

MEMORANDUM

TO: Board of Trustees

THROUGH: Indra Winquest
District General Manager

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

SUBJECT: Approve agreement amendment No. 5 with the Design Consultant (Jacobs) for the Effluent Pond Lining Project (Requesting Staff Member: Director of Public Works Brad Underwood)

STRATEGIC PLAN: Long Range Principle 5 – Assets and Infrastructure

DATE: June 29, 2022

I. RECOMMENDATION

That the Board of Trustees makes a motion to:

1. Approve Amendment No. 5 for the Effluent Pond Lining Project in the amount of \$216,000 – 2599SS2010 - Fund: Utilities; Division: Sewer; Vendor: Jacobs Engineering Group Inc. (Jacobs).
2. Authorize Staff to execute the Amendment.

II. DISTRICT STRATEGIC PLAN

Long Range Principle 5 – Assets and Infrastructure – The District will practice perpetual asset renewal, replacement, and improvements 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 June 2021 original agreement with Jacobs was for an analysis of a permanent HDPE liner in Pond 2; ASA 1 revised the original scope to achieve 30% design at no additional cost; ASA 2 was approved for 100% design of Pond 2 liner at an additional cost of \$425,339 with a contingency of \$40,000. The subsequent

amendments to Jacobs design scope were required following the Nevada Division of Water Resources - Division of Dam Safety (DWR) notice in December 2021 that the Mill Creek Dam No. 2 (Pond 2) would be subject to a full structural/hydrologic analysis, as well as going through the Dam Application process. This process was deemed prohibitive with regard to the feasibility of the original Pond 2 design proposal and overall effluent export pipeline construction schedule. The original scope was progressed to a formal 60% design level inclusive of project drawings and specifications; approximately \$220,000 of ASA 2 was expended to complete the 60% design. With the potential need for effluent storage in Pond 2 for the construction of the Effluent Pipeline Project, these design efforts may be used to line the pond to support construction activities.

Amendment 3 was approved with a scope for an alternative analysis on Pond 1 as the storage facility location, using \$18,800 of the contingency. From February 2022 to May 2022, the CMAR team of IVGID Staff, Jacobs, and Granite Construction collaborated to develop suitable alternatives that meet the Nevada Division of Environmental Protection WRRF discharge permit requirements. Three options were selected and progressed to 30% design in order to support a final selection based on health and safety, operational benefit/flexibility, and cost considerations. This resulted in the approval of Amendment 4 with a scope to achieve 30% for 3 of the proposed alternatives using a portion (\$26,200) of the funds remaining from ASA 2.

On June 8, 2022, the Board concurred with IVGID PW Staff and Jacobs' recommendation to progress with the final design for the proposed WRRF effluent storage facility as a two million gallon (2MG) pre-stressed concrete tank.

Jacobs has prepared a design scope and cost for services to include interim design deliverable packages at 60% and 90%; the amendment also includes completion of the contract documents (drawings and specifications) prepared to 100%.

In accordance with Board Policy 3.1.0., 0.15, Consent Calendar, this item is included on the Consent Calendar as it is routine business of the District and within the currently approved District Budget.

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 CIP Data Sheet) in the amount of \$1,550,000; unallocated budget is approximately \$1,122,000.

Following is a summary of the Jacobs contract amounts, associated with the Effluent Pond Lining Project, upon approval of Amendment 5:

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
Amendment 5	\$216,000	\$696,139

- * 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.

Approximately \$220,000 was expended from ASA 2 on the efforts to achieve the 60% design for Pond 2 as the effluent storage facility.

The design cost for the pre-stressed concrete tank (excluding the work completed for Pond 2) is approximately \$476,000 including the efforts to evaluate alternatives and provide 30% design for 3 alternatives. The estimated construction cost including construction contingency is \$5.5 million making the total design efforts less than the industry norm of 10%. Additional scope and cost in this design is the decommissioning of the Mill Creek Dam 1 as part of the project.

