

INTER-DEPARTMENT MEMORANDUM

Date: December 10, 2013

There is no impact to the General Fund. The engine replacement cost is \$317,368.24 and would be financed with Water Funds.

AUTHORIZE PURCHASE OF A NEW PUMP ENGINE
FROM WAUKESHA-PEARCE INDUSTRIES, INC
December 10, 2013
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RECOMMENDATION

It is recommended that the City Council:

- Authorize the Finance Director to issue a purchase order to Waukesha-Pearce Industries, Inc., in the amount of \$317,368.24, for the purchase of a new pump engine for Water Well 29; and
- Authorize the Finance Director to make modifications to the purchase order as appropriate.



WILLIAM E. MURRAY, P.E.
Public Works Director/City Engineer



By: Robert Bermudez
Water Production Supervisor

Attachment: Quote for Waukesha-Pearce Industries, Inc. pump engine

Recommended for Approval



Matthew Ferial
City Manager



Project: F3521G
Date: Wednesday, October 30, 2013
Expiration: Tuesday, January 28, 2014
Company: City of Garden Grove Water Service
Attention:
Estimate Number: 035QUO-07367-C8X3N3

WAUKESHA-PEARCE INDUSTRIES, INC.
2260 South Archibald Avenue Unit B
Ontario CA 91761
Contact: Mario Leos
Phone: 909.214.5118
Email: mario.leos@wpi.com

Scope of Supply

<u>Option Code</u>	<u>Model</u>	<u>Price Each</u>	<u>Extended Price</u>
P1610G1	F3521G	\$244,444.00	\$244,444.00

WPI is pleased to offer the following proposal for 1 Waukesha F3521G.

AIR CLEANER - Dry type with rain shield and service indicator.

BARRING DEVICE - Manual.

BEARINGS - Heavy duty, replaceable, precision type.

BREATHER - Closed system.

CONNECTING RODS - Drop forged steel, rifle drilled.

CONTROL SYSTEM - Pneumatic. Includes pilot operated valves for air start and prelube. Engine mounted control panel with two push button valves. Pilot operated air start valves omitted when starter is not furnished by Waukesha. Includes engine On/Off push button. One mounted on either side of the engine.

CRANKCASE - Integral crankcase and cylinder frame. Main bearing caps drilled and tapped for temperature sensors. Does not include sensors.

CRANKSHAFT - Counterweighted, forged steel, seven main bearings, and dynamically balanced.

CYLINDERS - Removable wet type cylinder liners, chrome plated on outer diameter.

CYLINDER HEADS - Six interchangeable, valve-in-head type. Two hard faced exhaust valves per cylinder. Hard faced intake and exhaust valve seat inserts. Roller valve lifters and hydraulic push rods.

ENGINE MONITOR DEVICES - Engine thermocouples, K-type, are wired to a common junction box for jacket water temperature, lube oil temperature and intake manifold temperature. Magnetic pickup wired for customer supplied tachometer. Lube oil pressure and intake manifold pressure sensing lines are terminated in a common bulk head.

ENGINE ROTATION - Counterclockwise when facing flywheel.

FLYWHEEL - Approx. WR2 = 155000 lb-in²; with ring gear (208 teeth), machined to accept two drive adapters: 31.88" (810 mm) pilot bore, 30.25" (768 mm) bolt circle, (12) 0.75"-10 tapped holes; or 28.88" (734 mm) pilot bore, 27.25" (692 mm) bolt circle, (12) 0.625"-11 tapped holes and (12) 0.75"-10 tapped holes.

FLYWHEEL HOUSING - No. 00 SAE.

FUEL SYSTEM - Natural gas, 4" (102 mm) updraft. Fisher Model S-201 2" (51 mm) gas regulator, 13 psi (89 kPa) maximum inlet pressure.

GOVERNOR - Woodward UG-8LD hydraulic lever type, with friction type speed control. Mounted on right hand side.

IGNITION - Waukesha Custom Engine Control™ Ignition Module. Electronic digital ignition system. 24V DC power required.

LEVELING BOLTS

LIFTING EYES - Requires 9.5 ton Working Load Limit (W.L.L.) anchor shackles.

LUBRICATION - Full pressure. Gear type pump. Full flow filter, 20 gallon (76 litres) capacity, not mounted. Includes flexible connections. Includes lube oil strainer, mounted on engine. Air/gas motor driven prelube pump. Requires final piping.

MANIFOLD - Exhaust, water cooled, vertical 5" (127 mm) pipe flange at rear and flexible stainless steel exhaust connection.

OIL COOLER - Shell and tube type, with thermostatic temperature controller. Mounted on left hand side.

