



CITY OF SUFFOLK

Purchasing Division

P.O. Box 1858, Suffolk, VA 23439-1858; TEL: (757) 514-7520; Fax (757) 514-7524

INVITATION FOR BID

TITLE: **6" Trailer Mounted Trash Pumps**

ACCEPTANCE DATE: Prior to 3:00 p.m., November 27, 2012, Prevailing EST.

IFB NUMBER: 2013-00056-MC

ACCEPTANCE PLACE: Finance Department, Purchasing Division, Room 105
441 Market Street
Suffolk, Virginia 23434

BID OPENING LOCATION: Purchasing Conference Room
441 Market St., Room 105

Requests for information related to this Invitation should be directed to:

Michael Coburn, Sr., CPPO
(757) 514-7523
Email address: mcoburn@suffolkva.us

This document can be downloaded from our web site: www.suffolk.va.us

Issue Date: November 8, 2012

IF YOU NEED ANY REASONABLE ACCOMMODATION FOR ANY TYPE OF DISABILITY IN ORDER TO PARTICIPATE IN THIS PROCUREMENT, PLEASE CONTACT THIS DIVISION AS SOON AS POSSIBLE.

If you have obtained this bid document from the City's website or a source other than the City of Suffolk, contact the Purchasing Division prior to submitting your bid to ensure that a complete up-to-date package has been received. The Purchasing Division is not responsible for providing addenda if the vendor is not listed as a prospective bidder.

1.0 PURPOSE

The intent of this Invitation for Bid is to obtain competitive bids for the purchase of Five new, (1) CD150M, (4) HL80M, trailer mounted trash pumps in accordance with all specifications, terms, and conditions herein.

2.0 COMPETITION INTENDED

It is the City's intent that this Invitation for Bid (IFB) permits competition. It shall be the bidder's responsibility to advise the Purchasing Agent in writing if any language requirement, specification, etc., or any combination thereof, inadvertently restricts or limits the requirements stated in this IFB to a single source. Such notification must be received by the Purchasing Agent not later than five days prior to the date set for bids to close.

4.0 INSTRUCTIONS TO BIDDERS

4.1 Submission of Bids

Pricing must be submitted on the Invitation for Bid pricing form only; failure to submit a bid on the official City form provided for that purpose shall be a cause for rejection of the bid. Include other information as requested or required. All bids shall be submitted in a sealed envelope and properly identified with the IFB number, IFB name and time and date of opening. Bids must be received by the Purchasing Division no later than the time specified on the opening date.

Bids may be mailed to City of Suffolk, Purchasing Division, P.O. Box 1858, Suffolk, VA 23439 or hand delivered to 441 Market Street, Room 105, Suffolk, Virginia 23434. Faxed and e-mailed bids shall not be accepted. It is the bidder's responsibility to ensure the bid is received prior to the bid acceptance time. It is the bidder's responsibility to ensure the bid is received prior to the bid acceptance time. The Bid may not be changed by markings on the envelope. Only the amounts indicated on the BID Form will be considered in determining the final Bid amount.

4.2 City Contacts

Questions related to bid submittals should be directed to:

Michael Coburn, Sr., CPPO
(757) 514-7523
mcoburn@suffolkva.us

Mr. Coburn is the authorized contracting officer for the City of Suffolk with respect to this IFB. All questions should be directed to the contracting officer's attention. The respondents to this IFB shall not contact, either directly or indirectly, any other employee or agent of the City regarding this IFB. This prohibition shall also extend to the Suffolk City Council and locally elected officials. Any such unauthorized contact may disqualify the bidder from this procurement.

4.3 Firm Pricing

Bid price must be firm for City acceptance for ninety (90) days from bid opening date.

4.4 Pricing to be F.O.B. Destination – Freight Included

Pricing shall be F.O.B. destination-freight included for all competitive bids. F.O.B. Destination-Freight Included shall include all shipping costs to the City location(s) at the unit cost. No additional shipping charges shall be allowed.

4.5 Unit Price

Bid unit price on quantity specified – extend and show total. In case of errors in extension, unit prices shall govern. Bids subject to unlimited price increases will not be considered.

4.6 Silence of Specifications

The apparent silence of these specifications and any supplemental specifications as to any detail or the omission from the specifications of a detailed description concerning any point shall be regarded as meaning that only the best commercial practices are to prevail and correct type, size and design are to be used. All interpretations of these specifications shall be made on the basis of this statement

4.7 Authority to Bind Firm in Contract

Bids must include full legal firm name and address of bidder. Failure to manually sign bid may disqualify it. Person signing bid should show Title or Authority to bind the firm in a Contract.

4.8 Withdrawal of Bids

Bids may be withdrawn any time prior to the bid opening. Withdrawal of bids may be accomplished by submitting such request in writing on the issuing company's letterhead either in person or by certified mail. No bids may be withdrawn after the established bid opening date or time, unless the purchaser has extended the opening date.

Bidders have the right to request withdrawal of their bids from consideration due to error by giving notice not later than two business days after the bids are publicly opened. Work papers showing evidence of error(s) may be required.

4.9 Rejection of Bid

The City reserves the right to waive any technical errors in bids received and/or to reject any and all bids. Without limiting the generality of the foregoing, any bid which is incomplete, obscure, or containing informalities may be rejected; any bid failing to comply with all terms and conditions or failing to conform to the specifications may be rejected; any bid having interlineations, erasures, or

corrections not appropriately initiated by the bidder may be rejected; and any bid accompanied by an insufficient or irregular bid security may be rejected.

4.10 Late Bids

Late bids will be returned to bidder unopened, if opening date and bidder's return address is shown on the container. Late bids shall not be accepted. It is the responsibility of the bidder to ensure the bid is received prior to the bid acceptance time.

4.11 Rights of City

The City reserves the right to accept or reject all or part of any bid, waive any informality and award the contract to the lowest responsive and responsible bidder to best serve the interest of the City.

4.12 Use of Contract by Other Public Bodies

Bidders are advised that the resultant contract may be extended, with the authorization of the Bidder, to other public bodies, or public agencies or institutions of the United States to permit their use of the contract at the same prices and/or discounts and terms and conditions of the resulting contract.

If any other public body decides to use the final contract, the Contractor shall deal directly with the public body concerning the placement of orders, issuance of the purchase orders, contractual disputes, invoicing and payment. The City of Suffolk acts only as the "Contracting Agent" for these public bodies. Failure to extend a contract to a public body will have no effect on consideration of your bid.

It is the Contractor's responsibility to notify the public body(s) of the availability of the contract(s).

Other public bodies desiring to use the contract shall make their own legal determination as to whether the use of this contract is consistent with their laws, regulations and other policies.

Each public body has the option of executing a separate contract with the Contractor(s). Public bodies may add terms and conditions required by statute, ordinances, and regulations, to the extent that they do not conflict with the contract terms and conditions. If, when preparing such a contract, the general terms and conditions of a public body are unacceptable to the Contractor, the Contractor may withdraw its extension of the award to that public body.

The City of Suffolk shall not be held liable for any costs or damages incurred by another public body as a result of any award extended to that public body by the Contractor.

4.13 Inclement Weather/Closure of City Hall

If City Hall is closed for business at the time scheduled for bid opening, for whatever reason, sealed bids will be accepted and opened on the next scheduled business day, at the originally scheduled time.

4.14 Basis for Award

Contract award will be made to the lowest responsive and responsible bidder at the City's sole discretion. The City reserves the right to award the contract by item or in total for the contract period; the decision to make such award will be at the sole discretion of the City.

