DOOLEY ROBERTS & FOWLER LLP
Suite 201, Orlean Pacific Plaza
865 South Marine Corps Drive
Tamuning, Guam 96913
Telephone No. (671) 646-1222
Facsimile No. (671) 646-1223

Attorneys for Appellant
Morrico Equipment, LLC

RECEIVED
OFFICE OF PUBLIC ACCOUNTABILITY
PROCUREMENT APPEALS
DATE: 01/31/13
TIME: 3:35 ☐AM ☑PM BY: JB
FILE NO OPA-PA: 13-001

THE OFFICE OF PUBLIC ACCOUNTABILITY

In the Procurement Appeal of	)	**NOTICE OF PROCUREMENT APPEAL**
MORRICO EQUIPMENT, LLC,	)	
Appellant.	)	Docket No. OPA-PA 13-001

Appellant Information:

Morrico Equipment, LLC ("Morrico")
197 Ypao Road
Tamuning, Guam 96931

Tel: 649-1946
Fax: 649-1947

Appeal Information:

A) General Services Agency (GSA) on behalf of Guam Fire Department.

B) Multi-Step Bid No.: GSA-005-13; New and Current Year, Custom Cab-Forward Pumpers, New and Current Year, Urban/Wildland Interface Pumpers, and 5-Year Extended Service/Maintenance Agreements.

C) Decision being appealed was made on January 30, 2013, by the Chief Procurement Officer, Claudia Acfalle, and received by Morrico on January 30, 2013.

D) Appeal is made from a decision on protest of method, solicitation or award.

E) Names of competing bidders:

MidPac Far East and Fleet Services.

Form and Filing:

1. On November 16, 2012, the GSA let the subject Multi-Step Bid. On January 23, 2013, the GSA advised Morrico that its "bid proposal has been rejected due to non-conformance

with the delivery requirement as stated in this Multi-Step Bid which specifically indicates: 240 days upon receipt of purchase order."

On January 23, 2013, Morrico filed its formal protest ("Protest") of the GSA's determination to reject the Morrico bid proposal. The substance of the Morrico protest was that the Multi-Step Bid first required the GSA to score a bidder's proposal on five separate criteria as shown on **Exhibit A** hereto. Each of the five criteria is worth 20 points, for a total of 100 possible points. Delivery was worth only 10 points out of 20 under the fourth criteria "Manufacturing and Delivery Schedule." Any score above 60 is considered potentially acceptable and would allow the bidder to be considered in the second step of the bid which concerns pricing. *See*, 2 GAR § 3109(t)(4) and (5).

On January 30, 2013, the GSA wrote to Morrico outlining and responding to each of the points in Morrico's protest and formally denying the protest. The January 30, 2013, letter from the GSA is attached hereto as **Exhibit B** and incorporated herein by reference. The GSA rejected the Morrico bid proposal outright based on what it considered a non-conforming delivery time and therefore did not even score the Morrico bid proposal on the five criteria listed in the Multi-Step Bid and as shown on Exhibit A hereto.

2. Morrico requests that the Office of Public Auditor rule that the reason given by the GSA for rejecting the Morrico bid proposal and for denying Morrico's protest constitutes an abuse of discretion and that the matter be remanded to the GSA with instructions to rescind its rejection of the Morrico bid proposal and to proceed to step two of the Multi-Step Bid with consideration of the Morrico bid proposal.

3. Supporting documents are attached as **Exhibit C**.

Declaration regarding court action:

Morrico confirms that an action in court has not been commenced.

Dated this 31st day of January, 2013.

DOOLEY ROBERTS & FOWLER LLP

By: _____
KEVIN J. FOWLER
Attorneys for Appellant Morrico Equipment, LLC

VERIFICATION

Tamuning, Guam) ss:

I, Torgun Smith, hereby declare under penalty of perjury under the laws of Guam that I am the Executive Vice President for Appellant Morrico and that I have read the foregoing Notice of Procurement Appeal and it is true to my own knowledge except as to matters alleged upon information and belief and as to those matters, I believe them to be true.

Dated this 31st day of January, 2013.

TORGUN SMITH

KJF: tg/M-278.11

PHASE I

TECHNICAL BID EVALUATION CRITERIA

For the New and Current Year Custom Cab-Forward Pumper

and New and Current Year Urban/Wildland Interface Pumper

Technical Bids of a multi-step bid are not opened publicly but in front of two (2) or more procurement officials. 2 GAR §3109(t)(3)

Each technical bid proposal will be evaluated based on the following criteria:

CRITERIA:

1. **Contractor's overall conformance to specification** **(20 Points)**
   a.) Specification adherence or provided equivalencies meeting intent or performance of function (10 points)

   b.) Dimension and design specifications (Size, Compartment layout, appearance, and accessibility to compartment and tools) (5 points)

   c.) Technical specifications (materials used, engineering, and overall design) (5 points)

2. **Contractor's Logistical and Service Support** **(20 Points)**
   a.) Fire Apparatus appropriate repair, maintenance, and sheltering facility. (5 points)
   b.) In house service capability and timeliness of service (5 points)
   c.) Service Technician Qualifications/Certifications (5 points)
   d.) Availability of consumable parts and supplies (5 points)

3. **Warranty provisions** **(20 Points)**
   a.) Warranty provisions and coverage. (10 points)
   b.) Manufacturer and factory warranty support. (5 points)
   c.) Designated One-Stop (Single Point of Contact) warranty Support representative. (5 points)

4. **Manufacturing and Delivery schedule** **(20 Points)**
   a.) Manufacture and Delivery Timelines. (10 points)
   b.) Acceptability of transportation, shipping and delivery procedures. (5 points)
   c.) Accessibility to manufacturing and transportation Progress information. (5 points)

5. **Contractor's Demonstrated Capabilities and Qualifications** **(20 Points)**
   a.) Contractor's/Manufacturer's design and engineering performance on similar vehicles (Recent Deliveries and customer references). (10 points)

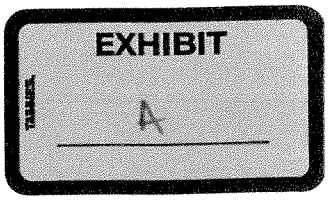
   b.) Acceptability of transportation, shipping and delivery procedures. (5 points)
   c.) Accessibility to manufacturing and transportation Progress information. (5 points)

80 – 100	**ACCEPTABLE**
60 – 79	**POTENTIALLY ACCEPTABLE**
59 and Below	**UNACCEPTABLE**

- Each bid shall be evaluated on the five factors stated above. This is a Multi-Step Invitation for bid, the sealed "BID COST" will only be opened and considered after the "TECHNICAL BID" has been evaluated and determined by GFD to be acceptable in the first phase. **2 GAR §3109(t)**

- Oral or Written discussions may be conducted on the unpriced "TECHNICAL BID" offer. **2 GAR §3109(t)(1)(e)**

- Bidders may designate those portions of the unpriced "TECHNICAL BID" offer which contain trade secrets or other proprietary data which are to remain confidential. **2 GAR §3109(t)(1)(f)**



Eddie Baza Calvo
Governor

Benita A. Manglona
Director

GSA

GENERAL SERVICES AGENCY
(Ahensian Setbision Hinlrat)
Department of Administration
148 Route 1 Marine Drive, Piti, Guam 96915
Tel: (671) 475-1707 Fax Nos: (671) 475-1727 / 475-1716

Ray Tenorio
Lieutenant Governor

Anthony C. Blaz
Deputy Director

January 30, 2013

Allan Morrison
President
Morrico Equipment LLC
197 Ypao Raod
Tamuning, Guam 96913

Re: Protest – Multi-Step Bid No.: GSA-005-13
(New and Current Year Cab Forward Pumper Truck Apparatus. New and Current Year Urban Wildfire Interface Pumper and 5 year Extended Service/Maintenance Agreements.)

Dear Mr. Morrison:

Buenas Yan Hafa Adai! This is to acknowledge receipt of your protest letter that was lodged on 23 January 2013 on GSA-005-13.

Based on our technical evaluation your protest was determined to be without merit. The following is the basis of our determination:

Issue No. 1

Morrico stated: "The technical analysis procedure of this multi-step bid has been incorrectly implemented by GSA. The letter of bid rejection to Morrico Equipment LLC is therefore invalid. Item 4 of the technical evaluation factors Page 116 of the GSA bid documents awards only 10 of the available 100 technical points to "Delivery Schedule."

Response:

Morrico Equipment LLC was rejected due to non-conformance with the 240 days delivery requirement as stated on Invitation for Bid No.: GSA-005-13. Therefore, the evaluation committee did not continue with the technical evaluation process of Morrico's technical bid package since delivery cannot be considered as a minor informality.

Issue No. 2

Morrico stated: "In regard to how many of those 10 points for delivery Morrico should be awarded for this item is subjective. In our opinion Morrico should be awarded a minimum of 5 out of the 10 points on offer."

Response:

Same response to Issue #1.

Please Print
ACKNOWLEDGEMENT COPY (Re-fax to GSA)
Received BY: Vince Cruz
Date: 1/29/13
Vendor Name: MORRICO EQUIPMENT LLC
Fax #'s: 472-4217 / 475-1727 / 1716

COMMITED TO EXCELLENCE

EXHIBIT
B

Issue No. 3

Morrico stated: "Morrico has quoted 270 days as opposed to the requested 240 days. A delivery only 30 days over that requested. Rosenbaurer America had already provided GFD the estimated Guam delivery times when "expert industry comment" was requested on GFD's draft Multi Step bid specifications in August 2012. Expert industry advice was requested and was provided to GFD on truck delivery time lines."
Response:

Same response to Issue #1

Issue #4

Morrico stated: "This is a US federally funded project that has taken GFD over 36 months to get to this point in the bid process. We expect a correct and competent implementation of the multi-step bid process in accordance with the bid documentation presented

Response:

We agree with your comment that you expect a correct and competent implementation of the multi-step bid process. Our determination to reject Morrico's bid package is based on non-conformance with the 240 days delivery requirement as stated on Invitation for Bid No.: GSA-005-13, we believe is correct due to delivery is not considered as a minor informality based on procurement statutes and or regulations.

Issue #5

Morrico stated: "On a technical analysis basis Morrico Equipment LLC and Rosenbauer America are very confident that our bid proposal will score well above 80 points on the technical evaluation portion of this bid evaluation."

Response:

Same response to Issue #1

Issue #6

Morrico stated: "A technical score of 80 – 100 points is deemed : Acceptable. Page 116/116 of subject GSA Bid Docs."

Response:

Same response to Issue #1

Issue #7

Morrico stated: "Under the terms of this technical evaluation any bid proposal must score a minimum of 60 points in order to make it to the Stage Two bid evaluation, which is price. We request that GSA show Morrico Equipment LLC the technical evaluation score sheet result. Marico should have scored close to 90 points on this evaluation."

Response:

Same response as Issue #1
Issue #8

Morrico stated: "Page 116/116 GSA Bid Documentations. Each Technical Bid Proposal will be evaluated based on the following criteria. Five technical evaluation criteria are then listed. Each is worth 20 points."

Response:

Same response as Issue #1

Issue #9

Morrico stated: "The Multi Step bid analysis score procedure is clearly defined in the government bid documents. Page 116/116 details the scoring methodology that is to be followed for the technical aspect of this bid. Each technical offer is marked out of 100. A technical score of 59 or below results I rejection of the proposal."

Response:

Same response as Issue #1

Issue #10

Morrico stated: "Page 116 third to lst paragraph: Each bid shall be evaluated on the five factors above. This is a multi-step invitation to bid."

Response:

Same response as Issue #1

Issue #11

Morrico stated: "Item 4 of these factors is: Manufacturing and Delivery Schedule. Worth 20 points. Item 4.a. Manufacturing and Delivery Time Lines. Worth 10 Points.

Response:

The intent of including in the evaluation criteria 4.a. Manufacturing and Delivery Timelines is to evaluate amongst the bidders how soon it will take from Point A to Point B to Point C. However, the bidder must meet the 240 days delivery requirement as stated on Invitation for Bid No.: GSA-005-13. On this case, Morrico failed to meet the 240 days delivery requirement, therefore, could not proceed with the technical evaluation due to non-conformance with the delivery requirement of the bid.

Issue #12

Morrico stated: "We draw attention to Page 116 of 116 the second to last paragraph and make note that no oral or written discussions have occurred between Marico and GFD or GSA on this bid proposal. We

question how a technical analysis of this size can be completed accurately without requesting clarification on any single issue."

Response:

Same response as Issue #1

Issue #13

Morrico stated: "The reason a Multi-Step bid process was recommended by Morrico Equipment LLC to the government of Guam for this particular requirement was because the specifications and requirements are particularly complex. Fire Trucks have to work because they save lives in the Guam community. A balanced and competent technical analysis is of each bidder's technical proposal is required in accordance with the multi-step bid documents presented by the government."

Response:

Same response as Issue #4

Issue #14

Morrico stated: "We confirm that all bid analysis work is to stop immediately upon receipt of a bid protest. We request immediate acknowledgement of our bid protest and confirmation that stage 2 bid evaluation scheduled for 9:00 a.m., Thursday 24 January 2013, will be postponed until the bid protest has been determined.

Response:

Yes. GSA issued a Stay of Procurement and did not proceed with the Step 2 process of the Multi-Step Bid.

Issue #15

Stage 2 (Price) is scheduled for 9:00 a.m., Thursday 24 January 2013.

Response:

Concern well noted.

Upon receipt of this notice, you are notified that it is our determination that your protest is deemed to be without merit and that you have the right to seek administrative or judicial review within the confines law.

Sincerely,

CLAUDIA S. ACFALLE
Chief Procurement Officer

cc: Office of the Attorney General

Eddie Baza Calvo
Governor

Benita A. Manglona
Director

GSA

GENERAL SERVICES AGENCY
(Ahensian Setbision Hinirat)
Department of Administration
148 Route 1 Marine Drive, Piti, Guam 96915
Tel: (671) 475-1707 Fax Nos: (671) 475-1727 / 475-1716

Ray Tenorio
Lieutenant Governor

Anthony C. Blaz
Deputy Director

Morrico Equipment LLC
197 Ypao Road
Tamuning, Guam 96913
Attention: Rene Molinos

January 23, 2013

Re: Multi-Step Bid No. GSA-005-13
New and Current Year Cab-Forward Pumper Truck Apparatus, New and Current Year Urban/Wildlife Interface Pumper and 5-Year Extended Service/Maintenance Agreements

Dear Mr. Molinos,

This is to inform you that your bid proposal has been rejected due to non-conformance with the delivery requirement as stated in this Multi-Step Bid which specifically indicates: **240 days upon receipt of purchase order.**

On your Letter of Deviation submitted it indicates: The first Pumper Truck and first Interface Truck will be delivered to the Guam Fire Department office within **270 days ARO.**

As a courtesy, GSA would like to extend an invitation to you for Phase 2 of this Multi-Step bid on January 24, 2013 9:00 a.m. located at GSA #148 Route 1 Marine Corp Drive, Piti.

1/23/13
Claudia S. Acfalle
Chief Procurement officer

ACKNOWLEDGEMENT COPY

RECEIVED BY: Vince Cruz

DATE: 1/23/13

EXHIBIT
C

GENERAL SERVICES AGENCY
148 Route 1 Marine Drive, Piti Guam 96915
Tel: 475-1713 * Telefax: 472-4217; 475-1716; 475-1727

Accountability * Impartiality * Competence * Openness * Value

MULTI-STEP BID NO. : GSA-005-13

DESCRIPTION:

**New and Current Year, Custom Cab-Forward Pumpers,
New and Current Year, Urban/Wildland Interface Pumpers,
and 5-Year Extended Service/Maintenance Agreements**

SPECIAL REMINDER TO PROSPECTIVE BIDDERS

Bidders are reminded to read the Sealed Bid Solicitation and Instructions, and General Terms and Conditions attached to the Multi-Step Bid to ascertain that all of the following requirements checked below are submitted in the bid enveloped, one original and three copies, at the date and time for bid submission.

(X) BID GUARANTEE (15% of Bid Amount) May be in the form of;
Reference #11 on the General Terms and Conditions

a. Cashier's Check or Certified Check
b. Letter of Credit must not expire earlier than ninety (90) days from the date of submittal
c. Surety Bond – Valid only if accompanied by:

1. Current Certificate of Authority issued by the Insurance Commissioner;
2. Power of Attorney issued by the Surety to the Resident General Agent;
3. Power of Attorney issued by two (2) major officers of the Surety to whoever is signing on their behalf.

(X) BROCHURES/DESCRIPTIVE LITERATURE;

(X) AFFIDAVIT DISCLOSING OWNERSHIP and COMMISSION
a. Date of signature of the person authorized to sign the bid and the notary date must be the same.

(X) OTHER REQUIREMENTS: Non-Collusion Affidavit, D.O.L. Wage Determination Affidavit, Restriction against Sexual Offenders Affidavit, No Kickbacks or Gratuities Affidavit and Ethical Standards Affidavit, and Affidavit re Contingent Fees

NOTE: TECHNICAL AND BID COST SHALL BE SUBMITTED IN A SEPARATE ENVELOPE LABELED "TECHNICAL BID" AND "BID COST". ALL REQUIRED FORMS AND AFFIDAVITS SHALL BE SUBMITTED IN THE ENVELOPE LABELED "TECHNICAL BID". REQUIRED BID BOND SHALL BE SUBMITTED IN THE ENVELOPE LABELED "BID COST". **DO NOT INCLUDE BID COST WITH TECHNICAL BID PACKAGE**

***NOTE**: IF BID COST IS INCLUDED WITH THE TECHNICAL PROPOSAL IT WOULD BE DEEMED AUTOMATIC DISQUALIFICATION OR REJECTION.

This reminder must be signed and returned in the bid envelope together with the technical bid. Failure to comply with the above requirements may be cause for disqualification and rejection of the bid.

On this _____ day of _____, 2012, I, _____,

authorized representative of _____ acknowledge receipt of this special reminder to prospective bidders with the above referenced Multi-Step Bid.

_____
Bidder Representative's Signature

DOA 132
Rev: 1/95

Multi-Step Bid No.: GSA-005-13

New and Current Year Custom Cab-Forward Fire Pumpers,
New Current Year Urban/Wildland Interface Pumpers,
and Five (5) Year Extended Service/Maintenance Agreements

ACKNOWLEDGEMENT RECEIPT FORM

Please be advised that to be considered a prospective bidder you must fill out this Acknowledgement receipt form. Please submit via email or fax form to Euphrasia.lujan@gsa.guam.gov or fax to 472-4217 / 475-1727

Name _____

Signature _____

Date _____

Time _____

Contact Number _____

Fax Number _____

Contact Person regarding IFB _____

Title _____

E-Mail Address _____

Company/Firm _____

Address _____

Note: GSA will not be liable for failure to provide notice to any party who did not register contact information.

For any questions or concerns please contact Belinda.paulino@gsa.guam.gov at 475-1711 or fax 475-1727

All questions and concerns must be submitted no later than **November 24, 2012** before the close of business.

MULTI-STEP BID

ISSUING OFFICE:

GENERAL SERVICES AGENCY
GOVERNMENT OF GUAM
148 ROUTE 1, MARINE DRIVE
PITI, GUAM 96915

Robt H. Kono 11/14/12
ROBERT KONO
Chief Procurement Officer (Acting)

DATE ISSUED: November 16, 2012 BID INVITATION NO: GSA-005-13

BID FOR: **NEW AND CURRENT YEAR CAB-FORWARD FIRE PUMPER APPARATUS, NEW AND CURRENT YEAR URBAN/WILDLAND INTERFACE PUMPER AND 5-YEAR EXTENDED SERVICE/MAINTENANCE AGREEMENTS**

SPECIFICATION: **See Attached**

DESTINATION: **Guam Fire Department**

REQUIRED DELIVERY DATE: 240 Days Upon Receipt of Purchase Order. For a period of one (1) year on an as needed basis. This is an indefinite bid quantity.

INSTRUCTION TO BIDDER:

INDICATE WHETHER: ____ INDIVIDUAL ____ PARTNERSHIP ____ CORPORATION

INCORPORATED IN: _____

Each bidder shall submit one original and three copies of the technical bid no later than **Date: 12/03/12 at 10:00am.** The technical bids (one original and three copies) shall be submitted in a sealed envelope marked conspicuously with the bidder name and address, bid number, and the type of proposal (Technical Bid). Bid submitted after the time and date specified above shall be rejected. See attached General Terms and Conditions and Custom Cab Pumpers specifications for details. Technical bids submitted will not be publicly opened.

The undersigned offers and agrees to furnish within the time specified, the articles and services at the price stated opposite the respective items listed on the schedule provided, unless otherwise specified by the bidder. In consideration to the expense of the Government in opening, tabulating, and evaluating this and other bidders, and other considerations, the undersigned agrees that this bid remain firm and irrevocable within **90** calendar days from the date of submittal to supply any or all the items which prices are offered.

NAME AND ADDRESS OF OFFEROR:

_____

_____

_____

SIGNATURE AND TITLE OF PERSON AUTHORIZED TO SIGN THIS BID:

_____

AWARD: CONTRACT NO.: _____ **AMOUNT:** _____ **DATE:** _____

ITEM NO(S). AWARDED: _____

CONTRACTING OFFICER:

_____
ROBERT KONO
Chief Procurement Officer (Acting)

NAME AND ADDRESS OF CONTRACTOR:

_____

_____

_____

_____

SIGNATURE AND TITLE OF PERSON AUTHORIZED TO SIGN THIS CONTRACT:

_____

SPECIAL PROVISIONS

This is an "Indefinite Quantity Bid" pursuant to Section 3119(i)(2) of the 2GAR Procurement Regulations. The quantities reflected are estimated requirements projected within a twelve (12) month period. These amounts may increase during the term of this bid. However, regardless of the fluctuation of quantities, this bid shall be subject to the availability of funds.

Delivery:
240 Days upon receipt of purchase order. Schedule time and quantity will be coordinated between the successful bidder and the requesting department on an as needed basis.

Contract Period:
The term of this contract is for a period of one (1) year on an as needed basis upon availability of funds

Additional Requirement:
In the event that other agencies within the Government of Guam, having the same requirements, upon notifications and acceptance of the additional requirements, the effective price of said bid, shall be used as a confirm price. This additional requirement shall not exceed the term of this bid.

AFFIDAVIT RE ETHICAL STANDARDS

TERRITORY OF GUAM)
) ss.
HAGATNA, GUAM)

_____[*state name of affiant signing below*], being first duly sworn, deposes and says that:

The affiant is _____ [*state one of the following: the offeror, a partner of the offeror, an officer of the offeror*] making the foregoing identified bid or proposal. To the best of affiant's knowledge, neither affiant nor any officers, representatives, agents, subcontractors or employees of offeror have knowingly influenced any government of Guam employee to breach any of the ethical standards set forth in 5 GCA Chapter 5, Article 11. Further, affiant promises that neither he or she, nor any officer, representative, agent, subcontractor, or employee of offeror will knowingly influence any government of Guam employee to breach any ethical standards set forth in 5 GCA Chapter 5, Article 11. These statements are made pursuant to 2 GAR Division 4 § 11103(b).

_____
Signature of one of the following:
Offeror, if the offeror is an individual;
Partner, if the offeror is a partnership;
Officer, if the offeror is a corporation.

Subscribed and sworn to before me
this _____ day of _____, 201__.

_____
NOTARY PUBLIC
My commission expires _____, _____.

AFFIDAVIT re NO GRATUITIES or KICKBACKS

TERRITORY OF GUAM)
) ss.
HAGATNA, GUAM)

_____[*state name of affiant signing below*], being first duly sworn, deposes and says that:

1. The name of the offering firm or individual is [*state name of offeror company*] _____. Affiant is _____ [*state one of the following: the offeror, a partner of the offeror, an officer of the offeror*] making the foregoing identified bid or proposal.

2. To the best of affiant's knowledge, neither affiant, nor any of the offeror's officers, representatives, agents, subcontractors, or employees have violated, are violating the prohibition against gratuities and kickbacks set forth in 2 GAR Division 4 § 11107(e). Further, affiant promises, on behalf of offeror, not to violate the prohibition against gratuities and kickbacks as set forth in 2 GAR Division 4 § 11107(e).

3. To the best of affiant's knowledge, neither affiant, nor any of the offeror's officers, representatives, agents, subcontractors, or employees have offered, given or agreed to give, any government of Guam employee or former government employee, any payment, gift, kickback, gratuity or offer of employment in connection with the offeror's proposal.

4. I make these statements on behalf of myself as a representative of the offeror, and on behalf of hte offeror's officers, representatives, agents, subcontractors, and employees.

_____
Signature of one of the following:
Offeror, if the offeror is an individual;
Partner, if the offeror is a partnership;
Officer, if the offeror is a corporation.

Subscribed and sworn to before me

this _____ day of _____, 201__.

_____
NOTARY PUBLIC
My commission expires _____, _____.

Eddie Baza Calvo
Governor

GENERAL SERVICES AGENCY
Government of Guam
148 Route 1 Marine Drive Corp
Piti, Guam 96915

Ray Tenorio
Lt. Governor

Benita Manglona
Director, Dept. of Admin. (Acting)

George A. Santos
Deputy Director

Special Provisions

Restriction against Sex Offenders Employed by service providers to Government of Guam from working on Government Property.

If a contract for services is awarded to the bidder or offeror, then the service provider must warranty that no person in its employment who has been convicted of a sex offense under the provisions of chapter 25 of Title 9 of Guam code Annotated or of an offense defined in Article 2 of chapter 28 of Title 9 of the Guam Code annotated, or who has been convicted in any other jurisdiction of an offense with the same elements as heretofore defined, or who is listed on the Sex Offender Registry, shall provide services on behalf of the service provider while on government of Guam property, with the exception of public highways. If any employee of a service provider is providing services on government property and is convicted subsequent to an award of a contract, then the service provider warrants that it will notify the Government of the conviction within twenty-four (24) hours of the conviction, and will immediately remove such convicted person from providing services on government property. If the service provider is found to be in violation of any of the provisions of this paragraph, then the government will give notice to the service provider to take corrective action. The service provider shall take corrective action within twenty-four (24) hours of notice from the Government, and the service provider shall notify the Government when action has been taken. If the service providers fail to take corrective steps within twenty-four (24) hours of notice from the Government, then the Government in its sole discretion may suspend temporarily and contract for services until corrective action has been taken.

_____
Signature of Bidder Date

Proposer, if an individual;
Partner, if a partnership;
Officer, if a corporation.

Subscribed and sworn before me this _____ day of _____, 201__

_____
Notary Public

Eddie Baza Calvo
Governor

GSA

Benita Manglona
Director, Dept. of Admin. (Acting)

GENERAL SERVICES AGENCY
Government of Guam
148 Route 1 Marine Drive Corp
Piti, Guam 96915

Ray Tenorio
Lt. Governor

George A. Santos
Deputy Director

FORM E
DECLARATION RE COMPLIANCE WITH U.S. D.O.L. WAGE DETERMINATION

Procurement No: GSA-005-13
New and Current Year, Custom Cab-Forward Pumpers, New and Current Year, Urban Interface Pumpers, and 5-Year Extended Service/Maintenance Agreements

Name of Offeror Company: _____ hereby certifies under penalty of perjury:

(1) That I am _____(the offeror, a partner of the offeror, an officer of the offeror) making the bid or proposal in the foregoing identified procurement;

(2) That I have read and understand the provisions of 5 GCA § 5801 and § 5802 which read:

§ 5801. Wage Determination Established.

In such cases where the government of Guam enters into contractual arrangements with a sole proprietorship, a partnership or a corporation ("contractor") for the provision of a service to the government of Guam, and in such cases where the contractor employs a person(s) whose purpose, in whole or in part, is the direct delivery of service contracted by the government of Guam, then the contractor shall pay such employee(s) in accordance with the Wage Determination for Guam and the Northern Mariana Islands issued and promulgated by the U.S. Department of Labor for such labor as is employed in the direct delivery of contract deliverables to the government of Guam.

The Wage Determination most recently issued by the U.S. Department of Labor at the time a contract is awarded to a contractor by the government of Guam shall be used to determine wages, which shall be paid to employees pursuant to this Article. Should any contract contain a renewal clause, then at the time of renewal adjustments, there shall be made stipulations contained in that contract for applying the Wage Determination, as required by this Article, so that the Wage Determination promulgated by the U.S. Department of Labor on a date most recent to the renewal date shall apply.

§ 5802. Benefits.

In addition to the Wage Determination detailed in this Article, any contract to which this Article applies shall also contain provisions mandating health and similar benefits for employees covered by this Article, such benefits having a minimum value as detailed in the Wage Determination issued and promulgated by the U.S. Department of Labor, and shall contain provisions guaranteeing a minimum of ten (10) paid holidays per annum per employee.

(3) That the offeror is in full compliance with 5 GCA § 5801 and § 5802, as may be applicable to the procurement referenced herein;

(4) That I have attached the most recent wage determination applicable to Guam issued by the U.S. Department of Labor. [INSTRUCTIONS – Please attach!]

_____
Signature Date

REGISTER OF WAGE DETERMINATIONS UNDER THE SERVICE CONTRACT ACT
By direction of the Secretary of Labor

U.S. DEPARTMENT OF LABOR
EMPLOYMENT STANDARDS ADMINISTRATION
WAGE AND HOUR DIVISION
WASHINGTON D.C. 20210

Wage Determination No.: 2005-2147
Revision No.: 14
Date Of Revision: 06/13/2012

Diane C. Koplewski
Director

Division of
Wage Determinations

States: Guam, Northern Marianas, Wake Island

Area: Guam Statewide
Northern Marianas Statewide
Wake Island Statewide

Fringe Benefits Required Follow the Occupational Listing

OCCUPATION CODE - TITLE	FOOTNOTE	RATE
01000 - Administrative Support And Clerical Occupations		
01011 - Accounting Clerk I		12.50
01012 - Accounting Clerk II		13.53
01013 - Accounting Clerk III		15.59
01020 - Administrative Assistant		17.67
01040 - Court Reporter		15.38
01051 - Data Entry Operator I		10.48
01052 - Data Entry Operator II		11.99
01060 - Dispatcher, Motor Vehicle		13.06
01070 - Document Preparation Clerk		12.25
01090 - Duplicating Machine Operator		12.25
01111 - General Clerk I		10.29
01112 - General Clerk II		11.28
01113 - General Clerk III		12.32
01120 - Housing Referral Assistant		17.15
01141 - Messenger Courier		10.12
01191 - Order Clerk I		11.23
01192 - Order Clerk II		12.25
01261 - Personnel Assistant (Employment) I		14.33
01262 - Personnel Assistant (Employment) II		14.90
01263 - Personnel Assistant (Employment) III		16.48
01270 - Production Control Clerk		18.34
01280 - Receptionist		9.67
01290 - Rental Clerk		11.10
01300 - Scheduler, Maintenance		13.75
01311 - Secretary I		13.75
01312 - Secretary II		15.38
01313 - Secretary III		17.15
01320 - Service Order Dispatcher		11.57
01410 - Supply Technician		17.67
01420 - Survey Worker		15.26
01531 - Travel Clerk I		11.61
01532 - Travel Clerk II		12.57
01533 - Travel Clerk III		13.44
01611 - Word Processor I		12.25
01612 - Word Processor II		13.75
01613 - Word Processor III		15.38
05000 - Automotive Service Occupations		
05005 - Automobile Body Repairer, Fiberglass		13.34
05010 - Automotive Electrician		13.06
05040 - Automotive Glass Installer		12.10
05070 - Automotive Worker		12.10
05110 - Mobile Equipment Servicer		8.59
05130 - Motor Equipment Metal Mechanic		13.06
05160 - Motor Equipment Metal Worker		12.10
05190 - Motor Vehicle Mechanic		13.06
05220 - Motor Vehicle Mechanic Helper		10.12
05250 - Motor Vehicle Upholstery Worker		12.10
05280 - Motor Vehicle Wrecker		12.10
05310 - Painter, Automotive		12.37
05340 - Radiator Repair Specialist		12.10
05370 - Tire Repairer		7.81
05400 - Transmission Repair Specialist		12.10

07000 - Food Preparation And Service Occupations	
07010 - Baker	10.47
07041 - Cook I	9.54
07042 - Cook II	11.78
07070 - Dishwasher	7.25
07130 - Food Service Worker	7.78
07210 - Meat Cutter	11.86
07260 - Waiter/Waitress	7.59
09000 - Furniture Maintenance And Repair Occupations	
09010 - Electrostatic Spray Painter	14.38
09040 - Furniture Handler	8.85
09080 - Furniture Refinisher	14.38
09090 - Furniture Refinisher Helper	10.66
09110 - Furniture Repairer, Minor	12.51
09130 - Upholsterer	14.38
11000 - General Services And Support Occupations	
11030 - Cleaner, Vehicles	8.23
11060 - Elevator Operator	8.23
11090 - Gardener	10.99
11122 - Housekeeping Aide	8.33
11150 - Janitor	8.23
11210 - Laborer, Grounds Maintenance	9.14
11240 - Maid or Houseman	7.25
11260 - Pruner	8.23
11270 - Tractor Operator	10.33
11330 - Trail Maintenance Worker	9.14
11360 - Window Cleaner	9.14
12000 - Health Occupations	
12010 - Ambulance Driver	15.81
12011 - Breath Alcohol Technician	15.81
12012 - Certified Occupational Therapist Assistant	21.70
12015 - Certified Physical Therapist Assistant	21.70
12020 - Dental Assistant	13.20
12025 - Dental Hygienist	29.85
12030 - EKG Technician	23.96
12035 - Electro-neuro diagnostic Technologist	23.96
12040 - Emergency Medical Technician	15.81
12071 - Licensed Practical Nurse I	14.14
12072 - Licensed Practical Nurse II	15.81
12073 - Licensed Practical Nurse III	17.63
12100 - Medical Assistant	11.54
12130 - Medical Laboratory Technician	14.14
12160 - Medical Record Clerk	11.82
12190 - Medical Record Technician	13.59
12195 - Medical Transcriptionist	14.14
12210 - Nuclear Medicine Technologist	34.75
12221 - Nursing Assistant I	10.03
12222 - Nursing Assistant II	11.30
12223 - Nursing Assistant III	12.31
12224 - Nursing Assistant IV	13.84
12235 - Optical Dispenser	15.81
12236 - Optical Technician	14.14
12250 - Pharmacy Technician	13.41
12280 - Phlebotomist	13.84
12305 - Radiologic Technologist	22.64
12311 - Registered Nurse I	20.70
12312 - Registered Nurse II	25.32
12313 - Registered Nurse II, Specialist	25.32
12314 - Registered Nurse III	30.64
12315 - Registered Nurse III, Anesthetist	30.64
12316 - Registered Nurse IV	36.72
12317 - Scheduler (Drug and Alcohol Testing)	19.59
13000 - Information And Arts Occupations	
13011 - Exhibits Specialist I	15.06
13012 - Exhibits Specialist II	18.66
13013 - Exhibits Specialist III	22.83
13041 - Illustrator I	15.06
13042 - Illustrator II	18.66
13043 - Illustrator III	22.83
13047 - Librarian	20.66
13050 - Library Aide/Clerk	12.00
13054 - Library Information Technology Systems Administrator	18.66
13058 - Library Technician	15.06
13061 - Media Specialist I	13.46

13062 - Media Specialist II		15.06
13063 - Media Specialist III		16.80
13071 - Photographer I		12.82
13072 - Photographer II		14.32
13073 - Photographer III		17.75
13074 - Photographer IV		21.73
13075 - Photographer V		26.30
13110 - Video Teleconference Technician		12.91
14000 - Information Technology Occupations		
14041 - Computer Operator I		13.65
14042 - Computer Operator II		15.76
14043 - Computer Operator III		17.56
14044 - Computer Operator IV		19.50
14045 - Computer Operator V		21.81
14071 - Computer Programmer I	(see 1)	15.73
14072 - Computer Programmer II	(see 1)	19.50
14073 - Computer Programmer III	(see 1)	23.84
14074 - Computer Programmer IV	(see 1)	
14101 - Computer Systems Analyst I	(see 1)	24.23
14102 - Computer Systems Analyst II	(see 1)	
14103 - Computer Systems Analyst III	(see 1)	
14150 - Peripheral Equipment Operator		13.65
14160 - Personal Computer Support Technician		19.50
15000 - Instructional Occupations		
15010 - Aircrew Training Devices Instructor (Non-Rated)		24.23
15020 - Aircrew Training Devices Instructor (Rated)		29.32
15030 - Air Crew Training Devices Instructor (Pilot)		33.30
15050 - Computer Based Training Specialist / Instructor		24.23
15060 - Educational Technologist		22.82
15070 - Flight Instructor (Pilot)		33.30
15080 - Graphic Artist		20.47
15090 - Technical Instructor		17.65
15095 - Technical Instructor/Course Developer		21.58
15110 - Test Proctor		13.87
15120 - Tutor		13.87
16000 - Laundry, Dry-Cleaning, Pressing And Related Occupations		
16010 - Assembler		8.08
16030 - Counter Attendant		8.08
16040 - Dry Cleaner		9.34
16070 - Finisher, Flatwork, Machine		8.08
16090 - Presser, Hand		8.08
16110 - Presser, Machine, Dry-cleaning		8.08
16130 - Presser, Machine, Shirts		8.08
16160 - Presser, Machine, Wearing Apparel, Laundry		8.08
16190 - Sewing Machine Operator		9.86
16220 - Tailor		10.33
16250 - Washer, Machine		8.46
19000 - Machine Tool Operation And Repair Occupations		
19010 - Machine-Tool Operator (Tool Room)		14.49
19040 - Tool And Die Maker		18.20
21000 - Materials Handling And Packing Occupations		
21020 - Forklift Operator		12.49
21030 - Material Coordinator		18.34
21040 - Material Expediter		18.34
21050 - Material Handling Laborer		10.65
21071 - Order Filler		9.66
21080 - Production Line Worker (Food Processing)		12.49
21110 - Shipping Packer		13.33
21130 - Shipping/Receiving Clerk		13.33
21140 - Store Worker I		13.23
21150 - Stock Clerk		18.58
21210 - Tools And Parts Attendant		12.49
21410 - Warehouse Specialist		12.49
23000 - Mechanics And Maintenance And Repair Occupations		
23010 - Aerospace Structural Welder		20.69
23021 - Aircraft Mechanic I		19.70
23022 - Aircraft Mechanic II		20.69
23023 - Aircraft Mechanic III		21.74
23040 - Aircraft Mechanic Helper		13.70
23050 - Aircraft, Painter		18.50
23060 - Aircraft Servicer		16.09
23080 - Aircraft Worker		17.38
23110 - Appliance Mechanic		14.49
23120 - Bicycle Repairer		9.74
23125 - Cable Splicer		15.43
23130 - Carpenter, Maintenance		13.00

23140 - Carpet Layer	13.55
23160 - Electrician, Maintenance	14.99
23181 - Electronics Technician Maintenance I	14.72
23182 - Electronics Technician Maintenance II	15.05
23183 - Electronics Technician Maintenance III	18.31
23260 - Fabric Worker	12.60
23290 - Fire Alarm System Mechanic	15.43
23310 - Fire Extinguisher Repairer	11.67
23311 - Fuel Distribution System Mechanic	15.43
23312 - Fuel Distribution System Operator	13.01
23370 - General Maintenance Worker	11.95
23380 - Ground Support Equipment Mechanic	19.70
23381 - Ground Support Equipment Servicer	16.09
23382 - Ground Support Equipment Worker	17.38
23391 - Gunsmith I	11.67
23392 - Gunsmith II	13.55
23393 - Gunsmith III	15.43
23410 - Heating, Ventilation And Air Conditioning Mechanic	15.76
23411 - Heating, Ventilation And Air Conditioning Mechanic (Research Facility)	16.55
23430 - Heavy Equipment Mechanic	15.15
23440 - Heavy Equipment Operator	13.73
23460 - Instrument Mechanic	15.43
23465 - Laboratory/Shelter Mechanic	14.49
23470 - Laborer	10.65
23510 - Locksmith	14.49
23530 - Machinery Maintenance Mechanic	17.38
23550 - Machinist, Maintenance	15.43
23580 - Maintenance Trades Helper	9.92
23591 - Metrology Technician I	15.43
23592 - Metrology Technician II	16.41
23593 - Metrology Technician III	17.37
23640 - Millwright	15.43
23710 - Office Appliance Repairer	14.38
23760 - Painter, Maintenance	13.55
23790 - Pipefitter, Maintenance	15.32
23810 - Plumber, Maintenance	14.38
23820 - Pneudraulic Systems Mechanic	15.43
23850 - Rigger	15.43
23870 - Scale Mechanic	13.55
23890 - Sheet-Metal Worker, Maintenance	15.21
23910 - Small Engine Mechanic	13.55
23931 - Telecommunications Mechanic I	19.01
23932 - Telecommunications Mechanic II	19.76
23950 - Telephone Lineman	18.24
23960 - Welder, Combination, Maintenance	14.66
23965 - Well Driller	15.43
23970 - Woodcraft Worker	15.43
23980 - Woodworker	11.67
24000 - Personal Needs Occupations	
24570 - Child Care Attendant	10.09
24580 - Child Care Center Clerk	12.58
24610 - Chore Aide	12.43
24620 - Family Readiness And Support Services Coordinator	12.44
24630 - Homemaker	16.12
25000 - Plant And System Operations Occupations	
25010 - Boiler Tender	15.43
25040 - Sewage Plant Operator	14.49
25070 - Stationary Engineer	15.43
25190 - Ventilation Equipment Tender	10.73
25210 - Water Treatment Plant Operator	14.49
27000 - Protective Service Occupations	
27004 - Alarm Monitor	10.90
27007 - Baggage Inspector	7.35
27008 - Corrections Officer	12.05
27010 - Court Security Officer	12.05
27030 - Detection Dog Handler	10.90
27040 - Detention Officer	12.05
27070 - Firefighter	12.05
27101 - Guard I	7.37
27102 - Guard II	10.90
27131 - Police Officer I	12.05
27132 - Police Officer II	13.40

28000 - Recreation Occupations		
28041 - Carnival Equipment Operator		9.53
28042 - Carnival Equipment Repairer		10.08
28043 - Carnival Equpment Worker		7.78
28210 - Gate Attendant/Gate Tender		13.18
28310 - Lifeguard		11.01
28350 - Park Attendant (Aide)		14.74
28510 - Recreation Aide/Health Facility Attendant		10.76
28515 - Recreation Specialist		18.26
28630 - Sports Official		11.74
28690 - Swimming Pool Operator		17.71
29000 - Stevedoring/Longshoremen Occupational Services		
29010 - Blocker And Bracer		15.20
29020 - Hatch Tender		15.20
29030 - Line Handler		15.20
29041 - Stevedore I		14.22
29042 - Stevedore II		16.25
30000 - Technical Occupations		
30010 - Air Traffic Control Specialist, Center (HFO)	(see 2)	35.77
30011 - Air Traffic Control Specialist, Station (HFO)	(see 2)	24.66
30012 - Air Traffic Control Specialist, Terminal(HFO)	(see 2)	27.16
30021 - Archeological Technician I		17.49
30022 - Archeological Technician II		19.56
30023 - Archeological Technician III		24.21
30030 - Cartographic Technician		23.18
30040 - Civil Engineering Technician		21.93
30061 - Drafter/CAD Operator I		17.49
30062 - Drafter/CAD Operator II		19.56
30063 - Drafter/CAD Operator III		20.74
30064 - Drafter/CAD Operator IV		24.21
30081 - Engineering Technician I		14.62
30082 - Engineering Technician II		16.41
30083 - Engineering Technician III		18.36
30084 - Engineering Technician IV		22.34
30085 - Engineering Technician V		27.83
30086 - Engineering Technician VI		33.66
30090 - Environmental Technician		21.10
30210 - Laboratory Technician		20.74
30240 - Mathematical Technician		23.34
30361 - Paralegal/Legal Assistant I		19.06
30362 - Paralegal/Legal Assistant II		21.53
30363 - Paralegal/Legal Assistant III		26.35
30364 - Paralegal/Legal Assistant IV		30.80
30390 - Photo-Optics Technician		21.93
30461 - Technical Writer I		22.17
30462 - Technical Writer II		27.10
30463 - Technical Writer III		32.79
30491 - Unexploded Ordnance (UXO) Technician I		22.74
30492 - Unexploded Ordnance (UXO) Technician II		27.51
30493 - Unexploded Ordnance (UXO) Technician III		32.97
30494 - Unexploded (UXO) Safety Escort		22.74
30495 - Unexploded (UXO) Sweep Personnel		22.74
30620 - Weather Observer, Combined Upper Air Or Surface Programs	(see 2)	20.74
30621 - Weather Observer, Senior	(see 2)	23.00
31000 - Transportation/Mobile Equipment Operation Occupations		
31020 - Bus Aide		8.15
31030 - Bus Driver		9.69
31043 - Driver Courier		8.97
31260 - Parking and Lot Attendant		7.25
31290 - Shuttle Bus Driver		9.99
31310 - Taxi Driver		8.21
31361 - Truck Driver, Light		8.97
31362 - Truck Driver, Medium		11.61
31363 - Truck Driver, Heavy		12.48
31364 - Truck Driver, Tractor-Trailer		12.48
99000 - Miscellaneous Occupations		
99030 - Cashier		7.46
99050 - Desk Clerk		9.70
99095 - Embalmer		22.74
99251 - Laboratory Animal Caretaker I		16.24
99252 - Laboratory Animal Caretaker II		17.04
99310 - Mortician		22.74
99410 - Pest Controller		13.28
99510 - Photofinishing Worker		11.95
99710 - Recycling Laborer		10.76

99711 - Recycling Specialist	16.27
99730 - Refuse Collector	10.24
99810 - Sales Clerk	8.95
99820 - School Crossing Guard	15.03
99830 - Survey Party Chief	20.30
99831 - Surveying Aide	11.54
99832 - Surveying Technician	15.00
99840 - Vending Machine Attendant	20.19
99841 - Vending Machine Repairer	23.57
99842 - Vending Machine Repairer Helper	20.19

ALL OCCUPATIONS LISTED ABOVE RECEIVE THE FOLLOWING BENEFITS:

HEALTH & WELFARE: $3.71 per hour or $148.40 per week or $643.07 per month

VACATION: 2 weeks paid vacation after 1 year of service with a contractor or successor; and 4 weeks after 3 years. Length of service includes the whole span of continuous service with the present contractor or successor, wherever employed, and with the predecessor contractors in the performance of similar work at the same Federal facility. (Reg. 29 CFR 4.173)

HOLIDAYS: A minimum of ten paid holidays per year, New Year's Day, Martin Luther King Jr's Birthday, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans' Day, Thanksgiving Day, and Christmas Day. (A contractor may substitute for any of the named holidays another day off with pay in accordance with a plan communicated to the employees involved.) (See 29 CFR 4174)

THE OCCUPATIONS WHICH HAVE NUMBERED FOOTNOTES IN PARENTHESES RECEIVE THE FOLLOWING:

1) COMPUTER EMPLOYEES: Under the SCA at section 8(b), this wage determination does not apply to any employee who individually qualifies as a bona fide executive, administrative, or professional employee as defined in 29 C.F.R. Part 541. Because most Computer System Analysts and Computer Programmers who are compensated at a rate not less than $27.63 (or on a salary or fee basis at a rate not less than $455 per week) an hour would likely qualify as exempt computer professionals, (29 C.F.R. 541. 400) wage rates may not be listed on this wage determination for all Occupations within those job families. In addition, because this wage determination may not list a wage rate for some or all occupations within those job families if the survey data indicates that the prevailing wage rate for the occupation equals or exceeds $27.63 per hour conformances may be necessary for certain nonexempt employees. For example, if an individual employee is nonexempt but nevertheless performs duties within the scope of one of the Computer Systems Analyst or Computer Programmer occupations for which this wage determination does not specify an SCA wage rate, then the wage rate for that employee must be conformed in accordance with the conformance procedures described in the conformance note included on this wage determination.

