



COOPERATIVE PURCHASING PROGRAM
 Houston-Galveston Area Council of Governments
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 Phone: 800-926-0234 Fax: 713-993-4548
www.hgacbuy.org

INVITATION TO SUBMIT COMPETITIVE:	<input checked="" type="checkbox"/> BIDS	<input type="checkbox"/> PROPOSALS
INVITATION No.: BS08-15	ISSUE DATE: March 05, 2015	
CATEGORY: School Buses		

PURPOSE OF THIS INVITATION

The Cooperative Purchasing Program (**HGACBuy**) of the Houston-Galveston Area Council of Governments is soliciting offerings for the furnishing of products/services as described herein. These products/services may be purchased by any of more than 5,400 member local governments, districts, agencies in 44 states across the nation.

Responses must be submitted in an original and one (1) copy, and shall be subject to the terms, conditions, requirements and specifications detailed in the documents comprising this Invitation. Responses are scheduled to be opened publicly at **H-GAC** offices on the date indicated. For Bid Invitations, responses will be available for public review until 4:00 p.m. CT that day, and on subsequent days by appointment only. Any Responses submitted later than 1:00 p.m. on the due date will be returned unopened to the bidder/proposer.

PROCUREMENT SCHEDULE & DETAILS

DRAFT SPECIFICATION / INVITATION:	January 06, 2015
PRE-BID/PROPOSAL CONFERENCE:	February 03, 2015 @ 9:00 a.m. CT; Conference Room 2 nd floor
FINAL SPECIFICATION / INVITATION:	March 05, 2015
BID/PROPOSAL RESPONSES DUE:	April 02, 2015 @ 1:00 p.m. CT; H-GAC Clock
PUBLIC RESPONSE OPENING:	April 02, 2015 @ 2:00 p.m. CT; Conference Room C 2 nd floor
RECOMMENDATIONS TO BOARD:	June 16, 2015
CONTRACT START DATE & TERM:	August 01, 2015 through July 31, 2017
The documents comprising this Invitation are available via web download at: https://www.hgacbuy.org/bids/	
For assistance regarding this Invitation, please contact:	
Name: Beverly Levy	Phone: 832-681-2592 E-mail: Beverly.Levy@h-gac.com

CONTENTS OF THIS INVITATION

- SECTION A** - General Terms & Conditions
- SECTION B** - Product/Service Specific Requirements & Specifications (Final)
- SECTION C** - **HGACBuy** *FORMS* (Final)
- SECTION D** - Pro-Forma (Sample) Contract

This procurement conforms to government requirements for Competitive Procurement.

LABELING OF SEALED RESPONSE PACKAGE

IMPORTANT:

You must affix an identifying label to the outside of your Sealed Response Package to ensure proper identification and log-in at **HGACBuy** offices on receipt. **HGACBuy** is not responsible for any response that might be lost or misdirected due to improper or unclear labeling. Your label should look as follows and should be affixed conspicuously to the package.



Responses by E-mail or FAX will not be acceptable. Hard copies, as described herein, plus appropriate electronic media are required.

NOTICE REGARDING NATIONWIDE SALES POTENTIAL

HGACBuy is conducting this procurement with the objective of establishing one or more blanket type contracts for use by our Members. Because our Members are located not only in Texas, but throughout the country, we strongly urge you to participate in the process at the corporate level. If you do not sell direct, your dealer network may still service customers while you handle the administrative functions of providing quotes, accepting purchase orders, and collecting payments. If this is not feasible, we will work with you to subsequently assign your contract to your dealers as necessary to service customers.

Whatever approach you choose to take, there is considerable potential sales value because **HGACBuy** is being used not only in the State of Texas, but **NATIONWIDE**. This means that **HGACBuy** contractors will have a special advantage available to them in promoting sales to government agencies throughout the country... the ability to sell products without the need for the buyer to duplicate the competitive bidding process and expend the associated staff time and taxpayer dollars. We believe an **HGACBuy** contract would enhance your competitive position in the government marketplace, and are eager to work with you to promote the best interests of our participating local governments and qualifying non-profit organizations.

We look forward to your participation in our process. Please contact the **HGACBuy** staff member listed on the cover of this Invitation for additional information.



SECTION A
GENERAL TERMS & CONDITIONS
FOR BIDS AND PROPOSALS

INVITATION No. BS08-13
DESCRIPTION: School Buses

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1. INTRODUCTION

The Houston-Galveston Area Council (**H-GAC**) is a "Government-to-Government" procurement service for States, State Agencies, Local Governments, Districts, Authorities, and qualifying Not-for-Profit Corporations (**End Users**). End Users become **Members** of the **H-GAC** Cooperative Purchasing Program (**HGACBuy**) by executing an Interlocal Contract, which is free of cost and evergreen unless cancelled. **HGACBuy**, acting on behalf of **Members**, is soliciting competitive offerings for the furnishing of products and/or services, as described elsewhere, which MAY be purchased by **Members** during the contract term. **Members** using the Program issue purchase orders directly to **HGACBuy** contractors.

2. DEFINITIONS, ABBREVIATIONS & ACRONYMS

The following definitions, abbreviations and acronyms may be found in these specifications, and shall be interpreted herein as specified below.

Definitions and Abbreviations:

Acceptance. Acceptance takes place when the **End User** agrees with the **Contractor** that the terms and conditions of the contract have been met and verified. Acceptance is not the same as Receipt, and can only occur after intact shipping, inspection by **End User**, and any onsite testing that has been stipulated as part of the order

Aggregate/Single Occurrence. The term "*aggregate*" in insurance terms is the sum of all claims against a specific policy for a specific loss incident. The term "*single occurrence*" differentiates between multiple claims and single claims against a specific policy. The inherent value of a policy's aggregate value is less important to an **End User** than is the value of a single claim as stated under "*single occurrence*."

Approved. Acceptable to the "authority having jurisdiction."

ARO. "After Receipt of Order". Used in conjunction with a defined time period (usually days or weeks) to establish the delivery or lead time pursuant to any individual purchase transaction. In the case of orders for bodies which will be mounted on a customer furnished cab/chassis, the term ARO shall be construed to mean "After Receipt Of Cab/Chassis".

Authority Having Jurisdiction. The authority shall be either **H-GAC** or the relevant **End User** based on the requirements as stated in each specification item. Unless specifically stated, the authority shall be **H-GAC**.

Bidder. Any entity that submits a competitive bid to this Invitation. (See also "**Offeror**")

Change Order. Request by an **End User** for a change in the composition of an already submitted purchase order, for example to change quantity ordered, add or delete items, etc.

Contract. Specifically, a contract between **H-GAC** and a successful **Offeror** which is executed based on an award made pursuant this Invitation.

Contract Pricing Worksheet. The standard **H-GAC** form to be used by **Contractor** in preparing a quotation to an End User, upon which End User's purchase order will be based. **Contractor** may use another quotation form provided it contains required information, and only if approved by **H-GAC**.

Contractor. The contracted business entity responsible for fulfilling a contract executed pursuant to this Invitation.

Dealer/Distributor. A duly authorized and/or franchised business entity which sells and services a manufacturer's product in a specified marketing area.

Defect. A discontinuity in a part or a failure to function that interferes with the service or reliability for which the part was intended.

Electronic Media. As used herein, means computer based media such as 100mb Zip Disk, CDROM, e-mail, e-mail attachment, file downloaded from the web, etc.

End User. (See "**Participant**" and "**Member**")

Listed. Equipment or materials included in a list published by an organization, acceptable to the "Authority Having Jurisdiction" and concerned with product evaluation, that conducts periodic inspection of production of listed equipment or materials and whose listing states either that the equipment or materials meet appropriate standards or has been tested and found suitable for use in a specified manner. NOTE: The means for identifying listed equipment may vary for each organization concerned with product evaluation, some of which do not recognize equipment as listed unless it is also labeled. The "authority having jurisdiction" should utilize the system employed by the listing organization to identify a listed product.

Manufacturer. The person or persons, company firm, corporation, partnership, or other organization responsible for taking raw materials or components and making a finished product.

May. A term indicating a permissive use or an acceptable alternative to a specified requirement.

Member. An authorized Participant in the Program. (See "**Participant**" and "**End User**")

Motor Vehicle. The meaning of this term shall be based on the legal definition ascribed to it by the laws and/or regulations of the state in which any specific sale made pursuant to a Contract takes place.

Must. A term indicating a mandatory requirement.

Offer or Offering. Any product or service offered in reply to this Invitation.

Offeror. Any entity that submits a competitive bid or proposal in response to this Invitation. Bidder or Proposer.

Participant. Generally, any qualifying governmental or non-profit entity which has executed an Interlocal Contract for cooperative purchasing services with **H-GAC**.

Product Liability Insurance. Failure of Components and/or assembled equipment resulting in personal injury, disability or death and/or property damage is covered under the product liability insurance provisions.

Product or Product Item. Any of the specific goods, materials, equipment or service(s) specified in this Invitation. This term encompasses the base line item itself, and any and all accessories, options, modifications, ancillary services, assembly, testing, etc. that may be included in the delivered Product.

Proposer. Any entity that submits a competitive proposal in response to this Invitation. (See also "**Offeror**")

Purchaser. The **End User** having responsibility for the specification, requisition, ordering and acceptance of the Product or Service. (See also "**End User**")

Purchasing Authority. The agency that has sole responsibility and authority for negotiating, placing and, if necessary, modifying any solicitation, purchase order, or other award issued by a governing body [**H-GAC**].

Quotation. See "Contract Pricing Worksheet".

Receipt. Receipt takes place when a Product or Service is delivered to an **End User** and a document is executed that establishes that the Product is now in the possession of the **End User** or that the Service has been completed. Receipt DOES NOT connote or imply Acceptance.

Response. All or part of any offering submitted in response to this Invitation.

Shall. A term indicating a mandatory requirement or action.

Should. A term indicating a recommended or advised response to a specified requirement.

Vendor. A manufacturer's representative or dealer authorized to make sales and supply parts and service.

Acronyms:

ANSI = **A**merican **N**ational **S**tandards **I**nstitute

ASTM = **A**merican **S**ociety for **T**esting and **M**aterials

ASME = **A**merican **S**ociety of **M**echanical **E**ngineers

CFR = U.S. **C**ode of **F**ederal **R**egulations

DOJ = U.S. **D**epartment **O**f **J**ustice

DOT = U.S. **D**epartment **O**f **T**ransportation

EPA = U.S. Environmental Protection Agency
FAA = Federal Aviation Administration
FMVSS = U.S. Federal Motor Vehicle Safety Standards
H-GAC = Houston-Galveston Area Council of Governments
IEEE = Institute of Electrical and Electronics Engineers
MVD = Motor Vehicle Division of Texas Department of Transportation
NFPA = National Fire Protection Association
NHTSA = National Highway Traffic Safety Admistration
NIOSH = National Institute For Occupational Safety And Health
NIST = National Institute of Standards and Technology
NTEA = National Truck Equipment Association
OSHA = U.S. Occupational Safety and Health Admistration
RRC = Railroad Commission of Texas
SAE = Society of Automotive Engineers
TBPC = Texas Building and Procurement Commission (formerly GSC)
TxDOT = Texas Department Of Transportation
UL = Underwriter's Laboratories Inc.
VTCS = Vernon's Texas Civil Statutes

3. NON-BINDING ORAL COMMENTS

No oral comment, utterance or response made by any employee, member, or agent of **H-GAC** or any Member of the Cooperative Purchasing Program shall be considered factual or binding with regard to this Invitation, or any contract awarded as a result of this Invitation. Valid and binding terms, conditions, provisions, changes or clarifications, or requests thereof, shall **ONLY** be communicated written form.

4. STRUCTURE OF RESPONSE

Depending on the Product or Service, market structures and sales practices can differ substantially. For example, dealers may sell into any market or may be restricted to certain territories, manufacturers may sell direct or may be limited by law to selling thru independent dealerships, etc. **H-GAC's** objective is to ensure that **End Users**, no matter where located, can buy contracted products/services and receive quality and timely service and support, while at the same time allowing for the most appropriate and effective response to this Invitation. Therefore, responses to this Invitation will be accepted in conformance with the following scenarios and requirements:

A. Single Respondent Acting Alone Or As "Lead" For A Group:

Offeror shall complete and sign a **Form A** and, if contracted, shall be solely responsible for all contractual requirements including administration, processing of purchase orders and handling of payments for transactions which may involve other dealers who actually deliver the products or services.

B. Multiple Respondents Acting Jointly:

A single Response shall be submitted, and each party to the Response shall complete and sign a separate **Form A** to be included in the single Response. If the Response is successful each party shall sign a separate contract with **H-GAC** and shall be responsible for compliance with all terms and conditions. Only those which have executed a written contract with **H-GAC** may process purchase orders and payments.

In any event, Offeror may be a party to one, and only one, response.

5. BASIC REQUIREMENTS & CONDITIONS

- a. The final requirements and specifications contained herein may be different, perhaps materially, from those in the "Invitation To Attend Pre-Bid / Pre-Proposal Conference", if any. It is **Offeror's** sole responsibility to thoroughly examine and review all documentation associated with this Invitation, including any Addendums, and to insure that any response submitted complies in every respect with all requirements.
- b. Any Addendum to this Invitation which may be required prior to the Response due date will be delivered to those prospective Offerors of record who have previously obtained a copy of this Invitation from **H-GAC**. Prospective Offerors shall be responsible for obtaining all documents relating to submission of a Response.
- c. **Offeror** shall thoroughly examine any drawings, specifications, schedules, instructions and any other documents, supplied as a part of this Invitation, and is solely responsible for understanding and compliance.

- d. **H-GAC** shall not be liable for **Offeror's** incomplete documentation, or for any costs associated with preparation and submission of any Response hereto. Additionally, all components of any Response become the property of **H-GAC**, and shall be considered to be in the public domain.
- e. **Offeror** shall make all investigations necessary to become thoroughly informed regarding any plan and/or infrastructure that may be required to support delivery of any Product or Service covered by this Invitation. No plea of ignorance by **Offeror** stemming from failure to investigate conditions that may now or hereafter exist, shall be accepted as a basis for varying **H-GAC's** requirements, or **Offeror's/Contractor's** obligations or entitlements.
- f. Requests for changes to the requirements or specifications herein must be in writing (e-mail, fax, letter) and must be received by **H-GAC** no later than fifteen (15) calendar days prior to the Response Due Date. **H-GAC** will review such requests, but may or may not make changes at its sole discretion. Changes, if any, will only be made by written Addendum sent to addressees of record. In any event, it is **Offeror's** sole responsibility to insure that any and all Addendums which may have been issued have been received and addressed.
- g. By submission of a response, **Offeror** expressly understands and agrees that all terms and conditions herein will be part of any subsequent contract that is executed pursuant to this Invitation.
- h. **Offeror** is advised that all **H-GAC** contracts are subject to the legal requirements established in any applicable Local, State or Federal statute.
- i. **Offeror/Contractor** must be in compliance with all licensing, permitting, registration and other applicable legal or regulatory requirements imposed by any governmental authority having jurisdiction. It is **Offeror/Contractor's** responsibility to insure that this requirement is met, and to supply to **H-GAC** upon request, copies of any license, permit or other documentation bearing on such compliance.
- j. Unless otherwise established elsewhere in this Invitation, NO minimum purchase quantities or spending levels are provided or guaranteed by **H-GAC** or any **End User**.
- k. This Invitation is not meant to restrict competition, but rather is intended to allow for a wide range of responses.
- l. Responses which are 'qualified' with conditional clauses or alterations of or exceptions to any of the terms and conditions in this Invitation may be deemed non-compliant at **H-GAC's** sole discretion.
- m. The term '**Offeror**', or derivative thereof, shall become synonymous with '**Contractor**' for any successful **Offeror** recommended for a contract pursuant to this Invitation.
- n. **H-GAC** reserves the right to:
- Reject any and all offers received in response to this Invitation.
 - Reject any part of an offer received in response to this Invitation.
 - Determine the correct price and/or terminology in the event of any discrepancies in any response.
 - Accept a response from, and enter into agreement with, other than the lowest price **Offeror**.
 - Accept responses and award contracts to as many or as few **Offerors** as **H-GAC** may select.
 - Amend, waive, modify, or withdraw (in part or in whole) this Invitation, or any requirements herein.
 - Hold discussions with **Offerors**, although award may be made without discussion.
 - Request an **Offeror** to give a presentation of the Response at a time and place scheduled by **H-GAC**.
 - Exercise any of these rights at any time without liability to any **Offeror**.
- o. **H-GAC** reserves the right to determine that conditions exist which prevent the public opening of responses on the date and at the time advertised, and to reschedule the public opening for a future date and time. Responses received by **H-GAC** by the original deadline will be secured unopened until the rescheduled opening date and time, and those having timely submitted such responses will be notified.

6. OFFEROR'S AUTHORIZED SIGNATORY

The signatory shall be authorized to sign and contractually bind **Offeror**, and shall sign any and all Response documentation requiring a signature.

7. SURETY FOR INSURANCE

Contractor shall be responsible for using a surety company properly licensed by any and all states in which Contractor will do business with Participants. The surety company shall not expose itself to any loss on any one risk in an amount exceeding ten percent (10%) of its surplus to policy holders, provided any risk or portion of any risk shall have been reinsured, and such reinsurance shall be deducted in determining the limitation of risk applicable to **H-GAC's** insurance requirements.

8. CONFIDENTIAL / PROPRIETARY MATERIALS

All documentation submitted as part of **Offeror's** response to this Invitation will be considered to be in the public domain and may be made available to Members and others, after contract award, upon properly submitted request. If **Offeror** submits documents marked "confidential" or "proprietary", the Response may be deemed non-compliant.

9. REFERENCES

- a. **Offeror** shall list the names of at least five government agencies within the continental United States which have purchased from **Offeror** products or services similar to those covered by this Invitation, within the last two years. **H-GAC** reserves the right to determine if such products or services are appropriately similar.
- b. **Offeror** may provide reference information in whatever format desired, but each should include the following specific information:
 - Agency name
 - Contact person name
 - Address
 - Phone & Fax numbers
 - Description of product(s) or service(s) and date sold
- c. Other information, including criticism however learned, may be used by **H-GAC** in evaluation of responses.

10. INSURANCE

- a. Unless otherwise stipulated in Section B, **Offeror/Contractor** must have the following insurance and coverage minimums:

General liability insurance with a Single Occurrence limit of at least \$1,000,000.00, and a General Aggregate limit of at least two times the Single Occurrence limit.

Product liability insurance with a Single Occurrence limit of at least \$1,000,000.00, and a General Aggregate limit of at least two times the Single Occurrence limit for all Products except Automotive Fire Apparatus. For Automotive Fire Apparatus, see Section B – Product Specific of this Invitation.

Property Damage or Destruction insurance is required for coverage of **End User** owned equipment while in **Contractor's** possession, custody or control. The minimum Single Occurrence limit is \$500,000.00 and the General Aggregate limit must be at least two times the Single Occurrence limit. This insurance may be carried in several ways, e.g. under an Inland Marine policy, as part of Automobile coverage, or under a Garage Keepers policy. In any event, this coverage must be specifically and clearly listed on insurance certificate(s) submitted to **H-GAC**.
- b. Insurance coverage shall be in effect for the length of any contract made pursuant to this Invitation, and for any extensions thereof, plus the number of days/months required to *deliver* any outstanding order after the close of the contract period.
- c. Original Insurance Certificates must be furnished to **H-GAC** on request, showing **Offeror/Contractor** as the insured and showing coverage and limits for the insurances listed above.
- d. If any Product(s) or Service(s) will be provided by parties other than **Offeror/Contractor**, all such parties are required to carry the minimum insurance coverages specified herein, and if requested by **H-GAC**, a separate insurance certificate must be submitted for each such party.
- e. **H-GAC** reserves the right to contact insurance underwriters to confirm policy and certificate issuance and document accuracy.

11. OFFEROR CERTIFICATIONS

Offeror, by submission of a Response hereto, makes the following certifications under penalty of perjury and possible contract termination if any of these certifications are found to be false.

Non-Collusive Response

- a. The prices in the Response have been arrived at independently without collusion, consultation, communication, or agreement for the purpose of restricting competition, as to any matter relating to such prices with any other **Offeror** or potential competitor.

- b. The prices which have been quoted in the Response (unless otherwise required by law), have not been knowingly disclosed by **Offeror** and will not be knowingly disclosed by **Offeror** prior to the public response opening, either directly or indirectly, to any other **Offeror** or competitor.
- c. No attempt has been made or will be made by **Offeror** to induce any other person, partnership or corporation to submit or not to submit a response for the purpose of restricting competition.

Non-Biased Specifications

This Invitation contains no requirements considered to be unduly biased in favor of **Offeror** or any other **Offerors** that may be competing for this procurement.

No Financial Interest or Other Conflict

- a. No **H-GAC** officer, employee, Board of Directors member or member of any **H-GAC** board or commission, nor family member of any such person, has a financial interest, direct or indirect, in **Offeror** or in any contract **Offeror** might enter into with **H-GAC**.
- b. No economic or employment opportunity, gift, loan, gratuity, special discount, trip, favor or service has been, or will be, offered or given to any officer, employee, Board of Directors member, or member of any **H-GAC** board or commission, nor to any family member of any such person.

Debarment and Suspension Status

- a. **Offeror** is not currently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from covered transactions by any government agency, nor is **Offeror** an agent of any person or entity that is currently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from covered transaction by any government agency.
- b. **Offeror** has not within a three year period preceding this Invitation been convicted of or had a civil suit judgement rendered against **Offeror** for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain or performing a public transaction or contract under a public transaction; violation of federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statement, or receiving stolen property.
- c. **Offeror** is not presently indicted for or otherwise criminally or civilly charged by a government entity (federal, state, or local) with commission of any of the offenses enumerated above.
- d. Offeror has not, within a three year period preceding this Invitation, had any government (federal, state, or local) transactions terminated for cause or default.

Insurance Coverages

Offeror has and will maintain insurance coverage in accordance with the requirements of this Invitation.

Licensing & Permits

Offeror(s) has (have) all licenses and/or permits, required by any and all governmental entities having jurisdiction, to legally sell the products/services offered.

12. HISTORICALLY UNDERUTILIZED BUSINESS (HUB) PARTICIPATION

- a. To satisfy Texas' statutory requirements [Government Code, Chapter 2161, Subchapter D], **H-GAC** requires all **Offerors** to supply information in any bid/proposal response listing (1) the total number of subcontracts and (2) the total number of HUB contracts applicable to the Products or Services offered in the response. Local governments often require this information for their own reporting requirements prior to placing orders through the **H-GAC** Cooperative Purchasing Program.
- b. **Offeror** must complete **Form B** and include subcontracts with HUB's that provide any materials or services related to sales that may be made thru **H-GAC**'s Cooperative Purchasing Program.

13. NON-RESIDENT RECIPROCAL SALES ACT

As required by Texas Civil Statutes in the award of contracts, an offeror which is not a Texas resident business must determine if its state of residence prohibits award of government contracts to Texas resident offerors without penalty. If **Offeror's** resident state DOES penalize Texas offerors, **Offeror** must provide this information along with a copy of its applicable resident state's statute in the Response.

14. TEXAS MOTOR VEHICLE COMMISSION CODE & LICENSING

Sales of motor vehicles in the State of Texas are subject to the Texas Motor Vehicle Commission Code. If this Invitation includes any motor vehicle to be sold in the State of Texas, **Offeror** certifies by submission of a response hereto that all required Texas Motor Vehicle Commission licenses are in place and current, and that copies of all such licenses **have been submitted with the Response**. Further, it shall be **Contractor's** responsibility to keep current all required Texas Motor Vehicle Commission licensing during the term of the contract, and to furnish license copies at any time on request by **H-GAC**. If **Contractor** does not maintain current licensing, **H-GAC** reserves the right to immediately terminate the contract.

<p>NOTE: In accordance with the Texas Motor Vehicle Commission Code, contracts for motor vehicles to be sold within the state of Texas may be made ONLY with properly licensed Texas Motor Vehicle Dealers. Therefore, to be considered for a contract covering Texas End Users, the Response must include a Form A from a licensed Texas Motor Vehicle Dealer</p>

15. INTENT AND SCOPE OF SPECIFICATIONS

- a. The intent of the specifications herein is to provide **Offeror** with sufficient information concerning the Products/Services to be contracted such that **Offeror** can prepare and submit an acceptable Response.
- b. The specifications may be detailed or general in nature with regard to any particular Product/Service. Where not otherwise specified, details of construction, materials, or the way in which services will be provided, are left to the discretion of the **Offeror**, provided only that any offering shall conform, as a minimum, to best Industry standards and practices and to what is currently being sold in the marketplace.
- c. Responses shall be considered only from **Offerors** that have established good reputations in their markets, and who furnish satisfactory evidence of ability to supply the Products/Services specified herein.
- d. **Offeror** shall show proof of ability to provide to **End Users** prompt and competent service, including parts if applicable, for all Products/Services covered by this Invitation, by proper completion of a Service Organization Document as described elsewhere herein.

16. REQUIREMENTS APPLICABLE TO PHYSICAL GOODS

In the case of physical goods (e.g. equipment, material, supplies, as opposed to services), all Products offered must, unless otherwise stipulated in Section B:

- a. Be new, unused, and not refurbished.
- b. Not be a prototype insofar as the general design, operation and performance. This requirement is NOT meant to preclude **Offeror** from offering new models or configurations which incorporate improvements in a current design or add functionality, but which in such new model or configuration may be new to the marketplace.
- c. Include any and all accessories which may or may not be specifically mentioned herein, but which are normally furnished or which are necessary to make a delivered Product ready for its intended use. Such accessories shall be assembled, installed and adjusted such that the Product is ready for continuous operation at time of delivery.
- d. Have assemblies, sub-assemblies and component parts that are standard and interchangeable throughout the entire quantity of a particular Product as may be purchased simultaneously by any individual **End User**.
 - a. Be designed and constructed using current industry accepted engineering and safety practices, and materials.
 - b. Be available for inspection at any time prior to or after procurement.

17. PRODUCT CODES

Unless otherwise addressed in Section B of this Invitation, the following requirements shall apply:

- a. Each Product/Service offered shall be uniquely identified using an **H-GAC** Product Code, which shall be determined as described in Section B of this Invitation. **Offeror** shall offer **ONLY ONE** Product for any particular Product Code. For example, **Offeror** may wish to submit a bid for Product Code ABC and may have another offering that also meets the requirements for ABC. **Offeror** **MAY NOT** submit two offerings for ABC. The alternate offering that also meets the requirements for ABC must be offered as an option "upgrade/downgrade" to ABC on **Form E**.
- b. Pricing for optional upgrades or downgrades to base bid items should be quoted as an "adder" or "deduct" amount as appropriate, to be applied to the offered price of the base Product Item listed on **Form D**.
- c. Base bid items and their associated HGACBuy Product Codes are included in the Section B and/or on **Form D**.

- d. Selection of Product Codes for which to submit an offer is at **Offeror**'s sole discretion.

