Re-Bid Specifications

Re-Bid Item #25-223A

New Diesel Engine for #8 Raw Water Pump Station

For

Augusta, Georgia – Augusta Utilities Department

Re-Bid Due: Wednesday, November 19, 2025 @ 11:00 a.m.

<u>Until further notice</u>
All bid openings, conferences, and evaluation meetings will be conducted by electronic teleconferencing via ZOOM. Instructions are enclosed.

Sec. 1-10-50. Sealed bids selection method:

Bid acceptance and bid evaluation. Provided that the bids are delivered to the Procurement Director at the time, place, and under the conditions contained in the Invitation for Bids, the bids shall be conditionally accepted without alteration or correction pending evaluation.

To Ensure Timely Deliveries; It Is The Responsibility Of The Vendor To Ensure Their Bid Submittal Is Received By The Time Specified Above. All Submittals MUST Be Received During Our Normal Office Hours From 8:30 A.M. To 5:00 P.M., Monday Through Friday.

Thanks for doing business with us . . .
Andy Penick, Procurement Director
535 Telfair Street, Room 605
Augusta, Georgia 30901

Rev. 09/02/25

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Revised 9/6/24

Invitation to Re-Bid

Sealed Re-bids will be received at this office until **Wednesday, November 19, 2025 @ 11:00 a.m.** via ZOOM **Meeting ID: 889 2293 0585; Passcode: 25223** for furnishing:

Re-Bid Item #25-223A **New Diesel Engine for #8 Raw Water Pump Station for Augusta, GA – Augusta Utilities Department**

Re-Bids will be received by Augusta, GA Commission hereinafter referred to as the OWNER at the offices of:

Andy Penick, Procurement Director
Augusta, GA. Procurement Department
535 Telfair Street - Room 605
Augusta, Georgia 30901

Re-bid documents may obtained through the Augusta, Georgia web site under the Procurement Department **ARCBid (http://appweb2.augustaga.gov/NewARCBid/ARCBid.html), Euna OpenBids (https://network.demandstar.com) and Georgia Procurement Registry (https://ssl.doas.state.ga.us/gpr/index).** Re-bid documents may be obtained at the offices of Augusta, GA Procurement Department, 535 Telfair Street – Suite 605, Augusta, GA 30901 **(706-821-2422). Addenda will also be posted on the above listed websites.**

For the mandatory site visit, please contact Steve Orton at (706) 836-7283 PRIOR to November 4, 2025.

All questions must be submitted in writing by email to procbidandcontract@augustaga.gov to the office of the Procurement Department by Tuesday, November 4, 2025 @ 5:00 P.M. No Bid will be accepted by email; all bids must be received by mail or hand delivered. All submittals must be received during our normal office hours from 8:30 a.m. to 5:00 p.m., Monday through Friday.

No Bids may be withdrawn for a period of ninety **(90)** days after bids have been opened, pending the execution of contract with the successful bidder.

***Invitation for bids and specifications*.** An invitation for bids shall be issued by the Procurement Office and shall include specifications prepared in accordance with Article 4 (Product Specifications), and all contractual terms and conditions applicable to the procurement. **All specific requirements contained in the invitation to re-bid including, but not limited to, the number of copies needed, the timing of the submission, the required financial data, and any other requirements designated by the Procurement Department are considered material conditions of the Bid which are not waiveable or modifiable by the Procurement Director.** All requests to waive or modify any such material condition shall be submitted through the Procurement Director to the appropriate committee of the Augusta, Georgia Commission for approval by the Augusta, Georgia Commission. Please mark REBID number on the outside of the envelope.

GEORGIA E-Verify and Public Contracts: The Georgia E-Verify law requires contractors and all sub-contractors on Georgia public contract (contracts with a government agency) for the physical performance of services over $2,499 in value to enroll in E-Verify, regardless of the number of employees. They may be exempt from this requirement if they have no employees and do not plan to hire employees for the purpose of completing any part of the public contract. Certain professions are also exempt. All requests for Bids issued by a city must include the contractor affidavit as part of the requirement for their bid to be considered.

Bidders are cautioned that acquisition of REBID documents through any source other than the office of the Procurement Department is not advisable. Acquisition of REBID documents from unauthorized sources placed the bidder at the risk of receiving incomplete or inaccurate information upon which to base his qualifications.

Submit correspondence via mail or email as follows:

Augusta Procurement Department
Attn: Andy Penick, Procurement Director
535 Telfair Street, Room 605
Augusta, GA 30901
Email: procbidandcontract@augustaga.gov

No Bid will be accepted by email; all bids must be received by mail or hand delivered.

Andy Penick, Procurement Director

Publish:

Augusta Chronicle	October 23, 30, 2025 and November 3, 2025
Metro Courier	October 23, 2025

cc:	**Tameka Allen**	**Administrator**
	Wes Byne	**Augusta Utilities Department**
	Stephen Orton	**Augusta Utilities Department**

Revised: 10/23/25

PROCUREMENT DEPARTMENT BIDS AND CONTRACTS
ELECTRONIC BID OPENING INFORMATION

The Augusta, Georgia Procurement Department conducts Public Bid Openings to award quality contracts for Augusta. Bidders may participate in our Public Bid Openings via webcast or teleconference by following the instructions outlined below:

ELECTRONIC BID INSTRUCTIONS

RE-Bid Opening – Re-Bid Item # 25-223A New Diesel Engine for #8 Raw Water Pump Station for Augusta, GA - Augusta Utilities Department

Wednesday, November 19, 2025 @ 11:00 a.m.

ZOOM Re-Bid Opening:

1. Or go to https://zoom.us/join and enter meeting ID: **Meeting ID: 889 2293 0585**
2. Password**: 25223**
3. **Teleconference: Telephone number**: **646 876 9923**

For Assistance: Please Contact the Bid and Contract Team at (706) 821-2422

Revised 9/05/2025

INSTRUCTIONS TO SUBMIT

1.1 **Purpose:** The purpose of this document is to provide general and specific information for use by vendors in submitting a bid to supply Augusta, Georgia with equipment, supplies, and or services as listed above. All bids are governed by the Augusta, Georgia Code.

1.2 **Viewing the Augusta Code**: All bids are governed and awarded in accordance with the applicable federal and state regulations and the Augusta, Georgia Code. To view the Code visit Augusta's website at **www.augustaga.gov** or **http://www.augustaga.gov/index.aspx?NID=685 Guidelines & Procedures**.

1.3 **Compliance with laws:** The Bidder shall obtain and maintain all licenses, permits, liability insurance, workman's compensation insurance and comply with any and all other standards or regulations required by federal, state or Augusta, Georgia statute, ordinances, and rules during the performance of any contract between the Bidder and Augusta, Georgia. Any such requirement specifically set forth in any contract document between the Bidder and Augusta, Georgia shall be supplementary to this section and not in substitution thereof.

1.4 **Bids for All or Part:** Unless otherwise specified by Augusta, Georgia or by the bidder, **AUGUSTA, GEORGIA RESERVES THE RIGHT TO MAKE AWARD ON ALL ITEMS, OR ON ANY OF THE ITEMS ACCORDING TO THE BEST INTEREST OF AUGUSTA, GEORGIA.** Bidder may restrict his bid to consideration in the aggregate by so stating but must name a unit price on each item submitted upon.

1.5 **All protest shall be made in writing to:**

Attn: Andy Penick
Procurement Director
535 Telfair Street, Room 605
Augusta, GA 30901
Email: procbidandcontract@augustaga.gov

1.6 **Local Vendor Preference:** The Local Vendor Preference policy shall only be applied to projects of one-hundred thousand dollars ($100,000) or less and only when the lowest local qualified bidder is within 10% or $10,000, whichever is less of the lowest non-local bidders.

1.7 **Minority/Women Business Enterprise (MWBE) Policy***: **Court Order Enjoining Race-Based Portion of DBE Program** **Augusta, Georgia does not have a race or gender conscious Disadvantaged Business Enterprises (DBE) program for projects having Augusta, Georgia as the source of funding. Augusta does enforce mandatory DBE requirements of federal and state agencies on contracts funded by such agencies and has a DBE Program to comply with U.S. Department of Transportation (DOT), Federal Transit Administration (FTA), Federal Aviation Administration (FAA) and other federal and state mandated DBE requirements for certain DOT, FTA, FAA, and other federal and state assisted contracts as required by 49 C.F.R. Part 26, et. seq. and/or 49 C.F.R. Part 23, et. seq. This DBE program is only for DOT, FTA and FAA assisted contracts and other federal or state funded contracts having mandatory DBE requirements. (See Article 13 of the Augusta, GA. Code.)***

Augusta, Georgia prohibits any language in any solicitation, bid or contract that is inconsistent with the July 21, 2011, Court Order in the case, Thompson Wrecking, Inc. v. Augusta Georgia, civil action No. 1:07-CV-019. Any such language appearing in any Augusta, Georgia solicitation, bid or contract is void and unenforceable.

A copy of this Order can be reviewed at www.augustaga.gov home page.

1.8 **Augusta, Georgia License Requirement:** For further information contact the License and Inspection Department @ 706 312-5050.

General Contractors License Number: If applicable, in accordance with O.C.G.A. §43-41, or be subjected to penalties as may be required by law.

Utility Contractor License Number: If applicable, in accordance with O.C.G.A. §43-14, or be subjected to penalties as may be required by law.

1.9 **Terms of Contract:** (Check where applicable)
[ ] (A) Annual Contract
[ ] (B) One time Purchase.
[X] (C) Other

Revised 9/26/24

NOTICE TO ALL VENDORS

ADHERE TO THE BELOW INSTRUCTIONS AND DO NOT SUBSTITUTE FORMS

PLEASE READ CAREFULLY:

Attachment B is a consolidated document consisting of:

1. Business License Number Requirement (must be provided)
2. Acknowledgement of Addenda (must be acknowledged, if any)
3. Statement of Non-Discrimination
4. Non-Collusion Affidavit of Prime Bidder/Offeror
5. Conflict of Interest
6. Contractor Affidavit and Agreement (E-Verify User ID Number must be provided)

Attachment B Must be Notarized & Two (2) Pages Must be returned with your submittal - No Exceptions.

Business License Requirement: Bidder must be licensed in the Governmental entity for where they do the majority of their business. Your **company's business license number must** be provided on Page 1 of Attachment B. If your Governmental entity (State or Local) does not require a business license, your company will be required to obtain a Richmond County business license if awarded a contract. For further information contact the License and Inspection Department @ 706 312-5050.

Acknowledgement of Addenda: You Must acknowledge all Addenda. See Page 1 of Attachment B.

E-Verify * User Identification Number (Company I.D.) The recommended awarded vendor will be required to provide a copy of Homeland Security's Memorandum Of Understanding (MOU). **Contractors, Bids, RFPs, RFQs - Any** contractors performing the physical performance of services" for your city, including those that respond to bids or requests for Bids, must submit an E-Verify affidavit. Your city cannot consider any contractors, even as part of a bidding or RFP process, unless they have given you the appropriate E-Verify contractor affidavits.

Contractors are defined as those who provide any "physical performance of services," which means any performance of labor or services for a public employer using a bidding process or by contract that costs over $2,499.99 in value between December 1 and November 30 of any given year. Typically, eligible contracts may include: New construction or the demolition of structures/roads Routine operation, repair, and maintenance of existing structures. Any contracts for labor and service that exceed $2,499.99. Contracts for the purchase of goods without any services provided are not subject to these E-Verify requirements.

The city, each contractor, and each subcontractor have different roles and responsibilities in the E-Verify process. The city collects E-Verify affidavits from the contractor. The contractor collects E-Verify affidavits from its subcontractors. The subcontractors collect E-Verify affidavits from its sub-subcontractors. Independent contractors (those with no employees) do not need to supply E-Verify information. Instead, they will provide a driver's license or state identification card from states on the "compliant" list created by the Georgia Attorney General. Those contractors and subcontractors that fill out the affidavits are responsible for the accuracy of the information. The city does not need to confirm that the E-Verify information is correct. The liability for incorrect information is on the contractor or subcontractor. NOTE: The authorization date can be found within the Memorandum of Understanding (MOU).