Additionally, because job titles vary widely and change quickly in the computer industry, job titles are not determinative of the application of the computer professional exemption. Therefore, the exemption applies only to computer employees who satisfy the compensation requirements and whose primary duty consists of:

(1) The application of systems analysis techniques and procedures, including consulting with users, to determine hardware, software or system functional specifications;

(2) The design, development, documentation, analysis, creation, testing or modification of computer systems or programs, including prototypes, based on and related to user or system design specifications;

(3) The design, documentation, testing, creation or modification of computer programs related to machine operating systems; or

(4) A combination of the aforementioned duties, the performance of which requires the same level of skills. (29 C.F.R. 541.400).

2) AIR TRAFFIC CONTROLLERS AND WEATHER OBSERVERS - NIGHT PAY & SUNDAY PAY: If you work at night as part of a regular tour of duty, you will earn a night differential and receive an additional 10% of basic pay for any hours worked between 6pm and 6am. If you are a full-time employed (40 hours a week) and Sunday is part of your regularly scheduled workweek, you are paid at your rate of basic pay plus a Sunday premium of 25% of your basic rate for each hour of Sunday work which is not overtime (i.e. occasional work on Sunday outside the normal tour of duty is considered overtime work).

HAZARDOUS PAY DIFFERENTIAL: An 8 percent differential is applicable to employees employed in a position that represents a high degree of hazard when working with or in close proximity to ordinance, explosives, and incendiary materials. This includes work such as screening, blending, dying, mixing, and pressing of sensitive ordance, explosives, and pyrotechnic compositions such as lead azide, black powder and photoflash powder. All dry-house activities involving propellants or explosives. Demilitarization, modification, renovation, demolition, and maintenance operations on sensitive ordnance, explosives and incendiary materials. All operations involving regrading and cleaning of artillery ranges.

A 4 percent differential is applicable to employees employed in a position that represents a low degree of hazard when working with, or in close proximity to ordance, (or employees possibly adjacent to) explosives and incendiary materials which involves potential injury such as laceration of hands, face, or arms of the employee engaged in the operation, irritation of the skin, minor burns and the like; minimal damage to immediate or adjacent work area or equipment being used. All operations involving, unloading, storage, and hauling of ordance, explosive, and incendiary ordnance material other than small arms ammunition. These differentials are only applicable to work that has been specifically designated by the agency for ordance, explosives, and incendiary material differential pay.

** UNIFORM ALLOWANCE **

If employees are required to wear uniforms in the performance of this contract (either by the terms of the Government contract, by the employer, by the state or local law, etc.), the cost of furnishing such uniforms and maintaining (by laundering or dry cleaning) such uniforms is an expense that may not be borne by an employee where such cost reduces the hourly rate below that required by the wage determination. The Department of Labor will accept payment in accordance with the following standards as compliance:

The contractor or subcontractor is required to furnish all employees with an adequate number of uniforms without cost or to reimburse employees for the actual cost of the uniforms. In addition, where uniform cleaning and maintenance is made the responsibility of the employee, all contractors and subcontractors subject to this wage determination shall (in the absence of a bona fide collective bargaining agreement providing for a different amount, or the furnishing of contrary affirmative proof as to the actual cost), reimburse all employees for such cleaning and maintenance at a rate of $3.35 per week (or $.67 cents per day). However, in those instances where the uniforms furnished are made of "wash and wear" materials, may be routinely washed and dried with other personal garments, and do not require any special treatment such as dry cleaning, daily washing, or commercial laundering in order to meet the cleanliness or appearance standards set by the terms of the Government contract, by the contractor, by law, or by the nature of the work, there is no requirement that employees be reimbursed for uniform maintenance costs.

The duties of employees under job titles listed are those described in the "Service Contract Act Directory of Occupations", Fifth Edition, April 2006, unless otherwise indicated. Copies of the Directory are available on the Internet. A links to the Directory may be found on the WHD home page at http://www.dol.gov/esa/whd/ or through the Wage Determinations On-Line (WDOL) Web site at http://wdol.gov/.

REQUEST FOR AUTHORIZATION OF ADDITIONAL CLASSIFICATION AND WAGE RATE {Standard Form 1444 (SF 1444)}

Conformance Process:

The contracting officer shall require that any class of service employee which is not listed herein and which is to be employed under the contract (i.e., the work to be performed is not performed by any classification listed in the wage determination), be classified by the contractor so as to provide a reasonable relationship (i.e., appropriate level of skill comparison) between such unlisted classifications and the classifications listed in the wage determination. Such conformed classes of employees shall be paid the monetary wages and furnished the fringe benefits as are determined. Such conforming process shall be initiated by the contractor prior to the performance of contract work by such unlisted class(es) of employees. The conformed classification, wage rate, and/or fringe benefits shall be retroactive to the commencement date of the contract. {See Section 4.6 (C)(vi)} When multiple wage determinations are included in a contract, a separate SF 1444 should be prepared for each wage determination to which a class(es) is to be conformed.

The process for preparing a conformance request is as follows:

1) When preparing the bid, the contractor identifies the need for a conformed occupation(s) and computes a proposed rate(s).

2) After contract award, the contractor prepares a written report listing in order proposed classification title(s), a Federal grade equivalency (FGE) for each proposed classification(s), job description(s), and rationale for proposed wage rate(s), including information regarding the agreement or disagreement of the authorized representative of the employees involved, or where there is no authorized representative, the employees themselves. This report should be submitted to the contracting officer no later than 30 days after such unlisted class(es) of employees performs any contract work.

3) The contracting officer reviews the proposed action and promptly submits a report of the action, together with the agency's recommendations and pertinent information including the position of the contractor and the employees, to the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, for review. (See section 4.6(b)(2) of Regulations 29 CFR Part 4).

4) Within 30 days of receipt, the Wage and Hour Division approves, modifies, or disapproves the action via transmittal to the agency contracting officer, or notifies the contracting officer that additional time will be required to process the request.

5) The contracting officer transmits the Wage and Hour decision to the contractor.

6) The contractor informs the affected employees.

Information required by the Regulations must be submitted on SF 1444 or bond paper.

When preparing a conformance request, the "Service Contract Act Directory of Occupations" (the Directory) should be used to compare job definitions to insure that duties requested are not performed by a classification already listed in the wage determination. Remember, it is not the job title, but the required tasks that determine whether a class is included in an established wage determination. Conformances may not be used to artificially split, combine, or subdivide classifications listed in the wage determination.

Eddie Baza Calvo
Governor

GENERAL SERVICES AGENCY
Government of Guam
148 Route 1 Marine Drive Corp
Piti, Guam 96915

Ray Tenorio
Lt. Governor

Benita Manglona
Director, Dept. of Admin.

Anthony C. Blaz
Deputy Director

AFFIDAVIT re NON-COLLUSION

TERRITORY OF GUAM)
) ss.
HAGATNA, GUAM)

_____[*state name of affiant signing below*], being first duly sworn, deposes and says that:

1. The name of the offering company or individual is [*state name of company*] _____.

2. The proposal for the solicitation identified above is genuine and not collusive or a sham. The offeror has not colluded, conspired, connived or agreed, directly or indirectly, with any other offeror or person, to put in a sham proposal or to refrain from making an offer. The offeror has not in any manner, directly or indirectly, sought by an agreement or collusion, or communication or conference, with any person to fix the proposal price of offeror or of any other offeror, or to fix any overhead, profit or cost element of said proposal price, or of that of any other offeror, or to secure any advantage against the government of Guam or any other offeror, or to secure any advantage against the government of Guam or any person interested in the proposed contract. All statements in this affidavit and in the proposal are true to the best of the knowledge of the undersigned. This statement is made pursuant to 2 GAR Division 4 § 3126(b).

3. I make this statement on behalf of myself as a representative of the offeror, and on behalf of the offeror's officers, representatives, agents, subcontractors, and employees.

_____
Signature of one of the following:
Offeror, if the offeror is an individual;
Partner, if the offeror is a partnership;
Officer, if the offeror is a corporation.

Subscribed and sworn to before me

this _____ day of _____, 201__.

_____
NOTARY PUBLIC
My commission expires _____, _____.

AFFIDAVIT DISCLOSING OWNERSHIP and COMMISSION

TERRITORY OF GUAM)
) SS:
HAGATNA, GUAM)

A. I, the undersigned, being first duly sworn, depose and say that I am an authorized representative of the offeror and that [please check only one]:

[ ] The offeror is an individual or sole proprietor and owns the entire (100%) interest in the offering business.

[ ] The offeror is a corporation, partnership, joint venture, or association known as _____[please state name of offeror company], and the persons, companies, partners, or joint venturers who have held more than 10% of the shares of interest in the offering business during the 365 days immediately preceding the submission date of the proposal are as follows [if none, please so state]

Name	Address	% of Interest
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

B. Further, I say that the persons who have received or are entitled to receive a commission, gratuity or other compensation for procuring or assisting in obtaining business related to the bid or proposal for which this affidavit is submitted are as follows [if none, please so state]:

Name	Address	Compensation
_____	_____	_____

C. If the ownership of the offering business should change between the time this affidavit is made and the time an award is made or a contract is entered into, then I promise personally to update the disclosure required by 5 GCA §5233 by delivering another affidavit to the government.

_____
Signature of one of the following:
Offeror, if the offeror is an individual;
Partner, if the offeror is a partnership;
Officer, if the offeror is a corporation.

Subscribed and sworn to before me
this _____ day of _____, 201__.

_____
NOTARY PUBLIC
My commission expires_____

AFFIDAVIT re CONTINGENT FEES

TERRITORY OF GUAM)
) SS:
HAGATNA, GUAM)

_____[state name of affiant signing below], being first sworn, deposes and says that:

1. The name of the offering company or individual is [state name of company]

_____

2. As a part of the offering company's bid or proposal, to the best of my knowledge, the offering company has not retained any person or agency on a percentage, commission, or other contingent arrangement to secure this contract. This statement is made pursuant to 2 GAR Division 4 § 11108(f).

3. As a part of the offering company's bid or proposal, to the best of my knowledge, the offering company has not retained a person to solicit or secure a contract with the government of Guam upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, except for retention of bona fide employees or bona fide established commercial selling agencies for the purpose of securing business. This statement is made pursuant to 2 GAR Division 4 § 11108(f).

4. I make these statements on behalf of myself as a representative of the offeror, and on behalf of the offerors officers, representatives, agents, subcontractors, and employees.

_____
Signature of one of the following:
Offeror, if the offeror is an individual;
Partner, if the offeror is a partnership;
Officer, if the offeror is a corporation.

Subscribed and sworn to before me
this ____ day of _____, 201__

_____
NOTARY PUBLIC
My commission expires_____

GOVERNMENT OF GUAM

GENERAL SERVICES AGENCY
148 Route 1, Marine Corp. Drive
Piti, Guam 96915

BID BOND
NO. _____

KNOW ALL MEN BY THESE PRESENTS that _____, as Principal hereinafter called the Principal, and (Bonding Company), _____ A duly admitted insurer under the laws of the Territory of Guam, as Surety, hereinafter called the Surety are Held firmly bound unto the Territory of Guam for the sum of _____ _____ Dollars ($_____), for Payment of which sum will and truly to be made, the said Principal and the said Surety bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has submitted a bid for (identify project by number and brief description)

_____

NOW, THEREFORE, if the Territory of Guam shall accept the bid of the Principal and the Principal shall enter into a Contract with the Territory of Guam in accordance with the terms of such bid, and give such bond or bonds as may be specified in bidding or Contract Documents with good and sufficient surety for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of the Principal to enter such Contract and give such bond or bonds, if the Principal shall pay to the Territory of Guam the difference not to exceed the penalty hereof between the amounts specified in said bid and such larger amount for which the Territory of Guam may in good faith contract with another party to perform work covered by said bid or an appropriate liquidated amount as specified in the Invitation for Bids then this obligation shall be null and void, otherwise to remain full force and effect.

Signed and sealed this _____ day of _____ 201__

_____
(PRINCIPAL)

(SEAL)

_____
(WITNESS)

_____
(TITLE)

_____
(MAJOR OFFICER OF SURETY)

_____
(TITLE)

_____
(MAJOR OFFICER OF SURETY)

_____
(TITLE)

_____
(RESIDENT GENERAL AGENT)

"BID BOND MUST BE SUBMITTED IN PHASE II "BID COST" ENVELOPE"

DOA 113/Rev: 4-1-87

INSTRUCTION TO PROVIDERS:

NOTICE to all Insurance and Bonding Institutions:

The Bond requires the signatures of the Vendor, two (2) major Officers of the Surety and Resident General Agent, if the Surety is a foreign or alien surety.

When the form is submitted to General Services Agency, it should be accompanied with copies of The following:

1. Current Certificate of Authority to do business on Guam issued by the Department of Revenue and Taxation.

2. Power of Attorney issued by the Surety to the Resident General Agent.

3. Power of Attorney issued by two (2) major officers of the Surety to whoever is signing on their behalf.

Bonds, submitted as Bid Guarantee, without signatures and supporting documents are invalid and Bids will be rejected.

GOVERNMENT OF GUAM
GENERAL TERMS AND CONDITIONS

SEALED BID SOLICITATION AND AWARD

Only those Boxes checked below are applicable to this bid.

[X] 1. **AUTHORITY:** This solicitation is issued subject to all the provision of the Guam Procurement Act (5GCA, Chapter 5) and the Guam Procurement Regulations (copies of both are available at the Office of the Complier of laws, Department of Law, copies available for inspection at General Services Agency). It requires all parties involved in the Preparation, negotiation, performance, or administration of contracts to act in good faith.

[X] 2. **GENERAL INTENTION**: Unless otherwise specified, it is the declared and acknowledged intention and meaning of these General Terms and conditions for the bidder to provide the Government of Guam (Government) with specified services or with materials, supplies or equipment completely assembled and ready for use.

[X] 3. **TAXES**: Bidders are cautioned that they are subject to Guam Income Taxes as well as all other taxes on Guam Transactions. Specific information on taxes may be obtained from the Director of Revenue and Taxation.

[X] 4. **LICENSING**: Bidders are cautioned that the Government will not consider for award any offer submitted by a bidder who has not complied with the Guam Licensing Law. Specific information on licenses may be obtained from the Director of Revenue and Taxation.

[ ] 5. **LOCAL PROCUREMENT PREFERENCE**: All procurement of supplies and services where possible, will be made from among businesses licensed to do business on Guam in accordance with section 5008 of the Guam Procurement Act (5GCA, Chapter 5) and Section 1-104 of the Guam Procurement Regulations.

[X] 6. **COMPLIANCE WITH SPECIFICATIONS AND OTHER SOLICITATION REQUIREMENTS**: Bidders shall comply with all specifications and other requirements of the Solicitation.

[ ] 7. **"ALL OR NONE" BIDS**: NOTE: By checking this item, the Government is requesting all of the bid items to be bided or none at all. **The Government will not award on an itemized basis**.

[X] 8. **INDEPENDENT PRICE DETERMINATION**: The bidder, upon signing the Invitation for Bid, certifies that the prices in his bid were derived at without collusion, and acknowledge that collusion and anti-competitive practices are prohibited by law. Violations will be subject to the provision of Section 5651 of that of the Guam Procurement Act. Other existing civil, criminal or administrative remedies are not impaired and may be in addition to the remedies in Section 5651 of the Government code.

[X] 9. **BIDDER'S PRICE**: The Government will consider not more than two (2) (Basic and Alternate) item prices and the bidder shall explain fully each price if supplies, materials, equipment, and/or specified services offered comply with specifications and the products origin. Where basic or alternate bid meets the minimum required specification, cost and other factors will be considered. Failure to explain this requirement will result in rejection of the bid.

[X] 10. **BID ENVELOPE**: Envelope shall be sealed and marked with the bidder's name, Bid number, time, date and place of Bid Opening.

[X] 11. **BID GUARANTEE REQUIREMENT**: Bidder is required to submit a Bid Guarantee Bond or standby irrevocable Letter of Credit or Certified Check or Cashier's Check in the same bid envelope to be held by the Government pending award. The Bid Guarantee Bond, Letter of Credit, Certified Check or Cashier's Check must be issued by any local surety or banking institution licensed to do business on Guam and made payable to the Treasure of Guam in the amount of fifteen percent (15%) of his highest total bid offer. The Bid Bond must be submitted on Government Standard Form BB-1 (copy enclosed). Personal Checks will not be accepted as Bid Guarantee. If a successful Bidder (contractor) withdraws from the bid or fails to enter into contract within the prescribed time, such Bid guarantee will be forfeited to the Government of Guam. Bids will be disqualified if not accompanied by Bid Bond, Letter of Credit, Certified Check or Cashier's check. Bidder must include in his/her bid, valid copies of a Power of Attorney from the Surety and a Certificate of Authority from the Government of Guam to show proof that the surety company named on the bond instrument is authorized by the Government of Guam and qualified to do business on Guam. For detailed information on bonding matters, contact the Department of Revenue and Taxation. Failure to submit a valid Power of Attorney and Certificate of Authority on the surety is cause for rejection of bid. **Pursuant to 5 GCA § 5212, all competitive sealed bidding for the procurement of supplies or services exceeding $25,000.00 a 15% Bid Security of the total bid price must accompany the bid package. The bid bond, Letter of Credit, Certified Check or Cashier's Check will serve as Bid Security for this procurement.**

[X] 12. **PERFORMANCE GUARANTEE**: Bidders who are awarded a contract under this solicitation, guarantee that goods will be delivered or required services performed within the time specified. Failure to perform the contract in a satisfactory manner may be cause for suspension or debarment from doing business with the Government of Guam. In addition, the Government will hold the Vendor liable and will enforce the requirements as set forth in Section 40 of these General Terms and Conditions.

[X] 13. **SURETY BONDS**: Bid and Bid Bonds coverage must be signed or countersigned in Guam by a foreign or alien surety's resident general agent. The surety must be an Insurance Company, authorized by the government of Guam and qualified to do business in Guam. Bids will be disqualified if the Surety Company does not have a valid Certificate of Authority from the Government of Guam to conduct business in Guam.

[X] 14. **COMPETENCY OF BIDDERS**: Bids will be considered only from the such bidders who, in the opinion of the Government, can show evidence of their ability, experience, equipment, and facilities to render satisfactory service.

[X] 15. **DETERMINATION OF RESPONSIBILITY OF BIDDERS**: The Chief Procurement Officer reserves the right for securing from bidders information to determine whether or not they are responsible and to inspect plant site, place of business; and supplies and services as necessary to determine their responsibility in accordance with Section 15 of these General Terms and Conditions. (2 GAR, Div. 4 § 3116)

[X] 16. **STANDARD FOR DETERMINATION OF LOWEST RESPONSIBLE BIDDER**: In determining the lowest responsible offer, the Chief Procurement Officer shall be guided by the following:

a) Price of items offered.
b) The ability, capacity, and skill of the Bidder to perform.
c) Whether the Bidder can perform promptly or within the specified time.
d) The quality of performance of the Bidder with regards to awards previously made to him.
e) The previous and existing compliance by the Bidder with laws and regulations relative to procurement.
f) The sufficiency of the financial resources and ability of the Bidder to perform.
g) The ability of the bidder to provide future maintenance and services for the subject of the award.
h) The compliance with all of the conditions to the Solicitation.

[X] 17. **TIE BIDS**: If the bids are for the same unit price or total amount in the whole or in part, the Chief Procurement Officer will determine award based on 2 GAR, Div. 4, § 3109(o) (2) or to reject all such bids.

[X] 18. **BRAND NAMES**: Any reference in the Solicitation to manufacturer's Brand Names and number is due to lack of a satisfactory specification of commodity description. Such preference is intended to be descriptive, but not restrictive and for the sole purpose of indicating prospective bidders a description of the article or services that will be satisfactory. Bids on comparable items will be considered provided the bidder clearly states in his bid the exact articles he is offering and how it differs from the original specification.

[X] 19. **DESCRIPTIVE LITERATURE**: Descriptive literature(s) as specified in this solicitation must be furnished as a part of the bid and must be received at the date and time set for opening Bids. The literature furnished must clearly identify the item(s) in the Bid. The descriptive literature is required to establish, for the purpose of evaluation and award, details of the product(s) the bidder proposes to furnish including design, materials, components, performance characteristics, methods of manufacture, construction, assembly or other characteristics which are considered appropriate. Rejection of the Bid will be required if the descriptive literature(s) do not show that the product(s) offered conform(s) to the specifications and other requirements of this solicitation. Failure to furnish the descriptive literature(s) by the time specified in the Solicitation will require rejection of the bid.

[ ] 20. **SAMPLES**: Sample(s) of item(s) as specified in this solicitation must be furnished as a part of the bid and must be received at the date and time set for opening Bids. The sample(s) should represent exactly what the bidder proposes to furnish and will be used to determine if the item(s) offered complies with the specifications. Rejection of the Bid will be required if the sample(s) do not show that the product(s) offered conform(s) to the specifications and other requirements of this solicitation. Failure to furnish the sample(s) by the time specified in the Solicitation will require rejection of the Bid.

[ ] 21. **LABORATORY TEST**: Successful bidder is required to accompany delivery of his goods with a Laboratory Test Report indicating that the product he is furnishing the Government meets with the specifications. This report is on the bidder's account and must be from a certified Testing Association.

[X] 22. **AWARD, CANCELLATION, & REJECTION**: Award shall be made to the lowest responsible and responsive bidder, whose bid is determined to be the most advantageous to the Government, taking into consideration the evaluation factors set forth in this solicitation. No other factors or criteria shall be used in the evaluation. The right is reserved as the interest of the Government may require to waive any minor irregularity in bid received. The Chief Procurement Officer shall have the authority to award, cancel, or reject bids, in whole or in part for any one or more items if he determines it is in the public interest. Award issued to the lowest responsible bidder within the specified time for acceptance as indicated in the solicitation, results in a bidding contract without further action by either party. In case of a error in the extension of prices, unit price will govern. It is the policy of the Government to award contracts to qualified local bidders. The Government reserves the right to increase or decrease the quantity of the items for award and make additional awards for the same type items and the vendor agrees to such modifications and additional awards based on the bid prices for a period of thirty (30) days after original award. No. award shall be made under this solicitation which shall require advance payment or irrevocable letter of credit from the government (2 GAR, Div.4 §1103).

[ ] 23. **MARKING:** Each outside container shall be marked with the Purchase Order number, item number, brief item description and quantity. Letter marking shall not be less than 3/4" in height.

[X] 24. **SCHEDULE FOR DELIVERY**: Successful bidder shall notify the General Services Agency, Telephone Nos. 475-1707 or 475-713, at least twenty-four (24) hours before delivery of any item under this solicitation.

[ ] 25. **BILL OF SALE**: Successful supplier shall render Bills of Sale for each item delivered under this contract. Failure to comply with this requirement will result in rejection of delivery. The Bill of Sale must accompany the items delivered but will not be considered as an invoice for payment. Supplier shall bill the Government in accordance with billing instructions as indicated on the Purchase Order.

[ ] 26. **MANUFACTURER'S CERTIFICATE**: Successful bidder is required, upon delivery of any item under this contract, to furnish a certificate from the manufacturer indication that the goods meet the specifications. Failure to comply with this request will result in rejection of delivery payment. Supplier shall bill the Government in accordance with billing instructions as indicated on the Purchase Order.

[X] 27. **INSPECTION**: All supplies, materials, equipment, or services delivered under this contract shall be subject to the inspection and/or test conducted by the Government at destination. If in any case the supplies, materials, equipment, or services are found to be defective in material, workmanship, performance, or otherwise do not conform with the specifications, the Government shall have the right to reject the items or require that they be corrected. The number of days required for correction will be determined by the Government.

[X] 28. **MOTOR VEHICLE SAFETY REQUIREMENTS**: The Government will only consider Bids on motor vehicles which comply with the requirements of the National Traffic and Motor Vehicle safety Act of 1966 (Public Law 89-563) and Clean Air Act as amended (Public Law 88-206), that are applicable to Guam. Bidders shall state if the equipment offered comply with these aforementioned Federal Laws.

[X] 29. **SAFETY INSPECTION**: All motor vehicles delivered under this contract must pass the Government of Guam Vehicle Inspection before delivery at destination.

[X] 30. **GUARANTEE**:

a) Guarantee of Vehicle Type of Equipment:

The successful bidder shall guarantee vehicular type of equipment offered against defective parts, workmanship, and performance, for a period of not less than one (1) year after date of receipt of equipment. Bidder shall also provide service to the equipment for at least one (1) year. Service to be provided shall include, but will not be limited to tune ups (change of spark plugs, contact points and condensers) and lubrication (change of engine and transmission oil). All parts and labor shall be at the expense of the bidder. All parts found defective and not caused by misuse, negligence or accident within the guarantee period shall be repaired, replaced, or adjusted within six (6) working days after notice from the Government and without cost to the Government. Vehicular type of equipment as used in this context shall include equipment used for transportation as differentiated from tractors, backhoes, etc.

b) Guarantee of Other Type of Equipment:

The successful bidder shall guarantee all other types of equipment offered, except those mentioned in 30a, above, against defective parts, workmanship, and performance for a period of not less than three (3) months after date of receipt of equipment. Bidder shall also provide service to the equipment for at least three (3) months. All parts found defective within that period shall be repaired or replaced by the Contractor without cost to the Government. Repairs, adjustments or replacements of defective parts shall be completed by the contractor within six (6) working days after notice from the Government.

(c) Compliance with this Section is a condition of this Bid.

[X] 31. **REPRESENTATION REGARDING ETHICS IN PUBLIC PROCUREMENT**: The bidder or contractor represents that it has not knowingly influenced and promises that it will not knowingly influence a Government employee to breach any of the ethical standards and represents that it has not violated, is not violating, and promises that it will not violate the prohibition against gratuities and kickbacks set forth on Chapter 11 (Ethics in Public Contracting) of the Guam Procurement Act and in Chapter 11 of the Guam Procurement Regulations.

[X] 32. **REPRESENTATION REGARDING CONTINGENT FEES**: The contractor represents that it has not retained a person to solicit or secure a Government contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, except for retention of bona fide employees or bona fide established commercial selling agencies for the purpose of securing business (GPR Section 11-207).

[X] 33. **EQUAL EMPLOYMENT OPPORTUNITY**: Contractors shall not discriminate against any employee or applicant of employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure that employees are treated equally during employment without regards to their race, color, religion, sex, or national origin.

[X] 34. **COMPLIANCE WITH LAWS**: Bidders awarded a contract under this Solicitation shall comply with the applicable standard, provisions, and stipulations of all pertinent Federal and/or local laws, rules, and regulations relative to the performance of this contract and the furnishing of goods.

[ ] 35. **CHANGE ORDER**: Any order issued relative to awards made under this solicitation will be subject to and in accordance with the provisions of Section 6-101-03.1 of the Guam Procurement Regulations.

[ ] 36. **STOP WORK ORDER**: Any stop work order issued relative to awards made under this solicitation will be subject to and in accordance with the provisions of Section 6-101-04.1 of the Guam Procurement Regulations.

[X] 37. **TERMINATION FOR CONVENIENCE**: Any termination order for the convenience of the Government issued relative to wards made under this solicitation will be subject to and in accordance with the provisions of Section 6-101.10 of the Government Procurement Regulations.

[X] 38. **TIME FOR COMPLETION**: It is hereby understood and mutually agreed by and between the contractor and the Government that the time for delivery to final destination or the timely performance of certain services is an essential condition of this contract. If the contractor refuses or fails to perform any of the provisions of this contract within the time specified in the Purchase Order (from the date Purchase Order is acknowledged by vendor), then the contractor is in default. Defaults will be treated subject to and in accordance with the provisions of 2 GAR, Div. 4 § 6101(8)

[X] 39. **JUSTIFICATION OF DELAY**: Bidders who are awarded contracts under this Solicitation, guarantee that the goods will be delivered to their destination or required services rendered within the time specified. If the bidder is not able to meet the specified delivery date, he is required to notify the Chief Procurement Officer of such delay. Notification shall be in writing and shall be receive by the Chief Procurement Officer at least twenty-four (24) hours before the specified delivery date. Notification of delay shall include an explanation of the causes and reasons for the delay including statement(s) from supplier or shipping company causing the delay. The Government reserves the right to reject delay justification if, in the opinion of the Chief Procurement Officer, such justification is not adequate.

[X] 40. **LIQUIDATED D[illegible]AGES**: When the contractor is given notice of delay or non[illegible]rmance as specified in Paragraph 1 (Default) of the Termination for Default Clause of this **contract (purchase order)** and fails to cure in the time specified, the contractor shall be liable for damages for delay in the amount of one-fourth of one percent (1%) of outstanding order per calendar day from date set for cure until either the territory reasonable obtains similar supplies or services if the contractor is terminated for default, or until the contractor provides the supplies or services if the contractor is not terminated for default. To the extent that the contractor's delay or nonperformance is excused under Paragraph 40 (Excuse for Nonperformance or Delayed Performance) of the Termination for Default Clause of this **contract (purchase order)**, liquidated damages shall not be due the territory. The contractor remains liable for damages caused other than by delay. 2 GAR, Div. 4 §6101(9) (a).

[X] 41. **PHYSICAL LIABILITY**: If it becomes necessary for the Vendor, either as principal, agent or employee, to enter upon the premises or property of the Government of Guam in order to construct, erect, inspect, make delivery or remove property hereunder, the Vendor hereby covenants and agrees to take, use, provide and make all proper, necessary and sufficient precautions, safeguards and protections against the occurrence of any accidents, injuries or damages to any person or property during the progress of the work herein covered, and to be responsible for, and to indemnify and save harmless the Government of Guam from the payment of all sums of money by reason of all or any such accidents, injuries or damages that may occur upon or about such work, and fines, penalties and loss incurred for or by reasons of the violations of any territorial ordinance, regulations, or the laws of Guam or the United States, while the work is in progress. Contractor will carry insurance to indemnify the Government of Guam against any claim for loss, damage or injury to property or persons arising out of the performance of the Contractor or his employees and agents of the services covered by the contract and the use, misuse or failure of any equipment used by the contractor or his employees or agents, and shall provide certificates of such insurance to the Government of Guam when required.

[X] 42. Contract will be cancelled if funds not appropriated or insufficient, and that government will timely inform contractor. R 3121(e)(1)(C) and R 3121(e)(1)(D)

[ ] 43. If cancelled, contractor will be reimbursed unamortized reasonably incurred non-recurring costs. R 3121(e)(1)(G)

[X] 44. **CONTACT FOR CONTRACT ADMINISTRATION**: If your firm receives a contract as a result of this Solicitation, please designate a person whom we may contact for prompt administration.

Name: _____ Title: _____

Address: _____ Telephone: _____

_____

_____

SEALED BID SOLICITAITON INSTRUCTION

1. BID FORMS: Each bidder shall be provided with one (1) set of Solicitation form. Additional copies may be provided upon request. Bidders requesting additional copies of said forms will be charged per page in accordance with 5 GCA § 10203 of the Government Code of Guam. All payments for this purpose shall be by cash, certified check or money order and shall be made payable to the General Services Agency (EO 86-24).

2. PREPARATIONS OF BIDS:
   a) Bidders are required to examine the drawings, specifications, schedule, and all instructions. Failure to do so will be at bidder's risk.
   b) Each bidder shall furnish the information required by the Solicitation. The bidder shall sign the solicitation and print or type his name on the Schedule. Erasures or other changes must be initialed by the person signing the bid. Bids signed by an agent are to be accompanied by evidence of this authority unless such evidence has been previously furnished to the issuing office.
   c) Unit price for each unit offered shall be shown and such price shall include packing unless otherwise specified. A total shall be entered in the amount column of the Schedule for each item offered. In case of discrepancies between a unit price and extended price, the unit price will be presumed to be correct.
   d) Bids for supplies or services other than those specified will not be considered.
   Time, if stated as a number of days, means calendar days and will include Saturdays, Sundays, and holidays beginning the day after the issuance of a Notice to Proceed. Time stated ending on a Saturday, Sunday or Government of Guam legal holiday will end at the close of the next business day.

3. EXPLANATION TO BIDDERS: Any explanation desired by a bidder regarding the meaning or interpretation of the Solicitation, drawings, specifications, etc., must be submitted in writing and with sufficient time allowed for a written reply to reach all bidders before the submission of their bids. Oral explanations or instructions given before the award of the contract will not be binding. Any information given to a prospective bidder concerning a Solicitation will be furnished to all prospective bidders in writing as an amendment to the Solicitation if such information would be prejudicial to uninformed bidders.

4. ACKNOWLEDGEMENT OF AMENDMENTS TO SOLICITATIONS: Receipt of an amendment to a Solicitation by a bidder must be acknowledged by signing an acknowledgement of receipt of the amendment. Such acknowledgement must be received prior to the hour and date specified for receipt of bids.

5. SUBMISSION OF BIDS:
   a) Bids and modifications thereof shall be enclosed in sealed envelopes and addressed to the office specified in the Solicitation. The bidder shall show the hour and date specified in the Solicitation for receipt, the Solicitation number, and the name and address of the bidder on the face of the envelope.
   b) Telegraphic bids will not be considered unless authorized by the Solicitation. However, bids may be modified or withdrawn by written or telegraphic notice, provided such notice is received prior to the hour and date specified for receipt (see paragraph 6 of these instructions).
   c) Samples of items, when required, must be submitted within the time specified, unless otherwise specified by the Government, at no expense to the Government. If not destroyed by testing, samples will be returned at bidder's request and expense, unless otherwise specified by the Solicitation.
   d) Samples or descriptive literature should not be submitted unless it is required on this solicitation. Regardless of any attempt by a bidder to condition the bid, unsolicited samples or descriptive literature will not be examined or tested at the bidder's risk, and will not be deemed to vary any of the provisions of this Solicitation.

6. FAILURE TO SUBMIT BID: If no bid is to be submitted, do not return the solicitation unless otherwise specified. A letter or postcard shall be sent to the issuing office advising whether future Solicitations for the type of supplies or services covered by this Solicitation are desired.

7. LATE BID, LATE WITHDRAWALS, AND LATE MODIFICATIONS:
   a) Definition: Any bid received after the time and date set for receipt of bids is late. Any withdrawal or modification of a bid received after the time and date set for opening of bids at the place designated for opening is late (Guam Procurement Regulations 2 GAR, Div.4 §3109(k)).

   b) Treatment: No late bid, late modification, or late withdrawal will be considered unless received before contract award, and the bid, modification, or withdrawal would have been timely but for the action or inaction of territorial personnel directly serving the procurement activity.

8. DISCOUNTS:
   a) Notwithstanding the fact that prompt payment discounts may be offered, such offer will not be considered in evaluating bids for award unless otherwise specified in the Solicitation. However, offered discounts will be taken if payment is made within the discount period, even though not considered in the evaluation of bids.
   b) In connection with any discount offered, time will be computed from date of delivery and acceptance of the supplies to the destination as indicated in the purchase order or contract. Payment is deemed to be made for the purpose of earning the discount on the date of mailing of the Government check.

9. GOVERNMENT FURNISHED PROPERTY: No material, labor or facilities will be furnished by the Government unless otherwise provided for in the Solicitation.

10. SELLER' INVOICES: Invoices shall be prepared and submitted in quadruplicate (one copy shall be marked "original") unless otherwise specified. Invoices shall be "certified true and correct" and shall contain the following information: Contract and order number (if any), item numbers, description of supplies or services, sizes, quantities, unit prices, and extended total. Bill of lading number and weight of shipment will be shown for shipments made on Government bills of lading.

11. CONFIDENTIAL DATA: The Procurement Officer shall examine the bids to determine the validity of any requests for nondisclosure of trade secrets and other proprietary data.

INTRODUCTION

These specifications are reflective of the Guam Fire Department and its needs. Most importantly, the specifications 0herein stated are to maximize firefighter capabilities and minimize risk of injuries. The Guam Fire Department is the primary ***Fire and Emergency Services*** organization on the island of Guam serving a population of over 150,000. Its primary mission is to provide quality emergency and non-emergency services to the population it serves either living, working, investing or visiting the island of Guam. This is accomplished by responding to fires, emergency medical incidents, hazardous materials incidents, and performing services to save life, property and preserve its environment. Guam's geographical location and inherent exposure to the elements of its environment include high heat temperatures, corrosion and decomposition factors, humidity and moisture. These are of some major concerns for any vehicle type to consider in the field of fire and emergency services on a Pacific island approximately 212 square miles with an elevation of 1332 feet.