Jacobs contract, inclusive of all ASA's and Amendments through #4, totals \$480,139. There is approximately \$165,000 remaining from the approved amount in ASA 2. Therefore, to fully fund this contract amendment an additional \$216,000 is necessary. Upon approval of Amendment 5, this current remaining budget will be utilized as part of the budget for the scope of Amendment 5 resulting in a total contract amount of \$696,139

IVGID Engineering Staff time will also be billed to the project to manage the continued design development and regulatory permitting for the project.

VI. ALTERNATIVES

The alternatives were presented at the June 8, 2022 Board meeting and included construction of a pre-stressed concrete tank, a steel tank or a lined pond. Each alternative was investigated for its suitability and relative cost effectiveness. The pre-stressed concrete tank was determined as the best option for the District and the Board concurred with the recommendation.

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 5 – Jacobs: Effluent Storage Facility Final Design, dated: June 16, 2022
- CIP Data Sheet – Effluent Storage Facility Project

AMENDMENT NO. 5 (DRAFT)
TO SHORT FORM AGREEMENT DATED JUNE 9, 2021
BETWEEN
INCLINE VILLAGE GENERAL IMPROVEMENT DISTRICT
AND
JACOBS ENGINEERING GROUP, INC.

This Amendment No. 5 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 services of Phase 2B, the preliminary and final design of a 2 million gallon (2-MG) pre-stressed concrete tank. interim design deliverable packages at 60% and 90%, completion of contract documents including drawings and specifications prepared to 100%, and services during bidding of the project.
- 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 “Pond 1 Prestressed Concrete Tank” proposal dated June 16, 2022. Basic services include:
 - a. Preliminary design to define required construction improvements associated with the selected effluent storage alternative, a 2-MG pre-stressed concrete tank;
 - b. 90% and Final Design plans and specifications;
 - c. Project and Design Management, including internal kickoff meeting, recurring internal and external design meetings, and partnering meetings, progress reporting and invoicing to the Client, overall team coordination and management and change management
 - d. Work is to be complete by January 30, 2023.
- 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 **Two Hundred Sixteen Thousand Dollars (\$216,000.00)**, 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:
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

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

Date

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 Prestressed Concrete Tank

June 16, 2022

Incline Village General Improvement District Effluent Pond Lining Final Design

This is an amendment to the Short Form Agreement dated June 9, 2021, 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 ponds adjacent to the Water Resource Reclamation Facility (WRRF) that may occasionally be 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 are 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. Phase Alt 2A alternatives analysis revealed a similar condition for Pond 1 and Mill Creek Dam No. 1, therefore the final recommendation for effluent storage is construction of a 2 MG prestressed concrete tank and decommissioning of Mill Creek Dam No. 1.

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 Prestressed Concrete Tank**
- Phase 3 – Engineering services during construction.

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

Phase 2B – Pond 1 Prestressed Concrete Effluent Storage Tank Preliminary and Final Design

Engineer will perform preliminary and final design services and will prepare plans and specifications for the anticipated installation of a 2 million gallon (MG) prestressed concrete effluent storage tank at the location of Pond 1 and associated improvements. Engineer will collaborate with IVGID and Granite to support environmental permit documentation and approvals.

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 were discussed and reviewed by the CMAR Team for final design selection.
- Three alternatives for effluent storage at Pond 1 were developed to a 30% design level for risk analysis and cost estimation.
- HDPE Lining of Pond 1 will also require an application of Approval for Dam Construction with NV DWR and is no longer a feasible option.
- Site design and considerations for a welded steel and prestressed concrete storage tank are similar but the material cost for welded steel is significantly higher than that of prestressed concrete.
- IVGID Board of Trustees approved final design for a 2 MG prestressed concrete tank at the June 8, 2022 board meeting.
- National Environmental Policy Act (NEPA) documentation is required for U.S. Army Corps of Engineers (USACE) funding and will be completed by others.
- Required applications for Nevada Department of Environmental Protection (NDEP) and Tahoe Regional Planning Agency (TRPA) will be completed by others.
- Design support for temporary pond lining and pump system at Pond 2 for effluent export pipeline project is not included in this scope of services and will be completed by others.