Affidavit Verifying Status for Augusta Benefit Application (S.A.V.E. Program) (Must Be Returned With Your Submittal)

The successful bidder will submit the following forms to the Procurement Department no later than five (5) days after receiving the "Letter of Recommendation" (Vendor's letter will denote the date forms are to be received)

1. Georgia Security and Immigration Subcontractor Affidavit
2. Non-Collusion Affidavit of Sub-Contractor
3. **PLEASE NOTE GEORGIA LAW CHANGE: E-Verify and Public Contracts:** The Georgia E-Verify law requires contractors and all sub-contractors on Georgia public contract (contracts with a government agency) for the physical performance of services over $2,499 in value to enroll in E-Verify, **regardless of the number of employees**. They may be exempt from this requirement if they have no employees and do not plan to hire employees for the purpose of completing any part of the public contract. Certain professions are also exempt. All requests for Bids issued by a city must include the contractor affidavit as part of the requirement for their bid to be considered.

WARNING: **Please review "Notice to Bidder" regarding Augusta Georgia's Local Small Business Opportunity Program Bidder Requirements.**
Vendors are cautioned that acquisition of bid documents through any source other than the office of the Procurement Department is not advisable. Acquisition of bid documents from unauthorized sources places the proposer at the risk of receiving incomplete or inaccurate information upon which to base his qualifications.
Bids are publicly opened. It is your responsibility to ensure that your company has met the Specifications and Licenses requirements prior to submitting a bid.

Rev. 4/09/21

Attachment B

You Must Complete and Return the 2 pages of Attachment B with Your Submittal. Document Must Be Notarized.

Augusta, Georgia Augusta Procurement Department
ATTN: Procurement Director
535 Telfair Street, Suite 605
Augusta, Georgia 30901

Name of Bidder: _____

Street Address: _____

City, State, Zip Code: _____

Phone: _____ Fax: _____Email: _____

Do You Have A Business License? Yes: _____ No: _____

Augusta, GA Business License # for your Company (Must Provide): _____

And/or Your State/Local Business License # for your Company (Must Provide): _____

Utility Contractors License # (Must Provide if applicable): _____ MUST BE LISTED ON FRONT OF ENVELOPE

General Contractor License # (Must Provide if applicable): _____

Additional Specialty License # (Must Provide if applicable): _____

NOTE: Company must be licensed in the Governmental entity for where they do the majority of their business. If your Governmental entity (State or Local) does not require a business license, please state above (Procurement will verify), your company will be required to obtain a Richmond County business license if awarded a BID. For further information regarding Augusta, GA license requirements, please contact the License and Inspection Department @ 706 312-5050.

List the State, City & County that issued your license: _____

Acknowledgement of Addenda: (#1) ____: (#2) ____: (#3) ____: (#4) ____: (#5) ____: (#6) ____: (#7) ____: (#8) ____:
NOTE: CHECK APPROPRIATE BOX (ES) - ADD ADDITIONAL NUMBERS AS APPLICABLE

Statement of Non-Discrimination

The undersigned understands that it is the policy of Augusta, Georgia to promote full and equal business opportunity for all persons doing business with Augusta, Georgia. The undersigned covenants that we have not discriminated against, on the basis of race, religion, gender, national origin or ethnicity, with regard to prime contracting, subcontracting or partnering opportunities.
The undersigned covenants and agrees to make good faith efforts to ensure maximum practicable participation of local small businesses on the bid or contract awarded by Augusta, Georgia. The undersigned further covenants that we have completed truthfully and fully the required forms regarding good faith efforts and local small business subcontractor/supplier utilization.
The undersigned further covenants and agrees not to engage in discriminatory conduct of any type against local small businesses, in conformity with Augusta, Georgia's Local Small Business Opportunity Program. Set forth below is the signature of an officer of the proposer/contracting entity with the authority to bind the entity.
The undersigned acknowledge and warrant that this Company has been made aware of understands and agrees to take affirmative action to provide such companies with the maximum practicable opportunities to do business with this Company;
That this promise of non-discrimination as made and set forth herein shall be continuing in nature and shall remain in full force and effect without interruption;
That the promises of non-discrimination as made and set forth herein shall be and are hereby deemed to be made as part of and incorporated by reference into any contract or portion thereof which this Company may hereafter obtain and;
That the failure of this Company to satisfactorily discharge any of the promises of nondiscrimination as made and set forth herein shall constitute a material breach of contract entitling Augusta, Georgia to declare the contract in default and to exercise any and all applicable rights remedies including but not limited to cancellation of the contract, termination of the contract, suspension and debarment from future contracting opportunities, and withholding and or forfeiture of compensation due and owing on a contract.

Non-Collusion of Prime Bidder

By submission of a bid, the vendor certifies, under penalty of perjury, that to the best of its knowledge and belief:
(a) The prices in the bid have been arrived at independently without collusion, consultation, communications, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other vendor or with any competitor.
(b) Unless otherwise required by law, the prices which have been quoted in the bid have not been knowingly disclosed by the vendor prior to opening, directly or indirectly, to any other vendor or to any competitor.
(c) No attempt has been made, or will be made, by the vendor to induce any other person, partnership or corporation to submit or not to submit a bid for the purpose of restricting competition. Collusions and fraud in bid preparation shall be reported to the State of Georgia Attorney General and the United States Justice Department.

You Must Complete and Return the 2 pages of Attachment B with Your Submittal. Document Must Be Notarized.
Rev. 4/09/21

Conflict of Interest

By submission of a bid, the responding firm certifies, under penalty of perjury, that to the best of its knowledge and belief:
1. No circumstances exist which cause a Conflict of Interest in performing the services required by this BID, and
2. That no employee of the County, nor any member thereof, not any public agency or official affected by this BID, has any pecuniary interest in the business of the responding firm or his sub-consultant(s) has any interest that would conflict in any manner or degree with the performance related to this BID. By submission of a bid, the vendor certifies under penalty of perjury, that to the best of its knowledge and belief:
(a) The prices in the bid have been arrived at independently without collusion, consultation, communications, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other vendor or with any competitor.
(b) Unless otherwise required by law, the prices which have been quoted in the bid have not knowingly been disclosed by the vendor prior to opening, directly or indirectly, to any other vendor or competitor.
c) No attempt has been made, or will be made, by the vendor to induce any other person, partnership or cooperation to submit or not to submit a bid for the purpose of restricting competition. For any breach or violation of this provision, the County shall have the right to terminate any related contract or agreement without liability and at its discretion to deduct from the price, or otherwise recover, the full amount of such fee, commission, percentage, gift, payment or consideration.

Contractor Affidavit and Agreement: Contractor Affidavit under O.C.G.A. § 13-10-91(b) (l)

GEORGIA E-Verify and Public Contracts: The Georgia E-Verify law requires contractors and all sub-contractors on Georgia public contract (contracts with a government agency) for the physical performance of services **over $2,499 in value to enroll in E-Verify, regardless of the number of employees**. They may be exempt from this requirement if they have no employees and do not plan to hire employees for the purpose of completing any part of the public contract. Certain professions are also exempt. All requests for Bids issued by a city must include the contractor affidavit as part of the requirement for their bid to be considered.

The undersigned contractor ("Contractor") executes this Affidavit to comply with O.C.G.A § 13-10-91 related to any contract to which Contractor is a party that is subject to O.C.G.A. § 13-10-91 and hereby verifies its compliance with O.C.G.A. § 13-10-91, attesting as follows:
a) The Contractor has registered with, is authorized to use and uses the federal work authorization program commonly known as E-Verify, or any subsequent replacement program;
b) The Contractor will continue to use the federal work authorization program throughout the contract period, including any renewal or extension thereof;
c) The Contractor will notify the public employer in the event the Contractor ceases to utilize the federal work authorization program during the contract period, including renewals or extensions thereof;
d) The Contractor understands that ceasing to utilize the federal work authorization program constitutes a material breach of Contract;
e) The Contractor will contract for the performance of services in satisfaction of such contract only with subcontractors who present an affidavit to the Contractor with the information required by O.C.G.A. § 13-10-91(a), (b), and (c);
f) The Contractor acknowledges and agrees that this Affidavit shall be incorporated into any contract(s) subject to the provisions of O.C.G.A. § 13-10- 91 for the project listed below to which Contractor is a party after the date hereof without further action or consent by Contractor; and
g) Contractor acknowledges its responsibility to submit copies of any affidavits, drivers' licenses, and identification cards required pursuant to O.C.G.A. § 13-10-91 to the public employer within five business days of receipt.

Georgia Law requires your company to have an E-Verify*User Identification Number (Company I.D.) on or after July 1, 2009.

For additional information or to enroll your company, visit the **State of Georgia** website:
https://e-verify.uscis.gov/enroll/ and/or http://www.dol.state.ga.us/pdf/rules/300_10 1.pdf

Federal Work Authorization User Identification Number: E-VERIFY REQUIRED FOR ALL CONTRACTS OVER $2,499.00 **Date of Authorization**

** **(E-Verify Number)** _____ _____

_____ _____

Name of Contractor **Name of Project / Bid Number**

AUGUSTA, GEORGIA – RICHMOND COUNTY CONSOLIDATED GOVERNMENT
Name of Public Employer

I hereby declare under penalty of perjury that the foregoing is true and correct.

Executed on _____, _____, 20_____ in _____ (City), _____ (State).

_____ _____

Signature of Authorized Officer or Agent **Printed Name and Title of Authorized Officer or Agent**

SUBSCRIBED AND SWORN BEFORE ME ON THIS THE _____ DAY OF _____, 20_____

_____ _____

Notary Public **My Commission Expires**: **NOTARY SEAL**

The undersigned further agrees to submit a notarized copy of Attachment B and any required documentation noted as part of the Augusta, Georgia Board of Commissions specifications which govern this process. In addition, the undersigned agrees to submit all required forms for any subcontractor(s) as requested and or required. **I further understand that my submittal will be deemed non-compliant if any part of this process is violated.**

You Must Complete and Return the 2 pages of Attachment B with Your Submittal. Document Must Be Notarized.

You Must Complete and Return with Your Submittal. Document Must Be Notarized

Systematic Alien Verification for Entitlements (SAVE) Program

Affidavit Verifying Status for Augusta, Georgia Benefit Application By executing this affidavit under oath, as an applicant for an Augusta, Georgia Business License or Occupation Tax Certificate, Alcohol License, Taxi Permit, Contract or other public benefit as reference in O.C.G.A. Section 50-36-1, I am stating the following with respect to my bid for an Augusta, Georgia contract for

_____

[Bid Project Number and Project Name]

_____

[Print/Type: Name of natural person applying on behalf of individual, business, corporation, partnership, or other private entity]

_____

[Print/Type: Name of business, corporation, partnership, or other private entity]

1.) _____ I am a citizen of the United States.

OR

2.) _____ I am a legal permanent resident 18 years of age or older.

OR

3.) _____ I am an otherwise qualified alien (8 § USC 1641) or nonimmigrant under the Federal Immigration and Nationality Act (8 USC 1101 *et seq.*) 18 years of age or older and lawfully present in the United States.*

In making the above representation under oath, I understand that any person who knowingly and willfully makes a false, fictitious, or fraudulent statement or representation in an affidavit shall be guilty of a violation of Code Section 16-10-20 of the Official Code of Georgia.

_____

Signature of Applicant

_____

Printed Name

_____

***Alien Registration Number for Non-Citizens**

SUBSCRIBED AND SWORN BEFORE ME ON THIS THE _____ DAY OF _____, 20____

_____

Notary Public

My Commission Expires: _____ **NOTARY SEAL**

Note: THIS FORM MUST BE COMPLETED AND RETURNED WITH YOUR SUBMITTAL

Rev. 2/17/2016

TRADE SECRET STATUS AFFIDAVIT
Augusta, Georgia

All documents, data, letters and generated information received by Augusta, Georgia constitutes a "public record" and is subject to disclosure under the Georgia Open Records Act ("GORA"). O.C.G.A. § 50-18-70 *et seq.* However, pursuant to O.C.G.A. § 50-18-72(a)(34), "[an] entity submitting records containing trade secrets that wishes to keep such records confidential under this paragraph shall submit and attach to the records an affidavit affirmatively declaring that specific information in the records constitute trade secrets pursuant to Article 27 of Chapter 1 of Title 10 [O.C.G.A. § 10-1-760 et seq.]."

