act of 1990 (ADA), as amended, 42 U.S.C. §§ 12101 *et seq.*, which requires that accessible facilities and services be made available to individuals with disabilities; and with the Architectural Barriers Act of 1968, as amended, 42 U.S.C. §§ 4151 *et seq.*, which requires that buildings and public accommodations be accessible to individuals with disabilities, and any subsequent amendments to these laws. In addition, the Contractor agrees to comply with applicable implementing Federal regulations and directives and any subsequent amendments thereto, as follows:

(1) U.S. DOT regulations, "Transportation Services for Individuals with Disabilities (ADA)," 49 C.F.R. Part 37;

(2) U.S. DOT regulations, "Nondiscrimination on the Basis of Handicap in programs and Activities Receiving or Benefiting from Federal Financial Assistance," 49 C.F.R. Part 27;

(3) Joint U.S. Architectural and Transportation Barriers Compliance board (U.S. ATBCB)/U.S. DOT regulations, "Americans With Disabilities (ADA) Accessibility Specifications for Transportation Vehicles," 36 C.F.R. Part 1192 and 49 C.F.R. Part 38;

(4) U.S. DOJ regulations, "Nondiscrimination on the Basis of Disability in State and Local Government Services," 28 C.F.R. Part 35;

(5) U.S. DOJ regulations, "Nondiscrimination on the Basis of Disability by Public Accommodations and in Commercial Facilities," 28 C.F.R. Part 36;

(6) U.S. General Services Administration (U.S. GSA) regulations, "Accommodations for the Physically Handicapped," 41 C.F.R. Subpart 101-19;

(7) U.S. EEOC, "Regulations to Implement the Equal Employment Provisions of the Americans with Disabilities Act," 29 C.F.R. Part 1630;

(8) U.S. Federal Communications Commission regulations, "Telecommunications Relay Services and Related Customer Premises Equipment for the Hearing and Speech Disabled," 47 C.F.R. Part 64, Subpart F; and

(9) U.S. ATBCB regulations, "Electronic and Information Technology Accessibility Standards," 36 C.F.R. Part 1194; FTA regulations, "Transportation for Elderly and Handicapped Persons," 49 C.F.R. Part 609; and

(10) Federal civil rights and nondiscrimination directives implementing the foregoing regulations, except to the extent the Federal Government determines otherwise in writing.

**15.0 ADDITIONAL INFORMATION TO BE SUBMITTED WITH BID:**

15.1 Description of Equipment: Bids shall be accompanied by sufficient information to enable the County to ascertain that the equipment offered meets the specifications and shall include correct product literature and detailed specifications. In most cases, manufacturer's product literature alone will not fulfill this requirement. The product description shall include at a minimum:

15.2 Drawing of the floor plan showing interior body dimensions and placement of seats, accessories, and ancillary equipment.

15.3 A complete description of the vehicle and all equipment to be provided.

NOTE: Failure to provide the required information with the bid may automatically disqualify the bid from consideration for award in connection with this transaction.

**\*Amended 12/08/09**

**16.0 DELIVERY INFORMATION:**

\*16.1 Delivery Schedule: See below:

19' to 22' Light Duty bus – initial order by October 31, 2010.

24' to 26' Light Duty bus – initial order by October 31, 2010.

32' to 37' Medium Duty bus – initial order by July 1, 2010.

16.2 Delivery: Vehicles and equipment shall be delivered FOB to the address shown on the purchase order between the hours of 8 a.m. and 4 p.m., Monday through Friday, excluding state holidays.

16.3 Cancellation By County: Delivery defaults by the vendor or failure to meet specifications authorize the County to cancel the purchase order, purchase the merchandise elsewhere, and charge full increase, if any, in cost and handling to the defaulting vendor.

16.3.1 Should delivery be delayed because of strike, injunction, government controls, or any circumstances beyond the control of the vendor, the vendor shall notify the County in writing of the cause of such delay within 5 days after the beginning thereof and shall state the estimated date delivery will be made.

16.3.2 If delay is foreseen, vendor shall give written notice to the County. The County has the right to extend delivery date if reasons appear valid. Vendor must keep the County advised at all times of the status of the order. Default in promised delivery (without accepted reasons) or failure to meet specifications may cause the vendor to be removed from the bid list.

16.4 Completeness: All equipment shall be delivered complete and ready for use. All parts necessary for operation or which are normally furnished as standard equipment shall be furnished whether specified or not. No substitutions or cancellations are permitted without written approval of the County.

16.5 Vehicle Title(s): When registering the vehicle title, the vendor will record a lien on the title, naming the Texas Department of Transportation, Public Transportation Division as lien holder.

**17.0 DOCUMENTS THAT SHALL BE FURNISHED WITH THE BID:**

17.1 Consolidated Certification Form.

17.2 Domestic Content worksheet (required for bids over \$100,000).

17.3 Printed product literature of the vehicle and all ancillary equipment.

- 17.4 Drawing of the proposed floor plan.
- 17.5 Warranty Certification. Also, a complete list of companies or individuals and their addresses who stock repair parts in the agency's area and who will perform the services.
- 17.6 Federal Motor Vehicle Safety Standards (FMVSS) Certification.
- 17.7 A copy of the franchised Texas new motor vehicle dealer's license.
- 17.8 A copy of the representative's license if required under the Texas Motor Vehicle Commission Code.
- 17.9 A copy of the manufacturer or converter license, whichever applies.
- 17.10 A list of three (3) agencies or people, including phone numbers, of those who have already purchased the proposed vehicle from the vendor and have placed the vehicle into service.
- 17.11 A copy of the Transit Vehicle Manufacturer's DBE certification letter sent by the manufacturer to the Federal Transit Administration.
- 17.12 Certification from the conversion vendor that the conversion system (specific to applicable engine families) meets EPA Memo-1A, and that tests have been performed according to procedures prescribed in 40 CFR Section 85.
- 17.13 Certification from the conversion vendor that the specific conversion system will not cause the vehicle to fail to meet applicable emission standards (according to procedures prescribed in 40 CFR Section 85) at any time during the vehicle's useful life.
- 17.14 Certification in writing from the conversion vendor that, should the conversion system fail to meet applicable emission standards according to procedures prescribed in 40 CFR Section 85) at any time during the vehicle's useful life, the conversion vendor will repair or replace the conversion system, at no charge to the purchasing entity, with a comparable conversion system meeting Memo-1A.

NOTE: Failure to provide the required information with the bid could automatically disqualify the bid from consideration for award in connection with this transaction.

**18.0 DOCUMENTS THAT SHALL BE FURNISHED AT TIME OF DELIVERY OF VEHICLE:**

- 18.1 Color-Coded Diagram(s) showing the complete, as-built electrical wiring of the vehicle, including wiring schematics for all alternative fuel conversion equipment and wheelchair accessibility features. The color coding on the alternative fuel system electrical schematic drawing shall match that of the rest of the vehicle wiring.

**\*Amended 12/08/09**

- 18.2 Manufacturer's Statement of Origin (MSO).
- 18.3 Certification that the GVW rating is not exceeded by the vehicle as equipped.
- 18.4 Vehicle manufacturer certification that the air conditioner meets or exceeds the air conditioner performance specifications.
- 18.5 Altoona Test Report if required in accordance with 49 CFR 665.
- 18.6 A detailed conversion system bill-of-materials (specific to applicable engine families) identifying primary conversion system components, including but not limited to, manufacturer, part number and function. Documentation to ascertain component functionality shall be provided.
- 18.7 Documentation of Federal Test Procedure 75, (FTP) or comparable test.
- 18.8 Copy of the alternative fuel converter's 503 Form Issued by the Texas Railroad Commission.
- 18.9 The LPG alternative fuel system must have been tested for EPA compliance under Option 3 of the Addendum to EPA's Memorandum 1A and must conform with the Railroad Commission of Texas rules and regulations. Each vehicle shall be scheduled for inspection by the Railroad Commission of Texas upon acceptance by the ordering agency.
- 18.10 Registration receipt recording a lien on the vehicle and naming the Texas Department of Transportation, Public Transportation Division as lien holder.

**\*19.0 UNIT BID PRICE:**

Unit bid price, per bus, without options, as specified herein, FOB Fort Bend County, Texas:

19' to 22' Bus 2009 model	\$ <u>61,465.00</u>
19' to 22' Bus 2010 model	\$ <u>63,615.00</u>
24' to 26' Bus 2009 model	\$ <u>71,862.00</u>
24' to 26' Bus 2010 model	\$ <u>73,862.00</u>
32' to 37' Bus 2009 model	\$ <u>N/A</u>
32' to 37' Bus 2010 model	\$ <u>128,083.00</u>

**20.0 OPTIONAL EQUIPMENT FOR 19' TO 22' BUS:**

20.1	Morryde suspension:	\$ <u>\$795.00</u>
20.2	Wheel inserts:	\$ <u>\$375.00</u>
20.3	Rear help bumper:	\$ <u>\$695.00</u>
20.4	Electric powered passenger entry door:	\$ <u>\$425.00</u>
20.5	Lift platform cover:	\$ <u>\$350.00</u>
20.6	Remote controlled mirrors:	\$ <u>\$775.00</u>
20.7	Bilingual signs and decals:	\$ <u>\$75.00</u>
20.8	Public information system:	\$ <u>\$425.00</u>
20.9	Stop request chime:	\$ <u>\$575.00</u>
20.10	Farebox:	\$ <u>\$1,500.00</u>
20.11	Destination signs:	\$ <u>\$2,700.00</u>
20.12	Interior ad racks:	\$ <u>\$150.00</u>
20.13	Ground plane:	\$ <u>\$125.00</u>
20.14	Driver's storage compartment (common keying):	\$ <u>Included in Bid Price</u>
20.15	Additional flip up seat (over wheelchair) position:	\$ <u>Included in Bid Price</u>
20.16	Non-standard paint scheme:	\$ <u>\$2,000.00 for Full body paint</u>
20.17	Boarding chair, secured behind last passenger Seat/lift:	\$ <u>\$475.00</u>
20.18	Child safety restraint systems:	\$ <u>\$1,100.00 for double seat</u>

**21.0 OPTIONAL EQUIPMENT FOR 24' TO 26' BUS:**

21.1	Driver's storage compartment (common keying):	\$ <u>N/A with front destination sign</u>
21.2	Additional flip up seat (over wheelchair) position:	\$ <u>Included in Bid Price</u>

21.3	Non-standard paint scheme:	\$2,500.00 for full body paint \$ _____
21.4	Boarding chair, secured behind last passenger Seat/lift:	\$475.00 \$ _____
21.5	Child safety restraint systems:	\$1,100.00 for double seat \$ _____
<b>22.0</b>	<b>OPTIONAL EQUIPMENT FOR 32' TO 37' BUS:</b>	
22.1	Rear position wheelchair lift:	No price difference from front lift \$ _____
22.2	Retractable seatbelts (below the seat):	\$225.00 per double seat \$ _____
22.3	Driver's storage compartment (common keying):	N/A with Destination sign \$ _____
22.4	Additional flip up seat (over wheelchair) position:	Included in bid price \$ _____
22.5	Non-standard paint scheme:	\$3250.00 for full body paint \$ _____
22.6	Boarding chair, secured behind last passenger Seat/lift:	\$475.00 \$ _____
22.7	Child safety restraint systems:	\$1,100.00 for double seat \$ _____

**Transit Buses  
Bid 10-032**

**Contract Sheet**

**THE STATE OF TEXAS  
COUNTY OF FORT BEND**

This memorandum of agreement made and entered into on the 7<sup>th</sup> day of Januray, 2010, by and between Fort Bend County in the State of Texas (hereinafter designated County), acting herein by County Judge Robert Hebert, by virtue of an order of Fort Bend County Commissioners Court, and National Bus Sales and Leasing, Inc. (hereinafter designated Contractor).

**WITNESSETH:**

The Contractor and the County agree that the bid and specifications for the **Transit Buses** which are hereto attached and made a part hereof, together with this instrument and the bond (when required) shall constitute the full agreement and contract between parties and for furnishing the items set out and described; the County agrees to pay the prices stipulated in the accepted bid.

It is further agreed that this contract shall not become binding or effective until signed by the parties hereto and a purchase order authorizing the items desired has been issued.

Executed at Richmond, Texas this 7<sup>th</sup> day of January, 2010.