4.15 Announcement of Award

Upon the award or the announcement of the decision to award a contract as a result of this solicitation, the City will publicly post such notice on the bulletin board located outside of Room 105 of the Purchasing Division and/or on the City's web site, www.suffolk.va.us for a minimum of ten (10) days.

4.16 Bidder Qualification

Only bids from established contractors for work similar in scope to work herein shall be considered; the City reserves the right to request specific reference information prior to award. Bidder shall demonstrate that he has adequate and appropriate manpower, tools and equipment to respond and perform in accordance with the provisions herein.

The City may, at its option, disqualify a bidder and reject his bid for cause. Reasons deemed to be sufficient for this action shall include, but not be limited to, the following:

- Evidence of collusion among bidders.
- Receipt of more than one bid on any project from an individual, or from a corporation. This restriction does not apply to subcontractors
- Default on any previous contract.
- For unreasonable failure to complete a previous contract within the specified time or for being in arrears on an existing contract without reasonable cause for being in arrears.
- Inability to perform as revealed by an investigation of the Bidder's financial statement, experience and/or plant and equipment.

4.17 Taxes in Arrears

No bid or proposal will be accepted from or Contract awarded to any person, firm or corporation that is in arrears, or is in default to the City upon any debt or contract, or that is a defaulter as surety or otherwise upon any obligation to the City.

4.18 Unless qualified by the provision "NO SUBSTITUTE", the use of the name of the manufacturer, brand make or catalog designation in specifying an item does not restrict bidders to the manufacturer, brand, make or catalog designation identification. This used simply to indicate the character, quality and/or performance equivalence of the goods and/or services desired. The goods and/or services on which bids are submitted must be of such character, quality and/or performance equivalence that it will serve as that specified. In submitting bids on

goods and/or services other than as specified, bidder shall furnish complete data and identification with respect to the alternate goods and/or services that they propose to furnish.

If the bidder does not indicate that the goods and/or services he proposes to furnish is other than specified, it will be construed to mean that the bidder proposes to furnish the exact goods and/or services described.

5.0 CONTRACT TERMS AND CONDITIONS

5.1 License Requirement

All firms doing business in the City of Suffolk are required to be licensed in accordance with the City of Suffolk business license ordinance. Wholesale and retail merchants without a business location in the City of Suffolk are exempt from this requirement.

Any questions concerning business licenses should be directed to the Commissioner of the Revenue's Office, telephone (757) 514-4260.

5.2 Hold Harmless Clause

The Contractor shall, during the term of the contract, indemnify and hold harmless the City of Suffolk from and against any and all losses, damages, claims, fines, penalties, suits and costs, including bodily injury or death of any person(s), or loss or damage to property, as well as fines, assessments and penalties imposed by any authority which may arise out of any violations of law by, and all acts and omissions of the Contractor, the Contractor's agents, employees occurring in connection with the products, completed operations, and other services covered herein.

5.3 Safety

All contractor and subcontractor performing services for the City are required and shall comply with all Occupational Safety and Health Administration (OSHA), State and City Safety and Occupational Health Standards and any other applicable rules and regulations. Also all contractors and subcontractors shall be held responsible for the safety of their employees and any unsafe acts or conditions that may cause injury or damage to any persons or property within and around the work site area under this contract.

5.4 Anti-Discrimination

By submitting their bids, bidders certify to the City that they will conform to the provisions of the Federal Civil Rights Act of 1964, as amended, as well as the Virginia Fair Employment Contracting Act of 1975, as amended, where applicable, the Virginians with Disabilities Act, the Americans with Disabilities Act and 2.2-4311 of the Virginia Public Procurement Act (VPPA). If the award is made to a faith-based organization, the organization shall not discriminate against any recipient of goods, services, or disbursements made pursuant to the

contract on the basis of the recipient's religion, religious belief, refusal to participate in a religious practice, or on the basis of race, age, color, gender or national origin and shall be subject to the same rules as other organizations that contract with public bodies to account for the use of the funds provided; however, if the faith-based organization segregates public funds into separate accounts, only the accounts and programs funded with public funds shall be subject to audit by the public body. (Code of Virginia 2.2.4343.1E).

In every contract over \$10,000 shall include the following provisions:

1. During the performance of this contract, the contractor agrees as follows:
 - a. The contractor will not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, age, disability, service disabled veterans or any other basis prohibited by state law relating to discrimination in employment, except where there is a bona fide occupational qualification reasonably necessary to the normal operation of the contractor. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.
 - b. The contractor, in all solicitations or advertisements for employees placed by or on behalf of the contractor, will state that such contractor is an equal opportunity employer.
 - c. Notices, advertisements and solicitations placed in accordance with federal law, rule or regulation shall be deemed sufficient for the purpose of meeting these requirements.
2. The contractor will include the provisions of No. 1 above in every subcontract or purchase order over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.

5.5 Ethics In Public Contracting

By submitting a bid, the bidder certifies that their bid is made without collusion or fraud and that they have not offered or received any kickbacks or inducements from any other bidder, supplier, manufacturer or subcontractor in connection with their bid, and that they have not conferred on any public employee having official responsibility for this procurement transaction any payment, loan subscription, advance, deposit of money, services or anything of more than nominal value, present or promised, unless consideration of substantially equal or greater value was exchanged. (Code of Virginia 2.2.4367)

5.6 Compliance with Federal Immigration Law

Contractor does not, and shall not during the performance of the contract for goods and services in the Commonwealth of Virginia knowingly employ an unauthorized alien as defined in the Federal Immigration Reform and Control Act of 1986.

5.7 Debarment Status

By submitting a bid, bidders certify that they are not currently debarred by the Commonwealth of Virginia from submitting bids or proposals on contracts for the type of goods and/or services covered by this solicitation, nor are they an agent of any person or entity that is currently so debarred.

5.8 Antitrust

By entering into a contract, the contractor conveys, sells, assigns, and transfers to the City of Suffolk all rights, title and interest in and to all causes of action it may now have or hereafter acquire under the antitrust laws of the United States and the Commonwealth of Virginia, relating to the particular goods or services purchased or acquired by the City of Suffolk under said contract.

5.9 Drug-Free Workplace

During the performance of this contract, the contractor agrees to (1) provide a drug-free workplace for the contractor's employees; (2) post in conspicuous place, available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in the contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition; (3) state in all solicitation or advertisement for employees placed by or on behalf of the contractor that the contractor maintains a drug-free workplace; and (4) include the provisions of the foregoing clauses in every subcontract or purchase order of over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.

For the purposes of this section, "*drug-free workplace*" means a site for the performance of work done in connection with a specific contract awarded to a contractor, the employees of whom are prohibited from engaging in the unlawful manufacture, sale, distribution, dispensation, possession or use of any controlled substance or marijuana during the performance of the contract.

5.10 Exemption from Taxes

The City is exempt from State Sales Tax and Federal Excise Tax. Tax Exemption Certificate indicating the City's tax exempt status will be furnished by the City of Suffolk.

5.11 Faith Based Organization

City of Suffolk does not discriminate against faith-based organizations.

5.12 Substitutions

NO substitutions or cancellations are permitted after award without written approval by the Purchasing Agent.

5.13 Method of Payment

Contractor shall submit invoices in duplicate for each delivery, such statement to include detailed breakdown of all charges, and shall be based on completion of tasks or deliverables.

Invoices shall be submitted to using departments. Upon acceptance of work, the City will render payment within forty-five (45) days of receipt of invoice.