INTENT OF SPECIFICATIONS

Bids are requested for a minimum of **TWO (2) NEW and CURRENT YEAR CUSTOM CAB-FORWARD FIRE PUMPER APPARATUS and a 5-YEAR SERVICE/MAINTENANCE AGREEMENT** for each of the fire apparatus. In general, these pumpers shall be of a 4-door full-tilt type custom cab configuration, with enclosed seating for a **MINIMUM OF SIX (6) PERSONS.** The bid price must remain valid for a minimum period of 90 days from the date of receipt by the General Services Agency of the Government of Guam.

It shall be the intent of these specifications to cover the furnishing and delivery of a complete apparatus equipped as hereinafter specified. These specifications shall cover both the general and performance requirements as to the type of construction and test to which the apparatus shall conform, together with certain details as to finish, equipment and appliances with which the successful bidder (bidding contractor) shall conform. Minor details of construction and materials, which are not otherwise specified, shall be left to the discretion of the manufacturing company, who shall be solely responsible for the design and construction of all features. It is and must be understood that no bidders, as of this bid, on Guam construct or manufacture fire service or emergency response vehicles but are only representatives of off-island manufacturing companies through contract. **Apparatus proposed by the bidder's representative manufacturing company shall meet the requirements of the National Fire Protection Association (NFPA) as stated in the current Pamphlet for Engine/Pumpers, NFPA 1901, 2009 edition.** Loose equipment shall be provided only as stated in the following pages.

Bids shall only be considered from bidders representing manufacturing companies that have an established reputation in the field of fire apparatus construction. Further, the bidding contractor shall specify the manufacturing company they represent, and shall maintain dedicated service facilities for the repair and service of the apparatus being sold. Evidence of such a facility shall be included in bid.

Each bidding contractor on Guam shall furnish satisfactory evidence of the manufacturer's ability to construct the apparatus specified and shall state the location of the factory where the apparatus is to be built. The bidding contractor shall also show that both its service facilities and the manufacturing company *are* in position to render prompt service and to furnish replacement parts.

Each bid shall be accompanied by a detailed set of "Contractor's Specifications" consisting of a detailed description of the apparatus and equipment proposed, and to which the apparatus furnished under contract shall conform. These specifications shall indicate size, type, model and make of all component parts and equipment.

ELIMINATION OF DIVIDED RESPONSIBILITY

It is understood that numerous manufacturers may manufacture various components of the apparatus. It is emphasized here that the responsibility for the quality of the entire apparatus, to include warranties and warranty work, lies solely with the successful bidding contractor so that divided responsibilities are not a problem to the Guam Fire Department. This would maintain improved service ability, stock standardized parts, maintain longevity, provide excellent quality and reliability, fit and finish, and reduced construction and assembly time. Therefore, bids shall only be accepted from vendors that accept responsibility for the collective management and action on all warranty components.

The chassis, cab, and body, must be joined on the premises of the bidder or the manufacturer being represented by the bidder, after which the bidder must also be qualified and authorized to complete all required warranty repairs relative to the apparatus. The bidder shall provide evidence that they comply with this requirement.

Each bidding contractor on Guam shall furnish satisfactory evidence of their representing company's ability to assemble the apparatus specified and shall state the location of the factory where the final assembly of the apparatus will take place. The bidding contractor shall also show that the local service facility is capable of rendering prompt service and keeping replacement parts on hand.

MANUFACTURER'S RELIABILITY

The bidding contractor on Guam and the representative's manufacturer must be satisfactory to the Guam Fire Department and the General Services Agency of the Government of Guam in terms of experience, reliability, and demonstrated ability to manufacture equipment, comparable as to size and type, as specified. A list, as well as contact numbers, of fire departments located in the United States that have purchased the same type of apparatus from the manufacturer over the past five years must be supplied along with the contractor's submission.

MANUFACTURER'S SOLVENCY

The solvency of the manufacturer is a prime concern of the purchaser. Each submission shall include an In-Depth Risk Assessment Report from Dun and Bradstreet on the apparatus manufacturer. Failure to submit such a statement could be cause for rejection. (Such statements are available to the public on the Internet.)

BUILT IN USA
All major components must be built and assembled in the United States of America (engine, cab, chassis, and body).

GENERAL CONSTRUCTION
The apparatus shall be designed with due consideration to distribution of load between the front and rear axles. Weight balance and distribution shall be in accordance with the recommendations of the National Fire Protection Association.

PROTOTYPE APPARATUS
No prototype or experimental apparatus will be accepted. The builder must demonstrate that it has successfully produced an apparatus of similar design in the past. Total deviation to these specifications will be cause for immediate rejection.

FACTORY AUTHORIZED SERVICE CENTER
The bidding contractor must provide a factory authorized service center (contractor) on Guam to include a minimum of two factory trained (trained by fire apparatus manufacturer) technicians to perform maintenance and repairs of all fire apparatus and systems, including power train, chassis, and controls. All service technicians must possess, at minimum, the appropriate, current ASE (Automotive Service Excellence) or EVT (Emergency Vehicle Technician) Certification from the respective manufacturer. The specific ASE or EVT certifications are dependent upon the specifications of the bid/quote submission by each contractor. This section part shall be applicable to the successful contractor, all required Maintenance Services on the emergency response vehicles and must be in place prior to apparatus acceptance.

The contractor also is required to provide warranty service at fire station locations whenever major shop work is not involved such as typical preventive maintenance warranty work. If, while under warranty, the apparatus is in need of towing for undetermined reasons, the contractor shall provide for that service, without delay. For warranty service involving the shop, the apparatus will be delivered to and picked up from the contractor's facility by fire department personnel. Towing and Wrecking Service inclusive of any storage fees shall be at no cost to the Guam Fire Department/Government of Guam. The contractor agrees to keep the apparatus in a covered, protected area at all times while the apparatus is in its possession. The contractor, for the units in its possession, shall provide proper insurance coverage for the apparatus. The contractor shall indicate, within the bid/quote submission, the location of their service center(s) and the number of mobile service unit(s) available. The contractor shall also submit all certifications for their current service technicians. This information will indicate to the reviewer(s) the resources offered by each contractor.

The Guam Fire Department reserves the right to visit the facility for evaluation and reject any contractor that, in the opinion of the Fire Chief of the Guam Fire Department or his designee, does not fully comply with the provisions of this section. No deviations to these requirements will be accepted.

LIQUIDATED DAMAGES
Liquidated damages will be assessed as provided in General Terms and Conditions. If after 30 days, the apparatus is not brought up to compliance, the contractor will be considered in default of the **contract (Purchase Order)**, and procedures to institute the provisions of law regarding the Bid Security may commence.

SERVICE ABILITY
The Guam Fire Department places a high priority on service. All bidders shall therefore provide complete details of their ability to service the apparatus proposed, including but not limited to the following:

Service Facility
Service Vehicles
Certified Service Employees [EVT / NAEVT / NFPA 1002 & or ASE]
Service Philosophy

The service ability section of these specifications will be a major factor in determining the successful bidder. Limited manpower does not allow for the apparatus to be taken to various places for repairs. It is the opinion of the Fire Department that repairs to the apparatus in the fire station or a local service facility will reduce the out of service time of the apparatus.

The bidder or the authorized service center shall have a minimum of one fully equipped service vehicle, which shall carry spare parts and repair equipment needed to work on the apparatus proposed.

The bidder must provide a service representative within 24 hours of a call of a unit being placed out-of-service.

There shall be no exceptions to the service ability section of these specifications. Each bidder shall provide a notarized document stating his ability. Alternatives to the service ability section may be offered if equal to or exceeding what is being asked for. All alternatives must be in writing and completely detailed to be considered.

REPLACEMENT PARTS
The contractor on these specifications must maintain a stock of repair parts on Guam. The Guam Fire Department reserves the right to reject submissions of contractors that cannot produce satisfactory evidence that they can furnish, promptly, all spare parts needed for service or repair of the equipment herein specified.

The successful contractor shall also maintain in stock, at minimum, one (1) spare engine and transmission of the same type as the specified fire apparatus. This shall also include stock fast moving items or consumable parts compatible for this specified engine and transmission to allow for decreased downtime of the emergency response vehicle at no more than 12 hours.

SPECIFICATION BID REQUIREMENTS

Bidding contractors shall also indicate in the **"Bidding on"** column if their bid complies on each item (PARAGRAPH) specified. Exceptions shall be allowed if they are equal to or superior to that specified and provided they are listed and fully explained on a separate page. Proposals taking total exception to specifications shall not be acceptable.

Also, bidding contractors shall submit a detailed proposal. A letter only, even though written on a company letterhead, shall not be sufficient. Bid proposals shall be submitted in the same sequence as specifications for ease of evaluation, comparison and checking of compliance. Failure to comply with this paragraph will result in the bid being rejected.

EXCEPTIONS

All exceptions shall be stated, no matter how seemingly minor. Any exceptions not taken shall be assumed by the purchaser to be included in the proposal, regardless of the cost to the bidder. **In instances that the specification states '(no exception)', failure to comply will result in the bid being rejected.**

EQUALS CLAUSE

Unless otherwise stated by the bidding contractor, the bid/quote submission will be considered in strict accordance with the specifications in this document.

REFERENCES TO A PARTICULAR TRADE NAME, MANUFACTURER'S CATALOG OR MODEL NUMBER ARE MADE FOR DESCRIPTIVE PURPOSES TO GUIDE CONTRACTORS AND THE MANUFACTURING COMPANIES THEY REPRESENT IN INTERPRETING THE SPECIFICATIONS AND REQUIREMENTS OF THE GUAM FIRE DEPARTMENT.

These references should not be construed as excluding proposals of other types of materials, equipment and supplies, unless otherwise stated. The contractor awarded a contract shall furnish each item referred to in the final specifications. Contractors and manufacturing companies submitting specifications that are equal to or greater than these specifications, hereinafter referred to as "Equivalent(s)", could be allowed, after review for said quality and compliance.

FAILURE TO LIST EQUIVALENTS

Failure to list an equivalent means the contractor is complying 100% with these specifications. Apparatus will be inspected on delivery for compliance with specifications. Exceptions will not be acceptable and can be cause for immediate rejection of apparatus unless they were originally listed in the contractor's submission. Liquidated damages (penalty) of one-fourth (¼) of one percent (1%) of outstanding order per calendar day shall be deducted from the final payment until the apparatus is considered acceptable. If after 30 days, the apparatus is not brought up to compliance, the contractor will be considered in default of the contract, and procedures to institute the provisions of the performance bond may commence.

ADHERENCE TO SPECIFICATIONS

The purchaser's specifications shall, in all cases, govern the construction of the apparatus. THIS IS NOT AN RFP (Request for Proposal).

NOTICE TO CONTRACTORS: ANY SUBMISSION INDICATING THAT THE MANUFACTURER'S SPECIFICATIONS SHALL SUPERSEDE THE PURCHASER'S SPECIFICATIONS WILL IMMEDIATELY BE REJECTED.

SUBMISSION REVIEW AND EQUIVALENTS

To properly review all bid/quotes, the Government of Guam General Services Agency, will utilize its policies, rules and regulations as well as the provisions of the most current version of the Guam Procurement Code, Guam Code Annotated and other public laws that govern this procurement.

Any submitted "equivalent" in construction, performance, test, or items of equipment between this (purchaser's specification and contractor's submission) shall be detailed and submitted on a separate sheet along with the contractor's submission in specification sequence, citing equivalent number, page, section and line numbers.

The contractor must explain in detail, along with full supporting documentation, such as but not limited to photographs, product brochures and test data, how the proposed item(s) meets or exceeds the specifications. **FAILURE TO COMPLY WITH THIS REQUIREMENT WILL AUTOMATICALLY DISQUALIFY THE CONTRACTOR.**

The purchaser reserves the right to determine which (if any) equivalents are acceptable.

A complete set of contractor's specifications, with generic scale drawings showing the front, rear, left, right, and top view of the proposed apparatus, must be submitted with the bid for the purpose of comparison.

The purchaser's specifications shall, in all cases, govern the construction of the apparatus, unless a properly documented equivalent was approved.

APPROVAL DRAWINGS

Proposed drawings shall be furnished in the technical bid envelope. Drawings for approval and blueprints, with all details, must be furnished to the Guam Fire Department, within 7 calendar days after the conclusion of the preconstruction conference. The engineering drawing must be drawn to scale and be representative of the fire apparatus unit after the preconstruction conference clarifications are incorporated. Views of sides as well as the front, back, and top must be shown. Location of major components shall be so indicated on the drawing. A minimum of two drawings shall be supplied. Generic drawings are unacceptable.

The Guam Fire Department will make every effort to correct the approval drawing before it is returned. However, if a variation or omission between the approval drawing and the written specifications is discovered, the written specifications shall prevail.

SPECIAL REQUIREMENTS
The overall size and weight of the finished apparatus is critical to the Guam Fire Department. The contractor shall supply all special and specific information and facts regarding the performance of the apparatus, to include but not limited to compartment sizes, overall length, width, height, wheelbase, turning radius, individual axle loads, acceleration, braking distances, increasing roadway grades, and fully loaded weight of the apparatus.

Each bid proposal shall include a turning radius report which shall show the wall to wall, curb to curb and bumper to bumper turning radius of the proposed vehicle.

Each bidder shall provide a complete weight analysis with the proposal indicating the estimated front and rear axle weights for the loaded vehicle including Six (6), 200 lb. firefighters, tools and 4000 pounds of Fire Department supplied equipment. No deviation to this requirement will be allowed.

Weight distribution shall not load the vehicle in such a manner as to exceed any individual axle ratings, spring or spring hanger rating, or tire and wheel rating. Axles are to carry weight distribution as per NFPA 1901 and SAE axle loading.

Certified weight readings are to be furnished with each apparatus as to front, rear, right side, and left side loaded curb weight.

BID BOND/CERTIFIED CHECK
A bid bond or certified check in the amount of 15% of the total bid amount shall be furnished with the bidder's submission. The successful contractor's bid bond/check will be returned or released after receipt and acceptance of the apparatus. In case of failure to comply within the stated time, the bid bond/check will be forfeited as liquidated damages because of the default. **The bid bond/check must be submitted in a separate sealed envelope labeled "Bid Price"**

WITHDRAWAL OF SUBMISSIONS
No submission may be withdrawn within ninety (90) days following the submissions by the bidders to the General Services Agency of the Government of Guam

AWARD OF CONTRACT
A contract (Purchase Order) will be awarded, as soon as practical. After the review and evaluation of Phase I of the technical bid proposalss, to engineer, design, construct, and deliver the type of vehicle specified. It is not the intention of the Guam Fire Department/Government of Guam to write out contractors, vendors or manufacturers of similar or equal equipment of the types specified. It should be noted however that this specification is written around specific needs of the Guam Fire Department.

Technical Bid packages received shall be evaluated by the following criteria and order of importance:

1. Contractor's overall conformance to specification;
2. Contractor's logistical and service support;
3. Warranty provisions;
4. Manufacturing and delivery schedule;
5. Contractor's demonstrated capabilities and qualifications;

An award shall be given to the contractor whose submission meets these specifications at the most competitive price.

BID BOND
Failure of the contractor to complete delivery according to the contract and specifications will cause to begin action to institute the provisions of the Bid bond. The bond shall guarantee compliance and performance with the warranty provisions of the specifications. Bonds issued to agents of the manufacturer are unacceptable.

BOND SUPPLIER'S QUALIFICATIONS
The bonds furnished by the successful contractor shall be from a surety company with a current license to underwrite surety bonds by the Government of Guam on Guam.

INFRINGEMENTS AND INDEMNIFICATIONS
Upon the award of an order or contract (purchase order) the successful bidder shall protect, defend and save the Guam Fire Department/Government of Guam harmless against any demand for payment for the use of any patented material, process, article, or device that may enter into the manufacture, construction or form of the work covered by either order or contract.

The bidder further shall indemnify and save the Guam Fire Department/Government of Guam harmless from suits or actions of every nature and description brought against it, for or on account of any injuries or damages received or sustained by a party or parties, by or from any of the acts of the contractor, and/or the agents, employees, successors or assigns of the contractor.

DEFAULT PROVISIONS
In the event of default by the bidder, the Guam Fire Department/Government of Guam may procure the articles or services from any other sources without further advertising and the contractor will be responsible for any excess costs occasioned thereby.

PRICING
The bidder's bid price shall include the price and charges for all items requested. This price shall also include all charges for delivery to the Guam Fire Department/Government of Guam and must be submitted in a separate envelope together with the Bid Bond and marked "BID PRICE".

PAYMENT TERMS
The Guam Fire Department will accept no contract form that requires down payments, progressive payments during construction, or contracts with escalator clauses. Terms of payment shall be 100% payment, within thirty (30) days, upon delivery, testing, and acceptance of the vehicle and receipt of invoice. No other terms shall be acceptable.

FACTORY INSPECTION TRIPS
The bidder shall include in the bid price, two factory inspection trips for two (2) representatives of the Guam Fire Department for the purpose of the preconstruction conference for the fire apparatus and final inspection before delivery of the unit(s).

The conference will be held after the contract (purchase order) has been signed so that all specifications, details, drawings, questions and engineering work can be reviewed and approved by the department. This conference will be in accordance with the build schedule of the manufacturer, and will not in any way hold up the construction of the unit. The conference will be held prior to the commencement of any work being done on the chassis or the body. The respective persons will be in attendance at the conference to authorize decisions to be made on the behalf of the department and the Government of Guam.

Trips shall be of such minimum duration to allow for business at hand to be completed. This will also include all commercial transportation, meals, and lodging that will be borne by the bidder.
The preconstruction conference shall be scheduled within 30 calendar days after the award of contract (Purchase Order).

PRE-DELIVERY SERVICE
After transportation from the factory and immediately prior to delivery, the apparatus shall receive pre-delivery service consisting of a thorough cleaning, an engine oil and filter change, chassis lubrication, adjustment of the engine to the manufacturer's specifications, and a complete inspection including all electrical and mechanical devices for proper operation and correction of leaks or obvious problems. This is the responsibility of the contractor/bidder. The complete cost for this service shall be included within the price submitted by the contractor/bidder. All Parts and Labor Fees shall be at no cost the Guam Fire Department/Government of Guam.

DELIVERY TERMS
The contractor shall deliver the completed apparatus to the agreed upon ocean port for overseas shipping to Guam.

The contractor will deliver the completed apparatus within 240 calendar days upon receipt of purchase order, with all equipment specified, to the current headquarters of the Guam Fire Department, Guam, USA.

The contractor/bidder must submit a firm delivery time (number of calendar days from date of order to date of delivery) of said apparatus with the technical bid. Quoting number of days after receipt of all components is unacceptable. A deduction of per day will be made for each day over and above the stated delivery date. The penalty also will apply if the unit is delivered and rejected, until the unit is returned meeting specifications.

OCEAN FREIGHT
Vehicles will ship roll on roll off service by ocean to Guam port. Vehicle will be shipped under deck to prevent direct exposure to salt air and spray.

PRODUCT LIABILITY INSURANCE
The contractor/bidder shall supply product liability insurance of not less than $2,000,000.00 (two million dollars). Documentation of the amount of product liability carried by the manufacturer and the name of the insurance carrier shall be provided by the contractor at the time of bid/quote submission. The successful contractor/bidder shall defend any and all suits and assume liability for the use of a patented device or an article forming a part of the apparatus furnished under the contract. Failure to supply a copy of the Certificate of Insurance with the bid/quote will be cause for immediate rejection of the contractor's submission.

ACCEPTANCE
Acceptance of the delivered apparatus and equipment will be made at the completion of all required tests and the receipt of all specified equipment. Equipment items not delivered at the time of the tests or construction not in conformance with the contractor/bidder's proposal will be cause for the accepting authority to withhold payment until all conditions of the final, approved specification have been met.

Failure to comply with changes to conform to any clause of the specifications, within 30 days after notice is given to the bidder of such changes, shall also be a cause for rejection of the apparatus.

A road test, where applicable, equal to the requirements of NFPA 1901, will be performed after the apparatus is fully equipped and loaded. The apparatus must pass all the requirements of this chapter to be considered acceptable.

The Department of Public Works and the Guam Fire Department of the Government of Guam shall inspect the apparatus and verify the complete compliance with the approved specifications. When compliance has been verified, only then will clearance be given for delivery to and final acceptance by the Guam Fire Department.

ROAD AND PERFORMANCE TESTS

The road and performance tests required are those specified in NFPA Standard 1901 and shall be conducted at the time of the pre-delivery to the purchaser at the manufacturer's facility and in the presence of the accepting authority or representatives.

In the event the apparatus fails to meet the test requirements on the first trials, second trials may be made at the option of the contractor/bidder within 30 days of the date of the first trials.

Such trials shall be final and conclusive, and failure to comply with these requirements a second time shall be cause for rejection.

Permission to keep or store the apparatus in any building owned or occupied by the purchaser during the above-specified period, with the permission of the contractor/bidder, shall not constitute acceptance. Insurance covering loss, theft, or liability shall remain the responsibility of the contractor/bidder until formal acceptance is completed.

WARRANTIES

All warranties described herein and within the technical specifications, are the minimum warranties that will be acceptable. Any warranty that does not meet these minimums shall be grounds for immediate rejection of the bid/quote submission.

The Bidder shall provide a full statement of the warranty provided for the vehicle(s) being bid. This warranty should clearly describe the terms under which the vehicle's Manufacturer accepts responsibility for the cost to repair defects caused by faulty design, quality of work or material, and for the applicable period of time after delivery.

Cost of repairs refers to all costs related thereto including, but not limited to, the cost of materials, the cost of labor.

The Manufacturer shall warrant all materials and accessories used in the vehicle(s), whether fabricated by the Manufacturer or purchased from an outside source and will deal directly with the Guam Fire Department on all warranty work.

The warranty shall commence upon acceptance of the vehicle.

OTHER WARRANTIES

Applicable warranties for all other components such as the axles, engine, transmission, generator, etc., shall be provided with technical bid proposal submission.

INTERNET IN-PROCESS SITE

The manufacturing company or bidding contractor shall post and maintain a website where the Guam Fire Department will be able to view digital images of their apparatus as its being manufactured. The digital images shall be posted once a week starting when the body begins production or when the cab/chassis arrives and shall continue until the final completion of the apparatus.

EQUIPMENT MOUNTING

The contractor/manufacturer, as per the fire department's instructions, shall mount all equipment supplied with the apparatus. Mounting hardware shall also be included in the bid price.

TRAINING

After delivery, a factory representative shall be present to familiarize those members designated by the Fire Chief of the Guam Fire Department with the basic operation of the apparatus, its components and equipment.

A structured four to eight-hour program covering proper operation and operator preventive maintenance shall be presented, at minimum, on four (4) consecutive days.

A minimum of one four to eight-hour block of instruction will also be provided to Guam Fire Department Maintenance personnel covering at, minimum, operation, maintenance, and repair of the various systems used on the apparatus.

The course outlines must be submitted to the Fire Chief for approval prior to the delivery.
The contractor/bidder agrees to allow a Guam Fire Department representative to videotape the instructional presentations for future reference and training.

CONSTRUCTION DOCUMENTATION

The contractor/bidder shall supply, at the time of delivery, at least one copy of the following documents:

1. The manufacturers record of apparatus construction details, including the following information:
   a. Owners name and address
   b. Apparatus manufacturer, model, and serial number
   c. Chassis make, model, and serial number
   d. Gross Axle Weight Rate (GAWR) of front and rear axles
   e. Front tire size and total rated capacity in pounds (kg)
   f. Rear tire size and total rated capacity in pounds (kg)
   g. Chassis weight distribution in pounds with water and manufacturer mounted equipment (front and rear)
   h. Engine make, model, serial number, rated horsepower and related speed, and governed speed
   i. Type of fuel and fuel tank capacity
   j. Electrical system voltage and alternator output in amps
   k. Battery make, model, and capacity in cold cranking amps (CCA)
   l. Chassis transmission make, model, and serial number; and chassis transmission
   m. Power Take Off (PTO) make, model, and gear ratio

n. Pump make, model, rated capacity in gallons per minute (liters per minute where applicable), and serial number
o. Pump transmission make, model, serial number, and gear ratio
p. Auxiliary pump make, model, rated capacity in gallons per minute (liters per minute where applicable), and serial
q. Number
r. Water tank certified capacity in gallons or liters
s. Paint manufacturer and paint number(s)
t. Company name and signature of responsible company representative

2. Certification of slip resistance of all stepping, standing, and walking surfaces.

3. For the fire pump, a copy of the following shall be provided: pump manufacturers certification of suction capability, apparatus manufacturer's approval for stationary pumping applications, engine manufacturers certified brake horsepower curve showing the maximum governed speed, pump manufacturers certification of the hydrostatic test, and the certification of inspection and test for the fire pump.

4. For the fixed line voltage power source, the certification of the test for the fixed power source.
5. For the air system, test results of the air quality, the SCBA fill station, and the air system installation.

6. Weight documents from a certified scale showing actual loading on the front axle, rear axle(s), and overall fire apparatus (with the water tank full but without personnel, equipment, and hose).

7. Written load analysis and results of the electrical system performance tests.
8. For the water tank, the certification of water tank capacity.

OPERATION AND SERVICE DOCUMENTATION

The contractor/bidder shall supply, at time of delivery, at least two sets of complete operation and service documentation covering the completed apparatus as delivered and accepted.

The documentation shall address at least the inspection, service, and operations of the fire apparatus and all major components thereof.

The contractor/bidder shall also provide documentation of the following items for the entire apparatus and each major operating system or major component of the apparatus:

1. Manufacturers name and address.
2. Country of manufacture.
3. Source of service and technical information.
4. Parts and replacement information.
5. Descriptions, specifications, and ratings of the chassis, and pump.
6. Wiring diagrams for low voltage and line voltage systems to include the following information: representations of circuit logic for all electrical components and wiring, circuit identification, connector pin identification, zone location of electrical components, safety interlocks, alternator-battery power distribution circuits, and input/output assignment sheets or equivalent circuit logic implemented in multiplexing systems.
7. Lubrication charts.
8. Operating instructions for the chassis, any major components such as a pump or any auxiliary systems.
9. Instructions regarding the frequency and procedure for recommended maintenance.
10. Overall apparatus operating instructions.
11. Safety considerations.
12. Limitations of use.
13. Inspection procedures.
14. Recommended service procedures.
15. Troubleshooting guide.
16. Apparatus body, chassis, and other component manufacturers warranties.
17. Copies of required manufacturer test data or reports, manufacturer certifications, and independent third-party certifications of test results.
18. A material safety data sheet (MSDS) for any fluid that is specified for use on the apparatus.

The contractor/bidder shall deliver with the apparatus all manufacturers operations and service documents supplied with components and equipment that are installed or supplied by the contractor.

ISO COMPLIANCE

The manufacturer shall operate a Quality Management System under the requirements of ISO 9001. These standards sponsored by the "International Organization for Standardization (ISO)" specify the quality systems that shall be established by the manufacturer for design, manufacture, installation and service. A copy of the certificate of compliance shall be included with the bid. ISO is a requirement of the NFPA Chapter 4.7.1 General Requirements.

ISO 9001: 2008 QUALITY MANAGEMENT SYSTEM - ALTERNATIVES

Offerors claiming an alternative to ISO 9001:2008 shall provide a description of their facilities' Quality Management System that is in place to ensure the manufacture and delivery of consistent quality product to the customer. Such a description shall include an explanation of policies and procedures relating to the following:

- Company Quality Policy
- Documentation and Control of Records
- Control and Validation of Production and Service
- Monitoring and Measurement of Product and Processes
- Control of Nonconforming Product
- Corrective and Preventive Action with Respect to Nonconforming Product
- Schedule for Internal and External Audits of Quality Management System
- External Certifications of Quality Management Systems

NFPA 2009 STANDARDS
Apparatus proposed by the bidder shall comply with the NFPA standards effective January 1, 2009, except for fire department directed exceptions. These exceptions shall be set forth in the Statement of Exceptions.

LIABILITY
The successful bidding contractor 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 apparatus or any appliance furnished under the contract.

MULTIPLEX COMPONENTS WARRANTY

5-Years
The multiplex components shall be warranted against defective materials or workmanship for a period of **five (5) years** from the date of delivery to the original purchaser. The warranty shall also include a standard repair time for covered components. A copy of the fire apparatus manufacturer's warranty shall be included with the bid. **FAILURE TO COMPLY WITH THIS REQUIREMENT WILL AUTOMATICALLY DISQUALIFY THE BID.**

WARRANTY PERFORMANCE
This apparatus is critical to the response capabilities of the Guam Fire Department. It is imperative that the apparatus remain in service and that "down time" be minimized. The following warranty performance provisions are required:

The successful contractor/bidder shall be required to provide service and or repair, as needed, as soon as possible but no more than twenty-four hours after notification by the Fire Department. These details are further explained in the attached, "Service and Maintenance Agreement".

If the contractor/bidder does not provide for the service/repair request within the twenty-four hour time frame, it will be assumed as approval for the Fire Department to repair the vehicle or obtain warranty service/repairs from component manufacturers or outside vendor(s) repair facilities. **The Fire Department shall be paid, by the contractor/bidder, an area average hourly rate for labor inclusive of transportation and parts replaced one for one.**

Defective and other parts replaced, as a result of these service/repairs, will be labeled and retained by the Fire Department. Parts shall be paid for by the contractor/bidder in exchange for work orders and replaced parts. Outside vendor repair facility parts and labor charges shall be billed directly to the successful contractor.

The contractor/bidder shall take full responsibility for returning any defective parts to their supplier.

These aforementioned service and/or repairs will, in no way, affect the validity of any warranties as depicted within the approved specifications.

Where parts of this section conflict with provisions of the "Service and Maintenance Agreement", said agreement shall take precedence.

There shall be no deviations to these requirements.

PUMP TEST
The rated water pump shall be tested, approved, and certified by an ISO certified independent third party testing agency at the manufacturer's expense. The test results, along with the pump manufacturer's certification of hydrostatic test, the engine manufacturer's certified brake horsepower curve, and the manufacturer's record of pump construction details shall be forwarded to the Guam Fire Department.

GENERATOR TEST
The generator shall be tested, approved, and certified by an ISO certified independent third party testing agency at the manufacturer's expense. The test results shall be provided to the Guam Fire Department at the time of delivery.

CUSTOMER SERVICE WEBSITE
A Customer Service website shall be provided which offers the dealer and customer access to comprehensive information pertaining to the maintenance and service of the apparatus. The website shall consist of the following features:

- Access to truck detail information on the major components of the vehicle, warranty information, drawings and sales options
- Parts look-up capability for items sourced by the fire apparatus manufacturer
- Ability to submit electronically a parts order and warranty claims
- Access to all currently published Operation and Maintenance Manuals
- Access to on-line diagnostic software
- Access to upcoming training classes offered by the fire apparatus manufacturer

The customer shall have limited access specific to their vehicle.

SPECIFICATIONS	BID[illegible]G ON / REMARKS
CHASSIS Chassis provided shall be a new, tilt-type 4-door custom fire apparatus. The chassis shall be designed and manufactured for heavy-duty service, with adequate strength and capacity for the intended load to be sustained and the type of service required.	
WARRANTY 1 YEAR CUSTOM CHASSIS Each piece of new fire or rescue apparatus shall be warranted to be free from defects in materials or workmanship under normal use and service. Each manufacturer shall supply, as a part of their bid package, a copy of the warranty or warranties that they propose to provide, and in no case shall it be less than one (1) year on the entire apparatus.	
All other warranties, as outlined in these specifications shall be provided in writing as a part of the technical proposal.	
Failure to provide the warranties, as outlined throughout these specifications, shall be cause for rejection of the bid submittal.	
UNDERBODY SUPPORT SYSTEM Due to the severe loading requirements of this pumper a method of body and compartment support suitable for the intended load shall be provided.	
The backbone of the support system shall be the chassis frame rails which is the strongest component of the chassis and is designed for sustaining maximum loads.	
The support system shall meet or exceed a .25" formed vertical and horizontal steel angle supports bolted to the chassis frame rails.	
A steel frame shall be mounted on the top of these supports to create a "floating substructure" which shall result in a 400 pound equipment support rating per lower side compartment and a 500 pound equipment support rating for the rear tailboard compartment.	
The "floating substructure" shall be separated from the horizontal members with neoprene elastomeric isolators. These isolators shall reduce the natural flex stress of the chassis from being transmitted to the body.	
The isolators shall have a broad load range, proven viability in vehicular applications, be of a failsafe design and allow for all necessary movement in three (3) transitional and rotational modes.	
Isolators shall be installed in a pattern to reduce the natural flex of the chassis being transmitted to the body.	
A design with body compartments hanging on the chassis in an unsupported fashion shall not be acceptable. Compartments shall as a minimum be capable of handling weight requirements of equipment held within (reference compartment minimum equipment list at end of this specification.	
UNDERCOATING, CAB & BODY The underside of the apparatus shall be undercoated with an asphalt petroleum based material, dark in color. The undercoating material utilized on the apparatus shall be formulated to resist corrosion and deaden unwanted sound or road noise.	
Coating texture shall appear firm, flexible, and resistant to abrasion. Minimum dry film thickness shall be in the range of 8.00 to 12.00 mils.	
The material shall be applied to the following areas: Body and cab wheel well fender liners, on the back side only. Underside of body and cab sheet metal, and structural components. Underside and vertical sides of all sheet metal compartmentation, including support angles.	

SPECIFICATIONS	BIDDING ON / REMARKS
Structural support members under running boards, rear platforms, battery boxes, walkways, etc.	
Inside surfaces of the pump heat enclosure, (when installed).	
SEATING CAPACITY The seating capacity in the cab shall be six (6).	
WHEELBASE The wheelbase of the vehicle shall be no greater than 180".	
GVW RATING The gross vehicle weight rating shall be a minimum of 40,000 lbs.	
FRAME The chassis frame shall be built with two (2) steel channels bolted to five (5) cross members or more, depending on other options of the apparatus.	
FRAME RAIL WARRANTY The frame rails shall be guaranteed for the **life of the vehicle**, which is estimated to be 50 years, against defects in design, material, or workmanship, excluding accident or abuse. A copy of the fire apparatus manufacturer's warranty shall be included with the bid.	
FRONT AXLE The front axle shall be a reverse "I" beam type with inclined king pins and a minimum rated capacity of 16,000 pounds. A viewing window shall be provided on each side of the axle for checking the oil level.	
FRONT AXLE WARRANTY A two (2) year, unlimited mileage, parts and labor warranty shall be provided with this axle.	
OIL SEALS Oil seals with viewing window shall be provided on the front axle.	
SHOCK ABSORBERS To provide a smoother ride, heavy-duty telescoping shock absorbers shall be provided on the front axle.	
REAR AXLE The rear axle shall have a capacity of 24,000 pounds.	
REAR AXLE WARRANTY A two (2) year, unlimited mileage, parts and labor warranty shall be provided with this axle.	
TOP SPEED OF VEHICLE A rear axle ratio shall be furnished to allow the vehicle to reach a top speed of at least 65 mph.	
OIL SEALS Oil seals shall be provided on the rear axle.	
SUSPENSION, FRONT Front springs shall be semi-elliptical, seven (7)-leaf, constant rate type with a ground rating of 16,000 pounds or greater.	
The spring pins shall be provided, with double "figure-eight" grease grooves. The bushing that holds the spring pin in place shall also have a grease groove.	
REAR SUSPENSION The rear springs shall be semi-elliptical, 10 leaves with a ground rating of 24,000 pounds. Spring hangers shall be castings with provisions for lubrication. The grease fittings shall be accessible without removing the wheels or cutting any sheet metal.	
The spring pins shall be provided, with double "figure-eight" grease grooves. The bushing that holds the spring pin in place shall also have a grease groove.	

SPECIFICATIONS	BIDDING ON / REMARKS
ANTI-LOCK BRAKE SYSTEM The vehicle shall be equipped with an anti-lock braking system. The ABS shall provide a four (4) channel anti-lock braking control on both the front and rear wheels.	
A digitally controlled system that utilizes microprocessor technology shall control the anti-lock braking system. Each wheel shall be monitored by the system.	
ANTI-LOCK BRAKE SYSTEM WARRANTY The ABS system shall come with a **three (3) year or 30,000 mile parts and labor** warranty provided by ABS manufacturer.	
BRAKES The service brake system shall be a full air type design.	
Front brakes shall be disc type with automatic pad wear adjustment ventilated rotors for improved stopping distance. The rear brakes shall be disc operated with automatic slack adjusters and a 17.00" ventilated rotor for improved stopping distance.	
ENGINE EXHAUST BRAKE A Jacobs Brake System shall be installed with the control located on the interior cab instrument panel within easy reach of the driver.	
It shall be wired to the rear brake lights so they are activated whenever the brake is operating.	
The ABS system shall automatically disengage the auxiliary braking device, when required.	
AIR COMPRESSOR, BRAKE SYSTEM The air compressor shall have adequate feet per minute output to match the braking system installed.	
BRAKE SYSTEM The brake system shall include:	
- Dual brake treadle valve with vinyl covered foot surface	
- Heated automatic moisture ejector	
- Total air system with a capacity of no less than 4300 cubic inches	
- Two (2) air pressure gauges with red warning light and audible alarm, that activates when air pressure falls below 60 psi	
- Spring set parking brake system	
- Parking brake operated by a control valve	
- A parking "brake on" indicator light on instrument panel	
- A double check valve system to provide automatic spring brake application at 40 psi	
- Air Dryer properly sized for the brake system	
BRAKE LINES Color-coded nylon brake lines shall be provided. The lines shall be wrapped in a heat protective loom where necessary in the chassis.	
AIR INLET A single air inlet with male coupling shall be provided. It shall allow station air to be supplied to the apparatus brake system through a shore line hose. The inlet shall be located on the driver side pump panel. A check valve shall be provided to prevent reverse flow of air. The inlet shall discharge into the "wet" tank of the brake system. A mating female coupling shall also be provided with the loose equipment.	

ENGINE
The chassis shall be powered by an electronically controlled engine as described below:

Min Power:	450 hp at 2100 rpm
Min Torque:	1200 lb-ft at 1400 rpm
Governed Speed:	2200 rpm
Emissions Level:	EPA 2010
Fuel:	Diesel [must be able to use fuel currently available on Guam]
Cylinders:	Six (6)
Fuel Filters:	Spin-on style primary filter with water separator and water-in-fuel sensor / Secondary spin-on style filter.
Coolant Filter:	Spin-on style with shut off valves on the supply and return line.

ENGINE WARRANTY
The engine shall have a **five (5) year** warranty provided by the engine manufacturer.

ENGINE INSTALLATION CERTIFICATION
The fire apparatus manufacturer shall provide a certification, along with a letter from the engine manufacturer stating they approve of the engine installation in the bidder's chassis. The certification shall be provided at the time of submittal.

MANUAL FLUID CHECK ACCESS
A central location for checking **all** engine compartment and Transmission fluids shall be located in the cab area, through a door located on the engine tunnel cover. **T**he engine oil dipstick shall allow for check only, and the transmission dipstick shall allow for check and fill.

An additional tube shall be provided for engine oil fill, located next to the engine check dipstick.

The door shall be insulated with the same material used in the engine tunnel area, and have a rubber seal.

Two (2) flush latches shall be provided on the access door.

ENGINE COMPARTMENT LIGHT
Two engine compartment lights shall be installed under the engine hood, of which the switch is an integral part. Lights shall have a lenses designed to prevent moisture retention.

ENGINE AIR INTAKE
The air intake with ember separator shall be mounted on the Engine and shall be easily accessible by tilting the cab. The ember separator must prevent road dirt and re-circulating hot air from entering the engine.

EXHAUST INSULATION BLANKET
An insulation "blanket" wrap shall be provided on the turbo charger and exhaust delivery pipe for reduction of heat to the cab. The "blanket" wrap shall extend down the exhaust delivery pipe to the bottom of the frame rail.

EXHAUST SYSTEM
The exhaust shall exit on the right side ahead of the rear wheels. A heat deflector shield shall be provided where the tail pipe is routed under any side compartmentation.

BATTERY SYSTEM
Six (6) 12 volt Exide brand or equal batteries shall be provided with the following capacities:

- 950 CCA, cold cranking amps
- 190 amp reserve capacity
- High cycle Group 31
- Rating of 5700 CCA at 0 degrees Fahrenheit
- 1140 minutes of reserve capacity
- Threaded stainless steel studs

SPECIFICATIONS	BIDDING ON / REMARKS
The battery compartments shall be constructed of stainless steel and shall be located one (1) each side mounted on the vehicle frame. They shall be well ventilated and enclosed to protect against road splash and debris. Suitable provisions shall be provided for drainage. The batteries shall sit on non-corrosive trays with appropriate stainless steel mounting hardware.	
Batteries shall be placed on non-corrosive mats and be stored in well-ventilated compartments located under the cab.	
Heavy-duty battery cables shall be used to provide maximum power to the electrical system. Cables shall be color-coded.	
Battery terminal connections shall be coated with anti-corrosion compound. Battery solenoid terminal connections shall be encapsulated with semi-permanent rubberized compound.	
MASTER BATTERY SWITCH A master battery switch, to activate the battery system, shall be provided inside the cab within easy reach of the driver.	
An indicator light shall be provided on the instrument panel to notify the driver of the status of the battery system.	
BATTERY CHARGING RECEPTACLE The battery charging receptacle location shall be on the driver side seat riser, to the rear of battery switch.	
IGNITION SYSTEM A single starting system shall be provided.	
A ignition switch and starter button shall be located on the instrument panel.	
ALTERNATOR Shall have a rated output current of 320 amps, as measured by SAE method J56. The alternator will feature an integral, self-diagnostic regulator and rectifier. The alternator will be connected to the power and ground distribution system with heavy-duty cables sized to carry the full rated alternator output. All end connecters that are not used and exposed to the elements will be sealed.	
HIGH IDLE A high idle switch shall be provided, inside the cab, on the instrument panel, that shall automatically maintain a preset engine rpm. A switch shall be installed, at the cab instrument panel, for activation/deactivation. The high idle shall be operational only when the parking brake is on and the truck transmission is in neutral. A green indicator light shall be provided, adjacent to the switch. The light shall illuminate when the above conditions are met. The light shall be labeled "OK to Engage High Idle".	
COOLANT LINES Rubber hose shall be used for all engine coolant lines to be installed by the chassis manufacturer. Hose clamps shall be stainless steel "constant torque type" to prevent coolant leakage. They shall react to temperature changes in the cooling system and expand or contract accordingly while maintaining a constant clamping pressure on the hose.	
RADIATOR The radiator and the complete cooling system shall meet or exceed NFPA and engine manufacturer cooling system standards.	
CLUTCH FAN An air actuated clutch fan shall be provided. Clutch fan shall be automatic when the pump transmission is in "Road" position and engaged constantly when in "Pump" position.	
FUEL TANK A 65-gallon (minimum) fuel tank shall be provided. It shall be equipped with swash partitions and a vent.	
The fuel tank shall be properly secured with stainless steel straps in place of the standard steel material where available.	

