



GENERAL IMPROVEMENT DISTRICT

September 30, 2019

Laura Whitney  
Program and Project Manager  
U.S. Army Corps of Engineers  
1325 J Street, 9th Floor  
Sacramento, California 95814-2922

RE: IVGID Effluent Storage Basin Improvements Project Scope of Work

### **BACKGROUND**

The Incline Village General Improvement District (IVGID or District) operates a wastewater collection, treatment, and effluent export system that serves the communities of Incline Village and Crystal Bay, NV and the Nevada State Parks (Sand Harbor, Spooner and Memorial Point) located at Lake Tahoe. A critical component of this operation is the 2.4 million gallon effluent storage basin located adjacent to the wastewater resource recovery facility (Plant). 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. By lining the storage basin, it will allow for effluent storage during emergency situations and planned effluent pipeline repair and replacement construction projects. The lining will also eliminate the need to retreat this effluent through the Plant, speeding recovery from the incident. Depending on the time of year and associated influent flows at the Plant, this final effluent storage basin can provide between 1.6 and 3.2 days of storage. The effluent storage basin also ensures there is adequate storage capacity to accommodate a multiple day power outage that interrupts Plant operations.

As a condition of the District's current operating permit with the Nevada Department of Environmental Protection (NDEP), the District is no longer allowed to utilize the effluent storage basin for storage because it is unlined. This significantly hampers the District's ability to conduct planned maintenance of the effluent export system and puts the District at risk of a discharge of effluent to the waters of Lake Tahoe in the event of a significant emergency.

### **EFFLUENT STORAGE IMPROVEMENTS PROJECT**

Analysis conducted as a component of the District's Effluent Export Project Predesign Report July 2004 indicates that, due to the regulatory limitations associated with the use of the Effluent Storage Basin, there is insufficient operational storage available to the District to provide adequate redundancy and reliability of the effluent export system.

The following improvements are proposed to be completed to allow routine use of the Effluent Storage Basin:

- 1) Clear, grub, and re-grade the Effluent Storage Basin.
- 2) Construct improvements to allow impervious containment of effluent within the Effluent Storage Basin.

PUBLIC WORKS DEPARTMENT  
1220 SWEETWATER ROAD · INCLINE VILLAGE NV 89451  
PH: (775) 832-1203 · FAX: (775) 832-1260 · WWW.IVGID.ORG

- 3) Install fencing around the basin periphery for security and safety.
- 4) Construct mechanical improvements to allow Effluent Storage Basin to be operated in conjunction with the Effluent Storage Reservoir.
- 5) Replace and automate existing piping, pumping system, and controls to allow unattended operation of the Effluent Storage Basin.

#### **ENVIRONMENTAL ASSESSMENT**

An Environmental Assessment is anticipated to be required for this project. The USACE will be the lead agency and oversee all field work and document composition with assistance from the District staff. The District expects to hire a consultant to complete the environmental assessment work for review by the USACE.

As a reference, the District completed an Environmental Assessment to allow previous effluent export system improvements. The Environmental Assessment was completed in October 2004 with a Finding of No Significant Impact, issued by the USACE. The area of impact for the recommended improvements to the Effluent Storage Basin is contained within the Environmental Assessment's Project Area and studied as a component of the project analysis. The document is now considered out of date and can't be used for findings.

#### **PROJECT WORK TO DATE**

The following work has been completed to allow implementation of the Effluent Storage Basin improvements:

- Expansion of the access road around the wastewater treatment plant to improve ingress/egress to allow construction of improvements to the Effluent Storage Basin. This work included the purchase of an adjacent parcel.
- A contract with a consulting engineer to complete pre-design analysis that evaluates alternatives, makes recommendations, completes preliminary design, and develops construction cost estimates to implement the above listed effluent storage recommendations.

#### **PROPOSED PROJECT SCHEDULE**

- Complete pre-design technical memorandum – September 2018
- Final design and environmental entitlement – November 2019 - April 2020
- Project bidding and contract award – June 2020
- Project construction – June 2020 - October 2020



**PROPOSED PROJECT BUDGET**

<b>Project Component</b>	<b>Estimated Cost</b>
Site Civil	\$200,000
Reservoir Improvements	\$1,200,000
Piping, Mechanical, & Controls	\$275,000
Subtotal	\$1,675,000
Contingency (20% of Subtotal)	\$335,000
<b>Construction Estimate</b>	<b>\$2,010,000</b>
Pre-Design	\$50,000
Final Design	\$250,000
Environmental Documentation	\$75,000
Construction Administration & Management	\$200,000
IVGID Project Administration & Management	\$125,000
<b>Estimated Project Total</b>	<b>\$2,710,000</b>
USACE Share (75%)	\$2,032,500
IVGID Share (25%)	\$677,500

**ESTIMATED FISCAL YEAR(FY) BUDGET**

<b>FY 2019</b>	<b>Estimated Cost</b>
Final Design	\$200,000
Environmental Documentation	\$75,000
IVGID Project Administration & Management	35,000
Subtotal	\$310,000
<b>FY 2020</b>	<b>Estimated Cost</b>
Final Design and Bidding	\$100,000
Construction	\$2,010,000
Construction Administration & Management	200,000
IVGID Project Administration & Management	90,000
Subtotal	\$2,400,000
<b>Total</b>	<b>\$2,710,000</b>



GENERAL IMPROVEMENT DISTRICT

**PROJECT LOCAL SHARE**

IVGID presently has sufficient funds in Utility Fund Balance to provide the necessary funding for design, permitting and construction phase costs.

Very sincerely yours,

Joseph J. Pomroy, P. E.  
Director of Public Works