Individual contractors shall provide their social security numbers, and proprietorships, partnerships, and corporations shall provide their federal employer identification number on the pricing form.

The City is interested in making payments by means of our Purchasing Card. Please indicate if you are willing and able to accept card payments in lieu of a printed check. Yes _____ No _____ Will you accept Electronic Funds Transfer in lieu of a check? Yes _____ No _____

5.14 Payments to Subcontractors

Within seven (7) days after receipt of monies paid by the City for work performed by a subcontractor under this contract, the contractor shall either:

- a. Pay the subcontractor for the proportionate share of the total payment received from the City attributable to the work performed by the subcontractor under this contract; or
- b. Notify the City and subcontractor, in writing, of his intention to withhold all or a part of the subcontractor's payment and the reason for non-payment.

The contractor shall pay interest to the subcontractor on all amounts owed that remain unpaid beyond the seven (7) day period except for amounts withheld as allowed in item b above.

5.15 Assignment of Contract

This contract may not be assigned in whole or in part without the written consent of the Purchasing Agent.

5.16 Termination without Cause

The City may at any time, and for any reason, terminate this Contract by written Notice to Contractor specifying the termination date, which shall be not less than thirty (30) days from the date such notice is mailed.

Notice shall be given to Contractor by certified mail/return receipt requested at the address set forth in Contractor's Bid Proposal or as provided in this Contract.

In the event of such termination, Contractor shall be paid such amount as shall compensate Contractor for the work satisfactorily completed, and accepted by the City, at the time of termination.

If the City terminates this Contract, Contractor shall withdraw its personnel and equipment, cease performance of any further work under this Contract, and turn over to the City any work completed or in process for which payment has been

made.

5.17 Termination with Cause/Default/Cancellation

In the event that Contractor shall for any reason or through any cause be in default of the terms of this Contract, the City may give Contractor written notice of such default by certified mail/return receipt requested at the address set forth in Contractor's Bid Proposal or as provided in this Contract.

Unless otherwise provided, Contractor shall have ten (10) days from the date such notice is mailed in which to cure the default. Upon failure of Contractor to cure the default, the City may immediately cancel and terminate this Contract as of the mailing date of the default notice.

Upon termination, Contractor shall withdraw its personnel and equipment, cease performance of any further work under the Contract, and turn over to the City any work in process for which payment has been made.

In the event of violations of law, safety or health standards and regulations, this Contract may be immediately cancelled and terminated by the City and provisions herein with respect to opportunity to cure default shall not be applicable.

5.18 Non Appropriation – Availability of Funds

It is understood and agreed between the parties hereto that the City shall be bound and obligated hereunder only to the extent that the funds shall have been appropriated and budgeted for the purpose of this Contract. In the event funds are not appropriated and budgeted in any fiscal year for payments due under this Contract, the City shall immediately notify Contractor of such occurrence and this Contract shall terminate on the last day of the fiscal year for which (an) appropriation(s) (was) were received without penalty or expense to the City of any kind whatsoever.

5.19 Severability

If any part, term, or provision of this agreement, shall be found by the Court to be legally invalid or unenforceable, then such provision or portion thereof, shall be performed in accordance with applicable laws. The invalidity or unenforceability of any provision or portion of any contract document shall not affect the validity of any other provision or portion of the contract document.

5.20 Applicable Laws

This contract shall be governed in all respects by the laws of the Commonwealth of Virginia. Any judicial action shall be filed in the Commonwealth of Virginia, City of Suffolk.

5.21 Compliance with State Law; Foreign and Domestic Business authorized to Transact Business in the Commonwealth (VPPA §2.2 – 4311.2)

A bidder or offeror organized or authorized to transact business in the Commonwealth pursuant to Title 13.1 or Title 50 is to include in its bid or proposal the identification number issued to it by the State Corporation Commission. Any

bidder or offeror that is not required to be authorized to transact business in the Commonwealth as a foreign business entity under Title 13.1 or Title 50 or as otherwise required by law shall include in its bid or proposal a statement describing why the bidder or offeror is not required to be so authorized. A public body may void any contract with a business if the business fails to remain in compliance with the provisions of this section.

BID FORM

TO: City of Suffolk, VA
Purchasing Division
441 Market Street
Suffolk, VA 23434

BID: 6" Trailer Mounted Trash Pumps
DUE: November 27, 2012
TIME: 3:00 p.m., Local

_____ (**Company**) quotes firm price, exclusive of all taxes, to furnish and deliver F.O.B. destination, two Ford Taurus (2) vehicles in accordance with specifications, terms, and conditions herein.

1 EA Godwin CD150M Trailer Mounted Trash Pumps, "NO SUBSTITUTES"

\$ _____ \$ _____
(Unit Price) (Amount)

4 EA Godwin HL80M Trailer Mounted Trash Pumps, "NO SUBSTITUTES"

\$ _____ \$ _____

MFG/Model/Year _____

Best Guaranteed Delivery _____

Bidder has included the following with his BID FORM (please check):

- _____ "Anticollusion/Nondiscrimination/Drug Free Workplace" clause
- _____ Proof of Authority to Transact Business in Virginia
- _____ Specifications Compliance Sheets (Pages 4-6)

OPTION

The City may wish to purchase additional vehicles as specified herein at the price quoted on the BID FORM.

Bidder agrees / disagrees (circle one) to provide additional vehicle(s), if requested, at the prices provided. Pricing quoted above will be valid for additional purchases through _____ (date).

(Ability to provide additional vehicles will not be a factor in the award.)

Payment Terms/Discounts _____ (Suffolk's normal payment schedule: items accepted and invoiced by 10th of month will be paid month end. Cash discounts offered for less than 30 Days from receipt of proper invoice will not be considered in award, but will encourage faster payments.)

BIDDER

Company Name _____

Address _____

Person Quoting _____ Title _____

Telephone No. _____ Fax No. _____

E-mail address: _____

I certify that this bid is made without prior understanding, agreement, or connection with any corporation, firm, or person submitting a bid for the same equipment/materials/ service and is in all respects fair and without collusion or fraud. I understand that collusive bidding is a violation of State and Federal law and can result in fines, prison sentences and civil damage awards. I agree to abide by all conditions of this bid and certify that I am authorized to sign this bid for the bidder.

I certify by my signature below that I have received the documents associated with this bid and understand that the review for completeness of these bid documents and the understanding and comprehension of the bid specifications is solely my responsibility; based on this, by my signature below I waive all rights to further claims against the City of Suffolk that the document were incomplete or not understandable.

I certify that the bidder represented herein is eligible to bid with respect to all applicable sections of State and Local Government Conflict of Interest Act, Code of Virginia, Section 2.1-639-1 et. seq.

Signature _____ **Date** _____

ANTICOLLUSION/NONDISCRIMINATION/DRUG FREE WORKPLACE CLAUSES

ANTICOLLUSION CLAUSE:

IN THE PREPARATION AND SUBMISSION OF THIS BID, SAID BIDDER DID NOT EITHER DIRECTLY OR INDIRECTLY ENTER INTO ANY COMBINATION OR ARRANGEMENT WITH ANY PERSON, FIRM OR CORPORATION, OR ENTER INTO ANY AGREEMENT, PARTICIPATE IN ANY COLLUSION, OR OTHERWISE TAKE ANY ACTION IN THE RESTRAINT OF FREE, COMPETITIVE BIDDING IN VIOLATION OF THE SHERMAN ACT (15 U.S.C. SECTION 1), SECTIONS 59.1-9.1 THROUGH 59.1-9.17 OR SECTIONS 59.1-68.6 THROUGH 59.1-68.8 OF THE CODE OF VIRGINIA.

