

**COUNCIL ACTION FORM**

**SUBJECT: ASSET DATA COLLECTION DEVELOPMENT FOR POWER PLANT**

**BACKGROUND:**

The Power Plant's current Computerized Maintenance Management Software (CMMS) currently has missing and incomplete information. On August 27, 2019, Council awarded a new CMMS system, Limble CMMS, to be implemented in the Power Plant. Limble CMMS provides the Power Plant with an up to date, user friendly platform where plant assets can be organized in a systematic way using a hierarchy structure and allow easy access by all employees. The limited information that the Power Plant has to populate the new Limble CMMS system is unorganized and inconsistently named. Having complete and accurate information is essential to the Plant's ability to operate properly and efficiently. To obtain this level of information, an estimated 1,800 assets need to be reviewed and each asset's data needs to be collected. An organizational hierarchy structure needs to be developed and implemented into the CMMS. Plant staff recognizes the need to improve the reliability and maintenance program and an accurately populated CMMS is the next step to all other aspects of a sound maintenance and reliability program.

City staff sought out three companies: Emerson Reliability Consulting, St. Louis, MO, Genesis Solutions, Spring, TX, and Life Cycle Engineering, Charleston, SC, to fully populate the Power Plant's CMMS with complete and accurate information. The chosen company would perform a walk down of the estimated 1,800 plant assets to capture applicable asset data, develop a hierarchy system to organize all of the data, and then populate the CMMS with the data. Experience, estimated project schedule, and price were leading items when considering what company should be awarded the project. A table providing a summary of the results is below:

<b>Company</b>	<b>Price</b>	<b>Time</b>
Life Cycle Engineering, Charleston, SC	\$84,000.00	11 weeks
Emerson Reliability Consulting, St. Louis, MO	\$99,532.00	4.2 weeks
Genesis Solutions, Spring, TX	\$170,050.00	18 weeks

As for experience, Genesis Solutions has no experience with the City of Ames Power Plant, but has experience with asset data collection in the power generation industry,

water/wastewater industry, as well as North American LNG. Life Cycle Engineering also does not have experience with the City of Ames Power Plant, but has completed similar asset data collection projects with smaller utilities such as Brownsville Public Utilities and Lansing Board of Water and Light.

**On the other hand, Emerson does have experience working with the City of Ames Power Plant while serving as a consultant for our maintenance management programs. In addition, Emerson’s proposal includes a proprietary photo organization and data extraction software called ORDITAL, as well as software called Catapult that will clean and organize the data into the proper hierarchy structure to be uploaded into the . The two other asset data collection companies will be using archaic software, requiring a number of manual processes and increasing the risk of unorganized data. Finally, Emerson’s estimated completion time is significantly shorter than the other two bidders. This timeframe is critical because the City employee who is leading the project for the Power Plant will be leaving her job in December.**

The FY 2019/20 Power Plant maintenance budget included \$50,000 for Power Plant CMMS improvements. The remaining \$50,000 will come from funds rolled over from FY 2018/19 that were designated for CMMS Updates.

2018/19 CMMS Update	\$50,000
2019/20 CMMS Improvements	<u>\$50,000</u>
<b>TOTAL</b>	<b>\$100,000</b>

**ALTERNATIVES:**

1. Award \$99,532 to Emerson, St. Louis, MO, to perform the project.
2. Award \$84,000 to Life Cycle Engineering, Charleston, SC. This decision would extend the length of the project by approximately 6 weeks.
3. Award \$170,050 to Genesis Solutions, Spring, TX, spending almost double the budget and extending the project by approximately 13 weeks.

**CITY MANAGER'S RECOMMENDED ACTION:**

Having a fully populated and well organized CMMS system is vital to the City of Ames Power Plant. It is crucial that this project is completed within a reasonable time and as accurately as possible to ensure the functionality of the CMMS. Because of their prior experience with the Power Plant, the shorter project completion date, and the two superior analytical software packages, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1 as stated above.