18. SPECIFIC DESCRIPTIVE REFERENCES

Except for Base Product Items listed on **Form D**, any reference to a specific catalog, data sheet, form, brochure, model name or number, etc. used herein to describe an item such as an option or accessory is only descriptive and is not to be considered restrictive unless otherwise noted. Such references are normally used only to indicate a type, general description, level of quality and/or required performance standards.

19. MANUALS

Unless otherwise specified or superceded herein, each Product delivered under an **H-GAC** contract, and if applicable any options thereto, shall be supplied with at least one (1) copy of a safety and operating manual. The cost of any such manuals must be included in the base price for any Product Item offered hereunder. If more detailed and technically orientated parts and maintenance manuals are available for a Product or option, at a cost, they shall be offered as options on the *FORM* designated herein for such options, or elsewhere in the Response as may be directed herein.

20. STANDARD FEATURES & OPTIONS

The following requirements are applicable primarily to physical goods.

Standard Features

- a. The stated minimum requirements for all Products listed herein include what **H-GAC** considers to be "standard" features. Even though such features might normally be offered as options rather than as standard, they are nonetheless considered to be standard in this Invitation, and must be included in the base price for any Product offered. Such features **SHOULD NOT** be offered as options except as deducts for their omission from the base Product.
- b. If it is unclear in the Response that an **H-GAC** standard feature is included in the base price, it will be assumed that such is the case. If awarded a contract **Offeror** will be expected to sell the Product with all **H-GAC** specified standard features included in the base price.
- c. Any feature or accessory normally offered by manufacturer as "standard" shall be considered a standard feature and shall be included in the base price of any offering, even though not specifically listed as a requirement in **H-GAC**'s specifications. Such features **SHOULD NOT** be offered as options except as deducts for their omission from the base Product.

Options - General

- a. Options are considered to be any features or accessories, other than **H-GAC**'s and Manufacturer's "standard" features or accessories.
- b. Options should be offered on the *FORMS* designated for quoting options. Each option should be listed and described on a separate line, and should include any Manufacturer's/Dealer's code number. If no Manufacturer's/Dealer's code number exists, **Offeror** should create one.
- c. Prices for all offered options shall be assumed to include any installation or mounting required to make it a fully functional component of the Product, unless otherwise stated in **Offeror's** response.

Required Options

- a. Product specifications in this Invitation may include **H-GAC** "Required Options". If so, **Offeror** must quote a price for ALL such options, and, if there is an **H-GAC** Option Code provided in this Invitation for such options, it MUST be used as part of the description.
- b. For any specific "Required Option", **Offeror** may quote an equivalent so long as its design and performance are as good as, or better than, the specified option item. Responses which do not include pricing for Required Options may be considered non-compliant.

Other Options

- a. "Suggested" or "Other" options may be listed for any particular Product in this Invitation, and **Offeror** is encouraged to quote pricing for such options. The extent of offered options in any response may be taken into consideration as part of the award criteria, at **H-GAC**'s sole discretion.

- b. **Offeror** is encouraged to include options for non-equipment items that may be applicable to a sale, such as: Extended Warranties, Maintenance Agreements, Buy-back or Trade-In Agreements, Out-of-state Delivery Charges, Quantity or Special Discounts, Extended Training Classes, etc.

Published & Unpublished Options

- a. H-GAC Cooperative Purchasing Program (Program) contracts are awarded through a public competitive bid or proposal (RFP) process. Further to that process, Program policy considers an 'option' listed and priced in a bid or RFP Response: (1) To be a "**Published Option**"; (2) To be part of any awarded contract; and (3) To be available for purchase by Program members separately and independently from associated base line items. However, since Published Options may have not been subjected to the same scrutiny as the associated base line items, it cannot be concluded they were directly competed. Therefore, pursuant to Local Government Code 252.021(a), purchase of a published option costing more than \$50,000 shall not be allowed. Furthermore, **H-GAC** reserves the right at its sole discretion to disallow purchase of any Published Option through the Program if deemed contrary to the intent of the law.
- b. Any option that has not been listed and priced in the Response is considered to be an "**Unpublished Option**". Unpublished Options may be sold, but only in connection with the sale of a base Product Item, and only insofar as the total cost of all Unpublished Options remains below twenty five percent (25%) of the total summed cost of the base Product(s) plus any Published Options.
- c. No Published or Unpublished Option may be sold which essentially converts a Product such that it competes with a Product Item awarded to another contractor.

21. WARRANTIES, SALES & SERVICE

Unless otherwise addressed in Section B, the following requirements shall apply:

- a. Offeror must be a properly franchised dealer authorized to sell and service, including warranty service, all products offered and sold in response to the bid invitation or under any **H-GAC** contract.
- b. **Offeror** shall provide detailed Parts and Labor Warranty information with the Response. If **Offeror** submits a warranty with the Response which does not meet the minimum requirements herein, **Offeror** agrees by submission of a Response that such warranty shall be considered to be amended to meet those minimums.
- c. Warranties shall be manufacturer's standard and shall be inclusive of any other warranty requirements which may be stipulated elsewhere herein.
- d. Any warranties offered by a dealer shall be in addition to the manufacturer's standard warranty, and shall not be a substitute for such. **Offeror's** base price for any Product shall be inclusive of the standard warranty.
- e. Complete warranty information will be supplied to **End User** with each Product sold.
- a. Warranties need not apply to normal maintenance service or adjustments, or to any product reasonably shown to have been repaired or altered in any way so as to affect its stability, or to any product which has been subject to misuse, negligence, or accident.
- f. **Offeror/Contractor** is encouraged to offer extended warranties as an option.
- g. Neither **H-GAC** nor **End User** assume any warranty or liability on **Contractor's** behalf unless made or assumed in writing, initiated by **Contractor**, and agreed to in writing by **H-GAC** or the **End User** respectively.
- h. **Contractor** shall be responsible for the execution and effectiveness of all product warranty, and shall be the sole source for solution to problems arising from warranty claims. **Contractor** agrees to respond directly to correct warranty claims and to ensure reconciliation of warranty claims that have been assigned to a third party.

22. H-GAC ORDER PROCESSING CHARGE

H-GAC will levy an Order Processing Charge on **Contractor** for each sale done thru the **H-GAC** contract, with the exception of orders for motor vehicles. Any bid pricing submitted will be considered to include the Charge. The amount of the applicable charge shall be per the most current **H-GAC** schedule. For motor vehicle orders, the Processing Charge shall be levied on and paid by the **End User**.

23. PRE-PAYMENTS AND DISCOUNTS

- a. Progress, pre-payment and special discounts of any kind may be offered and detailed in the Response. Such discounts shall be clearly explained, but shall not be a determining factor in awarding contracts except in the case of tie offerings.
- b. Quantity discounts applicable to similar Products sold to one or more **End User** Departments may be offered. Determination as to product similarity shall rest solely with **Contractor**.
- c. For specific purchases, any proposed quantity, pre-payment or special discounts shall be clearly shown on the Contract Pricing Worksheet.

24. INSPECTION / TESTING

All Products sold pursuant to this Invitation shall be subject to inspection/testing by or at the direction of **H-GAC** and/or the ordering **End User**, either at the delivery destination or the place of manufacture. In the event a Product fails to meet or exceed all requirements of this Invitation, and unless otherwise agreed in advance, the cost of any inspection and/or testing, shall be borne by the **Contractor**.

25. PRODUCT DELIVERY

Unless otherwise addressed in Section B, the following requirements shall apply:

- a. Title to goods, and responsibility and liability for loss and/or damage in shipping pass to **End User** at the delivery destination after receipt and acceptance have taken place. Cost of shipping/delivery shall be paid by **End User** unless otherwise agreed to by **Contractor**. If **Contractor** will be paying for shipping/delivery, shipping terms must be "F.O.B. Destination, Freight Prepaid". If **End User** will be paying for shipping/delivery, shipping terms must be "F.O.B. Destination – Freight Collect".
- b. The details for the application and calculation of shipping and delivery charges must be stated in the Response on **Form E**. Any freight, shipping or delivery charged to **End User** will be prepaid and added to the invoice, and will be clearly shown on any Contract Pricing Worksheet or other quote presented to the **End User**.
- c. The estimated delivery time after receipt of order (ARO), inclusive of Saturdays, Sundays and holidays, for all Products offered must be stated in the Response. Actual delivery for any particular order must be confirmed with **End User** at time of order placement, and must be stated clearly on the Contract Pricing Worksheet.
- d. **Contractor** shall be responsible for delivery and Acceptance according to the requirements of the Contract and the Purchase Order.
- e. Contractor shall advise **End User** prior to making any shipment/delivery, and shall make such shipment/delivery in accordance with **End User's** requirements, providing only that such arrangements do not contravene any requirement of the **H-GAC** contract unless agreed to by **Contractor**.
- f. The execution of all required tests, certifications and/or licensing, and costs thereof, shall be the responsibility of **Contractor**. Upon request by **End User** or **H-GAC**, **Contractor** shall provide any documentation or certification related to such tests, certifications or licensing.

26. OFFERED PRODUCT ITEM VARIANCES

Any variance in the specifications or performance of Products offered pursuant to this Invitation shall be acceptable to **H-GAC** only insofar as it MEETS or EXCEEDS the specifications and requirements of this Invitation.

27. REQUIREMENTS FOR SUBMISSION OF A RESPONSE

Unless otherwise addressed in Section B, the following requirements shall apply:

- a. Responses shall be submitted in two complete printed sets including an Original and one (1) Copy in separate "hard side" three-ring binders. The outer spine of each binder shall be labeled showing this Invitation No., **Offeror** Name, and either "Original" or "Copy", as applicable. The Original printed response will be considered to be the binding Response in case of any conflicts between printed copies and electronic copies. Except for required forms, **H-GAC** Invitation documents should not be included in the Response.
- b. The Original and the Copy shall be submitted complete, except that the Electronic Media should be submitted only with the Copy.
- c. All required **H-GAC FORMS** and documents shall be properly completed, without exception or **Offeror's** Response may be deemed non-compliant. **Offeror** may not modify the format of any **H-GAC FORM** in any way. **Offeror** may photocopy or print blank **FORMS** as needed. Information submitted on the printed copies of the **FORMS** may not be handwritten except for signatures and initials. It is **Offeror's** responsibility to insure that printed **FORMS** are clear and legible. Handwritten and illegible entries may be rejected. **Offeror's** printed, stamped or typed name shall appear on every **FORM** submitted in the Response.
- d. The entire response submission shall also be submitted on electronic media, including all required **H-GAC FORMS**. **Offeror** is strongly advised to make and work with copies of the original electronic **FORMS**. The originals can then be used to make additional electronic or printed copies of the blank **FORMS**. Signatures are not required on the electronic **FORMS**.
- e. The Response shall include ample written evidence, in the form of technical specifications, cut/tear sheets, brochures, pictures, drawings, etc., to demonstrate that all specifications herein have been met and/or exceeded.

- f. The Response shall include, in any format desired, an overview of the **Service Organization** which will support Products sold under any **H-GAC** contract. The overview must include facility locations, phone numbers and Service Manager names, as well as the following:
- The procedure to be used by an **End User** requiring repairs.
 - Typical turn-around time on repairs.
 - Service Department days and hours of operation.
 - Number of qualified / factory trained service personnel normally on hand.
 - Description of the parts inventory on hand.
 - Training services, facilities and personnel available.
- g. Responses shall be enclosed in a sealed package(s) addressed to the Houston-Galveston Area Council, Cooperative Purchasing. The following information shall be stated on the exterior of the package(s):
- Name and address of **Offeror**.
 - Date and hour of public response opening.
 - Bid/Proposal Invitation number.
 - The statement: "**SEALED BID/PROPOSAL, DO NOT OPEN IN MAIL ROOM**".
- H-GAC** shall not be responsible for any Response not properly labeled.
- h. Submission of a COMPLETE Response by telegraphic or electronic transmission is not acceptable. However, Responses may be modified by telegraphic or electronic notice if such notice is received prior to the deadline for submission.
- i. Samples, when required, shall be submitted within the time specified and at no expense to **H-GAC**. If not destroyed or consumed during testing, samples will be returned upon request at **Offeror's** expense.
- j. **Offeror** shall provide firm contract pricing for all Products and Options being offered.
- k. If applicable, responses shall include copies of all current licensing which may be required by the Texas Motor Vehicle Division for execution of sales pursuant to any contract with **H-GAC**.
- l. Due to the complexity of responses and to aid in evaluation, the Response should contain **ALL** required information in tabbed sections as detailed below. Omission of any required FORM or information will be sufficient grounds for H-GAC to consider your response to be non-compliant. **NOTE** – Items in the Fourth Section should be supplied **ONLY** in the Original.

First Section:

- **Form(s) A – Offeror Identification & Signatory:** Identifies the offering party(ies), and should be completed by each party to the Response. If awarded, a contract will be executed with each.
- **Form B – Historically Underutilized Business Enterprises:** Used to collect information about disadvantaged and minority suppliers and subcontractors, and to commit **Offeror** to working with Participants toward their program goals.
- **Form C – Response Checklist:** Certification, and also an aid, to insure that all required information has been included in your Response.
- References, formatted as described elsewhere herein.
- Service Organization Document, formatted as described elsewhere herein.

Second Section:

- **Form D – Offered Items Pricing:** For Bids, contains the list of the Product Items covered by this Invitation. Select the items offered and fill in the price for each. (For RFPs, follow the instructions in Section B as this **Form** may or may not be used.)
- **Form E – Published Options:** Used to list and price all offered options. List, each on a separate line, all upgrades, downgrades, optional equipment, features, accessories and services which you desire to sell thru the **H-GAC** contract, if awarded. Published catalogs/price sheets may be listed, along with the discount structure that will apply. (For RFPs, follow the instructions in Section B as this **Form** may or may not be used.)

Third Section:

- Technical Specifications, Product Brochures, Tear Sheets, Cut Sheets, Strippers, etc. which clearly list and show all the standard features and capabilities of each Product Item offered on Form D.
- Warranty Documentation, as described elsewhere herein, for all items offered.

Fourth Section:

- Copies of any applicable Texas MVD Licenses.
 - Electronic Media, containing the complete response including all required *FORMS*, stored in a pouch or an envelope such that it will not fall out of the binder. (Required in 'Copy' only, not in 'Original'.)
 - **Form CIQ – Conflict Of Interest Questionnaire:** Chapter 176 of the Texas Local Government Code requires vendors and consultants contracting or seeking to contract with **H-GAC** to file a Conflict of Interest Questionnaire (CIQ) if they have an employment or other business relationship with an **H-GAC** officer or an officer's close family member. The required questionnaire is located at the Texas Ethics Commission website: http://www.ethics.state.tx.us/whatsnew/conflict_forms.htm. It is Bidder's responsibility to download the form and furnish a completed copy with the Response, if it is applicable.
- m. By submittal of Response, **Offeror** certifies to the best of its knowledge that all information is true and correct.

28. CLARIFICATION TO SPECIFICATIONS & REQUIREMENTS

- a. If **Offeror** is in doubt as to the meaning of any item in this Invitation, a written request for clarification may be submitted to **H-GAC** up to fifteen (15) calendar days prior to the deadline for response submission. **H-GAC** shall not be responsible for late delivery. Requests may be transmitted by FAX or e-mail to the assigned Specification Specialist, and should clearly reference this Invitation number and the specific page and paragraph in question. If there are multiple questions, they should be stated separately and numbered.
- b. Any interpretation of Invitation documents, if made, will be by written Addendum duly issued. A copy of such Addendum will be mailed or delivered to each person officially on record as having been sent a copy of this Invitation. **H-GAC** will not be responsible for any other explanation or interpretation of the Invitation documents made or given prior to the award of the contract.
- c. Any objections to the Invitation documents must be filed in writing with **H-GAC** on or before fifteen (15) calendar days prior to the deadline for submission of responses.
- d. Prospective offerors are advised that, after a draft specification has been issued, the Pre-Bid/Proposal Conference is the primary forum through which comments and suggestions may be offered for consideration by **H-GAC** prior to issuance of the final invitation and specifications.
- e. All best efforts have been made to insure that the product/service descriptions and associated specification information in Sections B & C are correct, and adequate time has been given to prospective Offerors to point out mistakes. However, if an error remains and is caught by Offeror before the scheduled bid/proposal opening, Offeror shall make note of the required correction in the Response, and shall also notify **H-GAC** prior to the opening of responses.

29. INCONSISTENT INFORMATION

H-GAC review of responses supplied on **H-GAC FORMS** is a significant part of the evaluation process. **Offeror** shall state clearly all information required on the *FORMS*. **Offeror's** information supplied on the *FORMS* shall take precedence in the event any standard "boilerplate" type language included in **Offeror's** response is inconsistent with the information supplied by **Offeror** on the **H-GAC FORMS**. In all cases, information on **H-GAC's** printed *FORMS* supplied as part of **Offeror's** response shall take precedence over information supplied on electronic media.

30. REJECTION OF RESPONSES

- a. **H-GAC** may reject a response if:
- **Offeror** misstates or conceals any material fact in the Response, or if,
 - **Offeror** does not strictly conform to law or the requirements of this Invitation.
- b. **H-GAC** may reject any and all responses, and may reject any part of a response.
- c. **H-GAC, at its sole discretion**, may also waive any formalities or irregularities in any response, or ask for corrected information except for pricing.

31. WITHDRAWAL OR MODIFICATION OF RESPONSES

Once received by **H-GAC**, responses may be modified or withdrawn prior to the submission deadline only if the request to do so is in writing submitted by **Offeror's** authorized representative. Responses and requests for modification received after the submission deadline will not be accepted. Requests for response withdrawal

received after the submission deadline will be accepted if the request to do so is in writing submitted by **Offeror's** authorized representative.

32. RESPONSE EVALUATION

For Bid Responses:

- a. Section B will state whether the contract will be awarded to the lowest responsible bidder or to the bidder who provides goods or services at the best value for **H-GAC** and its participants.
- b. If the contract will be awarded based on best value, Section B will state any relevant criteria which **H-GAC** will consider.
- c. For each offered Product Item, **H-GAC** may use the offered price, prices for Required Options, and the prices of selected common Published Options to determine the lowest responsible offer.
- d. Failure of **Offeror** to submit pricing for **frequently purchased** options and any **H-GAC** required options may cause response to be considered non-compliant at **H-GAC's** sole discretion.

For Proposal Responses:

- e. **H-GAC** will evaluate proposals as detailed in Section B.
- f. By submission of a Response Offeror indicates acceptance of the evaluation technique, and recognizes and accepts that **H-GAC** may at its sole discretion make subjective judgments during the evaluation process.

33. ORDER OF PRECEDENCE PRIOR TO CONTRACT AWARD

In the event of conflict between this document and any references or documents cited herein, this document shall take precedence prior to contract award.

34. AWARD OF CONTRACT

- a. **H-GAC** reserves the right to accept or reject any Product Item or option offered. Additionally, all options included in Offeror's response and accepted by **H-GAC** are understood to be included in any contract.
- b. **H-GAC** shall award contract(s) for line items or groups of line items, at its sole discretion.
- c. With authority granted by the **H-GAC** Board of Directors, a written contract shall be presented to the successful **Offeror(s)** and shall be subject to acceptance by the successful **Offeror(s)** within thirty (30) calendar days after presentation by **H-GAC**. If a contract is not executed within thirty (30) calendar days, **H-GAC** may rescind the contract offer and award a contract to the next **Offeror** in order of rank as determined by **H-GAC**.
- d. Delivery time and prompt payment discounts, including time allowed for payment, may be considered in tie-breaking of offers which are judged by **H-GAC** to be equal in all other criteria.
- e. The contract shall include the following documents in the stated order of precedence:
 - 1st The contract document signed by **H-GAC** and **Offeror**.
 - 2nd This Invitation and all specifications referenced herein.
 - 3rd **Offeror's** response to this Invitation.

35. PRO-FORMA CONTRACT

This Invitation includes a Pro-Forma (sample) Contract which successful offerors will be expected to sign. The actual final contract will be the same or nearly the same as the Pro-Forma. NOTE: Successful Offerors MAY NOT process any purchase orders until the contract documents have been executed and returned to **H-GAC**.

36. CONTRACT TERM

The contract shall be in effect throughout the period stated elsewhere in the contract documents, and thereafter until such time as any outstanding orders against the contract have been fulfilled. The contract may be extended if deemed by **H-GAC** to be in the best interests of the Program, and subject to mutual agreement of the parties.

37. PERFORMANCE & PAYMENT BOND

H-GAC's contractual requirements DO NOT include a Performance & Payment Bond (PPB), and offered pricing should reflect this cost saving. However, **Contractor** must be prepared to offer a PPB to cover any specific order if so requested by **End User**. **Contractor** shall quote a price to **End User** for provision of any requested PPB, and agrees to furnish the PPB within ten business (10) days of receipt of **End User's** purchase order.

38. CHANGE ORDERS

End Users shall have the right to make additions by addenda for the purpose of clarification or inclusion of additional specifications, qualifications, conditions, etc. Any such addenda shall be made in writing and agreed upon by **Contractor** and the **End User** agency prior to issuance of any Change Order. A copy of any such Change Order shall be furnished by **Contractor** to **H-GAC**.

39. DUPLICATION OF TERMS OR STATEMENTS

Where statements or terms are duplicated or are extremely similar, **H-GAC** and the **End User** reserve the right to use the statement or term most favorable to **H-GAC** and/or the **End User**.

40. PUBLICITY

H-GAC encourages contractors to "market" the Program, and can provide some information and artwork to be used in published promotional materials. However, any publicity or published material released by **Contractor** referencing the contract, whether in the form of a press release, brochure, photographic coverage, or verbal announcement, shall be issued only with prior review and approval by H-GAC.

41. TAXES

HGAC and **End User** participants are either units of government or qualified non-profit agencies, and are generally exempt from Federal and State sales, excise or use taxes. **Offeror** shall not include any such taxes in the Response. Further, it shall be the responsibility of **Contractor** to determine the applicability of any taxes to a particular order and act accordingly. Exemption certificates will be provided upon request.

42. DRUG FREE WORKPLACE

Contractor shall provide notice to its employees and sub-contractors, as required under the Drug-Free Workplace Act of 1988. A copy of **Contractor's** Drug-Free Workplace policy shall, on request, be furnished to any **End User**.

43. PRODUCT NOTICES & MAILINGS

H-GAC is **NOT** the owner of Products sold pursuant to this Invitation, but acts only in the capacity of purchasing agent. In that regard, **Contractor** accepts sole responsibility for insuring that notices and mailings, such as Safety Alerts, Safety Recall Notices and Customer Surveys, are sent directly to the **End User** of record.

44. HANDLING OF ORDERS & PAYMENTS

In general, orders and payments will be handled as described below. More specific instructions and information regarding handling of purchase orders and the Order Processing Charge may be provided after contract award. Established procedures may be changed at any time by **H-GAC** as may be dictated by efficient business practice. The particulars of any sale, e.g. specific products, pricing, delivery, warranty, etc., will be in strict accordance with the terms and conditions of this Invitation and the specific contract awarded to **Contractor**. Beyond that:

- a. For any particular procurement to be made under the provisions of an **H-GAC** contract, **End User** and **Contractor** will discuss requirements and agree as to what will be provided.
- b. **Contractor** will prepare a Contract Pricing Worksheet and provide it to **End User**. The Worksheet will list everything being purchased including the base bid item(s), all published and unpublished options and the delivery date. All pricing shall be per the current contract.
- c. **End User** will send a purchase document to **Contractor**, which **Contractor** will fax **H-GAC** together with the Contract Pricing Worksheet. **NOTE: Contractor** agrees not to offer, agree to or accept from **End User** any terms or conditions that conflict with or contravene those in **Contractor's** **H-GAC** contract, except for pricing discounts.
- d. **H-GAC** will prepare an "Order Confirmation" and transmit it to **End User** and to **Contractor**. The Order Confirmation verifies that **Contractor** has a valid **H-GAC** contract and that the order is in compliance with the requirements of the **H-GAC** Cooperative Purchasing Program. **Contractor** will not ship any goods before receipt of both **End User's** purchase document and **H-GAC's** Order Confirmation.
- e. On notification that **Contractor** has received an order, **H-GAC** will invoice **Contractor** for the applicable Order Processing Charge. **NOTE: The Order Processing Charge is charged to Contractor, EXCEPT in the**

case of motor vehicles. For all sales of motor vehicles the Order Processing Charge is levied on the **End User**, collected by **Contractor**, and remitted to **H-GAC** by Contractor.

- f. **Contractor** will deliver products/services ordered, and will invoice **End User** for products/services accepted by **End User**. (See other Sub-Section herein dealing with Product Delivery.) **Contractor** will not invoice before shipment has been made.
- g. **End User** will pay **Contractor** for those products and/or services ordered which have been received and accepted. Under no circumstances shall any check be made payable to a representative or agent. Should a representative or agent submit an invoice to **End User** for any cost related to a purchase order issued to **Contractor** for products/services covered by an **H-GAC** contract, such invoice shall be forwarded to **Contractor** and **Contractor** will take action to correct the error.
- h. Upon delivery of any product/service by **Contractor** and acceptance by **End User**, **Contractor** shall remit to **H-GAC** the full amount of the applicable Order Processing Charge in accordance with the payment terms established in the **H-GAC** contract. Note, the Order Processing Charge is due whether or not **Contractor** has ever received an invoice from **H-GAC**. Sales executed based on the particulars of **Contractor's H-GAC** contract, without payment of the Order Processing Charge, may constitute fraud.

45. PRICE CHANGES

- a. Any permanent increase or decrease in offered pricing for a base contract item or published option is considered to be a price change. Temporary increases in pricing by whatever name (e.g. 'surcharge', 'adjustment', 'equalization charge', 'compliance charge', 'recovery charge', etc.), are also considered to be price changes.
- b. Except in the case of contracted published catalogs and price sheets, prices for Base Bid Items and Published Options are expected to be held firm for a minimum of 90 days from the date an awarded Offeror signs the H-GAC contract. Thereafter, changes will be considered if accompanied by justifying documentation satisfactory to H-GAC. For published catalogs and price sheets which are on an H-GAC contract, requests to amend the contract to reflect any new published catalog or price sheet may be submitted whenever the manufacturer publishes the new document. Any such request must include the new catalog or price sheet.
- c. If **Contractor** routinely offers discounted contract pricing, **H-GAC** may request **Contractor** to accept amended contract pricing equivalent to the routinely discounted pricing.
- d. No price change will be allowed unless it has been reviewed and approved by **H-GAC** in writing. **Contractor** must have received **H-GAC's** written approval of any change prior to charging the new price or using it in any quotation prepared for an End User.
- e. Price change requests must be submitted to **H-GAC** in writing and must be received by **H-GAC** at least thirty (30) calendar days prior to the requested effective date of the change, and must state the time period for which the requested pricing will remain firm.
- f. Price change requests shall include **H-GAC Forms D** and **E**, or whatever documentation was used to submit pricing in the original Response hereto, showing all affected items with current contract price, requested price, and percentage change shown clearly for each. This documentation should be submitted in MSExcel format to facilitate analysis and updating of the website.
- g. Price change requests **MUST** be supported with substantive documentation (e.g. manufacturer's price increase notices, copies of invoices from suppliers, etc.) showing that **Contractor's actual costs** have increased. The Producer Price Index (PPI) may be used as partial justification, subject to approval by **H-GAC**, but no price increase based solely on an increase in the PPI will be allowed.
- h. All Products shall, at time of sale, be equipped as may be required under any then current applicable local, state, and federal government requirements. If, during the course of any contract, changes are made to such government requirements which cause a manufacturer's costs of production to increase, **Contractor** may increase Product pricing to the extent of **Contractor's** actual cost increase. The increase must be substantiated with support documentation acceptable to **H-GAC** prior to taking effect. Modifications to a Product required to comply with such requirements which become effective after the date of any sale shall be the responsibility of the **End-User**.
- i. In cases involving contract extensions exceeding sixty-one (61) days beyond the stated expiration date of the contract, **Contractor** may request a price change based on the same conditions as stated above. However the thirty (30) day prior notice is waived and **H-GAC** will consider the request immediately on receipt.
- j. **H-GAC** reserves the right to accept or reject any price change request. Acceptance, if granted, will be in writing and the approved changes will become part of the contract.

