

MEMORANDUM

TO: Board of Trustees

THROUGH: Indra Winquest
District General Manager

FROM: Brad Underwood, P.E.
Director of Public Works

SUBJECT: Review, discuss, and possibly authorize a Professional Services Agreement for the Sewer Pump Station No.1 Improvements Project – 2599DI1703 – Fund: Utility; Division: Sewer; Vendor: Jacobs Engineering, Inc., in the amount of \$49,660 for the Sewage Pump Station No.1 Electrical Improvements Bid Documents Revisions and Bid Phase Services.

DATE: July 13, 2021

I. RECOMMENDATION

That the Board of Trustees moves to:

1. Review, Discuss, and Possibly Authorize a Professional Services Agreement for the Sewer Pump Station No.1 Improvements Project which is a design contract amendment for the Board-approved CIP 2599DI1703 – Fund: Utility; Division: Sewer; Vendor: Jacobs Engineering, Inc., in the amount of \$49,660 for the Sewage Pump Station No.1 Electrical Improvements Bid Documents Revisions and Bid Phase Services.
2. Authorize Staff to execute the contract documents.
3. Authorize Staff to execute additional service requests up to approximately 10% of the original contract (\$5,000.00).
4. Authorize carry-over of FY2020-21 capital project budget appropriations (\$54,660) for this purpose.

II. BACKGROUND

In March of 2018, IVGID entered into a professional services agreement with Jacobs Engineering (Task Order No. 21 – PO# 18-0238) to prepare engineering drawings, specifications, and construction documents for the modernization of Sewer Pump Station #1. The electrical equipment has reached the end of its useful life and needs to be upgraded. The proposed project upgrade includes removing and replacing pump adjustable frequency drives, programmable logic controller and the SCADA system. Structural and mechanical improvements are also required for implementing the electrical improvements and updating to code compliance.

In 2019, IVGID solicited and received bids for the Sewage Pump Station No. 1 Electrical Improvements project. The Board elected not to award the project as the low bid exceeded the amount budgeted for the construction project.

Public Works Staff has requested that Jacobs provide engineering services to revise and repackage bid documents with a solution better representing current and anticipated system needs in preparation for bid advertisement and provide bid phase services (see Short Form Agreement - Attachment A).

The scope of work includes evaluating historical pump data to determine the allowable pump motor downsizing and associated electrical and motor control center modifications, replacement of pump impellers and seals. Jacobs will revise drawings and specifications as required, provide an updated construction cost estimate, and prepare the bidding documents, with bid alternates if necessary.

III. BID RESULTS

This item is not subject to competitive bidding within the meaning of Nevada Revised Statute (NRS) 332.115 as described in subsection (b) Professional Services.

Additionally, per NRS 625.530, selection of a professional engineer or registered architect to perform work on public works projects (where the complete project costs exceed \$35,000) is to be made solely on the basis of the competence and qualifications of the engineer or architect and not on the basis of competitive fees.

Review, discuss, and possibly authorize a Professional Services Agreement for the Sewer Pump Station No.1 Improvements Project– 2599DI1703 – Fund: Utility; Division: Sewer; Vendor: Jacobs Engineering, Inc. in the amount of \$49,660 for the Sewage Pump Station No.1 Electrical Improvements Bid Documents Revisions and Bid Phase Services.

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July 13, 2021

Jacobs previously completed the design and contract documents for this project. This agreement is to modify the project scope of work to be in alignment with the project budget.

IV. FINANCIAL IMPACT AND BUDGET

Funding for the professional engineering services in the amount of \$49,660 for the Sewage Pump Station No. 1 Electrical Improvements Bid Documents Revisions and Bid Phase Services will be funded from the 2021/2022 CIP carry-over budget Project #2599DI1703 (see attached data sheet – Attachment B).

Engineering Staff time will also be billed to the project to manage the design and bidding phase of the project.

V. ALTERNATIVES

Not proceed with the project understanding the risk of continued operation of a sewage pump station where the electrical infrastructure has outlived its useful life.

Re-bid the original project, without modifying the project design, understanding that construction, labor, and material costs have increased since 2019.

VI. BUSINESS IMPACT

This item is not a "rule" within the meaning of Nevada Revised Statutes, Chapter 237, and does not require a Business Impact Statement.

Attachments:

A – Short Form Agreement (Jacob's Proposal)

B – CIP Data Sheet(s)

Incline Village General Improvement District Sewage Pump Station No. 1 Electrical Improvements: Bid Document Revisions and Bid Phase Services

This Exhibit is to the Agreement, between Jacobs Engineering Group, Inc. (Consultant), and Incline Village General Improvement District (District), for engineering and consulting services related to the SCADA software evaluation for Sewage Pump Station No. 1 Electrical Improvements Bid Document revisions and bid phase services.. The official name for the project will be the Sewage Pump Station No. 1 Electrical Improvements Bid Document Revisions, hereinafter referred to as the "Project".