O.C.G.A. § 10-1-761(4) defines "Trade secret" as "…information, without regard to form, including, but not limited to, technical or nontechnical data, a formula, a pattern, a compilation, a program, a device, a method, a technique, a drawing, a process, financial data, financial plans, product plans, or a list of actual or potential customers or suppliers which is not commonly known by or available to the public and which information:

A. Derives economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use; and
B. Is the subject of efforts that are reasonable under the circumstances to maintain its secrecy."

Therefore, the records listed below and attached hereto, that were submitted with _____response to Augusta, Georgia Request for Bid, Request for Quote, or Request for Qualified Contractor _____are marked confidential pursuant to O.C.G.A. § 10-1-761(4):

- (List specific information that the supplier wishes to withhold and how that information constitutes a trade secret)
- Additional trade secret information requested to be withheld
- **Your company is requested to send a redacted copy of your submittal.**

Under penalty of perjury, acknowledging that O.C.G.A. §16-10-71 provides a penalty of a fine of up to $1,000 and potential imprisonment of one to five years, I attest that the specific information in the records listed above constitutes trade secrets pursuant to O.C.G.A. § 10-1-761(4), and request that Augusta, Georgia not disclose this protected information under the Georgia Open Records Act ("GORA").

Signature:

_____
[Signatory Name in Print]

_____
[Signatory's Title] [Company Name]

_____
[Signatory's Title]

Date: _____

SUBSCRIBED AND SWORN BEFORE ME ON THIS _____ DAY OF _____, 202_.

_____
NOTARY PUBLIC

My Commission Expires: _____

Return form only if applicable. If form is not returned with your submittal, it will be deemed there are no trade secrets in your package submittal.

EXCEPTION SHEET

If the commodity (ies) and/or services proposed in the response to this bid is in anyway different from that contained in this bid, the bidder is responsible to clearly identify by specification section number, all such differences in the space provided below. Otherwise, it will be assumed that bidder(s) offer is in total compliance with all aspects of the bid.

Below are the exceptions to the stated specifications:

_____
Signature

_____
Date

_____
Company

_____
Title

Return with submittal if the commodity and/or services proposed in the response to this bid are in any way different from that contained in the specifications.

Minority and Women Owned Business Enterprise Program Ordinance Requirements

Notice To All Bidders (PLEASE READ CAREFULLY)

Shall apply to ALL Bids regardless of the dollar amount

In accordance with the Commission Action on 7/25/24 and the adoption of Ordinance No. 7945 Chapter 10C of the AUGUSTA, GA, CODE, Contractors agree to collect and maintain all records necessary to Augusta, Georgia to evaluate the effectiveness of its Minority and Women Owned Business Enterprise Program and to make such records available to Augusta, Georgia upon request. The requirements of the Minority and Women Owned Business Enterprise Program can be found at www.augustaga.gov. In accordance with AUGUSTA, GA. CODE, Contractors shall report to Augusta, Georgia the total dollars paid to each subcontractor, vendor, or other business on each contract, and shall provide such payment affidavits, regarding payment to subcontractors, if any as required by Augusta, Georgia. Such utilization reports shall be in the format specified by the Director of Compliance and shall be submitted at such times as required by Augusta, Georgia. Required forms can be found at www.augustaga.gov. If you need assistance completing a form or filing information, please contact the M/WBE Program office at (706) 821-2406. Failure to provide such reports withing the time period specified by Augusta, Georgia shall entitle Augusta, Georgia to exercise any of the remedies set forth, including, but not limited to, withholding payment from the Contractor and/or collecting liquidated damages.

SHALL APPLY TO PROJECTS IN EXCESS OF $300,000

Minority and Women Owned Business Enterprise Program (Continued)

Sec. 1-10-138. Race and Gender-Conscious Efforts

Contract-by-Contract Subcontractor Goals The City, through the Goal Setting Committee (GSC), will set specific, separate percentage-based MBE and WBE subcontracting goals on a contract-by contract basis for Prime contracts in Construction, Architecture & Engineering, Professional Services, and Other Services valued in excess of $300,000. The City shall establish such goals based upon the type of contract, the type of subcontracting work that will be required, and the availability of M/WBE firms to perform the work for that specific contract.

The GSC shall not establish subcontracting goals on contracts where (a) there are no subcontracting opportunities identified for the contract; or (b) there are not at least three (3) MBE and/or WBE firms that are available and capable to perform a CUF for the overall subcontracting opportunities on the contract.

Good Faith Efforts (GFE) Requirements and Guidance

1.Achievement of subcontracting goals or documentation of Good Faith Efforts applies to every Contract for which such goals are established. **The Bidder shall submit a compliance plan detailing its achievement of the goals or its Good Faith Efforts to meet the goals. The compliance plan shall be due at the time set out in the solicitation documents**.

2.When a Bidder cannot achieve the goals, its compliance plan shall document its GFE to achieve the goals. The Director of Compliance will determine whether the Bidder has made such GFE.

Bid Documents

All bid documents shall require proponents or bidders to submit with their bid the following written documents, statements, or forms, which shall be made available by the Procurement Department.

- Proposed Letter of Intent MBE/WBE.
- Proposed MBE/WBE Utilization Plan.
- Documentation of Good Faith Efforts Form (*in the event the bidder **will not** meet the MBE and WBE goals*).

Failure to submit the above documentation shall result in the bid being declared non-responsive.

Sec. 1-10-154.Exceptions

In accordance with § 1-10-8, on federally funded projects or contracts, the M/WBE Program shall only be utilized when authorized by the applicable federal (and/or Georgia) laws, regulations, and conditions relating to that project or contract. To the extent that there are any conflicts between any such laws, regulations, or conditions and the provisions of the M/WBE Program, the federal (and/or Georgia) guidance shall control.

NOTE: All forms should be submitted in a separate, sealed envelope, labeled M/WBE Forms, Company's Name & Bud number

For questions and or additional information, please contact:

Minority-Owned and Women-Owned Business Enterprise Program
535 Telfair Street, Suite 530
Augusta, Georgia 30901
(706) 821-2406
mwbe@augustaga.gov
Website: https://www.augustaga.gov/83/Disadvantaged-Business-Enterprise

REV. 9/6/24

INSTRUCTIONS TO SUBMIT

Augusta is seeking bids for a new **Diesel Engine #8 for Raw Water Pump Station (RWPS)** at the Augusta Utilities Department - Facilities and Maintenance Division. Your submittal should respond to, and be based on, the information included in this Invitation to Bid.

Bids will be received by the Augusta Commission, (hereinafter called the "Owner"), at the office of the Procurement Director, 535 Telfair Street, Room 605, Augusta, GA until Wednesday, November 19, 2025 @ 11:00 a.m., and then, at said office, publicly opened and read aloud. Each bid must be submitted in a sealed envelope and must be plainly marked on the outside as a bid for **"Bid Item 25-223A New Diesel Engine for #8 Raw Water Pump Station"** and the envelope should bear on the outside, the name of the bidder, his address and his license number, if applicable.

Opening will be held via ZOOM: Meeting ID: 889 2293 0585; Passcode: 25223
If the Bid is forwarded by mail, or other second party delivery service, the sealed envelope containing the bid must be enclosed in another envelope addressed to:

Andy Penick, Procurement Director
Augusta Procurement Department
535 Telfair Street - Room 605
Augusta, Georgia 30901

Bid Packages may be obtained at the Augusta Procurement Department, at the address listed above.

The Bid Package contains provisions required for the specifications. All firms responding are cautioned to read this information carefully for understanding and request clarification from Augusta on any questions pertaining to this request.

For the mandatory site visit, please contact Steve Orton at (706) 836-7283 PRIOR to November 4, 2025.

All questions must be submitted in writing by email to procbidandcontract@augustaga.gov to the office of the Procurement Department by Tuesday, November 4, 2025 @ 5:00 P.M. No bid will be accepted by email; all bids must be received by mail or hand delivered.

Interested firms are cautioned that acquisition of Bid Documents through any source other than the office of the Procurement Department is not advisable. Acquisitions of said documents from unauthorized sources place the bidder at the risk of receiving incomplete or inaccurate information upon which to base their bid.

Submit correspondence via mail, or email as follows:
Augusta Procurement Department
Attn: Andy Penick, Procurement Director
535 Telfair Street, Room 605
Augusta, GA 30901
Email: procbidandcontract@augustaga.gov

No Bid will be accepted by email; all bids must be received by mail or hand delivered. All bids must be made on the required Bid Form. All blank spaces for bid prices must be filled in with ink or typewritten, and the form must be fully completed and executed when submitted. Failure to provide all of the requested information may cause the bid to be rejected as non-responsive. An official authorized to bind the firm to the terms and provisions of the bid must sign the bid form.

All interested firms are required to meet Federal, State and Local laws and regulations.

The Owner may waive any informalities or minor defects or reject any and all bids. Any bid may be withdrawn prior to the above scheduled time for the opening of bids or authorized postponement thereof. Any bid received after the time and date specified shall not be considered.

No bids may be withdrawn for a period of ninety **(90)** days after bids have been opened, pending the execution of contract with the successful bidder. Should there be reasons why the Contract cannot be awarded within the specified period; the time may be extended by mutual agreement between the Owner and the bidder.

After bids have been submitted, the bidder shall not assert that there was a misunderstanding concerning the nature of the work to be done.

The party to whom the contract is awarded will be issued a Notice of Award. Should there be reasons why the Notice to Award cannot be issued the time may be extended by mutual agreement between the Owner and the Contractor.

The Owner may make such investigations as he deems necessary to determine the ability of the bidder to perform the work and the bidder shall furnish to the Owner all such information and data for this purpose as the Owner may request. The Owner reserves the right to reject any bid if the evidence submitted by or investigation of such bidder fails to satisfy the Owner that such bidder is properly qualified to carry out the obligations of the Agreement and complete the work contemplated therein.

A conditional or qualified bid will not be accepted. Award will be made as a whole to one bidder.

The Owner reserves the right to consider Bids or modifications thereof received at any time before the award is made if such action is in the interest of the Owner.

Each bidder is responsible for reading and being thoroughly familiar with the specifications. The failure or omission of any bidder to do any of the foregoing shall in no way relieve any bidder from any obligation in respect to his bid.

The Owner will not be liable for any costs incurred by any firm prior to receiving the Notice of Award.

SCOPE OF WORK

Augusta Utilities is seeking bids for 16 Cylinder 1600 HP 2300 RPM Continuous Running Heavy Duty Stationary Diesel Engine and Hydro Drive for operation of a Vertical Turbine Pump. This equipment is essential to our municipal infrastructure operations, and the selected engine must meet strict criteria for performance, reliability, and compatibility with our existing systems.

The location of the diesel engine is the Augusta Utilities Department, Facilities & Maintenance Division Raw Water Pump Station, Goodrich Street, Augusta, Ga 30901.

The Seller shall submit with his bid, a list of recommended spare parts & a separate price for each spare part.

The vendor is required to attend a mandatory site visit prior to the bid submittal to ensure that the Diesel Engine, and any required accessory equipment that would be needed to support its operation, is viewed. **Please contact Steve Orton at (706) 836-7283 prior to November 4, 2025. This site visit is MANDATORY.**

SPECIFICATIONS:

Engine Specifications are Based on a **Cummins KTA50 Diesel Engine**, and all bids must be either for a **Caterpillar Engine or a Cummins Engine.** Any other engine will be the bidder's responsibility to prove the engine is equal or superior to the engines above and must be proved and accepted as an equal by the Augusta Utilities Dept. under continuous heavy-duty use.

- This proven performance is a critical factor in selecting equipment that supports vital infrastructure through operational continuity.
- These specifications are consistent with and meet our needs required by equipment standardization interface & integration protocols.
- Technical Integration: Control systems, remote monitoring, and automation components have already been designed around existing Cummins and Caterpillar interface protocols, easing integration and reducing commissioning time.
- A new or different engine line would decrease emergency readiness through downtime reintegration, refitting, and cost associated required to comply with continuous critical system operations.