THE UNDERSIGNED BIDDER HEREBY CERTIFIES THAT THIS AGREEMENT, OR ANY CLAIMS RESULTING THEREFROM, IS NOT THE RESULT OF, OR AFFECTED BY, ANY ACT OF COLLUSION WITH, OR ANY ACT OF, ANOTHER PERSON OR PERSONS, FIRM OR CORPORATION ENGAGED IN THE SAME LINE OF BUSINESS OR COMMERCE; AND, THAT NO PERSON ACTING FOR, OR EMPLOYED BY, THE CITY OF SUFFOLK HAS AN INTEREST IN, OR IS CONCERNED WITH, THIS BID; AND, THAT NO PERSON OR PERSONS, FIRM OR CORPORATION OTHER THAN THE UNDERSIGNED, HAVE, OR ARE, INTERESTED IN THIS BID.

DRUG-FREE WORKPLACE:

DURING THE PERFORMANCE OF THIS CONTRACT, THE CONTRACTOR AGREES TO (I) PROVIDE A DRUG-FREE WORKPLACE FOR THE CONTRACTOR'S EMPLOYEES; (II) POST IN CONSPICUOUS PLACES, AVAILABLE TO EMPLOYEES AND APPLICANTS FOR EMPLOYMENT, A STATEMENT NOTIFYING EMPLOYEES THAT THE UNLAWFUL MANUFACTURE, SALE, DISTRIBUTION, DISPENSATION, POSSESSION, OR USE OF A CONTROLLED SUBSTANCE OR MARIJUANA IS PROHIBITED IN THE CONTRACTOR'S WORKPLACE AND SPECIFYING THE ACTIONS THAT WILL BE TAKEN AGAINST EMPLOYEES FOR VIOLATIONS OF SUCH PROHIBITION; (III) STATE IN ALL SOLICITATIONS OR ADVERTISEMENTS FOR EMPLOYEES PLACED BY OR ON BEHALF OF THE CONTRACTOR THAT THE CONTRACTOR MAINTAINS A DRUG-FREE WORKPLACE; AND (IV) INCLUDE THE PROVISIONS OF THE FOREGOING SECTIONS I, II, AND III IN EVERY SUBCONTRACT OR PURCHASE ORDER OF OVER \$10,000, SO THAT THE PROVISIONS WILL BE BINDING UPON EACH SUBCONTRACTOR OR VENDOR.

FOR THE PURPOSE OF THIS SECTION, "DRUG-FREE WORKPLACE" MEANS A SITE FOR THE PERFORMANCE OR WORK DONE IN CONNECTION WITH A SPECIFIC CONTRACT AWARDED TO A CONTRACTOR IN ACCORDANCE WITH THIS CHAPTER, THE EMPLOYEES OF WHOM ARE PROHIBITED FROM ENGAGING IN THE UNLAWFUL MANUFACTURE, SALE, DISTRIBUTION, DISPENSATION, POSSESSION OR USE OF ANY CONTROLLED SUBSTANCE OR MARIJUANA DURING THE PERFORMANCE OF THE CONTRACT.

NONDISCRIMINATION CLAUSE:

1. EMPLOYMENT DISCRIMINATION BY BIDDER SHALL BE PROHIBITED.
2. DURING THE PERFORMANCE OF THIS CONTRACT, THE SUCCESSFUL BIDDER SHALL AGREE AS FOLLOWS:
 - A. THE BIDDER, WILL NOT DISCRIMINATE AGAINST ANY EMPLOYEE OR APPLICANT FOR EMPLOYMENT BECAUSE OF RACE, RELIGION, COLOR, SEX, NATIONAL ORIGIN, AGE, DISABILITY, OR ANY OTHER BASIS PROHIBITED BY STATE LAW RELATING TO DISCRIMINATION IN EMPLOYMENT, EXCEPT WHERE THERE IS A BONA FIDE OCCUPATIONAL QUALIFICATION/CONSIDERATION REASONABLY NECESSARY TO THE NORMAL OPERATION OF THE BIDDER. THE BIDDER AGREES TO POST IN CONSPICUOUS PLACES, AVAILABLE TO EMPLOYEES AND APPLICANTS FOR EMPLOYMENT, NOTICES SETTING FORTH THE PROVISIONS OF THIS NONDISCRIMINATION CLAUSE.
 - B. THE BIDDER, IN ALL SOLICITATIONS OR ADVERTISEMENTS FOR EMPLOYEES PLACED ON BEHALF OF THE BIDDER, WILL STATE THAT SUCH BIDDER IS AN EQUAL OPPORTUNITY EMPLOYER.
 - C. NOTICES, ADVERTISEMENTS, AND SOLICITATIONS PLACED IN ACCORDANCE WITH FEDERAL LAW, RULE OR REGULATION SHALL BE DEEMED SUFFICIENT FOR THE PURPOSE OF MEETING THE REQUIREMENTS OF THIS SECTION.
 - D. BIDDER WILL INCLUDE THE PROVISIONS OF THE FOREGOING SECTIONS A, B, AND C IN EVERY SUBCONTRACT OR PURCHASE ORDER OF OVER \$10,000, SO THAT THE PROVISIONS WILL BE BINDING UPON EACH SUBCONTRACTOR OR VENDOR.

Name and Address of Bidder:	Date:
	By:
	Signature In Ink
	Printed Name
Telephone Number: ()	
Fax Phone Number: ()	Title
FIN/SSN#:	

Is your firm a "minority" business? Yes No If yes, please indicate the "minority" classification below:
 African American Hispanic American American Indian Eskimo Asian American Aleut
 Other; Please Explain: _____

Is your firm Woman Owned? Yes No

Is your firm a Small Business? Yes No

PROOF OF AUTHORITY TO TRANSACT BUSINESS IN VIRGINIA

THIS FORM MUST BE SUBMITTED WITH YOUR PROPOSAL/BID, FAILURE TO INCLUDE THIS FORM MAY RESULT IN REJECTION OF YOUR PROPOSAL/BID

Pursuant to Virginia Code §2.2-4311.2 an Officer/Bidder organized or authorized to transact business in the Commonwealth pursuant to Title 13.1 or Title 50 of the Code of Virginia shall include in its proposal/bid the identification number issued to it by the State Corporation Commission (“SCC”). Any Offeror/Bidder that is not required to be authorized to transact business in the Commonwealth as a foreign business entity under Title 13.1 or Title 50 of the Code of Virginia or as otherwise required by law shall include in its proposal/bid a statement describing why the Offeror/Bidder is not required to be so authorized. Any Offeror/Bidder described herein that fails to provide the required information shall not receive an award unless a waiver of this requirement and the administrative policies and procedures establish to implement this section is granted by the City Manager, as applicable.

If this quote for goods or services is accepted by the City of Suffolk, Virginia the undersigned agrees that the requirements of the Code of Virginia Section §2.2-4311.2 have been met.

Please complete the following by checking the appropriate line that applies and providing the requested information.

A. _____ Offeror/Bidder is a Virginia business entity organized and authorized to transact business in Virginia by the SCC and such vendor’s Identification Number issued to it by the SCC is _____.

B. _____ Offeror/Bidder is an out-of-state (foreign) business entity that is authorized to transact business in Virginia by the SCC and such vendor’s identification Number issued to it by the SCC is _____.

