

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 approve agreement amendments for the Design and CMAR team vendors for the Effluent Pipeline and Pond Lining Project - Fund: Utilities; Division: Sewer; Vendor: Jacobs Engineering (scope only, no cost) and Granite Construction Company, in the amount of \$40,526.

STRATEGIC PLAN: Long Range Principle 5 – Assets and Infrastructure

DATE: March 9, 2022

I. RECOMMENDATION

That the Board of Trustees makes a motion to:

1. Award a contract agreement amendment for Effluent Pond Lining Project – 2599SS2010 - Fund: Utilities; Division: Sewer; Vendor: Jacobs Engineering Group Inc. (Jacobs). The request is for a change in scope only; no change in contract fees.
2. Award a contract agreement amendment for Effluent Pond Lining Project – 2524SS1010 and for Effluent Pipeline Replacement Project – 2524SS2010 - Fund: Utilities; Division: Sewer; Vendor: Granite Construction Company (Granite), in the amount of \$40,526.
3. Authorize Staff to approve the Amendments.

II. DISTRICT STRATEGIC PLAN

Long Range Principle 5 – Assets and Infrastructure – The District will practice perpetual asset renewal, replacement, and improvement to provide safe and superior long term utility services and recreation venues, facilities and services.

- Maintain, renew, expand, and enhance District infrastructure to meet the capacity needs and desires of the community for future generations.

- Maintain, procure, and construct District assets to ensure safe and accessible operations for the public and the District's workforce.

III. **BACKGROUND**

The Board approved design contracts for HDR and Jacobs in June 2021. Since then the team of IVGID PW Staff, Granite Construction, HDR, Jacobs and other Agency partners have been working on each project with initial expectation of starting pond lining construction in summer 2022. However, as described in the recent March 1, 2022 memorandum, the pond lining project was advanced to 60% design. Nevada Division of Water Resources (DWR) reviewed the design and notified the project team that structural and hydraulic engineering analyses would be required as part of an Approval of Dam Plans application process.

The pond lining project is necessary to meet the permit requirements from the Nevada Division of Environmental Protection (NDEP) for permanent storage of effluent in an emergency situation. The lining of Pond 2 has been viewed as integral with the effluent export pipeline (EEP) project as it would store up to 6 million gallons (MG) of effluent. This amount of storage allows work on the EEP replacement to occur for up to four consecutive days, providing more efficiencies for construction activity to take place.

The original agreements with Jacobs and Granite did not include allowance for a detailed investigation and evaluation of several storage options and configurations for temporary and/or permanent storage of the effluent water. The Jacobs agreement was for the permanent lining design of Pond 2. The Granite Construction agreement combined CMAR tasks for both the pond lining and the pipeline replacement projects.

The project team has completed preliminary design analyses for alternative permanent effluent storage options, as presented at the March 1, 2022 Board meeting.

The project team recommends that three of the preliminary options for effluent storage facilities should be progressed to a design level of 30%. This represents appropriate due diligence to analyze the technical, construction, and regulatory elements and risks. These three selected options are:

1. Permanent HDPE liner system in Pond 1
2. 2-MG welded steel tank
3. 2-MG pre-stressed concrete tank

The following are summaries of the scope and cost changes for the amendments to the Jacobs and Granite agreements:

Jacobs Engineering:

The proposed Jacobs agreement amendment includes allowance for:

1. 30% design exhibits for permanent options (three separate exhibits)
2. Technical Memorandum summarizing each alternative, risk analysis, construction cost comparisons
3. Engineer's Estimate (three separate estimates)

A budget of \$26,200 is proposed for Jacobs services for these amended/additional tasks. However, this is a no cost amendment as the \$26,200 will utilize the amount currently remaining from ASA 2.