BRAND NAME STATEMENT

Any reference to brand names, trade names, model numbers or other description peculiar to specific brand products is made to establish a required level of equality and functional capabilities; it is not intended to exclude other products of that level. Comparable products equivalent in fit, form, and function of other manufacturers will be considered if proof of comparability is contained in the bid. It shall be the responsibility of the bidders to furnish with their bid such specifications, catalog pages, brochures, of the quality and functional capability of the product offered.

Equal products by anything other than the specified manufacturer must be approved by the owner in advance of the bid opening. It is the responsibility of the firm to demonstrate that their product is equal in fit, form, and fucntion. Approved equivalent requests must be sent on or prior to the last day for questions, Tuesday, November 4, 2025 @ 5:00 p.m. and directed to Andy Penick, Director of Procurement, and must be in writing by email to procbidandcontract@augustaga.gov.

Engine Characteristics:

- **Model:** KTA50-G (with specific suffix for 1800 rpm, e.g., KTA50-G12-B).
- **Type:** 4-cycle, 60° Vee, 16-cylinder diesel.
- **Displacement:** 50.3 liters (3067 cu. in).
- **Aspiration:** Turbocharged and Aftercooled.
- **Fuel System:** Cummins PT (Pump-type fuel injection).
- **Cylinder Head/Liners:** High-quality alloy cast iron with wet, replaceable cylinder liners.

- **Cooling System:** Typically, a one-pump, two-loop system with a coolant capacity of around 160 liters.
- **Air Cleaner:** Dry replaceable element with restriction indicator.
- **Turbocharger:** Holset turbocharger.
- **Pistons:** Dual Ni-resist, aluminum alloy, ground and shaped to compensate for thermal expansion.

Cooling System: Coolpac Performance Data

- Closed Lop Cooling Method

Engine must be able to produce full torque at 1800 Rpm for maximum use of pump.

This Bid is for the Engine and any required accessory equipment that would be needed to support operation of the engine. For this reason, **a site visit is MANDATORY** (EX: Fuel Day Tank, Heat Exchangers, Lubrication system and exhaust).

The Engine must come mounted on a frame ready to be mounted to the floor.

The Engine controls must be an integral part of the engine, and no other controls needed for engine to operate standalone (Software must be available to end users).

The Engine must come with a standard OEM Warranty on Parts. If other warranty options are available, must be listed and priced separately.

The Bidder is required to provide 72-hour notification of Delivery to allow for arrangement of equipment to offload Engine.

The Bid Price will include Delivery of the engine to the Address to be provided in the Bid. Unloading will be handled by End User. If that affects the warranty, then the manufacturer will be required to handle off-loading of the engine and handle the placement of said engine.

Pump and Gearbox that said Engine will run are attached and trans fluid drive.

SPECIAL TOOLS:

All special tools required for installation, adjustment or maintenance of the proposed equipment will be furnished with the equipment and their cost included in the price quoted. These tools (if any) should be listed in the bid.

ELECTRICAL SYSTEM REQUIREMENTS: Operating voltage levels are given below:

SIXTY HERTZ UTILIZATION: 120 Volts, Single phase, 480 Volts, Three phase

SERVICE: Lighting, Control & Misc. Motors through 600 HP

STANDARDS: Unless indicated or specified otherwise, materials and workmanship shall conform with the latest editions of the following standards:

a) ANSI, American National Standards Institute.
b) IEEE, Institute of Electrical and Electronic Engineers.
c) NEMA, National Electrical Manufacturers Association.
d) NBFU, National Board of Fire Underwriters.
e) UL, Underwriters Laboratories, Inc.
f) Local and State Building Codes, and all other authorities having jurisdiction; NEC, National Electrical Code.
g) ICEA, Insulated Power Cable Engineers Association Specification.
h) ASTM, American Society of Testing Materials.

i) NBS, National Bureau of Standards Handbook, H-30 NESC, National Electric Safety Code.

j) OSHA latest Standards.

Equipment and materials furnished under these specifications shall be tested in accordance with applicable accepted industry standards. **Special test requirements shall be as given in specific EQUIPMENT SPECIFICATIONS.**

DESCRIPTIVE MATERIAL:

All equipment, material or services offered must be fully and clearly described by means of drawings, written specifications and documents as required by the nature of the offering. In addition, the following information must be included, when applicable:

- The uncrated weight of each major item of equipment.
- The shipping weight of each item of equipment offered.
- For all vessels, a statement of:
  - **1)** Interior volume in cubic feet when filled to overflow.
  - **2)** If a pressure vessel, the applicable ASME Code Section under which manufactured, the pressure and temperature ratings and the materials to be used.

WARRANTIES AND GUARANTEES:

a) Performance:

A performance warranty based on the performance required in the technical section of these specifications will be incorporated in the purchase contract. An amount equal to 20% of the purchase price will be retained by the Purchaser until satisfactory operation has been achieved in accordance with the terms of the guarantee. In the event that the equipment should fail to perform in accordance with the purchase contract, and modifications and additions are required, they shall be made by the Vendor without cost to the Purchaser. In the event that the Vendor is unable to modify the equipment to meet performance guarantees, the purchaser shall have the option to return the equipment at the Vendor's expense for a full refund of the purchase price.

b) Materials and Workmanship:

As a minimum, unless stated otherwise, all equipment and materials offered shall be guaranteed free of defects in material and workmanship for a period of one (1) year after installation and start-up, all defective materials shall be replaced by the vendor, F.O.8. Augusta, Georgia at no cost to the Purchaser.

A specific statement of all warranties offered, including all limitations in scope and time, shall be a part of the bid.

DELIVERY OF MATERIALS:

Delivery is accepted by Augusta-Richmond County only between the hours of 9:00 A.M. and 4:00 P.M. EST/EDT, Monday through Friday except holidays. Deliver to the Augusta Raw Water Pump Station, Goodrich Street, Augusta, Georgia 30901. Delivery ticket must accompany goods.

Bid must contain a guarantee of the time required to complete delivery after placement of order, and approval of preliminary drawings. If more than one shipment is required, a schedule of such shipments must be included in the bid.

LIQUIDATED DAMAGES:

TIME IS OF THE ESSENCE FOR THE COMPLETION OF THE WORK AND THE WHOLE THEREOF, and should the Supplier neglect, refuse, or fail to complete the applicable portion of the work by the dates set forth in the Contract Schedule (as the date may be changed after adding any extensions of time granted by the Owner or provided for in the Contract), the Owner may deduct from the payments due to the Supplier or may collect from the Supplier or the Supplier's surety or sureties the sums described below:

Liquidated Damages for Schedule Performance:

For failure of Contractor to deliver the Equipment denoted as "LD #1" in the Contract Schedule $1000.00 per day

The sums will apply for each calendar day of delay beyond those specified dates. Said sums per day for such delay, failure or non-completion shall be deemed, taken and treated as liquidated damages which the Owner shall suffer by reason of such default and not by way of penalty. Such liquidated damages are in lieu of all other damages and remedies for delays beyond the specified dates and shall be the Owner's sole remedy and Supplier's sole obligation for damages, with respect to such delays. The provision for Liquidated Damages shall not relieve the Supplier or its sureties from any other obligations under the Contract.

SUBMISSION OF DRAWINGS:

Bids must state the time required to submit drawings, instruction manuals, wiring diagrams, etc., required for the complete design of all facilities associated with the equipment. For instance, the drawings must define such aspects as structural loadings, details of piping and wiring connections, dimensional outlines for operating and maintenance clearance purposes, anchor bolt locations, and special foundation requirements.

INSPECTION:

The Purchaser reserves the right to visit the Seller's shop and to inspect equipment being manufactured on his order. The Seller shall supply the Inspecting Agent with all assistance practicable including drawings and documents, as well as a guide who is familiar with the work in progress.

STATEMENT OF COMPLIANCE:

The bid must include a statement of compliance with all provisions of this request and the accompanying documents, and failure to include such a statement automatically subjects the bid to be rejected by the Purchaser.

RIGHT TO REJECT BIDS:

The Purchaser reserves the right to accept any bid or to reject any or all Bids, and to waive all technicalities in the opening of Bids.

The Purchaser reserves the right to accept any or all of the items in a bid from one Seller, or to reject any or all items in a bid from one Seller, and to waive all technicalities in the opening of Bids.

SAFETY:

All equipment shall comply with all regulations for safety, etc., as set forth by Federal, State and Local Authorities and National Occupational Safety and Health Act (OSHA).

The Supplier shall certify that all entities furnished under this bid will conform to and comply with said standards and regulations. The Supplier further agrees to indemnify, hold and save harmless the Purchaser for all damages or penalties assessed against the Purchaser as a result of Supplier's failure to meet the requirements of the Act and the standards issued thereunder and for the failure of the items furnished under this bid to meet said requirements.

THE FOLLOWING SPECIAL REQUIREMENTS ARE TO BE MET BY THE SUCCESSFUL BIDDER ONLY.

SHOP PRINTS AND SUBMITTALS:

The Supplier must submit to the Superintendent of the AUD F&M Division five (5) copies as follows:

The Supplier has the option to submit prints as "Certified for Installation" or "Preliminary for Approval". Thus, prints for any piece of equipment, etc., which is of Standard Manufacture and does not require additional information from the AUD F&M Division may be submitted "Certified for Installation".

A copy of each print submitted shall be returned to the Supplier with the appropriate action which will be one of the following:

1) **Approved**.
   If the print was submitted "Approved for Installation", this will be the only approval given and no further submission will be required. If the print was submitted "Preliminary for Approval", the print will be noted and returned to be resubmitted "Certified for Installation".

2) **Approved As Noted**.
   The indicated changes and corrections shall be made and the print resubmitted "Certified for Installation".

3) **Returned for Correction**.
   This type of approval means that for some reason the print submitted is not applicable and an explanation will be noted on the print, and the print returned.

The following data must appear on all prints submitted for "Certified for Installation":

1) Purchaser's Name.
2) Purchaser's Order Number.
3) Engineer's Project Number.
4) Purchaser's Equipment Number and/or Motor Number.
5) A statement that the print is certified by the Seller as being correct for the equipment offered and for the Purchaser's application and shall be signed or initialed by the Seller.

The following data must appear on all prints submitted "**Preliminary for Approval**": Same as above except **omit item 5.**

Mailing of Shop Prints: All mailing of prints with transmittal in duplicate shall be mailed to the Superintendent of the AUD F&M Division, 2869 Central Avenue, Augusta, Ga. 30909

Number of prints required:

"**Certified for Installation**"
Process Equipment and Motors - Five (5) prints
Instrumentation - Five (5)prints
Electrical, other than Motors - Five (5) prints

"**Preliminary for Approval**"
Process Equipment and Motors - Five (5) Copies
Instrumentation - Five (5) Copies
Electrical, other than Motors - Five (5) Copies

DISTRIBUTION OF PRINTS TO PURCHASER:

Distribution of items under Paragraph "SHOP PRINTS AND SUBMITTALS" shall be made to the Purchaser by the Engineer.

INSTALLATION MANUALS:

The Seller shall furnish hardback bound manuals complete with the necessary data to design the installation of, and install the equipment furnished. Mail six (6) copies of this manual to the Superintendent of the AUD F&M Division no later than three (3) weeks after receipt of purchase order. (This data may be included and furnished in the manuals required under Item 25, if desired.)

OPERATING INSTRUCTIONS AND MAINTENANCE MANUALS:

The Seller shall furnish hardback bound manuals complete with operating instructions and maintenance data. These manuals shall include necessary detailed parts drawings, parts lists, characteristic curves for pumps and turbines, installation drawings and data, and lubrication in **Page 21.**

The Seller will not begin manufacture, nor permit any subcontractor to do so, until he has received approval of his certified drawings or received a specific release from this requirement by the Purchaser.

