

MEETING DATE: 04/21/08

AGENDA ITEM: Authorize the issuance of a purchase order in the amount of \$29,987 to Clairemont Equipment Company for the purchase of a mobile diesel-powered sewer pump to provide bypass pumping capability in the event of sewer pump station failure.

ATTACHMENTS

		<u>Pages</u>
1	Bid Submitted by Clairemont Equipment Company.	1-23

Clairemont Equipment

RENTALS • SALES • SERVICE

7651 Ronson Road • San Diego, CA 92111-1190
(858) 278-8351 phone • (858) 492-9959 fax

March 5, 2008

City Purchasing Officer
4343 Duquesne Avenue
Culver City, Ca. 90232

Deliver to: City Clerk, City Hall
9770 Culver Boulevard
Culver City, CA 90232
DUE: 3:00pm

Reference: City of Culver City
Portable Sewer Pump – Bid# 1379
Thompson Pump Quotation No. WO-1337

We at Clairemont Equipment Co. are pleased to present to you our formal proposal for pumping equipment relative to the above reference inquiry.

We confirm that we have received and reviewed the detailed specification for the pumping unit referenced above that includes – **Cover page dated February 14, 2008, Instructions for Bidders, pages A-1 thru A-2, Bid Schedule, pages B-1 and B-2, General Conditions, page C-1, Equipment Specifications, Part One - General, and Part Two - Products.** Any and all comments to the bid package are noted in the attached proposal.

The equipment we propose to provide for this request is as follows:

One - Thompson Model **6JSCE-DJDST-4045TF-280-M** rated for specified maximum duty point of 1850 GPM at 80' TDH, and the secondary duty point of 1600 GPM at 120' TDH, 62HP at 1875 RPM. The pump will have 8" x 150# raised face suction and discharge flanges with Bauer style fittings. The pump includes a 8" cast iron swing check valve. The diesel engine will be a John Deere model 4045TF-280 **Tier 3** emissions rated; water cooled with 12 volt electric start and will include automatic safety shutdown switches, Instrument panel, mechanical governor, and Cowl exhaust silencer. This pump will be of the "End Suction" design and will be "Site Trailer" mounted. This pumping unit will include our patented "**Enviroprime**" "**GREEN**" environmentally safe "Holset Engine Mounted Compressor" dry priming system which means that the pump will have no liquid "**Blow By**" or require a hose extended from the pumps venturi. The pump casing is constructed out of cast iron with oversize shaft and bearings. The impeller

will be enclosed with wear ring – non clog design constructed of Cast Iron, hardened to 500 HB, capable of handling a 3” solid (sphere). The pump mechanical seal is oil lubricated with Tungsten Carbide rotating face and Silicone stationary face capable of handling 100psi suction pressure. The fuel consumption for this unit is approximately 2.9 gallons per hour. The fuel tank will be 114 gallon capacity with drain plugs and will operate for approx. 39 hours before refueling is required. The trailer is a single axel design and includes fenders, suspension system, front and rear support stands, side and rear reflectors, trailer lights with receptacle for towing, tow bar with pintel hitch and safety chains, and centralized lifting bail. See attached preliminary pump spec sheet and performance curve for further details.

Features:

- The pump will handle a 3” solid (sphere)
- The pump will pull up to a 28’ suction lift
- The pump will operate under “Snore” conditions
- Vacuum gauge for early warning of poor suction conditions or impeller wear
- The pump is environmentally safe – no liquid “Blow By”
- Three (3) sets of parts, service and operations manuals
- The pump is low maintenance and user friendly
- The pump is economical to operate.

ADDITIONAL PRICE OPITONS YOU MAY WANT TO CONSIDER:

Price adder for One (1) 12 Volt Automatic battery Charger, 115 volt, single phase
.....\$ 239.13 net each.

Price adder for Two (2) 8” x 30’ long suction hose with Bauer style fittings
.....\$ 2,945.53 net Lot.

Price adder for Two (2) 8” x 30’ long discharge hose with Bauer style fittings
.....\$ 987.87 net Lot.

We have reviewed your terms and conditions and they are made part of our offering.

The validity of this proposal is thirty (90) days from today’s date with all prices firm through the quoted shipping schedule.