By: Robert Hebert Fort Bend County, Texas  
County Judge

By: Ryan Frost Signature of Contractor


By: Ryan Frost South west Sales Representative  
Printed Name and Title

**Domestic Content Worksheet**

(Typical Components of Buses from Appendix B to 49 CFR Sec. 661.11, an itemized component listing from the manufacturer that verifies compliance with the Buy America Provisions may be submitted in lieu of this form)

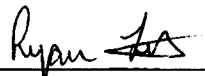
I. Components	% Domestic	X % Value	Dom. Value
1. engines			
2. transmissions			
3. front axle assemblies			
4. rear axle assemblies			
5. drive shaft assemblies			
6. front suspension assemblies			
7. rear suspension assemblies			
8. air compressor and pneumatic systems			
9. generator, alternator & electrical systems			
10. steering system assemblies			
11. front and rear air brake assemblies			
12. air conditioning compressor assemblies			
13. air conditioning evaporator/condenser assemblies			
14. heating systems.			
15. passenger seats			
16. driver's seat assemblies			
17. window assemblies			
18. entrance and exit door assemblies			
19. door control systems			
20. destination sign assemblies			
21. interior lighting assemblies			
22. front and rear end cap assemblies			
23. front and rear bumper assemblies			
24. specialty steel (structural steel tubing etc.) and aluminum extrusions			
25. aluminum, steel or fiberglass exterior panels and interior trim			
26. flooring and floor coverings			
TOTAL DOMESTIC CONTENT OF COMPONENTS (%)			73

<b>II. Construction Activities</b> (Describe Activities)	
Bus body is constructed on a GM, Freightliner, or International chassis	
Location of Construction Activities:	% OF DOMESTIC CONSTRUCTION ACTIVITIES:
Imlay City, MI	73


Champion Bus	Crusader, Challenger, Defender	2009/2010/2011
Vehicle Manufacturer	Model	Model Year
National Bus Sales and Leasing, Inc		1/5/2010
Vendor Name	Signature	Date

**WARRANTY CERTIFICATION**

The name and address of the Texas servicing dealer nearest the FOB point that will perform the warranty work for the chassis:

FIRM NAME National Bus Sales and Leasing, Inc.	
FIRM ADDRESS 15580 Highway 114 Justin, TX 76247	
FIRM TELEPHONE 817-636-2365	
PRINT BIDDER 'S NAME Ryan Frost	BIDDER 'S SIGNATURE 
NAME OF INDIVIDUAL TO CONTACT FOR WARRANTY Vikki Rinehart	

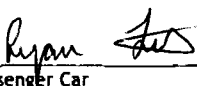
The agency may contact the vendor below for assistance in warranty administration.

FIRM NAME OF BIDDER National Bus Sales and Leasing, Inc.
ADDRESS 15580 Highway 114 Justin, TX 76247
PHONE 817-636-2365
BIDDER 'S SIGNATURE 
PRINT BIDDER 'S NAME Ryan Frost
DATE 1/5/2010

**FMVSS CERTIFICATION - 49 CFR 571 Part D**  
(Circle all applicable standard #s)

#	Title	#	Title
101	#*Controls and Displays	102	#*Transmission shift lever sequence, starter, interlock, transmission braking effect
103	#*Windshield defrost and defogging system	104	#*Windshield wiping and washing system
105	#*Hydraulic brake system	106	#*Brake hoses
107	#*Reflecting surfaces	108	#*Lamps, reflective devices, and assoc. equip.
109	#New pneumatic tires	110	#Tire selection and rims.
111	#*Rearview mirrors	112	#*Headlamps concealment devices.
113	#*Hood latch system	114	#Theft Protection (not for walk-in vans)
115	#*V.I.N. - basic requirements	116	#*Motor vehicle brake fluids
117	#Retreaded pneumatic tires (to be used on rear wheels only)	118	#Power-operated window, partition, roof panel system (GVWR < 10K)
119	*New pneumatic tires for vehicles other than passenger cars	120	*Tire selection & rims for vehicles other than passenger cars
121	*Air brake system	124	#*Accelerator control system
129	#New non-pneumatic tires for passenger cars	201	#@Occupant protection in interior impact
202	#@Head restraints	203	#@Impact protect driver steering control system
204	#*Steering control rearward displace (not walk-in vans)	205	#*Glazing materials
206	#Doors, locks, and door retention components	207	#*Seating system
208	#*Occupant crash protection	209	#*Seat belt assemblies
210	#@Seat belt assembly anchorages	211	#Wheels, nuts, wheel discs, and hub caps
212	#@Windshield mounting	213	#*Child restraint system
214	#@Side impact protection (not walk-in vans)	217	*Bus emergency exits / window retention & release
219	#@Windshield zone intrusion	220	*School Bus rollover protection
301	#@Fuel system integrity (+School Bus >10K GVWR)	302	#*Flammability of interior materials
403	*Wheelchair Securement	404	*Wheelchair Securement

The undersigned BIDDER hereby certifies that all vehicles furnished meet the FMVSS IAW 49 CFR 571.

Name of Company <b>National Bus Sales and Leasing, Inc</b>	Date <b>1/5/2010</b>
Printed Name of Person Signing Form <b>Ryan Frost</b>	Signature 

\*Bus

@Bus with GVWR below 10,000 lbs.

#Passenger Car

**CHANGE FORM / REQUEST FOR APPROVED EQUALS**

<b>PREPARED BY:</b>	<b>DATE:</b>
<b>ADDRESS:</b>	<b>PHONE: (    )</b>
<b>SPEC. #: TXDOT-070-99- _____ (VEHICLE TYPE)</b>	<b>SPEC. DATE:</b>
<b>LOCATION OF REQUEST FOR CHANGE (PAGE, PARAGRAPH #):</b>	
<b>CHANGE REQUESTED</b>	
<b>COMMENTS / REASON FOR CHANGE:</b>	
<b>AGENCY USE ONLY</b>	
<b>REVIEWED BY:</b>	<b>DATE:</b>
<b>ACTION TAKEN:</b>	<b>CONTROL #:</b>
	<b>(VEH. TYPE)</b>
<b>COMMENT:</b>	

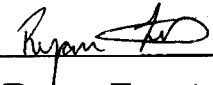
### CERTIFICATION OF RESTRICTIONS ON LOBBYING

The undersigned certifies, to the best of his or her knowledge and belief, that:

- 1) No Federal appropriated funds have been or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- 2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying", in accordance with its instructions.
- 3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance is placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, title 31 U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Executed this 5th day of January, 2010

Company: National Bus Sales and Leasing, Inc.  
Signature:   
Typed Name: Ryan Frost  
Title: Southwest Sales Representative  
Date: 1/5/2010

## Transit References

Houston Metro  
Mike Koepke 713-224-0850  
5700 Eastex Freeway  
Houston, TX 77208

Capital Metro  
Andrew Murphy 512-389-7566  
2910 East 5<sup>th</sup> Street  
Austin, TX 78702

CARTS  
Dave Marsh 512-481-1011  
2010 East 6<sup>th</sup> Street  
Austin, TX 78702

Concho Valley Council of Governments  
Robert Stephens 325-944-9666  
2801 W. Loop 306  
San Angelo, TX 76904

Central Texas Rural Transit District  
J.R. Salazar 325-625-4491  
2310 S. Concho  
Coleman, TX 76834

Hill Country Transit District  
Carole Warlick 325-372-4677  
2509 West Wallace  
San Saba, TX 76877



**BUY AMERICA  
DOMESTIC CONTENT WORKSHEET**

FORT BEND - CRUSADER

AT LEAST 60% OF THE MATERIAL COST OF THE FORT BEND CR BUS IS U.S. DOMESTIC CONTENT:

<u>COMPONENT/MANUFACTURER</u>	<u>FINAL ASS'Y</u>	<u>DOMESTIC CONTENT</u>
CHASSIS/GM	U.S.	62 % OF TOTAL COST
WHEELCHAIR LIFT/RICON	U.S.	4 % OF TOTAL COST
SEATS/FREEDMAN	U.S.	2 % OF TOTAL COST
		—————
	U.S.	68 % OF TOTAL COST

FINAL ASSEMBLY WILL BE AT IMLAY CITY, MICHIGAN, USA. THE COST OF THE FINAL ASSEMBLY WILL BE 12% OF THE TOTAL COST. THE FOLLOWING ACTIVITIES WILL TAKE PLACE AT THE FINAL ASSEMBLY POINT:

- \*CONSTRUCT BODY (ROOF, SIDEWALLS, WINDOWS AND FLOORS).
- \*MOUNT BODY TO CHASSIS
- \*INSTALL CUSTOMER SPECIFIED OPTIONS, SUCH AS WHEELCHAIR LIFTS, SEATS, FLOORING, ETC.
- \*FABRICATE AND INSTALL WIRING HARNESSSES
- \*EXTERIOR AND INTERIOR PAINT AND LETTERING.



**CHAMPION  
BUS, INC.**  
Thor Industries Commercial Bus Division

**BUY AMERICA  
DOMESTIC CONTENT WORKSHEET**

FORT BEND - CHALLENGER

AT LEAST 60% OF THE MATERIAL COST OF THE FORT BEND CH BUS IS U.S.  
DOMESTIC CONTENT:

<u>COMPONENT/MANUFACTURER</u>	<u>FINAL ASS'Y</u>	<u>DOMESTIC CONTENT</u>
CHASSIS/GM	U.S.	58 % OF TOTAL COST
WHEELCHAIR LIFT/RICON	U.S.	3 % OF TOTAL COST
SEATS/FREEDMAN	U.S.	2 % OF TOTAL COST
	U.S.	63 % OF TOTAL COST

FINAL ASSEMBLY WILL BE AT IMLAY CITY, MICHIGAN, USA. THE COST OF THE FINAL ASSEMBLY WILL BE 12% OF THE TOTAL COST. THE FOLLOWING ACTIVITIES WILL TAKE PLACE AT THE FINAL ASSEMBLY POINT:

\*CONSTRUCT BODY (ROOF, SIDEWALLS, WINDOWS AND FLOORS).

\*MOUNT BODY TO CHASSIS

\*INSTALL CUSTOMER SPECIFIED OPTIONS, SUCH AS WHEELCHAIR LIFTS, SEATS, FLOORING, ETC.

\*FABRICATE AND INSTALL WIRING HARNESSSES

\*EXTERIOR AND INTERIOR PAINT AND LETTERING.



**BUY AMERICA  
DOMESTIC CONTENT WORKSHEET**

FORT BEND - DEFENDER

AT LEAST 60% OF THE MATERIAL COST OF THE FORT BEND DF BUS IS U.S.  
DOMESTIC CONTENT:

<u>COMPONENT/MANUFACTURER</u>	<u>FINAL ASS'Y</u>	<u>DOMESTIC CONTENT</u>
CHASSIS/FREIGHTLINER	U.S.	67 % OF TOTAL COST
WHEELCHAIR LIFT/RICON	U.S.	2 % OF TOTAL COST
SEATS/FREEDMAN	U.S.	4 % OF TOTAL COST
	U.S.	73 % OF TOTAL COST

FINAL ASSEMBLY WILL BE AT IMLAY CITY, MICHIGAN, USA. THE COST OF THE FINAL ASSEMBLY WILL BE 12% OF THE TOTAL COST. THE FOLLOWING ACTIVITIES WILL TAKE PLACE AT THE FINAL ASSEMBLY POINT:

- \*CONSTRUCT BODY (ROOF, SIDEWALLS, WINDOWS AND FLOORS).
- \*MOUNT BODY TO CHASSIS
- \*INSTALL CUSTOMER SPECIFIED OPTIONS, SUCH AS WHEELCHAIR LIFTS, SEATS, FLOORING, ETC.
- \*FABRICATE AND INSTALL WIRING HARNESSSES
- \*EXTERIOR AND INTERIOR PAINT AND LETTERING.

## Frost, Ryan

---

**From:** Lynch, Karla  
**Sent:** Tuesday, January 05, 2010 11:33 AM  
**To:** Frost, Ryan  
**Subject:** service center closest to Rosenberg

Ryan

They are the closest that service diesel/medium duty

### **Classic Chevrolet Sugar Land**

13115 Southwest Freeway, Sugar Land, TX

(281) 491-9000

[classicchevysugarland.com](http://classicchevysugarland.com)

## Frost, Ryan

---

**From:** Lynch, Karla  
**Sent:** Tuesday, January 05, 2010 11:17 AM  
**To:** Frost, Ryan  
**Subject:** RE: Ft. Bend

Ryan

Here are some ACC service facilities in Houston

Limotech  
6529 Cunningham Rd.  
Houston, TX 77041  
281-531-4204

RPM Automotive  
8614 Beverlyhill St.  
Houston, TX 77063  
713-780-4049

Upland Automotive  
1408 Upland r.  
Houston, TX 77043  
713-464-1424

**PARTIAL  
STURAA TEST  
7 YEAR  
200,000 MILE BUS  
from  
CHAMPION BUS INC.  
MODEL CRUSADER/AMERICAN CRUSADER**

**APRIL 2009**

**PTI-BT-R0903**

**PENNSYLVANIA STATE**



**The Thomas D. Larson  
Pennsylvania Transportation Institute**

201 Transportation Research Building (814) 865-1891  
The Pennsylvania State University  
University Park, PA 16802

**Bus Testing and Research Center**

2237 Old Route 220 N. (814) 695-3404  
Duncansville, PA 16635

## EXECUTIVE SUMMARY

Champion Bus Inc. submitted a model Crusader/American Crusader, gasoline-powered 10 seat (including the driver) 23-foot bus, for a partial STURAA test in the 7 yr/200,000 mile category. The odometer reading at the time of delivery was 506 miles. Testing started on January 19, 2009 and was completed on March 25, 2009. The Check-In section of the report provides a description of the bus and specifies its major components.

