

Lift Station Rehabilitation: Program 8055

Description:

This project consists of improvements to the lift stations located throughout the Metropolitan area. The project will replace obsolete, aging equipment and if needed, increase the lift stations' pumping capacity. The project also includes lift station forcemain rehabilitation or replacement.

Purpose and Justification:

The lift stations included in this project need either replacement or rehabilitation based on an assessment of their condition and a history of their performance. Without the improvements, the lift stations will continue to degrade resulting in, at best, a continued increase in operation and maintenance costs or, at worst, a failure of the existing pumps and a need for emergency repairs.

Current Lift Station Projects:

Project Title	Project ID
Lift Station Property Maintenance	805501
Lift Station Condition Assessments	805502
Coon Rapids L34 Improvements	805560
Lift Station Fuel Upgrades and L66 Repairs	805565
Lift Station L73 Access Improvements	805570

Coon Rapids Lift Station L34 Improvements: Project 805560

L34 Facility – Originally constructed in 1963, Coon Rapids L34 will be renewed to enable the facility to function until a proposed new gravity interceptor begins to carry flows from Anoka to the upstream end of interceptor 4-NS-521 in 15 to 20 years.

Lift Station Fuel Upgrades and L66 Repair: Project 805565

A revision to Minnesota State Rule 7150 regulating underground storage tanks (UST) is expected to be adopted by October 2018. USTs that store diesel fuel for emergency power generation at lift stations L-15, L-29, L-44, and L-66 will no longer be exempt from the rules and will require improvements. Each of these tanks is constructed as a double walled fiberglass tank with leak detection. The new rules require continuous inventory control through automatic or manual daily tank gauging. The four tanks are not equipped with automatic tank gauging. In addition, improvements may be required for secondary containment on piping, overfill sumps, and high-level alarms and drop tubes on fill lines to meet the new rules.

The project also provides for the cleaning, resurfacing and coating of the concrete in the wet well channel of Lift Station L66. A condition assessment of the L66 wet well determined that it

has substantial deterioration. The project also includes the replacement of the wet well's fiberglass grating and supports.

Lift Station L73 Access Improvements: Project 805570

This project will provide an improved access to bottom of the wet well to allow personnel to assist and visually confirm that lifting hook has/remains fully engaged the pump lifting bail throughout the lifting process. It includes a permanent pump retrieval system to eliminate the need to hire a crane to remove the pumps for service. It will also correct elevated wet well hatches that are at an awkward height and represents a fall hazard and provide for ventilation of wet well and access facilities.

Lift Station Property: Project 805501

This project provides for the maintenance of property and/or structures purchased for future new expanded lift stations. Property maintenance includes such things as security, utilities, yard service, snow removal, etc.

Lift Station Condition Assessments: Project 805502

In future years, L01, L33, L35, and L66 will also be rehabilitated under this family of projects.