Delivery schedule for pumping equipment as described above is 3-4 weeks after receipt of your formal purchase order and acceptance by Thompson Pump Co. Management.

Terms of payment are Net 30 days, FOB Destination with freight pre-paid and included.

Comments to Pump Specifications

Parg. 1.2.3 –

Our pump design incorporates our patented "Enviroprime" priming system that is environmentally safe, which eliminates the need to have a hose extended from our pump venture taking the pump "Liquid Blow-By" back to the pumped source as dos the specified vendor. Their design is not environmentally safe and could cause ground water contamination should the "Blow-By" hose break, get plugged or not installed. **The City of Culver City, CA need to evaluate the risk potential before making their final purchase decision.**

Parg. 2.2 –

Thompson Pump Co. is ISO 9001:2000 certified. A copy of our certification is attached.

Parg. 2.2.2 –

Our pump impeller is a 2- vane, non clog impeller manufactured out of cast Iron with a barbell hardness of 500HB. The impeller is fully enclosed and is 84% efficient. This is the same impeller design that the City of Culver City utilizes on both their existing submersible non-clog sewage pumps and their vertical turbine water supply pumps.

Parg. 2.2.3 –

Our pump does not use wear plates, we provide a removable and replaceable wear ring which is hardened to 500HB. This is the same impeller wear ring design that the City of Culver City utilizes on both their existing submersible non-clog sewage pumps and their vertical turbine water supply pumps.

Parg. 2.2.5 –

Our pump mechanical seal design uses a tungsten carbide rotating seal face and a silicon carbide stationary seal face. The seal is oil lubricated and designed to run dry for 24 hrs.

Parg. 2.2.9 –

Our pump design incorporates our patented "Enviroprime" priming system that is environmentally safe, which eliminates the need to have a hose extended from our pump venture taking the pump "Liquid Blow-By" back to the pumped source as dos the specified vendor. Their design is not environmentally safe and could cause ground water contamination should the "Blow-By" hose break, get plugged or not installed. **The City of Culver City, CA need to evaluate the risk potential before making their final purchase decision.**

Parg. 2.2.10 –

The discharge of our pump will include an 8" Val-Matic check valve designed to eliminate pump Back-Flow during sever duty pumping conditions.

Parg. 2.2.11 –

The specifications reference a John Deere model 4045D engine and that it is to be Tier 3 emissions certified. This engine model is not Tier 3 certified. We propose to provide a John Deere model 4045TF-280 which is Tier 3 certified (approved by CA Air resources Board).

Parg. 2.2.14 –

The pump we are offering includes a 114 gallon fuel tank that will operate for 39 hrs. before re-fueling is required.

**City of Culver City
Portable Sewer Pump – Bid3 1379**

Contact Listing

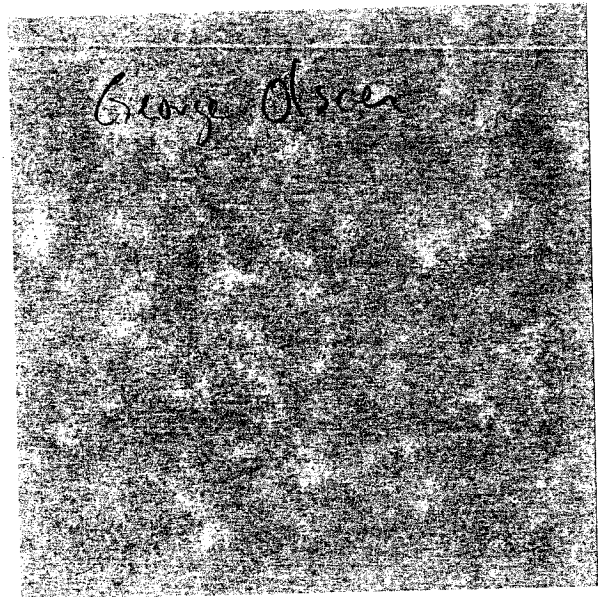
**City of San Bernardino
Mr. Tom Valdez
(909) 384-5192**

**City of Oceanside
Mr. Ray LaBelle
(760) 435-5935**

**Helix Water District
Mr. Tim Tomlinson
(619) 596-3860**

**City of Foster City
Mr. Gary Batis
(650) 286-3544**

**City and County of San Francisco
Mr. Michael L. Handy
(415) 695-2133**



NOTICE INVITING BIDS

Bid Number 1379

Notice is hereby given that sealed bids will be received by the City of Culver City, California, for furnishing the following:

FURNISH AND DELIVER ONE (1) NEW AND UNUSED PORTABLE SEWER PUMP

in strict accordance with the Specifications on file in the office of the CITY PURCHASING OFFICER, 4343 Duquesne Avenue, Culver City, California, 90232. Copies of specifications and bid documents may be obtained from the PURCHASING OFFICE at that address, telephone number (310) 253-6550.