OIL PAN - Base type. 66 gallon (250 litres) capacity including filter.

PAINT - Oilfield orange topcoat.

PISTONS - Aluminum with floating pin. Standard 10:1 compression ration. Oil cooled.

SHIPPING SKID - For domestic truck or rail.

VIBRATION DAMPER – Viscous type. Guard included with remote mounted radiator or no radiator.

WATER CIRCULATING SYSTEM, AUXILIARY CIRCUIT - For oil cooler. Pump is belt driven from crankshaft pulley.

WATER CIRCULATING SYSTEM, ENGINE JACKET - Belt driven water circulating pump, cluster type thermostatic temperature regulating valve, full flow bypass type with 165° - 170°F (74° - 77°C) start to open thermostats. Flange connections and mating flanges for 4" (102 mm) inlet and outlet.

WARNING

To prevent engine damage and possible injury, it is the customer's responsibility to provide engine protection switches and fuel shutoff valve(s) wired to simultaneously shut off the ignition and the fuel for the following conditions: normal shutdown, overspeed, low lube oil pressure, high jacket water temperature and high intake manifold air temperature on GSI and GL engines. See S8382-2 for recommended engine protection equipment set points.

	<u>Code</u>	<u>Accessory</u>	<u>Price Each</u>	<u>Extended Price</u>
Cooling	4230A	4230A Surge Tank - Jacket water circuit only. Mounted and connected to engine, 6" (152 mm) ANSI 125 lb. Pipe flange outlet. Can be used with Code 4292, Inlet Water Header. Do not use with Codes 1102, 4341, 4342, and 4293	\$2,328.00	\$2,328.00
Flywheel Housing	1163	1163 Flywheel - Machined for TD-321 clutch	\$1,605.00	\$1,605.00
Lubrication	5229A	5229A Lubricating System - Electric prelube pump for prelube and post lube for automatic or remote start applications that have time to prelube prior to starting engine. Does not include relief valve which is required for continuous operation. Includes 115V AC, 60Hz, single phase motor driven pre-lube pump, motor starter and pressure switch. Omits standard air/gas prelube motor drive system. Pneumatic control panel will include manual start push button. NOTE: Only available with a Non-ESM L7042GL.	\$459.00	\$459.00
Starting Equipment - Electrical	9000	9000 Two electric starting motors - 24 volt, solenoid engagement. Includes pneumatic prelube unless optional electric motor driven prelube pump is specified. (Ref. Codes 5229A, 5229E, 5235). NOTE: Only available on L7042GL with ESM*.	\$2,058.00	\$2,058.00
Total			\$6,450.00	\$6,450.00
<u>Additional products</u>			<u>Price Price</u>	<u>Extended Price</u>
Shipping			\$8,002.52	\$8,002.52
Installation			\$12,000.00	\$12,000.00
Start Up Labor			\$14,000.00	\$14,000.00
8% Tax			\$22,471.72	\$22,471.72
Buy out - flywheel coupling adapter			\$10,000.00	\$10,000.00
			\$66,474.24	\$66,474.24

Note: Standard Factory Test

Total Price: \$317,368.24

Best Regards,

Mario Leos
Regional Manager
Waukesha-Pearce Industries
909-638-0003
909.214.5118
mario.leos@wpi.com

Direct
Mobile

*Waukesha-Pearce Industries, Inc. (WPI)
Standard Terms and Conditions of Sale*

1. Acceptance

All quotations offered by WPI are subject to acceptance within thirty (30) days from the quoted date.

2. Payment Terms

Subject to WPI Credit Department approval, WPI's payment terms are Net-30 Days from date of invoice. On any GE Waukesha Gas Engines or WPI fabricated products quoted at \$150,000 or more, WPI requires progress payments with the following milestone achievements:

20% upon submittal of drawings

20% upon completion of skid fabrication

50% upon receipt of major components (engine(s), pump(s) generator(s) & switchgear)

10% (or full balance) 30 days from date of final invoice

3. Cancellation or Termination

The Buyer, only upon payment of reasonable cancellation charges related to expenses already incurred and/or commitments made by WPI, may cancel any order placed with WPI. Cancellation charges on GE Waukesha Engines are 100% after the engine order is placed with GE Waukesha. Cancellations charges for completed fabrication projects are 100%. No termination by Buyer for default shall be effective unless and until WPI shall have failed to correct such alleged fault within sixty (60) days after receipt by WPI of written notice specifying such default. WPI further reserves the right to fabricate ahead of the shipping schedule whenever it is deemed necessary and upon notification to Buyer. Such advance fabrication shall not void Buyer's responsibility for cancellation charges.

4. Alterations

No alterations in specifications, either for total quantity, delivery, mechanical, electrical or other details may be made without written consent of WPI and readjustment of price and estimated delivery.