SPECIFICATIONS	BIDDING ON / REMARKS
A drain plug shall be provided in a low point of the tank for drainage. A fill inlet shall be located on the driver's side of the body and be covered with a hinged, spring loaded, stainless steel door that is marked "Diesel Fuel Only".	
A Vent shall be provided running from top of tank to just below fuel fill inlet. The tank shall meet all FHWA 393.67 requirements including a fill capacity of 95% of tank volume. All fuel lines shall be provided as recommended by the engine manufacturer.	
AUXILIARY FUEL COOLING SYSTEM A supplementary fuel cooling system shall be provided to allow the use of water from the discharge side of the pump for cooling the chassis engine fuel. The heat exchanger shall be a cylindrical type and shall be a separate unit. The cooler shall operate any time the pump is discharging water and shall be plumbed to the master drain valve.	
TRANSMISSION An electronic torque converting automatic transmission (Allison Transmission or equivalent) shall be provided. Two (2) PTO openings shall be located on converter housing.	
A transmission temperature gauge with red light and audible alarm shall be installed on the cab dash.	
TRANSMISSION SHIFTER A five (5)-speed push button shift module shall be mounted to right of driver on console. Shift position indicator shall be indirectly lit for after dark operation. The gear ratios shall be specific to the engine manufacturer's recommendations. This shall meet, or exceed, the Guam Fire Department's Road and Performance Test specifications.	
TRANSMISSION COOLER A transmission oil cooler shall be provided in the lower tank of the radiator.	
TRANSMISSION WARRANTY The transmission shall have a five year unlimited mileage warranty covering 100% parts and labor. The warranty is to be provided by the transmission manufacturer and not the apparatus builder.	
DRIVELINE Drivelines shall be a heavy-duty metal tube and be equipped with universal joints.	
Each of the chassis drivelines shall have a U shaped safety guard provided and installed to protect the chassis electrical and air lines in the event of driveline failure.	
The shafts shall be dynamically balanced before installation.	
A splined slip joint shall be provided in each driveshaft.	
STEERING A steering gear, with integral heavy-duty power steering, shall be provided. For reduced system temperatures, the power steering shall incorporate a three (3)-line hydraulic pump with integral pressure and flow control.	
The steering wheel shall be 18.00" in diameter, and capable of tilting and telescoping to improve fit for a broader range of driver configurations.	
A letter from the hydraulic pump manufacturer stating they approve of the hydraulic pump selection and its operating temperature and flow shall be furnished with the bidder's technical proposal.	
TIRES Front tires shall be 315/80R22.50 radials, 20 ply "all-position" tread.	
The tires shall be mounted on 22.50" x 9.00" fully painted (red in color) Steel or polished aluminum wheels with ten (10) studs.	
Rear tires shall be four (4) 11R22.50 radials, 16 ply all-season tread.	

SPECIFICATIONS	BIDDING ON / REMARKS
The tires shall be mounted on 22.50" x 8.25" fully painted (red in color) steel wheels or polished aluminum wheels With ten (10)-studs.	
TIRE BALANCE All tires shall be balanced with Counteract balancing beads. The beads shall be inserted into the tire and eliminate the need for wheel weights.	
WHEEL CHOCKS There shall be one (1) set(s) of folding aluminum alloy wheel blocks, with easy-grip handle provided.	
WHEEL CHOCK BRACKETS There shall be one (1) set(s) of horizontal mounting wheel chock brackets provided for the folding wheel chocks. The brackets shall be mounted both ahead of the rear wheel on the driver's side.	
MUD FLAPS Mud flaps shall be installed behind the front and rear wheels of the apparatus.	
TIRE PRESSURE MANAGEMENT There shall be a tire alert pressure management system provided that shall monitor each tire's pressure. A chrome plated brass sensor shall be provided on the valve stem of each tire for a total of six (6) tires.	
The sensor shall calibrate to the tire pressure when installed on the valve stem for pressures between 20 and 120 psi. The sensor shall activate an integral battery operated LED when the pressure of that tire drops 8 psi.	
Removing the cap from the sensor shall indicate the functionality of the sensor and battery. If the sensor and battery are in working condition, the LED shall immediately start blinking.	
GRILLE A front cab grille shall be supplied. It shall consist of a polished stainless steel grille screen with decorative bright anodized aluminum framework.	
FENDER CROWNS Stainless steel fender crowns shall be installed at the cab wheel openings.	
MOLDING (on sides of cab) Chrome molding shall be provided on both sides of cab.	
CONVEX MIRRORS A 6.00" diameter round convex mirror shall be installed below each west coast mirror head.	
BUMPER A one (1) piece, stainless steel bumper shall be attached to the front of the frame. A 9.00" channel shall be mounted directly behind the bumper for additional strength.	
The bumper shall be extended 19.00" from front face of cab. As part of the bumper extension, a 1/4" thick by 9-3/8" high formed channel with 3" flanges or equivalent shall be provided directly behind the full width of the flat portion of the bumper to protect the front of the cab in the event of accident.	
TOW HOOKS Two (2) chromed steel tow hooks shall be installed under the bumper and attached to the front frame members. The tow hooks shall be designed and positioned to allow up to a 6,000 pound straight horizontal pull in line with the centerline of the vehicle. The tow hooks shall not be designed for, and are not intended to be used for lifting of the apparatus.	

GRAVEL PAN

A gravel pan, constructed of bright aluminum tread plate, shall be furnished between the bumper and cab face. The gravel pan shall be properly supported from the underside to prevent flexing and vibration of the aluminum tread plate.

HOSE TRAY

A hose tray shall be placed in the center of the extended bumper. The tray shall have a capacity of 100' of 1.75" double jacket cotton-polyester hose. Black rubber grating shall be provided at the bottom of the tray. Drain holes shall also be provided.

A pair of 2.00" wide black nylon strap(s), with Velcro fasteners, shall be provided within the hose tray(s). The strap(s) shall be used to secure the hose in the tray.

APPARATUS CAB

The cab shall be designed according to NFPA 1901, specifically for the fire service and manufactured by the chassis builder.

Construction of the cab shall consist of a 5052-H32 .125" aluminum welded to extruded aluminum framing or equivalent.

The cab shall be approximately 96.00" wide, with an interior width of no less than 87.50".

The forward cab section shall have an overall height (from the cab roof to the ground) approximately 99.00".

The crew cab section shall have a minimum 10.00" raised roof, with an overall cab height of approximately 111.00".

Floor to ceiling height inside the crew cab shall be approximately 67.00".

The cab shall be a full tilt design, allowing easy maintenance of the engine compartment. The engine shall be easily accessible and capable of being removed with the cab tilted.

The engine hood shall be insulated, lightweight, and non-corrosive (e.g. aluminum) for protection from heat and sound. The noise insulation shall keep the DBA level within the limits stated in the current NFPA 1901.

All cab access steps shall be approximately 22.00" wide x 8.00" minimum depth, located inside the door, protecting the step from weather elements.

A 20.00" slip resistant handrail shall be provided adjacent to all door openings to assist with entrance into the cab.

The cab doors shall be approximately 35.00" wide x 68.00" high.

The cab and crew cab doors shall be constructed of extruded aluminum with a nominal material thickness of .125". The exterior door skins shall be constructed from .090" aluminum.

All cab and crew cab doors shall contain a conventional roll down window. The crew cab shall be of the totally enclosed design.

Crew cab entrance doors shall be located on the side of the cab behind the front wheels.

The crew cab doors shall be double pan type and measure approximately 35.00" wide x 80.00" high.

The cab and crew cab shall be completely open to allow visual and audio communication with the passengers.

Flush mounted, chrome plated paddle type door handles shall be provided on the exterior of the cab and crew cab doors.

All interior cab and crew cab door handles shall also have flush paddle handles.

SPECIFICATIONS	BIDDING ON / REMARKS
The cab doors shall be provided with both interior (rotary knob) and exterior (keyed) locks as required by FMVSS 206.	
The locks shall be capable of activating when the doors are open or closed. The doors shall remain locked if locks are activated when the doors are opened, then closed.	
The door hinges shall be a stainless steel piano type with a .25" pin.	
There shall be double automotive type rubber seals around the perimeter of all cab and crew cab doors to ensure a weather tight fit.	
Door liners shall be constructed of smooth aluminum, painted to match the cab interior.	
Bright aluminum treadplate shall be overlayed on the outside rear wall of the crew cab except for areas that are not typically visible when the cab is lowered.	
Full circular inner fender liners, in the wheel wells, shall be provided.	
A curved, safety glass windshield shall provide approximately 2,754 square inches of clear viewing area.	
The cab windshield shall have bright trim inserts in the rubber molding holding the glass in place. All cab glass shall be tinted. Economical windshield replacement glass shall be readily available from local auto glass suppliers.	
Two (2) sun visors must be provided. The sun visors shall be located above the windshield with one (1) mounted on each side of the cab.	
The two (2) windshield wipers shall be electrically controlled and meet FMVSS requirements. Each wiper shall be individually controlled and have a speed modulation feature allowing the driver to adjust the speed of the wiper. The windshield wipers shall also be furnished with a feature which allows the wiper to return to the stored position when the wiper is not in use. Each wiper shall be equipped with a washer and wiper control. The washer reservoir shall be able to be filled without raising the cab.	
AIR CONDITIONING The apparatus shall have an air conditioning system with defogger capable of cooling the inside cab to a temperature of 75 degrees Fahrenheit within 30 minutes with an ambient temperature of 90 degrees Fahrenheit.	
Controls for the air conditioning system must be easily reachable for the driver and passengers if separate air conditioning/blower units are used.	
CAB INTEGRITY CERTIFICATION The fire apparatus manufacturer shall provide, at the time of bid submittal, a cab integrity certification. Testing shall meet or exceed the requirement below:	
- SAE J2422 Cab Roof Strength Evaluation - Quasi-Static Loading Heavy Trucks.	
- SAE J2420 COE Frontal Strength Evaluation - Dynamic Loading Heavy Trucks.	
There shall be no exception to any portion of the cab integrity certification. Nonconformance shall lead to immediate rejection of bid.	
CAB WARRANTY The bidder shall furnish a **ten (10) year** cab warranty. The warranty shall cover defects in design or workmanship in the cab tubular support and mounting supports and other cab structural components identified in the specifications. A copy of the warranty shall be submitted with the bid. **(No exception)**	

SPECIFICATIONS	BIDDING ON / REMARKS
CAB LIFT A hydraulic cab lift system shall be provided consisting of an electric powered hydraulic pump, and dual lift cylinders.	
Hydraulic pump shall have a manual override for backup in the event of electrical failure.	
Lift controls shall be located in a convenient location within an enclosed compartment.	
The cab shall be locked down by a latch that fully engages after the cab has been lowered. The system shall be able to release the normally closed locks when the cab lift control is in the raised position and cab lift system is under pressure.	
CAB FLOOR The cab and crew cab floor areas shall be covered with a floor mat that is durable, non-slip, and fluid resistant. Mat shall be black or dark gray. Floor matting must also provide significant sound dampening for interior of cab.	
CREW CAB WINDOWS Crew Cab windows shall be provided with factory tinted glass.	
CAB INTERIOR Headliner shall be installed in both forward and rear cab sections. Headliner material shall be vinyl. A sound barrier shall be part of its composition. Cab headliner shall be securely fastened and shall permit easy access for service of electrical wiring or other maintenance needs.	
CAB INTERIOR UPHOLSTERY The cab interior and seat upholstery shall be black or dark gray and of fluid resistant material.	
INTERIOR PAINT (Cab) The cab interior metal surfaces shall be stain resistant and painted gray.	
GRAB HANDLE A black or dark gray rubber covered grab handle shall be mounted on the door post of the driver and officer's side cab door to assist in entering the cab. The grab handle shall be securely mounted to the post area between the door and windshield.	
The driver's grab handle shall allow additional clearance between the steering wheel and grab handle.	
DRIVER SEAT An air-ride, mid-height with headrest style seat shall be provided in the cab for the driver. The driver's seat shall be furnished with three (3)-point shoulder type seat belt. The seat belt shall be furnished with automatic retractor. Extension shall be provided with the seat belt so the male end can be easily grasped and the female end easily located while sitting in a normal position.	
OFFICER SEAT An SCBA seat with high-back shall be provided in the cab for the officer. The SCBA cavity shall be adjustable front to rear in 0.50" increments to accommodate different size SCBA bottles.	
Moving the SCBA cavity shall be accomplished by unbolting, relocating and re-bolting in the desired location.	
The officer seat shall be furnished with three point shoulder type seat belts. The seat belts shall be furnished with automatic retractors. Extensions shall be provided with the seat belts so the male end can be easily grasped and the female end easily located while sitting in a normal position.	
REAR FACING PASSENGER SIDE OUTBOARD SEAT One (1) rear facing, SCBA seat shall be provided in the passenger side outboard position in crew cab. The SCBA cavity shall be adjustable front to rear in .50" increments to accommodate different size SCBA bottles.	

SPECIFICATIONS	BIDDING ON / REMARKS
Moving the SCBA cavity shall be accomplished by unbolting, relocating and re-bolting in the desired location.	
Seat shall be furnished with three-point shoulder type seat belt.	
The seat belt shall be furnished with automatic retractors.	
Extension shall be provided with the seat belt so the male end can be easily grasped and the female end easily located while sitting in a normal position.	
REAR FACING DRIVER SIDE OUTBOARD SEAT One (1) rear facing, SCBA seat shall be provided in the driver side outboard position in crew cab. The SCBA cavity shall be adjustable front to rear in .50" increments to accommodate different size SCBA bottles.	
Moving the SCBA cavity shall be accomplished by unbolting, relocating and re-bolting in the desired location.	
Seat shall be furnished with three-point shoulder type seat belt. The seat belt shall be furnished with automatic retractors. Extension shall be provided with the seat belt so the male end can be easily grasped and the female end easily located while sitting in a normal position.	
FORWARD FACING CENTER SEATS There shall be two (2) forward facing, SCBA seats provided at the center position in the crew cab. The SCBA cavity shall be adjustable front to rear in .50" increments to accommodate different size SCBA bottles.	
Moving the SCBA cavity shall be accomplished by unbolting, relocating and re-bolting in the desired location.	
The seats shall be furnished with a three three-point, shoulder type seat belt. The seat belts shall be furnished with automatic retractors. Extensions shall be provided with the seat belts so the male end can be easily grasped and the female end easily located while sitting in a normal position.	
PORTABLE RADIO STORAGE COMPARTMENT A radio compartment shall be provided under the officer's seat.	
The inside compartment dimensions shall be approximately 18" deep x 16" across x 6" high.	
A drop-down door with a chrome plated lift and turn latch shall be provided for access.	
The compartment shall be constructed of smooth, durable, non-corrosive material. It shall be painted to match the cab interior.	
AIR BOTTLE HOLDERS All SCBA type seats in the cab shall have a "Hands-Free" auto clamp style bracket in its backrest. For efficiency and convenience, the bracket shall include an automatic spring clamp that allows the occupant to store the SCBA bottle by simply pushing it into the seat back.	
For protection of all occupants in the cab, in the event of an accident, the inertial components within the clamp shall constrain the SCBA bottle in the seat and shall exceed the NFPA standard of 9G. Bracket designs with manual restraints (belts, straps, buckles) that could be inadvertently left unlocked and allow the SCBA to move freely within the cab during an accident, shall not be acceptable. There shall be a quantity of 5 SCBA brackets.	
SEAT BELTS All seating positions in the cab and crew cab shall have bright red seat belts.	

SEAT BELT MONITORING SYSTEM
A seat belt monitoring system (SBMS) shall be provided. The SBMS shall be capable of monitoring up to ten (10) sensors indicating the status of each seating position in the cab with green and red LED indicators as follows:

Seat Occupied	Buckled	Green
Seat Occupied	Unbuckled	Red
No Occupant	Buckled	Red
No Occupant	Unbuckled	Not Illuminated

The SBMS shall include an audible alarm that shall be activated when a red illumination condition exists and the parking brake is released, or a red illumination condition exists and the transmission is not in park.

HELMET HOLDER
There shall be six (6) helmet holder bracket(s) provided in the cab. The brackets shall provide quick access and secure storage of the helmet(s). The bracket location(s) shall be determined at time of final inspection.

CAB INTERIOR LIGHTING
Auxiliary lights shall be provided in the cab and consisting of:

- One (1) Clear Dome Light: Located in the center, controlled by automatic door switches.

- Two (2) Adjustable Map Lights: With switches mounted on the cab ceiling.

- An LED courtesy light at each door opening that illuminates the steps: controlled by automatic door switches.

CREW CAB INTERIOR LIGHTING
Auxiliary lights shall be provided in the crew cab and consist of:

Two (2) red/clear dome lights located one (1) each side, controlled by the following:

- Clear forward light controlled by the door switch and the lens
- switch.
- Red rearward light controlled by the lens switch.

INTERIOR CAB INSULATION
The cab and crew cab walls shall be insulated with 1.50" insulation and the ceiling shall have 1.00" insulation to reduce heat transfer into the cab.

CAB INSTRUMENTATION
The cab instrument panel shall include gauges, telltale indicator lamps, control switches, alarms, and a diagnostic panel. The function of the instrument panel controls and switches shall be identified by a label adjacent to each item.

Actuation of the headlight switch shall illuminate the labels in low light conditions. Telltale indicator lamps shall not be illuminated unless necessary.

The cab instruments and controls shall be conveniently located within the forward cab section, forward of the driver. The gauge assembly and switch panels are designed to be removable for ease of service and low cost of ownership.

GAUGES
The gauge panel shall include the following nine (9) black faced gauges with black bezels to monitor vehicle performance:

Voltmeter gauge (volts):
Low volts (11.8 VDC)
-Amber telltale light on indicator light display with steady tone alarm

High volts (15.5 VDC)
-Amber telltale light on indicator light display with steady tone alarm

Engine Tachometer (RPM)
Speedometer MPH

SPECIFICATIONS	BIDDING ON / REMARKS
Fuel level gauge (Empty - Full in fractions): -Low fuel (1/8 full)	
-Amber telltale light on indicator light display with steady tone alarm	
Engine Oil pressure Gauge (PSI) -Low oil pressure to activate engine warning lights and alarms -Red telltale light on indicator light display with steady tone alarm	
Front Air Pressure Gauges (PSI) -Low air pressure to activate warning lights and alarm -Red telltale light on indicator light display with steady tone alarm	
Rear Air Pressure Gauges (PSI) -Low air pressure to activate warning lights and alarm -Red telltale light on indicator light display with steady tone alarm	
Transmission Oil Temperature Gauge (Fahrenheit): -High transmission oil temperature activates warning lights and alarm	
-Amber telltale light on indicator light display with steady tone alarm	
Engine Coolant Temperature Gauge (Fahrenheit): -High engine temperature activates an engine warning light and alarms	
-Red telltale light on indicator light display with steady tone alarm	
INDICATOR LAMPS To promote safety, the following telltale indicator lamps shall be located on the instrument panel in clear view of the driver. The indicator lamps shall be "dead-front" design that is only visible when active. The colored indicator lights shall have descriptive text or symbols.	
The following telltale lamps (colored appropriately) shall be present: Low coolant Trac cntl (traction control) Check engine Check Trans (check transmission) Air rest (air restriction) Driver door open Passenger door open DPF (engine diesel particulate filter regeneration) HET (engine high exhaust temperature) ABS (antilock brake system) MIL (engine emissions system malfunction indicator lamp) Regen inhibit (engine emissions regeneration inhibit) Trans temp (transmission temperature) Side roll fault Front air bag fault Aux brake overheat (auxiliary brake overheat) Parking brake Stop engine Left turn Right turn Battery on Ignition Aux brake (auxiliary brake engaged) High beam	
INDICATOR LAMP AND ALARM PROVE-OUT A system shall be provided which automatically tests telltale indicator lights and alarms located on the cab instrument panel.	
CONTROL SWITCHES For ease of use, the following controls shall be provided immediately adjacent to the cab instrument panel within easy reach of the driver. All switches shall have backlit labels for low light applications.	
Headlight/Parking light switch: A three (3) position maintained rocker switch shall be provided.	
Panel backlighting intensity control switch: A variable voltage control switch shall be provided.	

SPECIFICATIONS	BIDDING ON / REMARKS
Ignition switch: A three (3) position momentary rocker switch shall be provided. The first switch position shall deactivate vehicle ignition.	
The second switch position shall activate vehicle ignition. The third momentary position shall perform prove-out on the telltale indicators and alarms when the ignition switch is held in the up position for 3-5 seconds to ensure proper performance. A green indicator lamp is activated with vehicle ignition.	
Engine start switch: A two (2) position momentary rocker switch shall be provided. The first switch position is the default switch position. The second switch position shall activate the vehicle's engine. The switch actuator is designed to prevent accidental activation.	
Hazard switch shall be incorporated into the steering column.	
Turn signal arm: A self-canceling turn signal with integrated high beam headlight controls.	
Windshield wiper control shall have high, low, and intermittent modes with washer controls.	
Parking brake control: An air actuated push/pull park brake control.	
Chassis horn control: Activation of the chassis horn control shall be provided on of the steering wheel assembly.	
CUSTOM SWITCH PANELS The design of cab instrumentation shall allow for emergency lighting and other switches to be placed within easy reach of the operator thus improving safety. There shall be positions for up to five (5) switch panels in the engine tunnel console. All switches have backlit labels for low light applications.	
High idle engagement switch: A maintained rocker switch with integral indicator lamp shall be provided. The switch shall activate and deactivate the high idle function. A green indicator lamp integral to the high idle engagement switch shall indicate when the high idle function is engaged.	
The OK TO ENGAGE HIGH IDLE indicator lamp must be active for the high idle function to engage.	
OK to high idle indicator lamp: A green indicator light shall be provided next to the high idle activation switch to indicate that the interlocks have been met to allow high idle engagement.	
Diesel particulate filter regeneration switch Diesel particulate filter regeneration inhibit switch	
DIAGNOSTIC PANEL A diagnostic panel shall be accessible while standing on the ground and shall be located on the driver's side. The diagnostic panel shall allow diagnostic tools such as computers to connect to various vehicle systems for improved trouble shooting providing a lower cost of ownership. Diagnostic switches shall allow engine and ABS systems to provide blink codes should a problem exist.	
The diagnostic panel shall include the following: Engine diagnostic port Transmission diagnostic port ABS diagnostic port Roll sensor diagnostic port	
Engine diagnostic switch (blink codes flashed on check engine telltale indicator)	
An ABS diagnostic switch shall be accessible while standing on the ground and located inside the driver's or passenger's cab side.	

The diagnostic switch shall allow ABS system blink codes should a problem exist.

ELECTRICAL POWER CONTROL SYSTEM

A compartment shall be provided in or under the cab to house the vehicle's electrical power and signal circuit protection and control components. The power and signal protection and control compartment shall contain circuit protection devices and power control devices.

Power and signal protection and control components shall be protected against corrosion, excessive heat, excessive vibration, physical damage and water spray.

Serviceable components shall be readily accessible.

Circuit protection devices, which conform to SAE standard, shall be utilized to protect each circuit. All circuit protection devices shall be sized to prevent wire and component damage when subjected to extreme current overload.

General protection circuit breakers shall be Type-I automatic reset (continuously resetting) and conform to SAE J553 or J258. PTO power circuits shall be protected by Type III manual reset non-cycling circuit breakers conforming to SAE J553 or J258 which remain open until manually reset. When required, automotive type fuses conforming to SAE J554, J1284, J1888 or J2077 shall be utilized to protect electronic equipment.

Power control relays and solenoids shall have a direct current (dc) rating of 125 percent of the maximum current for which the circuit is protected.

Visual status indicators shall be supplied to identify control safety interlocks and vehicle status. In addition to visual status indicators, audible alarms designed to provide early warning of problems before they become critical shall be used.

VOLTAGE MONITOR SYSTEM

A voltage monitor system shall be provided to indicate the status of each battery system connected to the vehicle's electrical load. The monitor system shall provide visual and audio warning when the system voltage is above or below optimum levels.

POWER AND GROUND STUD

A 12-volt power stud and a grounding stud shall be provided in the electrical component compartment for mobile mounted 2-way radio equipment.

EMI/RFI PROTECTION

The electrical system shall include means to control undesired electromagnetic and radio frequency emissions.

The apparatus shall have the ability to operate in the electromagnetic environment typically found in fire ground operations.

The contractor shall be able to demonstrate the EMI and RFI testing has been done on similar apparatus and certifies that the vehicle proposed meets SAE J551 requirements.

EMI/RFI susceptibility shall be controlled by applying immune circuit designs, shielding, twisted pair wiring and filtering. The electrical system shall be designed for full compatibility with low level control signals and high powered 2-way radio communication systems. Harness and cable routing shall be given careful attention to minimize the potential for conducting and radiated EMI-RFI susceptibility.

VEHICLE DATA RECORDER

A vehicle data recorder (VDR) shall be provided. The VDR shall be capable of reading and storing vehicle information. The VDR shall be capable of operating in a voltage range from 8VDC to 16VDC. The VDR shall not interfere with, suspend, or delay any communications that may exist on the CAN data link during the power up, initialization, runtime, or power down sequence.

The VDR shall continue operation upon termination of power or at voltages below 8VDC for a minimum of 10 milliseconds.

The information stored on the VDR can be downloaded through a USB port mounted in a convenient location determined by cab model. A CD provided with the apparatus shall include the programming to download the information from the VDR. A USB cable can be used to connect the VDR to a laptop to retrieve required information.

The vehicle data recorder shall be capable of recording the following data via hardwired and/or CAN inputs:

Vehicle Speed - MPH
Acceleration - MPH/sec
Deceleration - MPH/sec
Engine Speed - RPM
Engine Throttle Position - % of Full Throttle
ABS Event- On/Off
Seat Occupied Status - Yes/No by Position
(6 Seating Capacity)

Seat Belt Buckled Status - Yes/No by Position
(6 Seating Capacity)
Master Optical Warning Device Switch - On/Off
Time - 24 Hour Time
Date - Year/Month/Day

As per NFPA 1901, chap 4.11: Software shall be provided.

INTERCOM SYSTEM

An intercom system shall be provided. Intercom stations shall be provided for the driver, officer, and pump panel positions. All positions shall have radio interface capability.

The following components (or equivalent component types) shall be supplied with this system:

- One (1) 3010R Intercom Unit
- One (1) Mobile Radio Interface
- Two (2) HM-10 Interior Headset Modules
- One (1) PP-20 Exterior Headset Module
- One (1) UH-10S Headset
- One (1) UH-10 Headset
- Four (4) UH-20 Headset
- Six (6) Headset Hanger Hooks

RADIO INTERFACE

Due to the combination of the mobile radio and the brand of intercom system, a mobile radio interface adapter shall be provided if necessary.

AM/FM RADIO/CD SYSTEM

There shall be an AM/FM stereo radio with antenna, CD player, and speaker system provided in the cab by the chassis manufacturer.

ELECTRONIC LOAD MANAGEMENT

An electronic load management (ELM) system shall be provided that monitors the vehicles 12-volt electrical system, and automatically reduces the electrical load in the event of a low voltage condition and by doing so, ensures the integrity of the electrical system.

The ELM shall monitor the vehicle's voltage while at the scene (parking brake applied). It shall sequentially shut down individual electrical loads when the system voltage drops below a preset value. Two (2) separate electrical loads shall be controlled by the load manager. The ELM shall sequentially re-energize electrical loads as the system voltage recovers.

AMP DRAW REPORT

The bidder shall provide, at the time of bid submittal and delivery, an itemized print out of the expected amp draw of the entire vehicle's electrical system.

The manufacturer of the apparatus shall provide the following:

1) Documentation of the electrical system performance tests.
2) A written load analysis, which shall include the following:

A) The nameplate rating of the alternator.
B) The alternator rating under the conditions specified per: Applicable NFPA 1901 (Current Edition).
C) The minimum continuous load of each component that is specified per: Applicable NFPA 1901 (Current Edition).
D) Additional loads that, when added to the minimum continuous load, determine the total connected load.
E) Each individual intermittent load.

All of the above listed items shall be provided by the bidder per the applicable NFPA 1901 (Current Edition).

ELECTRICAL

All 12-volt electrical equipment installed by the apparatus manufacturer shall conform to modern automotive practices. All wiring shall be high temperature crosslink type. Wiring shall be run, in loom or conduit, where exposed and have grommets where wire passes through sheet metal. Automatic reset circuit breakers shall be provided which conform to SAE Standards.

Wiring shall be color, function and number coded. Function and number codes shall be continuously imprinted on all wiring harness conductors at 2.00" intervals. Exterior exposed wire connectors shall be positive locking, and environmentally sealed to withstand elements such as temperature extremes, moisture and automotive fluids.

Electrical wiring and equipment shall be installed utilizing NFPA 1901 standards and test requirements and procedures:

(1) All holes made in the roof shall be caulked with silicon, rope caulk is not acceptable. Large fender washers, liberally caulked, shall be used when fastening equipment to the underside of the cab roof.

(2) Any electrical component that is installed in an exposed area shall be mounted in a manner that shall not allow moisture to accumulate in it. Exposed area shall be defined as any location outside of the cab or body.

(3) Electrical components designed to be removed for maintenance shall not be fastened with nuts and bolts. Metal screws shall be used in mounting these devices. Also a coil of wire shall be provided behind the appliance to allow them to be pulled away from mounting area for inspection and service work.

(4) Corrosion preventative compound shall be applied to all terminal plugs located outside of the cab or body. All non-waterproof connections shall require this compound IN the plug to prevent corrosion and for easy separation (of the plug).

(5) All lights that have their sockets in a weather exposed area shall have corrosion preventative compound added to the socket terminal area.

(6) All electrical terminals in exposed areas shall have silicon (1890) applied completely over the metal portion of the terminal. All emergency light switches shall be mounted on a separate panel installed in the cab. A master warning light switch and individual switches shall be provided to allow pre-selection of emergency lights. The light switches shall be "rocker" type with an internal indicator light to show when switch is energized. All switches shall be properly identified and mounted in a removable panel for ease in servicing. Identification of the switches shall be done by either printing or etching on the switch panel. The switches and identification shall be illuminated.

All lights and reflectors, required to comply with Federal Motor Vehicle Safety Standard #108, shall be furnished. Rear identification lights shall be recessed mounted for protection. Lights and wiring mounted in the rear bulkheads shall be protected from damage by installing a false bulkhead inside the rear compartments.

An operational test shall be conducted to ensure that any equipment that is permanently attached to the electrical system is properly connected and in working order. The results of the tests shall be recorded and provided to the purchaser at time of delivery.

FEDERAL MOTOR VEHICLE SAFETY STANDARD (FMVSS) LIGHTING

A pair of three (3) lamp modules shall be provided. Each module shall include a stop-tail light, arrow directional light and backup light mounted in a polished aluminum housing.

The lights shall be mounted on the face of the rear body compartments.

Four (4) red reflectors shall be provided.

A license plate bracket shall be mounted on the driver's side above the warning lights. A step lamp shall illuminate the license plate.

Three (3) identification lights shall be located at the rear and shall be installed per the following:

As close as practical to the vertical Centerline.

Centers spaced not less than six (6) inches or more than twelve (12) inches apart.

Red in color.

All at the same height.

The outside clearance lights located at the rear shall be installed per the following:

To indicate the overall width of the vehicle.
At least one (1) each side of the vertical Centerline.
All at the same height.
As near the top as practical.
To be visible from the rear and the side.
Per FMVSS 108 and CMVSS 108 requirements.

"DO NOT MOVE APPARATUS" INDICATOR (NFPA 1901, Ch 13.11)

A flashing red indicator light, located in the driving compartment, shall be illuminated automatically per the current NFPA requirements. The light shall be labeled "Do Not Move Apparatus If Light Is On". The same circuit that activates the Do Not Move Apparatus indicator shall not activate any alarm when the parking brake is released.

OPEN DOOR INDICATOR LIGHT

Two (2) red LED indicator lights shall be provided and located in clear view of the driver, warning of an open passenger or equipment compartment door.

One (1) LED light shall indicate status of doors on the driver's side of the vehicle and the other light shall indicate the status of the passenger side and rear compartment doors.

GROUND LIGHTING, CAB (NFPA 1901, Ch 13.10)

There shall be a grommet mount weatherproof light provided for each cab door. Lighting shall be designed to provide illumination on areas under the driver, officer, and crew cab riding area exits, which shall be activated automatically when the exit doors are opened and by the same means as the body perimeter lights.

The lighting shall be capable of providing illumination at a minimum level of two (2) foot-candles on ground areas within 30.00" of the edge of the apparatus in areas which personnel climb in or out of the apparatus or descend from the apparatus to the ground level.

GROUND LIGHTING, BODY (NFPA 1901, Ch 13.10)

There shall be a total of four (4) grommet mount weatherproof lights provided on the apparatus. Two (2) lights shall be provided under the rear step area and two (2) lights shall be provided under the pump panel running boards.

The lights shall be spaced one (1) each side of apparatus and have a clear lens. The perimeter scene lights shall be activated by a parking brake.

The lighting shall be capable of providing illumination at a minimum level of two (2) foot-candles on ground areas within approximately 30.00" of the edge of the apparatus in areas designed for personnel to climb onto the apparatus or descend from the apparatus to the ground level.

EXTERIOR LIGHTING
Exterior lighting shall meet or exceed Federal Department of Transportation, Federal Motor Vehicle Safety Standards and National Fire Protection Association requirements in effect at time of proposal.

Front headlights shall be halogen type; rectangular shaped, quad style mounted in a chrome and polished aluminum housing.

Five (5) clearance and marker LED lights shall be installed across the leading edge of the cab.

SWITCHABLE STEP LIGHTS, (NFPA 1901, Ch 13.10)
Four (4) LED, step lights shall be provided. One (1) step light shall be provided on each side, on the front compartment face and two (2) step lights at the rear to illuminate the tailboard.

These step lights shall be actuated with the **pump panel light switch**.

All other steps on the apparatus shall be illuminated per the current edition of NFPA 1901.

HAND HELD LIGHT
There shall be two (2) lights with an orange thermoplastic body provided. The location shall be on the rear wall of the cab outboard of the rear forward facing seats. Lights shall be rechargeable type with integral charger mount. A 110v in-station charging system shall also be provided per unit.

AIR HORN SYSTEM
Two (2) air horns shall be provided and located, in the front bumper, recessed one each side front bumper. The horn system shall be piped to the air brake system wet tank. A pressure protection valve shall be installed in-line to prevent loss of air in the air brake system.

AIR HORN CONTROL
The air-horn shall be actuated by a dual lanyard cable, one on each side of the AC plenum for both the driver and the officer

ELECTRONIC SIREN
A Whelen Electronic Siren Model 295SL100 (or equivalent) with noise canceling microphone shall be provided. Siren control head shall be located in the cab lower instrument panel.

The driver shall have the option to control the siren or the chassis horns from the horn button by means of a selector switch.

SPEAKER
There shall be one (1) Whelen speaker model SA122FMP (or equivalent), with chrome finish provided. The speaker shall be 100-watts and connected to the siren amplifier. The speaker shall be recessed in the front bumper on the passenger's side.

MECHANICAL SIREN, (Auxiliary)
A Federal Q-Siren shall be furnished. A siren brake button shall be installed on the switch panel.

The mechanical siren shall be mounted on the bumper deck plate. It shall be mounted on the right side. A reinforcement plate shall be furnished to support the siren.

The mechanical siren shall be activated by foot switches for both the officer and the driver. The siren brake shall be controlled on the drivers switch panel.

SPECIFICATIONS	BIDDING ON / REMARKS
LIGHTBAR One (1) Whelen JE2NFPA 56.00" super LED light bar (or equivalent) shall be mounted on the cab roof.	
This light bar shall include the following: Four (4) red flashing forward facing LED modules.	
Two (2) red flashing front corner LED modules.	
Two (2) red flashing rear corner LED modules.	
One (1) switch located in the cab on the switch panel shall control this light bar.	
The lens color shall be clear.	
DIRECTIONAL (Front) (NFPA 1901, Ch 13.8) Front turn signals to be rectangular amber LED lamps housed in Chrome bezels. The turn signals shall be housed in the same common bezel as the front warning light and be located above the headlights.	
In addition to the front facing directional light, an amber marker/turn LED indicator shall be provided on each side of the cab.	
LIGHTS, FRONT ZONE LOWER One (1) pair of 6 x 4 Whelen 600 flashing super LED (or equivalent) warning lights shall be installed on the cab face above the headlights, in a common bezel with the directional lights.	
The color of these lights shall be red Super LED/red lens. These lights shall meet or exceed NFPA front lower zone requirements. Per NFPA, these lights shall be activated by a switch in the cab.	
SIDE ZONE LOWER LIGHTING Four (4) 6 x 4 Whelen 600 flashing super LED (or equivalent) warning lights shall be located in the following positions:	
Two (2) lights, one (1) on each side on the bumper extension. The color of these lights shall be red super LED/red lens each side.	
Two (2) lights, on the body fender panels. The color of these lights shall be red super LED/red lens each side.	
The above four (4) lights shall be required to meet or exceed the lower level optical warning and optical power requirements of NFPA.	
These lights shall be controlled by a lighted switch on the cab instrument panel.	
These lights shall be installed without a flange.	
REAR ZONE LOWER LIGHTING Two (2) Whelen 600 flashing super LED (or equivalent) warning lights shall be located at the rear of the apparatus, required to meet or exceed the lower level optical warning and optical power requirements of NFPA.	
The color of these lights shall be red super LED/red lens.	
One (1) switch in the cab on the switch panel shall control these lights.	
These lights shall be installed without a flange.	
WARNING LIGHTS (Rear of Truck) Two (2) Whelen L31 Super LED (or equivalent) warning lights shall be provided at the rear of the truck, located one (1) on each side.	
One (1) switch located in the cab on the switch panel shall control these lights.	
The color of the lights shall be one (1) red on the driver side and one (1) amber located on the passenger side.	
The rear warning lights shall be mounted on top of the hard suction compartmentation with all wiring totally enclosed.	

The rear deck lights shall be mounted on the beavertails high as possible.

ELECTRICAL SYSTEM (ALTERNATING CURRENT)
The following guidelines shall apply to the 120/240 VAC system installation:

Except where superseded by the requirements of NFPA 1901, all components, equipment and installation procedures shall conform to NFPA 70, National Electrical Code (herein referred to as the NEC).

Line voltage electrical system equipment and materials included on the apparatus shall be listed and installed in accordance with the manufacturer's instructions. All products shall be used only in the manner for which they have been listed.

Grounding
Grounding shall be in accordance with Section 250-6 "Portable and Vehicle Mounted Generators" of the NEC. Ungrounded systems shall not be used. Only stranded or braided copper conductors shall be used for grounding and bonding.

Operation
Instructions that provide the operator with the essential power source operating instructions, including the power-up and power-down sequence, shall be permanently attached to the apparatus at any point where such operations can take place.

Provisions shall be made for quickly and easily placing the power source into operation. The control shall be marked to indicate when it is correctly positioned for power source operation.

Any control device used in the drive train shall be equipped with a means to prevent the unintentional movement of the control device from its set position.

A power source specification label shall be permanently attached to the apparatus near the operator's control station. The label shall include and provide the operator with the following detail information.

Power Source Specifications Label
Operational Category
Continuous Duty Rating
Rated voltage(s) and type (ac or dc)
Phase
Rated frequency
Rated amperage
Continuous rated watts
Power source engine speed
Direct drive (PTO) and portable generator installations shall comply with Article 445 (Generators) of the NEC.

Over-current protection
The conductors used in the power supply assembly between the output terminals of the power source and the main over current protection device shall not exceed 144 inches. (3658 mm) in length.

For fixed power supplies, all conductors in the power supply assembly shall be type THHW, THW, or use stranded conductors enclosed in nonmetallic liquid tight flexible conduit rated for a minimum of 194 degrees Fahrenheit (90 degrees Celsius).

For portable power supplies, conductors located between the power source and the line side of the main overcurrent protection device shall be type SO or type SEO with suffix WA flexible cord rated for 600-volts at 194 degrees Fahrenheit (90 degrees Celsius).

Wiring Methods
Fixed wiring systems shall be limited to the following:
-Metallic or nonmetallic liquid tight flexible conduit rated at not less than 194 degrees Fahrenheit (90 degrees Celsius) or

- Type SO or Type SEO cord with a WA suffix, rated at 600 volts at not less than 194 degrees Fahrenheit (90 degree Celsius) Electrical cord or conduit shall not be attached to chassis suspension components, water or fuel lines, air or air brake lines, fire pump piping, hydraulic lines, exhaust system components, or low voltage wiring.