Original and two copies of the bid must be filed with the CITY CLERK in CITY HALL, 9770 Culver Boulevard, Culver City, California, 90232, not later than 3:00 p.m. on **March 6, 2008**, at which time they will be publicly opened in the Council Chambers on the first floor of City Hall. Facsimile bids will not be accepted. Any bidder may withdraw his bid, without obligation, at any time prior to the scheduled closing time for receipt of bids. A withdrawal will not be effective unless made personally or by telephonic notification received prior to the close of bids. Bids may later be referred to the City Council for appropriate action. The City reserves the right to reject any or all bids as the best interests of the City may dictate.

By: 
Ela Valladares, Deputy City Clerk

Published in The Culver City News on February 14, 2008

CITY OF CULVER CITY

EQUIPMENT BID SPECIFICATION

BID# 1379

FURNISH AND DELIVER ONE (1) NEW AND UNUSED PORTABLE SEWER PUMP

**BID ENVELOPES MUST DESIGNATE BID NUMBER AND DESCRIPTION
TITLE FOR WHICH THE BID IS SUBMITTED**

**BIDS MAY BE DELIVERED IN PERSON, OR MAILED TO THE *CITY CLERK*
IN CITY HALL, 9770 CULVER BOULEVARD, CULVER CITY, CA 90232
ALL BIDS MUST BE RECEIVED NO LATER THAN 3:00 PM ON MARCH 6,
2008.**

**CITY OF CULVER CITY
EQUIPMENT SPECIFICATION BID # 1379**

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**CITY OF CULVER CITY
EQUIPMENT SPECIFICATION BID #1379**

INSTRUCTIONS FOR BIDDERS

The City of Culver City invites bids on the form attached hereto. Bids will be received by the City Clerk no later than 3:00PM on March 6, 2008.

Envelops containing the *Original Bid and Two Copies* must be sealed and addressed to the City Clerk, City of Culver City, 9770 Culver Blvd., Culver City, California 90232, and must designate the bid number and title of project for which the bid is submitted. The envelope must show the bidder's name, address, bid number and closing date.

Late bids will be rejected. Any alteration of the bid form, additions, deletions, conditions, limitations, or provisions by the bidder will render the bid irregular and may cause its rejection.

Bids may be withdrawn upon written request at any time prior to the time stated for closing of bids. Such request must be signed by the bidder of his/her authorized agent.

PREPARATION OF BID

Each bid must be submitted on the form provided by the City of Culver City. Failure to do so, may cause rejection of the bid.

All blank spaces for the bid prices and within the technical specifications must be completed in ink or typewritten, in figures as appropriate. Bids must be submitted on all items listed under the "Schedule of Works and Prices" unless otherwise indicated on the bid form. All items are to be constructed as new, complete and in place, and prices shown shall be the prices bid to supply all material and labor excluding any applicable taxes (F.O.B. Destination) and services to perform all work required by the specifications. Bidder will not be released on account of errors.

Any erasures or deletions of information entered in this bid must be explained over the signature of the bidder. Modifications submitted separately from this form will not be accepted.

The bid must be signed and dated in ink by an agent duly authorized to commit to this procurement.

**CITY OF CULVER CITY
EQUIPMENT SPECIFICATION BID #1379**

ADDENDA AND INTERPRETATION

No interpretation of the meaning of the specifications or other bid documents will be made to any bidder orally. Bidders are not to contact any individual other than the Purchasing Officer with questions. Every request for such interpretation must be made in writing and addressed to: Purchasing Officer, City of Culver City, 4343 Duquense Ave., Culver City California 90230, and to be given consideration, must be received at least ten (10) days prior to the date fixed for closing of bids. Any and all such interpretations, and any supplemental instructions will be in the form of written addenda to the specifications which, if issued, will be mailed by certified mail with return receipt requested to all known prospective bidders (at the respective addresses furnished for such purposes), not later than seven (7) calendar days prior to the date fixed for the closing of bids.