Granite Construction Company:

As noted above, the Granite agreement covers both the pond lining project and the pipeline replacement project. Therefore, the proposed agreement amendment includes additional tasks that span each individual project. The proposed Granite agreement amendment includes allowance for:

1. Develop New Engineers Estimate (Pipeline) – Granite completed the cost estimate and construction schedule in the Fall of 2021 based upon the preliminary design plans from 2012. Granite will need to complete this task again upon delivery of the 30% design drawings from HDR. Additional contract amount for this item is \$14,294.
2. Pond #2 Temporary Storage (Pipeline) – This is a new task to further evaluate the use of Pond #2 in support of EEP construction efforts. Additional contract amount for this item is \$8,804.
3. Trenchless Technology Evaluations (Pipeline) While assessment of alternative technologies is within the original scope, efforts on other items within Task 3 required additional effort utilizing the budget. Additional contract amount for this item is \$6,302.
4. Pond #1 Design Options (Effluent Storage) – This is a new task to further evaluate three design options for permanent effluent storage at Pond #1. Additional contract amount for this item is \$11,126.

A total contract amendment with Granite of \$40,526.00 is proposed for these amended/additional tasks.

Review, discuss, and possibly approve agreement amendments for the CMAR and Design team vendors for the Effluent Pipeline and Pond Lining Project - Fund: Water; Division: Supply & Distribution; Vendor: Jacobs (Scope only, no cost) and Granite Construction Company in the amount of \$45,000

IV. BID RESULTS

There are no bid results associated with this item.

V. FINANCIAL IMPACT AND BUDGET

Funding exists within the FY 2021-22 CIP Budget for the Effluent Pond Lining Project 2599SS2010 (see attached data sheet) in the amount of \$1,550,000 and for the Effluent Pipeline Project 2524SS1010 (see attached data sheet) in the amount of \$2,000,000.

Following is a summary of the Jacobs contract amounts, associated with the Effluent Pond Lining Project, upon approval of Amendment 4:

| Contract | Amount | Total Amount |
|----------------------|-------------|--------------|
| Original | \$36,000 | \$36,000 |
| ASA 1 (Scope Change) | \$0 | \$36,000 |
| ASA 2 | \$425,339 * | \$461,339 |
| Amendment 3 | \$18,800 ** | \$480,139 |
| Amendment 4 | \$0 *** | \$480,139 |

- * A \$40,000 contingency was authorized by the Board with ASA 2
- ** The amount of contingency remaining with the approval of Amendment 3 is \$21,200.
- *** This is a scope change reallocating \$26,200 of the amount currently remaining from ASA 2.

Following is a summary of the Granite contract amounts, associated with the Effluent Pond Lining Project and the Effluent Pipeline Project, upon approval of ASA 1:

| Contract | Amount | Total Amount |
|-------------|-----------|--------------|
| Original | \$369,218 | \$369,218 |
| Amendment 1 | \$40,526 | \$409,744 |

IVGID Engineering Staff time will also be billed to the project to manage the design development phase of the project(s).

VI. ALTERNATIVES

There is no viable alternative for this item.

Review, discuss, and possibly approve agreement amendments for the CMAR and Design team vendors for the Effluent Pipeline and Pond Lining Project - Fund: Water; Division: Supply & Distribution; Vendor: Jacobs (Scope only, no cost) and Granite Construction Company in the amount of \$45,000

-5-

March 9, 2022

VII. 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:

- Draft Amendment 4 – Jacobs
- Draft Amendment 1 - Granite
- CIP Data Sheet – Effluent Pond Lining Project
- CIP Data Sheet – Effluent Pipeline Project

AMENDMENT NO. 4 (DRAFT)
TO SHORT FORM AGREEMENT DATED JUNE 9, 2021
BETWEEN
INCLINE VILLAGE GENERAL IMPROVEMENT DISTRICT
AND
JACOBS ENGINEERING GROUP, INC.

This Amendment No. 4 to the Short Form Agreement dated June 9, 2021 (“Amendment”) is made and entered into as of this (Date), by and between the Incline Village General Improvement District (“District”) and Jacobs Engineering Group, Inc. (“Consultant”). District and Consultant are sometimes individually referred to as “Party” and collectively as “Parties.”

Recitals

- A. **Original Agreement.** The Parties have entered into an agreement for Effluent Pond Lining Final Design dated June 9, 2021 and as amended by previous instruments dated July 14, 2021 and September 3, 2021 (“Original Agreement”), which is incorporated herein by reference as if fully set forth herein, for the purpose of District retaining Consultant to provide the Services set forth therein.
- B. **Amendment Purpose.** District and Consultant wish to amend the Original Agreement to provide a preliminary effluent storage alternative analysis.
- C. **Amendment Authority.** This Amendment is authorized pursuant to Section 5 of the Original Agreement.

