Gardnerville Ranchos
General Improvement District

Water System Improvements
Long Valley Booster Pump Station Upgrades

In the 2017 Water Master Plan for the Gardnerville Ranchos General Improvement District (GRGID or District), a capacity deficiency was identified for the upper pressure zone of the water system. A potential solution identified in the 2017 Water Master Plan for addressing the system capacity deficiency was to upgrade the existing Long Valley Booster Pump Station (BPS). The Long Valley BPS Upgrades Project will include the following: Replacement of the existing 30-horsepower (HP) pumps with new 60-HP vertical split-case pumps. Full replacement of the existing below grade pump station with a new, above grade pump station located in a secure and safer to operate building. The addition of an emergency generator and automatic transfer switch will ensure backup power is available to this critical pumping station. The addition of variable frequency drives will improve energy efficiency during pumping operations. Modifications to vault piping, fittings, and a new specialty control valve will also improve the overall system operation.

PROJECT AT A GLANCE

- Dual 60-Horsepower Vertical Split Case Pumps
- Emergency Generator for Backup Power
- Total number of population served from LVBPS is 11,300
- Variable Frequency Drives (VFD) will allow for greater operational capacity and energy efficiency.
- A new above grade pump station will provide a secure and safer facility for GRGID operational staff.
- The LVBPS will allow for critical repairs to be performed at the District's existing Upper Zone Storage Tank.

Next Steps: Long Valley Booster Pump Station Upgrades

The Long Valley Booster Pump Station Upgrades have been designed by Lumos & Associates and are ready to move into the construction phase with Q&D Construction. The project will replace an existing below grade pump station and increase hydraulic capacity for the Upper Pressure Zone. The project cost is anticipated at $2 million dollars, and a Guaranteed Maximum Price (GMP) contract will be developed in fall of 2023, with construction expected to commence before the end of 2023. Construction duration is anticipated to take about 6 months to complete, with the LVBPS to be online prior to the onset of peak summertime water demands.

This project is being submitted to the Nevada Department of Conservation to seek infrastructure funding from American Rescue Plan Act (ARPA) fund managed by the Natural Resources Nevada Water Conservation and Infrastructure Institute.

For project updates, please use GRGID's webpage: https://www.grgid.com/

Future Plans: Critical Water Storage Tank Repairs

Following the construction of the Long Valley Booster Pump Station additional water system improvements can be successfully completed. Once online, the LVBPS will allow the District will be able to safely take the existing Upper Pressure Zone Storage Tank offline in order to complete critical repairs and rehabilitation of the storage tank.