The primary part of this partial test was the Structural Durability Test, which also provides the information for the Maintainability and Reliability results. The Structural Durability Test was started on January 29, 2009 and was completed on March 20, 2009.

The interior of the bus is configured with seating for 10 passengers including the driver plus 1 wheelchair position. Free floor space will accommodate 7 standing passengers resulting in a potential load of 17 persons plus 1 wheelchair position. At 150 lbs per person, this load results in a measured gross vehicle weight of 11,940 lbs. The first segment of the Structural Durability Test was performed with the bus loaded to a GWW of 11,940 lbs. The middle segment was performed at a seated load weight of 10,960 lbs and the final segment was performed at a curb weight of 8,890 lbs. Durability driving resulted in unscheduled maintenance and failures that involved a variety of subsystems. A description of failures, and a complete and detailed listing of scheduled and unscheduled maintenance is provided in the Maintainability section of this report.

The Reliability section compiles failures that occurred during Structural Durability Testing. Breakdowns are classified according to subsystems. The data in this section are arranged so that those subsystems with more frequent problems are apparent. The problems are also listed by class as defined in Section 2. The test bus encountered no Class 1 or Class 2 failures. Of the 4 reported failures, 2 were Class 3 and 2 were Class 4.

The Safety Test, (a double-lane change, obstacle avoidance test) was safely performed in both right-hand and left-hand directions up to a maximum test speed of 45 mph.

**STURAA TEST**

**7 YEAR**

**200,000 MILE BUS**

**from**

**CHAMPION BUS INC.**

**MODEL CHALLENGER**

**APRIL 2007**

**PTI-BT-R0617**

**PENNSTATE**



---

**The Pennsylvania Transportation Institute**

201 Transportation Research Building  
The Pennsylvania State University  
University Park, PA 16802

(814)865-1891

**Bus Testing and Research Center**

2237 Old Route 220 N.  
Duncansville, PA 16635

(814) 695-3404

## EXECUTIVE SUMMARY

Champion Bus Inc. submitted a model Challenger, diesel-powered 19 seat (including the driver) 25-foot bus, for a 7 yr/200,000 mile STURAA test. The odometer reading at the time of delivery was 496 miles. Testing started on December 6, 2006 and was completed on March 16, 2007. The Check-In section of the report provides a description of the bus and specifies its major components.

The primary part of the test program is the Structural Durability Test, which also provides the information for the Maintainability and Reliability results. The Structural Durability Test was started on December 11, 2006 and was completed on March 12, 2007.

The interior of the bus is configured with seating for 19 passengers including the driver. Free floor space will accommodate 11 standing passengers resulting in a potential load of 30 persons. At 150 lbs per person, this load results in a measured gross vehicle weight of 15,030 lbs. In order to avoid exceeding the GAWR (4,600 lbs) of the front axle and (9,880 lbs) of the rear axle, ballast for 6 standing passengers was eliminated. This reduction from full capacity resulted in an adjusted measured vehicle weight of 14,070 lbs and was used for all dynamic testing. The first segment of the Structural Durability Test was performed with the bus loaded to a GVW of 14,070 lbs. The middle segment was performed at a seated load weight of 13,390 lbs and the final segment was performed at a curb weight of 10,410 lbs. Durability driving resulted in unscheduled maintenance and failures that involved a variety of subsystems. A description of failures and a complete and detailed listing of scheduled and unscheduled maintenance are provided in the Maintainability section of this report.

Accessibility, in general, was adequate. The alternator is located down low between the engine, wheel well and cowling. The lower of the two A/C compressors is also difficult to access. The remaining components covered in Section 1.3 (repair and/or replacement of selected subsystems), along with all other components encountered during testing, were found to be readily accessible and no restrictions were noted.

The Reliability section compiles failures that occurred during Structural Durability Testing. Breakdowns are classified according to subsystems. The data in this section are arranged so that those subsystems with more frequent problems are apparent. The problems are also listed by class as defined in Section 2. The test bus encountered no Class 1 failures. The one Class 2 failure was the result of a failed factory recalled exhaust pressure sensor. The two remaining failures were both Class 4.

The Safety Test, (a double-lane change, obstacle avoidance test) was safely performed in both right-hand and left-hand directions up to a maximum test speed of 45 mph. The performance of the bus is illustrated by a speed vs. time plot. Acceleration and gradeability test data are provided in Section 4, Performance. The average time to obtain 50 mph was 17.00 seconds.

The Shakedown Test produced a maximum final loaded deflection of 0.229 inches with a permanent set ranging between -0.002 to 0.006 inches under a distributed static load of 11,100 lbs. The Distortion Test was completed with all subsystems, doors and escape mechanisms operating properly except the outer barrier of the handicap device did not deploy in a number of positions. No water leakage was observed throughout the test. All other subsystems operated properly.

The test bus submitted for testing was not equipped with any type of tow eyes or tow hooks, therefore, the Static Towing Test was not performed. The Dynamic Towing Test was performed by means of a front-lift tow. The towing interface was accomplished using a hydraulic under-lift wrecker. The bus was towed without incident and no damage resulted from the test. The manufacturer does not recommend towing the bus from the rear; therefore, a rear test was not performed. The Jacking and Hoisting Tests were also performed without incident. The bus was found to be stable on the jack stands, and the minimum jacking clearance observed with a tire deflated was 8.8 inches.

A Fuel Economy Test was run on simulated central business district, arterial, and commuter courses. The results were 6.75 mpg, 7.37 mpg, and 11.71 mpg respectively; with an overall average of 7.89 mpg.

A series of Interior and Exterior Noise Tests was performed. These data are listed in Section 7.1 and 7.2 respectively.

**STURAA TEST**

**10 YEAR**

**350,000 MILE BUS**

**from**

**CHAMPION BUS INC.  
GENERAL COACH AMERICA INC.**

**MODEL DEFENDER**

**DECEMBER 2009**

**PTI-BT-R0911**

**PENNS**STATE



---

**The Thomas D. Larson Transportation Institute**

201 Transportation Research Building (814) 865-1891  
The Pennsylvania State University  
University Park, PA 16802

**Bus Testing and Research Center**

2237 Old Route 220 N. (814) 695-3404  
Duncansville, PA 16635

## EXECUTIVE SUMMARY

Champion Bus Inc. General Coach America Inc. submitted a model Defender. The bus is built on a Freightliner model Business Class M2 chassis, diesel-powered 29 seat (including the driver) 35-foot bus, for a 10 yr/350,000 mile STURAA test. The odometer reading at the time of delivery was 2,670 miles. Testing started on June 15, 2009 and was completed on November 27, 2009. The Check-In section of the report provides a description of the bus and specifies its major components.

The primary part of the test program is the Structural Durability Test, which also provides the information for the Maintainability and Reliability results. The Structural Durability Test was started on July 3, 2009 and was completed on November 23, 2009.

The interior of the bus is configured with seating for 29 passengers including the driver plus 2 wheelchair positions. Free floor space will accommodate 20 standing passengers resulting in a potential load of 49 persons plus 2 handicap positions. At 150 lbs per person and 600 lbs per wheelchair position, this load results in a measured gross vehicle weight of 24,540 lbs. The first segment of the Structural Durability Test was performed with the bus loaded to a GVW of 24,540 lbs. The middle segment was performed at a seated load weight of 21,630 lbs and the final segment was performed at a curb weight of 16,440 lbs. Durability driving resulted in unscheduled maintenance and failures that involved a variety of subsystems. A description of failures, and a complete and detailed listing of scheduled and unscheduled maintenance is provided in the Maintainability section of this report.

Accessibility, in general, was adequate, components covered in Section 1.3 (Repair and/or Replacement of Selected Subsystems) along with all other components encountered during testing, were found to be readily accessible and no restrictions were noted.

The Reliability section compiles failures that occurred during Structural Durability Testing. Breakdowns are classified according to subsystems. The data in this section are arranged so that those subsystems with more frequent problems are apparent. The problems are also listed by class as defined in Section 2. The test bus encountered no Class 1 or Class 4 failures. Of the three reported failures, one was a Class 2 and two were Class 3.

The Safety Test, (a double-lane change, obstacle avoidance test) was safely performed in both right-hand and left-hand directions up to a maximum test speed of 45 mph. The performance of the bus is illustrated by a speed vs. time plot. Acceleration and gradeability test data are provided in Section 4, Performance. The average time to obtain 50 mph was 24.46 seconds.

The Shakedown Test produced a maximum final loaded deflection of 0.274 inches with a permanent set ranging between -0.004 to 0.002 inches under a distributed static load of 19,575 lbs. The Distortion Test was completed with all subsystems, doors and escape mechanisms operating properly. No water leakage was observed throughout the test. All subsystems operated properly.

The Static Towing Test was performed using a target load (towing force) of 19,728 lbs. All four front pulls were completed to the full test load with no damage or deformation observed. The Dynamic Towing Test was performed by means of a front-lift tow. The towing interface was accomplished using a hydraulic under-lift wrecker. The bus was towed without incident and no damage resulted from the test. The manufacturer does not recommend towing the bus from the rear, therefore, a rear test was not performed. The Jacking and Hoisting Tests were also performed without incident. The bus was found to be stable on the jack stands, and the minimum jacking clearance observed with a tire deflated was 5.0 inches.

A Fuel Economy Test was run on simulated central business district, arterial, and commuter courses. The results were 6.39 mpg, 6.86 mpg, and 14.21 mpg respectively; with an overall average of 7.73 mpg.

A series of Interior and Exterior Noise Tests was performed. These data are listed in Section 7.1 and 7.2 respectively.



# **CHAMPION BUS, INC.**

Thor Industries Commercial Bus Division

January 27, 2009

To Whom It May Concern:

Champion Bus, Inc., hereby certifies that the buses we provide comply with all applicable Federal Motor Vehicle Safety Standards in effect on their date of manufacture.

A handwritten signature in black ink, appearing to read "Michael Clark".

Michael Clark  
Engineering Manager

Crusader

Quantity	Model	Description	GVW
1	<b>CR210GJ</b>	<b>CRUSADER 159-GMT610 6.6L DIESEL</b>	<b>12,300</b>
1	23234	BATTERY, BOX SLIDE TRAY (CUTAWAYS)	
1	14047	EXHAUST, STREET SIDE	
1	13012	FUEL SENDING UNIT ACCESS COVER-"DIAMOND PLATE"	
1	10605	MUD FLAPS FRONT	
1	10059	RUNNING BOARD, 12" WIDE	
1	10014	SPARE TIRE/WHEEL 16.0" SHIP LOOSE	
1	12980	TOW HOOKS, REAR (ALL)	
1	22002	ALTERNATOR, PX4 200/170 (GMT610 6.0 GAS ONLY)	
1	23152	AS BUILT WIRING DIAGRAMS	
1	25107	<b>ELECTRIC PACKAGE 2</b>	
1	23096	LIGHT, DOOR AJAR W/BUZZER (REAR DOOR)	
1	80913	LIGHT, OVERHEAD GLOVE BOX	
2	20046	LIGHT, REAR CENTER BRAKE "LED"	
2	MOPT	LIGHT, 4" AMBER REAR WALL SWITCH ACTIVATED	
1	23268	LIGHTS, LED ALL EXTERIOR (NON ADA) STANDARD LIGHTS ONLY- SOUND OFF, INCLUDES REAR CENTER AND SIDE DIRECTIONAL/TURN	
1	22833	MASTER DISCONNECT SWITCH (BODY ONLY)	
21	<b>30032</b>	<b>FLOORING, FULL RUBBER GRAY RCA (PER FOOT)</b>	
1	33240	PLYWOOD, 5/8" MARINE TECH FLOOR	
1	30008	YELLOW STANDEE LINE	
1	33117	YELLOW STEP EDGE NOSINGS	
1	45294	67,000 BTU A/C ACC 6.6 SNG ALT	
1	40808	HEATER 35, 000 BTU	
1	40163	EXTRA VALVE FOR HEATER LINES (ONE IS STANDARD)	
1	53089	BUMPER, ANTI-RIDE SHIELD	
1	54040	DOOR, REAR 37-1/8 x 56 w/2 WINDOWS	
1	52956	WINDOWS BOTH SIDES OF REAR DOOR	
1	53149	DRIP MOLDING OVER WINDOWS	
1	<b>65514</b>	<b>LIFT, PACKAGE RICON K-5010 403/404</b>	
1	60026	POUCH, KINEDYNE TIEDOWN - GRAY VINYL	
1	60152	KINEDYNE FF627-SC	
1	71826	GRAB RAILS, CEILING	
1	70208	BACKUP ALARM (SMALL)	
1	74004	ESCAPE HATCH STANDARD VENT MODEL (TRANSPEC)	
1	72814	EXIT BUZZER (1 PER BUS) "IN DASH"	
1	72816	EXIT SWITCH (PER EXIT)	
1	73034	EXTINGUISHER FIRE 10 POUND	
1	72827	FLARE KIT - REFLECTOR	
1	73242	FRESNAL LENS	
1	73036	KIT, FIRST AID - 24 UNIT	