Task 1: Preliminary Design

Engineer will perform preliminary design to define required construction improvements associated with the selected effluent storage alternative, a 2 MG prestressed concrete tank. Specific tasks and assumptions are presented below:

Pond 1 Grading and Access Road

- Engineer will prepare for and participate in up to three meetings with permitting agencies to collaborate on achieving success in the permitting process.

- Civil engineering and grading design will be developed commensurate with the 30% design for a prestressed concrete tank.
- Site grading will accommodate suggested construction staging and laydown areas for tank installation and material stockpiling.
- Design of access road from Sweetwater Road will accommodate construction vehicles during prestressed concrete tank construction and serve as a permanent access route for maintenance.
- Construction and permanent access routes and security will be coordinated with IVGID and Granite.
- Improvements to the existing decant facility are not included in this scope of services.

Mill Creek Dam No. 1 Decommissioning

- Decommissioning of Mill Creek Dam No. 1 documentation will be prepared in accordance with NV DWR NAC 535.220 and submitted to NV DWR for review and approval.
- A hydrologic analysis of the existing drainage basin with and without Mill Creek Dam No. 1 will be prepared and presented for NV DWR review.
- Recommended drainage improvements will be included in design plans and specifications as needed to prevent negative impact to downstream parcels with Mill Creek Dam No. 1 decommissioning and removal.

Plant Yard Piping Design

- Design of yard piping for incorporation of the effluent storage tank into WRRF operations will be completed.
- Pipeline capacity, size and connection details will be identified and verified.
- Existing utilities will be located and identified via potholing by Granite Construction or IVGID as needed to support connection design.

Prestressed Concrete Tank Design

- Geotechnical recommendation technical memorandum will be prepared to in support of the preferred prestressed concrete tank and site access road design.
- Minimum structural design criteria and recommendations will be established and presented on general foundation, roof and section plans and in required performance specifications.
- Mechanical design of appurtenances and locations of connections and hatches will be reviewed with IVGID for plant operations and detailed on the design drawings and specifications.
- Electrical requirements will be confirmed and designed accordingly
- I&C and SCADA connections and configuration will be designed for communication with existing effluent storage tank and proposed effluent storage tank.

Assumptions

- Plant hydraulic design criteria will be provided by IVGID for design integration.
- Two site visits and two CMAR partnering meetings by up to 3 staff members are assumed for the preliminary design phase.
- Jacobs Internal Discipline Quality Control (QC) review will be completed prior to Client deliverable.
- Engineer will prepare and deliver 60% design drawings, reports and technical specifications in electronic PDF format.
- IVGID and Granite will have two weeks to review and provide input on the 60% design drawings and then a Team workshop will be held to discuss and adjudicate the comments.
- Granite will be involved throughout the design process for constructability review and value engineering.
- Engineer will provide quantities as requested but no formal engineer's estimate for design. Cost estimation will be completed by Granite.

Deliverables

Engineer will prepare and submit the following:

- 60% design drawings and technical specifications. An anticipated sheet list is listed below:
 - Cover
 - Abbreviations
 - General Civil
 - General Structural
 - General Mechanical
 - General Electrical
 - Overall Site Plan and Survey Control
 - Civil Pond Area Plan 1
 - Civil Pond Area Plan 2
 - Civil Pond Sections 1
 - Civil Pond Sections 2
 - Civil Details 1
 - Civil Details 2
 - Structural Foundation Plan
 - Structural Roof Plan
 - Structural Sections
 - Structural Details 1
 - Structural Details 2
 - Yard Piping Plan & Profile 1
 - Yard Piping Plan and Profile 2
 - Yard Piping Details 1
 - Mechanical Details 1
 - Mechanical Details 2
 - Electrical Site Plan
 - I&C SCADA Details 1
 - I&C SCADA Details 2
 - Electrical Single Line/Panel
 - Standard Details 1
 - Standard Details 2
 - Standard Details 3
 - Standard Details 4
- Preliminary Geotechnical Report and recommendations
- Mill Creek Dam No. 1 decommissioning documentation as required by NAC 535.220
- Preliminary Hydrology report for Pond 1 drainage basin

Task 2: 90% and Final Design

Engineer will prepare final design plans and specifications for construction improvements associated with the selected effluent storage alternative, a 2 MG prestressed concrete tank. As defined in Phase Alt 2A and Preliminary Engineering.