- Separated by a minimum of 12 inches (305 mm), or properly shielded, from exhaust piping

- Separated from fuel lines by a minimum of six (6) inches (152 mm) distance. Electrical cord or conduit shall be supported within six (6) inches (152 mm) of any junction box and at a minimum of every 24 inches (610 mm) of continuous run. Supports shall be made of nonmetallic materials or corrosion protected metal. All supports shall be of a design that does not cut or abrade the conduit or cable and shall be mechanically fastened to the vehicle.

Wiring Identification
All line voltage conductors located in the main panel board shall be individually and permanently identified. The identification shall reference the wiring schematic or indicate the final termination point. When pre-wiring for future power sources or devices, the un-terminated ends shall be labeled showing function and wire size.

Wet Locations
All wet location receptacle outlets and inlet devices, including those on hardwired remote power distribution boxes, shall be of the grounding type provided with a wet location cover and installed in accordance with Section 210-7 "Receptacles and Cord Connections" of the NEC.

All receptacles located in a wet location shall be not less than 24 inches from the ground.

The face of any wet location receptacle shall be installed in a plane from vertical to not more than 45 degrees off vertical. No receptacle shall be installed in a face up position.

Dry Locations
All receptacles located in a dry location shall be of the grounding type. Receptacles shall be not less than 30 inches (762 mm) above the interior floor height.

All receptacles shall be marked with the type of line voltage (120-volts or 240-volts) and the current rating in amps. If the receptacles are direct current, or other than single phase, they shall be so marked.

Listing
All receptacles and electrical inlet devices shall be listed to UL 498, Standard for Safety Attachment Plugs and Receptacles, or other appropriate performance standards. Receptacles used for direct current voltages shall be rated for the appropriate service.

Electrical System Testing
The wiring and associated equipment shall be tested by the apparatus manufacturer or the installer of the line voltage system.

The wiring and permanently connected devices and equipment shall be subjected to a dielectric voltage withstand test of 900-volts for one (1) minute.

The test shall be conducted between live parts and the neutral conductor, and between live parts and the vehicle frame with any switches in the circuit(s) closed. This test shall be conducted after all body work has been completed.

Electrical polarity verification shall be made of all permanently wired equipment and receptacles to determine that connections have been properly made.

Operational Test per Current NFPA 1901 Standards
The apparatus manufacturer shall perform the following operation test

and ensure that the power source and any devices that are attached to the line voltage electrical system are properly connected and in working order. The test shall be witnessed and the results certified by an independent third-party certification organization.

The prime mover shall be started from a cold start condition and the line voltage electrical system loaded to 100 percent of the nameplate rating.

SPECIFICATIONS	BIDDING ON / REMARKS
The power source shall be operated at 100 percent of its nameplate voltage for a minimum of two (2) hours unless the system meets category certification as defined in the current NFPA 1901 standard.	
Where the line voltage power is derived from the vehicle's low voltage system, the minimum continuous electrical load as defined in the current NFPA 1901 standard shall be applied to the low voltage electrical system during the operational test.	
GENERATOR There shall be one (1) Honda Model EM6500 (or GFD approved equivalent in performance, noise rating (75db>), and reliability) gas powered portable generator with a continuous rating of 5,500 watts.	
This generator shall include electric start capabilities.	
GENERATOR LOCATION The generator shall be mounted in the driver's side rear compartment on a sliding tray. The slides, used for the tray, shall be ball bearing type with a capacity rating matched to the weight of the generator. Locking mechanisms shall be provided for holding the generator in the extended and stored positions.	
GENERATOR START The starting provision for the generator shall be located on the generator itself.	
CIRCUIT BREAKER PANEL A circuit breaker panel shall be installed in the driver side front compartment (D3). A directory for each breaker shall be provided adjacent to the circuit breaker panel. Identification of circuits shall be done in a durable manner that provides years of service.	
12 VOLT LIGHTING, FRONT VISOR CENTERED There shall be one (1) Whelen Pioneer PFP2, (or equivalent) 12 volt LED floodlight provided on the exterior portion of the front visor area, centered.	
The light shall be controlled by the following:	
- a switch at the driver's side switch panel - a switch at the passenger's side switch panel	
This light may be load managed when the parking brake is set.	
12 VOLT LIGHTING, DRIVER'S SIDE BODY There shall be two (2) Whelen Model PFP2 (or equivalent), 12 volt LED floodlights installed in semi-recessed housing(s) Model PBA203 (or equivalent) located on the driver's side of the body, in the upper corners.	
The light(s) selected above shall be controlled by the following:	
- a switch at the driver's side switch panel - a switch at the passenger's side switch panel	
These lights may be load managed when the parking brake is set	
12 VOLT LIGHTING, PASSENGER'S SIDE BODY There shall be two (2) Whelen Model PFP2 (or equivalent), 12 volt LED floodlights installed in semi-recessed housing(s) Model PBA203 (or equivalent) located on the passenger's side of the body, in the upper corners.	
The light(s) selected above shall be controlled by the following:	
- a switch at the driver's side switch panel - a switch at the passenger's side switch panel	
These lights may be load managed when the parking brake is set	
12 VOLT LIGHTING, REAR UPPER CORNERS There shall be two (2) Whelen Model PSP1(or equivalent), 12 volt LED, spotlights with Model PBAPED (or equivalent) pedestal mounting bracket(s) provided at the rear upper corners of the body.	

The lights selected above shall be controlled by the following:

- a switch at the driver's side switch panel
- a switch at the passenger's side switch panel

These lights may be load managed when the parking brake is applied.

20 AMP RECEPTACLE
Wired to the power supply shall be four (4) receptacles that are a 120 volt 20 amp three wire twist-lock NEMA L5-20 type with weather resisting cover located one on each side of the body in front of the rear wheels, and one on each side on the rear bulkhead.

20 AMP 220 VOLT RECEPTACLE
Wired to the power supply shall be two (2) receptacles that are 220 volt 20 amp three wire twist-lock NEMA L6-20 type with a weather resisting cover located one on each side of the rear bulk head of the body.

COMPARTMENTATION
Body and compartments shall be fabricated of 5052-H32 aluminum with a tensile strength to meet or exceed a minimum range of 31,000 psi.

The compartment dimensions as described within these specifications are the approximate dimensions requested. Each bidder is encouraged to offer their standard body configuration that most closely meets these dimensions while providing the maximum amount of enclosed compartment space.

Each bidder shall submit a detailed blueprint of the vehicle as being proposed which shall depict the compartment arrangement with all dimensions including the clear door opening of each compartment on the apparatus body.

Side compartments shall be an integral assembly with the rear fenders.

Circular fender liners shall be provided for prevention of rust pockets and ease of maintenance.

Compartment flooring shall be of the sweep out design with the floor higher than the compartment door lip.

The compartment door opening shall be framed by flanging the edges in approximately 1.75" and bending out again approximately .75" to form an angle.

Drip protection shall be provided above the doors by means of bright aluminum extrusion or formed bright aluminum tread plate.

All screws and bolts which protrude into a compartment shall have acorn nuts on the ends to prevent injury.

LOUVERS
Louvers shall be stamped into compartment walls to provide the proper airflow inside the body compartments and to prevent water from dripping into the compartment. Where these louvers are provided, they shall be formed into the metal and not added to the compartment as a separate plate.

COMPARTMENT LIGHTING
Amdor Luma Bar LED compartment light strips (or equal) shall be provided in each exterior cab and body compartment.

Strips shall be mounted vertically along both sides of the door framing on each compartment. The length of the light strips shall be within 6.00" to the top and bottom of the compartment door opening. The lighting

in each compartment shall be controlled from a door switch built into each roll up shutter door. Opening the compartment door shall automatically turn compartment lighting on.

SPECIFICATIONS	BIDDING ON / REMARKS
COMPARTMENTATION, DRIVER'S SIDE A full height, roll-up door compartment ahead of the rear wheels shall be provided. D1. The interior dimensions of this compartment shall be approximately 34" wide x 58" high x 26" deep in the lower 26" of the compartment and approximately 12" deep in the remaining upper portion. The height of the compartment shall be measured from the compartment floor to the bottom edge of the door roll.	
The depth of the compartment shall be calculated with the compartment door closed. The compartment interior shall open fully from the compartment ceiling to the compartment floor. It shall be designed so that no permanent dividers are required between the upper and lower sections. The clear door opening of this compartment shall be approximately 29" wide x 58" high.	
Closing of the door shall not require releasing, unlocking, or unlatching any mechanism and shall easily be accomplished with one hand.	
A roll-up door compartment over the rear wheels shall be provided. The interior dimensions of this compartment shall be approximately 67" wide x 25" high x 12" deep.	
The height of the compartment shall be measured from the compartment floor to the bottom edge of the door roll. The depth of the compartment shall be calculated with the compartment door closed. The clear door opening of this compartment shall be approximately 58" wide x 25" high.	
Closing of the door shall not require releasing, unlocking, or unlatching any mechanism and shall easily be accomplished with one hand.	
A full height, roll-up door compartment behind the rear wheels shall be provided. D3. The interior dimensions of this compartment shall be approximately 48" wide x 58" high x 26" deep in the lower 26" of height and approximately 12" deep in the remaining upper section of the compartment. The height of the compartment shall be measured from the compartment floor to the bottom edge of the door roll.	
The depth of the compartment shall be calculated with the compartment door closed. The compartment interior shall be fully open from the compartment ceiling to the compartment floor and designed so that no permanent dividers are required between the upper and lower sections.	
The clear door opening of this compartment shall be approximately 45" wide x 58" high. Recommendations from the manufacturer shall be made to accommodate the weight of the Heavy Duty Rescue Equipment in this Compartment D3. This shall include any reference to the GVWR, Rear Axles, or Chassis as to not exceed the specified rating. A list of the equipment follows under **Mounting Provisions**.	
Closing of the door shall not require releasing, unlocking, or unlatching any mechanism and shall easily be accomplished with one hand.	
COMPARTMENTATION, PASSENGER'S SIDE A full height, roll-up door compartment ahead of the rear wheels shall be provided. The interior dimensions of this compartment shall be approximately 36" wide x 58" high x 27" deep in the lower 26 " of the compartment and approximately 12" deep in the remaining upper portion.	
The height of the compartment shall be measured from the compartment floor to the bottom edge of the door roll. The depth of the compartment shall be calculated with the compartment door closed. The compartment interior shall be fully open from the compartment ceiling to the compartment floor and designed so that no permanent dividers are required between the upper and lower sections.	
The clear door opening of this compartment shall be approximately 30" wide x 58" high. Closing of the door shall not require releasing, unlocking, or unlatching any mechanism and shall easily be accomplished with one hand.	
A roll-up door compartment over the rear wheels shall be provided. The interior dimensions of this compartment shall be approximately 69 " wide x 25" high x 12 " deep.	

SPECIFICATIONS	BIDDING ON / REMARKS
The height of the compartment shall be measured from the compartment floor to the bottom edge of the door roll. The depth of the compartment shall be calculated with the compartment door closed. The clear door opening of this compartment shall be approximately 58" wide x 25" high. Closing of the door shall not require releasing, unlocking, or unlatching any mechanism and shall easily be accomplished with one hand.	
A full height, roll-up door compartment behind the rear wheels shall be provided. P3. The interior dimensions of this compartment shall be approximately 48" wide x 58" high x 12" deep. A section of this compartment shall be approximately 26" deep x 48" wide x 26" high directly behind the rear wheels.	
The height of the compartment shall be measured from the compartment floor to the bottom edge of the door roll. The depth of the compartment shall be calculated with the compartment door closed.	
The compartment interior shall be fully open from the compartment ceiling to the compartment floor and designed so that no permanent dividers are required between the upper and lower sections.	
The clear door opening of this compartment shall be approximately 45" wide x 58" high. Closing of the door shall not require releasing, unlocking, or unlatching any mechanism and shall easily be accomplished with one hand.	
ROLL-UP DOOR, SIDE COMPARTMENTS Roll-up doors with a finish that is painted one color to match the lower portion of the body shall be installed on the side compartments. Gortite brand roll up doors (or equal) will be acceptable.	
They shall be double faced, aluminum construction. A total of six (6) compartments with painted roll-up style doors shall be provided. Lath sections shall be an interlocking rib design and shall be individually replaceable without complete disassembly of door.	
Between each slat at the pivoting joint shall be a PVC inner seal to prevent metal to metal contact and prevent dirt or moisture from entering the compartments. Seals shall allow door to operate in extreme temperatures ranging from plus 180 to minus 40 degrees Fahrenheit. Side, top and bottom seals shall be provided to resist ingress of dirt and weather and be made of Santoprene.	
All hinges, barrel clips and end pieces shall be nylon 66. All nylon components shall withstand temperatures from plus 300 to minus 40 degrees Fahrenheit. Hardened plastic shall not be acceptable.	
A polished stainless steel lift bar shall be provided for each roll-up door. The lift bar shall be located at the bottom of door and have latches on the outer extrusion of the doors frame. A ledge shall be supplied over lift bar for additional area to aid in closing the door. A total of Six (6) compartment doors require this style of latch.	
Door(s) shall be constructed from an aluminum box section. The exterior surface of each slat shall be flat. The interior surfaces shall be concave to provide strength and prevent loose equipment from jamming the door from inside.	
To conserve space in the compartment(s), the spring roller assembly shall not exceed 3.00" in diameter. A roll-up door that retracts below the compartment ceiling (garage door style) shall not be acceptable.	
The header for the roll-up door assembly shall not exceed 4.00". A heavy-duty magnetic switch shall be used for control of "open compartment door" warning lights. All mechanical components of the door shall be warranted to be free from defects in materials and workmanship for the lifetime of the vehicle.	
The roll up doors exterior paint finish shall be warranted against blistering, peeling, bubbling, lack of adhesion or any other manufacturing or material defect for a period of **six (6) years**.	
The roll up doors shall also be warranted against corrosion perforation for a period of **ten (10) years**.	

COMPARTMENTATION, REAR
A roll-up door compartment above the rear tailboard shall be provided. Interior dimensions of this compartment shall be approximately 40" wide x 47" high x 26" deep in the lower 39" of height and approximately 16" deep in the remaining upper portion. Depth of the compartment shall be calculated with the compartment door closed.

Clear door opening of this compartment shall be approximately 33" wide x 39" high. Closing of the door shall not require releasing, unlocking, or unlatching any mechanism and shall easily be accomplished with one hand.

PARTITION, TRANSVERSE REAR COMPARTMENT
Two (2) partitions shall be bolted in place to separate the driver and passenger side rear compartments from the rear tailboard compartment.

ROLL-UP DOOR, REAR COMPARTMENT
Gortite brand roll up doors or Fire Department approved equal will be acceptable. They shall be double faced, aluminum construction and painted one color to match the lower portion of the body.

Lath sections shall be an interlocking rib design and shall be individually replaceable without complete disassembly of door.

Between each slat at the pivoting joint shall be a PVC inner seal to prevent metal to metal contact and prevent dirt or moisture from entering the compartments.

Seals shall allow door to operate in extreme temperatures ranging from plus 180 to minus 40 degrees Fahrenheit. Side, top and bottom seals shall be provided to resist ingress of dirt and weather and be made of Santoprene.

All hinges, barrel clips and end pieces shall be nylon 66. All nylon components shall withstand temperatures from plus 300 to minus 40 degrees Fahrenheit. Hardened plastic shall not be acceptable.

A polished stainless steel lift bar shall be provided for the roll-up door. The lift bar shall be located at the bottom of door and have latches on the outer extrusion of the door frame. A ledge shall be supplied over lift bar for additional area to aid in closing the door.

Door shall be constructed from an aluminum box section. The exterior surface of each slat shall be flat. The interior surfaces shall be concave to provide strength and prevent loose equipment from jamming the door from inside.

To conserve space in the compartment(s), the spring roller assembly shall not exceed 3.00" in diameter. A roll-up door that retracts below the compartment ceiling (garage door style) shall not be acceptable.

The header for the roll-up door assembly shall not exceed 4.00". A heavy-duty magnetic switch shall be used for control of "open compartment door" warning lights. All mechanical components of the door shall be warranted to be free from defects in materials and workmanship for the lifetime of the vehicle.

PULL-OUT TRAY for D3 and P3 COMPARTMENT
There shall be two (2) slide-out trays with 2.00" sides and a minimum capacity of 500 pounds provided. Capacity rating shall be in the extended position.

Slides shall be ball bearing type for ease of operation, dependability and longevity. Automatic locks shall be provided for both the "in" and "out" positions. The trip mechanism for it shall be located at the front of the tray for ease of use with a gloved hand.

Tray location shall be one (1) in D3 and one (1) in P3. Heavy-duty steel assembly shall support the body under the compartment floor. It shall be attached to the chassis frame for load transfer and to reduce stress on body.

TOOLBOARD
Tool boards with Pac Trac material on each side shall be provided in compartment P2 and upper portion of P3. The tool board shall be bolted to the interior wall.

It shall be a minimum of .188" thick with .20" diameter holes in a pegboard pattern with 1.00" centers between holes.

ADJUSTABLE SHELVES
There shall be ten (10) PacTrac shelves, with a minimum capacity of 215 pounds provided. The shelf construction shall consist of .125" pan-shaped aluminum with 2.00" sides. Each shelf shall be infinitely adjustable by means of a threaded fastener, which slides in a track.

The location shall be two (2) in D1 upper portion, one (1) in D1 lower portion, one (1) in D2, two (2) in D3 upper portion, (2) two in P1 upper portion, (1) one in P1 lower portion and one (1) in Rear compartment upper portion.

MOUNTING TRACKS
There shall be five (5) sets of tracks for mounting shelf(s) in the upper portion of the full height compartments (D1, D2, D3, P1, and Rear compartments) Also one (1) set each in D1 and P1 lower portion.

These tracks shall be installed vertically to support the adjustable shelf(s). A total of seven (7) sets of tracks for mounting shelf(s).

BACKBOARD STORAGE
Mounting shall be provide for two (2) Backboard (s) located above the crosslays. The boards shall be enclosed and removable from either side of the truck. The backboards shall be sized to fit area above the lower crosslays.

MOUNTING PROVISIONS
Provisions for mounting the following existing equipment shall be supplied by the bidder, and installed by the Fire Department. All necessary hardware and mounting devices shall be included.

Compartment D1 (Upper half of the compartment)
Pipe Wrench, 16"
Mallet
Hammer
(2) 1.5" Nozzle
(2) 2.5" Nozzle
Hydrant and Spanner Wrench Set
Generator at lower half

Compartment D3
Heavy Duty Rescue Equipment, Hurst *Jaws-of-Life*
Spreaders and Complements (Transformer II)
Cutters (JL-MOC)
Telescoping Ram (T-59)
Standard Ram and Complements (JL20C)
Power Unit (GXV160)
Percussion Rescue Tool (PRT)

Compartment P2
Round-Head Shovel
Square-Head Shovel
Mcleod Tool
Pulaski Tool
Push Broom

Compartment P3 (Upper half of the compartment)
36" Bolt Cutter
Hux Bar
Halligan Tool
Pick-Headed Axe

Flat-Head Axe
Sledge Hammer
Pry Bar
Crow Bar

RUB RAIL
Bottom edge of the side compartments shall be trimmed with a bright aluminum extruded rub rail. Trim shall be no less than 2" high with no less than 1.25" flanges turned outward for rigidity.

The rub rails shall not be an integral part of the body construction, which allows replacement in the event of damage.

The rub rails shall be the widest portion of the body and shall fully protect each side of the apparatus body including the rear fenders and the lift bar latch assembly on each roll up shutter door.

BODY FENDER CROWNS
Stainless steel fender crowns shall be provided around the rear wheel openings. A rubber welting shall be provided between the body and the crown to seal the seam and restrict moisture from entering.

A dielectric barrier shall be provided between the fender crown fasteners (screws) and the fender sheet metal to prevent corrosion.

HANDRAILS
Handrails shall be located on the front of the body in positions needed to meet NFPA requirements.

- One (1) vertical handrail, not less than 29.00" long, shall be located on each rear beavertail.

- One (1) full width horizontal handrail shall be provided below the hose bed at the rear of the apparatus.

AIR BOTTLE STORAGE
A total of four (4) air bottle compartments shall be provided, two (2) each side of the body. The air bottle compartment shall be in the form of a PVC round tube to accommodate different size air bottles. A Cast Products door with latch shall be provided to contain the air bottle.

LADDERS and LADDER STORAGE

EXTENSION LADDER
There shall be a 24', two (2) section, aluminum extension ladder provided.

ROOF LADDER
There shall be a 14' aluminum roof ladder provided.

The ladders shall be stored within a compartment on the passenger's side , medial to the passenger side compartment spaces. This compartment shall be accessible from the rear of the vehicle while standing on the ground.

The ladder storage area shall be enclosed as practical by means of sheet metal to protect the ladders from road dirt. The ladders that extend into the pump house shall also be enclosed . A form of dampening (such as a rubber boot) shall be provided to enclose the ladders in the gap between the pump house and the body.

Each ladder shall be stored vertically in a separate storage trough. Each trough shall be lined with Dura-Surf nylon slides.

A bright aluminum tread plate enclosure shall be provided at the rear of the body to properly contain the ladders.

A vertically hinged door with a pair of lift and turn latches shall be provided at the rear. The door shall be constructed of material matching the other surrounding materials at the rear of the truck.

FOLDING LADDER
One (1) aluminum, 10' folding ladder shall be provided, with storage.

PIKE POLE, 10'
One (1) pike pole, 10' long with a fiberglass handle, shall be provided and located in the 10' ladder storage compartment.

PIKE POLE, 8'
One (1) pike pole, 8' long with a fiberglass handle, shall be provided and located in the 10' ladder storage compartment.

PIKE POLE STORAGE
Poly tubing shall be provided for the storage of the two (2) pike poles and shall be located in the 10' ladder storage compartment.

HARD SUCTION HOSE
Two (2) lengths of 6.00" diameter clear corrugated PVC hard suction hose, 10' in length, shall be provided. The hose shall be equipped with a long handle female coupling on one (1) end and a rocker lug male coupling on the other end. Couplings shall be hard coated aluminum.

HARD SUCTION HOSE COMPARTMENTS

Two (2) enclosed hard suction hose compartments shall be provided, one (1) each side above the side body compartments. Each compartment shall run the full length of the body and shall be uniform with the height of the hose bed cover.

The side of the compartments shall be constructed of the same material as the body and painted job color. An extruded aluminum trim piece shall be provided to cover the seam between the body panel and the hose compartment.

The top of the compartment shall be constructed of bright aluminum tread plate.

A vertically hinged single panel stainless steel door shall be provided at the rear of each compartment.

HOSE BED

The hose bed shall be fabricated of 5052 aluminum with a 38,000 psi tensile strength. Hose bed width shall be a minimum of 68.00" inside.

The upper inside area of the beavertails shall be covered with brushed stainless steel to prevent damage to painted surface when hose is removed.

Flooring of the hose bed shall be removable aluminum grating with the top surface corrugated to aid in hose aeration. The grating slats shall be designed to provide for hose ventilation.

Hose bed shall accommodate 1500 feet of 2.50" or 3.0" with 2.50" couplings and 400 feet of 1.50" hose. Two (2) adjustable hose bed dividers shall be furnished for separating hose.

Each divider shall be constructed of approximately .25" aluminum sheet. Each divider shall be fully adjustable by sliding in tracks, located at the front and rear of the hose bed. It shall be held in place by tightening bolts at each end.

Acorn nuts shall be installed on all bolts in the hose bed which have exposed threads. Flat surfaces shall be sanded for uniform appearance, or constructed of brushed aluminum.

HOSE BED COVER

A two section hose bed cover, constructed of approximately .125" bright aluminum tread plate shall be furnished. The cover shall be hinged with full length stainless steel piano hinge. The sides shall be slanted down.

The cover shall be reinforced so that it can support the weight of a man walking on the cover. The cover, when open, shall activate the "Do Not Move" light inside the cab.

Chrome grab handles and gas filled cylinders shall be provided to assist in opening and closing the cover. A handrail is to be provided at the rear, in the center of the support, to assist in opening the cover.

A red vinyl flap shall be installed on the rear of the bright aluminum tread plate hose bed cover, with a chain weight and spring clip-and-hook hold downs shall be provided at the rear of the cover.

The Hose Bed Cover as described here is one acceptable design. The apparatus shall be equipped with a Hose Bed cover that is reinforced for strength to support the weight of a man, does not permit moisture to accumulate, can be opened and closed by one person without strain, and provides rear coverage of the hose bed and materials beneath from dirt or moisture.

DECK LIGHTS

Two (2)-6.00" deck lights with swivel mount shall be provided at the rear of the hose bed, one (1) each side. One (1) light shall be furnished with a 160,000 candle power halogen spot bulb and the other shall be furnished with a 6,000 candle power halogen flood bulb.

RUNNING BOARD SUCTION TRAY - DRIVER'S SIDE

The driver's side of the pump module shall be provided with a recessed and floating running board suction tray. The tray shall have a capacity of 20' of 4" suction hose. The bottom of the tray shall have aluminum slats and drain holes to allow water drainage. The running board shall be adequately supported in its design.

RUNNING BOARD SUCTION TRAY - OFFICER'S SIDE
The officer's side of the pump module shall be provided with a recessed and floating running board suction tray. The tray shall have a capacity of 20' of 4" suction hose. The bottom of the tray shall have aluminum slats and drain holes to allow water drainage.

The running board shall be adequately supported in its design.

TAILBOARD
Rear step shall also be constructed of .125" bright aluminum tread plate and spaced .50" from the body, as well as supported by a structural steel assembly.

The rear tailboard shall be approximately 16.00" deep. The exterior side shall be flanged down and in. Flanges shall not be notched.

Entire rear surface between the beavertails shall be covered with smooth aluminum.

The remaining inside surface of the beavertails shall be covered with bright aluminum tread plate.

AGGRESSIVE WALKING SURFACE
All exterior surfaces designated as stepping, standing, and walking areas shall comply with the required average slip resistance of the current NFPA standards.

STEPS
A step shall be provided on the front of each fender compartment. The step shall be a bright finished, non-skid luminescent folding type. The luminescent coating is rechargeable from any light source and can hold a charge for up to 24 hours. The step can be used as a hand hold with two openings wide enough for a gloved hand.

Two (2) additional folding steps shall be located on the driver side front of the body. The step(s) shall be bright finished, non-skid luminescent folding type. The luminescent coating is rechargeable from any light source and can hold a charge for up to 24 hours. The step(s) can be used as a hand hold with two openings wide enough for a gloved hand.

Bright finished, non-skid luminescent folding steps shall be provided at the rear. The luminescent coating is rechargeable from any light source and can hold a charge for up to 24 hours. The steps can be used as a hand hold with two openings wide enough for a gloved hand.

BACK-UP ALARM
A solid-state electronic audible back-up alarm that actuates when the truck is shifted into reverse shall be provided. The device shall sound at 60 pulses per minute and automatically adjust its volume to maintain a minimum five (5) dBA above surrounding environmental noise levels.

PUMP
Pump shall be a 1500 gpm single (1) stage midship mounted centrifugal type. Pump shall be the class "A" type.

Pump shall deliver the percentage of rated discharge at pressures indicated below:

- 100% of rated capacity at 150 psi net pump pressure.
- 70% of rated capacity at 200 psi net pump pressure.
- 50% of rated capacity at 250 psi net pump pressure.

Pump body shall be close-grained gray iron, bronze fitted, and facilitate easy removal of the entire impeller shaft assembly (including wear rings).

Pump shall be designed for complete servicing from the bottom of the truck, without disturbing the pump setting or apparatus piping.

Pump case halves shall be designed to minimize chance of leakage and facilitate ease of reassembly. No end flanges shall be used. Discharge manifold of the pump shall be cast as an integral part of the pump body assembly and shall provide a minimum of three (3) 3.50" openings for flexibility in providing various discharge outlets for maximum efficiency.

SPECIFICATIONS	BIDDING ON / REMARKS
Impeller shaft shall be stainless steel, accurately ground to size. It shall be supported at each end by sealed, anti-friction ball bearings for rigid precise support.	
Impeller shall have flame plated hubs.	
Bearings shall be protected from water and sediment by suitable stuffing boxes, flinger rings, and oil seals. No special or sleeve type bearings shall be used.	
Stuffing boxes shall be of the conventional two (2) piece, split-gland type, to permit adjustment or replacement of packing without disturbing the pump. Water shall be fed into stuffing box lantern rings for proper lubrication and cooling when the pump is operating.	
Wear rings shall be easily replaceable and eliminate the need to replace the entire pump casing due to wear.	
THERMAL RELIEF VALVE A thermal protection device shall be included on the pump that monitors pump water temperature and opens to relieve water to cool the pump. The thermal protection device shall be set to relieve water when the temperature of the pump water exceeds 120 degrees F. The thermal protection device shall include an indicator light and audible buzzer. The components of the thermal protection device shall be manufactured of brass and stainless steel and be compatible with all foam concentrates. The discharge line shall be 3/8 inch diameter tubing vented to atmosphere or back to the booster tank.	
PUMP TRANSMISSION Pump transmission shall be made of-a horizontally split casing. All shafts shall be ball bearing supported. The case is to be designed as to eliminate the need for water cooling.	
AIR PUMP SHIFT Pump shift engagement shall be made by a two (2) position sliding collar, actuated pneumatically by air pressure, with a three (3) position air control switch located in the cab. A manual back-up shift control shall also be located on the driver's side pump panel.	
Indicator lights shall be provided as per NFPA requirements. A green indicator light shall be installed adjacent to the hand throttle on the pump panel and indicate either the pump is engaged and the road transmission is in pump gear, or the road transmission is in neutral and the pump is not engaged. A green indicator light shall be installed adjacent to the throttle on the pump panel and shall be labeled "Warning: Do not open throttle unless light is on". The pump shift control in the cab shall be illuminated to meet NFPA requirements.	
TRANSMISSION LOCK-UP The direct gear transmission lock-up for the fire pump operation shall engage automatically when the pump shift control, in the cab, is activated.	
AUXILIARY COOLING SYSTEM A supplementary heat exchange cooling system shall be provided to allow the use of water from the discharge side of the pump for cooling the engine water. Heat exchanger shall be cylindrical type and shall be a separate unit. It shall be installed in the pump or engine compartment with the control located on the pump operator's control panel. Exchanger shall be plumbed to the master drain valve.	
INTAKE RELIEF VALVE An intake relief valve, preset at 125 psig, shall be installed on the inlet side of the valve.	
Relief valve shall have a working range of 75 psig to 250 psig. Outlet shall terminate below the frame rails.	
The front inlet shall have National Standard hose threads with a long handle chrome plated cap.	
The cap shall incorporate a thread design to automatically relieve stored pressure in the line when disconnected. (no exception)	

SPECIFICATIONS	BIDDING ON / REMARKS
The front suction shall have a chromed 6.00" swivel with National Standard hose threads and a long handle chromed plated cap.	
The swivel shall have a smooth surface chrome finish.	
PRESSURE CONTROLLER An electric pressure governor shall be provided which is capable of automatically maintaining a desired preset discharge pressure in the water pump. When operating in the pressure control mode, the system shall automatically maintain the discharge pressure set by the operator (within the discharge capabilities of the pump and water supply) regardless of flow, within the discharge capacities of the water pump and water supply.	
A pressure transducer shall be installed in the water discharge of the pump. The transducer continuously monitors pump pressure sending a signal to the Electronic Control Module (ECM).	
The governor can be used in two (2) modes of operation, RPM mode and pressure modes.	
In the RPM mode, the governor can be activated after vehicle parking brake has been set. When in this mode, the governor shall maintain the set engine speed, regardless of engine load (within engine operation capabilities).	
In the pressure mode, the governor system can only operate after the fire pump has been engaged and the vehicle parking brake has been set. When in the pressure mode, the pressure controller monitors the pump pressure and varies engine speed to maintain a precise pump pressure. The pressure controller shall use a quicker reacting J1939 database for engine control.	
A preset feature allows a predetermined pressure or rpm to be set.	
A pump cavitation protection feature shall be provided which shall return the engine to idle should the pump cavitate.	
The throttle shall be a vernier style control, with a large control knob for use with a gloved hand. A throttle ready light shall be provided adjacent to the throttle control. A large .75" RPM display shall be provided to be visible at a glance.	
Check engine, and stop engine indicator lights shall be provided for easy viewing.	
Large .75" push buttons shall be provided for menu, mode, preset, and silence selections.	
The water tank level indicator shall be incorporated in the pressure governor.	
A fuel level indicator shall be incorporated in the pressure controller.	
A pump hour meter shall be incorporated in the pressure controller.	
The pressure controller shall incorporate monitoring for engine temperature, oil pressure, fuel level alarm, and voltage. Pump monitoring shall include, pump gear case temperature, error codes, diagnostic data, pump service reminders, and time stamped data logging, to allow for fast accurate trouble shooting. It shall also notify the driver/engineer of any problems with the engine and the apparatus.	
Complete understandable messages shall be provided in a 20-character display, providing for fewer abbreviations in the messages. An automatic dim feature shall be included for night operations.	
The pressure controller shall include a USB port for easy software upgrades, which can be downloaded through a USB memory stick, eliminating the need for a laptop for software installations. A complete interactive manual shall be provided with the pressure controller.	

SPECIFICATIONS	BIDDING ON / REMARKS
PRIMING PUMP A Trident model air primer or GFD approved equivalent shall be provided with push button control on the pump panel. When dry, the pump system shall be capable of taking suction through 20 feet of hard suction hose and discharging water in not more than the time allowed by current NFPA 1901 standard.	
A push-pull control shall be located at the pump operator's panel. This valve shall utilize a switch arrangement so that as the valve is manually opened, a plunger closes the switch and the primer motor is energized.	
A second priming valve and push-pull control shall be plumbed to the front suction piping. The second control shall be located at the pump operator's panel. Primer motor shall be environmentally safe, self lubricating style.	
PLUMBING All inlet and outlet plumbing, 3.00" and smaller, shall be plumbed with either stainless steel pipe or synthetic rubber hose reinforced with high-tensile polyester braid. If hose is used it shall have a minimum burst rating of 1,000 psi and be equipped with high pressure couplings. Small diameter secondary plumbing such as drain lines shall be stainless steel, brass or hose. This shall include the pump manifold and all front suction piping.	
All lines to drain through either a master drain valve or shall be equipped with individual drain valves. All individual drain lines for discharges shall be extended with a hose to drain below the chassis frame. All water carrying gauge lines shall be of flexible polypropylene tubing.	
PUMP WARRANTY A **five (5) year** warranty shall be provided for the pump by the pump manufacturer.	
PUMP MANUALS Two (2) pump manuals from the pump manufacturer shall be furnished in compact disc format with the apparatus. Manuals shall cover pump operation, maintenance, and parts.	
PUMP PLUMBING WARRANTY The stainless steel plumbing components and ancillary brass fittings used in the construction of the water/foam plumbing system shall be warranted for a period of **ten (10) years or greater.** This covers structural failures caused by defective design or workmanship, or perforation caused by corrosion, provided the apparatus is used in a normal and reasonable manner. This warranty is extended only to the original purchaser for a period of ten years from the date of delivery. **A copy of the warranty shall be submitted in the technical bid proposal . (No exception)**	
MAIN PUMP INLETS A 6.00" pump manifold inlet shall be provided on each side of the vehicle. The suction inlets shall include screens that are designed to provide cathodic protection for the pump, thus reducing corrosion in the pump. The main pump inlets shall have National Standard Threads with a long handle chrome cap. The cap shall incorporate a thread design to automatically relieve stored pressure in the line when disconnected. **(No exception)**	
INLET VALVE Provisions shall be provided for a dealer installed piston intake valve.	
VALVES All discharges shall use in-line ball valves.	
VALVES WARRANTY Valves shall have a **ten (10) year** warranty.	
FRONT INLET A 6" front inlet with die cast zinc screens shall be provided using 5.00" welded black iron pipe or equivalent, and a 5.00" butterfly valve. Only radiused elbows shall be used in the piping, no mitered joints.	

SPECIFICATIONS	BILLING ON / REMARKS
Drains are furnished in all the low points of piping and have ball valve with a hand wheel control. A bleeder valve shall be located at the threaded connection.	
The front suction shall be located on the passenger side, on top of the bumper extension.	
The front suction shall have a chromed 6.00" swivel with National Standard hose threads and a long handle chromed plated cap.	
The swivel shall have a smooth surface chrome finish.	
The front suction shall be electrically operated valve with an electric control at the pump operator's panel. The control shall be momentary to allow the valve to be gated for ease of operation. LED indicator lights shall be provided to show if the valve is open or closed.	
INLET Driver's Side On the left side pump panel shall be one (1) 2.50" auxiliary suction, terminating in 2.50" National Standard Hose Thread. The auxiliary suction shall be provided with a strainer, chrome swivel and plug.	
INLET CONTROL Control for the side auxiliary inlet(s) shall be located at the inlet valve.	
INLET BLEEDER VALVE A .75" bleeder valve shall be provided for each side gated inlet. The valves shall be located behind the panel with a swing style handle control extended to the outside of the panel. The handles shall be chrome plated and provide a visual indication of valve position.	
TANK TO PUMP The booster tank shall be connected to the intake side of the pump with heavy duty piping and a quarter turn 3.00" full flow line valve with the control remotely located at the operator's panel. Tank to pump line shall run straight (no elbows) from the pump into the front face of the water tank and angle down into the tank sump. A rubber coupling shall be included in this line to prevent damage from vibration or chassis flexing.	
A check valve shall be provided in the tank to pump supply line to prevent the possibility of "back filling" the water tank.	
TANK REFILL A 1.50" combination tank refill and pump re-circulation line shall be provided, using a quarter-turn full flow ball valve controlled from the pump operator's panel.	
DISCHARGE OUTLETS (Driver's Side) There shall be two (2) discharge outlets with a 2.50" valve on the left side of the apparatus, terminating with a male 2.50" National Standard hose thread adapter.	
DISCHARGE OUTLETS (Passenger Side) There shall be two (2) discharge outlets with a 2.50" valve on the right side of the apparatus, terminating with a 2.50" male National Standard hose thread adapter.	
DISCHARGE OUTLET (Front) There shall be a 1.50" gated discharge outlet plumbed to the lower portion of the tray located in the center front bumper extension.	
The discharge shall have a 90-degree swivel and terminate with 1.50" National Standard hose.	
Plumbing shall consist of 2.00" piping with a 2.00" full flow ball valve controlled at the pump operator's panel.	
Automatic drains shall be provided at all low points in the plumbing.	
DISCHARGE OUTLET (Rear) There shall be one (1) discharge outlet piped to the rear of the hose bed, on the driver side, installed so proper clearance is provided for spanner wrenches or adapters. Plumbing shall consist of 2.50" piping along with a 2.50" full flow ball valve with the control from the pump operator's panel.	

ELBOWS, REAR OUTLETS
The 2.50" discharge outlets, located at the rear of the apparatus, shall be furnished with a 2.50"(F) National Standard hose thread x 2.50"(M) National Standard hose thread, chrome plated, 45 degree elbow.

The elbow shall incorporate a thread design to automatically relieve stored pressure in the line when disconnected. **(No exception)**

DISCHARGE CAPS
Chrome plated, rocker lug, caps with chains or stainless steel stranded Cable, shall be furnished for all side discharge outlets. The cap shall incorporate a thread design to automatically relieve stored pressure in the line when disconnected. **(No exception)**

OUTLET BLEEDERS
A .75" bleeder valve shall be provided for each outlet 1.50" or larger. Automatic drain valves are acceptable. The valves shall be located behind the panel with a swing style handle control extended to the outside of the side pump panel. The handles shall be chrome plated and provide a visual indication of valve position. The swing handle shall provide an ergonomic position for operating the valve without twisting the wrist.

Bleeders shall be located at the bottom of the pump panel. They shall be properly labeled identifying the discharge they are plumbed in to. The water discharged by the bleeders shall be routed below the chassis frame rails.

ELBOWS, LEFT SIDE OUTLETS
The 2.50" discharge outlets, located on the left side pump panel, shall be furnished with a 2.50"(F) National Standard hose thread x 2.50"(M) National Standard hose thread, chrome plated, 45 degree elbow. The elbow shall incorporate a thread design to automatically relieve stored pressure in the line when disconnected. **(No exception)**

ELBOWS, RIGHT SIDE OUTLETS
The 2.50" discharge outlets, located on the right side pump panel, shall be furnished with a 2.50"(F) National Standard hose thread x 2.50"(M) National Standard hose thread, chrome plated, 45 degree elbow. The elbow shall incorporate a thread design to automatically relieve stored pressure in the line when disconnected. **(No exception)**

DISCHARGE OUTLET CONTROLS
The discharge outlets shall incorporate a quarter-turn ball valve with the control located at the pump operator's panel. The valve operating mechanism shall indicate the position of the valve.

If a hand wheel control valve is used, the control shall be a minimum of a 3.9" diameter chrome plated hand wheel with a dial position indicator built in to the center of the hand wheel.

AIR BLOWOUT VALVE
A blowout shall be furnished to blow out any remaining water from the pump or individual discharge lines. Blowout shall be piped from the wet tank of the brake system to the main body of the pump, and shall be controlled at the pump operator's panel.

An additional blowout shall be piped from the air inlet on pump panel to the main body of the pump, and shall be controlled at the pump operator's panel.

An instruction plate shall be located at the operator's panel next to the blowout.

DELUGE RISER
A 3.00" deluge riser shall be installed above the pump in such a manner that a monitor can be mounted and used effectively. Piping shall be installed securely so no movement develops when the line is charged. The riser shall be gated and controlled at the pump operator's panel.