Crusader

1	72809	MIRROR, INTERIOR 6.0" x 16.0"	
1	70613	SEAT BELT WEB CUTTER	
3	71103	PADDED MODESTY PANEL	
1	73040	STANCHION, w/MODESTY/DRIVERS BARRIER	
1	83163	DRIVER'S COAT HOOK w/TIE BACK	
1	80008	FRONT GLOVE BOX, LOCKING	
21	82004	INTERIOR, CEILING FRP (PER FOOT)	
21	82005	INTERIOR, WALLS FRP (PER FOOT)	
1	52319	BLACKOUT WINDOWS - 1" AROUND WINDOWS	
1	51604	PAINT CUSTOM (CALL FOR QUOTE)	
4	94006	MID HI FEATHERWEIGHT RIGID w/T LEG DOUBLE	
1	94007	MID HI FEATHERWEIGHT RIGID w/T LEG SINGLE 2-1 SEATING	
1	94066	SEAT, 35" FSC TWO STEP FOLDAWAY FLIP	
11	90042	LEVEL 3 FABRIC UPGRADE (PER PASSENGER)	
1	90003	COVER DRIVER SEAT LEVEL 3	
11	94015	SEAT BELT, 2 PT RETRACTABLE (N/A W-PERIMETER SEATS OR FLIP SEATS)	
5	90037	FREEDMAN ABS BACK PROTECTOR	
4	95015	MOLDED AV GRAB HANDLE TOP BLACK	
1	MOPT	MANUAL SWITCH FOR FAST IDLE	
1	10120	VOLTMETER - HEAVY DUTY	
1	MOPT	12 GA 304 SS ENTRY DOOR FRAME	
1	MOPT	12 GA 304 SS LIFT DOOR FRAMES	
1	55248	DOOR PARA DUAL W/ DUAL HANDLE	
1	MOPT	12 GA 304 SS REAR EXIT DOOR FRAME	
1	MOPT	ASSORTED DECALS TXDOT	
1	MOPT	EXTRA INSULATION IN MOTOR COVER	
1	MANUALS	MANUALS INCLUDING HELMS	

Crusader 2010

Quantity	Model	Description	GVW
1	<b>CR210GJ</b>	<b>CRUSADER 159-GMT610 6.6L DIESEL</b>	<b>12,300</b>
1	23234	BATTERY, BOX SLIDE TRAY (CUTAWAYS)	
1	14047	EXHAUST, STREET SIDE	
1	13012	FUEL SENDING UNIT ACCESS COVER-"DIAMOND PLATE"	
1	10605	MUD FLAPS FRONT	
1	10059	RUNNING BOARD, 12" WIDE	
1	10014	SPARE TIRE/WHEEL 16.0" SHIP LOOSE	
1	12980	TOW HOOKS, REAR (ALL)	
1	22002	ALTERNATOR, PX4 200/170 (GMT610 6.0 GAS ONLY)	
1	23152	AS BUILT WIRING DIAGRAMS	
1	25107	<b>ELECTRIC PACKAGE 2</b>	
1	23096	LIGHT, DOOR AJAR W/BUZZER (REAR DOOR)	
1	80913	LIGHT, OVERHEAD GLOVE BOX	
2	20046	LIGHT, REAR CENTER BRAKE "LED"	
2	MOPT	LIGHT, 4" AMBER REAR WALL SWITCH ACTIVATED	
1	23268	LIGHTS, LED ALL EXTERIOR (NON ADA) STANDARD LIGHTS ONLY- SOUND OFF, INCLUDES REAR CENTER AND SIDE DIRECTIONAL/TURN	
1	22833	MASTER DISCONNECT SWITCH (BODY ONLY)	
21	<b>30032</b>	<b>FLOORING, FULL RUBBER GRAY RCA (PER FOOT)</b>	
1	33240	PLYWOOD, 5/8" MARINE TECH FLOOR	
1	30008	YELLOW STANDEE LINE	
1	33117	YELLOW STEP EDGE NOSINGS	
1	45294	67,000 BTU A/C ACC 6.6 SNG ALT	
1	40808	HEATER 35, 000 BTU	
1	40163	EXTRA VALVE FOR HEATER LINES (ONE IS STANDARD)	
1	53089	BUMPER, ANTI-RIDE SHIELD	
1	54040	DOOR, REAR 37-1/8 x 56 w/2 WINDOWS	
1	52956	WINDOWS BOTH SIDES OF REAR DOOR	
1	53149	DRIP MOLDING OVER WINDOWS	
1	<b>65514</b>	<b>LIFT, PACKAGE RICON K-5010 403/404</b>	
1	60026	POUCH, KINEDYNE TIEDOWN - GRAY VINYL	
1	60152	KINEDYNE FF627-SC	
1	71826	GRAB RAILS, CEILING	
1	70208	BACKUP ALARM (SMALL)	
1	74004	ESCAPE HATCH STANDARD VENT MODEL (TRANSPEC)	
1	72814	EXIT BUZZER (1 PER BUS) "IN DASH"	
1	72816	EXIT SWITCH (PER EXIT)	
1	73034	EXTINGUISHER FIRE 10 POUND	
1	72827	FLARE KIT - REFLECTOR	
1	73242	FRESNAL LENS	
1	73036	KIT, FIRST AID - 24 UNIT	

Crusader 2010

1	72809	MIRROR, INTERIOR 6.0" x 16.0"	
1	70613	SEAT BELT WEB CUTTER	
3	71103	PADDED MODESTY PANEL	
1	73040	STANCHION, w/MODESTY/DRIVERS BARRIER	
1	83163	DRIVER'S COAT HOOK w/TIE BACK	
1	80008	FRONT GLOVE BOX, LOCKING	
21	82004	INTERIOR, CEILING FRP (PER FOOT)	
21	82005	INTERIOR, WALLS FRP (PER FOOT)	
1	52319	BLACKOUT WINDOWS - 1" AROUND WINDOWS	
1	51604	PAINT CUSTOM (CALL FOR QUOTE)	
4	94006	MID HI FEATHERWEIGHT RIGID w/T LEG DOUBLE	
1	94007	MID HI FEATHERWEIGHT RIGID w/T LEG SINGLE 2-1 SEATING	
1	94066	SEAT, 35" FSC TWO STEP FOLDAWAY FLIP	
11	90042	LEVEL 3 FABRIC UPGRADE (PER PASSENGER)	
1	90003	COVER DRIVER SEAT LEVEL 3	
11	94015	SEAT BELT, 2 PT RETRACTABLE (N/A W-PERIMETER SEATS OR FLIP SEATS)	
5	90037	FREEDMAN ABS BACK PROTECTOR	
4	95015	MOLDED AV GRAB HANDLE TOP BLACK	
1	MOPT	MANUAL SWITCH FOR FAST IDLE	
1	10120	VOLTMETER - HEAVY DUTY	
1	MOPT	12 GA 304 SS ENTRY DOOR FRAME	
1	MOPT	12 GA 304 SS LIFT DOOR FRAMES	
1	55248	DOOR PARA DUAL W/ DUAL HANDLE	
1	MOPT	12 GA 304 SS REAR EXIT DOOR FRAME	
1	MOPT	ASSORTED DECALS TXDOT	
1	MOPT	EXTRA INSULATION IN MOTOR COVER	
1	MANUALS	MANUALS INCLUDING HELMS	



Challenger

Quantity	Model	Description	GWV
1	CH250GZ	CHALLENGER 159 GMT 610 6.0	14,200
1	23234	BATTERY, BOX SLIDE TRAY (CUTAWAYS)	
1	14047	EXHAUST, STREET SIDE	
1	13012	FUEL SENDING UNIT ACCESS COVER-"DIAMOND PLATE"	
1	10605	MUD FLAPS FRONT	
1	10059	RUNNING BOARD, 12" WIDE	
1	10014	SPARE TIRE/WHEEL 16.0" SHIP LOOSE	
1	10067	SUSPENSION, MOR/RIDE REAR-GMT610-139-159" W/B	
1	10009	TOW EYES, REAR (ALL)	
1	12212	WHEEL, INSERT 16.0" S/S (SET OF 4)	
1	22002	ALTERNATOR, PX4 200/170	
1	23152	AS BUILT WIRING DIAGRAMS	
1	23096	LIGHT, DOOR AJAR W/BUZZER (REAR DOOR)	
2	20046	LIGHT, REAR CENTER BRAKE "LED"	
2	MOPT	LIGHT, 4" AMBER REAR WALL SWITCH ACTIVATED	
1	23268	LIGHTS, LED ALL EXTERIOR (NON ADA) STANDARD LIGHTS ONLY-SOUND OFF, INCLUDES REAR CENTER AND SIDE DIRECTIONAL/TURN	
1	22833	MASTER DISCONNECT SWITCH (BODY ONLY)	
1	25031	PAGE, INTEGRATED PA W-MICROPHONE (AUDIO ONLY)	
1	21830	RADIO, AM/FM CD PLAYER w/4 SPEAKERS	
1	22998	RADIO, TWO WAY PREP	
1	30142	FLOORING - COVERED UP SIDEWALL	
25	30032	FLOORING, FULL RUBBER GRAY RCA (PER FOOT)	
1	33240	PLYWOOD, 5/8" MARINE TECH FLOOR	
1	30008	YELLOW STANDEE LINE	
1	33117	YELLOW STEP EDGE NOSINGS	
1	45294	67,000 BTU A/C ACC 6.6 SNG ALT	
1	40808	HEATER 35, 000 BTU	
1	40163	EXTRA VALVE FOR HEATER LINES (ONE IS STANDARD)	
1	50002	BUMPER, ENERGY ABSORBING REAR CH/CR-(ROMEO RIM)	
1	50409	DOOR, ENTRANCE 30" ELECTRIC CUTAWAY W/AUTO REVERSE	
1	54040	DOOR, REAR 37-1/8 x 56 w/2 WINDOWS	
1	52956	WINDOWS BOTH SIDES OF REAR DOOR	
1	50405	SIGN, DESTINATION FRONT TRANSIGN ROLLER CURTAIN	
1	53174	SIGN, DESTINATION SIDE TRANSIGN ROLLER CURTAIN	
1	50406	SIGN, DESTINATIONS PRINTED ON CURTAIN (QUOTE)	
1	63009	LIFT, CALIFORNIA PADDING KIT	
1	65514	LIFT, PACKAGE RICON K-5010 403/404	
2	60152	KINEDYNE, TIEDOWN FF627-SC	
1	71826	GRAB RAILS, CEILING	
1	70208	BACKUP ALARM (SMALL)	
1	74004	ESCAPE HATCH STANDARD VENT MODEL (TRANSPEC)	
1	72814	EXIT BUZZER (1 PER BUS) "IN DASH"	
2	72816	EXIT SWITCH (PER EXIT)	
1	73034	EXTINGUISHER FIRE 10 POUND	

Challenger

1	72827	FLARE KIT - REFLECTOR	
1	73242	FRESNAL LENS	
1	73036	KIT, FIRST AID - 24 UNIT	
1	72809	MIRROR, INTERIOR 6.0" x 16.0"	
1	72975	MIRRORS, EXTERIOR HEATED/REMOTE GM610 CH/R-ROSCO S/S ARMS	
1	70613	SEAT BELT WEB CUTTER	
3	71103	PADDED MODESTY PANEL	
1	73040	STANCHION, w/MODESTY/DRIVERS BARRIER	
25	82004	INTERIOR, CEILING FRP (PER FOOT)	
25	82005	INTERIOR, WALLS FRP (PER FOOT)	
1	52319	BLACKOUT WINDOWS - 1" AROUND WINDOWS	
1	51604	PAINT CUSTOM (CALL FOR QUOTE)	
7	94006	MID HI FEATHERWEIGHT RIGID w/T LEG DOUBLE	
1	94007	MID HI FEATHERWEIGHT RIGID w/T LEG SINGLE 2-1 SEATING	
15	90042	LEVEL 3 FABRIC UPGRADE (PER PASSENGER)	
1	90003	COVER DRIVER SEAT LEVEL 3	
15	94014	SEAT BELT 74" RETRACTABLE TRAVELING	
10	90037	FREEDMAN ABS BACK PROTECTOR	
5	95015	MOLDED AV GRAB HANDLE TOP BLACK	
1	10120	VOLTMETER - HEAVY DUTY	
1	MOPT	12 GA 304 SS ENTRY DOOR FRAME	
1	MOPT	12 GA 304 SS LIFT DOOR FRAMES	
1	55248	DOOR PARA DUAL W/ DUAL HANDLE	
1	MOPT	12 GA 304 SS REAR EXIT DOOR FRAME	
1	MOPT	ASSORTED DECALS TXDOT	
1	85340	FAREBOX DIAMOND WITH 2 VAULTS	
1	MOPT	EXTRA INSULATION IN MOTOR COVER	
1	MANUALS	MANUALS	