FINAL PRICE BREAKDOWN:

The Seller must agree to, and be prepared to furnish, a complete breakdown of his price by major and minor components, per listings and accounting numbers to be furnished by the Purchaser. This breakdown will be components usually sold on the market separately as equipment items but will not be carried so far as a breakdown into components normally sold as parts, i.e., V-belt drives will each carry a separate price and gear reducers will each carry a separate price, but the gears, bearings, casing parts, etc., which comprise the reducers, will not. In general, the breakdown will not be carried so far as to cause a hardship upon the Seller. For the Seller's guidance, a sample breakdown will be furnished in advance, if requested.

ROYALTIES AND PATENTS:

Seller shall indemnify and save Purchaser harmless from and against any claim that any of the equipment or the use thereof infringes upon any International or United States Patent, and at his own cost and expense shall defend any action against Purchaser upon any such claim and pay or secure Purchaser against any judgment in any action, provided that Purchaser shall have given prompt notice of the claim and delivered to Seller all papers received upon the claim or the action in the event of any such claim. Seller shall have the right to, and in the event of any adverse judgment in any such action, it shall, either procure a royalty-free, unconditional license under the patent involved permitting Purchaser to continue use of the equipment, or so change the equipment, without thereby making it unsatisfactory as to performance, that it shall not infringe patent.

RULES AND REGULATIONS COVERING CONTRACTING COMPANIES

WORKING OR VISITING ON PURCHASER'S PROPERTY:

The Seller must comply with the rules and regulations governing contracting companies working or visiting on the Purchaser's property. These rules and regulations or an escort will be furnished to the successful Vendor at the time of the commencement of work or visit.

The work covered by this section of the specifications consists of furnishing all plant, labor, equipment, materials, and appliances and in performing all operations in connection with furnishing, testing, and the initial operation of the Diesel Engine Pump Drives, complete with all appurtenances, in strict accordance with this specification.

Equipment Submittal: The manufacturer shall submit six sets of the following descriptive literature and drawings for all equipment being furnished under this section of the specifications for approval by the AUD F&M Division:

Certified sectional and dimension drawings.

Certified data on all motors furnished giving following information:

-Full load amps.
-Locked rotor amps. Operating design voltage, number of phases.
-Full load rpm.
-Efficiency at full,¾, and½ loads.
-Power factor at full,¾, and½ loads.
-Sound pressure at operating point, DBA.

Equipment, Specifications, Outline Dimension Drawings, Wiring and/or installation Diagrams:

Six sets for each item of equipment being furnished.

Operation and Maintenance Instructions:

Six sets for each item of equipment being furnished

PERFORMANCE REQUIREMENTS:

Service Requirements:	Continuous, 1600 HP minimum.
Rated Capacity:	110 percent maximum HP required from the pump curves at specified speed plus power required by the accessories, fluid coupling, and gear reducer.
Overload Capacity:	110 percent rated capacity for 2 hr. in 24 consecutive hrs.
Maximum Speed:	1,800 RPM

Site Ambient Conditions: The site characteristics are as described in paragraph PROJECT/SITE CONDITIONS.

ARRANGEMENT:

Each engine specified is to be used as the prime mover for the vertical pump. The engine shaft shall be connected to the reducer input shaft with two universal joints and an intermediate shaft. The Mechanical Integrator shall coordinate among the manufacturers of the diesel engine, gear reducer, and the pump manufacturer to confirm and ensure the compatibility of these components including, but not limited to, the proper fit of engine and reducer shafts, the interaction of major components, and control of safety and alarm signals. Fuel for each engine shall be supplied by an individual day tank located near the engine and in accordance with NFPA 37. Fuel oil will be pumped to day tank from outside storage tanks. A cooling system shall be used to maintain engine and lubricating temperatures at the temperatures recommended by the manufacturer. A starting system shall be furnished along with necessary accessories for engine start-up. Each engine shall have a completely independent lubrication and pre-lubrication system with an engine-driven primary pump. Manufacturer shall provide means and method by which the engine is engaged and disengaged by the gear box and be capable of automatic operation.

STANDARD PRODUCTS:

Materials and equipment comprising the engine drive system shall be the standard products of manufacturers regularly engaged in the production of diesel engine pump drives and shall essentially duplicate products which have been used satisfactorily for at least five years prior to bid opening. An offer proposing an experimental engine, one having a lesser or greater number of cylinders than the offerors' standard production engines, or one without a demonstrated satisfactory service record as a full diesel engine operating not less than 1,200 hr. a year at not less than rated load, will be rejected. All products shall be new.

The offeror shall have a maintenance operation, fully staffed, within 200 miles of the job site.

Nameplates:

Each major component shall have the manufacturer's name, address, type or style, model or serial number, and catalog number on a plate secured to the equipment. As a minimum, nameplates shall be provided for the following items:

Engines
Pumps and pump motors Radiators
Heaters
Exhaust mufflers Heat exchangers Day tanks Electric Motors

Personal Safety Devices:

Exposed moving parts, parts that produce high operating temperatures, parts which may be electrically energized, and parts that may be a hazard to operating personnel shall be insulated, fully enclosed, guarded, or fitted with other types of safety devices. The safety devices shall be installed so that proper operation of the equipment is not impaired.

SUBMITTALS:

Shop Drawings:
Layout and Shop Drawings
Installation

Submit six (6) Layout and shop drawings as specified.

Product Data:

Diesel Engine Cooling System.

Submit equipment and performance data certifying that the engine and cooling system function properly in the ambient temperature specified and provide the following design and performance data:

- **a.** The maximum allowable inlet temperature of the cooling water.
- **b.** The minimum allowable inlet temperature of the cooling water.
- **c.** The maximum allowable temperature rise in the coolant fluid through the engine.
- **d.** The magnitude *of* monitored values defining alarm or action set points, and the tolerance (plus and minus) at which the protective device activates and deactivates the alarm or action.
- **e.** The minimum allowable inlet fuel temperature.

Submit manufacturer's standard catalog data including a description and depiction *of* each engine and all ancillary equipment in sufficient detail to demonstrate complete specification compliance. If standard catalog data does not contain sufficient detail to verify compliance, then the manufacturer shall submit supplementary support documentation to verify compliance. All data submitted shall be on the engine manufacturer's letterhead and signed by a representative or official of the manufacturer authorized to make technical representations *of* his company's products.

Dynamic Analysis of Engine, Pump, and Governor:

Submit dynamic analysis with supporting calculations.

Onsite Training:

Submit a letter for conducting the onsite training course, the agenda *of* instruction, a description *of* the video taping service to be provided, and the kind and quality *of* the tape. A Mechanical Integrator will coordinate a date for the training with manufacturer.

Manufacturer's Published Instructions:

Submit posted instructions, including wiring and control diagrams showing the key mechanical and electrical control elements and a complete layout *of* the entire system. The instruction set shall be weatherproof, laminated in plastic, framed, and posted at a location as directed.

Field Engineer:

Submit certification that the field engineer is qualified to perform the specified functions.

Diesel Engine Pump Drive:

Submit written documentation that the products being supplied are appropriate for this diesel engine pump drive based on existing on-site operations, include past performance of the drive on certain types of service, i.e., marine generators, pump drives, locomotives, metal shredders, etc., with a minimum operation of 2,000 hr. per year of service with a minimum of 5 years of qualifying service. The certification of the unit's speed, horsepower, and duty rating that forms the basis of the qualifying experience is required for acceptance and shall be within 30 percent of these drives' ratings.

Installation:

Submit a copy of the manufacturer's installation and alignment procedures, including a detailed description of the manufacturer's recommended break-in procedure.

Test Reports:

Engine:

Submit a fully documented shop test report.
Submit the field test report, documenting all data for lubrication oil temperature and flow, cooling water temperature and flow, and compliance with specified performance criteria tested during the field tests.

Certificates:
Pressure Vessels:

Submit certificates of compliance for pressure vessels including official, signed statements from the fabricators of heat exchangers and expansion tanks associated with the engine cooling system certifying compliance with ASME BPVC SEC VIII 01.

Regulatory Requirements:

Submit certificates of compliance for equipment including official, signed statements from manufacturers. The statements shall certify the item and quantity supplied and the date of shipment.

Operation and Maintenance Data:

Diesel Engine:
Submit an Operation and Maintenance Manual detailing start-up and operating procedures, lubrication instructions, installation and alignment procedures, routine maintenance requirements and procedures,

complete detailed procedures for disassembly and reassembly of the engine, parts list for all parts detailed, assembly plans of the engine showing all parts, suppliers for all parts, settings and adjustment for protective devices, and a list of all tools, handling devices and spare parts furnished.

REGULATORY REQUIREMENTS:

Design fabrication of the equipment shall conform to the specified and applicable national, state, and local codes. Documentation for conformance shall be submitted according to paragraph SUBMITTALS.

DELIVERY, STORAGE, AND HANDLING:

Delivery of the materials listed in this specification shall be F.O.B. Augusta, GA.
Material and equipment shall be protected from weather, humidity, temperature variation, dirt, dust, and other contaminants during delivery and storage. Lifting, moving, and storage of the engine shall be per manufacturer's requirements.

Site Environment Criteria:

Maximum Air Temperature Minimum Ambient		115 deg F 10 deg F
Minimum Air Temperature in diesel room		40 deg F
Raw Water Temperature	Max Min	70 deg F 55 deg F
Leaving Cooling Water Temperature	Max	90 deg F
Installation Elevation	140 ft above sea level	

LAYOUT AND SHOP DRAWINGS:

Submit six (6) copies of layout and shop drawings including the following:

Base-mounted equipment, complete with base and all attachments including anchor bolt template and recommended clearances for maintenance and operation.

Complete starting system. Complete fuel system.

Complete cooling system.

Complete intake and exhaust systems.

Layout of relays, breakers, switches, and instrumentation provided and applicable single line and wiring diagrams with a written description of the sequence of operation.

Lubrication system is complete including piping, pumps, strainers, filters, heat exchangers for lube oil and turbocharger cooling, electric heater, controls, and wiring.

Location, type, and description of engine and rail mounting devices for all applications.

The safety system, together with a detailed description of its operation. Wiring schematics, safety devices with a listing of their normal ranges, alarm and shutdown valves (to include operation parameters such as pressures, temperatures, voltages, currents, and speeds) shall be included.

Layout of the engine control panel and alarm panel.

Mounting and support for each panel and major piece of electrical equipment.

Engine lifting points and rigging instructions.

Alignment information for the engine, gear box and pump specifying sequences, tolerances, and temperature change effects.

MAINTENANCE:

Spare Parts for Maintenance:

The following minimum spare parts shall be furnished when applicable to the type of engine proposed.

1 Complete fuel injector nozzle assembly and fuel injector pump assembly
1 Complete gaskets set for one engine
3 Refills, with storage box, for all lubricating oil filters for each engine.
3 Refills, with storage box, for all fuel oil filters for each engine
1 spare lubricating oil circulating pump assembly 1 jacket water pump
1 Pre-lube oil pump and motor assembly
1 Pressure transducers in sufficient quantity to supply all engines.

SPECIAL TOOLS FOR MAINTENANCE:

One complete set of special tools required for maintenance shall be provided. Special tools are those that only the manufacturer provides for special purposes or to reach otherwise inaccessible parts. The tools shall be supplied complete with a rigid metal toolbox.

MATERIALS AND EQUIPMENT:

Filter Elements:

Fuel-oil, lubricating-oil, and combustion-air filter elements shall be the manufacturer's standard type and be able to filter out particles down to a 25-to-40-micron size unless otherwise noted.
Pipe (150 psi System and Under):

Pipe for sleeves, fuel/lube-oil, compressed air, coolant, exhaust, and miscellaneous uses shall comply with ASTM A 53/A 53M, or ASTM A steel pipe. Pipe smaller than 2 inches shall be Schedule 80. Pipe 2 inch and larger shall be Schedule 40.

Flanges and flanged fittings: ASTM A 181/A 181M, Class 150, or ASME B16.5.
Pipe welding fittings: ASTM A 234/A 234M, Grade WPB or WPC, Class 150 or ASME B16.11, 3,000 lbs.
Threaded fittings: ASME B16.3, Class 150. Valves: Class 150.
Gaskets: manufacturer's standard.

Temperature Gauges for Oil or Water Service:

Manufacturer's standard flush-mounted, 4-inch minimum diameter dial size with standard operating point at 50 percent of the full gauge range. Gauge construction and materials shall be appropriate for the intended service.

