



**CITY OF
COVINGTON
KENTUCKY**

REQUEST FOR PROPOSALS

Fleet Vehicles and Financing

Sub-Part IV Ambulances

Issued: April 25, 2016

ISSUING ENTITY: CITY OF COVINGTON, KENTUCKY

PUBLICATION DATE: Monday, April 25 2016

DUE DATE AND TIME: Friday May 27, 2016 at 3:00PM

STAFF CONTACTS: David Geiger, EMS DIRECTOR, dgeiger@covingtonky.gov

LOCATION: Submit Proposal Binder in sealed package with following statement:
“**COVINGTON FLEET RFP-DO NOT OPEN WITH REGULAR MAIL**”
City of Covington, Kentucky
1st Floor, Finance Window
20 W. Pike Street
Covington, Kentucky 41011

REVIEW: All bids will be forwarded to the Selection Committee and reviewed according to the evaluation criteria specified within each Sub-Part.

SCHEDULE

EVENT	DATE
RFP Issued	April 25
Pre-Bid Meeting	May 9 at Covington City Hall at 3:00PM
Deadline to submit intent to bid	May 13
Deadline for clarification	May 20
Deadline to submit Proposals	May 27

ADDITIONAL SUB-PARTS

- Sub-Part I Introduction** All Bidders **must** complete separately.
- Sub-Part II Light Duty Vehicles** Bidders **may** complete if relevant.
- Sub-Part III Pursuit Rated Vehicles** Bidders **may** complete if relevant.
- Sub-Part IV Ambulances** Bidders **may** complete if relevant.
- Sub-Part V Fire Apparatus** Bidders **may** complete if relevant.
- Sub-Part VI Finance** Bidders offering financing or Financing Partnership Bidders **must** complete separately.

**CITY OF COVINGTON, KENTUCKY FLEET
REQUEST FOR PROPOSALS (“RFP”)
PART IV AMBULANCE/EMS VEHICLES**

TABLE OF CONTENTS

SECTION 1	Ambulance Definitions.....	2
SECTION 2	Instructions to Bidders.....	2
SECTION 3	Ambulance/EMS Attachments.....	4
SECTION 4	Ambulance/EMS Vehicles Terms and Conditions.....	5
SECTION 5	Ambulance/EMS Specifications	

SECTION 1 DEFINITIONS

The terms set forth below shall have the following meanings. Any other capitalized term within this Sub-Section shall have the meaning set forth in the Sub-Part I.

- 1.1 **“Pre-Construction Meeting”** shall have the meaning set forth in Section 4.4 below.
- 1.2 **“Manufacturer”** shall mean the entity or entities responsible for constructing the major components of any Ambulance bid under this Sub-Part.
- 1.3 **“Manufacturer Delivery”** shall mean any documents, report, test, or other product contemplated under the Specifications as being provided by the Manufacturer at any stage in the bid and/or construction process.
- 1.4 **“Manufacturing Facility”** shall mean the location where the construction and assembly of the major components of any Ambulance bid under this Sub-Part shall occur.
- 1.5 **“Required Certification”** shall mean any certification so required by the City of Covington within the Specifications by virtue of relevant regulations or the judgment of the relevant personnel and staff.
- 1.6 **“Required Test”** shall mean any test contemplated under the terms and conditions or Specifications as a condition of acceptance by the City of Covington.
- 1.7 **“Factory Authorized Warranty/Service Center”** shall mean the location where qualified repairs under the scope of each Warranty provided by the Manufacturer can be conducted during the term of the Warranty.

SECTION 2 INSTRUCTIONS TO BIDDERS

- 2.1 **Purpose and Intent.** This Request is for two (2) Ambulances, manufactured and delivered in accordance with the terms, conditions, and Specifications provided herein. These detailed Specifications set forth requirements pertaining to the type of construction, finish, equipment and tests to which the Ambulances shall be manufactured. The intent of this Request is to procure two (2) Ambulances with the highest level of quality and engineering excellence so as to meet each patient's need for pre-hospital care and to provide a safe working environment for the Emergency Medical Personnel. To this end, the City will evaluate all Proposals submitted under this Sub-Part IV according to the evaluation criteria set forth in Section 2.7 below.
- 2.2 **Form of Submission.** Every Proposal must be submitted in a three-ring Proposal Binder tabbed according to the attachments described below and corresponding to the Specifications based upon the way they are sequenced. Failure to comply with these submission requirements may result in a Bid being deemed Non-Responsive.
- 2.3 **A La Carte Bids.** Bidders may submit proposals to manufacture any combination of Ambulances set forth in the Specifications.
- 2.4 **Bidder Types.** This Sub-Part contemplates the following types of Bidders who might submit Responses to provide the Ambulances described within the Specifications. Each Bidder should indicate on the Bidder Information Form its corresponding Bidder type.
 - a. **Manufacturer Only Bidders:** For purposes of this Sub-Part Manufacturer Only Bidders shall mean Bidders who are able to only provide the Ambulances contemplated under the Specifications. Manufacturer Only

Bidders are not able to provide financing options for the acquisition or lease of the Ambulances and do not have a Finance Partner or Partners.

- b. **Financing Partnership Bidders**: For purposes of this Sub-Part, Financing Partnership Bidders include any Bidders who are able to provide the Ambulances contemplated under the Specifications and who have a partnership or partnerships with a lender(s), or similar financing entity, to finance the acquisition or lease of the Ambulances. Financing Partnership Bidders **must** submit separate Responses under this Sub-Part **and** under Sub-Part VI.

- 2.5 **Exceptions**. These Specifications are based upon design and performance criteria which have been developed by the City as a result of extensive research and careful analysis. Subsequently these Specifications reflect the only type of Ambulance that is acceptable. Utilizing the **AMBULANCE SPECIFICATION WORKSHEET**, Bidders shall indicate in the "yes/no" column if their Bid complies on each numbered item specified. If a product brand name is specified and is commercially available to all Bidders, an exception to such items is not acceptable and such bid may be rejected. Exceptions shall be allowed if they are equal to or superior to that specified and provided they are listed and fully explained in an **exception addendum** as described below.
- 2.6 **Questions and Answers**. Throughout the Bid Process, Bidders may submit clarifying questions related to the RFP to David Geiger via email at dgeiger@covingtonky.gov or via phone at (859) 431-0462.
- 2.7 **Evaluation Criteria**. A committee of qualified City Staff from the Fire Department, Department of Public Improvements, Department of Development, and the Legal Department shall evaluate all Proposals to determine, which Proposals submitted under this Part provide the Best Value to the City. Staff shall base its decision upon the following criteria:
- Cost
 - Financial Capacity
 - Consistency with Specifications
 - Distance to warranty repair site
 - Manufacturing techniques and Process
 - Manufacturing Capacity
 - Projected construction schedule and delivery date
 - Terms and Conditions provided in Warranty and Legal Documents
 - Length of time in business
 - Proven performance as reflected through Similar Contracts and Letters of Reference
 - Certifications
 - Evidence of responsiveness and part availability
 - Acceptance of Ambulance/EMS terms and conditions
 - Service and Support, including cost of repair and replacement

- 2.8 **Selection Committee.** The City will establish a Selection Committee to review and evaluate all proposals submitted in response to the RFP. The Selection Committee will be comprised of representatives from various City Departments so as to provide a range of perspectives to contribute to assessing the Best Value according to the criteria set forth below.
- 2.9 **Negotiation.** After making a Final Award, the City reserves the right to negotiate fair and reasonable terms and conditions based on the information provided in the Prevailing Bidder's Proposal. If after negotiation, the parties fail to reach a Final Agreement, the City reserves the right to proceed to the next highest evaluated proposal.
- 2.10 **Items to be Negotiated.** Terms and conditions that may be negotiated at the sole discretion of the City include but are not limited to issues related to invoicing, additional fees, delivery, construction monitoring trips, and insurance and maintenance requirements.

SECTION 3 AMBULANCE ATTACHMENTS

The following section describes the attachments that must be included in the Proposal Binder for the Ambulance Sub-Part. All attachments must be submitted in the same order and in a form that is substantially similar to the description provided below. Each Bidder must verify submission of the requested submissions on the attached **BIDDER CHECKLIST**.

- 3.1 **Master Bid Worksheet.** Each Bidder shall complete the Master Bid Worksheet attached to this packet. For any alternate pricing proposals such as bulk discounts or discounts for tying together multiple vehicles, the Bidder must complete additional Master Bid Worksheets for such proposals to be given consideration. The completed Master Bid Worksheet(s) shall be included in the Proposal Binder under **TAB IV-A**.
- 3.2 **Bidder Checklist.** Each Bidder shall complete the Bidder Checklist that is attached to this packet to confirm that it has supplied the requested materials, or, where applicable, that it has not supplied that requested materials. The Bidder Checklist shall be included in the Proposal Binder under **TAB IV-A**.
- 3.3 **Exception and Specification Worksheet.** For each Ambulance bid, the Bidder shall complete the corresponding Exception and Specification Worksheet. The completed Exception and Specification Worksheet and any explanatory addenda shall be included in the Proposal Binder under **TAB IV-A**.
- 3.4 **Exception and Explanatory Addenda.**
- a. **Explanatory Addendum.** Where the Specifications require an explanation or description of manufacturing techniques, processes or materials, all Bidders shall provide on separate pages the requested explanation with the corresponding specification number as a header. The Explanatory Addendum shall be included in the Proposal Binder under **TAB IV-A** immediately following the **SPECIFICATION WORKSHEET**.
 - b. **Exception Addendum.** All exceptions and deviations to Specifications shall be explained in a separate addendum. (the "Exception Addendum"). The Exception Addendum shall reference each Specification Number and provide an explanation that addresses each of the following issues: (i) how the proposal deviation is different; (ii) how the deviation meets or exceeds the specifications; (iii) and why it is necessary. The Exception Addendum shall be included in the Proposal Binder under **TAB IV-A** immediately following the **SPECIFICATION WORKSHEET**.

- 3.5 **Letter of Intent.** Each Bidder shall in not more than a one (1) page letter that express its intent to submit a bid to manufacture one or more of the Ambulances described in the specifications attached hereto. The Letter of Intent shall be signed by an Authorized Representative of the Bidder and submitted under **TAB IV-A.**
- 3.6 **Statement of Qualifications and Capacity.** Each Bidder shall in not more than three (3) pages include a statement of its qualifications and capacity in relation to its ability to manufacture the Ambulances for which it submits a Response. At a minimum each Bidder most provide statements pertaining to the following items to characterize its Qualifications and Capacity under this Sub-Part:
- a. A statement of the raw number of modular Ambulance bodies the Bidder has constructed with a strong preference being given to Bidders who have built two-thousand (2,000) or more Ambulance bodies;
 - b. A statement that, apart from the chassis, the Manufacturer will manufacture a complete Ambulance, including the modular body and all basic components, entirely within its Manufacturing Facility. For purposes of this sub-paragraph, accessories such as light bars, sirens, etc. shall not be considered as basic components of the modular body. **(No Exceptions).**
 - c. A statement that neither the OEM nor parent company of the OEM has have ever been fined or convicted of price fixing, bid rigging, or collusion in any domestic or international Ambulance market.
 - d. A statement that neither the Bidder nor its parent company has ever had a performance bond called in the last ten (10) years.

The Statement of Qualifications and Capacity shall be included in the Proposal Binder under **TAB IV-A.**

- 3.7 **Statement of Financial Capacity.** Each Bidder shall submit a Statement of Financial Capacity, which includes a financial statement setting forth total assets, total liabilities, and bonding capacity. Any Bidder may elect to further submit additional documentation to demonstrate its financial strength and project capacity. Materials submitted under this section that may present an unfair advantage to competitors may be marked "CONFIDENTIAL." The Statement of Financial Capacity and supporting documents shall be in the Proposal Binder under **TAB IV-A.**
- 3.8 **Similar Contracts.** Each Bidder shall submit a list of at least three (3) similar contracts that it has been awarded within the last three (3) years. The list shall include (i) the name of the Awarding Entity, (ii) a contact person and information for the Awarding Entity, (iii) the specifications of the Ambulances manufactured for the Awarding Entity, and (iv) the timeline from award to completion. The Bidder shall be solely responsible for notifying the contact person at each Awarding Entity that he or she may be contacted by the City during the Bid Process. The similar contracts list shall be included in the Proposal Binder under **TAB IV-B.**
- 3.9 **Letters of Reference.** Each Bidder shall submit three (3) letters of reference from representatives of Awarding Entities that Bidder has manufactured Ambulances for in the last three (3) years. The letters of reference may correlate with the similar contracts but shall be included separately in the Proposal Binder under **TAB IV-B.**
- 3.10 **Profile of Manufacturing Process and Facility.** Each Bidder shall submit in not more than ten (10) pages a profile of its Manufacturing Process and Facility. This profile shall include the following information:

- a. The Number of full-time employees employed at any manufacturing-site and the roles of each employee;
- b. The total square footage of any Manufacturing Facility;
- c. The Manufacturer's production schedule for the next twelve (12) months;
- d. Any other relevant information that Bidder deems informational with regards to its Manufacturing Facility and capacity to provide any Ambulance for which it submits a Proposal.