Amendment

Now therefore, the Parties hereby modify the Original Agreement as follows:

- 1. **Definitions.** All capitalized terms used in this Amendment not defined in this Amendment shall have the same meaning as set forth in the Original Agreement if defined in the Original Agreement.
- 2. **Additional Work** is more fully described in the attached, Consultant’s “Pond 1 Alternative Analysis,” dated February 24, 2022. Basic services include:
 - a. Three separate 30% design exhibits for permanent options to pond lining alternatives;
 - b. A Technical Memorandum summarizing each alternative, risk analysis and construction cost comparisons;
 - c. Three separate Engineer’s Estimates
- 3. **Payment to Consultant.**
 - a. **Basis and Amount of Compensation for Basic Services.** This Amendment is a change in project scope, only. There will be no additional compensation for these Basic Services.
 - b. Basic Services are included within the contingency from ASA 2.
- 4. **Continuing Effect of Agreement.** All provisions of the Original Agreement otherwise remain in full force and effect and are reaffirmed. From and after the date of this Amendment, whenever the term “Agreement” appears in the Original Agreement, it shall mean the Original Agreement as amended by this Amendment.

5. Adequate Consideration. The Parties hereto irrevocably stipulate and agree that they have each received adequate and independent consideration for the performance of the obligations they have undertaken pursuant to this Amendment.
6. Severability. If any portion of this Amendment is declared invalid, illegal, or otherwise unenforceable by a court of competent jurisdiction, the remaining provisions shall continue in full force and effect.

OWNER:
INCLINE VILLAGE G. I. D.
Agreed to:

CONTRACTOR:
Jacobs Engineering Group, Inc.
Agreed to:

By:

 Brad B. Underwood, P. E.
 Director of Public Works

By:

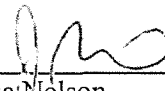
Signature of Authorized Agent

Print or Type Name and Title

Date

Date

Reviewed as to Form:


 Joshua Nelson
 District General Counsel

3/3/2022

Date

If Contractor is a corporation, attach evidence of authority to sign.

Owner's address for giving notice:
**Incline Village General Improvement
 District, Public Works Department**
 1220 Sweetwater Road
 Incline Village, Nevada 89451
 775-832-1267- Engineering Division

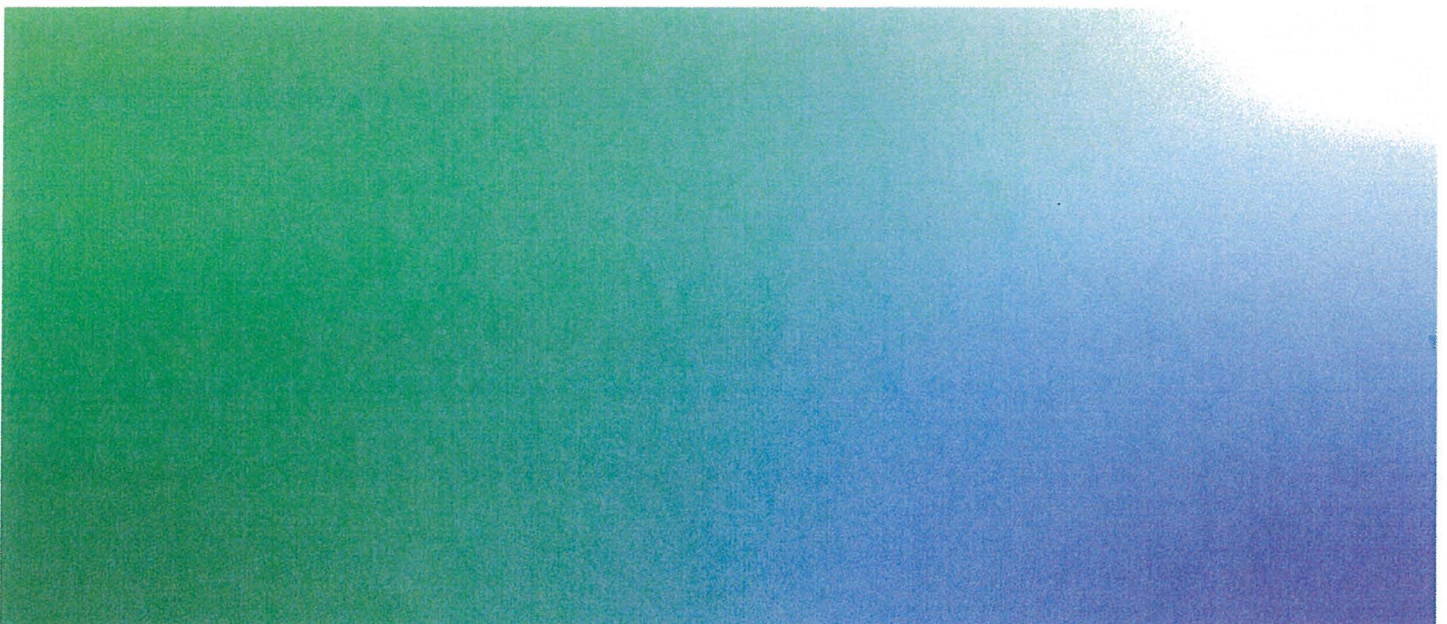
Contractor's address for giving notice:
Jacobs Engineering Group
 50 West Liberty St., Ste. 205
 Reno, Nevada 89501