46. CONTRACT ITEM CHANGES

- a. If a manufacturer discontinues a contracted item, that item will automatically be considered to be deleted from the contract with no penalty to Contractor. However, **H-GAC** may at its sole discretion elect to make a contract award to the next low offeror for the item, or take any other action deemed by **H-GAC** to be in the best interests of **End Users**, at its sole discretion.
- b. If a manufacturer makes any change in a contracted item which does not affect the contract price, Contractor shall advise **H-GAC** of the details. If the 'new' item is equal to or better than the originally contracted item, the 'new' item shall be approved as a replacement. Otherwise **H-GAC** may allow or reject the change, or take any other action deemed by **H-GAC** to be in the best interests of **End Users**, at its sole discretion. If the change is rejected there will be no penalty to Contractor.
- c. If a manufacturer makes any kind of change in a contracted item which affects the contract price, Contractor shall advise **H-GAC** of the details. **H-GAC** may allow or reject the change at its sole discretion. If the change is rejected there will be no penalty to Contractor. However, **H-GAC** may elect to make a contract award to the next low offeror for the item, or take any other action deemed by **H-GAC** to be in the best interests of **End Users**, at its sole discretion.
- d. In the case of specifically identified catalogs or price sheets which have been contracted as base bid items or as published options, routine published changes to products and pricing shall be automatically incorporated into the contract. However, **Contractor** must still provide thirty (30) calendar days written notice and an explanation of the changes to products and pricing. **H-GAC** will respond with written approval.

47. FORCE MAJEURE

If either party shall be wholly or partially prevented from the performance of any contractual obligation or duty by reason of or through strikes, stoppage of labor, riot, fire, flood, acts of war, insurrection, accident., order of any court, act of God, or specific cause reasonably beyond the party's control and not attributable to its neglect or nonfeasance, in such event, the time for the performance of such obligation or duty shall be suspended until such disability to perform is removed. Determination of Force Majeure shall rest solely with **H-GAC**.

48. PERFORMANCE UNDER CONTRACT

H-GAC is committed to insuring that **Contractor** provides effective and efficient service to all Participants in the Cooperative Purchasing Program, and expects that certain Performance Conditions must be met. Failure to meet these conditions may result in contract termination. In that regard, **Contractor shall:**

- a. Appoint a dedicated representative to be the contact person and focal point for all matters relating to End User quotations and orders. The representative shall have: A toll free phone number with voice mail; A fax number; A working e-mail address; and A postal address.
- b. Insure that the representative timely monitors all communication modes listed above, and promptly responds to communications from **End Users** and **H-GAC** in any of these modes. Phone calls will be promptly returned, in any event not later than the next business day. Acceptable failure will be due only to Force Majeure.
- c. Maintain sufficient qualified staff to promptly process all communications from **H-GAC** or **End Users**, and to efficiently, effectively and accurately service all requirements of the contract.
- d. As may be requested by **H-GAC**, replace any staff members who are not providing the service and expertise deemed necessary by **H-GAC** for acceptable support of **End Users**.
- e. Properly prepare and provide to **End User** a Contract Pricing Worksheet, or a quotation in other format as approved by **H-GAC**, for each and every order that is to be executed.
- f. Furnish, on request of **H-GAC**, reasonable data, forms and graphic material to be used in brochures or other print media, or on **H-GAC**'s website.
- g. Allow access to **H-GAC** authorized personnel for inspection of operating facilities, and auditing of purchase orders during the contract period, and for a period extending thru the completion of any outstanding orders. Site inspection may be arranged not less than ten (10) calendar days prior, shall include the names of all participants, and shall be at no expense to **Contractor**.
- h. **Reporting Requirements:**
 - **Contractor** agrees to submit written quarterly reports to **H-GAC** detailing all transactions during the previous three month period. Such reports shall include, but are not limited to the following:
 - **End User** name
 - Product/Service purchased, including Product Code if applicable

- End User Purchase Order Number
- Purchase Order Date
- Product/Service dollar amount
- **HGACBuy** Order Processing Charge amount
- Reports must be provided to **H-GAC** in MSExcel or other acceptable electronic format, and are due by the 30th day of the month following the applicable quarter being reported.

i. Should **Contractor** default in providing Products or Services as required by this Invitation and the contract, recourse may be exercised thru cancellation of the contract and other legal remedies as may be appropriate.

49. IMPLEMENTATION OF INTERNET BASED E-COMMERCE

H-GAC Cooperative Purchasing has adopted E-Commerce as part of its business model and maintains an internet website at www.HGACBuy.org. At any point in time, various information and process functions may be implemented and made operational thru the website, including but not limited to items such as:

Information Items

- | | |
|--|--|
| • Contract information | • Product and option item catalog listings |
| • Procurement schedules | • End User & Contractor information |
| • Response requirements & specifications | |

Functions

- | | |
|--|-----------------------------|
| • End User product inquiries | • Shipping/Delivery notices |
| • Product configuration and price quotes | • Invoice generation |
| • Purchase Orders and Confirmations | • Payment remittances, etc. |

All **H-GAC Contractors**, as a condition of contract, will be required to work with **H-GAC** and it's E-Commerce provider(s) to maximize use of E-Commerce within the context of **H-GAC** Cooperative Purchasing business. **Offeror** is encouraged to refer to **H-GAC's** Cooperative Purchasing web site where additional information can be found. If you have any questions, please contact **H-GAC** for assistance.

50. CONTRACTOR ORIENTATION/TRAINING

H-GAC believes that **Contractor's** familiarity with the operational policies and requirements of the Cooperative Purchasing Program is a key factor in achieving **End User** satisfaction. In that regard, the Contact Person listed on **Form A**, or an alternate, shall be required to participate in an **H-GAC** vendor orientation/training as soon as possible after contract award. In addition, any other of **Contractor's** staff who will be involved in any way with the **HGACBuy** Program should participate in orientation. The orientation may be presented as a teleconference or webinar, or may be held in **H-GAC's** offices as may be determined by **H-GAC** and **Contractor** to be the most efficient and effective form of delivery.

51. LEGAL & CONTRACTUAL REMEDIES

RESOLUTION OF PROTESTED SOLICITATIONS AND AWARDS

Procedure

Any actual or prospective **Offeror** or **Contractor** who is aggrieved in connection with a purchase transaction may file a grievance. The grievance may be filed at any phase of the procurement. In order for an above mentioned party to enter the grievance process, a written complaint must be sent to the Office Services Manger of **H-GAC** by certified mail which identifies the following:

1. Name, mailing address and business phone number of the complainant.
2. Appropriate identification of the procurement being questioned.
3. A precise statement of reasons for the protest.
4. Supporting exhibits evidence or documents to substantiate any claims.

The grievance must be based on an alleged violation of **H-GAC's** Procurement Procedures, a violation of State or Federal law (if applicable), or a violation of applicable grant or contract agreements to which **H-GAC** is a party. Failure to receive a procurement award from **H-GAC** in and of itself does not constitute valid grievance. Upon receipt of grievance, the Office Services Manager will initiate the informal resolution process.

Expedited Resolution

The Procurement Officer or Departmental Manager responsible for the solicitation shall contact the complainant and all interested parties and attempt to resolve the allegations informally within ten (10) working

days from date of complaint. If the allegations are successfully resolved by mutual agreement, documentation will be forwarded to the Office Service Manager of the resolution with specifics on each point addressed in the original complaint.

If the Procurement Officer or Departmental Manager is not successful in resolving the allegations, the complaint along with the comments will be forwarded to the Office Service Manager immediately. The Office Service Manager will review all documentation. All interested parties will be given written notice of the date, time, and place of the hearing and an opportunity to present evidence. A written decision will be issued within five (5) working days after the hearing along with notice of appeal rights.

Appeals

The complainant may appeal the Office Service Manager's decision by submitting a written appeal, within five (5) working days, to the Executive Director of **H-GAC**. The Executive Director, upon receipt of a written notice of appeal, shall contact the complainant and schedule a hearing within ten (10) working days. The Executive Director of **H-GAC** has the option of appointing a Hearing Officer to preside over the hearing. If appointed, the Hearing Officer shall conduct a hearing and forward a summary and recommended resolution to the Executive Director.

The decision reached by the Executive Director or his designee shall be final and conclusive. This decision will be forwarded to the complainant in writing within thirty (30) working days.

The **Contractor** may, if it elects to do so, appeal the final and conclusive decision of the Executive Director to a Court of competent jurisdiction.

RESOLUTION OF CONTRACT DISPUTES

Upon breach or default, **H-GAC** shall give the **Contractor** written notice of default. If the default is not remedied, within a reasonable specified time from date of notification, to the satisfaction and approval of **H-GAC**, default will be declared.

Upon breach of contract or default, **H-GAC** may exercise any and all of its rights afforded by law, including but not limited to those referenced in the General Contract Provisions.

SOLICITATIONS OR AWARDS IN VIOLATION OF THE LAW

Contracts awarded in violation of the competitive process or otherwise in violation of the law are voidable by **H-GAC**.

52. NATIONWIDE SALES OPPORTUNITIES

HGACBuy provides purchasing services to local governments qualifying non-profits throughout the nation, and desires to make established contracts available to them wherever and whenever practicable. Therefore, once a contract is awarded, **Contractor** is expected to expand the scope of its marketing effort to include sales to **End Users** in all areas of the United States, and/or to assign any **H-GAC** contract to another contractor(s) as deemed appropriate by **H-GAC** in the interest of its End Users.

- **Contractor** may sell through **HGACBuy** anywhere subject to compliance with applicable laws and regulations. If the market structure in which **Contractor** operates requires a contract assignment for any particular sale, **H-GAC** will expect **Contractor** to assign the contract to a Manufacturer or to another Dealer(s). Such assignment must be approved by **H-GAC**.
- **Contractor**'s differential costs (e.g. transportation & delivery charges) and allowances (e.g. manufacturer's sales incentives) related to any sale may be charged to buyer.

<p>End of Section A GENERAL TERMS & CONDITIONS</p>
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SECTION B: PRODUCT SPECIFIC REQUIREMENTS

For

SCHOOL BUSES SPECIFICATION NUMBER: BS08-15

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01. INTRODUCTION: PURPOSE AND SCOPE

In order to address the potential school bus needs of our Cooperative Purchasing program's local government Members, H-GAC has established this specification. It describes minimum configuration and performance standards on various categories of new model school buses and diesel retrofit systems. Successful bidders who are awarded contracts pursuant to this invitation will be able to sell awarded base unit models, as well as quoted accessory options and upgrades, to any H-GAC members during the term of the contract. The contract period shall cover a **twenty-four (24) month** period, commencing on or about **August 1, 2015**. As described earlier in this specification (Section A, Terms & Conditions), price changes may be allowed during the course of this eventual contract, per the guidelines described.

02. DEFINITIONS AND ABBREVIATIONS:

Aftertreatment device: Component used to reduce engine pollutant emissions downstream of the combustion chamber.

Ambulatory: Possessing the capacity for walking.

ANSI: American National Standards Institute.

ASTM: American Society for Testing and Materials.

ASHRAE: American Society of Heating, Refrigeration and Air Conditioning Engineers.

Base Unit: The basic configuration per the parameters prescribed in the specification, associated with Bidder's base price (Form D), exclusive of options.

BCI: Battery Council International.

BTU: The quantity of heat required to raise the temperature of one pound of water one degree Fahrenheit at a specified temperature (as 39°F).

CARB: California Air Resources Board

Catalytic Converter: Consists of a metal housing filled with a hard material which is covered with a catalytic compound. The system breaks down the chemicals in the exhaust and reduces harmful pollutant emissions.

Certified: obtaining a certificate of conformity for an engine family that complies with the highway emission standards and requirements.

CEM: Catalytic Exhaust Muffler

CFM: Cubic feet per minute.

CRT: Continuously Regenerating Technology

CO: (Carbon Monoxide) is a colorless, odorless and poisonous gas produced by the burning of fuels.

Conventional Bus: A school bus, with the engine in front of the windshield, and the service or entrance door behind the front wheels.

DOC : (Diesel Oxidation Catalyst) device that uses a chemical process to break down pollutants in the exhaust stream into less harmful components.

DPS: Department Of Public Safety

Education Agency/TEA: Texas Education Agency.

ETV: Environmental Technology Verification Program established to carefully examine and judge the efficacy of a technology.

EPA: United States Environmental Protection Agency.

FMVSS: Federal Motor Vehicle Safety Standards.

Federal Guideline No. 17: Federal Highway Safety Program Guideline Number 17.

Forward Control Bus: A school bus with the steering wheel, pedals, instruments, and other driver controls mounted as far forward as possible, usually just behind the windshield. The engine is located behind the windshield, either at the front of the bus, or at the rear of the bus, or in between these positions. The service door is located forward of the front axle.

GAWR: Gross Axle Weight Rating.

GVWR: Gross Vehicle Weight Rating. The maximum allowable weight of the fully loaded vehicle, per manufacturer, including passengers, cargo, and the tongue weight of any towed vehicle.

HC: An exhaust and evaporative pollutant of hydrogen and carbon atoms resulting from unburned fuel.

Knee Space: The horizontal distance from the front center of a seat back to the rear center of the seat back (or barrier) immediately ahead, measured at approximately four inches (4") above the seat cushion.

Manufacturer: A fabricator of school buses, bodies, chassis, or components.3.20

Member: Local government agencies (cities, counties, police and fire departments, etc.) participating in Houston Galveston Area Council's Cooperative Purchasing program, purchasing equipment and services through H-GAC from contracted manufacturers and/or distributors.

MPV: Multipurpose passenger vehicle accommodating ten (10) or less people.

NAAQS: National Ambient Air Quality Standards

NOx: (Oxides of nitrogen) family of reactive gaseous compounds that contribute to air pollution produced during the combustion of fuels at high temperatures.

NSSB: National Standards for School Buses (Formerly National Minimum Standards).

Oxidation Catalyst: A type of catalyst (catalytic converter) which chemically converts HC (hydrocarbons) and CO to water vapor and carbon dioxide.

PM: Particulate matter

Particulate Trap/Filter: An aftertreatment device which filters or traps diesel particulate from engine exhaust until the trap becomes loaded to the point that a regeneration cycle is implemented to burn off the trapped particulate matter.

Required Option. A bus component, such as air conditioning, that must be priced by Bidder on H-GAC's Form E/F. H-GAC members shall have the option of including these at the bid prices.

SAE: Society of Automotive Engineers.

SCR: Selective Catalytic Reduction

SCRT: Selective Catalytic Reduction and Continuously Regenerating Technology

SBMTC: School Bus Manufacturer's Technical Council.

SCAAN: Computer analysis of engine performance.

School Bus: A motor vehicle that was manufactured in compliance with the federal motor vehicle safety standards for school buses in effect on the date of manufacture and that is used to transport pre-primary, primary, or secondary students on a route to or from school or on a school-related activity trip other than on routes to and from school. A school bus is a bus owned, leased, contracted to or operated by a school or school district and regularly used to transport students to and from school or school-related activities, must meet all applicable FMVSS, and is readily identified by alternately flashing lights, National School Bus Yellow paint, and the legend "School Bus". The term does not include a chartered bus, a bus operated by a mass transit authority or school activity bus.

School Bus (State Definition - Transportation Code 541.201: "Vehicles" (15)): A school activity bus means a bus designed to accommodate more than 15 passengers, including the operator, that is owned, operated, rented, or leased by a school district, county school, open-enrollment charter school, regional education service center, or shared services arrangement and that is used to transport public school students on a school-related activity trip, other than on routes to and from school. The term does not include a chartered bus, a bus operated by a mass transit authority, or a school bus. The underlined section is where it says a school activity bus cannot be a "school bus".

Semi-forward Control Bus: A bus in which part of the engine is beneath and/or behind the windshield and beside the driver's seat.

Specially Equipped Bus: (Transportation Code 541.201 "Vehicles" (16)): Specially Equipped Bus: A school bus designed, equipped, or modified to accommodate students with special needs.

Bidder: Manufacturer's representative or dealer authorized to make sales and supply parts and services in Texas.

TBPC: Texas Building & Procurement Commission. Reference to the state of Texas' School Bus Specification.

VESC: Vehicle Equipment Safety Commission.

03. CHANGES IN UNDERLYING SPECIFICATIONS

In the event of a change in any third party specification referenced herein, this specification shall be deemed automatically updated to reflect such change. Buses furnished shall comply with such revisions, as of its effective date. If compliance with a revised specification would cause supplier's costs to change, supplier may request a price change (ref. the *Terms & Conditions* section of this document).

04. APPLICABLE THIRD PARTY SPECIFICATIONS AND STANDARDS

This specification describes the majority of school bus types required by the various Texas local governments. Buses bid and sold under this contract shall conform to all federal and state requirements, including applicable sections of those to follow. School bus bodies and chassis shall meet or exceed the minimum requirements set forth in these standards. Bidders are instructed that the school buses sold under this contract shall conform to the configuration and performance minimums set forth in TBPC's most current "Texas School Bus Specification", including applicable addenda and attachments, during the life of the contract, except where excluded specifically by this specification.

4.1 FEDERAL GUIDELINES

- ❑ Federal Highway Safety Program Guideline No. 17, Pupil Transportation Safety: Superintendent of Documents, U.S. Government Printing Office, P. O. Box 371954, Pittsburgh, PA 15250-7954, (202) 512-1800, Fax: (202) 512-2250, www.access.gpo.gov/su_docs
- ❑ Federal Motor Vehicle Safety Standards (FMVSS): Superintendent of Documents, U.S. Government Printing Office, P. O. Box 371954, Pittsburgh, PA 15250-7954, (202) 512-1800, Fax: (202) 512-2250, www.access.gpo.gov/su_docs
- ❑ School bus bodies and chassis shall meet or exceed the minimum requirements of all applicable FMVSS, including applicable requirements of the Federal Motor Vehicle Safety Standards, Public Law 49 U.S.C. Chapter 301, FMVSS, standards in effect at the time of purchase. All requirements of this specification must be met unless they are in conflict with the FMVSS as they apply to school buses.
- ❑ U.S. Environmental Protection Agency (EPA): 401 M Street, SW Washington, DC 20460-0003, (202) 260-2090, www.epa.gov : Current Noise Emission Standards.
- ❑ Clean School Bus : www.epa.gov/cleanschoolbus/retrofit
- ❑ Federal Highway Administration (FHA): United States Department of Transportation,
- ❑ Superintendent of Documents, U.S. Government Printing Office, P. O. Box 371954, Pittsburgh, PA 15250-7954, (202) 512-1800, Fax: (202) 512-2250, www.access.gpo.gov/su_docs: Federal Highway Administration FP-85 Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects.
- ❑ Superintendent of Documents, U.S. Government Printing Office, P. O. Box 371954, Pittsburgh, PA 15250-7954, (202) 512-1800, Fax: (202) 512-2250, www.access.gpo.gov/su_docs:
 - Federal Standard No. 595b - Colors used in Government Procurement.
 - Federal Specification No. TT-C-490D - Cleaning Methods for Ferrous Surfaces and Pre-treatments for Organic Coatings.
 - Federal Specification No. A-A 59295 - Corrosion Preventive Compounds, Cold Application.
 - Federal Specification No. A-A 2962 - Enamel, Alkyd, Exterior, Solvent Based
 - Federal Specification No. V-T-295E - Thread, Nylon
 - Federal Specification No. A-A 3158 - Matting, Rubber and Vinyl.
- ❑ NATIONAL SCHOOL TRANSPORTATION SPECIFICATIONS & PROCEDURES (NSTSP): School bus bodies and chassis shall meet or exceed all current NSTSP standards (except when those requirements are in conflict with the requirements of this specification. In such cases, the requirements specified herein shall prevail), including:
 - National School Transportation Specifications & Procedures: 2000 Revised Edition, National Conference (May, 2000). This publication is available from: Missouri Safety Center, Central Missouri State University, Humphreys Suite 201, Warrensburg, MO 64093, (660) 543-4830, Fax: (660) 543-4482.

4.2 STATE OF TEXAS GUIDELINES

- ❑ Texas Building & Procurement Commission (TBPC): P.O. Box 13047, Austin, Texas 78711-3047, 1711 San Jacinto, Austin, Texas 7870, Phone: (512) 463-6363; <http://www.tbpc.state.tx.us>: 2005 Texas School Bus Specification and Addenda and Attachments.
- ❑ Railroad Commission of Texas (RRC), Liquefied Petroleum Gas Division: P.O. Box 12967, Austin, TX 78711-2967, Phone: (512) 463-7288, www.rrc.state.tx.us:
 - Regulations for Compressed Natural Gas (Current Edition)
 - Safety Rules - Liquefied Petroleum Gas Division (Current Edition)
- ❑ Texas Commission on Environmental Quality (TCEQ): 12100 Park 35 Circle, Austin, TX 78753, (512) 239-1000, www.tceq.state.tx.us: Regulation IV (31 TAC CHAPTER 114), Control of Pollution from Motor Vehicles (Current Edition).

4.3 OTHER GUIDELINES

References to other specifications, standards, and test methods shall be to those in effect on the date of the Invitation for Bid. The following publications form a part of this specification to the extent specified herein:

- ❑ American National Standards Institute (ANSI): 11 West 42nd Street, New York, NY 10036-8002, (212)642-4948, Fax: (212) 840-2298, www.ansi.org: ANSI Z 26.1-96 - Safety Glazing Materials for Glazing Motor Vehicle and Motor Vehicle Equipment Operating on Land Highways, including Supplement Z 26.1a.
- ❑ The American Engineered Wood Association: P.O. Box 11700, Tacoma, WA 98411-0700, (253) 565-6600, Fax (253) 565-7265, www.apawood.org: Voluntary Plywood Standard PS 1-95, Construction and Industrial Plywood.
- ❑ American Society for Testing & Materials (ASTM): 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, (610) 832-9585, Fax: (610) 832-9555, www.astm.org:
 - ASTM A653/A 653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot Dip Process.
 - ASTM A924/A924M - Standard Specification for General Requirements for Steel Sheet, Metallic-Coated by the Hot Dip Process.
 - ASTM D 3574 - Test Method for Flexible Cellular Materials - Slab, Bonded, and Molded Urethane Foams.
 - ASTM B 117 - Standard Practice for Operating Salt Spray (Fog) Apparatus.
 - ASTM E 810 - Standard Test Method for Coefficient Retro-reflection of retro-reflective Sheeting.
- ❑ American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE): Customer Service, 1791 Tullie Circle NE, Atlanta, GA 30329, (800) 527-4723, Fax (404) 321-5478, www.ashrae.org:
 - ASHRAE 16 - Method of Testing for Rating Room Air Conditioners and Packaged Terminal Air Conditioners.
 - ASHRAE 41.1 - Standard Method for Temperature Measurement
- ❑ School Bus Manufacturer's Technical Committee (SBMTC): School Bus Design Objectives, National Association of State Directors of Pupil Transportation Services, P.O. Box 1402, Dover, DE 19903, (800) 585-0340, Fax (302) 698-1997, www.nasdpts.org: SBMTC Standard No. 001 – Procedure for Testing and Rating Automotive Bus Hot Water Heating and Ventilating Equipment.
- ❑ Society of Automotive Engineers, Inc (SAE): 400 Commonwealth Drive, Warrendale, PA 15096-0001, (724) 776-4970, www.sae.org:
 - SAE J20 – Coolant System Hoses.
 - SAE J377 – Performance of Vehicle Traffic Horns.
 - SAE J383 – Motor Vehicle Seat Belt Anchorage Design Recommendations.
 - SAE J514 – Hydraulic Tube Fittings.
 - SAE J516 – Hydraulic Hose Fittings.
 - SAE J517 – Hydraulic Hose.
 - SAE J561 – Electrical Terminals – Eyelet and Spade Type.
 - SAE J639 – Safety and Containment of Refrigerant for Mechanical Vapor Compression Systems for Mobile Air Conditioning Systems.
 - SAE J887 – School Bus Warning Lamps.
 - SAE J994 – Alarm – Backup – Electric – Laboratory Performance Testing.
 - SAE J1128 – Low Tension Primary Cable.
 - SAE J1133 – School Bus Stop Arm.

05. GENERAL INFORMATION AND REQUIREMENTS

Any parts or components not specifically mentioned below, but which are required to provide a complete operating unit, or which are called for in the specification, or which are standard for the model offered, shall be included.

5.1 EQUIPMENT INSTALLATION

Body and chassis manufacturers shall be responsible for installation/modification of all equipment and insure equipment conforms in strength, quality, and workmanship to accepted standards of the industry and State specifications and Federal Motor Vehicle Safety Standards of all equipment installed when the bus leaves their facility. The distributor/dealer shall be responsible for installation/modification of all equipment and insure equipment conforms in strength, quality, and workmanship to accepted standards of the industry and State specifications and Federal Motor Vehicle Safety Standards of all equipment added by the distributor/dealer.

5.2 NEW MODELS

(a) Each bus body and bus chassis furnished under this specification shall be new school buses of the current model year's production or the latest improved model in current production. The bidder represents that all units offered under this specification shall meet or exceed the minimum requirements specified herein.

(b) All Bidders must be licensed by the Texas Motor Vehicles Division of the Texas Department of Transportation to engage in the business of selling or exchanging motor vehicles as specified in the Texas Motor Vehicle Commission Code, latest revision.

5.3 SERVICING AND EQUIPPING

All bus bodies, chassis, or complete school bus units shall be completely assembled, adjusted, and all equipment installed. All parts not specifically mentioned herein which are necessary to provide a complete school bus, bus body, or chassis shall be furnished by the successful bidder and said parts shall conform in strength, quality of materials, and workmanship to recognized industry engineering practices.

5.4 RECALL NOTIFICATION

Manufacturer or Bidder awarded will be responsible for notifying the H-GAC member accepting delivery of the bus of any recall notices.

5.5 CERTIFICATION AND COMPLIANCE

By signing the bid, the bidder certifies that the equipment being offered meets or exceeds all requirements and conditions of this specification when built and on delivery of the bus. At point of delivery, bidder also certifies that the addition of any option or removal of any equipment will not compromise the safety or operation or warranty of the bus in any way and the bus will continue to meet Texas state school bus specifications and all federal requirements in effect at the time the bus is manufactured. Bidder shall note in bid where a particular model is in early, voluntary emissions compliance for state or federal standards. Failure to comply with all the requirements and conditions of this specification will subject the bid to rejection.