The Profile of Manufacturing Process and Facility shall be included in the Proposal Binder under **TAB IV-C.**

- 3.11 **Service and Support.** Each Bidder shall provide evidence of its ability to render prompt service and support to furnish replacement parts. Such evidence must include substantially all of the following in addition to other information deemed by the Bidder to be responsive to this section:
- a. Records and reports of historical service for other Ambulances constructed pursuant to other contracts with relevant metrics such as total downtime per Ambulance, cost of repair, and frequency of repair;
 - b. Evidence of partnership, or similar, agreements with Factory Authorized/ Warranty Service Centers;
 - c. A list of all Factory Authorized/ Warranty Service Centers with the distance from the City of Covington;
 - d. A statement of capacity of any Factory Authorized Service Center, which includes the total number of factory-trained mechanics on staff who are well versed in all aspects of service for all major components of any Ambulance;
 - e. An inventory report of any parts repository and its ability to fulfill warranty service requirements and parts requirements for each Ambulance;
 - f. All bidders shall provide a list of the company, manufacturing location, and engineering source for each individual major component.

The evidence related to Service and Support shall be included in the Proposal Binder under **TAB IV-C.**

- 3.12 **Site Visit Per Person Cost:** Provide an attachment for the per person cost to attend construction meetings throughout the manufacturing process. The per person site visit cost shall be included in the Proposal Binder under **TAB IV-D.**
- 3.13 **Proposed Construction Schedule.** For any Ambulance bid provide a proposed construction schedule and delivery date. The construction schedule should include all proposed meetings, including pre-construction, mid-construction, and final construction and any other milestones that Bidder deems relevant. The proposed construction schedule shall be included in the Proposal Binder under **TAB IV-D.**
- 3.14 **Sample Instruction Manual.** Each Bidder shall submit with its Proposal a sample Instruction Manual for a previous project. Preference will be given to Bidders that can demonstrate their capacity to produce an instruction manual that is digital in form. The Sample Instruction Manual shall be included in the Proposal Binder under **TAB IV-D.**
- 3.15 **Required Certifications.** Each Bidder shall submit with its Proposal proof of all required certifications (the "Required Certifications"). Such Required Certifications shall include the following:

- a. A Letter from the National Truck Equipment Association (N.T.E.A.) that Bidder is a member in good standing with the Ambulance Manufacturer's Division.
- b. A copy of Bidder's approved certification testing from MME or other qualified testing facility shall be included with the bid.
- c. Documentation verifying that all KKK-A-1822-F testing is current and certified by an independent Engineering firm.
- d. Documentation verifying that Bidder is an approved Ford vehicle modifier.

All Required Certifications shall be included in the Proposal Binder under **TAB IV-D**.

- 3.16 **Description of Training Program and Training Materials.** Each Bidder shall submit a description of its training program. The description must not exceed three (3) pages. Each Bidder may also submit any sample materials that it has utilized on a previous project for a similar Ambulance. The Training Description and Sample Training Materials shall be included in the Proposal Binder under **TAB IV-D**.
- 3.17 **Legal Documents.** All Bidders must attach any Legal Documents that it seeks to have incorporated into any Final Agreement. In the event Bidder elects to partner with a Finance-Only Bidder, the Bidder is responsible for submitting all Legal Documents, including ancillary agreements, required by its partner. Said Legal Documents shall include Manufacturer's Quality Assurance Vehicle Testing and acceptance documents. Failure to submit all Legal Documents will be deemed an incomplete bid subject to disqualification for insufficient materials. The Legal Documents shall be included in the Proposal Binder under **TAB IV-D**.
- 3.18 **Invoice, Price Quote or Work Order.** All Bidders shall supply a sample invoice, price quote, or Work Order for each Ambulance that it proposes to manufacture. The document shall include all fees, charges, pre-payment options, and discounts. The Bidder may set forth various pricing options on several separate sheets. The Invoice or Price Quotes shall be included in the Proposal Binder under **TAB IV-D**
- 3.19 **Warranties.** Each Bidder shall provide two (2) copies of the following warranties:
 - a. Lifetime Structural Module Warranty;
 - b. Four (4) year/48,000 mile Limited Ambulance conversion warranty;
 - c. Lifetime Electrical Warranty for electrical system provided by ambulance manufacturer
 - d. 7 year Paint warranty to include coverage for paint defects due to corrosion and dissimilar metals.

All warranties shall be included in the Proposal Binder under **TAB IV-E**.

- 3.20 **Bid Bond.** All bidders shall provide a bid bond as security for the bid in the form of a 10% bid bond to accompany their bid. This bid bond shall be issued by a Surety Company who is listed on the U.S. Treasury Departments list of acceptable sureties as published in Department Circular 570. The bid bond shall be issued by an authorized representative of the Surety Company and shall be accompanied by a certified power of attorney dated on or before the date of bid. The bid bond shall include language, which assures that the bidder/principal shall give a bond or bonds as may be specified in the bidding or contract documents, with good and sufficient surety for the faithful performance of the contract, including the Basic One (1) Year Limited Warranty, and for the prompt payment of labor and material furnished in the prosecution of the contract. Proposals received from bidders

who do not manufacture the chassis shall provide a warranty that shall be issued jointly and severally by, and signed by, both the bidder and the chassis manufacturer. The Bid Bond shall be included in the Proposal Binder under **TAB IV-E**.

- 3.21 **Performance Bond.** Upon the Final Award, the City may elect to require a performance bond for the full value of the contract.
- 3.22 **Warranty Bond.** If the Prevailing Bidder does not manufacture the chassis, the City may elect to require a warranty bond.

AMBULANCE/EMS TERMS AND CONDITIONS

- 4.1 **Bidder's Warranties and Representations.** Upon execution of a Final Agreement, all documents that Bidder has submitted under the General Instructions as well as under Section 2 above shall be incorporated as Warranties and Representations, which shall survive the completion of the project.
- 4.2 **Accuracy of Images.** Images and illustrative material in this specification are as accurate as known at the time of publication, but are subject to change without notice. Images and illustrative material is for reference only, and may include optional equipment and accessories and may not include all standard equipment.
- 4.3 **Inspections.** The Prevailing Bidder shall permit City Staff, or any City Designee, to inspect the Ambulance(s) during manufacturing on no less than two (2) occasions the terms of which shall be determined between the parties prior to executing a Final Agreement. All Inspection Trips shall include meals, travel, and lodging expenses for City Staff or City Designee selected to attend the inspection. The City may elect, in lieu of a mid-line inspection, to received digital pictures sent by e-mail to an address designated in the pre-construction conference. Pictures shall include, but not limited to, cab interior and exterior, pump operators stand and panel and body.
- 4.4 **Pre-Construction Meeting.** The Pre-Construction Meeting shall be held at a company facility or an Authorized Representative's facility during normal business hours, Monday-Friday. All costs of transportation, meals and lodging shall be included. The Pre-Construction Meeting shall be held prior to the commencement of any work being done on any Ambulance. Factory sales and engineering personnel shall participate in the conference as needed to ensure that the ambulance fulfills all the requirements of the accepted bid. Authorized Representatives from both the City, Prevailing Bidder, and, if necessary, lender, shall approve and sign any changes made during these meetings prior to the commencement of any work being done on the Ambulance. At the Pre-Construction Meeting a certified engineer shall be present for the duration of each engineering section.
- 4.5 **Training.** The Prevailing Bidder shall provide all relevant City personnel with training on the Ambulance as a condition of acceptance. Said training sessions shall be conducted at the sole expense of the Prevailing Bidder.
- 4.6 **Term of Offer.** Any Offer made under this Sub-Part shall remain open for on hundred and eight (180) days from the close of the Selection Period.
- 4.7 **Payment.** Final payment terms for the Ambulance shall be subject to the terms and conditions of the prevailing Finance Bidder. Unless otherwise provided in the terms of a Final Agreement, Final Payment will be made no sooner than thirty (30) days after Acceptance of the Ambulance.
- 4.8 **Contractor Deliveries.** According to the timelines provided below and prior to Acceptance pursuant to Section 3.8, the Bidder shall provide the following to the Bidder:

- a. Two (2) copies of conversion parts, service, and operational manuals in electronic .PDF file format on CD-Rom.
 - b. Two (2) OEM Chassis Owner's Guide materials as provided by the chassis manufacturer.
 - c. Two (2) copies of as built" customized electrical schematics on ambulance conversion on CD-ROM.
 - d. A KKK-A-1822F certification sticker, electrical load analysis sticker, and payload sticker shall be installed in the Oxygen Compartment. Any deviations from KKK-A-1822F shall be listed in the vehicle delivery packet with a notation on the certification sticker.
- 4.9 **Required Tests.** In addition to all test provided under the specifications below, the following tests shall be conducted upon each Ambulance at the relevant times in the manufacturing process:
- a. A.M.D. 001 - MANUFACTURERS' BODY STRUCTURE TESTING: The ambulance described herein shall be tested to the National Truck Equipment Associations Ambulance Division, Standard 001 – Static Load Test except the test weight shall be at least 2.5 times the test weight imposed by A.M.D. 001.
 - b. The manufacturer shall inspect and test all systems, electrical loads, per Federal specification KKK-A-1822-F Section 4. Testing results shall be documented and displayed in the Oxygen compartment and/or supplied with the vehicle delivery handbook.
- 4.10 **Failed Tests.** In the event any Ambulance fails a Required Test, a second test may be conducted within thirty (30) days to establish that the Ambulance meets the City's specifications. The continued failure of any Ambulance to pass a Required Test shall give the City the right to terminate the Final Agreement. An independent testing laboratory shall certify all Required Test results. The certified test results will be supplied to the City upon request.
- 4.11 **Acceptance.** The City shall not be deemed to have accepted any Ambulance constructed under this Sub-Part until all Contractor Deliveries are made, the Ambulance(s) have passed all Required Tests, and the City and its designees have a commercially reasonable time during which to confirm that the Ambulance was constructed according to the Specifications. Upon discovery that such criteria are not fulfilled, the City may reject the Ambulance at the sole cost of the Manufacturer. The storage of any Ambulance in a City facility shall not be deemed acceptance by the City.
- 4.12 **Delivery.** Delivery of any Ambulance awarded under this Sub-Part shall be made according to the timelines negotiated by the Parties and incorporated into any Final Agreement. Delayed delivery shall be subject to Liquidated Damages in an amount agreed upon by the parties prior to entering into a Final Agreement. The terms of any Final Agreement shall provide that each Ambulance shall be delivered to the City's Designated Location with approximately a full tank of fuel. In order to ensure proper break in of all components while still under warranty, each Ambulance shall be delivered under its own power - rail or truck freight shall not be acceptable. A qualified delivery representative shall deliver the Ambulance and remain for a sufficient length of time to instruct personnel in proper operation, care and maintenance of the equipment delivered. Delivery to Covington's facilities shall not be deemed acceptance.
- 4.13 **Indemnification.** The Prevailing Bidder shall indemnify the City against any damages to property or injuries to or death of any person or persons, including property and

employees or agents of the city, and shall defend and indemnify the City from any claims, demands, suits, actions or proceedings of any kind, including workers' compensation claims, of or by anyone, in any way resulting from or arising out of the Work, including operations of subcontractors and acts or omissions of employees or agents of the Contractor or Contractor's subcontractors. Insurance coverage specified here and in the special conditions constitutes the minimum requirements and those requirements shall in no way lessen or limit the liability of the contractor under the terms of the contract.