C. _____ Offeror/Bidder does not have an Identification Number issued to it by the SCC such vendor is not required to be authorized to transact business in Virginia by the SCC for the following reason(s):

Please attach additional sheets if you need to explain why such Offeror/Bidder is not required to be authorized to transact business in Virginia.

Legal Name of Company (as listed on W-9)

Legal Name of Offeror/Bidder

Date

Authorized Signature

Print or Type Name and Title

RETURN THIS PAGE WITH COPIES OF DOCUMENTATION

PART ONE – GENERAL- PU CD150M Specifications

1.1 PROJECT SCOPE

- 1.1.1 Requirements for providing an automatically starting, solids handling, utility pump.
- 1.1.2 The sound portable pump shall be delivered to the owner within 8 weeks of contract commencement or as stated in the notice to proceed.

1.2 GENERAL

- 1.2.1 The specifications herein state the minimum requirements of the City of Suffolk. All bids must be regular in every respect. Unauthorized conditions, limitations, or provisions shall be cause for rejection. The City of Suffolk may consider as “irregular” or “non-responsive”, any bid not prepared and submitted in accordance with the bid documents and specification, or any bid lacking sufficient technical literature to enable the City of Suffolk to make a reasonable determination of compliance to the specification. It shall be the bidder’s responsibility to carefully examine each item of the specification, failure to offer a completed bid or failure to respond to each section of the technical specification will cause the proposal to be rejected without review as “non-responsive”. All variances, exceptions, and/or deviations shall be fully described in the appropriate section; deceit in responding to the specification will be cause for rejection.
- 1.2.2 INTERPRETATIONS: No oral interpretations will be given to any bidder as to the meaning of the specifications documents or any part thereof. Every request for each consideration shall be made in writing to the City of Suffolk. Based upon such inquiry, the City of Suffolk may choose to issue an Addendum in accordance with Local Public Contract Laws.
- 1.2.3 GENERAL SPECIFICATIONS: Units described shall be new, unused and of the current years production. The style of pump being bid must be in production for a minimum of 5 years. (Include users list) Unit shall be of the latest design and in current production completely serviced, ready for work and shall include all standard and optional equipment as specified herein.
- 1.2.4 Bidders must have a fully stocked parts and service facility within one hours travel of the City of Suffolk. The City of Suffolk shall have the right to inspect the office and shall be the sole judge of its adequacy to fulfill this requirement.
- 1.2.5 Bidders, at the request of the City of Suffolk, may be required to review their specifications with the City of Suffolk and must, if requested, also be prepared to provide a unit for demonstration for the City of Suffolk. These services, if needed are considered as part of the bidder’s proposal and will be provided without cost or obligation to the City of Suffolk.

1.3 SYSTEM DESCRIPTION

- 1.3.1 The pumpset specified in this section will be used to pump raw sewerage.
- 1.3.2 Pump shall be fitted with a fully automatic priming system capable of repeated priming from a completely dry pump casing.
- 1.3.3 The pump and accessories shall be supplied by the pump manufacturer.
- 1.3.4 The pump offered shall be the manufacturer’s standard production model. It shall have been in continuous use by municipal and industrial owners for a minimum of five years. A list of five user contacts including contact names and telephone numbers shall be provided with the bid submittal. Failure to supply a verifiable users list will be cause for rejection of the bid.

1.4 DESIGN REQUIREMENTS

- 1.4.1 OPERATING SPEED (MAXIMUM) 2200 RPM
- MAXIMUM SOLIDS HANDLING SIZE 3 INCHES
- IMPELLER DIAMETER 10.8 INCHES
- SUCTION SIZE 6 INCHES
- DISCHARGE SIZE 6 INCHES
- MAXIMUM SUCTION LIFT 28 FEET
- MAXIMUM DUTY POINT 1200 GPM AT 125’TDH
(INCLUDING A 15’ SUCTION LIFT)
- SECOND DUTY POINT 1100 GPM AT 75’TDH
(INCLUDING A 25’ SUCTION LIFT)

1.5 REFERENCES

- 1.5.1 ANSI B16.1 - Standard for Cast Iron Pipe Flanges and Flanged Fittings.

1 PART TWO - PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

- 2.1.1 The pump shall be a Model CD150M, size 6” x 6” as manufactured by GODWIN PUMPS, Bridgeport, New Jersey. NO SUBSTITUTIONS

2.2 EQUIPMENT

- 2.2.1 CASING, SUCTION COVER, SEPARATION TANK: Pump castings shall be cast iron. Pump design shall incorporate a direct suction flow path that is in axial alignment with the impeller eye. There shall be no turns, chambers, or valves

between the suction flange and the impeller eye.

- 2.2.2 IMPELLERS: The pump impeller shall be an open, three-bladed, non-clog type with pump-out vanes on the back shroud and fabricated from hardened cast-chromium steel construction (minimum Brinell Hardness 340 HB).
- 2.2.3 WEARPLATES: Shall be fully adjustable and replaceable, fabricated of cast iron. Wear plate clearances shall have no relationship to the ability of the pump to achieve a prime.
- 2.2.4 BEARINGS AND SHAFTS: Pump shall be fitted with a bearing bracket to contain the shaft and bearings. Bearings shall be tapered roller bearings of adequate size to withstand imposed loads for sustained pumping at maximum duty points. Minimum ISO L₁₀ bearing life to be 100,000 hours. Impeller shafts shall be fabricated of nickel chrome steel.
- 2.2.5 SEALS: Seals shall be high pressure, mechanical self-adjusting type with silicon carbide faces capable of withstanding suction pressures to 100 psi. The mechanical seal shall be cooled and lubricated in an oil bath reservoir, requiring no maintenance or adjustment. Pump shall be capable of running dry, with no damage, for periods up to twenty-four hours. All metal parts shall be of stainless steel. Elastomers shall be Viton.
- 2.2.6 PUMP SUCTION AND DISCHARGE FLANGES: Shall be cast iron ANSI (B16.1) Class 150, raised faced.
- 2.2.7 PUMP GASKETS: Shall be compressed fiber and/or Teflon.
- 2.2.8 PUMP O RINGS: Shall be Buna-N.
- 2.2.9 PRIMING SYSTEM: Pump shall be fitted with a fully automatic priming system incorporating an air compressor and air ejector assembly. The compressor shall be installed on the engine auxiliary drive and shall be gear driven, lubricated and cooled from the engine. The priming system shall require no fail-safe protection float gear or any adjusting at high or low suction lifts. Pumps with self-priming chambers modified with vacuum priming systems shall not be accepted as equal. The pump must be capable of running totally dry for periods up to 24 hours, then re-priming and returning to normal pumping volumes. Pump and priming system is capable of priming the pump from a completely dry pump casing. The pump shall be capable of static suction lifts to 28 vertical feet, at sea level. It shall also be capable of operation using extended suction lines. Equipment acceptance shall be contingent upon the pump's ability to run continuously at full speed in a completely dry condition. The engineer may require a demonstration.
- 2.2.10 CHECK VALVE: Pump shall be supplied with an integral ball-type check valve mounted on the discharge of the pump, allowing unrestricted flow from the impeller. The check valve shall prevent in-line return of flow when the pump is shut off. Non-return valve elastomers shall be Nitrile rubber and shall be field

replaceable.