**Incline Village General Improvement District
Effluent Pond Lining Final Design –**

DRAFT Pond 1 Alternative Analysis

February 24, 2022



Incline Village General Improvement District Effluent Pond Lining Final Design

This is an agreement for professional services between Jacobs Engineering Group Inc. (Jacobs or Engineer) and Incline Village General Improvement District (IVGID or Owner).

Background and Project Need

IVGID owns and operates two existing effluent pond adjacent to the Water Resource Reclamation Facility (WRRF) that is occasionally utilized to temporarily store plant effluent for brief durations. The existing basins have a storage capacity of approximately 2 million gallons (MG) and 15 MG and is presently unlined. Lining of one of the ponds will allow IVGID to actively reincorporate the pond into their wastewater treatment and effluent management practices and comply with current regulations. Additionally, it is likely the effluent pond will be intermittently utilized during required construction improvements to IVGID's effluent export pipeline.

Phase 2 design development revealed HDPE Lining of Pond 2 will require application of Approval for Dam construction with NV DWR and extensive spillway improvements to current design standards and is therefore, not a feasible option.

IVGID has selected Granite Construction (Granite) as the construction manager at-risk (CMAR) to construct the effluent pond lining.

Scope of Professional Services

Engineer will provide the professional engineering services in the three phases:

- Phase 1 - Pond lining alternative analysis
- Phase 2 - Preliminary and final design - Pond 2
- Phase 2A1 - Pond 1 - Preliminary Effluent Storage Alternative Analysis
- **Phase 2A2 - Pond 1 - Effluent Storage Alternative Analysis - 30% Design**
- Phase 2B - Preliminary and final design - Pond 1
- Phase 3 - Engineering services during construction.

This Agreement authorizes time and material services for **Phase 2A2 only**. Engineer shall not perform unauthorized services without written approval by IVGID.

Phase 2A2 – Pond 1 Alternative Analysis – Revised for Review 2/24/22

Engineer will work with CMAR Team to develop Effluent Storage Alternatives to 30% design level for Risk Analysis and Cost Estimation.

Following is a brief project description resulting on findings and outcomes from Phase 1 and Phase 2 to date:

- HDPE Lining of Pond 2 will require application of Approval for Dam construction with NV DWR and extensive spillway improvements to current design standards and is therefore, not a feasible option.
- Four Preliminary options for permanent effluent storage at Pond 1 are being discussed and reviewed by the CMAR Team for final design selection.
- Up to 3 alternatives for effluent storage at Pond 1 will be developed to a 30% design level for risk analysis and cost estimation.
- IVGID and CMAR Team will select 1 alternative to develop to final design for construction under a future amendment.
- National Environmental Policy Act (NEPA) documentation is required for U.S. Army Corps of Engineers (USACE) funding and will be completed by others.