- 4.14 **Duty to Defend.** In addition to the indemnity provided above, the Prevailing Bidder shall defend any and all suits and assume all liability for the use of any patented process including any device or article forming a part of the Ambulance or any appliance furnished under the contract. To ensure this will occur, the bidder shall carry the following minimum insurance.
- 4.15 **General Liability Insurance.** In addition to the forms of insurance required under the GENERAL REQUIREMENTS, the Prevailing Bidder shall, during the performance of the contract and for three (3) years following Acceptance, keep in force at least the following minimum limits of commercial general liability insurance:
- a. Each Accident Combined Single Limit: \$1,000,000
 - b. Each Occurrence\$1,000,000
 - c. Products/Completed Operations Aggregate\$1,000,000
 - d. Personal and Advertising Injury\$1,000,000
 - e. General Aggregate\$5,000,000
- 4.16 **Umbrella Excess Liability Insurance.** In addition to the forms of insurance required in the GENERAL REQUIREMENTS. The Prevailing Bidder shall, during the performance of the contract and for three (3) years following Acceptance keep in force at least the following minimum limits of umbrella liability insurance:
- a. Aggregate: \$25,000,000
 - b. Each Occurrence: \$25,000,000

Coverage shall be written on a Commercial General Liability form. The policy shall be written on an occurrence form and shall include Contractual Liability coverage for bodily injury and property damage subject to the terms and conditions of the policy. The policy shall include the City as an additional insured when required by written contract.

The umbrella policy shall be written on an occurrence basis and at a minimum provide excess to the Bidder's General Liability, Automobile Liability and Employer's Liability policies. The required limits can be provided by one (1) or more policies provided all other insurance requirements are met. Coverage shall be provided by a carrier(s) rated A- or better by A.M. Bests. All policies shall provide a 30 day notice of cancellation to the named insured. The Certificate of Insurance shall provide the following cancellation clause: Should any of the above described policies be cancelled before the expiration date thereof, notice shall be delivered in accordance with the policy provisions. Bidder agrees to furnish owner with a current Certificate of Insurance with the coverages listed above along with its bid. The certificate shall show the purchaser as certificate holder. Proof of current liability insurance, with a Five Million Dollar (5,000,000) minimum shall be supplied with the bid submission. The proof of insurance shall bear the insurance carrier's name, address, and phone number. The proof shall also bear the name and address of the insured. This document shall contain the coverage schedule, explaining the type of insurance,

the policy number, the effective date of coverage, the policy expiration date, and the individual limits of liability.

- 4.17 **Approval Drawing.** A drawing of the proposed Ambulance shall be provided for approval before construction begins. The sales representative shall also have a copy of the same drawing. The finalized and approved drawing shall become part of the contract documents. This drawing shall indicate the chassis make and model, location of the lights, siren, horns, compartments, major components, etc. A "revised" approval drawing of the Ambulance shall be prepared and submitted to the City showing any changes made to the approval drawing.
- 4.18 **Quality of Materials.** The emergency medical care vehicle, chassis, ambulance body, equipment, devices, medical accessories and electronic equipment to be delivered under this contract shall be standard commercial products, which meet or exceed the requirements of this specification. The ambulance shall comply with all Federal Motor Vehicle Safety Standards (FMVSS), the Federal regulations applicable or specified for the year of manufacture. The chassis, components and optional items shall be as represented in the manufacturer's current technical data. Materials used in the construction shall be new and not less than the quality conforming to current engineering and manufacturing practices. Materials shall be free of defects and suitable for service intended. The ambulance and the allied equipment furnished under this specification shall be the manufacturer's current commercial vehicle of the type and class specified. The ambulance shall be complete with the operating accessories as specified herein. Items will be furnished with such modifications and attachments as may be necessary and specified to enable the vehicle to function reliably and efficiently in sustained operation. The design of the vehicle and the specified equipment shall permit accessibility for servicing, replacement and adjustment of component parts and accessories with minimum disturbance to other components and systems. The term "heavy-duty" as used to describe an item, shall mean in excess of the usual quality or capacity that is normally supplied with the standard production vehicle or component.
- 4.19 **Modifications to Specifications.** Images and illustrative material in this specification are as accurate as known at the time of publication, but are subject to change without notice
- 4.20 **Minor Modifications.** Minor details of construction and materials, which are not otherwise specified, are left to the discretion of the Prevailing Bidder.
- 4.21 **Interpretation of Specifications.** If Bidder's find a conflict between this specification and compliance with KKK-A-1822-F or Commonwealth of Kentucky KAR and KRS regulations, Bidder shall provide a written summary of the conflict with their bid and bid a vehicle that is compliant with the above standards and regulations.

**CITY OF COVINGTON FLEET TERMS AND CONDITIONS WORKSHEET
INCLUDE IN PROPOSAL BINDER UNDER TAB IV-A**

Instructions: After reviewing the terms and conditions provided in Section 4 above, complete the following worksheet to confirm acceptance of all terms and conditions, or, where, applicable indicate rejection and propose substitute terms.

TERM	ACCEPT	REJECT	Basis for rejection; Proposed Substitution
4.1			
4.2			
4.3			
4.4			
4.5			
4.6			
4.7			
4.8			
4.9			
4.10			
4.11			
4.12			
4.13			
4.14			
4.15			
4.16			
4.17			
4.18			
4.19			
4.20			
4.21			

Acknowledgement of Terms and Conditions

Bidder acknowledges that it has reviewed the above terms and conditions and has indicated its acceptance or rejection in the spaces provided above.

Entity Name

By: _____

Title: _____

**CITY OF COVINGTON FLEET MASTER BID WORKSHEET
INCLUDE IN PROPOSAL BINDER UNDER TAB IV-A**

COMPANY NAME:	
CONTACT PERSON:	PHONE:
TITLE:	EMAIL:
MAILING ADDRESS:	

Instructions: Please indicate each vehicle bid and list Base Price, which must include all fees, charges, profit-markups or other associated costs. Please also provide any Discounted Price based upon pre-payment, bulk, or other associated discounts.

VEHICLE/EQUIPMENT	BID? (Y/N)	PER UNIT W/O Options	PER UNIT W/ Options
Ambulance #1 built Type I Ford F-450 4x4			
Ambulance #2 built Type I Ford F-450 4x4			
OPTIONS			
		Option Price	
Sliding Door—Module Curbside Entry (O5.1)	If applicable		
Stryker Power-Load Cot Restraint System (O5.2)	Mandatory		
Stryker Power-Pro XT Ambulance Cot (O 5.3)	Mandatory		
Painting, Lettering, and Striping (O5.4)	Mandatory		
Wheels (O5.5)	Mandatory		

ACKNOWLEDGEMENT

Pursuant to and in accordance with the above stated Request for Quotation, the undersigned hereby declares that they have examined the RFQ documents and specifications for the item(s) listed below. The undersigned proposes and agrees, if their quotation is accepted to furnish the item(s) submitted below, including delivery to destination stated on opening page in accordance with the delivery schedule indicated below and according to the prices, products/services information submitted.

SUBMITTED BY: _____

DATE SUBMITTED: _____

**CITY OF COVINGTON FLEET BIDDER CHECKLIST
INCLUDE IN PROPOSAL BINDER UNDER TAB IV-A**

<u>ATTACHMENT</u>	<u>PROVIDED (Y/N)</u>	<u>EXPLANATION If No</u>
MASTER BID WORKSHEET (IV-A)		
TERMS AND CONDITIONS WORKSHEET (IV-A)		
SPECIFICATION WORKSHEET (IV-A)		
LETTER OF INTENT (IV-A)		
STATEMENT OF CAPACITY (V-A)		
STATEMENT OF FINANCIAL CAPACITY (V-A)		
SIMILAR CONTRACTS (IV-B)		
LETTERS OF REFERENCE (IV-B)		
PROFILE OF MANUFACTURING PROCESS (IV-C)		
SERVICE AND SUPPORT (IV-D)		
SITE VISIT PER PERSON COST (IV-D)		
PROPOSED CONSTRUCTION SCHEDULE (IV-D)		
SAMPLE INSTRUCTION MANUAL (IV-D)		
REQUIRED CERTIFICATIONS (IV-D)		
DESCRIPTION OF TRAINING PROGRAM (IV-D)		
MANUFACTURER'S SPECIFICATIONS (IV-D)		
LEGAL DOCUMENTS (IV-D)		
INVOICE PRICE QUOTE OR WORK ORDER (IV-D)		
WARRANTIES (IV-E)		
BID BOND (IV-E)		

SECTION 4 (2) AMBULANCE SPECIFICATIONS

- 5.1 CHASSIS – Ford F-450 Super Duty COMMERCIAL CHASSIS, 189" WB, 4 X 4 DWD – Diesel.** 2016 Ford F-450 Super Duty 4x4 Commercial Chassis with a wheelbase of not less than 189", Dual Rear Wheels (108" C.A.). All Bidders must state in their respective proposals the total available payload of the completed ambulance. **NO EXCEPTIONS.**
- 5.2 AMBULANCE PREP PACKAGE.** Chassis shall be provided with OEM Ambulance Prep Package and Compliance Stickers. All items normally provided in the OEM Ambulance Prep Package will be included even if not otherwise specifically mentioned in this document.
- 5.3 AIR BAGS – DUAL.** The Ford OEM chassis shall have driver and passenger side air bags. The air bags shall be newest generation.
- 5.4 AIR CONDITIONING .** The chassis shall be equipped an OEM high output fresh air heater and air conditioner system.
- 5.5 BATTERIES** Bidder shall provide details for their standard battery installation, minimum two(2), including number, type, and CCA ratings of batteries to be installed.
- 5.6 DUAL ALTERNATORS - 357 AMPS.** Chassis shall have dual OEM Ford alternators with internal regulators and rectifiers rated at a combined 357 amps.
- 5.7 BRAKES - 4 WHEEL ABS DISC.** The OEM Ford chassis shall have Heavy-Duty, duel hydraulic / hydroboost brake booster, power disc-type brakes on the front and rear axles. An all-wheel "Front and Rear axles" Anti-lock brake system (Four-Wheel ABS), and duel diaphragm booster with parking brake cable to rear wheels. **BRAKES – THELMA AUXILIARY RETARDER SYSTEM.** The vehicle shall be fitted with a THELMA Magnetic driveline retarder auxiliary braking system. **NO EXCEPTIONS.**
- 5.8 ENGINE - FORD – 6.7-LITER POWERSTROKE V8 TURBO DIESEL** Chassis shall be equipped with a 6.7-Liter Direct Injected Turbo Diesel V-8 Engine which includes: Block Heater, Coolant Recovery System, Engine Oil Cooler Integral with Engine, Heavy-Duty Cooling System and Catalytic Converter. The Engine shall be rated at 300H.P. @ 2800RPM and 660lb.-ft. @ 1600R.P.M. **If a long idle shutdown feature is supplied by the chassis manufacturer it shall be deactivated.**
- 5.9 GLASS, WINDOWS – TINTED.** All window glass on the chassis cab shall be OEM tinted.
- 5.10 HORNS – ELECTRIC.** Chassis shall have OEM electric horns activated on the steering wheel.
- 5.11 LIGHTS, CHASSIS EXTERIOR.** Chassis shall have standard OEM exterior lights: Two (2) Dual-beam jewel-effect headlamps, intelligent 3-blink turn signals, roof clearance marker lights and a heavy-duty turn signal flasher.
- 5.12 LIGHT, CAB DOME.** Chassis shall have a cab door activated courtesy light consisting of duel adjustable map/reading lights.

- 5.13 MIRROR, FLAT DAY/NIGHT - CAB INTERIOR.** Rear View Mirror w/ 4.3" Wide Screen backup camera display. This style of mirror completely replaces the OEM mirror while giving you the convenience of a 4.3" LCD screen and a video input.
- 5.14 POWER WINDOWS / DOOR LOCKS.** Chassis shall have OEM power windows and door locks.
- 5.15 SEATS - HIGH BACK CAPTAIN - INBOARD ARM RESTS.** Chassis shall have two (2) deluxe reclining high back captain's chairs provided by the OEM chassis manufacturer. Both seats shall be adjustable and have retractable combination shoulder harness / lap straps. The shoulder harness D-rings shall be adjustable. Both seats shall have inboard armrests only.
- 5.16 40 GAL. FUEL TANK.** FORD F-450 Chassis shall have a single tank with total capacity of not less than 40 Gallons and auxiliary fuel port.
- 5.17 AXLE RATING, FRONT - 4,600 LBS.** The front axle rating on the F-450 chassis shall be 4,600 Lbs. rating (4,600 Lbs. G.A.W.R.).
- 5.18 AXLE RATING, REAR - 9,600 LBS.** The F-450 Dual rear wheel axle rating shall be 9,600 Lbs. (9,600 Lbs. G.A.W.R.). The rear axle ratio shall be 4.10 with locking differential.
- 5.19 Suspension, FRONT - 4,600 LBS.** The front spring rating of the F-450 chassis shall be 4,600 Lbs. Combination rated, coil type.
- 5.20 Suspension, REAR – Liquid Spring.** A CLASS®, or Compressible Liquid Adaptive Suspension System, shall be provided and installed. Utilizing a strut, with a compressible fluid as the spring/damping medium, and its sophisticated on-board microprocessor, CLASS® adapts the entire vehicle's response to road variations and the driver. The system shall include an automatic lowering feature, which is activated by opening the rear patient compartment doors. There shall be a switch near the rear doors, which will defeat the lowering feature. **NO EXCEPTIONS.**
- 5.21 G.V.W.R. - 16,000 LBS.** Ford F-450 Dual rear wheel chassis shall be rated at not less than 16,000 Lbs. G.V.W.R.
- 5.22 SHOCK ABSORBERS.** Chassis shall have Front Heavy Duty shock absorbers– piston type, gas pressurized.
- 5.23 STEERING, POWER ASSIST, TILT WHEEL.** Chassis shall have power assist steering, with a tilt steering wheel.
- 5.24 TIRES - 225/70R X 19.5G ALL SEASON.** Vehicle shall have six (6) 225/70R X 19.5 (10-Ply rated), Steel belted Radial, All-Season tires.
- 5.25 TIRE, SPARE.** Bidder shall indicate cost savings to delete spare tire/rim and tire changing tools.
- 5.26 TRIM INTERIOR – FORD XLT CHASSIS OEM.** Shall have Steel HD Vinyl cab interior color. Shall have a molded OEM cab headliner. Shall have OEM color coordinated cab

door trim panels with storage pockets. Arm rests, sun visor and dash shall be padded. Interior shall have OEM heavy-duty molded plastic stepwell pads. Shall have cab floor coverings as provided by chassis manufacturer with standard trim package.