- 2.2.11 **DRIVE UNIT:** The drive unit shall be a diesel water-cooled engine. The engine shall drive the pump by use of direct-connected intermediate drive plate. Starter shall be 12VDC electric. A control panel consisting of a low oil pressure safety shutdown, high temperature shutdown, tachometer, and hour-meter shall be integrated into the engine control panel with a manual, mechanical, engine throttle control. Said panel shall include an auxiliary single multi-pin receptacle for interfacing with an A-91 Controller. Battery shall have 180-amp hour rating. The engine shall drive the pump by use of direct-connected intermediate drive plate. Drive unit shall be a John Deere 4045T290 Interim Tier 4 or equal, rated at 74 H.P. (continuous) at 2200 R.P.M. A certified continuous-duty engine curve shall be supplied to the owner/engineer.
- 2.2.12 **GOVERNOR:** Governor shall be a mechanical type. Engine speed shall be adjustable to operate the pump between maximum and minimum design operation speeds.
- 2.2.13 **FUEL SOURCE:** Integral skid fuel tank capacity shall be sufficient to provide at least twenty hours of operating time at full load. The engine shall be capable of operating satisfactorily on a commercial grade of distilled No. 2 fuel oil.
- 2.2.14 **EXHAUST:** Exhaust system shall include critical grade silencer.
- 2.2.15 **SKID BASE:** The pump and engine shall be skid mounted with an integral fuel tank. The fuel tank shall be equipped with drain plugs.
- 2.2.16 **SOUND ATTENUATED ENCLOSURE:** The engine and pump shall be completely enclosed with fourteen-gauge sheet metal panels backed with one inch and two-inch layers of polydamp acoustical sound-deadening material. The acoustical enclosure shall reduce pump and engine noise to sixty-eight dBA or less at a distance of thirty feet. The enclosure shall be removable for easy access to the engine / pump for maintenance and repair. The enclosure doors shall all be equipped with latches that are keyed alike. For maintenance and service needs, the enclosure sides shall have hinged doors for quick access to the engine oil fill, fuel fill port, oil dipstick, and filters
- 2.2.17 **TRAILER:** The complete pump assembly shall be mounted in a single axle trailer with a pintle type trailer hitch. The sound attenuated unit shall be attached to the trailer frame using Grade 8 nuts and bolts. Payload range D tires and 6000 lb Torflex #11 axle suspension or equivalent shall be required for the load range ratings. Trailers shall be equipped with fenders, hydraulic free backing brakes, front and rear support stands, lifting bar, safety chains and side and rear reflectors. Trailer design shall be in compliance with applicable DOT regulations.
- 2.2.18 **FACTORY PAINTING:** Pump, engine, base, and trailer shall be shop primed and finish painted at the place of manufacturer. Materials and thickness for priming shall be in accordance with manufacturer's standards.

2.2.19 SAFETY FEATURES: The controller shall integrate the engine safety shut-off for low oil conditions, high coolant temperature, and provide over-speed protection.

2.3 AUTOMATIC STARTING CONTROL SYSTEM

2.3.1 The engine shall be equipped with a factory installed PrimeGuard microprocessor-based controller as supplied by Godwin Pumps of America, Inc. and designed to start/stop the engine at a signal supplied by high and low level floats or a 4-20 mA transducer.

2.3.2 ENGINE / PUMP CONTROL SPECIFICATIONS

The engine shall be started, stopped, and controlled by a PrimeGuard high performance state of the art digital controller as supplied by Godwin Pumps of America, Inc. The controller shall be weather proof enclosed, and contain an external weatherproof 12-position keypad accessible without the need to remove or open any protective cover or enclosure. It shall be designed to start/stop the engine at a signal supplied by high and low level floats or a 4-20 mA transducer. The PrimeGuard controller shall provide the following functions without modification, factory recalibration, or change of chips or boards, by simply accessing the keypad.

2.3.2.1 The keypad shall be a capacitive touch sensing system. No mechanical switches will be acceptable. The keypad shall operate in extreme temperatures, with gloves, through ice, snow, mud, grease, etc. and maintain complete weather-tight sealing of the PrimeGuard controller.

2.3.2.2 In automatic mode, the unit shall conserve energy and go to “sleep”.

2.3.2.3 The PrimeGuard controller shall function interchangeably from float switches, pressure switch, or transducer, as well as manual start/stop by selection at the keypad. No other equipment or hardware changes are required.

2.3.2.4 The start function can be programmed to provide two separate functions each day for seven days (i.e. a start, exercise cycle on two separate days at different times and for a varying length of time all via the keypad).

2.3.2.5 Manual-Automatic Button:

2.3.2.5.1 In Manual Mode, manual “Start” button starts engine and runs until “Stop” button is depressed or an emergency shutdown occurs.

2.3.2.5.2 In Automatic Mode, start/stop sequencing is initiated by either one (1) high-level N/O and one (1) low-level N/C narrow angler float switches, pressure switch, transducer, or a signal from a digital input.

- 2.3.2.6 The controller shall integrate the engine safety shut-off for low and high oil temperature, and provide over-speed protection.
- 2.3.2.7 The controller shall include standard, field-adjustable parameters for engine cycle crank timer, and shutdown time delay.
- 2.3.2.8 The PrimeGuard controller shall have only one circuit board with eight built-in relays. Three (3) of the relays shall be programmable to output desired parameter on display and to be used as dry-contacts for communication with City of Suffolk SCADA system, all via the keypad without changing relays, chips, printed circuits, or any hardware or software.
- 2.3.2.9 Standard components shall consist of (24) digital inputs, (7) analog inputs, (1) magnetic pick-up input, (8) 20-amp form "C" relays, (1) RS232 port, (1) RS485 port, (1) RS232/RS485 port, (1) J1939 port, and (1) 64X128 pixel full graphic LCD display with backlight.
- 2.3.2.10 The industrially-hardened PrimeGuard Controller shall withstand Vibration of 3 g, 3 axis, frequency swept 10-1000 Hz, in an operating temperature Range of 4° to 176°F (-20° to 80°C) and an operating humidity range of 0-95% Non-Condensing.

2.4 OPTIONS

- 2.4.1 **FLOAT SWITCHES:** One-normally open and one-normally closed narrow angle (10° to 20°) float switches integrate into automatic pump controller. The floats shall be constructed with tilt sensation switches enclosed within stainless steel. Each float will have a minimum 25 ft. waterproof cable wired into a twist-lock wiring harness that connects directly to an A91 controller or equivalent 2.4.1
- 2.4.2 **FULLY AUTOMATIC TRICKLE CHARGER:** The unit shall include a fully automatic trickle charger powered by 2-amps, 115 VAC. It shall be hard-wired into the junction box within the enclosure
- 2.4.3 **ENGINE BLOCK HEATER:** The drive unit shall be supplier with an integral 750-Watt engine block heater (8-amp, 115 VAC required).
- 2.4.4 **FITTINGS:** Male Cam & Grove x Flange fittings supplied for the suction and discharge.

3 PART THREE - EXECUTION

3.1 MANUFACTURERS SERVICES

3.1.1 The manufacturer shall furnish the services of a competent factory representative to do the following:

3.1.1.1 Inspect the system prior to delivery, supervise the start up and testing of the system, and certify the system has been properly furnished and is ready for operation.

3.1.1.2 Instruct the owner's operating personnel in the proper operation and maintenance of the system for a period of not less than one-half day.

3.2 TOOLS AND SPARE PARTS

3.2.1 The manufacturer shall furnish the following with the pumping system:

3.2.1.1 A recommended list of spare parts.

3.2.1.2 An Operations and Maintenance manual.

3.3 WARRANTY

3.3.1 The manufacturer shall furnish the following to the owner:

3.3.1.1 A copy of the engine manufacturer's parts and labor warranty.

3.3.1.2 A one-year Parts and Labor Warranty issued by the manufacturer on the pumpset. This warranty must cover all pump parts, including the mechanical seal.

