



CITY OF FERNLEY

CITY COUNCIL

AGENDA REPORT

Meeting Date: December 1, 2021

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| REPORT TO: | Mayor and City Council |
| REPORT THRU: | Derek Starkey, City Engineer |
| REPORT FROM: | Kari Weitzel, Admin Specialist III |
| REVIEWED BY: | Brandi Jensen, City Attorney |
| REVIEWED BY: | Denise Lewis, City Treasurer |

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| FINANCIAL IMPACT: Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/> | CURRENTLY BUDGETED: Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/> | FUND/ACCOUNT: 520-166-100 |
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| ACTION REQUESTED: <input checked="" type="checkbox"/> Consent <input type="checkbox"/> Ordinance <input type="checkbox"/> Resolution <input type="checkbox"/> Motion <input type="checkbox"/> Receive/File |
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| AGENDA ITEM: Staff Report (For Possible Action): Possible action to approve a contract with Shaw Engineering in an amount not to exceed \$29,450 for professional engineering services for the East Lift Station Grit Chamber Replacement Project. |
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| Business Impact (per NRS Chapter 237): <input type="checkbox"/> A Business Impact Statement is Attached. <input type="checkbox"/> A Business Impact Statement is not required because this is not a rule (term excludes vehicles by which legislative powers are exercised under NRS Chapters 271, 278, 278A, or 278B). |
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| Agenda Item Brief: Staff is seeking approval to execute a contract for engineering design, bidding support and construction support for the East Lift Station Grit Chamber Replacement Project with Shaw Engineering. The project will replace the existing grit chamber which is no longer functional. The grit chamber is a pretreatment facility located at the East Lift Station and removes grit and small debris from the wastewater stream before it enters the wastewater treatment plant. |
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See attached report for background, analysis, alternatives.

RECOMMENDED MOTION:

“I move to approve the contract with Shaw Engineering in the amount not to exceed \$29,450 for professional engineering services for the East Lift Station Grit Collector Replacement Project.”

ALTERNATIVES:

Staff recommends approval of the contract for engineering services to replace the grit chamber.

PROJECT SUMMARY:

The contract would allow the engineering department to utilize the services of Shaw Engineering to complete design work, bidding support and construction support for repairing the grit chamber.

Staff has found a replacement system which means no major work to retrofit the present concrete structure has to be performed. However, some concrete surface rehabilitation will need to be completed before the system can be placed and placed back into production.

BACKGROUND:

A grit removal chamber is used to remove sand, silt and and other debris from wastewater before it enters the wastewater treatment ponds. These materials are removed to prevent them from accumulating within the treatment ponds. When they are allowed to accumulate within the treatment ponds it can reduce the capacity of the ponds and the efficiency of treatment over time. This material is also very damaging to internal pump components such as impellers and the pump housing and discharge.

The grit removal chamber at the East Lift station was originally constructed in 2007. The grit chamber is one of two pieces of equipment used to remove large debris from the wastewater stream before it enters the treatment plant. The other component is a bar screen with a chain and rake system that removes large material, rags, and debris. The grit chamber is a chain and bucket type removal system. This mean that it uses stainless steel buckets along a chain system to scrape the grit from the bottom of the concrete chamber and drop it in a bin for removal. The chain and sprocket components have broken on the existing system and will need to be removed and replaced.

The project will replace the existing system. Staff has chosen to purchase and install a similar system to avoid costly alterations to the existing concrete structure and other components.

ANALYSIS:

Staff recommends that the city proceed with the contract for engineering services, bidding support, and construction support for the Grit Chamber Replacement Project.

FINDINGS:

The work included in this proposal has been previously identified and Shaw Engineering has submitted a proposal for professional engineering services, bidding and construction support.

LEGAL IMPLICATIONS:

Staff has followed the applicable Nevada Revised Statues for the award of professional engineering contracts.

FINANCIAL IMPLICATIONS:

The funding for this project was approved in the fiscal year 2021/2022 budget. The funding is part of the sewer

enterprise capital project budget. The total funding for this project is \$310,000.

ATTACHMENTS:

- 1. City of Fernley Professional Contract**
- 2. Shaw Engineering SOW and Fee Schedule Proposal**