5.6 LITERATURE AND DRAWINGS

If bidder is subsequently awarded a contract pursuant to this bid invitation, H-GAC members may request, and bidder shall provide a metal certification statement certifying that the metal used in a given school bus conforms to the NSSB requirements, who requires that galvanized steel meet a 1000 (one-thousand) hour salt spray test in accordance with ASTM Standard B117, while losing no more than ten percent (10%) of material, by weight.

5.7 MANUFACTURER'S STATEMENT OF ORIGIN

Successful Bidder shall furnish the receiving agency a manufacturer's Statement of Origin (Certificate of Title will not meet this requirement), provided upon receipt of H-GAC member's payment to H-GAC, and made out in the name of the individual agency, providing the following:

- (a) GVWR for the model specified
- (b) GVWR required for an agency's written exception, or
- (c) Greater GVWR required by extra equipment
- (d) Nominal weight rating in tons

5.8 ODOMETER

Odometer Disclosure Statement: the Truth in Mileage Act requires the selling dealer to furnish a complete odometer statement to the purchaser. This statement must be complete and shall include mileage accrued to the point of delivery. In addition to the signature of the seller/agent certifying the odometer reading, both the dealership and the name of the agent shall be printed on the Odometer Disclosure Statement. The odometer statement on the MSO may satisfy this requirement. Odometer and MSO shall be presented by contractor to the H-GAC member at the time of delivery.

5.9 TEMPORARY LICENSE TAGS

Temporary license tags shall be issued by the bidder for use with each new bus delivered.

5.10 PRE-DELIVERY SERVICE

Bidder or the bidder's representative responsible for the final delivery shall include with the bus a signed certificate stating what inspection and preparation was performed to each bus prior to delivery.

5.11 TRADE-INS

H-GAC makes, and the bidders shall rely on, no representation or warranty whatsoever concerning the condition of any trade-ins, either expressed or implied, and no agent or employee of the H-GAC is authorized to make any representation or warranty as to the trade-ins.

5.12 OPTIONS

Pricing for all commonly ordered options, including those required options listed in this specification (Ref. Section 18.0) shall be listed separately, on Form E (separate from the base unit pricing on Form D).

06. WARRANTY AND SERVICE

All warranties listed herein shall apply to all school buses manufactured after the effective date of these specifications. Bus vendors shall provide an inclusive two (2) year warranty for all buses sold under this contract. These warranties shall be "bumper-to-bumper". Items not covered in the warranty are:

- (a) Damage from negligence
- (b) Damage from vandalism
- (c) Damage from acts of God
- (d) Damage from accidents
- (e) Normal wear and tear
- (f) Consumables

6.1 CONTRACTOR'S RESPONSIBILITY

Each successful bidder is ultimately responsible for and must assure H-GAC that any warranty service shall be performed to the satisfaction of the H-GAC and its member, regardless of whether the successful bidder or the bidder's agent performs the warranty work on school buses. Questions regarding responsibility of the body versus the chassis manufacturer to repair a given defect are the prime contractor's responsibility to see that the repairs are made to the satisfaction of the member school district.

6.2 DEFECTIVE WORKMANSHIP

In the event that an error is discovered or conclusive proof of defective workmanship and/or materials is found on any body or chassis after acceptance and payment has been made, the successful bidder shall make such repairs as required at the bidder's expense.

6.3 PENALTIES

Upon refusal of the successful bidder to make satisfactory adjustment(s), H-GAC reserves the right to claim and recover from said successful bidder, by due process of law, such sums as may be sufficient to correct the error or make good the defect in material and/or workmanship.

6.4 WARRANTY WORK AND GENERAL TERMS OF WARRANTIES

The H-GAC's purchase orders for school buses are issued to a single contractor, who has the ultimate responsibility of insuring the delivery of a bus that meets specifications in all details and is free of defects in materials and workmanship. Warranty coverage shall be per chassis, body, and component manufacturers OEM warranties.

07. REDUCED PASSENGER CAPACITY

The definition of passenger capacity, as used in this specification, has reference to seat space (width) allotted for each pupil. This is based on National height and weight percentile averages specified in Federal Highway Safety Guidelines Standard No. 17. Approximately thirteen (13) inches per pupil has been established for designating bus body passenger capacities. Passenger capacity may be reduced when junior high, high school, or adult passengers are primary passengers. As an example, for larger students in which only two (2) students can be accommodated per seat, then a 71-passenger school bus may only seat about forty-seven (47) students. Other capacity buses will like wise seat fewer than the stated capacity. If there is a question about seating capacity in regular or wheelchair-equipped school buses, please consult with vendor or manufacturer before ordering.

08. CHASSIS AND BODY SERVICE MANUALS

The Bidder shall provide one complete set per order (at no cost to H-GAC Member), in CD format, the following:

- (a) Operator's manual
- (b) Warranty information
- (c) Service manuals for engine, chassis, and body (on-line format is acceptable, but should be referenced if chosen)
- (d) Parts manuals (on-line availability is acceptable and should be referenced if chosen)

09. BUS SIZES

The bus sizes are designated in terms of ambulatory passenger capacity, **excluding the driver**, as listed below, for regular seating. Capacity is based upon National Height and Weight Percentile Averages as specified in Federal Highway Safety Program Guideline No. 17. (Ref. Section B.1.1 and B.1.2 of this document). The passenger capacity for the bus ordered is determined for all regular seats. Specially equipped buses may reduce seating capacity. **In determining seating capacity, each wheelchair securement location and/or lift shall be counted as four designated seating positions.**

In determining seat spacing, the National Highway Traffic Safety Administration (NHTSA) divides the seat width by the number 13, which represents the 12.8 inch hip breadth of a 5th percentile adult female dummy. This dummy is approximately 4-feet 11-inches tall and weighs 102 pounds. Per the FMVSS Formula: 7.56" to 22.4" = 1 seating position; 22.44" to 37.4" = 2 seating positions; 37.44" to 52.4" = 3 seating positions.

10. H-GAC BUS CATEGORIES

In addition to the requirements specified elsewhere in this document, the following broad bus types are recognized by this specification and subsequent contracts (Ref. TBPC's "*Texas School Bus Specification*" minimum requirements tables for other component specifics not listed here):

- ❑ **BUS TYPE "A":** A conversion van or body constructed utilizing a van-type cutaway chassis, with a left side driver's door. This type is designed for use in the 15-40 passenger capacity range. GVWR maximum: 14,050 pounds (Ref. Section 14.26)
- ❑ **BUS TYPE "C":** A body installed upon a flat back cowl chassis or integrated, conventional body-on-chassis configuration with a hood and front fender assembly, referred to as a conventional style bus. The entire engine is in front of the windshield and the entrance door is behind the front wheels. This type is designed for use in the 35-77 passenger capacity range. GVWR minimum: 23 - 29,000 pounds (depending on passenger capacity. Ref. Section 14.0)
- ❑ **BUS TYPE "D1":** A body installed upon a chassis, with the engine mounted in the front, behind the windshield and beside the driver's seat, sometimes referred to as a cab-over transit style bus. The main entrance door is ahead of the front wheels. This type is designed for use in the 47-84 passenger capacity range. GVWR minimum: 29.5 - 30,000 pounds (depending on passenger capacity. Ref. Section 14.0)
- ❑ **BUS TYPE "D2":** A body installed upon a chassis, with the engine mounted in the rear, on or behind the rear axle, sometimes referred to as a rear-engine transit style bus. The main entrance door is ahead of the front wheels. This type is designed for use in the 66-84 passenger capacity range. GVWR minimum: 29.5 - 35,000 pounds (depending on passenger capacity. Ref. Section 14.0)

11. BUSES FOR STUDENTS WITH DISABILITIES

Buses equipped for students with disabilities shall meet all the requirements of the chassis and body sections as well. As defined by the Code of Federal Regulations (CFR) 49§ 571.3, "*Bus* means a motor vehicle with motor power, except a trailer, designed for carrying more than ten persons" (eleven or more including the driver). This definition also embraces the more specific category, *school bus*. Vehicles with 10 or fewer passenger positions (*excluding* the driver) cannot be classified as buses. Manufacturers must use the federal vehicle classification of multipurpose passenger vehicle (CFR 49 § 571.3, or MPV) in lieu of the classification school bus. This classification system does not preclude state or local agencies or the national specifications from requiring compliance of school bus-type MPVs with the more stringent federal or state standards for school buses. If by addition of a power lift, mobile seating device positions or other modifications, the capacity is reduced such that vehicles become MPVs, the intent of these specifications is to require these vehicles to meet the same specifications they would have had to meet prior to such modifications, and such MPVs are included in all references to school buses and requirements for school buses which follow.

Within each section (seating requirements, heaters, etc.) the specifications refer to all types of buses in this bid. However, some sections may specify different requirements for different type buses or seat capacities. In such a case, the specifications would apply only to the type under which they are listed.

12. H-GAC PRODUCT CODES

Bidder shall choose from the base unit configurations described in the table below. These line items are represented by an alpha numeric character product code. Bidder shall limit their Form D response to a single model and configuration per product code. **Bidder shall price the base unit per this specification's minimums, on H-GAC's Form D. It is this bid price that will be used in the bid evaluations to determine contract awards.** Bidder should use **Form E** for pricing configuration and accessory options to be added to the base unit. The first character represents the overall bus type, as follows (Ref. Section 10.0):

- A:** school bus Type A
- C:** school bus Type C
- D1:** school bus type D, with front engine
- D2:** school type D, with rear engine

The second character represents the applicable vendor, defined as follows.

- A:** Bluebird
- B:** Collins
- D:** International
- E:** Mid Bus
- F:** Thomas Built
- G:** Starcraft

The third character (numeric) represents the base model and its most basic configuration (chassis manufacturer, drive train, and passenger capacity). For example: a Bluebird 59 passenger, front engine, Type D bus is a "D1A2".

Note: A detailed dealer quote/tear sheet is required for each Form D model bid.

13. MINIMUM, BASE UNIT REQUIREMENTS BY BUS TYPE & SEATING CAPACITY

Bidder shall use the following table as a general, minimum **base unit** bus performance and component guideline. The additional standards and requirements found elsewhere in this specification shall also prevail, where not listed in the table to follow. As a reminder, bidder's pricing shall also reflect conformance to TBPC's "Texas School Bus Specification" minimum requirement tables, and any other applicable TBPC configuration and performance minimums.

14. CHASSIS REQUIREMENTS FOR TYPE A, C, AND D BUSES

The specifications set forth in this section are descriptive of Type A (14-30 passenger capacity with dual rear wheels), C, and D school buses. The design of school bus bodies is to provide for the safety of pupils and for long range, maintenance free factors as required by Transportation Code 547.7015 and Education Code 34.002.

14.1 ALTERNATOR

This is a performance specification. Installer shall consider the following for alternators:

- (a) Minimum rated capacity of 145 amps for Type A and 175 amps for Type C and D, fourteen volt (for a 12 Volt System)
- (b) Ventilated and voltage controlled
- (c) Current controlled, if necessary
- (d) Buses Equipped with Air Conditioning and/or Wheelchair Lifts: All chassis except Type A shall be equipped with an alternator with high output at low RPM with a minimum rated capacity of 270 amps.
- (e) Alternator Performance Requirements: It is the responsibility of the installer of the wheelchair lift and/or air conditioner to provide an alternator to adequately maintain the electrical system while the bus remains at OEM idle speeds as well as standard operating speeds. The following conditions shall be considered, but not be limited, to the alternator selection and installation.

- Electrical System, Maximum Amperage Draw Test
 - The installer shall determine the total amperage draw at OEM idle speeds with all electrical items turned on. To determine the greatest draw on the electrical system, the wheelchair lift shall be in operation lifting a minimum weight of 800 pounds during the "maximum amperage draw test."
 - The cabling shall be inspected to determine sufficient current flow from the alternator to the battery as well as to the ground to maintain proper system amperage requirements.
 - The alternator selected shall be capable of delivering the required amperage at OEM idle speeds while not sustaining damage or causing damage to the electrical system or components at operating speeds of up to 60 MPH.
- Cabling and wiring including that of the alternator and battery system must be adequate to accommodate the increased amp load of the air conditioning and/or a wheelchair lift system. The vendor will notify the bus manufacturer of the increased amp load-wiring requirement.

14.2 BATTERY/ IES

The battery/ies furnished on each chassis shall have sufficient capacity to supply current for adequate operation of the engine starter, lights, signals, heater, and all other electrical equipment whether standard or optional. The batteries for all Type C and D buses shall be Group 31, twelve (12) volt batteries, as specified by the chassis manufacturer, and shall meet the demands of the system whenever the electrical load exceeds the output capacity of the alternator.

14.3 BRAKE, PARKING

On a school bus with a hydraulic brake a chassis manufacturer's standard is acceptable. On air brake models a dash-mounted control valve to spring-set the parking brake on the rear wheels is required.

14.4 BRAKES, SERVICE

Air Brakes and Associated Equipment: Each 59 through 84 passenger chassis shall be equipped with full anti-lock air brakes and parking brake systems as standard equipment. Full air brake systems shall meet the requirements of FMVSS No. 121 as applicable to school buses. The following equipment shall be furnished as follows:

- (a) Air Compressor: Buses equipped with air brakes shall have an air compressor of sufficient capacity to provide adequate air pressure for the air brake system. All air-brake buses shall have a minimum twelve cubic feet (12 cu. ft.) capacity.
- (b) Air Dryer: The air brake system shall be equipped with an automatic air dryer.

14.5 BUMPER, FRONT

School buses shall be equipped with a front bumper. The chassis manufacturer for all school bus types shall furnish the front bumper unless there is a specific agreement between the chassis manufacturer and body manufacturer.

- (a) The front bumper shall be of pressed steel channel or equivalent material at least 3/16" thick and not less than 9-1/2" wide (high). It shall extend beyond the forward-most part of the body, grill, hood and fenders and shall extend to the outer edges of the fenders at the bumper's top line. Type A buses weighing 14,050 pounds or less may be equipped with an OEM supplied bumper.

- (b) The front bumper, except breakaway bumper ends, shall be of sufficient strength to permit pushing a vehicle of equal gross vehicle weight without permanent distortion to the bumper, chassis, or body.
- (c) The bumper shall be designed or reinforced so that it or the chassis frame rail(s) will not deform when a chain or air bumper type jack is used to raise the bus from a proper lifting location on the bumper.
- (d) The bumper shall be black. Bumpers for "Type A" school buses shall be the manufacturer's standard color.
- (e) A means shall be provided to mount the license plate for an unobstructed view.

14.6 COOLING SYSTEM

The cooling system radiator shall be engine manufacturer's recommended type and shall cool the engine at all speeds in all gears. The cooling system fan shall be reinforced type with a fan clutch.

14.7 DAYTIME RUNNING LAMPS

A Daytime Running Lamp (DRL) system meeting chassis or body manufacturer's specifications shall be provided on all school buses, except Type A buses.

14.8 DRIVESHAFT GUARDS AND SHIELDS

Each drive shaft section shall be equipped with protective metal guard or guards to prevent the shaft from whipping through the floor or dropping to the ground when broken.

14.9 ENGINE EQUIPMENT

Engines shall meet or exceed the minimum engine listed in the tables found on Section 14-10 and 14-26 of this document

14.10 ENGINE POWER REQUIREMENTS

Each bus shall be furnished with an engine that meets or exceeds the following minimum requirements, when tested at or above the gross vehicle weight rating (GVWR) required for a given bus capacity and with all engine related accessories on and operating.

- (a) Acceleration from zero to fifty miles per hour (0 -- 50 mph) in sixty seconds or less.
- (b) Grade ability of one-and-one-half percent (1.5%) minimum at fifty miles per hour (50 mph).
- (c) Grade ability of five percent (5%) minimum at twenty-five miles per hour (25 mph).
- (d) Start ability of twenty percent (20%) minimum.

14.11 EXHAUST SYSTEM

- (a) Component Placement: The exhaust pipe, muffler, and tail pipe shall be mounted under the bus and attached to the chassis frame.
- (b) Tailpipe Exit: The tailpipe shall not exit the side of the bus anywhere within twelve inches (12") of a vertical plane through the center of the fuel filler opening and perpendicular to the side of the bus, unless protected with a metal shield to divert spilled fuel away from tailpipe. The tailpipe shall exit to the rear of the bus whenever possible.
- (c) Tailpipe: The tailpipe shall be constructed of seamless or electrically welded tubing of minimum sixteen gauge steel or equivalent, and shall extend no more than two inches (2") beyond the rear bumper. The size of the tailpipe shall not be reduced after it leaves the muffler.

14.12 FRAME SIDE MEMBERS

Each frame side member shall be of one-piece (1-piece) construction between the rear most spring hanger and the forward most spring hanger. If the frame side members are extended, such extension shall be designed, furnished, and guaranteed by the installing manufacturer. Either the chassis or body manufacturer shall make the installation.

Extensions of frame lengths are permissible only when such alterations are welded on behind the hanger of the rear spring. This specification does not permit wheel base extensions. Any welding, heating (for frame straightening or repairs), or the drilling of holes in chassis frame members shall be in accordance with chassis manufacturer's recommendations, and shall not compromise the structural integrity of the bus.

14.13 FRONT AXLE WHEEL BEARINGS AND SEALS

All school buses except Type A shall have oil lubricated front axle wheel bearings and seals.

14.14 FUEL/WATER SEPARATOR

Required on all diesel engines. It shall be of a design and installation compatible with chassis / engine application to ensure trouble free performance when properly maintained. The fuel/water separator filter may serve as the first primary engine fuel filter if approved by the engine manufacturer, or may be in addition to and ahead of the standard primary and secondary fuel filters on the engine. In addition, the fuel / water separator must be completely accessible for manufacturer's recommended servicing, with emphasis on under hood mounting location; have an electronic sensor with a dash mounted indicator or a clear drain (sight) bowl for accumulated water; and, contain a replaceable element of proper design to protect against premature fuel flow restriction or excessive passage of contaminants.

14.15 FUEL TANKS

Fuel tanks and fuel systems shall meet requirements of FMVSS 301. Filler spout shall be located for ease in servicing. Fuel gauge compatible with tank capacity shall be supplied. See Chassis Specifications Charts in this section for required fuel tank capacity.

14.16 FUEL TANK(S), ALTERNATIVE FUELS

Fuel tank(s) for alternative fuels shall meet or exceed all of the rules and regulations of the Texas Railroad Commission (RRC), the requirements of FMVSS No. 304 and others, as applicable. Capacity shall be that required to meet the range requirements of the alternative fuel option or as specified in the invitation for bids.

14.17 HOOD

Engine hood on Type C buses shall not require more than 20 pounds of force to open or close.

14.18 HORNS

Each bus shall be equipped with dual note horns or dual horns of standard make. Each horn(s) shall produce audible sounds in the frequency range from two hundred fifty to two thousand (250 to 2,000) hertz. The sound level measurements shall be made at a distance of fifty feet (50') directly in front of the vehicle in accordance with SAE J377.

14.19 SHOCK ABSORBERS

Front and rear, double acting; adequate size for axle load.

14.20 SPRINGS

Front: Manufacture standard coil or Double-wrap stationary end leaf spring Rear: Progressive or vari-ride type.

14.21 STEERING

Shall have factory-installed power steering, integral type. A factory installed tilt steering wheel/column is required.

14.22 TIRES AND WHEELS

All tires shall be steel belted radial tubeless type. All wheels shall be hub-piloted disc type.

14.23 TRANSMISSION, AUTOMATIC

All buses shall be delivered with an automatic transmission as standard. The automatic transmission must be appropriate to the passenger rating, GVWR, and engine size and type. Purchasers desiring a heavy-duty transmission for harsh terrain should seek additional information from the vendors.

14.24 TURN SIGNALS

Turn signals shall have a dash indicator light, self-canceling switch with lead wires on steering column for body manufacturer's attachment.

14.25 WIRING

All wiring shall conform to current applicable recommended practices of the SAE. All wiring shall use standard colors and number coding and each chassis shall be delivered with a wiring diagram that coincides with the wiring of the chassis.

- (a) All wires passing through metal openings shall be protected by a grommet or loom.
- (b) Install a readily accessible terminal strip or connector on the body side of the cowl or in an accessible location in the engine compartment of vehicles designed without a cowl. Main Circuits: The electrical system wiring shall have at least nine (9) main circuits:

- Head, tail, stop (brake), and instrument panel lamps
- Clearance and step well lamps
- Dome lamps
- Starter motor
- Ignition and emergency door signal
- Turn signal (directional)
- Alternately flashing signal lamps
- Horn
- Heater and defroster

(c) Cabling and wiring including that of the alternator and battery system shall be of a double ought (#00) size, except Type A.

14.26 CHASSIS SPECIFICATIONS CHART

CHASSIS SPECIFICATION: MINIMUMS		
TYPE A BUSES (DUAL REAR)		
Feature	Passenger Capacity: 14-25	Passenger Capacity: 29-30
GAWR, pounds, front	4050	4050
GAWR, pounds, rear	6084	8600
Engine Size	6.0L	6.0L
Wheelbase, inches	138	139
Fuel Tank Capacity, gallons	33	33
Tires	225/75	225/75
Rims	16 x 6	16 x 6
Transmission	4-speed (4 forward speeds)	4-speed (4 forward speeds)
Alternator	145	145

CHASSIS SPECIFICATION: MINIMUMS				
TYPE C BUSES				
Feature	Passenger Capacity: 30-36	Passenger Capacity: 42-54	Passenger Capacity: 59-66	Passenger Capacity: 71-77
GAWR, pounds, front	8000	8000	10000	10000
GAWR, pounds, rear	15000	15000	17500	19000
GVWR, pounds	23000	23000	27500	29000
Engine Horsepower	175	175	190	190
Wheelbase, inches	150	167	236	252
Fuel Tank Cap, gallons	35	60	60	60
Tires	9R22.5	9R22.5	10R22.5	11R22.5
Rims	6.75	6.75	7.5	7.5
Transmission	Allison 2500 PTS (5 forward gears)	Allison 2500 PTS (5 forward gears)	Allison 2500 PTS (5 forward gears)	Allison 2500 PTS (5 forward gears)
Alternator	175	175	175	175

CHASSIS SPECIFICATION: MINIMUMS				
TYPE D1 BUSES (FRONT ENGINE)				
Feature	Passenger Capacity: 47-60	Passenger Capacity: 65-72	Passenger Capacity: 77-78	Passenger Capacity: 83-84
GAWR, pounds, front	12000	12000	12000	13220
GAWR, pounds, rear	17500	17500	19000	19000
GVWR, pounds	29500	29500	30000	30000
Engine Horsepower	190	190	190	210
Wheelbase, inches	136	174	193	212
Fuel Tank Cap, gallons	35	60	60	60
Tires	10R22.5	10R22.5	11R22.5	11R22.5

Rims	7.5	7.5	8.25	8.25
Transmission	Allison 2500 PTS (5 forward gears)	Allison 2500 PTS (5 forward gears)	Allison 2500 PTS (5 forward gears)	Allison 2500 PTS (5 forward gears)
Alternator	175	175	175	175

CHASSIS SPECIFICATION: MINIMUMS				
TYPE D2 BUSES (REAR ENGINE)				
Feature	Passenger Capacity: 65-66	Passenger Capacity: 71-72	Passenger Capacity: 77-78	Passenger Capacity: 84
GAWR, pounds, front	12000	12000	12000	12000
GAWR, pounds, rear	17500	19000	19000	23000
GVWR, pounds	29500	30000	30000	35000
Engine Horsepower	190	190	190	207
Wheelbase, inches	181	209	238	267
Fuel Tank Cap, gallons	60	60	60	60
Tires	10R22.5	11R22.5	11R22.5	11R22.5
Rims	7.5	8.25	8.25	8.25
Transmission	Allison 2500 PTS (5 forward gears)	Allison 2500 PTS (5 forward gears)	Allison 2500 PTS (5 forward gears)	Manufacturer Recommended
Alternator	175	175	175	175

15. BODY SPECIFICATIONS FOR TYPES A, C, AND D BUSES

The specifications set forth in this section are descriptive of Type A (14-30 passenger capacity with dual rear wheels), C, and D school buses. The design of school bus bodies is to provide for the safety of pupils and for long range, maintenance free factors as required by Transportation Code 547.7015 and Education Code 34.002.

15.1 BATTERY SLIDE OUT TRAY

A body skirt-mounted slide out tray and battery box is required for the batteries on all Type A (diesel), C, and D bodies. When three batteries are installed the battery tray must be roll out type. Battery cables shall be long enough to allow the battery tray to be fully extended. All Type C, and D bodies equipped with air conditioning and/or lift shall also be equipped with a compartment mounted near but not greater than 24 inches from the battery box with external access, for mounting circuit breakers and control circuitry for these options.

15.2 BODY DATA (IDENTIFICATION) PLATE:

Each body shall bear a permanently attached metal plate, attached with rivets, showing the name of the manufacturer, the date of body manufacture, the body serial number, and the "Maximum Design Capacity". The plate shall have a space for the dealer to enter information. The dealer shall enter TX and the specification year (example TX 05). The plate shall be attached in the driver's area. Decals and glue are not acceptable.

15.3 BODY FLUID CLEANUP KIT

Each bus shall be provided with a mounted, removable, moisture-proof metal or hard plastic body fluid cleanup kit. Container shall be mounted in the driver's compartment and the container shall be easily removed without tools in the event of an emergency. This kit shall be identified as a body fluid cleanup kit, and shall NOT display the biohazard symbol, and contain as a minimum the following items and minimum quantities:

- (a) Step-by-step instructions, with drawings/pictures, including how to take off the rubber gloves
- (b) 1: 15 oz. Chlorine-type absorbent deodorant material that will counteract the odor
- (c) 12 oz. Germicidal spray disinfectant-EPA registered liquid
- (d) Pair of disposable non-latex gloves
- (e) 4: 18" x 18" absorbent towels
- (f) 1: pickup spatula-water resistant
- (g) 1: plastic hand broom
- (h) 1: plastic dustpan
- (g) 2: 14" x 19" disposal bags and ties (waterproof)
- (h) 2: adhesive "BODY FLUID CLEANUP" labels

- (i) 1: 12 oz. Deodorant spray
- (j) 4: individually wrapped, cold sterilization wipes in foil-lined pouches
- (k) 2: paper respiratory masks
- (l) 1: Body fluid cleanup kit metal or hard plastic mountable container, with No Bio-hazard Symbol.

15.4 BUMPER, REAR

Rear bumper shall be of pressed steel channel at least 3/16 inch thick, 9 1/2 inches high and flanged two (2) inches at top and bottom or otherwise designed to furnish equal flexural strength. It shall be of wraparound design and securely fastened to each chassis frame rail and braced diagonally from each end of bumper to chassis frame rail with heavy braces to permit fully loaded bus to be pushed without permanent distortion to bumper, chassis, or body. Contour of bumper shall fit contour of body in a manner to prevent hitching to or riding on bumper. An appropriate seal shall be applied between bumper and body panel, unless the gap between bumper and body panel is 1/8" or less.