PU HL80M Pump Specifications

PART ONE - GENERAL

1.1 PROJECT SCOPE

- 1.1.1 Requirements for providing an automatically starting solids handling, utility pump.
- 1.1.2 The pump shall be delivered to the owner within 8 weeks of contract commencement or as stated in the notice to proceed.

1.2 GENERAL

- 1.2.1 The specifications herein state the minimum requirements of the City of Suffolk. All bids must be regular in every respect. Unauthorized conditions, limitations, or provisions shall be cause for rejection. The City of Suffolk may consider as “irregular” or “non-responsive”, any bid not prepared and submitted in accordance with the bid documents and specification, or any bid lacking sufficient technical literature to enable the City of Suffolk to make a reasonable determination of compliance to the specification. It shall be the bidder’s responsibility to carefully examine each item of the specification, failure to offer a completed bid or failure to respond to each section of the technical specification will cause the proposal to be rejected without review as “non-responsive”. All variances, exceptions, and/or deviations shall be fully described in the appropriate section; deceit in responding to the specification will be cause for rejection.
- 1.2.2 INTERPRETATIONS: In order to be fair to all bidders, no oral interpretations will be given to any bidder as to the meaning of the specifications documents or any part thereof. Every request for each consideration shall be made in writing to the City of Suffolk. Based upon such inquiry, the City of Suffolk may choose to issue an Addendum in accordance with Local Public Contract Laws.
- 1.2.3 GENERAL SPECIFICATIONS: Units described shall be new, unused and of the current years production. The style of pump being bid must be in production for a minimum of 5 years. (Include users list) Unit shall be of the latest design and in current production completely serviced, ready for work and shall include all standard and optional equipment as specified herein.
- 1.2.4 Bidders must have a fully stocked parts and service facility within 25 miles of the City of Suffolk. The City of Suffolk shall have the right to inspect the office and shall be the sole judge of its adequacy to fulfill this requirement.
- 1.2.5 Bidders, at the request of the City of Suffolk, must be prepared to review their specifications with the City of Suffolk and must, if requested, also be prepared to provide a unit for the convenience of the City of Suffolk. These services, if needed are considered as part of the bidder’s proposal and will be provided without cost or

obligation to the City of Suffolk.

1.3 SYSTEM DESCRIPTION

- 1.3.1 The pumpset specified in this section will be used to pump raw sewerage.
- 1.3.2 Pump shall be fitted with a fully automatic priming system capable of repeated priming from a completely dry pump casing.
- 1.3.3 The pump and accessories shall be supplied by the pump manufacturer.
- 1.3.4 The pump offered shall be the manufacturer's standard production model. It shall have been in continuous use by municipal and industrial owners for a minimum of five years. A list of five user contacts including contact names and telephone numbers shall be provided with the bid submittal. Failure to supply a verifiable users list will be cause for rejection of the bid.

1.4 DESIGN REQUIREMENTS

- 1.4.1 OPERATING SPEED (MAXIMUM) 2200 RPM
- MAXIMUM SOLIDS HANDLING SIZE 1 INCHES
- IMPELLER DIAMETER 325 mm
- SUCTION SIZE 4 INCHES
- DISCHARGE SIZE 3 INCHES
- MAXIMUM SUCTION LIFT 28 FEET
- MAXIMUM DUTY POINT 400 GPM AT 195' TDH
(INCLUDING A 15' SUCTION LIFT)
- SECOND DUTY POINT 325 GPM AT 215' TDH
(INCLUDING A 25' SUCTION LIFT)

1.5 REFERENCES

- 1.5.1 ANSI B16.1 - Standard for Cast Iron Pipe Flanges and Flanged Fittings.

PART TWO - PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

- 2.1.1 The pump shall be Model HL80M, size 4" x 3" as manufactured by GODWIN PUMPS, Bridgeport, New Jersey.

2.2 EQUIPMENT

- 2.2.1 CASING, SUCTION COVER, SEPARATION TANK: Pump castings shall be cast iron. Pump design shall incorporate a direct suction flow path that is in axial

alignment with the impeller eye. There shall be no turns, chambers, or valves between the suction flange and the impeller eye.

- 2.2.2 IMPELLERS: The pump impeller shall be an open, three-bladed, non-clog type with pump-out vanes on the back shroud and fabricated from hardened cast chromium steel construction (minimum Brinell Hardness 340 HB).
- 2.2.3 WEARPLATES: Shall be fully adjustable and replaceable, fabricated of cast iron. Wear plate clearances shall have no relationship to the ability of the pump to achieve a prime.
- 2.2.4 BEARINGS AND SHAFTS: Pump shall be fitted with a bearing bracket to contain the shaft and bearings. Bearings shall be tapered roller bearings of adequate size to withstand imposed loads for sustained pumping at maximum duty points. Minimum ISO L₁₀ bearing life to be 100,000 hours. Impeller shafts shall be fabricated of 1.5% chromium alloy.
- 2.2.5 SEALS: Seals shall be high pressure, mechanical self-adjusting type with silicon carbide faces capable of withstanding suction pressures to 100 psi. The mechanical seal shall be cooled and lubricated in an oil bath reservoir, requiring no maintenance or adjustment. Pump shall be capable of running dry, with no damage, for periods up to twenty-four hours. All metal parts shall be of stainless steel. Elastomers shall be Viton.
- 2.2.6 PUMP SUCTION AND DISCHARGE FLANGES: Shall be cast iron ANSI (B16.1) Class 150, raised faced.
- 2.2.7 PUMP GASKETS: Shall be compressed fiber and/or Teflon.
- 2.2.8 PUMP O RINGS: Shall be Viton.
- 2.2.9 PRIMING SYSTEM: Pump shall be fitted with a fully automatic priming system incorporating an air compressor and air ejector assembly. The compressor shall be installed on the engine auxiliary drive and shall be gear driven, lubricated and cooled from the engine. The priming system shall require no fail-safe protection float gear or any adjusting at high or low suction lifts. Pumps with self-priming chambers modified with vacuum priming systems shall not be accepted as equal. The pump must be capable of running totally dry for periods up to 24 hours, then re-priming and returning to normal pumping volumes. Pump and priming system is capable of priming the pump from a completely dry pump casing. The pump shall be capable of static suction lifts to 28 vertical feet, at sea level. It shall also be capable of operation using extended suction lines. Equipment acceptance shall be contingent upon the pump's ability to run continuously at full speed in a completely dry condition. The engineer may require a demonstration.
- 2.2.10 CHECK VALVE: Pump shall be supplied with an integral ball-type check valve mounted on the discharge of the pump, allowing unrestricted flow from the

impeller. The check valve shall prevent in-line return of flow when the pump is shut off. Non-return valve elastomers shall be Nitrile rubber and shall be field replaceable.