Pressure Gauges:

Manufacturer's standard flush mounted, 4-inch minimum dial diameter with standard operating point at 50 percent of the full gauge range. Gauge construction and materials shall be appropriate for the intended service.

DIESEL ENGINE:

The engine should be a 16 Cylinder 1600 HP 1800 RPM Continuous Running Heavy Duty Stationary Diesel Engine and Clutch for operation of a Vertical Turbine Pump. The engine shall be turbocharged-aftercooled.

The engine rating shall be as specified in paragraph PERFORMANCE REQUIREMENTS. The engine shall be of the vee, piston type with a solid cast block or individually cast cylinders. Engines shall be current models of a type in regular production and shall be complete with all devices specified or normally furnished with the engine.

Fuel Consumption:

Engine fuel consumption shall not exceed the following maximum limits based on the conditions listed below:

SIZE RANGE NET HP	1,000-2,500
PERCENT OF RATED FULL LOAD	75-100
FUEL USAGE Gallons/HP-HR	0.400

Conditions:

19,350 BTU per pound heat value for fuel.
Sea level operation.
Intake air temperature not over 90 deg. F.
Intake air barometer pressure not less than 28.25 inch of mercury.

Crankcase Pressure Relief Valve:

A pressure relief valve shall be provided in the crankcase. The crankcase shall be vented in accordance with the manufacturer's recommendations, except the engine exhaust shall not be used as the venting system. Crankcase breathers, if provided on engines installed in a building or enclosure, shall be piped to vent to the outside.

Crankcase breathers using the venturi effect of the exhaust system will be allowed only when designed, installed, and provided directly from the engine manufacturer. Otherwise, the crankcase shall be vented to the outside and fitted with a goose neck to prevent rain entry.

FUEL SYSTEM:

The fuel system for each engine shall conform to requirements of NFPA 30 and NFPA 37. The fuel system shall include the following items.

Fuel Pump:

Each engine shall be provided with an engine-driven, positive displacement engine fuel pump. The pump shall have the capacity to transfer fuel from the day tank at a rate in excess of maximum fuel consumption stated in paragraph FUEL CONSUMPTION, as well as supplying adequate pressure for the fuel injectors.

Each engine shall be provided with a fuel solenoid shutoff wired to a shutdown system and a fuel pressure regulator supplied by the engine manufacturer to control the fuel over air mixture to the engine

Filter:

A minimum of one duplex filter with a trans-flow change-over valve shall be supplied for each engine. The filter shall have inlet and outlet connections plainly marked. An indicating differential pressure gauge shall be provided across the filter. The filter shall be located on the inlet side of the fuel pump. The filter shall be capable of filtering out particles down to 25-micron size.

Strainer:

A full flow strainer of the replaceable cartridge type shall be provided between the engine and the fuel tank, upstream of the duplex filter. An indicating differential pressure gauge shall be provided for upstream and downstream of the strainer. The strainer cartridge shall be capable of filtering out particles down to 125-micron size.

Fuel Cooler:

A fuel Cooler is required for this engine to maintain the fuel temperature in tolerances of manufactures fuel Temperatures.

Safety Bypass Valve:

A safety bypass valve shall be provided next to the pump isolation valve to prevent the buildup of excessive pressures if the discharge line or fuel pump filters become clogged. This bypass shall protect the fuel piping from over-pressurizing and will relieve it at a safe pressure. The bypass valve relief line shall return the fuel to the engine day tank.

Day Tank:

Each engine shall be provided with a day tank located next to the engine. Each day tank shall be fitted with a fuel supply line, fuel return line, local fuel fill port, direct reading liquid level indicator, vent, fill limit float switch assembly for automatic control of the fuel oil transfer pump if provided, alarm level sensing device, and a drain line. A fuel return line cooler shall be provided, if recommended by the engine manufacturer. Each day tank shall have a 200-gal capacity.

Drain Line:

Each day tank drain line shall be equipped with a shutoff valve and be arranged to allow drainage into 220 liter 55 gal drums.

Local Fuel Fill:

Each local fill port shall have a screw-on cap. An air vent with brass screen shall be provided so that the day tank does not develop a vacuum leading to the collapse of the day tank as the system empties.

Fuel Level Limit Devices:

Each day tank shall be provided with a fill level float switch assembly device to:

Initiate refueling of the day tank at the low-level mark, (e.g., 30 percent volume remaining). Stop refueling of the day tank at the high-level mark, (e.g., 90 percent volume).

Redundant Fuel Shutoff:

To stop fuel flow to the day tank, an automatic shutoff valve shall be provided on the fill line of the day tank and an automatic safety device shall be provided to stop the pump supplying fuel to the day tank. The valve and the safety device shall be activated at the overfill level as defined in paragraph SAFETY SYSTEM and shall respond before any fuel is forced out of the fuel overflow line.

Arrangement:

The day tank shall be positioned and arranged so that fuel level in the day tank at the day tank empty level is above the suction port of the engine-driven fuel pump. The day tank overflow connection shall be positioned and arranged so that the highest possible fuel level in the day tank is below the fuel injectors. The fuel supply line from the day tank to the engine connections shall be welded steel pipe. A water drain shall be provided at the low point of the day tank.

LUBRICATION:

Each engine shall have a separate lube-oil system conforming to NFPA 30 and NFPA 37. Each system shall be pressurized by engine-driven pumps. The system pressure shall be adjustable and regulated as recommended by the engine manufacturer. A sump tank shall be furnished as required. The lube-oil pump shall draw oil from the oil pan or sump tank through a mesh intake strainer and force it through a lubricating oil cooler and a single or duplex full-flow strainer into the engine. The pump shall be protected by a relief valve to bypass the oil into sump. A portion of the oil from the sump shall be bypassed through a lubricating oil filter and back into the engine oil pan or sump. The lubricating oil temperature shall be regulated by means of an automatic

temperature regulator which will control the amount of bypass oil around the cooler. The system shall be readily accessible for service such as draining or refilling. Each system shall permit the addition of oil and have oil-level indication with the set operating.

Pump Filters:

One full-flow, duplex, 80-micron filter shall be provided for each pump. The filter shall be readily accessible and capable of being changed without disconnecting the piping or disturbing other components. The filter shall have inlet and outlet connections plainly marked. An indicating differential pressure gauge shall be provided across the filter.

Lube-Oil Sensors:

Each engine shall be equipped with lube-oil temperature and pressure sensors. Temperature sensors shall provide signals for pre-high and high lube-oil indication and alarms. Pressure sensors shall be located downstream of the filters and provide signals for pre-low and low lube- oil indication and alarms.

Lubricating Oil Strainer:

A full-flow oil strainer shall be furnished in-line, ahead of the engine. The strainer shall be as recommended by the engine manufacturer. A bottom drain plug shall allow easy removal of the sludge.

Pre-Lubrication Oil Pump:

The pre-lubricating oil pump shall have a capacity and head rating as recommended by the engine manufacturer. The pump shall incorporate a built-in relief valve and be directly connected to an electric motor with the motor-pump assembly mounted on a common case iron or steel base. The pump shall be furnished completely and ready for operation with all controls included. The pre-lubrication pump shall completely fill the engine oil lines and establish lubricating oil pressure prior to starting. The pump motor shall be in accordance with the requirements of paragraph MOTORS.

COOLING SYSTEM:

Each engine shall have its own cooling system. The system shall be of the closed type and operate automatically while the engine is running.

The cooling system shall have an engine-driven water pump, shell-tube heat exchanger, expansion tank, and an automatic temperature regulating valve. The maximum temperature rise of the coolant across each engine shall not exceed the engine manufacturer's recommendation as submitted in paragraph SUBMITTALS.

The engine cooling system shall be of the closed type arranged to prevent rust and minimize formation of scale deposits within the engine. The system shall circulate jacket-coolant through the engine at the temperature and flow rate recommended by the engine manufacturer. The coolant shall be an ethylene-glycol water mixture with a concentration sufficient for freeze and corrosion protection. The maximum temperature rise of the coolant shall be no more than that recommended and submitted in paragraph SUBMITTALS.

Coolant Pumps:

Engine-driven jacket water pumps shall be of the centrifugal type. Each engine shall have an engine-driven primary pump. Secondary pumps shall be electric motor driven and have automatic controllers. The pump shall be a bronze fitted, single stage type with removable seal rings and stuffing box and properly sized for the intended purpose.

Shell and Tube Heat Exchanger:

The heat exchanger shall be a multiple pass shell type with removable U-tube bundles to facilitate cleaning and retubing. The heat exchanger shall be of sufficient capacity to cool the engine with 75 deg. F input cooling water. The raw water leaving the heat exchanger shall not exceed 90 deg. F. The heat exchanger shall operate with low temperature water in the shell and high temperature coolant in the tubes. Exchangers shall be constructed in accordance with requirements of ASME BPVC SEC VIII D1 and certified with an ASME stamp secured to the heat exchanger. Shells shall be constructed with seamless steel, welded steel, or cast iron. Tubes shall be either cupronickel or inhibited admiralty, meeting requirements of ASTM B 395/B 395M, suitable for the

temperature and pressure specified. Tube length shall be 50% longer than clean predicted performance to account for fouling on the raw water side. The shell side and tube side of the heat exchanger shall be designed for 200 psig working pressure and factory tested at 300 psig. High temperature, low temperature, and pressure relief connections shall be located in accordance with the manufacturer's standard practice. Coolant pressure loss through clean tubes shall be as recommended by the engine manufacturer. Minimum coolant velocity through the tubes shall be at least 12 inch/sec and sufficient to assure turbulent flow. One or more pressure relief valves shall be provided for each heat exchanger in accordance with ASME BPVC SEC VIII D1. A drain connection with a ¾ inch hose bib connection shall be installed at the lowest point in the system near the heat exchanger.

Thermostatic Control Valve:

A modulating type, thermostatic control valve shall be provided in the coolant system to maintain the engine coolant temperature in the range submitted in paragraph SUBMITTALS.

Temperature Sensors:

Each engine shall be equipped with coolant temperature sensors. Temperature sensors shall provide signals for pre-high and high-coolant temperature indication and alarms.

Expansion Tank:

An expansion tank of not less than 12 gal or not smaller than 20% of the total coolant volume in the system shall be furnished for each engine. The tank shall be properly fitted for vent, overflow, expansion, and make-up lines. The tank shall be suitable for an operating temperature of 250 degrees F and a working pressure of 125 psig. The tank shall be constructed of welded steel, hot-dipped galvanized inside and outside after fabrication, tested, and stamped in accordance with ASME BPVC SEC VIII 01 and registered with the National Board of Boiler and Pressure Vessel Inspectors. The tank shall be mounted so that the bottom of the tank is above the top of the engine. The tank shall be supported by steel legs or bases for vertical installations or steel saddles for horizontal installation.

FLUID COUPLING:

Provide Trans-fluid drain type fluid coupling by Kraft Power to match existing on pump with the following features:

Model	29KPTB/S
Application	Water Pump Start Up Drive
Engine Cummins	KTA 50 or Equal
Engine Horsepower and RPM	1600 H.P. 1800 RPM
Engine Flywheel and Housing	S.A.E. 00-21"
Pump HP Demand	1500 H.P.
Oil Type	ISO32
Oil Quantity	142 liters
Slip at Full Load	2.5% Maximum
Temp Thermocouple with Transmitter	4-20Ma
Quick Release Valves	
Modulating valve for heat exchanger	
Pressure Transmitter	4-20Ma
Two Sight Gauges	
Oil Feed Pump (Mounted on board)	
Output Speed indicator	4-20Ma
Oil Filter	
On/Off Valve	
US type Fittings	

Oil/Water cooler BCF08060-032 (or similar)

- Fresh water 75 Deg. F.

- Water flow 147lt/min
- Maximum discharge temperature 90 Deg. F.
- Input flexible coupling elastic coupling Arcusaflex AC 11.SN.F2K.21 complete with hub, mounted on input shaft of KPTB

SPECIAL LIMITATIONS:

Vibration Isolation:

The maximum engine vibration in the horizontal, vertical, and axial directions shall be limited to 6 mils peak- RMS, with an overall velocity limit of 0.95 inch/sec RMS. A vibration-isolation system shall be installed between the floor and the base. The vibration-isolation system shall limit the maximum vibration transmitted to the floor. The engine shall be provided with a vibration-isolation system in accordance with the manufacturer's standard practice. Vibration-isolation systems shall be designed and qualified as an integral part of the base and mounting system.