Background and Project Need

In 2019, IVGID advertised for bid Sewage Pump Station No. 1 Electrical Improvements bid documents where existing end-of-life pump motor variable frequency drives (VFDs) were to be replaced with new VFDs. IVGID elected to not award the bid as the estimated amount would exceed available budget. IVGID has requested that ENGINEER provide engineering services to revise and repackage bid documents with a solution better representing current and anticipated system needs in preparation for bid advertisement and provide bid phase services.

Scope of Professional Services

ENGINEER will provide the following engineering services:

- Facilitate a kickoff meeting at IVGID to confirm proposed design changes, discuss potential bid alternates, and participate in site walkthrough to collect additional information.
- Review pump data provided by IVGID to determine allowable pump motor downsizing and document in revised preliminary design memorandum.
- Revise drawings and specifications as required for replacement of pump impellers, pump seals, and appurtenances.
- Electrical and motor control center (MCC) design for modified improvements at SPS 1.
- Perform electrical engineering revisions to drawings associated with the site plan and provisions for backup power connections.
- Incorporate applicable addenda items from the 2019 bid.
- Update construction cost estimating from existing bid documents.
- Revise and update the specifications.

Deliverables

Deliverable include the following:

- Revised Preliminary Design Memorandum

- 95% Construction drawings, technical specifications, and construction cost estimate
- One complete digital set of Final Bid Documents comprising drawings and specifications in PDF format.
- Responses to prospective bidder questions
- Addendums as needed during the bid phase

Assumptions

The following assumptions were made to develop the scope of engineering services and estimated fee for this Project:

- One-day site visit for kickoff meeting to confirm design changes and collect supplemental measurements.
- Minor revisions will be required to the mechanical plans and sections, one-line diagram, MCC lineup and elevations, and panel schedule.
- Provide one set of bid documents and does not include owner-furnished equipment or other separate packages.

Compensation

Compensation by OWNER to ENGINEER will be as follows:

Cost Reimbursable Per Diem (Time and Expense)

For services defined in this Task Order, at the Per Diem Rates referenced below, plus Direct Expenses, plus a service charge of 10 percent of Direct Expenses and 10 percent of subcontracts and outside services, plus applicable sales, use, value added, business transfer, gross receipts, or other similar taxes.

Budget

A time and materials budgetary amount of \$49,660, excluding taxes, is hereby established for services in this Agreement. ENGINEER will make reasonable efforts to complete the work within the noted budgets and will keep OWNER informed of progress toward that end so that the budgets or work effort can be adjusted if found necessary. ENGINEER will give prompt notice to OWNER whenever ENGINEER observes or becomes aware of any significant development that affects the scope or timing of ENGINEER's services.

ENGINEER is not obligated to incur costs beyond the indicated budgets, as may be adjusted, and OWNER is not obligated to pay ENGINEER beyond these limits.

When any budget has been increased, ENGINEER's excess costs expended prior to such increase will be allowable to the same extent as if such costs had been incurred after the approved increase.

Per Diem Rates

Per Diem Rates are those hourly rates charged for work performed on the Project by ENGINEER's employees of the indicated classifications. These rates are subject to revision for other projects and annual calendar year adjustments; include all allowances for salary,

overheads, and fees; but do not include allowances for Direct Expenses, subcontracts, and outside services.

Direct Expenses

Direct Expenses are those necessary costs and charges incurred for the Project including, but not limited to: (1) the direct costs of transportation, meals and lodging, mail, and supplies; (2) ENGINEER's current standard rate charges for reproduction services; and (3) ENGINEER's standard project charges for special health and safety requirements of OSHA.

Renegotiation of Compensation

The estimate is based on the assumptions listed in this Task Order and timely completion of the Project. If the Project progresses under different conditions than the assumptions listed in this Attachment or if project timing deviates from the assumed schedule for causes beyond ENGINEER's control, ENGINEER reserves the right to request renegotiation of those portions of the fee affected by the time change.

Invoicing

Amount invoiced each month will be based on time and expenses expended to date. Invoices shall be accompanied by a listing of charges that make up the invoice total, including employee names, billing rates, and hours of project staff, plus direct expenses.

Schedule

The period of performance for this task order shall be through December 31, 2021. Anticipated milestones are presented below:

- Authorization/NTP: May 1, 2021
- Bid Documents Transmitted to IVGID: Two months after NTP

It is agreed that the ENGINEER cannot be responsible for delays occasioned by factors beyond ENGINEER's control, or factors which would not reasonably have been foreseen at the time this Task Order was executed.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be signed and intend to be legally bound thereby.