SPECIFICATIONS	BIDDING ON / REMARKS
MONITOR A Task Force Crossfire XFC-52 monitor (or equivalent) shall be furnished and properly installed on the deluge riser.	
The monitor shall include a M-R nozzle, 10" stream straightener and quad stacked tips. The portable base unit with folding legs and a safety valve shall have (2) 2.50" female NST inlets.	
The monitor shall be painted red to match the body. The deluge riser shall have male National Pipe Threads for mounting the monitor.	
CROSSLAYS/ SPEEDLAYS WITH TRAY Ahead of the pump panel shall be two (2) 1.75" speed-lay hose beds. Each bed shall have a 2.00" pre-connect line with a 2.00" quarter-turn ball valve and terminate with a 1.50" National Standard hose thread 90 degree swivel. The swivel shall be located at the top of the speed-lay compartment to allow easy removal of the hose in either direction. **(No exception)**	
Individual controls for the speed-lays shall be at the pump operator's panel.	
Each compartment shall be capable of carrying 200 feet of 1.75" double jacketed hose with the one (1) compartment located above the other. **(No exception)**	
A removable tray shall be provided for each speed-lay hose bed. The speed-lay trays shall be constructed of black poly to provide a lightweight sturdy tray. Two (2) hand holes shall be in the floor and additional hand holes shall be provided in the sides for easy removal and installation from the compartment. The floor of the trays shall be perforated to allow for drainage and hose drying. The bottom of the speed-lay compartments shall be lined with stainless steel to allow the tray to slide with ease. Scuff plates shall be provided on both sides, at the sides and bottom of each opening to protect the paint.	
CROSSLAY/SPEEDLAY HOSE RESTRAINT An elastic netting shall be provided across the top and on the ends of two (2) cross-lay(s)/speed-lay(s) to secure the hose during travel.	
BOOSTER HOSE REEL An electric rewind booster hose reel shall be installed in the rear compartment. The booster reel should be secured to the floor of this compartment and reinforced as may be necessary to hold the weight of this equipment.	
The exterior finish of the reel shall be painted gray from the reel manufacturer.	
Compartment floor shall be covered with bright aluminum tread plate. Roll-up door for this compartment shall not interfere with the hose reel. A polished stainless steel roller and guide assembly shall be provided on each beavertail so the booster hose does not rub against a painted surface.	
Discharge control shall be provided at the pump operator's panel.	
Reel motor shall be protected from overload with an appropriately sized automatic reset circuit breaker.	
Electric rewind control shall be a rubber covered button adjacent to the reel.	
Booster hose, 1.00" diameter and 200 feet, with chrome plated Bar-way, or equal couplings shall be provided.	
Working pressure of the booster hose shall be a minimum of 800 psi.	
Capacity of the hose reel shall be 200 feet of 1.00" booster hose.	
A 1.00" booster hose pistol grip nozzle shall be provided.	
A manual rewind shall be provided for the booster hose reel.	

SPECIFICATIONS	BIDDING ON / REMARKS
FOAM PROPORTIONER A foam proportioning system shall be provided that is an on demand, automatic proportioning, single point, direct injection system suitable for all types of Class "A" & "B" foam concentrates, including the high viscosity (6000 cps), alcohol resistant Class B foams.	
The design of the system shall allow operation from draft, hydrant, or relay operation. This shall provide a versatile system to meet the demands at a fire scene.	
System Capacity The system shall have the ability to deliver the following minimum foam solution flow rates at accuracies that meet or exceed NFPA requirements at a pump rating of 250 PSI.	
200 GPM @ 6% 400 GPM @ 3% 1200 GPM @ 1%	
Control System	
The system shall be equipped with a digital electronic control display located on the pump operator's panel. Push button controls shall be integrated into the panel to turn the system on/off, control the foam percentage, direct which foam to use on a multi-tank system, and to set the operation modes (automatic, manual, draft, calibration, or flush).	
The percent of injection shall have presets for class A and class B foam. These presets can be changed at the Guam Fire Department as desired. The percent of injection shall be able to be easily changed at the scene to adjust to changing demands.	
System on and foam pump on indicator lights shall also be included. Information displayed shall include mode of operation (automatic, manual, draft, calibration, or flush), foam supply selected (Class A or Class B), water total, foam total, foam Percentage, remaining gallons, and time remaining.	
Low Level, Foam Tank The control head shall display a warning message when the foam tank in use is below a quarter tank.	
Hydraulic Drive System The foam concentrate pump shall be powered by a hydraulic drive system, which is automatically activated, whenever the vehicle water pump is engaged. A system that drives the foam pump via an electric motor shall not be acceptable.	
Hydraulic oil cooler shall be provided to automatically prevent over heating of the hydraulic oil.	
The hydraulic oil reservoir shall be of four (4) gallons minimum capacity and shall also be of sufficient size to minimize foaming and be located to facilitate checking oil level or adding oil without spillage or the need to remove access panels.	
Foam Concentrate Pump	
The foam concentrate pump shall have minimum capacity for 12 gpm with all types of foam concentrates with a viscosity at or below 6000 cps including protein, fluoro-protein, AFFF, FFFP, or AR-AFFF.	
The foam concentrate pump shall be of positive displacement, self-priming; linear actuated design, driven by the hydraulic motor. The pump shall be constructed of brass body; chrome plated stainless steel shaft, with a stainless steel piston. In order to increase longevity of the pump, no aluminum shall be present in its construction.	
A relief system shall be provided which is designed to protect the drive system components and prevent over pressuring the foam concentrate pump.	

External Foam Concentrate Connection

An external foam pick-up shall be provided to enable use of a foam agent that is not stored on the vehicle. The external foam pick-up shall be designed to allow continued operation after the on-board foam tank is empty. The external foam pick-up shall be designed to allow use with training foam or colored water for training purposes.

Panel Mounted Strainer / External Pick-Up Connection

A bronze body strainer / connector unit shall be provided. The unit shall be mounted to the pump panel. The external foam pick-up shall be one (1) - 1.00" male connection with chrome-plated cap integrated to a 2.00" strainer cleanout cap. A check valve shall be installed in the pick-up portion of the cleanout cap. A basket style stainless steel screen shall be installed in the body of the strainer / connector unit. Removal of the 2.00" cleanout cap shall be all that is required to gain access to and remove the stainless steel basket screen. The strainer / connector unit shall be ahead of the foam concentrate pump inlet port to insure that all agent reaching the foam pump has been strained.

Pick-Up Hose

A 1.00" flexible hose with an end for insertion into foam containers shall be provided. The hose shall be supplied with a 1.00" female swivel NST thread swivel connector. The hose shall be shipped loose.

Strainer

A strainer with stainless steel screen shall be installed ahead of the foam concentrate pump inlet port. The strainer shall be easily accessible for cleaning.

Discharges

The foam system shall be plumbed to five (5) discharges. The foam capable discharges shall be the both cross lays, rear 2.5" discharge, front discharge, and the hose reel.

System Electrical Load

The foam proportioning shall not impose an electrical load on the vehicle electrical system any greater than five (5) amps at 12VDC.

Tank Selector

Electric valves shall be used for the foam supply. The foam supply valves shall be controlled at the foam system control head for ease of operation. The supply valves shall be electric, remote controlled, to eliminate air pockets in the foam tank supply hose.

Maintenance Message

A message shall be displayed on the control head to advise when system maintenance needs to be performed. The message shall display interval for cleaning the foam strainer, cleaning for the water strainers, and changing the hydraulic oil.

Flush System

The system shall be designed such that a flush mode shall be provided to allow the system to flush all foam concentrate with clear water. The flush circuit control logic shall ensure the foam tank supply valve is closed prior to opening the flush valve. The flush valve shall be operated at the foam system control head for ease of operation.

The valve shall be electrically controlled and located as close to the foam tank supply valve as possible. A manual flush drain valve shall be labeled and located under the driver's side running board.

REFILL, FOAM TANKS

The foam system's proportioning pump shall be used to fill the Class A foam tank. This shall allow use of the auxiliary foam pick-up to pump the foam from pails or a drum on the ground into the foam tank.

A foam shut-off switch shall be installed in the fill dome of the tank to shut the system down when the tank is full.

A separate air operated fill pump, controlled by the foam system controller, shall be provided for filling the Class B foam tank.

FOAM TANK-B
The foam tank shall be an integral portion of the polypropylene water tank. The cell shall have a capacity of 30 gallons of foam with the intended use of Class "B" foam.

The foam cell may reduce the capacity of the water tank. The foam cell shall have a screen in the fill dome and a breather in the lid.

FOAM TANK-B DRAIN
A system of 1.00" foam tank drains shall be provided, integrated into the foam systems strainer and tank to foam pump valve management system. The foam system controller shall have a mode that allows for a given foam valve to be opened at will. Flow of foam from the tank valve to the strainer shall be usable as a tank drain mode.

FOAM TANK-A
The foam tank shall be an integral portion of the polypropylene water tank. The cell shall have a capacity of 20 gallons of foam with the intended use of Class "A" foam. The foam cell shall not reduce the capacity of the water tank. The foam cell shall have a screen in the fill dome and a breather in the lid.

FOAM TANK-A DRAIN
A system of 1.00" foam tank drains shall be provided, integrated into the foam systems strainer and tank to foam pump valve management system. The foam system controller shall have a mode that allows for a given foam valve to be opened at will. Flow of foam from the tank valve to the strainer shall be usable as a tank drain mode.

FOAM LEVEL GAUGE
An electronic foam level gauge shall be provided on the operator's panel for each foam tank, which registers foam level by means of five colored LED lights. The lights shall be durable, ultra-bright five LED design, viewable throughout 180 degrees. The foam level indicators shall be as follows:

- 100% = Green
- 75% = Yellow
- 50% = Yellow
- 25% = Yellow
- Refill = Red

The light shall flash when the level drops below the given level indicator to provide an eighth of a tank indication. To further alert the pump operator, the lights shall flash sequentially when the foam tank is empty.

FOAM SYSTEM TRAINING
Training and demonstration shall be provided at the Guam Fire Department on the operation of the foam systems. This demonstration shall include:

- Review of the foam system manual, highlighting key areas.
- A walk around review of the system components, on the finished truck.
- A hands on foam system start-up and foam discharge session.
- Instructions on the use of the manual overrides.
- The proper way to shut down and flush the foam system.

Also included shall be training on the operation, service and maintenance for the fire pump and pressure governor.

PUMP COMPARTMENT and MOUNTING

The pump compartment shall be separate from the hose body and compartments so that each may flex independently of the other. The pump compartment shall be mounted on the chassis frame rails to allow for chassis frame + twist. Pump compartment, pump, plumbing and gauge panels shall be removable.

The mounting shall allow chassis frame rails to flex independently without damage to the fire pump.

PUMP CONTROL PANELS (Driver's Side)
All pump controls and gauges shall be located at the driver's side of the apparatus and properly identified.

SPECIFICATIONS	BIDDING ON / REMARKS
Layout of the pump control panel shall be ergonomically efficient and systematically organized. The pump operator's control panel shall be removable in two (2) main sections for ease of maintenance:	
The upper section shall contain sub panels for the mounting of the pump pressure control device, engine monitoring gauges, electrical switches, and foam controls. Sub panels shall be removable from the face of the pump panel for ease of maintenance. Below the sub panels shall be located all valve controls and line pressure gauges.	
The lower section of the panel shall contain all inlets, outlets, and drains. All push/pull valve controls shall have 1/4 turn locking control rods with polished chrome plated zinc tee handles.	
Guides for the push/pull control rods shall be chrome plated zinc castings securely mounted to the pump panel. Push/pull valve controls shall be capable of locking in any position. The control rods shall pull straight out of the panel and shall be equipped with universal joints to eliminate binding.	
IDENTIFICATION TAGS The identification tag for each valve control shall be recessed in the face of the tee handle.	
All discharge outlets shall have color coded identification tags, with each discharge having its own unique color. Color coding shall include the labeling of the outlet and the drain for each corresponding discharge.	
PUMP PANEL CONFIGURATION The pump panel configuration shall be arranged and installed in an organized manner that shall provide user-friendly operation.	
PUMP PANEL GAUGES AND CONTROLS The following shall, at a minimum be provided on the pump and gauge panels in a neat and orderly fashion:	
- An electronic engine monitor or status gauge shall display the engine oil pressure, engine temperature and engine rpm. A warning alarm shall be provided for these items.	
- Thermal Protection Device	
- Tachometer: Electric	
- Voltmeter	
Also provided at the pump panel shall be the following: - Master Pump Drain Control	
GAUGES, VACUUM and PRESSURE	
The pump vacuum and pressure gauges shall be silicone filled.	
The gauges shall be a minimum of 4.5" in diameter and shall have white faces with black lettering, with a pressure range of 30"-0-600 psig.	
The pump pressure and vacuum gauges shall be installed adjacent to each other at the pump operator's control panel.	
Test port connections shall be provided at the pump operator's panel. One shall be connected to the intake side of the pump, and the other to the discharge manifold of the pump. They shall have 0.25 in. standard pipe thread connections and non-corrosive polished stainless steel or brass plugs. They shall be marked with a label.	
These gauges shall include a minimum 10 year warranty against leakage, pointer defect, and defective bourdon tube.	
PRESSURE GAUGES The individual "line" pressure gauges for the discharges shall be Inter-lube filled. They shall be a minimum of 3.50" in diameter and shall have white faces with black lettering.	
Gauges shall have a pressure range of 30"-0-400psig.	

The individual pressure gauge shall be installed as close to the outlet control as practical.

The gauges shall include a 10 year warranty against leakage, pointer defect, and defective bourdon tube.

WATER LEVEL GAUGE

An electronic water level gauge shall be provided on the operator's panel that registers water level by means of five colored LED lights. The lights shall be durable, ultra-bright five LED design viewable through 180 degrees. The water level indicators shall be as follows:

- 100% = Green
- 75% = Yellow
- 50% = Yellow
- 25% = Yellow
- Refill = Red

The light shall flash when the level drops below the given level indicator to provide an eighth of a tank indication. To further alert the pump operator, the lights shall flash sequentially when the water tank is empty.

LIGHT SHIELD

Illumination shall be provided for controls, switches, essential instructions, gauges, and instruments necessary for the operation of the apparatus and the equipment provided on it. External illumination shall be a minimum of five (5) foot-candles on the face of the device. Internal illumination shall be a minimum of four (4) foot lamberts.

A green pump engaged indicator shall come on at the operator's panel when the pump is shifted into gear from inside the cab. One pump panel light shall also come on at the operator's panel when the pump is shifted into gear from inside the cab. The remaining lights to be actuated from a switch located on the pump panel.

WATER TANK

Booster tank shall have a capacity of 750 gallons and be constructed of polypropylene plastic.

Tank shall be baffled in accordance with NFPA 1901 requirements. Baffles shall permit movement of air and water between compartments.

Tank top shall be sufficiently supported to keep it rigid during fast filling conditions.

A sump shall be provided at the bottom of the water tank.

Fill tower shall be furnished with an approximately .25" thick Polypropylene screen and a hinged cover.

WATER TANK RESTRAINT

A heavy-duty water tank restraint shall be provided.

WATER TANK WARRANTY

The tank shall have a **lifetime** warranty.

If a tank problem renders the truck out-of-service, the tank manufacturer, or representative (successful bidder) shall dispatch a service technician. Service of the tank must commence WITHIN 10 DAYS.

LOOSE EQUIPMENT

The following equipment shall be furnished with the completed unit:

- One (1) bag of chrome, stainless steel, or cadmium plated screws, nuts, bolts and washers, as used in the construction of the unit.

- One (1) LDH Hydrant Valve made of corrosion resistant stainless steel and poly-impregnated aluminum combine for a more durable piston intake valve, used to permit the first-in pumper to lay a supply line directly from hydrant to fire and start pumping water.

SPECIFICATIONS	BIDDING ON / REMARKS
- One (1) Stainless Steel Piston Intake Relief Valve. It shall be designed to incorporate quick-connection, fast but controlled opening, with air bleeder and relief valve. 45° inlet providing smooth water flow for reduced friction loss. This valve shall have a 5" storz inlet to a 6" NST Female swivel.	
- One (1) two way clappered Siamese. It shall have (2) 2 ½" NST Female swivel inlets, and a 5" storz outlet, allowing 1 single or two supply lines to be connected to the above intake relief valve if required.	
- One (1) 5" storz cap with tether. - Two (2) 5" storz – 4" Storz adapter. - One (1) 5" storz – 6" swivel (Female) NST adapter. - One (1) 5" storz – 6" (Male) NST adapter.	
NFPA REQUIRED LOOSE EQUIPMENT, PROVIDED BY THE GUAM FIRE DEPARTMENT	
The following loose equipment as outlined in NFPA 1901, 2009 edition, section 5.8.2 and 5.8.3 shall be provided by the fire department. All loose equipment shall be installed on the apparatus before placed in emergency service, unless the fire department waives NFPA section 4.21.	
- 800 ft (60 m) of 2½" (65 mm) or larger fire hose. - 400 ft (120 m) of 1½" (38 mm), 1¾" (45 mm), or 2" (52 mm) fire hose. - One (1) handline nozzle, 200 gpm (750 L/min) minimum. - Two (2) handline nozzles, 95 gpm (360 L/min) minimum. - One (1) playpipe with shutoff and 1" (25 mm), 1 1/8" (29 mm), and 1¼" (32 mm) tips.	
- One (1) SCBA complying with NFPA 1981, *Standard on* Open-Circuit Self-Contained Breathing Apparatus for Fire and *Emergency Services*, for each assigned seating position, but not fewer than four (4), mounted in brackets fastened to the apparatus or stored in containers supplied by the SCBA manufacturer.	
- One (1) spare SCBA cylinder for each SCBA carried, each mounted in a bracket fastened to the apparatus or stored in a specially designed storage space(s).	
- One (1) first aid kit.	
- Four (4) combination spanner wrenches mounted in bracket(s) fastened to the apparatus.	
- Two (2) hydrant wrenches mounted in brackets fastened to the apparatus.	
- Four (4) ladder belts meeting the requirements of NFPA 1983, Standard on Fire Service Life Safety Rope and System Components	
- One (1) double female 2½" (65 mm) adapter with National Hose threads, mounted in a bracket fastened to the apparatus.	
- One (1) double male 2½" (65 mm) adapter with National Hose threads, mounted in a bracket fastened to the apparatus.	
- One (1) rubber mallet, for use on suction hose connections, mounted in a bracket fastened to the apparatus.	
- Two (2) salvage covers each a minimum size of 12 ft × 14 ft (3.7 m × 4.3 m).	
- One (1) traffic vest for each seating position, each vest to comply with ANSI/ISEA 207, Standard for High Visibility Public Safety Vests, and have a five-point breakaway feature that includes two at the shoulders, two at the sides, and one at the front.	
- Five (5) fluorescent orange traffic cones not less than 28" (711 mm) in height, each equipped with a 6" (152 mm) retro-reflective white band no more than 4" (152 mm) from the top of the cone, and an additional 4" (102 mm) retro-reflective white band 2" (51 mm) below the 6" (152 mm) band.	

- Five (5) illuminated warning devices such as highway flares, unless the five (5) fluorescent orange traffic cones have illuminating capabilities.

- One automatic external defibrillator (AED).

- If the supply hose carried does not use sexless couplings, an additional double female adapter and double male adapter, sized to fit the supply hose carried, shall be carried mounted in brackets fastened to the apparatus.

- If none of the pump intakes are valved, a hose appliance that is equipped with one or more gated intakes with female swivel connection(s) compatible with the supply hose used on one side and a swivel connection with pump intake threads on the other side shall be carried. Any intake connection larger than 3 in. (75 mm) shall include a pressure relief device that meets the requirements of 16.6.6

- If the apparatus does not have a 2½" National Hose (NH) intake, an adapter from 2½" NH female to a pump intake shall be carried, mounted in a bracket fastened to the apparatus if not already mounted directly to the intake.

- If the supply hose carried has other than 2½" National Hose (NH) threads, adapters shall be carried to allow feeding the supply hose from a 2½" NH thread male discharge and to allow the hose to connect to a 2½" NH female intake, mounted in brackets fastened to the apparatus if not already mounted directly to the discharge or intake.

SOFT SUCTION HOSE

There shall be a 20 foot length of 5.00" soft suction hose provided with a 4.50" long handle swivel coupling on one end and a 5.00" storz on the other end.

- One (1)-6.00" National Standard hose thread barrel strainer, chrome plated

DRY CHEM EXTINGUISHER PROVIDED BY THE GUAM FIRE DEPARTMENT

NFPA 1901, 2009 edition, section 5.8.3 requires one (1) approved dry chemical portable fire extinguisher with a minimum 80-B:C rating mounted in a bracket fastened to the apparatus.

The extinguisher is not on the apparatus as manufactured. The fire department shall provide and mount the extinguisher.

WATER EXTINGUISHER PROVIDED BY THE GUAM FIRE DEPARTMENT

NFPA 1901, 2009 edition, section 5.8.3 requires one (1) 2.5 gallon or larger water extinguisher mounted in a bracket fastened to the apparatus.

The extinguisher is not on the apparatus as manufactured. The fire department shall provide and mount the extinguisher.

AXE, FLATHEAD, PROVIDED BY THE GUAM FIRE DEPARTMENT

NFPA 1901, 2009 edition, Section 5.8.3 requires one (1) flathead axe mounted in a bracket fastened to the apparatus.

The axe is not on the apparatus as manufactured. The fire department shall provide and mount the axe.

AXE, PICKHEAD, PROVIDED BY THE GUAM FIRE DEPARTMENT

NFPA 1901, 2009 edition, Section 5.8.3 requires one (1) pick head axe mounted in a bracket fastened to the apparatus.

The axe is not on the apparatus as manufactured. The fire department shall provide and mount the axe.

PAINT

The cab shall be two-tone, with the upper section painted white and lower section of the cab and body painted red.

The paint shall be uniform in color and be free of defects or surface imperfections. Finish shall be durable, abrasion and peel resistant and shall be resistant to mold and mildew. Paint and topcoat shall be anti-fade and provide a stain resistant finish.

All removable items such as brackets, compartment doors, door hinges, trim, etc. shall be removed and painted separately to ensure paint behind all mounted items. Body assemblies that cannot be finish painted after assembly shall be finish painted before assembly.

PAINT CHASSIS FRAME ASSEMBLY
The chassis frame assembly shall be painted black before the installation of the cab and body, and before installation of the engine and transmission assembly, air brake lines, electrical wire harnesses, etc. Components that are included with the chassis frame assembly that shall be painted black are frame rails, cross members, axles, suspension, steering gear, fuel tank, body sub-structure supports, miscellaneous mounting brackets, etc.

PAINT AND CORROSION WARRANTY
The cab and body exterior paint finish shall be warranted against blistering, peeling, corrosion, lack of adhesion or any other manufacturing or material defect for a period of **ten (10) years**.

The cab and body shall also be warranted against corrosion perforation for a period of **ten (10) years**. A copy of the manufacturer's warranty shall be included with the bid.

All non-painted metal surfaces on the exterior of the vehicle shall be sprayed with a corrosion protective coating. A transit coating remover kit shall be supplied to remove the transit coating. The transit coating and the remover are biodegradable.

PAINT, COMPARTMENT INTERIOR
Interior of compartments shall be painted with a gray spatter type paint.

REFLECTIVE STRIPES
Three (3) reflective stripes shall be provided across the front of the vehicle and along the sides of the body. The reflective band shall consist of a 1.00" white stripe at the top with a 1.00" gap then a 6.00" white stripe with a 1.00" gap and a 1.00" white stripe on the bottom.

The reflective band provided on the cab face shall be below the headlight level.

CHEVRON STRIPING, REAR
There shall be alternating chevron striping located on the rear-facing vertical surface of the apparatus. The entire rear surface, excluding the rear compartment door, shall be covered. The colors shall be red and fluorescent yellow diamond grade. Each stripe shall be 6.00" in width. This shall meet the requirements of NFPA 1901, 2009 edition, which states that 50% of the rear surface shall be covered with chevron striping.

JOG(S) IN REFLECTIVE BAND
The reflective band located on each side of the apparatus body shall contain one (1) jog(s) and shall be angled at approximately a 45 degree "s" when installed.

REFLECTIVE STRIPE, CAB DOORS
A 6.00" x 16.00" yellow reflective stripe shall be provided across the interior of each cab door. The stripe shall be located approximately 1.00" up from the bottom, on the door panel. This stripe shall meet the NFPA 1901 requirement.

LAMINATION WARRANTY
The manufacturer shall provide a **three (3) year** warranty against defects in material and workmanship with the graphics process. A copy of the fire apparatus manufacturer's warranty shall be included with the bid.

LETTERING
Forty-one (41) to sixty (60) reflective gold colored lettering, 3.00" high, outlining and shading shall be provided. **Lettering and location shall be specified at the pre-construction conference and/or before final painting of the completed apparatus.**

The lettering shall be totally encapsulated between two (2) layers of clear fade and stain resistant coatings.

CD MANUAL, FIRE APPARATUS PARTS
Custom parts manuals for the complete fire apparatus shall be provided in hard book and CD format with the completed unit.

SPECIFICATIONS	BIDDING ON / REMARKS
CD MANUAL, CHASSIS SERVICE A hard book and CD format chassis service manual containing parts and service information on **all major components** shall be provided with the completed unit.	_____
CD MANUAL, CHASSIS OPERATION 2 Hard book and 2 CD format chassis operation manuals shall be provided.	_____
ELECTRICAL WIRING DIAGRAMS Two (2) electrical wiring diagrams, prepared for the model of chassis and body, shall be provided.	_____

These specifications were developed by the committee members, staff of the Guam Fire Department.

COMMITTEE MEMBERS:	SIGNATURES
Fire Captain Ronnie P. Chiguina (Chairman)	
F/Lt. Dean G. Aguon	
F/Lt. Richard D. Rosete	
F/Lt. Ken V.P. Cruz	
F/Lt. John A.B. Mabayag	
F/Lt. Rafael M. Mesa	
FFII Pasqual J. Uncangco	
FFII James R. Invencion	
Automotive Mechanic II Rudy C. Riveria	

And Approved By:

Michael F. Uncangco, (Acting) Fire Chief
Guam Fire Department

Sources Utilized by Guam Fire Department in development of specifications for Custom Pumper Trucks

1. Making apparatus Specs Clear, concise and Consistent By William C. Peters, June 1, 2009.
2. Specifying and Purchasing Fire Apparatus By Bill Peters, December 5, 2008.
3. Documentation concerning fire apparatus built by Ferrara Fire Apparatus, Inc., Holden, Luisianna.
4. Documentation concerning fire apparatus built by Pierce Manufacturing Inc., Appleton, Wisconsin.
5. National Fire Protection Association, Codes and Standards, Quincy, Massachusetts.
6. Documentation concerning fire apparatus built by Crimson Fire, Brandon, South Dakota.
7. Documentation concerning fire apparatus built by HME Ahrens-Fox, Wyoming, Michigan.
8. Documentation concerning fire apparatus built by Marion Body Works, Marion, Wisconsin.
9. Documentation concerning fire apparatus built by Rosenbauer, Lyons, south Dakota.
10. Documentation concerning fire apparatus built by Smeal Fire Apparatus Co., Snyder, Nebraska.
11. Documentation concerning fire apparatus built by Spartan Chassis, Charlotte, Michigan.
12. Documentation concerning fire apparatus built by Sutphen Corporation, Amlin, Ohio.
13. Documentation and operations manual for Pierce fire apparatus, Los Angeles Fire Department, Los Angeles, California.
14. Documentation concerning wireless communications devices built by FireCom, Portland, Oregon.
15. Documentation concerning lights and signals built by Federal Signal, University Park, Illinois.
16. Documentation concerning lights and signals built by Whelen Engineering Co., Chester, Connecticut.Documentation concerning fire apparatus pumps built by Darley Pumps, Chippewa Falls, Wisconsin.
17. Documentation concerning fire apparatus pumps built by Hale Products Inc., Conshohocken, Pennsylvania.
18. Documentation concerning fire apparatus pumps built by Waterous Corporation, South Saint Paul, Minnesota.
19. Documentation concerning diesel engines built by Caterpillar Corporation, Peoria, Illinois.
20. Documentation concerning diesel engines built by Cummins, Inc. Columbus, Indiana.
21. Documentation concerning diesel engines built by Detroit Diesel, Detroit, Michigan.
22. Documentation concerning transmissions built by Allison Transmission, Indianapolis, Indiana.
23. Specification and operation files maintained by the Guam Fire Department on Darley Pumps, E-One pumper trucks, and Pierce pumper trucks.
24. Specifications for a Triple Combination Pumper truck used by the Jefferson City Fire Department.

Guam Fire Department
Extended Service/Maintenance Agreement

New and Current Year Custom Cab-Forward Pumpers

INTENT

It shall be the intent of this Extended Service/ Maintenance Agreement for the Guam Fire Department and the Contractor to enter into a 5 year service/maintenance warranty agreement in order to maximize the serviceability of these New Current Year Custom Cab Pumpers and minimize the "down time" or "out of service time" so that said fire apparatus will be ready to respond to an emergency when called upon to do so. It is also the intent of this agreement to extend the usable lifespan of these Fire Apparatus so as to maximize the tax dollars used to purchase said Fire Apparatus.

AGREEMENT PERIOD

A. This document shall depict the minimum requirements for a five (5) year Extended Service/Maintenance Agreement as required by the Guam Fire Department for vehicles known as New and Current Year Custom Cab-Forward Pumpers. This Agreement compliments and adds to, where it exceeds, the regular warranties as provided by the specifications of the involved fire apparatus.

B. This Agreement shall commence the award of this contract (Purchase order) has been made, and the date that the fire apparatus has been accepted by the Contractor/Bidder for the first pre-service inspection.

STANDARDS OF CARE

A. This document also defines the minimum requirements for a preventive maintenance program and shall comply with national Fire Protection Association's (NFPA) 1915, Standard for Fire Apparatus Preventive maintenance Program, 2000 Edition, which has been deemed a part of this agreement (reference attached NFPA 1915 document).

B. The service, maintenance and their intervals as well as the methods of repairs recommended by the various manufacturers that make up the complete fire apparatus shall also be deemed as part of this agreement.

C. This agreement covers all systems and components of the fire apparatus, to include but not limited to drive train, body, cab, frame, foam proportioning system, fire pump, generator, electrical systems, lighting, plumbing, hose reels, doors, tires, wheels, etc.

RESPONSIBILITIES

A. The Contractor shall be responsible for the service, maintenance and repairs as well as other services explained herein, for these fire apparatus and all of their systems, for the contract period. If work cannot be completed by the Contractor and must be sub-contracted to another business, the Contractor must ensure that said business is qualified to do the work required. The Contractor is still responsible for all fire apparatus referenced within this Agreement and the maintenance of all warranties in good standing.

B. During the 5-year period of this contract, the Contractor agrees to conduct the specified services, maintenance and repairs, which includes, but is not limited to, labor costs and all consumables with the exception of apparatus tires. The Contractor will not be responsible for labor costs, parts and repairs that are not covered under the warranty provisions of the new fire apparatus.

C. All services, maintenance and repairs not specifically covered by the various warranties of the fire apparatus or this extended service contract shall be the responsibility of the Guam Fire Department and the Government of Guam and not that of the Contractor.

D. Under no circumstances will the warranted service, repair and/or maintenance of these fire apparatus be delayed due to any outstanding payments owed to the contractor by the Government of Guam. To delay these services will constitute a breach of this agreement.

E. The Guam Fire Department, and their personnel, will be responsible for following all recommended procedures for this Agreement and conduct all vehicle inspections, as required, especially the Daily Fire Apparatus Check and Checklist.

F. Guam Fire Department Vehicle Maintenance personnel, when allowed, shall at all times seek prior approval, from the Contractor, before conducting any type of maintenance or alteration(s) to these Fire Apparatus, no matter how minor.

SERVICE, MAINTENANCE, AND OTHER PROVISIONS

In addition to the above provisions, the following shall also apply:

A. Prior to placing a new vehicle in service, the Contractor shall conduct a pre-service inspection and service.

B. If there are any deficiencies, defects and/or damages noted at this time, said discrepancies shall be brought up to the attention of GFD and arrangements will be made, with the assistance of the Contractor, to rectify said discrepancies. If the Contractor is also responsible for all warranty items on this fire apparatus, then the Contractor shall handle all related issues.

C. Examples of some of the services to be conducted:
   a. Replace engine oil and filter(s)
   b. Inspect and replace fuel filter(s)
   c. Inspect air cleaner and intake system
   d. Inspect hoses, belts and belt tensioners and replace or adjust if needed
   e. Inspect front and rear suspension and steering to include tie rod ends, draglink, king pins, air bags (if equipped) and control valves
   f. Inspect fire pump for unusual water leaks
   g. Test Electrical System for proper operation
   h. Perform scheduled maintenance on generator

D. The Contractor shall supply a Daily Fire Apparatus Check list that will be utilized by the GFD Fire Apparatus driver/operator, while conducting their daily vehicle check at the beginning of their shift, as per GFD Rules and Regulations. This daily check will also ensure that certain provisional requirement of the warranty can be honored.

E. The Contractor may elect, from time to time, to provide remedial training on the operation and/or operator daily service checks and maintenance requirements, to GFD personnel, when deemed necessary.

F. The Contractor shall be responsible for the towing of the apparatus when needed. If the vehicle is on a public roadway, the tow function shall begin to be addressed within one (1) hour upon notification by GFD. The affected vehicle shall be under tow within two (2) hours after notification by GFD. If either of these two provisions is not met, it is deemed that the Contractor had given implied consent for GFD personnel to arrange for the towing. All costs of this towing shall be borne by the Contractor. If the cause of the towing is later found to not be warranty related, then GFD shall be responsible and billed for the towing service.

G. Guam Fire Department Vehicle Maintenance personnel shall be allowed to conduct minor vehicle repairs, such as changing of light bulbs, lamps, fuses, etc., as long as prior approval has been obtained from the Contractor.

H. Guam Fire Department Vehicle Maintenance personnel shall also be allowed to diagnose vehicle faults, such as but not limited to malfunctioning air conditioning or mobile radio system(s), and report same to the Contractor for verbal approval to have the vehicle further diagnosed and/or repaired by a sub-contractor, whenever the Contractor cannot effect or is not certified or qualified to effect said repairs or service. GFD personnel shall always obtain prior approval from the Contractor.

I. If the Contractor fails to begin addressing any complaint, by GFD, regarding the serviceability of any fire apparatus covered under this extended service agreement, within 24 hours after receiving said report by GFD, it shall be construed as unnecessary delay. Whenever an unnecessary delay situation occurs, this shall be deemed as implied consent from the Contractor for GFD to seek service and/or repairs elsewhere in order to expedite the return of the apparatus into emergency service.

J. All charges incurred during the unnecessary delay repairs/services will be charged back to the Contractor for payment. Neither GFD nor the Government of Guam will be held liable for these repairs/services and the warranties for said apparatus will not be affected in any way.

K. All Inspections/services shall be performed on a quarterly basis, at minimum.

L. All service and repairs shall be performed according to accepted industry standards, good faith practices and agreed upon time frames.

M. The Contractor shall furnish annual reports to GFD depicting total services, maintenance and repairs for each Fire Apparatus per annum. These reports shall be based on a calendar year timeframe and will be due to GFD, Office of the Fire Chief, no later than the 15th day of January of the following year. If the apparatus is covered for a partial year under this agreement, then the report will be based on that portion of the calendar year.

CONTRACT EXTENSION CLAUSE

At the end of this contract period, the Guam Fire Department reserves the right to extend this contract for another five (5) year period on a year to year basis upon availability of funds. Any revisions to this contract shall be addressed at that time prior to entering into another five (5) year term.

BREACH of CONTRACT/AGREEMENT CLAUSE

Breach of Contract Definition: The failure to perform a contract, without a legal excuse.

If the Contractor fails to perform to the provisions of this Agreement, GFD/Government of Guam may terminate said agreement if arrangements with Contractor cannot be rectified to the satisfaction with cause. Likewise, if the GFD/Government of Guam fails to perform its responsibilities per this agreement, then the Contractor can terminate, if an agreement cannot be made between the two parties to rectify the situation to the satisfaction of the Contractor, with cause. If either party cancels this agreement, then a refund for the full amount of the unused portion of the Contract funding shall be returned to the GFD/Government of Guam.

If the GFD/Government of Guam is unable to appropriate funds for payment of non-warranty items during any time, such services may be terminated by the Contractor.

FIRE APPARATUS IDENTIFICATION NUMBERS

VEHICLE IDENTIFICATION NUMBER	VEHICLE IDENTIFICATION NUMBER

AUTHORIZED SIGNATURES

We, the undersigned, have read this agreement and agree to all terms and conditions.

Guam Fire Department's Authorized Representative	Contractor's Authorized Representative

BIDDER'S REFERENCES FORM

The Bidder is **required** to provide a minimum of three (3) references where work of a similar size and nature was performed within the past five (5) years. This will enable the Government of Guam and the Guam Fire Department to judge the responsibility, experience, skill, and business standing of the Bidder.

Company Name		**Contact Name**	
Address			
Phone Number		**Fax Number**	
Dollar Value of Contract			
Contract Dates			
Requirements of Contract			
Company Name		**Contact Name**	
Address			
Phone Number		**Fax Number**	
Dollar Value of Contract			
Contract Dates			
Requirements of Contract			
Company Name		**Contact Name**	
Address			
Phone Number		**Fax Number**	
Dollar Value of Contract			
Contract Dates			
Requirements of Contract			
Company Name		**Contact Name**	
Address			
Phone Number		**Fax Number**	
Dollar Value of Contract			
Contract Dates			
Requirements of Contract			
Company Name		**Contact Name**	
Address			
Phone Number		**Fax Number**	
Dollar Value of Contract			
Contract Dates			
Requirements of Contract			

ITEM NO.	DESCRIPTION	QTY	UOM	UNIT PRICE	PRICE EXTENSION
1.1	**New and Current Year Custom Cab-Forward Pumpers**	**2**	**EA**	**$_____**	**$_____**

				Yearly Cost	**Total Price**
1.2	**Extended Service/Maintenance Agreement For Two (2) each New and Current Custom Cab-Forward Pumpers**	**5**	**YR**	**$_____**	**$_____**

Note: The Guam Fire Department reserves the right to extend this contract for another five (5) year period on a year to year basis upon availability of funds. Any revision to this contract shall be addressed at that time prior to entering into another five (5) year term.

BID COST SHALL BE SUBMITTED IN A SEPARATE ENVELOPE LABELED "BID COST"
BID BOND MUST BE INSERTED IN THE "BID COST" ENVELOPED

INTRODUCTION

These specifications are reflective of the Guam Fire Department and its needs. Most importantly, the specifications herein stated are to maximize firefighter capabilities and minimize risk of injuries, therefore exceptions will not be acceptable. The Guam Fire Department is the primary ***Fire and Emergency Services*** organization on the island of Guam serving a population of over 150,000. Its primary mission is to provide quality emergency and non-emergency services to the population it serves either living, working, investing or visiting the island of Guam. This is accomplished by responding to fires, emergency medical incidents, hazardous materials incidents, and performing services to save life, property and preserve its environment. Guam's geographical location and inherent exposure to the elements of its environment include high heat temperatures, corrosion and decomposition factors, humidity and moisture. These are of some major concerns for any vehicle type to consider in the field of fire and emergency services on a Pacific island approximately 212 square miles with an elevation of 1332 feet.

INTENT OF SPECIFICATIONS

Bids are requested for **TWO (2) URBAN/WILDLAND INTERFACE PUMPERS and a 5-YEAR EXTENDED SERVICE/MAINTENANCE AGREEMENT** for each of the fire apparatus. In general, these pumpers shall be of a 4-door cab configuration, with enclosed seating for a **MINIMUM OF FIVE (5) PERSONS**. The bid price must remain valid for a minimum period of 90 days from the date of receipt by the General Services Agency of the Government of Guam.

It shall be the intent of these specifications to cover the furnishing and delivery of a complete apparatus equipped as hereinafter specified. These specifications shall cover both the general and performance requirements as to the type of construction and test to which the apparatus shall conform, together with certain details as to finish, equipment and appliances with which the successful bidder (bidding contractor) shall conform. Minor details of construction and materials, which are not otherwise specified, shall be left to the discretion of the manufacturing company, who shall be solely responsible for the design and construction of all features. It is and must be understood that no bidders, as of this bid, on Guam construct or manufacture fire service or emergency response vehicles but are only representatives of off-island manufacturing companies through contract. **Apparatus proposed by the bidder's representative manufacturing company shall meet the requirements of the National Fire Protection Association (NFPA) as stated in the current Pamphlet for Engine/Pumpers, NFPA 1901, 2009 edition.** Loose equipment shall be provided only as stated in the following pages.

Bids shall only be considered from bidders representing manufacturing companies that have an established reputation in the field of fire apparatus construction. Further, the bidding contractor shall specify the manufacturing company they represent, and shall maintain dedicated service facilities for the repair and service of the apparatus being sold. Evidence of such a facility shall be included in bid.

Each bidding contractor on Guam shall furnish satisfactory evidence of the manufacturer's ability to construct the apparatus specified and shall state the location of the factory where the apparatus is to be built. The bidding contractor shall also show that both its service facilities and the manufacturing company *are* in position to render prompt service and to furnish replacement parts.

Each bid shall be accompanied by a detailed set of "Contractor's Specifications" consisting of a detailed description of the apparatus and equipment proposed, and to which the apparatus furnished under contract shall conform. These specifications shall indicate size, type, model and make of all component parts and equipment.

ELIMINATION OF DIVIDED RESPONSIBILITY

It is understood that numerous manufacturers may manufacture various components of the apparatus. It is emphasized here that the responsibility for the quality of the entire apparatus, to include warranties and warranty work, lies solely with the successful bidding contractor so that divided responsibilities are not a problem to the Guam Fire Department. This would maintain improved service ability, stock standardized parts, maintain longevity, provide excellent quality and reliability, fit and finish, and reduced construction and assembly time. Therefore, bids shall only be accepted from vendors that accept responsibility for the collective management and action on all warranty components.

The chassis, cab, and body, must be joined on the premises of the bidder or the manufacturer being represented by the bidder, after which the bidder must also be qualified and authorized to complete all required warranty repairs relative to the apparatus. The bidder shall provide evidence that they comply with this requirement.

Each bidding contractor on Guam shall furnish satisfactory evidence of their representing company's ability to assemble the apparatus specified and shall state the location of the factory where the final assembly of the apparatus will take place. The bidding contractor shall also show that the local service facility is capable of rendering prompt service and keeping replacement parts on hand.