- Engineer will prepare a set of 90% design drawings and specifications and a Final set of Contract Documents. Jacobs Internal Discipline Quality Control (QC) review will be completed prior to Client deliverable.
- Plans and specifications will be signed and sealed by professional engineers licensed in the State of Nevada.

The sheet list finalized during preliminary design will be advanced for final design. Any design items identified with 60% Design review that may be out of scope will be reviewed and included in a scope and cost amendment as needed. Additional sheets will be considered as necessary.

Deliverables

Engineer will prepare and submit the following:

- 90% design drawings, reports, and technical specifications submitted electronically in PDF format
- Contract Documents comprising final (100%) design drawings and specifications submitted electronically in PDF format

Task 3: Project Management

Project and Design Management will include internal kickoff meeting, recurring internal and external design meetings, and partnering meetings, progress reporting and invoicing to the Client, overall team coordination and management and change management.

Phase 2B Schedule

A preliminary schedule has been developed based on permitting expectations and partnering meetings with Granite and IVGID and is attached. It is anticipated that the general period of performance for Phase 2 will be July 2022 through January 2023.

Phase 2B Budget

The assumed level of effort and budget for Phase 2B is attached and will be amended during the design phase, if needed.

Task	Budget
Task 1: Preliminary Design	\$221,975
Task 2: Final Design	\$129,025

Task	Budget
Task 3: Project Management	\$26,700
Expenses	\$3,300
Phase 2B Design Total	\$381,000
Phase 2A Remaining Balance	\$165,000
Phase 2B Amendment Request	\$216,000

Phase 3 – Engineering Services During Construction - TBD

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:

**INCLINE VILLAGE GENERAL
IMPROVEMENT DISTRICT**

Agreed to:

By:

ENGINEER:

Jacobs Engineering Group Inc.

Agreed to:

By:

John Schoonover
Designated Manager

Date: _____, 2022

Address for Giving Notice:

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

Date: _____, 2022

Address for Giving Notice:

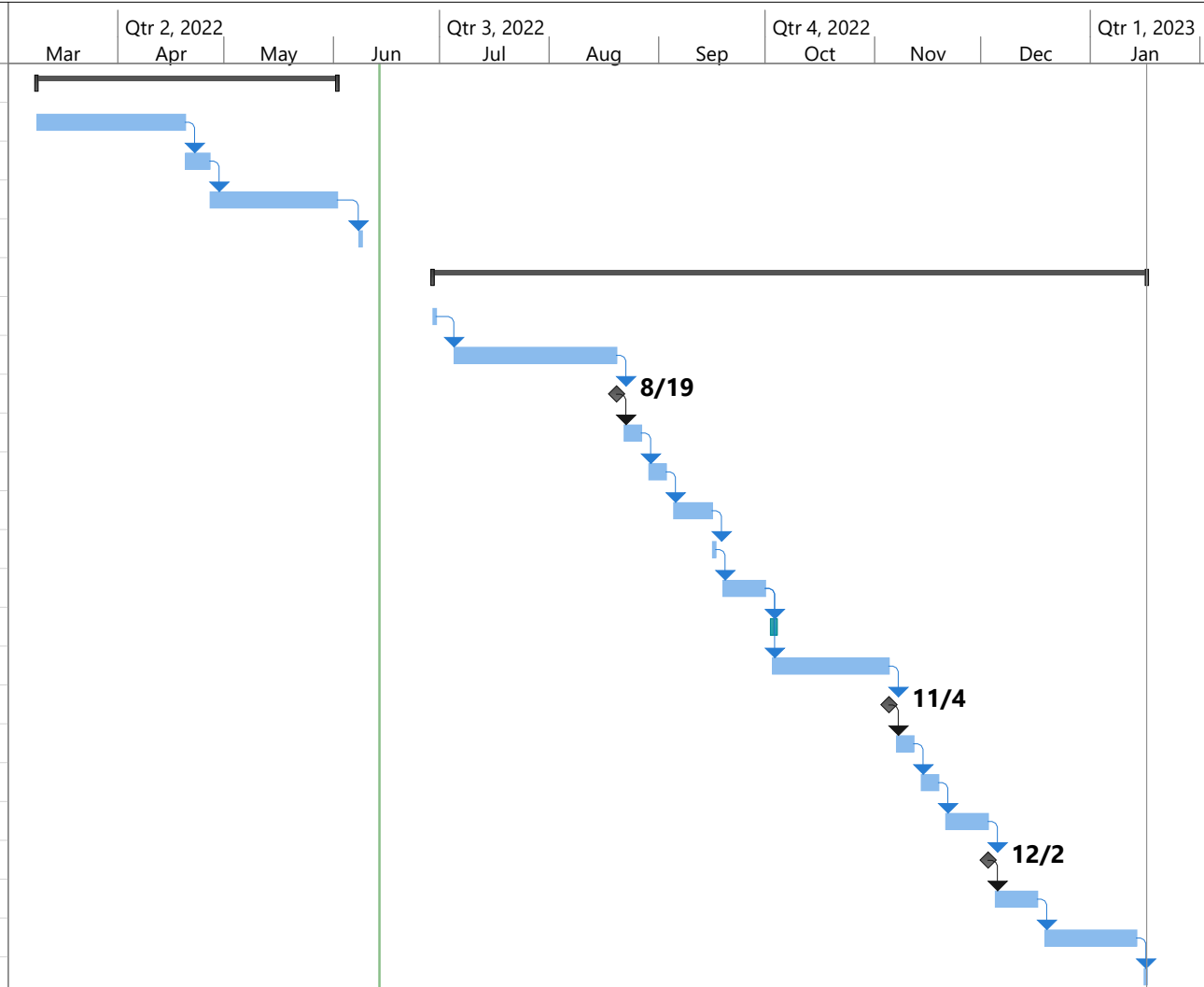
**Jacobs Engineering Group Inc.
50 West Liberty Street, Suite 205
Reno NV 89501**