- 5.27 CUP HOLDERS.** Cab interior shall provide two (2) cup holders.
- 5.28 AM/FM/ RADIO.** Vehicle shall be supplied with OEM Radio that is indicated in Ambulance Prep Package and/or bidded trim package but shall not be less than an AM/FM radio.
- 5.29 STABILIZER BARS, FRONT & REAR.** Shall have Heavy Duty OEM stabilizer bars on the front and rear
- 5.30 TRANSMISSION- AUTOMATIC-6 SPEED AUTOMATIC.** The chassis shall have an automatic 6-speed, Heavy Duty Transmission.
- 5.31 TRANSMISSION OIL COOLER** An OEM factory installed auxiliary, external transmission fluid cooler shall be installed in front of the radiator.
- 5.32 WIPERS -2 SPEEDS – INTERMITTENT.** Two (2), two-speed electric wipers with washers, and intermittent operation feature shall be included on the chassis.
- 5.33 HEAT SHIELDS.** Protective heat shields shall be installed above the exhaust system as recommended by the chassis manufacturer.
- 5.34 RUNNING BOARDS WITH GRIP STRUT.** Flared aluminum diamond plate running boards with Grip Strut, or comparable alternative, shall be provided on the cab. The running boards shall be wider toward the rear, extending out to the corners of the module, and shall be anodized after they are formed to retain finish and increase corrosion resistance.
- 5.35 BACKUP ALARM.** A Back-Up Alarm (OSHA Approved) minimum of 97 decibels at 4 feet will be installed and shall automatically activate whenever vehicle is placed in 'reverse' gear.
- 5.36 ENGINE BLOCK HEATER - SHORE LINE SUPPLIED & SWITCHED.** The engine block heater shall be electrically tied to the unit shoreline. There shall be a summer/winter switch consisting of a 15 Amp (toggle) circuit breaker, located in the PDQ (Power Distribution Quarters) to disable the block heater in warm weather conditions.
- 5.37 MIRRORS, EXTERIOR FORD OEM TELESCOPING- POWER WITH/CONVEX.** Chassis shall have heated OEM mirrors with power adjusted flat glass and manual adjusted convex glass.
- 5.38 FLOOR CONSOLE, MAP STORAGE.** A center floor console with a recessed storage well and an attached map storage area shall be included in the cab, between the seats. The console shall be able to house communications radios as well as any lighting system and siren control heads as specified herein.
- 5.39 MAP LIGHT.** A flexible goose-neck map light with red or white light capabilities shall be installed on the Floor Console in close proximity to the passenger seat.

- 5.40 ELECTRICAL CIRCUITS 12 VOLT.** All electrical circuits shall have wiring and circuit protection suitable to the demand and must meet the National Electrical Wiring Code requirements.
- a. The entire 12 Volt electrical system shall comply with the recommended standards and practices per FMVSS, Federal Specifications KKK-A-1822-F & SAE where applicable.
 - b. All added on wiring (18GA through 10GA) shall be color-coded and heat stamped with code numbers and functions every 4" for easy identification (all other wiring shall be color coded).
 - c. SGX insulated cable shall be used for all underhood / underbody battery and charging system cable. SXL high temperature thermoplastic cross link wire shall be used. High temperature (375°F) thermoplastic loom shall be used on all harnesses.
 - d. Electrical system shall consist of Five (5) main wiring harnesses that terminate at the electrical distribution panel. Distribution panel shall be centrally located with connections resulting through 45 Pin connectors. Harnesses shall include One (1) for Left Body, One (1) for Right Body, One (1) for Life Support Station, One (1) for Cab Switch Console and One (1) for Chassis.
 - e. All electrical components shall be mounted using "Plug In" type assembly, which affords speedy replacement of failed components. The entire unit shall be housed in a readily accessible maintenance cabinet built into the wall of the Patient compartment. Attached to inside of door shall be complete documentation of the 12 Volt Electrical system. The use of an exterior mounted electrical distribution panel is unacceptable.
 - f. The Main Power Distribution Panel shall consist of a Plug-In Modular system that includes locations for Forty Two (42) Plug-In circuit breakers and Sixty (60) Plug-In Relays, as standard equipment. This type of system is utilized to have standard circuit configuration while remaining totally flexible for custom circuits when required. All circuits shall consist of Plug-In Relays and Plug-In Circuit Breakers only. The use of Diodes, Rectifiers, Heat Sinks, or other than automotive type relays is unacceptable.
- 5.41 CIRCUIT BREAKERS.** All circuit breakers Thirty (30) Amps or less shall be Plug-In manual and/or auto reset type. All circuits that require greater capacity shall utilize a Cooper Electric or equal Forty (40) or Fifty (50) Amp "Maxi-Amp" manual or auto reset circuit breaker, dependant on electrical application.
- 5.42 RELAYS.** Devices being switched with loads in excess of One (1) Amp (12 Watt) shall be accomplished through Potter & Brumfield or equal, Forty (40) Amp SPDT 12 Volt automotive relay switching devices. All relays used in the panel shall be of the same type to insure complete compatibility and ease of replacement. Relays shall be controlled through a ground signal from all switches, including doorpost switches. All relays shall be plugged into the modular panel assembly including the 70 Amp Power relays where required. All relay circuits utilizing the SPDT relays and SPST 70 Amp relay shall include internal suppression to eliminate voltage spikes in the electrical system.
- 5.43 GROUNDING.** All modular bodies shall be grounded to the vehicle chassis via Two (2) 000 GA braided tinned copper grounding straps. Stranded copper conductors, such as battery cables, shall not be used. Each appliance (i.e. lights, fans, etc.) shall be grounded to the body structure in close proximity to its location or by a ground harness as required. The ground shall be equivalent to it's feed wire size and be minimized in length. Each ground attached directly to the vehicle structure shall use machine screws

with star washers or ring terminals with serrated ring to ensure a positive contact at all times. All body harnesses shall be contained within the body. Harnesses shall not be run on the underside exterior of the body. Under hood harnesses shall be protected within high temperature convoluted loom. All connections exposed to the elements or under hood shall be made within "waterproof" heat shrink connections. This type of connection shall also be used on all heavy-duty battery cables. All battery cables, both positive and ground shall be machine crimped and fully soldered prior to addition of waterproof heat shrink tubing. Any exposed connections not in heat shrink and battery connections not soldered shall be rejected. All electrical systems shall include Three (3) spare relays and spares of the correct size circuit breakers utilized, shall be mounted within the Electrical Distribution Panel.

- 5.44 12V – 110 VOLT CIRCUIT SCHEMATIC DOCUMENTATION.** All harnesses, relays, circuit breaker terminal junction points and circuits shall be drawn on individual 8 ½ X 11 size drawings. Each individual circuit shall be on One (1) drawing for ease of troubleshooting. A single drawing overall schematic is unacceptable. All electrical systems shall be designed for each vehicle. Generic or similar drawings are cause for rejection of vehicle. All schematics shall include only what circuits are provided in the proposed vehicle.
- 5.45 ELECTRICAL ANALYSIS.** Proper balance of the electrical system output and vehicle draw is critical in the design of all emergency vehicles. Vehicle proposed shall be provided with a detailed electrical analysis generated by the manufacturer of the ambulance and specific to this proposed vehicle and specific electrical equipment requested. General statements will not be acceptable.
- 5.46 DOOR POST SWITCHES ENTRANCE AND COMPARTMENT DOORS.** Sealed doorpost switches shall be installed in all entrance and compartment doors. All switches shall be sealed from the elements to prevent moisture damage and to prolong service life. The switches shall be warranted for the life of the vehicle. All doorpost switches shall activate the grounds of relays only. Under no circumstance shall the doorpost switch carry more than 140 Milliamps of electrical current.
- 5.47 WARNING DISPLAY.** A warning display shall be installed in the cab to provide visual and audible indications for:
- a. Parking Brake Set Condition
 - b. Parking Brake Release Condition
 - c. Outside Storage Compartment "DOOR OPEN" Warnings
 - d. Low Voltage
 - e. Low Oxygen Pressure Alarm
- 5.48 MASTER CONTROL CONSOLE.** Bidder shall supply detailed explanation of their construction techniques for a Master Control Console, mounted in the cab. The console will be easily removed for servicing of electrical components without hindering the removal of the engine cover.
- 5.49 ELECTRICAL COMPARTMENT.** The Electrical Compartment shall hold electrical components, (i.e., relays, circuit breakers, etc.) The Electrical Compartment shall be enclosed with a lockable, hinged door, located on the partition wall behind the attendant seat. One (1) spare 15 Amp circuit shall also be provided. All wiring harnesses shall be connected via a quick connect circular plug connectors. Communication radio tie-in points shall be installed and labeled in the cab console. The radio tie-in points shall be

comprised of insulation terminal stud blocks with one battery "HOT" and one ignition activated "HOT".

- 5.50 EMERGENCY MASTER SWITCH.** An Emergency Master switch for activating all emergency lights and the Load Management system shall be provided on the Master Control Console.
- 5.51 CONTROL PANEL SWITCH ILLUMINATION.** The switches on the Master Control Console and Attendant Control Panel shall have illumination for easy functional identification, day or night.
- 5.52 MODULE POWER SWITCH.** A Module Power switch for all the add-on electrical equipment shall be provided on the master control console.
- 5.53 AMP/VOLTMETER.** Ammeter(s) and Voltmeter(s) shall be provided on the Master Control Console.
- 5.54 PARK OVERRIDE.** A "PARK OVERRIDE" switch, located on the Master Control Console shall reactivate all lights disabled when the transmission is placed in the Neutral/Park positions.
- 5.55 LOAD MANAGER.** A Load Manager shall be installed. The Load Manager will automatically shed lights to help prevent electrical system overload, when the vehicle is stationary and the transmission is in the "PARK" position.
- 5.56 WARNING LIGHTS SWITCH.** All flashing module warning lights shall be operated from a switch(s) on the Master Control Console as specified throughout this document.
- 5.57 FRONT CLEAR DISABLE SWITCH.** Activation of the "FRONT CLEAR DISABLE" Switch on the Master Control Console shall disable all forward-facing clear warning lights.
- 5.58 CURBSIDE SCENE LIGHTS "ON" WITH CURBSIDE DOOR.** The curbside scene lights shall be wired to activate when the curbside door is in the open position.
- 5.59 REAR SCENE LIGHTS "ON" WITH REAR DOORS OPEN.** The rear scene lights shall be wired to activate when the rear doors are in the open position.
- 5.60 SHORELINE INLET RECEPTACLE, HEAVY-DUTY, 20 AMP AUTO EJECT.** A Kussmaul "Super Auto-Eject" SHORELINE Male Motor Base Model 091-55-20-120 with RED cover shall be installed and labeled on the module exterior (forward street side) near the driver's door and have a power indicator light mounted above it. The 115VAC, Heavy Duty 20-Amp receptacle shall have circuit interrupt, connected to the lighted Patient Care Area outlets and to the engine block heater (with a block heater "Summer/Winter" switch in the Power Distribution Quarters.) A Matching Female Connector designed for use with the auto-eject shoreline shall be shipped loose with the vehicle.
- 5.61 SHORELINE INLET RECEPTACLE, HEAVY DUTY, 30 AMP AUTO EJECT.** A Kussmaul Auto Eject shoreline inlet receptacle with a RED cover shall be installed and labeled on the module exterior near the driver's door and have a power indicator light mounted above it. The 30 Amp receptacle shall have a circuit interrupt. This shoreline

shall supply power to the auxiliary AC/Heat climate control system. A Matching Female Connector designed for use with the auto-eject shoreline shall be shipped loose with the vehicle.