Addenda required later than seven (7) calendar days prior to the bid closing date may cause a postponement in the bid closing date. Failure of any bidder to receive any such addendum or interpretation shall not relieve such bidder from any obligation under this bid as submitted. All addenda so issued shall become part of the purchase order documents.

DISCRETION TO AWARD

The City of Culver City shall have full discretion to determine the responsiveness of each bid and may reject any bid or all bids because of an improper or non-responsive bid, a non-responsible bidder, or the purchase based on said bids or for other reasons that the purchase becomes infeasible. These bid instructions should be strictly followed by all bidders, however, the City reserves the right to waive any bid irregularity it finds to be of minor value.

Bidder shall hold all bid prices offered for not less than ninety (90) days.

**CITY OF CULVER CITY
EQUIPMENT SPECIFICATION BID #1379**

BID SCHEDULE

SCHEDULE OF WORK AND PRICES FOR: One (1) Portable Sewer Pump.

- A. Unit price will be established, by the City, by dividing the item total (Column 4 by the quantity column).
- B. Do not include sales tax, (applicable taxes will be calculated by the City of Culver City on the grand total submitted).
- C. State, make and model offered in column 3, and furnish detailed specifications and any color photos.

Item	Quantity	Description	Item Total
Bid 1379	1	New Portable sewer pump	\$ 29,987 ⁰⁰
Other			\$ 22 Attachment
		GRAND TOTAL	\$ 29,987 ⁻

The grand total submitted (excluding applicable taxes) is subject to verification. If any discrepancy is found, the sum of the item total/s will govern.

If the time for delivery has not been established by the City (within these specifications) the bidder proposes that the time of delivery will be made (F.O.B. Destination) within 35 days calendar days.

The following addenda are acknowledged:

#	Date	#	Date	#	Date	#	Date

{ } Check if "No-Bid". Return this package to remain active in our Vendor Files.

Date: _____ Signature: _____

Company Name: _____

Bid # 1379 Addendum #1

The Equipment Bid Specification

ATTENTION BIDDERS: Change Bid Opening Date from March 6th to March 13, 2008 at 3:00 pm.

The following additions, modifications, and clarifications to the specifications shall be included in, and become a part of, any contract which may be executed for the above bid:

1. Change Technical Specifications, Part 2 – Products, Subsection 2.2.5 to read as follows:

"2.2.5 SEALS: Seals shall be high pressure, mechanical self-adjusting type with silicon carbide faces capable of withstanding suction pressures to 40 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. Change Technical Specifications, Part 5 – Options to read as follows:

Bid Price

"PART 5 - OPTIONS:

- | | |
|------------|--|
| \$ 39.13 | (1) One each: 12 Volt Automatic Battery Charger, 115 Volt, Single Phase, |
| \$ 2450.00 | (2) Two each: 15' segments of 8" diameter heavy duty black suction hose with 8" Bauer quick disconnect fittings. |
| \$ 2970.00 | (3) Three each: 10' segments of 8" diameter heavy duty black suction hose with 8" Bauer quick disconnect fittings. |
| \$ 600.00 | (4) One each: 10' segment of 8" diameter lay flat discharge hose rated for 150 psi with Bauer quick disconnect fittings. |
| \$ 770.00 | (5) One each: 15' segment of 8" diameter lay flat discharge hose rated for 150 psi with Bauer quick disconnect fittings. |
| \$ 1650.00 | (6) One each: 50' segment of 8" diameter lay flat discharge hose rated for 150 psi with Bauer quick disconnect fittings. |
| \$ 243.00 | (7) One each: 8" female Bauer X 8" flange fitting (for connection to 8" flanged force main) |
| \$ 321.00 | (8) One each: 8" female Bauer X 6" male cam lock fitting." (for connection to existing city-owned 6" cam lock hose) |

**CITY OF CULVER CITY
EQUIPMENT SPECIFICATION BID #1379**

SIGNATURE SHEET, AFFIDAVIT

I, Kenneth L. Birch

Deposed and say that I am Gen. Sales Manager
("Sole Owner", "A Partner", Title, Etc.)