OWNER:

ENGINEER:

**INCLINE VILLAGE GENERAL
IMPROVEMENT DISTRICT**

JACOBS ENGINEERING GROUP, INC.

Agreed to:

Agreed to:

By:

By:

Date: _____, 2021

John Schoonover
Designated Manager

Date: _____, 2021

Address for Giving Notice:

Address for Giving Notice:

**INCLINE VILLAGE G.I.D.
893 Southwood Boulevard
Incline Village, Nevada 89451**

**JACOBS ENGINEERING GROUP, INC.
50 West Liberty Street, Suite 205
Reno NV 89501**



Project Summary

Project Number:	2599DI1703
Title:	Sewer Pump Station #1 Improvements
Project Type:	D - Capital Improvement - Existing Facilities
Division:	99 - General Administration - Sewer
Budget Year:	2018
Finance Option:	
Asset Type:	SS - Sewer System
Active:	Yes

Project Description				
<p>The District owns 18 sewer pumping stations in Incline Village and Crystal Bay. Sewer Pump Station #1 collects and transports 50% of the raw sewage and transports it to the WRRF on Sweetwater Road. If something were to happen to Sewer Pump Station #8 there is a direct bypass that would send all of the raw sewage to Sewer Pump Station #1, thus accounting for 75% of the raw sewage in the District. Constructed in the early 1970s this station has provided reliable service. The station contains the mechanical and electrical equipment to pump sewage to the WRRF. The equipment in the station to be replaced as a part of this project are the variable frequency drives and motor control centers for the three pump sets plus instrumentation and controls. This will enhance the condition and reliability of our aging infrastructure to collect and pump sewage to the WRRF and to protect the environment.</p>				
Project Internal Staff				
Staff involvement is the coordination and contracting of the removal, procurement, and replacement of equipment with rebuilt or new equipment.				
Project Justification				
<p>This project funds the replacement of the equipment listed above at sewer pumping station #1. The age of the equipment, the number of hours of operation and other equipment analyses dictate replacement or rehabilitation of the equipment to maintain this reliability to provide continuous service. The project was bid in the summer/fall 2019 and one bid was received that was substantially above budget. All bids were rejected. The design team will make some modifications to the design for simplification and rebid the project in summer 2020. The construction estimate is based on the received bid. There will be carry forward funds from 2019-20 CIP.</p>				
Forecast				
Budget Year	Total Expense	Total Revenue	Difference	
2018				
Construction	155,000	0	155,000	
Year Total	155,000	0	155,000	
	155,000	0	155,000	
Year Identified	Start Date	Est. Completion Date	Manager	Project Partner
2017	Jul 1, 2020	Jun 30, 2021	Principal Engineer	



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Forecast			
Budget Year	Total Expense	Total Revenue	Difference
2019			
Construction	100,000	0	100,000
Year Total	100,000	0	100,000
	100,000	0	100,000
Year Identified	Start Date	Est. Completion Date	Manager
2017	Jul 1, 2020	Jun 30, 2021	Principal Engineer
			Project Partner



Project Summary

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Title:	Sewer Pump Station #1 Improvements
Project Type:	D - Capital Improvement - Existing Facilities
Division:	99 - General Administration - Sewer
Budget Year:	2020
Finance Option:	
Asset Type:	SS - Sewer System
Active:	Yes

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Forecast			
Budget Year	Total Expense	Total Revenue	Difference
2020			
Construction	250,000	0	250,000
Year Total	250,000	0	250,000
	250,000	0	250,000
Year Identified	Start Date	Est. Completion Date	Manager
2017	Jul 1, 2020	Jun 30, 2021	Principal Engineer
			Project Partner



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Active:	Yes

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Forecast			
Budget Year	Total Expense	Total Revenue	Difference
2021			
Construction	550,000	0	550,000
Construction Phase Management and Engineering 10%	50,000	0	50,000
Construction Reserve Fund 10%	50,000	0	50,000
Year Total	650,000	0	650,000
	650,000	0	650,000
Year Identified	Start Date	Est. Completion Date	Manager
2017	Jul 1, 2020	Jun 30, 2021	Principal Engineer
			Project Partner



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Year Identified	Start Date	Est. Completion Date	Manager
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Project Actual vs Budget - 5 Year History

Budget Year 2022 by GL Account

Project Number: 2599DI1703

Title: Sewer Pump Station #1 Improvements

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	2018		2019		2020		2021		2022	
	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual
Expense										
Capital Expenditure										
8120 - Capital Improvements	155,000	0	100,000	0	250,000	0	650,000	0	0	0
Total Capital Expenditure	155,000	0	100,000	0	250,000	0	650,000	0	0	0
Total Expense	155,000	0	100,000	0	250,000	0	650,000	0	0	0