- 5.62 GROUND FAULT CIRCUIT INTERRUPTER (GFCI).** A 20 Amp Duplex receptacle with ground fault circuit interrupter (GFCI) electronic ground leakage detector shall be installed in the electrical distribution compartment for the shoreline circuit.
- 5.63 ENGINE HOUR METER.** An Engine hour meter shall be provided and installed in the Master Control Console.
- 5.64 INVERTER/BATTERY CHARGER.** The vehicle shall have a *VANNER* LifeStar model 20-1050CUL-DC Ambulance Power Module installed. Inverter shall automatically take-over providing power to all 115v AC outlets from the shoreline when vehicle is started.

MODULE SPECIFICATIONS

- 5.65 MODULE BODY CONSTRUCTION .** Bidder shall supply detailed explanation of their construction techniques for fabricating an all aluminum module body, including material thicknesses and alloy types.
- 5.66 CONNECTIONS, CAB TO MODULE.** Bidder shall supply detailed explanation of their construction techniques for joining the module to the cab.
- 5.67 CONNECTIONS, MODULE TO FRAME RAILS.** Bidder shall supply detailed explanation of their construction techniques for connecting the module body to the chassis frame rail.
- 5.68 ALUMINUM PARTS, MODULE EXTERIOR .** All unfinished exterior aluminum parts shall be anodized after fabrication to retain the finish and increase corrosion resistance.
- 5.69 DOOR CONSTRUCTION - GASKET PLACEMENT.** Bidder shall supply detailed explanation of their construction techniques for all exterior hinged module doors, including material thicknesses and alloys used. Door gaskets shall be attached to the interior side of the door skin. Gaskets attached to interior door frames are not satisfactory and will not be accepted.
- 5.70 SWEEP-OUT COMPARTMENTS.** Exterior module compartments shall be of a sweep-out design to aid in facilitation of the purchaser's routine care and cleaning of the unit. All exterior compartment floors, with the exception of the front ALS compartment shall be constructed to be flush with the bottom of the doorframe.
- 5.71 INSULATION.** All insulation products used shall comply with FMVSS #302 Flame spread requirements. The entire underside of the module body, including all frame members, compartment lower panels and sub-floor shall be properly prepared and treated with a high quality automotive type, spray on undercoating.
- 5.72 FLOOR CONSTRUCTION- PATIENT COMPARTMENT.** Bidder shall supply detailed explanation of their construction techniques for the sub-floor in the Patient Care Compartment. The floor shall be sealed to prevent fluids from seeping under the cabinets.
- 5.73 MUD FLAPS, REAR.** Black rubber-reinforced mud flaps, 1/4-Inch thickness, 24 Inches x

20 Inches shall be bolted to the underside of the module behind the rear wheels.

- 5.74 RUB RAILS, BLACK RUBBER.** Black rubber rub rails shall be installed on the lower sides of the body below the outside compartment sill areas.
- 5.75 FENDERETTES, BLACK RUBBER.** Black rubber fenderettes shall be installed around the rear wheel well openings.
- 5.76 STONE GUARDS, MODULE FRONT - DIAMOND PLATE.** Anodized aluminum diamond plate stone guards shall be installed on the lower 24 Inches of the module front.
- 5.77 THRESHOLD, CURBSIDE DOORWAY.** A stepwell liner shall be installed in the curbside doorway threshold.
- 5.78 THRESHOLD, REAR DOORWAY.** An anodized aluminum diamond plate threshold shall be installed at the rear doorway, providing a kick / scuff plate at the rear of the vehicle.
- 5.79 ANTI-CORROSION PROTECTION-MODULE.** All module contact with dissimilar metals shall be protected with the use of nylon screw-hole inserts to prevent fastener contact with the module body, nylon hinge strips, ceramic-coated hinge bolts, and corrosion prohibitor spray.
- 5.80 DOORS, ALL – CAB & MODULE – ‘STRAPPED.’** All doors on the cab and the module shall be ‘Strapped’ to prevent hinge damage from over extension. ‘Strapping’ involves the installation of webbing of sufficient width, thickness and quantity so as to absorb the force overextension would otherwise place on the door hinges. Rear patient compartment entry doors and sliding doors, if equipped, are exempt from this requirement.
- 5.81 DOORS, MODULE CURBSIDE PASSAGE.** Bidder shall supply detailed explanation of their construction techniques for the curbside module door, including material thicknesses and alloys used, latching and locking devices, etc. The doors shall be lockable from the inside and outside. All doors shall shut on molded, air-core, automotive type door seals to prevent any water from leaking into the vehicle interior. Each door shall have an access port adjacent to the locks.
- 5.82 DOORS, REAR PASSAGE-HINGED- HANDLES.** The doors shall be lockable from the inside and outside. All doors shall shut on molded, air-core, automotive type door seals to prevent any water from leaking into the vehicle interior. Each door shall have an access port adjacent to the locks.
- 5.83 STAINLESS STEEL DOOR PANELS, LOWER PASSAGE DOORS.** A stainless steel panel shall be installed on the interior lower portion of each passage door. The top of the stainless steel shall be installed beneath the upholstered door panel.
- 5.84 STEP, ZICO RETRACTABLE – CURBSIDE PASSAGE DOOR.** If the step height, from level ground to the bottom of the curbside door opening, exceeds 12” then a Zico Model VS-24-9 retractable step shall be installed. Step shall meet NFPA 1901-09 for Slip Resistance and Static Load. Step shall provide a surface area of 24” wide x 8 3/8” deep with a 7 5/8” drop. Step shall be wired to operate automatically when the Curbside passage door is opened and closed.

- 5.85 WINDOW, FIXED - (1) EACH REAR MODULE PASSAGE DOORS.** A non-openable (fixed) window with limo tint shall be provided in each rear module passage door. The windows shall be secured with black oxide fasteners. The distance between the window glasses shall not exceed 6" to assure maximum vision to the rear. No warning lights shall be blocked from view when the rear doors are open.
- 5.86 WINDOW, SLIDING W/SCREEN - (1) CURBSIDE MODULE PASSAGE DOOR.** An openable (sliding) window with limo tint and removable screen shall be provided in the curbside module passage door. The window shall be secured with black oxide fasteners. No warning lights shall be blocked from view when the curbside door is open.
- 5.87 EXTERIOR STORAGE COMPARTMENTS DESIGN.** All exterior compartments shall include these features:
- a. Baffled seep holes and all joints sealed to prevent water from splashing or seeping into the exterior compartments.
 - b. Full-Length hinges on all exterior compartment doors with 3/16-Inch, two-way adjustable stainless steel hinge pins.
 - c. Compartment doors flush without a protruding flange or lip.
 - d. When double doors are provided, each door shall have an exterior handle, but only One (1) may be locked.
 - e. All exterior compartments and passage doors shall be keyed alike.
 - f. Lockable, recessed handles. A gasket shall be installed under each handle to protect the paint.
 - g. All exterior compartment doors shall have aluminum diamond plate inner door skins.
- 5.88 EXTERIOR COMPARTMENT – LIGHTING.** All exterior compartments shall be equipped with LED Strip lights in sufficient quantity and of sufficient intensity to fully illuminate the compartment.
- 5.89 OUTSIDE STORAGE PREFERENCES.** In order to maintain consistency across the fleet, the following outside storage compartments list the preferred equipment to be carried in each compartment.
- 5.90 OUTSIDE STORAGE #1 - FORWARD STREETSIDE. OSS#1.** (Forward Street side Compartment) Shall be sized to accommodate the following equipment. This compartment shall have One (1) adjustable shelf. This compartment shall house One (1) "H" size Oxygen cylinder. The compartment door shall be held open with a spring loaded gas cylinder.
- 5.91 OUTSIDE STORAGE #2—OSS#2.** (Street side Center Compartment) Shall have double doors, and be sized to accommodate the following equipment. This compartment shall have Two (2) SCBA brackets, supplied by Covington Fire Department, mounted on inside of the compartment. Brackets will secure a SCOTT 4.5 SCBA with 4500 psi, Thirty (30) Minute Carbon Fiber Cylinder. This compartment shall house Two (2) complete sets of structural firefighting gear, each set to include boots, pants, jacket and helmet. The top of the compartment shall be on an even plane with the top of the rear street side compartment, OSS#3. Each door shall be held open with a spring loaded gas cylinder.
- 5.92 OUTSIDE STORAGE #3—OSS#3.** (Street side Rear Compartment) Shall be constructed to provide the maximum possible cubic foot of storage space. Compartment

shall have One (1) adjustable shelf. It is preferred that the compartment be provided with a double door to minimize the open compartment doors projection into traffic. Compartment door shall be held open with a spring loaded gas cylinder. The top of the compartment shall be on an even plane with the top of center street side compartment, OSS#2.

- 5.93 OUTSIDE #4— OSS#4 BACKBOARD/SCOOP, IMMOBILIZATION EQUIPMENT.** Rear Curbside Compartment) Shall be sized to house the following equipment. Four (4) IRON DUCK Long Spine Boards, One (1) FERNO Scoop Stretcher Model 65EXL, One (1) FERNO Stair Chair measuring 40”h x 20”w x 7”d. Above the stair chair storage area shall be Three (3) shelves for storing One (1) C-Collar/CID bag measuring 24”h x 12”w x 6”d, extra adjustable C-Collars and extra STA-BLOK Head Immobilizer kits. Refer to conceptual drawing #CFD-4 for additional guidance as to the desired layout of this compartment. The compartment door shall be held open with a spring loaded gas cylinder.
- 5.94 OUTSIDE STORAGE #5 - FORWARD CURBSIDE --OSS#5.** (Forward Curbside Compartment) Shall provide Inside/Outside storage, and shall have Two (2) adjustable shelves. This compartment shall be sized to accommodate One (1) Pediatric Bag measuring 12”h x 18”w x 14”d, One (1) Trauma Kit – Medium sized, One (1) O2/Airway Kit – Large sized and One (1) Powered, Portable Suction device. The compartment door shall be held open with a spring loaded gas cylinder.
- 5.95 TURTLE TILE MAT SKID-RESISTANT (CHAR-GRAY) CURBSIDE STEPWELL .** Skid resistant Char Grey TURTLE TILE matting shall be installed on the Curbside stepwell.
- 5.96 ASSIST HANDLES, (3) 'V' STAINLESS STEEL, (3) BLACK URETHANE.** A total of Six (6) assist handles shall be provided: Three (3) 1-1/4" diameter Stainless Steel 'V' Handles, One (1) on each rear passage door and One (1) on the curbside door; and Three (3) assist handles, Two (2) handles at the rear doorway, One (1) at the curbside doorway.
- 5.97 RADIO ANTENNAS.** Purchaser shall supply up to Three (3) Radio Antennas to be installed on the module top. Appropriate access panels shall be provided for maintenance purposes. Antenna cable shall be installed from the antenna to the Master Control Console in the cab for later radio installation.
- 5.98 BACK-UP CAMERA.** A Back-Up Camera shall be installed over the rear module doors. Camera shall feed to integral color display in the rear view mirror.
- 5.99 MODULE, FRONT- WHELEN 900 SERIES – LINEAR SUPER LED.** Seven (7) WHELEN 900 SERIES LINEAR SUPER LED lights shall be mounted on the front of the module, in lieu of a front lightbar. Lights to be Five (5) Red and Two (2) White. The lights shall be installed in the order of Red, Red, White, Red, White, Red, Red. All lights shall operate from one (1) switch labeled “EMERGENCY MASTER”.
- 5.100 MODULE, FRONT-WHELEN 900 SERIES – WHITE – ALTERNATE WIRING.** The White LED lights shall additionally be wired to allow a steady burn mode while vehicle is parked and in scene mode for front scene lighting. Steady burn function to operate from a dedicated Console switch labeled “TAKEDOWN LIGHTS”.
- 5.101 MODULE, REAR- WHELEN 900 SERIES – LINEAR SUPER LED WHELEN 900**

SERIES lights shall be mounted on the rear of the module. There shall be Two (2) outboard Red WHELEN 900 SERIES LINEAR SUPER LED'S, Two (2) WHELEN 900 SERIES CLEAR LED Load lights, One (1) Amber WHELEN 900 SERIES LINEAR SUPER LED in the center position. The LED lights shall operate from the Console switch labeled " EMERGENCY MASTER ". The rear Scene/Load lights shall be automatically activated when the rear doors are opened or the transmission is in 'Reverse' gear, or from a switch on the Master Control Console labeled "REAR SCENE LIGHTS."