MANUFACTURER'S RELIABILITY

The bidding contractor on Guam and the representative's manufacturer must be satisfactory to the Guam Fire Department and the General Services Agency of the Government of Guam in terms of experience, reliability, and demonstrated ability to manufacture equipment, comparable as to size and type, as specified. A list, as well as contact numbers, of fire departments located in the United States that have purchased the same type of apparatus from the manufacturer over the past five years must be supplied along with the contractor's submission.

MANUFACTURER'S SOLVENCY

The solvency of the manufacturer is a prime concern of the purchaser. Each submission shall include an In-Depth Risk Assessment Report from Dun and Bradstreet on the apparatus manufacturer. Failure to submit such a statement could be cause for rejection. (Such statements are available to the public on the Internet.)

BUILT IN USA
All major components must be built and assembled in the United States of America (engine, cab, chassis, and body).

GENERAL CONSTRUCTION
The apparatus shall be designed with due consideration to distribution of load between the front and rear axles. Weight balance and distribution shall be in accordance with the recommendations of the National Fire Protection Association.

PROTOTYPE APPARATUS
No prototype or experimental apparatus will be accepted. The builder must demonstrate that it has successfully produced an apparatus of similar design in the past. Total deviation to these specifications will be cause for immediate rejection.

FACTORY AUTHORIZED SERVICE CENTER
The bidding contractor must provide a factory authorized service center (contractor) on Guam to include a minimum of two factory trained (trained by fire apparatus manufacturer) technicians to perform maintenance and repairs of all fire apparatus and systems, including power train, chassis, and controls. All service technicians must possess, at minimum, the appropriate, current ASE (Automotive Service Excellence) or EVT (Emergency Vehicle Technician) Certification from the respective manufacturer. The specific ASE or EVT certifications are dependent upon the specifications of the bid/quote submission by each contractor. This section part shall be applicable to the successful contractor; all required Maintenance Services on the emergency response vehicles and must be in place prior to apparatus acceptance.

The contractor also is required to provide warranty service at fire station locations whenever major shop work is not involved such as typical preventive maintenance warranty work. If, while under warranty, the apparatus is in need of towing for undetermined reasons, the contractor shall provide for that service, without delay. For warranty service involving the shop, the apparatus will be delivered to and picked up from the contractor's facility by fire department personnel. Towing and Wrecking Service inclusive of any storage fees shall be at no cost to the Guam Fire Department/Government of Guam. The contractor agrees to keep the apparatus in a covered, protected area at all times while the apparatus is in its possession. The contractor, for the units in its possession, shall provide proper insurance coverage for the apparatus. The contractor shall indicate, within the technical bid proposal submission, the location of their service center(s) and the number of mobile service unit(s) available. The contractor shall also submit all certifications for their current service technicians. This information will indicate to the reviewer(s) the resources offered by each contractor.

The Guam Fire Department reserves the right to visit the facility for evaluation and reject any contractor that, in the opinion of the Fire Chief of the Guam Fire Department or his designee, does not fully comply with the provisions of this section. No deviations to these requirements will be accepted.

LIQUIDATED DAMAGES
Liquidated damages will be assessed as provided in General Terms and Conditions. If after 30 days, the apparatus is not brought up to compliance, the contractor will be considered in default of the contract(purchase order), and procedures to institute the provisions of law regarding the Bid Security may commence.

SERVICE ABILITY
The Guam Fire Department places a high priority on service. All bidders shall therefore provide complete details of their ability to service the apparatus proposed, including but not limited to the following:

Service Facility
Service Vehicles
Certified Service Employees [EVT / NAEVT / NFPA 1002 & or ASE]
Service Philosophy

The service ability section of these specifications will be a major factor in determining the successful bidder. Limited manpower does not allow for the apparatus to be taken to various places for repairs. It is the opinion of the Fire Department that repairs to the apparatus in the fire station or a local service facility will reduce the out of service time of the apparatus.

The bidder or the authorized service center shall have a minimum of one fully equipped service vehicle, which shall carry spare parts and repair equipment needed to work on the apparatus proposed.

The bidder must provide a service representative within 24 hours of a call of a unit being placed out-of-service.

There shall be no exceptions to the service ability section of these specifications. Each bidder shall provide a notarized document stating his ability. Alternatives to the service ability section may be offered if equal to or exceeding what is being asked for. All alternatives must be in writing and completely detailed to be considered.

REPLACEMENT PARTS
The contractor on these specifications must maintain a stock of repair parts on Guam. The Guam Fire Department reserves the right to reject submissions of contractors that cannot produce satisfactory evidence that they can furnish, promptly, all spare parts needed for service or repair of the equipment herein specified.

The successful contractor shall also maintain in stock, at minimum, one (1) spare engine and transmission of the same type as the specified fire apparatus. This shall also include stock fast moving items or consumable parts compatible for this specified engine and transmission to allow for decreased downtime of the emergency response vehicle at no more than 12 hours.

SPECIFICATION BID REQUIREMENTS

Bidding contractors shall also indicate in the **"Bidding on"** column if their bid complies on each item (PARAGRAPH) specified. Exceptions shall be allowed if they are equal to or superior to that specified and provided they are listed and fully explained on a separate page. Proposals taking total exception to specifications shall not be acceptable.

Also, bidding contractors shall submit a detailed proposal. A letter only, even though written on a company letterhead, shall not be sufficient. Bid proposals shall be submitted in the same sequence as specifications for ease of evaluation, comparison and checking of compliance. Failure to comply with this paragraph will result in the bid being rejected.

EXCEPTIONS

All exceptions shall be stated, no matter how seemingly minor. Any exceptions not taken shall be assumed by the purchaser to be included in the proposal, regardless of the cost to the bidder. **In instances that the specification states '(no exception)', failure to comply will result in the bid being rejected.**

EQUALS CLAUSE

Unless otherwise stated by the bidding contractor, the bid/quote submission will be considered in strict accordance with the specifications in this document.

REFERENCES TO A PARTICULAR TRADE NAME, MANUFACTURER'S CATALOG OR MODEL NUMBER ARE MADE FOR DESCRIPTIVE PURPOSES TO GUIDE CONTRACTORS AND THE MANUFACTURING COMPANIES THEY REPRESENT IN INTERPRETING THE SPECIFICATIONS AND REQUIREMENTS OF THE GUAM FIRE DEPARTMENT.

These references should not be construed as excluding proposals of other types of materials, equipment and supplies, unless otherwise stated. The contractor awarded a contract shall furnish each item referred to in the final specifications. Contractors and manufacturing companies submitting specifications that are equal to or greater than these specifications, hereinafter referred to as "Equivalent(s)", could be allowed, after review for said quality and compliance.

FAILURE TO LIST EQUIVALENTS

Failure to list an equivalent means the contractor is complying 100% with these specifications. Apparatus will be inspected on delivery for compliance with specifications. Exceptions will not be acceptable and can be cause for immediate rejection of apparatus unless they were originally listed in the contractor's submission. Liquidated damages (penalty) of one-fourth (¼) of one percent (1%) of outstanding order per calendar day shall be deducted from the final payment until the apparatus is considered acceptable. If after 30 days, the apparatus is not brought up to compliance, the contractor will be considered in default of the contract, and procedures to institute the provisions of the performance bond may commence.

ADHERENCE TO SPECIFICATIONS

The purchaser's specifications shall, in all cases, govern the construction of the apparatus. THIS IS NOT AN RFP (Request for Proposal).

NOTICE TO CONTRACTORS: ANY SUBMISSION INDICATING THAT THE MANUFACTURER'S SPECIFICATIONS SHALL SUPERSEDE THE PURCHASER'S SPECIFICATIONS WILL IMMEDIATELY BE REJECTED.

SUBMISSION REVIEW AND EQUIVALENTS

To properly review all bid/quotes, the Government of Guam General Services Agency, will utilize its policies, rules and regulations as well as the provisions of the most current version of the Guam Procurement Code, Guam Code Annotated and other public laws that govern this procurement.

Any submitted "equivalent" in construction, performance, test, or items of equipment between this (purchaser's specification and contractor's submission) shall be detailed and submitted on a separate sheet along with the contractor's submission in specification sequence, citing equivalent number, page, section and line numbers.

The contractor must explain in detail, along with full supporting documentation, such as but not limited to photographs, product brochures and test data, how the proposed item(s) meets or exceeds the specifications. **FAILURE TO COMPLY WITH THIS REQUIREMENT WILL AUTOMATICALLY DISQUALIFY THE CONTRACTOR.**

The purchaser reserves the right to determine which (if any) equivalents are acceptable.

A complete set of contractor's specifications, with generic scale drawings showing the front, rear, left, right, and top view of the proposed apparatus, must be submitted with the bid for the purpose of comparison.

The purchaser's specifications shall, in all cases, govern the construction of the apparatus, unless a properly documented equivalent was approved.

APPROVAL DRAWINGS

Proposed drawings shall be furnished with in the technical proposal. Drawings for approval and blueprints, with all details, must be furnished to the Guam Fire Department, within 7 calendar days after the conclusion of the preconstruction conference. The engineering drawing must be drawn to scale and be representative of the fire apparatus unit after the preconstruction conference clarifications are incorporated. Views of sides as well as the front, back, and top must be shown. Location of major components shall be so indicated on the drawing. A minimum of two drawings shall be supplied. Generic drawings are unacceptable.

The Guam Fire Department will make every effort to correct the approval drawing before it is returned. However, if a variation or omission between the approval drawing and the written specifications is discovered, the written specifications shall prevail.

SPECIAL REQUIREMENTS

The overall size and weight of the finished apparatus is critical to the Guam Fire Department. The contractor shall supply all special and specific information and facts regarding the performance of the apparatus, to include but not limited to compartment sizes, overall length, width, height, wheelbase, turning radius, individual axle loads, acceleration, braking distances, increasing roadway grades, and fully loaded weight of the apparatus.

Each bid proposal shall include a turning radius report which shall show the wall to wall, curb to curb and bumper to bumper turning radius of the proposed vehicle.

Each bidder shall provide a complete weight analysis with the proposal indicating the estimated front and rear axle weights for the loaded vehicle including Six (6), 200 lb. firefighters, tools and 4000 pounds of Fire Department supplied equipment. No deviation to this requirement will be allowed.

Weight distribution shall not load the vehicle in such a manner as to exceed any individual axle ratings, spring or spring hanger rating, or tire and wheel rating. Axles are to carry weight distribution as per NFPA 1901 and SAE axle loading.

Certified weight readings are to be furnished with each apparatus as to front, rear, right side, and left side loaded curb weight.

BID BOND/CERTIFIED CHECK

A bid bond or certified check in the amount of 15% of the total bid amount shall be furnished with the bidder's submission in the separate envelope marked "BID PRICE". The successful contractor's bid bond/check will be returned or released after receipt and acceptance of the apparatus. In case of failure to comply within the stated time, the bid bond/check will be forfeited as liquidated damages because of the default.

THE RIGHT TO REJECT SUBMISSIONS

The Chief of Guam Fire Department reserve the right to reject any and all submissions received and accept any that, in their judgment, best serves the interest of the people of Guam.

WITHDRAWAL OF SUBMISSIONS

No submission may be withdrawn within ninety (90) days following the submissions by the bidders to the General Services Agency of the Government of Guam

AWARD OF CONTRACT

A contract(purchase order) will be awarded, as soon as practical, following the review and evaluation of the technical proposal bids, to engineer, design, construct, and deliver the type of vehicle specified. It is not the intention of the Guam Fire Department/Government of Guam to write out contractors, vendors or manufacturers of similar or equal equipment of the types specified. It should be noted however that this specification is written around specific needs of the Guam Fire Department.

Technical Bid packages received shall be evaluated by the following criteria and order of importance:

1. Contractor's overall conformance to specification;
2. Contractor's logistical and service support;
3. Warranty provisions;
4. Manufacturing and delivery schedule;
5. Contractor's demonstrated capabilities and qualifications;

An award shall be given to the contractor whose submission meets these specifications at the most competitive price.

PERFORMANCE BOND

Failure of the contractor to complete delivery according to the contract(purchase order) and specifications will cause to begin action to institute the provisions of the bid bond security. The bond also shall guarantee compliance and performance with the warranty provisions of the specifications. Bonds issued to agents of the manufacturer are unacceptable.

BOND SUPPLIER'S QUALIFICATIONS

The bonds furnished by the successful contractor shall be from a surety company with a current license to underwrite surety bonds by the Government of Guam on Guam.

INFRINGEMENTS AND INDEMNIFICATIONS

Upon the award of purchase order, the successful bidder shall protect, defend and save the Guam Fire Department/Government of Guam harmless against any demand for payment for the use of any patented material, process, article, or device that may enter into the manufacture, construction or form of the work covered by either order or contract.

The bidder further shall indemnify and save the Guam Fire Department/Government of Guam harmless from suits or actions of every nature and description brought against it, for or on account of any injuries or damages received or sustained by a party or parties, by or from any of the acts of the contractor, and/or the agents, employees, successors or assigns of the contractor.

DEFAULT PROVISIONS

In the event of default by the bidder, the Guam Fire Department/Government of Guam may procure the articles or services from any other sources without further advertising and the contractor will be responsible for any excess costs occasioned thereby.

PRICING
The bidder's bid/quote shall include the price and charges for all items requested. This price shall also include all charges for delivery to the Guam Fire Department/Government of Guam and must be submitted in a separate envelope together with the Bid Bond and marked "BID PRICE".

PAYMENT TERMS
The Guam Fire Department will accept no contract form that requires down payments, progressive payments during construction, or contracts with escalator clauses. Terms of payment shall be 100% payment, within thirty (30) days, upon delivery, testing, and acceptance of the vehicle and receipt of invoice. No other terms shall be acceptable.

FACTORY INSPECTION TRIPS
The contractor shall include in the
bid/quote price, two factory inspection trips for two (2) representatives of the Guam Fire Department for the purpose of the preconstruction conference for the fire apparatus and final inspection before delivery of the unit(s).

The conference will be held after the contract has been signed so that all specifications, details, drawings, questions and engineering work can be reviewed and approved by the department. This conference will be in accordance with the build schedule of the manufacturer, and will not in any way hold up the construction of the unit. The conference will be held prior to the commencement of any work being done on the chassis or the body. The respective persons will be in attendance at the conference to authorize decisions to be made on the behalf of the department and the Government of Guam.

Trips shall be of such minimum duration to allow for business at hand to be completed. This will also include all commercial transportation, meals, and lodging that will be borne by the bidder.
The preconstruction conference shall be scheduled within 30 calendar days after the award of contract.

PRE-DELIVERY SERVICE
After transportation from the factory and immediately prior to delivery, the apparatus shall receive pre-delivery service consisting of a thorough cleaning, an engine oil and filter change, chassis lubrication, adjustment of the engine to the manufacturer's specifications, and a complete inspection including all electrical and mechanical devices for proper operation and correction of leaks or obvious problems. This is the responsibility of the contractor. The complete cost for this service shall be included within the price submitted by the contractor. All Parts and Labor Fees shall be at no cost the Guam Fire Department/Government of Guam.

DELIVERY TERMS
The contractor shall deliver the completed apparatus to the agreed upon ocean port for overseas shipping to Guam.

The contractor will deliver the completed apparatus within 240 calendar days from the date of notice of award, with all equipment specified, to the current headquarters of the Guam Fire Department, Guam, USA.

The contractor must submit a firm delivery time (number of calendar days from date of order to date of delivery) of said apparatus with the technical bid. Quoting number of days after receipt of all components is unacceptable. A deduction of per day will be made for each day over and above the stated delivery date. The penalty also will apply if the unit is delivered and rejected, until the unit is returned meeting specifications.

OCEAN FREIGHT
Vehicles will ship roll on roll off service by ocean to Guam port. Vehicle will be shipped under deck to prevent direct exposure to salt air and spray.

PRODUCT LIABILITY INSURANCE
The contractor shall supply product liability insurance of not less than $2,000,000.00 (two million dollars). Documentation of the amount of product liability carried by the manufacturer and the name of the insurance carrier shall be provided by the contractor at the time of bid submission. The successful contractor shall defend any and all suits and assume liability for the use of a patented device or an article forming a part of the apparatus furnished under the contract. Failure to supply a copy of the Certificate of Insurance with the bid submittal will be cause for immediate rejection of the contractor's submission.

ACCEPTANCE
Acceptance of the delivered apparatus and equipment will be made at the completion of all required tests and the receipt of all specified equipment. Equipment items not delivered at the time of the tests or construction not in conformance with the contractor's proposal will be cause for the accepting authority to withhold payment until all conditions of the final, approved specification have been met.

Failure to comply with changes to conform to any clause of the specifications, within 30 days after notice is given to the bidder of such changes, shall also be a cause for rejection of the apparatus.

A road test, where applicable, equal to the requirements of NFPA 1901, will be performed after the apparatus is fully equipped and loaded. The apparatus must pass all the requirements of this chapter to be considered acceptable.

The Department of Public Works and the Guam Fire Department of the Government of Guam shall inspect the apparatus and verify the complete compliance with the approved specifications. When compliance has been verified, only then will clearance be given for delivery to and final acceptance by the Guam Fire Department.

ROAD AND PERFORMANCE TESTS
The road and performance tests required are those specified in NFPA Standard 1901 and shall be conducted at the time of the pre-delivery to the purchaser at the manufacturer's facility and in the presence of the accepting authority or representatives.

In the event the apparatus fails to meet the test requirements on the first trials, second trials may be made at the option of the contractor within 30 days of the date of the first trials.

Such trials shall be final and conclusive, and failure to comply with these requirements a second time shall be cause for rejection.

Permission to keep or store the apparatus in any building owned or occupied by the purchaser during the above-specified period, with the permission of the contractor, shall not constitute acceptance. Insurance covering loss, theft, or liability shall remain the responsibility of the contractor until formal acceptance is completed.

WARRANTIES
All warranties described herein and within the technical specifications, are the minimum warranties that will be acceptable. Any warranty that does not meet these minimums shall be grounds for immediate rejection of the bid/quote submission.

The Bidder shall provide a full statement of the warranty provided for the vehicle(s) being bid. This warranty should clearly describe the terms under which the vehicle's Manufacturer accepts responsibility for the cost to repair defects caused by faulty design, quality of work or material, and for the applicable period of time after delivery.

Cost of repairs refers to all costs related thereto including, but not limited to, the cost of materials, the cost of labor.

The Manufacturer shall warrant all materials and accessories used in the vehicle(s), whether fabricated by the Manufacturer or purchased from an outside source and will deal directly with the Guam Fire Department on all warranty work.

The warranty shall commence upon acceptance of the vehicle.

OTHER WARRANTIES
Applicable warranties for all other components such as the axles, engine, transmission, generator, etc., shall be provided with bid submission.

INTERNET IN-PROCESS SITE
The manufacturing company or bidding contractor shall post and maintain a website where the Guam Fire Department will be able to view digital images of their apparatus as its being manufactured. The digital images shall be posted once a week starting when the body begins production or when the cab/chassis arrives and shall continue until the final completion of the apparatus.

EQUIPMENT MOUNTING
The contractor/manufacturer, as per the fire department's instructions, shall mount all equipment supplied with the apparatus. Mounting hardware will also be included in the price of the bid/quote.

TRAINING
After delivery, a factory representative shall be present to familiarize those members designated by the Fire Chief of the Guam Fire Department with the basic operation of the apparatus, its components and equipment.

A structured four to eight-hour program covering proper operation and operator preventive maintenance shall be presented, at minimum, on four (4) consecutive days.

A minimum of one four to eight-hour block of instruction will also be provided to Guam Fire Department Maintenance personnel covering at, minimum, operation, maintenance, and repair of the various systems used on the apparatus.

The course outlines must be submitted to the Fire Chief for approval prior to the delivery.
The contractor agrees to allow a Guam Fire Department representative to videotape the instructional presentations for future reference and training.

CONSTRUCTION DOCUMENTATION
The contractor shall supply, at the time of delivery, at least one copy of the following documents:

1. The manufacturers record of apparatus construction details, including the following information:
   a. Owners name and address
   b. Apparatus manufacturer, model, and serial number
   c. Chassis make, model, and serial number
   d. Gross Axle Weight Rate (GAWR) of front and rear axles
   e. Front tire size and total rated capacity in pounds (kg)
   f. Rear tire size and total rated capacity in pounds (kg)
   g. Chassis weight distribution in pounds with water and manufacturer mounted equipment (front and rear)
   h. Engine make, model, serial number, rated horsepower and related speed, and governed speed
   i. Type of fuel and fuel tank capacity

j. Electrical system voltage and alternator output in amps
k. Battery make, model, and capacity in cold cranking amps (CCA)
l. Chassis transmission make, model, and serial number; and chassis transmission
m. Power Take Off (PTO) make, model, and gear ratio
n. Pump make, model, rated capacity in gallons per minute (liters per minute where applicable), and serial number
o. Pump transmission make, model, serial number, and gear ratio
p. Auxiliary pump make, model, rated capacity in gallons per minute (liters per minute where applicable), and serial number
q. Water tank certified capacity in gallons or liters
r. Paint manufacturer and paint number(s)
s. Company name and signature of responsible company representative

2. Certification of slip resistance of all stepping, standing, and walking surfaces.

3. For the fire pump, a copy of the following shall be provided: pump manufacturers certification of suction capability, apparatus manufacturer's approval for stationary pumping applications, engine manufacturers certified brake horsepower curve showing the maximum governed speed, pump manufacturers certification of the hydrostatic test, and the certification of inspection and test for the fire pump.

4. For the fixed line voltage power source, the certification of the test for the fixed power source.
5. For the air system, test results of the air quality, the SCBA fill station, and the air system installation.

6. Weight documents from a certified scale showing actual loading on the front axle, rear axle(s), and overall fire apparatus (with the water tank full but without personnel, equipment, and hose).

7. Written load analysis and results of the electrical system performance tests.
8. For the water tank, the certification of water tank capacity.

OPERATION AND SERVICE DOCUMENTATION

The contractor shall supply, at time of delivery, at least two sets of complete operation and service documentation covering the completed apparatus as delivered and accepted.

The documentation shall address at least the inspection, service, and operations of the fire apparatus and all major components thereof.

The contractor shall also provide documentation of the following items for the entire apparatus and each major operating system or major component of the apparatus:

1. Manufacturers name and address.
2. Country of manufacture.
3. Source of service and technical information.
4. Parts and replacement information.
5. Descriptions, specifications, and ratings of the chassis, and pump.
6. Wiring diagrams for low voltage and line voltage systems to include the following information: representations of circuit logic for all electrical components and wiring, circuit identification, connector pin identification, zone location of electrical components, safety interlocks, alternator-battery power distribution circuits, and input/output assignment sheets or equivalent circuit logic implemented in multiplexing systems.
7. Lubrication charts.
8. Operating instructions for the chassis, any major components such as a pump or any auxiliary systems.
9. Instructions regarding the frequency and procedure for recommended maintenance.
10. Overall apparatus operating instructions.
11. Safety considerations.
12. Limitations of use.
13. Inspection procedures.
14. Recommended service procedures.
15. Troubleshooting guide.
16. Apparatus body, chassis, and other component manufacturers warranties.
17. Copies of required manufacturer test data or reports, manufacturer certifications, and independent third-party certifications of test results.
18. A material safety data sheet (MSDS) for any fluid that is specified for use on the apparatus.

The contractor shall deliver with the apparatus all manufacturers operations and service documents supplied with components and equipment that are installed or supplied by the contractor.

ISO COMPLIANCE

The manufacturer shall operate a Quality Management System under the requirements of ISO 9001. These standards sponsored by the "International Organization for Standardization (ISO)" specify the quality systems that shall be established by the manufacturer for design, manufacture, installation and service. A copy of the certificate of compliance shall be included with the bid. ISO is a requirement of the NFPA Chapter 4.7.1 General Requirements.

ISO 9001: 2008 QUALITY MANAGEMENT SYSTEM - ALTERNATIVES

Offerors claiming an alternative to ISO 9001:2008 shall provide a description of their facilities' Quality Management System that is in place to ensure the manufacture and delivery of consistent quality product to the customer. Such a description shall include an explanation of policies and procedures relating to the following:

- Company Quality Policy
- Documentation and Control of Records
- Control and Validation of Production and Service
- Monitoring and Measurement of Product and Processes
- Control of Nonconforming Product
- Corrective and Preventive Action with Respect to Nonconforming Product
- Schedule for Internal and External Audits of Quality Management System
- External Certifications of Quality Management Systems

NFPA 2009 STANDARDS

Apparatus proposed by the bidder shall comply with the NFPA standards effective January 1, 2009, except for fire department directed exceptions. These exceptions shall be set forth in the Statement of Exceptions.

LIABILITY

The successful bidding contractor 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 apparatus or any appliance furnished under the contract.

MULTIPLEX COMPONENTS WARRANTY

5-Years

The multiplex components shall be warranted against defective materials or workmanship for a period of **five (5) years** from the date of delivery to the original purchaser. The warranty shall also include a standard repair time for covered components. A copy of the fire apparatus manufacturer's warranty shall be included with the bid. **FAILURE TO COMPLY WITH THIS REQUIREMENT WILL AUTOMATICALLY DISQUALIFY THE BID.**

WARRANTY PERFORMANCE

This apparatus is critical to the response capabilities of the Guam Fire Department. It is imperative that the apparatus remain in service and that "down time" be minimized. The following warranty performance provisions are required:

The successful contractor shall be required to provide service and or repair, as needed, as soon as possible but no more than twenty-four hours after notification by the Fire Department. These details are further explained in the attached, "Extended Service and Maintenance Agreement".

If the contractor does not provide for the service/repair request within the twenty-four hour time frame, it will be assumed as approval for the Fire Department to repair the vehicle or obtain warranty service/repairs from component manufacturers or outside vendor(s) repair facilities. **The Fire Department shall be paid, by the contractor, an area average hourly rate for labor inclusive of transportation and parts replaced one for one.**

Defective and other parts replaced, as a result of these service/repairs, will be labeled and retained by the Fire Department. Parts shall be paid for by the contractor in exchange for work orders and replaced parts. Outside vendor repair facility parts and labor charges shall be billed directly to the successful contractor.

The contractor shall take full responsibility for returning any defective parts to their supplier.

These aforementioned service and/or repairs will, in no way, affect the validity of any warranties as depicted within the approved specifications.

Where parts of this section conflict with provisions of the "Extended Service and Maintenance Agreement", said agreement shall take precedence.

There shall be no deviations to these requirements.

PUMP TEST

The rated water pump shall be tested, approved, and certified by an ISO certified independent third party testing agency at the manufacturer's expense. The test results, along with the pump manufacturer's certification of hydrostatic test, the engine manufacturer's certified brake horsepower curve, and the manufacturer's record of pump construction details shall be forwarded to the Guam Fire Department.

GENERATOR TEST

The generator shall be tested, approved, and certified by an ISO certified independent third party testing agency at the manufacturer's expense. The test results shall be provided to the Guam Fire Department at the time of delivery.

CUSTOMER SERVICE WEBSITE

A Customer Service website shall be provided which offers the dealer and customer access to comprehensive information pertaining to the maintenance and service of the apparatus. The website shall consist of the following features:

- Access to truck detail information on the major components of the vehicle, warranty information, drawings and sales options
- Parts look-up capability for items sourced by the fire apparatus manufacturer
- Ability to submit electronically a parts order and warranty claims
- Access to all currently published Operation and Maintenance Manuals
- Access to on-line diagnostic software
- Access to upcoming training classes offered by the fire apparatus manufacturer

The customer shall have limited access specific to their vehicle.

SPECIFICATIONS	BIDDING ON / REMARKS
OVERALL HEIGHT The height of the apparatus and all equipment and accessories permanently attached to the body shall not exceed 132" or 11'.	
OVERALL LENGTH The apparatus body shall be no more than 312" or 26' in length	
OVERALL WIDTH The overall width of the pumper body shall not exceed 110" or 9 ½'	
WHEELBASE Wheelbase shall be between 180"- 230" or 15'- 19'	
CENTER OF GRAVITY The apparatus, prior to acceptance, will be required to meet the vehicle stability of the applicable NFPA Automotive Fire Apparatus Standard. A calculated center of gravity shall be provided. The calculated or measured center of gravity (CG) shall be no higher that 80-percent of the rear axle track width.	
CAB, SUPERSTRUCTURE, & BODY CONSTRUCTION	
CAB AND BODY It is the intent of the Guam Fire Department to accept an apparatus of an all-aluminum body and sub-frame. The cab shall be constructed of aluminum or a combination of aluminum and fiberglass. No deviation to this requirement will be allowed.	
To prevent possible interaction of dissimilar metals and to reduce the weight of the completed apparatus, the body and ALL STRUCTURAL SUPPORTS shall be constructed entirely of aluminum.	
All extrusions utilized in the body superstructure, substructure and framing shall be alloy aluminum. For strength and rigidity, all aluminum sheets utilized in the apparatus body, hose body and compartment sides shall be a minimum of 3/16" alloy aluminum sheet.	
All extrusions shall be beveled at each joint and all seams shall be electrically seam welded using alloy aluminum wire.	
All vertical and horizontal structural members of the outer apparatus body shall be constructed of aluminum extrusions with a minimum .200" wall thickness fully welded together forming a unitized support system for the body and compartments.	
The apparatus shall be assembled using ECK or electrolysis corrosion control, on all high corrosion potential areas, such as door latches, door hinges, trim plates, fenderettes, etc. This shall be in addition to any other barrier material that may be used.	
Aluminum tread plate overlays and panels shall be installed on the front of the body from the lower edge to the top of the compartment doors. The material shall be bolted in place and sealed to prevent any moisture entry between the overlay and the body structure.	
Smooth aluminum shall be installed on the rear of the body, to allow for the installation of a "Chevron" stripe on the rear.	
Full body length polished aluminum rub rails shall be bolted in place on the lower right and left body sides.	
All 1/4" diameter and smaller screws and bolts shall be stainless steel with a powdered aluminum coating. This coating shall be bonded metallurgically to the stainless screws to prevent peeling and flaking. This coating is designed to reduce the potential for electrolysis and corrosion to occur where items are assembled and attached.	
All fasteners use in the apparatus body shall be attached with Ny-Lok type fasteners.	
All aluminum and stainless steel components shall be attached using stainless steel fasteners. Zinc or cadmium plated fasteners are not acceptable for use with any aluminum or stainless steel components on the vehicle.	
Due to the expected life of the vehicle, proposals will only be acceptable from manufacturers that include these corrosion features.	

The lower portion of the rear body shall be raised to provide a minimum 26 degree angle of departure for off road use.

One (1) access ladder constructed of aluminum tubing with aluminum non-slip rungs shall be installed on the apparatus. The ladder shall fold up in a secured position when not in use to maintain a high angle of departure. The ladder shall provide access to the top of the body.

AIR CONDITIONING

The apparatus shall have an air conditioning system with defogger capable of cooling the inside cab to a temperature of 75 degrees Fahrenheit within 30 minutes with an ambient temperature of 90 degrees Fahrenheit

Controls for the Air Conditioning system must be easily reachable for the driver and rear passengers if separate air conditioning/blower units are used

WHEELS / TIRES

The apparatus shall have chrome or stainless steel lug nut covers on the front and single rear axles.

The apparatus shall have chrome or stainless steel hub covers on the front drive axle and rear single axle wheels.

There shall be a tire pressure indicator at each tire's valve stem on the vehicle that Shall indicate if there is insufficient pressure in the specific tire.

COMPARTMENTS

Apparatus must have a minimum of six (6) compartments. There shall be one compartment on each side ahead of the rear wheels, one compartment on top of the rear wheels, and one compartment on each side behind the rear wheels with accommodations for departure angle cutaway.

In addition, an adequate number of compartments and shelving shall be provided to store all equipment specified by NFPA 1901 standards as well as the Guam Fire Department.

Compartment sides and walls shall be welded to the super-structure. Seams shall be sealed using an engineered grade polyurethane adhesive-sealant.

The compartments shall be designed to provide protected raceways for vertically hinged door fastener to eliminate the possibility of door hinge hardware from being damaged by or damaging equipment stored in the compartments.

The compartment door openings are to be full width of the compartment with no loss of space. The raceways shall be designed to allow door hardware removal by a single person with simple hand tools.

Access panels fastened with stainless steel fasteners shall be provided to access all wiring routed through vertical super-structure extrusions. There shall be no exposed wiring allowed within the compartment interiors.

The tops of the side exterior compartments shall be constructed of NFPA 1901 Standards compliant non-slip polished aluminum tread plate fastened to the body with stainless steel fasteners. Compartment tops that are welded in place do not meet the serviceability intent of this requirement.

ROLL UP COMPARTMENT DOORS

Exterior side equipment compartments so specified shall be equipped with roll-up shutter doors to be installed as specified herein. The door shall be located above and outside of the interior of the compartments thereby protecting the door in the raised position from possible damage by the shifting of equipment.

The roll up door(s) shall be fabricated from aluminum extrusions and be manufactured and assembled in the United States.

The roll-up door drum assembly shall be fully enclosed and protected from the elements. Provisions shall be made on each end and each side of the apparatus for moisture to self-drain from the raised doors to below the apparatus body using integral drainage ports.

An access shall be made for repairs and adjustments to the door roll assemblies without removing equipment from the compartments. Service must be capable of being performed without the cutting, damaging or destroying of the door shutters to gain access should the door become damaged or prohibited from being raised

SPECIFICATIONS	BIDDING ON / REMARKS
In order to provide unlimited access to stored equipment and to help prevent damage to the tracks by removing equipment, the tracks shall not protrude into any portion of the door frame opening.	
The width of the door frame opening shall be the actual useable width available to store and remove equipment.	
Nylon straps shall be provided and installed on each roll up door. The straps shall be secured to the side wall of the interior compartment in a way that will allow the strap to automatically tuck inside the compartment when closed to prevent the strap from dangling and hindering closing of the door.	
A cylindrical door lock shall be provided on the roll up door(s). The door locks shall operate a rod mechanism located within the bottom rail of the door that extends into both side rails when locked.	
A magnetic door ajar system shall be integrated in the lift bar handle and the lift bar handle retainer block to signal an open door.	
SHELVING The vertical extrusions forming the framework of the side exterior compartmentation shall be designed to incorporate fully recessed adjustable shelving standards. Shelving tracks shall run full height of all side exterior equipment compartment. The intent of this requirement is to allow full use of the available storage area without the interference of shelving tracks extending into and reducing the interior widths of the compartments which will allow equipment to be stored within the full width of the compartment interiors. Adjustable shelving tracks welded or bolted onto interior walls of the compartments do not meet the intent of these specifications.	
HOSE BED The hose bed compartment deck shall be constructed entirely from maintenance free, extruded aluminum slats. The slats shall have an anodized, radused ribbed top surface. The slats shall be of widths approximately 3/4" high x 6" wide, spaced approximately 1/2" apart and shall be welded into a one-piece grid system to prevent the accumulation of water and allow ventilation to assist in drying hose.	
The hose bed shall be designed to have a storage capacity for a minimum of 30 cubic feet of fire department supplied fire hose.	
One (1) fully adjustable hose bed divider constructed of aluminum shall be installed on the apparatus. The divider shall be mounted as to allow for full side to side adjustment.	
The hose bed openings shall be equipped with hose and nozzle securement devices to comply with applicable NFPA standards	
One (1) stationary hose bed partition shall also be provided in the main hose bed, mounted left to right. The partition shall be fabricated of aluminum. Partition shall be bolted in place using stainless steel fasteners to allow for ease of removal or relocation.	
The apparatus shall be equipped with a vinyl hose bed cover	
One (1) aluminum non-slip handrail, at least 12" in length, shall be provided and installed on the top-side of the rear hose bed for access to the hose bed area.	
BUMPERS AND TOWING The front bumper shall be fabricated from ASTM A36 or equivalent steel with a minimum height of 12"	
The bumper top and bottom flanges shall be attached directly to the frame rails and primed and undercoated.	
Bumper cladding fabricated from polished stainless steel shall beinstalled completely concealing the bumper for a high quality, finished appearance.	
The chassis frame shall be extended forward approximately 20" with reinforced steel angle and structural channel by the body builder. The extension shall be designed to support the bumper and other equipment to be installed.	
A front bumper gravel shield constructed from NFPA compliant, slip resistant aluminum tread plate material shall be provided on the front chassis frame extension. The extension shall be covered on the top and sides, up to the level of front bumper and shall be reinforced to support one (1) firefighter (approximately 250 pounds)	

SPECIFICATION	BIDDING ON / REMARKS
One (1) crosslay hose bed with minimum designed to carry 150 feet of 1-3/4" double jacket fire hose shall be provided and installed in the chassis front bumper extension. Crosslays shall be plumbed from the specified discharge valves on the fire pump using high pressure flexible hose with stainless steel end couplings. Crosslays shall be provided with recess mounted 1-1/2" NST swivel discharges	
There shall be two tow eyes furnished under the rear of the body and attached directly to each chassis frame rail. There shall be a reinforcement spreader bar connecting the two tow eyes.	
DRIVETRAIN	
ENGINE Diesel engine with a minimum 300 HP Minimum 900 ft-lbs torque @ 1200 rpm 2200 RPM governed speed	
Diesel engine must be compatible with diesel fuel offered by local vendors	
TRANSMISSION Automatic transmission with close ratio 5 speed with overdrive capable of handling more than maximum horsepower output of engine	
Included Oil level sensor	
Provisioned for Power Take Off and 4 wheel drive capability	
TRANSFER CASE Transfer case must be capable of providing 4 wheel drive output capability	
Must be of equal or greater strength as transmission being provided	
AXLES Front Driving with minimum 12,000 lb. capacity	
Rear Single with minimum 23,000 lb. capacity	
The PTO fire pump shall be installed and shall include installation of the fire pump, new drivelines and all pump-mounting brackets. The PTO drive shaft(s) shall be spin balanced prior to final installation.	
FIRE PUMP A fire pump shall be mounted with a rated capacity of 1000 GPM. In addition to meeting NFPA 1901 requirements, it shall be constructed and mounted in accordance with the following specifications:	
An electric powered PTO pump shift shall be installed in the cab driver's area where not subject to accidental engagement. The pump shift system shall permit "pump and roll" operations, as well as stationary pumping operations.	
Pump shall deliver, at a minimum, the percentage of rated discharge at pressures indicated below:	
100% of rated capacity at 150 pounds net pressure 70% of rated capacity at 200 pounds net pressure 50% of rated capacity at 250 pounds net pressure 100% of rated capacity at 165 pounds net pressure	
The main pump body shall be easily removable without disturbing setting of the pump on the chassis.	
The pump body is to be of high quality seawater resistant light alloy. All parts that come into contact with water to be special treated light alloy or stainless steel.	
The pump manufacturer shall test the pump for 10 minutes hydrostatically at a pressure of 500 psig. Hydrostatic Certification by the pump manufacturer shall be provided.	
A relief valve shall be plumbed to the high pressure side of the pump to prevent water spiking.	
The pump and plumbing shall be of a modular design and shall be completely removable as a single unit for future removal if necessary.	

SPECIFICATIONS	BIDDING ON / REMARKS
The pump shall undergo an Underwriters Laboratories Incorporated test per applicable sections of NFPA standards, prior to delivery of the completed apparatus. The UL acceptance certificate shall be furnished with the apparatus on delivery.	
The fire pump shall be equipped with a thermal bypass cooling system. The system shall automatically dump water through a discharge line to the ground when pump water temperature exceeds 140 degrees.	
The apparatus shall be equipped with a heat exchanger for supplementary chassis engine cooling during fire pump operations. A manually opened valve, mounted at	
the operator's panel, shall direct water from the fire pump to the heat exchanger that is mounted in the engine radiator cooling hose. The system shall provide cooling water from the fire pump to circulate around the engine radiator coolant without mixing or coming in direct contact with the engine coolant.	
HIGH PRESSURE FOAM SYSTEM An automatic high pressure around-the-pump foam proportioning system shall be provided and direct mounted to the water pump.	
The system shall be a fully mechanical system requiring no electricity, hydraulics or Calibration to operate.	
The system shall be capable of providing a constant foam proportioning independent of pump output and pump pressure and capable of delivering foam at a proportioning rate of up to 6%.	
Controls for the foam system shall be provided on the pump panel and in the cab. If a bumper turret is required, proper switching shall be provided in the cab for operation of high pressure water to the turret within reach of the Driver and Officer.	
The system shall be capable of providing a constant foam proportioning independent of pump output and pump pressure with a control switch at the pump operator's panel for controlling the foam proportion foam supply.	
The system shall deliver foam at a proportioning rate of 1%.	
PLUMBING The fire pump plumbing system shall be of rigid stainless steel pipe or flexible piping with stainless steel fittings.	
The plumbing system shall be unpainted.	
The hose threads shall be National Standard Thread (NST) on all base threads on the apparatus intakes and discharges.	
Couplings shall be installed to permit flexing of the plumbing system and allow for quick removal of piping or valves for service.	
Couplings shall be threaded stainless steel or mechanical grooved coupling connections.	
The fire pump and plumbing shall be hydrostatically tested in compliance to applicable sections of NFPA standards. The test results shall be included in the delivery documentation.	
DISCHARGES AND INTAKES Discharge and intake valve controls shall be color coded in compliance to guidelines of applicable sections of NFPA standards.	
A minimum of three (3) 2 ½" discharge connections, with appropriate chrome plated cap and cable securement, must be installed on the pump panel. Discharge gauges will provided and located on the pump instrument panel	
Bleeder valves at least 1 ¼" shall be installed on gated intakes and discharges larger Than 1 ½" in size	
Two (2) 4" diameter discharge pressure and intake gauges (30"-0-600 PSI) shall be provided. The gauges will be located on the pump instrument panel. The master gauges shall have clear scratch resistant molded crystals and O-ring seals to ensure distortion free viewing and to seal the gauge.	