The bumper shall be attached to the chassis frame in such a manner that it may be easily removed. It shall be so braced as to withstand impact from the rear or the side.

15.5 DRIVER'S SEAT AND SEAT BELT

All school buses shall have a driver's seat equipped with a one-piece high back, suspension seat designed to minimize the potential for head and neck injuries in rear impacts, providing minimum obstruction to the driver's view of passengers, and meeting applicable requirements. The driver contact area of the cushion and seat back shall be made of soil and wear resistant material. Seat shall be squared and centered $\pm 1/2$ inch behind the steering wheel with a backrest a minimum distance of 11 inches behind the steering wheel. Seat shall be securely mounted to ensure minimal flexing of the seat and the floor panel(s). A Type A bus may have manufacturer's standard seat. A Type 2 lap/shoulder belt shall be provided for the driver. The assembly shall be equipped with an emergency locking retractor for the continuous belt system. On all buses except Type A equipped with a standard chassis manufacturer's driver's seat, the lap portion of the belt system shall be guided or anchored to prevent the driver from sliding sideways under it.

15.6 DOOR HOLDING DEVICE

A door holding device shall be provided to hold the swing-out type emergency door(s) in the fully opened position.

15.7 ELECTRICAL EQUIPMENT AND WIRING

All wiring shall conform to current standards of SAE, be coded by color, number and be insulated. All joints shall be soldered or joined by equally effective fasteners. All wires of 4-gauge or larger and any accessory wire connected directly to the battery shall have soldered ends, and the ends shall be protected with heat shrink tubing. Body wiring and connectors, including any battery cables routed by the body manufacturer, shall be routed and/or protected so as to eliminate possibility of wiring and connectors becoming abraded, pierced by fasteners, shorted, or otherwise damaged during manufacture and use. Electrical components specified below shall be provided and wiring shall be in circuits as follows:

15.8 ACCESS PANEL, ELECTRICAL

All Type C buses shall be equipped with an exterior electrical access panel or must provide easy internal access to body electrical components and circuits. All Type D buses shall be equipped with an exterior electrical access panel to provide easy access to body electrical components and circuits.

15.9 BACKUP ALARM

Body manufacturer shall provide a backup alarm on each bus to provide audible warning that the bus is in reverse gear. Alarm shall meet requirements of SAE J994, and shall be 107dba plus or minus 4dba sound level.

15.10 CIRCUIT BREAKERS

Each circuit, except starting and ignition, shall be isolated and shall be protected by a circuit breaker device. For multiplex wiring systems, field effect transistors are acceptable.

15.11 EMERGENCY DOOR BUZZER

Emergency door (and window) buzzer shall be connected to accessory side of ignition switch.

15.12 HEATER/DEFROSTER

- (a) The heater utilize hot water.
- (b) If only one (1) heater is used, it shall be fresh-air or combination fresh-air and recirculation type.

- (c) If more than one (1) heater is used, additional heaters may be re-circulating air type.
 - (d) The heating system shall be capable of maintaining bus interior temperatures as specified in SAE test procedure J2233.
 - (e) All forced air heaters installed by body manufacturers shall bear a nameplate that indicates the heater rating in accordance with SBMTC-001. The plate shall be affixed by the heater manufacturer and shall constitute certification that the heater performance is as shown on the plate.
 - (f) Heater hoses shall be adequately supported to guard against excessive wear due to vibration. The hoses shall not dangle or rub against the chassis or any sharp edges and shall not interfere with or restrict the operation of any engine function. Heater hoses shall conform to SAE J20c. Heater lines on the interior of bus shall be shielded to prevent scalding of driver or passengers.
 - (g) Each hot water system installed by a body manufacturer shall include one ¼ turn ball-cock shut-off valve in the pressure line and one ¼ turn ball-cock shut-off valve in the return line with both valves at the engine in an accessible location, except that on all Type A buses, the valves may be installed in another accessible location.
 - (h) There shall be a water flow regulating valve or other regulating device installed in the pressure line for convenient operation by the driver while seated in the driver's seat. A ¼ turn ball-cock type coolant flow regulating valve for the heater shall be installed so that its control is accessible to the driver, but in such a location as to discourage tampering by students. This valve may be remotely located if a suitable remote control system is used.
 - (i) Accessible bleeder valves shall be installed in an appropriate place in the return lines of body company-installed heaters to remove air from the heater lines.
 - (j) Access panels shall be provided to make heater motors, cores and fans readily accessible for service. An outside access panel may be provided for the driver's heater.
 - (k) Defrosting equipment shall keep the windshield, the window to the left of the driver, and the glass in the service door clear of frost, and snow, using heat from the heater and circulation from fans. All defrosting equipment shall meet the requirements of FMVSS No 103. Any circulating fan installed on the curbside of the bus front shall be mounted on the windshield header to protect the fingers, hair, and clothing of entering and departing passengers.
- Note to above requirements: Type A buses shall have a fresh air type heater and defroster system as installed by the chassis manufacturer.**

15.13 EMERGENCY EXITS

All buses shall be equipped with a total number of emergency exits as follows for the maximum *design* capacity. Exits required by FMVSS No.217 may be included to comprise the total number of exits specified. Each emergency exit below shall comply with FMVSS No.217. These emergency exits are in addition to the rear emergency door or left side emergency door on rear engine bus exits.

- (a) Zero to 36-Passenger = One (1) emergency exit per side and one (1) roof hatch.
- (b) 41 to 48- Passenger = One (1) emergency exit per side and two (2) roof hatches.
- (c) 53-to 78-Passenger = Two (2) emergency exits per side and two (2) roof hatches.
- (d) 79-to 84-Passenger = Three (3) emergency exits per side and two (2) roof hatches.

NOTE: A side emergency door may be substituted for 2 emergency exits on the same side of the vehicle.

The area of an opening equipped with a wheelchair lift may be credited toward the required additional exit if, the lift folds or stows in such a manner that the area is available for use by persons not needing the lift.

15.14 EMERGENCY ROADSIDE REFLECTORS

Each school bus shall be equipped with three (3) triangular warning devices meeting the requirements of FMVSS No. 125. The devices shall be packed three (3) per metal or heavy-duty plastic box. Container for warning devices shall be mounted in the driver's compartment and the container shall be easily removed without tools in the event of an emergency.

15.15 FIRE EXTINGUISHER

The bus shall be equipped with at least one UL-approved pressurized, dry chemical fire extinguisher. The extinguisher shall be mounted (and secured) in a bracket, located in the Section C-6 driver's compartment and readily accessible to the driver and passengers. A pressure gauge shall be mounted on the extinguisher and shall be easily read without removing the extinguisher from its mounted position. The fire extinguisher shall have a total rating of 2A10BC (51b) or greater. The operating mechanism shall be sealed with a type of seal that will not interfere with the use of the fire extinguisher.

15.16 FIRST-AID KIT

Buses shall have removable, metal or hard plastic moisture and dust proof first aid kit. Container shall be mounted in the driver's compartment and the container shall be easily removed without tools in the event of an emergency. The kit shall contain each item listed below in the minimum quantities indicated:

- (a) 2: 1" x 2-1/2 yard adhesive tape rolls
- (b) 24: sterile gauze pads 3" x 3"
- (c) 20: 3/4" x 3" adhesive bandages
- (d) 8: 2" bandage compress
- (e) 10: 3" bandage compress
- (f) 2: 2" x 5 yard sterile gauze roller bandages
- (g) 2: non-sterile triangular bandage approximately
- (h) 40" x 36" x 54", 2 safety pins
- (i) 3: sterile gauze pads 36" x 36"
- (j) 3: sterile eye pads
- (k) 1: rounded end scissors
- (l) 1: pair non-latex gloves
- (m) 1: mouth-to-mouth airway
- (n) 1: basic first aid / CPR instructions included

15.17 FLOOR AND FLOOR COVERING

(a) The floor system in all buses shall be of 14-gauge steel with a metal zinc coating designation of G60. Other metal or materials used in construction shall have strength at least equivalent to steel components specified.

(b) Construction and Installation: The floor panels shall run the full width of the floor and shall be supported on all outside edges by a longitudinal frame member. The floor panels shall be welded, riveted, or bolted to the main and auxiliary cross members and shall be joined to form a leak and dust proof floor. The main and auxiliary cross members shall extend the full interior width of the floor panels. The side posts or bow frames shall be securely welded, riveted, or bolted to the floor system and to the longitudinal frame members or gussets

(c) Cross Members: The cross members shall be spaced not more than ten inches (10") center-to-center except Type A buses. The floor panels and cross members shall be designed and constructed to support all fixed and changeable loads under all operating conditions without deformation of the under body structure, strains to body, or fractures of member joints. The under structure shall be designed and constructed to eliminate the necessity of installing outriggers attached to the chassis except at the front entrance. The under surface of the entire floor structure, including wheel housing and step well, shall be sprayed with material at least one-eighths (1/8) thick, conforming to that specified in Undercoating Section to follow.

(d) Floor Covering:

- Aisle Material: The floor covering in the aisles will be of aisle-type rubber or equivalent, wear resistant and ribbed. Minimum overall thickness shall be .187 inch measured from tops of ribs.
- Installation: All floor covering must be permanently bonded to floor and must not crack when subjected to sudden changes in temperature. Bonding or adhesive material shall be waterproof and shall be of a type recommended by the floor-covering material manufacturer. All seams must be sealed with waterproof sealer.
- Trim: Seams shall be covered with extruded aluminum or stainless steel metal strips of a minimum three- sixteenths inches (3/16") high and one inch (1") wide that shall be installed on each side of the aisle, the full length of the aisle, so as to secure both the edges of the aisle covering and adjoining edges of the under seat covering. The strips shall be secured to the flooring with flush-mounted flat or low profile oval head screws; holes for the screws shall be countersunk. The screws shall be placed not more than nine inches (9") apart for the full length of the metal strips except that the ends of each piece of stripping shall have screws placed at not more than three fourths inches (3/4") from each end. Screws may be placed nine and one half inches (9-1/2") apart only to avoid interference with floor sill members.
- Under Seat Material: The floor in the under-seat area, including tops of wheel-housings, driver's compartment and toe-board, shall be covered with rubber floor covering or equivalent, having a minimum overall thickness of .125 inch. The driver's area in all Type A buses may be manufacturer's standard flooring and floor covering. Floor covering on toe-board shall be held in place by trim strip or molding.

15.18 FUEL ACCESS PORT

A fuel access port is required on all thirty-five through eighty four (35-84) passenger buses except front wheelchair equipped buses.

15.19 FUEL FILLER OPENING: TYPE C AND D BUSES

The body manufacturer shall provide an opening in the body panel to allow placement of the fuel nozzle into the fuel tank filler neck opening. This opening in the panel must be positioned so that the filler neck, when viewed at right angles from the side, is approximately centered in the cutout. Lettering shall be adjacent to the fuel filler opening indicating fuel type.

15.20 HANDRAILS

Handrails of not less than twenty inches (20") in length shall be installed on both sides of the stairwell. The outside surface of this handle shall be stainless steel, polished aluminum, or chrome-plated steel. The handrails shall assist passengers during entry or egress, and be designed to prevent entanglement, as evidenced by passage of the NHTSA String and Nut test.

15.21 HEATER / DEFROSTER

See ELECTRICAL EQUIPMENT AND WIRING

15.22 INSULATION AND SEALING OF JOINTS

Insulation, Thermal:

(a) The ceilings and sidewalls shall be thermally insulated with a fire-resistant material approved by Underwriters Laboratories, Inc. to adequately reduce the noise level and to minimize vibrations. Buses shall have the equivalent of one and one-half inches (1-1/2") of fiberglass or other insulation in the ceilings and walls including the interior of hat-shaped bows. Any insulation used shall have a minimum of 5.75 R-factor. Overlapping of edge of exterior roof and side panels shall be sealed with non-hardening resilient material.

(b) Noise Level:

The noise level shall neither exceed EPA "Noise Emission Standards" nor eighty-five (85) decibels at the ear of the occupant in the bus nearest to the noise source in the bus

15.23 LETTERING AND TRIM

(a) The bus body shall have the words "SCHOOL BUS" in black with yellow reflective background if not of lighted design on the front roof cap and the rear roof cap.

(b) The bus body shall have the words "SCHOOL BUS" in black on both sides. The lettering must have a reflective background or black reflective lettering.

(c) The school bus letters shall be neat, clearly defined block style eight inches (8") high with one-inch (1") wide strokes. Lettering on Type A buses may be six inches (6") high. The words "SCHOOL BUS" shall be as close to the center of the bus as possible.

(d) School Name Lettering: School name lettering shall be displayed between the upper two (2) rub rails in black letters on both sides of the bus near the belt line using decals or with black paint. Lettering shall be five (5) or six (6) inches high with minimum five-eighths inch (5/8") block strokes and be the same size on both sides. If paint is used it shall be equal in quality to that of the bus body paint and the color shall be black enamel (color No. 17038). If decals are used they shall meet or exceed the requirements of bus body paint. The lettering shall be black in color conforming to the color of black enamel (Color No. 17038). Abbreviations may be used to identify type of school district (ISD, CISD, CSD or MSD).

- The school district should list in the space provided on the School Bus Requisition Form, the name to be placed on the bus. Characters should be typed or printed plainly on the form to ensure accurate spelling.
- The school district (contractor) logo may be added to the bus. If a logo is placed on the school bus, it must be evenly placed on both sides as near the front of the school bus as possible and may not be larger than 500 square inches.

15.24 LICENSE HOLDER

A means shall be provided to mount the license plate on the front and the rear of the bus body. Any items added to the school bus must not obstruct the location of the front license plate.

15.25 LIGHTING: ALTERNATELY FLASHING SIGNAL LAMPS

The bus shall be equipped with two (2) red lamps at the rear of the vehicle and two (2) red lamps at the front of the vehicle.

(a) In addition to the four (4) red lamps described above, four (4) amber lamps shall be installed so that one amber lamp is located near each red signal lamp, at the same level, but closer to the vertical centerline of bus. The system of red and amber signal lamps shall be wired with a master "on/off" switch so that when the master switch is "on" the red lamps will automatically operate anytime the bus service door is opened. The amber signal lights, when manually activated, will cease operation when the bus service door is opened and the red signal lamps operate. The red and amber signal lamps shall be wired to ensure activation anytime the master switch is in the "on" position, even if the ignition switch is in the "off" position. An amber pilot light and a red pilot light shall be installed adjacent to the driver controls for the flashing signal lamp to indicate to the driver which lamp system is activated.

(b) All alternately flashing red and amber signal lamps shall be enclosed in the body in a readily accessible location.
Note: The lamps shall be wired independently and not wired through the ignition switch. This will allow removal of the ignition key without affecting operation of the alternately flashing eight warning signal lamps.

15.26 LIGHTING: BACK UP LIGHTS

There shall be two (2) four-inch (4") backup lights on the rear of all bodies with a universal type sealed electrical plug connector.

15.27 LIGHTING: BRAKE/TAIL LAMPS

The quantities, colors, requirements, and mounting of LED tail and stop lamps shall be in accordance with FMVSS No. 108, except stop lamps shall be a minimum of thirty-eight (38) square inches and mounted at approximately the belt line level of the bus. A set of minimum four-inch (4") tail/stop lamps shall be installed below the minimum of thirty-eight (38) square inches set.

15.28 LIGHTING: CLEARANCE AND IDENTIFICATION LIGHTS

LED Clearance lights shall be mounted at the four (4) body corners, upper section, amber front, and red-rear. Intermediate amber units are required on all units over 30 feet. The headlight switch shall activate the clearance lights.

(a) LED Identification lights shall be mounted as follows; three (3) amber on the front, three (3) red on the rear. Front and rear shall be grouped in a horizontal row. Lamp centers shall be spaced not less than six (6) nor more than twelve (12) inches apart, mounted as close as practical to the vertical centerline.

(b) All LED clearance and identification lights shall meet current SAE requirements and Federal Motor Vehicle Safety Standards and shall:

- Be a sealed type light.
- Be surface mounted with rust proof material guard unless recessed to prevent breakage.
- Use a universal type sealed electrical plug connector.

15.29 LIGHTING: CONTROL PANEL

The control panel or switches supplied by the body manufacturer shall be illuminated, and shall have an independent control for varying the illumination to the control panel or switches.

15.30 LIGHTING: EXTERIOR DOOR FIXTURE

There shall be a light fixture, mounted outside the bus below the beltline by the service door. The light shall be a minimum thirty-two (32) candlepower and light a minimum four (4) foot diameter area. The light shall come on with the step well lights and illuminate the ground around the bus door. The light must be installed to prevent a burn hazard.

15.31 LIGHTING: INTERIOR

Interior lamps shall be installed to provide uniform illumination of the interior of the bus, primarily the aisle and emergency passage way. The interior fixtures shall be mounted to provide uniform illumination of the passenger and driver's compartment. The quantity of interior lamps required for each bus is as follows:

SCHOOL BUS SIZE	INTERIOR DOME LIGHTS
Passenger Capacity	Minimum Per Bus
14 through 20	2
24 through 35	3
47 through 53	4

59 through 65	5
71 through 84	6

15.32 LIGHTING: STEPWELL LAMP

The step-well shall be illuminated with a separate lamp activated by opening the service door when the headlight/clearance lights are on. Step-well lamp fixtures must be installed to prevent a burn hazard.

15.33 LIGHTING: TURN SIGNAL / HAZARD WARNING LAMPS

The quantities, colors, requirements, and mountings of turn-signal/hazard warning lamps shall be in accordance with FMVSS No. 108, except rear turn-signal lamps shall be a minimum thirty-eight (38) square inches.

- (a) Front: The front turn signal lamps shall be the manufacturer standard. The operating units and flasher for turn signals and vehicular hazard warning signals shall meet the requirements of FMVSS No. 108.
- (b) Side: Buses thirty-six (36) passenger capacity or larger shall be equipped with amber side-mounted signal lights. The turn signal lamp on the left side shall be mounted rearward of the top of the stop signal arm and the turn signal lamp on the right side shall be mounted rearward of the service door. The candlepower of the light shall be a minimum of four (4) candlepower.
- (c) Rear: The rear turn signal lenses shall be amber of LED type.
- (d) Installation: The gasket shall be the full width of the flange on the lamp. Proper installation of the lamp shall be made in order to prevent seepage of moisture into the opening.

15.34 MIRROR SYSTEM

- (a) Interior Mirror: Interior mirror shall be either clear-view laminated glass or clear-view glass bonded to a backing, which retains the glass in the event of breakage. Mirror shall be a minimum of 6" X 30". Mirror shall have rounded corners and protected edges. Note: Interior mirrors on Type A shall be a minimum of fifty (50) square inches.
- (b) Exterior Mirrors: Each school bus shall be equipped with a system of exterior mirrors complying with FMVSS 111 and meeting the following requirements:

- ❑ Cross/side-view Mirror System: The cross/side -view mirror system shall provide the driver with indirect vision of an area at ground level from the front bumper forward, and the entire width of the bus, to a point where the driver can see by direct vision. The system shall also provide the driver with indirect vision of the area at ground level around the left and right front corners of the bus to include the tires and service entrance on all types of buses to a point where it overlaps with the rear vision mirror system. This mirror system shall incorporate the following features or requirements:
 - Only (1) one mirror shall be installed at each front corner of the bus.
 - Mirrors shall not reflect excessive glare from the bus headlights into driver's eyes.
 - Any fasteners used in the construction of the mirror and mounting brackets shall be corrosion proof.

- (c) Rear Vision Mirror System: A rear vision mirror system shall be provided which incorporates the following features and requirements:

- ❑ System shall consist of one aerodynamic mirror head, containing one flat and one convex mirror lens per side as standard. Each mirror set shall be mounted on a single breakaway arm with positive detent or lock. Type A buses may be exempted from this requirement if no such brackets are available.
- ❑ Each of the four required mirrors in the rear vision mirror system shall be electrically operated, remote control, rear view mirrors.
- ❑ Any fasteners used in the construction of the mirror and mounting brackets shall be corrosion proof.

Overall exterior mirror system (cross/side -view and rear vision mirrors) shall be isolated from vibration.

15.35 NOISE ABATEMENT SWITCH

There shall be a manual (on/off) noise abatement switch installed in the control panel, labeled and wired into the activation circuit for the master body circuit solenoid. This switch shall deactivate all body equipment that produces noise, including

at least, the radio, heaters, air conditioners, fans, and defrosters. This switch shall not deactivate safety systems such as windshield wipers, two-way radios, or lighting systems.

15.36 PAINT AND FINISH

Prior to the application of the finish coats to body, hood, and cowl, all surfaces shall be cleaned of grease, foreign matter, excessive body caulking, and sealing material and treated as per paint manufacturer's recommendation for proper paint adhesion. National School Bus Yellow paint shall meet National Specifications for color and shall have a finished gloss rating of at least eighty-five (85) at sixty degrees (60°) and a distinctness of image rating of an average of at least fifty (50) measured using the same method specified for gloss. Paint shall be applied for a total dry thickness of at least 1.8 mils over all painted surfaces. Trim, lettering, rub rails and bumpers shall be black except that bumpers may be striped in accordance with National Specifications or these specifications. The interior of the bus body shall be manufacture standard color unless otherwise specified in bid.

15.37 PANELING: INTERIOR: All interior wall and ceiling panels except wiring access panels shall be steel and of the body manufacturer's standard design except the panels beneath the window shall be clear-coated galvanized embossed steel meeting ASTM A 653/A 653M. Galvalume, aluminized steel, and aluminum over steel panels are acceptable for use beneath the windows and in the entryway. Wall and ceiling interior panels made of aluminum may be used in Type A buses only. Front and rear ceiling panels shall be formed to present a smooth, pleasing appearance. If the ceiling is constructed so as to contain lapped joints, the rear panel shall lap the forward panel and all exposed edges shall be beaded, hemmed, flanged, or otherwise treated to minimize sharp edges.

15.38 PANELING: EXTERIOR: Exterior paneling includes all sheet metal skin forming exterior surface of body. Exterior paneling should be of 20-gauge steel minimum thickness and shall be attached to bow frames to act as an integral part of structural frame. Twenty two (22) gauge steel is allowed on Type A 30 passenger or less.

15.39 PUBLICATIONS

On delivery, the vendor shall provide one complete set per order per model in any media format or as specified at time of invitation to bid by the district:

- (a) Operator's Manual
- (b) Warranty Information
- (c) Service Manuals (OEM of the Engine, Chassis, and Body)
- (d) Parts Manuals (OEM of the Engine, Chassis, and Body)
- (e) Complete body wiring diagram
- (f) Line Setting Ticket

School districts/entities desiring additional service manuals may purchase them separately for school buses ordered by corresponding directly with the manufacturers / distributors.

15.40 REFLECTIVE MARKING PACKAGE

There shall be installed a reflective marking package as specified in the National Specifications for School Buses. This package shall include markings for the front, rear, and both sides. Striping on sides of bus shall be at least 1 3/4 inches wide meeting the ASTM D-4956-90 Type 5 reflective sheeting standard. Striping shall be installed longitudinally the length of the body at the vertical location immediately below the seat level rub rails but high enough so as to clear wheel wells, whenever possible. Short breaks in the striping at rivet locations are acceptable.

15.41 REFLECTORS

Two amber reflectors shall be mounted on the sides of the bus body near the front even if chassis incorporates amber reflectors at or near the front of the chassis cowl area, and two red reflectors on rear side panels, two red reflectors on rear panels, and two intermediate amber reflectors on buses over thirty (30) feet.

15.42 RUB RAILS

- (a) There shall be one (1) rub rail on each side of bus approximately at seat level, which shall extend from entrance doorpost around bus body (except for emergency door) to point of curvature near cowl on left side.
- (b) There shall be rub rails located approximately at the floor line and bottom of outer skirt which shall cover same longitudinal area as upper rub rail, except at wheel housings, and shall extend only to radii of right and left corners.
- (c) There shall be a rub rail located horizontally at the bottom edge of the windows.

- (d) Rub rails shall be attached twice at each body post and at all other upright structural members.
- (e) Rub rails shall be a one-piece (1-piece) continuous construction, four (4) inches or more in width in its finished form, shall be of sixteen (16)-gauge steel, and shall be constructed in corrugated or ribbed fashion.
- (f) Rub rails shall be applied outside of body panels. Pressed-in or snap-in rub rails do not satisfy this requirement.
- (g) Drainage: The bottom edge of each rub rail shall have provisions for drainage of accumulated moisture.
- (h) On type D rear engine buses the rub rail may terminate at the engine compartment.

15.43 SERVICE DOOR

The service door shall be in the driver's control, designed to afford easy release and to provide a positive latching device on manual operating doors to prevent accidental opening. When a handle lever is used, no part shall come together that will shear or crush fingers.

- (a) The service door shall be located on the right side of the bus, opposite and within direct view of the driver.
- (b) The service door shall have a minimum horizontal opening of twenty-four inches ("24") and a minimum vertical opening of sixty-eight (68") (for Type A) and seventy-two (72") (for Types C, & D).
- (c) Service door shall open outward.
- (d) All door panels shall be of approved safety glass. The bottom of each lower glass panel shall not be more than ten inches from the top surface of the bottom step. The top of each upper glass panel shall not be more than three inches (3") from the top of the door.
- (e) Vertical closing edges on entrance doors shall be equipped with flexible material to protect children's fingers.
- (f) There shall be no door to the left of the driver on Type C or D vehicles. All Type A vehicles may be equipped with the chassis manufacturer's standard left-side door.
- (g) All doors shall be equipped with padding at the top edge of each door opening. Padding shall be at least three inches (3") wide and one-inch (1") thick and extend the full width of the door opening.
- (h) All service doors must allow for manual opening. Power operated service doors must have an emergency release valve, and a switch or a device to release the service door must be easily accessible and clearly labeled. Powered Service Doors shall be clearly and concisely marked with operating instructions in case of power failure.

15.44 SIZES OF BODIES

- (a) Overall Length: The overall length of a complete school bus body shall not exceed forty feet (40'), excluding safety equipment.
- (b) Exterior Width: The overall exterior width of a complete school bus body shall not exceed ninety-six inches, (96") excluding safety equipment.

15.45 STEP WELL

The step well and riser panels in the service door entryway shall be clear-coated, galvanized or stainless steel, embossing is not required. A step well of at least three (3) steps shall be built in the right front assembly enclosed with doors extending to bottom step. Each step shall be covered with "Pebble-Top" type elastomer, at least 3/16 inch thick, bonded to metal or durable polymer base and otherwise constructed to provide substantial support, including the leading horizontal edge which shall be Pebble Top type, white or a color that contrasts with the step tread by at least 70%. The lower (first) step height shall be between ten inches (10") and fourteen inches (14") above the ground for all Type A and C buses. Type D buses shall have a lower (first) step height between twelve inches (12") and sixteen inches (16") from the ground. **Note:** Two steps are acceptable on Type A buses. Risers in each case shall not exceed a height of ten inches (10").