Task 1: Design Alternatives Analysis - COMPLETE

Engineer will work with CMAR Team to develop Effluent Storage Alternatives to preliminary design level for Cost Estimation. Engineer will prepare draft technical memorandum to present the alternative analysis results and will present preliminary findings to IVGID Board of Directors at March 1 board meeting.

Initial Effluent Storage Alternatives:

- HDPE Liner System
- Reinforced Concrete Basin
- Welded Steel Storage Tank
- Prestressed Concrete Storage Tank

Assumptions

- Initial exhibits for 4 Alternatives and estimates will be presented to IVGID Board at March 1 Board meeting.

Deliverables

Engineer will prepare and submit the following:

- Draft TM, Estimates, and PowerPoint Presentation for IVGID Board Meeting

| Task | Budget |
|---|-----------------|
| Task 1: Pond 1 Preliminary Effluent Storage Alternatives Analysis | \$18,800 |
| Total | \$18,800 |

Task 2: Effluent Storage Alternatives Analysis – 30% Design

Engineer will work with CMAR Team to develop Effluent Storage Alternatives (up to 3) to 30% design level for Risk Analysis and Cost Estimation. Engineer will refine and finalize the draft technical memorandum from Phase 2A1 with final recommendation for consideration by IVGID Staff and Board. Engineer will continue to communicate with NV DWR and will provide 30% Design Exhibits and TM for review and clarification of application requirements in Final Design Phase.

Effluent Storage Alternatives for Consideration:

- HDPE Liner System
- Welded Steel Storage Tank
- Prestressed Concrete Storage Tank

Assumptions

- Selected alternative design (3 total) will be progressed to 30% design level
- Jacobs Internal Discipline Quality Control (QC) review will be completed prior to Client deliverable.
- Engineer will prepare and deliver 30% Design Exhibits in pdf format.
- CMAR Team will collaborate and develop Risk Analysis for alternative comparison.
- Granite will be involved in throughout the design process for constructability review and value engineering.
- Engineer will provide quantities for use in Opinion of Probable Construction Cost developed by Granite Construction as well as Engineer’s Estimate developed by Jacobs.
- Engineer will provide up to 15 hours of coordination and correspondence with NV DWR for review and consideration of presented alternatives.

Deliverables

Engineer will prepare and submit the following:

- 30% Design Exhibit for each Alternative
- Final Technical Memorandum summarizing each alternative, risk analysis, and project cost comparison.
- Engineer’s Estimate for each Alternative

| Task | Budget |
|---|-----------------|
| Task 2: Pond 1 Effluent Storage Alternatives Analysis - 30% Design | \$26,200 |
| Total | \$26,200 |

Compensation

Compensation by IVGID 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.

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 Agreement and timely completion of the Project. 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. If the Project progresses under different conditions than the assumptions listed in this Agreement 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.

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 Agreement was executed.

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.

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: _____, 2022

Date: _____, 2022

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**

**AMENDMENT NO. 1 (DRAFT)
TO CMAR PRE-CONSTRUCTION SERVICES AGREEMENT
DATED JANUARY 29, 2021 BETWEEN
INCLINE VILLAGE GENERAL IMPROVEMENT DISTRICT
AND
GRANITE CONSTRUCTION COMPANY**

This Amendment No. 1 to the CMAR Pre-Construction Services Agreement dated January 29, 2021 (“Amendment”) is made and entered into as of this (Date), by and between the Incline Village General Improvement District (“District”) and Granite Construction Company (“Consultant”). District and Consultant are sometimes individually referred to as “Party” and collectively as “Parties.”

Recitals

- A. Original Agreement. The Parties have entered into an agreement for CMAR Pre-Construction Services on January 29, 2021 (“Original Agreement”), which is incorporated herein by reference as if fully set forth herein, for the purpose of District retaining Consultant to provide the Services set forth therein.
- B. Amendment Purpose. District and Consultant wish to amend the Original Agreement to provide additional work on both the District's Effluent Export Pipeline and Pond Lining projects.
- C. Amendment Authority. This Amendment is authorized pursuant to Section 5 of the Original Agreement.