of - Claremont Equipment Company
Company Name

1330 Mission Rd Escondido CA 92029
(Address) (City) (State) (Zip)

C. 619 917 1500 OFF - 760 739 9100
(Telephone Number, include area code)

Whoever submits this proposal to the City of Culver City declares:

1. That he/she has read these specifications and has abided by and agree to the conditions herein and has carefully read the specifications and do hereby propose to furnish all equipment required in accordance with the specifications and for the item totals list in the Bid schedule.
2. That this bid is genuine, and not sham or collusive, nor made in the interest of, or in behalf of any person not herein named, and that the bidder has not directly or indirectly induced or solicited any other bidder to put in a sham bid, or caused any other person, firm, or corporation to refrain from bidding, and that the bidder has not in any manner sought by collusion to secure an advantage over any other bidder.
3. That the addenda indicated on Page B -1, of this proposal are acknowledged.

I certify or declare under penalty of perjury that the foregoing is true and correct and I am an authorized agent to submit this bid.

Kenneth L. Birch
Signature

03/05/08
Date

**CITY OF CULVER CITY
EQUIPMENT SPECIFICATION bid #1379**

GENERAL CONDITIONS

This specification provides for furnishing equipment and labor in the anticipated amount/s as indicated in these specifications.

The City of Culver City reserves the right to combine various bid items and/or alternates and to purchase separate items where bid quotes are more favorable to the City. The City of Culver City further reserves the right to reject and and/or all bids and to increase or decrease the number of unit/s estimated in each specification section in order to satisfy the City requirements.

The following GENERAL CONDITIONS are applicable to each type of vehicle offered:

- a. Equipment offered shall in all aspects meet and/or exceed all requirements of the Federal Government for safety standards for the current model year equipment offered.
- b. All equipment offered as standard by the manufacturer shall be provided.
- c. All regular pre-delivery and warranty services shall be provided for.
- d. Successful vendor/bidder/s shall furnish two (2) copies (each) of the current "Operators", "Maintenance" and "Parts" manuals for the exact equipment offered.
- e. All unit/s scheduled for earliest possible delivery after award of bid. Bidder to state delivery time, which will be considered as a condition of award.
- f. In evaluating bids, the City will take into consideration the sales tax differential return to the City from local vendors (if applicable) if the low bid/s are separated by less than one percent (1%).
- g. Technical specifications contained herein, including brand references, are not the City's absolute requirements but rather represent a level of performance or quality desired in the City's opinion. Comparable equipment options/features to satisfy the specifications herein in alternate ways will be considered. Alternate offers are to be supported by exact specifications and exact descriptive literature that fully describes the item(s) offered.

**CITY OF CULVER CITY
EQUIPMENT SPECIFICATION BID #1379**

TECHNICAL SPECIFICATIONS	CITY OF CULVER CITY
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**Section one (1) Technical Specifications: One (1) New and Unused
Portable Sewer Pump**

Contract(s) shall be awarded to the vendor or vendors submitting the most responsible bid (s) for the equipment. These specifications are in two parts.

In Column 2, after each specification item, the bidder shall indicate that the item being bid is exactly as specified, or describe any deviation from the detailed specification. Any additions, deletions, or variations from the following specifications must be noted. Any items appearing in the manufacturer's regular published specifications furnished by the Bidder are assumed to be included in the Bidder's proposal. Any additions, deletions, or variations from the manufacturer's regular published specifications must be outlined in an attached letter. Any unanswered columns shall be considered as non-compliance to that particular item.

INSTRUCTIONS TO BIDDER

Enter a comment in column 2 to indicate that the item offered is exactly as specified, or varies from the specification. Fully and clearly explain each variance. Further, answer 'yes' or be capable of giving an alternate. This unit may be referred to as a "Refuse Trailer" for identification purposes.

COLUMN 1 ITEM SPECIFICATIONS	COLUMN 2 BIDDER'S PROPOSAL
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PART ONE – GENERAL

1.1 PROJECT SCOPE

1.1.1 Culver City is seeking sealed bids for one (1) 8" x 8" Trailer Mounted Trash Pump. For procedural questions please contact the Purchasing Officer Margarita Lee (310) 253-6552 for technical questions please contact Steve Finton, Senior Civil Engineer (310) 253-6406.