15.46 STIRRUP STEPS AND HANDLES

A step and appropriate grab handle shall be installed on each front corner of the body to facilitate cleaning of windshield. The handle shall be stainless steel, chrome plated, or non-ferrous metal or may be made of non-metallic material of sufficient structural and mounting strength and resistant to weathering and deterioration and shall provide for secure mounting and adequate handhold. Handle shall be contoured and formed to provide a comfortable and safe grip. Steps and handles are not required on Type A buses.

15.47 STRUCTURAL DESIGN

Details of design shall have a direct relationship to specifications for grades of steel in the latest edition for the design of Light Grade Cold-Formed Steel Structural Members of the American Iron and Steel Institute. Material used in the body frame structure shall conform to chemical and mechanical requirements of the listed specifications or other published

specifications, including tensile and yield points, which establish properties and suitability of the steel for school bus body test code and safety requirements. All Type A, C, and D bodies shall meet the requirements of FMVSS 221 and the requirements of the 2000 National School Bus Specifications and Procedures, Side Intrusion Test.

(a) All welds used in construction of body shall conform to latest applicable specifications of the American Welding Society.

(b) Welds, rivets, or high-strength bolts may be used in connecting parts of the structural body. All bolts shall have provision to prevent loosening under vibratory loads. All bolts, nuts, washers, and screws used throughout the body shall be cadmium or zinc plated, or thoroughly treated in an approved manner for prevention of rust.

(c) All metal used in construction of the bus body shall be zinc or aluminum coated before construction, provided that for metals twelve (12) gauge or less in thickness, either zinc or aluminum coating shall be mill applied for these components:

- Service door panels
- Emergency door panels
- Guard rails
- All exterior body panels
- Wheel housings
- Body posts and roof bows
- Side strainers
- Roof strainers
- Window caps
- Window visors where used
- All floor section panels and floor sills
- Excluded are door handles, interior decorative parts, and other interior plated parts.

(d) All metal parts that will be painted shall be chemically cleaned, etched, zinc phosphate-coated and zinc-chromate or epoxy primed, or conditioned by equivalent process. Any areas from which primer is removed for any purpose,

such as sanding, grinding, welds, etc., must be thoroughly cleaned and treated as specified and primer applied. Rivets used in assembly shall be zinc-phosphate treated unless coated with rust prevention material and primed as specified. In providing for these requirements, particular attention shall be given to lapped surfaces, welded connections or structural members, cut edges, metal in which holes are punched or drilled, closed or box sections not vented or drained, and surfaces subjected to abrasion during vehicle operation.

(e) As evidence that above requirements have been met, samples of materials used in construction of the bus body, when subjected to 1,000-hour salt spray test as provided for in latest revision of ASTM, Designation: B 117, "Standard Method of Salt Spray (Fog) Testing," shall not lose, after rubbing to remove corrosion, more than ten percent (10%) of material by weight.

(f) The front-end assembly shall be sufficiently heavy to withstand vibrations transmitted to it through chassis cowl. Windshield or corner posts must be of sturdy construction, designed so that they will not be so wide as to unnecessarily obstruct driver's view. Body shall be fastened to chassis cowl in an approved waterproof manner.

(g) All bus bodies shall be constructed in square and level. There shall be no more than one inch (1") of difference from side to side and front to rear of the bus body (not counting any chassis lean or twist). All bodies shall be mounted such that all designed body contact points are in contact with the chassis frame. All bodies shall be centered on the chassis but shall be no more than one half inch (1/2") off of dead center.

NOTE: Type A buses may be constructed with exterior paneling of material other than steel, meeting all body manufacturer requirements and applicable FMVSS. Body structural design shall comply with all other applicable requirements above.

15.48 STOP ARM

Buses shall be equipped with one stop arm, air or electrically driven, meeting SAE J1133 and the following requirements:

(a) Design: The sign shall be octagon-shaped, constructed of zinc-coated steel, aluminum, or equivalent material of equal durability. It shall have a minimum one-half inch (1/2") wide white border and the word "STOP" in white letters at least six inches (6") high against a red background on both sides. The letters, border and background shall

be of reflective materials meeting DOT FHWA FP-85 on both sides. Double-faced red, alternately flashing lamps, flashing both sides, one above and below the word "STOP" each visible from both sides and shall be connected to, and flash with the required school bus red flashing signal lamp circuit when the arm is extended, or an LED Stop Sign. The stop arm assembly shall be non-corrosive.

(b) Mounting: If only one stop is provided, the stop arm shall be installed on the left side of the school bus near the front cowl section. If a second stop arm is provided, it shall be installed on the left side of the bus near the rear section of the bus and shall have one (1) "STOP" emblem facing the rear of the bus when the stop sign is in the open position. Dual stop arms may be provided on buses designed for forty-seven (47) passengers or larger. Reference Options section .

15.49 SUN SHIELD

An interior adjustable tinted transparent sun shield, with a finished edge and not less than 6 inches x 30 inches (6" X 30") for Types C, and D vehicles, shall be installed in a position convenient for use by the driver. The sun shield (visor) on all Type A buses shall be installed according to the manufacturer's standard.

15.50 UNDERCOATING

Entire underside of body including floor members, wheel housings, and side panels below floor level shall be coated with fire resistant asphalt base, rubber base, or other undercoating material, applied by spray method to seal, deaden sound, insulate, and prevent oxidation. Any undercoating material used shall be asbestos-free. Do not cover up or obliterate the chassis identification plate.

15.51 VENTILATION

24-84 passenger school buses shall be equipped with an effective exhaust type ventilation system, static non-closeable type installed in low-pressure area of roof, capable of ejecting foul air under all operating conditions. System shall be adequately weatherproof and dustproof.

15.52 WHEEL HOUSINGS

Wheel housings shall be constructed of sixteen (16) gauge or heavier steel and be rigidly reinforced, shall be attached to floor and side panels in such manner as to prevent water or dust from entering body, and shall be designed for easy removal of tires. For materials see STRUCTURAL DESIGN; for covering see FLOOR AND FLOOR COVERING.

15.53 WINDOWS

Side Windows, Passenger, Standard: There shall be either a standard or a push-out type window accessible for each passenger seat except where it is not possible because of the installation of side emergency exits or lift door. Buses may have one less set of passenger windows than rows of seats provided that each seat has access to a window.

(a) Standard side windows: shall open from the top only and shall operate freely. All side windows except the driver's and the service door windows shall be split sash type with positive latch. Side windows that can be latched in an uneven position are not acceptable. The passenger side windows shall provide an opening at least twenty-two inches (22") wide and between nine and thirteen inches (9" and 13") high, with minimal obstruction by the seatbacks or other objects.

(b) Side Windows, Passenger, Push-out Type: These windows shall be hinged at the top and shall be positioned for ease of egress. These windows shall provide an emergency opening at least twenty-two inches (22") wide and thirteen inches (13") high, with minimal obstruction by seatbacks or other objects. These windows shall meet or exceed Federal Standards. Push-out windows shall be equipped with an electrical switch connected to an audible signal automatically operated and located in the driver's compartment, which shall indicate when the window is released. The switch shall be enclosed to prevent tampering. Wires leading from the switch shall be concealed in the walls. No cut-off switch shall be installed in the circuit.

(c) Service Door and Emergency Door Windows: All glass panels in the emergency and service doors for all buses shall be safety glass panels, permanently closed, and shall be set in a waterproof manner.

(d) Rear windows (non emergency door windows): Shall be installed on each side of the rear emergency door. Each rear window glass shall have a minimum area of one hundred forty square inches (140 sq. in.) and shall be set solid in a waterproof manner. These windows shall be installed securely to prevent removal by hand. A rear "push-out" window, meeting the requirements of FMVSS No. 217, shall be provided on the rearward window on rear engine buses.

(e) Side Window, Driver's: The driver's window shall be a two-piece (2-piece) window of either of the following types:

- Two-piece (2-piece) sliding-sash type: This type will be acceptable only when the bus is equipped with an adequate air scoop to draw outside air into the driver's compartment. When driver's ventilation is drawn through the heater system, this air shall be shielded from the heat sources.
- Other Type: This type of window shall have the front part opening either in or out and rear part lowering and raising by use of a regulating handle.

(f) Windshield: Front body section in the area of windshield shall provide for corner vision and be fitted with curved glass, three or four-piece flat glass, or two-piece flat glass as approved by the Department of Public Safety. Glass shall be laminated safety polished plate with dark tint at top, installed in a waterproof manner and slanted to reduce glare. Glass shall meet current SAE specifications and Federal Motor Vehicle Safety Standards.

15.54 WINDSHIELD WIPERS AND WASHERS

- (a) Washers: An electric-operated windshield washer shall be furnished and installed. The washer shall have a minimum reservoir capacity of one quart (1 qt.) of liquid and shall direct a stream of water into the path of travel of each windshield wiper blade each time the actuating button is operated.
- (b) Wipers: A windshield wiping system, two (2) speeds or variable speed, with an intermittent feature, shall be provided. The wipers shall be operated by one (1) or more air or electric motor. If one (1) motor is used, the wipers shall work in tandem or opposing to give full sweep of the windshield.

16. SPECIALLY EQUIPPED BUSES, TYPES A, C, AND D

When so ordered by H-GAC member, 14 through 84 passenger school buses shall be equipped with a wheelchair lift meeting the following requirements. All parts which are not specifically mentioned that are necessary for the unit to be complete and ready for operation, or which are normally furnished as standard equipment, shall be furnished by the successful bidder. All school buses equipped with a lift shall provide a minimum 30-inch aisle leading from any wheelchair mobility aid position to at least one emergency door. A wheelchair securement position shall never be located adjacent to the lift door. All parts shall conform in strength, quality, and workmanship to industry standards meeting FMVSS 403 and installed according to FMVSS 404. All wheelchair positions shall be forward facing. The wheelchair lift furnished for option #76 shall: be operated by a twelve (12) volt DC electric-hydraulic, electro-mechanical system or a combination thereof. The lift shall have a minimum capacity rating of eight hundred (800) pounds. The vertical lift travel of the platform shall be appropriate for the school bus type and exceed the bus floor to ground distance by a minimum of six inches (6") to allow for un-level loading conditions. The lift shall be self contained and mounted directly to the existing bus body floor. The lift shall be grounded to the bus chassis with a cable of suitable gauge to insure positive grounding of the lift.

16.1 DOORS, SPECIAL SERVICE

One or two (1 or 2) special side doors with windows in each door shall be provided as follows:

- (a) Design: The special service door(s) may be the standard double or single swing-out doors furnished by the chassis manufacturer on vehicles used for converted van buses or the special service doors shall be constructed of zinc-coated steel (G-60) meeting ASTM A-924/A 924M. Doors may be either standard widths or as required for the lift furnished. The doors shall extend from the window header to the bottom of the floor line. Doors shall be water and weather tight when closed, with lift in the travel position.
- (b) Door Holding Device: A means (device) shall be provided to hold the swing-out type door(s) in the fully opened position (90° position minimum).
- (c) Drip Rails: Full-length drip rails shall be furnished over the special service doors, which shall direct water away from the doors.
- (d) Header Board: The head impact area on the inside at the top of the special service door shall be protected by an energy absorbing, padded header board, a minimum of three inches (3") wide and a minimum of one inch (1") thick, extending the full width of the door to prevent injury when accidentally impacted.
- (e) Rub Rails: Exterior side(s) of special service doors shall have two (2) rub rails with end caps installed at approximately the same level as the side-rub rails. Rub rail installation shall be in accordance with the requirements outlined in Section 15-42.

16.2 ELECTRICAL SYSTEM

All wiring and wiring connectors used in the construction of the wheelchair lift shall meet the requirements of SAE J561. The vendor will notify the manufacturer if an after market installation is planned. The vendor is responsible for an electrical up-grade.

- (a) Electrical Insulation: Any component(s) such as the motor, electric wiring, switches, and any connections or parts likely to pose a safety hazard, shall be enclosed in insulated housing(s) to protect passengers and equipment.
- (b) Circuit Protection: A re-settable circuit breaker for the lift electrical system shall be located as close to the battery compartment as possible but not in the passenger or battery compartment. The breaker must be easily accessed.

16.3 FRAME AND RELATED COMPONENTS:

- (a) Frame: Lift frame shall be constructed and designed to support the platform extension, toe board, and other parts necessary for proper operation, plus a minimum of eight hundred pounds (800 lbs.) of additional weight.
- (b) Design of Platform, Automatic Folding Type: The platform shall be of sturdy construction and covered with minimum one-eighth inch (1/8") safety plate steel or one-eighth inch (1/8") expanded metal (open grate) with maximum three-fourths inch (3/4") openings. The lift platform shall have a minimum thirty-two inches (32") clear, usable width, unobstructed by the required handrail. The minimum clear length of the platform between the outer edge barrier and the inner edge shall be forty inches (40"). Any portion of platform in the folded (travel) position that obstructs window vision shall be covered with expanded metal.
- (c) Handrail: The lift platform shall be equipped with two (2) handrails for security. The handrails shall be approximately twenty-five-and-three-fourths inches (25-3/4") in height and a minimum eighteen inches (18") in length and designed to fold when in stowed position so as not to add to the overall lift projection into the bus. The handrails shall be connected with an occupant restraint belt, which is electrically interlocked with the lift. The belt shall be connected to the handrails at a height of at least 24 inches. The lift will only operate when the belt is engaged.
- (d) Lift Action: Lift shall be equipped with two actions; power-up and controlled descent with slow (gentle) movement. Platform shall be level at all times during the raising and lowering action. A load switch shall be installed on the platform to prevent accidental folding while loading wheelchair passengers.
- (e) Safety Rails: The platform shall be equipped with safety rails on both sides, which are constructed of a minimum one-eighth inch (1/8") steel and one inch (1") high. The front of the lift shall have a folding type safety rail a minimum of three inches (3") in height. Safety rail folding action may be either manual or automatic.
- (f) Toe Board: A toe board shall be furnished that is angled at approximately eight degrees (8°) below horizontal.
- (g) Labeling: Each lift shall be affixed with a legible and durable nameplate. *Permanent plaques are required decals are not acceptable.* The plaque shall include the following:

- Name and address of the manufacturer
- Model number
- Serial number
- Month & year of manufacturing

16.4 LAMPS, SIGNALS, AND WARNING DEVICES

Alternately Flashing Signal Lamps: If ordered with a wheelchair lift door, the lift door shall be considered an entrance door and shall activate warning lights when open.

16.5 LEVEL TEST

The sides of any bus provided with a wheelchair lift shall be within plus or minus two inches ($\pm 2"$) of each other when measured from comparable points on each side to the ground with the bus empty and parked on a level hard surface (such as concrete). Chassis springs and suspension shall be adjusted as necessary to provide a level bus when the additional weight of a wheelchair lift is installed.

16.6 HYDRAULIC SYSTEM AND RELATED COMPONENTS

Electric-hydraulic wheelchair lifts shall be furnished with a hydraulic system for lift operation. The components shall include, but not be limited to, the following:

- (a) Hoses and Fittings: Hose, hose fittings, and hydraulic fittings shall meet the requirements of SAE J517, J516, and J514, respectively, for nominal size(s) furnished.

(b) Hydraulic Cylinders: Hydraulic cylinders shall be installed for lift operations. Piston rod diameter of each cylinder shall be a minimum three-fourths inch (3/4"). Cylinders shall have a minimum of thirty-four inches (34") of extension action and shall lift a minimum of eight hundred pounds (800 lbs.) in addition to the weight of the lift.

(c) Hydraulic Fluid Reservoir: A reservoir for hydraulic fluid shall be furnished and installed in an accessible location to allow easy checking of the fluid level and filling as necessary. Fluid capacity and type shall be as recommended by the lift manufacturer.

(d) Hydraulic Valves: The system shall provide valves for the following actions:

- Over pressure: A pressure-limiting device to prevent over loading of the lift system design capacity.
- Override: A bypass valve (or other means) shall be provided to prevent the lifting of the bus by over extending the hydraulic cylinders.
- Power Failure: The system shall be equipped with a manual back up system for raising and lowering the wheelchair platform in case of power failure. No tools other than those provided and stored on the lift shall be required for manual operation.

16.7 MAINTENANCE, TRAINING, AND SERVICE

(a) Documents: A comprehensive operator's, maintenance, and parts manual(s) shall be provided for the lift with each bus. Parts manuals must be designed so that all replaceable parts are illustrated by line drawings and such parts are numbered on the illustration, with a part description on a separate list under the corresponding part number. Part descriptions should be annotated appropriately with the part number, a proper description (part name) and the quantity required for the application listed in the drawing. Any maintenance actions that, if done improperly, could result in an unsafe condition must be identified and clearly emphasized in the maintenance manual. All components which must be isolated or identified for ease of troubleshooting and diagnosis, such as electrical wiring and components or hydraulic lines, hoses, or valves must be clearly identified in the service manual as to their specific functions and relation to other parts.

(b) Maintenance Accessibility: All systems or components serviced, as part of the periodic maintenance of the lift, whose failure may cause a safety hazard or a road call, shall be readily accessible for service and inspection. To the extent practicable, removal or physical movement of components unrelated to the specific maintenance and/or repair tasks involved shall be unnecessary. Relative accessibility of components, measured in time required to gain access, shall be inversely proportional to frequency of maintenance and repair of the components.

(c) Wheelchair Lift and Securement System Literature and Training: The following information shall be provided with each vehicle equipped with a securement system:

- Detailed installation, service and parts manual.
- Detailed instructions for the proper use of the wheel chair securement and occupant restraint system.
- The vendor shall be responsible for providing for lift and securement training. This training could be audiovisual or hands on by a qualified representative of the manufacturer of the lift and securement equipment.

16.8 MOUNTING AND INSTALLATION

Installation shall be such that vibrations will be minimal. The wheelchair lift shall be installed by the bus body manufacturer or authorized dealer of the lift manufacturer. The lift may be mounted on the front right curbside or right rear curbside of the school bus body floor. It shall be securely bolted in place through the floor using the lift manufacturers' recommended fastening system. The bus floor and frame shall be reinforced as required to support the lift and load. The tail pipe may be routed anywhere between the frame rails to provide sufficient clearance for the lift, but shall not exit in the lift area.

16.9 OPERATING CONTROLS AND SAFETY DEVICES

(a) Operating Switches: Controls for each movement of the lift shall be through a remote pendant-type control (or equivalent) equipped with automatic return-to-off switches. Electrical cables shall be copper, rubber insulated and of sufficient length to allow operation of the lift from inside and outside of bus.

(b) Warning and Safety Devices:

- Safety Switch: A safety switch shall be installed at or near the service door to prevent operation of the lift except when all special service doors are open.

- Warning Light: A signal light, mounted near the other dashboard instruments, shall warn the driver when the ignition switch is activated and the special service doors are open or ajar, i.e., not completely closed.

16.10 OTHER REQUIREMENTS

Wheelchair lift-equipped school buses shall also be provided with the following:

- (a) Floor Covering: The floor in the wheelchair area and the area in the lift entryway shall be smooth and free of projections. Aisle floor covering shall be the same as required in Section 15: FLOOR AND FLOOR COVERING.
- (b) Flooring: When plywood is used to cover existing steel floors on specially equipped buses, it shall conform to Section 15. Reference Options for marine grade plywood.
- (c) Interior Lamp, Lift Compartment: The lift compartment shall have one (1) interior lamp installed in the roof panel above the center of the lift compartment; or one (1) lamp shall be installed in the roof panels on each side of the lift door to illuminate the platform entryway area. The lamp(s) shall be minimum fifteen (15) candlepower each and shall be one (1) of the examples listed in Section C LIGHTS, INTERIOR LIGHTS.

16.11 UNIVERSAL HANDICAP SYMBOLS

School buses with wheelchair lifts shall display four Universal Handicapped Symbols in the following locations: the front and rear of the bus, and both sides below the window line. These emblems shall be white on a blue background, between six inches (6") and twelve inches (12") in size, and shall be of a high intensity reflectorized material meeting U.S. Department of Transportation FHWA FP-85 Standards.

16.12 SECUREMENT AND RESTRAINT SYSTEM FOR WHEELCHAIR/MOBILITY AID AND OCCUPANT

For purposes of better understanding the various aspects and components of this section, the term securement or phrase securement system is used exclusively in reference to the device(s), which secure the wheelchair/mobility aid. The term restraint or phrase restraint system is used exclusively in reference to the device(s) used to restrain the occupant of the wheelchair/mobility aid. The phrase securement and restraint system is used to refer to the total system, which secures and restrains the wheelchair/ mobility aid and the occupant.

(a) Securement and Restraint System – General

- ❑ The wheelchair/mobility aid securement and occupant restraint system shall be designed, installed, and operated to accommodate passengers in a forward facing orientation within the bus and shall comply with all applicable requirements of FMVSS 222. Gurney-type devices shall be secured parallel to the side of each bus. Securement system hardware and attachment points for the forward-facing system shall be provided.
- ❑ The securement and restraint system, including the system track, floor plates, pockets, or other anchorage shall be provided by the same manufacturer, or be certified to be compatible by manufacturers of all equipment/systems used.
- ❑ A wheelchair/mobility aid securement device and an occupant restraint shall share an integrated lap and shoulder belt with a common anchorage, including occupant restraint designs that attach the occupant restraint to the securement device or the wheelchair/mobility aid, the anchorage shall be capable of withstanding the loads of both the securement device and occupant restraint when applied simultaneously, in accordance with FMVSS 222. For more information see "Wheelchair/Mobility Aid Securement System" in the next Section.
- ❑ The bus body floor and sidewall structures where the securement and restraint system anchorages are attached shall have equal or greater strength than the load requirements of the system(s) being installed.
- ❑ The occupant restraint system shall be designed to attach to the bus body either directly or in combination with the wheelchair/mobility aid securement system by a method, which prohibits the transfer of weight or force from the wheelchair/mobility aid to the occupant in the event of an impact.
- ❑ When an occupied wheelchair/mobility aid is secured in accordance with the manufacturer's instructions, the securement and restraint system shall limit the movement of the occupied wheelchair/mobility aid to no more than 2" in any direction under normal driving conditions.
- ❑ The securement and restraint system shall incorporate an identification scheme, which will allow for the easy identification of the various components and their functions. It shall consist of one of the following, or combination thereof:

- The wheelchair/mobility aid securement (webbing or strap assemblies) and the occupant restraint belt assemblies shall be of contrasting color or color shade.
 - The wheelchair/mobility aid securement device (webbing or strap assemblies) and occupant restraint belt assemblies may be clearly marked to indicate the proper wheelchair orientation in the vehicle, and the name and location for each device or belt assembly, i.e., front, rear, lap belt, shoulder belt, etc.
- ❑ All attachment or coupling devices designed to be connected or disconnected frequently shall be accessible and operable without the use of tools or other mechanical assistance.
 - ❑ All securement and restraint system hardware and components shall be free of sharp or jagged areas and shall be of a non-corrosive material or treated to resist corrosion in accordance with 4.3(a) of FMVSS 209.
 - ❑ The securement and restraint system shall be located and installed such that when an occupied wheelchair/mobility aid is secured, it does not block access to the lift door.
 - ❑ A device for storage of the securement and restraint system shall be provided. When the system is not in use, the storage device shall allow for the clean storage of the system, shall keep the system securely contained and shall enable the system to be readily accessed for use.
 - ❑ The entire securement and restraint system, including the storage device, shall meet the flammability standards established in FMVSS 302.
 - ❑ Each securement device (webbing or strap assembly) and restraint belt assembly shall be permanently and legibly marked or incorporate a non-removable label or tag which states that it conforms to all applicable FMVSS requirements, as well as the current National School Transportation Specifications & Procedures. In addition, the system manufacturer, or an authorized representative, upon request by the original titled purchaser, shall provide a notarized Certificate of Conformance, either original or photocopied, which states that the wheelchair/mobility aid securement and occupant restraint system meets all of the requirements as specified in FMVSS 222 and the current National School Transportation Specifications & Procedures.
 - ❑ The following information shall be provided with each vehicle equipped with a securement and restraint system:
 - Phone numbers where information can be obtained about installation, repair, and parts. (Detailed written instructions and a parts list shall be available upon request.)
 - Detailed instructions regarding use, including a diagram showing the proper placement of the wheelchair/mobility aids and positioning of securement devices and occupant restraints, including correct belt angles.
 - ❑ The system manufacturer shall make available training materials to ensure the proper use and maintenance of the wheelchair/mobility aid securement and occupant restraint system. These may include instructional videos, classroom curriculum, system test results, or other related materials.

(b) Wheelchair/Mobility Aid Securement and Occupant Restraint System

- ❑ Occupant restraint belt assemblies and anchorage shall also be certified to meet the requirements of FMVSS No.'s 209 and 210.
- ❑ Each location for the securement of a wheelchair/mobility aid shall have a minimum of four anchorage points. A minimum of two anchorage points shall be located in front of the wheelchair/mobility aid and a minimum of two anchorage points shall be located in the rear. The securement anchorage shall be attached to the floor of the vehicle and shall not interfere with passenger movement or present any hazardous condition.
- ❑ Each securement system location shall have a minimum clear floor area of 30" by 48". Additional floor area may be required for some applications. Consultation between the user and the manufacturer is recommended to ensure adequate area is provided.
- ❑ The securement system shall secure common wheelchair/mobility aids and shall be easily attached by a person having average dexterity and who is familiar with the system and wheelchair/ mobility aid. The wheelchair securement system including all hardware (attachment bolts, track, etc.) shall have been successfully tested to meet minimum impact forces of a 20 G, 30 MPH deceleration to simulate a frontal impact on the transport vehicle per the Society of Automotive Engineers (SAE) J2249, Wheelchair Tie Down and Occupant Restraint Systems for use in Motor Vehicles. The securement systems shall be labeled that the products meets SAE J2249 standards.

(c) Belt Cutter

The bus shall contain a belt cutter located in the driver's compartment for use in emergencies, including evacuations. The belt cutter should be of a type that has a handgrip and is designed to eliminate the possibility of the operator or others being cut during use, and should be secured in a location of safekeeping within easy reach of the driver while seated behind the steering wheel.

16.13 SUPPORT EQUIPMENT AND ACCESSORIES

The following is recommended by the National School Transportation Specifications & Procedures for support equipment and accessories. It is included here for the information of school districts. The following items are not required to be provided by the body manufacturer unless specified in the Invitation for Bid.

16.14 SUPPORT EQUIPMENT SECUREMENT

Portable student support equipment or special accessory items shall be secured at the mounting location to withstand a pulling force of five (5) times the weight of the item, or shall be retained in an enclosed, latched compartment. Examples of special items are crutches, walkers, canes, and similar devices. Medical support equipment items are to be secured as specified above. These items include oxygen bottles, ventilators, and other items.

17. AIR CONDITIONING

Air conditioning is an upgrade to the base unit (Reference Section 18.0: Required Options, Option #28).

17.1 A test must be performed by the vendor, unbiased, independently certified, and documented by a third party capable of performing the testing procedures as outlined below for each series of buses. (*Certified in-house testing facility may be acceptable.*) Tests shall be performed at the expense of the vendor. All tests performed shall be demonstrated to the satisfaction of the DPS Specifications Committee. ***The purchaser or Committee must be able to replicate the test and results.*** However, if the A/C system presented does not pass after 3 tests, the manufacturer shall supply another system to meet the requirements. THIS TEMPERATURE DIFFERENTIAL SHALL BE HELD UNDER THE FOLLOWING CONDITIONS:

- (a) Air conditioning system will be designed to operate at 110 ° F, 50% humidity, and full sunshine.
- (b) All doors and vents closed and under a steady state condition.
- (c) All interior bus temperature measurements must fall within the comfort range of 30° F cooler than outside ambient temperature, plus or minus 3 ° F.