The gauges shall be filled with a synthetic mixture to dampen shock and vibration, lubricate the internal mechanisms, prevent lens condensation and ensure proper operation from –40□F to +160□F. A polished chrome-plated brass bezel shall be provided to prevent corrosion and protect the lens and gauge

FOAM DISCHARGES
Foam shall be plumbed to two (2) discharge(s). A variable rate foam venture proportioner shall be installed for each specified discharge. The venture proportioner shall have a flow capacity from 50 to 220 gallons per minute. The discharges that are to be foam capable shall be determined prior to the start of construction.

Labels shall be furnished for the discharges and intakes and for other controls and indicators.

GROUND SWEEP DISCHARGES
Ground sweep nozzles shall be provided and located one (1) each ahead of each wheel.

The left side and right side ground sweep nozzle discharges shall be controlled separately. The valves shall open and close with electric actuators and the switches shall be located in the chassis cab; accessible by both the driver and officer seating positions.

ELECTRIC REWIND HOSE REEL
One (1) Painted steel hose reel with leak proof ball bearing swing joint, adjustable friction brake, electric and crank rewind shall be installed. The reel shall be plumbed with wire reinforced, high-pressure hose coupled, and shall be bolted to a mounting system for easy service or removal.

A push button hose reel rewind switch shall be installed to control the electric rewind hose reel. The exact location of switch and hose reel shall be determined at construction.

FRONT BUMPER MONITOR DISCHARGE
One monitor discharge shall be piped to the right front bumper area. The ball valve shall be controlled in the chassis cab.

The monitor shall be supplied by a flexible high pressure hose mounted with adequate support brackets and abrasion resistant mountings.

A color coded nameplate label shall be provided.

The front bumper monitor discharge shall be piped to the high pressure side of the fire pump.

REMOTE ELECTRIC NOZZLE
An adjustable nozzle with electrically operated pattern control shall be provided.

The nozzle design shall allow for straight stream through dense wide fog patterns and be able to be flushed without shutting down.

The electric drive unit shall be enclosed in a waterproof cast aluminum housing and include a manual override device in the event the power source fails. The unit shall be compatible with 12 or 24 volt power systems and require no more than a 3 amp power draw.

Nozzle stream shaper actuator shall have a smooth transition between straight Stream and fog pattern with fine stream adjustment.

For corrosion resistance and durability the nozzle shall be constructed from hard coat anodized aluminum alloy, a protective rubber bumper, and five year warranty.

The nozzle shall have a 1-1/2" female NH swivel rocker lug coupling and a user adjustable flow range of 15-120 GPM at 100 PSI.

WATER TANK
The apparatus shall be equipped with at a minimum, seven-hundred-fifty (750) Gallon polypropylene water tank. Tank construction shall conform to applicable NFPA standards.

The apparatus shall be equipped with a polypropylene water tank, the body and end bulkheads constructed out of polypropylene; nitrogen-welded and tested inside and out.

SPECIFICATIONS	BIDDING ON / REMARKS
The tank shall be equipped with a minimum four-inch (4") overflow pipe.	
The partitions shall be designed and equipped with vent holes to permit air and liquid Movement between compartments; properly baffled to prevent surging of water.	
A fill tower measuring approximately 10" x 10" square shall be provided on the water tank.	
A cleanout plug shall be provided in the bottom of the tank sump.	
The water tank manufacturer shall certify the capacity of the water tank prior to delivery of the apparatus. This capacity shall be recorded on the manufacturers record of construction and the certification shall be provided to the purchaser when the apparatus is delivered.	
The tank shall carry a lifetime warranty.	
FOAM TANK	
One minimum 30 gallon foam tank shall be installed in addition to or within the water tank.	
Foam tank shall be non-corrosive and I meet applicable sections of NFPA standards.	
The foam concentrate tank shall be provided with a fill tower or expansion compartment having a minimum area of 12 square inches and having a volume of not less than 2 percent of the total tank volume.	
The fill tower opening shall be protected by a completely sealed air-tight cover, attached to the fill tower by mechanical means.	
The foam tank fill tower shall be equipped with a pressure/vacuum vent that enables the tank to compensate for changes in pressure or vacuum when filling or withdrawing foam concentrate from the tank.	
The pressure/vacuum vent shall not allow atmospheric air to enter the foam tank except during operation or to compensate for thermal fluctuations and shall be protected to prevent foam concentrate from escaping or directly contacting the vent at any time.	
PUMP PANEL	
All NFPA required gauges and controls shall be furnished on a panel furnished with the pump or installed on a panel fabricated by the apparatus body builder.	
All labels, instruction panels and warnings shall be installed on the pump panel for safe operation of the pumping equipment. Design and manufacture of gauges must of construction able to withstand the specified apparatus service environment and shall be backed by a warranty equal to that of the exterior paint and finish.	
The operator interface shall be configurable for emergency lighting, fire fighting functions and pressure governor throttle control.	
The governor shall operate in two control modes, pressure and RPM. No discharge pressure or engine RPM variation shall occur when switching between modes.	
There shall be switches on the panel to control the following: • Pump Start • Pump Stop • Tank Fill / Recirculating Line • Tank To Pump • Pump Air Blow-out • Auto Direct Tank Fill • Drain • High Pressure Valve • Primer • Engine RPM • Normal Pressure Foam System • High Pressure Foam System • Scene Lights • Pump Heater • Foam Percent	
All switches shall be back-lit, and shall have a colored LED light indicating when the switch circuit is in the engaged position	

One (1) engine monitoring display shall be installed on the pump panel. The kit shall include a display module, audible alarm buzzer, memory module, and cables capable of the following continuous displays:

- Engine RPM; shown in bright LED digits at least 1/2" high, updated in 10 RPM increments
- Oil pressure; shown on an LED with a minimum of 10 psi increments
- Battery voltage; shown on an LED display
- Engine coolant temperature; shown on an LED display with a minimum of 10 degree increments

The program shall support the accumulation of elapsed pump hours in a non-volatile, transferable memory module and Pump hours shall be displayed at the push of a button.

The program shall have self-diagnostic capabilities. It shall monitor inputs and support audible and visual warning alarms for the following conditions:

- Low oil pressure alarms when engine oil pressure is less than 8 psi
- Low battery voltage alarms at 11.5 volts if engine is off or 11.8 volts if engine is Running
- High battery voltage alarms at 15.6 volts, high engine coolant temperature visual alarm at 220 °F and audio alarm at 230 °F.

The following shall be located on the pump panel:

- Electric primer.
- Pump area service lights.
- All gauge piping and hoses.
- Intake dump valve.
- Pressure control device and throttle control.
- Pump engagement lights.
- Engine instruments.
- Master intake and discharge gauges.
- Tank fill control.
- Tank-to-pump control.

The apparatus shall be equipped with one (1) water tank level monitor display and foam tank level display located at the pump panel. The display module shall show the volume of water and foam in their respective tanks using 4 bright LEDs to easily distinguish the tank level at a glance.

Tank level indication is enhanced by the use of a different colored LED indicating tank full level, three-quarter level, half level, and one-quarter level. Low tank level warnings shall include flashing LEDs below the ¼ level and an output for an audible alarm. This electronic display module shall be waterproof and shock resistant and all wiring, cables and connectors shall be waterproof without the need for sealing grease.

ELECTRICAL SYSTEM

The electrical system shall include all panels, electrical components, switches and relays, wiring harnesses and other electrical components. System shall be a standard 12 volt with at a minimum, the following:

- Turn signal switch, self canceling
- Headlights (2) sealed beam halogen, rectangular, with chrome plated bezels.
- Horn, electric Dual.
- Parking light, integral with front turn signal and rear tail light.
- Stop, Turn, Tail and Back up lights, dual rear combination reflectors.
- Starter switch, Keyless.
- Running light (2) daytime.
- Turn signals, front flush mounted include reflectors and auxiliary side turn signals, solid state flashers.
- Data link connector in cab for vehicle programming and diagnostics.
- Windshield wipers single motor, electric, cowl mounted.
- Windshield wiper switch 2-speed integral with turn signal switch and intermittent
- Cigar lighter

The electrical equipment shall conform to most current automotive electrical system standards, the latest Federal DOT standards, and the requirements of the applicable NFPA standards.

SPECIFICATIONS	BIDDING ON / REMARKS
The system shall be modular and configurable to accommodate the necessary control functions for the emergency apparatus being specified.	
The system shall provide operator relief with optimized sequences and a central control point(s) for all functions.	
Operator interface(s) shall have key buttons with tactile feedback (even when wearing gloves) to control apparatus functions.	
The key buttons shall allow the operator to engage or disengage functions by touch (pressed button feedback).	
Key buttons shall be identified with color-coded pictographs and/or labels combined with LED control lamps indicating function status.	
Operator interface(s) shall be ergonomic in placement and design, intuitive to use, with functions arranged in a top-down order configuration.	
The operator interface(s) shall be internally backlit for operation at night and low light conditions.	
The system shall be pre-wired for computer accessibility to allow service personnel to easily connect to perform diagnostics, troubleshooting, or program additions.	
The system shall have the following functions or features available:	
• Power management • Load shedding • Solid-state circuitry • Switch input • Lighting device activation • Self-contained diagnostic indicators • Power distribution • Diagnostic display capability • High Idle • Throttle Control • Multiple Operator Interfaces	
All wiring shall be stranded copper or copper alloy conductors of a gauge rated to carry 125 percent of the maximum current for the protected circuit.	
Voltage drops in all wiring from the power source to the using device shall not exceed 10 percent.	
The wiring and wiring harness and insulation shall be in conformance to applicable SAE and NFPA standards.	
All exposed wiring shall be protected in a loom with a minimum 280 degree Fahrenheit rating.	
All wiring looms shall be properly supported and attached to body members.	
The electrical conductors shall be constructed in accordance with applicable SAE standards, except when good engineering practice requires special construction.	
The wiring connections and terminations shall use a method that provides a positive mechanical and electrical connection.	
Electrical connections shall be with mechanical type fasteners and large rubber grommets where wiring passes through metal panels.	
The wiring between the cab and body shall be joined using connectors or enclosed in a terminal junction panel area that will permit body removal with minimal impact on the apparatus' electrical system.	
All connections shall be insulated to resist moisture and foreign debris such as grease an road grime. Weather-resistant connectors shall be provided throughout to ensure the integrity of the electrical system.	
Any electrical junction or terminal boxes shall be weather resistant and located away from water spray conditions. In addition, the main body junction panel shall house the automatic reset breakers and relays where required.	

There shall be no exposed electrical cabling, harnesses, or terminal connections located in compartments, unless they are enclosed in a junction box or covered with a removable electrical panel.

The wiring shall be secured in place and protected against heat, liquid contaminants and damage.

Wiring shall be uniquely identified every three-inches (3") by color coding or permanent marking with a circuit function code and identified on a reference chart or electrical wiring schematic per requirements of applicable NFPA #1901 standards.

The electrical circuits shall be provided with low voltage overcurrent protective devices. Such devices shall be accessible and located in required terminal connection locations or weather resistant enclosures. The overcurrent protection shall be suitable for electrical equipment and shall be automatic reset type and meet SAE standards.

All electrical equipment, switches, relays, terminals, and connectors shall have a direct current rating of 125 percent of maximum current for which the circuit is protected.

The system shall have electro-magnetic interference suppression provided as required in applicable SAE standards.

The electrical system shall include the following:

- Electrical terminals in weather exposed areas shall have a non-conductive Grease or spray applied. A corrosion preventative compound shall be applicable to all terminal plugs located outside of the cab or body.
- The electrical wiring shall be harnessed or be placed in a protective loom.
- Holes made in the roof shall be caulked with silicone. Large fender washers shall be used when fastening equipment to the underside of the cab roof.
- Any electrical component that is installed in an exposed area shall be mounted in a manner that will not allow moisture to accumulate in it.
- A coil of wire must be provided behind an electrical appliance to allow them to be pulled away from mounting area for inspection and service work.
- All lights that have their sockets in a weather exposed area shall have corrosion preventative compound added to the socket terminal area.

NFPA REQUIRED TESTING OF ELECTRICAL SYSTEM

The apparatus shall be electrically tested upon completion of the vehicle and prior to delivery. The electrical testing, certifications, and test results shall be submitted with delivery documentation per requirements of the applicable NFPA standards.

The following minimum testing shall be completed by the apparatus manufacturer:

Reserve capacity test:

- The engine shall be started and kept running until the engine and engine compartment temperatures are stabilized at normal operating temperatures and the battery system is fully charged. The engine shall be shut off and the minimum continuous electrical load shall be activated for ten (10) minutes. All electrical loads shall be turned off prior to attempting to restart the engine. The battery system shall then be capable of restarting the engine. Failure to restart the engine shall be considered a failed test.

Alternator performance test at idle:

- The minimum continuous electrical load shall be activated with the engine running at idle speed. The engine temperature shall be stabilized at normal operating temperature. The battery system shall be tested to detect the presence of battery discharge current. The detection of battery discharge current shall be considered a test failure.

Alternator performance test at full load:

- The total continuous electrical load shall be activated with the engine running Up to the engine manufacturer's governed speed. The test duration shall be a minimum of two (2) hours. Activation of the load management system is permitted during this test. However, if an alarm sounds due to excessive battery discharge, as detected by the system requirements in the NFPA standards, or a system voltage of less than 11.7 volts dc for more than 120 seconds is present, the test has failed.

Low voltage alarm test:

- Following the completion of the above tests, the engine shall be shut off. The total continuous electrical load shall be activated and shall continue to be applied until the excessive battery discharge alarm activates. The battery voltage shall be measured at the battery terminals. With the load still applied, a reading of less than 11.7 volts dc for a 12 volt system shall be considered a test failure. The battery system shall then be able to restart the engine. Failure to restart the engine shall be considered a test failure.

NFPA REQUIRED DOCUMENTATION

The following documentation shall be provided on delivery of the apparatus:

- Documentation of the electrical system performance tests required above.
- A written load analysis, including:
  1. The nameplate rating of the alternator.
  2. The alternator rating under the conditions.
  3. Each specified component load.
  4. Individual intermittent loads.

INTERIOR

Interior comfort features must be at least inclusive of the following:

- ARM REST (2) Molded Plastic; One each door.
- COAT HOOK, CAB located on rear wall.
- CUP HOLDERS two cup holders.
- DOME LIGHT, CAB door activated and manual with timed theater dimming.

- GLASS, ALL WINDOWS Tinted
- GRAB HANDLE, CAB INTERIOR (1) "A" pillar mounted, passenger side
- GRAB HANDLE, CAB INTERIOR (2) Front of "B" pillar mounted, one each side

- GRAB HANDLE, CAB INTERIOR (4) Two each side, rear door mounted at hinge side and "C" pillar mounted

- INTERIOR SHEET METAL Painted exterior color
- STEPS, minimum (8), or two steps per door

- GAUGE CLUSTER English, with English speedometer in miles per hour Engine Oil Pressure (Electronic), Water Temperature (Electronic), Fuel (Electronic), Tachometer (Electronic), Voltmeter, Washer Fluid Level

- ODOMETER DISPLAY, Miles, trip miles, engine hours, trip hours, fault code readout
- WARNING SYSTEM Low fuel, low oil pressure, high engine coolant temp, and low battery voltage (Visual and Audible)

- SEATBELT WARNING PREWIRE includes seat belt switches and seat sensors for all belted positions in the cab and a harness routed to the center of the dash for the aftermarket installation of the data recorder and seatbelt indicator systems, for 4 to 6 seat belts

- GAUGE, OIL TEMP
- GAUGE, AIR CLEANER RESTRICTION {Filter-Minder} Mounted in Instrument Panel

- IP CLUSTER DISPLAY On Board Diagnostics Display of Fault Codes in Gauge Cluster

- SEAT, DRIVER, NFPA compliant, air suspension, high back
- SEAT BELT 3-point, lap and shoulder belt type

- SEAT, REAR, NFPA compliant, three individual seats on one riser, non-suspension, high back for SCBA.

- SEAT BELT (3) two 3-point shoulder belts for driver and outer passenger and one 2-point lap belt for center passenger

- SEAT, PASSENGER, NFPA compliant, non-suspension, high back for SCBA,

- SEAT BELT 3-point, lap and shoulder belt type
- SEAT BELT All red

- GRAB HANDLE chrome; towel bar type with anti-slip rubber inserts; for cab entry Mounted

- AIR CONDITIONING with defroster and fresh air filter
- STORAGE POCKET, DOOR molded plastic, full width; mounted on passenger door
- STORAGE CONSOLE, OVERHEAD molded plastic with retainer nets
- FLOOR COVERING Rubber, black
- HEADLINER soft padded cloth
- SUN VISOR (2) padded vinyl
- CAB REAR SUSPENSION air bag type

- AM/FM Stereo With CD player, weather band, clock, auxiliary input, and coaxial speakers

An electrical console shall be constructed of molded fiberglass or similar material mounted in the cab of the truck chassis. _____

Console shall be designed and installed accessible from the driver and passenger seats. _____

The operator shall be able to control many separate emergency apparatus functions at a central interface point. _____

The operator interface shall be configurable for emergency lighting and cab controlled fire fighting functions. _____

There shall be switches to control the following: _____
- Pump Start
- Pump Stop
- Tank To Pump
- Tank Fill / Recirculating Line
- High Pressure Valve
- Master Warning
- Primer

There shall be switches on the panel to control the following: _____
- Normal Pressure Foam System
- High Pressure Foam System
- Brow Light
- Left Scene Lights
- Rear Scene Lights
- Right Scene Lights
- Under-Truck Nozzles
- Truck Protection Sprinklers
- Air Blow Out
- Left Reel Rewind
- Right Reel Rewind

All switches shall be back-lit, with a colored LED light indicating when the switch circuit is in the engaged position. _____

An electric powered PTO pump shift shall be installed in the cab driver's area where not subject to accidental engagement. The pump shift system shall permit "pump and roll" operations, as well as stationary pumping operations. _____

The following indicator lights shall be included with pump shift. _____

- A green indicator light, labeled "PUMP ENGAGED" shall indicate pump shift has successfully been completed.
- A green indicator light, labeled "OK TO PUMP" shall indicate the chassis transmission is in proper gear and parking brake is engaged.
- Pump shift and interlocks shall comply with applicable sections of the NFPA standards.
- The pump shift shall have an instruction label and nameplate to indicate proper pump shift instructions.

The warning lights shall be switched in the chassis cab with labeled switches in an accessible location. _____

A siren unit featuring an electronic air horn, wail, yelp, hi-lo stone and a hard wired microphone shall be provided. _____

SPECIFICATIONS	BIDDING ON / REMARKS
A minimum 100 watt speaker for the siren shall be installed on the apparatus.	
Two (2) chrome plated air horns shall be mounted on the side of the hood of the chassis with an air protection provided in the air horn piping that will not allow the chassis air brake system to drop below 90 PSI.	
One (1) selector switch shall be provided on the cab's dash that will allow the chassis steering wheel horn button to activate either the electric traffic horn or air horn system.	
All electrical equipment switches shall be mounted on a switch panel mounted in the cab convenient to the operator. For easy nighttime operation, an integral indicator shall be provided to signal when the circuit is energized.	
All switches shall be appropriately identified as to their function.	
A single warning light switch shall activate all required warning lights. This switch will allow the vehicle to respond to an emergency and "call for the right of way". When the parking brake is applied, a "blocking right of way" system shall automatically activate per requirements of the applicable NFPA standards.	
All "clear" warning lights shall be automatically turned off upon application of the parking brake.	
LIGHTING - VEHICLE/ EMERGENCY / SCENE	
COMPARTMENT LIGHTING All compartments including the engine compartment shall have LED lights of sufficient length and lumens to provide adequate lighting. LED lights shall be installed, one on each side of the compartment door openings. The lights shall contain LEDs capable of producing sufficient lumens for working in low light conditions.	
The LED lighting shall be rated at a minimum of 100,000 hours of service and shall be provided with a 5 year free replacement warranty.	
The light shall have a tube enclosure for severe duty applications.	
The light stick shall be waterproof and be connectible via a jumper wire to add additional lights in series if required.	
All compartment lights will be controlled by a magnetic "On-Off" switch located on each compartment door.	
VEHICLE LIGHTING LED marker lights shall be installed on the vehicle in conformance to the Department of Transportation requirements.	
One (1) license plate bracket shall be provided at the rear bumper. The bracket shall have a polished finish and LED light.	
Two (2) LED tail/brake lights shall be provided. The rectangular light shall be red.	
Two (2) LED turn signals shall be provided.	
Two (2) mid body LED turn signals shall be provided. The location of the turn lights shall be at mid-body near the rear wheel axle	
Two (2) halogen backup lights shall be installed on the rear of the apparatus body. The lens shall be clear.	
Two (2) tail light cluster bezels shall be supplied. Each bezel shall be designed to hold the specified rear lights located at the lower rear corners of the body. A minimum of four (4) LED ground lights shall be installed under the cab doors, one (1) under each door.	
A minimum of two (2) LED ground lights shall be installed under the mid-body of the apparatus. One (1) light shall be located on the driver's side and one (1) light located on the officer's side of the apparatus.	
A minimum of two (2) LED ground lights shall be installed under the compartments located behind the rear wheels. At least one (1) light shall be located on the driver's side and one (1) light located on the officer's side of the apparatus.	
The ground lights shall automatically activate when the parking brake is applied.	

SPECIFICATIONS	BIDDING ON / REMARKS
A minimum of two (2) hooded step light(s) shall be installed. The step/walkway light switch shall be installed and wired to the parking brake.	
A minimum of six (6) scene lights shall be installed. The light optics shall provide an 8 to 32 degree light spread.	
A minimum of two (2) scene lights shall be located on the left side of the apparatus body.	
A minimum of two (2) scene lights shall be located on the right side of the Apparatus body.	
A minimum of two (2) scene light shall be located on the rear of the apparatus body.	
The rear scene lights shall activate automatically upon placing the transmission into reverse.	
DOOR OPEN LIGHT One (1) red flashing, warning light shall be provided and installed in the driver's compartment to indicate an open passenger or apparatus compartment door.	
The warning light shall also be attached to folding equipment racks and light towers as specified. The light shall be a flashing LED marker light with a red lens and shall be properly marked and identified.	
WARNING LIGHTS AND SIRENS One (1) LED light bar shall be installed. The lightbar shall be at least 55" in length. The configuration and lens color shall be red / clear / red and shall be mounted on the apparatus cab roof.	
One (1) pair of LED lower front warning lights shall be installed, one on each side of the front of the chassis cab.	
One (1) pair of LED intersection warning lights shall be installed one on each side of The chassis cab.	
One (1) pair of LED lower rear warning lights shall be installed, one each side of the apparatus body, towards the rear of the body.	
One (1) pair of LED lower rear side warning lights shall be installed, one each side of the apparatus body, towards the rear of the body.	
One (1) pair of LED upper rear warning lights shall be installed, one on each side of the upper portion of the body side, towards the rear of the body	
One (1) pair of LED upper rear side warning lights shall be installed, one on each side of the upper portion of the body side, towards the rear of the body	
<u>BODY PAINT PROCESS</u>	
All aluminum parts that are to be finish painted shall be properly fitted on the body and then removed to be painted individually.	
The back side of all aluminum parts shall be sanded smooth of any burrs and sharp edges.	
All aluminum parts shall be bolted to the body using stainless steel fasteners. Zinc or Cadmium plated fasteners are not acceptable.	
All bright metal fittings, if unavailable in stainless steel shall be heavily chrome plated. Iron fittings shall be copper plated prior to chrome plating.	
All seams shall be caulked both inside and along the exterior edges with a urethane automotive sealant to prevent moisture from entering between any body panels.	
One (1) to two (2) ounce bottle of touch-up paint shall be furnished with the completed truck at final delivery.	
The lettering shall be applied in simulated gold leaf material, shaded in black and encapsulated in clear Mylar.	
A quantity of seventy-five (75), four (4) inch letters are to be placed on the cab and on the body as directed by fire department.	
A straight Scotchlite reflective stripe, 4" minimum in width, shall be applied horizontally around the cab and body in compliance with applicable NFPA 1901 standards. The purchaser shall specify the color and location of the stripe.	

The entire rear portion of the body shall have 3M reflective red and amber striping installed. The chevron style striping shall be applied at a 45-degree upward angle pointing towards the center upper portion of the rear panel.

PLAQUES/LABELS

HEIGHT, LENGTH & WEIGHT
A highly visible label indicating the overall height, length, and weight of the vehicle shall be installed in the cab dash area.

FLUID DATA PLAQUE
One (1) fluid data plaque containing required information shall be provided based on the applicable components for this apparatus, located on the driver's compartment or on driver's door and compliant with NFPA Standards:

- Engine oil
- Engine coolant
- Chassis transmission fluid
- Drive axle lubricant
- Power steering fluid
- Pump transmission lubrication fluid
- Other NFPA applicable fluid levels or data as required

PUMP DATA PLATE
The pump shall be provided with a plate giving the rated flow at "capacity" and "pressure" test pressures, together with the rpm of the engine at those pressures and deliveries and mounted in clear view of the pump operators panel.

Data plate shall include model and serial numbers of the pump body and transmission, hydro and discharge test pressures, and the date of pump and transmission manufacture, mounted in plain view of the pump operators panel.

A fire pump performance and rating label shall be installed on the fire apparatus pump panel. The label shall denote levels of pump performance and testing completed at factory. These shall include GPM at net pump pressure, RPM at such level, and other pertinent data as required by applicable NFPA standards.

A color coded label or visible permanent marking that reads "FOAM TANK FILL" shall be placed at or near any foam concentrate tank fills opening.

Any restrictions on the types of foam concentrate that can be used with the system shall also be stated, and a warning message that reads "WARNING: DO NOT MIX BRANDS AND TYPES OF FOAM."

PUMP PANEL LABELS
Safety, information, data, and instruction labels for apparatus shall be provided and installed at the operator's instrument panel.

The labels shall include rated capacities, pressure ratings, and engine speeds as determined by the certification tests. The no-load governed speed of the engine, as stated by the engine manufacturer, shall also be included.

The labels shall be provided with all information and be attached to the apparatus prior to delivery.

CAB SEATING POSITION LIMITS
The label shall also include the seating positions for firefighters. A weight allowance of 250 pounds for each shall be factored into the gross vehicle weight rating of the chassis.

NO RIDE LABEL
One (1) "NO RIDERS" label shall be applied on the vehicle at the rear step area or other applicable areas. The label shall warn personnel that riding in or on these areas, while the vehicle is in motion is prohibited.

CAB SEATING POSITION LIMITS
One (1) label shall be installed in the cab to indicate seating positions for firefighters. A weight allowance of 250 pounds for each shall be factored into the gross vehicle weight rating of the chassis.

HELMET WARNING TAG
One (1) label shall be installed in the cab, visible from each seating position. The label shall read "CAUTION: DO NOT WEAR HELMET WHILE SEATED." Helmets must be properly stowed while the vehicle is in motion according to the current edition of NFPA 1901.

WARRANTIES

BUMPER TO BUMPER WARRANTY
Bidder warrants each new fire apparatus manufactured for a period of ONE YEAR from the date of delivery, except for chassis and other components noted herein. Under this warranty bidder agrees to furnish any parts to replace those that have Failed due to defective material or workmanship where there is no indication of abuse, neglect, unusual or other than normal service.

ALUMINUM BODY WARRANTY - TWENTY YEAR
Bidder warrants to the original purchaser that all aluminum body panels, fabricated by The manufacturer, under normal use and with reasonable maintenance, be structurally sound and will remain free from corrosion perforation for a period of TWENTY (20) years.

PAINT WARRANTY - SEVEN YEAR
The paint performance guarantee will cover the areas of the vehicle finished with the specified product for a period of SEVEN (7) years beginning the day the vehicle is delivered to the purchaser. This warranty will be covered for the following paint failures:

- Peeling or delaminating of the topcoat and/or other layers of paint.
- Cracking or checking.
- Loss of gloss caused by cracking, checking, or hazing.
- Any paint failure caused by defective finishes, which are covered by guarantee.

PUMP WARRANTY
Bidder warrants, to the original buyer only, that the pump products and parts manufactured will be free from defects in material and workmanship under normal use and service for a period of two (2) years from the date the product is first placed in service

PLUMBING WARRANTY – 10 YEARS
The bidder hereby warrants to each original purchaser only that plumbing components and ancillary fittings used in the construction of the water/foam plumbing system shall be warranted for a period of ten (10) years. This covers structural failures caused by defective design or workmanship, or perforation caused by corrosion, provided the apparatus is used in a normal and reasonable manner.

WATER TANK WARRANTY
Bidder warrants water and foam tanks free of manufacturing defects in material and workmanship for the service life of the vehicle (vehicle must be actively used in fire suppression).

COMPLETE PRINTED MANUALS AND CERTIFICATIONS

Bidder shall provide with the vehicle upon delivery, one (1) complete delivery manual. This manual shall be in a notebook type binder, with reference tabs for each section of the vehicle. A companion compact disk (CD) with all of the printed material in an electronic format (Adobe Acrobat PDF) shall be provided.

Within each section shall be:

- Individual component manufacturer instruction and parts manuals
- Warranty forms for the body
- Warranty forms for all major components
- Warranty instructions and format to be used in compliance with warranty obligations
- Wiring diagrams
- Installation instruction and drawings for major parts
- Visual graphics and electronic photos for the installation of major parts
- Necessary normal routine service forms, publications and components of the body portion of the apparatus
- Technical publications for training and instruction on major body components
- Warning and safety related notices for personnel protection
- Cab and chassis manuals on parts, service and maintenance shall be provided

Guam Fire Department
Extended Service/Maintenance Agreement

Urban/Wildland Interface Pumpers

INTENT

It shall be the intent of this Extended Service/ Maintenance Agreement for the Guam Fire Department and the Contractor to enter into a 5 year service/maintenance warranty agreement in order to maximize the serviceability of these Urban/Wildland Interface Pumpers and minimize the "down time" or "out of service time" so that said fire apparatus will be ready to respond to an emergency when called upon to do so. It is also the intent of this agreement to extend the usable lifespan of these Fire Apparatus so as to maximize the tax dollars used to purchase said Fire Apparatus.

AGREEMENT PERIOD

A. This document shall depict the minimum requirements for a five (5) year Extended Service/Maintenance Agreement as required by the Guam Fire Department for vehicles known as Urban/Wildland Interface Pumpers This Agreement compliments and adds to, where it exceeds, the regular warranties as provided by the specifications of the involved fire apparatus.

B. This Agreement shall commence after the award of purchase order has been made and the date that the fire apparatus has been accepted by the Contractor for the first pre-service inspection.

STANDARDS OF CARE

A. This document also defines the minimum requirements for a preventive maintenance program and shall comply with national Fire Protection Association's (NFPA) 1915, Standard for Fire Apparatus Preventive maintenance Program, 2000 Edition, which has been deemed a part of this agreement (reference attached NFPA 1915 document).

B. The service, maintenance and their intervals as well as the methods of repairs recommended by the various manufacturers that make up the complete fire apparatus shall also be deemed as part of this agreement.

C. This agreement covers all systems and components of the fire apparatus, to include but not limited to drive train, body, cab, frame, foam proportioning system, fire pump, generator, electrical systems, lighting, plumbing, hose reels, doors, tires, wheels, etc.

RESPONSIBILITIES

A. The Contractor shall be responsible for the service, maintenance and repairs as well as other services explained herein, for these fire apparatus and all of their systems, for the contract period. If work cannot be completed by the Contractor and must be sub-contracted to another business, the Contractor must ensure that said business is qualified to do the work required. The Contractor is still responsible for all fire apparatus referenced within this Agreement and the maintenance of all warranties in good standing.

B. During the 5-year period of this contract, the Contractor agrees to conduct the specified services, maintenance and repairs, which includes, but is not limited to, labor costs and all consumables with the exception of apparatus tires. The Contractor will not be responsible for labor costs, parts and repairs that are not covered under the warranty provisions of the new fire apparatus.

C. All services, maintenance and repairs not specifically covered by the various warranties of the fire apparatus or this extended service contract shall be the responsibility of the Guam Fire Department and the Government of Guam and not that of the Contractor.

D. Under no circumstances will the warranted service, repair and/or maintenance of these fire apparatus be delayed due to any outstanding payments owed to the contractor by the Government of Guam. To delay these services will constitute a breach of this agreement.

E. The Guam Fire Department, and their personnel, will be responsible for following all recommended procedures for this Agreement and conduct all vehicle inspections, as required, especially the Daily Fire Apparatus Check and Checklist.

F. Guam Fire Department Vehicle Maintenance personnel, when allowed, shall at all times seek prior approval, from the Contractor, before conducting any type of maintenance or alteration(s) to these Fire Apparatus, no matter how minor.

SERVICE, MAINTENANCE, AND OTHER PROVISIONS

In addition to the above provisions, the following shall also apply:

A. Prior to placing a new vehicle in service, the Contractor shall conduct a pre-service inspection and service.

B. If there are any deficiencies, defects and/or damages noted at this time, said discrepancies shall be brought up to the attention of GFD and arrangements will be made, with the assistance of the Contractor, to rectify said discrepancies. If the Contractor is also responsible for all warranty items on this fire apparatus, then the Contractor shall handle all related issues.

C. Examples of some of the services to be conducted:
   a. Replace engine oil and filter(s)
   b. Inspect and replace fuel filter(s)
   c. Inspect air cleaner and intake system
   d. Inspect hoses, belts and belt tensioners and replace or adjust if needed
   e. Inspect front and rear suspension and steering to include tie rod ends, draglink, king pins, air bags (if equipped) and control valves
   f. Inspect fire pump for unusual water leaks
   g. Test Electrical System for proper operation
   h. Perform scheduled maintenance on generator

D. The Contractor shall supply a Daily Fire Apparatus Check list that will be utilized by the GFD Fire Apparatus driver/operator, while conducting their daily vehicle check at the beginning of their shift, as per GFD Rules and Regulations. This daily check will also ensure that certain provisional requirement of the warranty can be honored.

E. The Contractor may elect, from time to time, to provide remedial training on the operation and/or operator daily service checks and maintenance requirements, to GFD personnel, when deemed necessary.

F. The Contractor shall be responsible for the towing of the apparatus when needed. If the vehicle is on a public roadway, the tow function shall begin to be addressed within one (1) hour upon notification by GFD. The affected vehicle shall be under tow within two (2) hours after notification by GFD. If either of these two provisions is not met, it is deemed that the Contractor had given implied consent for GFD personnel to arrange for the towing. All costs of this towing shall be borne by the Contractor. If the cause of the towing is later found to not be warranty related, then GFD shall be responsible and billed for the towing service.

G. Guam Fire Department Vehicle Maintenance personnel shall be allowed to conduct minor vehicle repairs, such as changing of light bulbs, lamps, fuses, etc., as long as prior approval has been obtained from the Contractor.

H. Guam Fire Department Vehicle Maintenance personnel shall also be allowed to diagnose vehicle faults, such as but not limited to malfunctioning air conditioning or mobile radio system(s), and report same to the Contractor for verbal approval to have the vehicle further diagnosed and/or repaired by a sub-contractor, whenever the Contractor cannot effect or is not certified or qualified to effect said repairs or service. GFD personnel shall always obtain prior approval from the Contractor.

I. If the Contractor fails to begin addressing any complaint, by GFD, regarding the serviceability of any fire apparatus covered under this extended service agreement, within 24 hours after receiving said report by GFD, it shall be construed as unnecessary delay. Whenever an unnecessary delay situation occurs, this shall be deemed as implied consent from the Contractor for GFD to seek service and/or repairs elsewhere in order to expedite the return of the apparatus into emergency service.

J. All charges incurred during the unnecessary delay repairs/services will be charged back to the Contractor for payment. Neither GFD nor the Government of Guam will be held liable for these repairs/services and the warranties for said apparatus will not be affected in any way.

K. All Inspections/services shall be performed on a quarterly basis, at minimum.

L. All service and repairs shall be performed according to accepted industry standards, good faith practices and agreed upon time frames.

M. The Contractor shall furnish annual reports to GFD depicting total services, maintenance and repairs for each Fire Apparatus per annum. These reports shall be based on a calendar year timeframe and will be due to GFD, Office of the Fire Chief, no later than the 15th day of January of the following year. If the apparatus is covered for a partial year under this agreement, then the report will be based on that portion of the calendar year.

CONTRACT EXTENSION CLAUSE

At the end of this contract period, the Guam Fire Department reserves the right to extend this contract for another five (5) year period on a year to year basis upon availability of funds. Any revisions to this contract shall be addressed at that time prior to entering into another five (5) year term.

BREACH of CONTRACT/AGREEMENT CLAUSE

Breach of Contract Definition: The failure to perform a contract, without a legal excuse.

If the Contractor fails to perform to the provisions of this Agreement, GFD/Government of Guam may terminate said agreement if arrangements with Contractor cannot be rectified to the satisfaction with cause. Likewise, if the GFD/Government of Guam fails to perform its responsibilities per this agreement, then the Contractor can terminate, if an agreement cannot be made between the two parties to rectify the situation to the satisfaction of the Contractor, with cause. If either party cancels this agreement, then a refund for the full amount of the unused portion of the Contract funding shall be returned to the GFD/Government of Guam.

If the GFD/Government of Guam is unable to appropriate funds for payment of non-warranty items during any time, such services may be terminated by the Contractor.

FIRE APPARATUS IDENTIFICATION NUMBERS

VEHICLE IDENTIFICATION NUMBER	VEHICLE IDENTIFICATION NUMBER

AUTHORIZED SIGNATURES

We, the undersigned, have read this agreement and agree to all terms and conditions.

Guam Fire Department's Authorized Representative	Contractor's Authorized Representative

BIDDER'S REFERENCES FORM

The Bidder is **required** to provide a minimum of three (3) references where work of a similar size and nature was performed within the past five (5) years. This will enable the Government of Guam and the Guam Fire Department to judge the responsibility, experience, skill, and business standing of the Bidder.

Company Name		**Contact Name**	
Address			
Phone Number		**Fax Number**	
Dollar Value of Contract			
Contract Dates			
Requirements of Contract			

Company Name		**Contact Name**	
Address			
Phone Number		**Fax Number**	
Dollar Value of Contract			
Contract Dates			
Requirements of Contract			

Company Name		**Contact Name**	
Address			
Phone Number		**Fax Number**	
Dollar Value of Contract			
Contract Dates			
Requirements of Contract			

Company Name		**Contact Name**	
Address			
Phone Number		**Fax Number**	
Dollar Value of Contract			
Contract Dates			
Requirements of Contract			

Company Name		**Contact Name**	
Address			
Phone Number		**Fax Number**	
Dollar Value of Contract			
Contract Dates			
Requirements of Contract			

ITEM NO.	DESCRIPTION	QTY	UOM	UNIT PRICE	PRICE EXTENSION
2.1	**New and Current Year Urban/Wild land Interface Pumper**	**2**	**EA**	$_____	$_____

				Per Year	**Annually**
2.2	**Extended Service/Maintenance Agreements For New and Current Year Urban/Wild land Interface Pumper (2 each)**	**5**	**YR**	$_____	$_____

At the end of this contract period, the Guam Fire Department reserves the right to extend this contract for another five (5) year period on a year to year basis upon availability of funds. Any revisions to this contract shall be addressed at that time prior to entering into another five (5) year term.

BID COST SHALL BE SUBMITTED IN A SEPARATE ENVELOPE LABELED "BID COST"
BID BOND MUST BE INSERTED IN THE "BID COST" ENVELOPED

PHASE I

TECHNICAL BID EVALUATION CRITERIA

For the New and Current Year Custom Cab-Forward Pumper

and New and Current Year Urban/Wildland Interface Pumper

Technical Bids of a multi-step bid are not opened publicly but in front of two (2) or more procurement officials. 2 GAR §3109(t)(3)

Each technical bid proposal will be evaluated based on the following criteria:

CRITERIA:

1. **Contractor's overall conformance to specification** **(20 Points)**
   a.) Specification adherence or provided equivalencies meeting intent or performance of function (10 points)

   b.) Dimension and design specifications (Size, Compartment layout, appearance, and accessibility to compartment and tools) (5 points)

   c.) Technical specifications (materials used, engineering, and overall design) (5 points)

2. **Contractor's Logistical and Service Support** **(20 Points)**
   a.) Fire Apparatus appropriate repair, maintenance, and sheltering facility. (5 points)
   b.) In house service capability and timeliness of service (5 points)
   c.) Service Technician Qualifications/Certifications (5 points)
   d.) Availability of consumable parts and supplies (5 points)

3. **Warranty provisions** **(20 Points)**
   a.) Warranty provisions and coverage. (10 points)
   b.) Manufacturer and factory warranty support. (5 points)
   c.) Designated One-Stop (Single Point of Contact) warranty Support representative. (5 points)

4. **Manufacturing and Delivery schedule** **(20 Points)**
   a.) Manufacture and Delivery Timelines. (10 points)
   b.) Acceptability of transportation, shipping and delivery procedures. (5 points)
   c.) Accessibility to manufacturing and transportation Progress information. (5 points)

5. **Contractor's Demonstrated Capabilities and Qualifications** **(20 Points)**
   a.) Contractor's/Manufacturer's design and engineering performance on similar vehicles (Recent Deliveries and customer references). (10 points)

   b.) Acceptability of transportation, shipping and delivery procedures. (5 points)
   c.) Accessibility to manufacturing and transportation Progress information. (5 points)

80 – 100	**ACCEPTABLE**
60 – 79	**POTENTIALLY ACCEPTABLE**
59 and Below	**UNACCEPTABLE**

- Each bid shall be evaluated on the five factors stated above. This is a Multi-Step Invitation for bid, the sealed "BID COST" will only be opened and considered after the "TECHNICAL BID" has been evaluated and determined by GFD to be acceptable in the first phase. **2 GAR §3109(t)**

- Oral or Written discussions may be conducted on the unpriced "TECHNICAL BID" offer. **2 GAR §3109(t)(1)(e)**

- Bidders may designate those portions of the unpriced "TECHNICAL BID" offer which contain trade secrets or other proprietary data which are to remain confidential. **2 GAR §3109(t)(1)(f)**