Challenger 2010

Quantity	Model	Description	GVW
1	CH250GZ	CHALLENGER 159 GMT 610 6.0	14,200
1	23234	BATTERY, BOX SLIDE TRAY (CUTAWAYS)	
1	14047	EXHAUST, STREET SIDE	
1	13012	FUEL SENDING UNIT ACCESS COVER-"DIAMOND PLATE"	
1	10605	MUD FLAPS FRONT	
1	10059	RUNNING BOARD, 12" WIDE	
1	10014	SPARE TIRE/WHEEL 16.0" SHIP LOOSE	
1	10067	SUSPENSION, MOR/RIDE REAR-GMT610-139-159" W/B	
1	10009	TOW EYES, REAR (ALL)	
1	12212	WHEEL, INSERT 16.0" S/S (SET OF 4)	
1	22002	ALTERNATOR, PX4 200/170	
1	23152	AS BUILT WIRING DIAGRAMS	
1	23096	LIGHT, DOOR AJAR W/BUZZER (REAR DOOR)	
2	20046	LIGHT, REAR CENTER BRAKE "LED"	
2	MOPT	LIGHT, 4" AMBER REAR WALL SWITCH ACTIVATED	
1	23268	LIGHTS, LED ALL EXTERIOR (NON ADA) STANDARD LIGHTS ONLY- SOUND OFF, INCLUDES REAR CENTER AND SIDE DIRECTIONAL/TURN	
1	22833	MASTER DISCONNECT SWITCH (BODY ONLY)	
1	25031	PAGE, INTEGRATED PA W-MICROPHONE (AUDIO ONLY)	
1	21830	RADIO, AM/FM CD PLAYER w/4 SPEAKERS	
1	22998	RADIO, TWO WAY PREP	
1	30142	FLOORING - COVED UP SIDEWALL	
25	30032	FLOORING, FULL RUBBER GRAY RCA (PER FOOT)	
1	33240	PLYWOOD, 5/8" MARINE TECH FLOOR	
1	30008	YELLOW STANDEE LINE	
1	33117	YELLOW STEP EDGE NOSINGS	
1	45294	67,000 BTU A/C ACC 6.6 SNG ALT	
1	40808	HEATER 35, 000 BTU	
1	40163	EXTRA VALVE FOR HEATER LINES (ONE IS STANDARD)	
1	50002	BUMPER, ENERGY ABSORBING REAR CH/CR-(ROMEO RIM)	
1	50409	DOOR, ENTRANCE 30" ELECTRIC CUTAWAY W/AUTO REVERSE	
1	54040	DOOR, REAR 37-1/8 x 56 w/2 WINDOWS	
1	52956	WINDOWS BOTH SIDES OF REAR DOOR	
1	50405	SIGN, DESTINATION FRONT TRANSIGN ROLLER CURTAIN	
1	53174	SIGN, DESTINATION SIDE TRANSIGN ROLLER CURTAIN	
1	50406	SIGN, DESTINATIONS PRINTED ON CURTAIN (QUOTE)	
1	63009	LIFT, CALIFORNIA PADDING KIT	
1	65514	LIFT, PACKAGE RICON K-5010 403/404	
2	60152	KINEDYNE, TIEDOWN FF627-SC	
1	71826	GRAB RAILS, CEILING	
1	70208	BACKUP ALARM (SMALL)	
1	74004	ESCAPE HATCH STANDARD VENT MODEL (TRANSPEC)	
1	72814	EXIT BUZZER (1 PER BUS) "IN DASH"	
2	72816	EXIT SWITCH (PER EXIT)	
1	73034	EXTINGUISHER FIRE 10 POUND	

Challenger 2010

1	72827	FLARE KIT - REFLECTOR	
1	73242	FRESNAL LENS	
1	73036	KIT, FIRST AID - 24 UNIT	
1	72809	MIRROR, INTERIOR 6.0" x 16.0"	
1	72975	MIRRORS, EXTERIOR HEATED/REMOTE GM610 CH/R-ROSCO S/S ARMS	
1	70613	SEAT BELT WEB CUTTER	
3	71103	PADDED MODESTY PANEL	
1	73040	STANCHION, w/MODESTY/DRIVERS BARRIER	
25	82004	INTERIOR, CEILING FRP (PER FOOT)	
25	82005	INTERIOR, WALLS FRP (PER FOOT)	
1	52319	BLACKOUT WINDOWS - 1" AROUND WINDOWS	
1	51604	PAINT CUSTOM (CALL FOR QUOTE)	
7	94006	MID HI FEATHERWEIGHT RIGID w/T LEG DOUBLE	
1	94007	MID HI FEATHERWEIGHT RIGID w/T LEG SINGLE 2-1 SEATING	
15	90042	LEVEL 3 FABRIC UPGRADE (PER PASSENGER)	
1	90003	COVER DRIVER SEAT LEVEL 3	
15	94014	SEAT BELT 74" RETRACTABLE TRAVELING	
10	90037	FREEDMAN ABS BACK PROTECTOR	
5	95015	MOLDED AV GRAB HANDLE TOP BLACK	
1	10120	VOLTMETER - HEAVY DUTY	
1	MOPT	12 GA 304 SS ENTRY DOOR FRAME	
1	MOPT	12 GA 304 SS LIFT DOOR FRAMES	
1	55248	DOOR PARA DUAL W/ DUAL HANDLE	
1	MOPT	12 GA 304 SS REAR EXIT DOOR FRAME	
1	MOPT	ASSORTED DECALS TXDOT	
1	85340	FAREBOX DIAMOND WITH 2 VAULTS	
1	MOPT	EXTRA INSULATION IN MOTOR COVER	
1	MANUALS	MANUALS	



Defender

Quantity	Model	Description	GVW
1	DF350M2	DEFENDER 259 - M2 FREIGHTLINER 6.7 CUMMINS	26,000
1	14047	EXHAUST, STREET SIDE	
1	10013	SPARE TIRE/WHEEL 19.5" SHIP LOOSE	
1	23268	LIGHTS, LED ALL EXTERIOR (NON ADA) STANDARD LIGHTS ONLY- SOUND OFF, INCLUDES REAR CENTER AND SIDE DIRECTIONAL/TURN	
1	21602	PAGE, SYSTEM W-2 SPEAKERS-SEPARATE	
1	21830	RADIO, AM/FM CD PLAYER w/4 SPEAKERS	
1	22998	RADIO, TWO WAY PREP	
35	30032	FLOORING, FULL RUBBER GRAY RCA (PER FOOT)	
1	33240	PLYWOOD, 5/8" MARINE TECH FLOOR	
1	30008	YELLOW STANDEE LINE	
1	33117	YELLOW STEP EDGE NOSINGS	
1	MOPT	ROOF TOP AC WITH DUCTING AND PARCEL RACK	
1	40809	HEAT CIRCULATION PUMP	
2	40807	HEATER 65, 000 BTU	
1	50409	DOOR, ENTRANCE 30" ELECTRIC CUTAWAY W/AUTO REVERSE	
1	50405	SIGN, DESTINATION FRONT	
1	53174	SIGN, DESTINATION SIDE	
1	50406	SIGN, DESTINATIONS PRINTED ON CURTAIN (QUOTE)	
1	65514	LIFT, PACKAGE RICON K-5010 403/404	
2	60026	POUCH, KINEDYNE TIEDOWN - GRAY VINYL	
2	60152	KINEDYNE, FF627-SC	
1	74004	ESCAPE HATCH STANDARD VENT MODEL (TRANSPEC)	
1	73034	EXTINGUISHER FIRE 10 POUND	
1	72827	FLARE KIT - REFLECTOR	
1	74035	KIT, BLOOD BORN DISEASE	
1	73036	KIT, FIRST AID - 24 UNIT	
1	70613	SEAT BELT WEB CUTTER	
1	73040	STANCHION, w/MODESTY/DRIVERS BARRIER	
2	70038	BARRIER, PLEXIGLASS	
1	86000	PASSENGER, PULL CORD CLEAR	
2	86007	PASSENGER, PUSH BUTTON (PER LOCATION)	
1	86009	SIGNAL, CHIME 2-TONE (ADA)	
1	52319	BLACKOUT WINDOWS - 1" AROUND WINDOWS	
1	51604	PAINT CUSTOM (CALL FOR QUOTE)	
35	50212	FRP, GELCOAT EXTERIOR (PER FOOT)	
12	94006	MID HI FEATHERWEIGHT RIGID w/T LEG DOUBLE	
4	94066	SEAT, 35" FSC TWO STEP FOLDAWAY FLIP	
32	90047	LEVEL 4 FABRIC UPGRADE (PER PASSENGER)	
1	90048	LEVEL 4 FABRIC UPGRADE - DRIVER SEAT	
32	94013	60" STANDARD SEAT BELTS	

Defender

16	90030	FREEDMAN US ARM (FLIP UP)	
1	10120	VOLTMETER - HEAVY DUTY	
1	MOPT	12 GA 304 SS ENTRY DOOR FRAME	
1	MOPT	12 GA 304 SS LIFT DOOR FRAMES	
1	55248	DOOR PARA DUAL W/ DUAL HANDLE	
1	MOPT	12 GA 304 SS REAR EXIT DOOR FRAME	
1	MOPT	ASSORTED DECALS TXDOT	
1	85340	FAREBOX DIAMOND WITH 2 VAULTS	
1	MANUALS	MANUALS	
1	25000	JUMPSTART CONNECTOR	
1	MOPT	EXTRA INSULATION IN MOTOR COVER	
1	10010	ALL VEHICLES KEYED ALIKE	
1	35048	UNDERCOAT ZIEBART RAILS	
1	MOPT	EXTERIOR MOUNTED DRIVERS GRAB HANDLE	
1	MOPT	LIGHTING INTERIOR LED PKG	
2	MOPT	LIGHT, 4" AMBER REAR WALL SWITCH ACTIVATED	
1	71011	MIRRORS EXTERIOR HTD REMOTE	
35	55270	RUB RAIL- PER FOOT	
14	95015	PADDED AV GRAB HANDLE TOP BLACK	





Control No. 154809

**MOTOR VEHICLE MANUFACTURER**

LICENSE NO: 101719



**MOTOR VEHICLE DIVISION**

CHAMPION BUS INC  
PO BOX 158  
IMLAY CITY, MI 48444-0158

EXPIRES: 08/31/2011  
PHYSICAL LOCATION:  
331 GRAHAM RD  
IMLAY CITY, MI 48444-9738

THE PERSON NAMED ABOVE IS LICENSED AS A MOTOR VEHICLE MANUFACTURER FOR THE FOLLOWING LINE(S):

CHALLENGER - BS, CRUSADER - BS, DEFENDER - BS, CTS FE - BS, CTS RE - BS, CHAMPION BUS - BS

HAVING SATISFIED THE APPLICABLE REQUIREMENTS OF CHAPTER 2301 OF THE TEXAS OCCUPATIONS CODE, CHAPTER 503 OF THE TEXAS TRANSPORTATION CODE, AND THE RULES OF THE TRANSPORTATION COMMISSION, THE PERSON NAMED ABOVE IS HEREBY LICENSED WITH THE TEXAS DEPARTMENT OF TRANSPORTATION, MOTOR VEHICLE DIVISION.

*Brett Bray*

BRETT BRAY, Director  
Texas Department of Transportation  
Motor Vehicle Division

WARNING: PENAL CODE SECTION 37.10, PROVIDES THAT TAMPERING WITH A GOVERNMENTAL RECORD IS AN OFFENSE PUNISHABLE AS A SECOND-DEGREE FELONY.