17.2 AIR CONDITIONING TEST

(a) The Contractor will test the air conditioning system by placing the Manufacturer's bus in a heat booth or similar surroundings, then heat saturate the *entire bus (interior) such that the interior of the bus shall have a maximum temperature of 110° F and a minimum of, no less than, 100° F.* The bus shall be heat saturated for a minimum of two (2) hours. Inside temperatures are measured at the three (3) described locations as stated below.

(b) The air conditioning system shall have sufficient capacity to maintain an inside temperature of approximately 30 ° F cooler than outside ambient temperature throughout the bus with an outside temperature of 110 ° F maximum (100 ° F minimum) and a humidity rating no less than fifty percent (50%). Electrical circuit shall have an on/off switch at A/C panel that can only be operated by maintenance personnel. The A/C system shall be manually controlled from the driver's area. The air conditioning system must be capable of lowering the inside temperature from 110 ° F maximum (100 ° F minimum) to a comfort range of 30 ° F cooler than the outside ambient temperature plus or minus 3 ° F in thirty (30) minutes or less with all the doors and windows closed and the main engine operating at ¾ of maximum rated RPM, tested in a controlled facility environment. Measurements will be taken four (4) feet above the floor along the aisle at the following locations:

- Driver's seat
- In the center or mid point of the bus
- Over the rear drive axle
- None can be in the direct path of the air exiting the evaporator

(c) After the inside temperature has reached a uniform saturation of 110 ° F maximum (100 ° F minimum), all doors, windows and vents will be closed

and the air conditioning test will begin. The main drive engine may be operated up to $\frac{3}{4}$ of the maximum RPM, controlled by a throttle regulator. The inside temperature at the driver's seat, mid-point, and at the rear of the bus will be monitored throughout the test period. Exterior temperature will be at an average 110 ° F maximum (100 ° F minimum) and be monitored for the test duration. Outside test instruments shall be mounted at the bumper and/or fender on the four "corners" of the bus body.

(d) After thirty (30) minutes the inside temperatures must attain the comfort range of 30 ° F cooler than the outside ambient temperature plus or minus 3 ° F at all three (3) points identified above. Temperature will be measured in five (5) minute increments, inside and outside of the bus. No single probe will vary more than $\pm 5^{\circ}$ F. Measurements will be recorded and held for review by prospective purchasers.

(e) Manufacturer may have a representative present during the test for observation purposes only. Results of the air conditioning test will be available to the purchaser in advance of the bid opening.

17.3 AIR CONDITIONING SYSTEM

(a) Vendor shall include a stamped metal data plate under the hood indicating the type and quantity of refrigerant used for each unit installed. A second copy of the information shall be included in the delivery folder.

(b) Serpentine belt configuration is preferred.

(c) High and low pressure cut out safety switches are required.

(d) Written documentation, both labeling and the service manual shall describe refrigerant capacities within each system on the vehicle, i.e., "curbside system capacity" and "street-side system capacity". Each air conditioning unit shall be affixed a stamped metal data plate. The data plate shall include the following information:

- Name and address of the manufacturer.
- Model
- Compressor
- Condenser
- Cooling capacity of the installed system (in BTU/hr.).
- Re-circulation and ventilation of air quantity in (CFM).
- The type and quantity of refrigerant used for each system installed.
- Alternator (See Section B Chassis)

As an option, when requested in the IFB, the air conditioning system shall be supplied with a drier with two (2) back-seated valves.

17.4 PRODUCT SUPPORT

(a) Parts books and/or software providing a complete listing of all parts and supplies to repair and maintain A/C systems specified in this bid contract shall be provided by the manufacturer. A minimum of 2 copies of the parts books (or if web based then 1 copy is acceptable) and/or software per complete unit shall be provided at the time of delivery. "Complete listing" is defined as all components represented in the complete installation of A/C system bid. 2. Service manuals providing recommended preventative maintenance, service intervals, and "trouble shooting" procedures for repair and maintenance shall be provided at the time of delivery. A minimum of 2 copies of the service manuals (or if web based then 1 copy is acceptable) and/or software per complete unit shall be provided at the time of delivery.

(b) Vendor is responsible for registration of warranties for air conditioning system.

(c) The vendor upon request must provide a copy of the performance test results for each series of bus purchased.

17.5 SPECIAL REQUIREMENTS

Unless otherwise noted, all school buses ordered with air conditioning shall be furnished with the following:

(a) Insulation:

- Minimum five-eighths inch (5/8") nominal thickness plywood shall be installed over the existing or manufacturer's standard steel floor for insulation. Except type A where 1/2 inch is acceptable.
- Air-conditioned buses shall have the equivalent of one-and-one-half inches (1-1/2") of Fiberglass or other insulation in the ceilings and walls including the interior of hat-shaped bows.

- The insulation shall have a minimum R-factor value of 5.75.
- The body must be equipped with insulation, including sidewalls, roof, firewall, rear, inside body bows and plywood or composite floor insulation to aid in heat dissipation and reflection.
NOTE: See Section F, Option 44 for marine grade plywood

(b) Tinting:

The side windows and windshield of air-conditioned buses shall be furnished as follows. All tinting materials used shall be in compliance with the Texas Department of Public Safety regulations.

NOTE: Maximum tinting shall be furnished with air-conditioned buses. It is not necessary to order Option #78 in Section 18.0.

- Side Windows, Passenger: All tinting shall conform to Texas Administrative Code Title 37, Part 1, Chapter 23, Subchapter C, Rule 23.42, Inspection Items, Procedures and Requirements. "Dark tinting" is not permitted on the windshield or any window used for driving purposes.
- Windshield: The windshield shall have a horizontal gradient band (tinted) starting slightly above the driver's line of vision, with approximately ninety percent (90%) light transmittance and gradually decreasing to a minimum of seventy percent (70%) light transmittance at the top of the windshield, or the entire windshield shall be tinted to meet the requirements of FMVSS No. 205.

(c) White Roof: See Section F Option # 77 for white roof.

(d) Extra cooling: See Section F Option #29 for extra cooling.

17.6 GENERAL AND PERFORMANCE REQUIREMENTS

The method to determine a uniform guideline for air conditioning systems in school buses shall conform to the American Society of Heating, Refrigerating, and Air Conditioning Engineers, Inc., ASHRAE 41.4-1986. Air conditioning systems shall:

- Be furnished to meet the requirements of this specification and shall be the mechanical vapor compression refrigeration type.
- Have sufficient power for simultaneous cooling, circulating, and dehumidifying the air.
- Be provided with refrigerant that must be nontoxic, nonflammable, and non-explosive.
- Be manufactured to conform to the requirements of SAE J639
- Be of the current year's production.
- Details not specifically defined herein shall be in accordance with the manufacturer's standard commercial practice for products of this type.
- Have stand-alone grounding system for evaporator and condenser fan systems.
- Have all power and grounding come directly from the battery.
- All air conditioning systems will conform to this specification.

17.7 CONTROLS

All air conditioning controls shall be located within the driver's reach while seated and operating the vehicle. The controls shall be of the manufacturer's design with a minimum of three operating speeds, OFF is not considered an operating speed.

17.8 INSTALLATION

- Installing Dealer: Installation of the air conditioning system(s) shall be by the bus body company or by an authorized manufacturer's air conditioning dealer who normally stocks, sells, installs, and services a unit of the type being furnished.
- Protection of Components: Any skirt-mounted air-conditioning component or component mounted underneath the bus shall be provided with shielding to protect these components from mud or road debris.

NOTE: NO INSTALLATION OF ANY AIR CONDITIONING UNITS OR SYSTEMS SHALL, UNDER ANY CIRCUMSTANCES, VOID THE CHASSIS MANUFACTURER'S ENGINE WARRANTY.

17.9 TESTING

Testing shall be done by, or at the direction of, the Department and/or the receiving school district or other entity. Tests shall be performed on buses furnished. *The air conditioning manufacturer bears the cost of the initial test.* The cost of additional tests shall be the responsibility of the requester of the test if the air conditioning system has already been certified as passing the test and passes the retest.

17.10 AVAILABILITY OF SERVICE AND REPAIR PARTS

Bidder shall have on file with the Department, a list of factory-authorized companies or individuals, and their addresses that stock repair parts and who can perform service on the products furnished.

18. REQUIRED OPTIONS

For each make and model, where applicable and **where normally available**, bidder shall price the following options on H-GAC's Form E, and include a reference to the option numbers below (a number may be used repeatedly), plus a brief description, and the H-GAC bid price for each option. If any of these items are standard equipment for a given base unit model bid, bidder shall inform H-GAC of this with the notation "INCL" in the Form E price column. Bidder shall use the standards set forth in the TBPC specifications. Bidder shall not relegate their Form E pricing to those listed below, but shall include all commonly ordered options as well. Brand and model name shall be included in each option.

REQUIRED OPTIONS			
Option Number	General Description	Option Number	General Description
Option No. 1	Alternative Fuel Engines (OEM)	Option No. 41	Flooring with Recessed Track
Option No. 2	Alternator: Increased Capacity	Option No. 42	Floor Covering: Alternate Color
Option No. 3	Brakes: Air	Option No. 43	Floor Covering: White Line Across Aisle
Option No. 4	Chassis: Longer Wheelbases	Option No. 44	Floor Insulation: Plywood
Option No. 5	Cruise Control (chassis mfr)	Option No. 45	Headroom: Maximum
Option No. 6	Differential: Auto, No-Spin, Locking	Option No. 46	Heater: Rear, Under Seat
Option No. 7	Engine: Diesel (including alternative engine-transmission packages)	Option No. 47	Heater: Rear, Wall Mount
Option No. 8	Engine: Gasoline	Option No. 48	Knee Spacing : Maximum
Option No. 9	Fuel Tank: Higher Capacity	Option No. 49	Exterior Lights: High Visibility LED
Option No. 10	Hood: Non-Reflective Paint	Option No. 50	Mirrors: Nickel Style, Remote Control
Option No. 11	Hub Odometer	Option No. 51	Mirrors: Exterior View
Option No. 12	Hydraulic Brakes	Option No. 52	Mirrors: Exterior View, Heated
Option No. 13	Low Profile Tires	Option No. 53	PA System/Radio
Option No. 14	Mud Flaps: Mounted	Option No. 54	Reflective Bumper Material
Option No. 15	Sound Abatement: Engine Insulation	Option No. 55	Rooftop Warning Strobe Lamp
Option No. 16	Suspension: Improved Ride Rear	Option No. 56	Seating: Increased Height
Option No. 17	Suspension: Air Suspension Rear	Option No. 57	Seating: Lap Belts
Option No. 18	Telescoping Steering Wheel	Option No. 58	Seating: Lap Belt Ready
Option No. 19	Tires: Mud and Snow tread	Option No. 59	Seating: Lap & Shoulder Belt
Option No. 20	Tow Hooks: Front and/or Rear	Option No. 60	Seating: Integral Child Restraint
Option No. 21	Transmission: Extended Warranty	Option No. 61	Seating: Extended Travel /Activity Style
Option No. 22	Transmission: Alternative (gearing, etc)	Option No. 62	Security System: Doors
Option No. 23	Transmission, Manual	Option No. 63	Seat Anchorage: Additional
Option No. 24	Wheel: Spare (less carrier & tire)	Option No. 64	Storage: Under Body, Locking
Option No. 25	Wheel: Spare, Mounted (less c & t)	Option No. 65	Storage: Driver, Locking
Option No. 26	Tachometer	Option No. 66	Storage: Tool Compartment
Option No. 27	Acoustical Ceiling Panels	Option No. 67	State Inspection Sticker: Prior to Delivery
Option No. 28	Air Conditioning (Ref. AC section)	Option No. 68	Stop Arm: Higher Visibility Versions
Option No. 29	Air Conditioning: Extra Cooling	Option No. 69	Stop Arm: Additional Rear
Option No. 30	Battery Compartment: Locking	Option No. 70	Stop Warning Sigh: LED
Option No. 31	Crossing Gate (per SAE J1133)	Option No. 71	Trip Recorder
Option No. 32	Communication Device: Driver to Base	Option No. 72	Transit Style (Type D) Front Engine
Option No. 33	Defroster/Heater	Option No. 73	Transit Style (Type D) Rear Engine
Option No. 34	Driver's Dome Light	Option No. 74	Turn Signal Lamps: Side Mount
Option No. 35	Driver's Seat: Air and/or Hydraulic	Option No. 75	Video Camera and Recording Systems
Option No. 36	Door: Air and/or Electric	Option No. 76	Wheelchair Lift: Folding Platform, front, middle, and rear curb mount

Option No. 37	Emergency Door Holding Device	Option No. 77	White Roof
Option No. 38	Fans: Defroster	Option No. 78	Window Glass: Dark Tint
Option No. 39	Fan: Driver	Option No. 79	Windows: Additional. Push-out, standard top hinge
Option No. 40	Flat Floor	Option No. 80	Windows: Push out, front edge hinged (emergency exit applications)
		Option No. 81	Replacement Filters (emission systems)

19. DIESEL RETROFITS

An engine “retrofit” shall include (but is not limited to) any of the following activities:

- addition of new/better pollution control after treatment equipment to certified engines
- upgrading a certified engine to a cleaner certified configuration
- upgrading an uncertified engine to a cleaner “certified-like” configuration
- conversion of any engine to a cleaner fuel
 - early replacement of older engines with newer
 - use of cleaner fuel and/or emission reducing fuel additive
 - equipment used to clean filters

19.1 MINIMUM REQUIREMENTS

- (a) Technology must meet or exceed January 2010 U.S EPA and ARB nitrogen dioxide (NO₂) emissions limit per notice EPA420-B-08-005 (<http://www.epa.gov/otaq/retrofit/documents/420b08005.pdf>).
- (b) All emission retrofit devices to be delivered under this bid must be listed as Currently Verified Technology by the U.S. Environmental Protection Agency or the California Air Resources Board. Currently Verified Technology will be included on the U.S. EPA website <http://www.epa.gov/otaq/retrofit/verif-list.htm>, and/or, the California Air Resources Board website <http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm>.
- (c) Manufacturers bidding an emission retrofit device, which has an exhaust temperature duty cycle requirement, may be required to substantiate compliance with that requirement for each engine to be retrofitted prior to device installation.

19.2 PRODUCT CODES AND PRICING

All Base Product Items offered shall be identified by a four (4) character alpha-numeric Product Code. The first character designates the primary equipment category (**E**), and the second, third and fourth the manufacturer, technology, or model. Base Product Items and associated Product Codes are detailed on **Form D**. It is this bid price that will be used in the bid evaluations to determine contract awards. Bidder should bid the base system price listed on **Form D** and any variations on **Form E** as options.

20. FEE STRUCTURE

The standard administrative fee for School Buses is \$600 flat per PO. For Diesel Retrofit Equipment, HGACBuy will assess contractors an Order Processing Charge of 1.5% of the order amount on all orders placed by Members under any contract executed pursuant to this procurement. **Offerors are responsible for taking this into account in determining bid pricing on Retrofit Equipment.**

21. EVALUATION OF RESPONSES AND AWARDS

Consistent with Texas bid award statutes, for each specific Form D line item, H-GAC will recommend a single award to the lowest responsible Offeror. Once approved by our Board of Directors, Offerors will be notified of H-GAC management’s final award recommendations by email, followed by a final formal signature request from our Contracts group.

----- End Of Section B -----

Specifications prepared by

**Houston-Galveston Area Council
Cooperative Purchasing Program**

For questions about this Invitation, please contact:

Beverly Levy

Ph: 832-681-2592

Email: Beverly.Levy@h-gac.com



SECTION C - H-GAC FORMS

(Rev 12/02/09)

For Use In Responding To Competitive Bid And Proposal Invitations

Invitation No.: BS08-15

Title: School Buses

This Section contains the following **H-GAC FORMS**.

FORM	DESCRIPTION
Form A:	Offeror Identification and Authorized Signatory
Form B:	Historically Underutilized Business Enterprises
Form C:	Response Checklist
Form D:	Offered Items Pricing
Form E:	Published Options

These *FORMS* are hereby made available in electronic format. They should be copied to Offeror's computer for completion and/or printout as required. The *FORMS* **may not** be changed or altered in any way, except as may be specified on the *FORM*.

ALL completed *FORMS* must also be submitted electronically on electronic media (DVD, CDROM, flash/thumb drive), excepting of course for signatures. The printed "Original" of the response will be considered as the official copy in case of any discrepancy between the electronic version and the printed Original.

FORM A - OFFEROR IDENTIFICATION & AUTHORIZED SIGNATORY
(DO NOT handwritten this Form. Information must be typed in.)

Invitation No.: BS08-15

Invitation Title: _____

Offeror Company: _____

(Legal name of business which will appear on contract, if awarded)

Offeror Status: Manufacturer Dealer/Distributor Other

Response Type(1): Single Offeror Acting Alone Or As Lead Multiple Offerors Acting Jointly

Contract Signatory(2): _____ Title: _____

Mailing Address(3): _____

Street/PO Box City State & Zip

Physical Address: _____

Street City State & Zip

Phone: _____ Fax: _____

Email Address: _____

Federal Tax ID No.: _____ Web Page URL: _____

- (1) If Joint Offering, all parties must submit a signed Form A. A contract will be offered to each.
- (2) Person who will sign final contract documents if an award is made.
- (3) Address to which final contract documents would be sent for signature.

Member Contact Information

Contact Person(4): _____ Title: _____

Mailing Address: _____

Street/PO Box City State & Zip

Physical Address: _____

Street City State & Zip

Toll Free Phone: _____ Fax: _____

Email Address: _____

- (4) Person who End Users will contact for product information and to get pricing quotes.

The Signatory below, on behalf of Offeror:

- Acknowledges having thoroughly reviewed the Invitation;
- Attests to having the authority to sign this response and commit Offeror to honor all requirements;
- Makes, under penalty of perjury, all required Offeror Certifications as detailed in General Terms;
- Certifies that all information provided in this Response is true and correct.

Signature: _____ Title: _____

Printed Name: _____ Date: _____

Title: _____**Offeror:** _____

Most, if not all, of the Members of HGACBuy are subject to various requirements relative to purchasing goods and services from Historically Underutilized Business Enterprises (HUBs)(See Note 1). These requirements are promulgated by federal and state governmental authorities, and include measureable criteria such as 'percentage of total dollars spent directed to HUBs', 'number of HUB contractors used', 'HUB subcontractors employed by primary contractors', etc. These requirements are generally formalized in goal oriented programs.

HGACBuy is comitted to promoting full and equal business opportunities for HUB contractors, and to assisting Cooperative Purchasing Program (COOP) Members in meeting mandated HUB goals. In that regard, Contractor shall make a good faith effort to use the services of Certified/Listed (See Note 2) HUBs whenever possible.

As part of a good faith effort, Contractor agrees to work with and assist HGACBuy Members in meeting HUB targets and goals, as may be required by any rules, processes or programs they might have in place. Such assistance may include such things as compliance with reporting requirements, provision of documentation, consideration of 'Certified/Listed' subcontractors, provision of documented evidence that an active participatory role for a HUB entity was considered in a procurement transaction, etc.

Note 1: There are many designations other than "HUB" used across the country within various jurisdictions. Examples include terms such as Disadvantaged Business Enterprise (DBE), Minority Owned Business Enterprise (MBE), Woman Owned Business Enterprise (WBE), Small Disadvantaged Business (SDB), Small, Woman or Minority-owned Business (SWAM), etc. Regardless of the formal designation, the overall objective of the relavant programs is basically the same, i.e. to insure that disadvantaged and underutilized members of the business community receive a fair share of public spending. The term HUB as used herein shall be understood to encompass all such programs/business enterprises, no matter what terminology is used by the Member.

Note 2: The terms "Certified" and "Listed" as used in conjunction with HUB programs relate to the process of HUB qualification review. Jurisdictions usually require that companies claiming HUB status be reviewed and confirmed as meeting certain minimum requirements to claim that status, and that the review and confirmation process be carried out by certain designated entities. They are then "Certified" or "Listed" by having their name included on an official listing published by the Certifying or Listing Authority.

Accepted and Agreed By:

Title:

Date:

HUB Status Of Offeror Offeror is a HUB, as detailed below. Offeror is not a HUB.

Designation(s):

 HUB DBE MBE WBE Other

Certifying/Listing Authority(s):

Subcontracts

On a separate sheet, list any subcontractors that would be employed in providing products or services related to this procurement. Include subcontractor name, designation (HUB, DBE, etc.) and certifying/listing authority.

 Subcontractor List attached. No Subcontractors will be used.

Title: _____

Offeror: _____

This *FORM* is provided to help insure that all required Response elements have been completed and included, or certified as being available upon request. **Responses that do not comply with all requirements may be considered non-compliant.** Offeror's signatory must review each item below, and certify by initialing in the space to the right.

This Response Includes:**Init.**

- | | |
|--|--|
| 1 An "Original" hard copy of the <u>COMPLETE</u> submission, including all required <i>FORMS</i> , plus one copy, each in a separate hard-sided 3-ring binder. | |
| 2 A copy of the <u>COMPLETE</u> submission, including all required <i>FORMS</i> , in electronic format (CD, DVD, flash drive). | |
| 3 An originally signed Form A from all entities who are party to this submission and who should be offered a contract if this submission is successful. | |
| 4 The required list of References . | |
| 5 Details of " Service Organization ", including locations, hours, personnel and parts/service availability. (Applies to hard goods only.) | |
| 6 Complete Warranty Documentation for all Products offered. | |
| 7 The manufacturer's latest Specification Documents detailing standard features, operating characteristics, etc., for all products offered. | |
| 8 Form CIQ , if required by law, completed and signed. (The Form, and instructions for its use, can be found at: http://www.ethics.state.tx.us/whatsnew/conflict_forms.htm) If Form CIQ does not apply, put "N/A" in the box to the right. | |
| 9 If the Non-Resident Reciprocal Bid Act applies, a copy of your state statute and a determination of the status of Texas bidders/proposers in your home state. If not applicable, indicate "N/A" | |
| 10 If offer includes motor vehicles to be sold in Texas, copies of all current licenses as required by the Texas Motor Vehicle Commission. | |

FORM D - PRODUCT ITEM BASE OFFERING PRICES		Invitation No.:	BS08-15
Note: Products that are not prelisted will be deemed noncompliant.			
Offeror Name:			
H-GAC Product Code	Base Bid Item Description (Offeror may not change any item description.)	Base Offered Price	
	School Buses		
	A : Bluebird		
AA1	Micro Bird: 14 pass / GM 6.0L Gas / 6-Sp auto / 139" WB, min.		
AA2	Micro Bird: 19 pass / GM 6.0L Gas / 6-Sp auto / 139" WB, min.		
AA3	Micro Bird: 20 pass / GM 6.0L Gas / 6-Sp auto / 139" WB, min		
AA4	Micro Bird: 24 pass / GM 6.0L Gas / 6-Sp auto / 159" WB, min.		
AA5	Micro Bird: 30 pass / GM 6.0L Gas / 6-Sp auto / 159" WB, min.		
CA1	Vision: 35 pass / Blue Bird / Cummins, 200 Hp / Allison 2500 PTS 5-Sp auto / 169" WB		
CA2	Vision: 47 pass / Blue Bird / Cummins, 200 Hp / Allison 2500 PTS 5-Sp auto / 189" WB		
CA3	Vision: 53 pass / Blue Bird / Cummins, 200 Hp / Allison 2500 PTS 5-Sp auto / 217" WB		
CA4	Vision: 59 pass / Blue Bird / Cummins, 200 Hp / Allison 2500 PTS 5-Sp auto / 238" WB		
CA5	Vision: 65 pass / Blue Bird / Cummins, 200 Hp / Allison 2500 PTS 5-Sp auto / 252" WB		
CA6	Vision: 71 pass / Blue Bird / Cummins, 200 Hp / Allison 2500 PTS 5-Sp auto/ 273" WB		
CA7	Vision: 77 pass / Blue Bird / Cummins, 200 Hp / Allison 2500 PTS 5-Sp auto/ 273" WB		
CA8	Vision: 78 pass / Blue Bird / Cummins, 200 Hp / Allison 2500 PTS 5-Sp auto/ 280" WB		
D1A1	T3FE: 54 pass / Bluebird / Cummins, 200 Hp / Allison 2500 PTS 5-Sp auto / 141" WB		
D1A2	T3FE: 60 pass / Bluebird / Cummins, 200 Hp / Allison 2500 PTS 5-Sp auto / 169" WB		
D1A3	T3FE: 66 pass / Bluebird / Cummins, 200 Hp / Allison 2500 PTS 5-Sp auto / 190" WB		
D1A4	T3FE: 72 pass / Bluebird / Cummins, 200 Hp / Allison 2500 PTS 5-Sp auto / 190" WB		
D1A5	T3FE: 78 pass / Bluebird / Cummins, 200 Hp / Allison 2500 PTS 5-Sp auto / 211" WB		
D1A6	T3FE: 84 pass / Bluebird / Cummins, 220 Hp / Allison 2500 PTS 5-Sp auto / 232" WB		
D2A1	T3RE: 63 pass / Bluebird / Cummins 200 Hp / Allison 2500 PTS 5-Sp auto / 189" WB		
D2A2	T3RE: 72 pass / Bluebird / Cummins 200 Hp / Allison 2500 PTS 5-Sp auto / 217" WB		
D2A3	T3RE: 78 pass / Bluebird / Cummins 200 Hp / Allison 2500 PTS 5-Sp auto / 245" WB		