- 2.2.11 **DRIVE UNIT:** The drive unit shall be a diesel water-cooled engine. The engine shall drive the pump by use of direct-connected intermediate drive plate. Starter shall be 12VDC electric. A control panel consisting of a low oil pressure safety shutdown, high temperature shutdown, tachometer, and hour-meter shall be integrated into the engine control panel with a manual, mechanical, engine throttle control. Said panel shall include an auxiliary single multi-pin receptacle for interfacing with an A-91 Controller. Battery shall have 180-amp hour rating. The engine shall drive the pump by use of direct-connected intermediate drive plate. Drive unit shall be a John Deere 4045T290 Interim Tier 4 or equal, rated at 74 H.P. (continuous) at 2200 R.P.M. A certified continuous-duty engine curve shall be supplied to the owner/engineer.
- 2.2.12 **GOVERNOR:** Governor shall be a mechanical type. Engine speed shall be adjustable to operate the pump between maximum and minimum design operation speeds.
- 2.2.13 **FUEL SOURCE:** Integral skid fuel tank capacity shall be sufficient to provide at least twenty-four hours of operating time at full load. The engine shall be capable of operating satisfactorily on a commercial grade of distilled No. 2 fuel oil.
- 2.2.14 **EXHAUST:** Exhaust system shall include a hospital grade muffler housed in a separate chamber within the enclosure. All exhaust piping and manifolds shall be encased in fitted acoustic blankets. They shall be constructed of high-density fiberglass material with waterproof jacketing.
- 2.2.15 **SKID BASE:** The pump and engine shall be skid mounted with an integral fuel tank. The fuel tank shall be equipped with drain plugs.
- 2.2.16 **SOUND ATTENUATED ENCLOSURE:** The engine and pump shall be completely enclosed with fourteen-gauge sheet metal panels backed with one inch and two-inch layers of polydamp acoustical sound-deadening material. The acoustical enclosure shall reduce pump and engine noise to sixty-eight dBA or less at a distance of thirty feet. The enclosure shall be removable for easy access to the engine / pump for maintenance and repair. The enclosure doors shall all be equipped with latches that are keyed alike. For maintenance and service needs, the enclosure sides shall have hinged doors for quick access to the engine oil fill, fuel fill port, oil dipstick, and filters
- 2.2.17 **TRAILER:** The complete pump assembly shall be mounted in a single axle trailer with a pintle type trailer hitch. The sound attenuated unit shall be attached to the trailer frame using Grade 8 nuts and bolts. Payload range D tires and 6000 lb Torflex #11 axle suspension or equivalent shall be required for the load range ratings. Trailers shall be equipped with fenders, hydraulic free backing brakes, front and rear support stands, lifting bar, safety chains and side and rear reflectors. Trailer

design shall be in compliance with applicable DOT regulations.

2.2.18 **FACTORY PAINTING:** Pump, engine, base, and trailer shall be shop primed and finish painted at the place of manufacturer. Materials and thickness for priming shall be in accordance with manufacturer's standards.

2.2.19 **SAFETY FEATURES:** The controller shall integrate the engine safety shut-off for low oil conditions, high coolant temperature, and provide over-speed protection.

2.3 AUTOMATIC STARTING CONTROL SYSTEM

2.3.1 The engine shall be equipped with a factory installed PrimeGuard microprocessor-based controller as supplied by Godwin Pumps of America, Inc. and designed to start/stop the engine at a signal supplied by high and low level floats or a 4-20 mA transducer.

2.3.2 ENGINE / PUMP CONTROL SPECIFICATIONS

The engine shall be started, stopped, and controlled by a PrimeGuard high performance state of the art digital controller as supplied by Godwin Pumps of America, Inc. The controller shall be weather proof enclosed, and contain an external weatherproof 12-position keypad accessible without the need to remove or open any protective cover or enclosure. It shall be designed to start/stop the engine at a signal supplied by high and low level floats or a 4-20 mA transducer. The PrimeGuard controller shall provide the following functions without modification, factory recalibration, or change of chips or boards, by simply accessing the keypad.

2.3.2.1 The keypad shall be a capacitive touch sensing system. No mechanical switches will be acceptable. The keypad shall operate in extreme temperatures, with gloves, through ice, snow, mud, grease, etc. and maintain complete weather-tight sealing of the PrimeGuard controller.

2.3.2.2 In automatic mode, the unit shall conserve energy and go to "sleep".

2.3.2.3 The PrimeGuard controller shall function interchangeably from float switches, pressure switch, or transducer, as well as manual start/stop by selection at the keypad. No other equipment or hardware changes are required.

2.3.2.4 The start function can be programmed to provide two separate functions each day for seven days (i.e. a start, exercise cycle on two separate days at different times and for a varying length of time all via the keypad).

2.3.2.5 **Manual-Automatic Button:**

2.3.2.5.1 In Manual Mode, manual "Start" button starts engine and runs until "Stop" button is

depressed or an emergency shutdown occurs.

- 2.3.2.5.2 In Automatic Mode, start/stop sequencing is initiated by either one (1) high-level N/O and one (1) low-level N/C narrow angle float switches, pressure switch, transducer, or a signal from a digital input.
- 2.3.2.6 The controller shall integrate the engine safety shut-off for low and high oil temperature, and provide over-speed protection.
- 2.3.2.7 The controller shall include standard, field-adjustable parameters for engine cycle crank timer, and shutdown time delay.
- 2.3.2.8 The PrimeGuard controller shall have only one circuit board with eight built-in relays. Three (3) of the relays shall be programmable to output desired parameter on display and to be used as dry-contacts for communication with City of Suffolk SCADA system, all via the keypad without changing relays, chips, printed circuits, or any hardware or software.
- 2.3.2.9 Standard components shall consist of (24) digital inputs, (7) analog inputs, (1) magnetic pick-up input, (8) 20-amp form "C" relays, (1) RS232 port, (1) RS485 port, (1) RS232/RS485 port, (1) J1939 port, and (1) 64X128 pixel full graphic LCD display with backlight.
- 2.3.2.10 The industrially-hardened PrimeGuard Controller shall withstand Vibration of 3 g, 3 axis, frequency swept 10-1000 Hz, in an operating temperature Range of 4° to 176°F (-20° to 80°C) and an operating humidity range of 0-95% Non-Condensing.

2.4 OPTIONS

- 2.4.1 **FLOAT SWITCHES:** One-normally open and one-normally closed narrow angle (10° to 20°) float switches integrate into automatic pump controller. The floats shall be constructed with tilt sensation switches enclosed within stainless steel. Each float will have a minimum 25 ft. waterproof cable wired into a twist-lock wiring harness that connects directly to an A91 controller or equivalent 2.4.1
- 2.4.2 **FULLY AUTOMATIC TRICKLE CHARGER:** The unit shall include a fully automatic trickle charger powered by 2-amperes, 115 VAC. It shall be hard-wired into the junction box within the enclosure
- 2.4.3 **ENGINE BLOCK HEATER:** The drive unit shall be supplied with an integral 750-Watt engine block heater (8-amp, 115 VAC required).
- 2.4.4 **FITTINGS:** Male Cam & Groove x Flange fittings supplied for the suction and

discharge.

PART THREE - EXECUTION

3.1 MANUFACTURERS SERVICES

3.1.1 The manufacturer shall furnish the services of a competent factory representative to do the following:

3.1.1.1 Inspect the system prior to delivery, supervise the start up and testing of the system, and certify the system has been properly furnished and is ready for operation.

3.1.1.2 Instruct the owner's operating personnel in the proper operation and maintenance of the system for a period of not less than one-half day.

3.2 TOOLS AND SPARE PARTS

3.2.1 The manufacturer shall furnish the following on delivery of the pumping system;

3.2.1.1 A recommended list of spare parts.

3.2.1.2 An Operations and Maintenance manual for the pump and engine.

3.3 WARRANTY

3.3.1 The manufacturer shall furnish the following to the owner:

3.3.1.1 A copy of the engine manufacturer's parts and labor warranty.

3.3.1.2 A one-year Parts and Labor Warranty issued by the manufacturer on the Trash Pump System. This warranty must cover all pump parts, including the mechanical seal.