- 5.102 LIGHTS, FRONT GRILLE - WHELEN 700 SERIES LINEAR SUPER LED - RED .** Two (2) WHELEN 700 SERIES Red LINEAR SUPER LED warning lights, One each side, shall be installed, with waterproof connectors, in the grille area of the chassis, and will operate from a dedicated Console switch labeled " EMERGENCY MASTER " .
- 5.103 LIGHTS, INTERSECTION-WHELEN 700 SERIES LINEAR SUPER LED - RED.** Two (2) WHELEN 700 SERIES Red LINEAR SUPER LED warning lights shall be installed on forward front fenders of the OEM chassis, One (1) each side, and will operate from a dedicated Console switch labeled " EMERGENCY MASTER " .
- 5.104 LIGHTS, REAR INTERSECTION-WHELEN 700 SERIES LINEAR SUPER LED – RED.** WHELEN 700 SERIES Red LINEAR SUPER LED warning lights shall be installed with waterproof connectors, above the rear wheel wells - One (1) each side, and will operate from a dedicated Console switch labeled " EMERGENCY MASTER " .
- 5.105 LIGHTS, REAR WINDOW-LEVEL - WHELEN 900 LINEAR SUPER LED - RED.** Two (2) WHELEN 900 SERIES Red LINEAR SUPER LED warning lights shall be installed on the rear of the module at window level, One (1) each side. This will function with the other flashing warning lights, and will operate from a dedicated Console switch labeled " EMERGENCY MASTER " . These lights shall also function as brake lights whenever the brake pedal is depressed.
- 5.106 LIGHTS, MODULE WHELEN 900 SERIES- 4 LINEAR SUPER LED WARNING & 4 LED SCENES.** WHELEN 900 SERIES LINEAR SUPER LED module warning and Halogen scene lights shall be installed. Four (4) total WHELEN 900 SERIES LINEAR SUPER LED Red warning lights shall be installed, to include Two (2) LED warning lights on the module curbside, and Two (2) LED warning lights on the module street side. These lights shall operate from a dedicated Console switch labeled "EMERGENCY MASTER". There shall be Four (4) WHELEN 900 SERIES LED Scene lights installed, Two (2) inboard of the warning lights, high on the module curbside and Two (2) inboard of the warning lights, high on the module street side. These lights shall operate from a dedicated Console switch labeled " LEFT SCENE" and "RIGHT SCENE" respectively.
- 5.107 LIGHTS, REAR TAIL WHELEN 600 LED STOP, TURN AND BACKUP.**One (1) pair each WHELEN 600 SERIES MAXIMUM INTENSITY LED Stop/Tail and Amber Turn Arrows, with chrome bezels shall be installed on the rear of the module. The Back-Up lights shall be WHELEN 600 SERIES White MAXIMUM INTENSITY LED lights in chrome bezels.
- 5.108 LIGHT, LICENSE PLATE.** One (1) license lamp shall be installed on the rear of the module, lower left side.
- 5.109 LIGHTS, LED MARKER/CLEARANCE LIGHTS.** The vehicle shall have LED Marker and Clearance - ICC lights installed on the front, rear and both sides of the body to meet

all federal lighting requirements FMVSS 108.

- 5.110 SIREN, FEDERAL SIGNAL E-Q2B WITH MICROPHONE.** A FEDERAL SIGNAL E-Q2B Siren Amplifier with digital output control head and microphone shall be flush-mounted in the Master Control Console located in the cab. The siren shall be capable of hands-free operation. **No Exceptions or Substitutions.**
- 5.111 SIREN SPEAKERS, CAST PRODUCTS- SA-4316-07G3551.** CAST PRODUCTS SA-4316-07G3551 Dual 100-Watt cast aluminum siren speakers shall be installed in the front bumper.
- 5.112 POWER LOCKS- PASSAGE, OSS DOORS, HIDDEN SWITCH-REMOTE-KEYLESS.** Power door locks shall be included on module passage doors and all outside storage compartments. The locks shall be activated from switches located at the interiors of the rear and curbside module doors, as well as the OEM chassis cab door switches. An exterior lock switch will also be included and hidden on the exterior rear streetside of the vehicle under a false chrome vent cover so as to be easily accessible. A keyless entry system shall be installed. The system shall include Two (2) remote Entry/Lock KEY FOB transmitters. The system will activate power to lock and unlock all powered locks provided on the cab and on the module.
- 5.113 PADS, HEAD AND BACK.** Vinyl upholstered, foam cushioned head/back pads shall be installed as follows: One (1) on the lower edge of the upper front wall cabinet (above the partition doorway or window), One (1) above the rear doors, One (1) above the side door, and One (1) on the curbside wall behind the squad bench. The pads shall be covered with color coordinated vinyl upholstery material.
- 5.114 PADDED EDGING PROTECTION.** Padded corner edging shall be installed where necessary on exposed corners and edges in the patient care compartment for Patient and Attendant protection.
- 5.115 STAINLESS STEEL WALL PROTECTION.** Brushed stainless steel panels shall be provided on the street side wall from the bottom of the CPR seat cushion down to the flooring material to protect this area from damage.
- 5.116 AISLE & FLOOR DIMENSIONS - REAR PATIENT COMPARTMENT.** Bidder shall provide detailed specifications for aisle and floor dimensions including the distance between the left wall and the edge of the squad bench and the floor from the rear doors to the partition doorway (with the rear doors closed).
- 5.117 HEADLINER - REAR PATIENT COMPARTMENT.** The Bidder shall provide detailed specifications for their standard headliner construction materials.
- 5.118 EMBLEMS / SIGNS - REAR PATIENT COMPARTMENT.** Two (2) "*NO SMOKING / OXYGEN EQUIPPED / FASTEN SEAT BELTS*" signs shall be provided. One (1) sign shall be installed in the cab and One (1) above the Oxygen outlets in the Patient Care Compartment street side cabinet.
- 5.119 UPHOLSTERY.** All cushions, headpads, door panels and seats shall be covered with vinyl upholstery material. The vinyl and all foam cushion material shall comply with FMVSS #302 Flame Spread requirements.

- 5.120 LONPLATE II, NON-SLIP EMBOSSED DIAMOND PLATE.** The floor in the Patient Care Compartment shall be covered with LONSEAL brand "LONCOIN II" (or comparable alternative) Non-Slip, (Embossed Diamond Plate) resilient sheet vinyl flooring material, which shall be covered 3-inches up the wall on the street side, and to the top of the squad bench base on the curbside. The flooring material shall be stripped and waxed before delivery.
- 5.121 CABINET FACING / WALL LAMINATE.** All exposed sidewalls, the partition wall (on the Patient Care Compartment side only), and the cabinet faces shall be covered with high-pressure plastic laminate material.
- 5.122 PASS -THROUGH - CAB TO REAR PATIENT COMPARTMENT.** A pass-through window separating the cab from the rear patient compartment shall be provided. Any sliding panels used in this pass-through should be easily removable without the use of tools.
- 5.123 COT FASTENER.** Provisions shall be made for the installation of a crash stable, Center position, cot fastener to accommodate a Stryker cot. Additionally, all necessary provisions will be made to accommodate the possible future installation of the Stryker Power-Load system. Cot shall be positioned in such a way as to allow at least 8" of space between end of cot and rear doors and in proper alignment with CPR seat.
- 5.124 LIGHT, ATTENDANT CONTROL PANEL AREA.** A LED strip light, of appropriate length, with integral switch shall be mounted under Attendant's Control panel.
- 5.125 DOME LIGHTS, SUPER-LED - (10) WHELEN #80C0EECR.** Eight (8) Dual Intensity White LED dome lights, WHELEN 80C0EECR shall be provided in the Patient Care Compartment, four (4) on each side. The dome lights shall have high and low intensity Three-way switching between the Attendant Control panel (ACP) and Master Control Console (MCC). The low dome lights shall be illuminated when the Patient Care Compartment side or rear doors are opened. Dome lights shall also be dimmable by installation of WHELEN Model 8dimctrl Dimmer control.
- 5.126 LIGHT, ELECTRICAL COMPARTMENT.** A small, 12volt light will be located in the electrical compartment, the light shall be wired, battery-hot to activate when the Electrical Compartment door is in the open position. The light shall be off when the Electrical Compartment door is in the closed position.
- 5.127 PRE-SHIFT INSPECTION LIGHTING / TIMER.** A switch shall be installed that shall activate enough lighting for the purpose of conducting a Pre-Shift inspection. These lights shall be operable without engaging any other switches and shall be on a field programmable timer initially set to turn lights off after 15 minutes.
- 5.128 EXHAUST VENTILATOR, 3-SPEED.** A three-speed, 285 CFM minimum electric exhaust fan shall be provided and located in the curbside cabinet in the Patient Care compartment. The exhaust fan shall be operated from a switch on the ACP (Attendant Control Panel). The exhaust system shall have a regulating grille inside and a louvered grille outside. The exhaust system shall vent through the side of the vehicle, not through the roof.
- 5.129 (5) 115VAC INTERIOR DUPLEX OUTLETS.** Five (5), 2-wire +plus ground hospital-grade duplex outlets shall be installed, with wiring run to and powered by the shoreline

when connected or by the Inverter when the vehicle is mobile. Power shall automatically switch from the shoreline to the inverter when the vehicle is started. In the Patient Care Compartment two (2) outlets shall be installed in the street side cabinet action area, One (1) forward and One (1) rearward of the CPR seat. Both outlets shall be capable of supplying 115VAC to the monitoring equipment. The third outlet shall be installed in the lower front wall inside/outside compartment. The fourth and fifth outlets shall be installed in the cab, on either side of the rear area of the Master Control Console. An indicator lamp shall be located within each 115VAC outlet as a line monitor to indicate a live circuit. The outlets shall be labeled, "115VAC".

- 5.130 (2) 12VDC INTERIOR (CIGAR TYPE) OUTLETS.** Two (2) 12VDC (Cigarette Lighter type) outlets shall be installed in the Patient Care Compartment, One (1) in the front wall inside/outside compartment, top left corner, and One (1) in the ACP area in the street side wall.
- 5.131 (1) 12VDC CAB (CIGAR TYPE) 3-OUTLET BOX.** An additional 3-outlet box shall be installed in the cab in the area of the Master Control Console. The outlets shall be labeled, "12VDC". A SCHOTTKY DIODE MEDICAL ISOLATOR shall be provided to protect the 12VDC outlets.
- 5.132 KNOX BOX – KeySecure.** A Knox KeySecure 4 will be mounted in the cab. All power needed for these to function shall be provided. Key code information For Knox and final mounting location will be provided at pre-construction meeting.
- 5.133 SHARPS AND TRASH CONTAINERS - SQUAD BENCH END.** A removable sharps container, and a trash container shall be installed in the forward end of the squad bench base.
- 5.134 HEAT/AIR CONDITIONING, MANUAL/AUTO SELECT, 5-SPEED BLOWER.** A high capacity Heater/Air Conditioner system with capacity size designed in accordance with the module needs and with a 5-speed blower shall be provided for high volume air movement with minimal noise. The Heater/Air Conditioner air return shall be filtered to minimize contamination of the Heater/Air Conditioner cores. The cab and module environmental systems shall be simultaneously capable of heating in the front while cooling in the rear and vice-versa. A thermostatically controlled rear system shall be provided for heating and air conditioning the Patient Care Compartment. The temperature, whether heating or cooling shall be controlled by a thermostat built into the Attendant Control Panel, located in the street side cabinet. The thermostat shall have Five (5) blower speeds. Heating and cooling may be selected automatically and manually. The Heater/Air Conditioner system shall function only when the ignition system is on. The rear heater shall have EPDM/NOMEX heater hoses. The rear air conditioner shall have BARRIER air conditioner hoses for R-134A refrigerant. A switch shall be located on the MCC (Master Control Console) to turn on/off the environmental system from the cab.
- 5.135 AUXILIARY CONDENSOR.** A/C condenser unit or equivalent shall be installed on a bracket on the front of the module above the cab roof.
- 5.136 AUXILLARY AC/HEAT UNIT.** An auxillary AC/Heat unit, independent of primary system, for shoreline operated climate control shall be installed. Unit to operate as 110V unit on shoreline (30 AMP) to provide heating and cooling of parked vehicle with thermostat control. Vehicle shall automatically switch to conventional climate control when running on engine power.