**FRANCHISED MOTOR VEHICLE DEALER**

FRANCHISE NO: A103711  
GENERAL DISTINGUISHING NO:

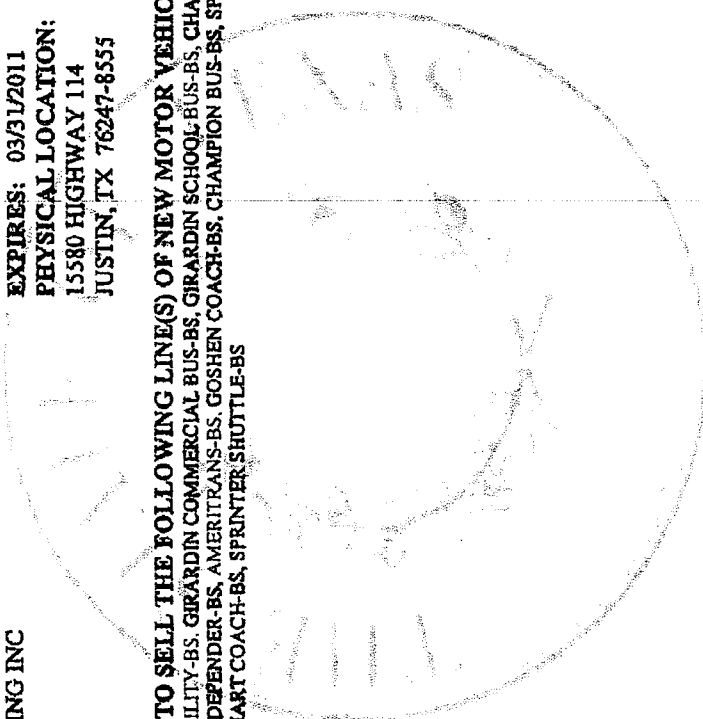
P48666 Motor Vehicle Dealer

**MOTOR VEHICLE DIVISION**

NATIONAL BUS SALES AND LEASING INC  
NATIONAL BUS SALES  
PO BOX 6549  
MARIETTA, GA 30065-0549

EXPIRES: 03/31/2011  
PHYSICAL LOCATION:  
15580 HIGHWAY 114  
JUSTIN, TX 76247-8555

**THIS DEALERSHIP IS LICENSED TO SELL THE FOLLOWING LINE(S) OF NEW MOTOR VEHICLES:**  
GLAVAL BUS-BS, STARCRAFT BUS & MOBILITY-BS, GIRARDIN COMMERCIAL BUS-BS, GIRARDIN SCHOOL BUS-BS, CHALLENGER-BS, CRISADER-BS, CTS FE-BS, DEFENDER-BS, AMERITRANS-BS, GOSHEN COACH-BS, CHAMPION BUS-BS, SPIRIT OF MOBILITY-BS, GENERAL COACH-BS, ELKHART COACH-BS, SPRINTER SHUTTLE-BS  
**ADDITIONAL LOCATION(S):**



HAVING SATISFIED THE APPLICABLE REQUIREMENTS OF CHAPTER 2301 OF THE TEXAS OCCUPATIONS CODE, CHAPTER 503 OF THE TEXAS TRANSPORTATION CODE, AND THE RULES OF THE TRANSPORTATION COMMISSION, THE PERSON NAMED ABOVE IS HEREBY LICENSED WITH THE TEXAS DEPARTMENT OF TRANSPORTATION, MOTOR VEHICLE DIVISION.

*Brett Bray*

BRETT BRAY, Director  
Texas Department of Transportation  
Motor Vehicle Division

**NATIONAL BUS SALES AND LEASING INC  
NATIONAL BUS SALES  
PO Box 6549  
Marietta, GA 30065-0549**

**License:** A103711  
**License Type:** Franchise  
**Business:** NATIONAL BUS SALES AND  
LEASING INC

**General Distinguishing Number:**  
P48666 Motor Vehicle Dealer

**Plates:**  
P43067  
No Plates Ordered  
P48666  
No Plates Ordered

**Stickers:**  
P43067  
No Stickers Ordered  
P48666  
No Stickers Ordered

# CHAMPION BUS, Inc. BUS BODY WARRANTY

**Warranty.** Subject to the conditions and limitations set forth below, that Champion Bus, Inc. (the "Manufacturer") warrants that the BUS BODY of each new Champion bus was manufactured and delivered free from substantial defects in material or workmanship and will remain in such condition for the term described below. This Warranty extends only to the Original Owner of a Champion Bus and is not transferable. "Original Owner" is defined as either the first purchaser or the first lessor of a Champion Bus.

**THIS WARRANTY DOES NOT APPLY, OR INCLUDE COVERAGE FOR, DEFECTS ATTRIBUTABLE TO:**

- a) NEGLIGENCE OR MISUSE;
  - b) FAILURE TO COMPLY WITH INSTRUCTIONS FOR SERVICE OR MAINTENANCE AS SET FORTH IN THE CHAMPION BUS MANUAL;
  - c) ACCIDENT, UNAUTHORIZED REPAIRS OR MODIFICATIONS, OR UNAUTHORIZED USE;
  - d) DAMAGE OR PRODUCT FAILURE CAUSED BY FREEZING, FLOODING, FIRE OR ANY OCCURRENCE THAT MIGHT BE TERMED AN ACT OF GOD;
  - e) ITEMS ORDINARILY DEPRECIATED BY USE, INCLUDING BUT NOT LIMITED TO, WIPER BLADES, FLUIDS, BULBS, BATTERIES, TIRES, ETC.;
- or,
- f) NORMAL MAINTENANCE ITEMS, ADJUSTMENTS PAST THIRTY(30) DAYS (DOOR ADJUSTMENTS, ETC.) AND ANY DEALER, SERVICE CENTER, OR OWNER INSTALLATION OF EQUIPMENT.

**Term.** The provisions of this Warranty commence on the day of delivery of the Champion Bus to the Original Owner and continue:

- a) as to the Bus Body, excluding the Body Structure (as defined herein), for a period of one (1) year thereafter, or 12,000 miles, whichever occurs first; and
- b) as to the Body Structure is defined as the steel body frame (which includes the side walls, roof, and floor frame only) for a period of five (5) years thereafter or 75,000 miles, whichever occurs first; and
- c) as to items not considered body structure, but are not limited to, are the following: doors, paint, corner moldings, inner ABS panels, interior wall and floor covering, windows, and trim moldings.

If the Champion Bus has been previously used in dealer demonstration service, the mileage and time accrued in the previous service is counted towards the applicable Warranty Period.

**Exclusive Remedy.** During the Warranty Period, the Manufacturer or the authorized dealer from whom the Champion Bus was purchased (the "Dealer-Seller") will, as the exclusive remedy under this Warranty, repair or replace any part or parts of the Champion Bus Body which conforms to the above Warranty, PROVIDED THAT:

- (1) the Original Owner gives written notice of any such defect to the Dealer-Seller at its business address within the Warranty Period;
- (2) such part or parts are delivered for inspection and repair in accordance with and only to the place designated by instructions from the Manufacturer or the Dealer-Seller; and
- (3) all warranty work performed under this Warranty that exceeds TWO HUNDRED DOLLARS (\$200) in value of parts and labor combined must have prior approval from the Champion Bus Warranty Department, P.O. Box 158, Imlay City, Michigan 48444, (810) 724-6474.

In the event it is not feasible for the Original Owner to deliver such part or parts to the Manufacturer or the Dealer-Seller, the repairs may be performed by a qualified repair station, PROVIDED THAT prior written authorization for such repair has been obtained from the Manufacturer's Warranty Department at the above location.

**Limitations:** This Warranty is limited exclusively to the Bus Body of the Champion Bus. The Manufacturer makes no warranty whatsoever as to parts, components or accessories not manufactured by Champion, including, but not limited to, the vehicle chassis, engine, drivetrain, tag-axle suspension systems, alternators, regulators, toilets, heaters, air conditioners, wheel chair lifts and lock assemblies, audio systems, automotive cruise controls, upholstery, tires or batteries. Such components or accessories are covered by separate warranties of the manufacturers thereof. These other producers or their local service agents should be contacted for prompt corrective warranty action and for routine service and maintenance on such components or accessories. Consult the Champion Bus Manual for additional information regarding such other warranties.

The Manufacturer reserves the right to make changes or improvements at any time in the design of or upon the Champion Bus without any obligation to make a corresponding change or improvement in or upon the Champion Buses previously manufactured by it.

The Manufacturer is required by law to have on file the names and addresses of owners of first record.

THIS IS THE EXCLUSIVE AND COMPLETE WARRANTY MADE BY THE MANUFACTURER WITH RESPECT TO THE CHAMPION BUS. NO PERSON WHATSOEVER IS AUTHORIZED TO MAKE ANY REPRESENTATION, WARRANTY OR PROMISE ON BEHALF OF THE MANUFACTURER. THE MANUFACTURER MAKES NO OTHER EXPRESS WARRANTIES AND DISCLAIMS ANY AND ALL IMPLIED WARRANTIES INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE REMEDIES SET FORTH ABOVE PERTAINING TO REPAIR OR REPLACEMENT OF PARTS OR MATERIALS ARE EXCLUSIVE OF ALL OTHER REMEDIES.

NEITHER THE MANUFACTURER NOR ITS DEALERS UNDER ANY CIRCUMSTANCES ASSUME ANY RESPONSIBILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES SUCH AS, BUT NOT LIMITED TO, EXPENSES FOR GASOLINE, TELEPHONE, TRAVEL, LODGING, LOSS OR DAMAGE TO PERSONAL PROPERTY, LOSS OF REVENUE, LOSS OF TIME, INCONVENIENCE, OR TOWING.

Any provision of this Warranty which is prohibited or unenforceable in any jurisdiction shall be, as to such jurisdiction, ineffective only to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof, and any such prohibition or unenforceability in any jurisdiction shall not invalidate or render unenforceable such provision in any other jurisdiction.

Original Owner certifies that it has received this Bus Body Warranty for Unit Serial # \_\_\_\_\_

Signature of Original Owner \_\_\_\_\_ on \_\_\_\_\_

Date Unit Sold: \_\_\_\_\_ Unit Mileage at Delivery \_\_\_\_\_

Dealer Name: \_\_\_\_\_ Phone No.: \_\_\_\_\_

Address: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Original Owner's Name: \_\_\_\_\_ Phone No.: \_\_\_\_\_

Address: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

ORIGINAL COPY - Original Owner Copy, COPY 2 - Manufacturer's duplicate plant file copy to be returned by Dealer to Manufacturer, COPY 3 - Dealer's file copy for Dealer's retention, COPY 4 - Manufacturer's suspense file copy to be kept by Manufacturer and then re-filed with returned blue copy.

OWNER COPY



U.S. Department  
Of Transportation  
**Federal Transit  
Administration**

Headquarters

1200 New Jersey Avenue S.E.  
Washington DC 20590

October 6, 2009

Ms. Kathleen Gaffney  
DBE Liaison Officer  
Champion Bus, Inc. and General Coach  
America, Inc.  
331 Graham Road  
P.O. Box 158  
Imlay City, Michigan 48444

Re: Fiscal Year 2010 Goal

Dear Ms. Gaffney:

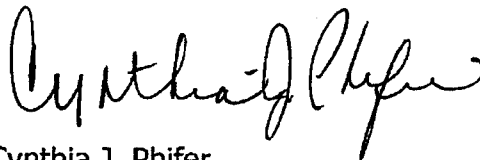
In accordance with the regulations on the Participation of Disadvantaged Business Enterprises (DBEs) in the Department of Transportation Financial Assistance Programs, 49 CFR Part 26, Section 26.49, the Federal Transit Administration's (FTA) Office of Civil Rights reviewed the DBE goal and methodology submitted by Champion Bus, Inc. and General Coach America, Inc. for the period October 1, 2009 through September 30, 2010. Based on our review, we accept your DBE goal submission of 1 percent as of October 6, 2009.

Your firm must submit semi-annual progress reports using the new reporting form entitled "Uniform Report of DBE Awards or Commitments and Payment," which is located on the website: [www.fta.dot.gov/dbe](http://www.fta.dot.gov/dbe). These reports should be submitted by June 1 (for the period October 1 – March 31) and December 1 (for period April 1 – September 30), showing contracts awarded and procurements from DBEs on transit vehicle contracts funded by the FTA. Please forward this information to:

Federal Transit Administration  
1200 New Jersey Avenue, S.E.  
Room E54-306  
Washington, DC 20590

If further assistance is needed, please contact me at (202) 366-1141, fax number at (202) 366-3475, or at my e-mail address: [Cynthia.phifer@dot.gov](mailto:Cynthia.phifer@dot.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Cynthia J. Phifer". The signature is written in a cursive style with a large initial "C" and a long, sweeping tail.

Cynthia J. Phifer  
Equal Opportunity Specialist  
FTA Office of Civil Rights

*Your New Bus*

# CUSTOMER SERVICE GUIDE

NATIONAL



BUS SALES & LEASING, INC.

**SHIPPING ADDRESS: 800 PICKENS DRIVE EXT. ■ MARIETTA, GA 30062**

**MAILING ADDRESS: P.O. BOX 6549 ■ MARIETTA, GA 30065-0549**

**(770) 422-8920 ■ (800) 282-7981**

VISIT US ON THE WEB: [www.NationalBusSales.com](http://www.NationalBusSales.com)

“The National Company with Local Service”

*Now that we are partners, we want you to know  
how you can count on us for support.*

PLEASE READ ON...

# Table of Contents

## **DELIVERY INFORMATION**

Questions and Answers regarding the delivery of your new bus	4
--	---

## **WARRANTY INFORMATION**

Questions and Answers regarding Warranty	5-8
--	-----

Customer Notes	9
----------------	---

## **SERVICE INFORMATION**

Questions and Answers about Service	10-11
-------------------------------------	-------

## **PARTS INFORMATION**

Questions and Answers about Parts	12
-----------------------------------	----

# Delivery

## QUESTIONS AND ANSWERS REGARDING THE DELIVERY OF YOUR NEW BUS

### **What to expect when bus is delivered?**

Either at the time of delivery or soon afterwards, you can expect an orientation on the product. The National Bus Sales representative with whom you have been working will provide the orientation.