D2A4	T3RE: 81 pass / Bluebird / Cummins 220 Hp / Allison 2500 PTS 5-Sp auto / 259" WB	
D2A5	T3RE: 84 pass / Bluebird / Cummins 220 Hp / Allison 2500 PTS 5-Sp auto / 273" WB	
	B. Collins	
AB1	Nexus DH400: 14 pass / GM 6.0L Gas / 6-Sp auto / 139" WB, min.	
AB2	Nexus DH400: 19 pass / GM 6.0L Gas / 6-Sp auto / 139" WB, min.	
AB3	Nexus DH400: 20 pass / GM 6.0L Gas / 6-Sp auto / 139" WB, min.	
AB4	Nexus DH416: 24 pass / GM 6.0L Gas / 6-Sp auto / 139" WB, min.	
AB5	Nexus DH500: 29 pass / GM 6.0L Gas / 6-Sp auto / 159" WB, min.	
AB6	Nexus DH516: 30 pass / GM 6.0L Gas / 6-Sp auto / 159" WB, min.	
AB7	Nexus DH400 MFSAB: 20 pass/ GM 6.0L Gas/ 6-Sp auto/ 139" WB. min.	
AB8	Nexus DH416 MFSAB: 24 pass/ GM 6.0L Gas/ 6-Sp auto/ 139" WB. min.	
AB9	Nexus DH500 MFSAB: 29 pass/ GM 6.0L Gas/ 6-Sp auto/ 159" WB. min.	
AB10	Nexus DH516 MFSAB: 30 pass/ GM 6.0L Gas/ 6-Sp auto/ 159" WB. min.	
AB11	Nexus DH516 MFSAB: 33 pass/ GM 6.0L Gas/ 6-Sp auto/ 159" WB. min.	
AB12	Nexus DH516 MFSAB: 22 & 2/ GM 6.0L Gas/ 6-Sp auto/ 159" WB. min.	
	D. International	
AD1	AE-14 23 pass / International / 220 Hp / Allison 2500 PTS 5-Sp auto/ 158" WB	
AD2	AE-17 30 pass / International / 220 Hp / Allison 2500 PTS 5-Sp auto/ 169" WB	
AD3	AE-19 35 pass / International / 220 Hp / Allison 2500 PTS 5-Sp auto/ 183" WB	
CD1	CE-18: 35 pass / International / 200 Hp / Allison 2500 PTS 5-Sp auto/ 158" WB	
CD2	CE-23: 47 pass / International / 200 Hp / Allison 2500 PTS 5-Sp auto/ 193" WB	
CD3	CE-25: 53 pass / International / 200 Hp / Allison 2500 PTS 5-Sp auto/ 218" WB	
CD4	CE-28: 59 pass / International / 200 Hp / Allison 2500 PTS 5-Sp auto/ 236" WB	
CD5	CE-30: 65 pass / International / 200 Hp / Allison 2500 PTS 5-Sp auto/ 236" WB	
CD6	CE-31: 71 pass (short WB)/ Intl / 200 Hp / Allison 2500 PTS 5-Sp auto/ 254" WB	
CD7	CE-32: 71 pass (long WB)/ Intl / 200 Hp / Allison 2500 PTS 5-Sp auto/ 276" WB	
CD8	CE-34: 77 pass / Intl / 200 Hp / Allison 2500 PTS 5-Sp auto/ 276" WB	
D2D1	RE-33: 66 pass / International / 190 Hp / Allison 2500 PTS 5-Sp auto / 195" WB	
D2D2	RE-35: 72 pass / International / 190 Hp / Allison 2500 PTS 5-Sp auto / 222" WB	
D2D3	RE-37: 78 pass / International / 190 Hp / Allison 2500 PTS 5-Sp auto / 249" WB	

D2D4	RE-39: 84 pass / International / 190 Hp / Allison 2500 PTS 5-Sp auto / 276" WB	
D2D5	RE-39: 90 pass / International / 190 Hp / Allison 2500 PTS 5-Sp auto / 303" WB	
	F. Thomas Built	
AF1	Minotour: 14 pass / GMC-Chev 6.0L gasoline / 6-Sp auto / 139" WB, min.	
AF2	Minotour: 19 pass / GMC-Chev 6.0L gasoline / 6-Sp auto / 139" WB, min.	
AF3	Minotour: 20 pass / GMC-Chev 6.0L gasoline / 6-Sp auto / 139" WB, min.	
AF4	Minotour: 24 pass / GMC-Chev 6.0L gasoline / 6-Sp auto / 139" WB, min. .	
AF5	Minotour: 29 pass / GMC-Chev 6.0L gasoline / 6-Sp auto / 159" WB, min.	
CF10	C2: 35 pass / Freightliner / 200 Hp / Allison 2500 PTS 5-Sp auto/ 158" WB	
CF12	C2: 47 pass / Freightliner / 200 Hp / Allison 2500 PTS 5-Sp auto/ 179" WB	
CF13	C2: 53 pass / Freightliner / 200 Hp / Allison 2500 PTS 5-Sp auto/ 199" WB	
CF14	C2: 59 pass / Freightliner / 200 Hp / Allison 2500 PTS 5-Sp auto/ 219" WB	
CF15	C2: 68 pass / Freightliner / 200 Hp / Allison 2500 PTS 5-Sp auto/ 238" WB	
CF16	C2: 71 pass / Freightliner / 200 Hp / Allison 2500 PTS 5-Sp auto/ 259" WB	
CF18	C2: 78 pass / Freightliner / 200 Hp / Allison 2500 PTS 5-Sp auto/ 279" WB	
CF19	C2: 81 pass / Freightliner / 200 Hp / Allison 2500 PTS 5-Sp auto/ 279" WB	
D1F1	EF: 47 pass / Thomas / 200 Hp / Allison 2500 PTS 5-Sp auto / 136" WB	
D1F2	EF: 53pass / Thomas / 200 Hp / Allison 2500 PTS 5-Sp auto / 136" WB	
D1F3	EF: 59 pass / Thomas / 200 Hp / Allison 2500 PTS 5-Sp auto / 155" WB	
D1F5	EF: 65 pass / Thomas / 200 Hp / Allison 2500 PTS 5-Sp auto / 174" WB	
D1F6	EF: 71 pass / Thomas / 200 Hp / Allison 2500 PTS 5-Sp auto / 193" WB	
D1F8	EF: 77 pass / Thomas / 200Hp / Allison 2500 PTS 5-Sp auto / 212" WB	
D1F10	EF: 83 pass / Thomas / 220 Hp / Allison 2500 PTS 5-Sp auto / 231" WB	
D1F11	EF: 89 pass / Thomas / 220 Hp / Allison 2500 PTS 5-Sp auto / 231" WB	
D2F1	HDX: 66 pass / Thomas / 220 Hp / Allison 2500 PTS 5-Sp auto / 181" WB	
D2F2	HDX: 72 pass / Thomas / 220 Hp / Allison 2500 PTS 5-Sp auto / 209" WB	
D2F3	HDX: 78 pass / Thomas / 220 Hp / Allison 2500 PTS 5-Sp auto / 238" WB	
D2F4	HDX: 84 pass / Thomas / 220 Hp / Allison 2500 PTS 5-Sp auto / 267" WB	
D2F5	HDX: 84 pass / Thomas / 240 Hp / Allison 2500 PTS 5-Sp auto / 277" WB	
	G. Starcraft Bus	

AG1	Quest DRW: 14 pass/ GM 6.0L Gas/ 6-Sp auto / 139" WB	
AG2	Quest DRW: 14 pass/ Ford 5.4L Gas/ 5-Sp auto / 138" WB	
AG3	Quest DRW: 20 pass/ GM 6.0L Gas/ 6-Sp auto / 139" WB	
AG4	Quest DRW: 20 pass/ Ford 5.4L Gas/ 6-Sp auto / 138" WB	
AG5	Quest DRW: 24 pass/ GM 6.0L Gas/ 6-Sp auto / 159" WB	
AG6	Quest DRW: 24 pass/ Ford 5.4L Gas/ 5-Sp auto / 158" WB	
AG7	Quest DRW: 29 pass/ GM 6.0L Gas/ 6-Sp auto / 159" WB	
AG8	Quest DRW: 30 pass/ Ford 5.4L Gas/ 5-Sp auto / 159" WB	
AG9	Quest DRW: 34 pass/ GM 6.0L Gas/ 6-Sp auto / 159" WB	
AG10	Prodigy DRW MFSAB: 14 pass/GM 6.0L Gas / 6-Sp auto / 139" WB	
AG11	Prodigy DRW MFSAB: 14 pass/ Ford 5.4L Gas/ 5-Sp auto / 138" WB	
AG12	Prodigy DRW MFSAB: 20 pass/GM 6.0L Gas / 6-Sp auto / 139" WB	
AG13	Prodigy DRW MFSAB: 20 pass/ Ford 5.4L Gas/ 6-Sp auto / 138" WB	
AG14	Prodigy DRW MFSAB: 24 pass/GM 6.0L Gas / 6-Sp auto / 159" WB	
AG15	Prodigy DRW MFSAB: 24 pass/ Ford 5.4L Gas/ 5-Sp auto / 158" WB	
AG16	Prodigy DRW MFSAB: 29 pass/GM 6.0L Gas / 6-Sp auto / 159" WB	
AG17	Prodigy DRW MFSAB: 30 pass/ Ford 5.4L Gas/ 5-Sp auto / 159" WB	
AG18	Prodigy DRW MFSAB: 34 pass/ GM 6.0L Gas/ 6-Sp auto / 159" WB	
AG19	Quest XL: 48 pass/Ford F59 6.8L Gas/6-Sp Auto/ 208" WB	
AG20	Prodigy XL MFSAB: 48 pass/Ford F59 6.8L Gas/6-Sp Auto/ 208" WB	
	Diesel Retrofit Equipment	
	Donaldson	
E003	Series 6000 DOC & Spiracle (25-33% PM, 13-23% CO, 50-52% HC reduction)	
E004	Series 6100 DOC (20-26% PM, 38-41% CO, 49-66% HC reduction)	
E005	Series 6100 DOC & Spiracle (28-32% PM, 31-34% CO, 42% HC reduction)	
	Engine Control Systems	
E006	Purifilter-Diesel Particulate Filter (90% PM, 75% CO, 85% HC reduction)	
E007	AZ Purimuffler or AZ Purifier DOC with ECS closed crankcase ventilation system with Low Sulfur Diesel Fuel (40% PM, 60% CO, 75% HC reduction) heavy duty engines	
E008	AZ Purimuffler or AZ Purifier DOC with Low Sulfur Diesel Fuel (40% PM, 40% CO, 70% HC reduction) medium heavy duty engines (1991-2003)	
E009	AZ Purimuffler or AZ Purifier DOC with Low Sulfur Diesel Fuel (35% PM, 40% CO, 70% HC reduction) medium heavy duty engines (1991-1993)	
E010	AZ Purimuffler (20% PM, 40% CO, 50% HC reduction) heavy duty 2 CYCLE engines	
E011	AZ Purifier (20% PM, 40% CO, 50% HC reduction) heavy duty 2 CYCLE engines	
E012	AZ Purimuffler (20% PM, 40% CO, 50% HC reduction) heavy duty 4 CYCLE engines	
E013	AZ Purifier (20% PM, 40% CO, 50% HC reduction) heavy duty 4 CYCLE engines	
	International Truck & Engine Corp.	
E014	Green Diesel Technology-Low Nox Calibration plus DOC with Ultra Low Sulfur Diesel (0-10% PM, 10-20% CO, 25% Nox, 50% HC reduction)	

Offeror Name:	
Notes: (Important)	<p>1) Use a single Form E for ALL Option/Accessory items and quote each on a single, separate line. DO NOT use multiple Form E's... Add or insert additional lines as necessary.</p> <p>3) Completely describe each item. Include the manufacturer's code or part number. Each item listed MUST have a unique code or part number so that it can be identified in any subsequent contract.</p> <p>4) Options which replace standard equipment on a Form D Item should be priced net of any credit due for the replaced item.</p> <p>5) Options which are upgrades/downgrades of a Form D Item should be priced at the differential amount between the cost of the Form D Item and the upgrade/downgrade option.</p>

Code or Part No.	Option Description	Offered Price

This is a sample of the contract that will be sent to you for execution IF you are recommended for a contract award. Do NOT complete and return with your Response.

A CONTRACT BETWEEN **HOUSTON-GALVESTON AREA COUNCIL**, Houston, Texas AND _____

This Contract is made and entered into by the **Houston-Galveston Area Council of Governments**, hereinafter referred to as **H-GAC**, having its principal place of business at 3555 Timmons Lane, Suite 100, Houston, Texas 77027, AND, _____ hereinafter referred to as the **CONTRACTOR**, having its principal place of business at _____.

ARTICLE 1: SCOPE OF SERVICES

The parties have entered into a _____ Contract to become effective as of _____, and to continue through _____ (the "**Contract**"), subject to extension upon mutual agreement of the **CONTRACTOR** and **H-GAC**. **H-GAC** enters into the Contract as Agent for participating governmental agencies, each hereinafter referred to as **END USER**, for the purchase of _____ offered by the **CONTRACTOR**. The **CONTRACTOR** agrees to sell _____ through the **H-GAC** Contract to **END USERS**.

ARTICLE 2: THE COMPLETE AGREEMENT

The Contract shall consist of the documents identified below in order of precedence:

1. The text of this Contract form, including but not limited to, Attachment A
2. General Terms and Conditions
3. Bid Specifications No: _____, including any relevant suffixes
4. **CONTRACTOR's** Response to Bid No: _____, including but not limited to, prices and options offered

All of which are either attached hereto or incorporated by reference and hereby made a part of this Contract, and shall constitute the complete agreement between the parties hereto. This Contract supersedes any and all oral or written agreements between the parties relating to matters herein. Except as otherwise provided herein, this Contract cannot be modified without the written consent of both parties.

ARTICLE 3: LEGAL AUTHORITY

CONTRACTOR and **H-GAC** warrant and represent to each other that they have adequate legal counsel and authority to enter into this Contract. The governing bodies, where applicable, have authorized the signatory officials to enter into this Contract and bind the parties to the terms of this Contract and any subsequent amendments thereto.

ARTICLE 4: APPLICABLE LAWS

The parties agree to conduct all activities under this Contract in accordance with all applicable rules, regulations, directives, issuances, ordinances, and laws in effect or promulgated during the term of this Contract.

ARTICLE 5: INDEPENDENT CONTRACTOR

The execution of this Contract and the rendering of services prescribed by this Contract do not change the independent status of **H-GAC** or **CONTRACTOR**. No provision of this Contract or act of **H-GAC** in performance of this Contract shall be construed as making **CONTRACTOR** the agent, servant or employee of **H-GAC**, the State of Texas or the United States Government. Employees of **CONTRACTOR** are subject to the exclusive control and supervision of **CONTRACTOR**. **CONTRACTOR** is solely responsible for employee payrolls and claims arising therefrom.

ARTICLE 6: END USER AGREEMENTS

H-GAC acknowledges that the **END USER** may choose to enter into an End User Agreement with the **CONTRACTOR** through this Contract and that the term of said Agreement may exceed the term of the **H-GAC** Contract. However this acknowledgement is not to be construed as **H-GAC's** endorsement or approval of the End User Agreement terms and conditions. **CONTRACTOR** agrees not to offer to, agree to or accept from **END USER** any terms or conditions that conflict with or contravene those in **CONTRACTOR's H-GAC** contract. Further, termination of this Contract for any reason shall not result in the termination of the underlying End User Agreements entered into between **CONTRACTOR** and any **END USER** which shall, in each instance, continue pursuant to their stated terms and duration. The only effect of termination of this Contract is that **CONTRACTOR** will no longer be able to enter into any new End User Agreements with **END USERS** pursuant to this Contract. Applicable **H-GAC** order processing charges will be due and payable to **H-GAC** on

any End User Agreements surviving termination of this Contract between **H-GAC** and **CONTRACTOR** .

ARTICLE 7: SUBCONTRACTS & ASSIGNMENTS

CONTRACTOR agrees not to subcontract, assign, transfer, convey, sublet or otherwise dispose of this Contract or any right, title, obligation or interest it may have therein to any third party without prior written notice to **H-GAC**. **H-GAC** reserves the right to accept or reject any such change. **CONTRACTOR** shall continue to remain responsible for all performance under this Contract regardless of any subcontract or assignment. **H-GAC** shall be liable solely to **CONTRACTOR** and not to any of its Subcontractors or Assignees.

ARTICLE 8: EXAMINATION AND RETENTION OF CONTRACTOR'S RECORDS

CONTRACTOR shall maintain during the course of its work, complete and accurate records of items that are chargeable to **END USER** under this Contract. **H-GAC**, through its staff or its designated public accounting firm, the State of Texas, or the United States Government shall have the right at any reasonable time to inspect copy and audit those records on or off the premises of **CONTRACTOR**. Failure to provide access to records may be cause for termination of this Contract. **CONTRACTOR** shall maintain all records pertinent to this Contract for a period of not less than five (5) calendar years from the date of acceptance of the final contract closeout and until any outstanding litigation, audit or claim has been resolved. The right of access to records is not limited to the required retention period, but shall last as long as the records are retained. **CONTRACTOR** further agrees to include in all subcontracts under this Contract, a provision to the effect that the subcontractor agrees that **H-GAC'S** duly authorized representatives, shall, until the expiration of five (5) calendar years after final payment under the subcontract or until all audit findings have been resolved, have access to, and the right to examine and copy any directly pertinent books, documents, papers, invoices and records of such subcontractor involving any transaction relating to the subcontract.

ARTICLE 9: REPORTING REQUIREMENTS

CONTRACTOR agrees to submit reports or other documentation in accordance with the General Terms and Conditions of the Bid Specifications. If **CONTRACTOR** fails to submit to **H-GAC** in a timely and satisfactory manner any such report or documentation, or otherwise fails to satisfactorily render performance hereunder, such failure may be considered cause for termination of this Contract.

ARTICLE 10: MOST FAVORED CUSTOMER CLAUSE

If **CONTRACTOR**, at any time during this Contract , routinely enters into agreements with other governmental customers within the State of Texas, and offers the same or substantially the same products/services offered to **H-GAC** on a basis that provides prices, warranties, benefits, and or terms more favorable than those provided to **H-GAC**, **CONTRACTOR** shall notify **H-GAC** within ten (10) business days thereafter of that offering and this Contract shall be deemed to be automatically amended effective retroactively to the effective date of the most favorable contract, wherein **CONTRACTOR** shall provide the same prices, warranties, benefits, or terms to **H-GAC** and its **END USER**. **H-GAC** shall have the right and option at any time to decline to accept any such change, in which case the amendment shall be deemed null and void. If **CONTRACTOR** is of the opinion that any apparently more favorable price, warranty, benefit, or term charged and/or offered a customer during the term of this Contract is not in fact most favored treatment, **CONTRACTOR** shall within ten (10) business days notify **H-GAC** in writing, setting forth the detailed reasons **CONTRACTOR** believes aforesaid offer which has been deemed to be a most favored treatment, is not in fact most favored treatment. **H-GAC**, after due consideration of such written explanation, may decline to accept such explanation and thereupon this Contract between **H-GAC** and **CONTRACTOR** shall be automatically amended, effective retroactively, to the effective date of the most favored agreement, to provide the same prices, warranties, benefits, or terms to **H-GAC**.

The Parties accept the following definition of routine: A prescribed, detailed course of action to be followed regularly; a standard procedure. *EXCEPTION: This clause shall not be applicable to prices and price adjustments offered by a bidder, or contractor, which are not within bidder's control [example; a manufacturer's bid concession], or to any prices offered to the Federal Government and its agencies.*

ARTICLE 11: SEVERABILITY

All parties agree that should any provision of this Contract be determined to be invalid or unenforceable, such determination shall not affect any other term of this Contract, which shall continue in full force and effect.

ARTICLE 12: DISPUTES

Any and all disputes concerning questions of fact or of law arising under this Contract, which are not disposed of by agreement, shall be decided by the Executive Director of **H-GAC** or his designee, who shall reduce his decision to writing and provide notice thereof to **CONTRACTOR**. The decision of the Executive Director or his designee shall be final and conclusive unless,

within thirty (30) days from the date of receipt of such notice, **CONTRACTOR** requests a rehearing from the Executive Director of **H-GAC**. In connection with any rehearing under this Article, **CONTRACTOR** shall be afforded an opportunity to be heard and offer evidence in support of its position. The decision of the Executive Director after any such rehearing shall be final and conclusive. **CONTRACTOR** may, if it elects to do so, appeal the final and conclusive decision of the Executive Director to a court of competent jurisdiction. Pending final decision of a dispute hereunder, **CONTRACTOR** shall proceed diligently with the performance of this Contract and in accordance with **H-GAC'S** final decision.

ARTICLE 13: LIMITATION OF CONTRACTOR'S LIABILITY

Except as specified in any separate writing between the **CONTRACTOR** and an **END USER**, **CONTRACTOR'S** total liability under this Contract, whether for breach of contract, warranty, negligence, strict liability, in tort or otherwise, but excluding its obligation to indemnify **H-GAC** described in Article 14, is limited to the price of the particular products/services sold hereunder, and **CONTRACTOR** agrees either to refund the purchase price or to repair or replace product(s) that are not as warranted. In no event will **CONTRACTOR** be liable for any loss of use, loss of time, inconvenience, commercial loss, lost profits or savings or other incidental, special or consequential damages to the full extent such use may be disclaimed by law. **CONTRACTOR** understands and agrees that it shall be liable to repay and shall repay upon demand to **END USER** any amounts determined by **H-GAC**, its independent auditors, or any agency of State or Federal government to have been paid in violation of the terms of this Contract.

ARTICLE 14: LIMIT OF H-GAC'S LIABILITY AND INDEMNIFICATION OF H-GAC

H-GAC'S liability under this Contract, whether for breach of contract, warranty, negligence, strict liability, in tort or otherwise, is limited to its order processing charge. In no event will **H-GAC** be liable for any loss of use, loss of time, inconvenience, commercial loss, lost profits or savings or other incidental, special or consequential damages to the full extent such use may be disclaimed by law. Contractor agrees, to the extent permitted by law, to defend and hold harmless **H-GAC**, its board members, officers, agents, officials, employees, and indemnities from any and all claims, costs, expenses (including reasonable attorney fees), actions, causes of action, judgments, and liens arising as a result of **CONTRACTOR'S** negligent act or omission under this Contract. **CONTRACTOR** shall notify **H-GAC** of the threat of lawsuit or of any actual suit filed against **CONTRACTOR** relating to this Contract.

ARTICLE 15: TERMINATION FOR CAUSE

H-GAC may terminate this Contract for cause based upon the failure of **CONTRACTOR** to comply with the terms and/or conditions of the Contract; provided that **H-GAC** shall give **CONTRACTOR** written notice specifying **CONTRACTOR'S** failure. If within thirty (30) days after receipt of such notice, **CONTRACTOR** shall not have either corrected such failure, or thereafter proceeded diligently to complete such correction, then **H-GAC** may, at its option, place **CONTRACTOR** in default and the Contract shall terminate on the date specified in such notice. **CONTRACTOR** shall pay to **H-GAC** any order processing charges due from **CONTRACTOR** on that portion of the Contract actually performed by **CONTRACTOR** and for which compensation was received by **CONTRACTOR**.

ARTICLE 16: TERMINATION FOR CONVENIENCE

Either **H-GAC** or **CONTRACTOR** may cancel or terminate this Contract at any time by giving thirty (30) days written notice to the other. **CONTRACTOR** may be entitled to payment from **END USER** for services actually performed; to the extent said services are satisfactory to **END USER**. **CONTRACTOR** shall pay to **H-GAC** any order processing charges due from **CONTRACTOR** on that portion of the Contract actually performed by **CONTRACTOR** and for which compensation is received by **CONTRACTOR**.

ARTICLE 17: CIVIL AND CRIMINAL PROVISIONS AND SANCTIONS

CONTRACTOR agrees that it will perform under this Contract in conformance with safeguards against fraud and abuse as set forth by **H-GAC**, the State of Texas, and the acts and regulations of any funding entity. **CONTRACTOR** agrees to notify **H-GAC** of any suspected fraud, abuse or other criminal activity related to this Contract through filing of a written report promptly after it becomes aware of such activity.

ARTICLE 18: GOVERNING LAW & VENUE

This Contract shall be governed by the laws of the State of Texas. Venue and jurisdiction of any suit or cause of action arising under or in connection with this Contract shall lie exclusively in Harris County, Texas. Disputes between **END USER** and **CONTRACTOR** are to be resolved in accord with the law and venue rules of the state of purchase. **CONTRACTOR** shall immediately notify **H-GAC** of such disputes.

ARTICLE 19: PAYMENT OF H-GAC ORDER PROCESSING CHARGE

CONTRACTOR agrees to sell its products to **END USERS** based on the pricing and other terms of this Contract, including, but not limited to, the payment of the applicable **H-GAC** order processing charge. On notification from an **END USER** that an order has been placed with **CONTRACTOR**, **H-GAC** will invoice **CONTRACTOR** for the applicable order processing charge. Upon delivery of any product/service by **CONTRACTOR** and acceptance by **END USER**, **CONTRACTOR** shall, within thirty (30) calendar days or ten (10) business days after receipt of payment, whichever is less, pay **H-GAC** the full amount of the applicable order processing charge, whether or not **CONTRACTOR** has received an invoice from **H-GAC**. For sales made by **CONTRACTOR** based on this contract, including sales to entities without Interlocal Contracts, **CONTRACTOR** shall pay the applicable order processing charges to **H-GAC**. Further, **CONTRACTOR** agrees to encourage entities who are not members of **H-GAC's** Cooperative Purchasing Program to execute an **H-GAC** Interlocal Contract. **H-GAC** reserves the right to take appropriate actions including, but not limited to, contract termination if **CONTRACTOR** fails to promptly remit **H-GAC's** order processing charge. In no event shall **H-GAC** have any liability to **CONTRACTOR** for any goods or services an **END USER** procures from **CONTRACTOR**.

ARTICLE 20: LIQUIDATED DAMAGES

Any liquidated damages terms will be determined between **CONTRACTOR** and **END USER** at the time **END USER's** purchase order is placed.

ARTICLE 21: PERFORMANCE BONDS FOR INDIVIDUAL ORDERS

Except as described below for fire apparatus, **CONTRACTOR** agrees to provide a Performance Bond at the request of **END USER** within ten (10) days of receipt of **END USER's** purchase order.

It shall be standard procedure for every order received for fire apparatus that a Performance Bond in the amount of the order be provided to the **END USER**. Failure of **CONTRACTOR** to provide such performance bond within ten (10) days of receipt of **END USER's** order may constitute a total breach of contract and shall be cause for cancellation of the order at **END USER's** sole discretion. **END USER** may choose to delete the requirement for a Performance Bond at **END USER's** sole discretion. If the bond requirement is waived, **END USER** shall be entitled to a price reduction commensurate with the cost that would have been incurred by **CONTRACTOR** for the bond.

ARTICLE 22: CHANGE OF CONTRACTOR STATUS

CONTRACTOR shall immediately notify **H-GAC**, in writing, of ANY change in ownership, control, dealership/franchisee status, Motor Vehicle license status, or name, and shall also advise whether or not this Contract shall be affected in any way by such change. **H-GAC** shall have the right to determine whether or not such change is acceptable, and to determine what action shall be warranted, up to and including cancellation of Contract.

ARTICLE 23: LICENSING REQUIRED BY TEXAS MOTOR VEHICLE BOARD [IF APPLICABLE]

CONTRACTOR will for the duration of this Contract maintain current licenses that are required by the Texas Motor Vehicle Commission Code. If at any time during this Contract period, any **CONTRACTOR'S** license is not renewed, or is denied or revoked, **CONTRACTOR shall** be deemed to be in default of this Contract unless the Motor Vehicle Board issues a stay or waiver. Contractor shall promptly provide copies of all current applicable Texas Motor Vehicle Board documentation to **H-GAC** upon request.

IN WITNESS WHEREOF, the parties have caused this Contract to be executed by their duly authorized representatives.

Signed for **Houston-Galveston Area Council**, Houston, Texas: _____
Jack Steele, Executive Director

Attest for **Houston-Galveston Area Council**, Houston, Texas: _____
Deidre Vick, Director of Public Services
Date: _____, 20__

Signed for _____

Printed Name & Title: _____ Date: _____, 20__

Attest for _____

Printed Name & Title: _____ Date: _____, 20__