

Attachment B – Project Descriptions

Fire Hydrant Replacement (5-C-030-19)

The Fire Hydrant Replacement Project prioritizes the replacement of outdated, obsolete or failed fire hydrants throughout the City of Olathe Water System.

Neighborhood Sanitary Sewer Improvements (1-R-100-19)

Replacement of sanitary sewers determined by inspection and/or maintenance history to be in poor or failing condition, resulting in increased operations and maintenance costs, an increase of extraneous flows, backups, overflows, and potentially reduced system capacity.

Sanitary Sewer Manhole Lining (1-C-026-18)

The Sanitary Sewer Manhole Lining and Rehabilitation Project will allow for the spray lining of more than 360 sanitary sewer manholes identified through manhole asset inspection as being subject to excessive corrosion. These manholes are located throughout the City of Olathe; typically, at the end of sewer force mains and/or areas with a large concentration of restaurants where conditions are right to generate hydrogen sulfide corrosion within the manhole. The corrosion caused by these conditions is particularly damaging to both brick and concrete manholes.

Vertical Well Field Improvements (5-C-031-18)

The City currently has eight remaining vertical wells that were installed from 1976 to 1992. To maximize the capacity of the City's aging vertical well field and to fully utilize the City's water rights, these wells will need to be replaced with new vertical wells.

Waterline Rehabilitation (5-R-000-19)

Repair, replacement, and rehabilitation of waterlines as identified through the asset management condition assessment evaluation process. This process incorporates criticality of location, age, material, corrosive soils, number of breaks per mile, capacity and history of leaks.

Lift Station Replacements (1-C-020-15)

The City currently has 22 sanitary sewer lift stations. This project includes rehabilitation and replacement of equipment for 11 of these lift stations to improve overall operations and efficiency. The scope of work for this project is based on the results of a Lift Station Study that was completed in 2013. Projects will include:

- 2018: Cedar Lake design
- 2019: Cedar Lake construction
- 2020: 95th Street and 111th Street
- 2021: Providence Village and Hedge Lane
- 2022: North Parker and North Woodland

Water Treatment Plant 2 Alternative Disinfection (5-C-004-16)

Addition of a disinfection system to protect public health and safety and meet regulatory requirements. This will allow the water plant clearwells to return to the intended purpose of finished water storage. Includes installation of a new building to house the disinfection equipment.

Water Treatment Plant 2 Basin Modification (5-C-025-16)

Paint the interior of the above ground clearwell, the equipment in all four treatment basins and replace equipment in three existing basins. Includes hydraulic improvements to existing basins to improve treatment.

WTP2: Lime Feed Building (5-C-029-15)

New building at the Water Treatment Plant No. 2 to house the lime feed equipment and replacement of existing equipment. The project includes replacement of two aging lime silos and rehabilitation of the remaining lime silo.

WTP2: Above-Ground Clearwell Replacement (5-C-049-18)

This emergency replacement project includes construction of a replacement above-ground clearwell at Water Treatment Plant #2. This clearwell provides the necessary disinfection for all membrane treatment for the plant.

103rd Lift Station and Force Main Improvements (1-C-011-17)

Relocation of aging force main for the 103rd Street Lift Station into the future alignment of Cedar Creek Parkway and the rehabilitation of the 103rd Street Lift Station. This force main has had several major breaks over the past five years with various pipe materials. Construction will include the installation of 8,500 feet of force main to redirect the lift station flow to a gravity sewer main just south of 111th Street and installation of new pumps, piping and appurtenances within the lift station.

Lakeview Avenue Sanitary Sewer Improvements (1-C-024-18)

Lakeview Avenue sanitary sewer improvements were identified in the Mill Creek Sanitary Sewer Master Plan. These mains are currently over capacity. These assets have been in-service for over 60 years and are beyond their estimated useful life.