

MEMORANDUM

TO: Board of Trustees

THROUGH: Indra Winquest
District General Manager

FROM: Brad Underwood
Director of Public Works

SUBJECT: Project Updates – Effluent Storage Tank (formerly Pond Lining) and Effluent Pipeline Project

DATE: November 9, 2022

I. RECOMMENDATION

This is an informational report, no action is required by the Board of Trustees.

II. BACKGROUND

Effluent Storage Tank Project Update (formerly Pond Lining)

Status – 60% design plans have been received, reviewed, and Public Works Staff and Granite have provided comments for Jacobs to prepare the 90% plan set.

Cost Estimate – The overall cost estimate for the Effluent Storage Tank remains the same at \$6.8 million as presented at the June 8, 2022 Board of Trustees meeting. However, the cost allocations within the total figure have shifted, primarily due to an increase in the actual construction costs that are approximately \$522,000 higher than the initial estimate. This additional construction cost is offset by a reduction in costs anticipated for Tahoe Regional Planning Agency (TRPA) coverage fees following preliminary discussions with TRPA staff.

Environmental – The environmental document will need to meet the requirements of the United States Army Corp of Engineers (USACE). The USACE project team recently met Public Works Staff to discuss these requirements and further discussions will take place to determine the best approach.

Permits –

- TRPA – TRPA has verified that the land coverage of Pond 1 is determined to be existing disturbed and will not be subject to the high cost coverage fees. Coverage fees will apply to the roadway surface area that is being constructed to support construction of and future access to the concrete tank. Next steps will be to submit the 100% plans to TRPA for determination of the extent of land coverage and required fees.
- Department of Water Resources (DWR), Dam Safety of Dams – The 60% design plans have been submitted for review and comment. Any comments received will be incorporated into the 90% design drawings. Upon completion of the plans and specifications, the application for decommissioning the Mill Creek Pond 1 will be submitted to DWR.
- Washoe County – A special use permit is required and the process has been initiated by Staff. The 100% plans will be submitted for review and permitting.

Funding –

- IVGID Staff continues to work with USACE to obtain 595 Grant Funds for the project. Additional information is being generated for submission to the USACE which will allow their internal review process to commence. The USACE has indicated that 75% of the project cost, per the 595 Program, is available at the current project cost estimate of \$6.8 million.

Schedule – The high-level planning schedule is as follows:

- December 2022 – Receive 90% plans from Jacobs
- January 2023 – 100% plans
- February 2023 – Granite to begin bidding process
- February 2023 – IVGID Board of Trustees approval of USACE 595 Model Agreement for Grant Funds
- March 2023 – IVGID Board of Trustees award of GMP (Guaranteed Maximum Price) Contract for construction (to Granite)
- March 2023 – Environmental document approval and all permits received
- May 2023 – Begin construction
- October 2024 – End construction

Effluent Pipeline Project Update

Status – 100% design plans and specifications have been received, reviewed, and Public Works Staff and Granite have provided comments for HDR to prepare the final bid set. On October 12, 2022, the Board of Trustees authorized Public Works Staff to work with Granite to bid for early procurement of ductile iron

pipeline materials in advance of construction in 2023 due to long lead times. The new pipeline alignment will be parallel to the current alignment and primarily within the southbound travel lane of State Route 28 (SR28). The 2023 work is planned within Segment 2 of the pipeline; this is dictated by the work required in the Marlette Creek area to relocate the existing effluent pipeline to eliminate conflict with scheduled Nevada Department of Transportation (NDOT) work.

Cost Estimate – The 60% overall cost estimate for the pipeline project is substantially higher at approximately \$66.4 million than the \$45.6 million estimate, developed in August 2021 and presented to the Board of Trustees on March 1, 2022. The cost increase is due to the actual construction estimate being approximately \$21.7 million higher than the previous estimate. The current estimate includes over \$6 million in construction contingency. Generally, this cost increase represents significant increases in both material and labor costs. A few specifics to the cost increase are:

- The estimate also includes 5% annual cost escalations (\$6.5 million overall) to labor, equipment, hauling, materials and subcontractors not included in the previous estimate.
- Design changes to the pipe type from ductile iron in the original estimate to a combination of ductile iron (25%), welded steel (25%), and HDPE (High Density Polyethylene) (50%). The welded steel has slower production rates due to the welding time thus increasing cost. The HDPE installation presents constructability challenges which increases cost.
- A 40% increase in trucking rates with the current fuel surcharges.
- Material cost increases along with extraneous lead times.
- Barrier rail installation in the work zone to protect the workers and the travelling public.