Perhaps you have already received an orientation on this particular product and do not feel you need another. That is fine, but, if for any reason you would like a "refresher" orientation, we would be happy to provide it. Should you desire an orientation, please call your sales representative so we can see that one is promptly scheduled.

### **What do I do if I have problems or questions regarding the delivery of my bus?**

Call our Sales Department at **(770) 422-8920** or **TOLL FREE 1 800-282-7981**. Please let our receptionist know whether you are trying to reach the School Bus or Commercial Bus Sales Department. We will see that your needs will be promptly met!

### **What kind of maintenance procedures do I need to follow as soon as the bus is delivered to my facility?**

Of course, you will want to perform routine checks such as fluid levels, belts, hoses, and proper tire pressure. You will want to ensure all safety and operational systems are functioning properly.

National Bus Sales and/or the bus manufacturer, as part of our standard procedures, has thoroughly checked all these items before delivery to you.

### **National's Sales Directory**

#### **Sales Staff**

John Walsh	Ron Frost
Ken Bosland	Donna Sanders
Karla Lynch	Brent Roy
Beth Taylor	Troy Raley
Ryan Frost	Joe Lynch
David Clawson	Dana Spurgeon
Trisha Horne	Erica Neebling
Jerry Busbee	Greg Dae
Wayne Yates	Craig Cox
Clay Bulmer	Andrew Clawson
Drew Hawkins	Jim Sullivan
Micah Bailey	Eugene Rankin
Lindsey Taylor	Ashley Hughes
Heather Kennedy	Eugene Rankin

# Warranty

## QUESTIONS AND ANSWERS REGARDING WARRANTY

We at National Bus Sales are eager to ensure your continued satisfaction with your new bus. There may come a time when repairs covered under your Warranty Policy are needed. The following information is provided to help you understand how to utilize the Warranty services and get your bus back on the road. It is our desire to serve you as quickly and effectively as possible.

### **What is Warranty intended to do?**

The Warranty Policy described in the Owner's Certificate is intended to cover the reasonable cost of making repairs to your bus for parts that fail within the designated Warranty period. Having the cost of a repair covered under the Warranty policy means you have followed all the maintenance procedures outlined in the Owner's Manual. It also means the part failed within the designated Warranty period.

The Warranty Policy does not cover routine maintenance. It, also, does not cover repairs for parts failing outside the designated Warranty period. If you have any questions, please contact our Warranty Administrator.

### **When does my bus Warranty go into effect?**

Your new bus Warranty goes into effect at the mileage and on the date it is delivered and/or registered, whichever comes first.

### **What should I do when I need a Warranty repair?**

If you have a problem, **prior to making the repair**, contact our Warranty Administrator and explain the problem in detail. Together, we will come to a solution to get your bus back into operation with the least amount of inconvenience.

Please note all repairs must have prior approval by the Warranty Administrator. Please have the following information available:

1. Body Number
2. Mileage
3. Cause of Problem
4. Approximate Repair Cost

### **Who do I contact regarding Warranty questions and claims?**

National Bus Sales & Leasing, Inc.  
Warranty Administrator  
Mailing Address: P.O. Box 6549 ■ Marietta, GA 30065-0549  
Shipping Address: 800 Pickens Drive Ext. ■ Marietta, GA 30062  
(770) 422-8920 ■ Toll Free 1 800-282-7981 ■ Fax: (770) 422-9007  
E-mail: [Warranty@NationalBusSales.com](mailto:Warranty@NationalBusSales.com)

# Warranty

## Where can I go for Warranty service?

Depending on the type of problem, the Warranty Administrator will discuss with you the best way to get your bus back on the road. We may ask you to return the bus to the National Bus Sales service facility or take it to another authorized Warranty service facility. If circumstances warrant, you will be given authorization to repair it at your own facility.

## What procedure do I follow when Warranty repairs are made at my own facility?

Call the National Bus Sales Warranty Administrator prior to taking any action, at that time, you will be given an authorization number. Using this number when communication with National Bus Sales will expedite the Warranty claim process for you.

Once you receive the authorization number and replacement part (if necessary) from National, you may then perform the required repair.

## How do I get parts for Warranty repairs performed at my own facility?

1. Call the Warranty Administrator for the authorization number and to request the needed parts. Warranty work performed under the National Bus Sales' Warranty Policy must use parts supplied by National Bus Sales.

A Parts Credit can only be issued when parts approved by National are used. **USE OF UNAPPROVED PARTS MAY VOID THE WARRANTY.** In most cases, National will get parts to you within 36 hours. The procedure to follow for those rare occasions when National Bus Sales is unable to provide parts will be discussed later in this Customer Service Guide.

2. Receive the necessary parts from National and use them to make the needed Warranty repairs.
3. Complete the Warranty Worksheet, explaining in detail what you did to repair the bus, and send it to the National Bus Sales Warranty Administrator *along with the old part*.

## How do I receive credit for labor and parts if I perform the work in my own facility?

Once the Warranty Administrator has received your completed repair order and the old bus part(s), a claim will be filed accordingly, and upon receipt of a credit, we will credit your account.

### **LABOR**

1. The Warranty Administrator will authorize a credit to your account with National for the labor expense you have requested on your repair order.
2. Prior to the authorized repairs being complete, the Warranty Administrator will discuss with you the standard labor time involved for certain repairs and the amount you will be reimbursed. If there are extenuating circumstances, please discuss this prior to labor authorization.

### **PARTS**

When National Bus Sales sends you a part for Warranty repair, National will then debit your account for the cost of the part(s). When you return the old part along with your completed repair order, the claim will be filed. Once the claim has been approved for payment, your account will be credited.

# Warranty

## **What if I already have the necessary part at my own facility?**

To avoid confusion and any misunderstanding, call the National Warranty Administrator. You will be sent a replacement part, ensuring the part you use meets the manufacturer's Warranty qualification. Following this procedure ensures that your bus stays within the Warranty guidelines.

## **What do I do in those rare instances when National has difficulty in providing the necessary parts?**

Call the National Warranty Administrator. If it is determined we are having difficulty providing the parts necessary to make the repair, you will be given instructions to expedite the repair of your bus and still stay within the Warranty guidelines.

## **Does Warranty cover the cost of transporting the bus to and from authorized Warranty repair centers?**

You are responsible for the cost of transporting the bus to and from the authorized Warranty service center. However, we can provide this transportation as a service to our customers at a very reasonable cost. These rates are based upon factors such as distance, chase cars, number of buses, etc

**Please let us know if you need assistance in transporting the vehicle.**

## **Is towing covered under Warranty?**

The component manufacturer (i.e. engine or transmission) covers towing under certain conditions since it is considered a policy decision. The Owner's Manual will detail the circumstances. **Bus manufacturers generally do not cover towing.**

## **What maintenance records are required to ensure the cost of the repairs are covered under Warranty?**

As mentioned earlier, it is a good idea to register your Warranty with National Bus Sales. It is also a good idea to save all your receipts for work performed on your bus. It is important to keep accurate records of all maintenance work. In order to ensure repair costs are covered under the Warranty, you may have to show you followed all the required maintenance procedures described in the Owner's Manual.

## **What do I do when I have problems with the bus while under Warranty but can not get it in for repairs right away?**

The length of time needed to repair your bus will depend upon the severity of the problem, who does the work, and availability of necessary parts. If you bring the bus to the National facility, it is our goal to complete the repairs as quickly as possible. If we know the parts are not immediately available and you want us to make the repairs, we recommend you wait to bring the bus in until the parts arrive. If you receive authorization from the Warranty Administrator to do the work at your own facility and parts are available (which is so the vast majority of the time), we will get the parts to you via UPS the next day.

# Warranty

## **How do I receive proper credit for my Warranty claims?**

1. Before taking any action, call the National Bus Sales Warranty Administrator. You will be given instructions on exactly what to do and will be provided with an authorization number to use in all communications with us.
2. If you perform the work at your own facility, make sure you complete your repair order including all the information for parts and labor. Send this form to our Warranty Administrator.
3. If you perform the work at your own facility, make sure the old parts are returned to us with the label attached to the part. If you received authorization from the Warranty Administrator to purchase parts from an outside vendor, it is essential for you to send a copy of the invoice along with the old part.

## **How long does it take for me to receive credit for my Warranty claims?**

We want to expedite the processing of your Warranty claims. We are committed to crediting you within thirty days after we have received all the paperwork and failed parts for you.

**Note: It is extremely important to file your Warranty claim within 30 days of the repair, or your claim could be subject to disapproval.**

# Warranty

## **Customer Notes:**

# Service

## QUESTIONS AND ANSWERS REGARDING SERVICE

### **Who do I call if one of my buses needs maintenance, repair, body work, an option installed, or some other kind of service?**

Call our Service Department at (770) 422-8920 or Toll Free 1 800-282-7981. We will be pleased to help you!

### **What kinds of service work can I expect the National Bus Sales Service Facility to perform?**

National is fully prepared to meet your bus service needs. We are experts in installing special options like wheelchair lifts, wheelchair securement, air conditioners, and roof vents. We can, also, provide service as it relates to chassis and body repair.

Our service facility can meet your extremely important routine maintenance functions, ensuring all Warranty prerequisites are met.

If you need major repairs, like engine work, transmission or brake repairs, we will make sure your bus is operational as soon as possible.

If you have sustained body damage and need repairs, your needs can be met at the National Bus Sales service facility and/or Body Repair Facility.

### **What about transporting the bus to and from your facility?**

We provide transportation service for our customers at a reasonable cost. These rates are based on distance, time, chase vehicles needed, number of buses, etc. Please note, pick up and delivery of buses will be made during normal business hours, unless other arrangements are made with the Service Manager.

Our hours of operation are Monday – Friday, 8:00 a.m. – 5:00 p.m.

### **How long will it take to get my bus repaired?**

Of course, the length of time necessary to repair your bus will depend on the type of repair necessary, its severity, and the availability of parts.

It is the goal of National Bus Sales to expedite repairs. Once an assessment has been made, we will be able to give a more accurate estimate of repair time.

### **What can I expect to pay?**

National's Service Department rates are both reasonable and competitive. Each job will be evaluated so that you receive the level of service needed to best accommodate the repair. We provide written estimates upon request.

# Service

## **What kind of Warranty do I receive on the service work performed?**

Our standard policy is to provide a 90 day Warranty covering parts and labor on any service work we perform. Any other arrangements for specialized services need to be agreed upon in writing prior to the work being performed.

# Parts

## QUESTIONS AND ANSWERS REGARDING PARTS

### Who do I call if I need parts for my bus?

Call our Parts Department at (770) 422-8920 or Toll Free 1 800-282-7981 and we will be happy to serve you!

### What kinds of parts do you stock?

We specialize in parts for Blue Bird, Goshen and Collins Buses. We can provide parts for many manufacturers of school, commercial and transit buses, and we also supply parts for our variety of environmentally safe vehicles.

### How quickly can I expect to receive the parts I order?

Approximately 90% of all orders received by 3:00 p.m. will ship the same day. Our standard procedure is to ship parts via UPS or motor freight (F.O.B. Marietta, Georgia). Should you require guaranteed service, inform your order analyst.

### May I come by your facility and pick up the parts I need?

Of course! We would be happy to see you and get the parts you need while you wait. This would be an excellent time to meet face-to-face with the people responsible for servicing your account.

### What if you do not have the parts I need in stock?

In most cases your order can be drop-shipped from the vendor. National can expedite shipping to meet your needs. Should the vendor or manufacturer not have the component you need, we will source the part with other manufacturers to expedite shipping.

**National Bus Sales accepts checks and all major credit cards.**



Thank you for your business!  
“The National Company with Local Service”  
[www.nationalbussales.com](http://www.nationalbussales.com)



## Consolidated Certification Form

Form PTN-130  
(Rev. 07/09)  
Page 1 of 4

### I. FOR ALL BIDS:

The undersigned vendor certifies to abide by these clauses and include the following clauses in each subcontract financed in whole or in part with Federal Transit Administration (FTA) funds. Vendors are certifying by reference the entire list of FTA FY 2009 Certifications and Assurances, and shall download the same at: [http://www.fta.dot.gov/documents/2009-Certs-Appendix\\_A.pdf](http://www.fta.dot.gov/documents/2009-Certs-Appendix_A.pdf).

#### A. Disadvantaged Business Enterprises (DBE) Certification

The vendor will provide products compliant with 49 CFR 26.49 regarding the vehicle manufacturer's overall DBE goal.

#### B. Access to Third Party Contract Records

As required by 49 U.S.C. § 5325(g). The VENDOR agrees provide sufficient access to records as needed to assure proper project management and compliance with Federal laws and regulations.