AIR INTAKE EQUIPMENT:

Filters and silencers should be provided in locations that are convenient for servicing. The silencer shall be of the high-frequency filter type, located in the air intake system as recommended by the engine manufacturer. A combined filter silencer unit meeting requirements for the separate filter and silencer items may be provided. Expansion elements in air-intake lines shall be copper.

EXHAUST SYSTEM:

The system shall be separate and complete for each engine. Exhaust piping shall be supported to minimize vibration. Provisions shall be made for pipe thermal expansion. Where a V-type engine having more than one exhaust outlet is provided, a V-type connector, with necessary flexible sections and hardware, shall connect the engine exhaust outlets. The exhaust connectors shall incorporate engine-mating and silencer-mating flanges, eliminating the need for adapters. The silencer shall be capable of reducing the noise level as shown below.

Center Frequency HZ Octane Band						
63 125 250	500	1000	2000	4000	8000	
Insertion						
24 29 37 41	41	38	37	36		
Loss						
DB						

RE 0.0002 microbars
Silencer insertion loss shall not be less than indicated above.

A flexible section shall be provided at each engine and an expansion joint at each muffler. Flexible sections and expansion joints shall have flanged connections. Flexible sections shall be multiple-ply stainless steel expansion bellows type with standard 1.5- and 3-inch allowable axial expansion. Elements in the flexible sections shall be capable of absorbing vibration from the engine and compensating for thermal expansion and contraction.

Exhaust Muffler:

A chamber type exhaust muffler shall be provided. The muffler shall be fabricated of welded steel and designed for inside vertical mounting. Eyebolts, lugs, flanges, or other items shall be provided as necessary for support of the muffler in the location and position indicated on the plans. The pressure drop through the muffle shall not exceed the recommendations of the engine manufacturer. Mufflers shall be fabricated from stainless steel. The muffler shall have a drain valve, nipple, and cap at the low point of the muffler. The muffler shall be supplied complete with any necessary soot boxes or inspection ports required for adequate operation and maintenance. The entire exhaust system shall be sized appropriately so that the operation of the engine is not affected by the exhaust system.

Exhaust Piping:

Horizontal sections of the exhaust piping shall be sloped downward away from the engine to a condensate trap and drain valve. Changes in direction shall be made utilizing long-radius fittings. Exhaust piping, mufflers, and silencers shall be insulated with ASTM C 533 calcium silicate insulation, minimum of 3-inch thickness or an appropriate thickness to limit the surface temperature to values below 175 deg. F. Insulation shall be secured with not less than 0.375-inch width Type 304 stainless steel bands spaced no farther apart than 8 inches on center. An aluminum jacket shall have a minimum thickness of 0.016 inch with a factory-applied polyethylene and kraft paper moisture barrier. The jacket shall be secured with not less than 0.5-inch-wide stainless-steel bands, spaced no farther apart than 8 inch on centers. Longitudinal and circumferential seams of the jacket shall be lapped not less than 3 inches. Jackets on horizontal lines shall be installed so that the longitudinal seams are on the bottom side of the pipe. The seams of the jacket for the vertical lines shall be placed on the off-weather side of the pipe. On vertical lines, the circumferential seams of the jacket shall overlap so that the lower edge of each jacket overlaps the upper edge of the jacket below. Vertical exhaust piping shall be provided with a hinged, gravity-operated, self-closing rain cover. When the exhaust pipe exits the building, the pipe will be isolated from the roof by means of thimbles in accordance with NFPA 37.

Pyrometer:

A pyrometer multi-point selector with individual thermocouples and thermocouple with calibrated leads shall be provided to indicate the temperature in each engine cylinder and the combined exhaust. Additional points, thermocouples and leads shall be provided to show the temperature in the turbocharger exhaust gas outlet and combustion air discharge passages. The selector switch shall be double pole, with an off position, one set of points for each thermocouple, and a suitable indicating dial. The pyrometer, thermocouple, leads, and compensating devices shall be calibrated to show true exhaust temperature within one percent above the highest temperature encountered at 110 percent load conditions

Emissions:

The finished installation shall comply with Federal and local regulations and restrictions regarding the limits of emissions such as CO, HC, and Nox, carbon monoxide, hydrocarbon, and nitro's.

STARTING SYSTEM:

Each diesel engine shall be provided with a starting system. The system shall be electric and of sufficient capacity to start the engine at the minimum temperature specified. The system shall have a start-stop switch which provides functions including testing, reset, manual run/start, manual stop, and adjustable cranking and cooling down operation. The starting system shall be the manufacturer's standard equipment.

Electrical Starting System:

An electrical starting system shall be provided to operate on a 24-V DC utilizing a negative circuit ground. An adjustable cranking device should be included to limit the engine cranking to a specified time limit. Starting motors shall be in accordance with SAE ARP892.

Battery:

A starting battery system shall be provided and include the battery, battery rack, intercell connectors, spacers, automatic battery charger with overcurrent protection, metering, and relaying. The battery shall be in accordance with SAE J537. The battery shall be a lead-acid type, with sufficient capacity, at the minimum indoor temperature specified, to provide a minimum cranking cycle consisting of three cranking periods of up to 8 sec per period with 8-sec intervals between crank periods.

BATTERY CHARGER:

A current-limiting battery charger, conforming to UL 1236, shall be provided to automatically recharge the batteries. The charger shall be capable of providing both automatic float charging and equalizing charging of the battery installation. The charger shall be capable of recharging fully depleted batteries within 8 hr. and providing a floating charge rate for maintaining the batteries in a fully charged condition. An ammeter and voltmeter shall

be provided on the charger to indicate charging rate and voltage. The charger shall have alarm functions providing indications of low battery voltage, high battery voltage, and battery charger malfunction.

JACKET-COOLANT HEATERS:

A thermostatically controlled electric heater shall be mounted in the engine coolant jacketing to automatically maintain the coolant within 10 deg of the control temperature. The heater shall operate independently of engine operation so that starting times are minimized, condensation is controlled, and the system ensures dependable, cold weather starts. Power supply for the heaters will be 480 volts AC.

LUBE OIL HEATERS:

A thermostatically controlled electric heater shall be mounted in the engine lube oil storage tank to automatically maintain the lube oil within 10 deg of the control temperature. The heater shall operate independently of engine operation so that starting times are minimized and the system ensures dependable cold weather starts. Heaters shall be selected so that heater skin temperatures do not exceed 300 deg F and have maximum heat densities 13 W/square in. Power supply for heaters will be 480 volts AC.

Provide power contactor(s) as required to interface between thermostat and heaters. Provide a secondary high-lube oil storage tank temperature switch to shut off heaters if temperature rises to 20°F above control temperature thermostat setting.

SAFETY SYSTEM:

Devices, wiring, remote annunciator panels, alarm panels, etc., shall be provided and installed as a complete system to automatically activate the appropriate signals and initiate appropriate safety actions. The safety system shall be provided with a self-test method to verify its operability. Alarm signals shall have manual acknowledgment and reset devices. The alarm signal system shall reactivate for new signals after acknowledgment is given to any signal. The systems shall be dealt with as an alarm on that system element. The remote annunciator panels and alarm panel shall be as specified.

Audible Signal:

The audible alarm signal shall sound at an approximate frequency of 70 Hz at a minimum volume of 100 dB at 10 ft. The sound shall be continuously activated upon alarm and silenced upon acknowledgment. Mechanical Integrator to locate.

Visual Signal:

The visual signal shall be a panel light. The light shall normally be off but activated to blinking upon alarm. The light shall change to continuously lit upon acknowledgment. If automatic shutdown occurs, the display shall remain in an activated status to indicate the cause of failure and shall not be reset until the cause of alarm has been cleared and/or restored to the normal condition. Shutdown alarms shall be amber.

Alarms & Action Logic:

DEEP SEA ELECTRONICS CONTROLLER WITH HARDWARE &SOFTWARE IS REQUIRED.

Integrated controller shutdown signals shall simultaneously activate the audible signal, activate the visual signal, and stop the engine.

Problem:

Problem signals shall be controller integrated and activate the visual signal.

ENGINE INSTRUMENT BOARD/CONTROL PANEL:

The panel as specified herein shall be capable of the operating as specified.

Enclosure:

NEMA 4X Stainless Steel, Floor mounted, door stop, hinged exterior door, and padlocking provisions. All lights, pushbuttons, switches, and instruments shall be visible and operable without opening the hinged exterior door. Instruments shall be mounted flush or semi-flush. Instruments shall be calibrated using recognized industry

calibration standards. Each device on the panel shall be provided with a plate that clearly identifies the device and its function as indicated.

Instruments:

Provide the following instruments on the control panel:

Coolant-fluid inlet temperature display
Lubricating-oil pressure indicator Lubricating-oil inlet temperature display Run-time meter
Fuel meter display
Fuel-header-pressure display Tachometer display
Pyrometer display with selector switch

Indicator Lights:

Provide the following indicator lights on the control panel:

Pre-low lube-oil pressure (110 percent of low lube -oil pressure)
Pre-high coolant fluid temperature indication (10 deg F lower than high coolant-fluid outlet temperature alarm)
Pre-high lube oil temperature indication (10 deg Flower) Day tank empty indication (20 percent volume remaining) Failure to start within the specified time indication
Engine battery voltage-low Engine battery voltage-high
Engine battery charger malfunction Over-crank

Indicator Lights:

Provide the following ALARM indicator lights on the control panel:

Day tank overfill (95 percent volume)
Engine over-speed
High lube-oil temperature Low lube-oil pressure
High coolant fluid outlet temperature

Switches/Push Buttons:

Engine start-stop switches
Fluid coupling switch
Red emergency stop/shutdown engine (mushroom head, maintained contact, push to stop, pull to allow start and run)

Functional Requirements:

The panel shall be suitable for 120 Volt, single phase, 60 Hz power.

Auxiliary Dry Contacts shall be provided for indications for external use as listed below. Contacts shall be provided with both normally open and normally closed logic.
Day tank overfill Engine over-speed
High lube-oil temperature Low lube-oil pressure
High coolant fluid outlet temperature Pre-low lube-oil pressure
Pre-high coolant fluid temperature indication

Pre-high lube oil temperature indication Day tank empty indication
Failure to start within the specified time indication Engine battery voltage-low
Engine battery voltage-high Engine battery charger malfunction Over-crank
Engine run Pump run Main alarm
Flashing alarm light, horn, and auxiliary contacts with test button, horn silence button and reset button. Alarm horn and light shall activate when any alarm condition is activated as defined herein.
Activation of Fluid Coupling Switch will provide indication to pump valve control panel to initiate valve open sequence.
Deactivate fluid coupling upon receipt of pump valve alarm/fault.

Crank case oil pump starter:
Provide panel with starter for crank case oil pump. Provide panel with on/off push button and run indicator light. High level indication from pump out tank will shut down pump.

Time-Delay on Alarms:
For startup of the engine, time-delay devices shall be installed bypassing the low lubricating oil pressure alarm during cranking [and the low coolant-fluid outlet temperature alarm]. The lube-oil time-delay device shall return its alarm to normal status after the engine starts. [The coolant time-delay device shall return its alarm to normal status 5 minutes after the engine starts.]

GOVERNOR:

Each engine shall be provided with a governor to control the rotational speed of the engine in response to changing load requirements. The governor shall be configured for safe manual adjustment of the speed during operation of the engine, without special tools.

Speed Regulating Governor:
The engine governor shall maintain close speed regulation under all load conditions. The speed variation shall not exceed 6 percent of normal speed when full load is suddenly applied or removed. The design of the governor shall be such that the engine speed may be changed by governor adjustment during engine operation to any speed between 80 and 100 percent of the normal speed (corresponding to normal operating pump speeds) within 2 percent. The speed fluctuation at any load shall not exceed 2 percent. A raise/lower speed control shall be mounted on the engine instrument board. The engine fuel rack servomotor shall be suitable for operation from a 120-V AC source.