See Attached Proposal

1.1.2 The pump offered shall be the manufacturer's standard production model. The manufacturer shall have a minimum of five (5) years experience in the manufacturing of portable trash pumps and shall have pumps in continuous use by municipal and industrial owners for a minimum of three (3) years. The manufacturer shall submit a list of five municipalities within California including contact names and telephone numbers that have the proposed pump model in service.

Thompson Pump Co. has b.
Manufacturer's these Pumps for
35 years. See attached Contact
Listings

1.1.3 The portable pump shall be delivered to Culver City within ten days of written bid award notification.

35 days ARO

1.2 SYSTEM DESCRIPTION

1.2.1 The portable trash pump specified in this section will be used to pump wastewater with solids. The pump shall be capable of operating at design in all forms of weather that is typically found in Southern California, particularly in temperatures ranging from 33° F to 100° F.

included

1.2.2 The pump and accessories shall be supplied by the pump manufacturer.

includes

1.2.3 The pump shall be fitted with a fully-automatic priming system incorporating an air compressor, air ejector assembly, and an air/water separation tank. The priming system shall be capable of priming the pump from a completely dry pump casing. The air ejector shall operate on the discharge side of the compressor, eliminating the possibility of water being drawn into the air source. The pump must be capable of running totally dry for periods up to twenty-four hours, then re-priming and returning to normal pumping volumes.

Thompson Pump Co. "Evaporative
Compression" Dry Prime" System
No Liquid "Blow-By" Evaporative
Safe Priming - included

1.2.4 The priming system shall not use a vacuum or diaphragm pump, nor require the use of a "Foot"-type valve. It shall contain no moving parts or protective float gear. A

demonstration of the pump's ability to repeatedly cycle from dry suction / pump / snore / repriming / shall be required. This will necessitate the draining of all residual water from the pump case to initiate a dry suction starting condition.

we comply

1.2.5 The diesel engine driven pump unit shall be mounted on a trailer suited for highway travel at 65 M.P.H. and wired for over-the-road usage in compliance with California Vehicle Code regulations.

included

1.2.6 Pump and priming system shall be fully automatic, needing no form of adjustment or manual addition of water for the priming system. The pump shall be capable of static suction lifts to twenty-eight vertical feet, at sea level. It shall also be capable of operation using extended suction lines.

included

1.2.7 Equipment acceptance shall be contingent upon the pumps ability to run continuously at full speed in a completely dry condition for periods up to twenty-four hours. This may require the draining of all residual water in the pump casing to simulate a dry suction/case condition. A demonstration may be required by the Culver City or its appointed designee.

included

1.3 DESIGN REQUIREMENTS

- 1.3.1 OPERATING SPEED (MAXIMUM)
2200 RPM
- 1.3.2 MAXIMUM SOLIDS HANDLING SIZE
3 INCHES
- 1.3.3 IMPELLER DIAMETER 11.2 INCHES
- 1.3.4 SUCTION SIZE 8 INCHES
- 1.3.5 DISCHARGE SIZE 8 INCHES
- 1.3.6 MAXIMUM SUCTION LIFT 28 FEET
- 1.3.7 MAXIMUM DUTY POINT 1850 GPM
AT 80'TDH
(INCLUDING A 20' SUCTION LIFT)
- 1.3.8 SECOND DUTY POINT 1600 GPM AT
120'TDH
(INCLUDING A 15' SUCTION LIFT)

included - see attached
Pump Performance Curve

1.4 REFERENCES

1.4.1 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 a Model CD200M, size 8" x 8" as manufactured by GODWIN PUMPS, Bridgeport, New Jersey or equal.

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. Pump end shall be manufactured to ISO 9002 specifications.

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

Included - TPM is
ISO 9001:2000 - sec
Attached Certification

Non Clog 2-VANE impeller
CAST IRON - 500 HB; Fully enclosed
Impeller - 84% efficient

CAST IRON impeller wear
Ring - 500 HB Hardness

Included

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.