**Incline Village General Improvement District
Effluent Pond Lining Final Design - Phase 2B
Jacobs Level of Effort**

6/12/2022

Hours by Position															Estimated Labor Hours	Estimated Labor Subtotal	Estimated ODCs/ Expenses	Budget Subtotal
Category	PM/Civil Engineer Ashley Kellogg	Design Manager Travis Howard	Lining/ Geotech. Engineer Mark Twede	Civil Engineer Designer Travis Howard	CAD Design Technicians TBD (All Disciplines)	Structural Engineer Jeremy Kellogg	Mech. Engineer Bill Misslin	Conveyance Engineer Jordan Vazquez	I&C/SCADA Design Derek Johnson	Electrical Engineer Craig Cusworth	Quality Control TBD (All Disciplines)	Geotechnical Review/Dam Specialist Dean Harris	Admin./ Doc. Processing Cheryl Perrine					
Name	Kellogg	Howard	Twede	Howard	Disciplines	Kellogg	Misslin	Vazquez	Johnson	Cusworth	Disciplines	Harris	Perrine					
2022 Hourly Rate:	\$185	\$185	\$200	\$185	\$120	\$185	\$225	\$185	\$185	\$185	\$225	\$225	\$85					
Task:																		
Preliminary 60% Design Drawings and Specs	82	40	118	110	310	90	90	102	100	90	60	16	120	1328	\$ 221,975	\$ 2,750	\$ 224,725	
<i>Civil - Pond Grading and Details</i>	60	5		100	60						8				\$ 39,525			
<i>Geotechnical - Report</i>		5	100								0	16			\$ 24,525			
<i>Mechanical - Tank and Appurtenances</i>		5			60		80				8				\$ 27,925			
<i>Electrical - Tank Service</i>		5			60					80	8				\$ 24,725			
<i>I&C - SCADA design</i>		5			60				80		8				\$ 24,725			
<i>Civil - Hydrology</i>		5			0			80			8		40		\$ 20,925			
<i>Structural - Prestressed Concrete Tank</i>		5			60	80					8		40		\$ 28,125			
<i>Site Visit</i>	12		12					12	12						\$ 9,060	\$ -		
<i>QA/QC and Review Meetings</i>	10	5	6	10	10	10	10	10	8	10	12	0	40		\$ 26,000			
Final Design Drawings and Spec	60	40	70	70	150	48	48	48	46	48	41	16	80	765	\$ 129,025	\$ 550	\$ 129,575	
<i>Civil - Pond Grading and Details</i>	40	5		60	60						5				\$ 27,750			
<i>Geotechnical - Report</i>		5	60		0						0	16			\$ 16,525			
<i>Mechanical - Tank and Appurtenances</i>		5			20		40				5				\$ 13,450			
<i>Electrical - Tank Service</i>		5			10					40	5				\$ 10,650			
<i>I&C - SCADA design</i>		5			10				40		5				\$ 10,650			
<i>Civil - Hydrology</i>		5			0			40			8		0		\$ 10,125			
<i>Structural - Prestressed Concrete Tank</i>		5			40	40					8		40		\$ 18,325			
<i>QA/QC and Review Meetings</i>	20	5	10	10	10	8	8	8	6	8	5	0	40		\$ 21,550			
Project Management	100	20									20			140	\$ 26,700	\$ -	\$ 26,700	
Total	242.19	100	188	180	460	138	138	150	146	138	121	32	200	2233	\$ 377,700	\$ 3,300	\$ 381,000	