Amendment

Now therefore, the Parties hereby modify the Original Agreement as follows:

- 1. Definitions. All capitalized terms used in this Amendment not defined in this Amendment shall have the same meaning as set forth in the Original Agreement if defined in the Original Agreement.
- 2. Additional Work is more fully described in Attachment A, Consultant’s Schedule of Manhours and Prices, dated January 31, 2022, basically consisting of:
 - a. Developing a new Engineer’s Estimate for the Effluent Export Project (EEP);
 - b. Evaluation of Pond 2 for temporary EEP storage;
 - c. Additional work required for the evaluation of trenchless technologies as part of the EEP;
 - d. Further evaluation of three design options for permanent storage at Pond 1.
- 3. Payment to Consultant.
 - a. "Reimbursable Expenses" shall mean the actual expenses incurred directly or indirectly in connection with the Project, including, but not limited to subconsultants or subconsultant costs, transportation and subsistence incidental thereto, obtaining bids or proposals from Consultant(s), toll telephone calls, express mail and telegrams, reproduction of Reports, Drawings, Specifications, Bidding Documents, and similar Project-related items in addition to those required under Section 1. In addition, Reimbursable Expenses will also include expenses incurred for main frame computer time and other highly specialized equipment, including photographic production.

- b. Basis and Amount of Compensation for Basic Services. Compensation shall be as indicated in Attachment A, with a total not to exceed amount of **Forty Thousand Five Hundred Twenty-Six Dollars (\$40,526.00)**, to be billed on a time and materials basis, as indicated in Attachment A. In no event shall compensation for any Activity identified in Attachment A exceed the amount set forth in the attachment.
4. Continuing Effect of Agreement. All provisions of the Original Agreement otherwise remain in full force and effect and are reaffirmed. From and after the date of this Amendment, whenever the term "Agreement" appears in the Original Agreement, it shall mean the Original Agreement as amended by this Amendment.
5. Adequate Consideration. The Parties hereto irrevocably stipulate and agree that they have each received adequate and independent consideration for the performance of the obligations they have undertaken pursuant to this Amendment.
6. Severability. If any portion of this Amendment is declared invalid, illegal, or otherwise unenforceable by a court of competent jurisdiction, the remaining provisions shall continue in full force and effect.

OWNER:
INCLINE VILLAGE G. I. D.
Agreed to:

CONTRACTOR:
Granite Construction Company
Agreed to:

By: _____
 Brad B. Underwood, P. E.
 Director of Public Works

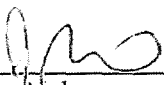
Date

By: _____
Signature of Authorized Agent

Print or Type Name and Title

Date

Reviewed as to Form:



 Joshua Nelson
 District General Counsel
 3/3/2022

Date

If Contractor is a corporation, attach evidence of authority to sign.

Owner's address for giving notice:
**Incline Village General Improvement
 District, Public Works Department**
 1220 Sweetwater Road
 Incline Village, Nevada 89451
 775-832-1267- Engineering Division

Contractor's address for giving notice:
Granite Construction Company
 1900 Glendale Avenue
 Sparks, Nevada 89431
 775-352-1902

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SCHEDULE OF MANHOURS AND PRICES
CMAR Preconstruction Services - Amendment # 1