- 5.137 ATTD SEAT - EVS HiBAC, INTEGRAL CHILD, EVS SWIVEL BASE.** A rear facing EVS HiBAC attendant seat shall be installed at the head of the patient cot. The seat shall be equipped with a sliding base with swivel capabilities and incorporate an integral child safety restraint system. The seat shall be covered with color-coordinated vinyl and equipped with automatic retracting safety seat belts.
- 5.138 CPR SEAT.** A CPR seat will be installed on the street side of the Patient Care Compartment, aft of the main action area counter. The seat, backrest, and sides of the seat shall be covered with cushioned vinyl. The CPR seat and cot mounting position shall be oriented so that the CPR seat is properly aligned so that the aft most side of the seat is aligned with the middle of the cot.
- 5.139 SQUAD BENCH - BASE WITH PROVISIONS FOR SHARPS/TRASH.** The squad bench base shall be constructed for maximum storage capacity. Bidder shall provide detailed explanation of their construction techniques for the squad bench base. Provisions shall be made for the sharps and trash containers to be installed in the squad bench base. Automatic locking, retractable seat belts shall be provided for Three (3) people while seated on the squad bench or for One (1) person lying down.
- 5.140 SQUAD BENCH - LID FASTENER, AUTOMATIC LATCHING.** An automatic latching fastener shall be installed to secure the squad bench lid in the closed position.
- 5.141 CABINET CONSTRUCTION-INTERIOR.** Bidder shall provide detailed explanation of their construction techniques for the interior cabinets.
- 5.142 RESTOCKING HINGES- INTERIOR CABINETS.** All cabinet frames with sliding doors shall be equipped with restocking hinges and gas assists. **NO EXCEPTIONS.**
- 5.143 CABINETS DOORS-SLIDING-CLEAR.** Sliding cabinet doors shall be nominally 1/4" thick clear acrylic material. The sliding cabinet doors shall be installed in aluminum track that shall be lined with PPL insert to eliminate rattles and prevent doors from opening during transit. An edge mounted aluminum handle shall be installed on each sliding cabinet door.
- 5.144 CABINETS, INTERIOR -ALS - ADVANCED LIFE SUPPORT.** Bidder shall supply detailed specifications for construction of interior cabinets and storage including cabinet layout options, door opening dimensions and interior dimensions. Provided photos are for illustrative purposes only and are intended to convey a general impression of desired cabinet layout. Bidder shall include any and all standard compartment layout options for their particular manufacturer. There shall be Two (2) action areas. One (1) shall be located to the right of the attendant seat with work area dimensions of approximately 14.5" High x 47.50" Wide x 17.25" Deep. The second shall be located to the rear of the CPR seat with work area dimensions of approximately 21.5" High x 18.25" Wide x 17.25" Deep. Both action areas shall be covered with a seamless, durable and stain resistant material that is easily decontaminated and with a one-inch lip on all sides, to prevent equipment from sliding off.
- 5.145 CABINET, LOCKING DRUG BOX.** A cabinet for the securing of narcotic drugs shall be provided inside the Patient Care Compartment. This cabinet shall be secured with a field programmable push button combination lock and be a minimum size of 8" x 8" x 4".

- 5.146 CABINET, LOWER FRONT WALL.** The lower front inside/outside wall cabinet shall be open to the patient compartment without doors or nets. Cabinet shall have a minimum of Two (2) adjustable shelves on unistrut adjustable track brackets. LED strip lights shall be provided in sufficient quantity and of sufficient intensity level to fully illuminate all areas of this compartment. There shall be an aluminum beveled ramp edging installed on the edge of each shelf. The exterior of the cabinet shall be covered with color coordinated high-pressure plastic laminate material. The interior shall be covered with multi-use Polychromatic specialty coating.
- 5.147 SQUAD BENCH STORAGE.** A storage area shall be provided in the squad bench base. The interior dimensions of the storage area shall be as large as possible.
- 5.148 OXYGEN CYLINDER STORAGE.** Provisions shall be made for the vertical storage of One (1) "H" Oxygen cylinder in the #1 Outside Storage Compartment (front street side.) The cylinder shall be easily removable for refilling from outside the vehicle. A spring loaded, hinged acrylic access door shall be installed to provide access to the Oxygen cylinder valve. The Oxygen Compartment shall be provided with a vent of at least 9 square inches, to permit any leaking gas to dissipate to the exterior of the ambulance. The Oxygen cylinder shall be secured with a minimum of Three (3) restraining devices, meeting AMD STANDARD 003, Oxygen tank retention system requirements. A tethered cylinder changing wrench shall be provided and secured in the Oxygen cylinder compartment. An adjustable shelf shall be installed in the area above Oxygen storage. The purchaser shall provide the Oxygen cylinder. Provisions shall be made for the secure storage of Two (2) "D" size Oxygen cylinders in the Patient Care Compartment.
- 5.149 OXYGEN SYSTEM.** Three (3) OHIO MEDICAL, quick release wall outlets shall be installed: Two (2) flush mounted outlets located in the face of the ACP (Attendant Control Panel) in the street side cabinet, and One (1) flush mounted outlet in the forward curbside wall, approximately 18"– 24" above squad bench (at forward end of the squad bench). The Oxygen system shall be completely installed and include a pre-set Oxygen regulator with a cylinder pressure gauge and a 200 PSI safety valve with all necessary piping and connections. The Oxygen system shall be completely low pressure and the regulator shall be fastened directly to the cylinder. The regulator shall be set to operate at approximately 50 PSI. The Oxygen cylinder shall be installed so it may be easily turned on and off at the main cylinder valve. Flexible conductive Oxygen hose with a minimum 900 lbs. Burst rating shall be installed between the regulator and the Oxygen receptacles. The system shall be tested and tagged in conformance with NFPA-56-F and KKK-A-1822-F. The electric Oxygen system shall be provided with an On/Off switch on the ACP (Attendant Control Panel). A readily accessible Emergency manual bypass valve shall be provided in the Patient Care area.
- 5.150 ASPIRATOR SYSTEM - IMPACT #324 SELF-CONTAINED-RECESSED .** A suction system with Bemis 1200ml disposable canister shall be mounted on the main action area counter. This system will be self-contained. The electric vacuum pump shall be mounted in a manner to reduce noise and vibration in the top front corner of streetside compartment. The suction aspirator system shall provide a free airflow of at least 20-LPM and achieve a minimum of 300 mm Hg Vacuum within four (4) seconds after the suction tube is clamped off. The system includes a vacuum control and shut-off valve for manual control of vacuum flow. operated from a switch on the ACP (Attendant Control Panel.) The pump performance shall comply with KKK-A-1822-F requirements. The exhaust shall be vented to the exterior of the vehicle.

- 5.151 GRAB RAIL-1-1/4" DIAM. X 64" L. OVER BENCH.** A 1-1/4" diameter x 64" long stainless steel grab rail will be included on the ceiling over the squad bench area for attendant/patient balance control. The grab rail will be installed securely to the ceiling/module super structure with Two (2) mounting brackets.
- 5.152 GRAB RAIL, 1-1/4" DIAM. X 96" L. IN CEILING OVER PATIENT COT.** A 1-1/4" diameter x 96" long stainless steel grab rail shall be installed on the ceiling for attendant/patient balance control. The grab rail shall be installed securely to the Ceiling/module super structure with Three (3) mounting brackets.
- 5.153 I V HANGERS, CEILING RECESSED - CAST PRODUCTS #IV2008-1 (1).** One (1) CAST PRODUCTS #IV2008-1 recessed, dual ceiling I.V. hanger shall be provided. Installed near the street side cabinet and over the cot.
- 5.154 "CRASH STABLE" CARGO NET - AT HEAD OF SQUAD BENCH.** A "CRASH STABLE" cargo net shall be installed at the forward end of the squad bench. The cargo net shall be secured with Two (2) stainless steel 1 1/4" bars attached at the ceiling and at flooring of module.
- 5.155 PAINT PROCEDURE.** All painted module body surfaces shall be thoroughly cleaned with wax and grease remover and hand dried. The Body shall then be completely sand blasted using a fine material. It shall then be filled with a premium body filler, if needed, sanded smooth and primed. All paint preparation procedures to be in accordance with paint manufacturers recommendations.
- 5.156 PAINT, MODULE.** The module shall be painted White, but Bidder shall price option O5.4 to provide the cost of painting the module Red to match the current fleet.
- 5.157 PAINT, CAB.** The cab of the vehicle including doorjamb's shall be painted to match the color of the modular body.
- 5.158 REFLECTIVE STRIPPING – REAR CHEVRON MARKINGS.** The rear of the vehicle shall be covered, to the greatest extent possible, excluding rear entry doors, with Red and Lime-Yellow SCOTCHLITE in an upside down "V" pattern to meet or exceed federal regulations. The Lime-Yellow background material will be 3M DIAMOND GRADE DG# FLOURESCENT YELLOW GREEN sheeting 4083. The Red, Six inch; Diagonal stripes will be SCOTCHLITE ELECTRONIC CUTABLE FILM 1172. Striping to match existing 2008 Seagrave Pumpers. NO EXCEPTIONS.
- 5.159 LETTERING AND STRIPING. SCOTCHLITE, RED REFLECTIVE TAPE - 6"x2" - OUTSIDE MOD DOORS.** A 6" x 2" piece of Red reflective SCOTCHLITE tape or comparable materials/devices shall be installed on the lower inside edge of each passage and outside storage compartment door for roadside visibility.
- 5.160 MODULE BODY TECHNIQUES.** Provide explanation and description of construction techniques for an all aluminum module body, including material thicknesses and alloy types;
- 5.161 ATTENDANT CONTROL PANEL TECHNIQUES.** Provide explanation and description of construction techniques for an Attendant Control Panel, which shall control all equipment installed in the Patient Care Compartment. The explanation shall be included in the Proposal Binder under **TAB IV-A.**

- 5.162 MODULE CAB CONNECTION.** Provide explanation and description of construction techniques for joining the module to the cab
- 5.163 TECHNIQUES THERMAL INSULATION.** Provide explanation and description of construction techniques for thermal and acoustical insulation of the Patient Care Compartment, including doors, cabinets, walls and floor surfaces
- 5.164 TECHNIQUES REAR STEP/BUMPER.** Provide explanation and description of construction techniques for the rear step/bumper
- 5.165 TECHNIQUES REAR MODULE DOORS.** Provide explanation and description of construction techniques for the rear module doors, including material thicknesses and alloys used, latching and locking devices, etc.
- 5.166 MONITOR - Color** A color monitor with a minimum 4.3" LCD screen and auxiliary video inputs will be provided in the cab and mounted in such a way as to not create a visual obstruction for the driver, anymore than a standard rearview mirror, nor obstruct or hinder any vehicle controls, accessories or safety systems. Monitor will continuously display the camera feed from the patient compartment camera except when the vehicle is placed into Reverse gear, at which time it will automatically switch to the feed from the back-up camera. Upon the gear selector being moved out of Reverse, display will automatically revert back to patient compartment camera feed.

OPTIONS

Bidders shall provide pricing for each of the following options:

- 05.1 SLIDING DOOR – MODULE CURBSIDE ENTRY.** If the manufacturer routinely offers a sliding curbside module entry door, the Bidder shall include an OPTION price and provide construction details for a sliding curbside module entry door.
- 05.2 STRYKER POWER-LOAD COT RESTRAINT SYSTEM** Provide pricing for furnishing and installing a new Stryker Power-Load Cot Restraint System. Pricing to include Stryker Pro-Care Protect Power-Load 7 year service contract.
- 05.3 STRYKER POWER-PRO XT AMBULANCE COT** Provide pricing for furnishing a Stryker Power-PRO XT powered ambulance cot with the following options; XPS, Powerload compatible, Knee Gatch/Trendelenburg, steer lock, Fowler O2 bottle holder, pocketed back rest pouch, head end storage flat and base storage net. Pricing to include Stryker Pro-Care Protect+ 7 year service contract.
- 05.4 PAINTING, LETTERING, AND STRIPING.** Bidder shall provide a price for painting, lettering, and striping to match current fleet.
- 05.5 WHEELS.** Bidder shall supply options for 19.5" wheels/rims including painted to match vehicle and painted gloss black.

If Manufacturer routinely offers alternate curbside wall seating and cabinetry designed to allow personnel to remain seated and belted while still providing patient care then provide construction details and drawings. The two items below are provided for general guidance.

SQUAD BENCH

SLIDING ATTENDANT SEAT. An attendant seat with a 5-point harness shall be installed on the Curb side interior side of the patient compartment In place of the squad bench. This seat shall be installed on a 48" track that will allow the seat to slide forward and aft. The seat shall have ability to lock into place every 4". The seat shall be installed to allow easy access to the patient on the cot.