ID	Task Name	Duration	Start	Finish	Predecessors	Mar	Qtr 2, 2022	May	Jun	Qtr 3, 2022	Aug	Sep	Qtr 4, 2022	Oct	Nov	Dec	Qtr 1, 2023	Jan	
1	Phase 2A Storage Alternatives	61 days	March 9, 2022	June 1, 2022		[Timeline bar from Mar to Jun]													
2	Draft TM	30 days	March 9, 2022	April 19, 2022		[Task bar]													
3	Internal QC	5 days	April 20, 2022	April 26, 2022	2														
4	Final TM	26 days	April 27, 2022	June 1, 2022	3														
5	IVGID Board Presentation	1 day	June 8, 2022	June 8, 2022	4FS+4 days														
6	Phase 2B - Pond 1 Tank Design	144 days	June 29, 2022	January 16, 2023						[Timeline bar from Jun to Jan]									
7	Board Approval / NTP	1 day	June 29, 2022	June 29, 2022															
8	Task 2 - Preliminary (60%) Design	34 days	July 5, 2022	August 19, 2022	7FS+3 days														
9	60% Engineering Cutoff	0 days	August 19, 2022	August 19, 2022	8														
10	60% CAD Cutoff	5 days	August 22, 2022	August 26, 2022	9														
11	60% Internal QC	5 days	August 29, 2022	September 2, 2022	10														
12	Drawing Fix up	9 days	September 5, 2022	September 15, 2022	11														
13	60% Client Submittal	1 day	September 16, 2022	September 16, 2022	12														
14	Client Review	10 days	September 19, 2022	September 30, 2022	13														
15	Client Review Meeting	1 day	October 3, 2022	October 3, 2022	14														
16	Task 3 - Final (90%) Design	25 days	October 3, 2022	November 4, 2022	14														
17	90% Engineering Cutoff	0 days	November 4, 2022	November 4, 2022	16														
18	90% CAD Cutoff	5 days	November 7, 2022	November 11, 2022	17														
19	90% Internal QC	5 days	November 14, 2022	November 18, 2022	18														
20	Drawing Fix up	10 days	November 21, 2022	December 2, 2022	19														
21	90% Client Submittal	0 days	December 2, 2022	December 2, 2022	20														
22	90% Client Review	10 days	December 5, 2022	December 16, 2022	21														
23	Final Design	20 days	December 19, 2022	January 13, 2023	22														
24	Final Signed Submittal	1 day	January 16, 2023	January 16, 2023	23														



Project: IVGID_Pond1_TankDesi Date: June 14, 2022	Task		Project Summary		Manual Task		Start-only		Deadline	
	Split		Inactive Task		Duration-only		Finish-only		Progress	
	Milestone		Inactive Milestone		Manual Summary Rollup		External Tasks		Manual Progress	
	Summary		Inactive Summary		Manual Summary		External Milestone			

046



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	