*TUNGSTEN CARBIDE ROTATING &
SILICON CARBIDE STATIONARY SEAL
Included*

2.2.6 PUMP SUCTION AND DISCHARGE

FLANGES: Shall be cast iron ANSI (B16.1) Class 150, raised faced with 8" Bauer fittings.

included

2.2.7 PUMP GASKETS: Shall be compressed fiber and/or Teflon.

included

2.2.8 PUMP O RINGS: Shall be Viton.

included

2.2.9 PRIMING SYSTEM: Pump shall be fitted with a fully automatic priming system incorporating a twin-cylinder compressor and air ejector assembly, no vacuum pump. The compressor shall be installed on the engine auxiliary drive and shall be belt 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 and positive pressure condition priming shut out valve shall be included.

*Thompson Pump Co. "ENVIRONMENTAL
COMPRESSION PRIMING SYSTEM"
NO BLOW-BY. ENVIRONMENTAL
SAFE. SEE ATTACHED SPEC
SHEET FOR DETAILS*

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. Nonreturn valve elastomers shall be Nitrile rubber and shall be field replaceable.

*8" VALVE DISCHARGE
CHECK VALVE*

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 twelve-volt electric. Safety shut down switches for low oil pressure and high temperature shall be provided. Battery shall have 180 amp hour rating. Unit shall include a tachometer and an hour meter. Drive unit shall be a John Deere 4045D or equal, rated at 71 H.P. (continuous) at 2200 R.P.M. A

certified continuous-duty engine curve shall be supplied to the owner/engineer.

*The specified 4045A is
A Tier 3 Certified Engine. &
Am Providing A John Deere
4045TF-280 TIER 3 ENGR*

2.2.11.1 EMISSIONS. The diesel engine provided shall be a Tier 3 engine in compliance with the Portable Diesel-Fueled Engines Air Toxic Control Measure (ATCM) promulgated by the California Environmental Protection Agency Air Resources Board.

included

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.

included

2.2.13 FUEL SOURCE: Integral skid fuel tank capacity shall be sufficient to provide a minimum of 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. Fuel tank capacity shall be a minimum of 60 gallons.

114 Gallon - 39 hr. Run Time
included

2.2.14 EXHAUST: Exhaust system shall include hospital grade muffler, cowl type.

included

2.2.15 BASE: The pump and engine shall be mounted with an integral fuel tank. The fuel tank shall be equipped with drain plugs.

included

4.1.1 TRAILER: The pump, engine and tank shall be trailer mounted with a pintle type trailer hitch. Tires and torsion bar suspension shall be adequately sized for the required load range ratings. Trailers shall be equipped with fenders, lights, front and rear support stand, lifting bar, safety chains and side and rear reflectors. Trailer design shall be in compliance with applicable California Vehicle Code provisions.

included

4.1.2 CONTROL PANEL: The control panel shall at a minimum be equipped with tachometer, a non-resettable hour meter, engine temperature gauge, oil pressure gauge, voltage output gauge and keyed start on/off switch.

included

2.3 FACTORY PAINTING

2.3.1 Pump, engine, base, and trailer shall be shop primed and finish painted at the place of manufacturer. Materials and dry film thickness for priming and finish paint shall be in accordance with manufacturer's standards.

included

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.

included

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.

included

3.2 TOOLS AND SPARE PARTS

3.2.1 The manufacturer shall furnish the following with the Portable Trash Pump System:

3.2.1.1 A recommended list of spare parts.

will comply

3.2.1.2 Three Sets of Operations and Maintenance manuals complete with breakdown drawings.

will comply

3.2.1.3 One set of Equipment breakdown drawings shall be submitted in electronic format (i.e. autocad).

will comply

3.2.1.4 One quart of matching touch-up paint.

will comply

3.3 WARRANTY

3.3.1 The manufacturer shall furnish the following to the owner:

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

included

PART 4 - EXCEPTIONS TO SPECIFICATIONS:

4.1 If a bidder wishes to propose a product that does not exactly match the specifications above, on a separate page he shall provide a complete list of all deviations and an explanation of how the proposed product meets or exceeds each line of the above specifications.

see Attached Comment Page

PART 5 - OPTIONS:

- (1) One each: 12 Volt Automatic Battery Charger, 115 Volt, Single Phase,
- (2) Two each: 30' segments of 8" diameter suction hose with compatible couplings.
- (3) Two each: 30' segments of discharge line with compatible couplings

included