5. Taxes

In addition to the prices stated in the quote, Buyer shall reimburse WPI for any excise, sales or use tax incident to this transaction for which WPI may be liable or compelled to collect.

6. Shipping Dates

Any shipment date provided in the quote is approximate and is estimated based on the advised lead-times provided by the manufacturer(s) of the equipment quoted. Upon receipt of a Purchase Order from Buyer, along with complete specifications and drawings approval, if require, and after receipt of WPI's Purchase Order to the manufacturer the estimated delivery will again be advised by the manufacturer to WPI and WPI will update Buyer on the new estimated delivery. WPI shall not be liable for any loss or damage for delay or non-delivery due to the acts of civil or military authority, acts of the Buyer or by reason of Force Majeure, which shall be deemed to mean all other causes whatsoever not reasonably within the control of WPI, including, but not limited to Acts of God, war, riots or insurrection, blockades, embargoes, sabotage, epidemics, fires, strikes, lockouts or other industrial disturbances, delays of carriers, the inability to secure materials, labor shortages or manufacturing delays. Any delay resulting from any such cause shall extend shipping dates correspondingly. WPI shall in no event be liable for any special, direct or indirect or consequential damages arising from delay(s) irrespective of the reason.

7. Indemnity

Buyer agrees that it will indemnify and hold harmless WPI, its officers, agents and employees, from and against any and all claims, losses, damages, causes of action, suits and liabilities of every kind, including all expenses of litigation, court costs and attorney's fees, forfeiture of an oil, gas or mineral lease, damage to a producing reservoir or lease operations of lost production, arising out of, or in any way connected with the failure of, or the operation of the equipment sold by WPI, unless WPI is proven in court to be 100% solely negligence in its responsibilities.

8. Consequential Damages and Other Charges

WPI will not be responsible or liable for any special, direct, indirect or consequential damages or for any operational interruptions or delays, production loss, or other damages or claims of whatever kind caused by or arising out of the fabrication, manufacture, sale, delivery, installation, use, breakage or performance of equipment sold or any part thereof, except only to the extent and in the manner set out in Item 12 below having to do with warranty.

9. Performance Guarantee

Performance is subject to manufacturer's guarantees for horsepower and capacities and is subject to de-rating for actual site conditions.

10. Comments and Exceptions

When Buyer's specifications are attached to or referenced in an invitation to quote, WPI makes a thorough and sincere effort to review these and provide a quote based on WPI's interpretation of the Buyer's specification. WPI's quote will clearly state what is included and what our interpretation is of Buyer's requirements. It is the Buyer's responsibility to review WPI's quote carefully and advise WPI of any discrepancies between Buyer's specification and WPI's quote. WPI's quote constitutes WPI's total offer and only those items; procedures, scope and content clearly stated in the quote are included and WPI makes no guarantee that the products quoted will meet the Buyer's specifications.

11. Structural, Current-Pulsation, Vibration, Torsional, Transport Studies

When requested by the Buyer, WPI will arrange for a third party analysis of the quoted fabricated equipment systems or components. Any changes or modifications to the original design, which result from these analyses are considered outside the scope of the original quote and will be charged at WPI's published rates for engineering, material, labor and necessary supervision in effect at that time.

12. Warranty

WPI warrants that the equipment of its own fabrication shall be free from defects in design, material, workmanship and title, under normal use, service, and operating conditions, for the period of one (1) year from date of start-up or commissioning or eighteen (18) months from date of shipment. WPI's exclusive remedy for breach of this warranty shall be repair or replacement of any defective parts packaged by WPI, F.O.B. Houston, Texas. Accessories or equipment furnished by WPI, but manufactured by others, shall carry that manufacturer's warranty, which will be passed-on to Buyer. WPI shall not be liable for any repairs, replacements, or adjustments to the equipment or any costs of labor performed by the Buyer or others without WPI's prior written approval. WPI will serve the Buyer by acting as Buyer's representative in regard to warranty claims for items not manufactured by WPI. However, warranty in all cases is limited to the manufacturers' warranty. Any part(s) found to be defective will be replaced no charge subject to each manufacturers' respective warranty policy, which WPI will administer. Any part(s) replaced that are not subsequently found to be defective by the manufacturer will be charged to the Buyer. Warranty labor for replacement or repair is on site only. Buyer is responsible for travel time, transportation and expenses to and from the closest WPI location to the location of the subjected equipment. Should WPI travel to the location and find that the cause is not warrantable, all expenses incurred by WPI, to include labor, will be billed to the Buyer. WPI will not be responsible for crane, barge, or special transportation charges associated with warranty repairs.