



RESOLUTION NO. 2012-04

**A RESOLUTION OF THE CITY OF LYNNWOOD, WASHINGTON,
WAIVING COMPETITIVE BIDDING REQUIREMENTS UNDER RCW
39.04.280 FOR THE PROCUREMENT OF REPLACEMENT HEAT
EXCHANGERS FOR THE WASTEWATER TREATMENT PLANT.**

WHEREAS, the City of Lynnwood owns and operates a system of sewerage and plant for the collection, treatment and disposal of wastewater pursuant to RCW 35.92.020; and

WHEREAS, the City of Lynnwood Wastewater Treatment Plant is a critical capital asset which provides for the treatment and disposal of wastewater generated within the City's service area, which serves approximately 38,000 people. In order to sustain ongoing sewer treatment and disposal operations, the facility requires routine maintenance, repair and replacement of equipment; and

WHEREAS, the City has adopted a Wastewater Comprehensive Plan and a Capital Facilities Plan which identify priority projects for maintenance, repair and equipment replacement at the Wastewater Treatment Plant; and

WHEREAS, the City's Capital Facilities Plan includes Project SE2006051A, a project for the replacement of the Heat Exchanger System at the Wastewater Treatment Plant (the "Project"); and

WHEREAS, the existing Heat Exchanger System at the Wastewater Treatment Plant has been in continuous service for over 14 years during daily operation of the Plant. The Heat Exchanger System is beyond its serviceable life, requires frequent maintenance, and requires replacement in the short term future; and

WHEREAS, the existing Heat Exchanger System unit required extensive repair work in 2005 due to metal fatigue; and

WHEREAS, the Heat Exchanger System is a unique, specialized, and integral component of the Incineration System at the Wastewater Treatment Plant, which is the basis of waste disposal in the treatment system; and

WHEREAS, the City has entered into contract #2061 with Gray & Osborne Consulting Engineers for the design of the replacement Heat Exchanger System; and

WHEREAS, during the preliminary design of the Heat Exchanger System, Gray & Osborne found that the manufacture of the Heat Exchanger System is anticipated to take 9 months; and

WHEREAS, it is in the best interest of the City to limit the overall duration of the Project so that the Heat Exchanger System can be designed, manufactured and installed in as expedient manner as is feasible; and

WHEREAS, the City has received a letter of recommendation from Gray & Osborne's sub-consultant who specializes in Wastewater Treatment Plant design, Chavond-Barry Engineering Corporation, recommending limiting bidders to two qualified manufacturers for the reasons stated in the letter, copy attached as Exhibit A; and

WHEREAS, due to the market conditions which include the limited number of firms that design and manufacture Heat Exchanger Systems in the United States, especially for custom applications and special facilities such as will be required for this Project, conducting an open bid process would require the City to expend considerable time and expense to develop and implement significant bidder qualification and evaluation criteria with no guarantee that these criteria will result in the most qualified manufacturer(s) being a low bidder for this special facility; and

WHEREAS, due to the critical nature of this special facility and the potential risks, costs and impacts to operations at the Wastewater Treatment Plant that would result from an improperly designed or manufactured Heat Exchanger System, City Staff and the Consultants working on the project are recommending that bidding be limited to only two manufacturers, based on their known professional experience, qualifications, design capabilities and manufacturing technology; and

WHEREAS, in order to steward this special facility project, the City must select a bid based on factors other than price alone; and

WHEREAS, the City is authorized under RCW 39.04.280(1)(b) to waive the public works competitive bidding requirements otherwise applicable under Chapter 39.04 RCW for projects involving special facilities or market conditions; and

WHEREAS, pursuant to RCW 39.04.280, this resolution will limit the bidding of the Project contract to two qualified bidders and retain an element of competition in bidding, unlike a single sole-source selection, and will reasonably assure conservation of City funds; and

NOW, THEREFORE, THE CITY COUCIL OF THE CITY OF LYNNWOOD, WASHINGTON, DOES HEREBY RESOLVE AS FOLLOWS:

Section 1. Special Facilities and Special Market Conditions: Pursuant to RCW 39.04.280, the City Council hereby declares the Project to constitute a “special facility” and finds the existence of “special market conditions.” In light of the factual basis set forth in the “Whereas” clauses above, incorporated and adopted in full by this reference, the City Council finds that the Project constitutes a special facility for the purposes of RCW 39.04.280(1)(b), and that special market conditions under RCW 39.04.280(1)(b) exist. These special market conditions include, but are not limited to, the small number of manufacturers that specialize in the manufacture and production of the special equipment needed for this type of project, economic and schedule considerations involved with the evaluation of qualified manufacturers, and the need to meet the necessary replacement schedule.

Section 2. Waiver of Bidding Process: In accordance with RCW 39.04.280, the bidding requirements under state law and in LMC 2.92.020 are hereby waived for the Project. The Mayor is authorized to conduct a competitive bidding process that limits open bidding to select, qualified bidders for the manufacture of the Wastewater Treatment Plant Heat Exchanger System. The Project contract will, otherwise, be awarded on the basis of the lowest responsive and responsible bidder.

PASSED BY THE CITY COUNCIL the 23rd day of April, 2012.



Don Gough, Mayor

ATTEST/AUTHENTICATE:



Lorenzo Hines Jr., Finance Director



MEMORANDUM

To: Chad Newton, Gray & Osborne
From: Louis T. Barry
Date: January 27, 2012
Ref: Procurement of Heat exchangers From Only Two Bidders

Although it is unusual to limit the bidders on any project, we recommend doing so here because it is critically important to receive bids from qualified suppliers. In the case of heat recovery equipment for fluidized bed sewage sludge incinerators, there are only two qualified/experienced vendors in the United States. They are Thermal Transfer (TT) and Alstom Power Energy Recovery (Alstom).

Both of these companies have been serving this and other high temperature heat recovery industries for at least 40 years. The heat exchangers required for fluidized bed incinerators (FBI) burning sewage sludge are unique due to:

1. The high ash concentration carried by the gas stream.
2. The frequent and cyclic temperature of the inlet gas, and
3. The low melting point of the ash.

These flue gas characteristics require the HXs to have special features, including:

1. The inlet tube sheet on the primary heat exchanger (PHE) is a developing design. Over the years the configuration has improved. The "best yet" design is used for this project. In the past, the top tube sheet welds has failed allowing the tube sheet and attached tubes to fall crushing all the internal expansion joints causing up to \$250,000 in internal damage. Lynnwood's tube sheet will be fully supported with a steel ring independent of and in addition to the weld sealing the system against the gas pressure. This design cannot fail even if the seal weld fails.
2. The bulk of the tube expansion is handled by one large expansion bellows located in the bottom of the PHE. However, individual tubes

do expand at differing rates, depending on their individual gas flow. In these designs, each tube has its own independent expansion joint to handle the tube-to-tube expansion differences.

3. The accuracy with which the equipment can be sized has been tuned to a fine science. Over the past 30+ years all of the heat exchangers provided by these two companies have hit their specified marks on the required efficiency.

Over the years CBE has tried to broaden the bidder field. Initially we did have a few boiler makers interested. However, they were unable to present the necessary understanding, technology and experience to be acceptable. In the past decade, there have been only the two recommended bidders.

Considering the above information and how critical the heat recovery exchangers are to the successful and efficient incinerator operation, we highly recommend proceeding with only the two bidders listed in the specifications.

A handwritten signature in blue ink, appearing to read "J. Barry". The signature is written in a cursive, flowing style.