#### C. Interest of Members of or Delegates to Congress

The vendor certifies that no member of or delegate to the Congress of the United States (US) shall be admitted to any share or part of this contract or to any benefit arising therefrom.

#### D. Prohibited Interest

The vendor certifies that no member, officer or employee of the Public Body or of a local public body during his or her tenure or one year thereafter shall have any interest, direct or indirect, in this contract or the proceeds thereof.

#### E. Cargo Preference - Use of United States-Flag Vessels

The vendor agrees: a. to use privately owned US -Flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material or commodities pursuant to the underlying contract to the extent such vessels are available at fair and reasonable rates for US-Flag commercial vessels; b. to furnish within 20 working days following the date of loading for shipments originating within the US or within 30 working days following the date of loading for shipments originating outside the US, a legible copy of a rated, "on-board" commercial ocean bill-of-lading in English for each shipment of cargo to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590 and to the FTA recipient (through the contractor in the case of a subcontractor's bill-of-lading).

#### F. Energy Conservation

The vendor agrees to comply with mandatory standards and policies relating to energy efficiency, which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act.

#### G. No Obligation by the Federal Government.

The Purchaser and vendor acknowledge and agree that, notwithstanding any concurrence by the Federal Government in or approval of the solicitation or award of the underlying contract, absent the express written consent by the Federal Government, the Federal Government is not a party to this contract and shall not be subject to any obligations or liabilities to the Purchaser, Contractor or any other party (whether or not a party to that contract) pertaining to any matter resulting from the underlying contract).

#### H. Program Fraud and False or Fraudulent Statements or Related Acts

The vendor acknowledges that the provisions of the Program Fraud Civil Remedies Act of 1986, as amended, 31 U.S.C. §3801 et seq. and U.S. DOT regulations, "Program Fraud Civil Remedies," 49 C.F.R. Part 31, apply to its actions pertaining to this project. The vendor certifies truthfulness and accuracy of any statement it makes pertaining to the FTA-assisted project. The vendor acknowledges that if it makes, or causes to be made, a false, fictitious or fraudulent claim, statement, submission or certification, the Federal Government reserves the right to impose the penalties of the Program Fraud Civil Remedies Act of 1986 as deemed appropriate. The vendor acknowledges that if it makes, or causes to be made, a false, fictitious or fraudulent claim, statement submission, or certification to the Federal Government relating to the FTA-assisted project, per 49 U.S.C. §5307, the Government reserves the right to impose the penalties of 18 U.S.C. §1001 and 49 U.S.C. §5307(n)(1) on the Contractor, as deemed appropriate.

#### I. Contract Work Hours

(1) **Overtime requirements** - No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) **Violation; liability for unpaid wages; liquidated damages** - In the event of any violation of the clause set forth in paragraph (1) of this section, the contractor & any subcontractor responsible therefore shall be liable for unpaid wages and shall be liable to the United States for liquidated damages which shall be computed for each individual laborer, mechanic, watchman or guard employed in violation of the clause set forth in paragraph (1) of this section, in the sum of \$10 for each calendar day that an individual was required / permitted to work over 40 hours in a workweek without payment of overtime wages required by the clause in paragraph (1) of this section.

(3) **Withholding for unpaid wages and liquidated damages** - The purchaser shall upon its own action or upon written request of the Department of Labor (DOL) withhold or cause to be withheld, from any money payable for work performed by the contractor or subcontractor under any contract or other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as set-forth in paragraph (2) of this section.

(4) **Subcontracts** - The contractor or subcontractor shall include the clauses set forth in this section and require the same from subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with these clauses.

(5) **Payrolls and basic records** - Payrolls and related basic records shall be maintained by the contractor during the course of the work and preserved for three years thereafter for all laborers and mechanics working at the work site (or under the United States Housing Act of 1937 or the Housing Act of 1949, in the construction or development of the project). Such records shall contain the name, address and social security number of each worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records showing that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, that the plan or program has been communicated in writing to the laborers or mechanics affected, and records of the costs anticipated or actual costs incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of registration of apprenticeship programs, certification of trainee programs, registration of the apprentices and trainees, and ratios & wage rates prescribed in applicable programs.

J. Civil Rights

(1) **Nondiscrimination** - In accordance with Title VI of the Civil Rights Act (CRA), as amended, 42 U.S.C. §2000d, section 303 of the Age Discrimination Act of 1975, as amended, 42 U.S.C. §6102, section 202 of the Americans with Disabilities Act of 1990, 42 U.S.C. §12132, and Federal transit law at 49 U.S.C. §5332, the vendor agrees that it will not discriminate against any employee or applicant for employment because of race, color, creed, national origin, sex, age, or disability. In addition, the vendor agrees to comply with applicable Federal implementing regulations and other implementing requirements FTA may issue.

(2) **Equal Employment Opportunity** - The following equal employment opportunity requirements apply:

(a) **Race, Color, Creed, National Origin, Sex** - In accordance with Title VI of the CRA, as amended, 42 U.S.C. §2000e, and Federal transit laws at 49 U.S.C. §5332, the vendor agrees to comply with all applicable equal employment opportunity requirements of U.S. DOL regulations, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, DOL," 41 C.F.R. Parts 60 et seq., (which implement Executive Order No. 11246, "Equal Employment Opportunity," as amended by Executive Order No. 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," 42 U.S.C. §2000e note), and with any applicable Federal statutes, executive orders, regulations and Federal policies that may in the future affect construction activities undertaken in the course of the Project. The vendor agrees to take affirmative action to ensure that applicants are employed & treated during employment without regard to their race, color, creed, national origin, sex or age. Action shall include but not be limited to employment, upgrading, demotion, transfer, recruitment, layoff, termination, rates of pay or other forms of compensation; and selection for training, including apprenticeship. The vendor agrees to comply with any implementing requirements FTA may issue.

(b) **Age** - In accordance with section 4 of the Age Discrimination in Employment Act of 1967 (29 U.S.C. §§623 and 49 U.S.C. §5332), the vendor agrees to refrain from discrimination against present and prospective employees for reason of age. and comply with any implementing requirements FTA may issue.

(c) **Disabilities** - In accordance with section 102 of the Americans with Disabilities Act (42 U.S.C. §12112), the contractor agrees to comply with the requirements of U.S. Equal Employment Opportunity Commission, "Regulations to Implement the Equal Employment Provisions of the Americans with Disabilities Act," 29 C.F.R. Part 1630, pertaining to employment of persons with disabilities. and to comply with any implementing requirements FTA may issue.

K. Altoona Test Certification (Check one of the following):

- The vehicle has been Altoona tested, report number: PTI-BT-R0903, PTI-BT-R0617, PTI-BT-R0911  
 The vehicle is exempt from testing IAW 49 CFR 665.  
 The vehicle is currently being tested at Altoona.

Federal funds will not be released until the purchasing agency receives a copy of the Altoona test report, as appropriate, per 49 CFR 665.

L. Federal Standards

The VENDOR agrees to comply with applicable third party procurement requirements of 49 U.S.C. chapter 53, applicable U.S. DOT third party procurement and financial administration regulations at 49 C.F.R. § 18.36 or 49 C.F.R. §§ 19.40 - 19.48, with FTA Circular 4220.1F, "Third Party Contracting Guidance," and any later revision thereto, and other procurement requirements in effect now or as amended to the extent applicable.

M. Federal Motor Vehicle Safety Standards (FMVSS)

Any vehicles provided by the vendor will comply with all applicable FMVSS.

N. Application of Federal, State, & Local Laws, Regulations, & Directives (Federal Changes)

The VENDOR agrees that Federal laws and regulations control project award and implementation. The VENDOR understands and agrees that unless the recipient requests FTA approval in writing, the VENDOR may incur a violation of Federal laws or regulations or this agreement if it implements an alternative procedure or course of action not approved by FTA. The VENDOR understands and agrees that Federal laws, regulations, and directives applicable on the date on which Federal assistance is awarded may be modified from time to time. In particular, new Federal laws, regulations, and directives may become effective after the date the project agreement is effective, and might apply to that project agreement. The VENDOR agrees that the most recent versions of such Federal laws, regulations, and directives will apply to the administration of the project at any particular time.

O. Right of the Federal Government to Terminate

Upon written notice, the VENDOR agrees that the Federal Government may suspend or terminate all or any part of Federal assistance if terms of the project agreement are violated, if the Federal Government determines that the purposes of the laws authorizing the Project would not be adequately served by the continuation of Federal assistance for the Project, if reasonable progress on the Project is not made, if there is a violation of the project agreement that endangers substantial performance of the Project, or if the Federal Government determines that Federal assistance has been willfully misused by failing to make appropriate use of Project property. Termination of Federal assistance for the Project will not typically invalidate obligations properly incurred before the termination date to the extent those obligations cannot be canceled. The Federal Government reserves the right to require the refund of the entire amount of Federal assistance provided for the Project or a lesser amount.

P. Disputes, Breaches, Defaults, or Other Litigation

The VENDOR agrees that FTA has a vested interest in the settlement of any dispute, breach, default, or litigation involving the Project. Accordingly:

a. **Notification to FTA.** The VENDOR is aware that recipients of Federal assistance must notify FTA in writing of any current or prospective major dispute, breach, default, or litigation that may affect the Federal Government's interests in the Project or the administration or enforcement of Federal laws or regulations. If the Federal Government is to be named as a party to litigation for any reason, in any forum, the appropriate FTA Regional Counsel is to be notified in writing before doing so.

b. **Federal Interest in Recovery.** The VENDOR is aware that the Federal Government retains the right to a proportionate share, based on the percentage of the Federal share awarded for the Project, of proceeds derived from any third party recovery.

c. **Enforcement.** The VENDOR agrees to pursue its legal rights and remedies available under any third party contract or available under law or regulations.

d. **FTA Concurrence.** The VENDOR is aware that FTA reserves the right to concur in any compromise or settlement of any claim involving the Project.

e. **Alternative Dispute Resolution.** The VENDOR is aware that FTA encourages the use of alternative dispute resolution procedures, as may be appropriate.

II. **FOR BIDS OVER \$100,000:**

The vendor agrees to include the following in subcontracts exceeding \$100,000 financed by the FTA.

A. **Buy America** (Check where applicable):

The vendor will comply with 49 USC 5323(j) and 49 CFR 661, providing Buy America compliant vehicles.

The vendor cannot comply with the requirements 49 USC 5323(j), but may qualify for an exception to the requirement pursuant to the regulations in 49 CFR 661.7.

B. **Non-Lobbying**

The vendor certifies that no funds to be provided under this Contract will be used to attempt to influence any member of or delegate to Congress, to favor or oppose any legislation or appropriation by Congress, to lobby the state or local legislatures, or to lobby any officer or employee of an agency. The vendor certifies that it will comply with "Restrictions on Lobbying: Certification and Disclosure Requirements" as imposed by 29 CFR.

C. **Debarment and Suspension**

The vendor hereby certifies that it and its principals have not presently or within a three year period been debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from covered transactions by any Federal agency; and the vendor hereby certifies that it and its principals have not presently or within a three-year period been convicted of or had a civil judgment rendered against them for the commission of a fraud or a criminal offense in connection with obtaining, attempting to obtain or performing a public (Federal, state or local) transaction; violation of Federal or state antitrust statutes; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements or receiving stolen property.

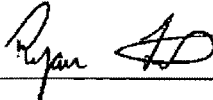
D. **Clean Water & Air**

The vendor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq. The vendor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. §§7401 et seq. The vendor agrees to report each violation to the Purchaser and understands and agrees that the Purchaser will, in turn, report each violation as required to assure notification to the FTA and the EPA.

III. **CERTIFICATION TO PURCHASER:**

A. The undersigned vendor certifies that the vehicle(s) furnished will meet or exceed the specifications.

B. The undersigned vendor certifies that it has read all of the bid documents and agrees to abide by the terms, certifications, and conditions thereof.

Name of Company National Bus Sales and Leasing, Inc.	Printed Name of Person Completing Form Ryan Frost
Address 15580 Hwy. 114 Justin, TX 76247	SS# or Tax ID # 58-1216021
Telephone 817-636-2365	Signature 

Disadvantaged Business Enterprise Information	<i>Type of Organization (circle)</i>	
	<input type="checkbox"/> Sole Proprietorship	<input type="checkbox"/> General Proprietorship
	<input checked="" type="checkbox"/> Corporation	<input type="checkbox"/> Limited Partnership
Is your firm a DBE? <input type="checkbox"/> (yes) <input checked="" type="checkbox"/> (no)	<input type="checkbox"/> Limited Proprietorship	
If yes, what type?		

The Texas Department of Transportation maintains the information collected through this form. With few exceptions, you are entitled on request to be informed about the information that we collect about you. Under Sections 552.021 and 552.023 of the Government Code, you also are entitled to receive and review this information. Under Section 559.004 of the Government Code, you are also entitled to have us correct information about you that is incorrect.