There are design elements and assumptions in the current estimate that will be discussed for potential modification during the 100% cost estimate development. A few specific design elements or assumptions to be discussed are:

- The 7-foot (average) excavation depth requiring shoring along the entire project length.
- Import of all backfill material versus using screened native soil as backfill for the intermediate trench zone.
- Type of pipe material to be installed.

Staff contracted with an Independent Cost Estimator (ICE) and Granite to review cost reduction opportunities, quantity verification and the 100% opinion of probable construction cost (100% OPCC).

Environmental Document – The environmental document completed in 2020 in conjunction with the proposed shared use path has been determined acceptable for use by State Revolving Fund (SRF) in the environmental clearance process. USACE is reviewing the 2020 environmental document to determine if the information is suitable for development of the environmental document for their approval. The cultural resources study is being updated to account for the deviation to place the entire pipeline project within the SR28 roadway footprint.

Permitting –

- NDOT – The initial desk audit has occurred and the application is currently under review by applicable NDOT Staff. TRPA – The proposed effluent pipeline project is a replacement of an existing pipeline and requires no new land coverage. TRPA has determined the work qualifies as Qualified Exempt under the current Memorandum of Understanding.

Funding –

- IVGID Staff continues to work with the SRF to apply for and receive low interest loans. Additional information is being compiled to submit the Letter of Intent to SRF. SRF Staff have advised us to carefully consider the amount of the loan (i.e. conservative cost estimate) as they are seeing high cost increases on projects currently funded by the SRF program.
- IVGID Staff continues to work with USACE to provide 595 Grant Funds for the project. USACE desires to move forward with the Agreement for this project even though funds in the 595 Program have not been identified. It is uncertain whether funds will be available for construction in the 2023 construction season. However, having an agreement in place with the USACE for 595 Program funds, puts this project in line to receive funds when they become available. Additional information is being prepared for submission to USACE to facilitate initiation of their internal review process.

Other Key Efforts –

- Public Works Staff will collaborate with NDOT to investigate the possibility of a full SR28 road closure at the beginning and ending of the construction season (May/June and September/October). This would be during the week (Sunday night to Friday morning) to accommodate pipeline construction. Should NDOT support IVGID pursuing the proposed road closure, extensive public outreach will be required prior to finalizing approval of the closure. For public outreach efforts, Public Works Staff recommends assistance from a professional communications/public relations firm. Potential benefits to full roadway closure are increased productivity rates, thus reducing overall pipeline construction duration, cost

reduction, and greatly improved safety to construction workers and general public.

- Public Works Staff is investigating with NDOT the possibility of installing an NDOT communication conduit concurrently with the effluent pipeline. NDOT will install this communication conduit along SR28 as part of a larger preservation project expected to commence following the IVGID pipeline project. Rather than trench and install at a later date, NDOT has requested that IVGID consider installing the communication conduit within the pipeline trench. Preliminary discussions are underway between Public Works and NDOT Staff. Moving this forward would require an Agreement with NDOT, design work by HDR (requiring a Contract Amendment), inclusion in the bid by Granite Construction and a determination of cost sharing. NDOT would be financially responsible for all work to support the installation of the communication conduit and share in the cost of trenching for the pipeline. Potential benefits to including this NDOT work in the Pipeline project are reduced public inconvenience, an additional source of funding for the pipeline project, and reputational benefit to both IVGID and NDOT resulting from positive and proactive collaboration.

Schedule – The high-level planning schedule is as follows:

- November 2022 – SRF Letter of Intent submittal
- November – December 2022 – ICE, Granite, Public Works cost reduction opportunities and cost estimating
- December 2022 – IVGID Board of Trustees award of material purchase
- January 2023 – 100% cost estimate
- January 2023 – Granite to begin bidding process
- February 2023 – IVGID Board of Trustees Approval of USACE 595 Model Agreement for Grant Funds
- February 2023 – IVGID Board of Trustees approval of Bonds and SRF Loan Agreement
- March 2023 – IVGID Board of Trustees Award Phase 2A (Construction) GMP to Granite Construction
- March 2023 – Environmental Document approval and all permits received
- May 2023 – Begin Construction Phase 2A
- October 2023 – End Construction Phase 2A
- 2023 – 2025 – Future Construction Phases