CURB SIDE SEAT CABINETS There shall be a cabinet installed forward of the sliding captain's seat and after the opening of the curbside door. The cabinet shall be a minimum of 35" high and there shall be three (3) drawers in the cabinet. There shall be two (2) drawers with a minimum interior dimension of 4.50" high X 9" wide X 13.50" deep. The drawers shall open towards the bench seat and shall have locking flush pull latches. There shall be one (1) drawer with a minimum interior dimension of 9.25" high X 12.25" wide X 13.50" deep. The drawer shall open towards the aisle and shall have locking flush pull latches.

Current Graphics Package and Exterior Compartment Layout



Covington Ambulance Graphics

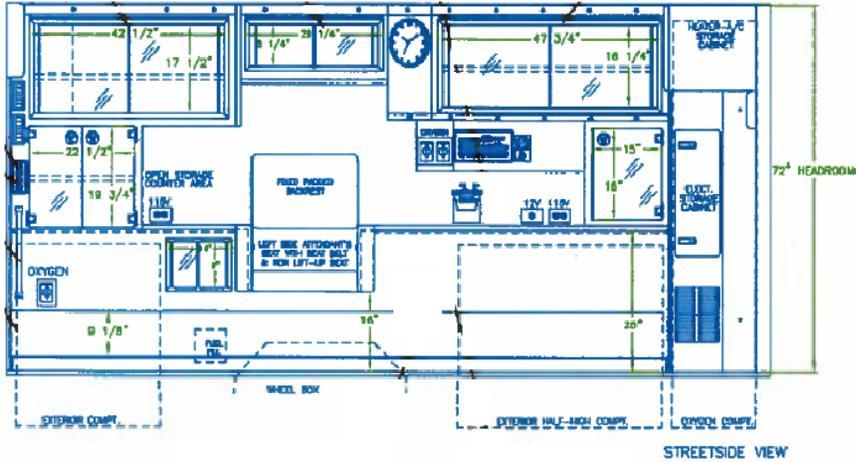
1/4" 3M White Reflective NFPA Striping on box and cab. Leo's Smart Gold w/ Black Print Lettering on box sides & rear doors. Blue on White Reflective Stars of Life on box sides & rear door windows. "Paramedics" in Reflective Blue on White Stripe. 6" Reflexite Red & Fluorescent Yellow/Lime Chevrons on box rear sides & Diamond Dots on rear diamond-plate.

Hidden Door Lock Switch under fake vent cover on left rear of module

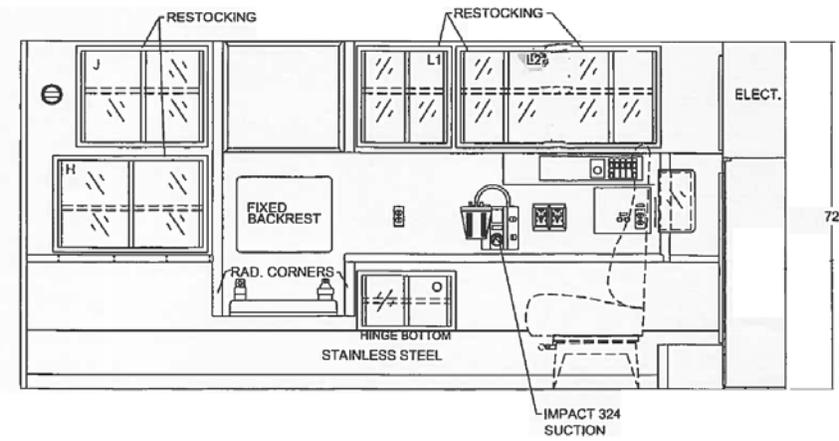


Interior Compartment Layout Examples (For Illustrative Purposes Only)

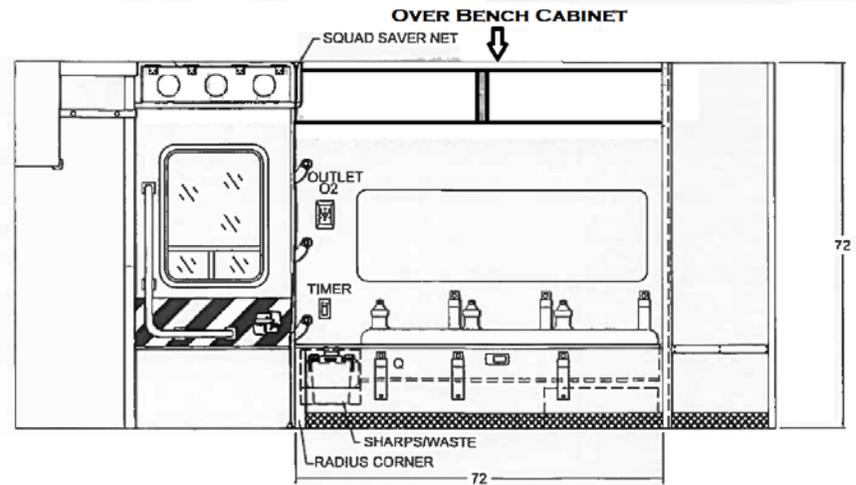
Streetside (Example 1)



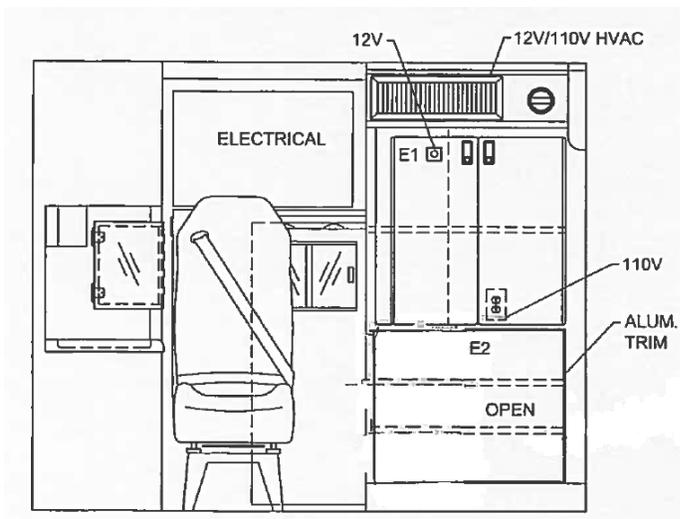
Streetside (Example 2)



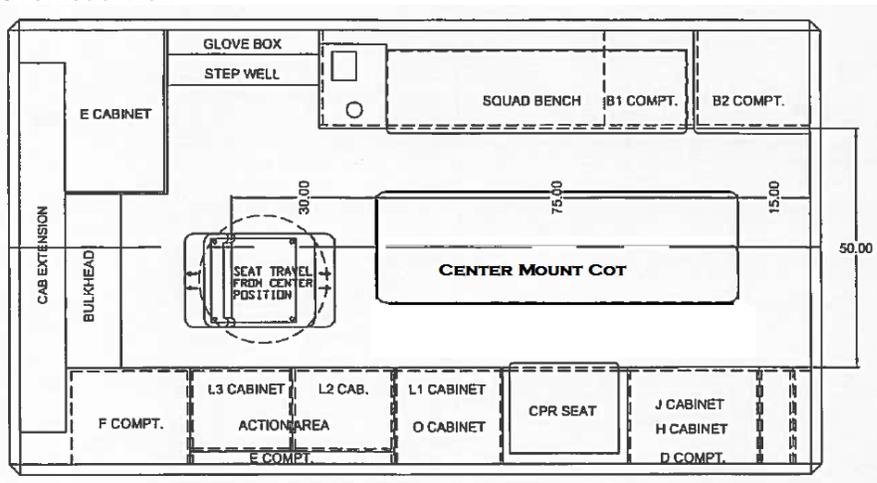
Curbside



Front Wall



Overhead View



**SPECIFICATIONS WORKSHEET AMBULANCES
INCLUDE IN PROPOSAL BINDER UNDER TAB IV-A**

SPEC #	Complies Y/N	If N, Explain (a) how the proposal deviation is different; (b) how the deviation meets or exceeds the specifications; and (c) why it is necessary.
5.1	NO EXCEPTIONS	
5.2		
5.3		
5.4		
5.5		
5.6		
5.7	NO EXCEPTIONS	
5.8		
5.9		
5.10		
5.11		
5.12		
5.13		
5.14		
5.15		
5.16		
5.17		
5.18		
5.19		
5.20	NO EXCEPTIONS	
5.21		
5.22		
5.23		
5.24		
5.25		
5.26		

**SPECIFICATIONS WORKSHEET AMBULANCES
INCLUDE IN PROPOSAL BINDER UNDER TAB IV-A**

SPEC #	Complies Y/N	If N, Explain (a) how the proposal deviation is different; (b) how the deviation meets or exceeds the specifications; and (c) why it is necessary.
5.27		
5.28		
5.29		
5.30		
5.31		
5.32		
5.33		
5.34		
5.35		
5.36		
5.37		
5.38		
5.39		
5.40		
5.41		
5.42		
5.43		
5.44		
5.45		
5.46		
5.47		
5.48		Provide explanation under TAB IV-A
5.49		
5.50		
5.51		
5.52		

**SPECIFICATIONS WORKSHEET AMBULANCES
INCLUDE IN PROPOSAL BINDER UNDER TAB IV-A**

SPEC #	Complies Y/N	If N, Explain (a) how the proposal deviation is different; (b) how the deviation meets or exceeds the specifications; and (c) why it is necessary.
5.53		
5.54		
5.55		
5.56		
5.57		
5.58		
5.59		
5.60		
5.61		
5.62		
5.63		
5.64		
5.65		Provide explanation under TAB IV-A
5.66		Provide explanation under TAB IV-A
5.67		Provide explanation under TAB IV-A.
5.68		
5.69		Provide explanation under TAB IV-A
5.70		
5.71		
5.72		Provide explanation under TAB IV-A
5.73		
5.74		
5.75		
5.76		
5.77		
5.78		

**SPECIFICATIONS WORKSHEET AMBULANCES
INCLUDE IN PROPOSAL BINDER UNDER TAB IV-A**

SPEC #	Complies Y/N	If N, Explain (a) how the proposal deviation is different; (b) how the deviation meets or exceeds the specifications; and (c) why it is necessary.
5.79		
5.80		
5.81		Provide explanation under TAB IV-A
5.82		
5.83		
5.84		
5.85		
5.86		
5.87		
5.88		
5.89		
5.90		
5.91		
5.92		
5.93		
5.94		
5.95		
5.96		
5.97		
5.98		
5.99		
5.100		
5.101		
5.102		
5.103		
5.104		

**SPECIFICATIONS WORKSHEET AMBULANCES
INCLUDE IN PROPOSAL BINDER UNDER TAB IV-A**

SPEC #	Complies Y/N	If N, Explain (a) how the proposal deviation is different; (b) how the deviation meets or exceeds the specifications; and (c) why it is necessary.
5.105		
5.106		
5.107		
5.108		
5.109		
5.110	NO EXCEPTIONS	
5.111		
5.112		
5.113		
5.114		
5.115		
5.116		Provide explanation under TAB IV-A
5.117		Provide explanation under TAB IV-A
5.118		
5.119		
5.120		
5.121		
5.122		
5.123		
5.124		
5.125		
5.126		
5.127		
5.128		
5.129		
5.130		

**SPECIFICATIONS WORKSHEET AMBULANCES
INCLUDE IN PROPOSAL BINDER UNDER TAB IV-A**

SPEC #	Complies Y/N	If N, Explain (a) how the proposal deviation is different; (b) how the deviation meets or exceeds the specifications; and (c) why it is necessary.
5.131		
5.132		Location TBD at Pre-Construction
5.133		
5.134		
5.135		
5.136		
5.137		
5.138		
5.139		
5.140		
5.141		Provide explanation under TAB IV-A
5.142	NO EXCEPTIONS	
5.143		
5.144		Provide explanation under TAB IV-A
5.145		
5.146		
5.147		
5.148		
5.149		
5.150		
5.151		
5.152		
5.153		
5.154		
5.155		
5.156		
5.157		

**SPECIFICATIONS WORKSHEET AMBULANCES
INCLUDE IN PROPOSAL BINDER UNDER TAB IV-A**

SPEC #	Complies Y/N	If N, Explain (a) how the proposal deviation is different; (b) how the deviation meets or exceeds the specifications; and (c) why it is necessary.
5.158	NO EXCEPTIONS	
5.159		
5.160		Provide explanation under TAB IV-A
5.161		Provide explanation under TAB IV-A
5.162		Provide explanation under TAB IV-A
5.163		Provide explanation under TAB IV-A
5.164		Provide explanation under TAB IV-A
5.165		Provide explanation under TAB IV-A
5.166		