| | \$158 | \$169 | \$129 | \$184 | \$129 | | | | | |
|------------------------------|-----------------|-------------------|---------------------|-------------|---------------|------------|-----------|--------------------|------------------|--------|
| | John O'Day | Donavin Greenwell | Ryan Floyd | Keith Oxner | Kirk McIntosh | | | | | |
| Description | Project Manager | Superintendent | Scheduler/Estimator | Tech Expert | Estimator | Task Hours | Task Cost | Other Direct Costs | ODC Explanations | |
| Task | | | | | | | | | | |
| Engineers Estimate | | | | | | | | | | |
| | 2 | 2 | 2 | 0 | 2 | 8 | \$1,170 | | | |
| Review 30% | 0 | 0 | 8 | 0 | 8 | 16 | \$2,064 | | | |
| Estimate & Schedule | 8 | 0 | 16 | 0 | 16 | 40 | \$5,392 | | | |
| Review 30% | 6 | 4 | 8 | 0 | 8 | 26 | \$3,688 | | | |
| Review 30% | 2 | 0 | 2 | 0 | 2 | 6 | \$832 | | | |
| Provide Comments | 4 | 0 | 4 | 0 | 0 | 8 | \$1,148 | | | |
| Item # 2 Temp Storage | | | | | | | | | | |
| Assess Pond # 2 | 4 | 0 | 4 | 0 | 4 | 12 | \$1,664 | | | |
| Material Pricing | 0 | 0 | 0 | 0 | 12 | 12 | \$1,548 | | | |
| Pond # 2 | 0 | 0 | 0 | 0 | 24 | 24 | \$3,096 | | | |
| Pond # 2 | 6 | 0 | 6 | 0 | 6 | 18 | \$2,496 | \$0 | | DESIGN |
| Technology Evaluation | | | | | | | | | | |
| Meetings | 6 | 0 | 6 | 6 | 0 | 18 | \$2,826 | | | |
| Plans | 2 | 0 | 0 | 0 | 0 | 2 | \$316 | | | |
| Savings Analysis | 4 | 0 | 0 | 0 | 0 | 4 | \$632 | | | |
| Cost Estimate | 12 | 0 | 0 | 0 | 0 | 12 | \$1,896 | | | |
| Estimate To HDR | 4 | 0 | 0 | 0 | 0 | 4 | \$632 | | | |
| Design Options | | | | | | | | | | |
| Designs | 4 | 0 | 4 | 0 | 4 | 12 | \$1,664 | | | |
| Design Options | 0 | 0 | 4 | 0 | 0 | 4 | \$516 | | | |
| Supplier Quotes | 0 | 0 | 0 | 0 | 4 | 4 | \$516 | | | |
| Estimate & Schedule (4) | 0 | 0 | 32 | 0 | 0 | 32 | \$4,128 | | | |
| Options (4) | 6 | 0 | 12 | 0 | 6 | 24 | \$3,270 | | | |
| Estimate To Jacobs | 0 | 0 | 8 | 0 | 0 | 8 | \$1,032 | | | |
| | 70 | 6 | 116 | 6 | 96 | 294 | \$40,526 | \$0 | | |
| Total Labor | 70 | 6 | 116 | 6 | 96 | 294 | \$40,526 | \$0 | | |
| | \$11,060 | \$1,014 | \$14,964 | \$1,104 | \$12,384 | | \$40,526 | | | |
| | | | | | | | | \$0 | | |

57



Project Summary

| | |
|-------------------------|---|
| Project Number: | 2599SS2010 |
| Title: | Effluent Pond Lining Project |
| Project Type: | D - Capital Improvement - Existing Facilities |
| Division: | 99 - General Administration - Sewer |
| Budget Year: | 2022 |
| Finance Options: | |
| Asset Type: | SS - Sewer System |
| Active: | No |

| | | | | |
|--|----------------------|-----------------------------|---------------------|------------------------|
| Project Description | | | | |
| Line the 2.4 million gallon effluent storage pond at the Water Resource Recovery Facility (WRRF) with reinforced concrete or the combination of concrete and shotcrete lining as recommended in the WRRF Effluent Storage Alternative Analysis Memorandum, prepared by Jacobs Engineering, dated September 2018. | | | | |
| Project Internal Staff | | | | |
| The engineering division will support this project. Outside consultants will be used for design and management. The project will be publicly advertised in accordance with NRS 338. | | | | |
| Project Justification | | | | |
| The effluent pond is a 2.4 million gallon effluent storage basin located directly adjacent to the Water Resource Recovery Facility (WRRF). This storage basin was designed to provide automated and passive back-up effluent storage in the event the Plant's 500,000-gallon effluent storage tank fills to capacity. As a condition of IVGID's current operating permit with the Nevada Department of Environmental Protection (NDEP), IVGID is no longer permitted to utilize this storage basin for effluent storage due to it being unlined. Lining the pond will allow IVGID to return the pond into the operating plan with NDEP and provide greater protection to Lake Tahoe. | | | | |
| Forecast | | | | |
| Budget Year | Total Expense | Total Revenue | Difference | |
| 2022 | | | | |
| Carry Forward from FYE 6.30.2021 from CIP 2524SS1010 Effluent Pipeline Project | 1,550,000 | 0 | 1,550,000 | |
| Year Total | 1,550,000 | 0 | 1,550,000 | |
| | 1,550,000 | 0 | 1,550,000 | |
| Year Identified | Start Date | Est. Completion Date | Manager | Project Partner |
| 2020 | Jul 1, 2020 | Jun 30, 2023 | Engineering Manager | |