Emergency Overspeed Governor and Load Limit:
An emergency governor with overspeed trip shall be provided on each engine to shut down the unit should the speed exceed a predetermined RPM. The overspeed trip shall also provide an alarm signal for remote indication. The emergency governor shall be independent of the regulating governor. When the overspeed stop has been tripped, the shutdown mechanisms shall be such that the engine fuel and air supply is prevented in the shortest time practicable from entering the engine cylinders. The trip mechanism may be part of the governor. The engine shall have an overload fuel limit set at 110 percent of the full load specified in paragraph DIESEL ENGINE.

Governor Controls Location:
The governor control shall be located at a point convenient to the location of the engine instrument board as shown on the plans.

BASE:
The base shall be constructed of structural steel. The base shall be designed to rigidly support the engine, ensure permanent alignment of all rotating parts, be arranged to provide easy access to allow changing of lube- oil, and ensure that alignment is maintained during shipping and normal operation. The base shall not permit skidding in any direction during installation and shall withstand and mitigate the effects of synchronous vibration of the engine and pump. The base shall be provided with (suitable holes for anchor bolts).

MOTORS:
Electric motors shall conform to the requirements of NEMA MG 1. Motors shall have sealed ball bearings and a maximum speed of 1,800 rpm. Motors shall have TEFC frames; alternating current motors larger than 1/2 Hp shall be of the squirrel-cage induction type for operation on 120 V, 60 Hz, three-phase AC power. Alternating current motors (1/2 Hp) or smaller, shall be suitable for operation on 480 V, 60 Hz, single- phase, AC power. Direct current motors shall be suitable for operation on 125 V DC. Motor controllers and starters shall conform to the requirements of NFPA 70 and NEMA ICS 2.

PAINTING:

The engine and the accessory equipment including, but not limited to, panels, valves, piping, intake, and exhaust system components shall be cleaned, primed, and painted in accordance with the manufacturer's standard color and practice.

FACTORY INSPECTION AND TESTS:

Prior to shipment, each engine shall be inspected and tested at the factory in the presence of the Owner's authorized representative. The inspection shall cover all components including, but not limited to, governors, instrumentation panels, engine starting system, intake and exhaust, lubrication system, cooling system, and fuel system. Inspection shall be completed, and all necessary repairs made prior to testing. The following factory tests shall be performed:

Simulated emergency or overspeed trip test. Sustained operation test of 4 hr. at rated full load.
Sustained operation test *of* 2 hr. at 70 percent of rated full load.
Fuel consumption tests of not less than 1 hr. each at 70 and 100 percent rated full load, respectively, using the type *of* diesel fuel specified.

The engine shall be operated at no load to demonstrate that the governor and its associated engine manifold shutoff valve function properly.

Test data shall be taken at 30-min intervals and recorded on the manufacturer's diesel engine test data sheets. The test data sheets shall provide entries for all data required for the evaluation of diesel engine performance including noise and vibration. The test data shall be submitted for approval as required in paragraph SUBMITTALS. No engine shall be shipped until the test data has been approved by the Engineer.

INSTALLATION:

The installation of the equipment furnished under this section and related pumps and gear reducers under other sections shall be coordinated and installed in accordance with the approved installation procedures specified and submitted per the requirements of paragraph SUBMITTALS.

Onsite Inspection and Tests:

The tests outlined in the subsequent subparagraphs shall be performed after complete installation of each engine and its associated equipment and accordance with the approved Dynamic Analysis of Engine, Pump, and Governor. Data taken during runs shall be recorded at 30-min intervals and shall include all available pressure and temperature data which is monitored by the instrumentation furnished with the engine.

Mechanical Integrator Supplied:

The Mechanical Integrator shall provide all equipment and supplies required for the inspections and tests including fuel and test instruments.

Instruments:

Readings of panel gauges, meters, displays, instruments, etc. provided under the specification shall be verified during all test runs by test instruments of greater precision and accuracy than the operational equipment. Instruments used in the tests shall be calibrated by a recognized standards laboratory within 30 days prior to testing.

Sequence:

The tests shall follow the sequence outlined in subsequent paragraphs. Measurements shall be made and recorded of all parameters necessary to verify that each engine meets specified parameters. If the results any of the test sequences are not satisfactory, adjustments or replacements shall be made, and the test sequence repeated until satisfactory results are obtained.

Piping Test:

Lube-oil and fuel-oil piping shall be flushed with the same type of fluid intended to flow through the piping, until the out-flowing fluid is free of obvious sediment and emulsions.

The lube oil, fuel-oil and coolant piping shall be hydrostatically pressure tested at 150 percent of the maximum anticipated working pressure, but in no case less than 150 psig for a period of 2 hr. to demonstrate the piping has no leaks. If piping is to be insulated, the test shall be performed before the insulation is applied.

Initial Inspection:

Correct functioning of the high and pre-high lubricating oil temperature circuit shall be demonstrated by removing the temperature-sensing elements from the engine and immersing the elements in a vessel containing controlled-temperature hot oil, recording the temperature at which the elements activate.

Correct functioning of the high and pre-high coolant-fluid outlet temperature circuit shall be demonstrated by removing the temperature-sensing elements of the circuit from the engine and immersing the elements in a vessel containing controlled-temperature hot coolant-fluid and recording the temperature at which the elements activate.

Electric Protective Device Tests:

Protective devices shall be visually and mechanically inspected, adjusted, tested, and calibrated in accordance with the manufacturer's published instructions. Device ratings, settings, and other operational data shall be documented.

Safety Run Test:

The safety run test consists of the following sequence of tests:

The engine shall be started, the starting time recorded, and all of the engine manufacturers recommended after-starting checks and inspections performed following a reasonable warm-up period.

The engine shall be operated for at least 2 hr. at 75 percent rated speed. Proper operation of all controls shall be verified.

Proper operation and set points of all gauges and instruments shall be verified. Setpoints shall be recorded.

Proper operation of all ancillary equipment shall be verified.

The manual emergency stop switch shall be activated and the time to stop the engine recorded.

The engine shall be started, the starting time recorded, the engine manufacturer's after-starting checks and inspections performed and recorded, and the engine operated for at least 15 min at 75 percent of rated speed.

The governor shall be manually adjusted to increase engine speed past the overspeed limit. The engine RPM at shutdown shall be recorded.

The day tank shall be manually filled to a level above the overfill limit. The level at which the overfill alarm activates shall be recorded. Shutdown of the fuel transfer pump shall be verified. The day tank shall be drained below the overfill limit following the test.

The time-delay low-lube oil pressure alarm bypass shall be temporarily removed from the engine safety circuits and an attempt made to start the engine. The results shall be recorded.

A manifold shall be attached to the engine oil system containing a shutoff valve in series with a connection for the engine's oil pressure sensor, followed by an oil pressure gauge, ending in a bleed valve. The oil pressure sensor shall be moved from the engine to the manifold and its normal location on the engine temporarily sealed.

The manifold shutoff valve shall be placed in the open position and the bleed valve closed.

The engine shall be started, the starting time recorded, the engine manufacturer's after-starting checks and inspections performed and recorded, and the engine operated for at least 15 min at 75 percent of rated speed.

The manifold shutoff valve shall be closed. The pressure in the manifold shall be slowly bled off through the bleed valve while observing the pressure gauge. The pressure at which the engine shuts down shall be recorded.

The oil spillage from the bleed valve shall be captured in a container. The oil system shall be refilled, the manifold removed, and the engine's oil pressure sensor reinstalled on the engine following the test.

The engine shall be started, the starting time recorded, the engine manufacturer's after-starting checks and inspections performed and recorded, and the engine operated for at least 15 min at 100 percent of rated speed.

The maximum sound level in each frequency band at a distance of 75 ft from the end of the exhaust piping directly along the path of discharge for horizontally discharged exhausts shall be recorded. The maximum sound level in each frequency band at a distance of 75 ft from the silencer at 45 deg apart in all directions around the unit shall be recorded.

The fuel from the day tank shall be slowly drained to lower the fuel level below the no fuel level limit and the level at which the audible alarm sounds recorded. The fuel shall be added back to the day tank, filling it above the low-level alarm limit following the test.

Final Inspection:

The lube-oil filter shall be removed, and the oil and filter examined by the engine manufacturer for excessive metal, abrasive foreign particles, and other indications of engine distress. Any corrective actions shall be verified for effectiveness by running the engine for 8 hr. at full rated speed, then re-examining the oil and filter.
The engine shall be inspected, and all engine mounting bolts checked for tightness and visible damage.

Manufacturer's Field Servicer:

Onsite Training:

The Mechanical Integrator shall conduct training courses for the plant operating staff as designated by the Engineer. The training period shall consist of a total of 40 hr. of normal working time and shall commence after the system is functionally completed, but prior to final acceptance. The course instructions shall cover pertinent points involved in operating, starting, stopping, and servicing the equipment, as well as all major elements addressed in the operations and maintenance manuals. Additionally, the course shall include demonstrations and instruction in all routine maintenance operations including oil change, oil filter change, air filter change, etc. Two copies of digital DVD format video media of the entire training session shall be submitted.

Field Engineer:

The manufacturer shall furnish a qualified engineer to supervise the complete installation of the engine, assist in performance of the onsite tests, and instruct personnel regarding operational and maintenance features of the equipment.

Acceptance:

Final acceptance of the engine will not be made until the Mechanical Integrator has successfully completed all tests, corrected all defects in installation material and installation procedures, and all deficiencies identified in on-site testing or routine operation have been corrected

PRICE SHEET

The awarded firm proposes to undertake the referenced project per locations as listed above and as is shown in this Invitation for Bids and all exhibits, at the following quoted lump sum prices to include but not limited to labor, parts, materials, supplies, equipment, and clean-up.

Lump Sum:

$_____

Dollars ($_____)

Make: _____ Model: _____

BID SUBMITTED BY:

NAME: _____

COMPANY: _____

ADDRESS: _____

CITY/STATE: _____

TELEPHONE: _____

FAX: _____ EMAIL: _____

SIGNATURE: _____

By signing this document, the bidder is stating that he is, or she is not an employee of Augusta, Georgia.

AUGUSTA RESERVES THE RIGHT TO REJECT ANY AND ALL BIDS

THIS FORM MUST BE RETURNED WITH YOUR SUBMITTAL

Minority and Woman Owned Business Enterprise Program (M/WBE) Goal Waiver

The Minority and Woman Owned Business Enterprise Program (M/WBE) provides for goals to be set for Minorities and Women on all applicable Augusta, Georgia procurements over $300,000 in value.

After careful review of the specific work categories available on this procurement and a review of the MBE and WBE firms available to perform a CUF on this procurement, the Goal Setting Committee has determined that neither a MBE nor WBE goal could be placed on this procurement. **As such, the M/WBE Waiver applies** and therefore, the M/WBE goal for this procurement is:

0 %

As a result of the M/WBE Goal on this procurement being ZERO, no M/WBE goal documents are required as a part of the procurement process. However, even when a solicitation does not contain a M/WBE goal (or the goal is set at zero), each Bidder must negotiate in good faith with each minority and woman owned business that responds to the Bidder's solicitation and each minority and woman owned business that contacts the Bidder on its own accord. All successful bidders are required to collect and maintain all records necessary for Augusta to evaluate the effectiveness of its M/WBE Program.

NO RESPONSE LETTER

Please submit Response by due date

Bid Item #25-223A	**New Diesel Engine for #8 RWPS**	**Due: Wednesday, November 19, 2025 @ 11:00 a.m.**

To: **Augusta, Georgia - Procurement Department**

This is to certify that _____, will not be submitting a response to the above referenced solicitation document prepared by Augusta Procurement Department.

Reason(s) for No Submission:

___ Unavailability of required resources

___ Prior commitments

___ Inadequate anticipated funding Level

___ Project Duration

___ Potential conflict of interest

___ Duplication of ongoing effort

___ Other (please explain)

_____

_____

Authorized Representative:

Name: _____

Title: _____

Signature: _____

Date: _____/ _____/ 20____