APPROVE PURCHASE OF PARTS AND SERVICES TO REBUILD A BELT FILTER PRESS FROM ALFA LAVAL, INC. AT THE REGIONAL WASTEWATER CONTROL FACILITY

RECOMMENDATION

It is recommended that the City Council approve by motion findings for an exception to the competitive bid process and authorize the purchase of parts and services to rebuild the belt filter press in use at the Regional Wastewater Control Facility from Alfa Laval, Inc., of Houston Texas in the amount of $252,000.

It is further recommended that the City Manager be authorized to take appropriate action to carry out the purpose and intent of this motion.

Summary

If approved, this action will authorize the purchase of parts and services to rebuild the belt filter press for dewatering solids at the Regional Wastewater Control Facility (RWCF) from Alfa Laval, formerly Ashbrook Simon-Hartley. The belt filter press is a large, 2.2-meter press that runs 24-hours a day, 7-days a week processing cake solids that are pumped to a solids loading area at the RWCF. The current unit is approximately 35-years old, no longer processes the cake solids as needed, and is frequently out of service for repairs. When not working properly, this unit is unable to remove sufficient water from the solids waste. The City pays a contractor to remove the dried cake solids from onsite. If the solids are not pressed and dried sufficiently, the City pays additional hauling costs because of the higher water content. The associated infrastructure supporting and connected to the current unit is designed specifically for a biosolids pump built by Ashbrook Simon-Hartley, now owned by Alfa Laval, who offers a rebuild program of older models that reconditions and upgrades the equipment, which is a cost-efficient alternative to purchasing a newer model.

DISCUSSION

Background

The sludge dewatering system consists of two 2.2-meter belt filter presses that receive the digested sludge, press to remove water from the biosolids, and pump the resulting sludge cake as 20-23% solids to an onsite loading area for transport by a contract vendor. Recently, the percent solids have dropped as low as 17%, which means there is more water in the sludge cake. A contractor transports the stabilized sludge cake to a disposal site, and because the disposal costs are based on weight, the excess water in the sludge cake increases the disposal costs to the City.

The two existing presses were installed in the late 1980s. They are approximately 35-years old and are out of service frequently for maintenance and repairs. The plant requires one press running at all
times in order to meet production requirements. Both presses require replacement, but one needs to remain in service at all times to meet production.

**Present Situation**

The RWCF solids handling process is designed to run two belt presses 24-hours a day, 7-days a week. The presses are used to dewater sludge solids and move the cake product to a holding area for removal. Both have outlived their useful life and are in need of replacement. The down-time affects the ability to process and remove sludge and the effective treatment of waste.

Ashbrook offers a ‘Rebuild Program’ on early model belt filter presses as an alternative to purchasing new equipment. The rebuild consists of onsite machine reconditioning and component upgrades that will meet the latest design standards. The rebuild program includes a 1-year warranty. Other companies do not offer similar rebuild programs that will upgrade the existing unit with newer technology and parts and include a warranty at approximately half the cost of a new unit. Although both presses need to be replaced, staff at this time requests approval to rebuild one unit as the other unit needs to remain in service to meet production. Staff will return to Council for approval of the second unit after the first is installed and running.

A significant cost benefit can be realized by a full rebuild of the current unit. The footprint of the new press will be the same as the existing, eliminating the need and cost for additional engineering design, infrastructure, and construction, which can exceed $100,000. Replacement parts for the presses are interchangeable and are already kept in stock for quick repairs. The ability to use the same parts reduces the cost of in-stock inventory. The preventative maintenance requirement is the same, reducing staff time for additional work. A new unit would cost approximately $460,000, delivered and installed. The full rebuild can save over $300,000 compared with the cost of purchasing a new unit with the required engineering design and infrastructure improvements.

**Findings**

Stockton Municipal Code Section 3.68.070 provides for an exception to the competitive bidding requirements for purchases in excess of $32,123 in cases where the City Council has approved findings that support and justify exceptions to the competitive bidding process.

Proposed findings to support this purchase are as follows:

- The belt press rebuild is needed as soon as possible to improve the sludge processing and reduce disposal costs. A full bid process to find comparable new units will delay installation, increase costs, and affect the RWCF’s ability to effectively process waste.
- Alfa Laval, formerly Ashbrook Simon-Hartley, offers a rebuild program for its older belt press units, which are currently in use at the RWCF. All supporting infrastructure, supporting structures, connections, and tooling are designed for the earlier model press purchased from Ashbrook and will reduce costs to the Department for the replacement.
- Other companies do not offer similar rebuild services with technology upgrades, and warranty for the press currently in use at the RWCF.
- Rebuilding the current unit ensures the existing facilities can support the new equipment, and that the new press will continue to operate as needed at the RWCF.
Changing to another brand would delay installation and require redesign of all associated infrastructure at a greater cost to the City.

Repair tools and replacement parts are consistent between the two belt filter presses. Purchasing a different brand of press following a bid will increase the cost of tooling and supplies for repair and maintenance.

Therefore, staff recommends the City Council approve these findings as an exception to the competitive bid process to purchase parts and services to rebuild the belt filter press from Alfa Laval, Inc. for the RWCF in the amount of $252,000 (Attachment A).

FINANCIAL SUMMARY

The cost for the belt press rebuild is $252,000. Sufficient funds are available in account 431-4331-575 (Wastewater Treatment Plant Maintenance) for this purchase.

There is no impact to the General Fund, or any other unrestricted fund, from this action.

Attachment A - Contract with Alfa Laval with Cost Proposal dated 5-6-14