Project Summary

| | |
|------------------------|--|
| Project Number: | 2524SS1010 |
| Title: | Effluent Pipeline Project |
| Project Type: | B - Major Projects - Existing Facilities |
| Division: | 24 - Transmission |
| Budget Year: | 2022 |
| Finance Option: | |
| Asset Type: | SS - Sewer System |
| Active: | Yes |

Project Description

The Effluent Pipeline Project will be a multi-year pipe replacement project. The immediate priority is to replace all of the remaining Segment 3 pipeline (12,385 linear feet) and to make immediate repairs to the Segment 2 pipeline (17,314 linear feet) to extend its life and avoid future leaks. The project timeline is to accomplish this over multiple construction seasons. TRPA and NDOT permits typically prohibit SR 28 traffic control delays from July 1 to September 5. This limits construction to May, June and Sept 6 to Oct 15. The replacement of Segment 3 would occur over two construction seasons. Replacing segment 2 would require 3 construction seasons. Repairs to segment 2 could be accomplished with a segment 3 construction phase.

Project Internal Staff

The engineering division will support this project. Outside consultants will be used for design and management. The project will be publicly advertised in accordance with NRS 338.

Project Justification

The District currently owns, operates and maintains a 21-mile pipeline that exports treated wastewater effluent out of the Lake Tahoe Basin. This pipeline was installed in 1970 as part of the regional effort to protect Lake Tahoe's water quality by requiring all wastewater effluent to be exported out of the basin. Within the Tahoe Basin, this pipe is divided into three segments. Segment 1 is the low-pressure supply pipe to the pump station near Sand Harbor. Segment 2 is the welded steel high-pressure discharge pipe exiting the pump station. Segment 3 is the remaining low pressure jointed steel transmission pipeline within the Tahoe Basin running south to Spooner Summit. Segment 4 is the pipe that carries the effluent down the east side of the Carson Range from Spooner Summit to Hwy 395. Segment 5 is the pipeline that extends from HWY 395 to the bank of the Carson River. Segment 6 is the pipeline from the Carson River that delivers the effluent to the IVGID Wetlands Disposal Facility and was installed in 1983. A condition assessment completed on Segments 2 and 3 confirmed pipe deficiencies.

Forecast

| Budget Year | Total Expense | Total Revenue | Difference |
|---------------------------------------|-------------------|---------------|-------------------|
| 2022 | | | |
| Internal Services | 100,000 | 0 | 100,000 |
| Project Design and Construction Costs | 1,900,000 | 0 | 1,900,000 |
| Year Total | 2,000,000 | 0 | 2,000,000 |
| 2023 | | | |
| Internal Services | 100,000 | 0 | 100,000 |
| Project Design and Construction Costs | 1,900,000 | 0 | 1,900,000 |
| Year Total | 2,000,000 | 0 | 2,000,000 |
| 2024 | | | |
| Internal Services | 100,000 | 0 | 100,000 |
| Project Design and Construction Costs | 1,900,000 | 0 | 1,900,000 |
| Year Total | 2,000,000 | 0 | 2,000,000 |
| 2025 | | | |
| Internal Services | 100,000 | 0 | 100,000 |
| Project Design and Construction Costs | 1,900,000 | 0 | 1,900,000 |
| Year Total | 2,000,000 | 0 | 2,000,000 |
| 2026 | | | |
| Internal Services | 100,000 | 0 | 100,000 |
| Project Design and Construction Costs | 1,900,000 | 0 | 1,900,000 |
| Year Total | 2,000,000 | 0 | 2,000,000 |
| | 10,000,000 | 0 | 10,000,000 |

| Year Identified | Start Date | Est. Completion Date | Manager | Project Partner |
|-----------------|------------|----------------------|---------|-----------------|
|-----------------|------------|----------------------|---------|-----------------|

| | | | | |
|------|-------------|--------------|---------------------|--|
| 2012 | Jul 1, 2020 | Jun 30, 2025 | Engineering Manager | |
|------|-------------|--------------|---------------------|--|